

# 2021

## Sustainability Report

### 中興電工 永續報告書

This English translation is prepared in accordance with the Chinese version and is for reference purposes only. If any inconsistency appears between the Chinese original and the English version, the Chinese version shall prevail.



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SDGs 索引表

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## Chairman's Message

CHEM was established in 1956 and focuses on 6 business groups including Power, CNC, system integration, parking management, China business group. Meanwhile the 3 focuses in green energy, engineering and service take the business operation into the new era after 65 years in operation while the Company holds the leading position in heavy power industry.

CHEM's growth in business is continually strong with the core proven-competitiveness by leveraging the resources. See the projects in Taiwan and Hualien, the annual contribution in power generation is estimated to reach 748 Million kW from overall power generation, this not only presents the significant move for green energy generation in Taiwan, but also brings the reliable and long-term promising revenue outlook for the Company itself. The company's move in green energy especially in hydrogen has shown optimistic results in carbon and emission reduction by power generation, light vehicles, distributed hydrogen refueling station and the EV friendly service available such as charging service for electric vehicles. We look forward to seeing more possible application for promoting and being part of the contribution for ESG movement.

For details in achievement in different business groups for the goal of business sustainability, and the strategy & agility in promoting ESG, please refer to the Chinese version of this report for details.

Chairman

江義福



## About this Report

- **General Facts**

This report is the first-time publication by CHEM and shall continue to publish on a yearly basis to reveal the operational outcome other than financial performance and to practice the sustainability for business operation. This report is to published in August 2022 and the next publication shall be June 2023.

- **Scope to Cover**

The data included in this report covers the information gathered from January 1 2021 to December 31, 2021. For more details please refer to CHEM's annual report 2021.

- **Compliance & Reference**

GRI Sustainability Reporting Standards, GRI Standards, 2016. (GRI 303, GRI 403 for 2018, GRI 207 for 2019, GRI 306 for 2020) Please refer to Glossary.

- **External Credibility**

All financial data is provided by Crowe (TW) CPAs and summarized based on IFRS – International Financial Reporting Standards

- **External Proposals**

GRI and Sustainable Development Goals, SDGs and Responsible Business Alliance, RBA. Compulsory for suppliers to avoid Conflict Minerals.

- **Headquarters & Branches**

For more details of headquarters and Branches with address, please refer to CHEM's annual report 2021 in Chinese.





## Subsidiaries of CHEM Taiwan

**Cheng-Hsin Engineering & Services Co., Ltd.**

**Sunrise Tech. Co., Ltd**

**Global-Entech Co., Ltd.**

**Etrovision Technology Co., Ltd.**

**San Feng Construction Co., Ltd.**

**Bao-Sheng Global Co., Ltd.**

**Wha Dun Building Management Service Co., Ltd.**

**Findata Finance Technology Corp.**

**Tian Chong Energy Co., Ltd.**

**Tian Peng Energy Co., Ltd.**

**Tian Cin Energy Co., Ltd.**

**Chung- Hsin Energy Tech. Inc.**

For detailed address in Chinese, please refer to the Chinese version of this report to avoid discrepancy in translation.

## About this Report

- **Contact Information**

This report is also available in “Investor Relations” in CHEM.com.tw

- **CHEM**

No.20, Guei-Shan Rd., Wen-de Rd., Taoyuan

[www.chme.com.tw/tc/index.aspx](http://www.chme.com.tw/tc/index.aspx)

Deputy Spokesperson - Jin-Fen Lai

+886-3-328-4170 ext. 2101

[tw006466@chem.com.tw](mailto:tw006466@chem.com.tw)

## Blueprints of Sustainability Development – I

### CHEM as the Pioneer in Green Energy Projects

CHEM leverages its own core competitiveness and resources in power industry for potentials, and promotes the sustainability by solar energy projects in its own plants and factories in Linko and Tainan.

Meanwhile, the green energy projects for fulfilling corporate social responsibilities have been completed and are planned to generate over 216 MW as the largest solar power plants domestically. This means to supply power to over 83,000 homes annually by over 300 Million kW hours

The power generation for green energy in Taiwan is estimated to reach approximately 748 Million kW Hours. To converse to the discharge coefficient of electricity, this is estimated to be 280,000 tons in reduction overall. CHEM is driving through its competitiveness for the contribution in economical development, green energy development and carbon-zero policy.



**CHEM's dedication for green energy generation with the success of solar energy projects in Tainan.**

## Blueprints of Sustainability Development – II

### CHEM for Urban Renovation Projects

CHEM takes its own core competitiveness and rich experiences in public engineering and constructions projects in Dun-Nan Urban Renovation Project and San-Chong projects.

Dun-Nan Project has been granted the National Golden Quality Awards in Buildings with its impeccable quality controls and management. SRC structures built in , Taylor Devices for risk aversion from earthquakes materials chosen are guaranteed for safety. Recognitions are received and awards have been granted to prove its competitiveness.

San-chong project is to be started in the end of 2022 and allows more availability for home choices with reliability in living quality. CHEM continues to fulfill the vision in sustainability in city renovation.



For detailed information about Dunnan urban renovation project categorized as green buildings, please refer to the Chinese version of this report.

The recognition was granted for the building project and proves the building has sustainability potential.





## Blueprints of Sustainability Development – III

### CHEM for Charging Service to Electric Vehicles

Growth in electric vehicle business is significant as the total number of electric cars sold for market needs is estimated to reach 68 thousand units in 2021, and this has increased 42.2% over the year. Policies in electric vehicles have also promoted the huge potential foreseeable in the near future.

CHEM's Dodohome parking management business was established in 1995 and the main business activities includes parking management for over 340 sites in Taiwan with registered members over 21,000.

The business itself has already started the unmanned operation and is in full speed in promoting charging service. Establishing over 200 charging station is as targeted in 3 years and the business has also gained the operation management rights for charging service in national highway service areas. CHEM aims for continuous parking experience enhancement in EV-friendly environment in Taiwan.



Charging station service integrated with remote control management and mobile payment service, available for most of types of electric vehicles

## Stakeholders' Engagement

•**Step 1** – Identify Stakeholders (6 major stakeholders)

- investors, employees, clients, suppliers, authorities and communities

•**Step 2** – Communicate with Stakeholders (12 Items)

- cooperate governance, policy for dividends, employee's rights and welfares, workplace safety and health, training and development, training for supervisors, production management, customers' relation management, community and involvement, regulation compliance, energy-saving and carbon reduction, pollution protocol and prevention

•**Step 3** – Identify Major Issues (7 topics for sustainability)

- topics focused on the impact to economics, society and environment, including cooperate governance, regulation compliance, energy-saving and carbon reduction, pollution protocol and prevention, learning the development for employees, social activities and involvement.

•**Step 4** – Conduct Evaluation and Start Discussion (Sustainability Reports)

The conduct is in accordance with the GRI (Global Reporting Initiative) and to disclose the information of major topics to release CHEM's first sustainability report.

## Identifying Stakeholders

CHEM is in compliance with Stakeholder Engagement Standard, AA1000 SES 2015) and has identified the stakeholders based on the following criteria:

1. [Independency](#)
2. [Responsibility](#)
3. [Tension](#)
4. [Influence](#)
5. [Diverse Prospective](#)

### 6 Major Stakeholders are

1. [Investor](#)
2. [Employees](#)
3. [Clients](#)
4. [Suppliers](#)
5. [Authorities](#)
6. [Community](#)

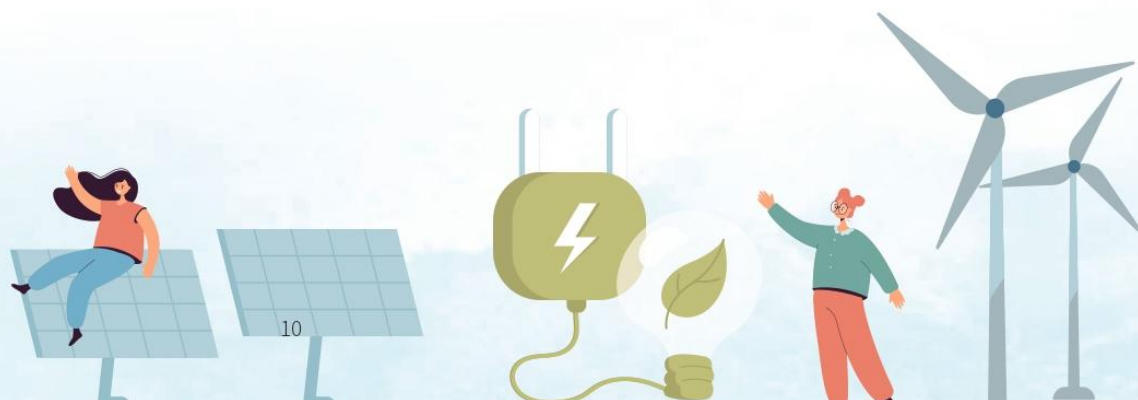
For Communication and details, please refer to the Chinese version of this report.

## Stakeholders' Engagement and Communication

Stakeholders	Issues to Focus	Frequency for Communication	Channels of Communication
<b>Investors</b>	<b>Corporate Governance Policy for Dividends</b>	Annually Quarterly / Yearly Based on Needs & Demands Annually Annually	Annual Report Financial Report Investor Relations Annual Meeting with Shareholders Earning Calls
		Based on Needs & Demands	MOPS / Material Information Announcement
<b>Employees</b>	<b>Employee's Rights and Welfare</b>	Quarterly Quarterly	Welfare Committees Employee's Union Committees
	<b>Workplace Safety and Health</b>	Quarterly Biennially Based on Needs & Demands Based on Needs & Demands	Employee's Union Committees Health Check Training for Education On-site Nurses and Assistance
	<b>Learning and Development for Employees</b>	Quarterly / Based on Needs & Demands	Learning and Development Activities
	<b>Training for Supervisors</b>	Based on Needs & Demands	Learning and Development Activities



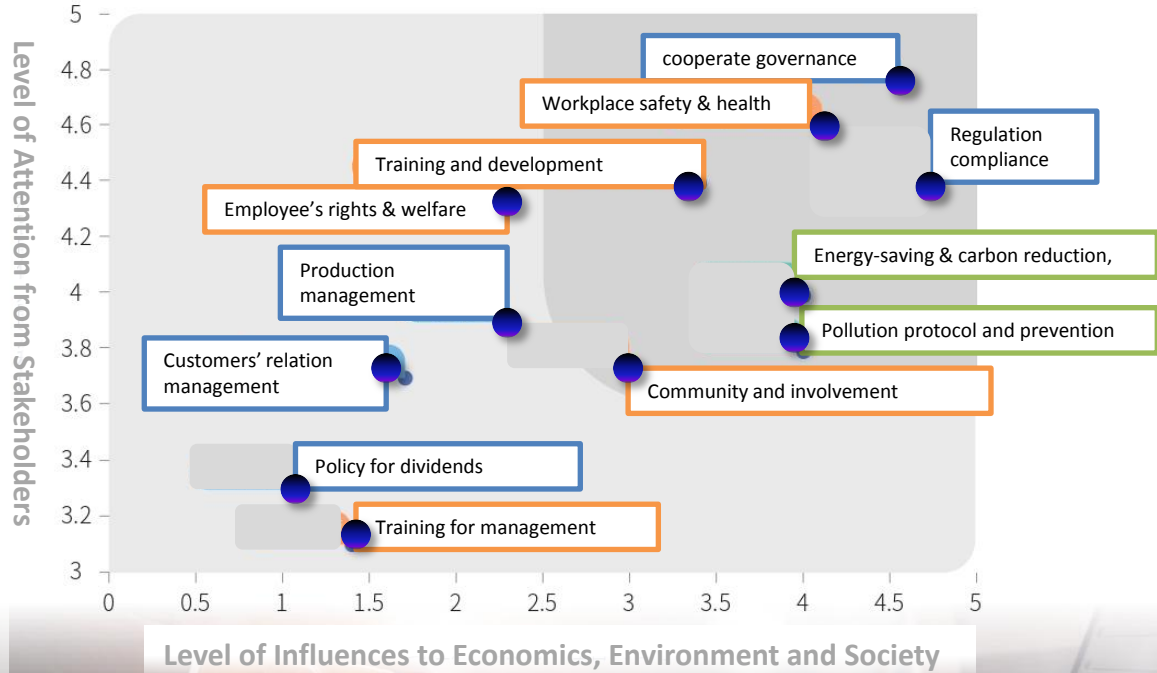
Stakeholders	Issues to Focus	Frequency for Communication	Channels of Communication
<b>Clients</b>	<b>Production Management (QCD)</b>	Based on Needs & Demands	Business development and Revisiting
	<b>Relation Management</b>	Every 6 months	Questionnaires for Satisfactory
<b>Suppliers</b>	<b>Production Management (QCD)</b>	New Suppliers Engagement At the Delivery Every 6 months	Contract Purchasing Suppliers' Assessment for Delivery Auditing for Suppliers
<b>Authorities</b>	<b>Cooperate Governance Social Activities and Involvement Regulation Compliance Energy-Saving and Carbon Reduction Pollution Protocol and Prevention</b>	Based on Needs & Demands	Government's Letters and Notices Questionnaires Announcement and Seminars
<b>Communities</b>	<b>Community Activities and Involvement</b>	Based on Needs & Demands	Charities Sponsorships Emergency Assistance



## Matrix of CHEM's Major Topics to Focus

The focus includes cooperate governance, policy for dividends, employee's rights and welfares, workplace safety and health, training and development, training for management, production management, customers' relation management, community and involvement, regulation compliance, energy-saving and carbon reduction, pollution protocol and prevention.

◆ Matrix of CHEM's Major Topics to Focus in 2021



## CHEM's Major Topics to Focus and The Relevance with Impact Indicator

■ Direct ● Indirect ▲ Commercial

Items	Major Topics	Correspondence in Chapters of this Report	Correspondence in GRI indicators	Stakeholders					
				investors	employees	clients	suppliers	authorities	communities
1	cooperate governance	Chapter 2 Cooperate Governance	GRI 201-1	■	●	●	▲	■	
2	regulation compliance	Chapter 2 Cooperate Governance	GRI 205-2	●	■	●	▲	■	
3	workplace safety and health	Chapter 6 Workplace Safety and Health	GRI 403-8		■		▲	●	
4	energy-saving and carbon reduction	Chapter 6 Workplace Safety and Health	GRI 403-8	●	●	●	▲	●	●
5	pollution protocol and prevention	Chapter 4 Environment Protection	GRI 307-1	●	●		▲	●	■
6	training and development	Chapter 5 Workplace Friendliness	GRI 404-1		■	●		●	
7	community activities and involvement	Chapter 7 Charity Work	GRI 203-1					●	■



# 1

# ESG

## **ABOUT CHEM**

### **p.14 – ABOUT CHEM**

**business performance  
operation and markets  
business segments and foot prints**

### **p.18 – AWARDS & RECOGNITION**

“Growth Top 100” by Commonwealth Magazine  
“Golden Quality Awards in Public Engineering”  
“Special Achievement Awards”

### **p.20 – ENGAGEMENT**

external proposals  
participated public events



## About CHEM

Established in 1956 and publicly listed in 1994, pioneering in power business and integrating R&D, manufactures and sales for not only domestic market strategy but also for global market.

### ◆ Highlights

**1956**

Factory established



**2008** Renewable Energy Business Group established



**2017** Strategic Cooperation with Toyota Tsusho for Japan Market in Fuel Cell



### Highlights

**1956** Factory established

**1983** Focused on Heavy Power Business

**1994** Listed in TWSE (Taiwan Stock Exchange) public market

**2003** Business Expanded in China Market

**2004** Business Expanded in Parking Management

**2008** Renewable Energy Business Group established

**2010** Pioneered as the first company with Fuel Cell System in Operation

**2011** CNC business established for advanced machining center

**2012** Strategic Cooperation with Ballard Power System for Fuel Cell Business

**2014** Joint Venture with Nomura Japan for Milling/Boring Machining Center

**2017** Strategic Cooperation with Toyota Tsusho for Japan Market in Fuel Cell

**2018** Established TreeValley Factory in Tainan for semi-conductor, display and vacuum chamber production

**2019** Signed 20-year Operation & Maintenance Contract with TaiSugar for 193MW Solar Power Project2

**2020** Started A+ Project for Liquid Cool fuel cell project with MOEA

**2020** Received Gold Quality Awards for Building Project – DunNan Project

**2012** Strategic Cooperation with Ballard Power System for Fuel Cell Business

**2019** Signed 20-year Operation & Maintenance Contract with TaiSugar for 193MW Solar Power Project2

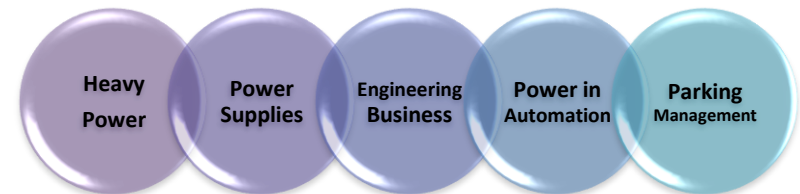
## Business performance highlights in Consolidated Financial Statement

Year	2019	2020	2021
Revenue	12,377,516	15,390,789	18,024,761
Operating Margin	2,065,515	3,285,639	4,298,539
Operating Profits	655,278	1,720,973	2,678,147
Income Tax	150,241	250,504	507,616
Net Income	638,788	1,551,301	1,972,560
EPS	1.55	3.59	4.19
Compensation, Salary and Welfare for Employees	4,118,032	4,233,113	4,654,636

## Business performance:

Consolidated Revenue had accumulated to NT18.02 Billion (with 17.11% increased, compared to NT2.63 Billion in 2020). The net income after tax had also reached NT1.97 billion if compared with performance in 2020, which showed an increase of NT420 Million, with EPS 4.19 as results

## Business Segment:





## Business Development

### Transitions to Green Energy-focused business

#### Green Energy

- Solar Power
- Hydrogen Fuel Cell, Smart Micro Grid
- Power Supply

#### Service

- Dodohome / EV Charging Service
- Maintenance, Operation & Management

#### Others

- Urban Renovation Projects
- System Integration
- Precision Machining

### CHEM for Green Energy

Unit: Hundred Million	Green Energy	Service	Others
Revenue	136.8	31.1	37.0
Percentage	66.78%	15.16%	18.06%

#### Green Energy

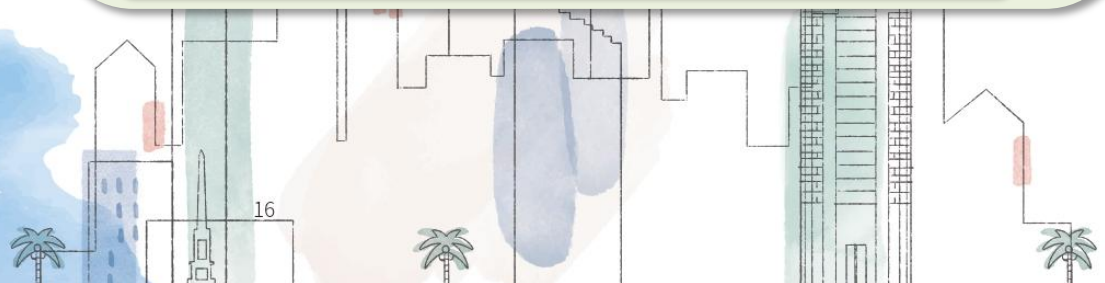
Solar Energy  
Hydrogen Fuel Cell & Micro-Grid  
Power Supply

#### Service

Dodohome  
EV Charging Service  
Maintenance, Operation & Management

#### others

Urban Renovation  
System Integration  
Precision Machining





## Dodohome

As the leading Parking Management Service in Taiwan, dodohome proudly stands as the owner of ISO 9001 certificates with high quality parking attendants management and operation.



## Heavy Power Facilities

CHEM as the only qualified partner for Taipower in GIS facilities, which are adopted solution by IPP power plans and other major power users.



**Power Generation Engineering Project** in Hu-si, Penghu Taiwan, was granted Golden Quality Awards in Constructions, and Design for Wind Turbines.



**CHEM's reforming technology for hydrogen in fuel cell systems** shows proven competitiveness commercially in reliability and stability for data center or telecommunication deployment.

## Awards & Recognition

### Growth 100

Recognized by Commonwealth Magazine for the proven growth in revenue and V-shaped turns in business performance in CHEM during the strike of adversity brought by pandemic in 2020.

#### 「天下韌性企業 200 強」之篩選方法：

1. 全年成長 Top100：以 2020 年全年稅後純益、上半年（1~6 月）營收成長率皆為正的企業為母體，依全年營收成長率篩選出最高之前 100 大企業。
2. V 型反轉 Top100：以 2020 年全年稅後純益為正、上半年（1~6 月）營收成長率為負的企業為母體，依 2020 年下半年（7~12 月）營收成長率篩選出最高之前 100 大企業。





**Power Engineering Project of Ta-Shan Power Plant in Kinmen, was granted Golden Quality Awards in Constructions.**

The award proves the highest reputation for public construction as if it is the Oscar Award for movie industry, and has set the benchmark for superior engineering quality in practice and the highest recognition for teams at CHEM.





## Engagement

### External Participation

1. Sustainable Development Goals, SDGs
2. Global Reporting Initiative, GRI
3. The United Nations Global Compact, UNGC,
4. World Economic Forum, WEF

### Public Involvement

CHEM actively participates in associations and committees for sharing the latest industry news with open-minded point of views for professional insider's knowledge in the hope of promoting the development in industries. CHEM is involved as active members in over 40 national level associations and/or committees.

Please refer to the Chinese version of this report for the names of associations in Chinese to avoid the discrepancy.

8. 中華民國中東經貿協會
9. 財團法人中華民國會計研究發展基金會
10. 財團法人全國認證基金會
11. 台灣區電機電子工業同業公會
12. 台灣機械工業同業公會
13. 台灣區冷凍空調工程工業同業公會
14. 台灣區水管工程工業同業公會
15. 台灣區電氣工程工業同業公會
16. 台灣消防器材工業同業公會
17. 台灣汽電共生協會
18. 台灣冷凍空調學會
19. 台灣智慧型電網產業協會
20. 台北市電器商業同業公會

1. 台北市冷凍空調技師公會
2. 台灣區工具機暨零組件工業同業公會
2. 台灣旅沙電力協會
3. 臺灣區航太工業同業公會
3. 台灣風力發電產業協會
3. 台灣區用電設備檢驗維護工程工業同業公會
3. 台灣燃料電池夥伴聯盟
3. 臺灣節能減排協會
35. DLMS
36. 台灣氫能產業發展聯盟
37. 財團法人台灣電子檢驗中心(含 ISO 9001、ISO 14001、OHSAS 18001)
38. 台南縣工業會
39. 中華民國全國營造業工地主任公會
40. 中華民國太陽光電發電系統商業同業公會

# 2

## **Corporate Governance**

### **p.22 Corporate Governance**

Strategy for Sustainable Development  
Actions for Corporate governance

### **p.24 Overview**

Board of Directors  
Structures, Responsibility & Obligation

### **p. 28 Code of Conduct**

Internal Control & Internal Auditing  
Ethical Corporate Management Best Practice  
Regulation Compliance

### **p. 31 Risk Management**

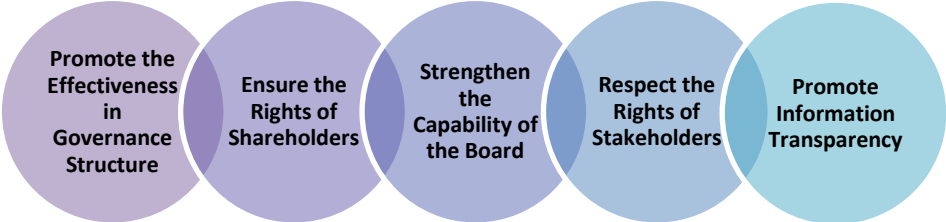
Risk Management and Responses  
Major Risks Management for Emerging Market Trends



### Strategy for Sustainable Development



### 5 Principles for Corporate Governance

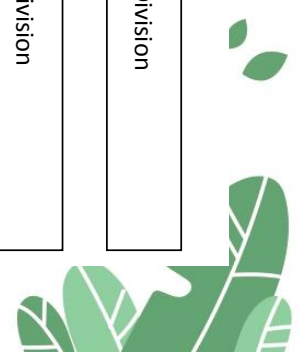
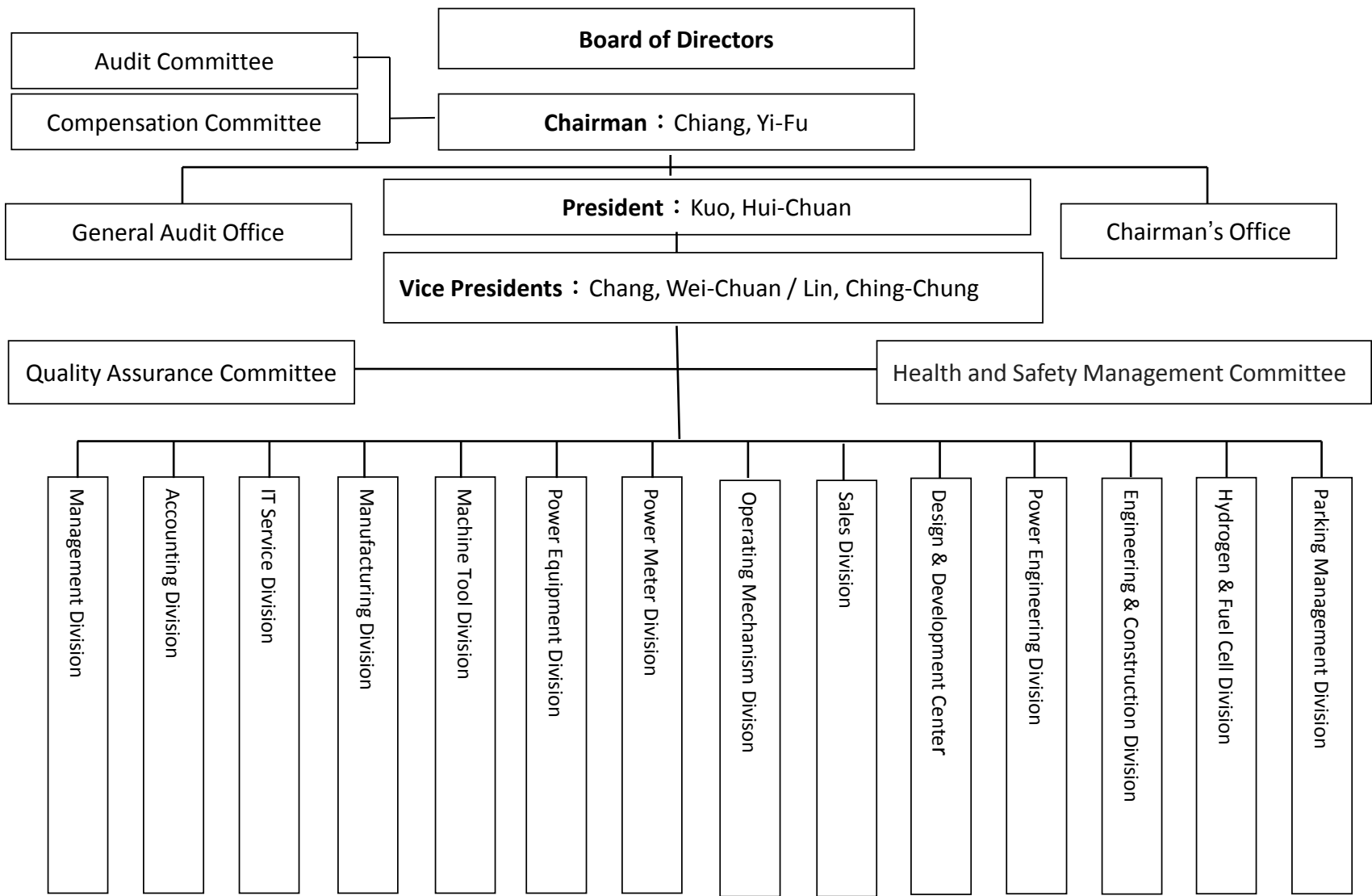


Scan for CHEM's Sustainability Development Practice in Principle

## Major Practice for Corporate Governance, Management and the Evaluation Criteria

Topics to Focus	Corporate Governance & Practice
To align the GRI indicators	GRI 201-1
Policy and commitments	Pursuit of Sustainable Business Management and Profit Gains Assurance of Stakeholders' Rights Maximize the Stakeholder's Gains
Objectives & Goals	<p><b>Short-term Goals</b></p> <ul style="list-style-type: none"> <li>-Be above the average from the result of Evaluation of Corporate Governance</li> <li>-Annual Consolidated Revenue to reach NT\$15 Billion and Net Income after Tax to reach NT\$ 1.5 Billion</li> </ul> <p><b>Long-Term Goals</b></p> <ul style="list-style-type: none"> <li>-Enhance the Business Performance in Operation</li> <li>-Stand in the Opportunity of Green Energy Industry &amp; Development</li> </ul>
Responsibility and Resources	<p>The board to authorize the management for sustainability development and the management shall update if in need.</p> <p>The board to authorize the Department heads to be the managers in sustainability in practice to enhance the effectiveness</p> <p>Whereas in need and raised by shareholders for topics in such topics, the board shall propose for resolution if in need.</p>
Evaluation Criteria and Results	<p>The result from evaluation for the Company's corporate governance has shown a satisfactory result (36%~50% among others).</p> <p>The company has also been recognized as Class A in Information Disclosure of Public Company from the past 10 years continuously.</p>





## Diversity in Board Members

Title	Name	Gender / Age	Educational Background & Experience Highlights
<b>Chairman</b>	Yi-Fu Chiang	Male>70	Department of Diplomacy, National Chengchi University, Head of Investigation Bureau President of CEM
<b>Director</b>	Hui-Chuan Kuo	Female<60	MS of Industrial Management, National Cheng Kung University Vice President of CEM
<b>Director</b>	Jin-Tiao Wu	Male<60	Ph.D. (Chemistry and Biochemistry), University of Maryland, U.S.A. President of Reinnova entech engineering Corp.
<b>Director</b>	Wei-Chuan Chang	Male<70	China Maritime College Vice President of CEM
<b>Director</b>	Fu-Nein, Chiang	Male<60	COO, Dodohome Group, Chung Hsin Electric & Machinery Mfg. Corp. Ltd.
<b>Director</b>	Ming-Xian Weng	Male>70	Department of Agricultural Engineering, National Taiwan University
<b>Independent Director</b>	Gene-Tzn Chen	Male>70	Department of Law, National Taiwan University. Legislator, Delegate to the National Assembly, Investigator, Lawyer, President of Taishin Securities Investment Trust CO.,LTD
<b>Independent Director</b>	Sing-San Pai	Male>70	S.J.D of Chinese Culture University M.Arch. National Cheng Kung University B.Arch. Chung Yuan Christian University M. Administration Management, University of San Francisco National Policy Advisor to the President. Board Director, Taipei Architects Association. Chairman, Consumers' Foundation, Chinese Taipei. Chairman, Memorial Foundation of 228. P.C.C Complaint Review Board for Government Procurement
<b>Independent Director</b>	Horng-Chi Chen	Male>60	S.J.D of Kindai University Legislator, Delegate to the National Assembly, Deputy Representative, Representative offices in Japan Chairperson of Taiwan-Japan Relations Association, Associate Professor

## 8 Capability of the Director of the Board

1. Professional Judgment for Operation
2. Accounting and Financial Analysis
3. Management and Operation
4. Risk Management
5. Industry knowledge
6. Business Perspective for Global Market
7. Leadership
8. Strategic Mindset for Execution

Title	Name	Course Name	Training Hours
Board Director / Representative of Stakeholders	Yi-Fu Chiang	Analysis of Global Trend – Risk & Opportunities	3
		Struggle for Management Rights & Case Studies	3
Board Director / Representative of Stakeholders	Ming-Xian Weng	New Corporate Governance Blueprints, Compliance of Regulations and the Focus	3
		Study for Business Finances and Application of Decisions	3
Board Director / Representative of Stakeholders	Hui-Chuan Kuo	Analysis of Global Trend – Risk & Opportunities	3
		Struggle for Management Rights & Case Studies	3
Board Director / Representative of Stakeholders	Jin-Tiao Wu	Freud Studies of Business Financial Statements and Case Studies	3
		Integrated case studies for Human Resources, Merges and Acquisition	3
Board Director / Representative of Stakeholders	Wei-Chuan Chang	Analysis of Global Trend – Risk & Opportunities	3
		Struggle for Management Rights & Case Studies	3
Board Director / Representative of Stakeholders	Fu-Nein Chiang	Analysis of Global Trend – Risk & Opportunities	3
		Struggle for Management Rights & Case Studies	3
Independent Director	Gene-Tzn Chen	Analysis of Global Trend – Risk & Opportunities	3
		Struggle for Management Rights & Case Studies	3
Independent Director	Sing-San Pai	Analysis of Global Trend – Risk & Opportunities	3
		Struggle for Management Rights & Case Studies	3
Independent Director	Horng-Chi Chen	Analysis of Global Trend – Risk & Opportunities	3
		Struggle for Management Rights & Case Studies	3



## The Performance Review of the Board

The Company had established Evaluation for Board Performance for enhancing efficiency and effectiveness of the board. The evaluation is performed at least once a year internally.

The average score of the self-evaluation for board performance is 4.84 (with 5 as the full mark). This has depicted that the board had well-performed the functions of supervision and directions for company policies, and the responsibilities for major business operation and the risk management. Meanwhile, the internal control protocol is established and is in compliance with corporate governance.

The average score of the individual board directors for self-evaluation is 4.61 (with 5 as full mark). This has also shown the board members are giving positive reviews for the efficiency and results for the assigned indicators.

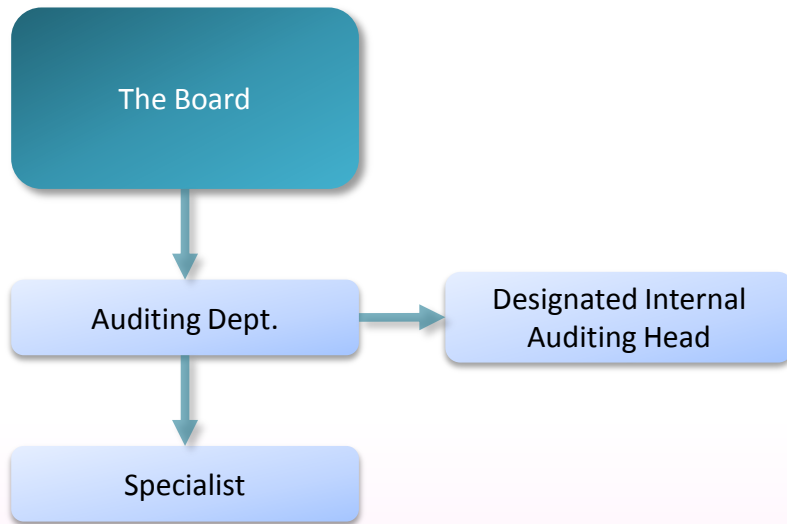
The average score of members of Audit Committee and the Remuneration Committee for self-evaluation is 5 (with 5 as full mark). This has also shown the appropriacy in operation for functional committees in terms of corporation governance, and had effectively enhanced the board functions.

The 5 elements for self-performance	Items for evaluation	Result
The level of participation of the business operation	12 items	4.67 /5
Decision Quality of the Board and Enhancement	12 items	4.83 /5
Composition and Structures of the Board	7 items	5.00 /5
Election of the Board Directors, Settlement, and Continuous Training Courses	7 items	4.71 /5
Internal Control	7 items	5.00 /5



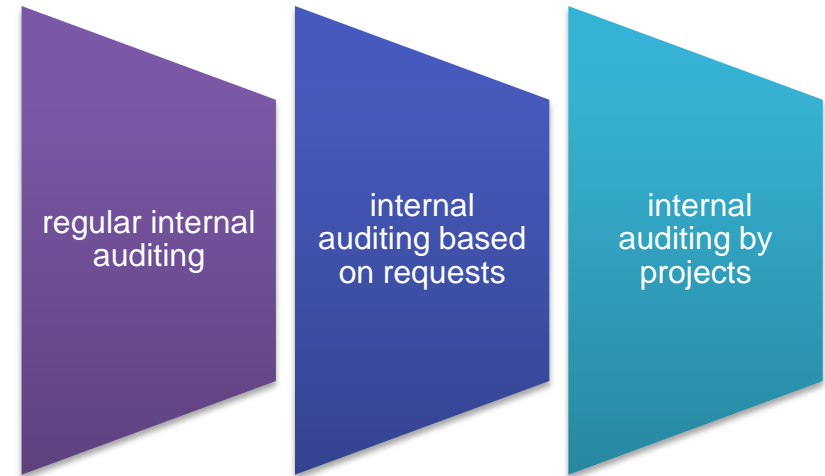
## Principle of Governance

•1 internal control and internal auditing, please see the organization chart for internal auditing.



## Internal auditing operation

the internal auditing is performed as,



## Integrity in Business Operation

Major Focus	Regulation Compliance
<b>GRI Indicator Correspondence</b>	GRI 205-2
<b>Company Policy &amp; Commitment</b>	Honesty, Transparency, Responsibility Honesty and Trust as the foundation for Policy making, governance and risk management protocol
<b>Responsibility &amp; Resources</b>	<p><b>Short-term Goal</b></p> <ul style="list-style-type: none"> <li>-promote integrity in business operation</li> <li>-plan for reporting system for effectiveness</li> </ul> <p><b>Mid-term Goal</b></p> <ul style="list-style-type: none"> <li>-establish guidelines</li> <li>-establish supervision system</li> <li>-examine the effectiveness</li> </ul> <p><b>Long-term Goal</b></p> <ul style="list-style-type: none"> <li>-be in compliance of the regulation, principle and practice</li> <li>-promote the enhancement of the integrity management</li> <li>-Put into practice for business operation</li> </ul>
<b>Establishment &amp; Supervision</b>	Establishment and Supervision
<b>Evaluation Criteria &amp; Results</b>	<ul style="list-style-type: none"> <li>-Establish the relevant policy and strategy in accordance with the regulation for Integrity in Business Operation, and is approved by the Board.</li> <li>-Over 117 employees have received relevant training on integrity by 438 hours in total, around 69 new employees have been trained in on-Board training under the same focus.</li> </ul>



### Code of Integrity Management

The company has formulated the "Code of Integrity Management" in March 2017 to prohibit the event of dishonesty, and it has been disclosed in the company's official website. The company's specific implementation of the integrity management policy and the plan to prevent dishonesty was also disclosed in the company's official website in 2021.

For more details in Code of Integrity Management, please refer to the Chinese version for sustainability report, the annual report of the Company or scan the QR code.



**Code of Integrity Management**



**Prevention of insider trading & Implementation**



## Emerging Risk Management

Covid-19 has brought the impact but the Company takes steps to mitigate the risks proactively and to enhance the quality of workplace safety and well-being balance.

### Measures of Pandemic Control Protocol includes:

- ◆Facilities to sanitize
- ◆Schedules to sanitize
- ◆Work flow to adjust
- ◆Vaccination days to promote
- ◆Following up for medical cares



The company is in compliance with the regulations, guides and protocols for managing emerging risk for stability and reliability in business management and operation. For details and practice please refer to the Chinese version of this report.



## Risk Management

The Company has established “Risk Management, Policy and the Procedures” for risk management and evaluation on a regular basis.

Risk Management and Response  
Please refer to the “Risk Management, Policy and the Procedures” from the Company Website.

## Risk Management in Segment



## Information Safety

### Management and Policy

The company has established the best practice for safety management for information and data. Confidentiality, integrity and availability are the priority in information management.

### Work Items to focus

Planning

Management of  
Safety

Management of  
Personal  
Information

Information Safety  
and Auditing

Curfew for Safety

Contracted and/or  
Supporting  
Contractors



Scan for  
Management in  
Practice for  
Information Safety

# 3

## Supply Chain Management

**p. 35 – Brief Introduction of Supply Chain**  
The Assessment for Supplier' s Performance

**p. 36 – Management of Supply Chain**  
Management Guideline and Commitment  
Management Strategies and Execution

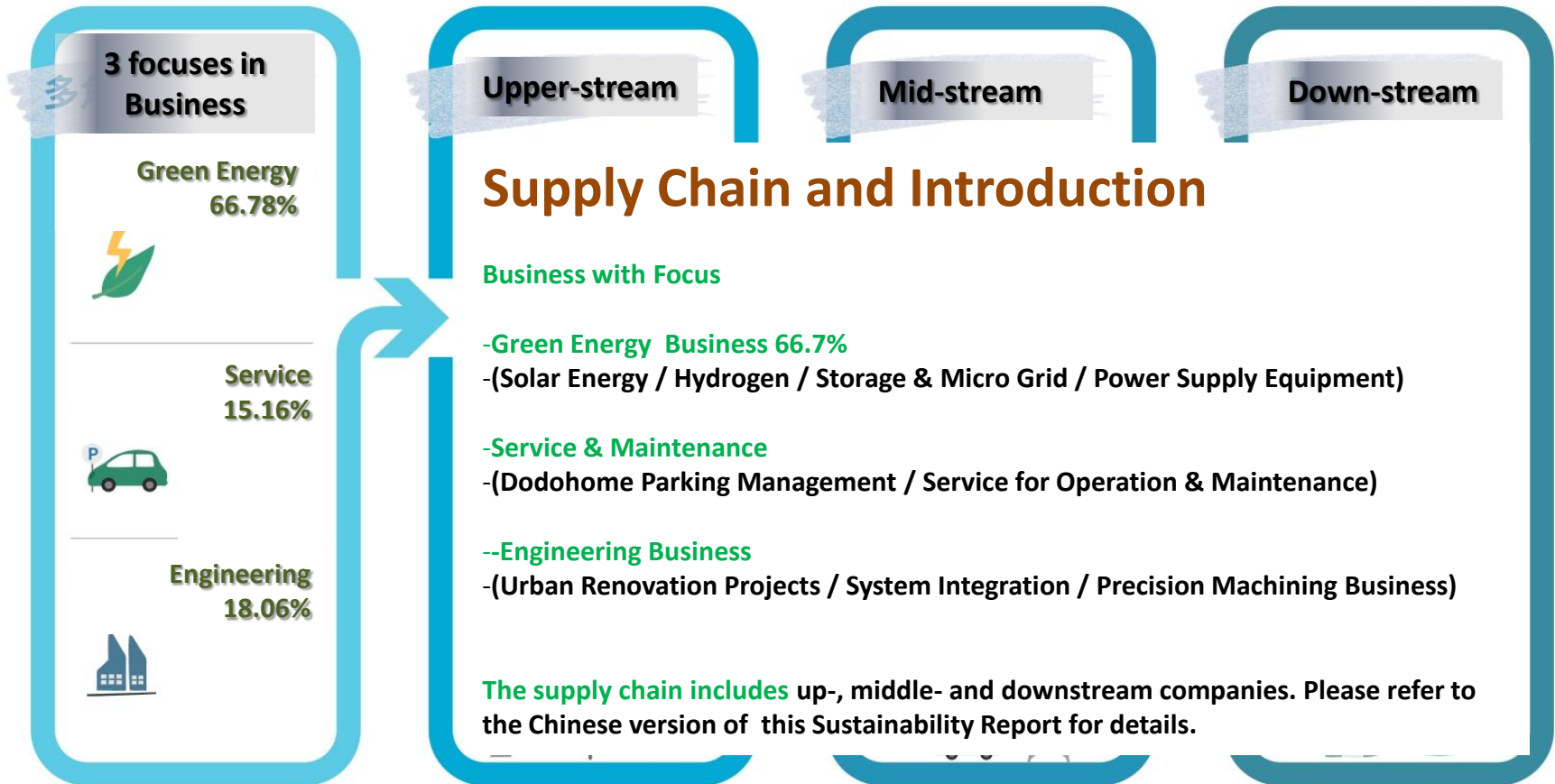
**p. 37 – Evaluation of Suppliers**  
Evaluation of Environmental Risks  
Evaluation of Social-Economic Risks

**p.37 – Assessment of Suppliers**  
The Assessment of Delivery  
The Auditing for Suppliers

**p. 38 – Sustainability in Supply Chain**  
Management & Practice



## Supply Chain and Introduction





## Supply Chain and Introduction

### -Management Guidelines and Commitment

CHEM has integrated resources and proven competitiveness for long-term and strategic cooperation with suppliers. Commitment by CHEM has included:



### -Management Strategies and Execution

CHEM puts management and strategies for sustainability in practice and has established the process for evaluation, assessment, assistance and training for suppliers. ISO 991 and ISO 14001 and other relevant or equivalent proofs are required as qualified suppliers of CHEM.



## Evaluation for Suppliers

The company evaluates the suppliers on a regular basis to enhance the continuity of supplying from contractors to fulfill the requirements in quality, environment protection and product safety. The Company looks into 3 major parts.

- Plans for Continuous Operation
- Understanding for the Source
- Evaluation and Improvement Revisit

### Evaluation of Environmental Risks

The Company also looks into the risk analysis for environmental factors, and social-economical factors. Evaluation is performed for continuity, reliability, and sustainability.

### The Assessment for Supplier's Performance:

-Assessment for Delivery

The currently suppliers to CHEM has proved 100% qualified as examined from 544 vendors/suppliers, with the qualifying mark at 70.

### -The Auditing for Suppliers

The company audits the suppliers based on criteria regularly. For details in understanding and the process of auditing, please refer to the Chinese version of Sustainability Report.

### Evaluation for Suppliers' Delivery of 2021

Qualifying Standard to fulfill	Numbers of Suppliers Evaluated	Suppliers Qualified	Percentage of Qualified Suppliers
70	544	544	100%

## Sustainability in Supply Chain

### Management & Practice:

the expenses on purchasing from domestic market have reached 73.98% if seen from the whole supply chain perspective.



The Practice takes 3 domains into account for sustainability in supply chain management. Environmentally, the company chooses vendors certificated with green labels granted by Bureau of Environmental Protection and other officially recognized sources. The company also practices 4R, by reuse, recycle, reduction and replace for the overall performance in environmental protection, carbon reduction in action and circular economics.



Socially, the company evaluates the suppliers with reference promoted by mineral resources or mineral reserves in SEC filings to avoid sources from conflicts and to fulfill the corporate social responsibilities.



From Governance perspective, the Company jointly developed products for renewable energy, “Liquid/Air Cool kW Hydrogen Fuel Cell Project” with National Central University. The Tenders as contractors have to prove with relevant certificates to comply the regulations.

### CHEM’s Spending in Domestic Purchase:

**\$3.7403**

**Billion**

**Total Spending  
in materials and parts**

**\$2.76608**

**Billion**

**Total Spending  
for Domestic Procurement**

**73.98**

**Percent**

**Percentage of  
Domestic Procurement**



# 4

## Environmental Protection

### p.40 Sustainability & Environment

- Principles for Environment Management

### p.41 Energy Management

- Statistics for Energy Consumption
- Reduction of Energy Consumption

### p.44 Pollution Control

- Management for Air Quality
- Management for Water Resource
- Management for the Disposable

廢棄物管理



## Sustainability in Environment

CHEM's Focus for Energy-Saving and Carbon Footprint Reduction in 2021.

focus	Energy-saving and Carbon Footprint Reduction
GRI Indicator Correspondence	GRI 305-5
Strategy and Commitment	CHEM's Goal is to move into the era of zero-pollution, energy-saving and clean.
Objectives and Tasks	<p>Short-term objectives</p> <ul style="list-style-type: none"> <li>-promotes carbon-reduction, changes to energy-saving equipment for AC and/or lightings</li> </ul> <p>Long-term objectives</p> <ul style="list-style-type: none"> <li>-supports the country's green energy business and relevant industries, promotes safety for energy, green economics and sustainability</li> </ul>
Responsibility and Resource	The Company had established renewable energy research center in 2008
Evaluation Criteria and Result	<ul style="list-style-type: none"> <li>-the Company</li> <li>-Greenhouse Gas Emission of 2021 from CHEM, Linko Plant is calculated and equivalent to 5,044.55 ton CO<sub>2</sub>e</li> <li>-Greenhouse Gas Emission Reduction by environmental forestation in plants to offset approximately 2% of the emission</li> <li>-Solar Panel for power generation in Plants, generating 2,200kWp.</li> <li>-Energy-saving in practice and had saved 87,609.39 kWh, greenhouse gas reduced by 45.62 ton CO<sub>2</sub>e.</li> <li>-NT\$8 Millions in expenditure for renewing facilities in air pollution reduction</li> <li>-CHEM had generated 1,070,752 kWh for TaiPower Company by solar power projects.</li> </ul>

## Energy Management

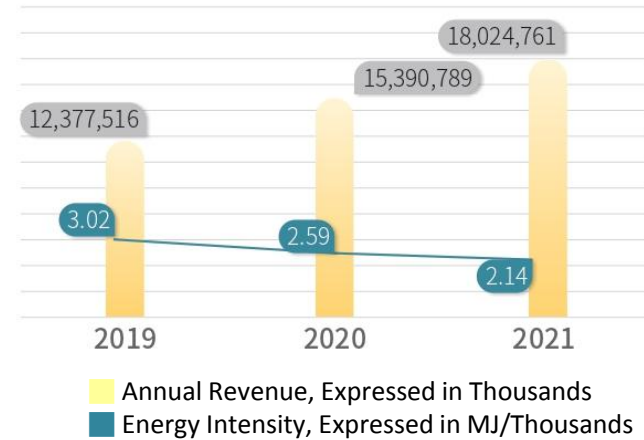
- statistics for energy consumption
- energy usage in the recent 3 years

Scope	types	Unit	2019	2020	2021
1	Petrol	Liter	19,690	22,930	19,620
	Diesel	Liter	72,000	108,000	126,000
2	Electricity	kWh	9,544	9,728	9,324
	Greenhouse emission	Ton CO2e	5,013.91	5,206.10	5,044.55

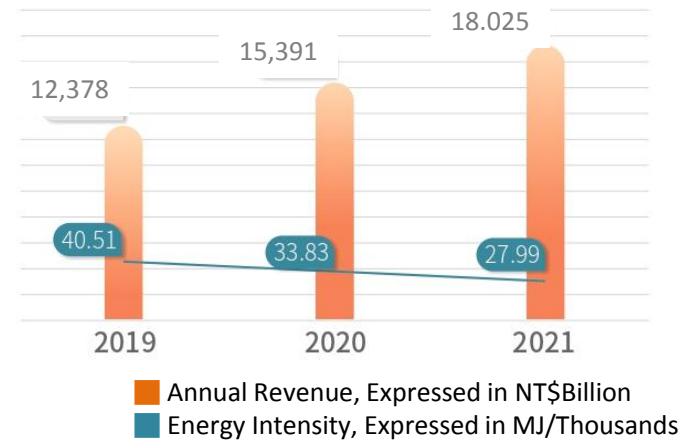
- energy consumption in the recent 3 years

Scope	types	Unit	2019	2020	2021
1	Petrol	MJ	546,088	635,948	544,147
	Diesel	MJ	2,528,064	3,792,096	4,424,112
2	Electricity	MJ	34,358,000	35,021,000	33,566,000
	Total Energy Consumption	MJ	37,432,152	29,449,044	38,534,259

## CHEM's Energy Consumption Intensity Level



## CHEM's Greenhouse Emission Intensity at Linko Plant



## Reduction on Energy Consumption

The Company had self-established the solar panel for generating 2,200 kWp . We also joined the project and purchased green power for 700,000 kWh with the goal fulfilling green power policy and practice.



CHEM's Self-Built Solar Panel Installation for Renewable Energy in Practice

## Energy-Saving and Performance Review

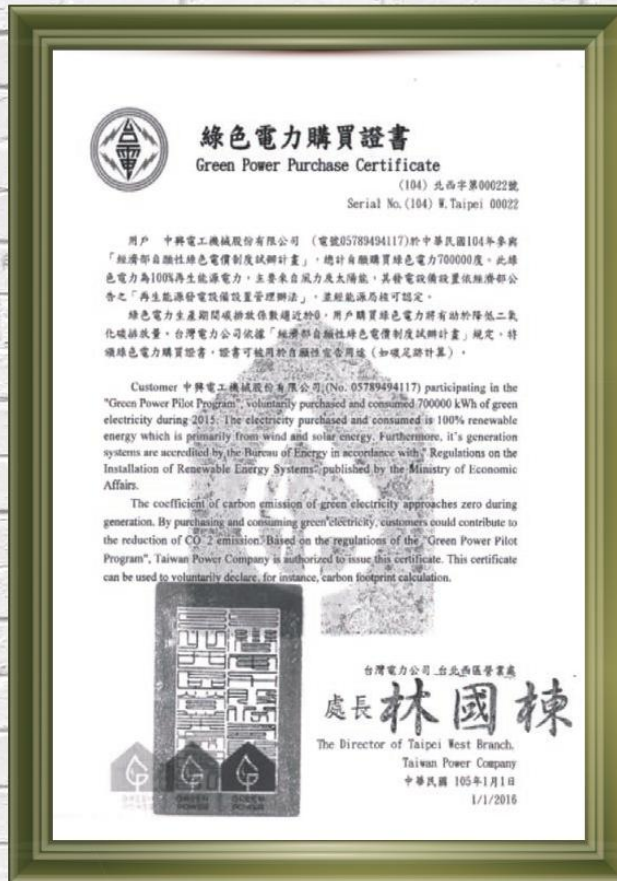
Actions	Power-Saving (Unit: kWh)	Reduction of Energy Consumption (Unit: MJ)	Reduction of Carbon Emission (Unit ton CO <sub>2</sub> e)
Lights to retire	21,225.6	74,413.12	11.05
LED lights to retire	24,122.7	86,841.72	12.56
Air compressor to change	42,261.08	152,139.89	22.01
Heat pump water heater to renew	28.8	216	15
Accumulation	87,638.18	315,609.73	60.62

## CHEM's Expected Capital Expenses for Environmental Protection Projects

Items	2021	2022	2023
<b>To be purchased</b>	Refurbishment for air quality improvement facilities	Renewal of waste water facilities	Improvement for the waste area
<b>Outcome to achieve</b>	To fulfill the requirement	To fulfill the requirement	To increase the efficiency of storage
<b>Estimated expenses</b>	Approx. NT\$ 8 Million	Approx. NT\$ 7.5 Million	Approx. NT\$ 8 Million
<b>Possible impact</b>	No significant impact	No significant impact	No significant impact



Green Power Purchase Certificate to CHEM from TaiPower Company and Ministry of Economic Affairs





## Pollution Prevention and Practice

focus	Pollution Prevention and Practice
<b>GRI Indicator Correspondence</b>	GRI 307-1
<b>Strategy and Commitment</b>	CHEM’s Goal is to be qualified for the ISO 14001 and to be in compliance with environmental protection regulations.
<b>Objectives and Tasks</b>	<p><b>Short-term objectives</b> -targeting air pollution, and reducing the air pollution</p> <p><b>Mid-term objectives</b> -targeting water pollution and waste water management</p> <p><b>Long-term objectives</b> -targeting waste reduction at the manufacturing and recycling the leftovers or the disposables.</p>
<b>Responsibility and Resource</b>	The Company had assigned relevant technicians and specialists focusing on reduction of air pollution, waste water management and waste cleaning. The responsibility of the team is to be in compliance with regulations as guided by the authorities.
<b>Evaluation Criteria and Result</b>	<ol style="list-style-type: none"> <li>1. The Company so far has never been in physical damage or suspension caused by pollution issues or concerns.</li> <li>2. The Company draws samples as regular tests for examination and environmental protection</li> <li>3. The Company has completed renewal for the waste water pipelines and engines for meeting the standards and requirements.</li> <li>4. The recyclables and the disposables are regularly scheduled for cleaning up.</li> <li>5. Noise Control is also in the place for manufacturing process in both plants and/or for engineering projects. Action for improvement is taken place when noises exceed the standards from the guidance.</li> </ol>



## Management for Air Quality

The Company practices the management in accordance with the regulations and follows the protocols and guidelines as the priority. The company does not operate any needs in burning, grinding and transporting with the result of creating harmful particles in air pollution. The efficiency has been significantly improved by adapting the new ACTIVE CARBON ADSORPTION TOWER. Please see the report as followed (Unit: kg)

Items	2019	2020	2021
NOx	44,310	49,710	46,160
SOx	3,520	3,910	4,450
VOCs	14,047.12	17,738.36	19,446.6

the new ACTIVE CARBON ADSORPTION TOWER is ready for use.



## Management for Water Resource

The company's water resources come from groundwater (approximately 70%) and the tap water (approximately 30%) respectively, and this does not impact or create the risk for the local water resource consumption. Water-saving procedure is also in place, water usage in 2021 was 82.111 M/Liter and was reduced by 17.217 M/Liter if compared with water usage in 2020. For more details and figures, please refer to Chinese Version of this report.

### Water Consumption by CHEM in recent 3 years (Unit: Million Liter)

Items	2019	2020	2021
Groundwater	64.61 (71.36%)	73.186 (73.66%)	61.89% (75.3%)
Tap water	25.904 (28.62%)	26.164 (26.34%)	20.24 (24.64%)
total	90.514	99.35	82.133

## Management for Waste

The Company practices the management in accordance with the regulations and standards for waste management.

1. Waste area is designated and regulated. Clean-up is scheduled and executed by qualified service provider and contractors.
2. Reporting for waste management and clean-up is practiced.
3. Examiners for visit to check the compliance are performed.
4. Toxic disposables are collected and managed in compliance to the goal of reducing harmful effect to environment.
5. Packaging by suppliers are encouraged to reduce, and to be collected for recycling after use for consumption reduction.
6. The total waste by CHEM at Linko plant is 435.619 tons. The toxic and the non-toxic waste generation is 0.048 ton and 435.571 tons respectively.
7. Industrial waste from business reaches 253.296 ton and stands for 58.18% of the total waste. The 253.25 tons are from recycled wooden pallets and 0.046 tons are recycled mercury bulbs.
8. Direct industrial waste reached 182.323 tons and is 41.85% of the total waste. 182.320 tons are waste from general waste and 0.002 tons are medical waste and is to be incinerated safely.

## Waste and Handling in 2021

Type of waste	Production	Transfer	Direct incineration
Toxic industrial waste	0.048	0.046	0.002
non-toxic industrial waste	435.571	253.25	182.321
<b>Total Waste</b>	<b>435.619</b>	<b>253.296</b>	<b>182.323</b>

Type of waste	Operation	Off-site Handling	Handling Operation	Off-site Handling
Toxic industrial waste	For Reuse	-	Incineration	0.002
	For Recycle	0.046	Burial	-
	Other types of recycling	-	Others	-
non-toxic industrial waste	For Reuse	-	Incineration	183.321
	For Recycle	253.25	Burial	-
	Other types of recycling	-	Others	-
	<b>Total Waste</b>	<b>253.296</b>	<b>Total</b>	<b>183.323</b>

# 5

## Working Environment

p.48 **Friendliness in Workplace**  
Human Resource Structures  
Talent Acquisition and Retention  
Fairness

p.50 **Welfare for Employees**  
Salary and Remuneration  
Workplace Relations  
Welfare and wellness with Diversity  
Gender Equality

p. 55 **Learning & Development**  
Training Resources



## Structures of Human Resource

Type of Employee Contracts		Male		Female		Total
		Taiwanese	Non-Taiwanese	Taiwanese	Non-Taiwanese	Numbers of Employee
<b>Contract</b>	Permanent	1232/73.42%	1/0.06%	304/18.12%	-	1537/91.60%
	Temporary	51/3.04%	76/4.53%	6/0.35%	8/0.48%	141/8.40%
	total	1283/76.46%	77/4.59%	310/18.47%	8/0.48%	1678/100%
<b>Type</b>	Full-Time	1279/76.22%	77/4.59%	310/18.47%	8/0.48%	1674/99.76%
	Part-Time	4/0.24%	-	-	-	4/0.24%
	Total	1283/76.46%	77/4.59%	310/18.47%	8/0.48%	1678/100%
<b>Workforce</b>	Direct	1058/63.05%	76/4.53%	272/16.21%	8/0.48%	1414/84.27%
	Indirect	225/13.41%	1/0.06%	38/2.26%	-	264/15.73%
	Total	1283/76.46%	77/4.59%	310/18.47%	8/0.48%	1678/100%

## Employee Acquisition and Turnover Rate

Type	Age	Male		Female		Total	
		#	%	#	%	#	%
New Employees	18~21	10	71.43%	0	0.00%	10	71.43%
	21-30	85	34.00%	24	41.38%	109	35.39%
	31-40	41	14.24%	8	10.13%	49	13.35%
	41-50	28	9.30%	6	8.11%	34	9.07%
	51	36	7.10%	6	5.61%	42	6.84%
Total		200	14.86%	44	13.84%	244	14.66%
Leaving Employees	18~21	1	7.14%	0	0.00%	1	7.14%
	21-30	47	18.80%	11	18.97%	58	18.83%
	31-40	41	14.24%	14	17.72%	55	14.99%
	41-50	21	6.98%	2	2.70%	23	6.13%
	51	79	15.58%	8	7.48%	87	14.17%
Total		189	14.04%	35	11.01%	224	13.46%

## Equality at Workplace

The Company creates a friendly workplace for the employees and follows the beliefs as below:

- **Diversity at Workplace**
- **Customized Job Responsibility for Needs**
- **Job opportunities and Stability**
- **Performance Recognition and Achievement for both sides**
- **Recognition**
- Granted by Taoyuen City Government for CHEM's Achievement in Creating Job Opportunities for Senior Employees.



## Welfare for Employees

Salary - The company increased 3% for average salary to ease the intensity brought by inflation. The average minimal wages and compensation for employees between male and female workers are shown to be 1:1 and this complies with the company's policy in income equality.

Year	2019	2020	2021
Average Salary of Non-Managers in CHEM	699K	747K	809K
Median in Salary	628K	659K	702K

	Gender	2019	2020	2021
Average Monthly Salary of Entry-Level Employees at CHEM	Male	31,066	32,354	32,368
	Female	29,364	31,127	31,694
Minimal Monthly Wage or Salary of Local Entry-Level Employees	Male	1.345	1.359	1.349
	Female	1.271	1.308	1.321

## Employers & Employees

Smoothness in Communication – the Company holds 4 times for meetings between the company and the representative of the Labor Union. Choices for communication are available for employees for open discussion. The Union has represented for 1,276 employees and stands for 76.04% of the total employees.



- CHEM management holds regular meetings with the representatives of employees for alignment.

## Human Rights Policy

### NO Child Labor

### NO Enforcement of Work

### NO Discrepancy in Hiring Decisions

The company joins RBA (Responsible Business Alliances ) and is in compliance with the requirement and standards in rights of employees , health and safety for employees and the managements systems for eco-friendliness and ethical requirements.

The Company does not hire child labors and prohibits any forms of enforcement of workforce. There are no gatherings or similar incidents for misunderstanding and no major conflicts between the Company and employees.

## Benefits

**The Company assists and provides employees with choices in** health and medical facilities, family planning, law and tax support, canteens, recreational facilities, and many others for distress relief, the cohesiveness and the group awareness.

The Company provides not only the regular labor insurance, paid leaves, parental leaves, but also supports in different types of medical insurance, retirement funds, emergency aids, gift cash for weddings and/or funerals, scholarship application and etc. The average cash benefits for one individual is approximately NT\$20,000.

**2021 vs. 2020**  
**+15,714,376 (0.97%)**

**2021**

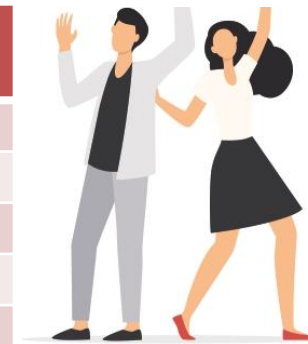
1,633,288,243

**2020**

1,617,573,867

**2019**

1,397,970,454





## CHEM's Welfare Package

### Work-Life Balance

- Birthday Gift Money
- Reimbursement for travels and trips

### Family Support

- Flexible Working Hours available
- Child Care Center available nearby with reimbursement
- Scholarship available for employee's family member's application

### Health Promotion

- Vaccination Leave
- Group Activities for Distress Relief as Quitting Smoking Month, Weight-Losing and weight Watcher Competition, Talks, Workshops and other engagement available.

## Activities for Employee's Health & Enhancement



### Basketball Competition



### Routine Exercise at Lunch Break & Tea Break

## Engagement of Physical Exercises



### Weekly Morning Exercise



### Distress Reliefs

## Clubs and Subsidies

clubs include bowling, badminton, billiards, charities, and others. The clubs also work with local communities for local awareness and environmental friendly acts

### Charity Club, Hiking Club & Bowling Club



- Bonds – Colleagues helping each other on accidents caused by heavy rainfall



## Recruitment and Package

- Cash compensation for introducing connections as the company's job applicants.
- Dorms available for needs.



## Retirement

- The Company is in compliance with regulations and labor laws for retirees.
- Pension is accumulated. 10% is collected from the Company based on salary calculation for trust funds. 6% is collected from individuals if new regulations applies and is available.

## Compensation

- For details for packages and benefits, please refer to the Chinese version for this report.

## Gender Equality

- Salary, compensation, welfare or benefits, promotion are managed without gender inequality. 30% of high-level management was composed of female employees.
- Needs for maternity or pregnancy are managed. Consultation or help for pregnancy-related concerns, designated parking space, breastfeeding room, and other health checks are available.

### ► Breastfeeding Room & Facilities



### ► Canteens, reimbursement for lunch



## Learning and Development

Focus	Learning and Training for Development
<b>GRI Indicator Correspondence</b>	GRI 404-1
<b>Strategy and Commitment</b>	CHEM's Goal is to create the friendly workplace for employee's career path and to build effective training path for career development.
<b>Objectives and Tasks</b>	<p><b>Short-term objectives</b> -enhance the capacity and productivity for big-picture innovative and thinking.</p> <p><b>Long-term Objectives</b> -Training given for talents to enhance the competitiveness.</p>
<b>Responsibility and Resource</b>	Specialists are assigned to support training and learning activities, training workshops and/or lectures are also available.
<b>Evaluation Criteria and Result</b>	<p>-on-board training is given for new-comers on company introduction, regulations, quality evaluation, environment policy.</p> <p>-Extra spot bonus or performance bonus to individuals is given if credits, certificates, qualifications and/or awards are granted or received to the individuals.</p> <p>-Average training hours of an individual is approximately 15.402 hours, while male employees have 15.885 hours and 10.959 hours for female employees respectively.</p> <p>-Accumulated compensation given to employees over the recent 5 years have reached \$1,123,979.</p>



## Learning and Development Resources

Specialists are assigned and professionals are hired for on-board training and at-work training. Learning and Development activities are scheduled on a needs-basis. The training includes management, core competency and self-development. Others also include language training and/or training, courses at schools. Accumulated compensation given for learning and development has reached over \$1.22 Million from the recent 5 years.

	Training Hours		Average Training Hours	
	Male	Female	Male	Female
<b>Employees</b>	6,084	341	15.844	10.656
<b>Management</b>	512	56	18.286	11.2
<b>High-Level management</b>	44	48	7.3333	9.6



# 6

## Safety and Health

### p. 58 Policy and Management

Occupational Safety and Health Management System  
Danger Identification and Risk Management  
Criteria for Evaluation & Effectiveness

### p. 68 Health Care

Health Check for Employees  
Occupational Health Physician and Service  
Protection Gears and Training for Use

### p. 64 Health Improvement Engagement

Walk-in & Visits for Health Inquiries Available

On-going Activities: No to Smoking, Diet & Weight-watcher

### p. 65 Pandemic Protocol

Covid-19 Prevention and Protocols  
Flu shots and Vaccination Availability

<b>focus</b>	<b>Occupational Safety and Health Management</b>
<b>GRI Indicator Correspondence</b>	GRI 403-8
<b>Strategy and Commitment</b>	CHEM's Goal is in compliance with ISO14001 and ISO 45001. The Company had also established the guidelines for employees' rights under incremental improvement.
<b>Objectives and Tasks</b>	<p><b>Short-term objectives</b></p> <p>-guidelines and protocols as the foothold established, emergency and drills for danger prevention executed, visits and check-in visits around plants are performed on a regular basis</p> <p><b>Long-term objectives</b></p> <p>-standards for protocols, improvement and enhancement</p> <p>-strengthening the communication and support among teams and departments</p>
<b>Responsibility and Resource</b>	The Company provides occupational medical staff consultation service. Protection gears and regular health check are provided to long-term night-shift workers. Health checks are scheduled biennially
<b>Evaluation Criteria and Result</b>	<ul style="list-style-type: none"> <li>■ISO 14001 approved</li> <li>■ISO 45001 (was OHSAS 18001) approved</li> <li>■Regular overall maintenance and examination for high-risk machines and operation included.</li> <li>■Self-management and measures for Safety and Health Management to reduce the possibility of risks and dangers on site is included.</li> <li>■Evaluation and management of suppliers/vendors is to be in compliance with relevant policies, regulations and protocols, to ensure the safety, risk management, environmental protection and human rights.</li> </ul>
	For details and certifications, please refer to the Chinese version of this report.



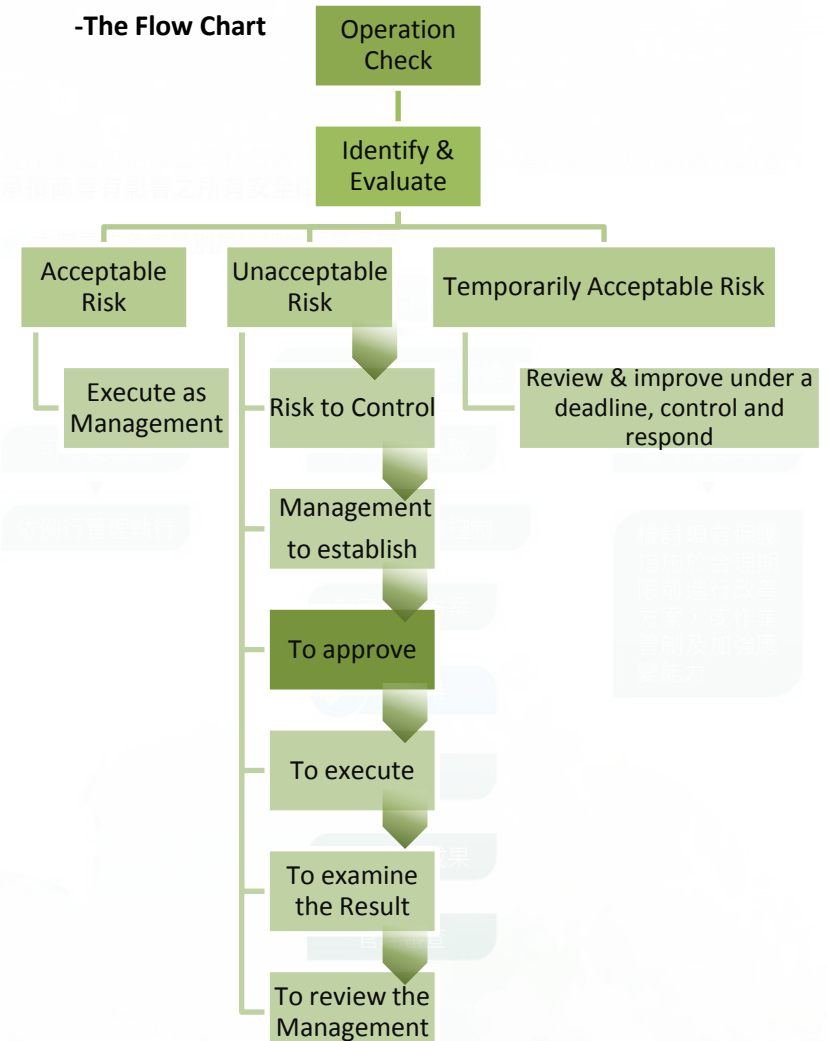
## Occupational Safety and Health Committee

The Committee was established in accordance with the regulations and is held for planning, execution, evaluation and enhancing the safety and health standard in work sites. The committee is composed of 31 members including supervisors, directors, technicians, medical specialists and the representative of the employees. Proposals and resolutions to follow up with evaluation and improvement are well-executed and tracked for reducing occupational risks .

For details with responsibility of each team in this committee, please refer to the Chinese version of this report.

## Risk Identification and Evaluation

### -The Flow Chart





## Execution

Risk identification and evaluation of risk are executed in accordance with the operation area and the departments. The evaluation is taking the following items into account, the work flow and operation, content, statues (regular or on-demand), raw material usage, types of machines and facilities, possible hazards or dangers.

For details and the process of danger-identifying and risk-evaluating, please refer to the Chinese version of this report.

## Control Measures

Risk Identification and Risk Level, please see below.

Risk Level	Risk Type	Response
1	<b>Very High Level Risk (Unacceptable)</b>	Review current status, speed up the immediate improvement and the responding reinforcement
2	<b>High Level Risk (Unacceptable)</b>	Review current status, respond before the reasonable deadline, start improvement and the responding reinforcement
3	<b>Upper-Medium Risk (Temporarily Acceptable Risk)</b>	Temporarily acceptable risks are managed and examined to see if any effective protection is available for operation procedures. Items to be added for later improvement and to reinforce the capability for immediate response.
4	<b>Medium Risk (Temporarily Acceptable Risk)</b>	Temporarily acceptable risks are monitored continuously.
5	<b>Low Risk (Acceptable Risk)</b>	Acceptable risks are monitored continuously.

## Educational Training for Safety & Health Practice

For details and the training for occupational safety and health practice with course names, content, hours, numbers of participants, please refer to the Chinese version of this report.

### General Training Courses

- For New Employees
- For Existing Employees
- For Supervisors
- For Management
- For Management on Board
- For Type A Supervisors
- others

### Mobile Crane Operation Training

- Training for lifting Allowance over 3 tons & lower than 3tons
- Training for lifting Allowance over 3 tons

- Safety in Operation (Vietnamese)
- Allowance >0.5 Tons but <3 tons

### Mobile Crane Operation

- Occupational Training
- Special Training – Initial Stage
- Allowance >1 tons

### Forklift Operation

- Dangers & Hazards in Operation
- Hazards (Dust) in Operation for Supervisors
- Limited Oxygen in Operation
- Engineering for Construction
- Cranes in Height
- High Pressure in Operation
- Air Pollution in Operation

### Special Operation

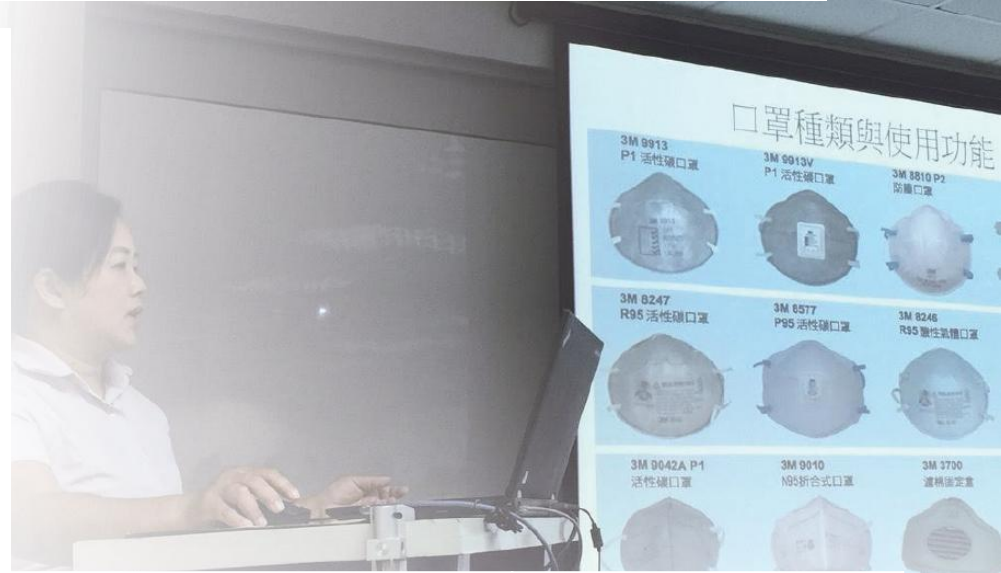
- Fire & Management
- Emergency Training
- Others

### Emergency Operation

## Occupational Injuries

The main causes for occupational injuries in CHEM are usually falls, clamps, hits, slips or trips and cuts, leading to occupational accidents. Clamps are the most common cause. The percentage of the recent 3 years is gradually decreasing and is lower than the average in the same industry.

For details, please refer to the Chinese version of this report.



	2019	2020	2021
<b>Working Hours</b>	3,033,269	3,385,586	2,912,517
<b>Minor Injuries</b>	7	5	3
<b>Minor Injuries Percentage</b>	2.3077	1.4768	1.03
<b>Serious Injuries</b>	0	1	0
<b>Minor Injuries Percentage</b>	0	0.2954	0
<b>Death Incidents</b>	0	0	0
<b>Death Rate</b>	0	0	0
<b>Number of Recordable Injuries</b>	7	6	3
<b>Percentage of Recordable Injuries</b>	2.3077	1.7722	1.03

## Occupational Health Check and Service

First Aid Room / Medical Emergency Room is available for employees. The health management is operated in accordance with the relevant requirement and regulations. Overall health check is provided biannually and cancer check is also open in selected hospitals.

Employees over 65 and those who are operating in special work environment are provided with health check once a year. Gadgets and protection wears are offered, training/work shops for health management are provided. Medical staff gives walk-in check for flexibility based on different working environment.

year	2019	2020	2021
Numbers of People Examined for Ear Health Check	171	124	146
Level 3 Personnel	0	18	14
Level 4 Personnel	0	8	3



Health Check and Consultation Service Available for Employees

## Availability for employee's relatives and vendors/contractors

CHEM practices the beliefs of a family-oriented working spirit and makes the health check available for employee's relatives and vendors/contractors. On-site medical staff or physicians for occupational safety and health advice are available. Starting from fewer than 100 people being encouraged to take part in for professional checks and consultation, for now it has increased to over 300 people receiving for professional and occupational medical advice and help especially in occupational safety and health concerns in special working environment.



On-site medical staff /physicians for occupational safety and health advice are available.



## Training for Using Protection Gadgets and Gears Correctly

To ease the risk of damage from hearing in working environment with high-level noise volume, the company provides different types of trainings for using protection gadgets and gears correctly and enhances the availability of various protection gadgets and gears.

## Health Advice & Engagement in Workplace

CHEM enhances the work-life balance for employees. Internal and external resources are integrated flexibly for reaching the balance and is also proactively assisting and improving health quality for employees.

For details and examples of the walk-in checks by the medical specialists, please refer to the Chinese report.

### Sound Proof and Protection Gear for Employees



25dB



24dB



33dB



28dB



27~32dB

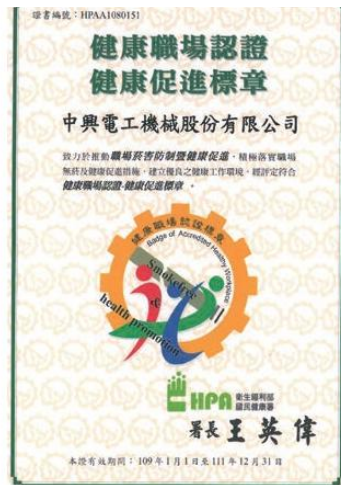
4-5 types  
available for  
different needs

CHEM provides over four types of protection gear for sound proof.



## Quit Smoking & Weight Watch Boot Camp

CHEM enhances the quality of employee's health by promoting events and activities such as smoking-quitting and weight-losing exercise boot camps. Nutritionist and medical consultants are available for employees. Events are open to domestic employees and also the foreign ones. Results are well-received. Furthermore, the Bureau of National Health had also approved and granted the recognition to the company with the "Health Promotion Achievement"



▲ Achievement for Health Promotion – the Recognition from the Bureau of National Health



▲ Weight-Watch Event and Goodie Bags for Participants

## COVID-19 and Pandemic Management

The company had been proactively promoting the pandemic protocol for prevention and protection. Acts include masks-purchasing in bulk for price affordability at the start of the pandemic outbreak, and making non-contact body-temperature measurement and sensors available at ease. Records were kept on track and assistance was provided if in the case of emergencies and needs.



▲ Bulk prices available for employees at the stages of pandemic control under limited numbers of masks and personal protection wear available.

## Vaccination for the Flu and the Availability

CHEM enhances the quality of employee's health by increasing the vaccination rate for employees and the relatives. The availability for vaccination allows the flexibility and the overall numbers of vaccinated employees for the flue. CHEM was also recognized with the Silver Award for Vaccination Promotion and Awareness.



- ▲ CHEM enhances the vaccination availability to boost the rate of vaccination for employees and was granted the silver award for recognition by Taiwan Immunization Vision and Strategy.



# 7

## Charity

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SDGs 1 No Poverty

SDGs 2 Zero Hunger

SDGs 3 Good Health & Well-Being

SDGs 4 Quality Education

SDGs 9 Industry, Innovation & Infrastructure

SDGs 10 Reduced Inequalities

SDGs 10 減少不平等





Focus	Charities and Participation for Social Activities
GRI Indicator Correspondence	GRI 203-1
Strategy and Commitment	<p>CHEM’s Goal is to evaluate the influence for community and to gain the recognition from community.</p> <p>CHEM’s move is to participate or to initiate activities such as commercial events, donation, volunteering events and/or other professional events with local organization, charities, local government to improve overall long-term development in communities.</p>
Objectives and Tasks	<p><b>Short-term objectives</b> -to increase the level of participation and leverage the influence</p> <p><b>Mid-term objectives</b> -to support professional infrastructures, to develop quality ones with high recoverability and affordability for public needs to assist economic development.</p>
Responsibility and Resource	<p>-The Board had authorized the management to execute and to report</p> <p>-CHEM’s Trust Fund for CHEM’s Charity Foundation is established for reinforcement and urgent needs.</p>
Evaluation Criteria and Result	<p>-the Company’s Trust Fund for CHEM’s Charity Foundation assists with instant financial and mental support.</p> <p>-Regular financial aids from NT\$3000-to NT\$20,000 to ones in need to get through the hardship.</p> <p>-Regular visits to orphanage and children’s home by supporting with aids in tuition, lunch fee and daily necessities. (Hung-Wha Children’s Home, Da-dun Children’s home etc.)</p> <p>-College and Industry Cooperation Project – Learning and Hands-on Experience projects and/or internship opportunities for college graduates</p> <p>-Overall donation from the Company Trust Fund for CHEM’s Charity Foundation had already reached NT\$4,687,285 to charities in remote village in Taoyuen, Northern Taiwan.</p>



## SDGs 1 No Poverty

### CHEM's helping hand to people-in-need

The Company's Trust Fund for CHEM's Charity Foundation had already made the achievement in giving support and works as a helping hand for families in need and people going through the hardship in challenging times. The Company also supports the events aiming at helping the elderly, and the kids in underprivileged families by donations and food aids

The total amount of donation had reached NT\$ 4,687,285 to charities around Taiwan to charities of various purpose and uses for goodwill, these include children's homes and shelters for families, teens, kids in need. Please refer to the Chinese report for the Chinese names of charities to avoid discrepancy in translation.

- (A) CHEM received recognitions from charities.
- (B) Children with outstanding achievement at school receiving scholarship provided by CHEM's Trust Fund and Supports.



A



B



**SDGs 2**  
**Zero Hunger**

- (A) CHEM received recognitions from charities. CHEM welcomes the residents nearby for job openings, encourages the participation of the Company's events, donates to the in-needs, also subsidizes the events financially.
- (B) CHEM gives aids in "Dish-Sharing Gathering" for the Elderly in Communities.



3



SDGs 3

Good Health  
& Well-Being

CHEM received recognitions from charities.

Picture shown below are from CHEM's blood donation events, which are regularly held in Company twice a year.







**SDGs 4**  
**Quality Education**

Please refer to the Chinese reports for direct project name.

School & Universities for Industry-Academy Cooperation with CHEM	Year of the Projects
National Taipei University of Technology, Taipei Tech	2014 & 2016
Lunghwa University of Science and Technology	2015-2019
Chang Gung University	2016-2019
National Chung Cheng University	2017-2019
Tung Nan University	2019
National Taipei University of Technology, Taipei Tech	2021-2023
Lunghwa University of Science and Technology	2021-2023

CHEM to provide the Internship	Year of the Internship Projects
Lee-Ming Institute of Technology	2014
National Formosa University	2015
Lunghwa University of Science and Technology	2016-2017 2019-2020
National Formosa University	2017
Chien Hsin University	2017
Lee-Ming Institute of Technology	2018
Lunghwa University of Science and Technology	2021 2022





## SDGs 9 Industry, Innovation & Infrastructure

### Sustainability in CHEM Innovation in Industrial Development Durability and Resistance in Contribution

CHEM aims at the goals of providing quality for constructions and national infrastructure especially power generation stations or plants covering hydraulic power, coal power, wind power and nuclear power. The Company also develops better and safer power supply systems to the people in Taiwan with a pragmatic attitude for execution and practice. Honesty and innovation are inherited and followed for day-to-day business operation. Therefore, CHEM is also granted recognitions and national awards throughout the years. CHEM also hopes to continue and to provide the best in quality and energy-saving products as near-term contribution to innovation in development for society with a big-picture perspective.

1998

Please refer to the Chinese version of this report to see the list of awards and recognition granted to CHEM from 1998 to the recent years to avoid discrepancy in translation.

2004

2006

2007

2008

2010

2011

2013

2015

2016

2017

2019

2020

2021



1998

工程第 II 標電廠發電設備及附屬設備工程

特優獎項：彰化王功風力發電新建工程  
「優獎」

通霄風力發電機組新建工程。

2004

2006

2007

2008

2010

2011

2013

2015

2016

2017

2019

2020

2021



**SDGs 9 / 10**  
**Reduce Inequalities**

**Bridging the Gap & Strengthening the balance between Cities and Countries, Helping-Hands events to family/the elderly in-need.**

▶ Road & safety maintenance project at Chi-qu District, Tainan.



▶ Donation of TV and video facilities for distant-learning in school at Sin-Yi Elementary School in Tainan.



▶ CHEM's donation of Police patrol Cars for Police Departments in Fengli, Haulien



CHEM provides aids and resources continuously. Infrastructures such as parking lots in Chia-li Station in Tainan, or road safety maintenance in Chi-qu, Tainan, patrol cars in Feng-lin Haulien, Body temperature measurers and TV & video facilities in school in Tainan. Donations to local tribes and remote country sides are also regular practice including helping-hand events for the elderly or family in need through local charities or religious group in Hualilen.

Resources including 25 wheelchairs, 35 walking sticks, far-sighted eyeglasses, cooking rice giving away for 150 units, cooking oil 20 boxes, canned goods 30 boxes, masks 10,000 units for adults and 5,000 units for children, winter blankets 83 units, 44 jackets, diapers 40 units and framed-shaped walking sticks for use in schools and long-term care communities.







## **Glossary**

**p. 78** GRI Index

**p. 82** SDG Index

**Please refer to the Chinese version of this ESG report for the direct reference in Chinese.**





Chung-Hsin Electric & Machinery Mfg. Corp.

# 2021 Sustainability Report

桃園市龜山區文德路25號(林口工三工業區)

TEL (03)328-4170 / FAX (03)328-4155

**No. 25, Wende Rd., Guei-Shan Dist., Taoyuen City**

**TEL 03-328-4170 / FAX 03-328-4155**

