



臺灣中華化學

CHUNG HWA CHEMICAL



2023
Sustainability Report



臺灣中華化學

CHUNG HWA CHEMICAL



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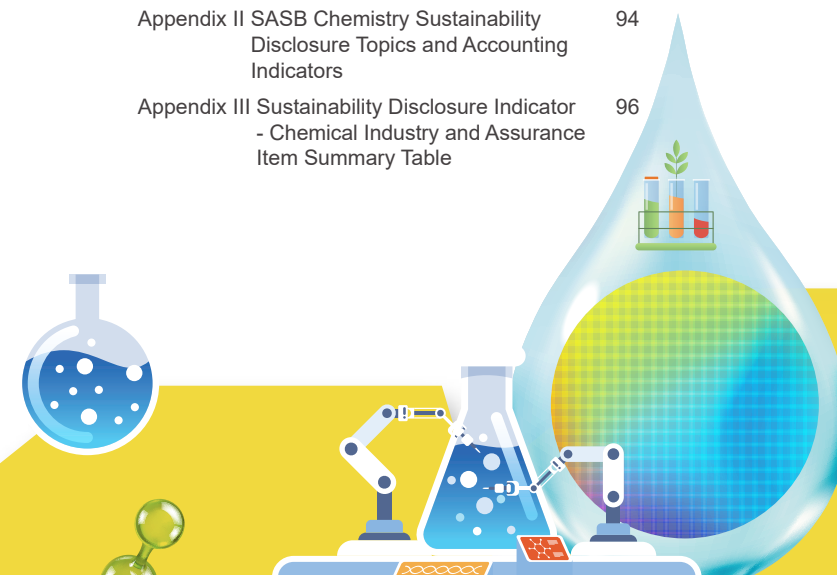
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About this Report

Welcome to the 2023 Sustainability Report of Taiwan Chung Hwa Chemical Industrial Works, Ltd. (hereinafter referred to as Chung Hwa or Chung Hwa Chemical). Chung Hwa recognizes the importance of corporate sustainability and responds to the government's expectations of corporate social responsibility by making use of the global sustainability information disclosure framework. A sustainability report is issued every year to let stakeholders understand Chung Hwa's performance in environment (E), society (S) and corporate governance (G).

Report Preparation Principles

This report has been prepared in accordance with 2021 GRI Standards issued by the Global Reporting Initiative (GRI). At the same time, the contents also correspond to the "Task Force On Climate-Related Financial Disclosures (TCFD)", the "United Nations Sustainable Development Goals (SDGS)", and the "Sustainable Accounting Standards Board (SASB)" and "Sustainable Development Best-Practice Principles for TWSE/TPEX Listed Companies". The GRI Standards Index is provided in the appendix for quick search and query of relevant chapters.

Boundary and Scope of the Report

This report disclosed Chung Hwa's performance in major economic, environmental, and social aspects from January 1, 2023 to December 31, 2023. All financial data are denominated in NT\$ and the financial statements have been prepared in accordance with the International Financial Reporting Standards (IFRSs). Except for the financial performance, which is within the scope of consolidated financial statements, other relevant activities of subsidiaries are not covered, Taiwan's Taoyuan Plant No. 1, Taoyuan Plant No. 2, and Changhua Plant are the scope of disclosure.

Report Review

For the data and information disclosed in the report, the convener of the task force of the Company's Sustainable Development Committee will gather the top executives or senior managers of relevant departments to facilitate the compilation of the report, formulate the overall sustainability policy, identify major sustainability issues, and compile information from various departments and sustainability performance indicators, etc.

The completeness and accuracy of the information and sustainability performance indicators of each department are initially reviewed by the department heads, and then the information data re-examination, content planning, editing and revision are carried out by the working group of the Sustainable Development Committee. The sustainability report is compiled for verification by a third-party external institution, and submitted to the Board of Directors for public disclosure.

Report Publication

Previous version (2022 Corporate Social Responsibility Report): Issued in June 2023

Current version (2023 Corporate Social Responsibility Report): Issued in June 2024

Chung Hwa regularly publishes the "Sustainability Report" every year, and discloses it on the Company's website and provides an electronic file for download.

If there is any error, correction, or information update in the report, the electronic file content announced on the Company's website shall prevail.

Contact Information

If you have any suggestions or questions about this report, please contact us through the following contact information.

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Message From the Management

It has been 68 years since Chung Hwa Chemical was established in 1956. Along with the expectation of sustainable management, we have looked for opportunities and growth momentum with steady steps. The Financial Supervisory Commission has announced the "Corporate Governance Sustainable Development Blueprint 3.0". The core vision of the blueprint is to "Implement corporate governance and enhance corporate sustainable development", "Create a sound ESG ecosystem and strengthen the international competitiveness of the capital market", "Strengthen the Board of Directors' functions to enhance corporate sustainable value", "Increase information transparency and promote sustainable operations", "Strengthen stakeholders communication and create good interaction channels", "In line with international norms and guidance due diligence" and "Deepen the Company's sustainable governance culture, providing diversified products" as the center. As business operators, we play an extremely important role in promoting sustainable development strategies and corporate culture. Since 2018, Chung Hwa has published the sustainability report annually to enhance corporate transparency and trust, facilitate stakeholder engagement and communication, promote sustainable development goals, and demonstrate our commitment to corporate governance.

2023 was a year of uncertainties. In view of geopolitics, extreme weather, the spread of war, disordered carbon emissions and other issues, the accompanying rise in raw materials, soaring oil prices, inflation, fluctuations in interest rates, labor shortages, electricity prices, etc. and factors such as promotions and other factors have led to an increase in the overall operating cost of the Company. Among these uncertainties, Chung Hwa regards sustainable development as its long-term strategy. We must not only pursue short-term profits, but also consider the long-term development of the enterprise and overall interests of society. We adhere to the sustainable development goals with environmental protection, social responsibility and economic benefits as the core, and strive to find a balance to achieve sustainable development.

Chung Hwa continues to uphold the spirit of ESG (Environmental, Social, and Governance) for sustainable corporate development and integrates it into various operations and management. We have formulated the following strategies:

Corporate Governance Aspect

Establish a sound corporate governance structure to ensure information transparency and fair decision-making, and protect shareholders' rights and interests. Strictly comply with laws, regulations, and industry norms, safeguard the legitimate rights and interests of the enterprise, prevent risks, and protect the rights and interests of stakeholders. Establish a risk management mechanism to promptly discover and respond to potential risks and ensure the continuous operation and development of the Company.

Environment Aspect

In response to global climate change, we have strengthened climate change governance, and implemented greenhouse gas emission actions in the value chain. Chung Hwa continues to improve the efficiency of manufacturing processes and energy resources, reduce pollution emissions, reduce the impact on the environment during the production process, and is committed to waste recycling. In order to reduce the environmental load caused by waste disposal, we will also explore low-carbon production models, accelerate the pace of enterprise upgrading, and make Chung Hwa more competitive in the market.

Society Aspect

The culture of safety is a core value for Chung Hwa. We aim to provide a safe and healthy work environment, value the training and career development of our employees, protect the rights and benefits of our employees, and realize the value of a happy enterprise.

With the passion for sustainable and mutual prosperity, Chung Hwa continues to care for society and support local development, actively participate in community public welfare activities, support local social development projects, give back to the community, establish a good corporate social image, and strengthen the positive influence of the Company to make a warmer, happier and more harmonious society.

Regardless of how the economic situation changes in the future, Chung Hwa will always adhere to the belief in justice and charity to create value for employees, partners, and stakeholders. These strategies will run through all fields of our business management and become the guiding principle of our actions. We will work together with employees, stakeholders, and all sectors of society to realize the goal of corporate sustainable development. While pursuing the long-lasting growth of Chung Hwa, we also bring a positive influence to society, and shoulder the corporate social responsibility of constructing positive values for the environment, economy, and society.

Chung Hwa Chemical Industrial Works, Ltd.
Chairman

王文元



Key Sustainability Performance

Environment

Annual energy consumption is
77,594 GJ

Unit product electricity consumption is
0.455 GJ/metric tons

Total annual water intake decreased by
35.71 million liters

Water consumption per unit product is
0.001467 million liters/metric tons

Total annual greenhouse gas emissions is
9,961.3 (tCO₂e)

Society

The total annual welfare expenditure was
NT\$6,202,530.

Accounted for **0.36%** of revenue

There are **198** males (**78%**)

There are **55** females (**22%**)

222 employees underwent health checkups in 2023

Number of people undergoing special health
examination: **8**

No major occupational injuries or diseases in 2023

Picked up **2,830 kg** of marine debris during beach
cleanup activities

Total social welfare expenditure of
NT\$188,630

Governance

Revenue of **NT\$1,723,980,000**

Net income of **NT\$46.05 million**

Earnings per share of **NT\$0.39**

Total annual product output is
145,524 metric tons

Basic Chemicals of **92,700 metric
tons**

Specialty Chemicals of **5,100 metric
tons**

Electronic Chemicals of
47,724 metric tons

No privacy rights and complaints in 2023



Assurance

大中國國際聯合會計師事務所
PKF Taiwan

PKF
Certified Public
Accountants & advisers

會計師有限確信報告

臺灣中華化學工業股份有限公司 公鑒：

本會計師接受臺灣中華化學工業股份有限公司（以下簡稱「中華化學」）之委任，對中華化學民國 112 年度（2023 年度）永續報告書中所揭露之特定績效指標（以下簡稱「確信標的資訊」）執行確信程序並出具有限確信報告。

確信標的資訊與適用基準

中華化學依據臺灣證券交易所「上市公司編製與申報永續報告書作業辦法」第四條所規定之化學工業應加揭露永續指標資訊及其適用基準詳列於附件一。

管理階層之責任

中華化學管理階層之責任係依據臺灣證券交易所「上市公司編製與申報永續報告書作業辦法」之規定，以及參考全球永續性報告協會（Global Reporting Initiative, GRI）發布之通用準則、行業準則及重大主題準則編製永續報告書，並建立及維持與永續報告書編製有關之內部控制，以確保永續報告書所列之標的資訊未存有導因於舞弊或錯誤之重大不實表達。

會計師之責任

本會計師係依照財團法人中華民國會計研究發展基金會所發布之確信準則 3000 號「非屬歷史性財務資訊查核或核閱之確信案件」之要求規劃並執行有限確信工作，以對第二段所述之確信標的資訊是否存在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，對與有限確信相關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，惟其目的並非對中華化學民國 112 年度（2023 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

本會計師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、專業能力及專業上應有之注意、保密及專業行為。此外，本會計師所隸屬會計師事務所已遵循品質管理準則 1 號「會計師事務所之品質管理」，該品質管理準則規定會計師事務所設計、付諸實行及執行品質管理制度，包含與遵循職業道德規範、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：

1. 取得中華化學民國 112 年度（2023 年度）永續報告書，並閱讀其內容；
2. 訪談中華化學管理階層及相關員工，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；
3. 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，或於必要時檢視相關文件，以獲取足夠及適切之有限確信證據。

上述確信程序係基於本會計師之專業判斷，包括辨認確信標的資訊可能存在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暨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，所執行程序之性質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低於合理確信案件中取得者。

先天限制

中華化學民國 112 年度（2023 年度）永續報告書內容涵蓋非財務資訊，對於該等資訊之揭露內容可能涉及中華化學管理階層之重大判斷、假設與解釋，故不同利害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標的資訊有未依適用之基準編製而須作重大修正之情事。

其他事項

中華化學網站之維護係中華化學管理階層之責任，對於本確信報告於中華化學網站公告後任何確信標的資訊或適用基準之變更，本會計師將不負就該等資訊重新執行確信工作之責任。

大中國國際聯合會計師事務所

會計師：高國晟

高國晟

民國 113 年 5 月 8 日

1 Overview of the Company

1-1 Company Profile

1-2 Management Philosophy and Core Values

1-3 Main Products and Their Uses

1-4 Market Overview

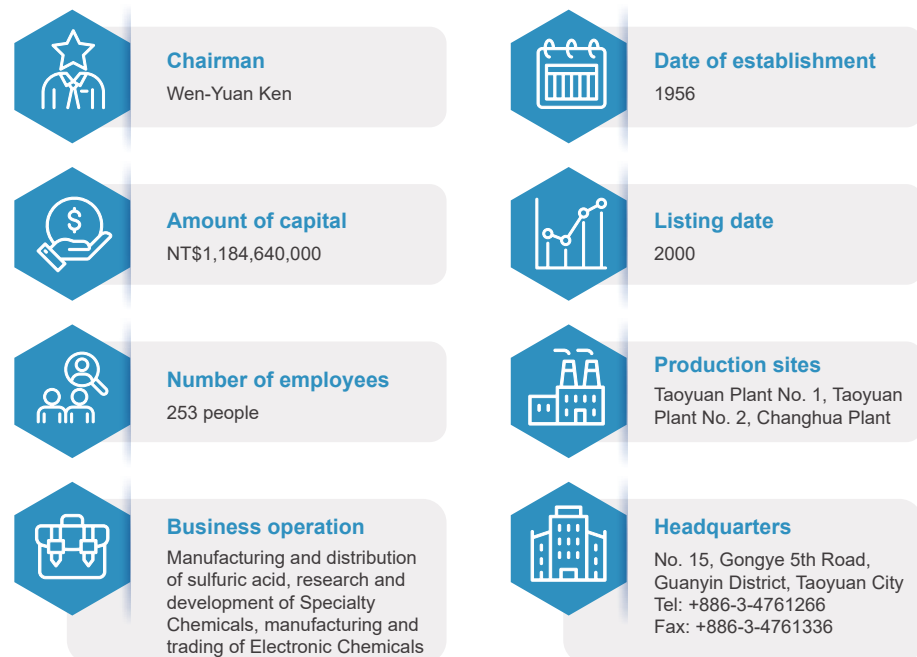
1-5 Production and Marketing Policy

1-6 Financial Performance

1-7 Research and Development Direction



1-1 Company Profile



Established in 1956, Chung Hwa Chemical Industrial Works, Ltd. ("Chung Hwa") has grown for more than 60 years, from Basic Chemicals to Specialty Chemicals and Electronic Chemicals. Chung Hwa's mission is to create helpful chemicals to improve the world.

With three major product lines as the main services:

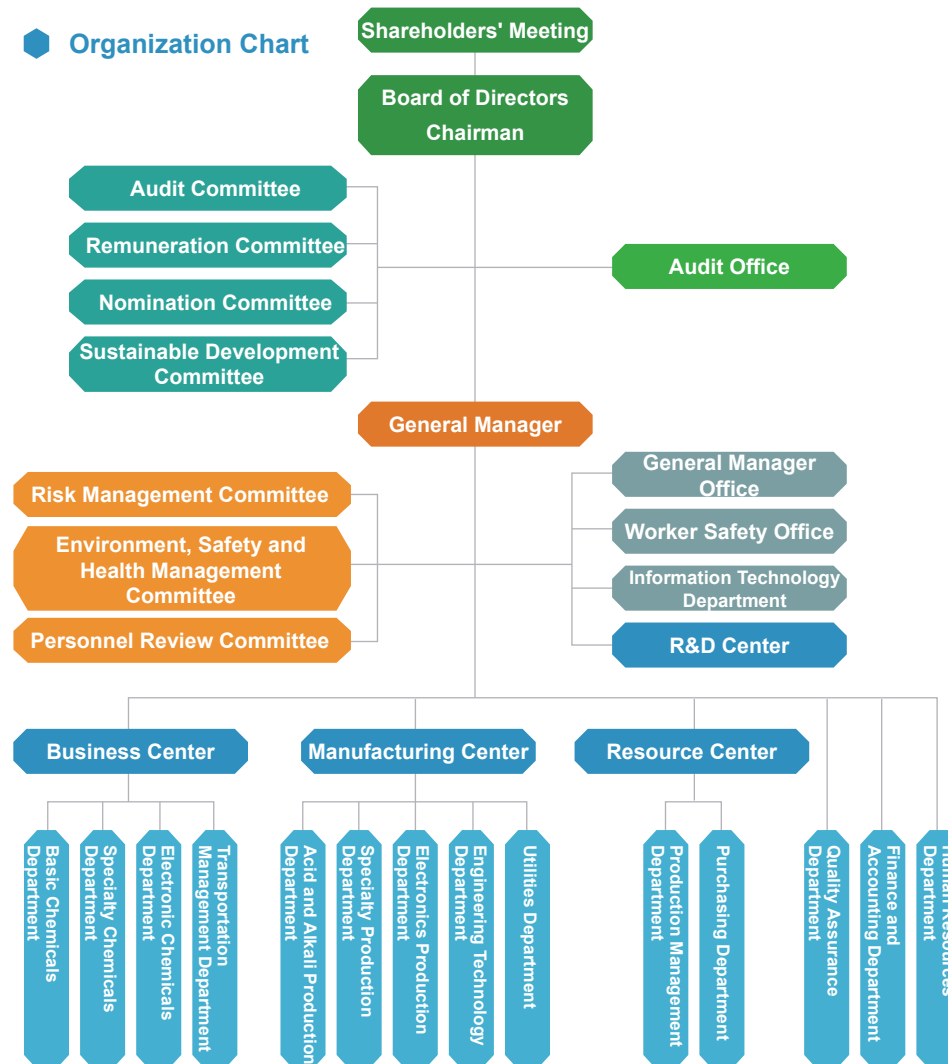
Basic Chemicals

Specialty Chemicals

Electronic Chemicals

The initiative is extended to Taiwan, Asia Pacific, Europe, and America to bring positive changes and values to Taiwan's economic, social, and environmental development.

Organization Chart





Taoyuan Plant No. 1

R&D Center
Warehouse
Manufacturing Center
Basic Chemicals
Specialty Chemicals
Electronic Chemicals



Taoyuan Plant No. 2

Head Office
Warehouse



Changhua Plant

Specialty Chemicals
Basic Chemicals
Warehouse

Time	Important events
1948	Mr. Han-Cheng Kan set up a factory in Banqiao, New Taipei City. Its main products are Basic Chemicals such as sulfuric acid, nicotinic acid, and aluminum sulfate.
1956	Reorganized as Chung Hwa Chemical Industrial Works, Ltd. and built a plant in Banqiao.
1971	Relocated the plant to Yingge Township, New Taipei City.
1987	Purchased an additional 11,300 square meters of land in Guanyin Industrial Park as the planned land for new factory (Taoyuan Plant No. 1).
1988	Taoyuan Plant No. 1 built the first sulfuric acid production line.
1991	The production line was relocated to Guanyin Industrial Park through the factory relocation plan.
1993	The second sulfuric acid production line was added for trial operation and started production.
1994	Signed a contract of merger with Tai Lien Chemical Co., Ltd.
1996	Signed a contract with Merck-kanto Advanced Chemicals Ltd. to set up a factory to produce electronic-grade sulfuric acid.
1999	Was officially listed on Taipei Exchange (OTC).
2000	Passed the ISO 9001 international quality management system certification.
2000	The Company was officially listed on the centralized market after being listed on the OTC market.
2002	Signed a licensing and joint development contract with DuPont of the United States.
2002	Signed an OEM Electronic Chemicals (developer) contract with JSR Corporation of Japan.
2003	Completed the production line of Electronic Chemicals (developer) outsourced by JSR Corporation of Japan.

Time	Important events
2006	Investment in the construction of polyaluminum chloride plant for tap water treatment agent.
2009	Purchased an additional 1,700 square meters of land in Chuansing Industrial Park, Changhua for business expansion.
2009	Construction of an electronic-grade sulfuric acid plant.
2010	Purchased an additional 5,100 square meters of land in Guanyin Industrial Park for the planned use of Taoyuan Plant No. 2.
2014	Expansion of electronic grade sulfuric acid plant and the developed fluid plant.
2015	Construction of the administration and sales building for Plant No. 2. Renovated Pin Yen Building and expanded the testing and analysis equipment for Electronic Chemicals. Passed the ISO 14001 Environmental Management System Certification.
2016	Passed the OHSAS 18001 Occupational Safety and Health Management System Certification.
2017	Passed the ISO 9001:2015 Quality Management System Certification. Passed the ISO 14001:2015 Environmental Management System Certification. In 2017, the Company received "Evergreen Enterprise Excellence Award" at 11th Taoyuan City Outstanding Enterprise Award.
2018	Passed the ISO 45001:2018 Occupational Health and Safety Management System certification.
2019	Expansion of electronic grade sulfuric acid plant.
2021	Expand the production line of Specialty Chemicals for electronics.
2023	Construct a new advanced electronic-grade sulfuric acid plant.

1-2 Management Philosophy and Core Values

Management Philosophy

Creating Helpful Chemical to Improve the World

Three Major Business Philosophies

1. Stable financial growth:

With its corporate brand of deep penetration into Taiwan market and long-term integrity management, Chung Hwa has achieved steady and conservative financial growth with the support and trust from major shareholders and many banking institutions in Taiwan. Under the challenges of changes in the economic environment, the Company continues to bring stable return on assets to shareholders, while creating services for product upgrades in the supply chain of chemical market in Taiwan and the Asia-Pacific region.

2. Continuous product improvement and service innovation

Internal quality improvement and product project promotion have become the key to the Company's sustainable growth and industrial competitiveness. Committed to product development for energy conservation, carbon reduction, and customized services to respond to market competition and environmental changes.

3. Sustainable development and future:

The Company regards sustainable development as an important goal of its operations and demonstrates its commitment to the environment and society by actively taking environmental protection measures, reducing its carbon footprint and participating in social responsibility practices. In the future, Chung Hwa Chemical will continue to delve into the fields of semiconductor materials, special polymers and water treatment chemicals to create more development opportunities for the Company.

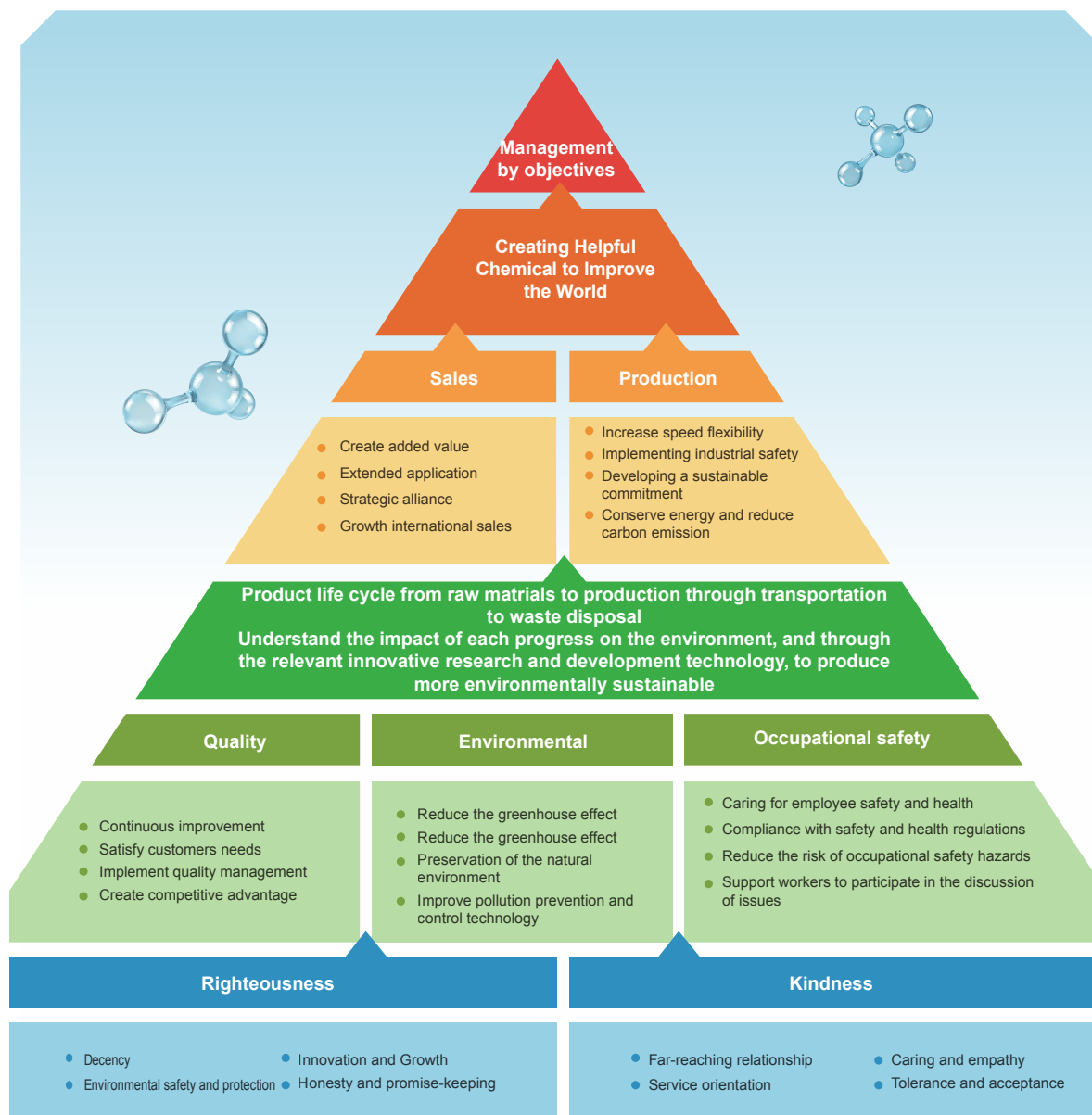
Sustainable Development Strategy

1. Obtain and pass ISO 14064 certification in 2025 to establish carbon inventory, carbon footprint, and carbon reduction capabilities; comprehensively identify greenhouse gas impacts and review carbon reduction effectiveness; manage greenhouse gas emissions more comprehensively; and improve Chung Hwa's contributions to sustainable development and climate change management.

2. With the goal of net-zero carbon emissions by 2050, Chung Hwa will develop a comprehensive strategy, including reducing fossil fuels, using renewable energy, improving energy efficiency, optimizing production processes, reducing greenhouse gas emissions, and establishing a monitoring/reporting/verification mechanism to ensure emissions are accurately tracked and reported. We are committed to sustainable development and making positive contributions to the earth and future generations.

The core values of Chung Hwa uphold the spirit of Christianity:

Emphasize the principle of justice and charity, pay attention to the needs and development of internal employees, and treat related industries, suppliers, customers, peers, and partners with sincerity; value long-term relationships, and create common growth and mutual benefits; establish a complete quality, environment, safety and health management system; focus on safety, value talents, protect the environment, and advocate good professional ethics.



A Corporate Culture Centered on Justice and Charity

Righteousness

Integrity

Integrity is the foundation of character and must be the basis for all words and actions. Commitment to customers, we must go all out. Equality and mutual respect between peers. We select and cooperate with suppliers in a reasonable, honest, and fair manner, and have established a reputation for business integrity in the industry.

Honesty and Integrity

We act transparently, speak the truth, and stay committed to people, safety, and the environment.

Environmental safety and protection

Emphasis on industrial safety and environmental protection to establish a safe working environment, ensure personnel safety, promote environmental and industrial safety education and training, implement self-inspection and 5S implementation, and reduce disaster risks. Promote a circular economy and actively implement pollution prevention and control.

Growth innovation

We do not become complacent or resist changes. We keep learning, seeking better methods, and doing better. Our vision is to create long-term value for customers, the Company, and society.

Affection

Care and empathy

Mutual respect, rational communication and experience sharing at work to jointly achieve the organizational vision.

Tolerance and acceptance

Overcome obstacles and difficulties with a proactive, initiative, and positive attitude.

Long-term relationships

We treat shareholders, employees, customers, suppliers and other partners with sincerity, and create long-term relationships of mutual prosperity and mutual benefits, harmony and interaction.

Service orientation

Care for and manage internal and external needs, take a proactive approach, uphold the principle of mutual benefit, and establish long-term partnerships.

1-3 Main Products and Their Uses

Current Products and Products in Development

Products	Current products	New products planned and developed
Basic Chemicals	<ul style="list-style-type: none"> Concentrated sulfuric acid, fuming sulfuric acid, various dilute acids Chlorosulfonic acid Aluminum sulfate, polyaluminum chloride Manufacturing, trading, and sales of sodium silicate, liquid caustic soda, hydrochloric acid, phosphates, and various inorganic chemicals 	<ul style="list-style-type: none"> Water treatment product application
Specialty Chemicals	<ul style="list-style-type: none"> OEM series Dye pigment intermediates Resin monomers used in the electronics industry Self-developed projects Functional fiber intermediates Thermal paper raw material intermediate series Toluene Sulfonated Products Reactive UV absorber Special dye intermediates Special modified plastic resin monomer 	<ul style="list-style-type: none"> Special functional resin/plastic material 5G/6G/automotive related materials Dye pigment intermediates Biomass itaconic acid and its derivatives
Electronic Chemicals	<ul style="list-style-type: none"> High-purity semiconductor grade sulfuric acid Yellow light process developer (agent) Metal etching liquid (agent) Solvent cleaning solution (agent) Photoresist remover for wet/dry film products 	<ul style="list-style-type: none"> Wet Electronic Chemicals OEM/ODM Various solvents/acid-base mixed acid for electronics industry Developer and special formulated products

The Company's Three Main Product Lines Are Described as Follows:

1. Basic Chemicals

Chung Hwa is engaged in the business of Basic Chemicals. Basic chemical materials and products are widely used in various industries, such as the chemical industry, light industry, textile metallurgy, petroleum, medicine and other industries. Because the acid and alkali industry is the mother of the general chemical industry, the manufacture of most industrial products is directly or indirectly related to the application of acid or alkali chemicals, which are widely used in industry. However, the main domestic economic development is also based on industry, these base chemical products will always have stable demand in the overall economic market. It has been more than half a century since the establishment of Taiwan-based Chung Hwa Chemical Industrial Works, Ltd., and it has participated in the development of the domestic economy ever since. It has also witnessed the vigorous development of the domestic chemical industry. In terms of the acid-base industry, Chung Hwa mainly supplies basic chemical materials and other industries. Therefore, this industry has the characteristics of a major upstream industry. The economic value chain is derived from the upstream to the downstream, making the prospects of the entire basic chemical industry more and more stable, and then extending the application channels of products on this basis to drive the development of products with higher added value, and the gross profit of chemical industry has a trend of increasing year by year.

Phosphate rock and sulfuric acid are necessary raw materials for the production of industrial phosphates. Raw material price fluctuations may challenge corporate profitability, but the widening gap between supply and demand affects the price trend of industrial phosphates. Many manufacturers in Europe and North America have even increased their production capacity through acquisitions and mergers to increase product mix and strengthen their business.

As far as the industrial phosphate market is concerned, industrial phosphates are used in various foods, including bread, seafood, dairy products, and poultry products. Because phosphorus is an important mineral element required by the human body, the main source of its intake comes from natural foods or food phosphate additives are one of the natural ingredients of almost all foods. In addition to being added to foods as a quality improver and improving food structure and taste, another function is to be used as a mineral nutrition fortifier. Rising health awareness in consumers and changing dietary patterns have led to an increase in the consumption of food-grade phosphates, thereby driving the growth of the industry. The demand for industrial phosphates is driven by the preservation of moisture and flavor, prevention of lipid oxidation, prolongation of shelf life, and increase of application scope of seafood products. Favorable government regulations by FDA and USDA for product use in the food industry will drive product demand.

In recent years, the awareness of environmental protection has been on the rise. In response to the future international chemical product market development trend, the global circular economy issue will be a major opportunity and challenge for the overall industry. Chung Hwa is also actively continuing to cultivate and deploy in the field of basic wastewater treatment circular economy. At the same time, we combine market regulations, meet customer needs to expand into new business areas and enhance the Company's sustainable management capabilities.

2. Specialty Chemicals

Specialty Chemicals are high-value products of the petrochemical industry. The definition and scope of Specialty Chemicals in Taiwan can be divided into eight categories according to the type of product, including eight major areas such as plastic additives, coatings, dyes and pigments, adhesives, surfactants and cleaning products, cosmetics, Electronic Chemicals and other Specialty Chemicals.

The rapid advancement of technology promotes continuous breakthroughs in materials science. Therefore, the field of Specialty Chemistry plays a key role in technological innovation. Nanomaterials, optoelectronic materials, and semiconductor materials are all applications of Specialty Chemistry. Since Chung Hwa has been in the field of Specialty Chemicals for more than 20 years, we have continuously used and strengthened our core competencies, as well as continuous learning and hard work. In recent years, the turnover and profit ratio of the Specialty Chemicals business have increased year by year.

In recent years, people's livelihood has gradually become more dependent on consumer electronics. 5G/6G/automotive-related high-end electronic products have also become the focus of development in the consumer electronics market. By integrating the monomer synthesis technology and mass production experience in recent years, we are actively developing customized special resin monomer services, exploring the market of special resins for plastics and coating applications, enhancing product specialization and high quality, increasing gross profits of Specialty Chemicals products and optimizing our product business structure. By gradually deepening the development of novel product technologies and strengthening development efficiency, we will establish the fine and high serviceability of our specialized departments in the market, and look forward to playing an important role as a supplier of special raw materials in the chemical fiber coatings/electronic materials and other markets.

3. Electronic Chemicals

Electronic Chemicals generally refer to the chemical products, raw materials and related materials used in the production process and assembly process of the electronic information industry. Currently, related industries with a wide range of applications include integrated circuits (IC), packaging and testing (Bumping), displays (LCD, Micro LED), printed circuit boards (PCB) and communications, etc. Electronic Chemicals have a wide range of products and technologies. The product range includes gases, high-purity chemicals, various metals, plastics, resins, ceramics, ordinary and high-purity organic or inorganic compounds and mixtures. In response to the development trend of the international chemical product market in the future, the demand for advanced semiconductor wafer processes is also increasing. Chung Hwa will continue to improve product quality to meet the needs of development of new specifications and special formulas for serving customers in the optoelectronics, packaging, and semiconductor markets. The technology of high-purity semiconductor-grade sulfuric acid in Chung Hwa is quite mature. With the demand of the semiconductor industry in the future, after years of hard work, there has been a significant leap in profitability. At this stage, we are still actively planning the establishment of new production lines, and expect a profitable growth in the future. At the same time, Chung Hwa is also speeding up the layout of wet Electronic Chemicals/high-end chemicals, and continues to move towards the semiconductor, memory packaging and testing (Bumping), etc. industries. It is expected that the overall product mix will increase in the future, which will definitely help increase the sales volume.



1-4 Market Overview

Industry Status and Development

The chemical materials manufacturing industries are divided into basic chemical materials manufacturing, petrochemical raw material manufacturing, man-made fiber manufacturing, fertilizer manufacturing, and synthetic resin, plastic, and rubber manufacturing. They generally cover the upper and middle reaches of the petrochemical industry. The chemical industry in a broad sense refers to the industry that uses organic or inorganic raw materials to manufacture intermediate materials and downstream products and other chemicals. Chemicals are the foundation of everyday industries and technology industries, and they are inseparable from a country's economy. Chemicals can be divided into basic (bulk) chemicals and Specialty Chemicals by volume and composition. The difference between the two is that basic (bulk) chemicals are only sold with chemical components, are single chemical substances, are produced in large quantities, and have lower added value than Specialty Chemicals; Specialty Chemicals are mostly compounds or formulas. The organization is complex and the technical threshold is high. Sales are mostly based on functionality and special purposes, and the added value is higher than Basic Chemicals.

Relationship of Upstream, Midstream, and Downstream Industries

The acid-base industry is the mother of the general chemical industry. In terms of industrial structure, the acid-base industry can be classified into upstream and intermediate chemicals because the manufacturing of most industrial products is closely related to the basis of chemicals (acid, alkali). Because there are many types, especially the acid industry, sulfuric acid and its related industries are illustrated in the figure below. As for the Specialty Chemicals section, Chung Hwa is engaged in the production and development of intermediates for various chemical products. Such products are widely used in various chemical industries. There are also reports on the market that intermediates are the basic raw materials of specialized industries. They are used in dyeing and finishing industries, electronics, optoelectronics, man-made fibers, inks and other related industries. The conductive polymer materials that have been developed will be widely used in passive components and other electronic product industries.

The chemical industry is not only related to traditional manufacturing industries, but its basic theory is also the basis of various applied sciences. In recent years, it has been closely related to biochemistry, polymers, aerospace materials, medicine, semiconductor electronic materials, photoelectrochemical engineering, polymer science, pollution prevention and control, Specialty Chemicals and other technologies, becoming both a traditional industry and part of the high-tech industry. Electronic Chemicals are one of the indispensable elements in the production process of electronic products. Although they account for a relatively low proportion of the cost, they occupy a very important industrial position. Therefore, although the sales volume of the relevant manufacturers is not large, the technical threshold and gross profit margin are very high, so this is also the golden goose for many international chemical companies. For Taiwan, a global powerhouse of electronic and IT products, how to grasp the key upstream components, materials,

and even chemicals has become an important key to the development of our country's technology industry. Electronic materials are the upstream of the information and electronics industry and the rock of the electronics industry. For the chemical industry, electronic materials are part of the Specialty Chemicals. Although the market value is not as high as that of the petrochemical industry, it has high added value. It can be said that electronic materials are the intersection of the chemical industry and the electronic industry.

Product Development Trends and Competition

The chemical industry is the main force supporting Taiwan's manufacturing industry and plays an important role in the international market. However, with the changes in the international environment, the chemical industry is faced with the dilemma of rising materials, falling profits, increasing number of competitors, and the concern for environmental protection and human health. The awareness has improved, and relevant policies and laws have become more stringent, so Chung Hwa is also actively seeking transformation. The current business running is focus on upgrading product levels, developing environmentally friendly alternative products, and increasing added value. In line with the promotion of "Global Harmonized System" (GHS), the hazard classification and labeling of chemicals have been implemented since 2016 to strengthen the safety management of workers over the handling of chemical operations in chemical industry workplaces.

In terms of industrial development, Specialty Chemicals are a highly technical field in the chemical industry, where supply and demand are not easily imbalanced, and where innovation is easy. However, the global production and technology of Specialty Chemicals are mainly concentrated in a few large multinational corporations, such as BASF, Bayer, Henkel in Germany, DuPont, Dow in the United States, BP in the United Kingdom, Clariant in Switzerland, TOTAL in France, and Akzo Nobel in the Netherlands. Compared with the above-mentioned countries, there is still a huge gap in competitiveness, technology, and sales in the international market. Therefore, it is necessary to actively accumulate R&D capabilities and professional technologies, and to take advantage of Taiwan's position as a market hub in Asia and with its continued participation in international trade organizations, it can continue to occupy a place in the global market.

Today's global chemical industry is no longer an industry that remains stagnant and whose performance only changes with fluctuations in the economy and product price. Products in the chemical industry are widely used by other industries. Recent new industry trends such as electric vehicles and smart grids have opened up new potential markets for chemical companies. In order to fully capture the value of old and new markets, many chemical companies around the world are also using new technology to carry out digital transformation in various fields of the value chain.

(1) Basic Chemicals:

This is a mature and stable product. In addition, we have been deeply rooted in the local market for many years, and we have a large and stable customer base. We are an oligopoly in the market. Other competitors have their own sales areas, and there are positive relationships with each other. At the same time, we have the ability to develop and adjust in real time to respond to customers' increasingly stringent needs and manufacture products to customer specifications to enhance the added value of products.

(2) Specialty Chemicals:

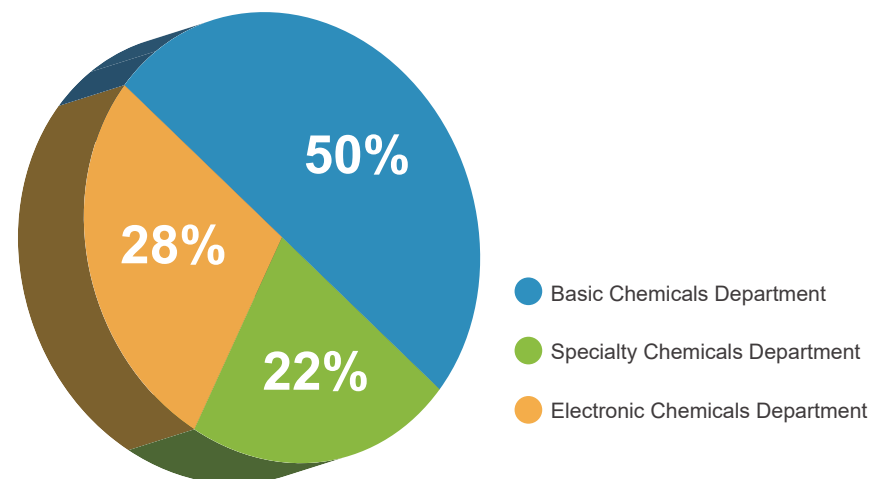
Consists of a small-scale, diverse and precise production and development model. Its products cover a wide range of applications. We are positioned as a professional developer and manufacturer of "precision Specialty Chemicals". We are actively establishing strategic alliances with major international chemical companies in order to become a precision chemical manufacturer. As a comprehensive supplier of chemicals, we also jointly develop new technologies, new processes, and new products with well-known domestic academic institutions to accumulate rich experience in "product cooperative development" and "process technology transfer".

(3) Electronic Chemicals:

Nowadays, the sales of semiconductor/Electronic Chemicals have entered a state of perfect competition, and all companies focus on the R&D of new products and the improvement in quality of existing products. In addition to being committed to meeting the quality requirements of semiconductor, packaging and testing and optoelectronic customers, Chung Hwa also needs to deepen product production control, quality assurance capabilities, technical support assistance and complete after-sales services in accordance with customer quality and stable supply needs. In addition to the existing customers in the panel industry, the Company has upgraded relevant technical capabilities to develop semiconductor-grade sulfuric acid products required by the semiconductor industry, and cooperated with well-known manufacturers in the industry to move towards areas with higher quality requirements. Looking forward to 2024, legal institutions will still select star industries such as semiconductors, electric vehicles, price increases, 5G/6G, and long-distance demand, which will drive the foundry, IC design, Wi-Fi 6, silicon wafers, equipment materials, automotive electronics, DRAM, passive components, 5G/6G equipment and raw materials and other sub-industry needs. We believe that the demand benefits generated by these star industries will bring more demand for Basic, Specialty and Electronic Chemicals.

1-4-1 Market Overview Analysis

Sales ratio of the three major business divisions



The products are mainly sold in Taiwan, and the product sales areas and proportions are:

Country	Taiwan	Asia	America	Europe	Total
Operating income (NT\$ thousands)	1,601,787	68,543	35,608	18,037	1,723,975
Proportion (%)	93%	4%	2%	1%	100%



Long and Short-Term Business Development Plans

1. Short-term business development plans

(1) Basic Chemicals

- A. Actively and continuously develop new products that connect upstream and downstream, and replace low-profit products.
- B. Actively build sales channels in the middle and lower reaches of the industry, introduce related trade products and increase connections with the market and customers.
- C. Extend the industrial field and create added value.

(2) Specialty Chemicals

- A. Enhance product quality, enhance the professionalism and versatility of production personnel, increase the utilization rate of on-site personnel and equipment, and reduce production costs.
- B. Expand sales channels in the global market.
- C. Actively seek cooperation opportunities with foreign major manufacturers through market deployment.
- D. Strengthen the production capacity of special monomers and cultivate the market of coating applications and Electronic Specialty Chemicals.

(3) Electronic Chemicals

- A. Expand equipment production capacity and improve product quality to meet the future demand for advanced manufacturing processes in the semiconductor industry.
- B. Expand OEM/ODM partners for electronic and chemical products, and achieve self-product diversification.
- C. Expand the timing of front-line customer contact to adjust the overall market sales status.



2. Medium and long-term business development plans

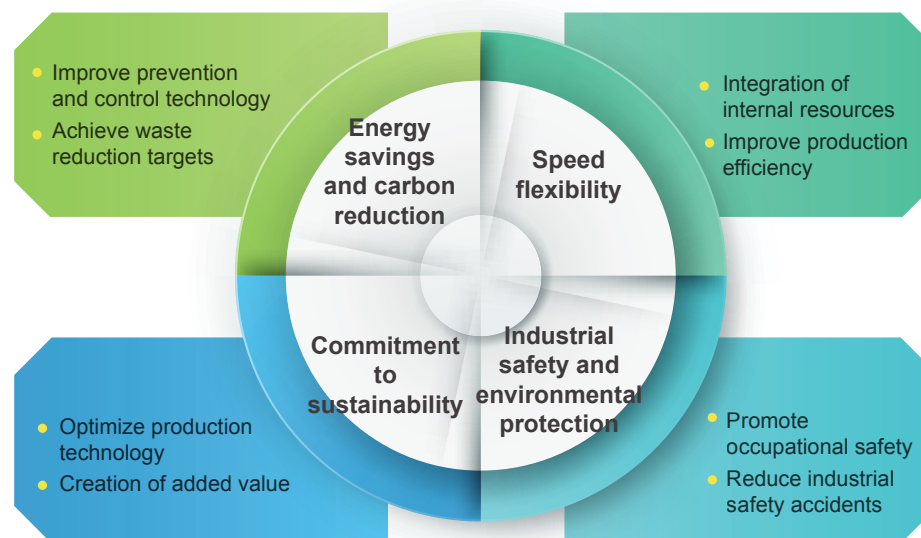
(1) Basic Chemicals: Develop vertically and horizontally integrated supply chain for industrial chemicals.

(2) Specialty Chemicals: We will position ourselves as a provider of “chemical process technology solutions” and explore new application markets, hoping to become a pioneer in the professional development and manufacturing of “precision specialty chemistry” in the future.

(3) Electronic Chemicals: Expand the types and channels of production and sales of Electronic Chemicals, actively cooperate with international chemical giants in strategic alliances for joint development, and accumulate development and process experience.

1-5 Production and Marketing Policy

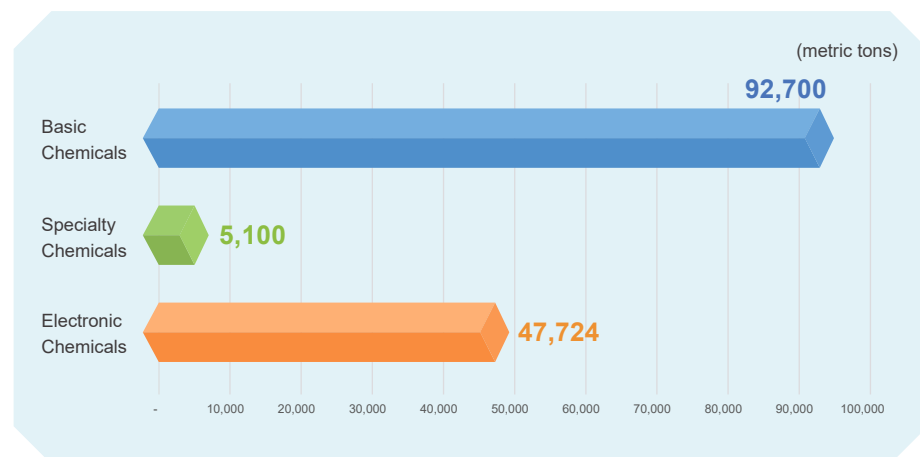
1-5-1 Production Policy



1-5-1-1 Products Produced

The products produced in 2023 were classified by category as follows:

Production volume in 2023 by product category



1-5-2 Sales Policy

1. International sales layout: Expand overseas marketing, deepen market development, and develop forward-looking products.
2. Extension of industrial fields: Extend existing products into different fields and develop self-owned products to enter the market.
3. Create added value: Increase product market share and provide comprehensive services in the product chain.
4. Collaborate with strategic partners: Production, technology and sales.

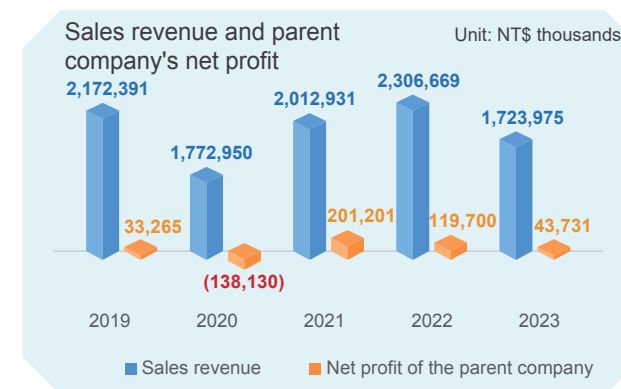
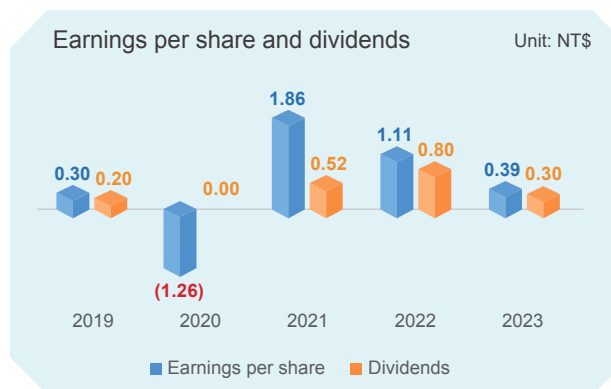
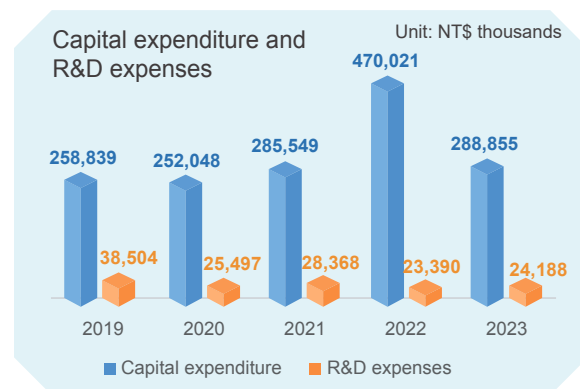
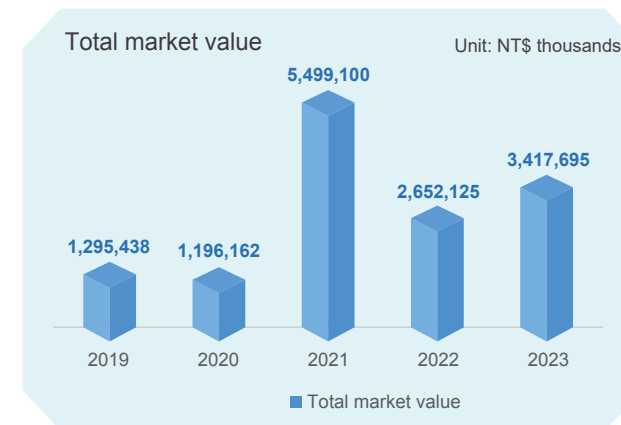
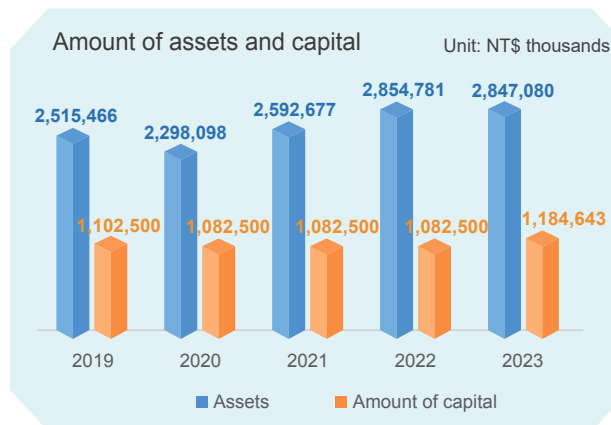
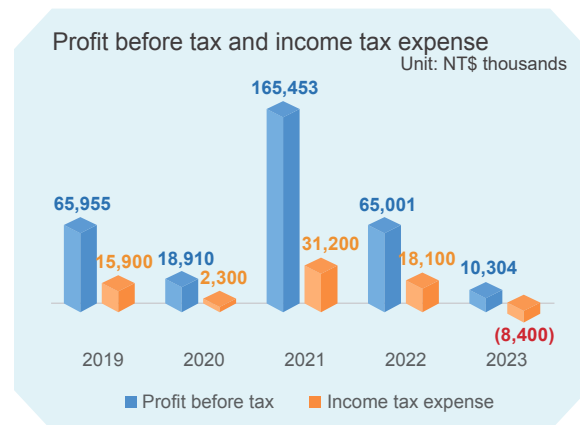
1-6 Financial Performance

In 2023, Chung Hwa's consolidated revenue was NT\$1,723,980,000, a decrease of 25.26% from NT\$2,366,670,000 in the previous year; consolidated net profit after tax was NT\$46,050,000, down from NT\$127,120,000 in the previous year, which represented a decrease of NT\$81,070,000 and an earnings per share of NT\$0.39.

Consolidated Financial Performance

Year Item	2019	2020	2021	2022	2023
Operating revenue (NT\$ thousands)	2,172,391	1,772,950	2,012,931	2,306,669	1,723,975
Operating cost (NT\$ thousands)	1,914,243	1,579,260	1,640,333	2,024,723	1,531,261
Net operating profit (NT\$ thousands)	52,715	11,254	159,522	66,209	3,059
Net income (loss) for the period (NT\$ thousands)	65,955	18,910	165,453	65,001	10,304
Income tax expense (benefit)	15,900	2,300	31,200	18,100	(8,400)
Net income from continuing operations	50,055	16,610	134,253	46,901	18,704
Profit (loss) from discontinued operations	(18,501)	(170,505)	73,772	80,219	27,349
Net income (loss) for the period (NT\$ thousands)	31,554	(153,895)	208,025	127,120	46,053
Earnings (loss) per share (NT\$)	0.3	-1.26	1.86	1.11	0.39

Key Financial Performance Indicators in the Past Years



1-7 Research and Development Direction

Chung Hwa's R&D team enhances R&D literacy and momentum through talent recruitment, management model, and organizational adjustment, assisting the Company in the goal of transformation and responding to rapid changes in the macro environment. Re-position the Company's product strategy through core technology inventory, and introduce a new project operation management system to ensure the effective use of resources and implement risk management and control based on feasibility assessment. In recent years, the chemical supply chain has been affected due to factors such as the pandemic and international tension. Chung

Hwa has relied on its many years of experience and core technology to continue to play the role of a supplier of chemical materials in Taiwan, while facing issues such as climate change. The Company has also actively invested in relevant research, taking the concepts of how to achieve low-carbon emissions, energy savings, and waste reuse into account when it comes to raw materials, energy, and waste in the development process of new products, and complying with regulatory requirements in order to achieve the goal of corporate sustainability.

2 Stakeholders Identification and Communication

2-1 Management of Sustainable Issues

2-2 Stakeholder Communication

2-3 Sustainable Development Goals (SDGs)

2-4 Participating Organizations and Associations

2-5 Quality Management



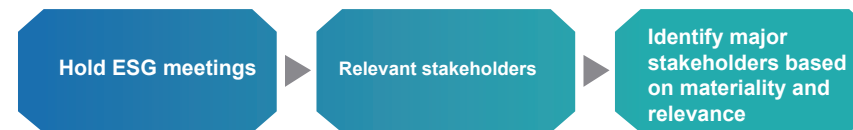
2-1 Management of Sustainability Issues

Identification of Stakeholders

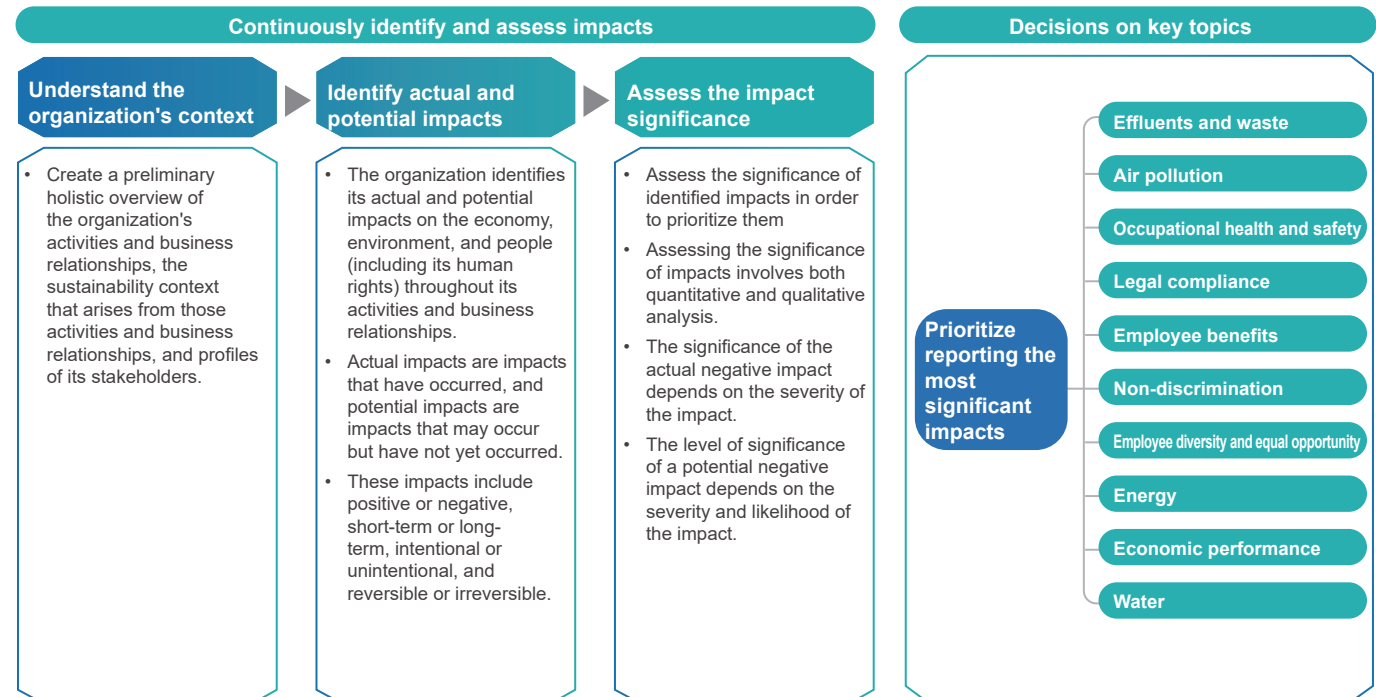
Through various communication channels, such as the corporate website, shareholders' meetings, corporate investor conferences, technical services, on-site visits and exchanges, satisfaction surveys, and participation in external associations or organizations, we understand the topics of concern to stakeholders. The identification of stakeholders is carried out by the Sustainability Development Committee of Chung Hwa. After discussion and analysis, the Sustainable Development Committee and its task force identify the stakeholders most relevant to the Company, including shareholders/ investment institutions, employees, customers, partners (suppliers, contractors, peers) government agencies/industry associations, communities/ neighborhoods, financial institutions.

Through various communication channels with stakeholders, Chung Hwa collects issues of concern to stakeholders, and identifies key ESG items based on GRI-specific topics and disclosure items. After discussion at the Sustainable Development Committee meeting, in 2023, a list of 7 economic, 6 environmental, and 10 social material topics are listed in "Table 1". Then, a matrix was created according to the "level of stakeholders' concern" and "level of impact on the company" as shown in "Figure 1". The higher the topic on the upper right, the more important the impact on the Company's operations and the level of concern of stakeholders. According to the major topic matrix, the major topics are: wastewater and waste, air pollution, occupational health and safety, legal compliance, employee benefits, non-discrimination, employee diversity and equal opportunity, energy, economic performance, water.

Analysis of Major Topics



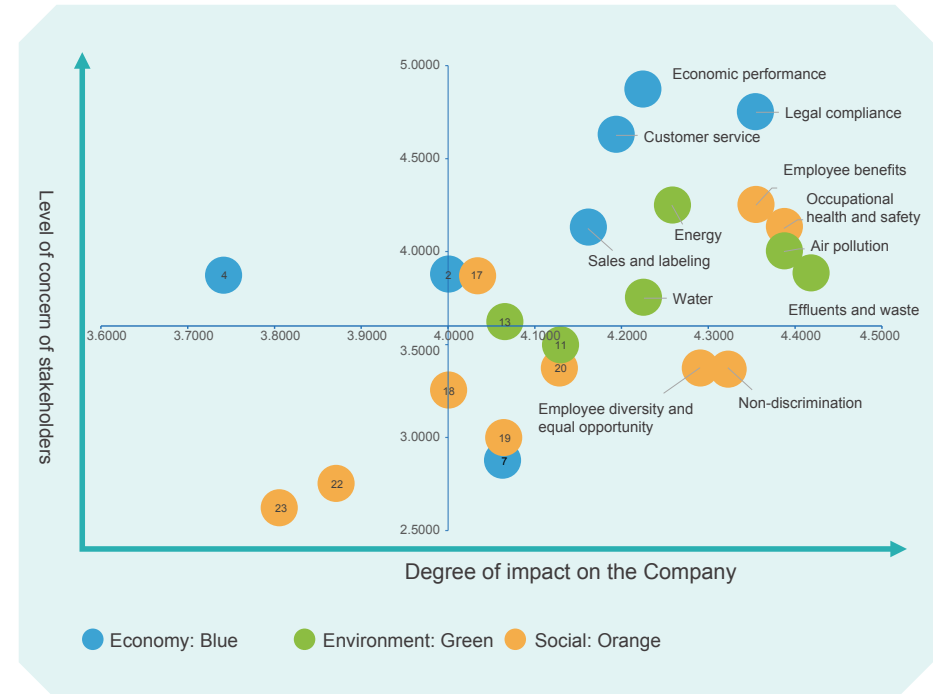
Process for Determining Major Topics



“Table 1” List of 23 Major Economic, Environmental, and Social Topics

Economy		Environment		Society	
1	Economic performance	8	Energy	14	Employee diversity and equal opportunity
2	Corporate governance	9	Water	15	Employee benefits
3	Legal compliance	10	Air pollution	16	Occupational health and safety
4	Supply chain management	11	Climate change	17	Labor relations
5	Customer service	12	Effluents and waste	18	Training and education
6	Sales and labeling	13	Raw materials	19	Child labor
7	Complaint system			20	Forced or compulsory labor
				21	Non-discrimination
				22	Local communities
				23	Public welfare investment

“Figure 1” Major Topic Analysis Matrix



2-2 Stakeholder Communication

Chung Hwa interacts with stakeholders on issues of concern through the communication window of each relevant stakeholder. Communication methods include but are not limited to questionnaires, meetings or telephone interviews, on-site visits, Facebook pages, email, telephone calls, and meetings, etc., the opinions and suggestions of stakeholders are widely solicited. After collecting and consolidating a wide range of opinions, they are used as a reference for the Company's operational decisions and reported and discussed in internal meetings. The communication channels and issues of concern between Chung Hwa and its stakeholders are as follows:













Stakeholders	Issues of concern	Communication channels and response methods	Frequency
Shareholders (Investment institutions)	Operation status Corporate governance Risk management and control Sustainability	Market Observation Post System: Disclosure of company information and material information	Irregular
		Company website: Investors section for investors to understand the Company's operations	Irregular
		AGM: Listen to shareholders' opinions, explain business goals, and publish annual report	Once per year
		Investor conference: Operation overview and investor interaction	Twice per year
Employees	Labor-employer relationship Salary and benefits Occupational safety and health	Internal website bulletin board: Publicity matters, education and training courses, employee welfare matters, information on Welfare Committee	Irregular
		Suggestion box set up in the Company's cafeteria: Provide a channel for employees to complain and express their opinions	Irregular
		ISO certification audit: ISO 14001/ISO 45001 certification	Once per year
		Environmental and Work Safety Committee, labor-management meetings: Regular communication	Once per quarter
		Department communication meeting	Once per month
		Social media (Facebook): Communication	Irregular




Stakeholders	Issues of concern	Communication channels and response methods	Frequency
Customers	R&D of innovative technologies Product quality After-sales service	Customer satisfaction survey: Customer feedback	Twice per year
		Customer visit: Exchange market information and industry trends	Irregular
		Daily telephone communication and correspondence: Understand the product status	Irregular
		Customer audit	On demand
		Company website: Product inquiry corner for customers to understand product information	Irregular
		Advertising/DM materials: Facilitate customers to understand the Company's profile and product information	Irregular
Partners (Supplier, contractor, peers)	Corporate governance Supply chain management Sustainability	Supplier evaluation and on-site audits	Irregular
		Industry association participation: Peer communication	Irregular
		Routine contact with suppliers: Routine procurement, outsourcing, and ensuring normal payment	Irregular
Government agencies/industry associations	Corporate governance Environmental protection Labor relations	Participation in various meetings such as briefings and seminars sponsored by the competent authorities	Irregular
		Coordination of supervision and audits	Irregular
		Daily official correspondence, email, and telephone communication	Irregular
Community/neighborhood	Air pollution control Community welfare Community engagement	The General Affairs Section is the Company's window for the implementation of social welfare and community-sponsored projects, and organizes charity societies to regularly collect information on sponsorship or donation activities from disadvantaged groups and other units.	Irregular
Financial institutions	Operation status Corporate governance	Company website: Disclosure of relevant information	Irregular
		Dedicated visit: Communication	Irregular

2-3 Sustainable Development Goals (SDGs)

In 2015, the United Nations released the “2030 Guidelines for Sustainable Development”, which outlines 17 global Sustainable Development Goals (SDGs) to serve as guiding principles for United Nations cross-border cooperation during the subsequent 15 years (before 2030). The goal is to achieve this common goal by taking into account the three major aspects of “economic growth”, “social progress” and “environmental protection”, demonstrating our global ambition for sustainable development.

Below is a Implementation Summary of Chung Hwa SDGs in 2023:

Sustainability issues	United Nations sustainable development goals (SDGs)	Sustainable development actions in 2023	Long-term goals for sustainable development
Climate change strategy	  	<p>Total greenhouse gas emissions in 2023 decreased by 1,971 tCO₂e (16.52%) compared to the base year, 2021.</p> <p>Electricity consumption in 2023 decreased by 10,868 GJ compared to 2021, a decrease of 13.88%.</p>	<p>Reduce greenhouse gas emissions by 30% in 2030 compared to the base year, 2021</p> <p>Reduce purchased energy by 30% in 2050 compared to the base year, 2021</p>
Business performance Risk and crisis management Corporate governance	  	<p>We have passed the certifications of international standard management systems such as ISO 9001, ISO 14001, and ISO 45001, and have established management procedures for supplier selection, evaluation, and regular audits.</p> <p>Commitment to RBA non-use of conflict minerals policy.</p> <p>Relevant suppliers are required to comply with the EU's Restriction of Hazardous Substances (RoHS) directive to ensure the safety of product raw material sources.</p> <p>All suppliers must pass the evaluation. Regular evaluations are conducted every year for suppliers that pass the evaluation, and on-site inspections are conducted based on the cooperation status.</p> <p>Suppliers are required to sign “Declaration of Compliance with Corporate Ethics and Supplier Code of Conduct” to prohibit unethical conduct.</p>	<p>Continue to pass ISO 9001, ISO 14001, ISO 45001 and other international standard management system certifications.</p> <p>Continue to select, evaluate, and regularly audit suppliers according to the management operating procedures.</p> <p>Commitment to RBA non-use of conflict minerals policy.</p> <p>Continue to require relevant suppliers to comply with the EU's Restriction of Hazardous Substances (RoHS) directive to ensure the safety of product raw materials.</p> <p>Continue to require suppliers to sign “Declaration of Compliance with Corporate Ethics and Supplier Code of Conduct” to prohibit unethical conduct.</p>
Employee profile and benefits Occupational health and safety	     	<ul style="list-style-type: none"> In 2023, there were no cases of abnormal occupational diseases in the special health examination results of employees. The Employee Welfare Committee integrates various welfare measures, plans annual welfare activities, and provides employee welfare programs. Continue to hold regular labor-management meetings to promote harmonious labor-management relations. Respond and resolve employees' opinions in a timely manner. 	<p>Continue to conduct special health examinations for employees with special operations every year.</p> <p>The Employee Welfare Committee continues to plan annual welfare activities and provide employee welfare programs.</p> <p>Continue to hold regular labor-management meetings to promote harmonious labor-management relations.</p> <p>Continue to reduce non-communicable diseases and promote mental health through prevention and treatment.</p>

Sustainability issues	United Nations sustainable development goals (SDGs)	Sustainable development actions in 2023	Long-term goals for sustainable development
<p>Climate change strategy</p> <p>Water resource management</p> <p>Air pollution control</p> <p>Waste management</p>	 	<p>The total water consumption in 2023 was reduced by 8.73% compared to the base year of 2021.</p> <p>In 2023, a total of 7.148 metric tons of stationary pollution emissions were reduced by 37.3% compared to the base year of 2021. There were 0.836 metric tons of sulfur oxides, 0.155 metric tons of nitrogen oxides, 2.518 metric tons of particulate pollutants, and 3.639 metric tons of volatile organic compounds.</p> <p>In 2023, the total output of waste was approximately 1642.388 metric tons, of which the total weight of in-plant and off-site reuse and resource recovery was approximately 1292.818 metric tons, with a recycling rate of 78.7%.</p>	<p>Total water consumption in 2050 was reduced by 30% compared to the base year, 2021.</p> <p>Total emissions from stationary sources in 2050 will be reduced by 30% compared to the base year, 2021.</p> <p>Reduce waste output by 80% in 2050 compared to the base year.</p> <p>By 2050, the waste reuse and recycling rate will reach 95%.</p>
<p>New values of community prosperity</p>	 	<p>We have long participated in donations to bring warmth and positivity to society, hoping to contribute to social harmony and change with our limited ability.</p> <p>Purchase Mid-Autumn Festival mooncakes baked by "Taoyuan City Private Guanyin Charity Home".</p> <p>Donation to "Da Guan New Life Center" community Christmas party for the Christmas sharing lucky draw for people in Caota Village.</p>	<p>Continue to actively engage in public welfare, sponsor charitable organizations, care for the underprivileged, protect the earth, give back to society, and take care of nearby residents to promote friendly development in society.</p>



2-4 Participating Organizations and Associations

By participating in the following external organizations and associations, we are able to grasp the market dynamics and understand the perspectives of relevant stakeholders on various topics through exchanges with peer manufacturers, in order to achieve the sustainable management goal of Chung Hwa.

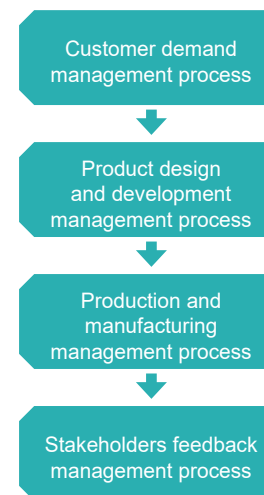
The Organizations and Associations That Chung Hwa Has Participated in Are as Follows:

Item	Organization	Amount invested (NT\$)
1	Taiwan Chemical Industry Association, TCIA	20,000
2	Taiwan Dyestuffs and Pigments Industrial Association	36,000
3	Taoyuan Young Entrepreneur Group	30,000
4	Taipei Chemical Suppliers' Association	3,600
5	Importers and Exporters Association of Taipei, IEAT	4,800
6	Taiwan Synthetic Resins & Adhesives Industrial Association, TSRAIA	36,000
7	Guanyin Industrial Association	12,000
8	Taiwan Corporate Governance Association, TCGA	10,000
9	Taiwan Carbon Capture Storage and Utilization Association, TCCSUA	5,000
10	Taiwan Responsible Care Association, TRCA	70,000

2-5 Quality Management

2-5-1 Product Quality and Reliability

Customers are an important stakeholder of Chung Hwa. We value their needs and are committed to building good partnerships. Chung Hwa adheres to the ISO 9001 Quality Management System and insists on continuous improvement through customer-oriented management processes, from customer demand management, product design and development management, production and manufacturing management to after-sales service management (including customer warranty service, customer satisfaction, customer complaint management and other measures), and uses a systematic management system to provide customers with high-quality product quality and reliability, consolidating existing customers and attracting new customers to achieve sustainable operations.



Quality Policy

Insist on continuous improvement
Meet customer needs
Implement quality management
Create competitive advantages



Based on this, we are committed to:

At Chung Hwa, we believe that we must continue to provide customers with excellent products and services in order to continue to increase the Company's profits and market share. One of the best strategies to achieve this goal is to implement a quality improvement policy for all employees. We must turn the idea of "insist on continuous improvement to meet customer needs and implement quality management to create competitive advantage" into a tangible part of the daily life and work of every employee of the Company. Through this activity, we can further improve our products in order to achieve the goal of customer satisfaction, we hereby jointly declare our full support for the participation of our employees in the Company and instruct our employees to achieve this quality improvement activity.

2-5-2 Product Recall Management Mechanism

Chung Hwa Chemical has established a product traceability mechanism. From the supply of raw materials, the production process, and the flow of product sales, we have a comprehensive production history in the entire process. When necessary, product recall and cause analysis can be conducted according to the product traceability mechanism. The most appropriate disposal method will be determined after cross-unit discussion according to the nonconforming product control process for the recalled products, and the products are prohibited from flowing out to the customer. At the same time, an improvement team is established according to the corrective and preventive control procedures to take necessary measures to prevent the recurrence of the cause.

2-5-2 Customer Satisfaction Survey

The Customer satisfaction survey is how the Company is able to understand “the feeling of its customers”. In order to strengthen customer services and provide the best quality to meet customer needs, customer satisfaction surveys are conducted at least twice a year. The content of the survey includes: satisfaction with the Company's personnel services, product delivery and quality satisfaction, and overall evaluation of the Company.

Items that do not meet the quality target score should be identified during statistical analysis, including customers whose total average score is lower than the target and a single item whose score is lower than the target score. When the recovery rate and quality target score in the customer satisfaction survey do not meet the target, the Company proposes corrective measures. The results of the statistical analysis and corrective measures are submitted to the management review meeting for discussion according to “Management Review and Control Procedures”.

In 2023, Chung Hwa conducted the first customer satisfaction survey. A total of 45 companies were selected as basic chemical customers, and 41 were recycled (91% recycling rate); 27 Specialty Chemicals were selected and 22 were recycled (81% recycling rate), 25 Electronic Chemical customers and 20 were recycled (80% recycling rate).

In 2023, the number of key customers sampled for Chung Hwa's second customer satisfaction analysis included 59 customers from Basic Chemicals, and 52 were recycled (88% recycling rate), 21 Specialty Chemicals and 17 were recycled (81% recycling rate), 27 Electronic Chemical customers and 22 were recycled (81% recycling rate).

The three-year customer satisfaction scores are shown in the table below:

The first half of 2021	Number of faxes	Number of recycling	Recycling rate	Average score
Electronic Chemicals	34	28	82%	53
Specialty Chemicals	29	24	83%	52
Basic Chemicals	52	48	92%	55
Total	115	100	87%	53

The second half of 2021	Number of faxes	Number of recycling	Recycling rate	Average score
Electronic Chemicals	48	39	81%	55
Specialty Chemicals	40	32	80%	53
Basic Chemicals	80	76	95%	56
Total	168	147	88%	55

The first half of 2022	Number of faxes	Number of recycling	Recycling rate	Average score
Electronic Chemicals	31	25	81%	53
Specialty Chemicals	32	26	81%	53
Basic Chemicals	65	62	95%	56
Total	128	113	88%	54

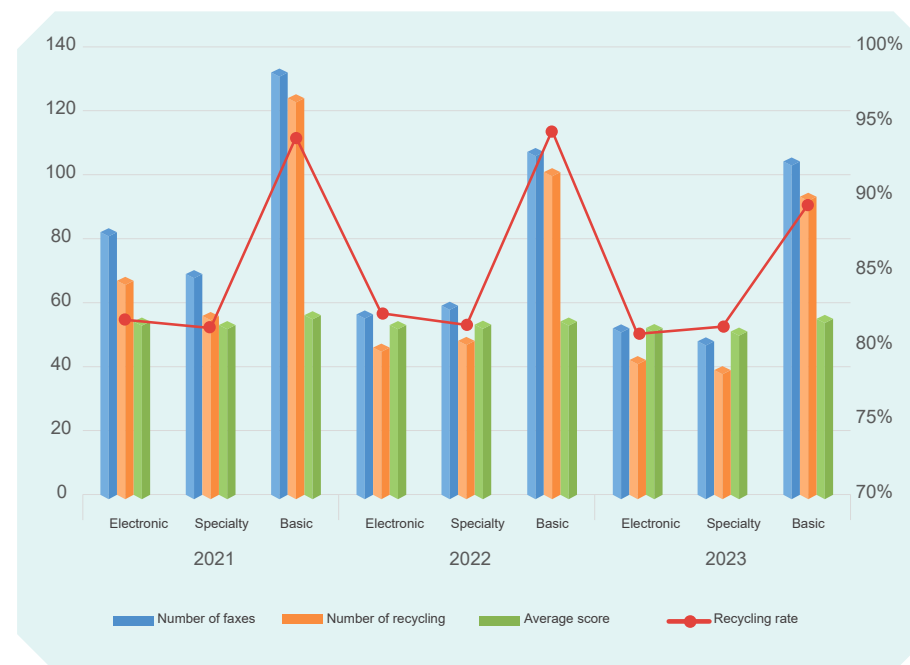
The second half of 2022	Number of faxes	Number of recycling	Recycling rate	Average score
Electronic Chemicals	25	21	84%	52
Specialty Chemicals	27	22	81%	53
Basic Chemicals	42	39	93%	56
Total	94	82	87%	54

The first half of 2023	Number of faxes	Number of recycling	Recycling rate	Average score
Electronic Chemicals	25	20	80%	52
Specialty Chemicals	27	22	81%	50
Basic Chemicals	45	41	91%	56
Total	97	83	86%	53

The second half of 2023	Number of faxes	Number of recycling	Recycling rate	Average score
Electronic Chemicals	27	22	81%	52
Specialty Chemicals	21	17	81%	52
Basic Chemicals	59	52	88%	53
Total	107	91	85%	52

*The full average score is 60 points, and the passing score is 48 points

2021-2023 Customer Satisfaction Survey



2-5-3 Customer Privacy

Chung Hwa attaches great importance to customers' confidential information and privacy. In order to implement the mechanism to protect customer privacy, we are committed to the secure management of confidential information and stipulate confidential information management regulations to ensure the protection of the rights and interests of the Company and customers. We require all employees to abide by the confidentiality regulations. Employees are required to sign the "Confidentiality Obligation" upon arrival, and each department supervisor is responsible for supervising the compliance of their personnel by the confidentiality regulations to ensure that confidential information is adequately protected.

In terms of management system: Externally, the Company signs non-disclosure agreements (confidentiality agreements) with customers to express Chung Hwa's commitment to the protection of confidential information. Internally, the Company's computers are equipped with firewalls and anti-virus software. We control data based on its confidentiality, set user permissions, and regularly audit the confidential data management status of each department through internal audits. In 2023, Chung Hwa did not receive any complaints about violating customer privacy rights or losing customer data.



3 Corporate Governance

- 3-1 Corporate Governance Structure
- 3-2 Highest Governance Body
- 3-3 Functional Committee
- 3-4 Ethical Corporate Management and Anti-corruption
- 3-5 Internal Control System and Internal Audit
- 3-6 Operational Continuity Management
- 3-7 Risk Management
- 3-8 Emergency Response Mechanism
- 3-9 Environmental Safety and Health Management
- 3-10 Supplier Management
- 3-11 Outcomes of Corporate Governance Activities

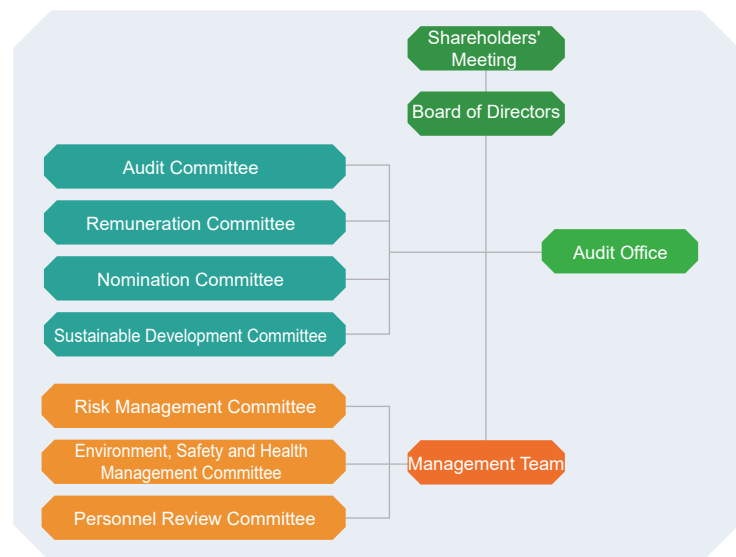


3-1 Corporate Governance Structure

Chung Hwa is committed to complying with laws and regulations related to the corporate governance system, and has formulated the “Corporate Governance Best Practice Principles”, “Ethical Corporate Management Best Practice Principles”, and “Sustainable Development Best Practice Principles” as the basis for compliance with the corporate governance structure. We have also established a “Code of Ethical Conduct”, which requires directors, managers and other relevant personnel to abide by the code of ethics when performing their duties to protect the interests of the Company and shareholders.

The Audit Committee (Section 3-3-1), the Remuneration Committee (Section 3-3-2), the Nomination Committee (Section 3-3-3), and the Sustainable Development Committee (Section 3-3-4) are established under the Board of Directors of Chung Hwa) to assist the Board of Directors in making appropriate decisions through the professional review and recommendations of each functional committee. In addition, the General Manager serves as the convener, and the management team forms the Risk Management Committee (Section 3-7-2), the Environmental Safety Management Committee (Section 3-9-2), and the Personnel Review Committee according to their powers.

The Audit Office is an independent unit under the Board of Directors. It is equipped with two full-time audit officers and auditors to assist the Board of Directors and managers in inspecting and reviewing the deficiencies of the internal control system, measuring the effect and efficiency of operations, and providing timely improvement suggestions to ensure internal control. The effective implementation of the system also serves as the basis for reviewing and revising the internal control system.



3-2 Highest Governance Body

3-2-1 Board of Directors

The Board of Directors is responsible for ensuring that the Company's operating information is open and transparent, complying with relevant laws and regulations, guiding the Company's strategies, supervising the management, and making arrangements for the corporate governance system; being accountable to the Company's shareholders; and exercising its powers in accordance with the laws and regulations and the Company's Articles of Incorporation. The members of the Board of Directors are elected in accordance with the relevant regulations of “Procedures for the Election of Directors” at Chung Hwa. The candidate nomination system is adopted and the members are elected at the shareholders' meeting. The current (28th) Board of Directors was elected on July 20, 2021 (term of office: July 20, 2021 to July 19, 2024).

The Company has established “Corporate Governance Best Practice Principles” to specify the policy for Board diversity. In addition to the requirements, values, and professional knowledge and skills of board members, the diversity of the Board is also considered. The Company is composed of practical experts from various fields including chemical industry, IT, electronics, energy, finance, accounting, management, academia, etc. Therefore, the Company's Board members possess the necessary knowledge, skills, and qualities to perform their duties. The 28th Board of Directors consists of 10 directors, of whom 1 is a female and 4 are independent directors. They have professional business or academic experience and provide professional guidance.

In terms of overseeing the impact management strategy, the Board of Directors confirmed that the Company's impact management strategy is related to its core business. The Board collaborates with senior management to ensure that these strategies not only comply with regulatory requirements, but also achieve the long-term goals of Chung Hwa. The Board of Directors also supervises the Company's risk assessment and management process to ensure that the organization has conducted a comprehensive assessment of environmental, social and governance-related risks and formulated corresponding countermeasures.

The highest governance unit (Board of Directors) ensures that Chung Hwa has set specific sustainability goals and tracks relevant indicators. Collaborate with internal and external stakeholders to ensure that Chung Hwa has made sustainable progress in environmental, social and governance aspects and that sustainability reporting is accurate, complete, and reliable. The Board of Directors cooperates with the Audit Office to ensure that the information in the report is verified in compliance with the relevant reporting standards.

3-2-2 Avoidance of Conflicts of Interest

Directors' recusal clause:

In order to prevent conflicts of interest between directors and the Company, the Company's directors must make a proposal and obtain the approval of the shareholders' meeting in accordance with the Company Act. Regarding the recusal of directors' for conflicts of interest, the “Rules of Procedure for Board of Directors Meetings” clearly stipulates the terms of recusal when a conflict of interest arises: “A director who has an interest in himself/ herself or the corporate entity he represents in the matter of the meeting shall explain the interest in the current board meeting. They shall not participate in the discussions and vote such proposal if the material content of such matters may be detrimental to the interests of the Company, and shall not exercise voting rights as a proxy for other directors”. (Please refer to the 2022 Annual Report of Chung Hwa Shareholders' Meeting: Corporate Governance Operation for details on the proposal of recusal).

Independent director:

The Company has appointed independent directors, who offer advice based on their professional experience from an objective and fair standpoint. When discussing any motion at the Board of Directors' meeting, their opinions are fully considered and the principle of recusal is taken into account to protect the Company's interests.

3-2-3 Educational Experience of Board members

Job title	Name	Gender	Education and major	Main experience
Chairman	Wen-Yuan Ken	Male	Master of Computer science, University of San Francisco, USA	Director of Everlight Chemical Industrial Corporation Independent Director of VIA Technologies Inc. Director of Honest Fine Chemical Co., Ltd. Management Staff of Quimax Computer System
Director	Chung-En Investment Co., Ltd. Representative Ray-An Tsai	Male	Bachelor of Management Science, National Chiao Tung University, Taiwan	Vice President of Everlight Chemical Industrial Corporation Spokesperson of Everlight Chemical Industrial Corporation Secretary of the Board of Directors of Everlight Chemical Industrial Corporation Chairman of Hung-Hui Investment Co., Ltd. Representative of the Supervisor of Trend Tone Imaging, Inc. Supervisor of Chung Hwa Chemical Industrial Works, Ltd. Deputy Manager of Formosa Chemicals & Fibre Corporation
Director	Everlight Chemical Industrial Corporation Representative Wen-Jang Chen	Male	PhD in Textile, University of Manchester, UK	Associate Vice President of Everlight Chemical Industrial Corporation Director of R&D Center, Everlight Chemical Industrial Corporation

Job title	Name	Gender	Education and major	Main experience
Director	Shian-Hsiung Chen	Male	Bachelor of International Trade, Tamkang University, Taiwan	Spring Media (Australia) Co., Director Supervisor of Chung Hwa Chemical Industrial Works, Ltd. Drputy Manager of See Sen Chemical (Malaysia)
Director	Han-Kao Ken	Male	Bachelor of Chemical Engineering, Chung Yuan Christian University, Taiwan	Supervisor of JiangSu Honest Fine Chemical Co., Ltd General Manager of Chung Hwa Chemical Industrial Works, Ltd. Chief Engineer of Chung Hwa Chemical Industrial Works, Ltd.
Director	Shu-Wan Tang	Male	MBA, The University of Texas at Arlington Professional licenses: Internal Auditor, ROC Internal Auditor, USA Tax Management Specialist, USA Management Accountant, USA Human Resource Management Specialist, USA	CEO & President, Chinese Strategic Management Accounting Institute ROC Supervisor of Chung Hwa Chemical Industrial Works, Ltd. COO/CFO, Baker McKenzie Taipei Senior Management Consultant, PwC Taiwan Special Assistant to Chairman and President, VIA Tech. Group Planning Director, Solomon Corp.
Independent director	Hsiao-Che Chiang	Male	PhD in Chemical Engineering, Worcester Polytechnic Institute	Director of Uplus Co., Ltd. Professor of Department of Chemical and Materials Engineering, National Central University Executive Supervisor of Taiwan Chemical Technology Industry Association Committee member, American Institute of Chemical Engineer separation division

Job title	Name	Gender	Education and major	Main experience
Independent director	Kuang-Hua Yu	Male	PhD in Chemical Engineering, State University of New York at Buffalo, USA	CEO of UPC South China Vice President of Oriental Union Chemical Corporation Project Manager of Fisher Company, USA Process Automation Specialist of Monsanto Chemical Company Assistant Professor of Department of Chemical Engineering, CBC University of Tennessee, USA Associate Professor of Department of Chemical Engineering, Tamkang University
Independent director	Shu-Chen Tsai	Female	EMBA, National Central University, Taiwan Professional licenses: Accountant	CPA of KenWill United CPAs Firm Independent Director of Champion Microelectronic Corp. Supervisor of eGalax_eMPIA Technology Inc. Remuneration Committee Member of Syncomm Technology Corporation
Independent director	Hsiao-Kang Ma	Male	PhD in Mechanical Engineering, University of Illinois, Chicago, USA	Independent Director of Ho-Ping Power Company Independent Director of Data Image Co., Ltd. Independent Director of Chung Hwa Pulp Corporation President of Taiwan Carbon Capture Storage and Utilization Association (TCCSUA) President of Taiwan Association of Environmental and Resource Economics FIAAM Fellow Former professor of Department of Mechanical Engineering, National Taiwan University Former Researcher of the Center for Climate Change and Sustainable Development, National Taiwan University Environmental Impact Assessment Committee of Environmental Protection Department



Members of the Board of Directors of Chung Hwa (left to right): Independent Director Hsiao-Che Chiang, Director Wen-Jang Chen, Director Ray-An Tsai, Director Shian-Hsiung Chen, Independent Director Shu-Chen Tsai, Chairman Wen-Yuan Ken, Independent Director Kuang-Hua Yu, Director Han-Kao Ken, Independent Director Hsiao-Kang Ma, Director Shu-Wan Tang

3-2-4 Attendance at the Board of Directors Meeting

The Board of Directors held a total of 5 meetings in 2023. The attendance of directors is shown in the table below:

Job title	Name	Actual attendance rate (B)	Number of attendance by proxy	Number of attendance required (A)	Actual attendance % (B/A)	Note
Chairman	Wen-Yuan Ken	5	0	5	100	Re-election; re-elected on July 20, 2021
Director	Representative of Everlight Chemical Industrial Corporation: Wen-Jang Chen	5	0	5	100	Newly appointed; re-elected on July 20, 2021

Job title	Name	Actual attendance rate (B)	Number of attendance by proxy	Number of attendance required (A)	Actual attendance % (B/A)	Note
Director	Chung-En Investment Co., Ltd. Representative: Ray-An Tsai	5	0	5	100	Newly appointed; re-elected on July 20, 2021
Director	Han-Kao Ken	4	1	5	80	Re-election; re-elected on July 20, 2021
Director	Shian-Hsiung Chen	4	1	5	80	Newly appointed; re-elected on July 20, 2021
Director	Shu-Wan Tang	5	0	5	100	Newly appointed; re-elected on July 20, 2021
Independent director	Hsiao-Che Chiang	5	0	5	100	Re-election; re-elected on July 20, 2021
Independent director	Kuang-Hua Yu	5	0	5	100	Re-election; re-elected on July 20, 2021
Independent director	Shu-Chen Tsai	5	0	5	100	Newly appointed; re-elected on July 20, 2021
Independent director	Hsiao-Kang Ma	5	0	5	100	Newly appointed; re-elected on July 20, 2021

3-2-5 Continuing Education of Directors

The Company has established "Procedures for Continuing Education for Directors" to encourage directors to continuously enrich their knowledge. Continuing education courses are arranged for directors every year. In 2023, the education hours of directors of the Company met the regulations.



Chung Hwa's 28th Board of Directors Meeting

3-3 Functional Committee

3-3-1 Audit Committee

In order to improve the oversight responsibility and strengthen the management mechanism of the Board of Directors, Chung Hwa formed an Audit Committee in 2021. It is composed of all independent directors and operates in accordance with "Audit Committee Charter". It is responsible for assisting the Board of Directors in reviewing the Company's financial statements, internal control systems, audit services, accounting policies and procedures, major asset transactions, appointment of accountants, appointment and removal of accounting and internal audit supervisors, and other related matters to ensure that the Company's operations comply with relevant government laws and practical regulations. In order to maintain an effective internal control system, the operation of the Audit Committee contributes to the judgment of the Board of Directors in operating decisions through the professional evaluation of the Company's risk management, finance, and operation models by independent directors. The convener of the committee, independent director Shu-Chen Tsai, is an accountant with practical experience in professional financial accounting and meets the professional competence required by the committee.

The Company's Audit Committee consists of 4 independent directors. The Audit Committee aims to assist the Board of Directors in supervising the quality and integrity of the Company's accounting, auditing, financial reporting process, and financial control implementation.

The Company appointed the Audit Committee to replace the supervisors on July 20, 2021. In 2023, the Audit Committee held a total of 5 meetings, with an attendance rate of 100%. The attendance record was shown in the table below:

Attendance of the Audit Committee

Job title	Name	Actual attendance rate (B)	Number of attendance by proxy	Number of attendance required (A)	Actual attendance % (B/A)	Note
Convener	Shu-Chen Tsai	5	0	5	100	Took office on July 20, 2021
Committee member	Hsiao-Che Chiang	5	0	5	100	Took office on July 20, 2021

Job title	Name	Actual attendance rate (B)	Number of attendance by proxy	Number of attendance required (A)	Actual attendance % (B/A)	Note
Committee member	Kuang-Hua Yu	5	0	5	100	Took office on July 20, 2021
Committee member	Hsiao-Kang Ma	5	0	5	100	Took office on July 20, 2021

Main duties of the Audit Committee:

1. Establishment or amendment of the internal control system in accordance with Article 14-1 of the Securities and Exchange Act.
2. Evaluation of the effectiveness of the internal control system.
3. Establishment or amendment of the procedures for major financial or business activities such as acquisition or disposal of assets, engagement in derivative transactions, lending of funds to others, making endorsements or providing guarantees for others in accordance with Article 36-1 of the Securities and Exchange Act.
4. Matters involving the directors' personal interests.
5. Significant asset or derivative transactions.
6. Material loans, endorsements, or guarantees.
7. The offering, issuance, or private placement of marketable securities that are of an equity nature.
8. Appointment, discharge, or remuneration of CPAs.
9. Appointment or dismissal of the head of finance, accounting, or internal audit.
10. Annual financial statements signed or sealed by the chairperson, managers, and chief accounting officer.
11. Other important matters as required by the Company or the competent authority.

3-3-2 Remuneration Committee

In 2011, Chung Hwa established a Remuneration Committee to improve the remuneration system for directors and senior managers. The members of the Remuneration Committee are appointed by the Board of Directors in accordance with the "Remuneration Committee Charter". Currently, the committee consists of 4 independent directors and holds at least 2 meetings every year. In 2023, the Remuneration Committee held 4 meetings with an attendance rate of 100%.

Remuneration Committee attendance

Job title	Name	Actual attendance rate (B)	Number of attendance by proxy	Number of attendance required (A)	Actual attendance % (B/A)	Note
Convener	Hsiao-Che Chiang	4	0	4	100	Re-elected, re-elected on July 20, 2021
Committee member	Kuang-Hua Yu	4	0	4	100	Re-elected, re-elected on July 20, 2021
Committee member	Shu-Chen Tsai	4	0	4	100	Re-elected, re-elected on July 20, 2021
Committee member	Hsiao-Kang Ma	4	0	4	100	Newly appointed, re-elected on July 20, 2021

Main duties of the Remuneration Committee:

1. Review the Remuneration Committee Charter and propose amendments.
2. Establishment and review of the policies, systems, standards, and structures for the performance evaluation and remuneration of the Company's directors and managers.
3. Evaluate the remuneration of the Company's directors and managers.

Remuneration policy

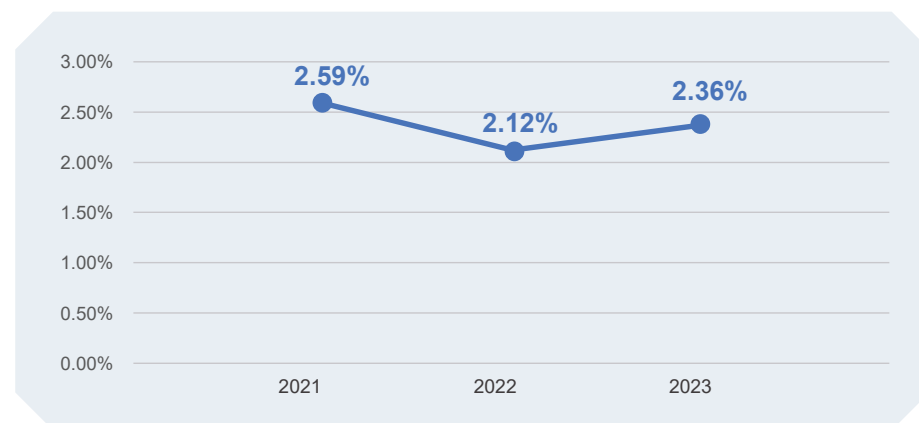
1. Maintain external competitiveness of salary:
Maintain a competitive salary level by analyzing and understanding the relevant labor market and salary conditions on a regular and ad hoc basis.
2. Maintain internal salary balance:
Use appropriate salary management tools to ensure that salary can truly reflect the relative contribution of each position and ensure internal balance.

3. Implement the incentive compensation system:
Salary is appraised based on the degree of contribution of the position, and is adjusted based on performance to ensure that the salary of employees with high contributions and outstanding performance is significantly different from that of ordinary employees.
4. Personnel costs for controlled companies:
Control the salary distribution of each position, so that each employee's salary falls within the appropriate salary range to effectively control personnel costs.

Remuneration determination process

The Company has established a Remuneration Committee, which evaluates the remuneration policy and system for the Company's directors and managers in a professional and objective position and makes recommendations to the Board of Directors for reference in decision-making.

Annual remuneration ratio



Note: Annual total compensation of the highest-paid individual in the organization ÷ Median of annual total compensation of all employees (excluding the highest-paid individual)

3-3-3 Nomination Committee

In order to improve the nomination system for the Company's directors and functional committee, the Company established a Nomination Committee in 2017 in accordance with "Nomination Committee Charter". Currently, the board consists of four independent directors, who meet at least twice a year and may convene a meeting at any time as needed to submit their recommendations to the Board of Directors for discussion. The Nomination Committee held 3 meetings in 2023, with an attendance rate of 100%.

Nomination Committee attendance

Job title	Name	Actual attendance rate (B)	Number of attendance by proxy	Number of attendance required (A)	Actual attendance % (B/A)	Note
Convener	Hsiao-Che Chiang	3	0	3	100	Re-elected, re-elected on July 20, 2021
Committee member	Kuang-Hua Yu	3	0	3	100	Re-elected, re-elected on July 20, 2021
Committee member	Shu-Chen Tsai	3	0	3	100	Re-elected, re-elected on July 20, 2021
Committee member	Hsiao-Kang Ma	3	0	3	100	Newly appointed, re-elected on July 20, 2021

Main duties of the Nomination Committee:

1. Formulate the professional knowledge, skills, experience, gender diversity, and independence standards required for board members, supervisors, and senior managers, and identify, review, and nominate directors, supervisors, and senior managers candidates accordingly.
2. Establish and develop the organizational structure of the Board of Directors and each committee, evaluate the performance of the Board of Directors, each committee, each director, and senior managers, and evaluate the independence of the independent directors.
3. Establish and regularly review the continuing education program for directors and the succession plan for directors and senior managers.
4. Establishment of the Company's Corporate Governance Best Practice Principles.

3-3-4 Sustainable Development Committee

In order to promote the Company's sustainable development and achieve the philosophy of corporate sustainable management, the Company's Board of Directors approved the establishment of the Sustainable Development Committee under the Board of Directors on February 23, 2022 in accordance with "Sustainable Development Committee Charter". The 1st Sustainability Committee consists of 7 directors (including the Chairman, 2 directors, and 4 independent directors) nominated by the Board of Directors. The convener of the committee, independent director Hsiao-Kang Ma, has experience in climate change, sustainable development research and net-zero carbon emission plan promotion, and meets the professional capabilities required by the committee. The Sustainability Committee held 2 meetings in 2023, with an attendance rate of 100%.

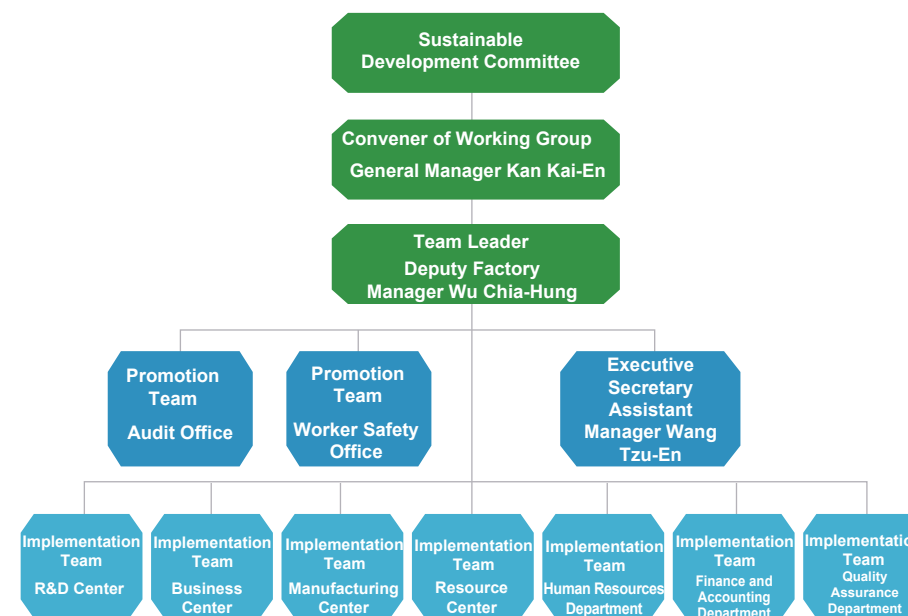
Attendance of the Sustainable Development Committee

Job title	Name	Actual attendance rate (B)	Number of attendance by proxy	Number of attendance required (A)	Actual attendance % (B/A)	Note
Convener	Hsiao-Kang Ma	2	0	2	100	Re-election; took office on February 23, 2022
Committee member	Kuang-Hua Yu	2	0	2	100	Re-election; took office on February 23, 2022
Committee member	Hsiao-Che Chiang	2	0	2	100	Re-election; took office on February 23, 2022
Committee member	Shu-Chen Tsai	2	0	2	100	Re-election; took office on February 23, 2022
Committee member	Wen-Yuan Ken	2	0	2	100	Re-election; took office on February 23, 2022
Committee member	Ray-An Tsai	2	0	2	100	Re-election; took office on February 23, 2022
Committee member	Shu-Wan Tang	2	0	2	100	Re-election; took office on February 23, 2022

Main duties of the Sustainable Development Committee:

1. Formulate sustainable development policies, systems, or related management guidelines.
2. Supervise the specific promotion plans and implementation status of sustainable development.
3. Evaluate the effectiveness of the Company's sustainable development plans on a regular basis, and report the results to the Board of Directors every year (at least once a year).
4. Review of the Sustainability Report.
5. Other matters that the committee may resolve to handle by the Board of Directors.

Organization chart of the working group of the Sustainable Development Committee



Execution team: Promote relevant issues and compile and provide data for the responsible projects
Implementation team: Assist in reviewing the integrity and accuracy of the information on each issue

Team leader: Promote overall work, control the progress, and regularly report to the Board of Directors

3-4 Ethical Corporate Management and Anti-corruption

The Company is based on the business philosophy of integrity, transparency, and accountability, and has formulated policies based on integrity. The policies have been approved by the Board of Directors, and sound corporate governance and risk control mechanisms have been established to create a sustainable business environment. The Company has formulated "Business Integrity Code of Conduct" and "Business Integrity Procedures and Behavioral Guidelines" to express the policies and practices of business integrity and disclose them on the Company's website. The Company has a dedicated unit responsible for corporate governance (hereinafter referred to as the Company's dedicated unit) appointed by the Chairman of the Board of Directors and related personnel. The unit is under the supervision of the Audit Office, which reports to the Board of Directors. It has sufficient resources and qualified personnel to handle the revision, implementation, interpretation, consulting services, registration and filing of notification content and other related operations and supervision of these operating procedures and behavioral guidelines, and supervise the execution and report to the Board of Directors on a regular basis (at least once a year) by the head of corporate governance.

3-4-1 System Promotion

1. The Company has established its "Code of Ethical Conduct" based on "Example of Establishment of Ethical Codes of Conduct for TWSE/TPEX Listed Companies" and the "Ethical Corporate Management Best-Practice Principles for TWSE/TPEX Listed Companies".
2. The Company implements "integrity" as the principle of business operations, and engages in business activities based on the principles of fairness, honesty, trustworthiness, and transparency. To implement the integrity policy and actively prevent unethical behavior, the Company has established "Ethical Corporate Management Procedure and Code of Conduct" to specifically regulate personnel matters needing attention when executing business activities.
3. Regarding major donations, according to "Rules of Procedure for Board of Directors Meetings", donations to related parties or major donations to non-related parties must be reported to the Board of Directors to ensure prior supervision.
4. Whistleblowing mechanism: The Company has institutionalized "Employee Opinions and Complaint Management Regulations" to provide an internal channel for reporting the Company's illegal acts. When dealing with whistleblowing situations, the Company and the investigators shall uphold the principle of impartiality in investigation and reporting.
5. The "Supplier Control Procedures" stipulates that when suppliers and contractors are selected, they are required to sign "Declaration of Compliance with Corporate Ethics and Supplier Code of Conduct" to prohibit unethical conduct.
6. In order to ensure that employees understand and abide by the regulations, employees are required to declare their willingness to abide by "Confidentiality Obligation" in the "Employment Contract" and an "Employee Work Rules" handbook has been issued to the employees. On the first day of employment, employees are explicitly informed of the promotion of honest management, requiring employees to abide by disciplines and integrate the Company's

insistence on corporate ethics and professional ethics into daily operations.

7. Confidential information management system: Externally, the Company signs non-disclosure agreements with customers to express Chung Hwa's commitment to the protection of confidential information. Internally, the Company's computers are equipped with firewalls and antivirus software, and we also set user privileges and regularly inspect the confidential information management of each department through internal audits.

The Rules and Regulations Amended in 2023 Were Summarized as Follows:

Rules and regulations	Time	Description
Amendments to "Corporate Governance Best Practice Principles"	Approved by the Board of Directors on January 17, 2023	Amend the system according to the requirements of the competent authorities.
Amendments to "Rules of Procedure for Board of Directors Meetings"	Approved by the Board of Directors on January 17, 2023	
Amendments to "Regulations Governing the Handling of Material Internal Information and Prevention of Insider Trading"	Approved by the Board of Directors on January 17, 2023	
Amendment to "Directors and Managers Salary and Remuneration Act"	Approved by the Board of Directors on 5/9/2023	Revised in response to operational development needs.
Amendments to "Regulations Governing Related Party Transactions"	Approved by the Board of Directors on 11/18/2023	Revised with reference to the letter from the competent authority.



3-4-2 Education and Dissemination

Advocacy topic	Personnel of the advocacy unit	Time	Target audience
• 2023 Seminar on Prevention of Insider Trading	Securities and Futures Development Foundation	June 2023	Director and head of corporate governance
• Ethical corporate management and insider trading prevention • Making known common ways in which reporting changes related to insider shareholding violates the Securities and Exchange Act	Finance and Accounting Department	August 9, 2023	Directors and managers
• Prevention of insider trading • Constituent requirements • Penalty provisions • Making known common ways in which reporting changes related to insider shareholding violates the Securities and Exchange Act	Finance and Accounting Department	12/8/2023	Managers and heads of various departments
• Education and promotion of ethical corporate management • Business integrity policy • Prohibition of dishonest conduct • Ethical Corporate Management Best Practice Principles • Channels and methods for whistleblowing • Disciplinary action for dishonest behavior	Finance and Accounting Department	12/8/2023	Managers and heads of various departments
	Head of each department	December 2023 Begin to proceed	Comprehensive promotion across all departments of the Company

3-4-3 Incident statistics and legal compliance

Complaint case	Reporting mailbox	Corruption and fraud case	Complaints about breach of customer privacy or loss of customer data	Breach of confidential information
0 case	0 case	0 case	0 case	0 case

County/city Type of unit	Date of announcement	Disposition date	Disposition number	Name of business unit (person-in-charge) Name of natural person	Violation of laws and regulations	Contents of violation	Penalty for violation of facts in NT\$
Taoyuan City	September 7, 2023	July 6, 2023	Fu-Lao-Jian-Zi No. 1120179278	Chung Hwa Chemical Industrial Works, Ltd.	Article 175, Paragraph 5 of the Occupational Safety and Health Facility Regulations and Article 6, Paragraph 1 of the Occupational Safety and Health Facility Regulations & Article 224, Paragraph 1 of the Occupational Safety and Health Facility Regulations and Article 6, Paragraph 1 of the Occupational Safety and Health Law	If there is a risk of explosion or fire due to static electricity, the employer shall ground the following equipment, humidify it, use a static remover, or other devices to remove static electricity: I. ... V. Equipment for conveying and screening flammable powdery solids. VI. ... Employers shall install guardrails, covers, and other protective equipment of appropriate strength to edges and openings in the workplace at a height of more than 2 meters, where workers are at risk of falling.	NT\$100,000
Taoyuan City	October 5, 2023	August 10, 2023	Fu-Lao-Jian-Zi No. 1120214722	Chung Hwa Chemical Industrial Works, Ltd.	Article 27, Paragraph 1, Subparagraph 1 of the Occupational Safety and Health Act & Article 27, Paragraph 1, Subparagraph 3 of the Occupational Safety and Health Act	To prevent occupational disasters when a business unit, contractor, or subcontractor works together with separate laborers, the original business unit shall take the following necessary measures: I. Set up an joint organization and designate the organization's leaders, supervisors, and coordinators. II. ... In order to prevent occupational disasters when a business unit, contractor, or subcontractor employs laborers for joint operations, the original business unit shall take the following necessary measures: I. ... III. Inspection of the workplace. IV. ...	NT\$100,000

Regarding the Anti-corruption Prevention Mechanism, in Addition to Education and Promotion, There Are Other Operational Regulations That Constrain Such Behavior:

- Regarding major donations, according to "Rules of Procedure for Board of Directors Meetings", donations to related parties or major donations to non-related parties must be reported to the Board of Directors to ensure prior supervision.

For the procurement units with directly related interests, in addition to education and publicity, the procurement contract clearly stipulates anti-bribery clauses that prohibit employees from receiving kickbacks or similar (suppliers shall not offer the Company future contracts, bribes, commissions, percentage payments, brokerage fees, post-gratuities, kickbacks, improper gifts and entertainment, or other improper advantages).

Whistleblowing system:

The Company's "Procedures for Ethical Management and Guidelines for Conduct" stipulate a system for reporting unethical conduct. The Company has established and announced an independent reporting mailbox and hotline on the Company's website and intranet for the use of internal and external personnel.

Violators of business integrity may be reported through the following channels:

Reporting mailbox: ethics@chciw.com.tw

Whistleblowing hotline: 03-4761266 ext. 12999

3-5 Internal Control System and Internal Audit

In order to ensure the implementation of corporate governance, strengthen internal control and audit operations, the Audit Office not only conducts on-site audits based on the annual audit plan that are approved by the Board of Directors and based on risk considerations, but also executes project audits from time to time. In addition, in order to ensure the accuracy of the information in "Sustainability Report", the "Sustainability Report Preparation and Verification Operational Procedures" was formulated in 2023 to establish reporting processes and internal controls, and included them in the annual audit of "Management of Financial and Non-Financial Information" plan.

After the internal audit report and audit deficiency follow-up report are completed, they are submitted to the independent directors for review before the end of the following month. The internal audit officer reports on the internal audit operations to the Audit Committee and the Board of Directors on a quarterly basis. The Company shall immediately issue a report and notify the independent directors of the discovery of major violations or the possibility of major damages to the Company. In 2023, no major internal control deficiencies were found, and the deficiencies and anomalies discovered were documented and traced until the improvements were completed.

In order to implement the Company's self-monitoring mechanism and respond to changes in the environment in a timely manner, an internal control self-assessment is conducted at least once a year, and the self-assessment reports of each unit and subsidiary are reviewed by the Audit Office. Together with the improvement of internal control deficiencies and abnormal matters discovered by the Audit Office, it serves as the basis for the Board of Directors and the General Manager to evaluate the effectiveness of the overall internal control system and issue a statement on the internal control system to improve the quality and efficiency of internal control. The 2023 Statement of Internal Control System was approved by the Board of Directors on February 21, 2024.



3-6 Operational Continuity Management

The main purpose of business continuity management (BCM) is to quickly incorporate preventive and recovery measures in the event of any accident or disaster to ensure the continuous operation of the enterprise under emergency conditions.

We have established principles for operational continuity, including the identification of internal and external risks and the impact of threats. We have also developed management mechanisms to respond to risk occurrences or for disaster recovery purposes. The purpose of disaster recovery is to minimize the impact of disasters, and take the necessary steps to ensure that resources, employees, and business processes can continue to operate in a timely manner. The disaster handling and recovery procedures are as follows:

1. Confirm the cause of the damage.
2. Confirm the extent of damage and the scope of impact.
3. Adopt disaster recovery measures.
4. Perform recovery operations.
5. Track/confirm the recovery status.
6. Recovery report and related records.

3-7 Risk Management

3-7-1 Risk management Policies and Procedures

- (I). The risk management policy established by the Company was discussed and approved by the Board of Directors.
- (II). The Company's risk management policy is to pursue balanced development between operational profits and operational risks to maximize shareholder value. Adopted the following strategies:
 1. Commit to include the overall organization as the scope of risk management and establish an operational risk management system.
 2. Introduce the best risk management practices to achieve sustainability, strengthen corporate governance, and improve operational performance.
 3. Implement education and training with the Company's risks as the management issues to strengthen risk awareness.
 4. Provide appropriate resources to integrate risk management affairs.
 5. Implement legal compliance, social, and environmental policy obligations.

3-7-2 Risk Management Committee

The Company set up the Risk Management Committee on March 20, 2018, and formulated "Risk Management Committee Organization Regulations". The General Manager serves as the convener of this committee, and the heads of each unit participate in its operation. Committee meetings are held regularly to discuss risk issues related to operations. Each responsible unit collects risk issues and identifies risks, and assesses risks based on the likelihood of occurrence and consequences (measured using qualitative or quantitative methods), continuously reviews response strategies and tracks implementation status, and reports risk management execution status to the Board of Directors regularly (at least once a year).

Risk management organizational structure and responsibilities

The Company's Board of Directors is the highest decision-making and supervisory unit for risk management. It is responsible for approving the Company's risk management policies and supervising the risk management operation mechanism.



The Audit Office draws up an annual audit plan based on the risk management policy and risk assessment results, executes audits according to the plan, assists the Board of Directors in supervising and controlling potential risks from decision-making, and ensures that all operational risks are effectively managed and escalated in a timely manner, and provide timely improvement suggestions.

In response to the governance policy proposed by the Board of Directors, the Risk Management Committee has specified the goals and communicated them through supervisors at all levels during town hall meetings, factory affairs meetings, monthly quality meetings, environmental and occupational safety committees, ESG meetings, etc. to ensure full implementation of the policy. Executives at all levels shall review the risks they are responsible for supervising and ensure the implementation of relevant risk management practices in a cautious and rigorous manner.

1. Operational risks: The General Manager Office and the management teams of all departments conduct risk assessments against the annual operating policy, and performance tracking on a regular basis to ensure that the operating strategy is in line with the Company's vision and business goals.
2. Market risks: Production, sales, and other functional units evaluate and take relevant countermeasures according to their business responsibilities and market changes. The decision-making layer and the management team of each department form a special task force when necessary to control market risks.
3. Financial and credit risks: The Finance and Accounting Department is responsible for measuring, monitoring and evaluating financial and credit risks, analyzing the appropriateness of the Company's balance sheet structure and important financial ratios.
4. Information security risks: The Information Office is responsible for planning, monitoring, and implementing information security management operations.
5. Legal compliance risks: Relevant units evaluate and adopt relevant countermeasures in accordance with laws, policies, and industry developments. The main responsible units are as follows:

Responsible department	Relevant laws and regulations
Worker Safety Office	Laws and regulations related to the environment, water resources, safety and health, and fire protection
Audit Office	Internal control related laws and regulations
General Manager Office	Corporate governance-related laws and regulations

Responsible department	Relevant laws and regulations
Human Resources Department	Labor-related laws and regulations
Finance and Accounting Department	Fiscal and economic laws and regulations
R&D Center	Product-related laws and regulations
Utilities Department	Energy-related laws and regulations
Business Center	Business, import/export, food and trade-related laws and regulations

3-7-3 Risk Management Mechanism

Chung Hwa has established a risk management process in accordance with the ISO process-oriented model. Every year, the relevant responsible units collect internal and external business issues (including economic, environmental, social, and corporate governance related issues), and continue to monitor the status of such internal and external issues. Risk assessment is conducted for each risk factor according to the materiality principle (possibility of risk occurrence and impact of consequences), development of risk response measures, and continuous review of the effectiveness of control measures.

Risk Assessment



Include risk factors with high risk assessments in the discussion proposals of "Risk Management Committee" and continue to track the implementation status of risk control. We will also carry out important risk discussion proposals into the work plans of relevant departments, continue to review the effectiveness of risk control implementation, and evaluate the effectiveness of control measures or other improvement measures to reduce risks.

3-7-4 Operation Status of Risk Management

During the risk management meeting in June 2023, we reviewed the implementation of risk control from the whole of 2022 to the first half of 2023, which can be classified as follows.

Risk category	Risk description
Raw material price and supply chain risks	Raw material price fluctuation Supply chain management
Energy risk	Rising energy prices
Financial risk	Accounts receivable risk Endorsement/guarantee risk
Information security risk	Production and control system maintenance Information system security control
Market risk	Customer demand for product changes Competitors
Occupational safety risk	Aftermath of the accident Operator loss/property loss Employee work safety
Production management capability risk	Quality assurance risk Equipment maintenance risk
Operational strategic risk	Investment risk Industry risk Management and protection of trade secrets
Human resource risk	Manpower shortage Rising labor costs

Risk category	Risk description
Environmental risk	Carbon neutrality/carbon tax Stricter environmental regulations Circular economy issues (recycling and reuse) Control limits for public dangerous goods and poisonous substances
Others (natural disasters, geopolitics)	Direct or indirect production suspension caused by typhoons and earthquakes Geopolitics causing transportation disruptions

Operating Budget and Strategy Meetings

The Company regularly conducts comprehensive risk analysis, strategic planning, and development of operational goals in the third quarter of each year. The Company convened “Operating Budget and Strategy Meeting” on December 13, 2023, in which the management team reports to the Board of Directors, and through the interaction between the Board of Directors and the management team, board members can better understand the Company's operating conditions and provide professional guidance and suggestions to enhance the capabilities of the management team and guide the Company's operational development.

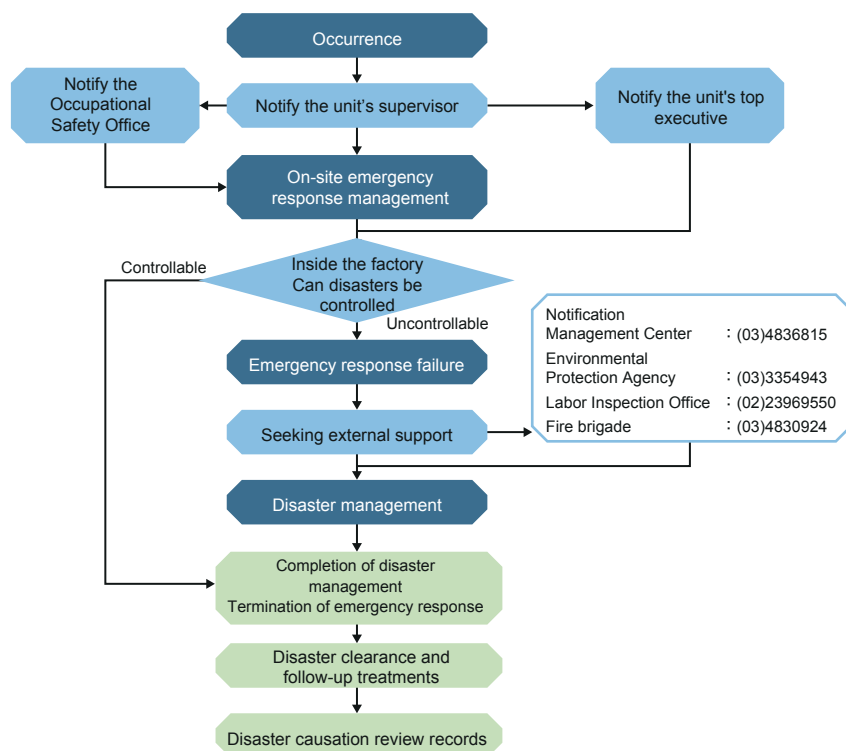


Chung Hwa's operating budget and strategy meeting: Group photo of management team and directors

3-8 Emergency Response Mechanism

In response to possible damage caused by accidents such as natural disasters, fires and explosions, chemical or tanker leakage and personnel injuries, Chung Hwa was able to deploy various disaster relief resources, manpower, and equipment to handle the disaster quickly to prevent the expansion of disaster and the impact on the factory area. For internal and external losses of personnel and the natural environment, relevant education and training on chemicals and emergency response drills are conducted. The purpose is not only to reduce the severity of disasters, but also to understand the essential hazards of chemicals and mechanical equipment, and the prevention of such hazards through education and training, and creating preventive measures to prevent the possibility of disasters.

Emergency Response Process



The Company conducts disaster prevention drills in accordance with laws and regulations, simulates emergency response measures in the event of a leak inside or outside the plant, and implements various disaster prevention and relief measures. A mutual assistance and cooperation system is established to facilitate contact in the event of an accident and mutual support channels. The Company evaluates the applicability and feasibility of accident reporting and response measures through education, training, and drills, so that emergency response units and support units are familiarized with their roles and functions in the rescue process.

The record of emergency drills in 2023 is as follows:

Emergency Response Drill

Drill description

Topic: Handling and leakage of the toxic substance dimethylformamide and air pollution drill
Time: December 27, 2023 11:00 - 11:40
Location: Between the poison warehouse and the first floor of the factory building

Purpose:
1. Familiarize employees with the contingency procedures for abnormal situations
2. Strengthen employees' disaster response capabilities
3. Be familiar with the location and use of strain relief equipment in the factory



3-8-1 Environmental, Safety, and Health Emergency Response Mechanism

In accordance with “Emergency Preparedness and Contingency Management Procedures” in the factory, personnel can quickly and effectively take appropriate emergency measures for emergency handling in the event of an accident during loading, unloading, or transportation operations. Regular drills and reviews of possible accidents are also provided to ensure that once an accident occurs, it can be handled quickly in an organized and systematic manner to minimize injuries and losses.

The emergency response procedures for off-site accidents are mainly based on the emergency response procedures for tank truck transportation. The relevant emergency response equipment and joint prevention mechanisms are also relatively well-equipped and complete. In order to have standard response procedures when tank trucks have accidents outside the factory, tank trucks must be transported in compliance with relevant regulations of local authorities. Any accidents during transportation must be reported to local fire protection, environmental protection, and police authorities.

Disaster level “1” (Stage 1)

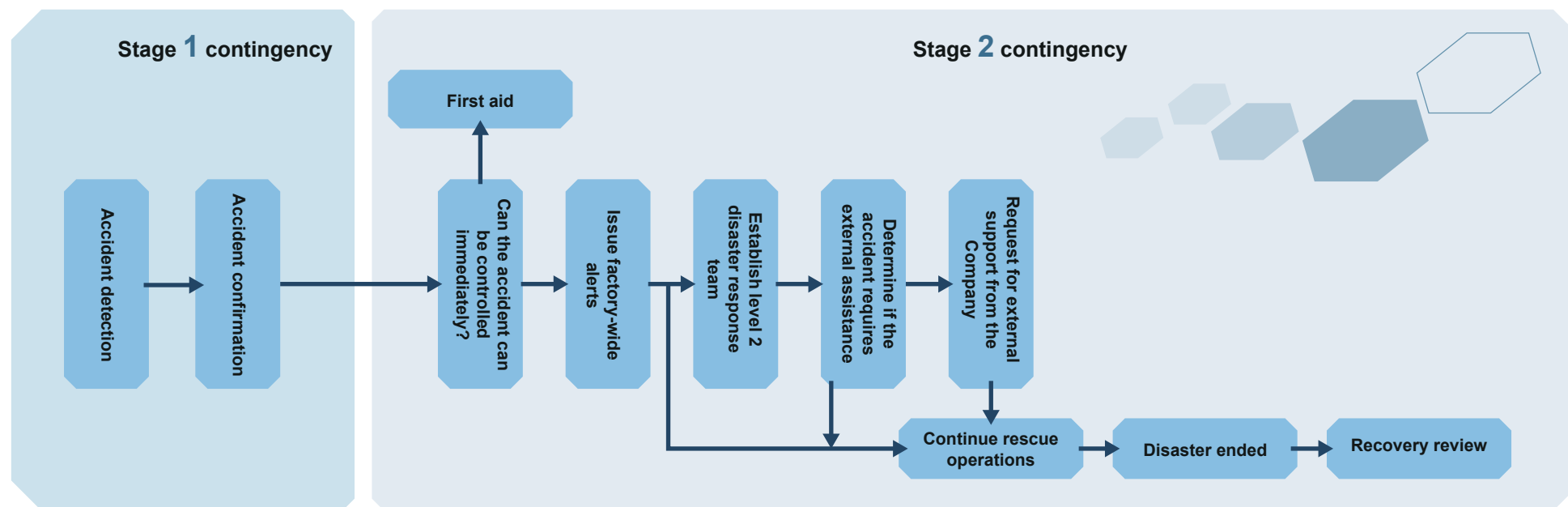
Responsibilities of response unit personnel (responding to the task of firefighting team in the unit)

Serial number	Strain unit	Job responsibilities
1	On-site response command	The duty supervisor is responsible for commanding and coordinating various task groups in the unit to perform on-site rescue and disaster relief, or elimination of fires, oil spills, oil pollution removal, chemical leakage removal, and shutdown.
2	Announcement class	Contact and report, and assist on-site command and execution of disaster relief work, coordinate with relevant units to provide information, manpower, and resources in a timely manner, and guide foreign aid units to enter the disaster area.
3	Safety protection class	Responsible for the disposal of on-site power supply and other related matters for power cut-off/interruption, oil spills, oil pollution removal, chemical leakage removal, and shutdown. Vigilance and control at the rescue site.
4	Evacuation guidance class	Ensure the safety of emergency response personnel and control the safety of personnel entering the controlled area.
5	First aid team	Emergency treatment of the injured and contact with the fire and ambulance to provide information.
6	Fire-fighting class	Responsible for the removal of hazardous materials and on-site fire extinguishing.

Disaster level “2” (Stage 2)

Responsibilities of response unit personnel

Serial number	Strain unit	Job responsibilities
1	Emergency response commander	In case of disaster level 2, the Company is responsible for commanding and implementing the overall response, ensuring the safety of personnel and equipment, and effectively controlling the disaster and reducing disaster losses.
2	Deputy response commander	Control the disaster situation effectively, provide the commander-in-chief with response information, and assist in the dispatch work.
3	Rescue team	As ordered by the commander-in-chief, the Company expanded the unit in order to rescue personnel, materials, equipment, and documents in the disaster area in a timely manner, and cooperate with external support units to implement disaster relief work.
4	Water and power team	Strengthen and maintain the normal supply of firefighting water and emergency power.
5	Fire brigade	Rescue on-site personnel and extinguish fires.
6	First aid team	First aid for the injured or hospitalization for serious injuries.
7	Maintenance team	In the event of an emergency, maintain a normal supply of water, electricity and related equipment to facilitate disaster relief work.
8	Communication team	Control the smooth flow of external and internal communication networks for disaster relief. Responsible for reporting the disaster situation to the commander-in-chief, liaising with the disaster relief units for support, and acting as the Company's external communication representative when necessary.
9	Public relations team	Represented the Company in explaining disasters and responding to related matters.
10	Guards	Control the disaster area and alert the surrounding areas, and control the traffic and personnel at the gate.



3-8-2 Sales Emergency Response Mechanism

Risk identification			Risk response	
Risk factor	Risk event		Risk consequence	Existing control measures
Contract order processing	Contract order processing	As some customer contracts are standard contracts, some of the contents have performance risks, but the Company passively accepts them.	It may cause the Company to default and suffer losses due to breach of contract	1. Sign a contract with a customer only after adding an attachment to the formal contract (for legal affairs) 2. If the customer signs a supplementary agreement with the Company, please note
		The Company adopts the related-party transaction mechanism	Integrate group resources to maximize profits	-
		Inadequate consideration of legal requirements when formulating contracts and prices for related party transactions	The degree of compliance with the relevant national laws and regulations is insufficient. In severe cases, the transaction will be suspended after review	Establishment of related party contracts, collection of legal and accounting opinions, and operational guidance
		Before signing the contract, we will conduct a cross-department review and a legal review	Reduce the risk of default	Continuously implemented in accordance with the "Contract Review Procedures"

3-8-2 Sales Emergency Response Mechanism

Risk identification			Risk response	
Risk factor	Risk event		Risk consequence	Existing control measures
Contract order processing	Order processing	Effective management of finished product safety inventory	Can meet the needs of most customer orders	Dynamic adjustment of labor process based on sales forecast
		Wrong ERP order (inconsistent with the customer's order)	1. Wrong products shipped, customer complaints, and increased external costs 2. Wrong invoice issued to customer	Order review mechanism
		The business did not verify the customer's product version when receiving the customer's order	Wrong products shipped, customer complaints, and increased external costs	When the customer places a formal order in writing (FAX or Email), the Sales Department must first confirm the order content (including: product items, delivery time and price, product version, etc.)
Customer service	Customer service	Defects in the Company's products (including those caused by customers)	Product returns and replacements increase operating costs	Customer complaint handling
		The Company can perform product replacement according to the requirements of contract signed with the customer (whether it is charged based on the attribution of responsibility)	Serving customers and improving customer satisfaction	Implement in accordance with the regulations
		The Company provides related services (such as testing, providing market information, etc.)	Serving customers and improving customer satisfaction	-
		Regularly visit customers or obtain customer information during communication and pass it on to relevant units	Pay attention to customer's voice and improve customer satisfaction	1. Develop a customer visit plan 2. Prepare the customer visit report and notify the relevant units of the relevant customer information in real time 3. Report customer-related information at production and marketing meetings or review meetings

3-8-3 Information Security Emergency Response Mechanism

I. Purpose: Ensure that the Company's information system continues to operate normally. In the event of an emergency, personnel using the system shall handle it as soon as possible and restore operations to minimize possible losses.

II. Scope: All users of computer software and hardware connected to the Company's information system and servers are included.

III. Hazard identification and risk assessment:

Threat source	Possible risks	Preventive measures	Contingency procedures
Natural disasters	Fire	1. Install temperature and smoke detection equipment in the data center 2. Perform daily backup operations	Internal control system ICP-IT-02 6.1
	Flood disaster	Wet documents, short-circuit or crash of the main unit, or interruption of operation	
	Earthquake	Machine overturned, slippage, wire breakage, floor cracks, and operation suspension.	
Vandalism	Personnel intrusion	Equipment damage	Internal control system ICP-IT-02 6.2
	Network intrusion	System crash, data outflow, and data tampering	
	Virus attack	System crash, operating system damage	
Service interruption	Power outage	Work interruption, data loss	Internal control system ICP-IT-02 6.3
	Communication interruption	Connection interruption, update data is lost	
	System crash	Suspended operation	
	Hardware failure	Suspended operation	
	System out of order	Process errors, functional errors, work stoppages	
	Data out of order	Incorrect data files, output errors, operation halts	

- IV. If system services are still operational during the recovery plan, scheduled drill or maintenance work, data shall be backed up as necessary. Emergency recovery processing focuses on the main operating system and system recovery is the first priority. Regularly review threat prevention measures, information systems, and software and hardware updates to ensure the feasibility of contingency plans.

3-9 Environmental Safety and Health Management

3-9-1 Environmental Safety and Health Management System and Policies

In order to fulfill our corporate responsibility and commitment to society and the goal of sustainable operation, the Company passed the ISO 14001:2015 Environmental Management System Certification in 2017 and the ISO 45001 Occupational Safety and Health Management System certification in 2018, and continues to promote the implementation of the relevant requirements and specifications of ISO 14001 and ISO 45001, in addition to pursuing operational performance, we are also committed to environmental protection, social welfare participation, employee care, and employee health and safety protection, hoping to fulfill our corporate citizenship responsibilities and moving toward the road to sustainable management.

Environmental Policy:

“Maintain natural landscapes, improve pollution prevention and control technologies, implement waste reduction and resource reuse, and reduce the greenhouse effect”. Based on this, we will:

1. Comply with government environmental protection regulations and the relevant compliance obligations set by the Company.
2. Implement environmental education for employees, and improve their independent environmental management capabilities through consensus among all employees.
3. Promote the environmental management system and continuously improve environmental management performance.
4. Commit to environmental protection, including pollution prevention and other specific environmental protection issues related to the Company's environment.
5. Establish good communication channels with suppliers, outsourcers, and the surrounding public, so that stakeholders can understand the Company's environmental policies and related practices, and work together for improvement.

Occupational Safety and Health Policy:

“Comply with Safety and Health Regulations, and Care for Employee Safety and Health”

Based on this, we shall:

1. Continue to improve the overall safety and health management performance.
2. Comply with occupational safety and health regulations and other relevant regulatory requirements.
3. Provide safety and health knowledge, work, environment, and equipment.
4. Strengthen the safety and health organizational structure, and fully support risk control and full participation.

5. It is the responsibility of supervisors, managers and all employees at all levels to promote and implement safety and health work.
6. The management must recognize the Company's safety and health policy and continuously implement and improve it.
7. Regularly audit and review the safety and health policy, management and performance to learn from the experience.
8. Implement and promote various safety and health tasks and education and training to improve the overall safety and health performance.
9. Provide safe and healthy working conditions to prevent work-related injuries and ill health.
10. Continuously eliminate hazards and reduce occupational safety and health risks.
11. Continue to support workers in consulting and participating in occupational safety and health-related issues.

3-9-2 Environmental and Work Safety Committee

To achieve effective environmental, safety, and health management, the Company has established an Environmental and Safety Management Committee. This committee operates in accordance with the international standards and management systems of ISO 14001 and ISO 45001. The chairman serves as the chief committee member, and department heads act as implementation committee members. They oversee the Company's overall environmental, safety, and health operations, holding quarterly meetings to review execution status and performance.

The Company's Occupational Safety and Health Office is a unit dedicated to environmental safety and health management. It is responsible for the planning, supervision and management of environmental safety and health management throughout the Company, as well as the promotion and implementation of environmental protection treatment operations related to air pollution, water pollution, waste, toxins, etc. in the factory area. In addition to strictly implementing normal environmental protection business, the Company complies with the Company's environmental safety and health policy for planning, promotion, and implementation management work, and discusses, tracks, and reviews the implementation status of environmental safety and health work in the environmental, industrial and safety committee every quarter to achieve the goals of full participation, improved communication and continuous improvement.

The implementation status of Environmental and Work Safety Committee in 2023 was as follows:

Time	Meeting name	Number of participants		
		Number of people expected to attend	Committee member	Labor representative
2023/04/18	Q1 Environmental and Work Safety Committee	14 people	9 people	5 people
2023/07/26	Q2 Environmental and Work Safety Committee	15 people	10 people	5 people
2023/10/26	Q3 Environmental and Work Safety Committee	15 people	10 people	5 people
2024/01/25	Q4 Environmental and Work Safety Committee	23 people	15 people	8 people

3-10 Supplier Management

Chung Hwa has always regarded suppliers as partners, and is committed to guiding suppliers for long-term cooperation to jointly establishing a stable and sustainable chemical supply chain. At the same time, Chung Hwa has passed ISO 9001, ISO 14001, ISO 45001 and other standard management system certifications, and has established management operating procedures for supplier selection, evaluation, and regular audits. Its supply management covers quality, business ethics, labor rights, environmental protection, labor safety and health, technology and supply capacity, and non-hazardous substances are considered. Suppliers are required to sign "Declaration of Compliance with Business Ethics and Supplier Code of Conduct" to prohibit any unethical conducts. The Company's Purchasing Department reviews the supplier's goodwill, including the supplier's history of impacting the environment and society before deciding whether to proceed with procurement. At the same time, we also require relevant suppliers to comply with the EU's Restriction of Hazardous Substances (RoHS) directive to ensure the safety of product raw materials to protect human health.

For supplier management, we review their social responsibilities and environmental performance through risk assessment and supplier review management operations, as well as supervise and assist suppliers to fulfill corporate social responsibility and improve their environmental management capabilities. As for the vendor management part, all suppliers we deal with must pass the selection process. After passing the assessment, they can be registered as a qualified supplier for the Company. For qualified suppliers, regular assessments will be conducted every year. (E), (S), and (G) respectively represent the Environmental, Social, and Governance assessment aspects, and on-site evaluation and audit plans based on cooperation status will be arranged.

Item	Quality (G)	Delivery deadline schedule (G)	Schedule progress (G)	Warranty and technical expertise (G)	Service flexibility (S)	Environmental, safety, and health management (E)
Score percentage	40%	30%	10%	10%	5%	5%

Qualified suppliers whom we deal with are included in the evaluation mechanism if they have late delivery (engineering), poor quality, or violated industrial safety-related regulations, so as to select high-quality partners for long-term cooperation. Supplier management is carried out mainly through the following methods:

Supplier selection and review	Supplier qualification certification	Supplier performance management	Continuous improvement
<ul style="list-style-type: none"> Written evaluation Sample evaluation Audit evaluation 	<ul style="list-style-type: none"> Register as a qualified supplier after qualification certification 	<ul style="list-style-type: none"> Conduct annual periodic evaluations Level A: 90 - 100 points (priority will be given to cooperation) Level B: 70 - 89 points (can be ordered) Level C: 60 - 69 points (improvement required within deadline) Level D: Below 59 points (no trading allowed) Formulate annual audit plans and conduct on-site evaluations 	<ul style="list-style-type: none"> Irregular communication Improvements are required to address the deficiencies in the supplier rating and selection process

2020-2023 Raw material supplier evaluation results

Year	2020	2021	2022	2023
Number of appraisers	38	33	40	48
Pass rate	100%	100%	100%	100%

2020-2023 Contractor evaluation results

Year	2020	2021	2022	2023
Number of appraisers	37	42	20	26
Pass rate	100%	100%	100%	100%

Chung Hwa has good safety management measures in place to control the quality of contractors and improve their industrial safety standards; contractors of Chung Hwa are required to conduct on-site "safety and health education training" publicity and to prevent occupational injuries to its employees. At the same time, through regular education and training and contractor agreement organization meetings, contractors enhance their understanding of the plant's process environment, potential hazards during operation, and safety precautions. They are also required to sign "Chung Hwa's Occupational Safety Discipline Commitment Letter and Workplace Environment and Hazardous Factors Notification Sheet" to ensure that contractors understand there are risks and hazards when entering the factory and that negligence during on-site operations may lead to industrial safety accidents.

In order to effectively promote the green supply chain, the Company promotes suppliers that have passed the ISO 14001 environmental management system certification to be listed as cooperative and priority suppliers. It is hoped that through publicity and experience sharing with suppliers, the proportion of suppliers promoting the ISO 14001 environmental management system will be increased. The Company has begun the registration of suppliers in response to the implementation of "Regulations for Data Registration of New and Existing Chemical Substances" announced by the Ministry of Environment.

The Company purchases 83% of its raw materials from domestic suppliers to facilitate the reduction of carbon emissions from transportation. Among them, most of the manufacturers of Specialty Chemicals are imported. The Company measures the reduction of carbon emissions from transportation to help achieve the goal of carbon reduction in the supply chain. In recent years, we have gradually shifted the source of imports from Europe and the United States to China, India, Japan, South Korea and other neighboring countries.

3-10-1 Non-use of Conflict Minerals Commitment

In recent years, the issue of conflict minerals has become widespread. Mineral transactions in the Democratic Republic of the Congo and its surrounding countries and regions have been controlled by local militia, and are used to trade arms, continue the bloody conflict, and ravage the local civilians, thus triggering international controversy and outrage.

Based on the commitment to corporate social responsibility and the practice of international justice, Chung Hwa has also cooperated with the Dodd-Frank Act of 2010, HR 4173 passed by



the U.S. Congress to prevent the use of illegally mined metals. Chung Hwa expresses its concern about the conflict mineral issue and makes the following statement:

1. Chung Hwa fully supports the boycott of conflict minerals, and is committed to abiding by the RBA non-use of conflict minerals policy, and will not accept minerals (gold (AU), tantalum (TA), tin (SN), tungsten (W)) that are used to directly or indirectly finance armed conflicts from the Democratic Republic of the Congo and its surrounding countries.
2. Chung Hwa has clearly communicated to its suppliers and strives to require them to inform immediately if they are aware of the use of conflict metals in their products; it requires suppliers to sign a "Guarantee for Non-use of Conflict Minerals".

3-10-2 Supply Chain Security Management Policy

1. Comply with supply chain security-related laws and regulations and the security matters required by customers.
2. Ensure the safety of the product manufacturing process and transportation supply.
3. Protect business secrets and information security, and not disclose information to any third party without permission.
4. Improve the security quality of business partners to meet supply chain security requirements.
5. Implement supply chain crisis management and immediate recovery from accidents.
6. Implement supply chain risk management and continuously improve the supply chain security system.

Establish supplier ethics and supplier code of conduct.

3-11 Outcomes of Corporate Governance Activities

3-11-1 Evaluation of the Performance of the Board of Directors

On August 11, 2020, the Company's Board of Directors passed the amendments to "Rules for the Evaluation of Performance of the Board of Directors". The Company conducts an internal evaluation of the performance of the Board of Directors every year, and once every three years, the evaluation is conducted by an external professional independent institution or a team of external experts and scholars. The Company completed the 2023 internal evaluation of the operation of the Board of Directors in February 2024, and submitted a report to the Board of Directors on February 21, 2024, which was also publicly disclosed on the Company's website.

Item	Evaluation cycle	Assessment period	Assessment scope	Assessment method	Assessment content
Internal evaluation	Implemented once a year	From January 1, 2023 to December 31, 2023	Overall Board of Directors	Internal self-evaluation (Evaluation conducted by members of the Nomination Committee)	I. Participation in the Company's operations II. Improve the quality of Board of Directors' decision-making III. Composition and structure of the Board of Directors IV. Election and continuing education of directors V. Internal control
			Individual board members	Members' self-assessments (Evaluation conducted by directors and independent directors)	I. Understanding of the Company's goals and tasks II. Awareness of the duties and responsibilities of directors III. Participation in the Company's operations IV. Internal relationship management and communication V. Professional and continuing education of directors VI. Internal control
			Functional committees	Internal self-evaluation (Evaluation conducted by members of the Nomination Committee)	I. Participation in the Company's operations II. Understanding of the duties of functional committee III. Improve the decision-making quality of functional committee IV. Composition of the functional committee and selection of members V. Internal control



Item	Evaluation cycle	Assessment period	Assessment scope	Assessment method	Assessment content
External assessment	Once every three years	From November 1, 2020 to October 31, 2021	Board of Directors and functional committee	Evaluation by an external professional and independent institution (evaluation conducted by Taiwan Corporate Governance Association) 1. Self-assessment of the assessed company 2. Preliminary review by the association commissioner 3. Written review by the evaluation committee 4. Interviews by evaluation committee members and association commissioner	I. Composition of the Board of Directors II. Guidance of the Board of Directors III. Authorization of the Board of Directors IV. Supervision of the Board of Directors V. Communication between the Board of Directors VI. Internal control and risk management VII. Self-discipline of the Board of Directors VIII. Others (board meetings, support systems, etc.)

Overview of 2021 External Evaluation Report

- Four out of ten directors of the Company are independent directors, accounting for more than one-third of the total number of seats on the board. All four independent directors have professional and rich business and management practices, and are courageous in taking on their duties. They actively participate in and contribute to the operation of the Board of Directors. The independence, professionalism, and commitment of the Company's Board of Directors, as well as the culture of openness in board meetings are worthy of recognition.
- The Chairman of the Company fully respects and incorporates the opinions of the members of the Board of Directors, and communicates with directors through various formal and informal channels on important operational matters, facilitating the provision of opinions by directors. The meeting of the functional committee of the Board of Directors is arranged to be convened one day before the board meeting, which allows more sufficient time for the meeting, and all key items from the meeting are noted to assist the directors in fulfilling the function of guiding and supervising the management team.
- The Company convenes the "Operating Budget and Strategy Meeting" on a regular basis, in which each unit head reports the growth strategy, quantitative goals, and work plans to the directors. Through active interaction and communication among members on the Company's development strategy and material issues, medium and long-term strategies and annual plans can be formed, which is helpful for board members to control the Company's overall risks and grasp the strategic direction.
- The Company organizes continuing education courses for directors every year, and adopts advanced opinions provided by experts to fully demonstrate the Company's ambition to implement corporate governance, enhance the effectiveness of the Board of Directors and continuously improve corporate governance.

Improvement Recommendations and Future Improvement Plans in the 2021 External Evaluation Report

Item	Improvement suggestions	Improvement plan
1	The Company's Chairman also serves as the General Manager. Although the required number of independent directors has been met, it is recommended that we continue to pay attention to and plan for suitable candidates for General Manager, formulate policies for the succession and training of senior managers, and include them in the scope of supervision of the Nomination Committee, and review the operation of relevant mechanisms on a regular basis. To strengthen the role of the Board of Directors and functional committee in supervising the effectiveness of talent development and execution, we will continue to create momentum for sustainable development of the Company.	In 2021, a suitable candidate was selected, and Mr. Chih-Shun Chiang was appointed as the operations consultant from June 1, 2021 to participate in the Company's various operating activities and interact with the management team. On February 22, 2022 and February 23, 2022, the Nomination Committee and the Board of Directors, respectively, discussed and approved the appointment of Mr. Chih-Shun Chiang as the General Manager of the Company to implement the separation of ownership and management of the Company.
2	The Company regularly conducts a performance self-evaluation of the Board of Directors and functional committees on an annual basis in accordance with the "Board of Directors Performance Evaluation Regulations". It was also agreed by the directors that the self-assessment indicators of the Company's Board of Directors and functional committee can be more discriminatory and in line with the Company's practical needs.	The Company discussed this improvement proposal on January 25, 2022. The Chairman and the convener of each functional committee discussed the future work plans and goals, and planned to include them in self-assessment indicators.
3	It is suggested that the Company may elevate the "Social Responsibility Committee" to a functional committee under the board of directors. The Board of Directors is responsible for coordinating corporate social responsibility, sustainable development direction, and supervising specific implementation plans. Synergy with the communication and execution of social responsibility strategies and actions, so that various sustainable operations works in the organization are more effective and concrete from top to bottom.	On December 13, 2021, the Company's Nomination Committee reviewed the Company's organizational structure plan and pointed out that ESG issues are becoming increasingly important. It is recommended that the level of the Social Responsibility Committee should be elevated to be subordinate to the Board of Directors. The Company has renamed the "Social Responsibility Committee" into "Sustainable Development Committee" and upgraded it to the level of the Board of Directors. This was discussed and approved by the Nomination Committee on February 22, 2022 and the Board of Directors on February 23, 2022.

3-11-2 CPA's Evaluation

Before the appointment of CPAs by the Board of Directors at the end of each year, the Company reviews the independence of CPAs by checking whether the CPAs are the Company's directors, shareholders, or are paid salary by the Company; the Company has no other financial interests or business relationship, except for the fees of attestation and fiscal and tax cases, and the appointment of the CPAs and the review of the expenses shall be made only after the CPAs issue a "Declaration of Independence". Conducted the assessment of the CPAs including: review of requirements for independence, review of independent operations, and review of suitability.

The latest assessment was that the Company's financial and accounting department conducted a review of the suitability and independence of the CPAs in January 2024. No incompetence or violation of independence has been found among the Company's CPAs. The evaluation results have been discussed and approved by the Audit Committee on January 16, 2024 and the Board of Directors on January 17, 2024.

3-11-3 Corporate Governance Evaluation

The Corporate Governance Center of the Taiwan Stock Exchange Corporation announced the list of the 9th Corporate Governance Evaluation. In the 2023 evaluation results, Chung Hwa was ranked in the top 21%-35% of the listed group, and the evaluation result of the category with a market capitalization less than NT\$5 billion was ranked in the top 2%-10%. In the future, we will continue to work hard to improve corporate governance.

3-11-4 Information Disclosure

Disclose material information of the Company in both Chinese and English

MOPS began disclosing major company information in both Chinese and English in 2018 to provide investors with real-time and important relevant business information.

General shareholders' meeting to be held before the end of May

The Company's annual general meeting of shareholders was held on May 26, 2023. In order to encourage shareholders to participate in corporate governance, the Company began to adopt electronic voting in 2017, and began to provide English version of shareholders' meeting notices in 2017 to make it more convenient and efficient for shareholders to participate in shareholders' meetings.

Annual conference by invitation or sponsor

The Company was invited to attend an investor conference held by Fubon Securities on August 24, 2023, to explain the Company's financial and operational overview.



4 Environmental Performance

4-1 Environmental Management Policies and Systems

4-2 Risks, Opportunities and Financial Impacts of Climate-related Financial Disclosures (TCFD)

4-3 Environmental Management Accounting

4-4 Raw Material Management

4-5 Energy Resource Management

4-6 Water and Effluents

4-7 Air Pollution Control

4-8 Waste Management

4-9 Greenhouse Gas Inventory Check



4-1 Environmental Management Policies and Systems

In light of global climate change, it is difficult to obtain natural resources, and the industry continues to develop and expand. The utilization of various resources and environmental pollution have become issues of global concern. For the sustainable operation and development of the industry, Chung Hwa is committed to the effective use of natural resources and the reduction of pollutant emissions. In addition to complying with legal requirements and specifications, it is also important to seek technical resources to reduce output of pollutants.

Environmental Protection Policy of Chung Hwa:

Adhering to the environmental principles of “preserving natural landscapes, enhancing pollution prevention technology, reducing waste and promoting resource reuse, and mitigating the greenhouse effect”, the Company strives to advance the environmental management system. Based on this, we are committed to:

- I. Comply with government environmental regulations and compliance obligations set by the Company.
- II. Implement environmental education for employees, and improve their independent environmental management capabilities through consensus among all employees.
- III. Promote the environmental management system and continuously improve environmental management performance.
- IV. Commitment to protect the environment, including pollution prevention and other specific environmental protection issues related to the Company's environment.
- V. Establish good communication channels with suppliers, outsourcers, and the surrounding public, so that stakeholders can understand the Company's environmental policies and related practices, and work together for improvement.

Environmental Goal Achievement Status and Ongoing Action Plan

Category	Target	Performance metrics	Performance in 2023	Calculated value	Continuous action plan
Energy conservation	Reduce electricity consumption by 10% in 2024 as compared to 2014	Electricity consumption below 70,978 GJ in 2024	14.47% less than in 2014	(2014 electricity consumption - 2023 electricity consumption)/2014 electricity consumption*100%	Establish a dedicated unit for energy management, formulate energy management-related systems and energy-saving goals
					Real-time monitoring platform for factory-wide energy consumption to detect abnormalities immediately
					Strengthen the publicity of energy-saving concepts, such as energy-saving education and training, energy-saving case studies, and expert exchanges
					Track the effectiveness of energy conservation projects and include performance in rewards
					Purchase equipment with energy-saving labels and introduce energy-saving design products and processes
					Establish an appropriate energy strategy and engage all employees to promote sustainable business operations
Pollution prevention	“Zero pollution” of exhaust, wastewater, waste, and groundwater	Test data pass rate is 100 (%)	100% achieved by 2023	100%	Continue to promote the environmental management system

Category	Target	Performance metrics	Performance in 2023	Calculated value	Continuous action plan
Water conservation	Reduce water consumption by 10% in 2024 as compared to 2014	Water consumption below 411,224 kWh in 2024	18.29% less than in 2014	(Water consumption in 2014 - Water consumption in 2023)/Water consumption in 2014*100%	Continue to promote the wastewater recycling system
					Evaluate the installation of wastewater recycling equipment
					Factory-wide water consumption monitoring for real-time abnormality detection
Waste management	Waste recycling rate of more than 95% in 2024	In 2024, the waste recycling rate was above 95 (%)	The waste recycling rate in 2023 was 78.7%	(Total waste output in 2023 - Total recycling and reuse) / Total waste output	Continue to implement proper resource waste classification plans
					Cooperation with waste resource recycling companies
					Recycling and reuse of process waste in other processes within the factory
Greenhouse gas reduction	Reduce total greenhouse gas emissions by more than 5% in 2024 as compared to 2015	2024 Greenhouse gas emissions reached 11,528 tCO ₂ e	Greenhouse gas emissions decreased by 16.52% compared to the base year	(GHD emissions in 2021 - GHG emissions in 2023)/GHG emissions in 2021*100%	Replace crude oil with natural gas
					Continue to implement energy-saving (electricity) programs

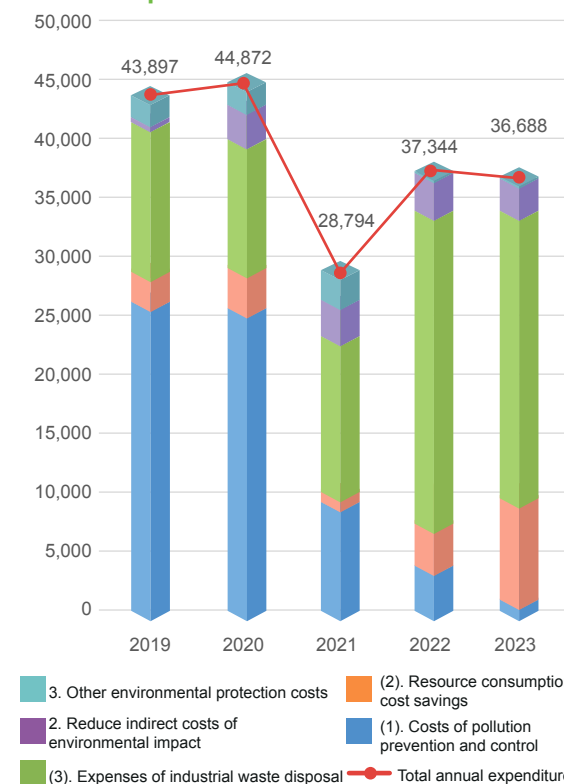


4-2 Risks, Opportunities and Financial Impacts of Climate-related Financial Disclosures (TCFD)

The purpose of the environmental accounting system is not only to identify and count the Company's environmental costs, but also to evaluate and count the benefits of cost reduction or revenue generation due to the implementation of environmental protection plans, thereby encouraging and promoting economical environmental protection plans. Given the trend of higher environmental costs for enterprises in the future, Chung Hwa is able to more effectively manage the cost-effectiveness of environmental protection through environmental accounting. The actual practice of environmental accounting is to clearly classify various types of environmental expenditures and establish independent accounts, which can be correctly classified by each unit when preparing its annual budget. Cost statistics are systematically accounted for by environmental accounts.

Environmental Protection Cost Expenditure Statistics

Unit: NT\$ thousands



Unit: NT\$ thousands

2023 Environmental protection cost category by item	Description	Capital expenditure	Expenses
1. Direct costs of reducing environmental impact			
(1). Costs of pollution prevention and control	Including: air pollution prevention and control costs, water pollution prevention and control costs, and other pollution prevention and control costs	34	979
(2). Resource consumption cost savings	Cost of resource savings (water and electricity resources)	8,658	-
(3). Expenses for the treatment and recycling of business waste and general office waste	Expenses of industrial waste treatment (including reuse, incineration, landfill, etc.)	-	24,017
2. Indirect costs of reducing environmental impact (environmental protection-related management expenses)	Including: (1) environmental education expenses for employees; (2) environmental management system framework and certification acquisition fees; (3) environmental load monitoring expenses; (4) increased expenses for purchasing environmental protection duty products; (5) personnel expenses related to environmental protection organizations	-	2,814
3. Other environmental protection costs	Including: (1) expenses for soil remediation and natural environment restoration; (2) insurance premiums for environmental pollution damage and environmental taxes and fees imposed by the government; (3) settlement of environmental problems, compensation, fines, and litigation costs	-	186
Total		8,692	27,996

1. Governance

(1) Description of the Board's supervision of climate-related risks and opportunities.

The Board of Directors is the Company's highest-level monitoring organization for climate-related risks and opportunities. The Board of Directors is responsible for supervising the effectiveness of risk control. In addition, the Sustainability Committee has been established under the Board of Directors to assess matters related to climate change impacts. The Board members have fully understood the significance and impact of climate change, and have taken the impact of climate change into consideration when making major investment decisions.

Risk Management Committee: The General Manager serves as the convener. The Committee convenes at least twice a year to discuss risk issues and reports the risk management results to the Board of Directors at least once a year.

Sustainable Development Committee (ESG Committee): An independent director serves as the convener and has established the ESG Committee working group under it.

A task force of the Sustainable Development Committee is responsible for identifying, evaluating, and managing climate change-related risks and opportunities. The task force leader of the Sustainable Development Committee regularly reports to the Board of Directors on the promotion and effectiveness of related works.

(2) The management's role in assessing and managing climate-related risks and opportunities.

Climate change involves a wide range of issues. In order to fully incorporate the opinions of various units and discuss countermeasures, the Sustainable Development Committee's working group is led by the General Manager and consists of the Worker Safety Office, Audit Office, General Manager Office, Human Resources Department, Finance and Accounting Department, R&D Center, Utilities Department, Sales Center, and other units.

The working group of the Sustainable Development Committee holds regular meetings to report the assessment results of climate change-related risks and opportunities to the Sustainable Development Committee, and conduct tracking and improvement.

2. Strategy: impacts of climate-related risks and opportunities on the organization's business, strategy, and financial planning

(1) Description of the short-, medium- and long-term climate-related risks and opportunities that the organization has identified.

Assess the impact and possible financial impacts of climate change. The task force of the Sustainable Development Committee identifies climate-related risks based on the TCFD framework and the unique nature of the chemical industry. In addition, it cooperates with the Company's risk management system to carry out risk control plans to minimize the impact of hazards as much as possible.

For climate-related risks, short-, medium- and long-term risks and opportunities are identified to compile the relative quantitative impacts of each risk issue and response opportunities and strategies.

Risks and Opportunities Related to Climate Change

Risk type	Climate risk	Upstream	Operations	Downstream
Risk	Net zero emissions	On the road to zero-carbon emissions, administrative expenses and production costs have increased, thereby increasing product prices	Increase operating expenses by adding carbon reduction equipment or purchasing renewable energy, green power, and carbon credits	Customers commit to net zero, and the Company is required to be more proactive in carbon reduction
	Carbon fee/carbon tax GHG cap control	Production capacity is limited by carbon emissions, which in turn affects the increase in costs associated with its shipments being able to comply with regulations, resulting in an increase in the price of its products	Capacity expansion is limited, affecting revenue growth Increase in compliance-related expenses Increased production costs	Due to carbon tax, customers demanded the Company to be more proactive in carbon reduction
	Drought/flood	Unable to supply goods normally due to drought/flood	Operations affected by drought/flood	The customer considers the impact of drought/flood and requires the Company to strengthen investment in continuous operations to reduce supply chain risks
	Reputation	Suppliers are not actively promoting climate and carbon management, resulting in negative impact on the Company's reputation	Unable to meet stakeholders' expectations, impacting corporate reputation	Unable to meet stakeholders' expectations, impacting corporate reputation
Opportunity	Low-carbon products/ services	The development of low-carbon products by suppliers contributes to carbon reduction in the Company's supply chain and meets the expectations of the customers and other stakeholders	Satisfy customers' green/low-carbon product requirements and generate revenue	Increased customer demand and trust in the Company's products, which in turn enhances long-term partnerships with the Company and participates in renewable energy plans/carbon trading markets
	Satisfy customers' green/ low-carbon product requirements and generate revenue	The participation of suppliers in renewable energy projects and carbon trading markets helps the Company achieve Scope 3 carbon emission reductions and complies with regulatory requirements to establish a green transportation and distribution system	Participating in renewable energy plans and carbon trading markets can help achieve net-zero emissions goals, comply with regulatory requirements, and smoothly expand production capacity.	The competitiveness of customers' consumption market has improved, which in turn has driven the growth of demand for the Company's products
	Promote water efficiency and diversification	Improve suppliers' water management performance and strengthen supply chain climate resilience	Strengthening climate resilience and competitiveness	Maintain business continuity and increase customers' trust in the Company

Based on the risk identification results, the sustainability promotion team has identified five major transition risks and three physical risks, as shown in the figure below:



After conducting financial assessments for the above climate risks, we have planned improvement activities to mitigate and adapt to climate change risks. The summary is as follows:

Climate Change Risk, Opportunity, Impact Description and Financial Impact

Risk type	Climate risk	Potential financial impact	Climate opportunity	Potential financial impact	Response actions
Transition risk	GHG cap control and carbon tax and fee	Restricted capacity expansion and increased operating costs	<ul style="list-style-type: none"> Participation in renewable energy projects Participation in the carbon trading market 	<ul style="list-style-type: none"> Purchase renewable energy at an early stage to smoothly expand production capacity 	<ul style="list-style-type: none"> Set carbon reduction targets: Commit to achieving net zero emissions by 2050, and all greenhouse gas emissions from operations will be zero. Establish a renewable energy task force to accelerate the development of renewable energy and actively negotiate the purchase of green power.
	Net zero emissions	Increase in installation and operation costs of carbon reduction equipment Increased expenses for purchasing renewable energy and carbon credits Reduce product weight and packaging materials	<ul style="list-style-type: none"> Obtain subsidies and cooperation from relevant government departments Develop low-carbon products and services Enhance energy efficiency of customer products 	<ul style="list-style-type: none"> Accumulate the carbon credits needed to offset future emissions Satisfy customers' demand for energy-saving products and increase revenue 	<ul style="list-style-type: none"> Map the company-wide net-zero emissions path and developing the net-zero strategy. Implement greenhouse gas reduction actions, participate in the government's carbon reduction reward project, and accumulate carbon rights Long-term planning for the purchase of carbon credits Continue to invest in R&D resources to develop energy-saving products
Transition risk	Market risk	Customers and investors are paying more and more attention to corporate climate change actions and prefer to purchase green and low-carbon products. If the chemical industry fails to adapt to such changes in demand, it may face a loss of market share	Innovation and technology development	Build advanced production lines, low-carbon production lines, and low-carbon processes	<ul style="list-style-type: none"> Implement ISO 14064 management of greenhouse gas emissions, respond to relevant regulatory requirements, and identify energy conservation and improvement possibilities Research, develop, and find low-GWP raw materials to replace high-carbon raw materials
	Uncertainty in the development of new energy-saving and carbon reduction technologies	The new process technology will increase the electricity consumption of the production line, resulting in an increase in operating costs	Enhance energy efficiency of factory	Reduce operating costs of water and electricity	<ul style="list-style-type: none"> Pay attention to the development trend of new energy-saving technologies and equipment, and evaluate the application benefits in the factory Stability and durability while improving efficiency
	Impact on corporate reputation	Failure to meet stakeholder expectations, resulting in damage to corporate reputation			Adhere to green manufacturing and green innovation, and enhance the corporate green image through transparent disclosure
Physical risk	Flood disaster Drought	Production is affected, resulting in financial loss and decreased revenue	Enhance natural disaster resistance	Strengthen climate resilience and reduce the probability of operational disruption and possible loss	Assess the drought/flood risk at the plant, and develop and implement risk mitigation measures
	Increase in premium for natural disaster insurance	Increase in operating expenses			Establish and improve the water monitoring mechanism and emergency response procedures, and conduct regular drills
	Temperature rise	Rising electricity consumption, costs, and carbon emissions	Promote low-carbon green production	Save electricity and costs	Establish the Energy Conservation and Carbon Reduction Committee, with senior executives leading greenhouse gas reduction actions

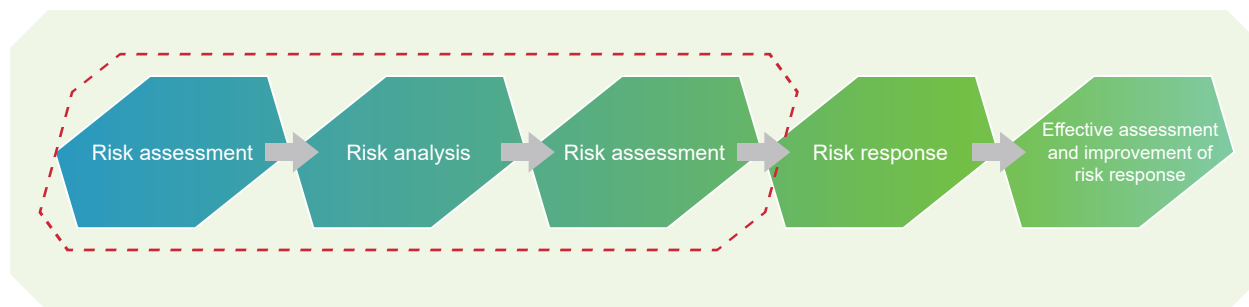
The organization's strategic resilience, considering different climate-related scenarios.

3. Climate change risk management

(1) The organization's process for identifying and assessing climate-related risks.

Climate-related risk identification and assessment are carried out in accordance with the Company's risk management mechanism.

(2) The organization's management process for climate-related risks.



Include risk factors with high risk assessments in the discussion proposals of "Risk Management Committee" and continue to track the implementation status of risk control. We will also carry out important risk discussion proposals into the work plans of relevant departments, continue to review the effectiveness of risk control implementation, and evaluate the effectiveness of control measures or other improvement measures to reduce risks.

(3) How the process of identifying, assessing, and managing climate-related risks is integrated into the organization's overall risk management system.

The climate-related risk management system integrates the management mechanisms of different functional units and levels. We consider management policies, actual assessment practices, and confirmation of countermeasures to reduce operational impacts.

4. Indicators and targets

(1) Indicators used to assess climate-related risks and opportunities according to the strategy and risk management process.

(2) Disclosure of Scope 1, Scope 2, and Scope 3 (if applicable) greenhouse gas emissions and related risks.

(3) Objectives used by the organization in managing climate-related risks and opportunities, and the performance of the objectives.



Category	Target	Performance metrics	Short-term goals 2021 - 2023	Mid-term goals 2024 - 2026	Long-term goals 2027 - 2030	2023
Greenhouse gas reduction	Reduce total greenhouse gas emissions by 33% in 2030	Greenhouse gas emission in 2030 is 10,000 (tCO ₂ e)	Decrease by 4% YoY	Decrease by 3% YoY	Decrease by 3% YoY	The total greenhouse gas emissions in 2023 was 9961.3 (tCO ₂ e), a decrease of 16.52% compared to 2021.
	Continuous action plan					
	<ul style="list-style-type: none"> Replace crude oil with natural gas Continue to implement energy-saving (electricity) programs 					
Energy consumption	Reduce by 10%	Energy consumption reached 69,386 (GJ) in 2030	Decrease by 4% YoY	Decrease by 3% YoY	Decrease by 3% YoY	In 2023, energy consumption decreased by 18,991 (GJ), or 19.66% compared to the base year (2021).
	Continuous action plan					
	<ul style="list-style-type: none"> Establish a dedicated unit for energy management, formulate energy management-related systems and energy-saving goals Real-time monitoring platform for factory-wide energy consumption to detect abnormalities immediately Strengthen the publicity of energy-saving concepts, such as energy-saving education and training, energy-saving case studies, and expert exchanges 			<ul style="list-style-type: none"> Track the effectiveness of energy conservation projects and include performance in rewards Purchase equipment with energy-saving labels and introduce energy-saving design products and processes Establish an appropriate energy strategy and engage all employees to promote sustainable business operations 		
Environmental Impact	Compliant with emission standards 100 (%)	Test data pass rate is 100 (%)	Test data pass rate is 100 (%)	Test data pass rate is 100 (%)	Test data pass rate is 100 (%)	Test data pass rate is 100 (%)
	Continuous action plan					
	<ul style="list-style-type: none"> Continue to promote the environmental management system 					
Water resources	Reduce total water intake by 10% in 2030	Total water withdrawal reached 365 (million liters)	Decrease by 3%	Decrease by 3%	Decrease by 4%	The total water withdrawal in 2023 decreased by 30.832 million liters, or 7.63% from the base year (2021).
	Continuous action plan					
	<ul style="list-style-type: none"> Continue to promote the wastewater recycling system 		<ul style="list-style-type: none"> Evaluate the installation of wastewater recycling equipment 		<ul style="list-style-type: none"> Factory-wide water consumption monitoring for real-time abnormality detection 	
Waste management	Waste recycling rate of more than 95% in 2030	Waste recycling rate of more than 95 (%)	Waste recycling rate of more than 80 (%)	Waste recycling rate of more than 90 (%)	Waste recycling rate of more than 95 (%)	In 2023, the waste recycling rate reached 78.7%.
	Continuous action plan					
	<ul style="list-style-type: none"> Continue to implement proper resource waste classification plans 		<ul style="list-style-type: none"> Cooperation with waste resource recycling companies 		<ul style="list-style-type: none"> Recycling and reuse of process waste in other processes within the factory 	

4-3 Environmental Management Accounting

The purpose of the environmental accounting system is not only to identify and count the Company's environmental costs, but also to evaluate and count the benefits of cost reduction or revenue generation due to the implementation of environmental protection plans, thereby encouraging and promoting economical environmental protection plans. Given the trend of higher environmental costs for enterprises in the future, Chung Hwa is able to more effectively manage the cost-effectiveness of environmental protection through environmental accounting. The actual practice of environmental accounting is to clearly classify various types of environmental expenditures and establish independent accounts, which can be correctly classified by each unit when preparing its annual budget. Cost statistics are systematically accounted for by environmental accounts.

The environmental cost in 2023 was NT\$36,688 thousand. Chung Hwa has invested in the maintenance and update of pollution prevention and control equipment, which has paid off, to reduce operating expenses. Meanwhile, we continue to invest in energy management system costs to effectively control the consumption of energy resources and mitigate greenhouse gas emissions. On the other hand, Chung Hwa is committed to waste recycling and reuse to reduce the environmental impact of waste disposal. At the same time, we continue the plan to upgrade process equipment to improve process efficiency, reduce pollution emissions, and reduce the impact on the environment during production process. The reduction in energy, water usage, and waste output during the implementation of environmental protection plan in 2023, as well as the economic benefits obtained from the recycling and reuse of wastewater and waste, totaled approximately NT\$14,635 thousand, as explained in the following table:

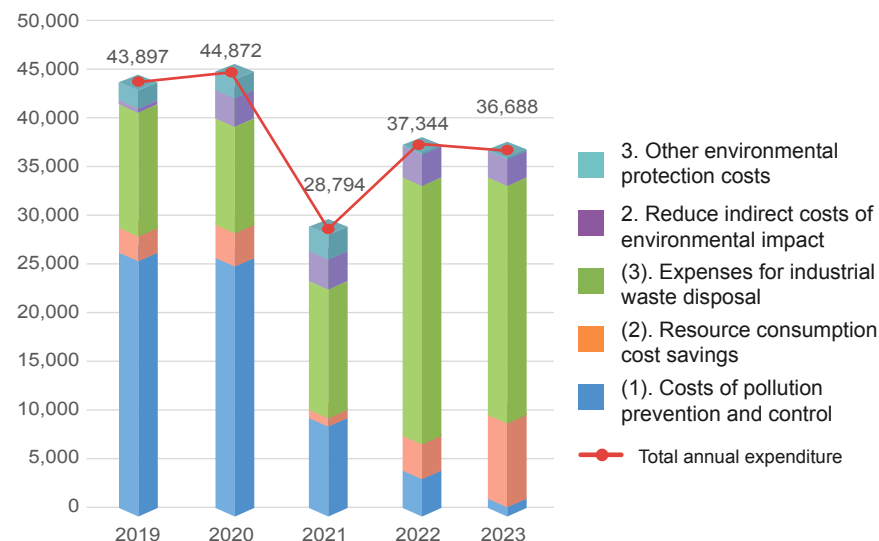
2023 Environmental Protection Cost Table

Unit: NT\$ thousands

Environmental cost item by category	Description	Capital expenditure	Expenses
1. Direct costs of reducing environmental impact			
(1). Costs of pollution prevention and control	Including: air pollution prevention and control costs, water pollution prevention and control costs, and other pollution prevention and control costs	34	979
(2). Resource consumption cost savings	Cost of resource savings (water and electricity resources)	8,658	-
(3). Expenses for the treatment and recycling of business waste and general office waste.	Expenses of industrial waste treatment (including reuse, incineration, landfill, etc.)	-	24,017

Environmental Protection Cost Expenditure Statistics

Unit: NT\$ thousands



2023 Environmental Protection Cost Table

Unit: NT\$ thousands

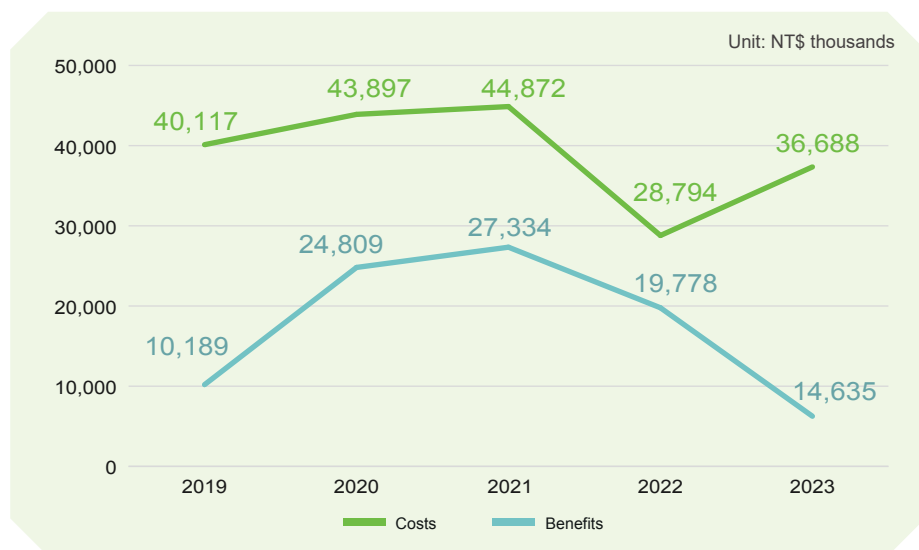
Environmental cost item by category	Description	Capital expenditure	Expenses
2. Indirect costs of reducing environmental impact (environmental protection-related management expenses)	Including: (1) environmental education expenses for employees; (2) environmental management system framework and certification acquisition fees; (3) environmental load monitoring expenses; (4) increased expenses for purchasing environmental protection products; (5) related personnel expenses for environmental protection organizations	-	2,814
3. Other environmental protection costs	Including: (1) expenses for soil remediation and natural environment restoration; (2) insurance premiums for environmental pollution damage and environmental taxes and fees imposed by the government; (3) settlement of environmental problems, compensation, fines, and litigation costs	-	186
Total		8,692	27,996

2023 Environmental Benefits Statistical Table

Unit: NT\$ thousands

2023 Environmental benefits statistical table			
Category	Description	Environmental benefits	Economic benefits
1. Expenses saved by implementing environmental protection programs	Energy saving program: 6 completed	Total savings of 1,560GJ	1,433
	Water saving program: 2 completed	A total of 60,532 metric tons of tap water were saved	871
	Waste reduction program: 4 completed	Reduced waste generation by 822.53 metric tons	8,409
2. Substantial income from waste recycling and reuse	Including the recycling of waste pallets, waste batteries, waste lamps, waste packaging materials, waste cardboard boxes, waste metals, waste plastics and other wastes	410.32 (metric tons)	3,922
Total			14,635

Environmental Costs and Benefits:



4-4 Raw Material Management

Sulfur, hydrochloric acid, aluminum hydroxide, PTSA-D, EG, etc. are the main raw materials of our products. In view of the changes in natural environment, Chung Hwa continues to seek renewable raw materials and develops low-carbon chemicals to reduce the consumption of natural resources in the production process.

4-5 Energy Resource Management

Chung Hwa has established an intelligent digital power monitoring platform to analyze energy consumption efficiency through systematic management, seek effective energy use, and lay the foundation for green factories. In addition, Chung Hwa continuously monitors the power system and adopts variable frequency and energy-saving equipment to reduce the electricity load.

Energy Management Policy

- Establish a dedicated unit for energy management, formulate energy management-related systems and energy-saving goals.
- A real-time monitoring platform for plant-wide energy consumption detects anomalies immediately.
- Strengthen the promotion of energy conservation concepts, such as energy conservation knowledge education and training, energy conservation case studies, and expert exchange and sharing.
- Track the effectiveness of energy conservation projects and include performance in rewards.
- Purchase equipment with energy-saving labels and introduce energy-saving design products and processes.
- Establish an appropriate energy strategy and engage all employees to promote sustainable business operations.

Dedicated Energy Management Unit

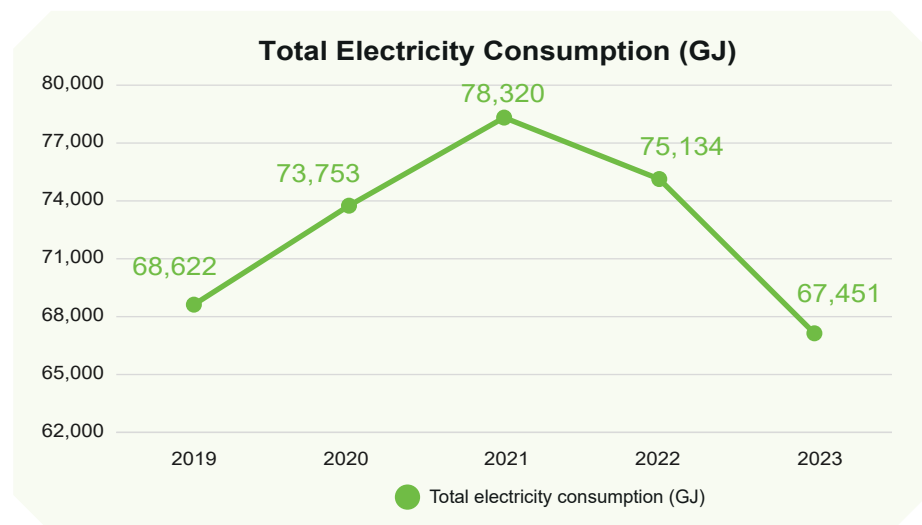
The factory director leads the department managers to establish a cross-department energy management team. Hold monthly energy conservation meetings with the Utilities Department and plant energy management personnel of the dedicated unit to review the various measures and goals specified in the Energy Management Regulations.

In 2023, the source of energy consumption of Chung Hwa came from the use of electricity, natural gas, gasoline and diesel. The total energy consumption of Taoyuan Plant No. 1, Taoyuan Plant No. 2, and Changhua Plant in 2023 was 77,594 GJ (GIGAJOULE). Electricity consumption was 67,451 GJ; natural gas consumption was 3,838 GJ; oil consumption was 6,305 GJ

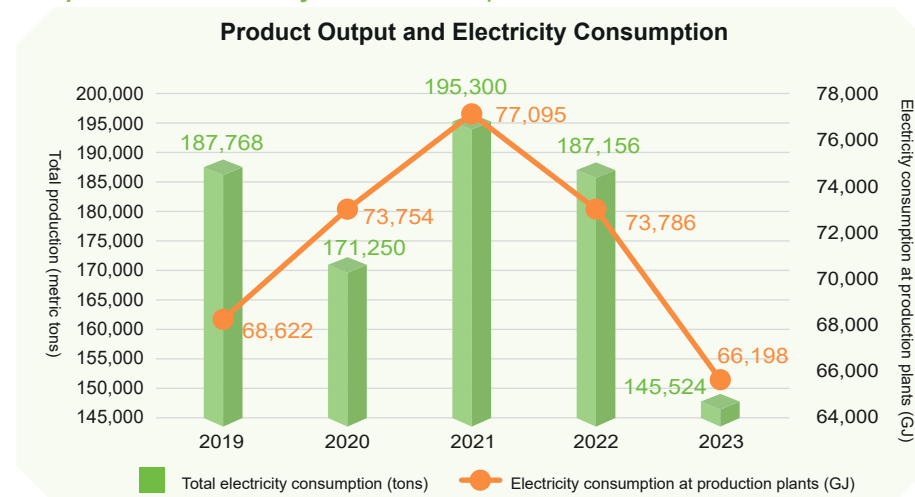
In 2023, the implementation of energy-saving plan resulted in a reduction of 18,991 GJ compared to the base year of 2021 (96,585 GJ), a decrease of 19.7%. In 2023, the unit product electricity consumption was 121.11 GJ/metric tons.

The percentage of our purchased electricity is 100%, and we neither use renewable energy nor generate energy for self-use.

Total Electricity Consumption (the scope includes the production base Taoyuan Plant No. 1, Taoyuan Plant No. 2, and Changhua Plant)

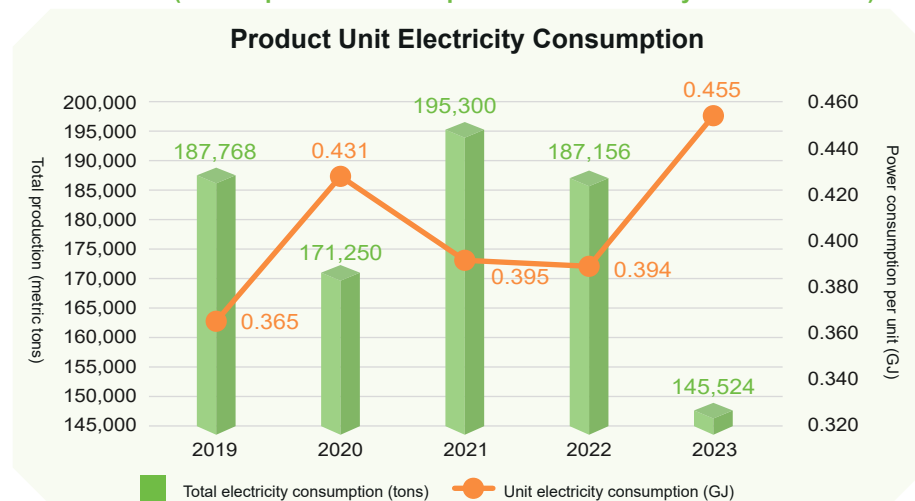


Total Electricity Consumption per Unit of Product (the scope includes the production base Taoyuan Plant No. 1)



Note: Chung Hwa's production base is Taoyuan Plant No. 1.

Chung Hwa's Production Volume and Electricity Consumption of Chemical Products (the scope includes the production base Taoyuan Plant No. 1)



Note: Chung Hwa's production base is Taoyuan Plant No. 1.

4-6 Water and Effluents

As major products require a large amount of water, Chung Hwa is well aware that water is an important issue in product manufacturing. In addition to continuously integrating product water consumption monitoring to rationalize water consumption, we continue to implement water reuse measures and promote various water-saving plans. In addition, during the energy-saving meeting, measures and management aspects were reviewed and improved in response to water-saving goals.

Chung Hwa's Water Resource Management Policy:

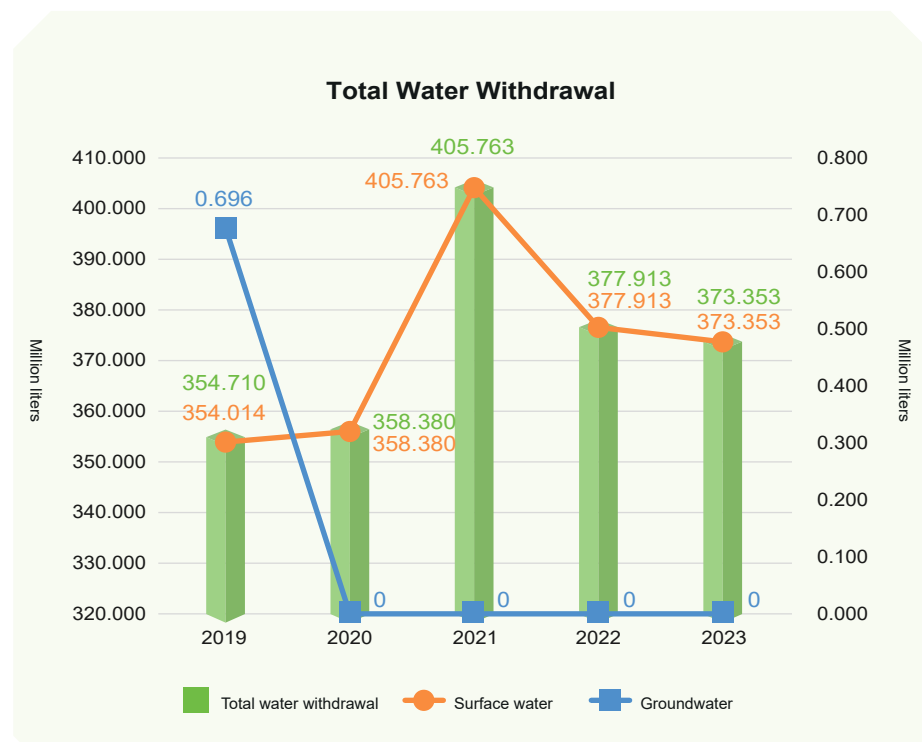
1. Promote water conservation to reduce water consumption per unit of output.
2. Implement water conservation and recycling in the process to significantly reduce water consumption.
3. Gradually implement the water regeneration plan.
4. Encourage all units to pay attention to water resource risks and make joint efforts for water conservation.
5. Promote water inventory, water conservation, establish water footprint, and set water conservation goals.

Water resource management is one of the main operational risks of Chung Hwa. We explored water risk management measures from the aspects of laws and regulations, natural disasters and other aspects, and summarized the following table:

Orientation	Aspects to consider	Risk		Opportunity		Response actions
Regulations	The impact of water-related regulations	The use of recycled water will increase operating costs	Low to medium	Using recycled water reduces the risk of water shortage	Low to medium	<ul style="list-style-type: none"> • Continue to promote the policy of using recycled water • Develop new technology for wastewater recycling treatment system
	Drainage standards	Emission standards raise operating costs	Low to medium	Promote process improvement, raw material reduction, and lower production costs	Low to medium	
Natural disasters	Storms and floods	Increased likelihood and severity of reduced or interrupted production capacity	Low to medium	Increase market demand for factory capacity	Low to medium	<ul style="list-style-type: none"> • Assess and mitigate the risks of climate-related disasters at the factory • Conserve water and increase water recycling rate • Evaluate the installation of wastewater recycling equipment
	Water shortage	The increase in probability and severity of occurrence will reduce production capacity and increase operating costs	Medium to high	Increase market demand for factory capacity	Low to medium	
Others	Corporate reputation	Reputation damage, share price falls	Medium to high	Proactive water conservation and reduction of water footprint to enhance corporate reputation	Medium to high	Surpass targets and goal and exert influence to drive the industry
	Supply chain	Poor mitigation and adaptation capabilities increase operating costs	Medium	Reduce vicious competition in the industry	Low to medium	Request suppliers to establish the concept of water conservation and water resource management system
	Social and economic situation	Changes in the situation increase operating costs/reduce production capacity	Medium	Actively conserve water and reduce the impact of water resource shrinkage	Medium	Participate in the government and require suppliers to establish a water conservation concept and water resource management system

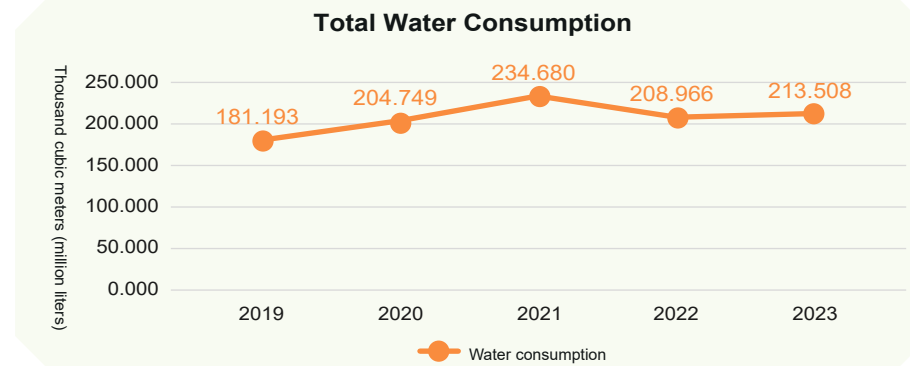
4-6-1 Total Water Intake (the scope includes the production base Taoyuan Plant No. 1 and Taoyuan Plant No. 2)

Since 2014, Chung Hwa has continuously reduced the use of groundwater, hoping to make sustainable use of land resources and maintain the natural environment. By 2020, the Company stopped the use of ground water resources. Therefore, Chung Hwa's water source is surface water (tap water). Due to the influence of climate and environmental factors, surface water sources must be recycled and reused more effectively. Therefore, Chung Hwa is committed to recycling and reusing drainage water to reduce the consumption of water resources. The total water intake in 2023 was 373.353 thousand cubic meters (million liters), a decrease of 7.99% compared to 2021.



Note: Water consumption includes water used for acid and alkali production, Specialty Chemicals, production management, quality assurance and R&D, and non-production-related water used in the cafeterias and employee dormitories, etc.

Total Water Consumption (the scope includes the production base Taoyuan Plant No. 1 and Taoyuan Plant No. 2)

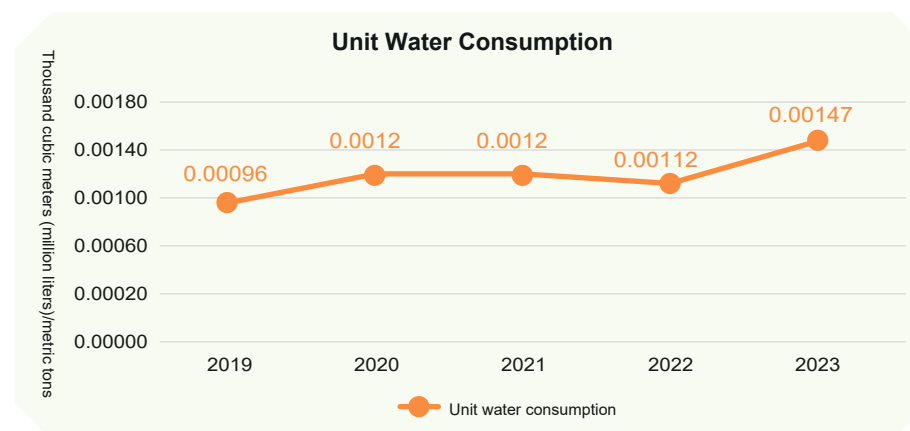


Note: Water consumption = Total water intake - Water discharge

Note: The total water consumption of Chung Hwa's Taoyuan Plant No. 1 and Taoyuan Plant No. 2 in 2023 was 213.508 thousand cubic meters (million liters). There is no statistical data on the water discharge of Changhua Plant, so the water consumption of Changhua Plant is excluded.

Water Consumption Per Unit of Product (the scope includes the production base Taoyuan Plant No. 1)

Chung Hwa changed its product structure and mass-produced high-standard sulfuric acid. Therefore, the water consumption per unit of product in 2023 was 0.00147 thousand cubic meters (million liters)/metric tons, which increased by 0.00035 thousand cubic meters (million liters)/metric tons as compared to 2021.



The main water-saving measures in 2023 were as follows:

Chung Hwa continues to build a plant-wide water flow system and analyzes production capacity and water consumption to find more appropriate water consumption per unit of production. In addition, we continuously carry out ROR wastewater recycling and reuse, and use wastewater for cooling systems to reduce the water consumption of cooling systems. The total recycled water consumption is 964.68 million liters.

Category	Water saving measures	Water volume (unit: thousand cubic meters (million liters))
Total reused water consumption	Continuous ROR wastewater recycling for cleaning, process cooling cycles, and waste gas scrubbing	964.68

Note: The volume of water recycled and reused in 2023 was based on the data reported by the Bureau of Industry.

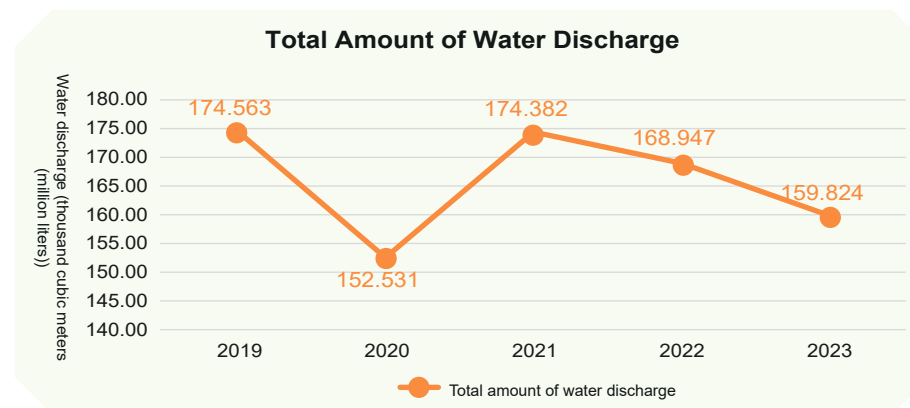
Water Pollution Control

In order to reduce the total water consumption, the Acid, Alkali and Specialty Chemicals Production Department transports the discharged water from main RO pure water equipment to the cooling system through pipelines to supplement the tap water volume required by the cooling system due to natural leaks or loss from the production of sulfuric acid. Sulfur needs to be burned at high temperature, so the sulfuric acid process will produce a large amount of steam, and the steam will be introduced into the heating equipment and drying equipment required for Specialty Chemicals production, reducing the operation of the boiler to achieve energy saving. Finally, the wastewater that cannot be recycled is discharged to the wastewater treatment plant set up in the plant for terminal wastewater treatment.

A strict classification strategy is adopted for front-end wastewater to improve the efficiency of wastewater treatment. The wastewater generated in the manufacturing process can be divided into inorganic wastewater, organic wastewater, wastewater containing organic solvents, laboratory wastewater, R&D wastewater, and domestic wastewater. All wastewater is strictly classified and managed at the front end, and is collected through pipelines to various wastewater treatment facilities. In order to achieve strict classification management, under the careful operation and maintenance, the factory wastewater is treated until it meets the management standards stipulated in the industrial zone, and then discharged to the wastewater treatment plant in the industrial zone for further treatment. After the above-mentioned comprehensive treatment procedures, the wastewater is confirmed to meet the discharge water standards before being discharged to the river from the industrial zone sewage treatment plant. The sewage treatment plant in the industrial zone will also dispatch personnel from time to time to measure the water quality of each company's discharge outlets.

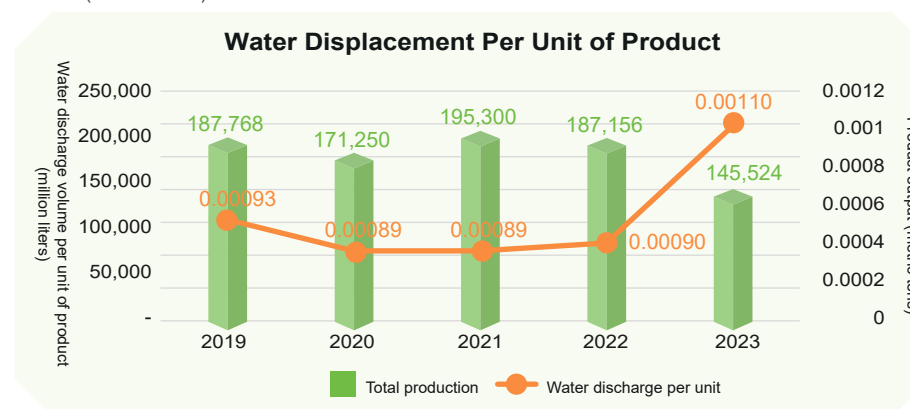
Total Wastewater Discharge (the scope includes the production base Taoyuan Plant No. 1 and Taoyuan Plant No. 2)

The total water discharge in 2023 was 159.824 million cubic meters (million liters), which was 8.35% less than the base year (2021).



Water Displacement Per Unit of Product

Due to the change in the process and product structure of Chung Hwa, the production line mass-produced high-specification sulfuric acid in 2023. The water discharge per unit product in 2023 was 0.00002 thousand cubic meters (million liters), an increase of 0.00011 thousand cubic meters (million liters) from 2021.

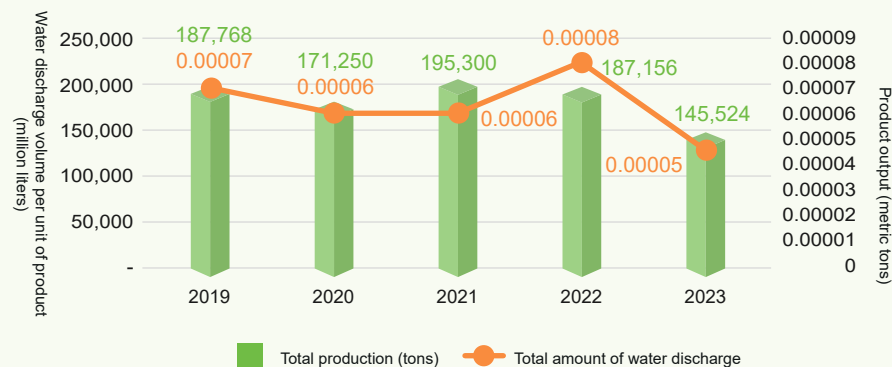


4-7 Air Pollution Control

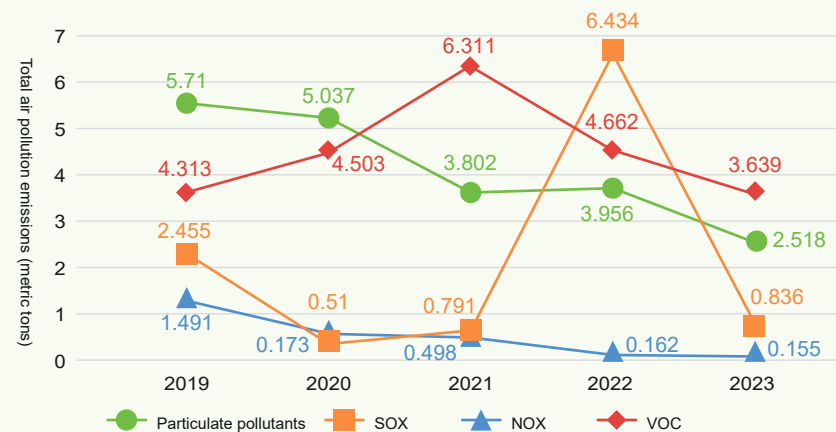
Chung Hwa continues to control the normal operation of all air pollution prevention equipment, and conducts regular testing according to regulatory requirements to ensure that pollutant emissions are in compliance with regulations, and use the testing results as the basis for reviewing the improvement of production processes and pollution prevention equipment. For the volatile organic compound (VOC) solvent production line, we updated the process and increased the organic solvent recovery rate, and reviewed and inspected each valve component so that the emissions of volatile organic compounds (VOCs) can be continuously reduced. In order to reduce the amount of air pollutant emissions, the start-up fuel of the sulfur furnace has been changed from diesel to natural gas.

Chung Hwa is committed to reducing air pollutant emissions. Chung Hwa's air pollution source is located at Taoyuan Plant No. 1 in Guanyin Industrial Park, Taoyuan City. In 2023, the total emission from stationary sources was 7.148 metric tons, including 0.836 metric tons of sulfur oxides, 0.155 metric tons of nitrogen oxides, and 2.518 metric tons of particulate pollutants. Volatile organic pollutant was 3.639 metric tons, a decrease of 37.3% from 2021.

Unit Air Pollutant Emissions



Total Air Pollution Emissions



4-8 Waste Management

Chung Hwa adopts a source management approach that distinguishes the sources of waste into two categories: employee domestic waste and process waste. In terms of employee domestic waste management, we improve employee behavioral standards through employee education and training to effectively promote reduction and classification management, thereby improving resource reuse and recycling, and the value of resource recycling. Process waste management optimizes packaging materials and reduces the proportion of hazardous waste, and promote reduction management based on recycling and reuse.

In accordance with the Waste Disposal Act, waste is collected, stored, sorted, and processed to achieve the most complete waste classification. Each unit centralizes waste in the storage area, and the responsible unit manages waste to effectively grasp the source of waste. We also cooperate with resource recycling companies to increase the value of resource utilization, with the ultimate goal of zero waste.

The industrial waste generated is entrusted to the legal clearance and treatment plants, and the qualified plants with the most effective waste treatment capacity are screened according to the characteristics of waste and the best treatment technology, and irregular audits are conducted to ensure that waste is properly disposed of. General and hazardous industrial wastes are generated, cleared, transported, and disposed of (including recycled) in accordance with recycling regulations and waste disposal control procedures, and the general and hazardous waste pre-clearance inspection form must be filled out.

For general industrial waste, each unit contacts the contractor or the General Affairs Section to dispose of it. Hazardous industrial waste is packaged in sturdy packaging materials or sturdy airtight containers before commissioning and then entrusted to be cleared by a legally licensed removal agency. In 2023, the total output of Chung Hwa's Taoyuan Plant No. 1 and Taoyuan Plant No. 2 was 1,642.388 metric tons (hazardous industrial waste: 189.727 metric tons; general industrial waste: 1,452.661 metric tons).

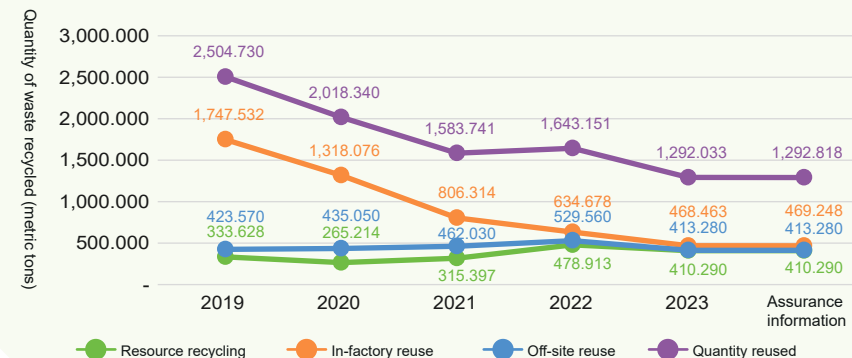
Waste Output Per Unit of Product

The waste reused and recycled by Chung Hwa is divided into three categories. The output volume was approximately 410.29 metric tons, the output volume of in-plant reuse was approximately 469.248 metric tons, and the output volume of off-site reuse was approximately 413.28 metric tons. The total output of reuse and recycling was about 1,292.818 metric tons, and the waste recycling and reuse rate was 78.7%. The output of reuse hazardous waste in the factory was 2.807 metric tons, and the recycling percentage was 1.48%. As Changhua Plant is mainly an office space and the general waste is less significant than that of Taoyuan Plant No. 1 and Taoyuan Plant No. 2, the total amount of waste generated by Changhua Plant is not disclosed.

Waste Output



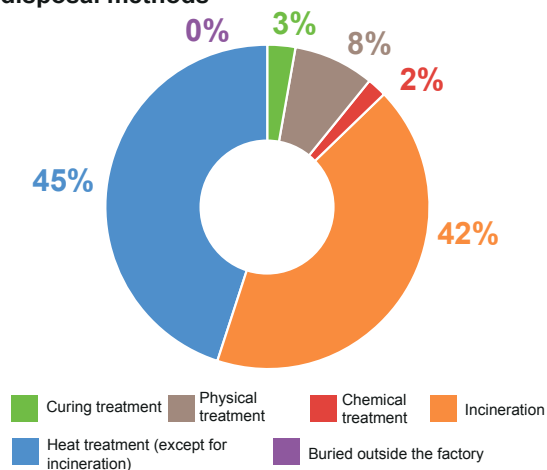
Waste Reuse



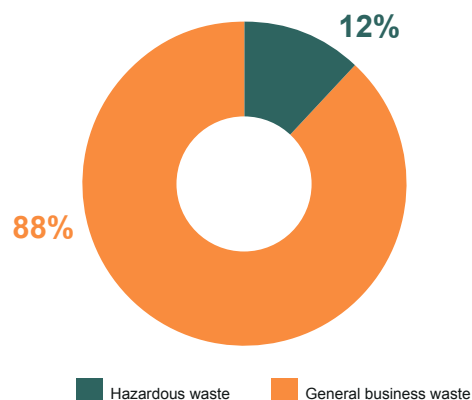
Category	Waste reduction measures	Output reduction (unit: metric tons/year)
Resource recycling	Scrap machinery and equipment with announced recycling value	410.29
In-plant recycling	Recycle waste liquid in the manufacturing process	469.248
Off-site reuse	The sewage sludge is heat treated and finally disposed of for use in cement.	413.28

Waste Disposal Method

Percentage of business waste disposal methods



Waste percentage



4-9 Greenhouse Gas Inventory

Due to the increase in greenhouse gas emissions, climate change not only directly affects the global ecological environment but also indirectly affects the acquisition of energy and resources for enterprises. It has become an environmental issue of global concern and importance. We deeply understand that greenhouse gas reduction is an important means to combat climate change and global warming. Therefore, we identify the sources of greenhouse gas emissions through product carbon footprint inventory, and reduce greenhouse gas emissions through energy-saving and emission reduction methods, thereby enhancing our self-management capabilities. We replace high-energy-consuming process equipment, discuss greenhouse gas reduction plans, set reduction targets and priorities, and implement various carbon reduction plans with the purpose of taking global ecological environment as the Company's responsibility.

According to the 2018 version of ISO 14064-1, greenhouse gas emission sources can be divided into six categories, and the organizational boundaries of the emission sources include (Taoyuan Plant No. 1, Taoyuan Plant No. 2, and Changhua Plant).

Category 1

Direct GHG emissions and removals (old version of Scope 1): Direct GHG emissions and removals are from sources or sinks within the organization's boundaries, and those owned or controlled by the organization. These sources can be stationary (e.g. heaters, generators, industrial processes) or mobile (e.g. vehicles).

Category 2

Indirect greenhouse gas emissions from energy input (old version of Scope 2), greenhouse gas emissions from the combustion of fuel related to the production of final energy sources and utilities, such as electricity, heat, steam, cooling, and compressed air. It excludes all fuel-related upstream emissions (from the cradle to the gate of the power plant), emissions due to the construction of power plants, and emissions allocated to transportation and distribution losses.

Category 3

Indirect greenhouse gas emissions from transportation (old version of Scope 3), greenhouse gas emissions come from sources outside the boundaries of the organization. These sources are mobile and result primarily from fuel combustion in transportation equipment.

Category 4

Indirect greenhouse gas emissions from the use of products (upstream) (old version of Scope 3), greenhouse gas emissions come from the goods used by the organization. These sources may be stationary or mobile and relate to all types of goods purchased by the reporting organization.

Category 5

Indirect greenhouse gas emissions (downstream) associated with the use of products (old version of Scope 3), where the greenhouse gas emissions or removals associated with the use of the organization's products come from the processes that the organization sells in the life stage after the organization's production. These emissions or removals may cover a very wide range of services and related processes.

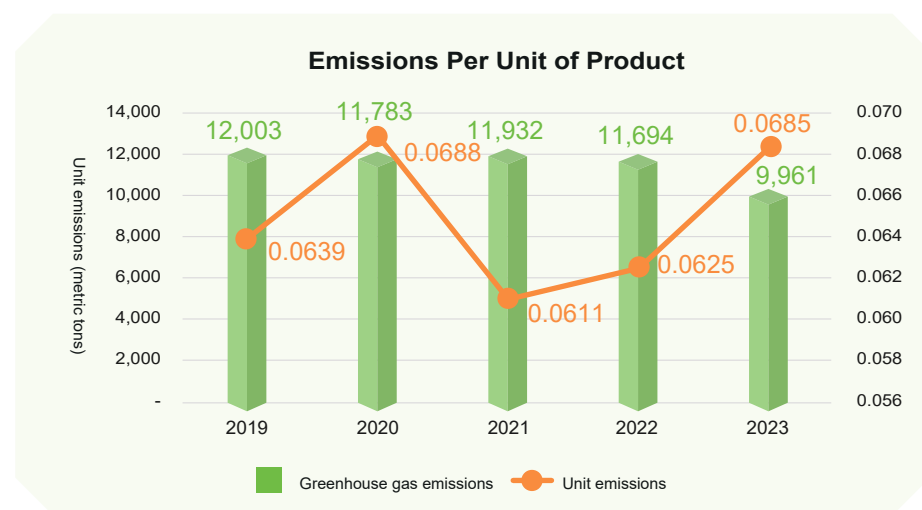
Category 6

Indirect greenhouse gas emissions from other sources (not classifiable) (old version of Scope 3), the purpose of this category is to capture any organization-specific emissions (or removals) that cannot be reported in any other category.

Emissions are estimated using various methods, including: (1) actual statistics: annual travel distance of employees and the Company's product transportation fuel consumption; (2) carbon footprint database: production and transportation of raw materials by suppliers, waste transportation and recycling, etc.

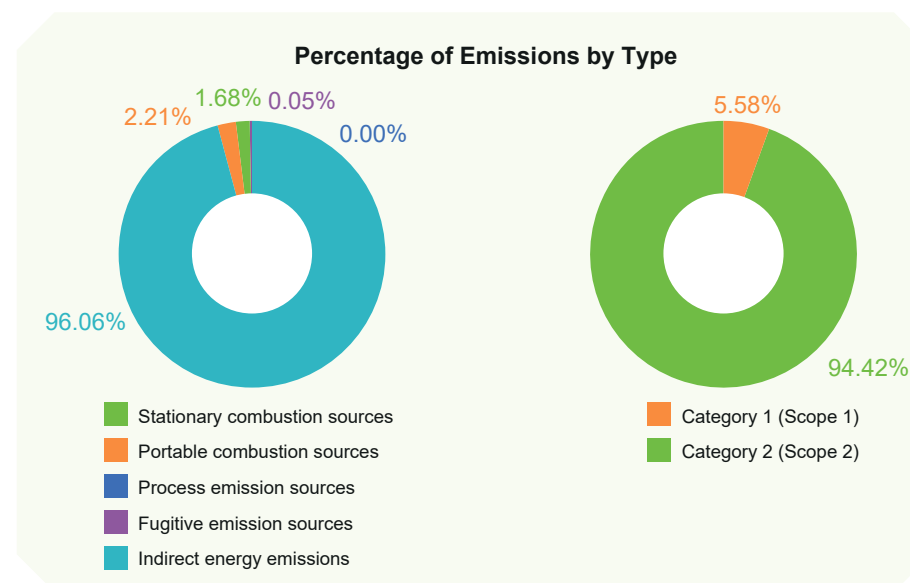
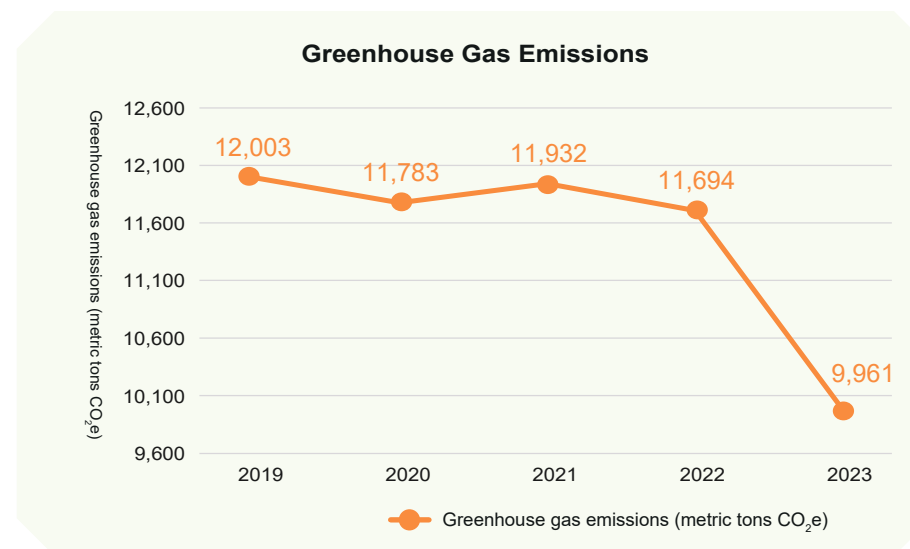
Through various power-saving measures and the use of monitoring systems to reduce unnecessary energy consumption and reduce greenhouse gas emissions from purchased electricity, total greenhouse gas emissions in 2023 were 9,961.3 tCO₂e, a decrease of 16.52% from 2021.

Unit GHG Emissions (tCO₂e)



Due to the change in product mix, Chung Hwa mass-produced high-specification sulfuric acid. As a result, electricity consumption per unit increased, and GHG emissions per unit of product increased by 0.004 metric tons compared to the base year in 2021.

Total GHG Emissions



5 Corporate Commitment

5-1 Employee Profile

5-2 Employee Care

5-3 Talent Education and Development

5-4 Workplace Safety

5-5 Friendly Workplace



Over the past sixty years, Chung Hwa has navigated challenging paths, witnessing the economic takeoff, transformation, and development of Taiwan. We established this enterprise not only to realize our own dreams but also to protect the lives of our employees and their families, both now and in the future. We adhere to the philosophy of “creating beneficial chemistry to change society”, providing not just a stable income but also a bright vision for the future. We sincerely ensure that every employee can work with peace of mind in a harmonious workplace and maintain harmonious labor relations.

Chung Hwa adheres to the Labor Standards Act as the minimum requirement. Beyond safeguarding the basic rights of workers, we strive to create a healthy, safe, and hygienic work environment in line with the characteristics of the chemical industry. We respect internationally recognized fundamental human rights, including freedom of association, the right to collective bargaining, care for the disadvantaged, prohibition of child labor, elimination of all forms of forced labor, and eradication of employment discrimination. We have established various management methods to ensure that every employee can fully develop their career at Chung Hwa.

5-1 Employee Profile

Human Resources

As of the end of 2023, Chung Hwa had a total of 253 employees (excluding overseas subsidiaries), of which 46 foreign employees were on fixed-term contracts, and the rest were full-time employees. The Company did not hire temporary or part-time employees.

As Chung Hwa is a raw chemical manufacturer, on-site production work requires physical strength, and because the factory area must continue to operate, the percentage of male employees is higher than that of female employees.

There were 198 males, accounting for 78%, and 55 females, accounting for 22%.

Distinguished by age group, the average age of employees is about 40 years old, and about 84.5% of employees are under 50 years old, indicating that Chung Hwa is a young, energetic and innovative enterprise.

Employee Structure

Aspect	Assessment category	Male		Female		Total	
		Number of people	Percentage	Number of people	Percentage	Number of people	Percentage
Position	Supervisor position	26	10.2%	6	2.3%	32	13%
	Professional occupation	172	6.8%	49	19.3%	221	87.3%
Age	Under 30 years old	30	11.8%	21	8.3%	51	20.1%
	Aged 30-50	133	52.5%	30	11.8%	163	64.4%
	Aged 50 and above	35	13.8%	4	1.5%	39	15.4%
Educational background	Senior high school or below	72	28.4%	5	1.9%	77	30.4%
	Junior college	92	36.3%	43	17%	135	53.3%
	Master's degree	31	15.6%	7	2.8%	38	15%
	PhD	3	1.2%	0	0%	3	1.2%
Total		198	78.2%	55	21.7%	253	100%

Note: The percentage may not be equal to 100% due to rounding differences.

Employee Employment and Benefits

Chung Hwa adheres to the Company's business philosophy of honesty and integrity, adheres to a corporate culture of justice and kindness, and complies with government labor laws. We attach great importance to labor rights and interests, and arrange job positions according to the skills and functional levels of employees. Adhering to the principle of fair employment, there will be no difference in employee recruitment, appointment, salary, assessment, promotion, education and training, and personal welfare based on gender, race, religion, political stance, or marital status to create fair and diversified employment opportunities in all operating regions.

In accordance with "People with Disabilities Rights Protection Act", Chung Hwa needs to hire 3 persons with disabilities. As of the end of 2023, three persons with disabilities were hired, which met regulatory requirements.

Gender and Age Distribution of New Recruits in 2023

By age	Male	Female	Total	Ratio
Under 30 years old	11	7	18	34.6
Aged 30 - 50	20	11	31	59.6
Aged 50 and above	3	0	3	5.8
Total	34	18	52	100%

New Employee Guidance Mechanism

Chung Hwa conducts new employee orientation training program to activate the "New Employee Guidance Mechanism" from the first day of employment. The program is implemented step by step in five stages:

1. On the first day of employment, the Human Resources Department will introduce the factory environment and employees from various departments.
2. Arrange to get acquainted with colleagues in various departments, provide guidance within the department, assist in answering questions, and offer relevant advice on daily life in the workplace.
3. Let new employees get to know the Company from all aspects, such as the Company's business philosophy, management rules and systems, ISO system introduction, welfare committee's welfare measures, ethical management/anti-corruption/environmental protection/health/safety/hygiene, etc.
4. The HR Department regularly visits new employees to check their adaptability to the work environment and work conditions to care for their emotions and the state of integration into the organization. Interviews are also arranged before the expiration of the probation period and "New Employee Questionnaire" is filled out. In addition to understanding the newcomers' adaptation to work, they also assess whether counselors can fully assist the newcomers in their work and life.
5. Pursuant to the "Performance Development and Guidance Regulations", new employees must pass the relevant assessments before department heads can offer financial incentives based on their performance.



Employee Severance Management and Childcare Leave

Chung Hwa values each employee. Once an employee's intention to resign is known, the supervisor and the Human Resources Department will conduct interviews with the supervisor to understand the reason for the employee's resignation, and to come to understand the employee's personal expertise, work content and family status through the interview. The Company will provide assistance as appropriate to achieve employee retention and establish a stable employment environment. In addition, in order to enable employees to balance the needs of personal and family care, in accordance with their rights conferred by the Act of Gender Equality in Employment, all employees of the Company are entitled to a parental leave policy that complies with the Labor Standards Act, and employees can apply for unpaid parental leave.

In 2023, **4** male employees applied for paternity leave, and **3** employees applied for parental leave without pay.

Gender and Age Distribution of Employees Resigned in 2023

By age	Male	Female	Total	Ratio
Under 30 years old	7	6	13	5.1%
Aged 30 - 50	26	10	36	14.2%
Aged 50 and above	7	1	8	3.2%

Note: Ratio = Number of employees resigned/Total number of employees.

Retirement Plan

We have established employee retirement regulations in accordance with the "Labor Standards Act" and "Labor Pension Act". We have also established the Labor Retirement Reserve Fund Supervisory Committee to review the amount of pension required by employees who meet the retirement requirements in the following year before the end of March each year. These amounts are fully allocated to a dedicated account to ensure the pension rights of employees under the old system. According to the "Labor Pension Act", the new system requires employers to contribute 6% to a monthly pension according to the salary grading table and deposit it into the individual labor pension account, and note the amount of pension appropriation on employee's payroll.

5-2 Employee Care

Fair Salary Treatment

Chung Hwa attaches great importance to gender equality in its human resource policy, eliminates gender discrimination in the workplace, and complies with the Act of Gender Equality in Employment and the Employment Service Act in Taiwan. Employee salaries are determined based on educational experience, position, and individual work performance, and will never differ due to gender, race, religion, political stance, place of birth, physical or mental disability, and marital status; the standard starting salary for new employees with the same qualifications is the same regardless of gender, and the system of equal pay for equal work is implemented.

The Company's financial and operational performance as well as industry practices are considered for employee reward and remuneration plans of corporate subsidiaries in Taiwan and overseas. Through salary review by the Remuneration Committee, no less than 1% of the Company's surplus was allocated as employee compensation in 2023, and rewards will be given to employees based on their personal performance.

Male and Female Basic Salary Payout Ratio and Basic Salary Ratio

Amount: NT\$

Gender	Total basic salary	Number of people	Average salary	Basic salary	Remuneration ratio	Basic salary ratio	Warning
Male	8,468,670	198	42,771	26,400	53%	62%	●
Female	2,098,601	55	38,156	26,400	47%	45%	●
Subtotal	10,567,271	253	41,768	-	100%	-	

Note: The warning light ● indicates a salary better than the local minimum wage, and ● indicates a salary lower than the local minimum wage.

2023 Welfare Measures Overview

Unit: NT\$

Welfare measures	Item description	Subsidy amount	Number of beneficiaries
Marriage allowance	NT\$10,000/person for employee's wedding	40,000	4
Childbirth subsidy	NT\$5,000/per birth by employee or his/her spouse	25,000	5
Hospitalization condolences	NT\$3,000/person for employee	24,000	8
Funeral subsidy	The maximum amount is NT\$18,200/person, depending on kinship level	515,400	35
Birthday cash gift	Gift vouchers of NT\$2,000 per employee	494,000	247
Festival bonus	Gift cash and gift vouchers for Labor Day, Dragon Boat Festival, Mid-Autumn Festival, and Spring Festival	1,724,000	246
Scholarship for children	Depending on student status, a maximum of NT\$5,000/person	64,000	18
Travel subsidy	NT\$7,000/person	1,520,571	241
Free dormitory	Provide accommodation for employees with a transportation distance of more than 35 kilometers	1,620,000	29
Fellowship subsidy	A maximum of NT\$750/person	175,559	300
Total		6,202,530	

In 2020, a medical lounge was set up in the factory to provide employees with treatment of injuries and illnesses and health consultation, and a breastfeeding room with privacy and safety was added to solve the problems of employees who are breastfeeding after returning to the workplace.

To implement employee health and safety concerns, the Company conducts general health checkups for all employees every year, and employees in special operations will undergo special operation health examinations. For those with abnormal health examination reports, a doctor's interview and individual health guidance will be provided so that necessary assistance is available as early as possible when abnormalities are detected and follow-up visits will be tracked.

5-3 Talent Education and Development

5-3-1 Employee Training

Chung Hwa lays the foundation with solid education and training, and accumulates the growth momentum of talents step by step, hoping to maximize the benefits of employees' abilities, enhance the Company's competitiveness, and realize the value of a happy enterprise. In 2023, the average time of participation in education and training was 8.9 hours per person.

Item	Total training hours		Number of people	Average training hours per person	
General employee	Male	1177.7	172	6.8	8.3
	Female	664.4	49	13.6	
Management level	Male	301.3	26	11.6	12.4
	Female	96.5	6	16.1	
Total	2239.9		253	8.9	

5-3-2 Training System

► NEW EMPLOYEE ORIENTATION

Training program: Stage 1 Employee guidance
 Stage 2 General training for new employees
 Stage 3 Professional training for new employees

Training content: In order for new employees to understand the operation of various businesses and related departments of the Company as soon as possible, the Human Resources Department is responsible for planning and implementing new employee training, hoping to help new employees understand the environment, corporate vision, organizational structure, rules and regulations, and each business unit and its products.

► IN-HOUSE TRAINING

Training program: Through the development of internal lecturers, we implemented “technical experience inheritance”, and had important responsibility of conveying corporate culture and improving talent quality.

Training content: The human resources unit is responsible for the planning and implementation of internal training programs. Before planning an annual internal training program, the training needs are confirmed to meet the Company's organizational and strategic needs in order to assist in implementing the Company's major training projects.

► OUTSIDE TRAINING

Training plan: Short-term/long-term/external training

Training content: The training courses organized by business management consulting companies, universities, government agencies, academic groups, or public welfare institutions are called external training. The business department and human resources unit assist in providing relevant training information, and department heads and employees may recommend and sign up for external training courses based on job requirements.

► ON JOB TRAINING

Training program: On-the-job training for each department, department function training/seminar

Training content: In order for the current employees/new employees/the transferred department personnel to understand the relevant professional knowledge and skills of the department, or to become familiar with the department's internal operations to ensure that his/her work performance meets the needs of the department, direct supervisors shall conduct on-the-job training for current/new/transferred employees.

► Industry-Academia Collaboration

Since 2014, Chung Hwa has been engaged in industry-academia collaboration projects with universities such as Central, Chung Yuan, Yuan Ze, and Lunghwa to promote the “Talent Development Plan”, including internship system, automation, talent cultivation, etc. To jointly promote holistic collaborative research and enhance the R&D capacity of key core technologies in the future, we are engaged in ad hoc projects with the Institute of Material and Chemical Engineering of Industrial Technology Research Institute (ITRI) to optimize key technologies through project development and research to develop innovative biotechnology fields.

◆ 5-3-3 Performance Appraisal

Chung Hwa has implemented a performance appraisal system in accordance with “Performance Development and Guidance Regulations”. We conduct quarterly performance interviews and guidance for all employees. Performance appraisals are conducted every six months and are based on annual work goals, career planning goals, functional performance evaluation, and business philosophy. Personal evaluation results are used as a reference for training and career development, as well as for salary adjustments, promotions, and bonuses. By the end of 2023, all employees required for evaluation have completed 100% of the evaluation work.

Since 2016, at the end of the year, Chung Hwa has recommended employees from each department to have exemplary performance (E.A.R.) in the unit, which will be approved by the general manager's office to recommend outstanding employees. During this period, employees will continue to improve their work skills and efficiency, and grow together with Chung Hwa.

◆ 5-3-4 Minimum Notice Period for Operational Changes

Chung Hwa promises that when there is a major impact on operations and the labor contract must be terminated, the notice period shall be in accordance with the following provisions:

- I. Those who have worked at Chung Hwa for more than three months but less than one year are to be given 10 days notice in advance.
- II. Those with more than one year but less than three years of working experience at Chung Hwa are to be given 20 days notice in advance.
- III. Those who have worked at Chung Hwa for more than three years are to be given 30 days notice in advance.

After receiving a notice, workers are allowed to seek employment outside of the premises during working hours. The number of hours of leave shall not exceed two working days per week, and wages shall be paid during the leave period.

5-4 Workplace Safety

Chung Hwa has a dedicated occupational safety and health management unit responsible for planning, supervising, and promoting occupational safety and health-related business. We have also established the "Occupational Safety and Health Committee" chaired by the Chairman, which consists of the designated occupational safety office, heads of various departments, and labor representatives. Meetings are held regularly every quarter and are responsible for reviewing, coordinating and recommending safety and health-related business. It coordinates and makes suggestions on safety and health policies, working environment monitoring, health management, education and training and other related issues. The committee has a total of 23 members, of which labor representatives account for more than one-third.

At the same time, in order to implement the occupational safety and health policy, we actively promote various management plans through ISO 14001 and ISO 45001 systematic management systems, education and training, and the improvement of the working environment to actively promote various management plans to achieve the goal of "zero disasters".

Occupational Safety and Health Implementation Priorities

Compliance with safety and health laws and regulations	Implement hazard identification	Promote self-management	Implement risk management and control
Strengthening health services	Encourage all employees to participate	Promote physical and mental health	Improve safety and health performance
Continuous improvement of facilities	Organize occupational safety training	Creating a quality workplace	Enhance safety awareness

5-4-1 Safety and Health Management System and Audit

Chung Hwa continues to promote the Occupational Health and Safety Management System to strengthen the content of the Company's internal occupational safety and health management and ensure the operation of environmental safety and health management system. The Company conducts a self-audit and undergoes an audit by an impartial external third-party institution every year to ensure that the implementation and operation of governance system are in line with the Company's policies and goals. In addition, the Occupational Safety and Health Office conducts regular inspections of the workplace, and makes recommendations on corrective improvements and preventive measures for the discovered deficiencies to maintain the safety of the overall working environment and the health of workers; the Occupational Safety Office also assists on-site operations supervisors in formulating various standard operating procedures, and on-site operation supervisors conduct education and training, prompting employees to comply with regulations.

In accordance with the requirements of ISO 45001 Occupational Safety and Health Management System, Chung Hwa regularly reviews the hazard identification and risk assessment once a year, and re-examines the hazard identification and risk assessment for accidents, with a view to analyzing routine and non-routine operating procedures; and carries out prevention, improvement, and management measures based on the evaluation results to reduce the risk of hazards.

5-4-2 Safety and Health Education and Training

In terms of education and training, in order to enhance all employees' awareness of the environmental safety and health system, various courses have been defined for general employees, professionals, and management. Appropriate environmental safety and health training courses are provided to suit the nature of the work they are responsible for and the characteristics of the workplace. In addition, the Company organizes emergency response drills every year in accordance with the regulations on fire protection and toxic chemical substances, including emergency response team, emergency evacuation, first aid, firefighting, and toxic substance leakage drills, so as to build the emergency response capability of all employees and reduce the losses caused by disasters.

We believe that creating a safe and worry-free work environment is an important belief for corporate growth. In addition to complying with environmental protection and occupational safety regulations, each operation is committed to eliminating or reducing safety and health risks to employees, suppliers, contractors, and stakeholders due to processes, facilities, and activities.

We have established an environmental safety and health policy as criteria for the safety of working environment, personnel and social responsibility. The Occupational Safety Office and the Environmental, Industrial, and Safety Committee in the organizational structure are engaged in research, planning, and risk management related to environmental safety and health management, with an emphasis on the promotion and execution of employee safety business. Through hazard identification and risk assessment, the Office analyzes the direct and indirect causes of occupational accidents for high-risk operations, and proposes improvement plans to reduce operational risks, thus providing employees with a safe, healthy, and equal development workplace. Our structure and measures are as follows:

1. Implement ISO 9001 Quality Management System, ISO 14001 Environmental Management System, and ISO 45001 Occupational Safety and Health Management System.
2. Establish a dedicated unit under the employer to plan and promote the Company's overall quality and environmental management.
3. Train professional labor safety personnel and participate in relevant training to promote professionalism in the management of workplace safety and health.
4. Implement safety and health education and training.

5. Establish a fire disaster prevention and rescue system, conduct regular quarterly security inspections of fire safety equipment, and conduct "fire safety drills" every six months.
6. Formulate and implement "Environmental, Safety and Health Work Principles" and the safe use of various equipment.
7. Regularly conduct "Annual Employee Health Checkup" every year.
8. Committed to creating an equal workplace, and implementing implementing "Gender Equality Management Regulations", "Illegal Harassment Prevention Plan" and "Illness Prevention Plan Due to Abnormal Workload".

5-4-3 Work Environment Protection

Regarding the work environment, through review, audit, and communication, as well as through education, training and requirements, all personnel substantively participate in safety, health and environmental management activities, take appropriate corrective measures, continuously improve anomalies, and strengthen relevant safety issues in the procurement and contracting system to achieve the goal of "zero work-related injuries, zero disasters, and zero pollution" and create a sustainable operating environment.

Occupational safety and health operations require personnel to follow the standard operating procedures (SOP), and the equipment and facilities strictly require intrinsic safety. For high-risk operations and construction on holidays, there are application procedures that require approval before operations can be performed to ensure the safety of personnel. At the same time, employees' opinions are valued and the management principle of "safety and care" is adopted. All safety and health management suggestions can be made through proper response channels to enable managers to make quick and immediate improvements.

Chung Hwa has contracted medical institutions and special medical personnel to provide employees with professional health guidance and consultation, health promotion, and health lectures. We will also provide professional health guidance, health consultations and other assistance to new employees with abnormal physical examinations. At the same time, we plan and organize healthy weight loss competitions and encourage employees to participate in order to reduce health risks and the possibility of occupational diseases. For operating environments with special hazards to health, the Company has conducted risk assessments, formulated relevant operational safety and health standards, conducted health inspections for special hazard operations, and regularly outsourced environmental monitoring plans. In 2023, all monitoring items were within the regulatory standards, and there are no abnormalities in special health.

5-4-4 Investigation and Statistical Analysis of Occupational Accidents

When an occupational disaster occurs, in addition to immediate first aid and rescue, Chung Hwa also reports in accordance with the accident investigation and management operating procedures, and then cooperates with the Occupational Safety Office to conduct analysis together with the accident investigation team and labor representatives. The accident unit must propose prevention plans and corrective measures. The order of improvement is based on: elimination, replacement, engineering improvement, administrative management, and personal protective equipment to prevent the same accident from happening again.

The statistics of Chung Hwa's lost working hours in 2023 were as follows:

Classification	Monthly average number of people	Total working days	Total hours worked	Number of work-related injuries	Lost days	Number of occupational illnesses
Chung Hwa Chemical	262	65,533	524,264	8	51	0

Classification	Disabling Injury Frequency Rate (FR)	Disabling Injury Severity Rate (SR)	Total injury index	Work-related fatalities	Absence rate	Occupational disease rate
Chung Hwa Chemical	15.26	97	1.22	0	0.08%	0

*Disabling injury frequency rate = (Total number of injuries caused by injuries x 10⁶) ÷ Total number of working hours

*Disabling injury severity rate = (Total number of days lost due to work-related injuries x 10⁶) / Total work hours

*Total injury index = √(Disabling injury frequency FR × Disabling injury severity rate (SR)) ÷ 1000

*Occupational disease rate: (Number of occupational disease cases / Total work hours) x 1,000,000

*Absence rate (AR): Total days absent (number of days lost) / Total number of days worked (including injury leave, sick leave, menstrual leave, etc.) x 100%

In 2023, the types of injuries caused by the Company's occupational accidents were mainly traffic accidents and contact with hazardous objects, while the type of injury that caused the most severe disability loss was traffic accident injury.

In terms of traffic accidents, a total of 4 traffic accidents occurred in 2023, and the total number of lost days was 200 days. The incidents mostly occurred during commuting times with motorcycles being the primary mode of transportation, which often results in severe injuries. After analysis, most instances of contact with hazardous substances were because employees failed to follow the standard operating procedures or wear the appropriate personal protective equipment. The preventive measure is to review the standard operating procedures and provide education and training on the wearing of personal protective equipment.

5-4-5 Emergency Preparedness

In order to strengthen the ability of supervisors to respond to emergencies when they occur, 2023 planning-related response drills in factory areas are designed to strengthen the factory's emergency response mechanism.

Emergency Response Drill

Drill description

Topic: Handling and leakage of the toxic substance dimethylformamide and air pollution drill
Time: December 27, 2023 11:00 - 11:40
Location: Between the poison warehouse and the first floor of the factory building

Purpose:

1. Familiarize employees with the contingency procedures for abnormal situations
2. Strengthen employees' disaster response capabilities
3. Be familiar with the location and use of strain relief equipment in the factory



5-4-6 Healthcare

From the first day when employees report to the Company, they receive the Company's health care. Health examinations are arranged every year to ensure they remain healthy. Chung Hwa adopts annual health checkups, abnormal workload-induced disease prevention plan, biannual labor environment testing according to laws and regulations, and regular health guidance and consultation conducted by contracted medical institutions and designated medical personnel to assess whether there are potential occupational latent diseases and provide dietary, exercise, and medical advice.

5-5 Friendly Workplace

Communication Channel

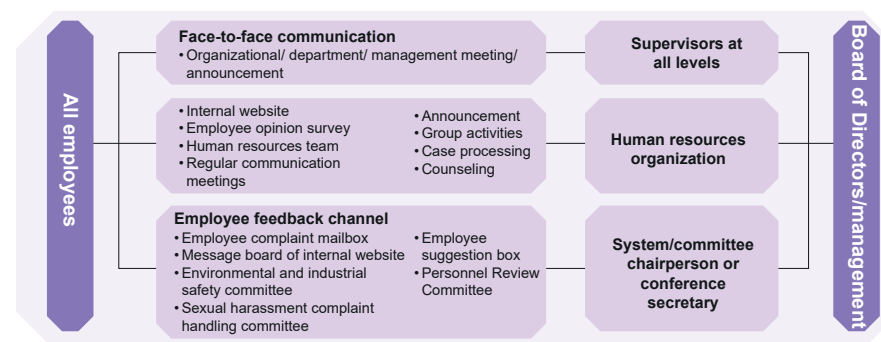
James 1:19 - "Everyone should be quick to listen and slow to speak". The foundation of labor-management relations lies in "listening power". If you don't listen well, you won't be able to experience the joy of connecting with the other person and generating new ideas or discoveries, and you won't be able to build a creative relationship.

Chung Hwa has established communication management procedures to listen to the opinions and voices of colleagues through regular meetings and individual interviews. In addition, the Company organizes performance consultation and coaching measures every quarter, listens to the opinions of its employees through one-on-one communication, and responds to them in a timely and appropriate manner to achieve the goal of promoting labor-management harmony and creating a win-win situation for the Company and employees. This includes:

1. Hold regular meetings for supervisors and employees at all levels.
2. Establish interactive and harmonious labor-management relations through quarterly labor-management meetings.
3. Conduct employee satisfaction surveys and plan improvement policies based on employees' opinions.
4. Full-featured internal website: The content includes a message from the Chairman, important company information, and event promotions.
5. For major management, financial, audit, and other issues, the following confidential complaint channels are provided:
An independent committee, the "Personnel Review Committee" led by the head of human resources
6. The employee suggestion box provides a channel for employees to submit general suggestions and opinions related to work and environment.

The Company also respects the rights of employees conferred by law, and has never prevented or hindered the freedom of association of employees. As of the end of 2023, no employee has come forward to form a labor union and no losses have been suffered due to labor disputes.

Chung Hwa's Internal Communication Framework



Complaint Channel

Category	Complaint method	Responsible unit
Sexual harassment prevention and complaint	Manager Miao-Jen Chen Telephone: (03) 4761266 Email: janny@chciw.com.tw	Sexual Harassment Prevention Committee
Workplace abuse	Email: es@chciw.com.tw Written submission: Employee suggestion box	Worker Safety Office
Various grievances filed by employees	Email: hr@chciw.com.tw Written submission: Employee suggestion box	Human Resources Department

Care and Guidance

The Company has hired Chinese-speaking and Filipino-speaking pastors to provide one-on-one counseling to foreign migrant workers who need to care for their injuries, illnesses, and counseling. They also lead study clubs every week to impart character education, as well as blessings for the Ghost Festival, Christmas and year's end. Blessing services have become a Chinese corporate culture.

Sexual Harassment Prevention

In order to provide employees and job seekers with a work and service environment free from sexual harassment, the Company complies with Article 13, Paragraph 1 of the "Act of Gender Equality in Employment" and the "Regulations for Establishing Measures of Prevention, Correction, Complaint and Punishment of Sexual Harassment at Workplace". The complaints and punishment measures for prevention and control measures of sexual harassment in the workplace are formulated. When employees encounter sexual harassment in the workplace, complaints may be made to the Sexual Harassment Prevention Committee or the Human Resources Department.

There were no incidents of sexual harassment in 2023.

Employee Travel

In order to promote leisure and entertainment activities after work and participate in group recreational activities to enhance physical and mental health, boost work morale, and cultivate team spirit, the Welfare Committee organizes employee trips every year. Due to the impact of the coronavirus (COVID-19), no group travel was held in 2023. Instead, employees applied for travel expenses on their own and enjoyed one day of paid travel leave.

6 Social Welfare

6-1 Community Engagement

6-2 Social Contributions



6-1 Community Engagement

In corporate social responsibility (CSR) engagement, Chung Hwa mainly encourages and supports colleagues to invest in various social care, social welfare, marine environment maintenance, and source waste reduction concepts. In response to social needs, the awareness of social citizenship is further cultivated and transformed into a corporate social responsibility culture to implement corporate social responsibility. With the concept of giving back to society, we hope to exert a positive influence on society and work together to create a harmonious society of co-existence, common prosperity, and common good. In recent years, we have actively participated in and organized the following activities:

Social Service, Social Contribution, Social Welfare

We have established the Green Charity Society to actively engage in public welfare and sponsor charitable organizations, care for the underprivileged, protect the Earth, and give back to society to take care of residents in the neighborhood in order to promote the friendly development of society.

► In 2023, the Green Charity Society made the following public welfare donations:

1. Sponsored "Tsao Lei Pao Chang Palace in celebrating Ghost Festival" to integrate customs and responsibly pursue the future.
2. Purchase the charity mooncakes baked by "Hsinchu City Catholic Saint Joseph Social Welfare Foundation".
3. Donated money to "Shulin Village Community Development Association" to celebrate the Mid-Autumn Festival, and energy saving and carbon reduction lottery event to promote emotional exchanges among the local people.
4. Participated in the beach cleanup at Da Kue River organized by "District 300B5 of Lions International".
5. Donated gifts to "Da Guan New Life Center" community Christmas party for the Christmas sharing lucky draw for people in Cao Lei Village.

► Sponsored Tsao Lei Pao Chang Palace in Celebrating Ghost Festival

Located in Pao Chang Village, Pao Chang Temple is currently one of the religious centers for residents in Taoyuan City. At the event held every nine years, the Company donated NT\$10,000 in cash to the organizer, demonstrating the vitality of folk culture by integrating customs and continuing traditions.



► Charity Mooncake Making

On the eve of the Mid-Autumn Festival, we purchased 274 boxes of charity mooncakes baked by "Hsinchu City Catholic Saint Joseph Social Welfare Foundation" as gifts for employees, investing a total of NT\$161,660. Not only were they delicious, but they also helped disadvantaged groups and helped to make society a better place.



財團法人新竹市天主教仁愛社會福利基金會、附設晨曦發展中心、仁愛啟智中心、全體大小朋友

Give Back to Society and Care for the Community

Donated NT\$8,000 in cash to Shu Lin Village Community Development Association to organize the Mid-Autumn Festival celebration, and energy saving and carbon reduction lottery activity in the community.



Maintain the Marine Environment and Reduce Carbon at the Source

Under the leadership of Plant Director Wu, Chung Hwa dispatched a total of 39 environmental protection enthusiasts and other volunteers to participate in beach cleanup activity. They picked up 2,830 kg of sea-drifting garbage, demonstrating their love and protection for the environment. We have developed a profound understanding of the tremendous power that comes from teaming up. We must also establish the concept of waste reduction at the source and work together to maintain the local environment.



Christmas Family Party

The Company donated three stainless steel electric cookers to “Da Guan New Life Center” as Christmas party gifts for parent and children. A total of NT\$8,970 was donated to the Christmas sharing lucky draw for people in Cao Lei Village.



6-2 Social Contributions

We have long participated in donations to the above organizations and communities, triggering positivity and love in society, hoping to contribute to social harmony and change with our limited ability, and to spread the power of love among people. Long-term donors are listed as follows:

- ▶ Naivery ADHD Taiwan Association Federation
- ▶ Chinese Worldwide Gospel Mission
- ▶ Love Covenant Family Education Foundation
- ▶ Love Network Foundation
- ▶ Social Welfare Foundation of Wisdom
- ▶ Good News Broadcasting Association
- ▶ Gabriel Broadcasting Foundation (GOOD TV)
- ▶ Renewal Foundation Taiwan
- ▶ House of Dreams
- ▶ Dandelion Hope Foundation
- ▶ Christian Business & Marketplace Connection
- ▶ Christian Tribune News



Summer Camp for Employees' Children

The General Manager Office, R&D Center, Sales Center, Human Resources Department, Utilities Department, Welfare Committee, and Taoyuan City Conference jointly designed a series of workplace experience activities and children's character courses to care for employees' family members and increase opportunities for interaction with each other. Through simple and interesting processes, children of employees can learn about the culture and workplace experience in Chung Hwa Chemical.



Appendix

Appendix I: GRI 2021 Content Index

GRI Standards	Disclosure items	Reference chapter	Page number	Omission
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GRI 2: General Disclosures	2-1 Detailed information of the organization	1-1 Company Profile	9	
	2-2 Entities included in the organization's sustainability reports	1-1 Company Profile	9	
	2-3 Reporting period, frequency and contact persons	About this Report	4	
	2-4 Restatement of information	About this Report	4	
	2-5 External guarantee/assurance	Assurance	7	
Events and workers				
GRI 2: General Disclosures	2-6 Activities, value chain and other business relationships	1-4 Market overview	15	
	2-7 Employees	5-1 Employee Profile	73	
	2-8 Workers who are not employees	There are no workers who are not employees		V
Governance				
GRI 2: General Disclosures	2-9 Governance structure and composition	3-1 Corporate Governance Structure	30	
	2-10 Nomination and selection of the highest governance body	3-3-3 Nomination Committee	35	
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	2-19 Remuneration policy	3-3-2 Remuneration committee	34	
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	2-21 Annual total compensation ratio	3-3-2 Remuneration committee	34	
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GRI 201: Economic Performance	201-1 Direct economic value generated and distributed by the organization	1-6 Financial Performance	18	
	201-2 Financial impacts and other risks and opportunities arising from climate change	4-2 Risks, opportunities and financial impacts of climate-related financial disclosures (TCFD)	56	
	201-3 Defined benefit plan obligations and other retirement plans	5-2 Employee Care	75	
	201-4 Financial subsidies from the government	None		V
GRI 202: Market Position	202-1 The ratio of the standard salary to local minimum wage for entry-level personnel of different genders	5-2 Employee Care	75	
	202-2 Proportion of senior management hired from the local community	5-3-1 Employee training	72	
GRI 203: Indirect Economic Impacts	203-1 Development and impact of infrastructure investment and support services	6-1 Community Engagement	83	
		6-2 Social contributions	85	
	203-2 Significant indirect economic impacts	6-1 Community Engagement	83	
		6-2 Social contributions	85	
GRI 204: Procurement Practice	204-1 Proportion of procurement expenditure from local suppliers	3-10 Supplier Management	48	
GRI 205: Anti-corruption	205-1 Operational locations that have undergone corruption risk assessments	3-4 Ethical Corporate Management and Anti-corruption	37	
	205-2 Communication and training on anti-corruption policies and procedures	3-4 Ethical Corporate Management and Anti-corruption	37	
	205-3 Confirmed incidents of corruption and actions taken	3-4 Ethical Corporate Management and Anti-corruption	37	
GRI 206: Anti-competitive Behavior	206-1 Legal actions for anti-competitive behavior, anti-trust and monopoly behavior	None		V
GRI 207: Taxation	Disclosure item 207-1 Tax policy	None		V
	Disclosure item 207-2 Tax governance, control and risk management	None		V
	Disclosure item 207-3 Stakeholder engagement and management of tax-related issues	None		V
	Disclosure item 207-4 Country-by-country report	None		V

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GRI 301: Materials	301-1 Weight or volume of materials used	None		V
	301-2 Renewable materials used	4-8 Waste Management	69	
	301-3 Recycled products and their packaging materials	No recycled products and packaging materials		V
GRI 302: Energy	302-1 Energy consumption within the organization	4-5 Energy and resource management	64	
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GRI 303: Water	303-1 Interactions of shared water resources	4-6 Water and Effluents	65	
	303-2 Management of water discharge-related impacts	4-6 Water and Effluents	65	
	303-3 Water withdrawal	4-6 Water and Effluents	65	
	303-4 Water discharge	4-6 Water and Effluents	65	
	303-5 Water consumption	4-6 Water and Effluents	65	
GRI 304: Biodiversity	304-1 Operational sites owned, leased, or managed by the organization or their adjacent areas located in environmental protection areas or other areas of high biodiversity value	No direct impact		V
	304-2 Significant impacts of activities, products and services on biodiversity	No direct impact		V
	304-3 Habitats protected or restored	No direct impact		V
	304-4 Among the habitats affected by the operations, species that have been included in the IUCN Red List and the National Protected List species	No direct impact		V

GRI Standards	Disclosure items	Reference chapter	Page number	Omission
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GRI 305 Emissions	305-1 Direct (Scope 1) greenhouse gas emissions	4-9 Greenhouse gas inventory	70	
	305-2 Energy indirect (Scope 2) greenhouse gas emissions	4-9 Greenhouse gas inventory	70	
	305-3 Other indirect (Scope 3) greenhouse gas emissions	None		V
	305-4 Greenhouse gas emission intensity	4-9 Greenhouse gas inventory	70	
	305-5 Greenhouse gas emission reduction	4-9 Greenhouse gas inventory	70	
	305-6 Emissions of ozone-depleting substances	4-9 Greenhouse gas inventory	70	
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GRI 306: Waste	306-1 Waste generation and significant waste-related impacts	4-8 Waste Management	69	
	306-2 Management of waste-related significant impacts	4-8 Waste Management	69	
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GRI 308: Supplier Environmental Assessment	308-1 New suppliers screened using environmental criteria	3-10 Supplier Management	48	
	308-2 Negative environmental impacts of the supply chain and actions taken	3-10 Supplier Management	48	
Topic-specific standards: Social				
GRI 401: Labor-employer Relations	401-1 New employee hires and employee turnover	5-1 Employee Profile	73	
	401-2 Benefits provided to full-time employees (excluding temporary or part-time employees)	5-2 Employee Care	75	
	401-3 Parental leave	5-1 Employee Profile	73	
GRI 402: Labor/Capital Relations	402-1 Minimum notice period for operational changes	5-3-4 Minimum notice period for operational changes	77	

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Topic-specific standards: Social				
GRI 403: Occupational Health and Safety	403-1 Occupational safety and health management system	5-4-1 Occupational safety and health management system and audit	78	
	403-2 Hazard identification, risk assessment and incident investigation	5-4-2 Safety and health education and training	78	
	403-3 Occupational health services	5-4-3 Work environment protection	79	
	403-4 Worker participation, consultation, and communication on occupational safety and health	5-4-4 Investigation and statistical analysis of occupational accidents	79	
	403-5 Worker training on occupational safety and health	5-4-5 Emergency preparedness	80	
	403-6 Worker health promotion	5-4-3 Work environment protection	79	
	403-7 Prevention and mitigation of occupational safety and health impacts directly related to business relationships	5-4-3 Work environment protection	79	
	403-8 Workers covered by the Occupational Health and Safety Management System	5-4-1 Occupational safety and health management system and audit	78	
	403-9 Occupational injuries	5-4-6 Healthcare	80	
	403-10 Occupational disease	No occupational disease cases in 2023		V
GRI 404: Training and Education	404-1 Average training hours per employee per year	5-3-1 Employee training	76	
	404-2 Programs for upgrading employee competency and transition assistance	5-1 Employee Profile	76	
	404-3 Percentage of employees receiving regular performance and career development reviews	5-3-3 Performance appraisal	77	
GRI 405: Diversity and Equal Opportunity	405-1 Diversity of governance units and employees	5-1 Employee Profile	76	
	405-2 Ratio of basic salary and compensation for women and men	5-2 Employee care	75	
GRI 406: Non-discrimination	406-1 Discrimination incidents and improvement actions taken by the organization	5-5 Friendly Workplace	81	
GRI 407: Freedom of Association and Collective Bargaining	407-1 Operational sites or suppliers at risk of freedom of association and group bargaining	No violations or major risks to workers' freedom of association occurred		V
GRI 408: Child Labor	408-1 Operational sites and suppliers with significant risks of child labor	Not using child labor		V
GRI 409: Forced or Compulsory Labor	409-1 Operational sites and suppliers with significant risks of forced and compulsory labor	5-5 Friendly Workplace	81	

GRI Standards	Disclosure items	Reference chapter	Page number	Omission
Topic-specific standards: Social				
GRI 410: Security Practice	410-1 Security personnel trained in human rights policies or procedures	Security personnel are outsourced		V
GRI 411: Rights of Indigenous People	411-1 Incidents involving infringements on the rights of indigenous peoples	None		V
GRI 413: Local Communities	413-1 Operational activities through local community engagement, impact assessments, and development plans	6-1 Community Engagement	83	
	413-2 Operating activities with significant actual or potential negative impact on the local community	6-1 Community Engagement	83	
GRI 414: Supplier Social Assessment	414-1 New suppliers screened using social criteria	3-10 Supplier management	48	
	414-2 Negative social impacts in the supply chain and actions taken	3-10 Supplier management	48	
GRI 415: Public Policy	415-1 Political contributions	None		V
GRI 416: Customer Health and Safety	416-1 Assessment of the health and safety impacts of product and service categories	None		V
	416-2 Violations of health and safety regulations for products and services	None		V
GRI 417: Marketing and Labeling	417-1 Information and labeling requirements for products and services	None		V
	417-2 Incidents of non-compliance with product and service information and labeling regulations	None		V
	417-3 Incidents of non-compliance with laws and regulations related to marketing communication	None		V
GRI 418: Customer Privacy	418-1 Complaints of substantiated breach of customer privacy or loss of customer information	2-5-3 Customer privacy	28	

Appendix II: SASB Chemical Sustainability Disclosure Topics and Accounting Indicators

Topic	Topic description	Category	Measurement unit	Indicator number	Page number
Greenhouse gas emissions	Total global Scope 1 emissions, percentage covered by emissions cap regulations	Quantitative	Metric tons (t) CO ₂ e, percentage (%)	RT-CH-110a.1	59
	Discuss long-term and short-term strategies or plans for managing Scope 1 emissions and emission reduction targets, and analyze the performance against these targets	Discussion and analysis	Questionnaire	RT-CH-110a.2	61
Air quality	The following air pollutants are emitted: (1) Nitrogen oxides (excluding N ₂ O) (2) Sulfur oxides (SO _x) (3) Volatile organic compounds (VOC) (4) Hazardous air pollutants (HAP)	Quantitative	Metric tons (t)	RT-CH-120a.1	68
Energy management	(1) Total energy consumption (2) Percentage of grid electricity (3) Percentage of renewable energy (4) Total self-generated power 2	Quantitative	Gigajoules, percentage (%)	RT-CH-130A.1	64
Water resource management	(1) Total water withdrawal, (2) Total water consumption, and the percentage of each water consumption site in areas with high or very high baseline water stress	Quantitative	Thousand cubic meters (cubic meters), percentage (%)	RT-CH-140a.1	66
	Number of non-compliance incidents related to water quality permits, standards, and regulations	Quantitative	Number	RT-CH-140a.2	None
	Describe water management risks and discuss strategies and practices to mitigate these risks	Discussion and analysis	Questionnaire	RT-CH-140a.3	67
Hazardous waste management	Amount of hazardous waste, recycling percentage	Quantitative	Metric tons, percentage (%)	RT-CH-150a.1	69
Community relations	Discuss engagement processes to manage risks and opportunities in relation to community interests	Discussion and analysis	Questionnaire	RT-CH-210a.1	83

Topic	Topic description	Category	Measurement unit	Indicator number	Page number
Workforce health and safety	(1) Total Recordable Incident Rate (TRIR) and (2) fatality rate for (a) direct employees and (b) contract employees	Quantitative	Frequency	RT-CH-320a.1	79
	Describe efforts to assess, monitor, and reduce employee and contract worker's exposure to long-term (chronic) health risks	Discussion and analysis	Questionnaire	RT-CH-320a.2	78
Product design to improve use-phase efficiency	Revenue from products designed for use phase Resource efficiency	Quantitative	Reporting currency	RT-CH-410a.1	18
Chemical safety and environmental management	(1) Percentage of products containing Globally Harmonized System of Classification and Labeling of Chemicals (GHS) Category 1 and Category 2 substances hazardous to health and the environment, and (2) Percentage of such products that have undergone hazard assessment	Quantitative	Percentage of revenue (%), percentage (%)	RT-CH-410b.1	Not applicable
	Discuss strategies for: (1) managing chemicals of concern and (2) developing alternatives that reduce human and/or environmental impacts	Discussion and analysis	Questionnaire	RT-CH-410b.2	Not applicable
Genetically modified organisms	Percentage of products containing genetically modified organisms (GMOs) by revenue	Quantitative	Percentage by revenue (%)	RT-CH-410c.1	Not applicable
Management of the legal and regulatory environment	Discuss the Company's position related to government regulations and/or policy recommendations to address environmental and social factors affecting the industry.	Discussion and analysis	Questionnaire	RT-CH-530a.1	23
Operational safety, emergency preparedness, and response	Process safety incident count (PSIC), process safety total incident rate (PSTIR), and process safety incident severity rate (PSISR)	Quantitative	Quantity, rate	RT-CH-540a.1	79
	Number of transportation accidents	Quantitative	Number	RT-CH-540a.2	Not applicable

Appendix III:

大中國際聯合會計師事務所
PKF Taiwan

PKF
Certified Public
Accountants & advisers

會計師有限確信報告

臺灣中華化學工業股份有限公司 公鑒：

本會計師接受臺灣中華化學工業股份有限公司（以下簡稱「中華化學」）之委任，對中華化學民國 112 年度（2023 年度）永續報告書中所揭露之特定續效指標（以下簡稱「確信標的資訊」）執行確信程序並出具有限確信報告。

確信標的資訊與適用基準

中華化學依據臺灣證券交易所「上市公司編製與申報永續報告書作業辦法」第四條所規定之化學工業應加強揭露永續指標資訊及其適用基準詳列於附件一。

管理階層之責任

中華化學管理階層之責任係依據臺灣證券交易所「上市公司編製與申報永續報告書作業辦法」之規定，以及參考全球永續性報告協會（Global Reporting Initiative, GRI）發布之通用準則、行業準則及重大主題準則編製永續報告書，並建立及維持與永續報告書編製有關之內部控制，以確保永續報告書所列之標的資訊未存有導因於舞弊或錯誤之重大不實表達。

會計師之責任

本會計師係依照財團法人中華民國會計研究發展基金會所發布之確信準則 3000 號「非屬歷史性財務資訊查核或核閱之確信案件」之要求規劃並執行有限確信工作，以對第二段所述之確信標的資訊是否存在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，對與有限確信相關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，惟其目的並非對中華化學民國 112 年度（2023 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

本會計師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、專業能力及專業上應有之注意、保密及專業行為。此外，本會計師所隸屬會計師事務所已遵循品質管理準則 1 號「會計師事務所之品質管理」，該品質管理準則規定會計師事務所設計、付諸實行及執行品質管理制度，包含與遵循職業道德規範、專業準則及所適用法令相關之書面政策及程序。

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- 1 -
The PKF International Association is an association of legally independent firms.

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所執行程序之實施說明

本會計師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：

1. 取得中華化學民國 112 年度（2023 年度）永續報告書，並閱讀其內容；
2. 訪談中華化學管理階層及相關員工，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；
3. 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，以獲取足夠及適切之有限確信證據。

上述確信程序係基於本會計師之專業判斷，包括辨認確信標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暨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，所執行程序之性質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低於合理確信案件中取得者。

先天限制

中華化學民國 112 年度（2023 年度）永續報告書內容涵蓋非財務資訊，對於該等資訊之揭露內容可能涉及中華化學管理階層之重大判斷、假設與解釋，故不同利害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標的資訊有未依適用之基準編製而須作重大修正之情形。

其他事項

中華化學網站之維護係中華化學管理階層之責任，對於本確信報告於中華化學網站公告後任何確信標的資訊或適用基準之變更，本會計師將不負該等資訊重新執行確信工作之責任。

大中國際聯合會計師事務所

會計師：高 國 晟

高國晟

民國 113 年 5 月 8 日

序	填項內的資訊	適用基準	頁碼	作業辦法
6	2023 年度中華電力能源消耗報告係源自電力用戶、天然氣及汽油油。 2023 年度範圍一廠、範圍二廠及彰化龍二廠之消耗總電量為 1,994 GJ (Gigajoules, 十億焦耳)；能源消耗總量為 67,451 GJ；天然氣為 3,328 GJ；用油量為 6,305 GJ。 外購電力百分比：100.00%。 再生能源使用率及自來水資源使用總數：0。 中華電力 2023 年度範圍一廠、範圍二廠及彰化龍二廠之總取水量為 373,383 立方公方。 中華電力 2023 年度範圍一廠及範圍二廠總耗水量為 213,508 立方公方。彰化龍二廠無統計資料故未列入總耗水量統計。 中華電力 2023 年度範圍一廠及範圍二廠零售新抽水量為 150,872 公方。彰化龍二廠主要為辦公大樓，無抽水機及抽水機，因此範圍二廠不抽水，故未將範圍二廠之抽水量。 中華電力 2023 年度範圍一廠及範圍二廠零售新抽水量為 189,722 公方。內再將內銷量為 2,807 公方，有差額原因回收百分比為 1.48%。 彰化龍二廠主要為辦公大樓，有差額係由抽水機抽水，因此範圍二廠不抽水，故未將範圍二廠之抽水量。 中華電力 2023 年度範圍一廠統計表(不含委外委託契約，涵蓋有統計學員工如下表)： 月總入職人員數 月數 總工作日數 總應酬工時 1 月 259 16 6,144 33,152 2 月 260 20 5,200 41,600 3 月 266 24 6,384 51,072 4 月 267 17 4,339 36,312 5 月 268 21 3,874 46,992 6 月 264 21 5,544 44,352 7 月 267 21 5,544 44,352 8 月 264 21 6,072 48,576 9 月 263 21 6,123 44,184 10 月 259 22 5,668 45,584 11 月 259 22 5,668 45,584 12 月 253 21 5,313 42,594 合計 3,145 250 65,533 524,264	用電量係根據外部供應商中華電力統計用電量總和； 天然氣係根據外部供應商華豐統計供氣量總和； 汽油係根據外部供應商華豐統計供油量總和。 部分石油量係根據外部供應商之油公司客戶端之系統紀錄統計，而部分石油量係根據中華電力零售聯絡中心數，除以「能源部能源局」之 2023 年逐月柴油油價中，國產汽油零售則以計算之平均值，計算其值。 依據台灣自來水股份有限公司自來水費單之抽水(費)總計，以各廠實際度數換算成立方公方。 依據 GRI 303-5 指引，不具備度數系統無法測出耗水量以便使用以下公式計算： 耗水量=總耗水費÷總耗水費。 依據山林股份有限公司有限公同計水處理費紀錄如華之水量及水價再換算成萬立方公方。 依據 2023 年度安南區環境衛生「廚管物管理辦法」及中華電力「廚管物管理控制程序」之規定，因清理之有害廢棄物，應內銷利用或出售或捐贈予「華信」廢棄物管理控制程序，之相關數額。	64 66 67	編號二 編號二 編號二
7	依據「職業安全衛生法第 38 條」之規定，中華電力按月彙報勞動部職業安全衛生署並經安委之職業安全衛生部表。		79	編號四

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臺灣中華化學

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