

# 2023 SUSTAINABILITY REPORT

125

#### 台字肥料股份有限公司 TAIWAN FERTILIZER CO., LTD.

- About this Report
- Message from the Chairman
- Overview of the Company
- Summary of Performance in 2023
- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

Appendix

# Contents

About this Report	02
B Message from the Chairman	04
Overview of the Company	07
Summary of Performance in 2023	12
Corporate Responsibility and Sustainable Management	13
1-1 Vision for Sustainable Development and Organizational Structure	14
1-2 Stakeholder Interaction and Management	17
1-3 External Organization Participation and International Initiatives Support and Compliance	22
2 Integrity Management and Strong Governance	23
2-1 Business Management	24
2-2 Corporate Governance	26
2-3 Risk Management	34
2-4 Climate Change Response	42
2-5 Legal Compliance	46

#### **B** Sustainable Agriculture and Circular Economy

3-1 Enhancement of Core Business 50 Competencies

49

67

71

73

74

79

87

88

90

3-2 Resource Circulation and Green 55 Economy

#### Energy Conservation, 59 Environmental Protection and Environmental Management

- 4-1 Green Sustainability Management 60
- 4-2 Energy and Resource Management 61
- 4-3 Greenhouse Gas Management
- 4-4 Raw Material Management70
- 4-5 Waste Management

#### 5 Caring and Friendly Workplace for Employees

- 5-1 Employee Employment Status
- 5-2 Comprehensive Talent Development System
- 5-3 Remuneration and Benefits 83 System
- 5-4 Equal and Friendly Workplace
- 5-5 Labor-Management Communication
- 5-6 Health and Safety Work Environment
- 5-7 Emergency Response and Transportation Management 96

# **6** Co-creation of Value and Common Prosperity

6-1 Product Responsibility 103 6-2 Customer-Centric Service 108 6-3 Supplier Management and 110 Procurement 6-4 Promoting Sustainable 115 Agriculture Education 6-5 Implementation of Corporate 117 Social Responsibility 6-6 ESG Key Case Studies 120 6-7 Community Harmony and 123 Mutual Prosperity

### B Appendix

Appendix 1: Independent Assurance Report by Certified Public Accountant	125
Appendix 2: GRI Standards Comparison Table	128
Appendix 3: Article 4 of the "Regulations Governing the Preparation and Filing of Sustainability Reports by TWSE Listed Companies" by the Taiwan Stock Exchange	130

Appendix 4: 131 Disclosure of SASB Indicator Content

#### 台湾肥料股份有限公司 TAIWAN FERTILIZER CO., LTD.

#### **About this Report**

- Message from the Chairman
- Overview of the Company
- Summary of Performance in 2023
- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

Appendix



# **ABOUT THIS REPORT**

This report is the 10th "Sustainability Report" issued by Taiwan Fertilizer Co., Ltd. (hereinafter referred to as "TFC", "Taiwan Fertilizer," "the Company," "we," or "our"). The report has been prepared in accordance with the latest version of the Global Reporting Initiative (GRI) Standards (GRI Standards 2021) and with reference to the "Guidelines for Preparation and Reporting of Sustainability Reports by Listed Companies" issued by the Taiwan Stock Exchange, serving as the foundational framework for information disclosure.

To demonstrate TFC's commitment and achievements in corporate sustainability, this report comprehensively compiles the Company's performance in environmental stewardship, social responsibility, and corporate governance. It addresses the expectations and needs of stakeholders, aiming to establish long-term partnerships with customers and the broader community, promoting social inclusion, and advancing towards sustainable growth objectives. In addition to disclosing key indicators related to material topics, this report also covers the Company's performance and initiatives in areas such as corporate governance, employee care, customer engagement, environmental protection, and social participation.

# Basis for Report Data

The statistical data disclosed in this report are derived from TFC's internal statistics and surveys, presented using internationally recognized indicators. In cases where estimates are applied, relevant explanations are provided in the respective sections. All financial data presented are sourced from the publicly released consolidated financial reports, which have been audited and certified by KPMG Taiwan in accordance with International Financial Reporting Standards (IFRS) and are presented in New Taiwan Dollars (NTD). The Company has also implemented and verified management systems, including ISO 9001 Quality Management System, ISO 45001, CNS 45001 Occupational Health and Safety Management System, ISO 14001 Environmental Management System, and ISO 50001 Energy Management System.

# <sup>®</sup>Report Editing, Review, and Assurance

The report has been prepared by Ernst & Young in accordance with Assurance Standard No. 3000, "Assurance Engagements other than Audits or Reviews of Historical Financial Information," issued by the Accounting Research and Development Foundation. A limited assurance engagement was conducted on the subject matter information. The Assurance Statement is detailed in Appendix 1, and the GRI Standards Content Index is provided in Appendix 2.

To enhance transparency in sustainability information, this report is published in both Chinese and English versions, with the content simultaneously available on the "Sustainability Management" section of the TFC website (https://www.taifer.com.tw/CSR/), where the report can also be downloaded. Moving forward, we will continue to publish an annual sustainability report, assured by a third-party independent organization, to proactively communicate TFC's sustainability mission, commitments, strategies, concrete actions, and future goals to stakeholders concerned about the Company. This ongoing engagement with stakeholders will serve as a critical foundation for the sustainable development of the enterprise.

# 台污肥料股份有限公司 TAIWAN FERTILIZER CO., LTD.

#### **About this Report**

- Message from the Chairman
- Overview of the Company
- Summary of Performance in 2023
- Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

Appendix

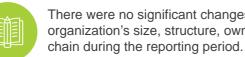


From Jan. 1, 2023, to Dec. 31, 2023

### **Report Boundaries**

The economic, social, and environmental performance reported herein encompasses Taiwan Fertilizer Co., Ltd., including its operational sites such as the Taipei Headquarters, Keelung Factory, Miaoli Factory, Taichung Factory, and Hualien Factory. Certain disclosed information also covers subsidiaries included in the consolidated financial statements. specifically Taiwan Yes Deep Ocean Water Co., Ltd., Taifer Chemicals International Inc., and Peifeng Technology Co., Ltd., but excludes the investment companies TAIFER (CAYMAN) INTERNATIONAL GROUP CO., LTD., TAIFER INTERNATIONAL (SAMOA) CO., LTD.

The financial performance disclosure includes TFC and its subsidiaries, as well as the investee companies included in the consolidated financial statements.



There were no significant changes in the organization's size, structure, ownership, or supply

# <sup>©</sup>Report Issuance Dates



Previous Edition: Issued in Sep. 2023

Current Edition: Issued in Aug. 2024

# Contact Information

#### Taiwan Fertilizer Co., Ltd.

Corporate Governance Department, Secretariat, Board of Directors, Shawn Wu, Jeff Gee

Address

E-mail

17th Floor, No. 170, Jingmao 1st Road, Nangang District, Taipei City, Taiwan

### Tel

+886-2-2542-2231

gee@taifer.com.tw







#### 台湾肥料股份有限公司 TAIWAN FERTILIZER CO., ITD.

### **MESSAGE FROM THE CHAIRMAN**

#### About this Report

#### Message from the Chairman

- Overview of the Company
- Summary of Performance in 2023
- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

Appendix

The coronavirus crisis holds profound lessons that can help us address climate change—if we make greater economic and environmental resiliency core to our planning for the recovery ahead.

> McKinsey & Company, Global Management Consulting Firm

In 2023, Taiwan downgraded the severity level of COVID-19 as a notifiable infectious disease, officially entering the post-pandemic era. Taiwan Fertilizer Co., Ltd. successfully navigated through the pandemic. However, after overcoming the risks posed by the pandemic, the Company continues to face another systemic risk-climate change. The World Health Organization (WHO) predicts that by 2030 to 2050, climate change will cause an additional 250,000 deaths annually due to health-related issues. This will, in turn, lead to increased occupational health and safety risk for businesses and higher operating costs. Environmental risks often have a direct impact on a company's financial performance, and in recent years, businesses have increasingly focused on environmental issues as a key component of their ESG strategies. Over the past year, TFC has aligned its efforts with industry perspectives and insights from McKinsey, striving to focus its operations on environmental sustainability. Through these efforts, the Company aims to enhance its resilience in both environmental and economic aspects while also increasing its contributions to social responsibility and corporate governance.

# Developing Clean Energy Ventures

TFC originally operated four main business units: fertilizer and chemicals, electronic-grade chemicals, biotechnology involving deep ocean water, and real estate development. In alignment with the government's "2050 Net-Zero Carbon Emissions" policy, we are actively transforming the Company from a "provider of earth nutrients" into a "clean energy provider," thereby establishing a fifth business unit focused on the development of low-carbon ammonia energy.

For decades, TFC has been the largest domestic supplier of liquid ammonia, traditionally using ammonia as a raw material for fertilizers. However, ammonia is also an energy source for the new era. Given that ammonia's chemical composition contains no carbon, its combustion for power generation does not produce carbon monoxide or carbon dioxide, resulting in "zero carbon emissions." Recognizing this potential, in June 2023, we imported Taiwan's first batch of low-carbon liquid ammonia (liquid ammonia with lower carbon emissions in its production process) from SABIC AN, a company based in Saudi Arabia. Moving forward, we plan to further expand the import of low-carbon ammonia. To meet the increasing demand for storage and transportation, TFC will invest NT\$3 billion to construct two additional liquid ammonia storage tanks, increasing our total storage capacity to 80,000 metric tons.

# Supporting the Sustainability of the Semiconductor Supply Chain

In recent years, Taiwan's semiconductor industry has been dedicated to creating a low-carbon supply chain. TFC's supply of low-carbon ammonia aligns with the sustainability needs of the semiconductor sector. Ammonia solution is widely used in wafer processing to remove surface contaminants. By using our electronic-grade ammonia solution, which is produced from low-carbon ammonia, the overall carbon emissions during the wafer manufacturing process are reduced. Additionally, we not only produce electronic-grade chemicals but also take responsibility for the disposal of waste generated from these products. We recycle and supply customized high-spec electronic-grade chemicals for domestic large panels, optoelectronics, solar energy, and semiconductor industries, implementing the principles of a green circular economy.





#### About this Report

#### Message from the Chairman

Overview of the Company

- Summary of Performance in 2023
- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

Appendix

# **Nincreasing Investment in Green Research and Development**

To advance the United Nations Sustainable Development Goals (SDGs) specifically Goal 2: "Zero Hunger," Goal 12: "Responsible Production and Consumption," and Goal 13: "Climate Action," we are intensifying our green research and development efforts:

#### 🔊 I. Advancing Towards Zero Hunger

Plants, like humans, may suffer from calcium deficiencies, which can affect their health. To address this, we have developed a composite formula of "Amino Acid-Calcium Fertilizer" which, when applied to crops such as cherry tomatoes, strawberries, and wax apples, effectively prevents calcium deficiency. This helps in reducing fruit softening and cracking, extending the shelf life of produce, and thus reducing food waste, bringing us a step closer to the goal of "Zero Hunger."

#### 😤 II. Efforts Towards Responsible Production and Consumption

Farmers are one of TFC's most important stakeholders. We aim to help them slow down soil acidification by promoting the use of compound fertilizers enriched with humic acid, peat organic matter, and beneficial microorganisms. This approach progressively improves soil quality. Additionally, we have developed "Slow-Release" (or "Controlled-Release") compound fertilizers. As the name suggests, these fertilizers release nutrients slowly and in a controlled manner, reducing the need for multiple applications and preventing excessive nutrient release, which can lead to soil acidification and water eutrophication. This method supports soil health, allowing farmers and TFC to work together towards "Responsible Production and Consumption," ultimately protecting the Earth's soil resources.

#### III. Joining the "Climate Action"

To contribute to the reduction of greenhouse gas emissions, we are actively exploring the use of agricultural circular materials, recycling, and reutilization as organic fillers in composite fertilizers. This approach aims to reduce the reliance on chemical fertilizers, promote the recycling and reuse of agricultural waste, and ultimately decrease carbon emissions. Through these efforts, we are joining the global "Climate Action" initiative, adding our support to this important cause.



We place great emphasis on strengthening corporate governance to ensure the Company adheres to both proactive and prudent practices. One of the critical indicators in the "Corporate Governance Evaluation" (hereinafter referred to as the "Evaluation") is the establishment and operation of various functional committees within the Board of Directors. In addition to the existing Audit Committee and Remuneration Committee, the Board of Directors at TFC added a "Real Estate Resources Committee" in 2023 to address the needs of the Company's real estate development ventures. We also carefully review and strive to comply with other indicators of the "Evaluation," such as appointing a dedicated corporate governance officer. As a result, in the latest "Evaluation," we have maintained a position in the top tier of companies, ranking within the top 21% to 35% of listed companies.



#### 台湾肥料股份有限公司 TAIWAN FERTILIZER CO., LTD.

#### About this Report

#### Message from the Chairman

- Overview of the Company
- Summary of Performance in 2023
- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

Appendix

# Creating a Diverse and Inclusive Workplace

Vice President Hsiao Bi-khim once remarked, "Since returning to Taiwan at the end of last year (2023), I have deeply felt the rapid growth of female power in Taiwan, which has become an undeniable force in the country." Indeed, female leadership has flourished within TFC. In 2023, women comprised 15.56% of all managerial positions, up from (12.04%) the previous year, including the addition of a new female manager. As of May 2024, the proportion of female managers has further increased to 21.78%, now aligning with the overall gender ratio within the Company.

In addition to increasing female representation in management, we are also dedicated to creating a diverse and inclusive work environment. We continue to provide maternity and childcare subsidies and, in support of the #MeToo movement, have organized specialized seminars on workplace gender equality. Furthermore, we are committed to a zero-tolerance policy against sexual harassment, ensuring that any complaints are promptly handled in accordance with relevant laws and internal procedures. We firmly believe that women who balance family responsibilities while pursuing careers bring invaluable passion to their work, a quality we deeply cherish. By fostering a safe and comfortable work environment, we aim to retain this passion and, in doing so, further strengthen our internal "DEI" (Diversity, Equity, and Inclusion) values, enhancing our competitiveness and profitability.

Reflecting on 2023, since I took office in May, TFC has upheld its commitment to ESG principles and charted a new course for the next six decades. While this may have initially appeared to increase the Company's capital expenditures, in reality, it represents an investment in sustainability and the future. This commitment has once again earned us a place in the "Taiwan Sustainability Index." We are not solely focused on short-term gains but are equally committed to building long-term organizational resilience. I am deeply grateful to all our colleagues for joining me on this rightful path. As we move forward, I am reminded of the lyrics from President Lai Ching-te's campaign song "The Road 2024": "When there's a road, we sing along; when there's none, we cross rivers and climb mountains." No matter the challenges ahead, with courage and determination, we will forge a sustainable path for TFC!





#### 台: 完肥料股份有限公司 TAIWAN FERTILIZER CO., LTD.

About this Report

Message from the Chairman

#### **Overview of the Company**

- Summary of Performance in 2023
- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

Appendix

# **OVERVIEW OF THE COMPANY**

Honor and Recognition

#### **Awards and Achievements**

Inclusion in the FTSE4Good TIP Taiwan ESG Index Organizer: Taiwan Index Plus Corporation and FTSE International Limited



In 2023, TFC was selected as a component of the FTSE4Good TIP Taiwan ESG Index by meeting the ESG criteria and financial benchmarks established by Taiwan Index Plus Corporation and FTSE International Limited.

Sports Enterprise Certification Organizer: Sports Administration Ministry of Education



Awarded Sports Enterprise Certification in 2021, with the certification valid for a period of three years.

#### **Corporate Sustainable Rural Impact (CSRI)** Organizer: Agency of Rural Development and Soil and Water Conservation

TFC received the Gold Award for Corporate Sustainable Rural Impact (CSRI)

企業永續農村影

CORPORATE SUSTAINABLE RURAL IMPACT

感謝企業共同守護臺灣農業 成為永續行動的關鍵人物

#### 台湾肥料设体有限公司 TAIWAN FERTILIZER CO., LTD.

#### About this Report

#### Message from the Chairman

#### **Overview of the Company**

- Summary of Performance in 2023
- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

Appendix



Taiwan Fertilizer Co., Ltd. was established on May 1, 1946. During its state-owned period, the Company fully aligned with government policies, producing and supplying fertilizers essential for domestic agricultural development, making it the largest fertilizer manufacturer in Taiwan. Following the completion of its shareholding privatization on Sep. 1, 1999, the Company transitioned into a publicly listed private enterprise, with its headquarters located in Nangang District, Taipei City.

In response to ongoing socio-economic development and transformation, and considering the proximity of some production plants to city centers, the Company has consolidated its manufacturing operations at the Taichung Factory. The lands of former production facilities have been repurposed for commercial real estate and residential development, enhancing asset value and revenue. This strategic shift aims to improve operational efficiency and establish a sustainable financial foundation.

To enhance operational performance and diversify revenue streams, the Company has established specialized chemical storage tanks in the Taichung Port Petrochemical Zone to supply raw materials for the polyurethane (synthetic leather) industry. Additionally, a new compound fertilizer plant has been constructed, not only to meet domestic demand but also to explore international market opportunities. We are also advancing our purification technology for electronic-grade chemicals, focusing on the development of high-profit IC-grade electronic chemicals. In line with the 12 key strategies for incorporating hydrogen energy into the net-zero emission pathway, we plan to build two dedicated liquid ammonia storage tanks at the Taichung Factory. At the Miaoli Factory, we are planning an ammonia-hydrogen cracking facility and a 2 MW solar power system, aiming to enter Taiwan's ammonia energy supply chain and establish a hydrogen energy application platform.

Embracing the philosophy of giving back to society, we established the TFC Foundation, a non-profit organization that annually conducts scholarship programs and charitable activities. At the same time, we are committed to achieving a win-win-win outcome for society, shareholders, and employees, striving towards sustainable operations and fulfilling our corporate social responsibility goals.

#### **Shareholder Structure**



Note: Data as of the share transfer suspension date, Apr. 28, 2024.

The Company's business activities and main products are as follows, aimed at providing high-quality services and products to meet customer needs:



#### **Production and Sales of Fertilizer Products**

Main products include nitrate-based and ammonium phosphate-based compound fertilizers, agricultural urea, superphosphate, ammonium sulfate, potassium chloride, organic fertilizers, and microbial fertilizers.

#### 冂

#### Production and Sales of Chemical Products

Main products include nitric acid, sulfuric acid, sulfanilic acid, liquid ammonia, industrial urea, and melamine.

# 

#### **Production and Sales of Electronic Grade Chemicals**

Main products include IC-grade NMP, electronic grade NMP, CPN, ammonia, nitric acid, and regenerated phosphoric acid.

#### Real estate management

Real estate management, development, sales, and leasing.



#### 台汽肥料股份有限公司 TAIWAN FERTILIZER CO., LTD. **Company Overview Corporate Culture Core Values** Company Name Integrity, Initiative, Innovation, Foresight, Taiwan Fertilizer Co., Ltd. Message from the Chairman Effectiveness, Responsibility **Overview of the Company** Eisting Date Date of Establishment Summary of Performance in 2023 Mission May 1, 1946 Mar. 24, 1998 To foster vitality on the land through excellence Corporate Responsibility and and enduring enterprise Sustainable Management Market/Stock Code ┟┟ Industry Classification 2 Integrity Management and Strong Publicly Listed Company / 1722 Chemicals **Business Philosophy** Cultivation, Foundation Strengthening, 3 Sustainable Agriculture and Circular **Primary Business Operations** 🐻 Paid-in Capital Innovation, Sustainability T Fertilizer Sector: The largest fertilizer NT\$9.8 billion 4 Energy Conservation, Environmental producer and supplier in Taiwan Protection and Environmental Chemical Sector: The largest supplier of liquid ammonia and nitric acid in Taiwan Vision To develop fertilizer chemicals, real estate, 5 Caring and Friendly Workplace for Acting President and investment businesses, sustain vitality on Chairman the land, and become a globally outstanding brand Chang-Lang Chang Suen-Zone Lee 6 Co-creation of Value and Common Number of Employees **Business Production Bases** Three locations (Taichung Factory, Miaoli 633 (as of Dec. 31, 2023) Factory, Hualien Factory)



About this Report

Governance

Economy

Management

Employees

Prosperity

Appendix

#### 台汽肥料股份有限公司 TAIWAN FERTILIZER CO., LTD.

#### Operatio

#### About this Report

Message from the Chairman

#### **Overview of the Company**

Summary of Performance in 2023

- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

Appendix

<b>Operational Locations</b>		Primary Products and Service Markets	
Miaoli Factory, Northern Regional Sales Office (Miaoli County)	<b>Headquarters</b> (Taipei City)		
Agricultural biotechnology research and development, and production of organic fertilizers and electronic-grade chemicals, Service Location	Corporate Headquarters	Product Name Sales Regio	on Revenue Proportion Production Volume (metric tons)
Taichung Factory (Taichung City) Trade logistics and production of fertilizers and	Hualien Factory (Hualien County)	Fertilizer Products Simple Fertilizer Series, Zinc Phosphate-based Organic (Bao-Hsiao) Compound Fertilizer Series, Nitrophosphate-based Organic (Hei Wang) Compound Fertilizer Series, Organic Fertilizer Series, Instantly Soluble Compound Fertilizer Series, Vitality Nutrient Series, Vitality Phosphate, Magnesium-Calcium Fertilizer	
chemical products Central Regional Sales Office	Developing a deep ocean water industrial park will bring together related industries, including tourism and	Chemical Products Industrial-Grade Urea, Melamine, Sulfonic Acid, Liquid Ammonia, Nitric Acid, Sulfuric Acid, Fuming Sulfuric Acid, Chemical Storage Tank Services	e, and <b>24.30</b> %
(Yunlin County) Service Location	recreation, food and aquaculture application research and development, and production.	Real Estate       Taiwan         Residential Real Estate, Commercial Real Estate       Taiwan	31.71%
Southern Regional Sales Office	production.	Resold Urea     Southeast A China	sia, <b>3.40</b> %
(Kaohsiung City) Service Location		Electronic-Grade Chemicals IC-Grade NMP, Electronic-Grade NMP, CPN, Ammonia Solution, Nitric Acid, PGMEA	<b>2.95</b> % 22,226.47
		Others           Deep ocean water, aquatic products, etc	2.74%

Note: Production volume data includes the subsidiary Peifeng Technology & Fertilizer Co., Ltd.

#### 台湾肥料股份有限公司 TAIWAN FERTILIZER CO., ITD.

#### About this Report

Message from the Chairman

#### **Overview of the Company**

- Summary of Performance in 2023
- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

Appendix

#### **Group Overview**

#### Al-Jubail Fertilizer Company

#### 50% Joint Venture

Al-Jubail Fertilizer Company was established in 1979 as a joint venture between TFC and SABIC. The Company primarily produces products such as liquid ammonia, urea, 2-EH, DOP, and TGU. By leveraging the advantage of low raw material costs, it secures stable investment returns.

#### **Taifer Chemicals International Inc.**

#### 100% Owned Subsidiary

Focused on asset management and operates gas stations (located in Keelung and Miaoli). Additionally, in alignment with the organizational restructuring and development strategy of its parent company, TFC, its overseas investment business was transferred to its affiliated company, "Taiwan Yes Deep Ocean Water Co., Ltd." in June 2023.

Note 1: The focus is on investments where the Company holds more than 50% of the shares.

#### Taiwan Yes Deep Ocean Water Co., Ltd.

#### 100% Owned Subsidiary

Focused on the development of Deep Ocean Water (DOW) related industries, the Company is committed to becoming an expert in deep-sea minerals and promoting their health benefits domestically and internationally. It operates Asia's largest deep ocean water manufacturing plant, utilizing advanced processing technologies and automated equipment to produce high-quality deep-sea natural mineral concentrates, bottled drinking water, and deep-sea salt products. Additionally, the Company made an overseas investment in June 2023, acquiring the assets previously managed by "Taifer Chemicals International Inc." to operate the "Taiwan Cultural Center" office rental business in Ulaanbaatar, Mongolia.

#### Peifeng Technology & Fertilizer Co., Ltd.

#### 100% Owned Subsidiary

Primarily responsible for the production of nitrate-phosphate compound fertilizers and the trading of related chemicals.



Note 2: TAIFER (CAMBODIA) Co., Ltd. submitted an application for business suspension and dissolution liquidation procedures in Cambodia in June 2023. The relevant legal procedures are still ongoing.

# **SUMMARY OF PERFORMANCE IN 2023**

台湾肥料股份有限公司 TAIWAN FERTILIZER CO., ITD.





About this Report

Message from the Chairman

Overview of the Company

Summary of Performance in 2023

- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

Appendix



100



- 1-1 Vision for SustainableDevelopment and OrganizationalStructure
- 1-2 Stakeholder Interaction and Management
- 1-3 External Organization Participation and International Initiatives Support and Compliance

ficiency

#### 台汽肥料股份有限公司 TAIWAN FERTILIZER CO., LTD.

About this Report

Message from the Chairman

Overview of the Company

Summary of Performance in 2023

**1** Corporate Responsibility and Sustainable Management

- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

Appendix



# 1-1 VISION FOR SUSTAINABLE DEVELOPMENT AND ORGANIZATIONAL STRUCTURE

# Vision for Sustainable Development

In response to the rapid changes in the global economic environment and to strengthen our risk management capabilities, we leverage our corporate sustainability management mechanisms by integrating our core business competencies. Through the "Sustainable Development Committee," we employ a top-down approach to consolidate internal resources, formulate sustainability strategies based on key stakeholder concerns, and fulfill our corporate social responsibilities, all in pursuit of the goal of sustainable corporate operations.

#### Vision, Strategy, Action Plan

**Our Vision** 



, en areg), i terrer i ar				
Aspect / Strategy	Objective		Aspect / Strategy	Objective
			🛆 Implemented energy	Integrating energy efficient measures to establish a green brand image
Action Plan				

#### **Action Plan**

Aspect / Strategy

Leveraging the Company's core competencies and integrating group resources, we implement the green innovation concept across various operational aspects, including research and development, manufacturing, and marketing.

Made long-term investments in the development of agricultural waste applications for organic fertilizer materials, transforming them into organic fertilizer products and promoting the resource utilization of agricultural waste.

Established internal and external "organic demonstration farms," obtained organic agricultural product certifications, and engaged in interactions and exchanges with farmers. By replicating the actual farming practices of farmers and introducing the Internet of Things (IoT) systems, we are building a comprehensive organic agriculture cultivation technology database, positioning ourselves as a benchmark organic farm in Taiwan.

The Hualien Factory has adopted green strategies by utilizing the inexhaustible properties of deep ocean water. We are gradually installing a gravity-flow multi-stage series system and solar energy facilities to develop diversified projects such as smart aquaculture, aiming to produce high-value-added aquatic products and maximize the benefits of the "circular economy." Simultaneously, we are aligning with the government's "net-zero" policy by continuously focusing on the protection of marine "blue carbon."

Promoting green procurement (such as purchasing low-carbon raw materials and environmentally friendly packaging) and local procurement to reduce product carbon emissions and carbon footprint, thereby establishing a green brand image.

In response to the "clean energy" industry trend, we are evaluating and exploring the feasibility of developing "ammonia energy" co-firing power generation technology and "hydrogen energy" power generation within the Company.

#### **Action Plan**

- Implemented energy integration and upstream-downstream integration within the production value chain to enhance energy efficiency and promote the effective use of resources.
- Established an energy management system that focuses on high-energy-consuming equipment, planning energy-saving initiatives and executing them to reduce energy consumption.
- The Taichung and Miaoli factories have implemented the ISO 14001 Environmental Management System and the ISO 14064-1 Greenhouse Gas Inventory System, conducting annual inventories to achieve enhanced environmental performance and energy conservation and waste reduction goals.
- The Taichung Factory has adopted the ISO 50001 Energy Management System, conducting regular internal and external audits to track progress and correct deficiencies, ensuring the realization of energy-saving and carbon reduction targets.
- Engage certified vendors to manage waste disposal and treatment in compliance with regulatory requirements, while monitoring the final disposal process to prevent environmental pollution.

#### 台湾肥料政化有限公司 TAIWAN FERTILIZER CO., ITD.

FAIWAN FERTILIZER CO., LTD.

About this Report

Message from the Chairman

Overview of the Company

Summary of Performance in 2023

1 Corporate Responsibility and Sustainable Management

- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

Appendix

Aspect/Strategy	Objective
Social Creating a healthy and happy workplace	Upholding a people-centric approach to enhance employee self-worth

#### Action Plan

- Offered a competitive remuneration system that provides flexible salary adjustment opportunities and ranges for high-performing new and existing employees.
- Committed to fostering a learning organization, the Company not only provides standard training programs but also supports lecturer development, peer knowledge sharing, and expert seminars to create a positive learning and sharing knowledge system.
- Each factory has strengthened the implementation of automated inspections to ensure the safe operation of equipment. Regular environmental monitoring is conducted, and necessary safety protective equipment is provided to prevent injuries and health hazards during work.
- Annual health examinations are conducted for all current employees, with costs subsidized by the Company. Employees working in particularly hazardous environments receive additional specialized health check services.

Social Fulfilled social responsibility and community care Implementing localized business strategies and promoting sustainable development initiatives

#### **Action Plan**

• Organized workshops on rational fertilization and conducted field demonstrations on organic fertilizer trials to assist farmers in reducing the usage of chemical fertilizers, thereby ensuring the production of safe and high-quality agricultural products.

Social

Enhancing supplier management mechanisms and cultivating customer relationships

#### Action Plan

- Implemented a sustainable development assessment and management plan for suppliers, urging them to adopt practices that protect the environment, improve safety and hygiene, and uphold human rights.
- Established a comprehensive and diverse customer service mechanism with accessible channels, we utilize customer feedback to optimize product quality, strengthen market competitiveness, and enhance customer satisfaction.

Aspect/Strategy	Objective
Corporate Governance	Cultivating a culture of
Strengthening	corporate ethics and
corporate governance	implementing business
systems	integritypolicies

#### **Action Plan**

- Established a sustainable management framework to enhance transparency, accuracy, and timeliness of information disclosure, ensuring clear communication channels for stakeholders.
- Enforce business integrity policies by conducting regular annual education and training on integrity and anti-corruption for all employees, reinforcing the principles of ethical business practices.
- Risk management operations are conducted in accordance with the "Taiwan Fertilizer Co., Ltd. Risk Management Policy and Procedures," with clearly defined responsibilities for identifying and assessing risks across various domains.
- The Audit Office formulates an annual audit plan and conducts audits accordingly. In the event of internal control deficiencies or risk incidents, the office is responsible for overseeing the development of corrective action plans by relevant departments and regularly tracking the implementation results.
- Participated in external competitions and arrange ESG-related seminars to learn from industry benchmarks, thereby enhancing corporate competitiveness and shaping TFC's positive corporate image.

#### 台湾肥料设修有限公司 TAIWAN FERTILIZER CO., LTD.

### About this Report

Message from the Chairman

Overview of the Company

Summary of Performance in 2023

1 Corporate Responsibility and Sustainable Management

- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

Appendix

# Sustainable Development Committee and Its Operating Mechanisms

The Sustainable Development Committee is the highest-level project implementation body within the Company, responsible for executing various initiatives under the sustainability policies approved by the Board of Directors. The Committee is chaired by the Chairman of the Board, who serves as the Guiding Commissioner, and the President, who acts as the Chief Commissioner overseeing the implementation of sustainability initiatives. The Vice President serves as the Deputy Chief Commissioner, while other members include Assistant Vice Presidents, General Manager, and Factory Managers. The Secretariat of the Board of Directors assists the Sustainable Development Committee in planning and executing the Company's ESG actions. The Committee is further divided into three subgroups, each responsible for different topics, which conduct relevant projects through regular or ad-hoc meetings. Each subgroup regularly reports its progress to the Board of Directors, covering areas such as greenhouse gas inventory planning, climate change issues, and risk management.

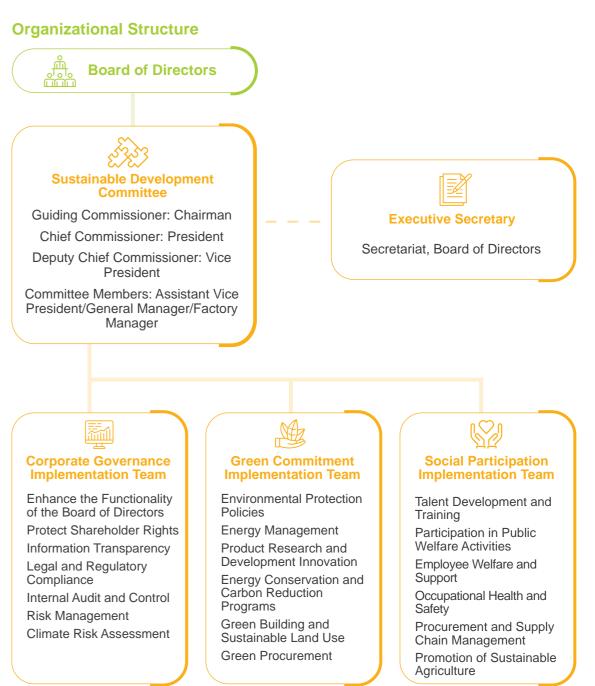
#### **Operations of the Sustainable Development Committee**

#### Management Representatives

- Guiding Commissioner/Chairman
- Chief Commissioner/President

#### Execution Division

- Board of Directors/Policy Approval
- Sustainable Development Committee/Formulation and Implementation of Sustainable Development Policies
- Subcommittees of the Committee/Establishment of performance indicators and execution plans, with final implementation and promotion by each unit, as well as performance evaluation and review
- Corporate Governance Office under the Board Secretary/Regularly conduct sustainable development training and assist the committee in policy planning and implementation



#### 台湾肥料设修有记公司 TAIWAN FERTILIZER CO., LTD.

About this Report

Message from the Chairman

Overview of the Company

Summary of Performance in 2023

#### 1 Corporate Responsibility and Sustainable Management

- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

Appendix

# 1-2 STAKEHOLDER INTERACTION AND MANAGEMENT

### Stakeholder Engagement

The Company, through internal discussions and incorporating perspectives from external experts, and referencing the stakeholders identified by peers in the chemical industry, has conducted stakeholder engagement procedures and significance assessments in accordance with the five principles of the AA1000 SES Stakeholder Engagement Standard. In 2023, we concurrently adhered to the GRI Standards (2021) and redefined stakeholders as individuals or groups whose interests have been or may be impacted by the organization's activities. During the "Sustainability Issue Impact Assessment" phase, we evaluate the potential impact of each sustainability issue on these individuals or groups, and classify stakeholders based on the degree of impact. This classification includes eight key stakeholders directly related to TFC's operations: employees, government (regulatory authorities), shareholders, fertilizer customers, chemical customers, farmers, suppliers, and real estate customers.

#### **Stakeholder Concerns and Communication Channels**

	Stakeholders	Issues of Concern	TFC's Response	Communication Channels and Frequency
Gove		Cabor-Management	Regularly convene labor-management forum with representatives from various labor unions to listen to employees' concerns.	<ul> <li>Labor-Management Forums / Annually</li> <li>Labor-Management Meetings /</li> </ul>
	<u>m</u> m m	Continuously expand business operations to establish a long-term, stable profit structure and become the most	Quarterly Union Manager Meetings / Quarterly	
	Employees	Occupational Health and Safety	competitive enterprise. Hold bi-monthly Occupational Health, Safety, and Environmental (OHSE) meetings to promote relevant regulations and workplace accident case studies, provide recommendations and reviews related to safety, health, and environmental practices.	<ul> <li>Internal Website / Real-time</li> <li>Employee Complaint Email or Hotline / Real-time</li> <li>Internal Proposal Improvement System / Real-time</li> </ul>
		Legal Compliance	Internal auditors are required to report any discovered regulatory violations that are deemed significant or pose a substantial risk of harm to the Company. Such reports must be submitted immediately for review and must be followed up continuously until corrective actions are fully implemented. This ensures that relevant departments take prompt and appropriate measures to address the issues.	<ul> <li>Public Shareholder Representatives Meetings / Ad-Hoc</li> <li>Regulatory Authority Meetings / Ad-Hoc</li> <li>Government Inspections / Ad-Hoc</li> </ul>
	Government gulatory authority)	Emissions	Through process improvements, equipment upgrades, and the acquisition of energy-efficient equipment, regularly track and review greenhouse gas emissions from each facility on an annual basis.	<ul> <li>Business-Related Seminars, Forums, Public Hearings, and Discussion Panels / Ad-Hoc</li> <li>Incoming Official Correspondence / Ad-Hoc</li> </ul>

#### 台湾肥料股份有限公司 TAIWAN EERTIIIZER CO ITD

TAIWAN FERTILIZER CO., LTD.	Stakeholders	Issues of Concern	TFC's Response	Communication Channels and Frequence
About this Report Message from the Chairman	بَبْرَانَ الْمَرْمَةُ الْمَرْمَةُ الْمَرْمَةُ الْمَرْمَةُ الْمَرْمَةُ الْمَرْمَةُ الْمَرْمَةُ الْمَرْمَةُ الْمُ	Economic Performance	TFC is committed not only to reducing costs and enhancing market competitiveness but also to comprehensively upgrading its products and technical services.	<ul> <li>Shareholders'Assembly / Annually</li> <li>Financial Reports / Quarterly</li> <li>Corporate Briefings / Ad-Hoc</li> <li>Shareholder Service Email and Dedicated Personnel / Real-time</li> </ul>
Overview of the Company Summary of Performance in 2023 <b>1 Corporate Responsibility and</b> <b>Sustainable Management</b>		Corporate Governance	Strengthen corporate governance continuously through internal audits and external verification mechanisms.	<ul> <li>Material Information on the Market Observation Post System, Corporate Website / Real-time</li> </ul>
2 Integrity Management and Strong Governance	$\gamma \Delta$	Product Health and Safety	All products undergo stringent raw material inspection and labeling in compliance with domestic regulations before being distributed through various channels.	<ul> <li>Customer Satisfaction Survey / Annually</li> <li>Customer Audits / Ad-Hoc</li> </ul>
<ul> <li>3 Sustainable Agriculture and Circular Economy</li> <li>4 Energy Conservation, Environmental Protection and Environmental</li> </ul>	Fertilizer Customers	Privacy and Information Security	Establish an Information Security Management Committee to formulate information security policies and procedures, and conduct regular awareness and training programs.	<ul> <li>Corporate Website / Real-time</li> <li>Customer Service Hotline / Real-time</li> </ul>
<ul> <li>Management</li> <li>5 Caring and Friendly Workplace for Employees</li> <li>6 Co-creation of Value and Common Prosperity</li> <li>Appendix</li> </ul>	Chemical Customers	Supply Chain Sustainability Management	Promote supplier self-assessments, track potential risks, and implement further controls.	<ul> <li>Customer Satisfaction Survey / Annually</li> <li>Customer Audits / Ad-Hoc</li> <li>Visits and Exchanges / Ad-Hoc</li> <li>Corporate Website / Real-time</li> <li>Customer Service Hotline / Real-time</li> </ul>



# 台:方肥料股份有限公司 TAIWAN FERTILIZER CO., LTD.

台湾宛科设体有限公司 TAIWAN FERTILIZER CO., LTD.	Stakeholders	Issues of Concern	TFC's Response	Communication Channels and Frequer
About this Report Message from the Chairman Overview of the Company	Farmers	Customer Service and Satisfaction	Upon receiving customer complaints, the sales department promptly assigns personnel to address the issues. If necessary, they will conduct on-site investigations or collaborate with the production department to resolve the matters, and complete a "Customer Complaint Handling Form".	<ul> <li>Corporate Website / Real-time</li> <li>Customer Service Hotline / Real-time</li> <li>Rational Fertilization Workshops / Ad-Hoc</li> <li>Product Briefings / Ad-Hoc</li> </ul>
Summary of Performance in 2023           1 Corporate Responsibility and Sustainable Management           2 Integrity Management and Strong Governance           3 Sustainable Agriculture and Circular Economy	Suppliers	Business Integrity	Regularly schedule training on integrity and anti-corruption, and communicate the principles of business integrity practices to all employees.	<ul> <li>Supplier Evaluation Questionnaire Annually</li> <li>Annual Supplier Conference / Annually</li> <li>Corporate Website / Real-time</li> <li>Visits and Exchanges / Ad-Hoc</li> <li>Supplier Self-Assessment Questionnaire / Annually</li> </ul>
<ul> <li>4 Energy Conservation, Environmental Protection and Environmental Management</li> <li>5 Caring and Friendly Workplace for Employees</li> <li>6 Co-creation of Value and Common Prosperity</li> </ul>	Real Estate Customers	Local Community	During land development activities, align with the surrounding urban development context and planning. Conduct public hearings, forums, or exhibitions as required by law to listen to community residents' expectations and feedback, and reassess the transformation and utilization of old factory sites	<ul> <li>Corporate Website / Real-time</li> <li>Customer Service Hotline / Real-time</li> </ul>
Appendix				



#### 台湾肥料设体有限公司 TAIWAN FERTILIZER CO., LTD.

#### About this Report

Message from the Chairman

Overview of the Company

Summary of Performance in 2023

1 Corporate Responsibility and Sustainable Management

- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy

4 Energy Conservation, Environmental Protection and Environmental Management

- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

Appendix

# Identification of Material Topics and Boundaries



#### 台:污肥料设化有限公司 TAIWAN FERTILIZER CO., LTD.

About this Report

#### Changes in Material Topics

	····
	Message from the Chairman
	Overview of the Company
	Summary of Performance in 2023
1	Corporate Responsibility and Sustainable Management
2	Integrity Management and Strong Governance

- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

Appendix

Impact on TFC	Impact on the Environment, Economy, and People
New additions in 2023	· · · · · · · · · · · · · · · · · · ·
Privacy and Information Secu	rity
Source of Concern: Customers	
Positive Impact	Positive Impact
Negative Impact 🔺	
Reduction in 2023	
Green Innovation and R&D	
Source of Concern: Customers,	Government
Positive Impact V	Positive Impact V
Waste Management	
Source of Concern: Governmen	t
Negative Impact 🔻	Negative Impact 🔻
Product Health and Safety	
Source of Concern: Customers,	NGO
Negative Impact 🔻	Negative Impact 🔻
Climate Change Mitigation	
Source of Concern: Governmen	t, Customers
Negative Impact V	Negative Impact 🔻
Air Pollution Emissions	
Source of Concern: Governmen	it, NGO
Negative Impact 🔻	Negative Impact 🔻

#### **Material Topics Matrix**

	Low Materiality Topics	Moderate Materiality Topics	High Materiality Topics
High pact on the onomy, vironment, d People	Ecological Conservation Social Participation Genetically Modified Organisms (GMOs) Taxation	Climate Change Mitigation Risk Management Local Community Air Pollution Emissions Waste Management Water Resources Raw Material Reduction Management Green Innovation and R&D Talent Attraction and Retention Talent Development Diversity and Equality Labor-Management Relations Human Rights Management	Economic Performance Corporate Governance Legal Compliance Occupational Health and Safety Privacy and Information Security Product Health and Safety Business Integrity Supply Chain Sustainability Management Customer Service and Satisfaction
Low		Impact on TFC	High



#### 台污肥料设化有限公司 TAIWAN FERTILIZER CO., LTD.

About this Report

Message from the Chairman

Overview of the Company

- Summary of Performance in 2023
- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

Appendix

# **1-3** EXTERNAL ORGANIZATION PARTICIPATION AND INTERNATIONAL INITIATIVES SUPPORT AND COMPLIANCE

In 2023, TFC participated in 25 industry associations and union activities both domestically and internationally. These engagements fostered collaboration, provided access to the latest information, and ensured close alignment with industry developments.

25 in	ndustry associations and union activities		Taiwan Acid and Alkali Industries Association
<b>&amp;</b>	The Third Wednesday Association	5	Taiwan Stock Affairs Association
	The Chinese National Association of Industry and Commerce	Responsible Care'	Taiwan Responsible Care Association
	Chinese International Economic Cooperation Association	TACA	Taipei City Plant Protection Commercial Association
のいたので、	Chinese Blood Donation Association		Agricultural Association of Taiwan
TSIA	Taiwan Semiconductor Industry Association		The Chinese Society of Soil and Fertilizer Sciences
CIER	Chung-Hua Institution Economic Research - Chung-Hua Finance Summit Forum	中華肥料協會	Chinese Fertilizer Association
SACEA	Sino-Arabian Cultural & Economic Association	(	International Fertilizer Association
٢	Sino-Indonesian Cultural & Economic Association	F	Financial Executives Institute
мева	Middle East Business Association		Taiwan Protection Commercial Association
TABA	Taiwan-Africa Business Association	R	Taiwan Deep Ocean Water Development Association
$\diamond$	Chinese Petroleum Institute	<b>IIA</b>	Internal Audit Association of the Republic of China
Ġ.	Taiwan Institute of Chemical Engineers		Taiwan Hydrogen and Fuel Cell Partnership

# United Nations Global Compact

TFC respects and supports the standards and principles of international human rights conventions such as the Universal Declaration of Human Rights, the United Nations Global Compact, and the International Labor Organization's **Declaration on Fundamental Principles** and Rights at Work. We comply with relevant domestic labor regulations and have established the Taiwan Fertilizer Co., Ltd. Human Rights Policy Statement. This policy is dedicated to protecting the fundamental human rights of our employees, fostering a diverse and inclusive work environment, and ensuring that all personnel are treated with equality and dignity. The policy is also published on our corporate and internal websites for employee access and as a reference for our management policies. In 2023, we conducted training sessions on gender equality, workplace regulations, and anti-bullying. A total of 572 participants attended these sessions, accumulating 1,144 training hours, to enhance awareness of gender equality and related legal rights.

- 台:方肥料设化有限公司 TAIWAN FERTILIZER CO., LTD.
  - About this Report
  - Message from the Chairman
  - Overview of the Company
  - Summary of Performance in 2023
- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity
  - Appendix





### INTEGRITY MANAGEMENT AND STRONG GOVERNANCE

- 2-1 Business Management
- 2-2 Corporate Governance
- 2-3 Risk Management
- 2-4 Climate Change Response
- 2-5 Legal Compliance

#### 台汽肥料股份有限公司 TAIWAN FERTILIZER CO., LTD.

#### About this Report

#### Message from the Chairman

Overview of the Company

- Summary of Performance in 2023
- Corporate Responsibility and Sustainable Management

#### 2 Integrity Management and Strong Governance

- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

Appendix

# **2-1** BUSINESS MANAGEMENT

Material topics: Economic Performance



### **Impact Description**

Positive:Continued profitability fosters economic stability and provides relatively stable employment opportunities.

### **Goals and Targets**

- Expand the production and sales of niche products while entering the clean energy sector. Leverage extensive experience in liquid ammonia procurement, storage, and transportation to invest in the hydrogen energy value chain.
- · Under the principle of stable income and sustainable operations, adopt strategies such as self-development, co-development, and leasing/sales of commercial offices, hotels, and residential properties based on land location conditions.

#### **Preventive or Remedial Measures**

- Prepare annual budgets and hold regular performance review meetings to track and continuously improve response measures.
- Conduct regular production and sales meetings to stay fully informed of market conditions.

#### Significance

Maximizing profits is the key objective for TFC's efforts, not only to fulfill the expectations of shareholders but also to strengthen employee cohesion and enhance supplier confidence, creating a win-win scenario for all stakeholders.

#### Policy

Generate profits to achieve sustainable growth.

#### **Performance and Adjustments**

- · 2023 operating revenue: NT\$15,014,788 thousand
- · 2023 net profit after tax: NT\$3,919,051 thousand



#### 台湾肥料股份有限公司 TAIWAN FERTILIZER CO., ITD.

#### Financial Performance

#### Unit: NT\$ thousand





#### 台湾肥料设修有记公司 TAIWAN FERTILIZER CO., LTD.

#### About this Report

#### Message from the Chairman

Overview of the Company

- Summary of Performance in 2023
- 1 Corporate Responsibility and Sustainable Management

#### 2 Integrity Management and Strong Governance

- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

Appendix

# **2-2** CORPORATE GOVERNANCE

#### Material topics: Corporate Governance

### Description

Positive: Implementing corporate governance and business integrity helps establish a strong governance framework and maintain the stability of the Company's operations.

### Goals and Targets

• Enhance the diversity and independence of the Board of Directors. In the future, based on the operational needs of the board and the company's business model, we will adjust the Company's diversity policy as needed to ensure that directors possess the professional knowledge and skills required to perform their duties.

To align with corporate governance principles and strengthen the oversight mechanism of independent directors, the Company will aim to increase the proportion of independent directors to 50% of the board in the future.

#### S Preventive or Remedial Measures

- Conduct an annual self-assessment of the Board of Directorsand functional committees, and engage an external professional independent institution or external experts to perform aBoard of Directors performance evaluation every three years.
- Enhance corporate governance continuously through internal audits and external verification mechanisms.

#### Significance

Good corporate governance and business integrity form the foundation of the Company's activities and are key factors in gaining the trust of stakeholders.

#### Policy

Strictly adhere to the Corporate Governance Best Practice Principles and the Business Integrity Best Practice Principles, along with related regulations.

#### **Performance and Adjustments**

- In 2023, the Board of Directors established the Real Estate Resources Committee to review proposals related to real estate development and management. The committee draws on diverse expertise to provide recommendations, enhancing the legal compliance, reasonableness, and financial feasibility of proposals.
- The 2023 Board of Directors Performance Evaluation included a total of 45 indicators, with an average score exceeding 4 points (excellent). The performance evaluation indicators for all committees also achieved an average score of 5 points (excellent).
- The Company encouraged all directors to actively pursue professional development related to directorship. In 2023, the total training hours for the Company's directors reached 60 hours, with an average of 6.67 hours of training per director.



#### 台湾肥料設修有限公司 TAIWAN FERTILIZER CO., LTD.

#### About this Report

Message from the Chairman

- Overview of the Company
- Summary of Performance in 2023
- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

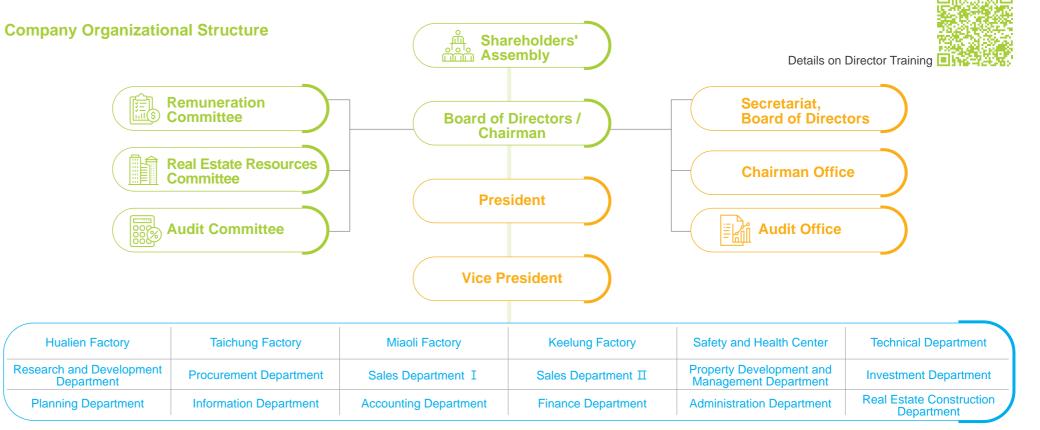
Appendix

# Board of Directors

A well-structured, diverse, and professional Board of Directors is a crucial component of the corporate governance system and a fundamental pillar for achieving sustainable development. The TFC Board of Directors comprises 9 members (including 1 female director) with a term of 3 years. This includes 3 independent directors and 1 worker director, with the Chairman being Suen-Zone Lee. All directors are nationals of Taiwan.

To strengthen corporate governance, the election of directors (including independent directors) is conducted using a candidate nomination system. Directors have held significant positions in government agencies or higher education institutions and possess extensive experience in environmental sustainability, environmental engineering, fertilizer chemistry, finance and accounting, agricultural economics, public administration, aquaculture, urban renewal, and management.

The Company encourages all directors to actively pursue professional development related to their roles. In addition to arranging two internal training sessions (on circular economy benefits and business models, and carbon credit trading mechanisms and carbon management applications), directors are also encouraged to participate in external training. Self-directed training courses for directors include the 2023 Internal Stakeholder Equity Trading Legal Compliance Briefing, challenges and responsibilities of the board under corporate governance evaluation indicators and sustainability action plans, and corporate sustainability transformation through ESG investment and financing. In 2023, the total training hours for the Company's directors amounted to 60 hours, with an average of 6.67 hours per director. (The training hours are calculated based on the 9 directors in office as of Dec. 31, 2023.)





# 台:疗肥料般化有限公司 TAIWAN FERTILIZER CO., LTD.

#### **Board of Directors and Areas of Expertise**

- Message from the Chairman
- Overview of the Company
- Summary of Performance in 2023
- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

Appendix

Job Title	Name	Gender	Age	Date of Appointment	Term Expiration Date	Current Position	Expertise
Chairman	Suen-Zone Lee	Male	60~69	112/5/30	113/7/27	Chairman of TFC	Environmental Sustainability, Environmental Engineering
	Jong-I Hu	Male	60~69	110/02/22	113/7/27	Director of TFC	Agricultural Economics, Agricultural Extension
	Mei-Ling Fan	Female	50~59	110/03/08	113/7/27	Chief Secretary of the Ministry of Agriculture	Public Administration
Director	Ko-Yuan Tai	Male	30~39	110/7/28	113/7/27	Confidential Secretary of Administrative Office, Chiayi County Dalin Township Office	Aquaculture, Floriculture
	Jia-Fong Jhang	Male	41-50	112/10/06	113/7/27	Engineer of Occupational Safety and Health Division, Taichung Factory, TFC	Fertilizer Chemical Engineering
	Chi-Hung Tsao	Male	70~79	110/7/28	113/7/27	Chairman of Da Wu Shan Educational and Cultural Foundation	Education, Agriculture
	Su-Ming Lin	Male	60~69	110/7/28	113/7/27	Independent Director of Chunghwa TelecomIndependent Director of Sunny Friend Environmental Technology Co., Ltd.	Accounting and Taxation
Independent Director	Ming-Jang Weng	Male	50~59	110/7/28	113/7/27	Associate Professor, Department of Applied Economics, National University of Kaohsiung	Business Management, Applied Economics
	Yen-Sheng Ho	Male	40~49	110/7/28	113/7/27	Associate Professor, Department of Real Estate and Built Environment, National Taipei University	Urban Renewal and Dispute Resolution

Note: The 35th Board of Directors was re-elected on Jul. 28, 2021, for a term of three years.

#### 台湾肥料设化有限公司 TAIWAN FERTILIZER CO., LTD.

### Board of Directors Performance Evaluation

#### About this Report

Message from the Chairman

Overview of the Company

Summary of Performance in 2023

1 Corporate Responsibility and Sustainable Management

#### 2 Integrity Management and Strong Governance

- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

Appendix

To enhance the effectiveness of the Board of Directors, TFC approved its Board of Directors Performance Evaluation Measures on Dec. 24, 2019. These measures mandate an internal performance evaluation of the Board to be conducted annually, and at least once every three years, an evaluation must be carried out by an external professional independent institution or a team of external experts. The evaluation period spans from Jan. 1 to Dec. 31 of each year. The scope of the evaluation includes the overall Board, individual directors, the Remuneration Committee, the Audit Committee, and the Real Estate Resources Committee.



Performance Evaluation Regulations for the Board of Directors of Taiwan Fertilizer Co., Ltd.

#### 2023 Internal Performance Evaluation of the Board of Directors



- A. The directors exhibit a high level of participation in the Company, and the quality of the board's decision-making is excellent. The composition and structure of the board are sound, and internal controls are effectively monitored.
- B. Regarding proposals related to real estate development management, which involve significant financial amounts, it is recommended that these be reviewed and thoroughly discussed by the Real Estate Resource Committee before submission to the board. This process allows for diverse professional input and perspectives, offering suggestions that enhance the legal compliance, reasonableness, and financial feasibility of the proposals, thereby serving as a highly effective internal review mechanism.
- C. Directors have a solid grasp of the Company's goals and objectives, fully recognize their responsibilities, and actively engage in company operations. They also continuously participate in ongoing education for directors, which enhances their internal control capabilities.
- D. Directors contribute operational recommendations during company meetings.



#### About this Report

Message from the Chairman

- Overview of the Company
- Summary of Performance in 2023
- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

Appendix

# Director Remuneration

The Company's policy on director remuneration is clearly stipulated in the Articles of Incorporation. According to these provisions, the Chairman's remuneration is calculated based on the President's remuneration, set at 1.25 times that amount. The remuneration for other directors and independent directors is capped at the highest salary grade outlined in the TFC's employee pay scale. Additionally, directors' profit-sharing bonuses are allocated from no more than 1.6% of the Company's annual profit, while independent directors do not participate in the profit-sharing scheme.



# Board of Directors Operations

The Board of Directors exercises its authority in accordance with the Company Act, the Company's Articles of Incorporation, relevant regulations, and resolutions of the shareholders' meeting. Regular meetings are held monthly, with a minimum requirement of one meeting per quarter. In cases of urgent matters or upon request by a majority of the directors, meetings may be convened at any time. The agenda for regular Board meetings includes reviewing the minutes and execution status of the previous meeting, important financial and business reports, internal audit reports, and the matters scheduled for discussion in the current meeting. Directors are responsible for deliberating on major operational decisions of the Company, as well as supervising and monitoring their implementation.

# Attendance of the Board of Directors and Functional Committees in 2023

	Meeting Frequency	Average Attendance Rate (%)
會會 Board of Directors	8	91.67
Remuneration Committee	5	93.34
Audit Committee	6	100
Real Estate Resource Committee	rces 2	100





### About this Report

#### Message from the Chairman

Overview of the Company

Summary of Performance in 2023

1 Corporate Responsibility and Sustainable Management

#### 2 Integrity Management and Strong Governance

- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

Appendix



#### Audit Committee

Under the leadership of Independent Director Su-Ming Lin, who serves as the convener, the Board of Directors is assisted in establishing or amending internal control systems, appointing or dismissing external auditors and determining their remuneration, and managing existing or potential risks to enhance the Company's governance structure.

#### **Audit Committee Members and Effectiveness**

Effectiveness in 2023	
Review	Revision of Regulations
2022 Annual Business Report and Profit Distribution	<ul> <li>Public Selection Procedure for Accounting Firms</li> </ul>
Proposal	<ul> <li>Corporate Governance Best Practice Principles</li> </ul>
<ul> <li>2022 Consolidated and Individual Financial Statements of the Company and Subsidiaries</li> </ul>	<ul> <li>Sustainable Development Practice Guidelines</li> </ul>
2022 Internal Control System Effectiveness	<ul> <li>Organizational Regulations</li> </ul>
Assessment <ul> <li>2023 Consolidated Financial Statements for the First,</li> </ul>	<ul> <li>Board of Directors and Executive Responsibilities Allocation Table</li> </ul>
Second, and Third Quarters of the Company and Subsidiaries	<ul> <li>Internal Control Standards for Shareholding Services Unit</li> </ul>
<ul> <li>2023 Evaluation of Auditor Independence and Competence</li> </ul>	<ul> <li>Regulations for Travel and Relocation Expenses for Employees</li> </ul>
<ul> <li>2024 Appointment of External Auditor and Remuneration Proposal</li> </ul>	<ul> <li>Management Regulations for Executive Confidential Personnel</li> </ul>
2024 Audit Work Plan	<ul> <li>Salary Management Regulations and Salary Grade Table</li> </ul>
Establishment of Regulations	Organizational Guidelines for Preparatory and
Company Subsidiary Management Guidelines	Engineering Departments
<ul> <li>Real Estate Resources Committee Organizational Regulations</li> </ul>	<ul> <li>Management Guidelines for Personnel Assigned to Domestic Investment Companies</li> </ul>
	<ul> <li>Board Meeting Rules</li> </ul>
Abrogation Regulations	Land Acquisition and Exchange Operating Procedures
<ul> <li>Company Shareholding Services Management</li> </ul>	<ul> <li>Delegation of Authority Details</li> </ul>
Guidelinés	<ul> <li>Equity Management Guidelines for Invested Businesse</li> </ul>

Note: The second-term Audit Committee members are all Independent Directors. The Company re-elected the 35th Board of Directors on Jul. 28, 2021, with the term ending on Jul. 27, 2024.

#### 台湾肥料股份有限公司 TAIWAN FERTILIZER CO., ITD.

#### About this Report

Message from the Chairman

Overview of the Company

Summary of Performance in 2023

1 Corporate Responsibility and Sustainable Management

#### 2 Integrity Management and Strong Governance

3 Sustainable Agriculture and Circular Economy

4 Energy Conservation, Environmental Protection and Environmental Management

- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

Appendix

#### **Remuneration Committee**

To establish a sound cc system for the Company's directors and executives, the Remuneration Committee, chaired by Independent Director Ming-Jang Weng, assists the Board of Directors in formulating and periodically reviewing the performance evaluation and remuneration policies, systems, standards, and structures for directors and executives.

#### **Remuneration Committee Members and Effectiveness**

Convener Ming-Jang Weng	Yen-Sheng Ho, Chen-Chi Ma	1 🗄
	Review of the 2022 Distribution of Directors' Compensation	
	<ul> <li>Review of the 2022 Year-End Bonus Proposal for the Director of the Board Office (Corporate Governance Officer), Finance Department General Manager, and Assistant Vice Presidents or Higher</li> </ul>	
Effectiveness in 2023	<ul> <li>Review of the 2022 Employee Compensation Proposal for Finance Executives and Assistant Vice Presidents or Higher</li> </ul>	
	2022 Performance Evaluation of the Board of Directors and Functional Committees	
	<ul> <li>Review of Proposed Amendments to the Company's Salary Management Regulations</li> </ul>	
	<ul> <li>Review of the Salary Adjustment Proposal for the Director of the Board Office (Corporate Governance Officer), Finance Department General Manager, and Assistant Vice Presidents or Higher</li> </ul>	

Note: The Fifth Remuneration Committee, with the exception of Chen-Chi Ma as an external member, is composed of independent directors. The Company re-elected the 35th Board of Directors on Jul. 28, 2021, with a term ending on Jul. 27, 2024.

#### **Real Estate Resources Committee**

To enhance corporate governance, strengthen the function of the Board of Directors, and actively optimize the Company's assets, a Real Estate Resources Committee has been established. The committee is chaired by Independent Director Yen-Sheng Ho.

#### **Real Estate Resources Committee Members and Effectiveness**

Convener Yen-Sheng Ho	Committee Members Su-Ming Lin, Ming-Jang Weng, Chi-Hung Tsao, Yu-Chang Su
Effectiveness	<ul> <li>Review of the Company's Real Estate Leasing Proposal</li> </ul>
്് in 2023	<ul> <li>Review of the Company's Real Estate Development Proposal</li> </ul>

Note: The First Real Estate Resources Committee, with the exception of external member Yu-Chang Su, is composed of directors and independent directors. The committee members' term is aligned with the Board of Directors' term, ending on Jul. 27, 2024.



In accordance with the "Corporate Governance Best Practice Principles for Taiwan Fertilizer Co., Ltd.," the Company provides liability insurance for its directors annually and reports this to the Board of Directors.

# Implementation of Shareholder Activism

TFC has implemented an electronic voting system and adheres to the principles of public, transparent, and timely information disclosure. Prior to the shareholders' meeting, the Company uploads the meeting agenda, notices, and annual reports in both Chinese and English. Additionally, an annual sustainability report is provided in both languages, and monthly operational updates in English are promptly published on the Company's official English website to ensure shareholders have access to the most accurate and up-to-date information.



#### About this Report

Message from the Chairman

Overview of the Company

#### Summary of Performance in 2023

Corporate Responsibility and Sustainable Management

#### 2 Integrity Management and Strong Governance

- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

Appendix

# Business Integrity and Anti-Corruption

All personnel prioritize integrity, lawfulness, and ethical conduct in formulating business strategies and carrying out operations. "Integrity" is the core value of TFC's corporate culture. The Company fully implements preventive measures against dishonest behavior by establishing whistleblowing channels and a disciplinary system, thereby fostering a culture of business integrity conduct and maintaining a robust risk management mechanism.

For disclosures on conflicts of interest, refer to the "2023 Shareholders' Meeting Annual Report, p23-p25, and p45." For details on directors holding positions in other companies and major shareholder disclosures, refer to "2023 Shareholders' Meeting Annual Report, p10-p15."

- "Taiwan Fertilizer Co., Ltd. Business Integrity Code"
- "Code of Ethical Conduct for Directors, Supervisors, and Senior Executives"
- "Taiwan Fertilizer Co., Ltd. Employee Work Rules"
- "Taiwan Fertilizer Co., Ltd. Employee Performance Evaluation Regulations"
- Organizational "Taiwan Fertilizer Co., Ltd. Whistleblowing Handling Procedures for Internal and Regulations External Personnel"

ÅÅ **Employee** Training

Handling

· We arrange regular training on integrity and anti-corruption to promote the principles of business integrity to all employees annually. In 2023, we invited attorneys Stacy Lo, Alex Li, Jeffrey Liu, and Yi-Ya Wang from Lexcel Partners Attorneys at Law to conduct a seminar titled "Business Integrity and ESG-related Policy Overview." The seminar lasted a total of three hours and was attended by 199 employees, representing 31.43% of the total workforce.

The "Taiwan Fertilizer Co., Ltd. Whistleblowing Handling Procedures for Internal and External Personnel" has been established and published on the Company's official website. Whistleblower

- System and Legal personnel at TFC are available to handle consultations regarding ethical or unlawful conduct. Procedures
  - The Audit Office is the dedicated unit for receiving whistleblowing reports. The whistleblowing mailbox is located at 17th Floor, No. 170, Jingmao 1st Road, Nangang District, Taipei City, Taiwan Fertilizer Co., Ltd., Attn: Chief Auditor.

# Mechanism for Preventing **Insider Trading**

To prevent insider trading, avoid improper information leakage, and ensure consistency and accuracy of information disclosed externally, TFC has established the "Internal Material Information Handling and Insider Trading Prevention Management Procedures." These procedures stipulate that individuals who are aware of material information must not disclose it to others and are prohibited from inquiring about or collecting non-public material company information unrelated to their personal duties. This policy applies to the Company's directors (including independent directors), managers, and all employees to effectively implement insider trading prevention measures.

#### 台湾肥料设体有限公司 TAIWAN FERTILIZER CO., LTD.

About this Report

Message from the Chairman

Overview of the Company

Summary of Performance in 2023

- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

Appendix

# 2-3 RISK MANAGEMENT

# **Internal Audit and Operations**

The Audit Office, reporting to the Board of Directors, is led by a Chief Auditor who oversees internal audit activities and supervises the department's operations. The department is staffed by five dedicated auditors responsible for conducting both regular and ad-hoc internal audits. These audits cover various areas including derivative trading, lending and endorsements, compliance with laws and regulations, asset acquisition or disposal, related-party transactions, oversight and management of subsidiaries, the operation of the Board of Directors and Audit Committee meetings, financial statement preparation processes (including compliance with international accounting standards, accounting judgments, and changes in accounting policies and estimates), IT and information security, sustainability information management, sales and receivables cycles, procurement and payment cycles, and other related areas. Audit findings are reported to the Board of Directors.

The Audit Office also monitors and reviews the internal operations of various units and subsidiaries of the Company. At least one internal evaluation is conducted annually to identify and address internal control deficiencies and anomalies. These evaluations serve as a primary basis for the Board of Directors and the President to assess the overall effectiveness of the internal control system and to issue the internal control system declaration.

# Risk Management System

To implement effective risk management and establish a crisis management mechanism, the Company has formulated its "Risk Management Policy and Procedures" in accordance with Article 44 of the "Regulations Governing the Establishment of Internal Control Systems by Public Companies" issued by the Financial Supervisory Commission and the "Corporate Governance Best Practice Principles for TWSE/TPEx Listed Companies" issued by the Taiwan Stock Exchange. These policies were approved by the Board of Directors after considering the Company's business nature, industry characteristics, and operational scale. The policy aims not only to establish a company-wide risk management mechanism but also to integrate and control various potential risks—such as financial, operational, market, and cybersecurity risks—that could impact the business, thereby strengthening corporate governance and achieving sustainable development goals.

In accordance with the "Risk Management Policy and Procedures," the Company has established a "Risk Management Promotion and Implementation Team" to integrate risk management into daily operations and decision-making processes. This team regularly reviews potential risks and assesses major risk factors. After identifying, analyzing, and evaluating the various risks that may impact company operations, the team develops appropriate response measures and contingency plans. These efforts aim to ensure the achievement of sustainable development goals. No major deficiencies were reported in 2023.



# 台:方肥料设化有限公司 TAIWAN FERTILIZER CO., LTD.

#### 2023 Key Operational Risk Identification and Response

		Risk Identification	Risk Response		
About this Report	Operational Item: Production				
Message from the Chairman Overview of the Company	Raw Material	<ol> <li>Raw Material Supply: Disruptions in raw material imports due to climate change and war, leading to supply shortages.</li> <li>Raw Material Costs: Significant price fluctuations in raw materials, impacting procurement costs and profitability.</li> <li>Port Facilities and Ammonia Storage/Transport: Climate change and warfare damage port facilities, requiring alternative solutions that increase unloading costs.</li> <li>Engineering Labor: Price volatility and rising wages affect vendor bidding, pricing, and contract fulfillment.</li> </ol>	<ol> <li>Avoidance/Elimination: Utilize backup storage systems to purchase in advance at lower prices; Implement bid bonds and performance bonds to strengthen control over the contracting process.</li> <li>Transfer/Distribution: Diversify sourcing and assess alternative raw materials; Activate external backup unloading/loading solutions and prepare spare parts in advance; Carefully select vendors, invite multiple bids, and ensure strict budget control.</li> </ol>		
Summary of Performance in 2023 1 Corporate Responsibility and	and Engineering Labor Contracting		<ol> <li>Continuous Monitoring: Continuously track real-time market trends and regulatory changes; Keep abreast of market price information.</li> </ol>		
Sustainable Management 2 Integrity Management and Strong		1. Production Factors: The impacts of the pandemic, material costs, transportation, geopolitical conflicts, and water and electricity shortages have resulted in labor and material shortages, disrupting production.	<ol> <li>Employees are encouraged to receive vaccinations.</li> <li>Providing monthly raw material balance reports to procurement departments for reference.</li> <li>Water: During water shortages, securing water from alternative suppliers to maintain</li> </ol>		
<b>Governance</b> 3 Sustainable Agriculture and Circular	Fertilizer	2. Natural Disasters: Work stoppages and financial losses caused by natural disasters such as earthquakes or typhoons.	<ul><li>operations.</li><li>4. Energy: In line with the ISO 50001 energy-saving initiatives at the facility, an evaluation of the installation of solar power generation systems is being conducted.</li></ul>		
Economy	Descharte	<ol> <li>Production halts and losses due to lack of spare parts following equipment malfunctions.</li> </ol>	5. Disaster: Continuation of preventive measures, such as pre-typhoon disaster prevention inspections and post-earthquake on-site equipment assessments, to effectively address and manage related risks.		
4 Energy Conservation, Environmental Protection and Environmental Management		<ol> <li>Losses caused by production stoppages due to facility fires or workplace accidents.</li> </ol>	<ol> <li>Transfer/Distribution: Ongoing efforts to identify alternative suppliers and substitute materials while enhancing inventory levels.</li> <li>Continuous Monitoring: Additional monitoring points and CCTV systems have been installed for real-time equipment surveillance, with ongoing employee training to strengthen preventive measures.</li> </ol>		
5 Caring and Friendly Workplace for Employees		<ol> <li>The pandemic, geopolitical conflicts, and international labor strikes have made platinum mesh procurement difficult and delivery times unstable, negatively impacting nitric acid</li> </ol>	1. Continuous Monitoring: Monitoring continues through the existing procurement mechanism, while pipeline, equipment maintenance, inspections, and thickness measurements are carried out in accordance with current SOP standards.		
6 Co-creation of Value and Common Prosperity	Chemical Products	<ul><li>production.</li><li>2. Pipeline leaks and rotating equipment damage caused by</li></ul>	2. Transfer/Distribution: Alternative plans are in place, including sourcing nitric acid from external suppliers to ensure continuity.		
Appendix	Utility	Electrical or mechanical equipment malfunctions, pipeline leaks, and similar issues have resulted in disruptions to the supply of industrial water, compressed air, cooling water, demineralized water, boiler steam, and fuel, preventing normal operations from proceeding.	<ol> <li>Transfer/Distribution: Backup systems are in place to switch over in case of equipment failures, and sufficient spare parts for consumable components are maintained.</li> <li>Continuous Monitoring: Regular maintenance and record-keeping are rigorously followed, along with periodic emergency response drills to enhance emergency preparedness capabilities.</li> </ol>		
		<ol> <li>The conventional setup of production equipment has hindered innovative improvements in product quality.</li> <li>The lack of clear categorization of incoming chemical waste has led to inefficiencies and multitasking issues, resulting in poor recycling outcomes.</li> </ol>	<ol> <li>Continuous Monitoring: Continuous process improvements are being implemented to enhance product quality.</li> <li>Avoidance/Elimination: Assistance from the Industrial Development Bureau is sought to help businesses manage and categorize waste liquids more effectively.</li> </ol>		

台汽服	科股份有限公司	
TAIWAN	FERTILIZER CO., LTD.	

About this Report

Message from the Chairman

Overview of the Company

Summary of Performance in 2023

1 Corporate Responsibility and Sustainable Management

2 Integrity Management and Strong Governance

3 Sustainable Agriculture and Circular Economy

4 Energy Conservation, Environmental Protection and Environmental Management

5 Caring and Friendly Workplace for Employees

6 Co-creation of Value and Common Prosperity

Appendix

	Risk Identification	Risk Response
Operational Ite	m: Production	
Multi-Stage Aquaculture	<ol> <li>Extreme weather conditions have caused the seawater intake pipelines to rupture, preventing the supply of deep ocean water for aquaculture use.</li> <li>Increased turbidity of seawater due to natural disasters or extreme weather, or pipeline blockages caused by marine biological growth, have led to a reduced supply of deep seawater for aquaculture.</li> </ol>	<ol> <li>Continuous Monitoring: Continuous monitoring of pipeline pressure is conducted, with immediate reporting of any anomalies. Regular testing a cleaning of pipelines are performed to prevent supply reductions.</li> <li>Transfer/Distribution: Prior to typhoon events, seawater is stored in adva and adjustments are made early to ensure preparedness.</li> </ol>
Occupational Safety and Environmental Protection	<ol> <li>Fines resulting from air and water pollution incidents have negatively affected the Company's image.</li> <li>Incidents of workplace accidents have led to injuries and fatalities, as well as production stoppages and financial losses.</li> <li>The failure to address and eliminate hazardous factors during production, transportation, maintenance, and repair processes has resulted in disasters and losses.</li> </ol>	Continuous Monitoring: Install 24/7 real-time detection and monitoring syste on chimneys; hold regular Occupational Safety and Health Committee meet to discuss improvement measures, with supervisors conducting unschedule inspections of the work site; strictly adhere to the Safety, Health, and Environmental Work Plan, ensuring the implementation of inspections, traini emergency response, and control measures; regularly conduct 6S audits an unscheduled dynamic inspections.
Operational Ite	em: Sales	
Fertilizer	<ol> <li>Due to fluctuations in the import prices of fertilizer raw materials, the cost of sales has been impacted, subsequently affecting profitability.</li> <li>The demand for fertilizers varies significantly between peak and off-peak seasons due to crop management requirements, leading to substantial differences in sales volume and revenue during these periods.</li> <li>Climate change-induced droughts have resulted in policy-driven fallow periods for farmers, negatively affecting fertilizer sales.</li> </ol>	<ol> <li>Transfer/Distribution: Develop new, multifunctional, and differentiated products, and expand marketing efforts overseas. Utilize external custor warehouses to regulate fertilizer supply during peak and off-peak season</li> <li>Continuous Monitoring: Continuously monitor the annual fallow or crop rotation areas affected by water availability, and adjust production and s strategies accordingly.</li> </ol>
Chemical Products	<ol> <li>The relocation of downstream industries has caused a decline in demand, leading to reduced profitability.</li> <li>Sales concentration has resulted in increased sales risk.</li> <li>The entry of new competitors has impacted sales volume and profitability.</li> </ol>	<ol> <li>Transfer/Distribution: Explore industrial synergies to develop new product and create new revenue streams.</li> <li>Avoidance/Elimination: Establish a distributor management mechanism a set performance guarantees; adopt strategic alliances to transform competition into mutually beneficial cooperation.</li> <li>Continuous Monitoring: Monitor information regarding distributors and downstream customers.</li> </ol>
Electrochemical Products	<ol> <li>To maintain factory utilization rates and reduce excess capacity, timely price adjustments are necessary to sustain sales.</li> <li>The lengthy and costly evaluation process for end customers affects business expansion.</li> <li>Aggressive price competition has led to the loss of orders.</li> <li>In response to the global net-zero carbon trend, well-known companies are establishing green supply chains, impacting the sales of electrochemical products.</li> <li>Domestic and international regulatory constraints have caused a reduction or cessation of customer usage of company products, leading to a decline in sales and revenue.</li> </ol>	<ol> <li>Transfer/Distribution: Conduct thorough market research on product sup and demand before product launch; initially sell to system integrators be gradually introducing products to end customers; diversify waste liquid sources to ensure a stable supply of recycled materials; seek alternative explore new technologies, and develop new markets; collaborate with th Industrial Development Bureau to assist enterprises in increasing the utilization rate of recycled products, promoting the development of the ci economy.</li> <li>Continuous Monitoring: While maintaining order volumes, strive for the n favorable pricing for the company; continuously strengthen carbon reduct management and ensure the effectiveness of existing control measures.</li> </ol>

台湾紀科設化有限公司 TAIWAN FERTILIZER CO., LTD.		Risk Identification	Risk Response
	Operational Ite	em: Sales	
About this Report	(Ch	<ol> <li>Due to industry competition, the volume of contracted business has decreased, leading to a decline in profitability.</li> </ol>	<ol> <li>Avoidance/Elimination: Utilize dedicated terminals and new equipment installations.</li> </ol>
Message from the Chairman	Logistics	<ol> <li>Stricter environmental regulations have limited business contracting, further compressing profits.</li> </ol>	<ol> <li>Transfer/Distribution: Seek industry integration to expand service offerings.</li> <li>Continuous Monitoring: Continue exploring innovative collaboration models</li> </ol>
Overview of the Company			through diverse perspectives.
Summary of Performance in 2023	Operational Ite	em: Property Development Management and Investment Re	allocation
1 Corporate Responsibility and		<ol> <li>Litigation arose due to the lessee's failure to fulfill contractual obligations.</li> </ol>	1. Continuous Monitoring: Continuously track the lessee's compliance with contractual performance.
Sustainable Management	Litigation Related to	<ol> <li>Litigation resulted from changes in circumstances after the contract was signed.</li> </ol>	<ol> <li>Avoidance/Elimination: Minimize differences in interpretation during the contract drafting phase.</li> </ol>
2 Integrity Management and Strong Governance	Property Leasing		3. Transfer/Distribution: Utilize communication, negotiation, and mediation to reduce the occurrence of litigation.
3 Sustainable Agriculture and Circular Economy		<ol> <li>Due to changes in market demand and adjustments in policies and regulations have affected the product positioning and project</li> </ol>	<ol> <li>Avoidance/Elimination: Shorten execution timelines or implement flexible measures to adapt to market fluctuations.</li> </ol>
4 Energy Conservation, Environmental		<ul><li>timelines of development plans.</li><li>Due to unreasonable increases in construction costs have</li></ul>	<ol> <li>Continuous Monitoring: Establish oversight mechanisms and control project progress.</li> </ol>
Protection and Environmental Management	Real Estate Development Assessment	impacted financial revenue and profit forecasts.	3. Transfer/Distribution: Consider project timeline risks and ensure a reasonable assessment of financial feasibility.
5 Caring and Friendly Workplace for			<ol> <li>A dedicated task force will be established to conduct a review, implement improvements, and track results.</li> </ol>
Employees		<ol> <li>The product prices of Al-Jubail Fertilizer Company have declined due to market supply and demand fluctuations, leading to poor profitability and impacting the Company's non-operating income.</li> </ol>	<ol> <li>Transfer/Distribution: Continuously monitor product market conditions and Al-Jubail sales performance, and proactively plan and implement countermeasures for periods of poor profitability.</li> </ol>
6 Co-creation of Value and Common Prosperity	Business	<ol> <li>Unexpected shutdowns at the Al-Jubail factory have caused profit reductions, affecting the Company's non-operating income.</li> </ol>	<ol> <li>Continuous Monitoring: Maintain close contact with Al-Jubail staff to stay updated on the latest operational status and provide assistance as needed.</li> </ol>
Appendix	Management	pront rougoliono, anooling the company of nen operating moorne.	
		Investment alignment with policies or investments in overseas or emerging industries can lead to associated risks.	<ol> <li>Avoidance/Elimination: Establish a comprehensive risk assessment mechanism to reduce investment risks.</li> </ol>
	Investment		2. Transfer/Distribution: Extend the evaluation period and diversify investments to mitigate risk factors.
	Development		<ol> <li>Continuous Monitoring: Implement phased investment approaches to strengthen investment risk management.</li> </ol>

- 5 Caring and Friendly Work Employees
- 6 Co-creation of Value and Prosperity



台汽服	科股份有限公司	]
TAIWAN	FERTILIZER CO., LTI	D.

TAIWAN FERTILIZER CO., LTD.		Risk Identification	Risk Response
	Operational Iter	n : Finance	
About this Report		Due to the tax audit by the National Tax Bureau, the Company was required to pay additional business tax and corporate income tax,	1. Avoidance/Elimination: Familiarize with the tax laws of both countries and maintain close communication with accountants and the National Tax Bureau.
Message from the Chairman	Taxation	resulting in financial losses.	2. Continuous Monitoring: Ensure that tax filings comply with the regulations of both domestic and Saudi tax laws.
Overview of the Company		1. Input and Output Invoices: Errors in invoice entry caused discrepancies during cross-checking by the National Tax Bureau.	Continuous Monitoring: Enhance training for staff on business tax concepts; ensure the operations department provides declaration data for verification;
Summary of Performance in 2023	Business Tax	2. Zero-Rated Sales Revenue: Incorrect system exchange rates during tax calculation impacted the tax refund amount.	encourage staff to effectively utilize output invoice verification reports.
1 Corporate Responsibility and Sustainable Management	Filing	3. Export Declarations: Filing across different periods required corrections to previous business tax returns.	
2 Integrity Management and Strong Governance	Withholding of Various Income	Failure to withhold taxes in accordance with income tax laws has resulted in interest charges, fines, or late payment penalties.	Continuous Monitoring: Stay updated on relevant regulations and annual withholding filing announcements; strengthen awareness, implement multiple checks, and cross-verification procedures.
3 Sustainable Agriculture and Circular Economy	Types	1. Rising bank interest rates have made loan negotiations less	Continuous Monitoring: Maintain good relations with banks and closely monitor
4 Energy Conservation, Environmental Protection and Environmental Management	Fund Allocation	<ul><li>favorable.</li><li>2. Exchange rate fluctuations have caused foreign exchange gains and losses.</li></ul>	exchange rate trends; ensure a safe level of liquidity to maintain flexibility in fund allocation.
5 Caring and Friendly Workplace for Employees	Financial Investments	Market price fluctuations have caused depreciation of financial investment products, resulting in company losses.	Continuous Monitoring: Closely monitor market changes and manage asset allocation; regularly review investment positions and track performance; strictly implement stop-loss control mechanisms according to regulations.
6 Co-creation of Value and Common Prosperity		Failure to report or disclose material information in accordance with stock exchange regulations has resulted in fines or penalties.	1. Avoidance/Elimination: Ensure all departments provide major information in a timely manner.
Appendix	Material Information Disclosure		2. Continuous Monitoring: Maintain close communication with the stock exchange liaison.
		<ol> <li>Amendments to International Financial Reporting Standards (IFRS), changes in accounting policies and estimates, or failure to assess asset impairments or provision for loss reserves have affected the fair presentation of financial statements.</li> </ol>	Continuous Monitoring: Establish a working group to review new accounting standards and a task force for financial statement preparation; regularly assess non-financial asset impairments and provisions for doubtful accounts; coordinate with Al-Jubail Fertilizer Company to ensure early provision of financial reports.
命	Financial Statement Preparation	<ol> <li>Inability to provide required data in time has resulted in the failure to publish financial statements within the prescribed deadline.</li> </ol>	

台汽服	科股份有限公司	
TAIWAN	FERTILIZER CO., LTD.	

TAIWAN FERTILIZER CO., LTD.		Risk Identification	Risk Response
	Operational Iter	m : Information	
About this Report		Packaged Software Systems: Ineffective system operation and increased cybersecurity risks due to improper access control, version upgrades, system development issues, or database loss.	Continuous Monitoring: Strengthen access management by enforcing regular password updates; enhance education and training; assign dedicated personnel for version control; continuously patch vulnerabilities and perform regular backup
Message from the Chairman			and recovery drills.
Overview of the Company	Software	Custom Software Development: Low program efficiency, heightened cybersecurity risks, or operational failure caused by lack of technical	Continuous Monitoring: Enhance technical training and conduct regular source code scanning; stay updated with vendor technical information for timely
Summary of Performance in 2023	System	expertise, program vulnerabilities, or improper modifications.	updates; program modifications and testing should be confined to the development environment.
1 Corporate Responsibility and Sustainable Management		Outsourced Software Projects: Project failure due to the outsourcing vendor's lack of understanding of requirements, poor execution, or budget overruns.	Avoidance/Elimination: Carefully select outsourcing vendors; ensure thorough system analysis, and strengthen communication and requirement confirmation; strictly control project scope, timelines, and budget.
2 Integrity Management and Strong Governance		Network Communications: External network interruptions caused by events such as cable cuts, regional power outages, single points of failure, or external attacks.	Avoidance/Elimination: Implement multi-line redundancy to ensure network continuity in case of disruptions; enhance cybersecurity defenses by deploying security gateways and proactively evaluate DDOS mitigation strategies.
<ul><li>3 Sustainable Agriculture and Circular Economy</li><li>4 Energy Conservation, Environmental</li></ul>	Hardware and	Corporate Website Content: Targeted website defacement reported by the media, impacting corporate image.	Avoidance/Elimination: Continuously patch vulnerabilities to reduce the risk of successful attacks; immediately suspend website services until full recovery if defacement occurs.
Protection and Environmental Management		Data Center and Server System Operations: Server downtime due to power or air conditioning failure.	Avoidance/Elimination: Implement an environmental control alert system for the data center, uninterrupted power supply (UPS) systems, and server performance monitoring; establish server redundancy and off-site data backup mechanisms;
5 Caring and Friendly Workplace for Employees	Network	Server Security Protection: Server resources become inaccessible	regularly conduct disaster recovery plan drills for IT systems.         Avoidance/Elimination: Deploy endpoint protection and endpoint detection and
6 Co-creation of Value and Common Prosperity		or illicitly used due to hacker attacks or ransomware.	response (EDR) systems.
Appendix		Personal Computers: Hacker intrusion or data leaks caused by malware.	Avoidance/Elimination: Regularly update and deploy endpoint protection and USB control; conduct cybersecurity awareness training and social engineering simulations.
		Data Leakage Prevention: Internal document leakage leading to improper external use, harming the Company's reputation.	Avoidance/Elimination: Implement file encryption and USB usage controls; prohibit the use of external communication software, personal email, and cloud storage platforms.



台汽肥	科股仆有	限公司
TA DA/A NI	FEDTULZED (	

TAIWAN FERTILIZER CO., LTD.		Risk Identification	Risk Response
	Operational Iter	m : Administration	
About this Report		Employee Conduct, Ethics, and Integrity: Violations of the Company's code of ethical conduct or business	<ol> <li>Avoidance/Elimination: Enforce disciplinary actions for violations in accordance with the "TFC Employee Evaluation Regulations" and conduct awareness training.</li> </ol>
Message from the Chairman		integrity principles by employees, resulting in damage to the Company's interests.	<ol> <li>Transfer/Distribution: Insure directors and financial management personnel under fidelity insurance.</li> </ol>
Overview of the Company			<ol> <li>Continuous Monitoring: Provide reporting channels and establish a disciplinary system.</li> </ol>
Summary of Performance in 2023		Labor Rights Issues: Violations of international labor rights policies have resulted in workplace safety concerns.	<ol> <li>Avoidance/Elimination: A "TFC Human Rights Policy Statement" is established, disclosed in the annual report and ESG sustainability report, and adheres to international human rights conventions. Awareness training is conducted</li> </ol>
1 Corporate Responsibility and Sustainable Management			annually. 2. Continuous Monitoring: A "Sexual Harassment Prevention and Handling
2 Integrity Management and Strong Governance	Human		Guidelines" is in place, with a complaint hotline and contact point. Regularly, all supervisors are provided with a workplace misconduct self-assessment checklist for self-monitoring.
3 Sustainable Agriculture and Circular Economy	Resources	Labor Law Compliance: Non-compliance with labor laws or failure to implement company regulations has led to employee rights violations or damage to	<ol> <li>Transfer/Distribution: An "Employee Opinion and Complaint Handling Guidelines" is established, with a dedicated mailbox to ensure open communication for employee feedback.</li> </ol>
Leonomy		corporate reputation.	<ol> <li>Continuous Monitoring: The Audit Office conducts a biannual review of company regulations and labor law compliance.</li> </ol>
4 Energy Conservation, Environmental Protection and Environmental Management		Labor-Management Relations: Labor-management discord has led to opposition, affecting corporate operations.	<ol> <li>Transfer/Distribution: The Company has established "Guidelines for Labor-Management Relations Meetings" and regularly holds such meetings. Employee opinions and suggestions can be voiced through the labor union, and the Company responds formally in writing with improvements.</li> </ol>
5 Caring and Friendly Workplace for Employees			2. Continuous Monitoring: A dedicated labor-management relations department and personnel are in place, regularly participating in labor meetings and facilitating negotiations and communications.
6 Co-creation of Value and Common Prosperity		Corporate Image: Negative media reports have led to poor corporate image or reputational damage, causing immediate adverse effects.	Avoidance/Elimination: The Company issues comprehensive clarifications through press releases and engages in individual communication with media reporters to explain and correct the information.
Appendix	Negative Media Reports	Stock Price Reaction: Shareholder confidence may be shaken by concerns over potential mismanagement or operational negligence, affecting the Company's stock price.	Avoidance/Elimination: Ensure compliance with regulatory standards and cautious management practices.
		Employee Conduct: Leaks of internal documents or negative media reports have led to speculation about the source of information and concerns about the integrity and professionalism of company employees.	Avoidance/Elimination: Apply the employee evaluation guidelines to raise awareness and enforce disciplinary actions for violations.

台汽肥	科股份有限公司
TA DA/A NI	FEDTULZED CO LED

IWAN FERTILIZER CO., LTD.		Risk Identification	Risk Response
	Operational Iter	m : Board of Directors and Research & Development	
About this Report Message from the Chairman		<b>R&amp;D Projects:</b> Intellectual property (IP) rights infringement by or against the Company due to self-developed technologies or technology transfers, leading to damages and compensation.	<ol> <li>Avoidance/Elimination: Evaluate and apply for patent protection for self-developed technologies and carefully select partners. Ensure confidentiality agreements are signed.</li> <li>Continuous Monitoring: Adhere to relevant intellectual property regulations and regularly monitor the market for potential infringement activities.</li> </ol>
Overview of the Company	Research &		
Summary of Performance in 2023	Development	Technological Change: Market competition from new products by other companies replacing the Company's existing products, leading to reduced	1. Avoidance/Elimination: Continuously innovate to develop new technologies and products that meet market demands.
Corporate Responsibility and Sustainable Management		revenue and profitability.	2. Continuous Monitoring: Monitor market trends and maintain communication with customers to gather relevant feedback.
Integrity Management and Strong Governance	Legal Compliance	<ol> <li>Legal Changes: Amendments in domestic or international laws may require the Company to adjust its practices to avoid legal violations.</li> <li>Significant Litigation: Disputes between the Company and third</li> </ol>	Continuous Monitoring: Continuously track changes in domestic and international regulations; monitor legal risks related to transactions with third parties and labor-management relations; ensure the legality and compliance of actions across all departments.
Sustainable Agriculture and Circular Economy		<ul> <li>parties leading to major lawsuits, non-litigation disputes, or administrative litigation events.</li> <li>3. Regulatory Compliance: Failure of various departments to</li> </ul>	
Energy Conservation, Environmental		adhere to external regulations or internal rules and procedures.	
Protection and Environmental Management		Failure to conduct board and functional committee meetings in accordance with legal requirements and procedural standards, which may impact company operations.	Continuous Monitoring: Proactively inquire about the status of proposal approvals before the submission deadline; remind directors to complete their actions within the scheduled time; actively review the agenda to identify any
Caring and Friendly Workplace for Employees			proposals requiring board member abstention.
Co-creation of Value and Common Prosperity	Board Operations and Shareholding Management	Disclosure of proposal content to unauthorized personnel prior to the meeting, which may impact company operations.	Avoidance/Elimination: Limit the distribution of meeting materials to reduce the risk of leakage; continuously remind attendees of their confidentiality obligations
Appendix		Potential impact on company stability due to a reduction in the shareholding of directors or major shareholders, or an increase in external investors' holdings surpassing public shareholders.	Continuous Monitoring: Continuously monitor changes in shareholding by directors and major shareholders.



### 台湾肥料设修有限公司 TAIWAN FERTILIZER CO., LTD.

About this Report

- Message from the Chairman
- Overview of the Company
- Summary of Performance in 2023
- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

Appendix

# 2-4 CLIMATE CHANGE RESPONSE

### Governance

The Board of Directors serves as the highest risk management oversight body of the Company, responsible for supervising all types of risks, including climate-related risks. Governance is conducted through a task-based approach, with the establishment of a "Risk Management Promotion and Implementation Team." This team is chaired by the President, with senior managers serving as team members. They are responsible for advancing and executing risk management activities, including those related to climate risks. The team is required to hold at least one meeting annually and report at least once a year to the Board of Directors on its operations.

The "Sustainable Development Committee" of TFC is responsible for identifying and assessing risks and opportunities related to climate change. This committee regularly convenes "Climate-Related Financial Disclosure Discussion Meetings" with relevant team members to discuss climate change risks and opportunities. Subsequently, relevant departments propose appropriate response measures. Additionally, the "Audit Committee" is also responsible for governance on certain climate-related issues. It conducts meetings to discuss relevant topics, hears reports from internal audit managers, and reviews the design and effectiveness of internal controls related to climate risks, as well as audit findings.





### 台湾肥料设化有限公司 TAIWAN FERTILIZER CO., LTD.

About this Report

Message from the Chairman

Overview of the Company

Summary of Performance in 2023

1 Corporate Responsibility and Sustainable Management

#### 2 Integrity Management and Strong Governance

- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

Appendix



To enhance organizational climate resilience and mitigate the impact of climate change on the Company's business, financials, and operations, the Company will assess relevant climate risks and opportunities over the short term (within 3 years), medium term (3 to 5 years), and long term (beyond 5 years). This assessment will include the potential effects on the Company's business, financials, and strategy. Additionally, actions will be planned to address climate-related risks and opportunities.

Impact and Re	esponse Actions on Business, Financia	ls, and Strategy
Short Term (1–3 years)	Medium Term (3–5 years)	Long Term (5 years and above)
Physical Risk: flooding in indust	ce of typhoons, heavy rain, and lightning Ty ial areas, leading to work stoppages. Lightn and port equipment.	phoons and heavy rain may cause ing strikes could result in damage to
These events have a transient impact on factory production and goods transportation but pose a low financial impact. Mitigation measures include the installation of flood barriers and lightning protection systems.		
Physical Risk: Changes in preciperation of the content of the cont	pitation patterns and extreme climate variabi	lity. Prolonged drought conditions may
	This can increase manufacturing costs and affect factory operations, though the financial impact remains relatively low. It is advisable to enter into contracts with water supply companies for contingency water procurement.	In cases where manufacturing costs significantly increase and factory production and financial expenditure are severely impacted, it is essential to seek legally permissible options for the drilling of groundwater wells.
Transition Risk: Greenhouse Gas	Cap-and-Trade and Carbon Tax	
Implementation of greenhouse gas cap-and-trade systems and the payment of carbon taxes or fees will increase operational costs or operating expenses. It is necessary to enhance energy efficiency to reduce carbon emissions.		
Transition Risk: Low-Carbon Proc	ess Technology	
	Development of new low-carbon process technologies will raise research and development costs. In the event of unsuccessful development, financial losses may occur. Establishing a specialized R&D center and seeking support from external R&D teams is recommended.	
Transition Risk: Net Zero Carbon	Emission Trends	
		The acquisition of energy-saving and carbon-reducing equipment will increase operating costs. It is crucial to carefully assess investments and seek financial support from external banks.

#### 台湾肥料股份有限公司 TAIWAN FERTILIZER CO., ITD.

#### About this Report

Message from the Chairman

Overview of the Company

Summary of Performance in 2023

1 Corporate Responsibility and Sustainable Management

2 Integrity Management and Strong Governance

3 Sustainable Agriculture and Circular Economy

4 Energy Conservation, Environmental Protection and Environmental Management

5 Caring and Friendly Workplace for Employees

6 Co-creation of Value and Common Prosperity

Appendix

Impact and Response Actions on Business, Financials, and Strategy					
Short Term (1–3 years)	Medium Term (3–5 years)	Long Term (5 years and above)			
Opportunities: Enhancing Energy Efficiency					
Construct green buildings and utilize renewable energy sources in accordance with the ISO 50001 Energy Management System. Through standardized procedures and the PDCA cycle improvement model, continuously improve energy performance in daily operations.	Procurement of Energy-Efficient Equipment and Low-Carbon Raw Materials	Implement an environmental management system to monitor energy usage.			
<b>Opportunities:</b> Innovat	ions in Low-Carbon Product	Development			
Increase the sales ratio of low-carbon products to enhance revenue.	Utilize low-carbon raw materials and reformulate product ingredients.	Innovate in the development of low-carbon green products.			
Opportunities: Enhance Corporate Reputation.					
Fulfill corporate social responsibility and strengthen the Company's green image.	Strengthen corporate governance by establishing a culture that prioritizes and acts on climate-related issues.	Continuously improve sustainability performand ratings to build a strong corporate image.			

### Risk Management

### **Financial Impact of Extreme Weather Events**

Through internal discussions, inventory, and assessments, the Company has identified potential risks during the production or transportation phases related to an increase in typhoons, heavy rain, lightning events, changes in rainfall patterns, and extreme fluctuations in climate patterns.

Typhoons and heavy rain can cause flooding at production facilities, leading to operational shutdowns. Lightning can damage factory and port equipment, resulting in temporary shipping disruptions. Extreme changes in precipitation and climate patterns, such as prolonged droughts, can lead to water shortages that affect production line operations. In such cases, water supply must be maintained through measures such as reducing water use, using water trucks, or coordinating with other facilities, which can reduce production efficiency and increase operational costs.

To address the increased risk of typhoons, heavy rain, and lightning, the company has installed waterproof barriers and lightning protection systems at the production facilities to prevent flooding and equipment damage, which could otherwise lead to production or shipping interruptions. Regarding risks associated with changes in rainfall patterns and extreme climate fluctuations, the Company has signed contracts with water truck companies and is actively seeking legally permissible groundwater wells as contingency measures.



#### 台湾肥料股份有限公司 TAIWAN FERTILIZER CO., LTD.

### About this Report

### Message from the Chairman

- Overview of the Company
- Summary of Performance in 2023
- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

Appendix

### **Financial Impact of Transition Actions**

Transition risks associated with transitioning to a low-carbon economy may involve extensive policy and regulatory changes, technological advancements, and market shifts. Depending on the nature, pace, and focus of these changes, key factors such as greenhouse gas emissions regulations, carbon taxes or fees, low-carbon processing technologies, and net-zero carbon trends may increase the Company's operating expenses, raise business operating costs, or reduce sales volume. Additionally, failed research and development efforts could result in financial losses.

Considering that the Company is gradually shifting towards the production and sales of low-carbon products while continuously innovating and expanding related product lines, market sales have not yet shown significant adverse impacts in various scenarios. Therefore, the Company is focusing on analyzing operating costs. In the context of low-carbon transformation, the financial impact of carbon taxes and fees primarily affects the Company's operational and supply chain costs.

The Company has implemented energy-saving and carbon reduction projects to minimize the environmental and climatic impacts of energy consumption, water usage, and waste. Efforts include improving energy efficiency, reducing carbon emissions, constructing green buildings, utilizing renewable energy, and investing in green energy equipment. Additionally, a dedicated research and development center will be established to drive innovation in green products, aligning with the net-zero carbon market trends and mitigating related transformation risks.

### **Indicators and Targets**

The Company established the "Risk Management Policy and Procedures" in 2022 and formed the "Risk Management Promotion and Execution Team" responsible for identifying, analyzing, and assessing operational risks, including both physical and transition risks associated with extreme weather events. This team also leads the planning of relevant mitigation measures.

The Risk Execution and Promotion Team integrates and manages risks that may affect operations and profitability, based on the business scope of each operational department. The team conducts risk identification and consolidation across seven major areas: production, sales, asset development and investment, finance, information, administration, and board-level R&D. At least once a year, the team presents a risk assessment execution report to theBoard of Directors and regularly monitors and reviews the risk management execution to strengthen the Company's resilience.

In response to climate change and the net-zero carbon initiative, relevant operational units have been instructed to include strategic management items in their annual plans and promote key performance indicators (KPIs) related to environmental aspects. The net-zero carbon KPI has been incorporated into departmental performance evaluations. Performance is assessed quarterly to ensure effective implementation of environmental initiatives.



### 台湾肥料股份有限公司 TAIWAN FERTILIZER CO., LTD.

About this Report

### Message from the Chairman

Overview of the Company

- Summary of Performance in 2023
- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

Appendix

# 2-5 LEGAL COMPLIANCE

### Material topics: Legal Compliance

Impact Description

Negative: Violations of regulations may result in fines and legal liabilities, potentially harming the Company's reputation.

### ) Goals and Targets

Ensure the Company's operational efficiency and asset security through regulatory compliance.

### Preventive or Remedial Measures

When internal audit personnel identify significant regulatory violations or situations where the Company is at substantial risk of damage, they must immediately report the findings and submit them for review, by ensuring that the relevant departments have taken appropriate corrective measures in a timely manner.

### Significance

Adhering strictly to government regulations is crucial to avoid legal violations that could impact the Company's operations and financial aspects.

### Policy

Promote and educate employees on the importance of legal compliance to prevent inappropriate behavior and regulatory violations. Provide warnings about the negative consequences of failing to adhere to legal requirements.

### **Performance and Adjustments**

- The Audit Office conducts quarterly checks on regulatory compliance matters.
- Regularly review and update operational and management regulations to ensure alignment with current laws and regulations.
- Provide regulatory compliance training to all personnel at least once a year.



### 台:疗肥料设化有限公司 TAIWAN FERTILIZER CO., LTD.

### About this Report

Message from the Chairman

Overview of the Company

Summary of Performance in 2023

1 Corporate Responsibility and Sustainable Management

#### 2 Integrity Management and Strong Governance

- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

### Appendix



In 2023, TFC faced a violation for failing to comply with Article 6, Paragraph 1 of the Occupational Safety and Health Act at its Taichung Factory due to inadequate safety and health equipment and measures. The Company will strengthen internal operations and management processes and require strict adherence from responsible units and personnel to prevent similar incidents in the future.

### Product Regulations

TFC's fertilizer products are produced, labeled, and tested in accordance with domestic product regulations before being distributed through various channels. However, discrepancies occasionally occur between the Company's internal product tests and those conducted by government agencies. To address this, the Company will enhance raw material inspections and adjust fertilizer formulations based on inspection results to prevent recurrence of such issues. TFC experienced one incident of non-compliance with fertilizer management regulations in 2023.

### **Product Regulatory Violations**

Violation Details	Handling and Preventive Measures
Fertilizer Management A	ct Number of Incidents: 1
The nutrient analysis of the "Nong-You brand Taifer Biopower micronutrient fertilizer" has been found non-compliant with regulatory standards.	Immediate actions include the reclaimed of the affected batch and verification that no residual stock remains at any distribution points. The formulation has been adjusted accordingly, and external contract manufacturing quality control measures have been reinforced. Regular quarterly inspections of inventory will be conducted to enhance quality assurance and minimize product quality issues.



### 台湾肥料设化有限公司 TAIWAN FERTILIZER CO., LTD.

About this Report

Message from the Chairman

Overview of the Company

Summary of Performance in 2023

1 Corporate Responsibility and Sustainable Management

2 Integrity Management and Strong Governance

- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

Appendix

### Environmental Regulations

TFC did not experience any significant leakage incidents in 2023. However, violations of the Waste Disposal Act, the Water Pollution Control Act, the Air Pollution Control Act, and the Soil and Water Conservation Act resulted in a total environmental fine of NT\$709,000. In response, we have conducted a thorough review of operational and audit processes and have implemented internal training programs to enhance supervisory and management capabilities. We are continuously reviewing each case of non-compliance and proposing improvement measures, with the goal of achieving zero violations and zero fines as our ultimate objective.

### **Environmental Regulation Violations**

Violation Details	Handling and Preventive Measures	Violation Details	Handling and Preventive	
Air Pollution Control Act, Artic	cle 16, Paragraph 2	Waste Disposal Act, Article 31, Paragraph 1, Sub	oparagraph 1	
The Company's "Taiwan Fertilizer Keelung Factory No. 1 Soil and Water Conservation Plan" is currently underway on-site. However, work commenced before the construction air pollution control fee was declared to the Keelung City Environmental	Originally, the project was classified as a simple soil and water conservation project and thus was not required to pay the air pollution control fee. Due to a misunderstanding of the regulations, upon receiving the notification for supplementary payment from the Environmental Protection Bureau, we instructed the contractor to make the necessary payment to the relevant authority.	The registration extract for the Keelung Factory lists the land parcels under the De-Yu section with 16 land numbers, which does not align with the basic data in the approved "Waste Disposal Plan," which specifies a single land parcel in the De-Yu section. The discrepancy was not rectified within 15 days after the occurrence of the fact by amending the "Waste Disposal Plan."	The Keelung Factory has since paid the fine within the deadline and has conducted environmental training for its personnel.	
Protection Bureau on the commencement date (Mar. 28,	Moving forward, for specialized projects, we will require contractors to formally communicate with	Soil and Water Conservation Act, Article 23, Par	agraph 1	
2022), and the fee was still unpaid 30 days after the start of construction.	the supervising authority before the start of construction and ensure compliance with regulations based on the obtained official responses.	The Keelung City Government conducted an on-site inspection at the Keelung Factory on Feb. 2, 2023, and found that the on-site practices did not comply with the	Required to complete the payment of fines within the stipulated period and rectify	
Air Pollution Control Act, Artic	cle 23, Paragraph 1	"Soil and Water Conservation Plan for the Geological Improvement Project at Taiwan Fertilizer's Keelung	the soil and water conservation deficiencies, followed by a re-increasion	
The Company's "Taiwan Fertilizer Keelung Factory No. 1 Soil and	Immediately instructed the contractor to make improvements and enhance on-site personnel	Factory" approved by the Keelung City Government. followed by a re-inspection.		
Water Conservation Plan" did not implement effective control	training. Additionally, the contractor is required to use water spraying methods to reduce emissions if	Waste Disposal Act, Article 31, Paragraph 1, Subparagraph 2		
measures as required by Articles 4, 6, and 8 of the "Regulations for Air Pollution Control of Particulate Matter from Fixed Sources."	complete coverage is not feasible during construction, and to ensure that exposed soil and rock without construction work are properly covered with dust control nets.	The Keelung Factory of the Company has failed to report the storage of waste (D-0902 inorganic sludge) for Mar. 2023 within the required timeframe.	The Keelung Factory has since paid the fine within th deadline and has conducted environmental training for it personnel.	
Waste Management Act, Articl	es 31 and 36	Water Pollution Control Act, Article 14, Paragrap	oh 1	
The Keelung City Environmental Protection Bureau conducted an on-site inspection at the factory on Nov. 16, 2023, and found that the relocation of the original sludge storage area had not been applied for and lacked pollution prevention measures.	<ul> <li>Prior to moving business waste, a formal application for approval must be submitted, and the inspection agency (Keelung City Government) must be invited for on-site review before proceeding with the relocation.</li> <li>When relocating business waste from the old site to the new site, waterproof tarps should be added as a protective measure to prevent groundwater infiltration.</li> </ul>	The Taichung factory holds a permit for the discharge of wastewater into surface water bodies. On Oct. 27, 2023, the Taichung City Environmental Protection Bureau conducted an inspection and collected samples at the discharge outlet. Although the test results met the effluent quality standards under the Water Pollution Control Act, they exceeded the more stringent standards stipulated in the environmental impact difference analysis report approved by the permit.	The Taichung factory has responded to the Taichung City Government on Dec. 29 2023, detailing improvement and explanations regarding the inspection results. The factory has also submitted a revised improvement report and paid the fines within the required timeframe.	



- About this Report
- Message from the Chairman
- Overview of the Company
- Summary of Performance in 2023
- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

Appendix



11.21

# 

### SUSTAINABLE AGRICULTURE AND CIRCULAR ECONOMY

- 3-1 Enhancement of Core Business Competencies
- 3-2 Resource Circulation and Green Economy

### 台湾肥料设修有限公司 TAIWAN FERTILIZER CO., LTD.

### About this Report

- Message from the Chairman
- Overview of the Company
- Summary of Performance in 2023
- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance

### **3** Sustainable Agriculture and Circular Economy

- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

Appendix

# **3-1** ENHANCEMENT OF CORE BUSINESS COMPETENCIES

The Research and Development Department of TFC has innovatively combined microbial fermentation with fertilizer development technologies to actively develop high-quality agricultural materials, including various microbial fertilizers, organic fertilizers, and new environmentally friendly fertilizer products. In recent years, the promotion of compound fertilizers incorporating humic acid peat organic matter and beneficial microorganisms aims to progressively improve soil conditions, enhance crop quality and yield, and increase farmers' income.

In its commitment to sustainable agriculture and environmental stewardship, TFC plays a pivotal role in Taiwan's sustainable development. The Company is dedicated to advancing the production of superior organic fertilizers through the establishment of both internal and external organic demonstration farms, conducting collaborative crop trials and agricultural education seminars. These efforts are designed to lead more farmers towards adopting environmentally friendly farming practices and organic methods, while safeguarding the wellness of farmers, consumers, and the land.

To transition into high-tech industries, TFC's R&D team has also intensified collaborations with domestic and international industry, government, and academic institutions to introduce new technologies for the purification of electrochemical products. This initiative aims to accelerate the development of new ventures and promote a green circular economy through the recovery, purification, and reuse of waste liquids.



### **Innovative Products developed in 2023**

#### Organic Agriculture Cultivation Research and Development of Technologies and Materials

Development of Organic Compound Fertilizer Products using Agricultural Residual Materials as Fillers

In 2022, spent mushroom cultivation substrates were developed as organic material fillers, and in 2023, chicken manure was introduced as an organic material filler. By incorporating agricultural residual materials into the production process of organic compound fertilizers, the amount of chemical fertilizers can be reduced, achieving the recycling and reuse of agricultural waste.

### Development of Special Functional Seaweed-Based Raw Materials

### Polysaccharide Extraction Technology Research and Efficacy Establishment

In 2018, the Company commissioned the National Taiwan Ocean University to develop a mass-production extraction technology for polysaccharides from Ulva seaweed, cultivated using deep ocean water. The extraction process for Ulva polysaccharides was successfully established in 2019.

- In 2020, the polysaccharide extraction technology was transferred from Professor Chang-Jer Wu of Ocean University, and commercialization and mass production were initiated. Since 2021, monthly samples of Ulva polysaccharide extract powder have been outsourced for analysis to determine molecular weight distribution, efficacy (antioxidant properties), heavy metal content, and levels of elements such as sodium, potassium, magnesium, and calcium. Based on these results, the product's COA specifications were formulated.
- In 2023, the Company commissioned Kaohsiung Medical University to evaluate the effects of seaweed polysaccharide extracts on bone physiology and bone disorders. Preliminary results from both cell and animal trials demonstrated that TFC Ulva polysaccharides exhibit inhibitory effects on osteoarthritis (OA) and show potential in promoting the self-repair of cartilage matrix.

#### 台湾肥料政化有限公司 TAIWAN FERTILIZER CO., ITD.

About this Report

Message from the Chairman

Overview of the Company

Summary of Performance in 2023

- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance

### **3** Sustainable Agriculture and Circular Economy

- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

Appendix

Development of New "Labor-Saving, Safe, and Precision Agriculture" Fertilizers

Controlled-Release Fertilizer Product Development and Field Application

- In alignment with the Agricultural and Food Agency's "Subsidy for Carbon Reduction through Coated Compound Fertilizers" promotion policy, in 2022, the #1 "Geili" Controlled Release Fertilizer product was developed for use during the growth periods of rice and other crops. This product contains both fast-acting and controlled-release nitrogen fertilizers. By adjusting the nutrient release rate, it meets the varying nutritional needs of crops at different growth stages, prolonging fertilizer efficacy, reducing the frequency of applications, and making it suitable for use with aerial drones and backpack-powered fertilizer applicators. This approach reduces labor, fertilizer use, and time requirements.
- In 2023, a collaboration with the "Plastics Industry Development Center" resulted in the development of environmentally friendly, biodegradable coating materials. The aim is to use optimal materials and coating technologies to produce a range of controlled-release fertilizer products for farmers' selection.

#### Research and Production of Functional Amino Acid Calcium Fertilizer Materials

- Since 2019, in collaboration with Miura Farm in Japan and the Miaoli District Agricultural Improvement Station, research and development have focused on creating functional materials to enhance flowering and fruiting, strengthen disease resistance, and improve the aroma, flavor, and quality of strawberries during cultivation.
- In 2022, a "Amino Acid + Calcium Fertilizer" compound formula was developed. This formulation is designed to supplement crop nutrients and prevent calcium deficiencies, aiming to enhance fruit quality. It has shown significant effects in preventing and improving calcium deficiency in crops such as cherry tomatoes and wax apples.
- In 2023, the "Nong-You brand Taifer Biopower Liquid Calcium Fertilizer" product was officially registered and launched. It has been expanded to include crop trials, demonstrating excellent performance in strawberry cultivation in Miaoli's Dahu area. The fertilizer's efficacy is comparable to that of imported fertilizers, and efforts to promote the product are ongoing.

#### Development of Solvent Reduction and Waste Liquid Recovery Technologies in the Photovoltaic Industry

Development of EBR (PGMEA) Phase Separation and Esterification Technology

- In response to the global trend of waste resource recovery, the Miaoli Factory of the Company has made breakthroughs in chemical purification technology, planning the recovery, regeneration, and purification of EBR waste liquid for reuse.
- In 2020, in collaboration with the Industrial Technology Research Institute (ITRI), the "EBR Purification Technology Development" project was initiated, and a PGMEA purification technology was successfully established in the laboratory. This process enabled the purification of PGMEA waste liquid to semiconductor-grade solvent levels.
- In 2021, the Company initiated the construction and development of a new production line at the Miaoli Factory, planning and designing a PGMEA production facility.
- In 2023, the construction of the EBR waste solvent esterification factory was completed, and production trials were conducted, resulting in the establishment of an optimal SOP. The Company is currently in active negotiations with domestic semiconductor manufacturers for product sales.



Demonstration Field for "Geili" Fertilizer



#### 台汽肥料股份有限公司 TAIWAN FERTILIZER CO., LTD.

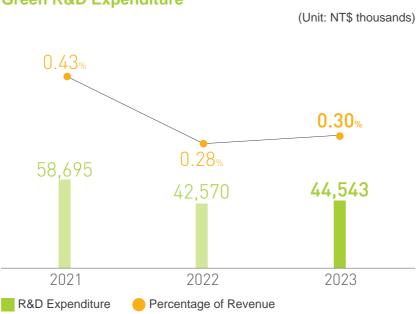


#### 3 Sustainable Agriculture and **Circular Economy**

Governance

- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

Appendix



### R&D Team Education and Training

TFC encourages R&D personnel to participate in various seminars and courses on emerging technology trends. Internal training programs include topics such as the benefits and business models of the circular economy, TFC's hydrogen technology for low-carbon ammonia, in-depth ESG sustainability management and environmental protection, and information security awareness. Additionally, the team participates in a variety of external training sessions to enhance professional R&D capabilities.

### 2023 R&D Team External Education and Training Courses



### 2023 R&D Team Training Sessions and Average Training Hours

Category	Sessions	Average Hours (Hours/Person)
هُمْ Internal Training	25	2.2
External Development Courses	8	7.3



### 台湾肥料设修有限公司 TAIWAN FERTILIZER CO., LTD.

### About this Report

Message from the Chairman

- Overview of the Company
- Summary of Performance in 2023
- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance

### **3** Sustainable Agriculture and Circular Economy

- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

Appendix

### Strategic Partnerships

To deepen its proprietary technologies and leverage existing market and operational resources for expanding new business ventures, TFC actively collaborates with industry, government, and academia to introduce new technologies, thereby shortening development timelines. Grounded in the principles of sustainable development, the Company continues to focus on key core technologies such as microbial and organic fertilizers, enzyme hydrolysis extraction techniques, and the recovery and reuse of electronic chemicals. These efforts balance technological and economic growth with environmental protection, fulfilling its responsibilities as a global corporate citizen.

### **Collaborative Development Projects**

Fisheries Research Institute, MOA		Jun Zl	han Agricultural S	Science Consultants Limited		
Collaborative Development Projects Food-Grade Collagen Peptide Promotion Program Expected Benefits		Field T		e <mark>nt Projects</mark> n Bacillus subtilis Ba-BPD1 1×109 ontrol of Tomato Bacterial Wilt:		
		Efficacy	y and Phytotoxicity			
technology, discard collagen peptides. regeneration, reduc	led Íish This pro ces was	atic hydrolysis extraction scales are recycled to produce ocess achieves resource te emissions, and supports hrough waste minimization.	Develo	ed Benefits opment of organic a ation of microbial s e applications in di	-	
2006			Oct. 1, 2021			
Jul. 24, 2018				Jul. 1, 2022		
	Yufo	ng Agricultural Product Co.		Taichung Dist	trict Agricultural Research and Ex	tension Station, MOA
Collaborative Development Projects TFC and Yufong Agricultural Products Strategy Alliance		Alliance	Production and A	Development Projects Application Technology of Composite For sing Microbial Strains	rmulations for	
Expected Benefits			Expected Benef	its		
Supporting the mango industry with rational fertilization management techniques			production of o physical prope	nsfer and development of microbial s organic matter fertilizers, aimed at im rties and advancing sustainable deve vironmental practices.	proving soil	



#### 台汽肥料股份有限公司 TAIWAN FERTILIZER CO., LTD.

### **Collaborative Development Projects**



### 台湾肥料设修有限公司 TAIWAN FERTILIZER CO., LTD.

About this Report

Message from the Chairman

Overview of the Company

Summary of Performance in 2023

- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- **3** Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

Appendix

# **3-2** RESOURCE CIRCULATION AND GREEN ECONOMY

### Hualien Environmental Protection and Energy-Saving Deep Ocean Water Park

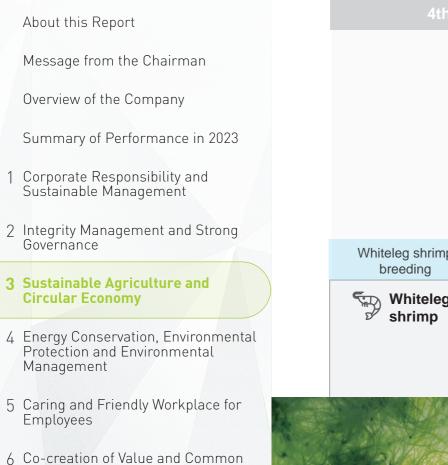
Deep ocean water is an important resource characterized by its consistently low temperature and purity, and is rich in various rare trace elements. It can be directly used to produce a range of mineral-based products for human consumption. TFC extracts deep ocean water from a depth of 662 meters at the Hualien Deep Ocean Water Park. In addition to its subsidiary, Taiwan Yes Deep Ocean Water Co., Ltd., specializing in the development of beverages, health foods, and skincare products made from deep ocean water, the Company also leverages its natural low temperature, purity, and mineral content to combine multi-stage water use and smart aquaculture systems. This approach supports the development of deep-sea water-based aquaculture for algae and white shrimp, enabling year-round cultivation of various seaweeds such as Gut weed, Sarcodia, and Ulva lactuca, as well as white shrimp. These endeavors provide a rich supply of rare marine ingredients and serve as key raw materials for biotechnology applications, including the extraction of special functional components.

Given the burgeoning development opportunities in the seaweed industry, TFC has, after years of research, perfected key technologies for the commercial mass production of species such as Gut weed, Sarcodia, and Ulva lactuca. The Company has established seaweed and white shrimp processing factories that adhere to ISO and HACCP certifications, enabling the year-round production of fresh seaweed, dried seaweed powder, and white shrimp. The Company is currently engaged in active discussions with numerous domestic and international partners regarding the development of raw materials and products.



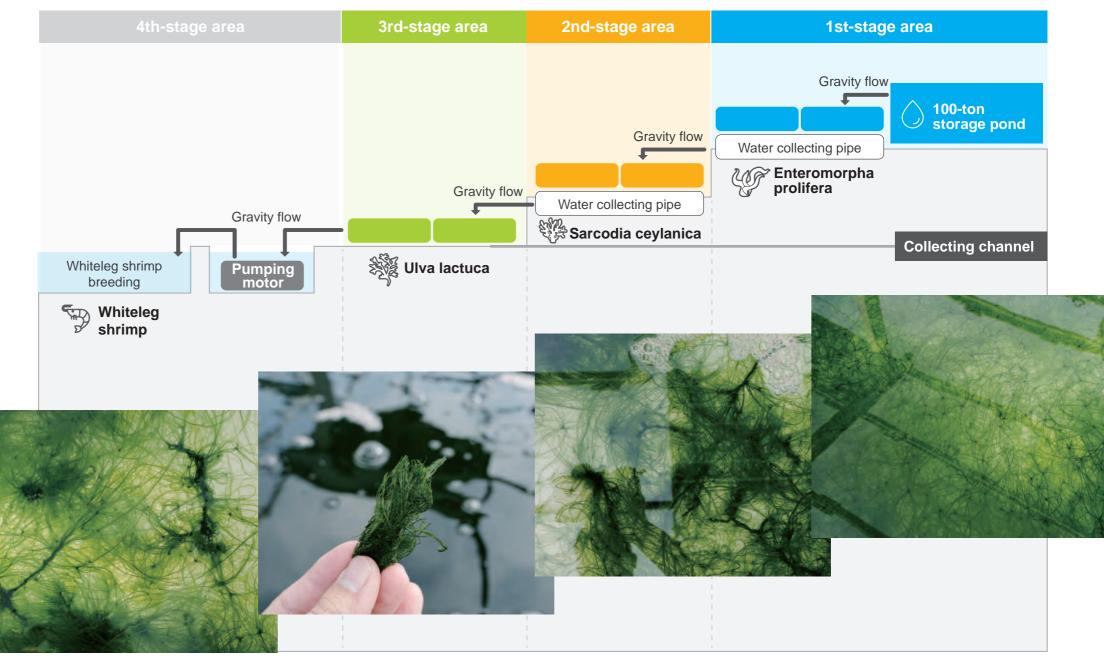
## 台:字肥料设修有限公司 TAIWAN FERTILIZER CO., LTD.

### **Deep Ocean Water Aquaculture Cycle**



Appendix

Prosperity





#### 台湾肥料政化有限公司 TAIWAN FERTILIZER CO., ITD.

About this Report

Message from the Chairman

Overview of the Company

Summary of Performance in 2023

- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance

### **3** Sustainable Agriculture and Circular Economy

- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

ГП

Appendix

### Intelligent White Shrimp Aquaculture

Utilizing clean, deep ocean water at low temperatures for white shrimp farming yields shrimp with fresh, sweet meat and excellent quality. To ensure stable production management of white shrimp farming, TFC integrates various intelligent monitoring systems. This includes the use of sensors for real-time monitoring of water quality parameters such as pH, ORP (Oxidation-Reduction Potential), water temperature, and dissolved oxygen levels. Additionally, high-frequency monitoring of algae, nutrients, and bacteria is conducted, and a comprehensive water quality data repository is established to stabilize the production process.

In addressing diseases, specifically the widespread issue of Enterocytozoon hepatopenaei (EHP) infections affecting the global shrimp industry, the Company will collaborate with Professor Ming-Wei Lu from the National Taiwan Ocean University. This partnership aims to implement biological agents for disease prevention and control. To eradicate potential infection sources and prevent cross-contamination across all farming regions, the Company will fully implement the stocking of SPF shrimp larvae in 2024.



White shrimp farmed in clean, deep ocean water at low temperatures exhibit fresh and sweet meat quality.

### Miaoli Green Circular Park

For many years, electronic-grade chemicals have played a pivotal role in Taiwan's high-tech industry, and the subsequent treatment of these chemicals is a significant challenge that both the government and society must address.

To ensure a sustainable and circular production and service model, TFC leverages its core expertise to overcome the challenges associated with waste disposal. The Company reclaims and supplies customized high-specification electronic-grade chemicals for domestic applications, including large panels, optoelectronics, solar energy, and semiconductors. Additionally, with its advantageous access to raw materials such as phosphoric acid, nitric acid, sulfuric acid, and ammonia, the Company has established comprehensive production traceability, building a reliable brand image and advancing the principles of a green circular economy.

Ammonia and NMP Processing

Facility in Miaoli Factory



### 台湾肥料般佔有限公司 TAIWAN FERTILIZER CO., LTD.

### About this Report

- Message from the Chairman
- Overview of the Company
- Summary of Performance in 2023
- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance

#### 3 Sustainable Agriculture and Circular Economy

- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

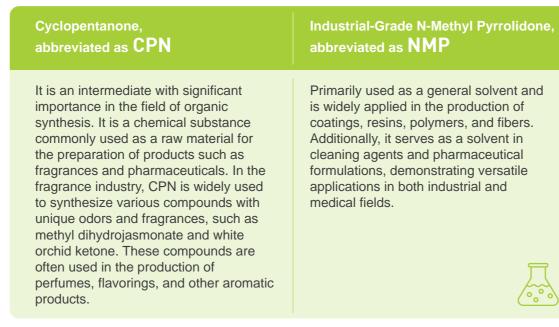
Appendix

# Emerging Opportunities in the Recycling of Electronic-Grade Chemicals

For many years, TFC's Miaoli Factory has consistently and reliably operated its "Solvent Recycle System" and "Phosphoric Acid Regeneration Recycle System," earning a strong reputation in the industry. In recent years, TFC has leveraged its advanced technology and recovery services to create a unique, integrated service model from supply to recovering in the industry. This approach allows customers to purchase electronic-grade chemicals without concerns about waste recovery, partnering with them to build a green circular economy.

### **Solvent Recycle System**

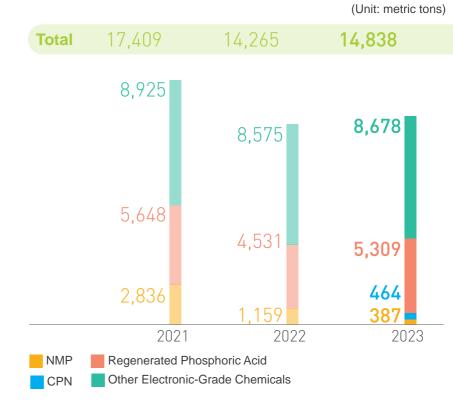
Currently, the Miaoli Factory is equipped with two SRS distillation columns, 5KL and 20KL in capacity, providing purification, recovery, formulation, quality control, and logistics services for solvents required by the panel industry. The factory primarily produces N-Methyl Pyrrolidone (NMP) and Cyclopentanone (CPN). However, in response to increasingly stringent European Union environmental regulations, domestic semiconductor manufacturers have been gradually replacing NMP as a raw material. In 2023, the NMP produced by the Solvent Recycle System amounted to 387 metric tons, representing a 67.78% decrease compared to the production volume in 2022.



### Phosphoric Acid Regeneration Recycle System

At the Miaoli Factory, phosphoric acid is regenerated from etching waste liquids produced in the panel and IC industries through evaporation and circulation equipment to produce secondary industrial-grade phosphoric acid. The waste aluminum etching solution, after being treated with Technical Department of Recovery, achieves a recovery rate of over 99%. In 2023, the regenerated phosphoric acid processed and sold by the phosphoric acid regeneration recycle system amounted to 5,309 metric tons, representing 35.78% of TFC's electronic-grade chemical sales, with a production increase of approximately 17.2% compared to 2022.

### Sales Volume of Electronic-Grade Chemicals





- 台:字肥料設修有限公司 TAIWAN FERTILIZER CO., LTD.
  - About this Report
  - Message from the Chairman
  - Overview of the Company
  - Summary of Performance in 2023
- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity
  - Appendix



#### ENERGY CONSERVATION, ENVIRONMENTAL PROTECTION AND ENVIRONMENTAL MANAGEMENT

- 4-1 Green Sustainability Management
- 4-2 Energy and Resource Management
- 4-3 Greenhouse Gas Management
- 4-4 Raw Material Management
- 4-5 Waste Management

### 台污犯科政化有限公司 TAIWAN FERTILIZER CO., LTD.

About this Report

### Message from the Chairman

Overview of the Company

Summary of Performance in 2023

- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy

#### 4 Energy Conservation, Environmental Protection and Environmental Management

- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

Appendix



### 4-1 GREEN SUSTAINABILITY MANAGEMENT

# Environmental Health and Safety Organization

To provide a safe and wellness-focused working environment and to ensure the physical and mental well-being of employees, the Company has implemented a comprehensive safety and health management system that establishes clear guidelines for management and operations. TFC has formulated the "Industrial Safety and Health Management Regulations" to govern the promotion of occupational safety and health-related activities within the Company and its factories. In addition to complying with government-issued occupational safety and health regulations, all activities must be conducted in accordance with these internal management regulations and operational procedures. In terms of environmental protection, pollution control facilities are maintained to ensure their effectiveness and treatment efficiency. fully complying with relevant environmental protection laws and regulations. Moreover, the Company promotes internal waste reutilization and seeks to reduce waste generation to support environmental preservation.

The "Safety and Health Center" at the headquarters serves as the primary unit responsible for planning and managing environmental health and safety at TFC, while environmental and safety units are established at each factory to oversee related matters. The Company holds regular "Occupational Safety and Environmental Protection Meetings" every two months, with a total of six meetings held in 2023. Chaired by the President, these meetings regularly review the Company's safety, wellness, environmental, and energy operations, tracking progress and conducting reviews for improvement. Additionally, legal updates and occupational accident case studies are shared to raise awareness. Through this organizational framework, the Company regularly evaluates and adjusts safety and environmental policies, goals, and implementation plans.

### Implementation of International Standard Management Systems

### Environmental Management System (ISO 14001)

To implement green environmental policies, TFC has completed the establishment and certification of the ISO 14001 Environmental Management System at its Taichung and Miaoli Factories. Through the PDCA management model, the Company continuously promotes environmental management improvement initiatives to enhance environmental performance, achieve energy conservation and waste reduction, and protect the natural environment. Recently, the Miaoli and Taichung Factories successfully completed their certifications on Jun. 4, 2023, and Jul. 14, 2023, respectively. In the future, recertifications will be conducted before the certificate expiration to ensure the continued effectiveness of the system.

> Environmental Management System Certificate

### Energy Management System (ISO 50001)

TFC's Taichung Factory completed the establishment of its Energy Management System and obtained the ISO 50001 certification in 2016. Through the PDCA management model, the factory continuously improves energy efficiency, enabling the achievement of energy conservation and carbon reduction goals in daily operations. The system was recently recertified on Jul. 6, 2023, and will undergo recertification before the certificate expiration in the future to ensure the continued effectiveness of the system.

### Greenhouse Gas Inventory (ISO 14064-1)

In alignment with the national "Climate Change Response Act" and its climate change adaptation strategies aimed at reducing and managing greenhouse gas emissions, the Company implemented the ISO 14064-1 Greenhouse Gas Inventory System in 2023. The Taichung Factory conducted the greenhouse gas emissions inventory for 2022, which was verified and certified by an independent third party, establishing 2022 as the base year for greenhouse gas data at the Taichung Factory.



Additionally, as a publicly listed company with capital between NT\$5 billion ~ NT\$10 billion, the Company will comply with the Financial Supervisory Commission's "Sustainable Development Roadmap for Listed Companies." The plan includes conducting a comprehensive greenhouse gas emissions inventory for the entire company, including subsidiaries, with the goal of completing the inventory by 2025 (using 2024 as the base year for greenhouse gas data) and achieving verification by 2027. Based on these results, the Company will implement a greenhouse gas management plan to gradually reduce emissions year by year.

Unit: terajoules

### 台污犯科政化有限公司 TAIWAN FERTILIZER CO., LTD.

About this Report

- Message from the Chairman
- Overview of the Company
- Summary of Performance in 2023
- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

Appendix

# 4-2 ENERGY AND RESOURCE MANAGEMENT

### Energy Usage

TFC's energy consumption includes electricity, natural gas, steam, fuel oil, and diesel. Steam is generated by natural gas boilers or collected as waste heat steam from various workshops by utility factories. In terms of energy usage, in 2023, TFC consumed approximately 96 million kWh of electricity, 7.364 million kiloliters of natural gas, 357.5 kiloliters of fuel oil, and 47.3 kiloliters of diesel. The total energy consumption, after conversion, amounted to 651.09 terajoules.

Electricity is the primary energy source, with the annual total electricity consumption (96 million kWh) accounting for approximately 52.97% of the total energy consumption. Natural gas (7.364 million kiloliters) ranks second, making up around 42.64% of total consumption, while diesel consumption accounts for less than 1%.

In recent years, the Taichung and Miaoli Factories have complied with environmental regulations by gradually replacing fuel oil furnaces with natural gas burners to further reduce fuel oil usage and lower air pollutant emissions.

### Energy Consumption

Item	2021	2022	2023
Total Electricity Consumption	352.04	359.83	344.91
Total Consumption of Steam Pressure Reduction Power Generation	-	8.29	12.51
Total Natural Gas Consumption	-	254.82	277.64
Total Fuel Oil Consumption	110.59	54.83	14.37
Total Diesel Consumption	2.60	2.33	1.66
Total Consumption	465.23	680.10	651.09

Note 1: The statistical data for 2021-2023 includes information from the Miaoli, Taichung, and Hualien Factories.

2: Electricity Heat Value: Taiwan = 3.6 E06 J/kWh

- 3: Natural Gas Heat Value: Taiwan = 37.7 E03 J/L
- 4: Fuel Oil Heat Value: Taiwan = 40.2 E06 J/L
- 5: Diesel Heat Value: Taiwan = 35.18 E06 J/L
- 6: The conversion factors are sourced from the Heat Content of Energy Products Table published by the Ministry of Economic Affairs.
- 7: The total diesel consumption data represents the purchase volume.
- 8: The total electricity consumption is based on the billing period disclosed in Taipower's electricity bills.
- 9: The total natural gas consumption is based on the billing period disclosed in the gas company's bills.



#### 台湾肥料股份有限公司 TAIWAN FERTILIZER CO., ITD.

### About this Report

Message from the Chairman

Overview of the Company

Summary of Performance in 2023

- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

Appendix

In 2023, the production of self-manufactured products was approximately 782,547.62 metric tons. After calculation, the energy intensity for 2023 was 8.32 E-04 TJ/metric ton, which represents an increase of approximately 10.34% compared to the energy intensity of 7.54 E-04 TJ/metric ton in 2022. This increase is primarily due to the rise in natural gas usage.

### **Energy Intensity**

ltem	2021	2022	2023
Total Consumption			Unit: TJ
	465.23	680.10	651.09
Production Volume of		I	Unit: metric tons
Self-Manufactured Products	946,777	902,519	782,547.62
Energy Intensity		Ur	nit: TJ/metric ton
	4.91E-04	7.54 E-04	8.32E-04

Note: Energy Intensity = Annual Consumption / Annual Production Volume

### Energy Conservation Performance

In response to the increasingly severe challenges of climate change and energy consumption, the Company actively aligns with government policies on energy conservation and carbon reduction. To effectively address the challenges of electricity savings and carbon reduction, we have implemented a series of measures and plans. Firstly, we have upgraded equipment across various factories and adopted more efficient production processes to achieve the goals of energy conservation and consumption reduction.

### **Energy-Saving Solutions from Equipment Upgrades and Process** Improvements Completed in 2023

Item	Estimated Electricity Savings (Annually)
Taichung Factory	
Ammonium Sulfate Factory - Installation of Vari Drives for Dissolution Pumps	able Frequency 62,172
Phosphorous Factory - Implementation of Anti- and Discontinuation of Crusher Operations	Caking Measures 288,000
Nitric Acid Factory - Recovery of Ammonia Tanl Power Trap System	k Condensate via 22,110
Nitric Phosphorus Factory 1 - Installation of Var Drives for Production Equipment	riable Frequency 12,672
Miaoli Factory	
Wastewater Oxidation Pond - Replacement of Blower with Variable Frequency Screw Blower	Traditional Roots 102,437
Integration of Oxidation Pond and BIONET Blow Wastewater Treatment Area	wers in the 17,280
Total	504,671



#### 台湾肥料股份有限公司 TAIWAN FERTILIZER CO., ITD.

About this Report

Message from the Chairman

Overview of the Company

Summary of Performance in 2023

- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy

4 Energy Conservation, Environmental Protection and Environmental Management

- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

Appendix

Since 2020, the Taichung Factory has progressively completed the following projects: "Conversion of Utility Boilers to Natural Gas," "Conversion of Nitric Phosphorus Factory 1 to Natural Gas," and "Conversion of Phosphorus Factory 2 to Natural Gas," and "Conversion of Phosphorous Factory 2 to Natural Gas." Additionally, the Miaoli Factory completed the "Conversion of Fuel Oil Boilers to Natural Gas Boilers with the Installation of Heat Recovery Units" in 2022. This transition has gradually replaced fuel oil with natural gas, which has lower pollution and greenhouse gas emissions. Fuel oil consumption has significantly declined since 2019, and by 2023, it accounted for only 8.23% of the 2019 levels. It is anticipated that by 2024, fuel oil will be completely replaced by natural gas, resulting in an annual reduction of approximately 7,732 tons of carbon dioxide equivalent emissions.

Moreover, the Company continues to advance other energy transition efforts. The Taichung Factory has successfully implemented process optimization measures. Through boiler pressure reduction technology, previously wasted pressure has been converted into electrical energy, contributing an additional 3,474,950 kWh through "Self-Generated 40K Steam Pressure Reduction Power Generation." In alignment with national renewable energy development policies, the Taichung Factory installed a 755 kW solar power system in 2023. This system is expected to generate approximately 960,000 kWh of electricity annually for internal use, equivalent to saving 3.46 terajoules of energy and reducing 477.4 tons of carbon dioxide equivalent emissions. The Company plans to continue developing and installing renewable energy generation systems in the future. These initiatives not only help reduce energy costs and environmental impacts but also mitigate energy supply risks, achieving a win-win situation.

In 2023, the total energy consumption at the Taichung Factory amounted to 503.52 terajoules. Of this, the total purchased electricity reached 83,870,579 kWh, accounting for 59.96% of the total energy consumption. At the Miaoli Factory, the percentage of purchased electricity was 22.51%, while the Hualien Factory's purchased electricity percentage was 100%. TFC's renewable energy usage rate is 0%, with a total of 12.51 terajoules of self-generated and self-consumed energy.





### 台湾肥料設佔有限公司 TAIWAN FERTILIZER CO., LTD.

### About this Report

- Message from the Chairman
- Overview of the Company
- Summary of Performance in 2023
- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy

#### 4 Energy Conservation, Environmental Protection and Environmental Management

- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

Appendix

### Water Stewardship

The Taichung, Miaoli, and Hualien Factories of TFC are located inWuqi District, Taichung City; Miaoli City, Miaoli County; and Hualien City, Hualien County, respectively. According to the World Resources Institute's "Water Risk Assessment Tool," the water stress in these areas is classified as "Low - Medium risk (1-2)." The primary water source for the Company's operations across all sites is municipal water (sourced from local reservoirs). The Miaoli Factory also utilizes groundwater from a water rights-licensed well. The water extraction at each factory does not have a significant impact on the water sources.

Following the relocation and several capacity change applications, the Taichung Factory committed through environmental assessments to a total water consumption of 2,363 CMD (approximately 862 million liters/year) for the entire factory, sourced from the Liyutan Reservoir, which has an effective capacity of approximately 115,837 million liters. In 2022, the Liyutan Reservoir had an inflow of 575,067 million liters and an outflow of 265,308 million liters (data sourced from the 2022 Reservoir Water Volume Operations Statistical Report). The reservoir supplies water for domestic, agricultural, and industrial use and is classified as a water quality protected area by the Environmental Protection Administration. In 2023, the Taichung Factory used 468.35 million liters of municipal water, which accounts for only 0.18% of the Liyutan Reservoir's outflow, resulting in a minimal impact on the reservoir's water supply area. The Miaoli Factory sources its water from both municipal water and groundwater. The municipal water is drawn from the Mingte Reservoir in Miaoli County, which has an effective capacity of approximately 12,398 million liters. In 2022, the Mingte Reservoir had an inflow of 163,670 million liters and an outflow of 29,145 million liters (data sourced from the 2022 Reservoir Water Volume Operations Statistical Report). In 2023, the Miaoli Factory's total municipal water consumption was 324.60 million liters, accounting for 1.1% of the Mingte Reservoir's outflow, with no significant impact on the water source.

The Hualien Factory primarily uses deep ocean water from the Pacific Ocean for its main products. Therefore, its water extraction does not have a significant impact on the water source.





### 台湾肥料设体有限公司

TAIWAN FERTILIZER CO., LTD.

	About this Report
	Message from the Chairman
	Overview of the Company
	Summary of Performance in 2023
1	Corporate Responsibility and Sustainable Management

- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

Appendix

ach Factory				
	Miaoli Factory	Taichung Factory	Hualien Factory	
Municipal water	324.60 (Mingte Reservoir)	468.35 (Liyutan Reservoir)	14.49	
Seawater	0	43,960.40	1,366.18	
Groundwater	46.93	0	233.98	
Water withdrawal	371.53	44,428.75	1,614.65	
Water discharge	138.77	43,971.20	153.85	
Water consumption	232.76	457.55	1,460.80	

- Note 1: Hualien County lacks reservoirs and relies on water sourced from the Meilun Creek well for its municipal water supply.
  - 2: The water usage for each factory is billed based on the consumption disclosed during the Taiwan Water Corporation's billing period.
  - 3: The Taichung Factory's water discharge volume includes both wastewater discharge and cooling seawater (non-contact cooling water). The aforementioned non-contact cooling water is exclusively used within the factory for temperature exchange in the heat exchange piping system.

### Water Resource Recovery

To conserve water resources and promote recycling, each factory continues to implement various water-saving measures. They are committed to improving water treatment systems and reducing water consumption in processes, as well as increasing the recovery rate of process-generated wastewater. For instance, cooling water used in heat exchangers is recirculated and reused, minimizing the impact on water resources.

#### Water Recovery Status

(Unit: thousand cubic meters)

Item	2021	2022	2023
Municipal Water Consumption	509.86	481	468.35
Reclaimed Water	56.58	53.00	53.09
Steam Condensate Recovery	-1.7	17.72	22.1
Water Recovery Rate (%)	10.7%	14.7%	16.1%

Note1: The scope of the statistical data pertains to the Taichung Factory.

2: Water Recovery Rate = Reclaimed Water Volume + Condensed Steam (Demineralized Water) Recovery Volume/ Total Municipal Water Consumption.



### 台湾肥料设体有限公司 TAIWAN FERTILIZER CO., LTD.

### About this Report

Message from the Chairman

Overview of the Company

Summary of Performance in 2023

- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

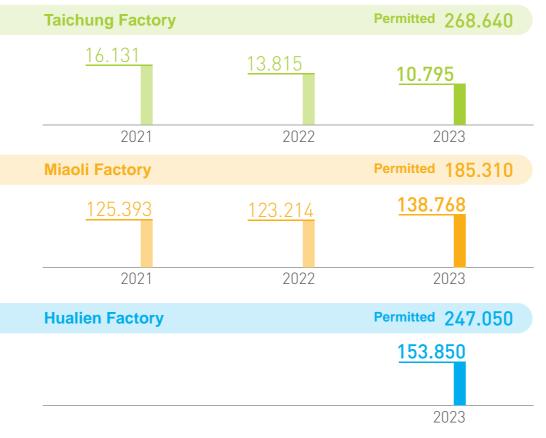
Appendix

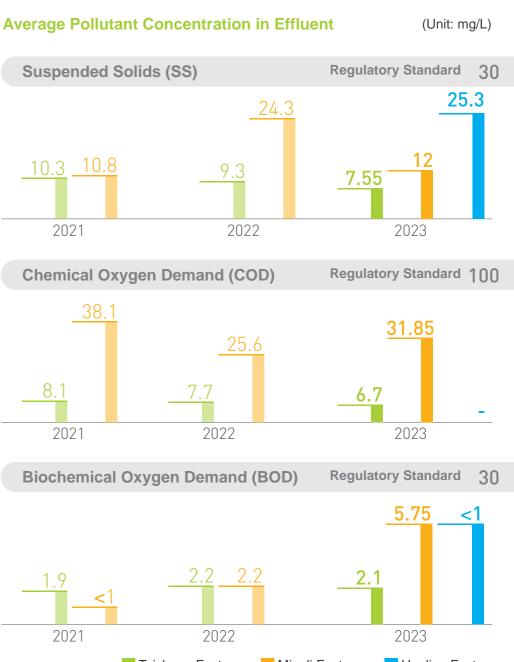
### Wastewater Treatment

Wastewater Discharge Volume

TFC ensures that all wastewater from its main production facilities is properly treated by on-site wastewater treatment facilities before discharge. Regular wastewater quality testing is conducted to ensure minimal environmental impact. Upon treatment, the wastewater is discharged into nearby rivers or marine areas as per regulations. The Miaoli Factory discharges into the "Houlong River," while the Taichung Factory discharges into the marine areas adjacent to Taichung Port. The Hualien Factory only generates a small amount of domestic wastewater. In 2023, the pollutant concentration levels of effluent discharged from both the Taichung and Miaoli Factories were significantly below the regulatory discharge standards.

(Unit: thousand cubic meters)





Note: Wastewater discharge data does not include domestic wastewater generated within the factory.

Taichung Factory Miaoli Factory

Hualien Factory

# 台:方肥料设化有限公司 TAIWAN FERTILIZER CO., LTD.

# 4-3 GREENHOUSE GAS MANAGEMENT

### **Greenhouse Gas Emission Source Identification**

About this Report	Greenhouse Gas Emission Source Identification				
Message from the Chairman		M01 Nitric acid production procedure (N <sub>2</sub> O)	Emergency flare – Natural gas (CO2, CH4, N2O)	G02 Emergency diesel generator- Diesel (CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> O)	
Overview of the Company Summary of Performance in 2023		M03, M07 Other phosphate fertilizer manufacturing procedures - Natural gas (CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> O)	M04 boiler steam generation process Natural gas/No. 4~6 heavy oil (CO₂, CH₄, N₂O)	s- M05 Other phosphate fertilizer manufacturing procedures-No. 4~6 heavy oil (CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> O)	
1 Corporate Responsibility and Sustainable Management	Scope 1	Refrigerator, water dispenser- Refrigerant (R-134a)	A/C equipment- Refrigerant (R-410a, R-32)	Chiller- Refrigerant (R-410a, R-134a)	
<ul><li>2 Integrity Management and Strong Governance</li><li>3 Sustainable Agriculture and Circular</li></ul>	Direct greenhouse gas emissions	The wastewater treatment process- Anaerobic (CH <sub>4</sub> )	Septic Tank - Methane (CH4)	Leakage from high-voltage electrical switch insulation equipment (SF <sub>6</sub> )	
Economy 4 Energy Conservation, Environmental Protection and Environmental Management		Staff canteen- Natural gas (CO₂, CH₄, N₂O)	Maintenance- Acetylene (CO <sub>2</sub> )	Forklift-Diesel (CO₂, CH₄, N₂O)	
5 Caring and Friendly Workplace for Employees		Fire protection system- Fire extinguisher, firefighting equipment (CO <sub>2</sub> )	Official vehicles- Gasoline, diesel (CO₂, CH₄, N₂O)	Official vehicle- Refrigerant (R-134a)	
6 Co-creation of Value and Common			For the entire f	factory to use	
Prosperity Appendix	Scope 2 Indirect greenhouse gas emissions	Purchased electricity from Taiwan Power Company			
	<b>Scope 3</b> Sources of emissions that are not self-owned or discretionarily controllable	Employee commuting Public transportation Waste landfill incineration treat		Outsourcing transportation Outsourcing	

### 台汽肥料股份有限公司 TAIWAN FERTILIZER CO., LTD.

### About this Report

Message from the Chairman

- Overview of the Company
- Summary of Performance in 2023
- Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy

**4** Energy Conservation, **Environmental Protection and Environmental Management** 

- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

Appendix



In alignment with the national "Climate Change Response Act" and its climate change adaptation strategies aimed at reducing and managing greenhouse gas emissions, the Company implemented the ISO 14064-1 Greenhouse Gas Inventory System in 2023. The Taichung Factory conducted the greenhouse gas emissions inventory for 2022, which was verified and certified by an independent third party, establishing 2022 as the base year for greenhouse gas data at the Taichung Factory.

Additionally, as a publicly listed company with capital between NT\$5 billion ~ NT\$10 billion, the Company will comply with the Financial Supervisory Commission's "Sustainable Development Roadmap for Listed Companies." The plan includes conducting a comprehensive greenhouse gas emissions inventory for the entire company, including subsidiaries, with the goal of completing the inventory by 2025 (using 2024 as the base year for greenhouse gas data) and achieving verification by 2027. Based on these results, the Company will implement a greenhouse gas management plan to gradually reduce emissions year by year.

**Greenhouse Gas Emissions** 

Total

440.168

42.647

397.494

2015

(Unit: metric tons CO2e) 469.195 489.899 480.092 479.834 532,907 529.175 503.918 423.388 49.037 47.533 47.83 48.147 49.371 51,380 483,869 46.577 481,642 456,086 441,752 430,721 428.454 45.625 422.618 377.763 2016 2017 2019 2023 2018 2020 2021 2022 4: The operational control approach is employed to identify greenhouse gas

Note 1: The scope of the greenhouse gas emissions inventory includes the Company's current operations at the Taichung and Miaoli Factories.

- 2: Scope 3 emissions, which are not owned or directly controlled by the Company, are excluded from the emissions calculations.
- 3: The GWP values used in the greenhouse gas inventory are based on the IPCC's Fifth Assessment Report (2013).
- emission sources. 5: The electricity emission factors used for calculations are based on the 2023 announcement from the Bureau of Energy, Ministry of Economic Affairs, with the 2022 electricity emission factor being 0.495 kg CO2e. Historical factors are as follows: 2021 = 0.509, 2020 = 0.502, 2019 = 0.509, 2018 = 0.533, 2017 = 0.554,

and 2016 = 0.53.

In recent years, TFC has been committed to improving greenhouse gas emissions by optimizing production processes. replacing outdated equipment, and acquiring energy-efficient technologies. The Company regularly tracks and reviews greenhouse gas emissions across all factories and updates its management policies accordingly.

#### **Scope 1 Direct Greenhouse Gas Emissions**

Process emissions and fossil fuel combustion emissions primarily consist of carbon dioxide (CO<sub>2</sub>), nitrous oxide (N<sub>2</sub>O), and methane (CH4).

### Scope 2 Indirect Greenhouse Gas Emissions

Purchased electricity is sourced entirely from Taiwan Power Company.

(Unit: ppm)

#### 台湾肥料股份有限公司 TAIWAN FERTILIZER CO., ITD.

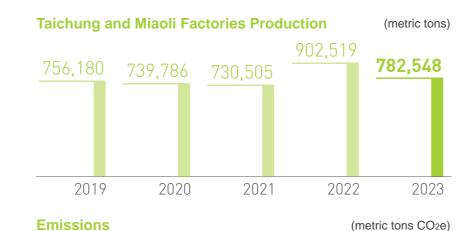
AIWAN FERTILIZER CO., LTD.

### About this Report

- Message from the Chairman
- Overview of the Company
- Summary of Performance in 2023
- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

Appendix

### **Greenhouse Gas Emission Intensity**





### Air Pollutant Emissions

TFC's factories operate and maintain air pollution control facilities in accordance with the Fixed Pollution Source Operating Permit requirements. Regular testing and analysis of emission results are conducted to ensure that all factory emissions comply with regulatory standards and to minimize air pollutants, thereby mitigating environmental impact. Currently, the air pollutants generated at the factories include nitrogen oxides (NOx), sulfur oxides (SOx), volatile organic compounds (VOC), and particulate matter (PM).

In 2023, air pollutant emissions from the Taichung Factory were lower compared to the previous year. The Miaoli Factory, having upgraded its boiler equipment, now only emits a small amount of volatile organic compounds and nitrogen oxides, with no emissions of sulfur oxides or particulate matter. The air pollutant emissions from both factories remain well below standard levels, indicating effective air pollution management. The Hualien Factory has transitioned to a deep ocean water research and aquaculture base and does not have air pollutant emissions.

### Air Pollutant Emissions

Factory	Regulatory Standard	2021	2022	2023
Taichung Factory	250.00	67.3	86.63	69.75
Miaoli Factory	250.00	3.18	86.00	2.01
Taichung Factory	300.00	5.83	4.73	1.39
Miaoli Factory	300.00	3.73	0	0
Taichung Factory	150.00	0	0	0
Miaoli Factory	150.00	3.15	36.00	3.51
Particulate Matter PM) Taichung Factory	50.00	5.65	3.75	2.08
Miaoli Factory	100.00	0.65	0	0.12
	Taichung Factory Miaoli Factory Taichung Factory Miaoli Factory Taichung Factory Miaoli Factory Taichung Factory	Taichung FactoryStandardTaichung Factory250.00Miaoli Factory250.00Taichung Factory300.00Miaoli Factory300.00Taichung Factory150.00Miaoli Factory150.00Taichung Factory150.00Taichung Factory50.00	Taichung Factory250.0067.3Miaoli Factory250.003.18Taichung Factory300.005.83Miaoli Factory300.003.73Taichung Factory300.000Miaoli Factory150.000Miaoli Factory150.003.15Taichung Factory50.005.65	Taichung Factory         250.00         67.3         86.63           Miaoli Factory         250.00         3.18         86.00           Taichung Factory         250.00         3.18         86.00           Taichung Factory         300.00         5.83         4.73           Miaoli Factory         300.00         3.73         0           Taichung Factory         150.00         0         0           Miaoli Factory         150.00         3.15         36.00           Taichung Factory         150.00         5.65         3.75

### 台湾肥料股份有限公司 TAIWAN FERTILIZER CO., LTD.

About this Report

Message from the Chairman

Overview of the Company

Summary of Performance in 2023

- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy

4 Energy Conservation, Environmental Protection and Environmental Management

- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

Appendix

### 4-4 Raw Material Management

### **Arrow Material Procurement and Use of Recycled Materials**

TFC is committed to selecting alternative recycled materials instead of conventional raw materials within the scope of technical feasibility, provided that product quality and safety are not compromised. This effort supports the Company's environmental, energy-saving, and sustainability goals.

In 2023, raw material procurement was categorized into primary raw materials, auxiliary materials, and packaging materials. The total weight of procured raw materials was approximately 469,763 metric tons, all of which were non-recyclable raw materials. Of this, 82,934 metric tons were recycled materials, primarily sourced from reclaimed metal smelting by-products from overseas (24,997 metric tons) and sulfuric acid by-products from chemical products produced in Taiwan (57,937 metric tons). The Company employs exclusive processing technology to utilize recycled materials as fertilizer ingredients, ensuring that these materials are free from hazardous substances and heavy metals.

In 2023, recycled materials accounted for 17.65% of the total raw material weight used. This represents a 0.9% decrease from 18.55% in 2022, due to variations in initial and final inventory levels and adjustments in production volume. The remaining raw materials, which include natural minerals or natural gas-derived products, are non-recyclable.

Raw Material Procurement Volume in 2023 Unit: metric tons

Category	Quantity
Non-Recyclable Raw Materials	
Primary Raw Materials (Liquid Ammonia, Urea, Phosphate Rock, Peat, etc.)	453,757
Auxiliary Materials (Including Fuel Oil and Sulfur Flux)	13,416
Packaging Bags (PP Plastic)	2,590
Total	469,763

Note: The quantity of PP plastic for packaging bags is calculated based on the specifications of packaging bags used by the Company, which account for 99% of usage (primarily 25 kg and 40 kg bags), and the consumption of PP. The calculation is weighted and does not include the less than 1% of ton bags and paper bags.





### 台湾肥料设修有限公司 TAIWAN FERTILIZER CO., LTD.

About this Report

Message from the Chairman

Overview of the Company

- Summary of Performance in 2023
- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy

4 Energy Conservation, Environmental Protection and Environmental Management

- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

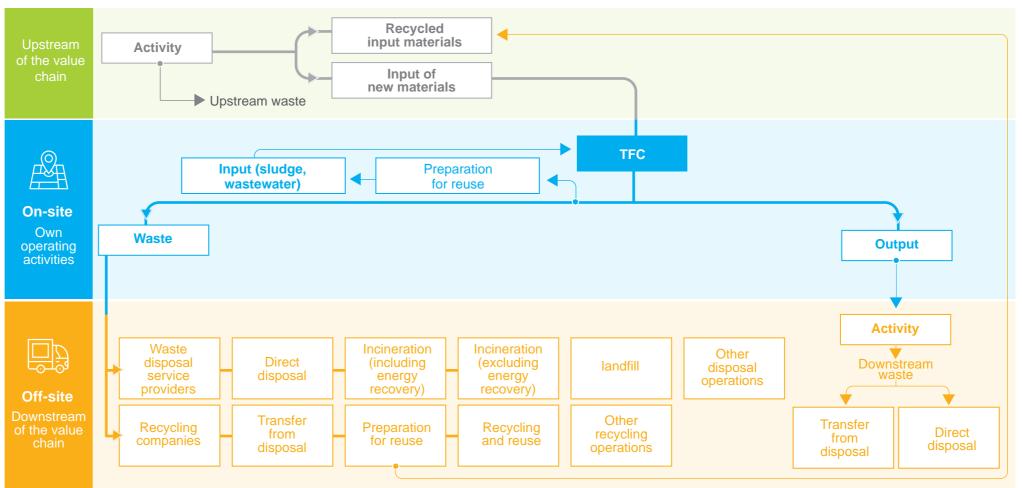
Appendix

4-5 Waste Management

### Waste Disposal and Management

TFC's primary production bases are the Taichung and Miaoli Factories. These facilities primarily generate general industrial waste, including waste liquids, sludge, and domestic waste. Most of this waste is treated through incineration or thermal treatment. There is also a small amount of hazardous industrial waste. The Hualien Factory generates only a small amount of domestic waste.

### Waste Value Chain Flowchart





# 台:字肥料设化有限公司 TAIWAN FERTILIZER CO., LTD.

#### About this Report

Message from the Chairman

Overview of the Company

Summary of Performance in 2023

- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy

**4** Energy Conservation, Environmental Protection and **Environmental Management** 

- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

Appendix

#### Industrial Waste Treatment Volume

#### Hazardous waste

Wast	e Composition	On-site	Off-Site
	Waste Liquid Final Disposal Method: Incineration, Thermal Treatment, Physical Treatment	0	909.01
Note 2: T	he Company's hazardous waste recovery rate is 0%. he quantity of hazardous waste is based on the weight recorded	d at the waste dis	sposal facility.

	Non-Hazardous Organic Waste Solvents Final Disposal Method: Incineration, Thermal Treatment, Physical Treatment	0	107.74
3	Organic Sludge Final Disposal Method: Incineration, Thermal Treatment	0	137.89
Ę	Inorganic Sludge Final Disposal Method: On-Site Recycling	49.61	0
	Domestic Waste Final Disposal Method: Incineration	0	129.91

#### (Unit: metric tons)

Each of TFC's factory is equipped with an environmental grievance hotline. Residents or organizations who have concerns about the environmental impact of the Company's production processes can call this hotline. Upon receiving a grievance, the factory will promptly investigate the issue and make necessary improvements to address any shortcomings.

**Environmental Grievance Handling** 

#### **Grievance Hotline**

Taichung Factory	04-2521-8588
Miaoli Factory	037-260-601
Hualien Factory	03-822-3181
Keelung Factory	02-2420-1053



# 台:疗肥料设化有限公司 TAIWAN FERTILIZER CO., LTD.

- About this Report
- Message from the Chairman
- Overview of the Company
- Summary of Performance in 2023
- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity
  - Appendix





# CARING AND FRIENDLY WORKPLACE FOR EMPLOYEES

- 5-1 Employee Employment Status
- 5-2 Comprehensive Talent Development System
- 5-3 Remuneration and Benefits System
- 5-4 Equal and Friendly Workplace
- 5-5 Labor-Management Communication
- 5-6 Health and Safety Work Environment
- 5-7 Emergency Response and Transportation Management

#### 台湾肥料股份有限公司 TAIWAN FERTILIZER CO., LTD.

# **5-1** EMPLOYEE EMPLOYMENT STATUS

About this Report

Message from the Chairman

Overview of the Company

Summary of Performance in 2023

- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management

5 Caring and Friendly Workplace for Employees

6 Co-creation of Value and Common Prosperity

Appendix

Employee care is a key component of TFC's management philosophy, with a focus on fostering harmonious labor relations and embodying the concept of a unified corporate family. We adopt an employee-centered approach, implementing strategies that prioritize employee well-being, communication, and physical and mental safety. Our goal is to create a healthy and safe workplace, provide opportunities for continuous learning and growth, and establish a strong foundation of mutual trust in labor relations, ensuring that all employees can fully utilize their skills in the right roles.

## Human Resources Policy

To create a work environment filled with passion and energy, we offer competitive salaries and comprehensive benefits to attract top talent, strengthen internal cohesion, and motivate and retain employees. This is driven by 6 key human resource policies.



## Workforce Structure

As of Dec. 31, 2023, the total number of employees at TFC amounted to 633, comprising 627 full-time workers and 6 contract workers. The total headcount remained consistent with 2022, with a net increase of 8 full-time workers and a corresponding reduction of 8 contract workers. This adjustment was primarily due to the replacement of departing personnel, transitioning from contract to full-time positions. Additionally, the Company employed 43 outsourced workers (including dispatched personnel) who primarily handle support services, driving, aquaculture, cultivation, and cleaning-related tasks.

The Company's workforce is composed of 501 male employees (79.15%) and 132 female employees (20.85%). The Company adheres to international human rights protection principles and domestic regulations, ensuring no discrimination or differential treatment based on gender. In recent years, TFC has actively recruited exceptional talent across various professional fields and implemented talent development programs to accelerate workforce renewal, significantly improving the Company's overall workforce structure. As a result of these efforts, employees aged 40–49 now constitute the majority, representing 39.81% of the total workforce.

The average age of TFC employees is 43.75 years, with an average service tenure of 12.69 years. In terms of educational qualifications, the majority hold associate degrees or higher, accounting for 53.40% of employees, followed by those with master's degrees (26.86%) and high school/vocational school diplomas (19.11%).



TFC employees visiting grape farmers in Changhua.

# 台:字肥料设修有限公司 TAIWAN FERTILIZER CO., LTD.

## Analysis of Employee Categories, Age, and Gender in 2023

About this Report	
-------------------	--

Message from the Chairman

Overview of the Company

Summary of Performance in 2023

- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management

5 Caring and Friendly Workplace for Employees

6 Co-creation of Value and Common Prosperity

Appendix

		Full-Time E	mployees	Contract E	mployees	Tota	al	
Gender	Age	Number of Employees	Proportion	Number of Employees	Proportion	Number of Employees	Proportion	
	24 years old and below	0	0.00%	0	0.00%	0	0.00%	
	25~29 years old	4	0.63%	0	0.00%	4	0.63%	
Female	30~39 years old	47	7.42%	2	0.32%	49	7.74%	
remale	40~49 years old	50	7.90%	0	0.00%	50	7.90%	
	50~59 years old	15	2.37%	0	0.00%	15	2.37%	
	60 years old and above	14	2.21%	0	0.00%	14	2.21%	
Total Fe	male	130	20.53%	2	0.32%	132	20.85%	
	24 years old and below	5	0.79%	0	0.00%	5	0.79%	
_	25~29 years old	14	2.21%	0	0.00%	14	2.21%	
Male	30~39 years old	151	23.86%	3	0.47%	154	24.33%	
Male	40~49 years old	202	31.91%	0	0.00%	202	31.91%	
	50~59 years old	84	13.27%	1	0.16%	85	13.43%	
	60 years old and above	41	6.48%	0	0.00%	41	6.48%	
Total Ma	le	497	78.52%	4	0.63%	501	79.15%	
Total		627	99.05%	6	0.95%	633	100.00%	

# Distribution of Employee Educational Qualifications in 2023

	nber of ployees	Percentage
Doctorate	3	0.47%
Master's Degree	170	26.86%
Associate Degree	338	53.40%
High School (Vocational)	121	19.11%
Below High School (Vocational)	1	0.16%

Note: Contract employees are those with a fixed-term contract of up to 12 months with TFC.



#### 台湾肥料设体有限公司 TAIWAN FERTILIZER CO., LTD.

#### About this Report

Message from the Chairman

Overview of the Company

Summary of Performance in 2023

1 Corporate Responsibility and Sustainable Management

- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management

#### 5 Caring and Friendly Workplace for Employees

6 Co-creation of Value and Common Prosperity

Appendix

# **Employee Turnover**

The influx of new employees brings vitality and innovation to the Company. TFC conducts annual recruitment drives, hiring 27 new employees in 2023, which accounts for 4.27% of the total workforce (new hire rate).

In 2023, a total of 32 employees left the Company, including 19 retirements, 1 layoff, 9 resignations, and 3 deaths due to illness, resulting in a turnover rate of 5.06%. TFC employees exhibit strong loyalty and alignment with the Company, with many serving long-term until retirement. The employee turnover rate is significantly lower than the industry average (the overall turnover rate for traditional manufacturing industries was 23.0% in 2022, according to 104 Job Bank's HR FBI Survey).

#### Number of New Employees and New Hire Rate in 2023

Gender	Age	Number of Employees	New Hire Rate
	29 years old and below	3	75.00%
Female	30~49 years old	6	6.06%
	50 years old and above	1	3.45%
Total Fema	le	10	7.58%
	29 years old and below	3	15.79%
Male	30–49 years old	11	3.09%
	50 years old and above	3	2.38%
Total Male		17	3.39%
Total		27	4.27%
Total New H	Hire Rate		4.27%

Note: New Hire Rate = Number of new employees in the age group for the year / Number of employees in the age group at the end of the year



# 台:字肥料设修有限公司 TAIWAN FERTILIZER CO., LTD.

#### Number of Employee Turnover and Turnover Rate in 2023

Gender	Age	Retirements	Layoffs R	Resignations	Deaths	Total	Turnover Rate
	29 years old and below	0	0	3	0	3	75.00%
Female	30–49 years old	0	0	0	0	0	0.00%
	50 years old and above	3	0	0	1	4	13.79%
Total Fem	ale	3	0	3	1	7	5.30%
	29 years old and below	0	0	1	0	1	5.26%
Male	30–49 years old	0	1	5	1	7	1.97%
	50 years old and above	16	0	0	1	17	13.49%
Total Male	•	16	1	6	2	25	4.99%
Total		19		9	3	32	5.06%
Total Turn	over Rate						5.06%

Note1: Turnover Rate = Number of employee turnover in the age group for the year / Number of employees in the age group at the end of the year

2: The number of employee turnover includes layoffs, retirements, deaths due to illness, and resignations.

About this Report

Message from the Chairman

Overview of the Company

Summary of Performance in 2023

- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management

5 Caring and Friendly Workplace for Employees

6 Co-creation of Value and Common Prosperity

Appendix



#### 台污肥料設佔有限公司 TAIWAN FERTILIZER CO., LTD.

#### About this Report

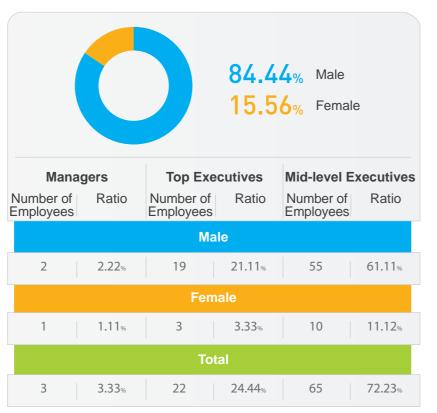
- Message from the Chairman
- Overview of the Company
- Summary of Performance in 2023
- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

Appendix

## Gender Analysis of Managerial Positions

TFC has a total of 90 managerial positions, representing 14.22% of the total employees. Among these, 76 are held by male managers, accounting for 84.44% of the managerial team, while 14 are held by female managers, making up 15.56%.

#### **Gender Composition of Managerial Positions in 2023**



Note1: Managers include Acting President and Vice President.

- 2: Top Executives are Assistant Vice Presidents and above, including department heads
- 3: Mid-level Executives encompass positions such as team leaders, supervisors, factory managers, section chiefs, and managers at various levels.
- 4: All members of the management team are 100% local residents of Taiwan.



Chairman Suen-Zone Lee emphasizes female empowerment by appointing over 40% of managerial positions to female.

#### 台湾肥料股份有限公司 TAIWAN FERTILIZER CO., LTD.

About this Report

Message from the Chairman

Overview of the Company

Summary of Performance in 2023

- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management

5 Caring and Friendly Workplace for Employees

6 Co-creation of Value and Common Prosperity

Appendix

# 5-2 COMPREHENSIVE TALENT DEVELOPMENT SYSTEM

## **Education and Training**

TFC emphasizes the essential competencies required for employees, including knowledge, skills, attitudes, and business execution capabilities. To fully harness employee potential, enhance work quality, and improve performance, the Company continuously establishes a robust training system as a key strategy in human resource management. Each year, training courses are planned based on the "TFC Training Map," which includes general orientation training, core competencies training, professional skills training, and management skills training.

For new employees, the Company offers a comprehensive onboarding program. This training covers "Company Business Strategies and Future Directions," "Quality and Quality Control Training," "Information Systems Application," "Occupational Safety, Environmental Protection, and Health Training," and "Company Organization and Personnel System Overview," enabling new hires to quickly integrate into their roles and the TFC family.

To achieve its talent development goals, the Company is committed to fostering a learning organization. Beyond standard training programs, it leverages internal trainers, employee experience sharing, expert lectures, knowledge management systems, and online learning platforms to create a positive knowledge-sharing and learning environment.

In addition to enhancing job competencies, the Company also focuses on employee well-being and career development. Annually, TFC organizes health promotion activities and subsidizes labor education and training through labor unions. These soft skills training activities help employees pay attention to their physical, mental, and spiritual health, as well as their career growth.



#### 台湾肥料股份有限公司 TAIWAN FERTILIZER CO., ITD.

#### About this Report

Message from the Chairman

- Overview of the Company
- Summary of Performance in 2023
- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management

#### **5** Caring and Friendly Workplace for Employees

6 Co-creation of Value and Common Prosperity

Appendix

#### **Competency Enhancement Programs in 2023**

#### Core Competency Training

In 2023, the core competency training programs include "Sustainable Management and Environmental Protection Education" and "Self-Improvement Training." These programs focus on policy trends and corporate case studies, as well as production and quality management tools and techniques. The training aims to enhance the relevant knowledge and logical thinking of both on-site and management personnel.

#### Professional Skills Training

Professional skills training is tailored to various business needs such as land development, asset management, legal regulations, production practices, human resources, information technology, and internal auditing and control. Training is delivered through external or internal instructors, and includes information from external management consulting firms and educational institutions. The program ensures continuous updates and alignment with external training resources. Additionally, employee feedback, unit reports, and action plans are used to consolidate and reflect on the training, integrating the learned skills into daily business operations.

#### 🔠 Management Skills Training

In 2023, the Company implemented a management skills training program focusing on "Integrated Risk Management." Additionally, the Company continued to send supervisors and reserve supervisors to participate in the mid-to-senior-level management training series organized by the Chung-Hua Institution Economic Research. This program features lectures by highly reputable professors from various prestigious universities and is complemented by well-crafted instructional materials. The training aims to enhance the management and strategic planning skills of supervisors and reserve supervisors, broadening their perspectives and enriching their knowledge to boost the Company's competitive advantage.

#### ے شی Others

In alignment with the annual training plan, the Company invited industry professionals and academic experts to deliver specialized lectures. In 2023, a total of 24 lectures and training sessions were conducted, including the Company's first-ever public seminar. These events facilitated professional discussions, opinion exchanges, and experience sharing, contributing to the holistic development of employees' skills, well-being, and knowledge.

- · Mar. 2023: Colorectal Cancer Prevention and Control Awareness Seminar
- Apr. 2023: Information Security Awareness Seminar and Internal Information Security Leak Prevention Plan Training
- May 2023: Internal Information Security Leak Prevention Plan Series Courses, Information Systems Training Seminar, and Internal Document Management Training
- Jun. 2023: Information Systems Training Seminar
- Jul. 2023: Internal Information Security Leak Prevention Plan Series Courses, Social Engineering Awareness Seminar, and Occupational Accident First Aid Awareness Seminar
- · Aug. 2023: Gender Equality in the Workplace Awareness Seminar
- Sep. 2023: Workplace Legal Compliance Seminar, Occupational Safety Emergency Response Drill, and Circular Economy Benefits and Business Models Director Course
- Oct. 2023: Hydrogen Energy Technology Seminar on Low-Carbon Ammonia, Disaster Response Drill, Information Security Awareness Seminar, Integrity Management and ESG Policy Awareness Seminar, and Human Factors Engineering Health Prevention Seminar
- Nov. 2023: ISO Internal Audit Personnel Training and Carbon Trading and Carbon Management Applications Director Course
- Dec. 2023: Social Engineering Awareness Seminar, Personal Data Protection Law Awareness Seminar, Workplace Bullying Awareness Seminar, and Information Systems Training Seminar
- Throughout 2023, the Company continued its collaboration with online learning platforms, allowing supervisors and employees to select and participate in various courses.



#### 台湾肥料股份有限公司 TAIWAN FERTILIZER CO., ITD.

About this Report

Message from the Chairman

Overview of the Company

Summary of Performance in 2023

- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management

5 Caring and Friendly Workplace for Employees

6 Co-creation of Value and Common Prosperity

Appendix

TFC offers comprehensive and diverse learning courses to its employees and closely collaborates with external training institutions to deliver various professional skills training programs. In 2023, the Company provided a total of 12,804 training hours, with 4,055 employees participating, and incurred a total training expense of NT\$3,275,000.

The average training time per employee in 2023 was 20.23 hours, with an average training cost of NT\$5,170 per employee. Compared to the previous year, there was a slight decrease in average training hours, but an increase in average training costs. This change reflects the Company's commitment to maintaining a flexible training system that continues to offer rich and comprehensive professional skills courses, thereby unlocking employee potential and improving work quality and performance. Additionally, while the Company continued its partnership with online learning platforms, the proportion of employees participating in physical courses increased in the second half of the year as domestic pandemic conditions improved, resulting in higher training costs compared to the previous year's expenses for virtual courses.

#### Average Employee Training Costs in 2023

Unit: NT\$ thousand

Gender	Total Training Costs	Average Training Costs
Male	2,144	4.28
Female	1,131	8.57

#### Average Employee Training Hours in 2023

Item	Gender	Number of Employees	Total Training Hours (hour)	Average Training Hours (hour/person)
	Male	2	94	47.00
Managers	Female	1	21	21.00
	Total	3	115	38.33
	Male	19	539	28.37
Top Executives	Female	3	152	50.67
	Total	22	691	31.41
	Male	55	1,590	28.91
Mid-level Executives	Female	10	320	30.20
	Total	65	1,892	29.11
	Male	425	6,779	15.95
General Employees	Female	118	3,327	28.19
	Total	543	10,106	18.61
	Male	501	9,002	17.97
Total Number of Employees	Female	132	3,802	28.80
	Total	633	12,804	20.23

Note 1: Managers include Acting President and Vice President.

2: Top Executives are Assistant Vice Presidents and above, including department heads

3: Mid-level Executives encompass positions such as team leaders, supervisors, factory managers, section chiefs, and managers at various levels.

4 Average Training Hours = Total training hours for the category / Number of employees in the category



#### 台湾肥料股份有限公司 TAIWAN FERTILIZER CO., LTD.

#### About this Report

Message from the Chairman

Overview of the Company

Summary of Performance in 2023

1 Corporate Responsibility and Sustainable Management

- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

Appendix

## Performance Evaluation

TFC implemented a performance evaluation system where all employees are assessed, and the results are linked to bonuses. Based on performance evaluation outcomes, employees receive performance bonuses semi-annually. Additionally, an annual bonus is allocated based on the Company's operational performance and submitted to the Board of Directors for approval. Both individual performance bonuses and year-end bonuses are determined based on individual job responsibilities, contributions, and evaluation results. Individual performance results serve as a reference for training and career development, and are used as criteria for salary adjustments, promotions, and bonus allocations.

#### **Annual Performance Evaluation System**

Q

刯

8888

Individual employees set annual performance goals.

In both the first and second halves of the year, supervisors conduct performance evaluations based on work performance and various competency factors.

Performance review meetings are held as necessary.

The results of the performance evaluations are communicated to individuals, and improvements are made in accordance with established standards. As of the end of 2023, a total of 626 employees participated in the evaluations, representing 100% of the eligible workforce, indicating that all company employees (including contract employees) undergo regular performance assessments.

#### Analysis of Employee Categories and Gender in 2023 Performance Evaluations

				mployees - M mployees - Fe	
Full-Time	Employees	Contract E	mployees	Tot	al
Number of Employees	Proportion	Number of Employees	Proportion	Number of Employees	Proportion
		Ма	le		
493	79.52%	4	66.67%	497	79.39%
		Fem	ale		
127	20.48%	2	33.33%	129	20.61%
		Tot	tal		
620	100%	6	100%	626	100%

Note: Employees with over 3 months of service are required to undergo annual performance evaluations.

#### 台湾肥料股份有限公司 TAIWAN FERTILIZER CO., LTD.

About this Report

- Message from the Chairman
- Overview of the Company
- Summary of Performance in 2023
- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management

#### 5 Caring and Friendly Workplace for Employees

6 Co-creation of Value and Common Prosperity

Appendix

# 5-3 REMUNERATION AND BENEFITS SYSTEM

### Fair Remuneration

TFC's Remuneration System includes base salary, supervisory allowances, and meal allowances. The amounts are determined based on approved job levels, individual education and experience, professional skills, years of service, abilities, workload, and work performance. Adjustments are made based on job changes, with no gender-based discrepancies.

To attract and retain top talent, the Company provides a competitive remuneration system that supports both entry-level employees and new hires. In terms of salary, we offer salary and benefits that exceed the national entry-level wage. In addition, the employee remuneration management policy has been revised to raise the cap on total salary adjustments for both position changes and promotions. A salary adjustment mechanism for new hires has also been established, providing more flexible opportunities and ranges for salary increases for new employees and current employees with strong performance. This practical feedback mechanism serves to motivate and incentivize employees.

# Comparison of 2023 Entry-Level Employees Salaries and Basic Salary

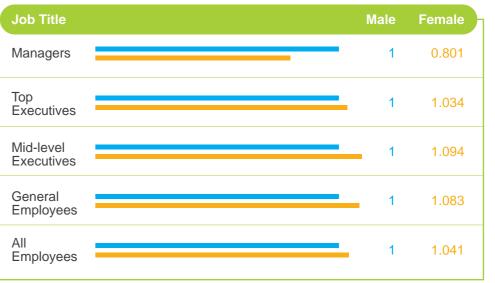
Job Title	Gender	Compared to the basic salary
Techniciana Olarka	Male	1.104 times
Technicians, Clerks	Female	1.104 times
Assistant Engineers,	Male	1.428 times
Assistant Specialists	Female	1.428 times

Note1: The national basic salary in Taiwan for 2023 is NT\$26,400 per month.

2: The comparison formula with the basic salary is: starting salary for the respective job levels at the Company / basic salary

TFC's human resources policy emphasizes gender equality, eliminates workplace gender discrimination, and adheres to national gender equality and employment service laws. We ensure equal pay for equal work and foster a friendly and equitable work environment. Within the Company, standard starting salaries for female and male employees are identical. The overall gender pay ratio difference is within 5%, approaching gender parity. According to preliminary results from the Directorate-General of Budget, Accounting and Statistics for 2023, the average hourly wage for female in Taiwan is NT\$318, which is 85.3% of the NT\$373 average hourly wage for male, resulting in a gender pay gap of 14.7%. This indicates that there is no gender-based salary disparity within the Company.

#### **Gender Pay Ratio for 2023**



Note1: Managers comprise 3 individuals: the Acting President and 2 Vice Presidents, including 1 female Vice President.

2: The components of the basic salary and remuneration package include base salary, meal allowances, supervisory allowances, holiday bonuses, year-end bonuses, and employee bonuses.



#### 台湾肥料政化有限公司 TAIWAN FERTILIZER CO., ITD.

About this Report

- Message from the Chairman
- Overview of the Company
- Summary of Performance in 2023
- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- **5** Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

Appendix



Number of Non-Managerial Employees, Average

Salary, and Median Salary

Number of Employees

- Note1: The number of employees refers to those who have been with the Company for more than 6 months during the payroll period and excludes the Chairman, President, Vice President, and Chief Financial Officer.
  - 2: "Total salary" refers to the salary attributable to the fiscal year, calculated on an accrual basis of responsibility. This includes regular salary (base salary and fixed allowances and bonuses paid monthly), overtime pay (both taxable and non-taxable), and irregular salary (allowances, bonuses, employee bonuses, etc., not paid monthly).

## Employee Benefits

TFC offers a comprehensive benefits system for its employees, establishing a wide range of employee benefits and activities. These are integrated into policies and regulations and include vacation, birthday bonuses, diverse club activities, employee travel, discounts at affiliated stores, and the provision of work uniforms. Additionally, the Company has established an Employee Welfare Committee to provide various subsidies and organize activities for employees.

Furthermore, employees facing situations such as parental leave, further education, or serious illness requiring extended time off can apply for parental leave or unpaid leave. Upon completion of this period, employees can apply for reinstatement, allowing them to balance family responsibilities with their work.



#### 台汽肥料股份有限公司 TAIWAN FERTILIZER CO., LTD.

About this Report

Governance

Economy

Management

Employees

Prosperity

Appendix

Message from the Chairman

Corporate Responsibility and Sustainable Management

Protection and Environmental

Overview of the Company

#### **Employee Benefits for 2023**





#### 台:行肥料股份有限公司 TAIWAN FERTILIZER CO., LTD.

2

3

About this Report	Benefits Exceedin
Message from the Chairman	TF
Overview of the Company	• Paic
Summary of Performance in 2023	Family Care day Leave pers
Corporate Responsibility and Sustainable Management	·Paic
Integrity Management and Strong Governance	Ordinary Sick Leave
Sustainable Agriculture and Circular Economy	• No s leav
Energy Conservation, Environmental Protection and Environmental Management	・Dea 14 c Bereavement Leave
Caring and Friendly Workplace for Employees	• Dea
Co-creation of Value and Common Prosperity	• 1 da mor mer in a
Appendix	Q day. cou
	Menstrual • Sala Leave day leav
	• Sick com the
<u>In</u>	

# Benefits Exceeding Legal Requirements

	TFC Benefits Exceeding Legal Requirements	Legal Standards
amily Care Leave	• Paid for up to 7 days; unpaid for any period exceeding 7 days (counts as part of personal leave).	<ul> <li>No salary is provided during personal leave.</li> </ul>
Ordinary Sick Leave	<ul> <li>Paid in full for up to 14 days.</li> <li>Half salary is provided for sick leave between 15 and 30 days.</li> <li>No salary is provided for sick leave exceeding 30 days.</li> </ul>	<ul> <li>For ordinary sick leave not exceeding 30 days within a year, salary is paid at half rate.</li> </ul>
ereavement Leave	<ul> <li>Death of Parents or Spouse: 14 days</li> <li>Death of Spouse's Parents or Children: 10 days</li> <li>Death of Siblings: 5 days</li> </ul>	<ul> <li>Death of Parents or Spouse: 8 days</li> <li>Death of Spouse's Parents or Children: 6 days</li> <li>Death of Siblings: 3 days</li> </ul>
<b>O</b> Menstrual Leave	<ul> <li>1 day of menstrual leave per month. If the total number of menstrual leave days taken in a year do not exceed 3 days, these days are not counted as sick leave.</li> <li>Salary is fully paid for the days not counted as sick leave.</li> <li>Sick leave days shall be compensated according to the sick leave policy.</li> </ul>	<ul> <li>1 sick leave day per month. If the total sick leave days taken in a year do not exceed 3 days, these days will not be integrated into the sick leave calculation.</li> <li>Both integrated and non-integrated sick leave days will result in salary payments at half the normal rate.</li> </ul>

# Retirement Benefits for Employees

TFC adheres to regulatory requirements by implementing comprehensive guidelines for employee retirement, pension, and severance. The Company ensures robust contributions and disbursements for retirement benefits.

**Pension Contribution and Management Methods** 

Pension for Employees under the New Scheme 84%

Since the implementation of the Labor Pension Act on Jul. 1, 2005, the Company has contributed 6% of the monthly salary to individual pension accounts for employees covered under this Act. As of the end of 2023, the recognized expense amount was NT\$23,254,000.

16% Pension Reserve for Employees under the Old Scheme 101 employees

TFC, in accordance with the Labor Standards Act, contributes 9% of the total monthly salary to the Taiwan Bank Labor Pension Reserve Account for employees under the old pension scheme. The Company has established a "Labor Pension Reserve Supervision Committee" as per its "Employee Retirement, Pension, and Severance Regulations," which meets quarterly to oversee the management of the old pension reserve. Additionally, a professional accounting consultant conducts annual actuarial evaluations to ensure full coverage. As of the end of 2023, the fair value of the plan assets was NT\$249,500,000, with recognized expenses amounting to NT\$11,739,000. Any shortfall in contributions has been accounted for as accrued pension liabilities, resulting in a net defined benefit liability of NT\$107,613,000.

#### 台湾肥料设体有限公司 TAIWAN FERTILIZER CO., LTD.

About this Report

Message from the Chairman

Overview of the Company

- Summary of Performance in 2023
- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

Appendix



# 5-4 EQUAL AND FRIENDLY WORKPLACE

### Parental Leave Policy

In 2023, TFC had 65 employees eligible for parental leave without pay. Of these, 3 employees submitted applications. By the end of 2023, 2 employees had returned to work, resulting in a 100% return-to-work rate for parental leave in 2023, with a retention rate of 67%.

#### Parental Leave Status

Iten	n	Male Fe	emale	Total
(1)	Number of Employees Eligible for Parental Leave in 2023	48	17	65
(2)	Number of Actual Parental Leave Applications in 2023	1	2	3
(3)	Expected Number of Employees Returning from Parental Leave in 2023	1	1	2
(4)	Number of Actual Returns to Work in 2023	1	1	2
(5)	Number of Actual Returns to Work in 2022	2	1	3
(6)	Number of Employees who Returned to Work in 2022 and Remained Employed for 12 Months through 2023	1	1	2
	Return-to-Work Rate=(4)/(3)	100%	100%	100%
	Retention Rate=(6)/(5)	50%	100%	67%

Notes: Eligibility for parental leave of absence requires that the employee has been employed for at least 6 months. Such leave may be applied for before each child reaches the age of 3. The duration of the leave is until the child turns 3, but it must not exceed 2 years.

## Preventive Measures against Sexual Harassment

TFC is committed to providing a work and service environment free from sexual harassment for its employees and job applicants. To achieve this, the Company implemented appropriate preventive and disciplinary measures for sexual harassment incidents. In accordance with Article 13, Paragraph 1 of the Gender Equality in Employment Act and other relevant regulations, the Company has established the "Taiwan Fertilizer Co., Ltd. Guidelines for Preventing and Handling Sexual Harassment." Employees who encounter sexual harassment in the workplace can file a grievance with the Administration Department's supervisor or the personnel supervisor at each factory. In 2023, 3 grievances were received. Upon receipt, these cases were promptly processed in accordance with relevant laws and internal company procedures, including remediation, corrective actions, and disciplinary measures for those found responsible. Additionally, employee training on relevant regulations was strengthened. Moving forward, the Company will continue to enhance internal awareness of gender equality and take measures to prevent similar incidents from occurring.

# Ensuring Employment Opportunities for Individuals with Disabilities

In 2023, the Company achieved a utilization rate for individuals with disabilities that meets over 80% of the statutory quota set by the Disability Rights Protection Act. The shortfall was due to the death of an employee due to illness. Moving forward, TFC will continue to collaborate with employment service agencies to expand our talent pool and work diligently towards meeting the full quota for the employment of individuals with disabilities.

#### Number of Individuals with Disabilities Employed in 2023

Unit	Number of Employees	Required Number of Individuals with Disabilities to be Employed	Actual Number of Individuals with Disabilities Employed
Headquarters	202	2	2
Taichung Factory	314	3	1
Miaoli Factory	86	1	2
Hualien Factory	28	0	0
Keelung Factory	3	0	0
Total	633	6	5

#### 台湾肥料设修有记公司 TAIWAN FERTILIZER CO., LTD.

About this Report

Message from the Chairman

Overview of the Company

- Summary of Performance in 2023
- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management

#### 5 Caring and Friendly Workplace for Employees

6 Co-creation of Value and Common Prosperity

Appendix

# 5-5 LABOR-MANAGEMENT COMMUNICATION

### Effective Communication Channels

TFC places significant importance on employees' opinions and voices. The Company has established multiple effective communication channels and formed several labor union groups to facilitate two-way communication between labor and management. This approach allows for timely and appropriate responses to employee feedback, which is then converted into policies for implementation.

To promote the Company's management policies, strengthen communication with labor unions and employees, enhance labor-management relations, foster unity, and improve work efficiency, the Company has established the "Labor-Management Relations Forum Implementation Guidelines." A labor-management relations forum is held every year in the second quarter, chaired by the President or a designated Vice President, with attendance from human resources and relevant department heads, as well as representatives from labor unions. Labor feedback can also be voiced through the TFC Enterprise Union's regular member representative meetings, board of supervisors meetings, and manager team meetings. The Company will respond to employee feedback and improvement proposals in writing.

#### Labor-Management Communication Channels

Lab Manag Foru

Lab Manag Meet

	Key Communication Issues	Frequency
or-	<ul> <li>After the relocation of the Taipei Headquarters, have the attendance regulations been relaxed?</li> </ul>	Once a year
ement Ims	<ul> <li>Adjustment of meal allowance</li> <li>For field employees driving company vehicles, are there any additional insurance coverage options?</li> </ul>	
or- ement ings	<ul><li>Company business overview discussion</li><li>Employee benefits matters discussion</li></ul>	<ul> <li>4 times a year</li> </ul>

# <sup>്റ്റ്</sup>Labor Union Groups

TFC adheres to international labor conventions and relevant domestic labor union laws. All employees have the freedom to form and join labor unions and to engage in collective bargaining in accordance with applicable laws. In 2023, there were no violations of the freedom of association or collective bargaining rights.





#### 台湾肥料般化有限公司 TAIWAN FERTILIZER CO., LTD.

#### About this Report

Message from the Chairman

- Overview of the Company
- Summary of Performance in 2023
- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- **5** Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

Appendix



In accordance with the Collective Agreements Act, TFC has entered into collective agreements with its corporate labor unions. These agreements, which institutionalize employee rights, stabilize labor relations, and promote labor-management harmony, exceed the requirements of domestic labor laws and international human rights conventions, ensuring robust protection of employee rights. The collective agreements apply to company employees who are members of the respective labor unions. For employees not covered by the collective agreements, the Company adheres to consistent labor conditions and contractual standards as per company policy, ensuring that their terms of employment are not affected by the scope of the collective agreements.

#### **Status of Collective Agreement Signings**

**Taiwan Fertilizer Co., Ltd. Enterprise Union - Miaoli Factory** Number of Members (as of May 7, 2024) : 94 people

The collective agreement between TFC Miaoli Factory Enterprise Union and TFC Miaoli Factory was signed on Oct. 18, 2021.

#### Taiwan Fertilizer Co., Ltd. Enterprise Union - Taichung Factory

Number of Members (as of May 7, 2024) : 299 people

The collective agreement between TFC Taichung Factory Enterprise Union and TFC Taichung Factory was signed on Nov. 7, 2016, and expired on Nov. 6, 2019. According to the terms of the agreement and Article 21 of the Collective Agreements Act, it retains residual validity.

#### Taiwan Fertilizer Co., Ltd. Enterprise Union Number of Members(as of May 7, 2024): 218 people

The collective agreement between TFC Enterprise Union and TFC was signed on Mar. 19, 2015, and expired on Mar. 18, 2018. According to the terms of the agreement and Article 21 of the Collective Agreements Act, it retains residual validity. Both parties have initiated negotiations for a new collective agreement in 2022. As of May 2024, a total of 16 collective bargaining meetings have been conducted.

**Taiwan Fertilizer Co., Ltd. Enterprise Union - Hualien Factory** Number of Members (as of May 7, 2024): 26 people

The collective agreement between TFC Hualien Factory Enterprise Union and TFC Hualien Factory was signed on Jul. 13, 2023.



#### 台湾肥料设修有限公司 TAIWAN FERTILIZER CO., LTD.

#### About this Report

#### Message from the Chairman

Overview of the Company

- Summary of Performance in 2023
- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- **5** Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

Appendix

# 5-6 HEALTH AND SAFETY WORK ENVIRONMENT

#### Material topics: Occupational Health and Safety



Negative: Occupational accidents pose health risks to employees and decrease the Company's trustworthiness in the public's perception. Employee injuries and illnesses can also reduce attendance hours and increase personnel costs.

### **Goals and Targets**

Committed to achieving zero workplace injuries and zero occupational diseases.

 To ensure the protection of employee health, special health examinations are conducted in accordance with regulations for employees working in environments with specific health hazards.

#### **Preventive or Remedial Measures**

- Regular safety and health education training and disaster response drills are conducted.
- In accordance with the "Emergency Response and Disaster Prevention Guidelines," a "Disaster Prevention and Emergency Response Team" is established at each factory to ensure a swift response, minimizing the risk of injury and property damage.

#### Importance



The sustainability of a business is fundamentally dependent on the physical and mental health and well-being of its employees.

#### Policy

- Complied with occupational health and safety regulations by enhancing self-inspections and safety audits.
- Implemented safety and health training and drills to strengthen safety awareness and emergency response capabilities.
- Conducted risk assessments and establish standard operating procedures to identify and eliminate potential hazards.
- Strengthened contractor safety management to ensure construction site safety.

#### **Performance and Adjustments**

- · In 2023, no major occupational injuries occurred at TFC.
- In 2023, no occupational diseases were reported among TFC employees.
- In 2023, the Company organized awareness sessions for employees, including topics such as "Gender Equality in the Workplace," "Common Legal Pitfalls in the Workplace," and "Ending Workplace Bullying." These sessions saw a total attendance of 326 attendees.
- In 2023, a total of 23 drills were conducted, including fire drills, liquid ammonia tanker accidents, toxic chemical leaks, liquid ammonia and nitric acid pipeline leaks, dilute sulfuric acid leaks, concentrated sulfuric acid leaks, and ammonia gas leaks, with a total participation of 427 attendees.





#### About this Report

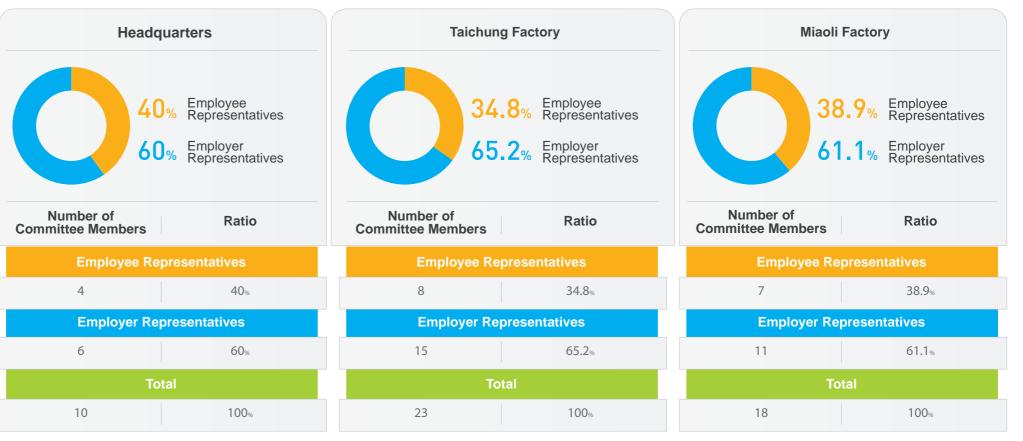
- Message from the Chairman
- Overview of the Company
- Summary of Performance in 2023
- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

Appendix

### Safety and Health Committee

TFC has established an "Occupational Safety and Health Committee," composed of both employer and employee representatives, with employees occupying no less than one-third of the seats. The committee is chaired by the President or Factory Manager and holds regular meetings every three months. The main functions of the committee are to provide recommendations on the Company's safety and health policies, as well as to review, coordinate, and propose matters related to occupational safety and health.

#### 2023 Occupational Safety and Health Committee Member Ratio



Note: The Hualien Factory is classified as a Category I enterprise. However, since the number of employees is less than 100, the Safety and Health Committee has not been established.



#### 台湾肥料股份有限公司 TAIWAN FERTILIZER CO., LTD.

#### About this Report

- Message from the Chairman
- Overview of the Company
- Summary of Performance in 2023
- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

Appendix

### Dual System Certification for Safety and Health Management

Both the Taichung and Miaoli Factories of TFC have obtained dual system certifications for ISO 45001 and CNS 45001 Occupational Safety and Health Management. These certifications ensure workplace safety and health for employees, aiming to establish hazard identification, risk assessment, and risk control systems, which are externally verified to provide a safe and healthy working environment, thus preventing accidents.

For the construction, renovation, or demolition of factories, relevant departments such as safety and engineering must conduct safety and health risk assessments during the planning and design stages. Throughout the construction process, contractors are required to strictly comply with occupational safety and health regulations. The Company also conducts unannounced inspections at various construction sites to prevent safety accidents and protect employee well-being.

## <sup>©</sup>Factory Safety and Health Management

TFC has established comprehensive safety and health management regulations and systems, serving as guidelines for operations, with the goal of achieving zero accidents and zero injuries, and ensuring employee safety.

We enhance the implementation of automatic inspections across our production facilities to ensure equipment safety. Regular environmental monitoring is conducted, and necessary safety protective equipment is provided and mandated for use by employees to prevent injuries or health hazards during work.

Additionally, we regularly conduct safety and health education training and disaster response drills to improve employees' safety knowledge and emergency response skills. Each quarter, 6S evaluations are performed at each factory to identify and mitigate potential hazards through external audits, aiming to prevent incidents and improve safety measures.

#### 2023 Safety and Health Education Training/Drill Statistics

	Safety and Health Education Training		Contractor Safety and Health Education Training		Emergency Response Drills	
	Number of Attendees	Training Hours (Hours)	Number of Attendees	Training Hours (Hours)	Number of Attendees	Training Hours (Hours)
Male	651	2,562	559	571	339	563
Female	232	582	13	13	88	181
Total	883	3,144	572	584	427	744





#### About this Report

- Message from the Chairman
- Overview of the Company
- Summary of Performance in 2023
- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

Appendix

## Hazard Identification and Incident Investigation

The Company has established an Occupational Health and Safety Management System, and all activities related to hazard identification, risk assessment, and incident investigation are conducted in accordance with the procedures outlined in the Environmental, Health, and Safety Management System.

We adhere to the provisions of Article 18 of the Occupational Safety and Health Act and Article 25 of its Enforcement Rules, which specify guidelines for "imminent danger." All employees are informed that if they encounter a situation presenting an immediate risk during work, they should promptly report it and may also retreat to a safe location. Employees are encouraged to report any safety concerns immediately to factory personnel and safety and health officers. In the event of an incident, immediate care and handling of the injured should be prioritized, followed by the necessary reporting and subsequent incident investigation.

#### Hazard Identification and Risk Assessment Process



### Safety and Health Management Performance

To implement effective safety and health management, the Safety and Health Center selects several key environmental, health, and safety indicators each year. These include Injury Rate (IR), Lost Day Rate (LDR), Occupational Disease Rate (ODR), number of emergency response drills, and number of environmental, health, and safety audits. Annual targets are set for these indicators to serve as performance evaluation standards. In 2023, no major occupational injuries were reported. Efforts to enhance safety awareness and protection measures across all units have been intensified. aiming to achieve the goal of zero accidents. Regarding workers, there is currently no control mechanism for contractors and subcontractors. The statistics provided only cover dispatched employees of TFC and do not include contractors, subcontractors, or other workers.

#### 台湾肥料股份有限公司 TAIWAN FERTILIZER CO., ITD.

About this Report

Message from the Chairman

Overview of the Company

Summary of Performance in 2023

- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management

5 Caring and Friendly Workplace for Employees

6 Co-creation of Value and Common Prosperity

Appendix

#### 2023 Employee Occupational Injury Statistics

Category	ltem		Category	ltem	
	Female	259,215	Fatality Rate Due to Occupational Injuries	Female	0
Total Work Hours	Male	990,342		Male	0
	Total	1,249,557		Total	0
Absenteeism Rate	Female	0.012%	High-Consequence	Female	0
	Male	0.055%		Male	0
	Total	0.046%		Total	0
Lost Day Rate	Female	15.43	Recordable Occupational Injury Rate (Including Fatalities and Severe Occupational Injuries)	Female	0
(LDR) – Proportion of Lost Workdays	Male	68.78		Male	4.039
	Total	57.72		Total	3.201

#### Type of Occupational Injury Traffic Accidents \ clipping and rolling hazards \ Contact with hazards

- Note1: Fatality rate due to occupational injuries= Number of fatalities due to occupational injuries / Total work hours \* 1,000,000
  - 2: High-consequence work-related injury rate = Number of high-consequence work-related injury (excluding fatalities) / Total work hours \* 1,000,000; High-consequence work-related injuries refer to injuries resulting in disability or inability to return to pre-injury health within six months.
  - 3: Recordable occupational injury rate= Number of recordable occupational injuries (including fatalities and severe occupational injuries) / Total work hours \* 1,000,000
  - 4: In 2023, there were no occupational injuries among non-employee workers (temporary employee), with total hours worked amounting to approximately 81,904 hours (males: 46,399 hours; females: 35,505 hours).
  - 5: Absenteeism rate = (Total days of absence / Total number of working days for all employees in a year) \* 100%
  - 6: Lost day rate = (Total lost workdays / Total hours worked) \* 1,000,000, rounded to two decimal places, with the third and subsequent decimal places disregarded.
  - 7: Occupational injury data includes commuting accidents involving employees.

## Contractor Safety and Health Management

To ensure smooth company operations, collaboration with contractors and other partners is essential. We place great emphasis on the safety management of contractors. TFC has established "Safety and Health Management Guidelines for Various Engineering and Contractor Operations," which are incorporated into the "Instructions to Bidders" and the "Contract for Contractor Work" to ensure compliance.

For safety regulations during contractor construction processes, the "Safety and Health Code for Contractor Construction" has been separately established. In addition to general safety regulations, high-risk activities such as hot work, working at heights, confined space operations, and pipeline equipment dismantling and repairs require work permits before commencement. Furthermore, safety tags must be placed on equipment within the work area to prevent accidents due to erroneous actions.

We hold regular coordination meetings, as legally required, with contractors from various fields to discuss and promote matters related to safety and health management, ensuring work safety is maintained. Before commencing work, contractors who have been awarded contracts must receive safety and health education and hazard communication training from the Company's safety department. They are also required to sign the "Contractor Work Safety Commitment" before beginning construction. In 2023, a total of 572 attendees attended contractor hazard communication and safety and health education training sessions.

#### 台湾肥料般佔有限公司 TAIWAN FERTILIZER CO., LTD.

- About this Report
- Message from the Chairman
- Overview of the Company
- Summary of Performance in 2023
- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- **5** Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

Appendix

## Employee Health Management

To promote the physical and mental well-being of employees, we not only maintain basic health records for all staff but have also established the "Employee Health Management Guidelines," which serve as a basis for work arrangements and improvements to the working environment. As part of our employee care and support policy, employee health examinations and health management are prioritized. The Company subsidizes annual health checkups for all employees, and family members of employees may also participate at a discounted rate.

In 2023, we partnered with the "Zhongshan District Health Service Center in Taipei" to offer free cervical smear screenings and encouraged employees from other companies in the TFC Building to participate. Under our strict occupational safety and health management system, there were no reported cases of occupational diseases among TFC employees in 2023. For employees working in high-risk environments, TFC conducts special health checkups as required by regulations to ensure employee health protection. There were no cases classified as Level 4 in the special health checkup results.

# TFC Employee Health Checkup Benefits Exceed Legal Requirements

#### 2023 Number of Employees Undergoing Specialized Health Examinations



### Health Promotion Activities

In 2023, the Company organized awareness sessions for employees, including topics such as "Gender Equality in the Workplace," "Common Legal Pitfalls in the Workplace," and "Ending Workplace Bullying." These sessions saw a total attendance of 326 attendees.



#### 台湾肥料股份有限公司 TAIWAN FERTILIZER CO., LTD.

#### About this Report

- Message from the Chairman
- Overview of the Company
- Summary of Performance in 2023
- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- **5** Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

Appendix

# 5-7 EMERGENCY RESPONSE AND TRANSPORTATION MANAGEMENT

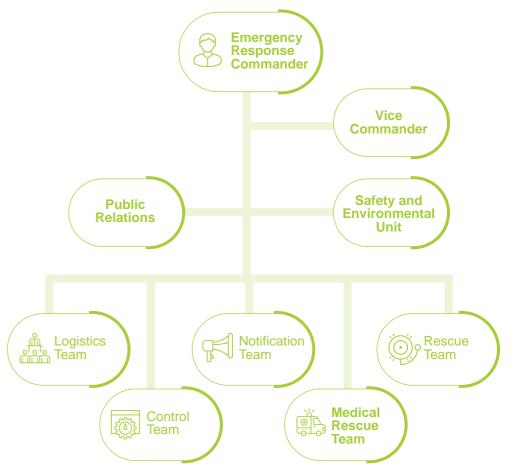
TFC ensures the safe, swift, and appropriate handling of emergencies through a comprehensive emergency response management system and thorough practical drills, safeguarding the life, health, and safety of employees, the community, and surrounding residents. All transportation activities within the production facilities are strictly managed according to internal safety protocols. After leaving the factory, transportation providers are required to adhere to the same rigorous transportation safety standards. In the event of transportation accidents, we leverage our expertise in chemicals and relevant equipment to assist in incident management, ensuring stringent oversight for the protection of life and property.

### Comprehensive Emergency Response Management System

The Company has established a comprehensive emergency response management system and organizational planning, in accordance with the "Key Points for Disaster Prevention and Emergency Response." Each factory is equipped with a "Disaster Prevention and Emergency Response Team" to follow these guidelines for managing various types of disasters and emergencies, ensuring swift action to minimize risks of injury and property damage.

Through equipment upgrades and a range of emergency response drills for different types of disasters, we enhance defensive mobilization and emergency response mechanisms, and improve the analytical and response capabilities of our emergency personnel. Additionally, we have developed post-disaster recovery plans and integrated them into the industrial zone's mutual defense system, all aimed at enhancing overall emergency response capabilities.





#### 台汽肥料股份有限公司 TAIWAN FERTILIZER CO., LTD.

About this Report

Message from the Chairman

Overview of the Company

Summary of Performance in 2023

Corporate Responsibility and Sustainable Management

2 Integrity Management and Strong Governance

3 Sustainable Agriculture and Circular Economy

4 Energy Conservation, Environmental Protection and Environmental Management

5 Caring and Friendly Workplace for Employees

6 Co-creation of Value and Common Prosperity

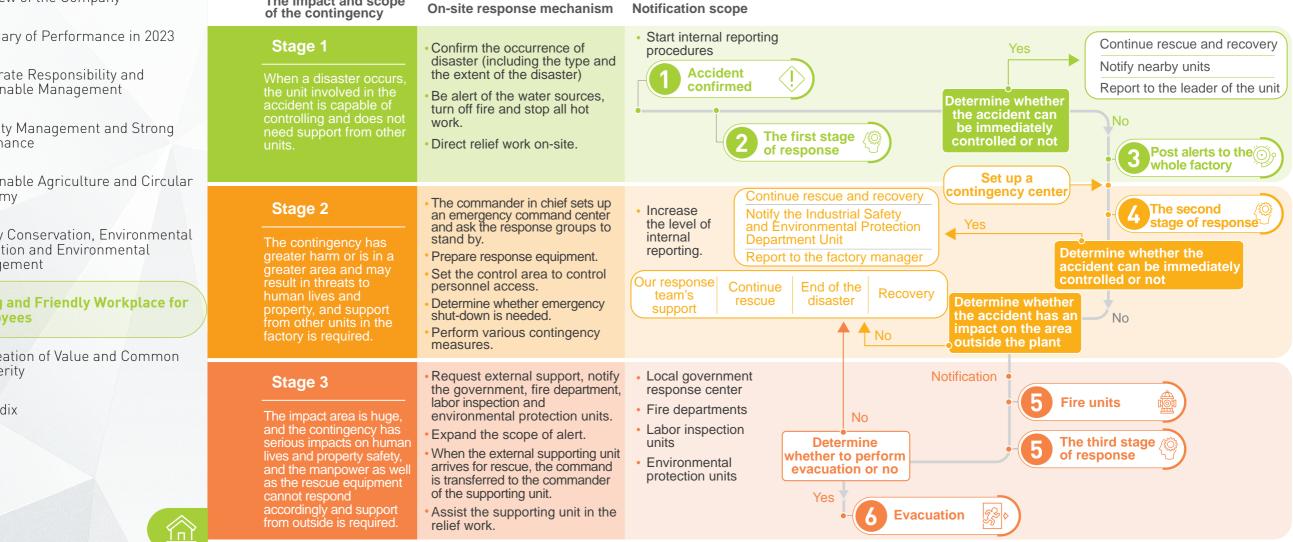
Appendix

### Disaster and Incident Classification and Response Mechanism

We have established a three-stage on-site response mechanism based on the severity and scope of the disaster. This mechanism involves progressively expanding response units and notification targets and areas according to different stages. The graded management approach ensures the rapid integration of internal and external resources, including local authorities, to implement appropriate response measures and collaboratively address and manage the disaster.

#### **Three-Stage Emergency Response Management Process**

The impact and scope



Note: Based on different stages, the scope and level of the response units and notification objects will be classified into different levels

台汽肥料股份有限公司 TAIWAN FERTILIZER CO., LTD.

About this Report

Message from the Chairman

Overview of the Company

Summary of Performance in 2023

- Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management

5 Caring and Friendly Workplace for Employees

6 Co-creation of Value and Common Prosperity

Appendix

# Disaster Incident Investigation and Improvement Procedures

Work

• The responsible unit for the incident prepares a "TFC Incident Injury Investigation Report" (including investigation results and remedy actions) in accordance with the "Incident Investigation Procedure."

> • Each factory's safety unit assigns personnel to investigate the incident site within one day of the emergency event. They are responsible for providing a report detailing the cause of the incident. the investigation findings, and proposed corrective measures.





and

Each factory reviews whether similar potential hazards exist and implements improvements to prevent recurrence of similar incidents.

## Disaster Emergency Response Drills

At the end of each year, the Company requires all production facilities to submit plans for various disaster response and emergency drills for the upcoming year, along with budgets for the acquisition of protective equipment. These drills are conducted according to a predetermined schedule.

Upon completion of each disaster emergency response drill, the factory's safety and health unit is responsible for consolidating feedback from the participating departments and preparing a review report. Based on the deficiencies identified during the drill, relevant response procedures are revised to enhance the capability to manage emergency situations. In 2023, a total of 23 drills were conducted, including fire drills, liquid ammonia tanker accidents, toxic chemical leaks, liquid ammonia and nitric acid pipeline leaks, dilute sulfuric acid leaks, concentrated sulfuric acid leaks, and ammonia gas leaks, with a total participation of 427 attendees.

#### **Emergency Response Drill for Ammonia Tanker Accident**



1. Simulate a liquid ammonia leakage scenario.

2. Deploy fire hoses in the affected area for water spraying.





3. Response personnel don Level A protective suits for emergency operations.

4. During the drill, response personnel will carry out leak stoppage at the leakage point on-site.

#### 台湾肥料股份有限公司 TAIWAN FERTILIZER CO., LTD.

#### About this Report

- Message from the Chairman
- Overview of the Company
- Summary of Performance in 2023
- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- **5** Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

Appendix

## Pipeline Management

The Company follows the national standard CNS 9329 "Pipeline Identification" to establish the "Pipeline Identification Guidelines for Associated Units." The pipelines within the factory are marked with arrows, colors, and text to provide on-site personnel with quick access to information about the flow direction, type, name, status, and hazard level of the substances inside the pipelines. Each factory's designated unit is responsible for the maintenance and upkeep of the pipelines to ensure their proper operation.

### Material Unloading and Storage Operations Management

TFC relies heavily on importing raw materials from overseas, primarily through maritime transportation. The Company has established comprehensive management regulations for the unloading, storage, and transportation of chemicals such as ammonia, sulfuric acid, nitric acid, and phosphoric acid, with a strong emphasis on safety and health management throughout each stage of the transportation process. In addition, standard operating procedures (SOPs) have been developed and strictly followed for the unloading and storage operations of materials transported by ship to ensure the safety of loading and unloading activities. TFC adheres to a rigorous approach in managing maritime unloading and storage operations. In 2023, no major accidents occurred during the transportation or unloading processes.

#### Key Focus Areas in Unloading and Storage Operations Management

#### **Before Operations**

- Monitoring pipeline temperature during unloading
- Monitoring weather conditions; suspend operations during adverse weather
- Conducting thorough inspections of unloading and storage equipment on-site
- Ensuring safety protective gear is properly worn by all personnel

#### **During Operations**

- · Regularly inspecting storage tanks, pipelines, and fittings for any leaks
- Periodically checking pipeline pressure gauges to ensure pressure is within normal range

#### After Operations

- · Removal of residual materials from pipelines after unloading
- · Cleaning and organizing the site post-unloading
- Conducting routine maintenance and inspection of all unloading and storage equipment

### Tanker Transportation Management

The transportation of chemicals for TFC is arranged by the customers, who coordinate with carriers (tanker trucks) to collect goods from various production factories. In terms of chemical transportation management, TFC has established the "Industrial Safety and Health Management Guidelines" and the "Safety Management Key Points for Entrusted Road Transportation of Hazardous Materials." Upon entering the factory premises, transportation vehicles must comply with safety and health regulations, including traffic routes and fire control measures. The Company strictly requires customers to ensure that carriers continue to adhere to legal requirements and company regulations after leaving the premises to prevent transportation accidents.



#### 台湾肥料股份有限公司 TAIWAN FERTILIZER CO., ITD.

AIWAN TERHEIZER CO., EIE

About this Report

Message from the Chairman

Overview of the Company

Summary of Performance in 2023

- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management

5 Caring and Friendly Workplace for Employees

6 Co-creation of Value and Common Prosperity

Appendix

#### **Tanker Transportation Management Items**

Legal Compliance	음≣ Personnel Management
Strict requirements are imposed on carriers to comply with government regulations and TFC's internal management policies when handling hazardous materials transportation. Carriers must also undergo thorough training, inspection, and supervision by the relevant authorities and the Company. All transportation vehicles must pass inspections conducted by traffic regulatory agencies and obtain a "Permit to Operate" issued by the local highway authority before being allowed to operate.	<ul> <li>Carriers must employ drivers who are licensed, have completed hazardous materials transportation training, and are physically and mentally fit for the role.</li> <li>Before a carrier's first entry into the factory, the Company owner or designated representative, along with the drivers, must undergo safety and health training and hazard communication provided by the safety and environmental protection department of each factory.</li> <li>Before conducting loading or unloading operations, tanker drivers and on-site personnel must ensure that they are properly equipped with full protective gear.</li> </ul>
Equipment Management	Emergency Response Management and Support Measures
The necessary emergency response equipment, including rescue tools and safety gear, must be fully stocked and inspected, maintained, and tested monthly, with records kept to ensure all equipment remains in optimal condition.	<ul> <li>Regular training is provided to the rescue team members, with at least one emergency drill conducted annually to enhance their emergency response skills and capabilities.</li> </ul>
Vehicles and tankers must undergo daily inspections, with constant monitoring of safety valves, pressure gauges, and critical vehicle components such as brakes and steering. Before and after loading and unloading, safety inspections must be conducted, including checks of the tanker's pressure gauges, safety valves, loading/unloading valves, pressure gauges, and the remeval of unloading bases before driving	<ul> <li>Upon receiving notification of a tanker accident, an emergency rescue team is immediately formed to assess the situation and prepare the necessary rescue equipment and protective gear.</li> </ul>
pipelines, grounding connections, and the removal of unloading hoses before driving. Tanker transportation should avoid peak traffic hours to reduce risks.	<ul> <li>At the accident site, the rescue team operates under the direction of the incident commander, assisting in the handling of the incident.</li> </ul>
Depending on the nature of the hazardous materials being transported, carriers must	<ul> <li>After the incident has been resolved, a detailed written report</li> </ul>
equip the vehicles with adequate emergency response equipment and personal protective gear.	documenting the situation and the rescue operations is submitted to the Company.

## Regional Toxic and Hazardous Substance Coordination Organization

TFC's Taichung and Miaoli Factories are members of the "Central Region Toxic and Hazardous Substance Coordination Organization" in compliance with the "Toxic and Concerned Chemical Substances Management Act." They manage the registration and deregistration of existing chemical substances according to the "New and Existing Chemical Substances Registration Regulations," with a total of 15 substances registered to date.

All factories regularly participate in training and drills organized by the joint defense organization, strengthening employees' emergency response and self-safety management capabilities. They also engage in mutual observation and learning in occupational safety, health, and environmental protection, enhancing the safety and health protection of operating personnel. In the event of an accident, they can mutually assist in disaster response by adhering to the support agreement, effectively achieving accident control, reducing losses, and preventing secondary hazards.

CO-CREATION OF VALUE AND COMMON PROSPERITY

6-1 Product Responsibility

6-2 Customer-Centric Service

6-3 Supplier Management and

6-5 Implementation of Corporate

6-7 Community Harmony and Mutual

Social Responsibility

6-6 EESG Key Case Studies

Prosperity

Procurement

6-4 Promoting Sustainable Agriculture Education

#### 台:字肥料设修有限公司 TAIWAN FERTILIZER CO., LTD.

#### About this Report

Message from the Chairman

Overview of the Company

Summary of Performance in 2023

- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

Appendix



#### 台汽肥料股份有限公司 TAIWAN FERTILIZER CO., LTD.

#### About this Report

Message from the Chairman

Overview of the Company

Summary of Performance in 2023

Corporate Responsibility and Sustainable Management

2 Integrity Management and Strong Governance

- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees

6 Co-creation of Value and Common **Prosperity** 

Appendix



If company secrets are leaked by employees or exposed through hacker attacks, it could result in business interruptions or significant financial losses.



Dedicated to reducing losses caused by network attacks, social engineering attacks, denial-of-service attacks, and data breaches, as well as protecting the Company's reputation.

Engage third parties to conduct internal control audits of the information environment and assess information processing procedures to ensure their adequacy and effectiveness.

#### **Preventive or Remedial Measures**

- · Implemented network firewalls and intrusion detection systems to proactively block known threats.
- Conduct 2 information security awareness sessions and 2 social engineering drills each year to enhance employees' information security awareness.
- Regularly perform backup operations, ensuring data and systems are backed up to off-site disaster recovery facilities, and conduct periodic disaster recovery drills.

#### Importance



Company operations rely on network communications and various information systems. In the event of a hacker attack, this could result in business interruptions or significant financial losses.

#### Policy

Establish an Information Security Management Committee to formulate information security policies and procedures, and conduct regular awareness and training programs.

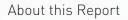
#### **Performance and Adjustments**

- In 2023, no significant security deficiencies were reported by TFC regarding information security.
- · In 2023, 1 Information Security Management Committee meeting was held.
- · In 2023, a total of 2 "Information Security Training" sessions were conducted with 342 participants and a total training duration of 6 hours.
- In 2023, 2 social engineering drills were carried out with a 100% coverage rate among employees.
- · In 2023, 2 disaster recovery drills were also conducted.



#### 台湾肥料设化有限公司 TAIWAN FERTILIZER CO., LTD.

# 6-1 PRODUCT RESPONSIBILITY



Message from the Chairman

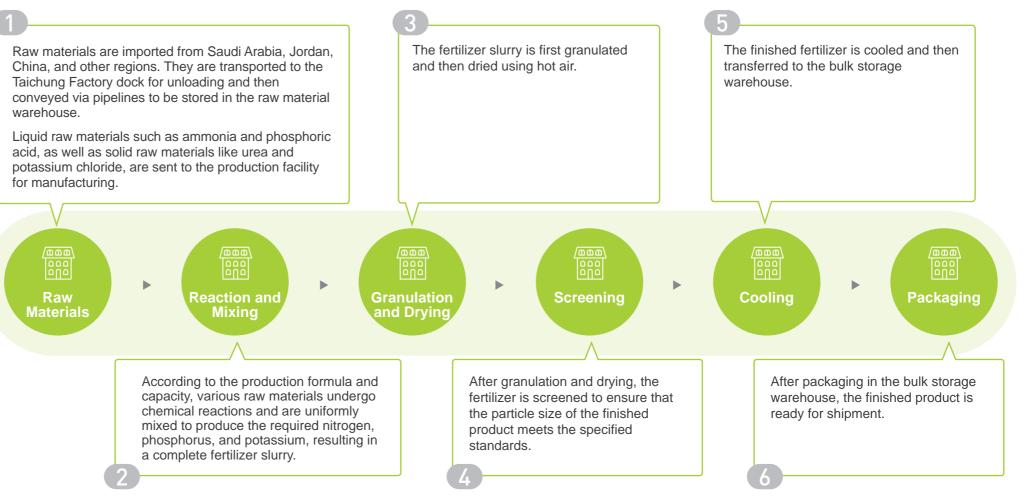
- Overview of the Company
- Summary of Performance in 2023
- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

Appendix



In alignment with our core values of "Integrity, Innovation, and Responsibility," we continuously innovate our technologies and services to provide customers with high-quality, safe, and healthy products. Prioritizing customer needs and expectations, we enhance our customer service mechanisms and establish long-term, stable partnerships with our clients.

#### **Fertilizer Production Process**



#### 台汽肥料股份有限公司 TAIWAN FERTILIZER CO., LTD.

#### About this Report

Message from the Chairman

Overview of the Company

Summary of Performance in 2023

Corporate Responsibility and Sustainable Management

- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees

6 Co-creation of Value and Common Prosperity

Appendix

## **Product Quality Management**

TFC has established a "Quality Management Operating Standard" to comprehensively enhance product quality. This standard encompasses all stages from raw material procurement to production completion, integrating management and monitoring throughout. Quality control is conducted in three main areas: material quality control, process quality control, and finished product quality control. Dedicated units are assigned to oversee each factory, and each factory has its own quality control unit responsible for internal inspections, ensuring effective implementation of quality management practices.

The Taichung and Miaoli Factories have implemented the ISO 9001 international guality management system and have obtained certification. By formulating quality policy guidelines and implementing the PDCA cycle for quality planning, assurance, and improvement, the Company aims to achieve its quality objectives. Additionally, each factory is required to hold regular quality review meetings to ensure that the management system operates continuously, effectively, and appropriately.

#### Fertilizer products Deep ocean water (DOW) 100% 100% products 100% Chemical products Salt products 100% 5% Cosmetics Concentrate 100% ISO 22000 HACCP 100% Deep ocean water (DOW) 100% Deep ocean water (DOW) products products Seaweed related products HACCE 100% Seaweed related products 100% 100% 100% Health food Health food 100% Salt products Salt products 100% Concentrate 100% Concentrate 100% HALAL SNQ Deep ocean water (DOW) Deep ocean water (DOW) 33% 100% products products Concentrate 29% Salt products 100% Health food 30% Concentrate 57% 3

GHP

Health Food Labe

products

Cosmetics

Deep ocean water (DOW)

ISO 22716 or Voluntary Cosmetic

Good Manufacturing Practice

33%

95%

Proportion of Products with Food Safety Certification or Food Safety Labels

**ISO 9001** 

TQF

products

products

**Monde Selection** 

Deep ocean water (DOW)

Deep ocean water (DOW)

(International Quality Institute)

TOF

01194040

Note: Deep Ocean Water Hai-Kuan 1400 was honored with the Bronze Award in the 2015 Monde Selection

33%

33%



#### About this Report

- Message from the Chairman
- Overview of the Company
- Summary of Performance in 2023
- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

Appendix

# Product Labeling and Marketing

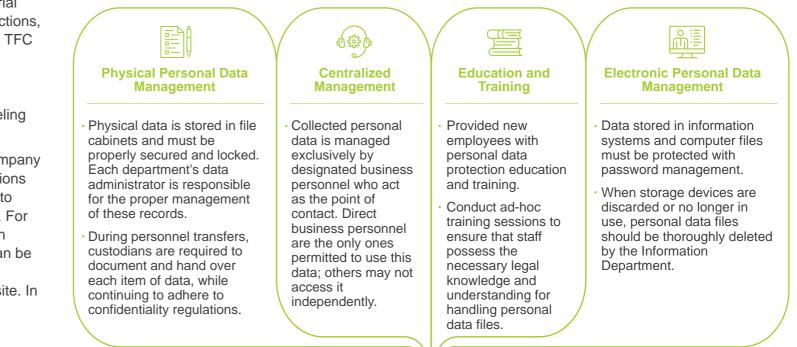
To ensure that farmers and consumers use products correctly, TFC complies with regulations such as the "Trademark Act" and the "Fertilizer Management Act" by providing complete information on packaging, including raw material names, composition, usage instructions, and application rates. Additionally, TFC cooperates with the Ministry of Agriculture and local agricultural authorities for regular and ad-hoc inspections to ensure product labeling complies with legal requirements.

During product promotion, the Company strictly adheres to national regulations and provides detailed information to consumers about product content. For public convenience, information on fertilizer usage and precautions can be accessed through the "Fertilizer Classroom" on TFC's official website. In 2023, there were no penalties or violations related to marketing regulations.

## **Customer Privacy Management**

To enhance the protection of customer privacy and business information, the Company has established a "Personal Data Protection Management Committee" to formulate and implement personal data management and protection policies and systems. The Company strictly adheres to the "Confidentiality Implementation Guidelines" and "Personal Data Protection Management Operations Guidelines" to ensure the security of business secrets and safeguard company interests.

#### **TFC Personal Data Protection Management Methods**



#### Results

The Company conducts regular internal audits to ensure compliance. In 2023, training sessions related to personal data protection management were held for committee members and employees, with a total of 141 participants and a cumulative training duration of 212 hours.

As of 2023, TFC has not encountered any grievances related to violations of customer privacy rights.



#### 台湾肥料設修有限公司 TAIWAN FERTILIZER CO., LTD.

#### About this Report

Message from the Chairman

Overview of the Company

Summary of Performance in 2023

- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

<u>\_\_\_\_</u>

Appendix

### Information Security Protection

TFC places great emphasis on information security protection. The Company has established an Information Security Management Committee (hereinafter referred to as the ISMC), with the President serving as the Chairperson. The Vice Chairperson is the IT Vice President, and the Executive Secretary is the IT Director. The committee members consist of all senior management personnel, and dedicated information security officers and personnel are appointed to oversee information security matters.

#### **Information Security Management Committee**

The Information Security Management Committee is primarily responsible for formulating and reviewing information security management policies and systems. Its duties include developing internal information security awareness initiatives and training plans, assessing the compliance and appropriateness of the information security management system, and evaluating the effectiveness of the Company's information security operations. To enhance cybersecurity defenses by utilizing network security intelligence, TFC joined the "Taiwan CERT/CSIRT" alliance in Jan. 2022 and the "Taiwan Information Security Officer Alliance" in Dec. 2022. Through these alliances, the Company exchanges cybersecurity intelligence and discusses security issues related to operations or critical cybersecurity topics recently identified. This collaborative effort aims to strengthen joint defense mechanisms and improve Taiwan's overall cybersecurity capabilities.



#### Implementation of Management Systems and Cultivation of an Information Security Culture

The Company regularly conducts information security training sessions and social engineering exercises throughout the year. These initiatives aim to strengthen employees' ability to respond to information security risks and raise awareness of security practices. New employees are also provided with educational training to prevent the leakage of personal and confidential information, which could impact the Company's operations and customer interests.

#### Information Security Risk Assessment and Analysis

In 2023, TFC did not experience any significant deficiencies in information security. There were no violations related to information security, customer data breaches, or incidents leading to fines for major security breaches. Additionally, no grievances were filed by third parties or regulatory authorities due to violations of customer personal data protection or data loss, nor were there any legal actions resulting from such issues. By actively reinforcing its information security and confidential information protection mechanisms, TFC maintains its competitive edge and safeguards the interests of customers and business partners.

#### 台湾肥料政化有限公司 TAIWAN FERTILIZER CO., ITD.



Message from the Chairman

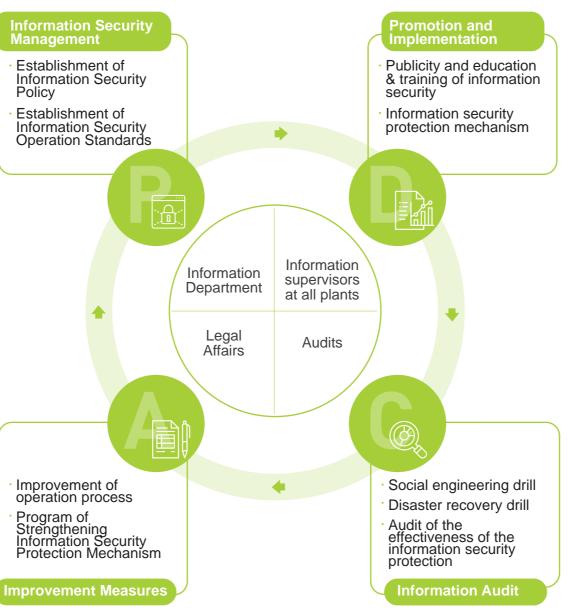
Overview of the Company

Summary of Performance in 2023

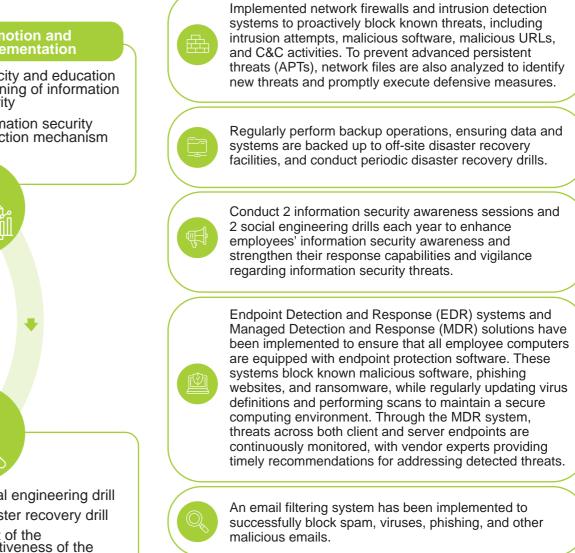
- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

Appendix

#### **Information Security Risk Framework**



#### **Management Measures**



 $\square$ 

To control access to internal and external systems and manage data transmission rights, the organization has also implemented file sharing systems, network access control operations, bandwidth management, and software asset management procedures.

#### 台污肥料设化有限公司 TAIWAN FERTILIZER CO., LTD.

## 6-2 CUSTOMER-CENTRIC SERVICE

About this Report

Message from the Chairman

Overview of the Company

Summary of Performance in 2023

1 Corporate Responsibility and Sustainable Management

- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees

6 Co-creation of Value and Common Prosperity

Appendix

TFC upholds a customer-first philosophy by establishing a comprehensive service network and setting up service points in various regions, including an 0800 customer service hotline. In alignment with contemporary trends, we leverage online platforms and social media to create diverse customer service channels, enhancing our complaint handling mechanisms. We ensure prompt responses and resolution of customer feedback. Additionally, through face-to-face interactions with farmers, we gather valuable feedback and suggestions, which are then transformed into innovative products and services.



Established an 0800 customer service hotline and utilized online platforms and social media to create diverse customer service channels, enhancing our grievance handling mechanisms to ensure prompt response and resolution of customer feedback.

#### **Providing Diverse Platforms to Serve Customers across Various Regions**

#### ② Real-Time Interaction via Online Communities

- TFC's official website, "Fertilizer Classroom," provides comprehensive information on the use of various fertilizers.
- The Facebook fan page, "TFC Agricultural Promotion Center," introduces the characteristics and usage instructions of different fertilizer products, as well as fertilization optimization practices, product briefings, and demonstration fields. Additionally, it regularly shares updates on agricultural advancements both domestically and internationally, helping Taiwanese farmers stay aligned with global trends.

#### $\mathbb{Q}_{\!\mathrm{H}}^\circ$ Nationwide Service Coverage through Three-Region Service Network

Service points are established in the northern, central, and southern regions of Taiwan. Our regional sales personnel are dedicated and possess extensive knowledge of fertilizers. Services offered include handling fertilizer sales inquiries, coordinating supply, providing product usage guidance, and managing customer grievances.

pio	viaing product usag	je gulue		iging customer	gnevan	000.				
	Northern Regional Sales Office		Central Regional Sales Office		Southern Regional Sales Office					
	Tel									
	(037)269-345		(05)591-6992			(07)222-5717				
			Service	e Areas						
Та	aichung, Miaoli, Hsir aoyuan, Taipei, New <sup>-</sup> eelung, Yilan, Kinmer	Taipei,				tung, Kaohsiung, an, Hualien, Taitung				
	Customer Service Hotline									
	ertilizer Products Sustomer Service Hotline			Electronic-G Chemica Customer Se Hotline	ls ervice	Real Estate Rental and Sales Customer Service				
			Customer Se	ervice Hotline						
	0800-883-300	(02	)2542-2231	(02)2542-2231		(02)2542-2231				
			Respons	sible Unit						
S	Sales Department I	Sale	s Department I	Sales Depart I	tment	Property Development and Management Department				





- About this Report
- Message from the Chairman
- Overview of the Company
- Summary of Performance in 2023
- Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

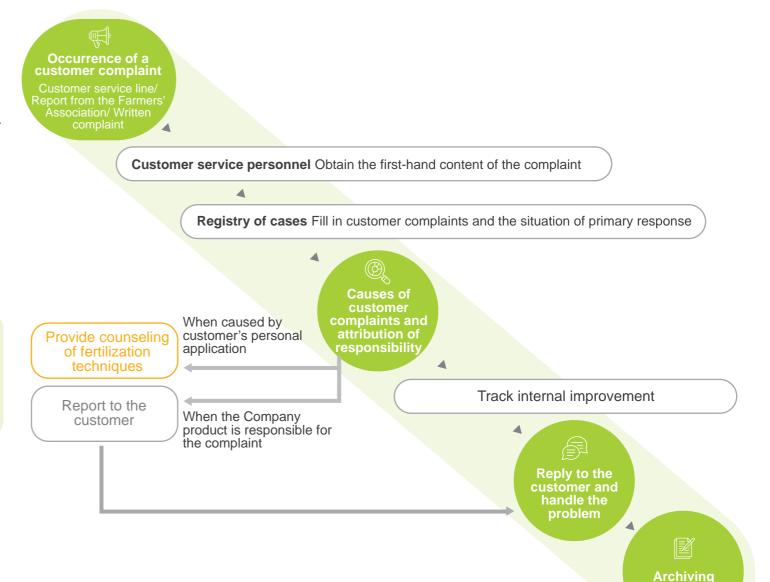
Appendix



The Company adheres to the "Grievance Management" procedures outlined in the "Business Management Guidelines" as the basis for handling customer grievances. Upon receiving a customer grievance, the Sales Department is required to assign personnel to address the issue promptly. If necessary, they may visit the site or coordinate with the Production Department to resolve the matter and complete a "Customer Grievance Handling Form." In addition to addressing the grievance, we continuously require the production unit to improve quality and prevent the recurrence of similar issues.

Under our ongoing efforts to enhance customer relationship management, there was only 1 grievance case in 0 0 2023.





#### About this Report

- Message from the Chairman
- Overview of the Company
- Summary of Performance in 2023
- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees

6 Co-creation of Value and Common Prosperity

Appendix

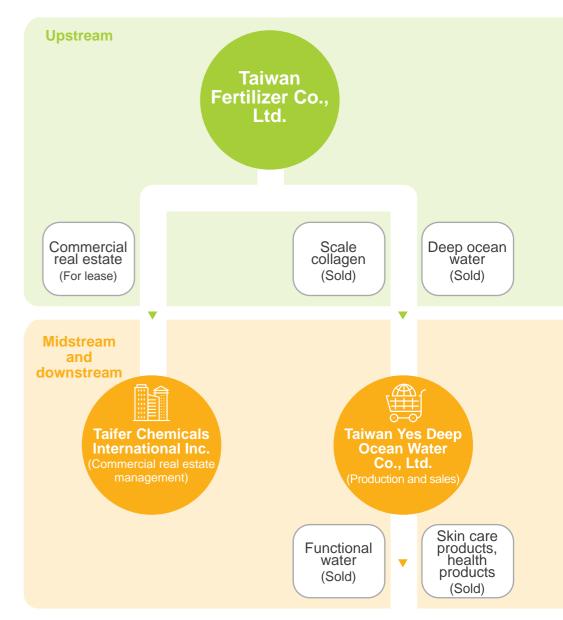
## 6-3 SUPPLIER MANAGEMENT AND PROCUREMENT

Supply chain management is a critical component of the operating strategy at TFC. Through the diversified development of the internal supply chain, we create unique value in the market. We enhance our external supplier management system by leveraging our internal system expertise and progressively integrating ESG principles. This approach fosters a sustainable growth value chain with our suppliers and leads Taiwan's industry toward simultaneous advancement.

The supply chain within TFC is divided into "External Supply Chain" and "Internal Supply Chain." The External Supply Chain primarily focuses on the fertilizer, chemical products, and electronic-grade chemicals businesses. The Internal Supply Chain, on the other hand, is centered on real estate development and the distribution of health and wellness products, striving to build a comprehensive quality management and supplier management system.

# Internal Supply Chain Management

TFC utilizes the Group's diversified business model, collaborating with wholly-owned subsidiaries to enter various business sectors and established an "Internal Supply Chain System" encompassing health and wellness products and real estate development. TFC acts as a provider of upstream raw materials and products, supplying and managing operations for downstream subsidiaries. Through the Group's structure, TFC exerts substantial control, rigorously managing each phase from front-end research and development to end-stage sales, ensuring product safety and quality.





#### About this Report

- Message from the Chairman
- Overview of the Company
- Summary of Performance in 2023
- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

Appendix

### External Supplier Management

In the value chain of the fertilizer and chemical industry in Taiwan, TFC occupies a midstream production and supply role. Due to Taiwan's scarcity of natural resources, fertilizer raw materials are almost entirely reliant on imports. After purchasing fertilizer raw materials from foreign suppliers, TFC produces and manufactures products such as nitric acid, superphosphate, sulfuric acid, sulfonic acid, ammonium phosphate, and compound fertilizers. The fertilizer products are then sold to agricultural users through fertilizer distributors, while the chemical raw materials are sold to downstream industrial users for the production of end-use petrochemical products. Additionally, raw materials imported by TFC, such as anhydrous ammonia, are also directly sold to industrial users.

### **TFC Fertilizer and Chemical Industry Value Chain**

#### Upstream Raw Materials

Liquid Ammonia, Urea, Potassium Chloride, Potassium Sulfate, Phosphate, Sulfur Melt

#### Midstream Products

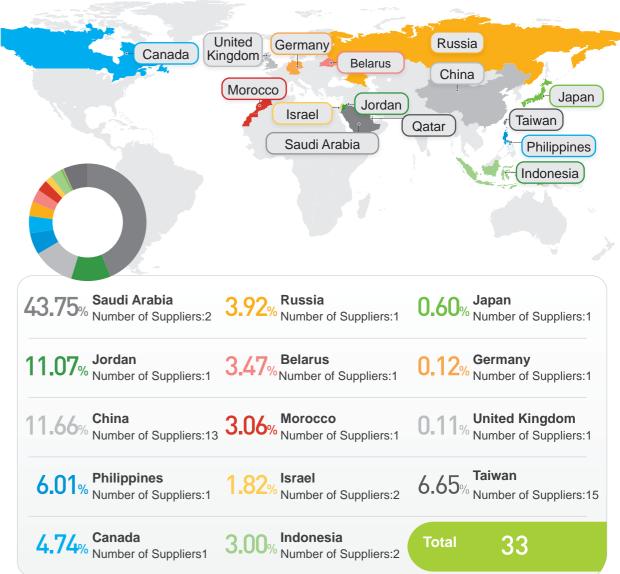
Nitric Acid, Calcium Superphosphate, Sulfuric Acid, Ammonium Sulfate, Sulfonic Acid, Melamine, Nitrophosphate Compound Fertilizer, and Phosphorous Compound Fertilizer

#### Downstream Applications

Agricultural UsersFarmers' Associations, Fertilizer Distributors,<br/>FarmersIndustrial UsersFertilizer Industry, Electronics Industry, Food<br/>Industry, Power Generation Industry,<br/>Environmental Protection Industry, Chemical

Industry, Steel Industry

## **Global Distribution of External Raw Material Suppliers by Number and Procurement Amount Percentage in 2023**



About this Report

Message from the Chairman

Overview of the Company

Summary of Performance in 2023

- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees

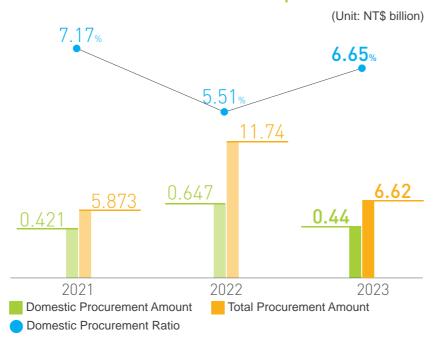
6 Co-creation of Value and Common Prosperity

Appendix

### Local Procurement

The Company's fertilizer production materials primarily consist of natural minerals or natural gas-derived products that are lacking in Taiwan, necessitating procurement from international suppliers. In 2023, TFC's total procurement amounted to approximately NT\$6.62 billion, with NT\$290 million allocated for sourcing raw materials produced in Taiwan or engaging with local suppliers. An additional NT\$150 million was spent on purchasing fertilizer packaging bags produced in Taiwan, with suppliers predominantly located in Yunlin and Changhua counties in central and southern Taiwan. TFC prioritizes the procurement of domestic products in all procurement activities, supporting the development of small and medium-sized enterprises in Taiwan. We collaborate with local businesses to create job opportunities and support the livelihoods of local families. Compared to 2022, the proportion of domestic procurement increased by 1.14% in 2023. However, the procurement amount experienced a decline due to the softening of international raw material prices.

#### Local Procurement Amount and Proportion



### Supplier Selection Principles

Our upstream raw materials, such as liquid ammonia, urea, potassium chloride, and phosphate, are largely dependent on international imports. Most of our upstream suppliers are long-term partners with a solid track record of quality and reputation. In terms of downstream clients, we maintain stable and long-term business relationships with clients in the fertilizer, chemical, and electronic-grade chemical sectors.

To effectively implement our external supplier management system, we have established the "Material Management Guidelines" and the "Procedures for Evaluating New Bulk Raw Material Suppliers." These guidelines and procedures ensure that supplier development, selection, and evaluation adhere to standardized practices, thereby stabilizing material quality and securing supply sources. Additionally, we encourage our supply chain partners to actively engage in environmental protection and human rights issues, fostering a sustainable supply chain.

Supplier selection and evaluation criteria are primarily based on performance capability, price, quality, and safety, supplemented by the following considerations. We select suppliers who align with our sustainability goals and principles, using these criteria as a reference for supplier assessment and selection. We also ensure that our suppliers adhere to local corporate governance, environmental protection, and labor rights regulations, maintain sustainable operations, uphold business ethics, and take responsibility for environmental protection, safety and health in production processes, and social human rights issues. This approach ensures the delivery of high-quality products and services.

About this Report

Message from the Chairman

Overview of the Company

Summary of Performance in 2023

- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

Appendix



To achieve our sustainable development goals, the Company ensures that suppliers adhere to legal requirements, meet social standards, positively address environmental protection and social issues, and proactively assume corporate social responsibility while continuously improving and enhancing their practices.

## Promoting Supplier Self-Assessment

In 2023, TFC continued to promote supplier self-assessment to track potential risks and further manage them. Based on the results of the supplier self-assessment, we analyzed and categorized suppliers' evaluation scores into three levels: Excellent, Qualified, and Needs Improvement. This year, we introduced a total of 30 suppliers. According to the scoring results, suppliers with a total self-assessment score above 85 are categorized as Excellent, with 26 suppliers meeting this standard, while 4 suppliers scored between 60 and 84, qualifying as Qualified.

TFC conducts an annual self-assessment survey on suppliers' corporate sustainable development (ESG) status. Historical supplier evaluation results have shown that, across environmental, labor rights, human rights, social, and product responsibility aspects, all areas have exceeded the Qualified threshold.

In 2023, TFC did not receive any grievances or reports of legal violations from major suppliers due to environmental, labor, human rights, or social impact issues.

We continue to implement and refine our supplier corporate sustainable development (ESG) management assessments by setting short-, medium-, and long-term management goals. We will also continue to enhance our supplier management practices, driving our supplier partners to jointly address ESG-related sustainability issues and achieve sustainable growth and mutual benefits.



About this Report

Message from the Chairman

Overview of the Company

Summary of Performance in 2023

- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees

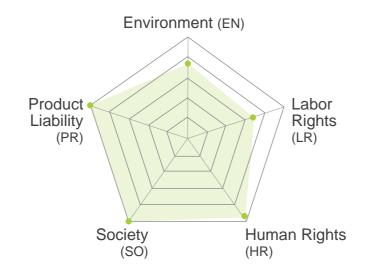
6 Co-creation of Value and Common Prosperity

Appendix

#### Supplier Information Disclosure Levels



#### **Supplier Information Disclosure Scores by Dimension**



### Contract Manufacturing Management

To ensure the quality and safety of TFC products, we manage contract manufacturing quality through the "Outsourcing Quality Management Guidelines." The "Technical Department" is responsible for quality management and oversees regular audits conducted by each outsourcing unit. The Company has 3 contract manufacturers, primarily assisting in the production of certain fertilizer chemical products. In 2023, we conducted 1 audit of our contract manufacturers, which passed the inspection.

#### **Contract Manufacturing Management Approaches**

#### Outsourcing Contract Manufacturer Selection

Select reputable and high-performing manufacturers. Currently, there are a total of 3 contract manufacturers.

#### Product Raw Material Control

Contract manufacturers are required to provide complete product formulations, full ingredient specifications (including supplier information), ingredient efficacy, and relevant certification documentation. Quality requirements and procurement control methods must be clearly stated, and inspection reports or affidavits must be provided to avoid violations of relevant regulations or any potential harm to consumers.

#### Production Process Audits

During the initial production run, product development personnel visit the contract manufacturers to understand the production process. For formal mass production, process conditions and control specifications must be ensured.

#### Product Specifications

Establish clear product specifications (standards or documentation), define quality requirements, control points, control and inspection methods, and acceptance criteria. Each batch should be sampled and sent to the Quality Assurance and Hygiene Department for inspection to confirm batch quality.

### Audit Team

The "Technical Department" drives quality management and conducts quality education and training. Personnel from various units undergo training by ISO auditors or supplier management specialists, establishing a human resources pool for auditors and ensuring thorough auditing.

#### About this Report

- Message from the Chairman
- Overview of the Company
- Summary of Performance in 2023
- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

Appendix

## **6-4 PROMOTING SUSTAINABLE AGRICULTURE EDUCATION**

Sustainable land use is closely related to sustainable agricultural environments. As a leading company in Taiwan's fertilizer industry, TFC recognizes the importance of sustainable agriculture education. During our promotional and educational activities across various regions, we not only provide farmers with professional knowledge on crop cultivation but also, based on agricultural science, recommend the use of high-quality and suitable agricultural materials. Our goal is for farmers to reduce fertilizer usage while producing safe, high-quality crops, thus achieving cost savings, time efficiency, labor reduction, and environmental protection in agriculture.

### **Promoting fertilization optimization Practices**

TFC holds frequent workshops on fertilization optimization practices in various agricultural townships each year, advocating that farmers adjust their fertilizer usage, product selection, application methods, and timing according to different farming environments and crop types. This promotes the concept of applying the "right amount of fertilizer at the right time." To provide faster and more efficient services to farmers, the Company has expanded its service platforms by increasing its presence on social media (Facebook fan page: TFC Agricultural Promotion Center) and enhancing telephone and online support. These efforts enable convenient and rapid access to a wide range of agricultural technical services through online platforms.

# Field Observation Meetings, and Online Services

In recent years, TFC has responded to changes in farmers' cultivation practices by introducing a variety of high-quality fertilizer materials, helping farmers transition to environmentally friendly and safe farming methods. Regular fertilizer demonstration fields for safe or organic farming practices are held in agricultural towns across the country, translating classroom knowledge into practical field applications. In 2023, TFC intensified the promotion of new fertilizers, conducting a total of 305 events, including crop fertilization efficacy trials, demonstration observation sessions, and new product seminars nationwide. Online services (via Facebook page and telephone) were provided a total of 283 times.

# Promoting New Fertilizer Solutions for Sustainable Agriculture

In line with industry trends, TFC introduced a new type of controlled-release compound fertilizer in 2021, designed to reduce the frequency of fertilization for farmers. The multi-stage release of nutrients prevents nutrient loss, enhances crop nutrient utilization, reduces labor, and minimizes environmental pollution caused by fertilization.

In 2023, we actively promoted carbon reduction and net-zero emissions initiatives, including continued fertilization optimization workshops, field trials, and the advancement of controlled-release compound fertilizers. The Company also focused on revitalizing domestic organic materials and exploring ways to incorporate agricultural resources into compound fertilizers. TFC remains committed to developing and promoting innovative fertilizers that help farmers save costs, time, and labor while protecting the environment, ultimately advancing Taiwan's agricultural soils towards the goal of sustainable use.



#### 台行肥料设化有限公司 TAIWAN FERTILIZER CO., LTD.

#### About this Report

Message from the Chairman

Overview of the Company

Summary of Performance in 2023

**Social Impact** 

- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

Appendix

### **Contributions and Achievements of Fertilization Optimization**

For many years, TFC has been dedicated to promoting fertilization optimization education and organizing fertilizer demonstration fields, consistently investing human resources and financial support. According to statistics, over the past three years, approximately 5,315 personnel were involved in promotional activities, with over 42,683 farmers participating. The total implementation cost amounted to NT\$15,496,913, during which 1,594 fertilization optimization seminars, demonstration fields, and online services were successfully conducted, yielding significant results.

Number of Fertilization Optimization Workshops and Demonstration Fields Held and Their

Fertilization Optimization Workshops Internal Manpower Investment External Manpower Investment and Demonstration Fields (person-times) (person-times) 588 1.790 1.761 1,764 2.352 2,169 2,135 507 499 2021 2022 2023 2021 2022 2023 2021 2022 2023 Execution Budget (NT\$) Number of Farmers Directly Engaged 5,326,104 15,876 5,044,964 5,125,845 13,510 13,297 2021 2023 2022 2021 2022 2023



About this Report

#### Message from the Chairman

Overview of the Company

Summary of Performance in 2023

1 Corporate Responsibility and Sustainable Management

- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees

6 Co-creation of Value and Common Prosperity

Appendix

## 6-5 IMPLEMENTATION OF CORPORATE SOCIAL RESPONSIBILITY

### Charitable Contributions by TFC and its Foundation

In addition to its core business of fertilizer production and sales, TFC established the TFC Foundation in 2007 to further its commitment to supporting rural communities and promoting sustainable agricultural development. The Foundation upholds the principles of public welfare and corporate responsibility, continuously nurturing talent in Taiwan's agricultural sector and fostering innovation in rural areas.

#### In 2023

TFC's total charitable contributions amounted to NT\$33,475,890.

TFC Foundation's contributions totaled NT\$339,000.



#### **Charitable Contributions Initiatives by TFC in 2023**

#### **Support for Agricultural Products and Farmers**

In alignment with government agricultural policies, the Company has assisted farmers in expanding their sales by purchasing domestic agricultural products, including atemoya, pomelos, honey tangerines, pineapples, and mangoes. All of these products were donated to public and government-funded schools in remote areas, social welfare organizations, and food banks across various counties and cities.



TFC procured domestic agricultural products, including atemoya, pomelos, honey tangerines, pineapples, and mangoes, and donated them in full to various organizations in need across different regions.

#### Charitable Sponsorship and Support for Vulnerable Groups

Committed to social development by giving back to the community through local engagement and public welfare initiatives. This includes sponsoring the "2023 Shining Star Charity Run by the Taiwan Association for Autism Adaptation Sports and Recreation", "30th National Outstanding Heartwarming Mother Award by the Taiwan Disability-Free Association", "2023 Internet Safety and Education Promotion Campaign by the Taiwan Concern Society," and the "2023 Love Legacy Charity Concert by the CSBC Taitung Radio Station."

#### Caring for Retired Personnel and Distributing Annual Seniority Allowances

In recognition of the contributions of our retired personnel, we have sponsored 13 activities organized by 6 associations formed by retired employees from the Headquarters and various factories. Additionally, we have distributed annual seniority allowances to retired members who are 80 years of age or older at each association's annual general meeting.

#### Supporting Cultural and Artistic Organizations

We support cultural and artistic organizations by innovatively integrating elements of traditional Taiwanese martial arts culture into performances. We are also promoting the "2024 Tainan Four Hundred Lantern Festival" internationally to attract global attention to Taiwan's unique cultural and artistic industries, thereby effectively enhancing tourism benefits.



About this Report

Message from the Chairman

Overview of the Company

Summary of Performance in 2023

1 Corporate Responsibility and Sustainable Management

- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy

4 Energy Conservation, Environmental Protection and Environmental Management

5 Caring and Friendly Workplace for Employees

6 Co-creation of Value and Common Prosperity

Appendix

Charitable Contributions Initiatives by TFC Foundation in 2023



Public Donations and Support for Vulnerable Groups

To express our commitment to supporting economically disadvantaged elderly individuals, we have donated Mid-Autumn Festival mooncake gift boxes, which were distributed by the social welfare organization "The Huashan Social Welfare Foundation -Zhongshan Angel Station," fulfilling our social responsibility.

#### Promotion of Organic Agriculture and Food Education

Collaborated with agricultural promotion organizations, including the "Taiwan Hand-in-Hand Foundation" and the "Taiwan San Tian Si Sheng Association," to co-organize several summer camp activities. These include the "Organic Farming Summer Camp" and the "Food and Agriculture Education Parent-Child Summer Camp for Disadvantaged Students."



Public Welfare Case

Harmonious Home, United by Love — TFC donated domestic pomelo to the Harmony Home Foundation Taiwan's Nangang Children's Home

In Sep. 2023, Taiwan Fertilizer Co., Ltd. donated domestic pomelo to the "Harmony Home Foundation Taiwan's Nangang Children's Home," a charity organization supporting underprivileged families and children. This gesture was intended to share warmth with the children. The children greatly enjoyed the pomelos, and their teachers expressed their gratitude to TFC in a special letter.

Historically, TFC's Nangang Factory was the largest urea factory in the Far East, with a large scale and advanced equipment. With the progression of time, the Nangang Factory has ceased operations and, in line with national economic development, has been transformed. It now forms a major part of the Nangang Economic and Trade Park, housing the Nangang Software Park and Nangang Exhibition Hall, among other facilities. Over the past two decades, as the Nangang area has gradually prospered, TFC has shifted its focus to the real estate redevelopment and land development of its former factory area, actively contributing to the development of the Nangang region. This deep connection with Nangang has motivated the Company to seek opportunities to give back to the local community.

In 2024, TFC will relocate its headquarters to the TFC Nangang Economic and Trade Building. To better serve nearby residents and underprivileged groups, the Company has reached out to the "Harmony Home Foundation Taiwan." Established in 2011, the Harmony Home Foundation Taiwan was created in response to the rapid changes in Taiwan's social and economic structures, which have led to issues such as unemployment, family breakdowns, and children left without support. The foundation is dedicated to providing substantial care for women and children in distress.

TFC has decided to collaborate with the Harmony Home Foundation Taiwan, distributing the locally produced Tainan pomelo fruit as a warm gesture. This initiative aligns with the United Nations Sustainable Development Goals (SDGs), specifically Goal 1: No Poverty and Goal 2: Zero Hunger.





Teachers and children at the "Nangang Children's Home of the Harmony Home Foundation Taiwan" (Photo courtesy of the Harmony Home Foundation Taiwan's Nangang Children's Home)



TAIWAN FERTILIZER CO., LTD.

#### About this Report

- Message from the Chairman
- Overview of the Company
- Summary of Performance in 2023
- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

Appendix



### **Public Welfare Case**

Fertilizer becomes a goodwill ambassador! TFC donated to address Eswatini's agricultural crisis

Strengthening the "Banana Bonds" between Taiwan and its African ally! In Mar. 2023, TFC generously donated 20 metric tons of fertilizer to the Kingdom of Eswatini, primarily for the cultivation of bananas and fruit trees. As Eswatini faced a severe fertilizer shortage, threatening farmers' incomes and national food security, TFC's heartfelt contribution provided critical support to the country's agricultural sector.

The donation ceremony took place in late Mar. at the Taiwan Embassy in Eswatini, with Ambassador Jeremy H. S. Liang representing TFC, while Eswatini's Minister of Agriculture, Jabulani Mabuza, received the donation on behalf of the kingdom. The event attracted coverage from local television and radio stations, as well as three major print media outlets.



With over 70% of Eswatini's population relying on agriculture for their livelihood, Taiwan has long provided support through agricultural technical missions. Key initiatives include the "Healthy Seed Potato Propagation Project" and the "Fruit Tree Production and Marketing Project," focusing on the development of crops such as potatoes, bananas, papayas, and dragon fruits. The trial cultivation and promotion of the "Taiwan Banana No. 2" banana variety is also part of these efforts to enhance crop yields and increase farmers' incomes.

According to experts, Eswatini's agriculture has struggled in recent years due to the COVID-19 pandemic, the disruption of agricultural value chains caused by the Russia-Ukraine war, and the impact of climate change, all of which have driven up the prices of agricultural inputs such as fertilizer. In response to this crisis, Taiwan's government began planning aid measures in Jul. last year. During this process, senior management from TFC coincidentally became involved and immediately pledged their support. After 8 months of planning and coordination, the fertilizer was successfully delivered to the African ally. This act of goodwill is expected to ease Eswatini's difficulties, allowing the friendship from Taiwan to continue nourishing the land. This initiative aligns with the United Nations Sustainable Development Goals (SDGs), specifically Goal 1: No Poverty and Goal 2: Zero Hunger.





#### 台湾肥料设修有记公司 TAIWAN FERTILIZER CO., LTD.

About this Report

Message from the Chairman

Overview of the Company

Summary of Performance in 2023

- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees

6 Co-creation of Value and Common Prosperity

Appendix

## 6-6 ESG KEY CASE STUDIES

Leading Taiwan in importing "low-carbon ammonia"! TFC opened a new chapter in net-zero carbon emissions

Caring for Earth's sustainability! TFC has made a special purchase of low-carbon ammonia from Saudi Arabia's SABIC Agri-Nutrients (SABIC AN) and Saudi Aramco. The first shipment of low-carbon ammonia arrived at Taichung Port in Jun. 2023, marking the first import of "sustainable concept" liquid ammonia in Taiwan. This shipment opens a new chapter for Taiwan in achieving net-zero carbon emissions.

In recognition of this milestone, SABIC AN sent a delegation to Taichung Port, led by Vice President Yazeed Al-Angari, to present TFC with the "International Certification for Low-Carbon Ammonia." Together, they witnessed this historic moment as the low-carbon ammonia arrived in Taiwan. Liquid ammonia is one of the key raw materials for Taiwan's fertilizer, chemical, and electronics industries, with the country entirely reliant on imports. In recent years, large international manufacturers have been actively developing low-carbon ammonia to align with global net-zero carbon emission goals. Low-carbon ammonia refers to ammonia produced through a process in which carbon dioxide is captured, stored, and reused, significantly reducing carbon emissions throughout the production cycle. TFC's proactive efforts in securing the import of low-carbon ammonia stem from the collaboration between Saudi Arabia's largest petrochemical and oil companies. As the world faces increasing risks from climate change, this product provides a solution to help mitigate those risks, drawing interest from companies in Japan, South Korea, and India.





IAIWAN FERHLIZER CO., LID.

About this Report

Message from the Chairman

Overview of the Company

Summary of Performance in 2023

- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

Appendix



### TFC's fifth business focus aiming to transform into a clean energy provider

On Oct. 3. 2023. TFC held the "TFC Low-Carbon Ammonia Hydrogen Energy Technology Industry Conference" at the banquet hall of the Grand Hilai Hotel in Nangang, Taipei. The event brought together dozens of experts from industry, government, academia, and research to discuss key issues related to hydrogen energy raw material supply and the development of related industries, as part of Taiwan's strategy to achieve net-zero emissions by 2050 through twelve critical strategic pathways. At the conference, Chairman Suen-Zone Lee announced that TFC, which has been established for 77 years, currently operates four core business segments: general chemical industry, high-precision chemical industry, deep ocean water and biological industry, and real estate. The Company is now introducing a fifth focus area-clean energy. TFC's low-carbon ammonia is the cleanest and most energy-efficient hydrogen source in Taiwan, and the Company has already been actively planning and positioning itself in this area.



In 2022, President Tsai Ing-wen unveiled Taiwan's 2050 net-zero emissions pathway strategy, which includes twelve key strategic initiatives, with hydrogen energy identified as a critical component in achieving net-zero emissions. However, the international storage, transportation, and safety of pure hydrogen remain significant challenges, representing the biggest bottleneck in Taiwan's hydrogen energy development. TFC, with its clean ammonia, specifically low-carbon ammonia, can play a major role in overcoming these challenges and maximizing its contribution and value.

In alignment with the government's green energy policy, Taiwan Fertilizer Co., Ltd. is prioritizing international cooperation to import low-carbon ammonia. By taking concrete action to provide low-carbon solutions, the Company not only assists domestic enterprises in reducing carbon emissions but also aims to promote the development of a low-carbon hydrogen industry ecosystem. The "Low-Carbon Ammonia Hydrogen Energy Policy and Technology Conference" aimed to initiate dialogue between national hydrogen energy policy and industry development thought leaders, jointly exploring how ammonia can contribute to national net-zero emissions, and providing sustainable and economically viable guidance for Taiwan's hydrogen energy deployment.

Just as TSMC integrates the semiconductor supply chain, TFC is positioned to play a similar role in integrating the upstream, midstream, and downstream hydrogen energy industry chain in Taiwan, contributing more powerfully to Taiwan's net-zero transition and sustainable development. Chairman Suen-Zone Lee emphasized that TFC will not only evolve from a traditional provider of essential nutrients for the earth to a national supplier of clean energy but also further deepen the Company's advantages in this field.



About this Report

Message from the Chairman

Overview of the Company

Summary of Performance in 2023

- Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees

6 Co-creation of Value and Common **Prosperity** 

Appendix



Nangang Economic and Trade Building receives dual certifications for green building and intelligent building

"Architectural design that prioritizes human health and comfort, pursues symbiosis with the Earth's environment, and ensures the sustainable development of living spaces. " This is the fundamental definition of a green building. With a focus on environmental protection, energy efficiency, and sustainability, TFC aims to create buildings that consume minimal energy and resources, generate the least waste, and embody ecological, energy-saving, and health-conscious features while minimizing waste. Among the completed buildings that have received green building certification are the TFC ONE Building in Hsinchu and the Nangang Economic and Trade Building.

In Dec. 2023, TFC's Nangang Economic and Trade Building was awarded the Gold-level Green Building Label and subsequently received the Silver-level Intelligent Building Label in Mar. 2024.



#### **Green Building Indicators**

Greening	A total of 161 large trees and 6 small trees have been planted, along with shrubs covering an area of 3,536.53 m2. Native
Efforts	species were selected for planting.
Site Water Conservation	The site incorporated permeable granite, permeable wooden platforms, permeable asphalt, infiltration drainage pipes, and infiltration catch basins.
	<ul> <li>The building envelope utilized multilayered Low-E glass.</li> <li>The air conditioning system employed a chilled water system and</li> </ul>
Daily Energy Efficiency	<ul> <li>VRF technology.</li> <li>Lighting systems utilized LED fixtures and sensor-activated lighting.</li> </ul>
Carbon Dioxide Reduction	Structural elements and building materials are designed with a focus on lightweight construction.
Waste Reduction	High-burned cement and high-performance concrete are used. During construction, dust covers are implemented to reduce dust emissions.
Indeer	<ul> <li>All residential spaces are equipped with an external air supply system.</li> </ul>
Indoor Environment	• Green building materials constitute over 60% of the total materials used, with more than 50% being ecological building materials.
	<ul> <li>All domestic wastewater is properly connected to the sewage system.</li> </ul>
	<ul> <li>Dedicated kitchen wastewater is equipped with grease traps.</li> </ul>
Wastewater	Facilities for the pre-treatment of refrigerated, frozen, or
and Garbage Improvements	<ul> <li>compacted waste are provided.</li> <li>A dedicated waste collection area is designed with ample space and efficient waste movement. This area includes aesthetic enhancements.</li> </ul>
	Strict implementation of waste resource separation and recycling is in place, with sealed, animal-proof bins to prevent tampering.

#### About this Report

- Message from the Chairman
- Overview of the Company
- Summary of Performance in 2023
- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees

6 Co-creation of Value and Common Prosperity

Appendix

## 6-7 COMMUNITY HARMONY AND MUTUAL PROSPERITY

TFC is committed to fostering positive relationships with surrounding communities and the environment. In industrial operations, the Company pursues environmentally symbiotic practices. For residential and commercial use, the Company seeks interactive models that promote mutual prosperity with the community. Throughout the development process, the Company adheres to all legal regulations and engages in comprehensive communication with stakeholders to minimize the impact of development activities on the environment and community.

# 100% Proportion of Impact Assessments for Operational Sites

TFC's current operational sites, including the Taichung Factory, Miaoli Factory, and Hualien Factory, underwent public exhibitions and briefings at the time of their designation for industrial use in accordance with legal requirements. Local residents or organizations were allowed to submit written opinions during the public exhibition period. The industrial use of these sites was permitted only after the Urban Planning Committee reviewed and approved the plans. The construction of the Taichung Factory was conducted in full compliance with environmental impact assessment regulations. After identifying potential environmental impacts and formulating protective measures, an Environmental Impact Statement (EIS) was submitted. Public hearings were also held to gather input from local residents and stakeholders. The project proceeded after receiving approval from the Environmental Impact Assessment Review Committee. The Company's operational sites have achieved a 100% rate of community consultation, impact assessment, and development planning in coordination with local communities.

# Factory Sites

TFC previously operated 6 production factories across Taiwan. With industrial shifts and urban expansion, these operations have been consolidated into the Taichung Factory, Miaoli Factory, and Hualien Factory. The remaining land from the Nangang, Hsinchu, Kaohsiung, and Hualien Factory sites is managed by the "Property Development and Management Department" and the "Real Estate Construction Department" for land development purposes. In alignment with surrounding urban development trends and plans, public hearings, forums, and exhibitions are held in compliance with legal requirements to gather feedback and engage in dialogue with local communities, ensuring that the repurposing of former factory sites aligns with community expectations.

During the development process, comprehensive planning and design efforts are made to incorporate public amenities such as open spaces, green corridors, and parking facilities, improving the quality of urban life and reshaping the urban landscape. The commercial activities following the development are expected to stimulate local economic growth, create employment opportunities, and revitalize land assets. Throughout this process, we share the benefits of development with local residents, fostering a mutually beneficial, win-win situation.



About this Report

- Message from the Chairman
- Overview of the Company
- Summary of Performance in 2023
- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

Appendix

#### 2023 Real Estate Development Projects

#### Keelung Old Factory

Following the completion of the Taichung Factory, the Keelung Factory will be transformed into a backup facility in the short term, with production adjusted based on fertilizer demand. In the medium to long term, land reutilization plans will be proposed depending on market conditions.

#### **Hsinchu Old Factory**

- In response to the national science and technology industrial development policy and in coordination with the Hsinchu City Government's promotion of the "HSP X Plan," land in the technology and business district within the first phase of the Hsinchu City Urban Plan has been allocated for development. The D6 block has been designated for the establishment of a software office building under a surface rights agreement with the Hsinchu Science Park Administration, with subsequent phased developments of blocks D4, D5, and D7 planned to construct commercial office buildings. This will lead to the transformation of the area into the "Hsinchu Business Park."
- TFC's first commercial office building in Hsinchu, "TFC ONE," was completed in 2017 and is currently operational. The building has seen successful tenant acquisition, achieving a 100% occupancy rate for office space by 2023, attracting major domestic and international technology companies.

#### **Kaohsiung Old Factory**

In alignment with the government's urban planning amendment designating the area as the "Kaohsiung Multifunctional Economic and Trade Park," the factory was demolished in 2016 as part of the transformation into a dedicated core economic and trade zone. The site is currently participating in the Kaohsiung City Government's land consolidation program and is planned for future development as a mixed-use commercial and office district.

#### Taipei Nangang Old Factory

In alignment with the government's urban planning initiative to rezone as the "Taipei Nangang Economic and Trade Park Special District Plan" for residential and commercial use, the development of residential complexes has been completed. For commercial land, the C2 block has been developed into a tourist hotel and office building. The office building began operations in the fourth quarter of 2021 after obtaining its occupancy permit, attracting numerous international technology companies to establish offices. The hotel, managed by Grand Hilai, officially opened in Oct. 2023. Additionally, the C4 block is planned for office building development, with completion expected by the end of 2027.



#### **Hualien Old Factory**

The land of the Hualien Factory is planned for development into a "Deep Ocean Water Industrial Park," with functions that include serving as a tourist factory and supporting the development of industries related to deep ocean water.



## 台:污肥料设化有限公司 TAIWAN FERTILIZER CO., LTD.

### **APPENDIX 1: INDEPENDENT ASSURANCE REPORT BY CERTIFIED PUBLIC ACCOUNTANT**

About this Report		
Message from the Chairman		<b>医</b> 学安永 Building a better Building a better
Overview of the Company		working world Talchung City, Talwas, R.O.C. www.rey.com/tw
ummary of Performance in 2023		English Translation of a Report Originally Issued in Chinese
orporate Responsibility and ustainable Management		Independent Auditor's Limited Assurance Report To: Taiwan Fertilizer Co., Ltd.
ntegrity Management and Strong overnance	Taiwan Fertilizer Co., Ltd. Independent Auditor's Limited Assurance Report	Scope We have been engaged by Taiwan Fertilizer Co., Ltd. ("Taiwan Fertilizer") to perform a "limited assurance engagement", as defined by Standards on Assurance Engagements issued by the Accounting Research and Development Foundation in Taiwan, here after referred to as the engagement, to report on Taiwan Fertilizer's selected sustainability performance indicators ("the
ustainable Agriculture and Circular conomy	2023	Subject Matter") in Taiwan Fertilizer's 2023 Sustainability Report ("the Report"). Selected Information and the Applicable Criteria Regarding the Subject Matter and the applicable criteria ("Criteria"), please refer to Appendix 1.
nergy Conservation, Environmental rotection and Environmental lanagement		Management's Responsibility Taiwan Fertilizer's management is responsible for selecting the Criteria, including referencing to the Taiwan Stock Exchange Corporation Rules Governing the Preparation and Filing of Sustainability Reports by TWSE Listed Companies and GRI Standards 2021 issued by the Global Reporting Initiative ("GRI"), and for presenting the Subject Matter in accordance with that Criteria, in all material respects. This responsibility includes establishing and maintaining internal controls, maintaining adequate records and making estimates that are relevant to the preparation
aring and Friendly Workplace for mployees		of the subject matter, such that it is free from material misstatement, whether due to fraud or error. EY's responsibilities Our responsibility is to express a conclusion on the presentation of the Subject Matter based on the evidence we have obtained.
o-creation of Value and Common rosperity		We conducted our engagement in accordance with Assurance Engagements Other than Audits or Reviews of Historical Financial Information ("TWSAE 3000") issued by the Accounting Research
ppendix		and Development Foundation in Taiwan. Those standards require that we plan and perform our engagement to express a conclusion on whether we are aware of any material modifications that need to be made to the Subject Matter in order for it to be in accordance with the Criteria, and to issue a report. The nature, timing, and extent of the procedures selected depend on our judgment, including an assessment of the risk of material misstatement, whether due to fraud or error We believe that the evidence obtained is sufficient and appropriate to provide a basis for our limited assurance conclusions.
		i i

AIWAN FERHLIZER CO., LID

#### About this Report

Message from the Chairman

Overview of the Company

Summary of Performance in 2023

- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

Appendix



#### Our independence and quality management

We have maintained our independence and confirm that we have met the requirements of the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants, and the Norm of Professional Ethics for Certified Public Accountant of the Republic of China (NFCPAAROC Code), and have the required competencies and experience to conduct this assurance engagement.

We also apply Standard on Quality Management 1, "Quality Management for Firms that Perform Audits or Reviews of Financial Statements, or Other Assurance or Related Services engagements," issued by the Accounting Research and Development Foundation in Taiwan which requires that we design, implement and operate a system of quality management including policies or procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

#### Description of procedures performed

Procedures performed in a limited assurance engagement vary in nature and timing from and are less in extent than for a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed. Our procedures were designed to obtain a limited level of assurance on which to base our conclusion and do not provide all the evidence that would be required to provide a reasonable level of assurance.

Although we considered the effectiveness of management's internal controls when determining the nature and extent of our procedures, our assurance engagement was not designed to provide assurance on internal controls. Our procedures did not include testing controls or performing procedures relating to checking aggregation or calculation of data within IT systems.

A limited assurance engagement consists of making enquiries, primarily of persons responsible for preparing the Subject Matter and related information, and of applying analytical and other appropriate procedures.

Our procedures included:

- Conducted interviews with Taiwan Fertilizer's personnel to understand the business and reporting process.
- Conducted interviews with Taiwan Fertilizer's key personnel to understand the process for collecting, collating and reporting the subject matter during the reporting period.

2



- Checked that the calculation criteria have been correctly applied in accordance with the methodologies outlined in the Criteria.
- Performed analytical procedures on selected sustainability performance indicators; Collected and assessed other supporting documentation and management representation obtained; Tested on a sample basis if necessary.
- Identified and tested assumptions supporting calculations.
- Selected samples of the underlying source information for testing to check the accuracy of the data.
- Read the Report to ensure the implementation of overall sustainable responsibility and reporting process is consistent with our understanding.

#### Inherent Limitations

Considering non-financial information contains within the Report are subject to measurement uncertainties, the selection of different measurement techniques can result in materially different measurement. Also, assurance engagements are based on selective testing of information being examined, and it is not possible to detect all existing material misstatements whether resulting from fraud or error.

#### Conclusion

Based on our procedures and the evidence obtained, we are not aware of any material modifications that should be made to the selected sustainability indicators, in order for it to be in accordance with the Criteria.

Ernst & Young, Taiwan

Chen, Ming Hung

17 July 2024

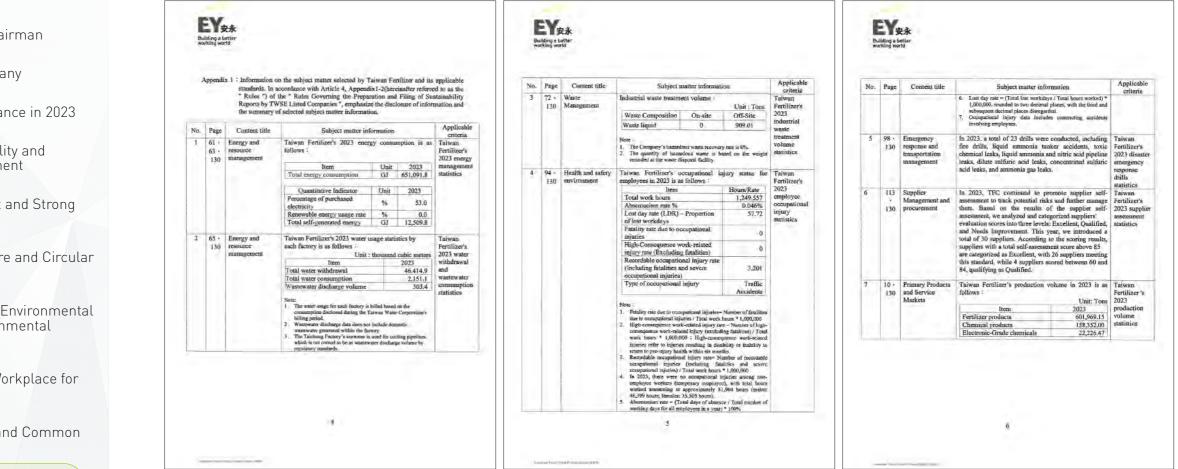
Vosioci to Readers The reader is advised dust the assurance report, has been prepared originally in Chinese. In the event of a conflict letiveen the assurance report and the original Chinese version or difference in interpretation between the two versions, the Chinese language assurance report shall are vait.



Contemport Press Court & Instany Garray Diverses

### 台湾肥料股份有限公司

TAIWAN FERTILIZER CO., LTD.



#### About this Report

Message from the Chairman

Overview of the Company

Summary of Performance in 2023

- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

#### Appendix

APPENDIX 1

## 台:字肥料设修有限公司 TAIWAN FERTILIZER CO., LTD.

#### About this Report

Message from the Chairman

#### Overview of the Company

#### Summary of Performance in 2023

- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

Appendix



## Statement of Use

Taiwan Fertilizer Co., Ltd. has prepared its 2023 Sustainability Report in reference to the GRI Standards. The data and information presented cover the period from Jan. 1, 2023, to Dec. 31, 2023.

**GRI 1 used** GRI 1: Foundation 2021

Applicable GRI Industry Standards None

### <sup>(C)</sup>GRI 2: General Disclosures 2021

Disc	losure Item No./Title	Corresponding Chapters	Page
	Organization and Reporting		
2-1	Organizational details	Company Introduction	p08
2-2	Entities included in the organization's sustainability reporting	About the Report	p03
2-3	Reporting period, frequency and contact point	About the Report	p03
2-4	Restatements of information	About the Report	p03
2-5	External assurance	Appendix 1: Independent Assurance Report by Certified Public Accountant	p125
Q.	Activities and Workers		
2-6	Activities, value chain and other business relationships	Company Introduction 6-3 Supplier Management and Procurement	p08 p110
2-7	Employees	5-1 Employee Employment Status	p74
2-8	Workers who are not employees	5-1 Employee Employment Status	p74
	Governance		
2-9	Governance structure and composition	2-2 Corporate Governance	p27
2-10	Nomination and selection of the highest governance body	2-2 Corporate Governance	p27
2-11	Chair of the highest governance body	2-2 Corporate Governance	p28
2-12	Role of the highest governance body in overseeing the management of impacts	2-2 Corporate Governance	p30
2-13	Delegation of responsibility for managing impacts	1-1 Vision for Sustainable Development and Organizational Structure	p16
2-14	Role of the highest governance body in sustainability reporting	1-1 Vision for Sustainable Development and Organizational Structure	p16
2-15	Conflict of Interest	2-2 Corporate Governance	p33
2-16	Communication of critical concerns	<ul><li>1-1 Vision for Sustainable Development and Organizational Structure</li><li>2-2 Corporate Governance</li></ul>	p16 p27

Disc	losure Item No./Title	Corresponding Chapters	Page
	Governance		
2-17	Collective knowledge of the highest governance body	2-2 Corporate Governance	p28
2-18	Evaluation of the performance of the highest governance body	2-2 Corporate Governance	p29
2-19	Remuneration policies	2-2 Corporate Governance	p30
2-20	Process to determine remuneration	2-2 Corporate Governance	p30
2-21	Annual total compensation ratio	The annual total compensation ratio for TFC in 2023 is 5.327.	-
The second secon	Strategy, policies, and practic	es	
2-22	Statement on sustainable development strategy	Message from the Management	p04
2-23	Policy commitments	1-3 External Organization Participation and International Initiatives Support and Compliance	p22
2-24	Embedding policy commitments	2-2 Corporate Governance 6-4 Promoting Sustainable Agriculture Education	p33 p115
2-25	Processes to remediate negative impacts	4-5 Waste Management 5-4 Equal and Friendly Workplace 5-7 Emergency Response and Transportation Management	p71 p87 p97
2-26	Mechanisms for seeking advice and raising concerns	2-2 Corporate Governance	p33
2-27	Legal Compliance	2-5 Legal Compliance	p47
2-28	Membership associations	1-3 External Organization Participation and International Initiatives Support and Compliance	p22
	Stakeholder Engagement		
2-29	Approach to stakeholder engagement	1-2 Stakeholder Interaction and Management	p17
2-30	Collective bargaining agreements	5-5 Labor-Management Communication	p89

#### 台:方肥料般化有限公司 TAIWAN FERTILIZER CO., LTD.

About this Report

- Message from the Chairman
- Overview of the Company
- Summary of Performance in 2023
- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

ĺп

Appendix



	s to determine material	Corresponding Cha 1.2 Stakeholder Inter and Management		Indicators 3-2	Disclosure Requir List of material topic		Corresponding Chapte 1-2 Stakeholder Interact and Management	
GRI Topics	Indicators					Correspo	onding Chapters	Page
Economic	GRI 3 Material Topics 2021		3-3 Management	of material topi	cs	2-1 Business Management 2-1 Business Management		p24
Performance	GRI 201 Economic Per	rformance 2016	201-1 Direct economic value generated and distributed		nerated and			p25
Corporate Governance	GRI 3 Material Topics 2	2021	3-3 Management	of material top	cs	2-2 Corpoi	rate Governance	p26
Legal Compliance	GRI 3 Material Topics 2	2021	3-3 Management	of material top	CS	2-5 Legal (	Compliance	p46
Secupational	GRI 3 Material Topics 2	2021	3-3 Management	of material top	cs	5-6 Health Environme	and Safety Work	p90
Health and Safety	GRI 403 Occupational Health and Safety 2018		403-1 Occupation system	al health and s	afety management	5-6 Health Environme	and Safety Work	p92
			403-2 Hazard ider incident investigat	ntification, risk	assessment, and	5-6 Health Environme	and Safety Work	p93
			403-3 Occupation	al health servio	ces	5-6 Health Environme	and Safety Work	p95
			403-4 Worker par communication or	ticipation, cons	ultation, and health and safety	5-6 Health Environme	and Safety Work	p91
			403-5 Worker train safety	ning on occupa	tional health and	5-7 Emerg Transporta	ency Response and ation Management	p98
			403-6 Promotion	of worker healt	h	5-6 Health Environme	and Safety Work	p95
			403-7 Prevention health and safety relationships	and mitigation impacts directl	of occupational y linked by business	5-6 Health Environme	and Safety Work ent	p92
		403-8 Workers covered by an occupational he and safety management system		cupational health	5-6 Health Environme	and Safety Work	p92	
			403-9 Work-relate	d injuries		5-6 Health Environme	and Safety Work	p94
			403-10 Work-relat	ed ill health		5-6 Health Environme	and Safety Work	p95
Privacy and Information Security	GRI 3 Material Topics 2	2021	3-3 Management	of material top	cs	6-1 Produc	ct Responsibility	p102

#### 台:字肥料设修有限公司 TAIWAN FERTILIZER CO., LTD.

About this Report

- Message from the Chairman
- Overview of the Company
- Summary of Performance in 2023
- 1 Corporate Responsibility and Sustainable Management
- 2 Integrity Management and Strong Governance
- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

Appendix

### APPENDIX 3: ARTICLE 4 OF THE "REGULATIONS GOVERNING THE PREPARATION AND FILING OF SUSTAINABILITY REPORTS BY TWSE LISTED COMPANIES" BY THE TAIWAN STOCK EXCHANGE

#### Table 1-2 Sustainability Disclosure Indicators – Chemical Industry

No.	Indicators	Types of Indicators	Annual Disclosure Status	Unit	Corresponding Chapter and Page Number
I	Total energy consumption, percentage of purchased electricity, renewable energy usage rate, and total self-generated energy	Quantitative	Total Energy Consumption: 651,091.8 Gigajoules Percentage of purchased electricity: Taichung Factory 60.0%, Miaoli Factory 22.5%, Hualien Factory 100.0% Renewable Energy Usage Rate: 0% Total Self-Generated Energy: 12,509.8 Gigajoules	Gigajoules, Percentage (%)	p61 p63
II	Total water withdrawal, total water consumption, and wastewater discharge volume disclosed in accordance with regulations or voluntarily.	Quantitative	Total Water Withdrawal: 46,414.9 thousand cubic meters Total Water Consumption: 2,151.1 thousand cubic meters Wastewater Discharge Volume: 303.4 thousand cubic meters	Thousand cubic meters (m <sup>3</sup> ), Percentage (%)	p65
111	Total hazardous waste generated from product manufacturing processes as required by regulations or voluntarily disclosed, and the percentage recovery.	Quantitative	Total Hazardous waste: 909.01 metric tons Percentage of Hazardous Waste Recovery: 0.00%	Metric tons (t), Percentage (%)	p72
IV	Explanation of the Number and Rate of Occupational Accidents	Quantitative	Number of Occupational Accidents: 4 people Rate of Occupational Accidents:3.201	Percentage (%), Quantity	p94
V	Operations with significant actual and potential negative impacts on local communities	Qualitative Description	In 2023, a total of 23 drills were conducted, including fire drills, liquid ammonia tanker accidents, toxic chemical leaks, liquid ammonia and nitric acid pipeline leaks, dilute sulfuric acid leaks, concentrated sulfuric acid leaks, and ammonia gas leaks.	N/A	p98
VI	Specific and effective mechanisms and actions implemented by the Company and its suppliers to mitigate negative environmental or social impacts.	Qualitative Description	In 2023, TFC continued to promote supplier self-assessment to track potential risks and further manage them. Based on the results of the supplier self-assessment, we analyzed and categorized suppliers' evaluation scores into three levels: Excellent, Qualified, and Needs Improvement. This year, we introduced a total of 30 suppliers. According to the scoring results, suppliers with a total self-assessment score above 85 are categorized as Excellent, with 26 suppliers meeting this standard, while 4 suppliers scored between 60 and 84, qualifying as Qualified.	N/A	p113
VII	Product Output by Product Category	Quantitative	Fertilizer Products: 601,969.15 metric tons Chemical Products: 158,352.00 metric tons Electronic-Grade Chemicals: 22,226.47 metric tons	Varies according to product type.	p10

## 台:方肥料设化有限公司 TAIWAN FERTILIZER CO., LTD.

### **APPENDIX 4: DISCLOSURE OF SASB INDICATOR CONTENT**

About this Report	Item	Code	Indicator Content	Types of Indicators	Corresponding Chapters	Page
Message from the Chairman		RT-CH-110a.1	Scope 1 greenhouse gas emissions (tons CO <sub>2</sub> e); Scope 1 the percentage of greenhouse gas emissions subject to carbon trading regulations (%)	Quantitative	4-3 Greenhouse Gas Management	p68
Overview of the Company Summary of Performance in 2023	Greenhouse Gas	RT-CH-110a.2	Management strategies or plans for Scope 1 greenhouse gas emissions, including reduction targets and performance evaluation metrics.	Qualitative	4-3 Greenhouse Gas Management	p62
1 Corporate Responsibility and Sustainable Management	Air Quality	RT-CH-120a.1	The emissions of the following air pollutants: (1) Nitrogen oxides, (2) Sulfur oxides, (3) Volatile organic compounds, (4) Hazardous air pollutants	Quantitative	4-3 Greenhouse Gas Management	p69
2 Integrity Management and Strong Governance				 		
3 Sustainable Agriculture and Circular Economy	Energy Management	RT-CH-130a.1	(1) Total Energy Consumption (GJ), (2) Proportion of Grid Electricity Usage (%), (3) Proportion of Renewable Energy Usage (%), (4) Self-Generated Energy (GJ)	Quantitative	4-2 Energy Management	p61 p63
4 Energy Conservation, Environmental Protection and Environmental Management		RT-CH-140a.1	(1) Total Water Withdrawal, (2) Total Water Consumption, (3) Operational Sites Located in Areas of "High" or "Extremely High" Water Scarcity and Their Proportions of (1) and (2)	Quantitative	4-2 Energy Management	p64 p65
5 Caring and Friendly Workplace for Employees	Water Management	RT-CH-140a.2	The number of incidents of non-compliance with water quality-related discharge permits, standards, and regulations	Qualitative	2-5 Legal Compliance	p48
6 Co-creation of Value and Common Prosperity		RT-CH-140a.3	Description of water stewardship risks and strategies, as well as mitigation practices	Qualitative	4-2 Energy and Resource Management	p64
Appendix	Hazardous Waste Management	RT-CH-150a.1	The total volume of hazardous waste generated by the Company and the percentage of waste recovery	Quantitative	4-5 Waste Management	p72
	Community Relations	RT-CH-210a.1	Discuss the process of engaging with management regarding risks and opportunities related to community interests	Qualitative	6-7 Coexistence and Harmony with the Community	p123

About this Report

Message from the Chairman

Overview of the Company

Summary of Performance in 2023

1 Corporate Responsibility and Sustainable Management

2 Integrity Management and Strong Governance

- 3 Sustainable Agriculture and Circular Economy
- 4 Energy Conservation, Environmental Protection and Environmental Management
- 5 Caring and Friendly Workplace for Employees
- 6 Co-creation of Value and Common Prosperity

ГП

Appendix

Item	Code	Indicator Content	Types of Indicators	Corresponding Chapters	Page	
	RT-CH-320a.1	For both employees and non-employees: (1) Total Recordable Incident Rate (TRIR), (2) Fatality Rate	Quantitative	5-6 Health and Safety Work Environment	p94	
Labor Health and Safety	RT-CH-320a.2	Description of the assessment and monitoring of health risks for employees and non-employees related to reducing exposure to long-term/chronic risks	Qualitative	5-6 Health and Safety Work Environment	p95	
Product design for efficiency improvements during the usage phase	RT-CH-410a.1	Revenue from products that enhance resource efficiency during the usage phase	Quantitative	TFC has not compiled relevant data	-	
Chemical safety and	RT-CH-410b.1	The revenue percentage from products containing chemical substances classified as GHS hazard categories for wellness and environmental hazards, with classification levels 1 and 2, and the proportion of such products that have undergone hazard analysis (%)	Quantitative	TFC has not compiled relevant data	-	
environmental management	RT-CH-410b.2	Development strategy for highly concerning chemicals and alternative products aimed at reducing human and environmental impact	Qualitative	6-1 Product Responsibility	p10	
Genetically modified products	RT-CH-410c.1	The percentage of total revenue derived from genetically modified products	Quantitative	TFC does not use genetically modified materials	-	
Regulatory and Policy Management	RT-CH-530a.1	The Company's involvement in government management and policy planning on environmental and social issues	Qualitative	Message from the Management	p04	
Occupational Safety and	RT-CH-540a.1	Process Safety Incidents Count (PSIC), Process Safety Total Incident Rate (PSTIR), and Process Safety Incident Severity Rate (PSISR)	Quantitative	TFC has not compiled relevant data	-	
Occupational Safety and Emergency Response	RT-CH-540a.2	Number of transportation incidents	Qualitative	5-7 Emergency Response and Transportation Management	p99	
Operational Activities	RT-CH-000.A	Production volume of major product categories	Quantitative	Company Introduction	p10	

