



# 2022

## Sustainability Report



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## About this Report

This report follows the GRI Sustainability Reporting Standards (hereinafter referred to as the GRI Standards) issued by the Global Sustainability Standard Board (GSSB), and discloses the 2022 operating performance and future plans of EMC (Elite Material Co., Ltd.) to all stakeholders, showing EMC's business philosophy and goals for sustainable operation. In the future, EMC will continue to disclose information relating to society, environment and corporate governance at all levels, allowing the public to understand EMC's overall operations and prospects for continuous development.

## Reporting Guidelines and Principles

This report was compiled based on the new-version GRI Standards (2021). The SASB (Sustainability Accounting Standards Board) indices have been used for information disclosure. For details, please refer to the GRI Content Index in Appendix 1 and the SASB Index in Appendix 2 of this report.

## Period of Disclosure

The time period for this report's disclosure is the year 2022 (1st January to 31st December 2022); the disclosed content includes EMC's social, environmental and corporate governance actions and performance for the fulfillment of corporate social responsibility, and the responses to issues of stakeholders' concern.

## Scope and Boundary of Report GRI 2-2 , GRI 2-4

The financial data presented in this report came from EMC's consolidated financial/revenue reports. The non-financial data encompassed EMC's corporate governance, environmental and social performance. The business achievements focused on the following production/business bases. In comparison with the 2021 Report, subsidiaries Elite Electronic Material (Kunshan) Co., Ltd., Elite Electronic Material (Zhongshan) Co., Ltd. and Elite Electronic Material (Huangshi) Co., Ltd. were added into the boundary of this report. For any data revised due to errors generated during the previous reporting period, explanatory notes shall be provided in corresponding chapters or sections. The "Taiwan plants" mentioned in some sections of the report include Guanyin Plant and Hsinchu Plant. For the production site Arlon EMD in California, USA, only the information of plant area was disclosed; its corporate governance, environmental and social performance was not disclosed in this report.

### 1 Guanyin Plants of Elite Material Co., Ltd.

(including Plant 1, Plant 2, and Plant 3 located at No. 18, Datong 1<sup>st</sup> Rd., Guanyin Dist., Taoyuan City, Taiwan; No. 10, Yuanyuan St., Guanyin Dist., Taoyuan City, Taiwan; No. 3, Jingjian 2<sup>nd</sup> Rd., Guanyin Dist., Taoyuan City, Taiwan, respectively.)

### 2 Hsinchu Plant of Elite Material Co., Ltd.

(located at No. 14, Wenhua Rd., Hukou Township, Hsinchu County, Taiwan)

### 3 Elite Electronic Material (Kunshan) Co., Ltd.

### 4 Elite Electronic Material (Zhongshan) Co., Ltd.

### 5 Elite Electronic Material (Huangshi) Co., Ltd.

## Information and Data Quality

The disclosed statistics of this report were obtained from the Company's own statistics and surveys except the financial data which was open information attested by CPAs and was presented in values commonly used for description.

## Report Verification GRI 2-5

This report was compiled based on the new-version GRI Universal Standards (2021). In addition, relevant laws and regulations such as "Sustainable Development Best Practice Principles for TWSE/TPEX Listed Companies" have also been followed for its information disclosure. Taiwan Branch of the British Standards Institution (BSI) has been entrusted to conduct verification on this report and to issue the Assurance Statement. The verification results showed that this report complies with GRI Standards, and the AA1000AS v3/ Type 1/Moderate assurance level.

## Contact Information GRI 2-3

We welcome you to read the 2022 Corporate Social Responsibility (CSR) Report of EMC. GRI Universal Standards (2021) content index and material-issue disclosure index have been provided in this report for easier access to relevant information.

This report was published in June, 2023 (We will continue to publish the Sustainability Report on a yearly basis.)

For any questions or comments about this report, please contact us at:

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## Message from the Chairman GRI 2-22 and GRI 2-23

Being affected by the COVID-19 pandemic and the rising geopolitical risks, Taiwan's technology industry has been faced with unprecedented challenges since early 2020. However, through the strict pandemic control measures implemented by EMC's employees all over the Company's plant worksites and offices, EMC has maintained its normal operations with its revenue and profit both hitting record highs. Over the past few years, when faced with the trends of business sustainability and circular economy, EMC has endeavored to create profits while also being accountable to shareholders and responsible to all stakeholders, to realize the concepts of both economic prosperity and environmental sustainability. To bring the value of corporate sustainability, we believe enterprises need to improve continuously, fulfill their "environmental, social and corporate governance" goals in the course of rapid development, and take the initiative to exert their positive influence.

## Operation Management

Being the world's largest green-material laminate and prepreg supplier, EMC has been focusing on the development of halogen-free substrate materials for mobile and high-speed application products, and extending its leading high-end HDI technology to meet the strict requirements for material's conductivity and multi-layer lamination set by LEO satellite customers. After years' efforts, EMC has gained a foothold in the market, with its market share growing exponentially year by year. Additionally, since LEO satellites do not require the construction of base stations, they can work with 5G mobile communications in a complementary way. With the increase in the number of satellite launches, the demand for satellite equipment, ground receiving stations, and user terminal equipment has increased significantly, from which EMC shall benefit. In terms of EMC's materials for high-end HDI SLP (Substrate Like PCB), besides mobile phone customers' increasing demand for SLP, with the upgraded functions in new chip design as well as the high layer count and multi-layer lamination design adopted in newly launched laptops and tablets, EMC's operations shall be benefited from these trends. The 2022 annual revenue reached NT\$38,672,549 thousands, hitting a record high for four consecutive years. The earnings per share was NT\$ 15.24, which was the second highest among the year-on-year records. The main reason for the slight growth

in business performance lies in the continuously increasing market share of infrastructure and network communication products. The increased shipment of such products has mitigated the impact of declined shipment of consumer products such as mobile phones, laptops, etc. on the business performance.

## Sustainable Supply Chain

"Maintaining Upstream/Downstream Partnership and Stabilizing Market Mechanism" is our supply chain policy. EMC is the world's largest manufacturer of halogen-free substrates. Our products are environmentally friendly and are applied to high-end HDI (High Density Interconnect) PCBs. What supports us to become a leading halogen-free substrate manufacturer is our strong raw material supply chain. Our major raw materials include copper foil, glass cloth, and chemicals, among which the copper foil and glass cloth are 100% domestically made. High-end HDI manufacturing process and halogen-free environmentally friendly substrate have been applied to areas other than mobile phones, including automotive materials, infrastructure and Netcom products, expanding the applications of EMC's products. We will continue to work together with our suppliers in making another great achievement. In 2022, despite a minor scale supply tension caused by the extension of the pandemic as well as temporarily increased demand for some special-specifications materials, with all suppliers' dedicated cooperation, fortunately, the Company's production was not affected by these external factors.

Moreover, with the rapid consumption of the earth's limited resources due to the overwhelming development of the global economy, sustainable utilization and development of resources has become an international consensus, and circular economy has also become an important issue for social and economic development. Take copper foil as an example (which is one of EMC's important raw materials), we already have had suppliers who can provide products containing 40%~98% recycled copper, which shall facilitate the maximization of resource efficiency, and the establishment of circular economy society through joint efforts.

## Environmental Protection

EMC is capable of controlling and managing the air pollution problems created from various manufacturing processes, services and activities. In addition to complying with relevant environmental protection laws and regulations such as the Waste Disposal Act, the Water Pollution Control Act, and the Air Pollution Control Act, we also invest a considerable amount of money in protecting the environment of the plant areas every year and implement pollution preventing measures to ensure the quality of our environment. In response to the global community's carbon reduction trend, we are using natural gas as a transition fuel to shift from high-carbon energy to low-carbon energy sources. By replacing highly polluting heavy oil with natural gas that has less impact on the environment, the purpose of reducing greenhouse gas emissions can be achieved. In addition, when using natural gas as fuel, boilers' combustion efficiency can be enhanced by 0.5–1% as compared with heavy oil. That is, the fuel can be reduced while meeting the same level of thermal energy demand, thus helping achieve environmental sustainability.

In comparison with the reports of the previous years in which only the environmental performance data of plants in Taiwan was disclosed, the performance data of EMC's plants in Mainland China was incorporated into the report in 2022. The Company will take 2022 as the base year for the establishment of baseline data for the planning of various reduction goals.

## EnSafe Workplace

EMC strives to create a safe and healthy workplace, allowing every employee to go to work and return home safely. A safe working environment is not just about software or hardware upgrades, but following the set rules and regulations by all employees regardless of their positions. Adhering to the philosophy of "improving the safety and hygiene of the working environment, and reducing the occupational injuries of workers", EMC has promoted our infrastructure comprehensively and improved the working environment of employees year by year, allowing our employees to feel safe in their work. EMC conducts employee health checkup every year and implement the "friendly workplace" inspection to actively eliminates potential workplace hazards through mechanisms such as "improvement proposal ", "safety observation", and "false alarm incident notification". In addition, EMC continues to review and improve our emergency response procedures, automatic inspections, safety and health education and training, and working environment examination every year, striving to create a

healthy and safe working environment for our employees. Since the COVID-19 pandemic in 2020, the plant areas and offices of EMC have implemented strict pandemic-prevention measures, making every effort to ensure the normal operation of the company.

Looking further ahead, EMC will enhance the sales percentages of high-end products/materials and increase the added value, diversify the sources of raw materials to reduce risks, and develop a long-term centralized procurement system with suppliers based on the demand of our corporate group in Taiwan and China, to achieve the goal of stabilized cost and supply. EMC has become the world's largest environmentally friendly substrate manufacturer, and has strong R&D as well as market development capabilities. We have accumulated substantial technologies and product strengths, which are essential for the substrate market in the future, making the prospect of EMC promising.

Chairman



## I 2022 Key Performance Summary

### Corporate Governance Performance

- 1.The 2022 annual revenue reached NT\$38,672,549 thousands, hitting a record high with an annual increase of 0.45%.
- 2.The Company attaches great importance to the gender equality of board member composition, and aims to increase the number of female directors. Currently, males account for 86% (6 directors) and females account for 14% (1 director) of the board members.
3. No illegal act or corruption incident violating the principle of integrity occurred in 2022. All employees complied with ethical regulations, and practiced the Company's philosophy of ethical management.
4. No incidents involving the violation of information-security-related laws and regulations, and no information security incidents occurred during the period from 2019 to 2022.

### Sustainable Supply Chain Performance

- 1.The Company initiated a product carbon footprint survey for the EM-390 series CCL products in 2022, confirming that nearly 70% of carbon emissions were generated in the design stage (i.e. raw material stage).
- 2.The usage percentage of recycled copper has reach 40-98%. (The percentage achieved by plants in Taiwan reached 98% in 2022).
- 3.The number of suppliers signing the "Social Responsibility Commitment Agreement" and "Conflict-free Metals Declaration", and the achievement rate both reached 100% in 2022.
4. In 2022, none of the manufacturers who completed the audit procedures was deemed ineligible for unsatisfactory performance in relation to corporate social responsibility or EHS management system practices.
- 5.The return rate of the Customer Satisfaction Questionnaire sent in the first and second half of 2022 was both 100 %. The customer satisfaction rates (for general items) were 71.8% and 74.4% respectively, higher than the target value 65%.

### Environmental Protection Performance

1. EMC's plants in Mainland China were added into the scope of disclosure in 2022. In addition to the original Guanyin Plant and Hsinchu Plant, data of subsidiaries Elite Electronic Material (Kunshan) Co., Ltd., Elite Electronic Material (Zhongshan) Co., Ltd. and Elite Electronic Material (Huangshi) Co., Ltd. was also added. The 2022 base year data was established for the planning of reduction goals
2. The use of fuel oil has been significantly reduced by replacing oil boilers with natural gas boilers. The 2022 air pollution emissions (NOx (nitrogen oxides) + SOx (sulfur oxides) + VOCs (volatile organic compounds) + PM (particulate matters)) from the Company's plants in Taiwan were reduced by 23% compared with 2021.
3. Through measures such as replacing old air compressors, switching to the use of LED lights, upgrading the efficiency of air compressors, controlling water chillers temperature, upgrading cooling towers, adding frequency converters to water pumps, adding temperature-difference controllers to water chillers' water pumps to control water flows, etc., the total energy saving and carbon reduction achieved by EMC's plants in Taiwan and Mainland China in 2022 was 1,617.33 metric tons CO<sub>2</sub>e /year.
4. The total water withdrawal in 2022 was reduced by 9.6% compared to 2021.




Employee Care Performance

1. EMC has more than 3700 employees. Most of the employees are under the age of 50, accounting for more than 90% on average.
2. Expand the scope of educational training for operative level of management, middle level of management and top level of management to narrow the gap between the Company's managerial positions. The per capita training hours has reached 25 hours plus.
3. Except for Huangshi Plant, the turnover rate of other plants was lower than 30%.
4. Establish an employee care system to promote peace and reliance in work-place for employees.

Safe Workplace Performance

1. The implementation rate of occupational safety and health educational training programs reached 100% (the outcome was 15.5 hours).
2. Continue to add relevant safety protection measures to the plants' old-type in-service machines. The measures shall eliminate the risk of accidents during operations, and shall actively promote personnel's hazard awareness. (For example, adding spray ball devices to glue-mixing tanks; adding a hydraulic lifting function to the packaging work platform; adding safety light curtains to substrate cutting & packaging machine's stacking crane in Elite Electronic Material (Zhongshan) Plant, etc.)


EMC's Responses to the United Nations Sustainable Development Goals (SDGs)

3 GOOD HEALTH AND WELL-BEING	SDGs
 <ul style="list-style-type: none"> <li>• Ensure people's health and promote the well-being of all ages</li> </ul>	
3.3 By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases, and combat hepatitis, water-borne diseases and other communicable diseases. 3.6 By 2030, halve the number of global deaths and injuries from road traffic accidents. 3.8 Achieve universal health coverage (hereinafter referred to as UHC), including financial risk protection, access to quality essential health-care services, and access to safe, effective, quality and affordable essential medicines and vaccines for all.	
EMC's approaches in response to SDGs	Corresponding Chapters
1. Regular health checks 2. Organize health lectures 3. On-site doctor services	5.2 Comprehensive Employee Health Management


4 QUALITY EDUCATION	SDGs
	<ul style="list-style-type: none"> <li>Ensure non-discriminatory, fair and high-quality education, and promote lifelong learning</li> </ul>
<p>4.4 By 2030, substantially (for x%) increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship.</p> <p>4.5 By 2030, eliminate gender disparities in education, and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples, and children in vulnerable situations.</p> <p>4.6 By 2030, ensure that all youth and a substantial proportion (at least x%) of adults, both men and women, achieve literacy and numeracy.</p> <p>4.7 By 2030, ensure all learners acquire knowledge and skills needed to promote sustainable development, including among others through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship, and appreciation of cultural diversity and of culture's contribution to sustainable development.</p> <p>4.a Build and upgrade education facilities that are child, disability and gender sensitive, and provide safe, non-violent, inclusive and effective learning environments for all.</p>	
EMC's approaches in response to SDGs	Corresponding Chapters
<ol style="list-style-type: none"> <li>Ensure that all levels of staff can receive relevant training</li> <li>Provide placement opportunities to facilitate industry-academia collaboration</li> </ol>	<p>6.3</p> <p>Talent Development and Educational Training</p>

8 DECENT WORK AND ECONOMIC GROWTH	SDGs
	<ul style="list-style-type: none"> <li>Promote inclusive and sustainable economic growth to achieve comprehensive and productive employment and to help people have a good job.</li> </ul>
<p>8.2 Achieve higher levels of productivity of economies through diversification, technological upgrading and innovation, including through a focus on high value added and labor-intensive sectors.</p> <p>8.3 Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage formalization and growth of micro-, small- and medium-sized enterprises including through access to financial services.</p> <p>8.8 Protect labor rights, and promote safe and secure working environments of all workers, including migrant workers, particularly women migrants, and those in precarious employment.</p> <p>8.9 By 2030, devise and implement policies to promote sustainable tourism which creates jobs, promotes local culture and products.</p>	
EMC's approaches in response to SDGs	Corresponding Chapters
<ol style="list-style-type: none"> <li>Set up Occupational Safety and Health Committee to create a safe and healthy work environment</li> <li>Ensure the compliance with Child Labor Prohibition Policy and regulations related to labor, health &amp; safety, environment, corporate ethics, etc.</li> </ol>	<p>5.</p> <p>Building a Safe and Healthy Workplace</p> <p>6.4</p> <p>Employee Communication and Care</p>



12 RESPONSIBLE CONSUMPTION AND PRODUCTION	SDGs
	<ul style="list-style-type: none"> <li>• Ensure a sustainable consumption and production model .</li> </ul>
<p>12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling, and reuse.</p> <p>12.6 12.6 Encourage companies, especially large and trans-national companies, to adopt sustainable practices, and to integrate sustainability information into their reporting cycle.</p> <p>12.7 12.7 Promote public procurement practices that are sustainable in accordance with national policies and priorities.</p>	
EMC's approaches in response to SDGs	Corresponding Chapters
Endeavor to develop green energy products, reduce the use of hazardous substances, and emphasize HSF (Hazardous Substance Free) production lines	3.1 Green Product Design

16 PEACE, JUSTICE AND STRONG INSTITUTIONS	SDGs
	<ul style="list-style-type: none"> <li>• Promote peaceful and inclusive societies for sustainable development; provide access to justice for all; and build effective, accountable and inclusive institutions at all levels</li> </ul>
16.5 Substantially reduce corruption and bribery in all its forms.	
EMC's approaches in response to SDGs	Corresponding Chapters
EMC has upheld "integrity" as the standard and core value of employees' code of conduct. We have formulated and announced relevant internal regulations such as "Operating Procedures and Conduct Guidelines for Ethical Management", "Code of Ethical Conduct", etc.	2.4 Implementation of Ethical Management, Anti-corruption and Legal Compliance

13 CLIMATE ACTION	SDGs
	<ul style="list-style-type: none"> <li>• Adopt emergency measures to respond to climate change and its impacts .</li> </ul>
<p>13.1 Strengthen resilience and adaptive capacity to climate related hazards and natural disasters in all countries.</p> <p>13.2 Integrate climate change measures into national policies, strategies, and planning.</p> <p>13.3 Improve education, awareness raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction, and early warning.</p>	
EMC's approaches in response to SDGs	Corresponding Chapters
<p>1. Calculate the base year's greenhouse gas emissions in accordance with ISO 14064-1 :2018 standards, and develop further energy saving measures based on the results.</p> <p>2. Set carbon neutrality objectives</p>	4.1 Climate Change and Greenhouse Gas Management

# 01

- ▶ Material Issues and Stakeholder Engagement

## 1.1 Material Issue Analysis GRI 3-1, GRI 3-2 and GRI 3-3

EMC has followed GRI standards and the four principles of Inclusivity, Materiality, Responsiveness and Impact entailed in AA1000 AP (AA1000 Accountability Principles) to identify the material issues related to the Company's operations. Moreover, by following GRI Standards 2021, EMC has further assessed the significance of the material issues' impacts on economy, environment and corporate governance. The assessment results have served as the basis for the Company's planning of sustainable development strategies as well as the foundation for this report's information disclosure.

Implementation Steps	Content	Result
<b>Step 1. Identify target objects for communication</b>	Sent the "Stakeholder Identification Questionnaire" designed based on the five principles highlighted in AA1000 Stakeholder Engagement Standard, which are Dependency, Influence, Responsibility, Diverse Perspectives and Tension, to ESG Committee taskforce members. According to the questionnaire statistical results approval by the Corporate Social Responsibility Committee (CSR Committee for short), 5 types of stakeholder groups have been confirmed based on their significance, which are investors (shareholders and board of directors), governing agencies, customers, suppliers, and employees.	5 major stakeholder groups
<b>Step 2. Collect sustainability issues</b>	Reference 1. GRI sustainability reporting standards 2. TCFD (Task Force on Climate-related Financial Disclosures) framework 3. Assess the 17 goals of SDGs and the associated 169 targets to screen out the contribution actions that EMC may take. 4. SASB (Sustainability Accounting Standards Board) Standards, and 5. 22 sustainability issues have been summarized and listed by the taskforce in the process of stakeholder communication.	25 sustainability issues

Implementation Steps	Content	Result
<b>Step 3. Survey the tension of stakeholders' concern</b>	The taskforce identified the closely related and influential stakeholders by surveying the tension of the 5 stakeholder groups' concern about the 22 sustainability issues through "2022 EMC Stakeholder ESG Questionnaire". A total of 651 valid questionnaires have been collected from stakeholders, including customers (46), employees (563), and suppliers (42).	651 valid questionnaires being collected
<b>Step 4. Determine material issues</b>	After examining the results obtained in Step 3 and making adjustments based on CSR Committee's recommendation, the taskforce selected 11 sustainability issues of high-level concern as the current year's material issues for which a Materiality Matrix was created, and reported the result to the CSR Committee and Board of Directors.	11 material issues
<b>Step 5. Assess the significance of impact</b>	After Step 1~ Step 4 were implemented and completed during the period from November 2022 to January 2023, the taskforce further assessed the economic, environmental and corporate governance impacts of the 11 material issues through an "Impact Assessment Questionnaire", then gave scores to the positive/negative impacts, and analyzed the material issues' impact boundary and involvement level in the value chain. Through this step, EMC confirmed that the 11 material issues are the ones with significant impact on the Company.	11 material issues
<b>Step 6. Determine the sequence of issues and the content to be disclosed</b>	The taskforce determined the sequence of the material issues based on their impact intensity, and described the material issues' response strategies, short-/medium-/long-term goals, achieved performance and management guidelines in this report in accordance with each issue's reporting requirements. The 11 material issues corresponded to 12 GRI topics in total.	12 GRI topics

## 22 sustainability issues

Environment (E)	<ul style="list-style-type: none"> <li>● Air pollution/Air Quality Management</li> <li>● Water Resource Management</li> <li>● Waste Management</li> <li>● Circular Production</li> <li>● Climate Change and Energy Management</li> <li>● Green Products and Services (Hazard Substance Management)</li> <li>● Ecological Impact</li> </ul>
Society (S)	<ul style="list-style-type: none"> <li>● Occupational safety and health management</li> <li>● Attracting and retaining talented personnel</li> <li>● Diversified and equal opportunities</li> <li>● Labor-management relations</li> <li>● Community participation and development</li> <li>● Human rights</li> <li>● Customer privacy&amp;Information security</li> </ul>
Corporate governance(G)	<ul style="list-style-type: none"> <li>● Business Ethics and Ethical Management</li> <li>● Legal Compliance</li> <li>● Operational Risk Management</li> <li>● Sustainable Development Strategies</li> <li>● Supply Chain Management</li> <li>● Economic Performance</li> <li>● Product Design and Life Cycle Management</li> <li>● Technological Innovation and Market Layout (business model flexibility)</li> </ul>

## Impact Significance Assessment

The CSR Committee taskforce has assessed the influence brought by the 11 material issues on economy, environment and corporate governance, and conducted a comprehensive assessment of the actual/potential and positive/negative degree of influence and likelihood of occurrence of such impacts. The assessment results were preliminarily summarized. After being adjusted based on the management team's recommendation, the impacts were sequenced based on their materiality to EMC in 2022.

## 1. Assessment Procedures

### (1) Quantify the impact:

Various issue-related units have given 1~5 points to the material issues' economic, environmental and social impacts and positive/negative impacts, which were then compiled by the CSR Committee taskforce. The examples are shown in the tables below:

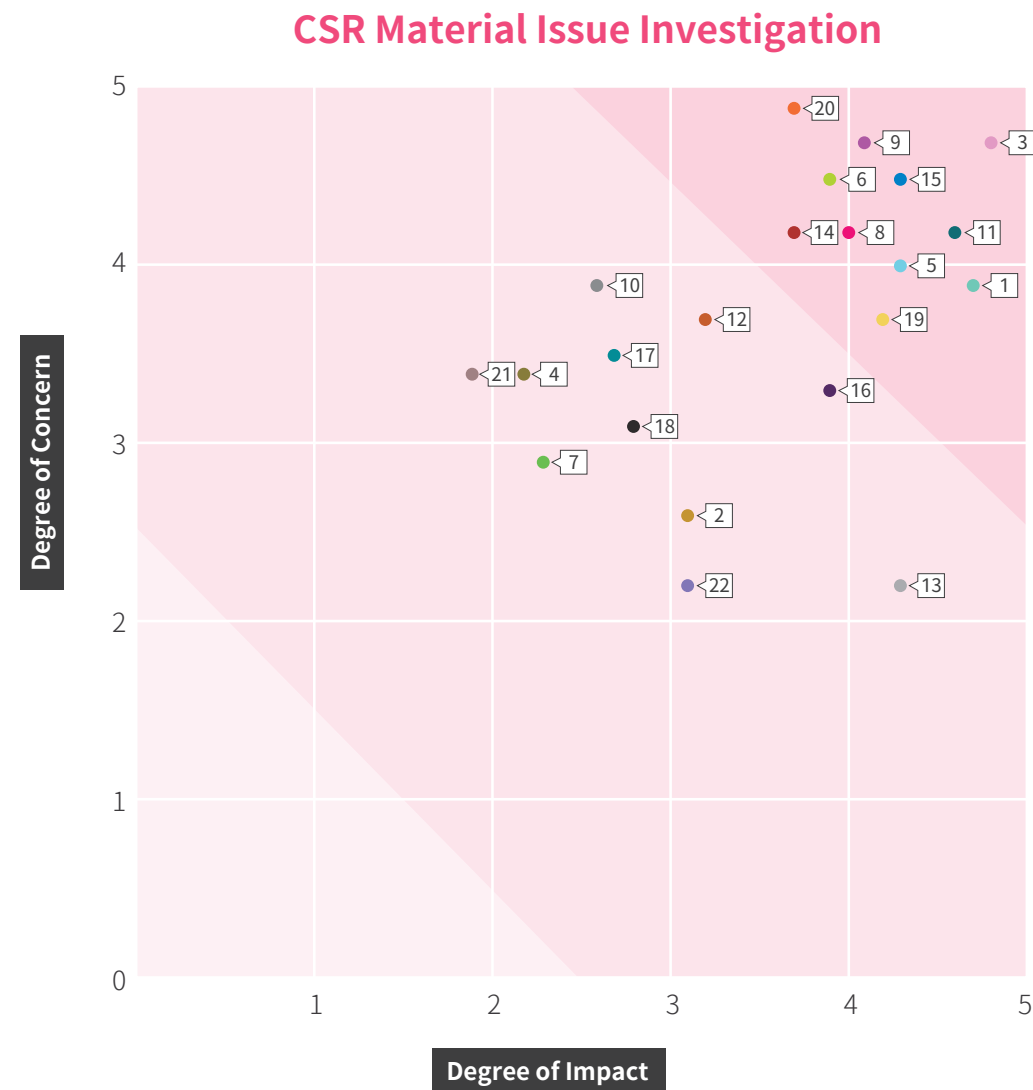
Material Issues	Environment			
	Degree of Influence		Likelihood of Occurrence	
	Positive	Negative	Positive	Negative
Climate change (including GHG management)	4	2	4	5

Material Issues	Social (or Human Rights)			
	Degree of Influence		Likelihood of Occurrence	
	Positive	Negative	Positive	Negative
Occupational safety and health management	5	3	4	2

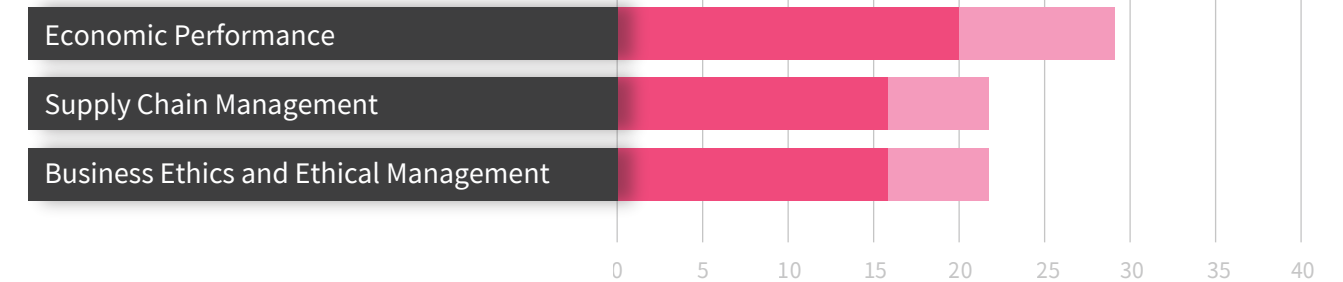
Material Issues	Corporate governance			
	Degree of Influence		Likelihood of Occurrence	
	Positive	Negative	Positive	Negative
Economic Performance	5	3	4	3

(2) Determine impact sequence:

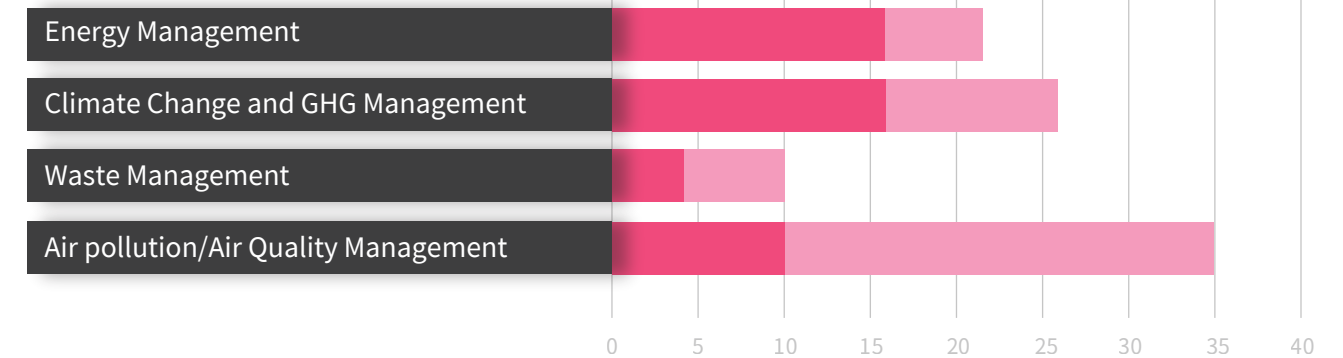
The CSR Committee taskforce, after calculating the 11 material issues' quantitative impacts and comprehensively considering the management team's recommendation, has obtained the assessment results illustrated in the figures/charts on the right:



## Sequence of Corporate Governance Impact



## Sequence of Environmental Impacts



## Sequence of Social (including Human Rights) Impacts



## Conduct regular material issue reviews

EMC's sustainability topics have been identified and obtained through internal impact assessment, comprehensive consideration of stakeholders' perspectives and other relevant procedures, and have been confirmed and finalized by CSR Committee's top responsible person. We will keep interacting with stakeholders on a regular and irregular basis to monitor the positive/negative impacts caused by EMC, and understand internal/external stakeholders' expectations for us. Moreover, we will conduct materiality identification on a yearly basis to comprehensively consider the Company's internal/external perspectives and obtain the material topics that need to be emphasized by the Company.

EMC has formulated management guidelines and developed action plans for its material topics, and has established goals and metrics through figure-based measurement strategies to keep regular track of implementation outcomes. As for other non-material topics, EMC has followed the existing management procedures and measures to disclose related indicators for stakeholders to understand EMC's overall sustainability achievements.

Dimension	Material issue	Significance to EMC
Environment	Air pollution/Air quality management	EMC is committed to substituting heavy oil with natural gas in the process of its operations to control pollution, reduce the consumption of energy and resources, and facilitate the development of circular economy.
	Climate change and energy management	Through the inventory of greenhouse gas emissions produced in the process of business operations, the opportunities for cost reduction and effective emission mitigation can be assessed and corresponding objectives can be set. External communication is also conducted on the actions being taken and the status of objective achievement. Determine the relationship between climate change and EMC, modify EMC's business model, develop relevant climate-related thinking, and establish a set of business operating procedures that can be applied in emission reduction, climate risk adaptation, and new business model launching.
	Waste Management	Ensure that the waste generated by EMC is properly handled by relevant service providers, and the waste does not cause any significant impact on surrounding environment.

Dimension	Material issue	Significance to EMC
Environment	Green products and services (Hazard substance management)	EMC not only continues to develop high-end application materials, but also assumes its social responsibility by adopting halogen-free environmentally friendly materials as the main development direction, reducing the impact of materials on the environment.
Society	Occupational safety and health management	Maintaining workplace safety and hygiene and establishing employee health management plans are EMC's top priority for our employees.
	Human Resource and Talent Development	Long-term development of talents will be our ultimate goal. Talents will be cultivated from scratch, with a sound supporting mechanism and cultivation plan to accelerate the vision and development of talents.
	Labor-management relations	Employees are the most important companions of EMC. In addition to protecting employees' work rights and providing competitive compensation, we also shown great respect and offer good care for our employees, hoping to attract more outstanding talents.
	Customer privacy & Information security	With the hackers' attacks that enterprises have been faced with, and the widespread cyber (information / communication) threats and product security issues arising in recent years, information security has become an issue emphasized by companies in the industry. Therefore, how to control and reduce the risks, and minimize losses from the accidents has become a focus for business management.
Corporate governance	Business Ethics and Ethical Management	Incorporate stability, honesty and integrity into business operations; establish a sound corporate governance structure, and promote relevant measures to protect the rights and interests of all stakeholders. Moreover, the board of directors shall be assisted to carry out the commitment of ethical management by supervising the Company's internal management and business activities to ensure that the management and activities are compliant with ethical management standards, and are creating positive influence on various economic activities.



Dimension	Material issue	Significance to EMC
Corporate governance	Supplier management	EMC standardizes the management process of the supply chain, establishes supplier management procedures, and incorporates labor rights, environmental protection, safety and health management into the assessment and audit criteria for suppliers. Based on the assessment results, improvement measures will be formulated to assist suppliers in continuous improvement, hoping to improve the sustainable management of the supply chain, reduce the supply chain operational risks, and establish a partnership with the suppliers for sustainable development.
	Economic performance	Maintaining a stable financial performance is the commitment of EMC to its stakeholders.

## Description of and Management Guidelines for Material Issue Impact

● Direct impact ◎ Indirect impact ○ Business relationships

Dimension	Material issue	Material Topics	Report boundary					Corresponding GRI Standards	Corresponding chapter
			Competent authority	Shareholders	Suppliers	Employees	Customers		
Environment	Air pollution/Air quality Management	GRI 305 Emissions	●		◎	●	●	305-7	4.3.1 Air Pollution Control
	Climate change and energy management	GRI 302 Energy GRI 305 Emissions	●	◎	◎	●	●	302-1、302-3、 305-1、305-2、 305-4	4.1 Energy Management 4.2 Climate Change and Greenhouse Gas Management
	Waste management	GRI 306 Waste	●		◎	●	●	306-1、306-2、 306-3、306-4、 306-5	4.3.2 Waste management
	Green products and services (Hazard substance management)	-	●		◎	●	●	-	3.1 The Use of Green Materials

Dimension	Material issue	Material Topics	Report boundary					Corresponding GRI Standards	Corresponding chapter
			Competent authority	Shareholders	Suppliers	Employees	Customers		
Society	Occupational safety and health management	GRI 403 Occupational Safety and Health	●	◎		●		403-1、403-2、 403-3、403-4、 403-5、403-6、 403-7、403-8、 403-9、403-10	5.1 Occupational safety and health management 5.2 Comprehensive Employee Health Management
	Human Resource and Talent Development	GRI 404 Training and Education	●	◎		●	◎	404-1、404-3	6.3 Human Resource and Talent Development
	Employment	GRI 405 Diversity and Equal Opportunity GRI 401 Employment	●			●		401-1、401-2、 401-3	6.1 Employment Status 6.2 Employee Remuneration and Benefits
	Customer privacy & Information security	GRI 418: Customer Privacy	●			●	●	418-1	2.6 Information Security Management
Corporate governance	Business Ethics and Ethical Management	GRI 2-15, GRI 205	●			●		205-1、205-2、 205-3	2.4 Implementation of Ethical Management, Anti-corruption and Legal Compliance
	Supplier management	GRI 204 Procurement Practices GRI 414 Supplier Social Assessment GRI 308 Supplier Environmental Assessment		●	●	●		204-1、308-1、 414-1	3.2 Supply Chain Management
	Economic performance	GRI 201 Economic performance	●	●	◎	●	●	201-1	2.3 Corporate Operating Performance

11 material issues have been identified, which have been combined with the GRI Standards to form the basis for the Corporate Sustainability Report's disclosure, through which stakeholders' concerns can be accurately responded. The number of issues is the same as that of the previous year; however, the issue of Operational Risk Management has been replaced by Business Ethics & Ethical Management. The management methods for material issues have been described in each corresponding chapter. The GRI indexes and related

## ◆ 1.2 Stakeholder Communication GRI 2-29

Stakeholders' demands are the key to an enterprise's sustainability and success. EMC believes that communicating with stakeholders, understanding stakeholders' needs and expectations, and responding accordingly can assist an enterprise in reviewing and planning short-, medium- and long-term strategies, and creating the value of the enterprise to stakeholders, thereby bringing about new business opportunities for sustainable operations.

By following the AA1000 Stakeholder Engagement Standard (AA 1000 SES), the following key stakeholders have been identified by EMC's various departments: investors (shareholders, board of directors), competent authorities, customers, suppliers and employees. There are no significant changes in the company's key stakeholders in comparison with those specified in the 2021 Report.

Stakeholders	Communication channel	Frequency
Investors (shareholders)	1. Annual General Meeting	1. Once/year
	2. Release of quarterly financial report/annual report in accordance with regulations	2. Four times/year
	3. Reply to phone or e-mail inquiries and requests	3. Anytime when needed
	4. Important messages revealed on the company's external website	4. Anytime when needed
Investors (Board of Directors)	1. Board of Directors	Eight times in 2022
	2. Audit report	Regularly
	3. Annual Statement of Internal	Regularly
	4. Remuneration Committee	Three times in 2022

Stakeholders	Communication channel	Frequency
Competent authority (Financial Supervisory Commission or Taiwan Stock Exchange)	1. Market Observation Post System 2. Phone 3. E-mail 4. Official documents Public meetings	Regularly/not regularly
Competent authority (Department of Environmental Protection)	1. Written letter 2. Policy advocacy meeting 3. On-site inspection	Not regularly
Competent authority (Office of Labor Inspection)		
Competent authority (Industrial Park Service Center)		
Customers	1. Customer Audit 2. Various business meetings 3. Customer satisfaction survey 4. Technical seminars 5. CSR/RBA audit	Regularly/not regularly
Suppliers	1. Regular supplier meetings 2. Regular audit, evaluation and coaching 3. Supplier complaint channels 4. Technical seminars 5. Project horizontal expansion	Regularly/not regularly
Employees	1. Direct supervisor 2. Dedicated staff of the Human Resources Department 3. Company website 4. Company bulletin board 5. Employee suggestion mailbox 6. Employee meeting/regular employer-employee meeting 7. Monthly/weekly meetings of each department 8. Employee complaint channels 9. Employee Welfare Committee 10. Training courses and policy advocacy meetings	Not regularly

# 02

► Corporate Governance

## 2. Corporate Governance

The Company has focused its vision on "Strive for Excellence; Become the World's Leading Brand of "Green" Laminate Materials" since its establishment, and has taken "RESPONSIBILITY, TEAMWORK, VALUE CREATION" as its core value. It is always committed to continuous technological innovation and improvement to create more value for the world.

Dimension	Corporate Governance (G)
Material Issue	Business Ethics, Ethical Management and Economic Performance
Management Mechanisms	<ol style="list-style-type: none"> <li>1. Integrate integrity and ethical values into the Company's business strategies, and formulate relevant measures in cooperation with laws and regulations systems to prevent corrupt practices and ensure ethical management.</li> <li>2. Identify and monitor the risks that may impact the Company's sustainable development based on the three dimensions of economy (including corporate governance), environment and society.</li> <li>3. Provide employees with a good and stable working environment, and maximize shareholders' long-term profits.</li> </ol>
Responsible Unit	The corporate group's Finance/Accounting Department, Audit Office, HR Department
Commitment / Policy	<ol style="list-style-type: none"> <li>1. No fraud in any form shall be allowed; nor shall any business-ethics-related reporting or legal proceedings.</li> <li>2. Minimize possible risks through relevant management strategies and countermeasures such as risk transfer, mitigation, avoidance, etc.</li> <li>3. No incidents involving significant violations of social, environmental and economic laws or regulations occurred in 2022.</li> </ol>
2022 Evaluation Mechanisms and Achievements	<ol style="list-style-type: none"> <li>1. The 2022 annual revenue reached NT\$38,672,549 thousands, hitting a record high with an annual increase of 0.45%. (Goal achieved)</li> <li>2. The Company attaches great importance to the gender equality of board member composition, and aims to increase the number of female directors. Currently, males account for 86% (6 directors) and females account for 14% (1 director) of the board members. The Company shall make efforts to increase the number of female directors in the future to achieve the goal. (Goal achieved)</li> <li>3. No illegal act or corruption incident violating the principle of integrity occurred in 2022. All employees complied with ethical regulations, and practiced the Company's philosophy of ethical management. (Goal achieved)</li> <li>4. In 2022, a total of 4 recovery drills were carried out in EMC, Elite Electronic Material (Kunshan), Elite Electronic Material (Zhongshan), and Elite Electronic Material (Huangshi), focusing on the inter-plant switching of major equipment and services, and testing of backup data recovery.</li> </ol>

Dimension	Corporate Governance (G)
Medium- / Long-term Goals	<ol style="list-style-type: none"> <li>1. In response to the enlarged transaction volume of 5G mobile phones and the recovery of the automotive market, it is expected that the operational performance will scale new heights in 2023.</li> <li>2. Continue to maintain the status of being the world's largest green-material laminate manufacturer. EMC's strong R&amp;D and market development capabilities as well as the technology and product strengths it has accumulated will play an essential role in future substrate material market, and will bring the Company promising prospects.</li> <li>3. In addition to the characteristics of lightness and thinness, high reliability and multifunctionality, high-frequency/high-speed and being "green" are also some dominant trends for electronic products' development. The applications of high-density interconnection (HDI PCB) technology, high layer count PCB, IC substrate, and rigid-flex board to mobile phones, consumer electronics and other portable products generate higher demand in environmental protection. High-functional and environmentally friendly substrates have strong growth potential, and will be the focus of PCB development in the future.</li> </ol>

### 2.1 Company Overview GRI 2-1

**The Company was founded** in 1992; Stock code: 2383

**Revenue of EMC in 2022:** NT\$ 38,672,549 (Unit: thousands)

In the early stage, the Company's main products were FR-4 CCL and sheets. It became the world's largest supplier of halogen-free PCB substrates in 2013, and remains the market leader to date. On the strength of professional R&D teams, EMC has developed a variety of excellent halogen-free products, including materials of different grades such as Mid. Loss, Low Loss, Very Low Loss, Ultra low loss, Extreme Low Loss, etc. The products meet the needs of advanced high-precision PCB technologies in various application fields such as Anylayer, mSAP, IC substrate, ultra-high-speed substrate, high-speed transmission/high-frequency products, etc., which have been recognized by many customers. By upholding the belief of value creation and persisting in technological innovation and improvement, EMC has acquired more than 250 patents around the globe, and has acquired a leading position in technologies and applications of smartphones, artificial intelligence (AI), supercomputers, cloud data centers, 5G networks, electric vehicles, self-driving cars, etc.

The manufacturing process is as follows: First, soak a reinforcing material such as glass fiber cloth, etc. in resin; cut the said material, and attach copper foil on the material's one side or both sides; and shape it through thermocompression. In addition to the mechanical strength and electrical insulation required for PCB manufacturing process, CCL, depending on the different requirements for different function PCB products, also needs to possess good thermal conductivity, chemical resistance, heat resistance or other special performance requirements.

CCL can be divided into a variety of types with different characteristics based on the substrate material it uses. The common types include paper base CCL, compound CCL, epoxy resin glass fiber CCL, flexible CCL, etc., among which the epoxy resin glass fiber CCL is the most commonly used one.

<b>Vision</b>	Strive For Excellence Become The World Leading Brand Of “Green” Laminate Materials
<b>Core Value</b>	RESPONSIBILITY TEAMWORK VALUE CREATION

## Headquarters and Major Production Bases

Location of headquarters: No. 18, Datong Road, Guanyin District, Taoyuan City, Taiwan

### Major Production Bases

#### 1. Elite Material Co., Ltd.- Guanyin Plant

(including No. 18, Datong 1st Road, Guanyin District, Taoyuan City (plant area: 164,445.08 square feet) and No. 10 Yuanyuan Street, Guanyin District, Taoyuan City (Plant 1 and Plant 3) (plant area: 53,315.8 square feet) as well as No. 3, Jingjian 2nd Road, Shulin Village, Guanyin District, Taoyuan City (Plant 2) (plant area: 36,347.28 square feet)

#### 2. Elite Material Co., Ltd. - Hsinchu Plant (plant area: 149,069.04 square feet)

(No. 14, Wenhua Road, Hukou Township, Hsinchu County)

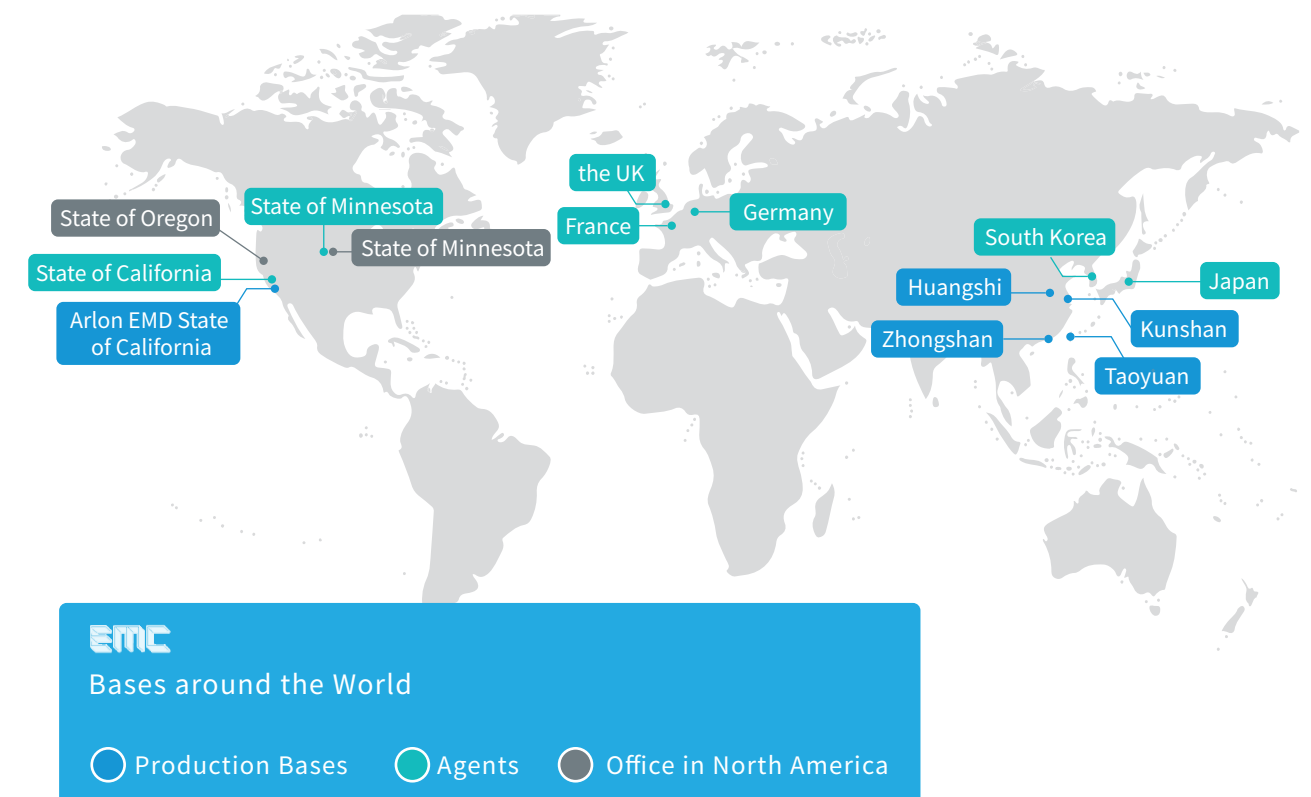
#### 3. Elite Electronic Material (Kunshan) Co., Ltd. (plant area:1,183,183.59 square feet)

#### 4. Elite Electronic Material (Zhongshan) Co., Ltd. (plant area: 433,161.02 square feet)

#### 5. Elite Electronic Material (Huangshi) Co., Ltd. (plant area: 545,153.25 square feet)

#### 6. Arlon EMD in California, USA (plant area: 76,396 square feet)

## Bases around the World



Continent	Country	Operating base
Asia	Taiwan	Headquarters, Guanyin Plant, Hsinchu Plant
	China	Kunshan Plant, Zhongshan Plant, Huangshi Plant
	Japan	Agents: Imanaka Ltd・Molymer SSP Co., Ltd
	South Korea	Agent: Landmark International Corp
America	USA	Agent: Arlon Contact offices: CA・MN EMC acquired Arlon EMD in California, USA in 2020, which became EMC's first production base in the United States, and the fourth production base in the Company's overseas territory.
Europe	France	Agents: CCI Eurodam S.A. and Roland Jacquet
	Germany	DetlevKÜBLER
	UK	Mark Gordon

Note: Please refer to EMC's official website for detailed contact information of each operating base.  
([https://www.emctw.com/zh-TW/contact\\_us/index#tw](https://www.emctw.com/zh-TW/contact_us/index#tw))



### Major Products:

The Company's major products include CCL, prepregs, multi-layer laminate, etc. The percentage and amount data of 2022 operating revenue is shown in the table below (based on the Production Volume and Value Table)

(Consolidated revenue)

Major Products	Unit	Quantity	Operating revenue (NT\$ thousands)	Percentage of operating revenue (%)
CCL	Thousands (SHT)	34,487	21,565,368	55.76
Prepreg	Thousand meters (MTR)	108,678	16,447,245	42.53
Multi-layer laminate	Thousand SF (S.F.)	3,358	574,143	1.49
Others	-	-	85,793	0.22
Total	-	-	38,672,549	100.00

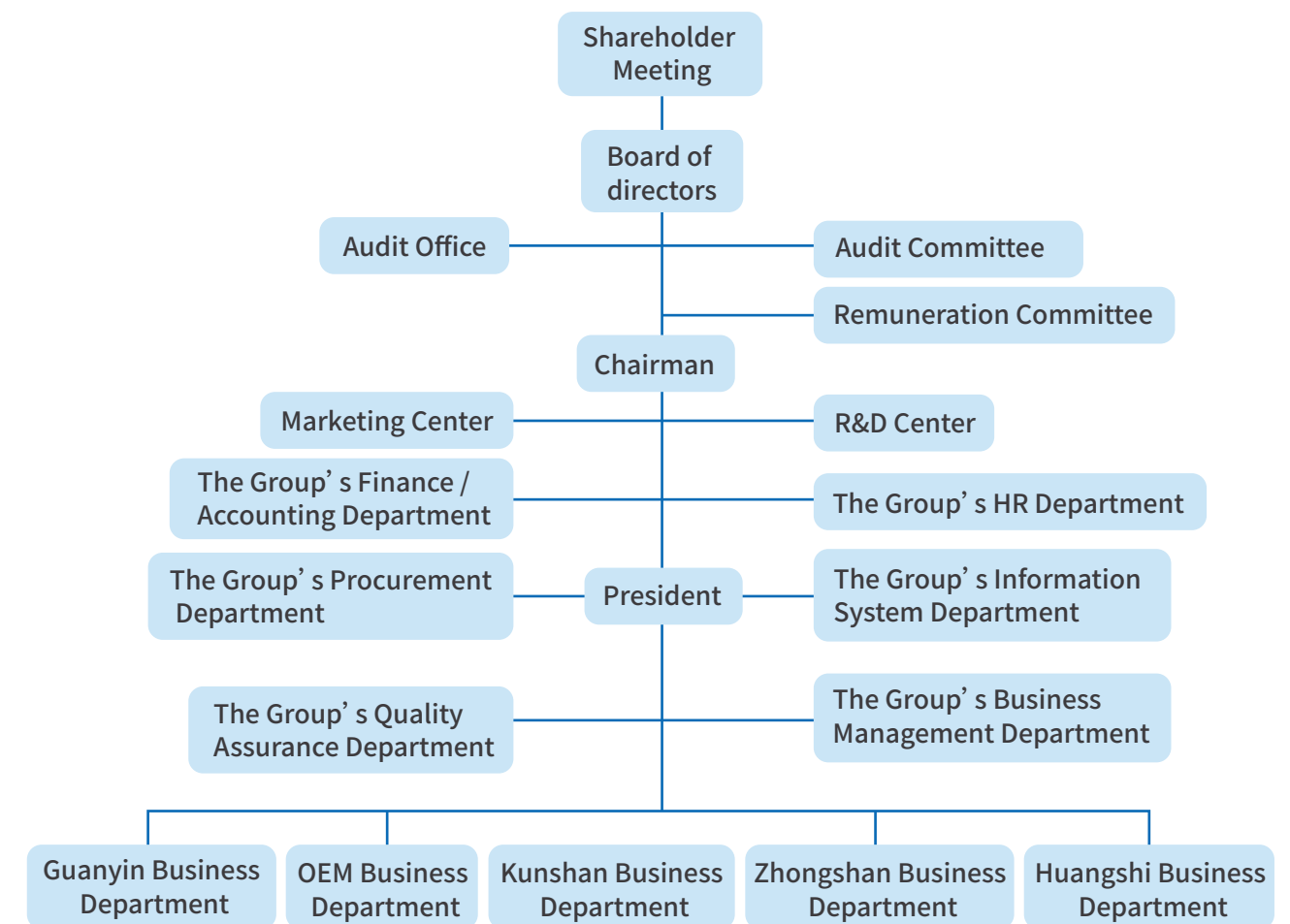
### Number of Employees

The total number of employees is 3,712, including 3,005 male employees (accounting for 80.95% of the total number of employees), and 707 female employees (accounting for 19.05% of the total number of employees)

## 2.2 Corporate Governance

### 2.2.1 Corporate Organizational Structure GRI 2-9

The board of directors is EMC's highest governance body and decision-making center for material business affairs. For continuous corporate governance reinforcement, independent directors have been set in the board of directors. In addition, functional committees such as Remuneration Committee, Audit Committee, etc. have also been established to develop comprehensive performance objectives and remuneration structure for the Company's directors and managers, and to effectively implement operations such as internal control, risk management/control, etc. to respond to various potential or possible corporate crises or risks.



### Job Functions of Departments

Chairman's Office	Coordinate the operations and strategic planning of the Group
President's Office	Responsible for annual business policies and management strategies, evaluation and analysis of business performance, and planning of major investment projects.
Audit Office	Implement all internal audit plans of the Group and provide improvement suggestions for the system.
The Group's Finance / Accounting Department	Coordinate the planning and management of the Group's accounting affairs and the management of investor relations.
The Group's HR Department	Coordinate the planning of the Group's human resources, training, general affairs, welfare system, etc.



The Group's Procurement Department	Review and formulate annual procurement plans, procurement items, relevant projects, etc.
The Group's Information System Department	Take charge of the Group's information-related affairs such as planning, management, etc.
R&D Center	Responsible for the comprehensive planning and management of the R&D units in the Group's various operating bases.
Marketing Center	Responsible for the market research and marketing strategy planning of the Group's products.
The Group's Quality Assurance Department	Responsible for the integration of the Group's quality systems, the establishment of product characteristics database, etc.
The Group's Business Management Department	Take charge of the enhancement of manufacturing and operating benefits, and optimize capital expenditure review operations and relevant benefit tracking mechanisms.
Various Business Units (Guanyin, OEM, Kunshan, Zhongshan, Huangshi)	Implement annual business guidelines, goals, management strategies, EHS tasks, etc.

1. More than 50% of the board members do not concurrently serve as the Company's managers or employees.
2. There are three independent directors included in the Company's Board, accounting for 3/7 of all directors. The independent directors possess extensive experiences in areas of finance/accounting, business management and legal affairs, respectively, and shall effectively exert their professional competencies to supervise the Company's operations.
3. Members of the Company's Audit Committee and Remuneration Committee are all independent directors. All committees can carry out comprehensive discussions and propose suggestions for the Board to make decisions and perform corporate governance.

Eight meetings were called by the Board in 2022 to review and supervise the Company's material decisions regarding economic, social and environmental issues to maximize benefit and interests for shareholders. If the meeting items involve interests issues related to certain directors or the corporations such directors represent, the critical content of the issues shall be explained in that board meeting. If there is a concern that the Company's interests might be affected, such directors shall not be allowed to join the discussions and voting, and shall recuse themselves to avoid conflicts of interest. Moreover, they shall not act on behalf of other directors to exercise their voting rights.

As required by the "Taiwan Stock Exchange Corporation Procedures for Verification and Disclosure of Material Information of Companies with Listed Securities", EMC shall communicate with and report to the board of directors when the following situations, which are regarded as material and critical events, occur. Occurrence of a disaster, group protest, strike, environmental pollution, cyber (information/communication) security event, or any other material event, resulting in any of the following situations :

1. Where the company incurs a material loss or impact;
2. Where a relevant authority orders suspension of work, suspension of business, termination of business, or revokes or voids a permit pertaining to pollution;
3. Where the administrative fines for one single event have accumulated to NT\$1 million or more. No material and critical events happened to EMC in 2022.

## ► 2.2.2 Operation of Board of Directors

### GRI 2-10, GRI 2-11, GRI 2-11, GRI 2-12, GRI 2-16, GRI 2-17, GRI 2-18 and GRI 2-19

EMC has set up the "Board of Directors", "Remuneration Committee" and "Audit Committee" in accordance with the "Company Act" and "Securities and Exchange Act", for which directors and committee members are regularly selected in accordance with relevant regulations to make the best decisions for EMC's sustainable development.

The board of directors is EMC's highest governance body, which is chaired by the Company's Chairman. The board of directors is responsible for implementing and supervising the Company's various businesses and operations. The following measures have been taken by the Company :

Name	Title	Gender	Curriculum Vitae
Ding-Yu Dong	Chairman	Male	Ph.D. degree in Engineering, Stanford University Assistant Professor in San José State University
Yu-Chang Investment Co., Ltd. Representative: Fei-Liang Tsai	Vice Chairman	Male	Master in Chemical Engineering, National Tsing Hua University President of Taiwan Union Technology Corporation
Yu-Chang Investment Co., Ltd. Representative: Wen-Shiung Lee	Director	Male	Bachelor of Chemical Engineering, Tamkung University Director of Unimicron Corporation President of Isola Asia Pacific (Taiwan) Inc.
Mon-Chong Hsieh	Director	Male	Master in International Affairs, Columbia University, USA Chairman of Food Industry Research and Development Institute Director of The Eisenhower Exchange Fellowships, Inc. Director of the Chinese National Federation of Industries
Bing Shen	Independent Director	Male	MBA, Harvard University Financial Analyst of World Bank Chief Investment Officer of International Bank Corp. Executive Director of Morgan Stanley & Co. Vice President of China Development Industrial Bank President of CDIB Partners Investment Holding Corporation
Duen-Chian Cheng	Independent Director	Male	Master of Business Administration in Columbia University Director of Appier Holdings Inc. Independent director of Ta Ya Electric Wire & Cable Co., Ltd. Chairman of LuxNet Corp. Chairman of Clientron Corp. President of UMC Capital Corporation
Hsi-Chia Chen	Independent Director	Female	Ph.D. in Law, National Taiwan University Ph.D. in Law, Peking University Partner of Pinsent Masons LLP; Chief Representative of its Beijing Office; Joint Head of Office-China; and Member of Asia Pacific Operating Committed (APOC) Trainee of King & Wood Mallesons (previously known as King & Wood) Associate & Partner of Formosan Brothers, Attorneys-at-Law

Note: For more detailed information, please refer to the Company's 2022 Annual Report.

## Board Diversity and Independence GRI 2-11

### ✓ Board Diversity :

The current directors all have acquired extensive experiences in TWSE/TPEX-listed company business management, and possess leadership and decision-making capability, crisis management ability and global market perspectives. Among the three independent directors, Mr. Bing Shen and Mr. Duen-Chian Cheng have considerable expertise in finance/accounting, industrial knowledge, business judgment, etc., and Ms Hsi-Chia Chen is a partner of Chen & Chang, Attorneys-at-Law, possessing profound legal knowledge and rich practical experiences. As for the other four non-independent directors, Chairman Ding-Yu Dong, Director Fei-Liang Tsai, Director Wen-Shiung Lee and Mon-Chong Hsieh all have long years' experiences in serving as important managerial positions such as chairman, president, etc. for TWSE/TPEX-listed companies. The industries that the directors engaged in include technology, biochemistry, foods, manufacturing, etc. They have professional capabilities in marketing, technology and business management, and possess rich industrial knowledge and a keen business sense.

Among the seven Board members, one member concurrently serves as an employee of the Company, accounting for 14% of the Board members. One independent director's tenure is less than 3 years, and two independent directors' tenure is between 3-9 years. As for directors' age structure, two directors are over 71 years old, three are between 61 and 70 years old, and two are under 60. The Company pays attention to gender equality in the Board composition, and aims to increase the number of female directors. Currently males account for 86% of the Board members (6 persons), and female accounts for 14% (one person). The Company shall make efforts to increase the number of female directors in the future to achieve the goal.

Diversity Items  Name of Director	Basic Composition								Professional Background			Professional knowledge and competency			
	Nationality	Gender	Concurrently serving as the Company's employee	Age			Independent director's term of office / tenure		Industrial experiences	Finance	Legal	Business judgement	Business management	Leadership & decision-making	Global market perspectives
				51   60	61   70	71   80	Under 3 years	3-9 years							
Ding-Yu Dong	ROC	Male	✓		✓				✓			✓	✓	✓	✓
Fei-Liang Tsai	ROC	Male			✓				✓			✓	✓	✓	✓
Wen-Shiung Lee	ROC	Male				✓			✓			✓	✓	✓	✓
Mon-Chong Hsieh	ROC	Male		✓					✓			✓	✓	✓	✓
Bing Shen	ROC	Male				✓		✓	✓	✓		✓	✓	✓	✓
Duen-Chian Cheng	ROC	Male			✓			✓	✓	✓		✓	✓	✓	✓
Hsi-Chia Chen	ROC	Female		✓			✓		✓		✓	✓	✓	✓	✓

Name	Bing Shen	Duen-Chian Cheng	Hsi-Chia Chen
Whether the person, or the person's spouse / any of the person's relatives by blood within the second degree of kinship serves as the Company's or any of its affiliates' director, supervisor or employee	No	No	No
The number and percentage of the Company's shareholding by the person, or the person's spouse / any of the person's relatives by blood within the second degree of kinship (or in someone else's name)	N/A	N/A	N/A
Whether the person is a director, supervisor or employee of a company that has a specific relationship with the Company	No	No	No
The amount of compensation earned in the last two years by providing business, legal, financial, accounting and other services to the Company or its affiliates	N/A	N/A	N/A

## ✓ Board Independence:

The Company has a total of 7 directors. None of any Board members is involved in the affairs listed in the paragraphs/subparagraphs of Article 30 of the Company Act, nor are they involved in any situations stipulated in paragraph 3-3 of Article 26 of the "Securities and Exchange Act" (which states that the following relationships may not exist among more than half of a company's directors: 1. A spousal relationship. 2. A familial relationship within the second degree of kinship), and paragraph 4 (which states that no spousal relationship or familial relationship within the second degree of kinship shall exist among supervisors and directors).

All independent directors are in compliance with FSC's regulations on independent directors. Details of the independence are listed in the table below :

## Board Performance Evaluation

The Company formulated the "Elite Material Co., Ltd. - Measures for the Board of Directors Performance Evaluation" in accordance with "Corporate Governance Best Practice Principles for TWSE/TPEX Listed Companies", which was approved by the Board of Directors in 2020. Board members and the Board's meeting unit conduct internal self-evaluations on a yearly basis to evaluate the Board's performance of a current year. It is also clearly stipulated that at least one external evaluation shall be conducted every three years by an external professional independent agency or by a team of external experts and scholars. The Company entrusted "Taiwan Association of Board Governance (TABG)" to perform an external evaluation in 2022. The summary of the internal and external performance evaluation results of the Board of Directors in 2022 is as follows :

Evaluation method	Evaluation content
Board members' Self-evaluation	<b>Nine major dimensions, including 36 indicators :</b> <ol style="list-style-type: none"> <li>1 The Company's tasks and goals</li> <li>2 The Company's internal control and risks</li> <li>3 Management of internal relations</li> <li>4 Management of external relations</li> <li>5 Composition and capabilities of the board of directors</li> <li>6 The Board's culture</li> <li>7 The Board's operations</li> <li>8 Chairman/chair of Board meetings</li> <li>9 Director's self-evaluation</li> </ol>
Evaluation period	
From: January 01, 2022 Until: December 31, 2022	

## Evaluation result

As indicated by the results of the evaluation based on various indicators and criteria, the Company's 2022 Board's performance was evaluated as Medium-High Level (96 points).

Evaluation method	Evaluation content
The Board's Internal Self-evaluation	<b>Two major dimensions, including 7 indicators :</b> <b>Compliance with relevant laws and regulations</b> <ol style="list-style-type: none"> <li>1 Compliance with submitting meeting proposals, which by law should be discussed by the board of directors, to the Board for discussion.</li> <li>2 Whether the board meeting is held at least once a quarter.</li> <li>3 Directors' compliance with the rule of interests recusal.</li> </ol> <b>Participation degree in the Company's operations</b> <ol style="list-style-type: none"> <li>1 Supervise and understand the implementation of operation plans, presentation of financial statements, audit reports and associated tracking status.</li> <li>2 Assess CPAs' independence.</li> <li>3 Assess and monitor the company's existing or potential risks.</li> <li>4 Communication and interaction with the company's managerial personnel.</li> </ol>
Evaluation period	
From: January 01, 2022 Until: December 31, 2022	

## Evaluation result

As indicated by the results of the evaluation based on various indicators and criteria, the Company's 2022 Board's performance was evaluated as Medium-High Level (96 points).

Evaluation method	Evaluation content
External Evaluation	<b>Seven major dimensions, including 70 indicators :</b> <ol style="list-style-type: none"> <li>1 The Board's composition and structure</li> <li>2 Selection/appointment of directors and their continuing training</li> <li>3 Participation degree in the Company's operations</li> <li>4 Improve the Board's decision-making quality</li> <li>5 Internal Control</li> <li>6 Environmental, Social and Governance (ESG)</li> <li>7 Value Creation</li> </ol>
Evaluation period	
From: January 01, 2019 Until: September 30, 2022	

## Evaluation result

### Conclusion :

On the whole, the governance and operations of the Company's Board of Directors conform to Taiwan Stock Exchange's regulations on corporate governance practices and Board evaluation. Specifically, the advantages of the Company's board governance include :

1. Diversity of Board members' professional background: General directors have extensive industrial experiences, and are very skilled in corporate operations. Independent directors possess financial, business management and legal expertise, which is helpful to the Company's operation strategies and sustainable development.
2. The management can provide board members with detailed data and information related to the Company's material business issues, and full communication can be carried out, which allows the Board of Directors to discuss and decide based on sufficient information.
3. In addition to the yearly self-evaluation conducted by the Board itself, one external evaluation is also conducted every three years by an external independent agency. Results of the performance self-evaluation shall also be submitted to the Board of Directors and shareholders meetings, fully demonstrating the board's self-discipline and responsibility.
4. The Chairman has unique views on the talent cultivation and succession planning for various business departments, and can grasp opportunities in a timely manner to facilitate the Company's growth when the demand for production capacity expands.
5. The Company attaches great importance to R&D, and its business development strategies can closely respond to the trends of the industry's demand. Through continuous innovation, business opportunities can be grasped, and business growth can be maintained.

## Suggestions :

1. The Company may build a New Director Orientation System for newly appointed directors to smoothly perform their duties.
2. Mailboxes personally managed by independent directors may be set, or an impartial third-party professional organization may be entrusted to act as the contact to accept reporting/whistleblowing cases so that the system for stakeholders' whistleblowing shall be more complete.
3. The Company may rename the "Corporate Social Responsibility Committee" as "ESG (Sustainability Development) Committee", and invite more than one independent directors as committee members. Moreover, elevate the committee's level to a functional committee to demonstrate the Company's commitment to sustainable development.

## Improvement plans:

The Company formulated the Measures to Promote Directors' Continuing Training in 2023 for directors to continuously absorb new knowledge, thereby maintaining their core value and professional strengths and abilities.

Currently the existing internal/external reporting channels are all in normal operation. In the future, the Company shall assess the necessity based on actual operational needs to set up a whistleblowing system where an independent director/impartial third-party acts as an agent to receive the Company's whistleblowing / reporting cases.

In addition to renaming the committee, the Company shall also assess the necessity based on actual operational needs to elevate the committee to a level of functional committee.

## Continuing Training and Education for the Board of Directors GRI 2-17

As required by the "Directions for the Implementation of Continuing Education for Directors and Supervisors of TWSE and TPEX Listed Companies", it is advisable that newly-appointed directors/supervisors shall take a minimum of 12 hours training in the inaugural year, and a minimum of 6 hours training per year from the following year onwards.

In 2022, the total training hours for directors were 54 hours, with an average of 6 hours per director, which was compliant with the recommended criterion of 6 hours stipulated in the Directions.

Position	Name	Training Date	Organizer	Title of Training Course	Training hours
Chairman	Ding-Yu Dong	2022.4.27	Taiwan Corporate Governance Association	Analyze ransomware threats, and establish information security & protection strategies for TWSE/TPEX-listed companies	3
		2022.8.17	Taiwan Academy of Banking and Finance	Corporate Governance Forum – What Taiwan can Learn from the Russia-Ukraine War	3
Total					6
Director	Fei-Liang Tsai	2022.4.27	Taiwan Corporate Governance Association	Analyze ransomware threats, and establish information security & protection strategies for TWSE/TPEX-listed companies	3
		2022.7.27	Taiwan Independent Director Association	Net zero emissions, carbon neutrality, and company's regulatory compliance	3
Total					6
Director	Mon-Chong Hsieh	2022.6.10	Securities & Futures Institute (SFI)	2022 Insider Trading Prevention Promotion Conference	3
		2022.8.5	Taiwan Corporate Governance Association	Investment in Influence -- Enhance corporate influence, grasp opportunities, and practice SDGs	3
Total					6
Director	Wen-Shiung Lee	2022.4.27	Taiwan Corporate Governance Association	Analyze ransomware threats, and establish information security & protection strategies for TWSE/TPEX-listed companies	3
		2022.7.27	Taiwan Independent Director Association	Net zero emissions, carbon neutrality, and company's regulatory compliance	3
Total					6



Position	Name	Training Date	Organizer	Title of Training Course	Training hours
Independent director	Bing Shen	2022.3.10	QIC, Georgeson, and Taiwan Stock Exchange	Look at the role of independent directors and 2022 Shareholders' Meeting from a global point of view	1
		2022.4.27	Taiwan Corporate Governance	Analyze ransomware threats, and establish information security & protection strategies for TWSE/TPEX-listed companies	3
		2022.8.3		Investigation Bureau, Ministry of Justice - Mindset for enterprise's anti-corruption, and sharing of investigation experiences and cases.	3
Total					7
Independent director	Duen-Chian Cheng	2022.4.27	Taiwan Corporate Governance Association	Analyze ransomware threats, and establish information security & protection strategies for TWSE/TPEX-listed companies	3
		2022.5.6	Taiwan Institute of Directors (TWIOD)	The Board's response to the great future of China-US convergence	3
		2022.7.14	Securities & Futures Institute (SFI)	Risks and opportunities of climate change and net zero emission policies to business operations	3
Total					9

Position	Name	Training Date	Organizer	Title of Training Course	Training hours
Independent director	Hsi-Chia Chen	2022.7.20	Taiwan Stock Exchange and Over-the-Counter Securities Exchange	Industrial Topic Advocacy Meeting -- Sustainability Route-map	2
		2022.7.27	Taiwan Independent Director Association	Net zero emissions, carbon neutrality, and company's regulatory compliance	3
		2022.10.18	Securities & Futures Institute (SFI)	Corporate M&A Practice Sharing-Focusing on Hostile Takeovers	3
		2022.10.25	Taiwan Corporate Governance Association	Interpretation of Important Judgments on Corporate Governance: Focusing on Directors' Responsibilities	3
		2022.11.15	Taiwan Corporate Governance Association	Ownership competition and analysis of prevention strategies	3
Total					14

## ► 2.2.3 Operation of the Audit Committee

The Audit Committee of EMC is composed of 3 Independent Directors. The Audit Committee aims to assist the Directors in supervising the quality as well as the integrity of the accounting, auditing, financial reporting operations and financial controls implemented by the Company. The Audit Committee held a total of 7 meetings in 2022, and the main items discussed in the meetings include :

1. Material asset transactions and external investment.
2. Internal control systems and relevant policies and procedures.
3. Revision of procedures for acquiring or disposing of assets.
4. Endorsement/guarantee, and affiliates' capital increase.
5. Review of the CPA's fee.
6. Review financial reports :



( 1 ) The Board of Directors prepared the EMC's 2021 Business Report, Financial Statements, Surplus Earnings Distribution Proposal, etc., among which the Financial Statements have been verified by KPMG Taiwan, and a verification report has been issued. The above-mentioned Business Report, Financial Statements and Surplus Earnings Distribution Proposal have been checked by the Audit Committee and no discrepancies have been found.

( 2 ) 2022 Q1, Q2 and Q3 consolidated financial statements.

## Directors and Managers Remuneration Policy

The Company's remuneration policies, criteria and portfolios, procedures for determining remuneration, and correlation with business performance and future risks are explained as follows :

### ( 1 ) Directors:

As stipulated in the Company's Articles of Incorporation, an amount not greater than 1.2 % of a given year's surplus earnings shall be allocated as the remuneration for the Company's directors. Directors' remuneration is determined in accordance with the Company's "Measures for the Board of Directors Performance Evaluation". In addition to considering the Company's overall operating performance and the industry's future business risks and development trends, an individual's performance and contribution to the Company's achievements shall also be considered. Dimensions for consideration include director's grasp of corporate goals and tasks, awareness of a director's role and responsibilities, participation degree in the Company's operations, internal relationship management and communication, director's professionalism and continuing training, internal control , etc. These factors shall be incorporated into the performance evaluation and remuneration payment consideration, based on which reasonable compensation shall be granted. The reasonableness of performance evaluation and remuneration shall be reviewed by the Remuneration Committee and the Board of Directors, and the remuneration system shall be constantly reviewed based on actual operating conditions and relevant laws and regulations to seek a balance between the Company's sustainable operation and risk control.

### ► 2.2.4 Remuneration Committee GRI 2-19 and GRI 2-20

EMC has set up its Remuneration Committee in accordance with "Regulations Governing the Appointment and Power-exercise of Remuneration Committee of a Company Whose Stock is Listed on the Taiwan Stock Exchange or the Taipei Exchange". The Committee is composed of three independent directors with a service term of three years. The Committee meets at least twice a year to assess and examine whether the Company's internal remuneration system complies with relevant regulations, and can attract and retain excellent personnel.

( 1 ) The Company's Remuneration Committee has 3 members.

( 2 ) The term of office of the current committee members is from May 26, 2022 to May 25, 2025.

The Remuneration Committee held three meetings in 2022. The members' eligibility and attendance are listed in the table below :

Position	Name	Actual attendance	Attendance rate	Note
Independent director	Bing Shen	3	100%	-
Independent director	Duen-Chian Cheng	3	100%	-
Independent director	Hsi-Chia Chen	2	100%	Newly-appointed on 2022.5.26
Independent director	Rong-Dong Tsai	1	100%	Stepped down on 2022.5.26

## ( 2 ) The President and Senior Executive Vice Presidents :

The Company's policy related to the remuneration payment for the President, senior executive vice presidents, and other managers is determined by reference to the salary levels for corresponding positions in the market, responsibilities assumed by the positions, and the contribution being made to the Company's operating goals. The remuneration structure is planned based on the industry's characteristics. Relevant remuneration plans shall be deliberated and approved by the Remuneration Committee by comprehensively considering factors such as the Company's business achievements, individual's performance, remuneration levels adopted by peer companies, future risks, etc. Bonuses are offered in accordance with the Company's "Directions for Management Bonus Payment" and "Employee Remuneration Regulations". Corresponding reasonable compensation shall be given based on the evaluation criteria listed in the said Directions and Regulations, including a plant's revenue and profit achievement, the reduction of work hour loss due to occupational safety issues achieved in each plant compared to the previous year, an achievement of Class A in plants' internal control audits, and an individual's performance appraisal result.

## ( 3 ) The Company's remuneration policy shall be formulated based on the current year's operating achievements and financial status as well as the funds needs and plans for the future. The assessment of future risks is also taken into consideration to minimize the possibility of risk occurrence.

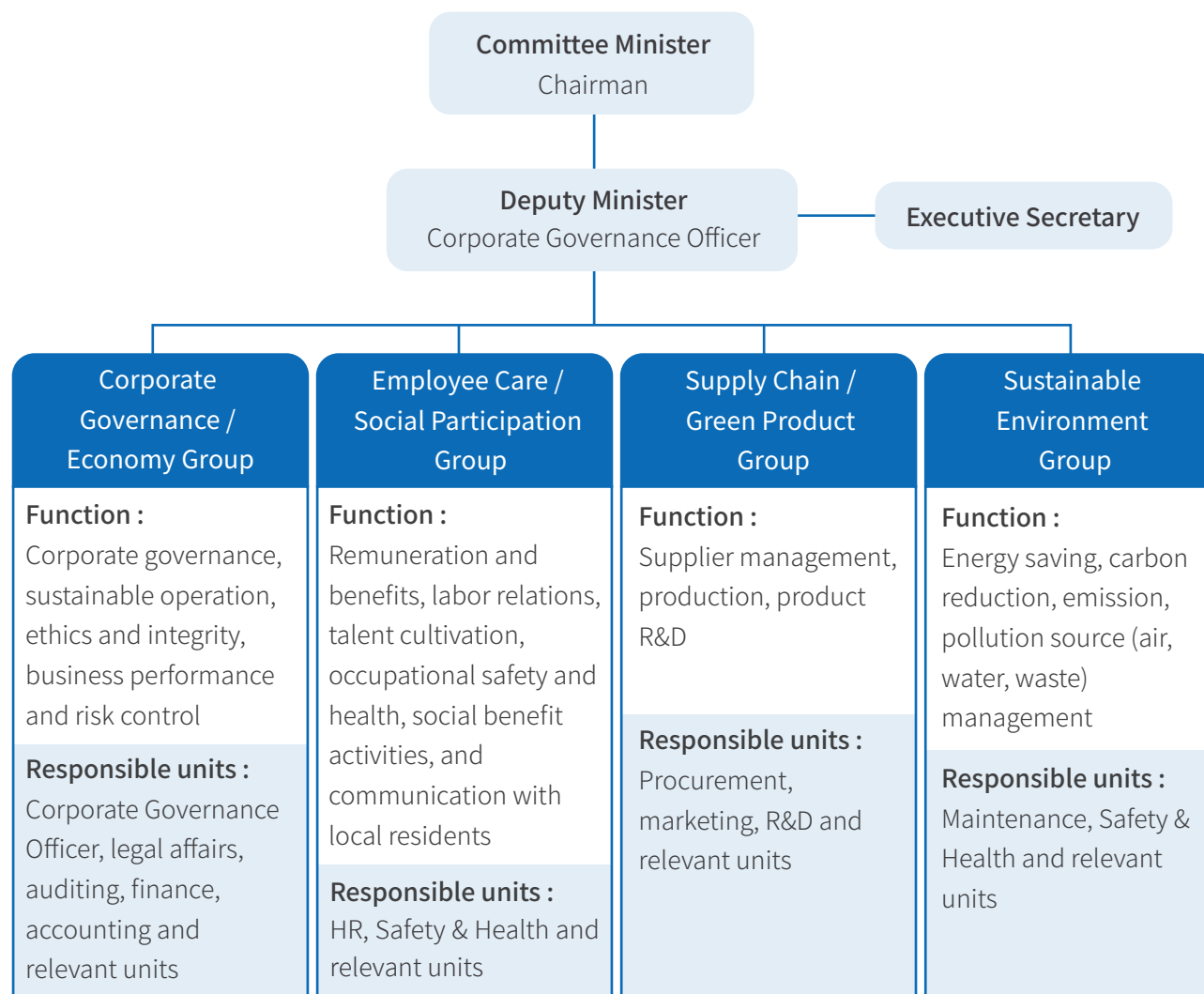
With the aggravating environmental impacts caused by global climate change, more and more global standards have been set to regulate the impacts that enterprises create on the environment, which in turn makes stakeholders' concerns keep changing with new provisions and guidelines. By upholding the concept of sustainable management, EMC has been active in participating in relevant association activities, through which the Company can share its operating experiences with peer companies, and establish collaborative partnership with other association participants. It is hoped that such engagement shall make contribution to the overall industry, and enhance the sustainable development of the industry.

## Membership of Associations and Initiatives in 2022: GRI 2-28

Title of Initiative	Responsible Business Alliance (RBA)
Association	Taiwan Printed Circuit Association (TPCA)
Degree of engagement	Member; and the Chairman serving as the Executive Director

## ► 2.2.5 Corporate Social Responsibility Governance and CSR Committee GRI 2-14

With the aim of fulfilling corporate social responsibility and carrying out the concept of sustainable management, EMC's Board of Directors passed the "CSR Code of Conduct", and set the "Corporate Social Responsibility Committee" (CSR Committee for short) in 2020 to take the responsibility for implementing corporate social responsibility tasks and developing specific plans for sustainable business operations. The "Corporate Social Responsibility Committee" is chaired by the Chairman (serving as the committee minister), under which four working groups have been set, which are Corporate Governance/Economic Group, Supply Chain/Green Product Group, Employee Care/Social Participation Group, and Sustainable Environment Group. The groups are formed by heads of relevant units/ departments or their representatives to be responsible for the data collection, planning, assessment and implementation related to various issues.



## 2.3 Operational Performance GRI 201-1

The Company follows the IFRS framework to disclose its relevant financial data. The operating data indicated in the consolidated financial reports of the past three years is summarized in the table below (Please refer to the Market Observation Post System of the Taiwan Stock Exchange (<http://mops.twse.com.tw>) for EMC's CPA-audited-attested financial reports and annual report).

EMC's 2022 annual revenue reached NT\$38,672,549 thousands, hitting a record high with an annual increase of 0.45%. In addition to planning the establishment of plants for substrate material manufacturing in Taoyuan, Taiwan, EMC also plans to set up plants in Southeast Asia to meet customers' needs.

By extending the leading high-end HDI technology to meet the strict requirements for material's conductivity and multi-layer lamination set by LEO satellite customers, after years' efforts, EMC has gained a foothold in the market, with its market share growing exponentially year by year. Additionally, since LEO satellites do not require the construction of base stations, they can work with 5G mobile communications in a complementary way. With the increase in the number of satellite launches, the demand for satellite equipment, ground receiving stations, and user terminal equipment has increased significantly, from which EMC shall benefit. In terms of EMC's materials for high-end HDI SLP (Substrate Like PCB), besides mobile phone customers' increasing demand for SLP, with the upgraded functions in new chip design as well as the high layer count and multi-layer lamination design adopted in newly launched laptops and tablets, EMC's operations shall be benefited from these trends.

Working Group	Responsible Units	Functions
Corporate Governance / Economy Group	Corporate Governance Officer, legal affairs, auditing, finance, accounting and relevant units	Corporate governance, sustainable operation, ethics & integrity, business performance, risk management
Supply Chain / Green Product Group	Procurement, marketing, R&D and related units	Supplier management, customer satisfaction, raw material management
Employee Care / Social Participation Group	Human resources, EHS and related units	Remuneration and benefits, labor relations, occupational health and safety, talent cultivation, communication with local residents, promotion of products to increase visibility
Sustainable Environment Group	Maintenance, safety & health and related units	Pollution source management, greenhouse gas management, energy management

## Financial data of the last 3 years (consolidated financial reports)

Unit: NT\$ thousands

Item \ Year	2020	2021	2022
Operating Revenue	27,200,786	38,500,026	38,672,549
Operating Cost	20,160,757	28,431,472	28,962,487
Gross Profit	7,040,029	10,068,554	9,710,062
Operating Expenses	2,356,578	3,145,934	3,484,815
Operating Profit	4,683,451	6,922,620	6,225,247
Non-operating Revenue and Expenditure	160,112	-10,724	70,808
Profit before tax of continued operations	4,843,563	6,911,896	6,296,055
Income Tax Expense	1,149,293	1,411,739	1,219,815
Net Income	3,694,270	5,500,157	5,076,240
Earnings per share (NT\$ Dollars)	11.33	16.50	15.24

Note : For the payment of employee salaries and benefits as well as the payment of government fees in 2022, please refer to pages 35 and 53 of the Company's 2022 Consolidated Financial Report. For the payment of shareholder dividends, please refer to the Company's 2022 Shareholders' Meeting Report. The 2022 "Community Engagement" expenditure was NT\$50,000 (donation to TPCA).

## Important financial ratios of the last 3 years

(Financial Analysis - International Financial Reporting Standards (IFRS))

Item \ Year	2020	2021	2022
Financial structure	Ratio of liabilities to assets (L/A) (%)	39.85	45.92
	Ratio of long-term funds to real estate, plant and equipment (%)	265.38	247.13
Solvency	Percentage of current assets (%)	203.55	178.41
	Percentage of liquid assets (%)	165.04	140.68
Profitability	Returns on assets (%)	13.98	17.26
	Return on equity (%)	24.39	30.11
	Ratio of pre-tax income to paid-in capital (%)	145.49	207.62
	Net profit margin (%)	13.58	14.29

## Subsidiaries included in the consolidated financial reports are listed in the table below :

Name of Subsidiary	Main Business
EMC OVERSEAS HOLDING INCORPORATED	General investment business
Grand Wuhan Incorporated	General investment business
EMC INTERNATIONAL HOLDING INCORPORATED	General investment business
Grand Zhuhai Incorporated	General investment business
Grand Shanghai Incorporated	General investment business
Grand Zhongshan Incorporated	General investment business
Elite Electronic Material (Kunshan) Co., Ltd.	Production of prepreg and CCL for printed circuit boards
Elite Electronic Material (Zhongshan) Co., Ltd.	Production of prepreg and CCL for printed circuit boards
Elite Electronic Material (Huangshi) Co., Ltd.	Production of prepreg and CCL for printed circuit boards
EMC SPECIAL APPLICATION INCORPORATED	General investment business
EMC USA HOLDING INCORPORATED	General investment business
EMD SPECIALTY MATERIALS, LLC	Production of prepreg and CCL for printed circuit boards



## ◆ 2.4 Implementation of Ethical Management, Anti-corruption and Legal Compliance GRI 2-15, GRI 205-1, GRI 205-2 and GRI 205-3

### ▶ 2.4.1 Ethical Management

EMC has upheld "integrity" as the standard and core value of employees' code of conduct since the Company was founded. We have formulated and announced relevant internal regulations such as "Operating Procedures and Conduct Guidelines for Ethical Management", "Code of Ethical Conduct", etc. In order to clearly define personal conduct guidelines and work-related rewarding / disciplinary measures for employees, the Company has announced "Guidelines for the Reporting and Handling of Illegal/Unethical/Dishonest Conduct Cases", in which measures in relation to the reporting of conduct that violates laws or Code of Ethical Conduct/Best Practice Principles have been formulated. Moreover, independent e-mail address and hotline for reporting are provided on the Company's official website for internal and external personnel to submit relevant statements. Cases being reported shall be handled by responsible units in a prompt manner once they are received. Employees are required to comply with relevant laws/regulations and internal guidelines. Moreover, the value of loyalty and integrity is extensively promoted to enhance the Company's corporate culture.

In addition to promoting the importance of integrity among internal personnel, the Company also requires external personnel such as suppliers, etc. to sign "Letter of Undertaking of Integrity for Suppliers", in which the prohibition on improper or dishonest trading in business activities are clearly stated. Those who violate the regulations shall be listed as a target for transaction rejection. The "Integrity Clause" that prohibits dishonest and unethical trading conduct has also been specified in the Company's standard trading contracts. No illegal act or corruption incident violating the principle of integrity occurred in 2022. All employees complied with ethical regulations and practiced the Company's philosophy of ethical management. No significant corruption risk had been identified in the Company's production bases through mechanisms such as internal audits, personnel interviews, etc.

#### Operating Procedures and Conduct Guidelines for Ethical Management

台光電子材料股份有限公司		文件編號	EMC-30-17
文件名稱		版次	1.1
誠信經營作業程序及行為指南		總共頁次	3 / 8
<p><b>第一條 訂定目的及適用範圍</b></p> <p>本公司基於公平、誠實、守信、透明原則從事商業活動，為落實誠信經營政策，並積極防範不誠信行為，依「上市上櫃公司誠信經營守則」及本公司及集團企業與組織之營運所在地相關法令，訂定本作業程序及行為指南，具體規範本公司人員於執行業務時應注意之事項。</p> <p>本作業程序及行為指南適用範圍及於本公司之子公司、直接或間接捐助基金累計超過百分之五十之財團法人及其他具有實質控制能力之機構或法人等集團企業與組織。</p> <p><b>第二條 適用對象</b></p> <p>本作業程序及行為指南所稱本公司人員，係指本公司及集團企業與組織董事、監察人、經理人、受僱人、受任人或具有實質控制能力之人。</p> <p>本公司人員藉由第三人提供、承諾、要求或收受任何形式或名義之金錢、餽贈、禮物、佣金、職位、服務、優待、回扣、疏通費、款待、應酬及其他利益，推定為本公司人員所為。</p> <p><b>第三條 禁止不誠信行為</b></p> <p>本公司人員禁止不誠信行為，所稱不誠信行為係指本公司人員於執行業務過程，為獲得或維持利益，直接或間接提供、收受、承諾或要求任何不正當利益，或從事其他違反誠信、不法或違背受託義務之行為。</p> <p>前項行為之對象，包括公職人員、參政候選人、政黨或黨職人員，以及任何公、民營企業或機構及其董事（理事）、監察人（監事）、經理人、受僱人、受任人、具有實質控制能力者或其他利害關係人。</p> <p><b>第四條 利益之態樣</b></p> <p>本作業程序及行為指南所稱利益，係指任何形式或名義之金錢、餽贈、禮物、佣金、職位、服務、優待、回扣、疏通費、款待、應酬及其他有價值之事物。</p> <p><b>第五條 法令遵循、防範措施及專責單位</b></p> <p>本公司應遵守公司法、證券交易法、商業會計法、政治獻金法、貪污治罪條例、政府採購法、公職人員利益衝突迴避法、上市相關規章或其他商業行為有關法令，以作為落實誠信經營之基本前提。</p>			

#### Code of Ethical Conduct

台光電子材料股份有限公司		文件編號	EMC-30-18
文件名稱		版次	1.2
道德行為準則		總共頁次	3 / 4
<p><b>第一條 訂定目的及依據</b></p> <p>為使本公司董事、經理人及所有員工之行為符合道德標準，並使本公司之利害關係人更加瞭解本公司道德標準，爰訂定本準則，以資遵循。</p> <p><b>第二條 適用對象</b></p> <p>本準則適用本公司董事、經理人及所有員工（以下簡稱「本公司人員」）。</p> <p><b>第三條 誠實信用原則</b></p> <p>本公司及本公司人員在企業經營及執行職務時，應遵循道德規範，並秉持積極進取、認真負責之態度，摒棄本位主義，注重團隊精神，恪遵誠實信用原則。</p> <p><b>第四條 防止利益衝突</b></p> <p>本公司人員應以客觀及有效率的方式處理公務，且不得以其在公司擔任之職務而使得其自身、配偶或二親等以內之親屬獲致不當利益。</p> <p>本公司與前述人員所屬之關係企業有資金貸與或為其提供保證、重大資產交易、進（銷）貨往來之情事時，相關之本公司人員應主動向公司說明其與公司有無潛在之利益衝突，並依本公司所訂之「員工行為規範」辦理，以防止利益衝突。</p> <p><b>第五條 不得圖己私利</b></p> <p>本公司人員不得為下列事項：</p> <p>（1）透過使用公司財產、資訊或藉由職務之便獲取私利。</p> <p>（2）與公司競爭。其經股東會同意解除競業禁止之限制者不在此限。</p> <p>（3）本公司行為規範或其他相關規定所訂禁止之行為。</p> <p><b>第六條 保密責任</b></p> <p>本公司人員對於公司本身或其進（銷）貨客戶之資訊，除經授權或法律規定公開外，應負保密義務。應保密的資訊包括所有可能被他人利用或洩漏之後對公司或客戶有損害之未公開資訊。</p> <p><b>第七條 公平交易</b></p> <p>本公司人員應公平對待公司進（銷）貨客戶、競爭對手及員工，不得透過操縱、隱匿、濫用其基於職務所獲悉之資訊、對重要事項做不實陳述或其他不公平之交易方式而獲取不當利益。</p> <p><b>第八條 保護並適當使用公司資產</b></p> <p>本公司人員均應保護公司資產，並確保其能有效合法地使用於公務上，避免被</p>			

Note: For detailed regulation content, please refer to EMC's official website.

## ► 2.4.2 Legal Compliance GRI 2-27

Strict compliance with laws and regulations in business operations is a practice of corporate social responsibility, and one of the keys to sustainable operations. Since EMC is providing products and services in various markets around the globe, with a view to ensuring the compliance with regulations applicable in the global market, EMC has set up legal affairs units to pay close attention to any regulatory formulation and development, by which the Company might be affected. In addition, a system to assess the Company's compliance with laws, policies and regulations has also been established to assist all units in implementing various laws and regulations. Moreover, the Company has conducted legal identification and management in accordance with ISO 9001, ISO 14001 and ISO 45001 standards to monitor the laws and regulations in relation to business operations, environmental protection and OSH. For any material event that poses a penalty to the Company due to administrative/legal violations, or any event that seriously affects the Company's operations, such events shall be disclosed in the CSR Report to fulfill the goals of balanced reporting and information transparency.

In 2022, a fine of NT\$100,000 issued by the Environmental Protection Bureau was posed to EMC's Hsinchu Plant as the pressure gauges being used did not accord with the specifications indicated in the operating permits. In response to this event, the Company conducted an overall inventory to ensure that all the pressure gauges used in the plants are compliant with the specifications stated in the permits.

Guanyin Plant's Plant 3 was fined NT\$60,000 by a labor inspection agency in May 2022 due to a violation of subparagraph 5, paragraph 1, Article 58 of the "Rules for Occupational Safety and Health Facilities" (the provision states that protective equipment such as protection shields, enclosures, safety interlock switches, etc. shall be set for dangerous parts of computer numerical control (CNC) or other automated machinery). The accident occurred when personnel was performing maintenance operations and was accidentally hurt by the machine (an injury caused by being caught/drawn in). Inspections were conducted afterwards to check all equipment parts with similar hazards, for which safety light curtains were installed to prevent further incident occurrence.

## ◆ 2.5 Risk Management

In response to changes in the global economic environment and sustainability-related risks, EMC has developed a complete risk management organizational structure and practical implementation framework based on three major aspects, which are economy (including corporate governance), environment and society, to identify and monitor the risks that may impact the Company's sustainable development. Through related management strategies and corresponding measures such as risk transfer, reduction and avoidance, potential risks may be minimized, or even turned into operational opportunities.

The risk management policy of EMC is to define various risks in accordance with the company's overall operating strategy, establish a risk management mechanism for early identification, accurate measurement, effective supervision and strict control, and prevent possible losses within the tolerable risks. As the internal and external environment changes, we will continue to adjust and improve the best risk management practices to protect the interests of our employees, shareholders, partners and customers, increasing the value of the company, and achieving the goal of optimizing the allocation of the company's resources.

### ■ Risk Scope Identification

EMC has identified various risk items of different levels based on various units' responsibility and functionality. The CSR Committee has further divided the risks into different risk types, which are economic (including corporate governance), environmental and social, based on the materiality principle. The details are listed in the table below.



Dimension	Risk Type	Description of Risk	Risk Control Measures
1. Economy (including corporate governance)	1.1 Market risk	<p>1.1.1 Political and economic dimension : Including the risk of financial or business impact on the company due to domestic / international political, economic and regulatory requirements.</p> <p>1.1.2 Industrial dimension: Including the risk of financial or business impact on the company due to domestic / international technological and industrial changes.</p> <p>Financial dimension: Including the risk of losses resulted from the changes of the company' s financial assets or liabilities (including on- and off-balance sheet assets and liabilities) due to fluctuations in market risk factors (interest rates, exchange rates, stock prices, commodity prices, electricity prices, etc.).</p>	1. In the era of IoT, besides the needs of high-speed computing, the high-frequency substrate materials for signal sending and receiving also play an important role. Only the sending and receiving through high-frequency base materials can achieve the true performance of wireless transmission. PTFE used to be the material for high-frequency substrates used for the sending and receiving of high-order signals. However, the PTFE material was not easy to be widely used due to its high-level of difficulty in processing. Particularly with the popularity of self-driving cars, the demand for driving detection radars and automotive chips has increased dramatically. With the aim of meeting the needs of self-driving cars and post-5G electronic products, EMC further invests in the development of high-frequency substrates for automotive radars and advanced packaging to meet global customers' growing needs.
	1.2 Operational Risk	<p>1.2.1 Operational dimension: Including the risks that cause impact on the company due to changes in the business model, adjustment of organizational structure, over-concentrated sales/purchasing, product replacement, product/service design, quality management, and major risk management of business contracts, etc.</p> <p>1.2.2 Financial dimension: Including the risks that cause impact on the company due to asset evaluation, credit and solvency, liquidity risks and accounting policies, etc.</p> <p>1.2.3 Internal control dimension: Including risks related to the company's internal control.</p> <p>1.2.3 Supply chain dimension: Including the risks that cause impact on the company due to issues such as supplier quality, price, delivery and corporate social responsibility.</p>	

Dimension	Risk Type	Description of Risk	Risk Control Measures
1. Economy (including corporate governance)	1.3 Investment Risk	1.3.1 Investment dimension: Including the risk of short-term investment market price fluctuation impact on the company due to over-concentrated reinvestment targets, high-risk and high-leverage operations, financial derivatives trading, financial planning, etc., or the operational management risks involved in the long-term investment of the company to be invested.	<p>2. The applications of high-density interconnection technology (HDI PCB), high layer count PCB, IC substrate, and rigid-flex board to mobile phones, consumer electronics and other portable products generate higher demand in environmental protection. High-functional and environmentally friendly substrates have strong growth potential and will be the focus of PCB development in the future.</p> <p>3. Enhance the sales percentages of high-end products/materials and increase the added value.</p> <p>4. Diversify the sources of raw materials to reduce risks, and negotiate with suppliers to reach a long-term procurement agreement based on the demand of the entire Group, achieving the goal of stable cost and supply.</p>
	1.4 Regulatory Compliance Risk	<p>1.4.1 Regulatory compliance dimension: Including the risks of failure to comply with relevant laws and regulations, including but not limited to the Labor Act, Company Act, Securities and Exchange Act, import/export regulations, industry code of conduct, anti-corruption regulations, etc.</p> <p>1.4.2 Legal dimension: Including the risks that may be resulted from the failure to comply with various legal norms, or various legal risks that may infringe the company's rights and interests.</p>	

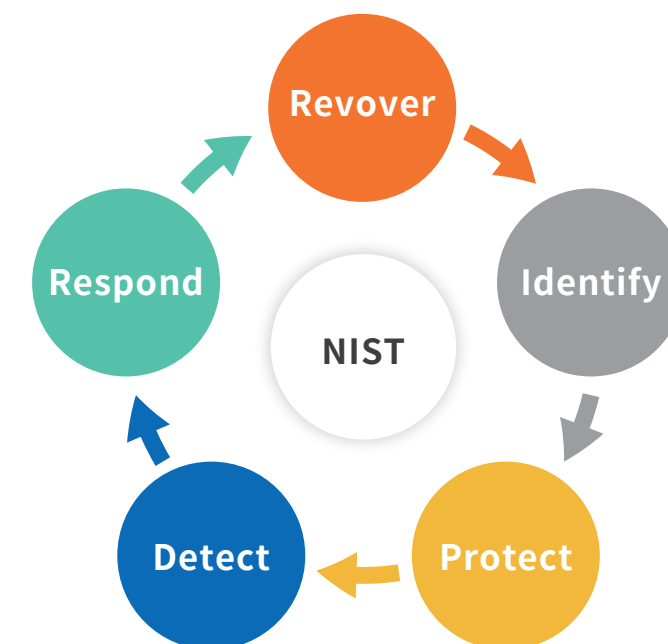
Dimension	Risk Type	Description of Risk	Risk Control Measures
2. Environment	2.1 Environmental Risk	2.1.1 Including the risks related to greenhouse gas emission management, carbon credits management, energy management that are conducted in response to climate change and natural disaster issues; and the risks for complying with international and local environmental protection laws such as the emission/discharge management of gas, water, waste, poison, and noise or the requirements of Environmental Impact Assessment.	<ol style="list-style-type: none"> <li>1. EMC not only continues to develop high-end application materials, but also assumes its social responsibility by adopting halogen-free environmentally friendly materials as the main development direction, reducing the impact of materials on the environment.</li> <li>2. Respond to environmental protection issues, and continue to improve the manufacturing process to reduce carbon emissions.</li> <li>3. Adopt life cycle perspective to identify the environmental risks that may have significant impact on the environment, and carry out corresponding measures for improvement, control and supervision.</li> </ol>
		3.1.1 Operational dimension: Including the risks to the company caused by occupational safety, hygiene and health, chemical management, safety protection and emergency response, and other improper management operations or errors. 3.1.2 Workplace dimension: Including risks caused by issues related to the safety of workplace for employees or contractors.	<ol style="list-style-type: none"> <li>1. Comply with relevant laws and regulations, and formulate various operation management guidelines.</li> <li>2. The Workplace Safety and Health Committee regularly reviews the compliance with environmental/occupational safety laws and regulations</li> </ol>
3. Society	3.2 Human Resources Risk	3.2.1 Including human rights issues of employees or suppliers, including but not limited to risks derived from labor relations, child labor, forced labor; as well as the risks resulted from the cultivation of talents, such as the mechanisms for the recruitment, retention and development of talents.	<ol style="list-style-type: none"> <li>1. Regularly conduct manpower check and review</li> <li>2. Plan and implement employee education, training and development plans</li> <li>3. Design competitive compensation and employee benefit measures</li> <li>4. Develop complete training and local talent development plans</li> </ol>

## 2.6 Information Security Management GRI 418-1

EMC has formulated its "Directions for Information Security Management" based on the three principles for information security management, which are "confidentiality, integrity, and availability". The information security management aims to provide an information environment for EMC Group's overall business to operate without interruption, and to establish management systems and standard procedures to meet relevant regulatory requirements, and protect the Company from various information security threats or accidents such as data misuse, leakage, tampering, theft, destruction, etc. to reduce possible hazards.

EMC, Elite Electronic Material (Kunshan), Elite Electronic Material (Zhongshan) and Elite Electronic Material (Huangshi) are all equipped with a cyber (information/communication) security response group. The general manager acts as the leader of the group, and heads of departments and cyber (information/communication) security reporting network contact personnel serve as group members.

EMC has followed the standards established by U.S. National Institute of Standards and Technology (NIST) to evaluate its information security status and set up relevant security goals. The Cybersecurity Framework (CSF) is adopted for the planning of information security policies to reduce the security risks that key operating facilities are faced with.



## ► 2.6.1 Information Security Implementation and Protection

In order to protect the security of the Company's and customers' business secrets, we first classify data by its security level and category for further management. Next, we carefully examine and strengthen the management measures for the information transmitted between the Company and customers, and conduct permission/authorization control over network access, and the computers and personnel being engaged. EMC has developed three major information security management objectives :

### 1. Information equipment security management

Classify systems by their security level and category, build a "no storing of data in endpoints" structure, set up file-related permission/authorization management rules, monitor records of the Security Information and Event Management (SIEM) system, and carry out Two-Factor Authentication (2FA) and Multi-factor Authentication (MFA) to reinforce authentication mechanisms and ensure the continuity of company operations. The Company conducts a "Backup/Restore" drill every six months, ensuring that relevant operations can be quickly restored when an incident or disaster occurs to reduce potential risks and losses from the incidents and disasters. In 2022, a total of 4 recovery drills were carried out in EMC, Elite Electronic Material (Kunshan), Elite Electronic Material (Zhongshan), and Elite Electronic Material (Huangshi), focusing on the inter-plant switching of major equipment and services, and testing of backup data recovery.

### 2. Network and antivirus management

To prevent cyber attacks and respond to malicious intrusions, we have set up firewalls, intrusion prevention systems, email security filtering systems, virus/malware protection systems, advanced Endpoint Detection and Response (EDR) and Host Defense in Depth (DiD) systems to block zero-day system vulnerability attacks. Moreover, we continuously obtain external threats information, and combine the information with existing information security systems to identify external malicious attacks. Automated detection and blocking systems are also employed. Vulnerability scanning is performed on a monthly basis through vulnerability scan tools, and system patching is conducted for identified vulnerabilities. Network information security risk management systems are also adopted to continuously assess EMC's cyber security risks. We also regularly entrust external information security professionals to reinforce our information security systems through measures such as penetration tests, etc. to conduct thorough search of blind spots in information security protection, thereby establishing a safe operating environment for the systems and ensuring the Company's sustainable operations.

### 3. Employee information security education and training

In addition to the information security promotion programs conducted for new employees, the Company also provide information security advocacy and training sessions on an irregular basis to strengthen employees' awareness of customer privacy and information confidentiality to improve employees' understanding of information security importance.

## ► 2.6.2 Reporting Procedures for Information Security Incidents and Related Events

When an information security incident occurs, the Company's employees shall follow "EMC Operating Procedures for Information/Communication Security Incident Reporting and Response" to report the incident to the top information supervisor. The responsible unit shall determine the security level and category of the incident, and take immediate control measures to deal with the incident in the most prompt way. No incidents involving the violation of information-security-related laws and regulations, and no information security incidents occurred during the period from 2020 to 2022.

Information security incident management status in the last three years	2020	2021	2022
Total number of information security breaches	0	0	0
Total number of security hacking incidents	0	0	0
Total number of customers affected by information security incidents	0	0	0
Total amount of fines associated with information security / cyber security violation incidents	0	0	0

## ► 2.6.3 Specific Management Plans

The Company has implemented relevant measures in accordance with corresponding operating regulations for its physical and environmental security, network and computer security, system access control, system's sustainable operation, information security promotion and educational training, etc. The Company's Audit Office serves as the supervisory unit for information security supervision. The Audit Office is responsible for supervising the implementation of internal information security measures, and performing regular inspections. For deficiencies identified in inspections, responsible units shall propose corresponding improvement plans and specific improvement actions, for which regular tracking shall be performed to ensure the improvement effectiveness, thereby reducing internal information security risks. In addition, with the aim of reinforcing the Company's information security risk management, the annual information security improvement items were submitted to the board of directors on December 21, 2022 to ensure the Company's continuous operation.

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# 03

► Sustainable Supply Chain

## 3. Sustainable Supply Chain

EMC emphasizes the importance of establishing a sustainable supply chain. In addition to regulating various supplier management affairs through relevant systems such as "Supplier Management Procedures", etc., EMC also requires suppliers to sign the "Social Responsibility Commitment Agreement" and "Conflict-free Metals Declaration", through which the Company shall gain more understanding of and control over supply chain's issues such as labor rights, environmental protection, ethics, safety and health risk control, etc. to reduce EMC's and suppliers' operational risks and costs, and to work together with supply chain partners towards a stable and sustainable future.

Dimension	Corporate governance	Environment
Material Issue	Supply Chain Management	Green Products and Services (Hazard Substance Management)
Management Mechanisms	1. According to the "Supplier Management Procedures", all major raw material suppliers need to be reviewed, assessed and audited to control their risks and ensure their sustainable management. By reviewing, assessing, and auditing suppliers' environmental/labor/human rights/social performances, appropriate suppliers can be selected and the responsibility of a prudent administrator can be fulfilled. 2. Follow "Hazardous Substance Management Procedures" and announce HSF (Hazardous Substance Free) Policy as the basis for compliance. Take effective control measures for designing, manufacturing, testing and supply chain management, and establish corresponding management systems.	
Responsible Unit	Procurement Department, R&D units	
Commitment / Policy	1. View suppliers as important partners for sustainable growth; carry out sustainable supply chain management to reduce operating risks and costs. 2. Be committed to developing green energy products, reducing the use of hazardous substances and creating HSF (Hazardous Substance Free) processes/production lines.	

Dimension	Corporate governance	Environment
2022 Evaluation Mechanisms and Achievements	1. The percentage of recycled copper contained in copper foil will reach 40-98 plus. (The percentage achieved by plants in Taiwan reached 98% in 2022). 2. The number of suppliers signing the "Social Responsibility Commitment Agreement" and "Conflict-free Metals Declaration", and the achievement rate both reached 100% in 2022. 3. In 2022, none of the manufacturers who completed the audit procedures was deemed ineligible for unsatisfactory performance in relation to corporate social responsibility or EHS management system practices. 4. The return rate of the Customer Satisfaction Questionnaire sent in the first and second half of 2022 was both 100 % (a total of 13 questionnaires were sent to major customers for satisfaction survey). The customer satisfaction rates (for general items) were 71.8% and 74.4% respectively, higher than the target value 65%.	
Medium- / Long-term Goals	1. EMC has become the world's largest supplier of halogen-free environmentally friendly materials for HDI PCBs, and has taken the initiative to expand the development of halogen-free environmentally friendly materials for 5G, Netcom infrastructure and automotive-related applications. It continues to seek niche products for each plant, increasing the added value of the products to create the blue ocean market in sales.° 2. In response to future market demand, EMC shall develop glass-fiber-cloth-free adhesive-coated CCL products to achieve the goal of zero-use of glass fiber cloth. In addition, the Company shall adhere to its guidelines to maintain the production of halogen-free eco-friendly materials, and adopt new-type manufacturing processes and methods to reduce the solvents used in formulas (about 10%-20% solvent reduction for per kg production) and the waste glue generated during production to significantly reduce waste generation in the process of production. 3. Start to assess the use of biomass-based or reusable eco-friendly resins.	



## ◆ 3.1 The Use of Green Materials

In consideration of the aggravating environmental impact of global warming and climate change, EMC pays close attention to the impact of the Company's products on the environment during the products' life cycle. Therefore, the Company initiated a product carbon footprint survey for the EM-390 series CCL products in 2022, confirming that nearly 70% of carbon emissions were generated in the design stage (i.e. raw material stage).

The "Hazardous Substance Management Procedure" of EMC covers the Restriction of Hazardous Substances Directive of EU (EU RoHS), the chemicals policy of EU (Registration, Evaluation, Authorization and Restriction of Chemical, REACH), IEC 61249-2-21 halogen-free regulations, and other international environmental protection regulations and industry standards. To make the quality of product in line with the green-product related environmental protection regulations, EMC has formulated material incoming inspection procedures and set up the fluorescent X-ray hazardous substance analyzer to measure the content of hazardous substances in raw materials, packaging materials, semi-finished products, and finished products by a non-destructive method. Suppliers are also required to ban the use of hazardous substances in their production and in the products, and are required to sign an Environmental Assurance Agreement (Declaration of Non-use) to ensure that the products can meet the requirements of RoHS, REACH and other relevant environmental regulations.

The major raw materials used in EMC's products are copper foil, glass-fiber cloth and chemicals, referred to as the "three major raw materials".

### ■ Halogen-free Regulations

In response to the rising awareness of environmental protection worldwide and the increasingly competitive industrial environment after the implementation of RoHS regulations by the European Union, EMC has worked hard over the years to meet the requirements and has become the world's largest supplier of halogen-free environmentally friendly materials for HDI PCBs. It has taken the initiative to expand the development of halogen-free environmentally friendly materials for 5G, Netcom infrastructure and automotive-related applications. EMC continues to seek niche products for each plant, increasing the added value of the products to create the blue ocean market in sales. In addition, to provide customers with the latest product information, the results of product development are displayed on the company's website.

## ■ New types of green products with high performance and low pollution

EMC shall continue the development of glass-fiber-cloth-free build-up film products. In addition to adhesive-coated CCL, film material is also a key product for the Company to gradually achieve the goal of glass-fiber cloth reduction. In addition, the Company shall adhere to its guidelines to maintain the production of halogen-free eco-friendly materials, and adopt new-type manufacturing processes and methods to reduce the solvents used in formulas and the waste glue generated during production to significantly reduce waste generation in the process of production. Gradually reduce the use of glass cloth year by year. According to market information, it is estimated that there will be 400,000 m<sup>2</sup>–800,000 m<sup>2</sup> demand per month in 2024; that is, the annual demand is about 5 million m<sup>2</sup>–10 million m<sup>2</sup>. Relatively speaking, the use of glass cloth can be reduced by about 5 million m<sup>2</sup> to 10 million m<sup>2</sup> per year.

## ◆ 3.2 Supply Chain Management

### ► 3.2.1 Supply Chain Management Policy

EMC believes that the implementation of corporate sustainability management shall not be limited to the company itself, the potential indirect environmental and social impacts caused by the supply chain shall also be properly managed. In order to communicate EMC's management requirements for the supply chain, and ensure that the Company's core values can be extended through the supply chain, we have established a complete supplier management system, requiring all suppliers to comply with our quality requirements and abide by the general social ethics, the principle of good faith, and the environmental protection regulations for products and operations, fulfilling corporate social responsibility. Therefore, in daily procurement operations, in addition to the consideration of costs and quality, supplier's performance in labor rights protection, environmental protection, and safety and health management shall also be taken as important criteria in evaluations and audits. Moreover, improvement measures shall be developed based on assessment/evaluation results to assist suppliers in making continuous progress, thereby enhancing supply chain's sustainability management quality and reducing supply chain's operational risks to establish sustainable and supportive partnership. In 2022, despite a minor scale supply tension caused by the extension of the pandemic as well as temporarily increased demand for some special-specifications materials, with all suppliers' dedicated cooperation, fortunately, the Company's production was not affected by these external factors.

## ► 3.2.2 Implement Local Procurement Principles GRI 2-6 and GRI 204-1

EMC's main product CCL is a midstream product of the PCB industry chain. The downstream part consists of suppliers of various electronic products. The whole PCB industry chain is illustrated as follows :

Upstream	Midstream	Downstream
Glass fiber / glass cloth	CCL	Various electronic products
Epoxy resin	Manufacturing of RPCB, FPCB, and IC Substrate	
Phenolic resin		
Copper foil		
Polyimide resin	Substrate assembly / processing and related manufacturing	
Production process and testing		

CCL is a key basic material for PCB production. It is made by mixing solvent, hardener, promoter, resin, etc. together, and immersing a reinforcing material such as glass fiber cloth to make a sheet (prepreg), which will be checked and cut in the next procedure. Several sheets will be stacked and covered by copper foil, which will then go through processes of thermocompression, trimming, inspection and cutting for the final product CCL to be completed. Among numerous CCL manufacturers in Taiwan, EMC has gained a position in the global market as a leading manufacturer of halogen-free CCL, with a market share as high as 26%. As indicated in the data released by Prismark in 2021, EMC's global share was about 7%.

The main raw materials used to fabricate EMC's products are copper foil, glass cloth, and chemicals, referred to as the three major raw materials. The local purchase percentages of copper foil and glass-fiber cloth are higher; while the percentage of chemicals is lower. This is because the chemicals currently used are all high-end products, and the related technologies are still owned by the suppliers. It is difficult to find suitable local suppliers within a short period of time. The details are summarized in the following table :

Three major raw materials Copper foil	Percentage of local suppliers (calculated based on payment amount)			
	Guanyin Plant & Hsinchu Plant	Elite Electronic Material (Kunshan)	Elite Electronic Material (Zhongshan)	Elite Electronic Material (Huangshi)
Glass cloth	100.00%	46.15%	53.85%	58.00%
Three major raw materials	100.00%	66.67%	56.25%	83.00%
Chemicals	14.00%	57.14%	35.48%	59.00%

## ► 3.2.3 Percentage of recycled copper contained in copper foil

With the rapid consumption of the earth's limited resources due to the overwhelming development of the global economy, sustainable utilization and development of resources has become an international consensus, and circular economy has also become an important issue for social and economic development. Take copper foil as an example (which is one of EMC's important raw materials), we already have had suppliers who can provide products containing 47%~98% recycled copper, which shall facilitate the maximization of resource efficiency, and the establishment of circular economy society through joint efforts.

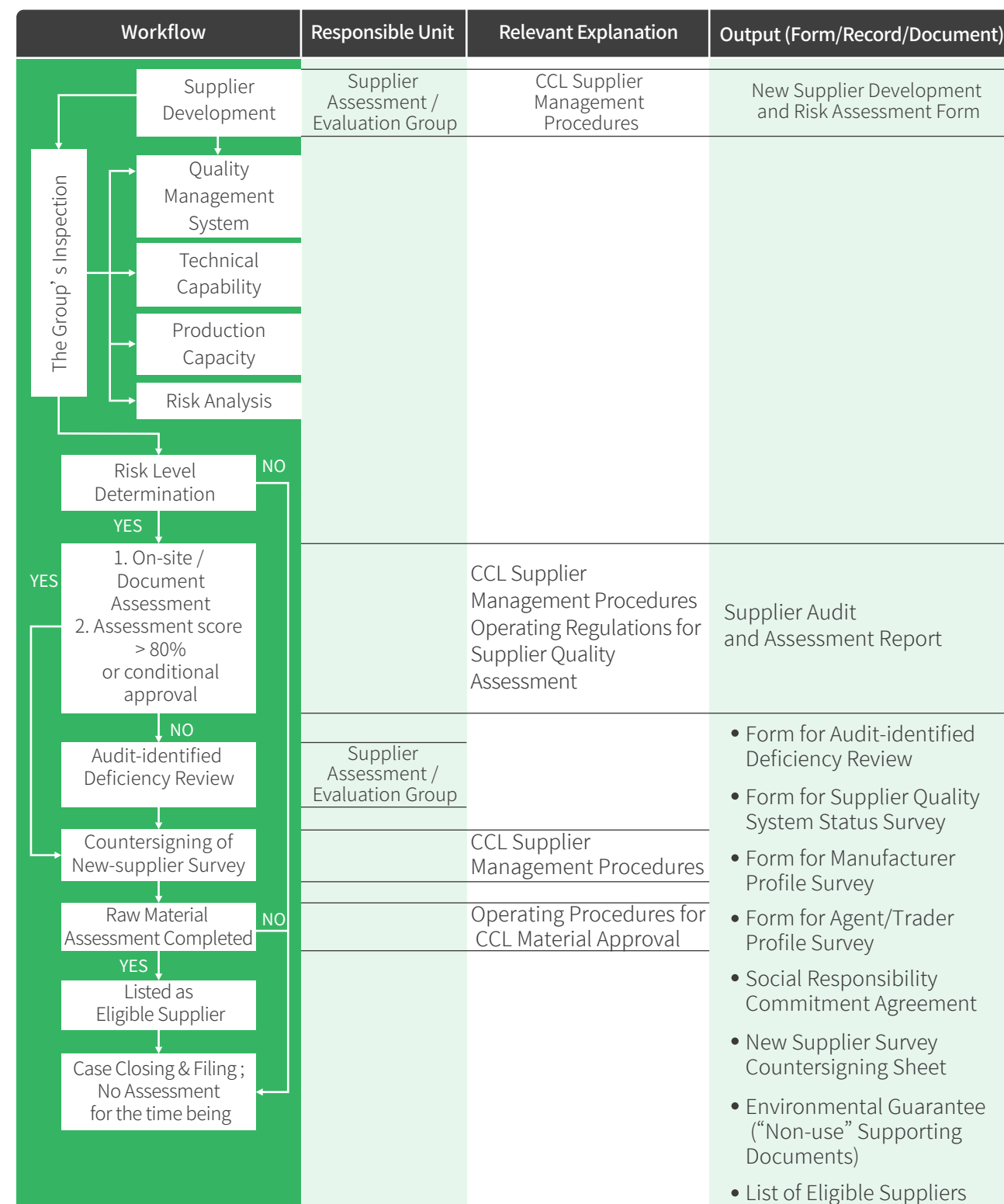
Plant	Guanyin Plant & Hsinchu Plant	Elite Electronic Material (Kunshan)	Elite Electronic Material (Zhongshan)	Elite Electronic Material (Huangshi)
The percentage of recycled copper contained in copper foil (Weighted total percentage)	98%	60%	62%	47%

(Percentage of each plant's suppliers was weighted for calculation based on their shipment amount.)

## ► 3.2.4 Supplier Management Procedures GRI 308-1 and GRI 414-1

To ensure that the raw materials supplied by the suppliers can meet EMC's quality requirements, RoHS and Hazardous Substances Free (HSF) requirements, relevant laws and regulations and customer requirements have been considered to formulate the Company's supplier management procedures to enhance the Company's productivity and competitiveness.

We adopt the Responsible Business Alliance (RBA) and relevant international regulations as references, and incorporate the content of the existing supplier evaluation and audit operations to formulate the "Supplier Management Procedures". Major raw material suppliers shall be reviewed, evaluated and audited in order to control their risks and ensure sustainable management. Through reviewing, evaluating and auditing the environmental/labor/human rights/social aspect of the suppliers, suitable suppliers can be selected to fulfill the management responsibility.



## 1. New Supplier Assessment

(1) Supplier Assessment and Audit Team: The Team is composed of members from various units, and the qualifications of the auditors must be certified. The assessment of supplier must be completed before the formal order is placed.

(2) Content of supplier assessment:

① When assessing a new supplier, the Procurement Department should include the following six major items for review. The new supplier approval procedure will be completed after the assessment results have been countersigned by related units. After approval, the new supplier can be registered in the list of eligible suppliers. The assessment is used to better understand the supplier's operating conditions, financial stability, operational continuity planning, etc., reducing procurement risks.

No.	Assessment Item
1	New Supplier Development Risk Assessment Form
2	Supplier Quality System Status Survey Form
3	Manufacturer Basic Information Survey Form
4	Agent/Trader Basic Information Survey Form
5	Social Responsibility Agreement, Conflict-free Metals Declaration
6	Supplier Assessment Report

② Among the assessment items, Item No. 6--"Supplier Audit Assessment Report" covers 11 major items for auditing, including quality system, resource management, design and development, procurement, production control, monitoring and measurement, continuous improvement of performance, operation and management, corporate social responsibility, hazardous substance management, and environmental safety and health management system.

③ Assessment rating

In 2022, a total of 11 new suppliers were added into the supplier lists of EMC's four major production plants. 100% of the new suppliers were assessed based on the requirements covering the scope of environmental management and corporate social responsibility specified in the New Supplier Assessment Procedures.

Rating	Description	2022 New Supplier Assessment Results							
		Guanyin Plant & Hsinchu Plant		Elite Electronic Material (Kunshan)		Elite Electronic Material (Zhongshan)		Elite Electronic Material (Huangshi)	
		No. of supplier	Percentage	No. of supplier	Percentage	No. of supplier	Percentage	No. of supplier	Percentage
Pass qualification Score : 80% - 100%	Collaboration with the supplier is allowed	0	0	6	100%	3	75%	0	0
Approved conditionally Score: 70% - 79%	Collaboration with the supplier is allowed only if the supplier can make improvement. Re-audit will be carried out within 6 months; if the score is still below 80%, collaboration will be stopped.	1	100%	0	0	1	25%	0	0
Fail The score is below 70% or the score of individual item is below 70%	Collaboration with the supplier is not allowed	0	0	0	0	0	0	0	0

④ In addition, EMC requires its major raw material suppliers (except traders/agents) to sign a "Social Responsibility Commitment Agreement", requiring the suppliers to comply with the Labor Act and social ethics, and reinforcing the suppliers' implementation of social responsibilities. EMC also requires its suppliers to sign the "Conflict-free Metals Declaration", ensuring that the supplied products contain no conflict metals.

Number of suppliers signing the "Social Responsibility Commitment Agreement", and the achievement rate in 2022							
Guanyin Plant & Hsinchu Plant		Elite Electronic Material (Kunshan)		Elite Electronic Material (Zhongshan)		Elite Electronic Material (Huangshi)	
No. of supplier	Percentage	No. of supplier	Percentage	No. of supplier	Percentage	No. of supplier	Percentage
55	100%	39	100%	45	100%	60	100%

⑤ EMC requires all of its major raw material suppliers to sign and return the "Conflict-free Metals Declaration", stating and guaranteeing that the supplier has not obtained gold, tantalum, tungsten, cobalt, tin, palladium through anarchy or illegal groups, or from the mining area in the conflict zone of the Democratic Republic of the Congo, or through illegal smuggling. The metals exported from the following countries ("conflict areas") do not comply with the "conflict-free norms": Democratic Republic of Congo, Luanda, Uganda, Burundi, Tanzania, and Kenya.

Number of suppliers signing the "Conflict-free Metals Declaration", and the achievement rate in 2022							
Guanyin Plant & Hsinchu Plant		Elite Electronic Material (Kunshan)		Elite Electronic Material (Zhongshan)		Elite Electronic Material (Huangshi)	
No. of supplier	Percentage	No. of supplier	Percentage	No. of supplier	Percentage	No. of supplier	Percentage
55	100%	91	100%	91	100%	63	100%

Supplier assessments and audits shall be continued to track suppliers' performance until the required key issue improvement is completed. In the meantime, educational training for suppliers shall also be continued.



## 2. Eligible Supplier Evaluation

EMC performs evaluation on eligible suppliers regularly. The evaluation items include :

### ① Monthly evaluation items

Responsible unit	Evaluation items
Quality Assurance Department	Perform evaluation on incoming material quality, process quality, customer quality, VCAR response, abnormal recurrence, data provision, and summarize the scores with ratings.
Procurement Department	Responsible for carrying out the evaluation on price satisfaction, delivery control, service/degree of cooperation/future collaboration and summarize the scores with ratings.

### ② Annual evaluation items

The "Supplier Evaluation Report" covers 11 major items for audit, including quality system. In 2022, none of the suppliers who completed the audit procedures was deemed ineligible for unsatisfactory performance in relation to corporate social responsibility or EHS management system practices.

## 3. Evaluation rating

Rating		Description	2022 Evaluation Results			
			Guanyin Plant & Hsinchu Plant	Elite Electronic Material (Kunshan)	Elite Electronic Material (Zhongshan)	Elite Electronic Material (Huangshi)
Grade A	Excellent : 90.01 or higher	Expand the area and scope for collaboration	391 times	794 times	718 times	500 times
Grade B	Good : 90.00~75.01	Maintain normal procurement volume	65 times	107 times	104 times	36 times
Grade C	Require support : 75.00~60.01	Reduce procurement volume without affecting customers' demand and the plant's normal supply	0 times	9 times	2 times	0 times
Grade D	Limited : 60.00~00.00	Eliminate the supplier eligibility if improvement is not completed within specified time limit	0 times	0 times	0 times	0 times

Note : If a supplier has been rated as Grade C for 2 consecutive months, the procurement volume will be reduced, and the supplier shall be requested to come to the plant for performance review and improvement.

EMC's QA and procurement units shall conduct supplier evaluation on a monthly basis. For a Grade A supplier with a score reaching 90.01, the area and scope for collaboration shall be expanded, and the procurement volume shall be increased. For a Grade B supplier with a score falling in the range of 90.00~75.01, the normal procurement volume shall be maintained. For a Grade C supplier with a score falling in the range of 75.00~60.01, guiding assistance shall be provided. (The procurement volume shall be reduced without affecting customers' demand and the plant's normal supply. If a supplier has been rated as Grade C for 2 consecutive months, the supplier shall be requested to join a review meeting, and to receive the Company's guiding assistance for improvement. If a supplier has been rated as Grade C for 3 consecutive months, it will be directly downgraded to Grade D.) For a Grade D supplier with a score falling in the range of 60.00~00.00, the supplier shall be asked to make improvement within specified time limit. If the next score is still under 60, its supplier eligibility shall be eliminated.

In addition, the Assessment/Evaluation Group shall conduct major eligible/qualified suppliers' evaluation on a yearly basis. The Assessment/Evaluation Group is composed of members from units such as quality assurance, production, technology, material development, procurement, etc. Personnel from other units may be included as needed. For a supplier whose total score (%) or the score of any individual item is below 70%, the collaboration shall not be considered for the time being.

## 3.3 Customer Relationship Management

### Customer Satisfaction :

EMC is a "people-focused" enterprise, and strives to provide customers with the best quality through its reliable products and comprehensive services. The Company is also committed to maintaining the overall social benefit and ecological value through the utilization of its products and services, thereby facilitating the development of social civilization as well as mankind's environmental conservation, survival and progress to achieve the ultimate goal of customer satisfaction.

Through a biannual questionnaire survey conducted by the Company, we can analyze market needs from customers' point of view, and can try our best to comprehensively respect and safeguard customers' interests to precisely grasp market trends and situations, thereby exceeding customers' expectations. As we know, sales personnel act as a communication channel between customers and a company. However, providing good customer service and improving customer satisfaction is not a responsibility for the business department only, it is also a goal for all employees to achieve through continuous efforts. EMC values customers' rights, interests and opinions very much, and has maintained continuous positive interaction and communication with customers, through which a virtuous circle for mutual growth has been formed, and a win-win partnership has been created.

## Satisfaction Survey Results :

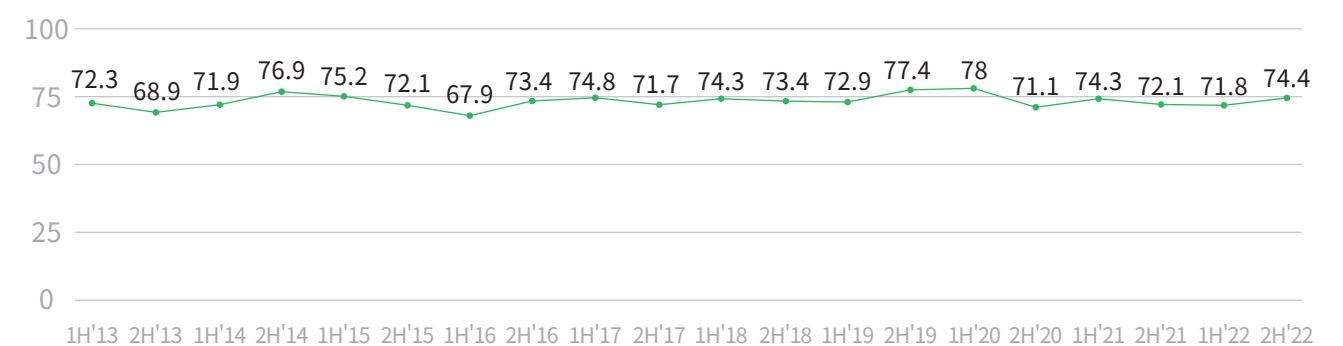
The return rate of the Customer Satisfaction Questionnaire sent in the first and second half of 2022 was both 100 % (a total of 13 questionnaires were sent to major customers for satisfaction survey). The customer satisfaction rates (for general items) were 71.8% and 74.4% respectively. The survey results showed that customers were pretty satisfied with EMC's delivery, quality, price, reliability, and after-sales service.

Among the respondents, the highest score (88) was given by Company U, and the score with the most significant increase (+21%) compared to the previous survey was given by Company S. Despite the impact of economic recession in the second half of 2022, EMC still maintained its share of orders, and continued to improve its performance from various aspects, which was recognized by customers, and earned the Company enhanced customer satisfaction. Moreover, with overall market's keen response to EMC's products, particularly the demand for server products after the pandemic outbreak, EMC has not only played a leading role in the area of green/eco-friendly materials for consumer electronics, but has also made remarkable progress and become the fourth largest server manufacturer in the world, and such progress is still ongoing. By adhering to a customer-centric philosophy and continuously receiving feedback and opinions from customers, EMC continues its improvement and progress to exceed customer expectations and to seek excellence and innovation.

## 2022 Second-Half Year , Customer Satisfaction Survey Report

2nd' 2022		Price	Design	Quality	HSF	Deilvery	Reliability	Response	Service	Cooperation	HSF (Management)	Sub TTL
1	W	0	8	8	8	8	8	8	5	8	10	71
2	U	8	10	8	10	8	10	8	8	8	10	88
3	U	5	8	8	8	5	8	8	8	5	10	73
4	T	0	8	8	8	8	8	8	5	8	10	71
5	G	5	8	6	8	6	8	8	6	4	10	69
6	C	4	8	8	8	7	8	7	8	8	10	76
7	C	5	8	5	10	5	8	8	8	8	10	75
8	L	6	8	7	7	6	7	8	8	8	10	75
9	S	9	8	8	8	7	8	9	9	9	10	85
10	I	5	5	5	10	7	5	5	5	8	10	65
11	M	5	5	5	5	8	8	10	10	10	10	76
12	K	8	8	5	8	5	8	10	8	8	10	78
13	L	5	5	5	8	7	5	7	7	6	10	65
Sub TTL		65	97	86	106	87	99	104	95	98	130	967
Avg		5.0	7.5	6.6	8.2	6.7	7.6	8.0	7.3	7.5	10.0	74.

## Customer Satisfaction of EMC - Trend of Grand Average





# 04

► Environmental Protection  
and Sustainability

## 4. Environmental Protection and Sustainability

Dimension	Environment
Material Issue	Air pollution/Air Quality Management, Waste Management, Climate Change and Energy Management
Management mechanisms	<ol style="list-style-type: none"> <li>1. By replacing highly polluting heavy oil with natural gas that has less impact on the environment, the purpose of reducing greenhouse gas emissions can be achieved. In addition, when using natural gas as fuel, boilers' combustion efficiency can be enhanced by 0.5~1% compared with the use of heavy oil. That is, the fuel used to meet the same level of thermal energy demand can be reduced to help achieve environmental sustainability.</li> <li>2. Choose eligible service providers with efficient waste disposal capabilities to properly handle the waste. Ensure that the waste generated by EMC is properly handled by relevant service providers, and the waste does not cause any significant impact on surrounding environment.</li> <li>3. Calculate the base year's greenhouse gas emissions in accordance with ISO 14064-1:2018 standards, and develop further carbon reduction measures based on the results.</li> </ol>
Responsible Units	Maintenance Department, Safety and Health Department (Environmental Protection Division)
Commitment / Policy	<ol style="list-style-type: none"> <li>1. Use natural gas as a transition fuel to shift from high-carbon energy to low-carbon energy sources in response to the carbon reduction trend in the global community.</li> <li>2. Regularly track and declare waste volume and set waste reduction objectives.</li> </ol>
2022 Evaluation Mechanisms and Performance	<ol style="list-style-type: none"> <li>1. EMC's plants in Mainland China were added into the scope of disclosure in 2022. In addition to the original Guanyin Plant and Hsinchu Plant, data of subsidiaries Elite Electronic Material (Kunshan) Co., Ltd., Elite Electronic Material (Zhongshan) Co., Ltd. and Elite Electronic Material (Huangshi) Co., Ltd. was also added. The 2022 base year data was established for the planning of reduction goals.</li> <li>2. As of 2022, no incidents involving the violations of environmental regulations, which resulted in substantial fines or non-monetary penalties, had occurred. (Goal not achieved) (In 2022, a fine of NT\$100,000 issued by the Environmental Protection Bureau was posed to the Hsinchu Plant as the pressure gauges being used did not accord with the specifications indicated in the operating permits. In response to this event, the Company conducted an overall inventory to ensure that all the pressure gauges used in the plants are compliant with the specifications stated in the permits to avoid further occurrence of the same incident.)</li> </ol>

Dimension	Environment
2022 Evaluation Mechanisms and Performance	<ol style="list-style-type: none"> <li>3. The use of fuel oil has been significantly reduced by replacing oil boilers with natural gas boilers. (Goal achieved) The 2022 air pollution emissions (NOx (nitrogen oxides) + SOx (sulfur oxides) + VOCs (volatile organic compounds) + PM (particulate matters)) from the Company's plants in Taiwan were reduced by 23% compared with 2021.</li> <li>4. By replacing old air compressors, switching to the use of LED lights, upgrading the efficiency of air compressors, controlling water chillers temperature, upgrading cooling towers, adding frequency converters to water pumps, and adding temperature-difference controllers to water chillers' water pumps to control water flows, about 860,000 kWh of electricity had been saved during the year. The 2022 total power consumption by the Company's plants in Taiwan was 36,743.13 (thousand kWh/year), showing a decrease of 1.9% compared to the consumption of 37,461.39 (thousand kWh/year) in 2021.</li> <li>5. The total water withdrawal in 2022 was reduced by 9.6% compared to 2021. (Goal achieved)</li> </ol>
Medium- / Long-term Goals	<ol style="list-style-type: none"> <li>1. Set carbon neutrality objectives.</li> <li>2. The year-on-year Energy Performance Indicator rate shall drop by more than 1.2%.</li> </ol>

### 4.1 Energy Management

EMC (Elite Material Co., Ltd.) implements control over the use of all electrical and mechanical equipment in the company to save the consumption of electricity, water, oil or fuel to avoid waste of resources. In order to enhance employees' awareness of resource saving and appreciate the available resources around us, the company's Maintenance Department compiles statistics on energy consumption on a regular basis for EMC to make improvements in energy conservation. The energy currently used by EMC is all purchased from external energy providers; no non-renewable fuel is used; and there is no sale of energy.

EMC's plants in Mainland China were added into the scope of disclosure in 2022. In addition to the original Guanyin Plant and Hsinchu Plant, data of subsidiaries Elite Electronic Material (Kunshan) Co., Ltd., Elite Electronic Material (Zhongshan) Co., Ltd. and Elite Electronic Material (Huangshi) Co., Ltd. was also added. Statistics of all plants' energy consumption in 2022 are listed in the table below :

Note : The "energy intensity" was calculated for electricity only.

Plant		Guanyin Plant	Hsinchu Plant	Elite Electronic Material (Kunshan)	Elite Electronic Material (Zhongshan)	Elite Electronic Material (Huangshi)	Total
Year		2022	2022	2022	2022	2022	2022
Energy Consumption	Purchased electricity (1000 kWh /Year) (Front-end process : prepregs)	12,851.42	6,990.00	23,258.51	23,896.00	20,985.00	87,980.93
	Purchased electricity (1000 kWh /Year) (Back-end process : CCL)	14,768.88	2,132.83	18,771.75	20,281.00	16,640.00	72,594.46
	Heavy oil used for the boiler steam process (liter/year)	1,830,000.00	0.00	0.00	0.00	0.00	1,830,000.00
	Natural gas consumption (1,000 cubic meter/year)	3,085.83	1,431.27	6,168.12	4,621.93	5,005.00	20,312.15
Converted to GJ / year	Purchased electricity (GJ/year) (Front-end process: prepregs)	46,273.44	25,168.53	83,745.71	86,041.08	75,559.60	364,056.95
	Purchased electricity (GJ/year) (Back-end process: CCL)	53,177.54	7,679.57	67,590.46	73,024.74	59,914.78	261,387.09
	Heavy oil used for the boiler steam process (GJ/year)	73,553.70	0.00	0.00	0.00	0.00	73,553.70
	Natural gas consumption (GJ/year)	110,221.35	47,939.57	206,597.47	154,808.64	167,639.47	687,206.50
	Total energy consumption (GJ/year)	283,226.03	80,787.67	357,933.64	313,874.46	303,113.85	1,338,935.65
Energy intensity	Prepreg (PP) production (thousand meters) -A	29,069.89	11,485.57	52,736.48	36,726.74	47,131.77	177,150.45
	CCL production (thousand sheets)-B	4,336.76	1,246.01	14,546.13	8,412.21	7,293.28	35,834.39

Plant		Guanyin Plant	Hsinchu Plant	Elite Electronic Material (Kunshan)	Elite Electronic Material (Zhongshan)	Elite Electronic Material (Huangshi)	Total
Year		2022	2022	2022	2022	2022	2022
Energy intensity	Electricity consumption of per unit production-A (Electricity consumption (1000 kWh)/production volume)	0.44	0.61	0.44	0.65	0.45	0.50
	Electricity consumption of per unit production-B (Electricity consumption (1000 kWh)/production volume)	3.41	1.71	1.29	2.41	2.28	2.03
	Electricity consumption of per unit production-A (Electricity usage (GJ)/production volume)	1.59	2.19	1.59	2.34	1.60	1.79
	Electricity consumption of per unit production-B (Electricity usage (GJ)/production volume)	12.26	6.16	4.65	8.68	8.22	7.29
Sustainability Indicator	Purchased electricity (%)	100%	100%	100%	100%	100%	100%
	Renewable energy usage rate	0.00	0.00	0.00	0.00	0.00	0.00

Explanation of energy conversion factors

Energy Product	Heat value (kcal)	Unit	Heat value (GJ)	Unit
Fuel oil (heavy oil)	9,600	kcal / liter	40.1933	GJ / thousand liters
Liquefied natural gas (imported)	9,000	kcal / m <sup>3</sup>	33.4944	GJ / thousand m <sup>3</sup>
Electricity (consumption side)	860	kcal / kWh	3.6006	GJ / thousand kWh

Reference: Bureau of Energy (MOEA) - Table of Energy Products Heating Value  
(Updated on 2019-10-15) 1 Kcal=4,186 J 1 GJ=10<sup>9</sup> J

In the future, the Company shall take 2022 as the base year for the establishment of baseline data, and the electricity energy intensity as an indicator for the planning of reduction goals.

Energy consumption	Purchased electricity (1000 kWh /Year) (Front-end process: preregs)	87,980.93
	Purchased electricity (1000 kWh /Year) (Back-end process: CCL)	72,594.46
Energy Intensity	Prepreg (PP) production (thousand meters) -A	177,150.44
	CCL production (thousand sheets)-B	35,834.39
	Electricity consumption of per unit production-A (Electricity consumption (1000 kWh)/production volume)	0.50
	Electricity consumption of per unit production-B (Electricity consumption (1000 kWh)/production volume)	2.03

## ► 4.1.1 Electricity Consumption Management

### 1. Elite Material Co., Ltd.- Guanyin Plant

Plant 1's front-end process is for the production of preregs, and its back-end process is for the production of CCL; those in Plant 3 and Plant 2 are all back-end processes.

Plant		Guanyin Plant					
		Plant 1 (front-end process + back-end process) and Plant 3 (back-end process)			Plant 2 (back-end process)		
Year		2020	2021	2022	2020	2021	2022
Energy Consumption	Purchased electricity (1000 kWh /Year) (Front-end process: preregs)	12,714.71	13,233.53	12,851.42	0.00	0.00	0.00
	Purchased electricity (1000 kWh /Year) (Back-end process: CCL)	10,995.59	11,847.27	11,505.18	3,199.50	3,489.90	3,263.70
	Heavy oil used for the boiler steam process (liter/year)	1,824,000.00	2,220,000.00	1,830,000.00	0.00	0.00	0.00
	Natural gas consumption (1,000 cubic meter/year)	2,119.45	2,576.90	2,768.79	329.86	347.16	317.04
Converted to GJ / year	Purchased electricity (GJ/year) (Front-end process: preregs)	45,781.20	47,649.28	46,273.44	0.00	0.00	0.00
	Purchased electricity (GJ/year) (Back-end process: CCL)	39,591.25	42,657.85	41,426.10	11,520.27	12,565.90	11,751.43
	Heavy oil used for the boiler steam process (GJ/year)	73,312.54	89,229.08	73,553.70	0.00	0.00	0.00
	Natural gas consumption (GJ/year)	70,989.84	86,311.85	98,895.64	11,048.60	11,627.78	11,325.71
	Total energy consumption (GJ/year)	229,674.83	265,848.07	260,148.89	22,568.87	24,193.68	23,077.14

Plant		Guanyin Plant					
		Plant 1 (front-end process + back-end process) and Plant 3 (back-end process)			Plant 2 (back-end process)		
Year		2020	2021	2022	2020	2021	2022
Energy Intensity	Prepreg (PP) production (thousand meters) -A	36,530.20	38,426.05	29,069.89	0.00	0.00	0.00
	CCL production (thousand sheets)-B	3,518.50	3,968.21	3,342.23	987.13	1,097.96	994.53
	Electricity consumption of per unit production-A (Electricity usage (thousand kWh)/production volume)	0.35	0.34	0.44	/	/	/
	Electricity consumption of per unit production-B (Electricity usage (thousand kWh)/production volume)	3.13	2.99	3.44	3.24	3.18	3.28
	Electricity consumption of per unit production-A (Electricity usage (GJ)/production volume)	1.25	1.24	1.59	/	/	/
	Electricity consumption of per unit production-B (Electricity usage (GJ)/production volume)	11.25	10.75	12.39	11.67	11.44	11.82

## 2. Elite Material Co., Ltd. - Hsinchu Plant

Containing front-end process (Prepreg) and back-end process (CCL)

Plant		Hsinchu Plant (front-end process + back-end process)		
Year		2020	2021	2022
Energy Consumption	Purchased electricity (1000 kWh /Year) (Front-end process: prepregs)	7,421.00	6,836.00	6,990.00
	Purchased electricity (1000 kWh /Year) (Back-end process: CCL)	1,916.31	2,054.69	2,132.83
	Heavy oil used for the boiler steam process (liter/year)	0.00	0.00	0.00
	Natural gas consumption (1,000 cubic meter/year)	1,037.59	946.94	1,431.27

Plant		Hsinchu Plant (front-end process + back-end process)		
Year		2020	2021	2022
Converted to GJ / year	Purchased electricity (GJ/year) (Front-end process: prepregs)	26,720.41	24,614.03	25,168.53
	Purchased electricity (GJ/year) (Back-end process: CCL)	6,899.96	7,398.22	7,679.57
	Heavy oil used for the boiler steam process (GJ/year)	0.00	0.00	0.00
	Natural gas consumption (GJ/year)	34,753.49	31,717.22	47,939.57
	Total energy consumption (GJ/year)	68,373.85	63,729.47	80,787.67
Energy Intensity	Prepreg (PP) production (thousand meters) -A	13,639.92	14,149.69	11,485.57
	CCL production (thousand sheets)-B	1,610.44	1,408.15	1,246.01
	Electricity consumption of per unit production-A (Electricity consumption (1000 kWh)/production volume)	0.54	0.48	0.61
	Electricity consumption of per unit production-B (Electricity consumption (1000 kWh)/production volume)	1.19	1.46	1.71
	Electricity consumption of per unit production-A (Electricity usage (GJ)/production volume)	1.96	1.74	2.19
	Electricity consumption of per unit production-B (Electricity usage (GJ)/production volume)	4.28	5.25	6.16



## 3.Statistics of Elite Material Co., Ltd. Plants in Taiwan

Plant		Total		
Year		2020	2021	2022
Energy Consumption	Purchased electricity (1000 kWh /Year) (Front-end process: prepregs)	20,135.71	20,069.53	19,841.42
	Purchased electricity (1000 kWh /Year) (Back-end process: CCL)	16,111.40	17,391.86	16,901.71
	Heavy oil used for the boiler steam process (liter/year)	1,824,000.00	2,220,000.00	1,830,000.00
	Natural gas consumption (1,000 cubic meter/year)	3,486.91	3,871.00	4,517.10
Converted to GJ / year	Purchased electricity (GJ/year) (Front-end process: prepregs)	72,501.60	72,263.31	71,441.97
	Purchased electricity (GJ/year) (Back-end process: CCL)	58,011.48	62,621.97	60,857.11
	Heavy oil used for the boiler steam process (GJ/year)	73,312.54	89,229.08	73,553.70
	Natural gas consumption (GJ/year)	116,791.92	129,656.86	158,160.91
	Total energy consumption (GJ/year)	320,617.55	353,771.22	364,013.69
Energy intensity	Prepreg (PP) production (thousand meters) -A	50,170.12	52,575.74	40,555.46
	CCL production (thousand sheets)-B	6,116.07	6,474.32	5,582.77
	Electricity consumption of per unit production-A (Electricity consumption (1000 kWh)/production volume)	0.40	0.38	0.49
	Electricity consumption of per unit production-B (Electricity consumption (1000 kWh)/production volume)	2.63	2.69	3.03
	Electricity consumption of per unit production-A (Electricity usage (GJ)/production)	1.45	1.37	1.76
	Electricity consumption of per unit production-B (Electricity usage (GJ)/production)	9.49	9.67	10.90

In 2022, the total power consumption was reduced due to the decline in overall economic performance and a drop of production volume. Since machines must be powered on continuously to maintain an operating status, a basic level power consumption is required for manufacturing processes, which resulted in an increased energy intensity in 2022 compared to 2021. The Company shall actively improve this situation based on various energy-saving indicators.

The 2022 total power consumption by the Company's plants in Taiwan was 36,743.13 (thousand kWh/year), showing a decrease of 1.9% compared to the consumption of 37,461.39 (thousand kWh/year) in 2021.

## 4. Plants of Elite Material Co., Ltd. in Mainland China

Plant		Elite Electronic Material (Kunshan)	Elite Electronic Material (Zhongshan)	Elite Electronic Material (Huangshi)
Year		2020	2021	2022
Energy Consumption	Purchased electricity (1000 kWh /Year) (Front-end process: prepregs)	23,258.51	23,896.00	20,985.00
	Purchased electricity (1000 kWh /Year) (Back-end process: CCL)	18,771.75	20,281.00	16,640.00
	Heavy oil used for the boiler steam process (liter/year)	0.00	0.00	0.00
	Natural gas consumption (1,000 cubic meter/year)	6,168.12	4,621.93	5,005.00
Converted to GJ / year	Purchased electricity (GJ/year) (Front-end process: prepregs)	83,745.71	86,041.08	75,559.60
	Purchased electricity (GJ/year) (Back-end process: CCL)	67,590.46	73,024.74	59,914.78
	Heavy oil used for the boiler steam process (GJ/year)	0.00	0.00	0.00
	Natural gas consumption (GJ/year)	206,597.47	154,808.64	167,639.47
	Total energy consumption (GJ/year)	357,933.64	313,874.46	303,113.85
Energy intensity	Prepreg (PP) production (thousand meters) -A	52,736.48	36,726.74	47,131.77
	CCL production (thousand sheets)-B	14,546.13	8,412.21	7,293.28
	Electricity consumption of per unit production-A (Electricity consumption (1000 kWh)/production volume)	0.44	0.65	0.45
	Electricity consumption of per unit production-B (Electricity consumption (1000 kWh)/production volume)	1.29	2.41	2.28
	Electricity consumption of per unit production-A (Electricity usage (GJ)/production)	1.59	2.34	1.60
	Electricity consumption of per unit production-B (Electricity usage (GJ)/production)	4.65	8.68	8.22



## ► 4.1.2 Oil Consumption (Heavy Oil) Management

Heavy oil is mainly used in the boilers heating process for the generation of water vapor. The boiler type used in the company's plants is fire tube steam boiler. In order to ensure that boilers can smoothly supply the steam needed for production lines, relevant management measures have been stipulated and regular equipment maintenance is implemented. The "Operation Record Chart" and "Self-inspection Checklist" are set up for the Maintenance Department to easily stay on top of the equipment status. Moreover, the Boiler Association also conducts regular inspections every year. Boilers can only be used when the confirmed approval is obtained. Currently heavy oil is only used in Elite Material Co., Ltd. (Plant 1). The heavy oil consumption data in the past two years is disclosed as follows :

Plant	Guanyin Plant		
	Plant 1 (front-end process + back-end process) and Plant 3 (back-end process)		
Year	2020	2021	2022
Heavy oil used for the boiler steam process (liter/year)	1,824,000.00	2,220,000.00	1,830,000.00
Heavy oil used for the boiler steam process (GJ/year)	73,312.54	89,229.08	73,553.70

## ► 4.1.3 Natural Gas Management

With the consideration for increasingly rigorous environmental pollution/emission standards and sustainable operations of the business, the company has developed step-by-step plans to replace oil boilers with natural gas boilers. The consumption of natural gas in 2020 and 2022 is as follows :

### 1. Elite Material Co., Ltd.- Guanyin Plant

Plant	Guanyin Plant					
	Plant 1 (front-end process + back-end process) and Plant 3 (back-end process)			Plant 2 (back-end process)		
Year	2020	2021	2022	2020	2021	2022
Natural gas consumption (1,000 cubic meter/year)	2,119.45	2,576.90	2,768.79	329.86	347.16	317.04
Natural gas consumption (GJ/year)	70,989.84	86,311.85	98,895.64	11,048.60	11,627.78	11,325.71

### 2. Elite Material Co., Ltd.- Hsinchu Plant (Plant 4)

Plant	Hsinchu Plant (front-end process + back-end process)		
Year	2020	2021	2022
Natural gas consumption (1,000 cubic meter/year)	1,037.59	946.94	1,431.27
Natural gas consumption (GJ/year)	34,753.49	31,717.22	47,939.57

### 3. Plants of Elite Material Co., Ltd. in Mainland China

Plants	Elite Electronic Material (Kunshan)	Elite Electronic Material (Zhongshan)	Elite Electronic Material (Huangshi)
Year	2022	2022	2022
Natural gas consumption (1,000 cubic meter/year)	6,168.12	4,621.93	5,005.00
Natural gas consumption (GJ/year)	206,597.47	154,808.64	167,639.47

## ► 4.1.5 Water Management

100% of the water used in EMC's Guanyin Plant and Hsinchu Plant comes from Municipal Water Supply (tap water). The water is mainly used for employees' daily needs and the plants' peripheral equipment and cleaning machinery, particularly air-conditioning facilities (accounting for 70% of water consumption). The wastewater and sewage being produced are separately discharged via legal pipelines to sewage treatment plants in Guanyin Industrial Park and Hukou Industrial Park for treatment. We believe that water is a precious resource on earth, and thus how to reduce water consumption and improve water use efficiency is a very important task. In order to implement water resource management, EMC has taken various measures for water conservation; for example, building an air conditioning water quality control system, and evaluating the monitoring results of air conditioning water quality. With respect to the water used for employees' daily needs, the Company endeavors to raise awareness of water conservation among employees, and has taken measures such as the use of water-efficiency devices, etc. to reduce water consumption and protect the environment. The total water withdrawal by plants in Taiwan in 2022 was reduced by 9.6% compared to 2021.

The statistics of water withdrawal and intensity in the past three years (Guanyin Plant and Hsinchu Plant) are as follows :

	2020	2021	2022
1. Water withdrawal (cubic meter/year or m <sup>3</sup> /year)	107,785	101,897	92,126
2. 2022 Annual Revenue (the parent company only financial reports; Unit : NT\$ thousands)	6,930,636	9,189,939	9,202,695
3. Total water consumption intensity (Water consumption/total revenue (Unit: NT\$ thousands))	0.016	0.011	0.010
4. 2022 total water withdrawal reduction	-9.6%		

Statistics of each plant's 2022 water withdrawal and water consumption

Plant		Guanyin Plant	Hsinchu Plant	Elite Electronic Material (Kunshan)	Elite Electronic Material (Zhongshan)	Elite Electronic Material (Huangshi)	Total of all plants
Year		2022	2022	2022	2022	2022	2022
Water resource management	Municipal water withdrawal (m <sup>3</sup> /year)	75,968	16,158	155,492	202,272	142,599	592,489
	Ground water withdrawal (m <sup>3</sup> /year)	0	0	0	0	0	0
	Other water withdrawal (m <sup>3</sup> /year)	0	0	0	0	0	0
	Total water withdrawal (m <sup>3</sup> /year)	75,968	16,158	155,492	202,272	142,599	592,489
	Domestic sewage discharge (m <sup>3</sup> /year)	21,239	12,141	39,600	30,422	26,576	158,438
	Process wastewater discharge (m <sup>3</sup> /year)				28,460		
	Total water discharge (m <sup>3</sup> /year)	21,239	12,141	39,600	58,882	26,576	158,438
	Water consumption (m <sup>3</sup> /year)	54,729	4,017	115,892	143,390	116,023	434,051

In the future, the Company shall take 2022 as the base year for the establishment of baseline data, and the total water withdrawal intensity as an indicator for the planning of reduction goals.

2022 total water withdrawal (m <sup>3</sup> /year)	592,489
2022 revenue (Unit : NT\$ : thousands)	37,899,357
Total water withdrawal intensity (water consumption / total revenue)	0.0156

## 4.2 Climate Change and Greenhouse Gas Management

### 4.2.1 Greenhouse Gas Management

EMC follows ISO 14061-1: 2018 standards to conduct GHG emissions inventory, by which the company can stay on top of each plant's emission status through the inventory process and results, and propose feasible solutions for greenhouse gas reduction. In order to enhance the information and reports credibility of GHG inventory and to improve the quality of GHG inventory, an impartial third-party inspection agency is appointed to perform external verification in accordance with set standards after the internal verification is completed, through which complete inventory procedures can be established and the data quality can be improved.

The GHG emissions has been calculated by means of the operational control method. The GWP values stated in the IPCC Sixth Assessment Report (2023) have been adopted in the calculation. In order to effectively grasp the amount of greenhouse gas emissions, the "greenhouse gas emission intensity (metric tons CO<sub>2</sub> e/total consolidated revenue (NT\$ thousands))" is used as an indicator for greenhouse gas management. For plants in Taiwan, 2021 has been set as the base year. The carbon reduction outcomes are listed as follows: Category1 and Category 2 total emissions decreased by 6%; emissions intensity decreased by 6.1%. Since EMC's plants in Mainland China were added into the scope of disclosure in 2022, the base year was changed to 2022 for the year-on-year GHG reduction data to be disclosed in the following years.

In 2022, EMC did not use any carbon offsets or renewable energy certificates (RECs), nor did it use any internal carbon pricing method as a planning tool. The GHG emissions data of plants in Taiwan is listed in the table below: Category 1 and Category 2 GHG emissions :

Plant	Guanyin Plant		Hsinchu Plant		Subtotal of Plants in Taiwan		Carbon reduction achievements (with 2021 serving as the base year)
Year	2021	2022	2021	2022	2021	2022	
Category 1 (metric tons CO <sub>2</sub> e/year)	13,146.1561	12,398.6629	2,533.2730	2,868.1874	15,679.4291	15,266.8503	-2.6%
CO <sub>2</sub> (metric tons CO <sub>2</sub> e/-year)	12,823.0218	11,920.4352	2,410.8408	2,713.9396	15,233.8626	14,634.3748	
CH <sub>4</sub> (metric tons CO <sub>2</sub> e/-year)	70.3164	72.5344	29.1312	38.4463	99.4476	110.9807	
N <sub>2</sub> O(metric tons CO <sub>2</sub> e/-year)	17.1455	15.2880	1.1660	1.3377	18.3115	16.6257	
HFCs(metric tons CO <sub>2</sub> e/-year)	235.6724	390.4053	92.1350	114.4638	327.8074	504.8691	
PFCs(metric tons CO <sub>2</sub> e/-year)	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
SF <sub>6</sub> (metric tons CO <sub>2</sub> e/-year)	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
NF <sub>3</sub> (metric tons CO <sub>2</sub> e/-year)	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Category 2 (metric tons CO <sub>2</sub> e/year)	14,342.4914	14,058.7327	11,413.0704	10,213.3904	25,755.5618	24,272.1231	-5.8%
Category 1+ Category 2(metric tons CO <sub>2</sub> e/year)	27,488.6479	26,457.3956	13,946.3434	13,081.5778	41,434.9913	39,538.9734	-4.6%
total consolidated revenue (NT\$ thousands)					9,189,939	9,202,695	
Category 1 + Category 2 Total greenhouse gas emission intensity (metric tons CO <sub>2</sub> e/Total					0.0045	0.0043	-4.7%

EMC's plants in Mainland China were added into the scope of disclosure in 2022. In addition to the original Guanyin Plant and Hsinchu Plant, data of subsidiaries Elite Electronic Material (Kunshan) Co., Ltd., Elite Electronic Material (Zhongshan) Co., Ltd. and Elite Electronic Material (Huangshi) Co., Ltd. was also added. The Category 1 and Category 2 GHG emissions in 2022 are listed in the table below :

**Take 2022 as the base year for the establishment of baseline data, and the total Category 1+ Category 2 GHG emissions intensity as an indicator for the planning of reduction goals.**

Plant	Guanyin Plant	Hsinchu Plant	Elite Electronic Material (Kunshan)	Elite Electronic Material (Zhongshan)	Elite Electronic Material (Huangshi)	Total
Year	2022	2022	2022	2022	2022	2022
Category 1 (metric tons CO <sub>2</sub> e/year)	12,398.6629	2,868.1874	14,305.0000	13,789.1200	15,635.2470	58,996.2173
CO <sub>2</sub> (metric tons CO <sub>2</sub> e/year)	11,920.4352	2,713.9396	13,592.0000	12,897.7300	11,633.7036	52,757.8084
CH <sub>4</sub> (metric tons CO <sub>2</sub> e/year)	72.5344	38.4463	88.0000	101.5700	80.7935	381.3442
N <sub>2</sub> O (metric tons CO <sub>2</sub> e/year)	15.2880	1.3377	12.0000	7.0400	8.1076	43.7733
HFCs (metric tons CO <sub>2</sub> /year)	390.4053	114.4638	613.0000	782.7800	3,912.6423	5,813.2914
PFCs (metric tons CO <sub>2</sub> /year)	0	0	0	0	0	0
SF <sub>6</sub> (metric tons CO <sub>2</sub> /year)	0	0	0	0	0	0
NF <sub>3</sub> (metric tons CO <sub>2</sub> e/year)	0	0	0	0	0	0
Category 2 (metric tons CO <sub>2</sub> e/year)	14,058.7327	10,213.3904	26,463.2400	25,641.2200	21,581.6348	97,958.2179
Category 1+ Category 2 (metric tons CO <sub>2</sub> e/year)	26,457.3956	13,081.5778	40,768.2400	39,430.3400	37,216.8818	156,954.4352
total consolidated revenue (NT\$ thousands)	37,899,357					
Category 1 + Category 2 Total greenhouse gas emission intensity (metric tons CO <sub>2</sub> e/Total revenue (NT\$ thousands))	0.0041					

Category 3~Category 6 Other indirect GHG emissions Unit: (metric tons CO<sub>2</sub>e/year)

Plant	Guanyin Plant	Hsinchu Plant	Elite Electronic Material (Kunshan)	Elite Electronic Material (Zhongshan)	Elite Electronic Material (Huangshi)	Total
Year	2022	2022	2022	2022	2022	2022
Category 3: Indirect greenhouse gas emissions from upstream transportation	946.3487	185.4871	-	1,407.1150	3,178.8186	5,717.7694
3-1 Upstream raw material transportation and distribution (4) <sup>Note 1</sup>	250.5500	29.1755	-	798.3400	1,802.0537	2,880.1192
3-2 Business trips (6)	121.7997	-	-	198.3700	6.9608	327.1305
3-3 Employees' commuting (7)	573.9990	156.3116	-	6.9550	82.5062	819.7718
3-4 Downstream transportation and distribution (9)	-	-	-	403.4500	1,287.2979	1,690.7479
Category 4: Indirect greenhouse gas emissions from products used by the organization	4,480.3786	2,604.5159	2,490.5940	58,454.9900	121,227.0321	189,257.5106
4-1 Procurement of goods and services (1)	-	-	-	53,793.9900	85,332.7449	139,126.7349
4-2 Capital goods (2)	-	-	-	168.9600	32,130.7797	32,299.7397
4-3 Fuel- and energy-related activities (3)	4,190.6972	2,514.9762	386.2520	4,378.5500	3,717.9898	15,188.4652
4-4 Waste generated in operations (5)	289.6814	89.5397	2,104.3420	113.4900	45.5177	2,642.5708
4-5 Upstream leased assets (8)	-	-	-	-	-	-
Category 5: Indirect greenhouse gas emissions from the use of products associated with the organization	-	-	-	-	-	-
5-1 Processing of sold products (10)	-	-	-	-	-	-
5-2 Use of sold products (11)	-	-	-	-	-	-
5-3 End-of-life treatment of sold products (12)	-	-	-	-	-	-
5-4 Downstream leased assets (13)	-	-	-	-	-	-
Category 6: Other indirect emissions	-	-	-	-	-	-

Note 1: Figures in () were obtained based on the Scope 3 identification/quantification/classification according to the GHG Protocol Scope 3 Evaluator Tool.

Note 2: The greenhouse gas inventory data of Elite Electronic Material (Kunshan) refers to the relevant report data of the green factory certification issued in February 2023, so some items in Category 3 and Category 3 are not included in the scope of the inventory.

## ► 4.2.2 Risks and Opportunities of Climate Change

The Intergovernmental Panel on Climate Change (IPCC) has listed a number of scientific evidences in its published assessment reports to prove that climate change has become a fact that cannot be changed. The most representative evidence is that the global average temperature has increased in the past 150 years (from the 1860s to the 2000s), and the speed at which it increases is getting faster and faster; and observations show that the global average sea level has risen due to the melting of glaciers. EMC realizes that it is impossible to stay out of the issue of climate change. In terms of the products, we have achieved the production of halogen-free Copper-Clad Laminate; regarding the climate change issues faced by the plants, we spare no effort in finding out countermeasures.

The management actions taken by EMC in response to climate change are shown in the table below :

Item	The Company's management actions	Content	Actions taken in 2022
Governance	The Board's supervision	The board of directors is the highest governance body on climate issues for supervising and deciding on relevant affairs. The "Corporate Social Responsibility Committee" regularly reports to the board of directors on the implementation progress of tasks related to climate change issues.	The Corporate Social Responsibility Committee regularly reports to the Chairman on EMC's core climate risks and response strategies, and reports to the Board of Directors at least once a year on the CSR implementation status of climate-change-related issues for the Board to understand the Company's climate-related risks, decide on relevant management policies, and supervise associated implementation affairs.
	Managerial personnel's roles and responsibilities	The "Corporate Social Responsibility Committee" is chaired by the Chairman (serving as the committee minister), under which four working groups have been set, which are Corporate Governance/Economic Group, Supply Chain/Green Product Group, Employee Care/Social Participation Group, and Sustainable Environment Group. The groups are formed by heads of relevant units/ departments or their representatives.	As guided by the TCFD framework, through interdepartmental discussions and communication, at least one assessment of operational impact and related likelihood shall be conducted every year to identify material risks and opportunities, and develop mitigation or adaptation strategies.



Item	The Company's management actions	Content	Actions taken in 2022
Strategy	Identification of short-, medium-, and long-term risks and opportunities	Introduce the identification of climate-related risks and opportunities, conduct comprehensive inventory and assessment of short-, medium-, and long-term impacts of the risk and opportunity issues on the Corporate Group's operations, and follow existing internal goals to manage the schedules. By definition, short-term is less than 3 years, medium-term is 3-5 years, and long-term is longer than 5 years.	The increased operating costs arising from climate change have prompted the Company to use or adopt cost-reducing methods or actions. For example, by conducting inventories of various procurement costs, for items of high unit price or large purchase volume, substitute-item assessments shall be conducted, or substitute vendors shall be considered. For items that cannot be replaced, long-term contracts shall be adopted for price reduction. With respect to GHG reduction, approaches for electricity saving and the use of clean energy (e.g. substituting heavy oil with natural gas) shall be carried out to reduce indirect GHG emissions.

Our risks and opportunities in the face of climate changes according to the inventory conducted by CSR Committee are as follows :

Type	Climate Change Issues	Potential Impacts	Possible impacts on the company's business operation and development
Risks	Natural disasters (such as typhoons, earthquakes and floods, etc.)	Operating costs ↑ Incidence of occupational accidents ↑ Incidence of environmental pollution ↑ Anomaly incidence of machinery/equipment ↑	The occurrence of natural disasters may cause damage to machinery/equipment or public facilities, or increase the company's operating costs.
	Greenhouse Gas Emissions	Operating costs ↑ Incidence of environmental pollution ↑	A carbon tax may be imposed by the government in the future in accordance with the《Paris Agreement》, by which the operating costs will be raised.
	Abnormal temperature and air pressure changes	Operating costs ↑ Incidence of environmental pollution ↑ Anomaly incidence of machinery/equipment ↑	Abnormal temperature and air pressure changes may cause equipment overload, for which more air conditioning systems/facilities should be added and electricity consumption will increase.

Type	Climate Change Issues	Potential Impacts	Possible impacts on the company's business operation and development
Opportunities	Customers' regular inspections and requirements	Incidence of occupational accidents ↓ Incidence of environmental pollution ↓ Anomaly incidence of machinery/equipment ↓	Cooperate with external regular audits and requirements to optimize various equipment and facilities in the plants to reduce occupational accidents, environmental pollution, and anomaly incidence of machinery/equipment.
	Participation in energy-saving & waste-reduction projects and the stipulation of related objectives	Operating costs ↓ Incidence of environmental pollution ↓	Formulate in-plant waste reduction plans on a yearly basis to reduce waste generation, waste removal cost, and environmental pollution.
	Announcement and enforcement of new environmental regulations	Incidence of environmental pollution ↓ Anomaly incidence of machinery/equipment ↓	Comply with and implement the new regulations announced by the government; make possible improvements on equipment and adjust the operation methods adopted in the plants to reduce the incidence of occupational accidents and environmental pollution.
	Development of green products (halogen-free CCL)	Revenue ↑ Incidence of environmental pollution ↓	Continue to develop green products in response to global environmental protection trends in the future to enhance products' competitiveness and reduce the environmental pollution caused by the products.
	High-efficiency plant and equipment	Revenue ↑ Incidence of occupational accidents ↓ Incidence of environmental pollution ↓ Anomaly incidence of machinery/equipment ↓	Make regular improvements on plant equipment to increase product yield and the company's revenue. The re-assessed equipment can also enhance the safety in operating environment and reduce the incidence of occupational accidents.



## ► 4.2.3 Countermeasures against Climate Change (Energy efficiency improvement measures taken in plant areas)

Climate change has already been an issue which needs to be faced by the whole world and responded to by EMC with all efforts. All departments work with maintenance units of the plants in maintaining and improving the equipment used in areas that consume more energy of the plants according to the results of annual GHG inventory.

The Company's plants always pay attention to the impacts of their production and operation activities on climate change, and have formulated strategies and goals for energy conservation and carbon & greenhouse gas reduction. As indicated by the 2022 statistics of the benefits created through energy saving and carbon reduction improvement measures carried out in the Company's plants, successful improvement projects included replacing the fuel oil used for plants' air pollution prevention equipment with low-carbon natural gas, and, by reference to ITRI's energy saving suggestions, upgrading the motors of the water pumps used for air conditioning facilities to energy-efficient ones, and adding temperature controllers to the water pumps. Through these measures, electricity consumption has been reduced and energy efficiency has been enhanced.

(The "Power Saving" shown in the table below is an estimate of the electricity consumption difference before and after a certain replacement, and Carbon Reduction = Power Saving x Electricity Emission Factor, which is 0.509 metric tons CO<sub>2</sub>e/1000 kWh according to TaiPower's announcement).

Plant	Guanyin Plant			Hsinchu Plant			Subtotal of Plants in Taiwan		
	2020	2021	2022	2020	2021	2022	2020	2021	2022
Power saving (thousand kWh/year)	409.55	113.13	409.00	152.89	44.62	453.90	562.44	157.75	862.90
Carbon reduction (metric tons CO <sub>2</sub> e /year)	208.46	57.58	208.18	77.82	22.71	231.04	286.28	80.29	439.22

The energy saving and carbon reduction achieved by EMC's plants in Taiwan and Mainland China in 2022 are listed in the table below :

Plant	Guanyin Plant	Hsinchu Plant	Elite Electronic Material (Kunshan)	Elite Electronic Material (Zhongshan)	Elite Electronic Material (Huangshi)	Total
Power saving (thousand kWh/year)	409.00	453.90	1,915.01	385.76	13.80	3,177.47
Carbon reduction (metric tons CO <sub>2</sub> e /year)	208.18	231.04	974.74	196.35	7.02	1,617.33
Energy conversion factors (GJ/thousand kWh)	3.6006	3.6006	3.6006	3.6006	3.6006	3.6006
Energy being saved (GJ/year)	1,472.67	1,634.33	6,895.26	1,388.99	49.69	11,440.93

Energy saving and carbon reduction measures taken by plants of Elite Material Co., Ltd. in 2022

Plant	Guanyin Plant
Year	2022
Management measures for energy saving and carbon reduction	Power saving (Unit: thousand kWh/year)
Using low-carbon natural gas for #2TO	43
Replacing old lighting devices with LED lights to reduce power consumption	40
Upgrading two air compressors (with higher efficiency) 100HP	102
Adding temperature controllers to water chillers in Areas 1 & 2: Total 175 HP	224
Subtotal	409

Plant	Hsinchu Plant
Year	2022
Management measures for energy saving and carbon reduction	Power saving (Unit: thousand kWh/year)
Upgrading two cooling towers	8.9
Adding frequency converters to two ML water chillers to control temperature difference and water flows	288
Adding temperature-difference controllers to water chillers' water pumps to control water flows	157
<b>Subtotal</b>	<b>453.9</b>

Plant	Elite Electronic Material (Kunshan)
Year	2022
Management measures for energy saving and carbon reduction	Power saving (Unit: thousand kWh/year)
Using super energy-efficient lights to replace the original light tubes for areas where lights are kept on all the time.	98.42
Replacing PRE FFU with DC FFU	42.77
Upgrading the air compressor pipelines in Jinmao Plant to aluminum alloy pipes	373.24
Installing solar photovoltaic (PV) power generation system in Jinmao Plant	400
Using shared heat transfer oil pumps for EF line pressers	225
Adding a capturing unit to 5#RTO	52.33 <small>Note 1</small>
Reducing the air volume for the Gluing Machine Process	691.25 <small>Note 1</small>
Replacing the motor of air handling unit's water pump with permanent-magnet motor	32
<b>Subtotal</b>	<b>1915.01</b>

Note 1 : The power saving was obtained by converting the heat value of the natural gas being saved.

Plant	Elite Electronic Material (Huangshi)
Year	2022
Management measures for energy saving and carbon reduction	Power saving (Unit: thousand kWh/year)
Replacing old lighting devices with LED lights to reduce power consumption	13.8
<b>Subtotal</b>	<b>13.8</b>

## ◆ 4.3 Management of Pollution Sources

### ► 4.3.1 Air Pollution Control GRI 305-7

EMC has taken measures to control and manage the air pollution issues arising from its production, services and activities, and follows regulatory requirements to carry out improvement. EMC' Guanyin Plant has changed the fuel used for A012 and A016 exhaust gas incinerators from heavy oil to natural gas since 2019. In 2022, the fuel used for A003 exhaust gas incinerator was changed from heavy oil to natural gas, by which the destruction and removal efficiency (DRE) reached 95% and above, and thus the VOCs emissions were reduced. The 2022 NOx emissions increased slightly due to the change in product order patterns.

As Plant 2's original VOCs emissions had not reached the standards for which control and monitoring was required, and thus no declaration was filed before 2021. The Company voluntarily started the declaration in 2022, which resulted in an increase of VOCs emissions in Plant 2.

The 2022 air pollution emissions (NOx (nitrogen oxides) + SOx (sulfur oxides) + VOCs (volatile organic compounds) + PM (particulate matters)) from plants in Taiwan reduced by 23% compared with 2021. Relevant statistics are listed in the table below :

Plant		Total emissions from plants in Taiwan		
Pollutant emission unit (kg)		2020	2021	2022
Air pollution emissions management	NOx (Nitrogen oxides)	20,565.03	24,836.66	26,390.91
	SOx (Sulfur oxides)	40,656.80	31,493.72	39,317.45
	VOCs (Volatile Organic Compounds)	772,981.71	720,142.01	533,974.86
	PM (Particulate matters)	3,517.86	3,334.32	3,265.44
	Total (kg)	837,721.41	779,806.72	602,948.62
	<b>2022 Achievement</b>	-23%		

### 3. Elite Material Co., Ltd.- Hsinchu Plant

Pollutants (kg)	2020	2021	2022
NOx (Nitrogen oxides)	5,442.86	5,206.73	6,226.22
SOx (Sulfur oxides)	15,076.86	14,495.36	17,827.61
VOCs (Volatile Organic Compounds)	364,418.9	289,501.33	187,809.38
PM (Particulate matters)	651.64	646.49	641.61
<b>Total (kg)</b>	<b>385,590.26</b>	<b>309,849.91</b>	<b>212,504.82</b>

### 4. The pollutant emissions from EMC's plants in Taiwan and Mainland China in 2022 are listed in the table below :

#### 1. Elite Material Co., Ltd.- Guanyin Plant (Plant 1 and Plant 3, M01)

Pollutants (kg)	2020	2021	2022
NOx (Nitrogen oxides)	14,641.40	19,122.95	19,656.81
SOx (Sulfur oxides)	25,579.94	16,998.36	21,489.84
VOCs (Volatile Organic Compounds)	408,562.81(Note)	430,640.68	346,156.20
PM (Particulate matters)	2,866.22	2,666.98	2,596.29
<b>Total (kg)</b>	<b>451,650.37(Note)</b>	<b>469,428.97</b>	<b>389,899.14</b>

Note : The total VOCs in 2020 should be corrected to 408,562.81, and the "Total" should be 451,650.37.

#### 2. Elite Material Co., Ltd.- Guanyin Plant (Plant2, M02)

Pollutants (kg)	2020	2021	2022
NOx (Nitrogen oxides)	480.77	506.98	507.88
SOx (Sulfur oxides)	0	0	0
VOCs (Volatile Organic Compounds)	0	0	9.28
PM (Particulate matters)	0	20.85	27.54
<b>Total (kg)</b>	<b>480.77</b>	<b>527.83</b>	<b>544.70</b>

Plant		Guanyin Plant	Hsinchu Plant	Elite Electronic Material (Kunshan)	Elite Electronic Material (Zhongshan)	Elite Electronic Material (Huangshi)	Total
Pollutant emission unit (kg)							
Air pollution emissions management	NOx (Nitrogen oxides)	20,164.69	6,226.22	2,988.00	22,082.00	10,885.21	62,346.12
	SOx (Sulfur oxides)	21,489.84	17,827.61	Not detected	7,036.00	392.12	46,745.57
	VOCs (Volatile Organic Compounds)	346,165.48	187,809.38	8,625.60	17,348.00	3,964.43	563,912.89
	PM (Particulate matters)	2,623.83	641.61	707.26	759.00	1,167.22	5,898.92
	<b>Total (kg)</b>	<b>390,443.84</b>	<b>212,504.82</b>	<b>12,320.86</b>	<b>47,225.00</b>	<b>16,408.98</b>	<b>678,903.50</b>

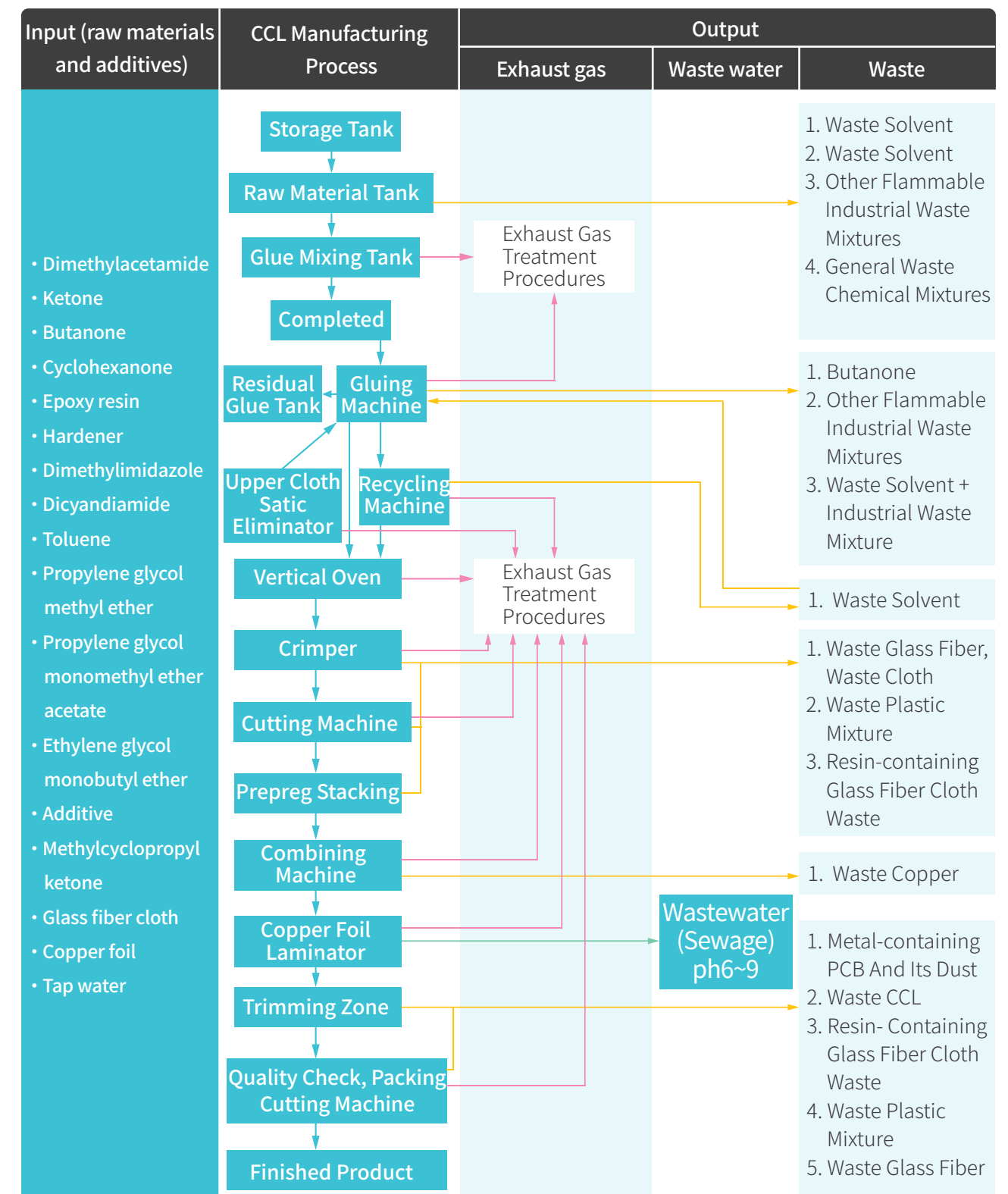
Source of Guanyin Plant and Hsinchu Plant data: EPA Air Pollution Control Fee Reporting System;  
Source of Kunshan Plant, Zhongshan Plant and Huangshi Plant data: Annual Report on Pollutant Emission Permit Implementation

## Calculation explanation (Guanyin Plant and Hsinchu Plant)

1. Calculation of NO<sub>x</sub> (Nitrogen oxides): Materials consumption\*Emission factor <published by the Environmental Protection Administration>
2. Calculation of SO<sub>x</sub> (Sulfur oxides): Materials consumption\*Emission factor <published by the Environmental Protection Administration>\*The percentage of sulfur contained in materials
3. Calculation of VOCs ( Volatile Organic Compounds ) :  $\Sigma$  Process Emissions ( Materials consumption\*Emission factor <published by the Environmental Protection Administration> )
4. Calculation of PM (Particulate matters):  $\Sigma$  Process Emissions (Materials consumption\*Emission factor <published by the Environmental Protection Administration>)

### 4.3.2 Waste Management

EMC's industrial waste includes general industrial waste and hazardous industrial waste. The management strategies for the waste generated in production process focus on "legal removal & disposal" and "waste reduction & reuse". All waste in the plants shall be cleared, transported and disposed of by government-approved waste removal/disposal service providers in compliance with laws and regulations. The waste that can be recycled and reused shall be classified by category, and then disposed of by contracted service providers.



The Company's contracted waste removal & disposal service providers were not involved in any legal or agreement violations in 2022. There was no incident related to chemical, oil or fuel leakage. EMC is committed to protecting the environment against significant impact caused by waste. The manufacturing process, input (raw materials and additives), and output are illustrated in the diagram above:

Relevant operations on the plants' waste are all implemented in accordance with the "Industrial Waste Cleanup Plan" approved by governing environmental protection bureaus. The waste is disposed of by government-approved waste removal/disposal service providers. The Company shall perform regular checks on the routes of the removal/disposal service providers' vehicles to ensure that the waste arrives at legal final disposal sites. As shown in the above diagram, the raw materials and additives used in the manufacturing process do not contain any ozone-depleting substances (ODS), and nor do the output and finished products.

The recyclable (or rejected product) waste including fiberglass cloth, recycled solvents, scrap solvents, empty plastic buckets and buckets with deposits on the bottom, etc. These items are collected and classified by category and then recycled by lawful recyclers so that the life cycle of resources can be extended through recycling and reuse. Additionally, a resource classification/recycling system has also been established to improve the awareness of resource recycling.

The waste treatment methods implemented in 2022 are disclosed as follows :

## 1. The recycling rates achieved by the Company's plants in 2022 are listed in the table below:

Plant		Guanyin Plant	Hsinchu Plant	Elite Electronic Material (Kunshan)	Elite Electronic Material (Zhongshan)	Elite Electronic Material (Huangshi)	Total
Waste disposal methods Unit (metric tons)		2022	2022	2022	2022	2022	2022
General waste	Recyclable						
	Reuse	721.97	600.65	0.00	0.00	0.00	1,322.62
	Outsourcing for reuse	548.99	200.34	1,834.18	2,588.31	1,318.29	6,490.11
Total		1,270.96	800.99	1,834.18	2,588.31	1,318.29	7,812.73

Plant		Guanyin Plant	Hsinchu Plant	Elite Electronic Material (Kunshan)	Elite Electronic Material (Zhongshan)	Elite Electronic Material (Huangshi)	Total	
Waste disposal methods Unit (metric tons)		2022	2022	2022	2022	2022	2022	
General waste	Non-recyclable	Incineration treatment	0.00	179.28	325.08	741.50	0.00	1,245.86
		Physical treatment	996.69	189.91	0.00	0.00	637.02	1,823.62
		Solidification treatment	0.50	0.00	0.00	0.00	0.00	0.50
		Thermal treatment	0.00	0.00	0.00	0.00	0.00	0.00
		Stabilization treatment	0.00	0.00	0.00	0.00	0.00	0.00
		Cleaning treatment	0.00	0.00	0.00	0.00	0.00	0.00
		Total	997.19	369.19	325.08	741.50	637.02	3,069.98
	Percentage of recyclable general waste		56.04%	68.45%	84.94%	77.73%	67.42%	71.79%
Hazardous waste	Recyclable	Reuse	0.00	63.67	0.00	0.00	0.00	63.67
		Outsourcing for reuse	0.00	0.00	2,814.51	11,484.36	812.34	15,111.21
		Total	0.00	63.67	2,814.51	11,484.36	812.34	15,174.88
	Non-recyclable	Incineration treatment	562.11	242.45	130.30	184.13	279.01	1,398.00
		Physical treatment	0.00	63.91	0.00	0.00	0.00	63.91
		Solidification treatment	0.00	0.00	0.00	0.00	0.00	0.00
		Thermal treatment	0.00	626.63	0.00	0.00	0.00	626.63
		Stabilization treatment	0.00	75.46	0.00	0.00	0.00	75.46
		Cleaning treatment	0.00	2.33	499.39	1,307.44	0.00	1,809.16
		Total	562.11	1,010.78	629.69	1,491.57	279.01	3,973.16
Percentage of recyclable hazardous waste		0%	5.93%	81.72%	88.51%	74.43%	79.25%	



Guanyin Plant includes Guanyin Plant - Plant 1 & 3 and Guanyin Plant - Plant 2, which are separately explained with the tables below :

## 2. Elite Material Co., Ltd. - Guanyin Plant (Plant 1 and Plant 3)

Waste Category	Total	Disposal Method	Weight (metric tons)	General waste	Hazardous waste
Recyclable waste	1,270.96	Reuse	721.97	721.97	0
		Outsourcing for reuse	548.99	548.99	0
Non-recyclable waste	1,496.35	Incineration treatment	561.62	0	561.62
		Physical treatment	934.23	934.23	0
		Solidification treatment	0.50	0.50	0
Total (metric tons)			2,767.31	2,205.69	561.62

Data source: Environmental Protection Administration, Executive Yuan-Industrial Waste Declaration and Management Information System

## 3. Elite Material Co., Ltd. - Guanyin Plant (Plant 2)

Waste Category	Total	Disposal Method	Weight (metric tons)	General waste	Hazardous waste
Recyclable waste	0	Reuse	0	0	0
		Outsourcing for reuse	0	0	0
Non-recyclable waste	62.94	Incineration treatment	0.49	0	0.49
		Physical treatment	62.45	62.45	0
Total (metric tons)			62.94	62.45	0.49

## Waste Management Measures

- (1) Carry out inspections on an irregular basis to make sure whether the Company's waste is properly handled at the disposal sites. Moreover, regularly inspect (at least once a year) the outsourced service providers on the operation and management of storage, removal, treatment and reuse of the contracted waste in accordance with the "Waste Management Procedures" specified in ISO14001 Environmental Management Systems.
- (2) Since online reporting and filing is required by law for the clearance of each batch of waste, the Company makes reports on the waste treatment status on a monthly basis as required by the Environmental Protection Administration.
- (3) Suppliers are required to provide documents concerning the proper disposal of each batch of waste entrusted by the Company.
- (4) Commission reclamation agencies of related categories based on published information to deal with the Company's recyclable (scraps) waste.
- (5) Precisely implement waste classification and recycling to reduce the types and quantities of waste that needs to be cleared.
- (6) Introduce eco-friendly consumables and raw materials in a step-by-step manner.
- (7) Reduce the use of disposable utensils; give each employee a set of cutlery for personal use; and staff canteen uses stainless steel tableware for repeated use.

Take 2022 as the base year for the establishment of baseline data, and the total waste intensity as an indicator for the planning of reduction goals.

2022 total amount of waste generated (metric tons/years)	30,030.75
2022 revenue (Unit: NT\$ thousands)	37,899,357
Total waste intensity (metric tons/NT\$ thousands)	0.0008

In addition to the basic compliance with environmental laws and regulations such as Waste Disposal Act, Water Pollution Control Act, Air Pollution Control Act, etc., EMC also allocates funds every year to implement pollution prevention measures to protect the plants' environment and maintain environmental quality. The main reasons for the decrease in pollution prevention and control expenses in 2022 include: 1. The overall cost for stationary air pollution sources control dropped due to the decrease of VOCs emissions; 2. The SOP for scraps classification has been formulated, and the recycling was precisely implemented, through which the waste disposal expenses were reduced. The pollution control costs for plants in Taiwan are listed in the table below :

Pollution Control Costs			
Item	2020年	2021年	2022年
	Amount (NT\$ thousands)	Amount (NT\$ thousands)	Amount (NT\$ thousands)
Remediation cost for soil and groundwater pollution	261	261	178
Cost for stationary air pollution sources	20,651(corrected)	20,840	13,984
Cost for water pollution prevention and control	602	0	0
Cost for sewage treatment	2,932	2,824	2,657
Cost for waste disposal	86,403	87,762	81,597
Total	110,849	111,687	98,416

Unit: NT\$ thousands

# 05

- ▶ Building a Safe and Healthy Workplace

## 5. Building a Safe and Healthy Workplace

EMC carries out comprehensive construction projects based on the principles of "improving the safety and health of work environment, protecting employees and reducing occupational injuries" to step-by-step improve employees' work environment for employees to commit themselves in the workplace with ease.

Dimension	Society (S)
Material Issue	Occupational Safety and Health Management
Management Mechanisms	The company should focus on equipment operation management, personnel training, and inspection /maintenance routines as well as improvement of dust collection system to ensure the normal operation of all environmental protection equipment. With the aim of carrying out the occupational safety policy, relevant investments should be made and objectives should be set every year based on annual objectives to examine the effectiveness of the implementation.
Responsible Unit	Safety and Health Department
Commitment/ Policy	<ol style="list-style-type: none"> <li>1. Be committed to building a safe workplace in accordance with various standard procedures required by ISO 45001:2018 Occupational Safety Management System to enable every employee to work under safe conditions.</li> <li>2. Standard operating procedures for workplace safety and employee health management should be established by on-site units of all factories. Besides, regular educational training on safety and health and simulation exercises aiming at the education, training and promotion of management related to work environment, equipment and hazardous substances should be held to ensure the safety and health of employees.</li> </ol>
2022 Evaluation Mechanisms and Achievements	<ol style="list-style-type: none"> <li>1. The implementation rate of occupational safety and health educational training programs reached 100% (the outcome was 15.5 hours) – goal achieved.</li> <li>2. Continue to add relevant safety protection measures to old-type in-service machines in plant areas (For example, adding spray ball devices to glue-mixing tanks, and a hydraulic lifting function to the packaging work platform) – goal achieved.</li> <li>3. Organize at least two health lectures with 100 plus participants (Health lectures were not held as scheduled due to the impact of pandemic – goal not achieved).</li> </ol>

Dimension	Society (S)
Medium- / Long-term Goals	<ol style="list-style-type: none"> <li>1. EMC demands that every part of the production must strictly abide by the safety principles, employees' safety awareness must be reinforced, and workplace safety should never be overlooked. The internal managerial units must thoroughly analyze the causes of every occupational accident, and figure out prevention strategies and post-incident management measures.</li> <li>2. All units should make work safety as one of their strategic objectives and aim to achieve the goal of 'zero work hour loss due to occupational safety issues' .</li> <li>3. Continuously care about employees' health and be supportive and caring in tracking health risk factors.</li> <li>4. Achieve the goal of "zero work hour loss due to occupational safety issues"</li> </ol>

## 5.1 Occupational Safety and Health Management

### 5.1.1 Occupational Safety and Health Management System GRI 403-1

<b>EMC's EHS Policy</b> Legal Compliance, Risk Control Pollution Prevention, Conservation & Waste Reduction Consultation & Communication, Continuous Improvement	<p><b>With the aim of accomplishing the EHS policy, the company makes the following commitments :</b></p> <ol style="list-style-type: none"> <li>1. Comply with EHS laws and regulations, protect workers' safety and health, and control the risks of potential environmental pollution and safety accidents.</li> <li>2. Prevent pollution and reduce energy/resource consumption for energy/resource conservation through the implementation of system management.</li> <li>3. Take appropriate management measures to control the risks of hazards such as confined space, falling, chemical hazards, fire &amp; explosion, mechanical equipment injuries, electric shocks, etc.</li> <li>4. Provide opportunities for consultation and communication through various meetings for all employees and collaborative companies to be aware of and understand the company' s EHS Policy and its meaning, and set goals for continuous improvement.</li> </ol>
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EMC strives to create a safe and healthy workplace for every employee to work at ease and return home safe and sound after work. However, a safe work environment requires not only the upgrade of relevant soft and hard safety facilities but also the coordination of every company member. Safety and Health Department and on-site units have established standard operating procedures for workplace safety and employees health management. In terms of the managerial training on work environment, equipment and hazardous substances, regular educational training and simulation exercises are held to ensure the safety and health of employees. In order to ensure the normal operation of machinery and equipment, the company strengthens the equipment operation management, personnel training and inspection/maintenance routines and also improves the dust collection system. The above work guidelines are implemented based on the established annual goals and the effectiveness of implementation shall be examined to ensure the realization of ESH policy.

EMC gives importance to the occupational safety and health management performance and is committed to providing efficient operating services which emphasize the safety and comfort of stakeholders such as employees, customers, communities and related operating partners. By upholding the principles of "improving the safety and health of work environment, protecting employees and reducing occupational injuries", EMC carries out comprehensive construction projects to step-by-step improve employees' work environment for employees to commit themselves in the workplace with ease. The Occupational Safety and Health Management System has been established based on the management requirements set by international standards and related laws and regulations announced by the Ministry of Labor in Taiwan, and was successfully migrated to ISO 45001 in 2020. According to the requirements of standardized operating procedures, the company demands that every part of the production must strictly abide by the safety principles, employees' safety awareness must be reinforced, and workplace safety should never be overlooked. The causes of occupational accidents must be clarified and thoroughly analyzed so as to develop follow-up prevention strategies and handling procedures.

EMC has introduced the occupational safety and health management systems (ISO 45001) in its Headquarters and all production plants, and has set up occupational safety and health management units and dedicated personnel to take the responsibility for drafting, planning, supervising and promoting safety and health management work items, and guiding relevant units to implement corrective and preventive measures for disasters/accidents in hope that workplace hazards can be reduced, and safety and health management level can be enhanced.





## ► 5.1.2 Hazard identification, Risk Assessment and Incident Investigation GRI 403-2 、 GRI 403-9 、 GRI 403-10 、 GRI 2-8

### 1. Hazard Identification & Risk Assessment Procedures

EMC gives importance to the safety and health of workers' work environment based on the principles of "advance preparation", "zero accident" and "zero disaster". The scope of the said principles encompasses the company's routine operations and other personnel who are engaged in activities on EMC's work sites (including contractors, visitors, suppliers, etc.) The Occupational Safety and Health Management System Promotion Team shall review the results of hazard identification and risk assessment in accordance with the "Hazard Identification & Risk Assessment Management Procedures" on a yearly basis (by reference to the Procedures for Hazard Identification and Risk Assessment), and then take corresponding improvement and control/management measures based on the levels of risks. The risk levels (five levels in total) are determined based on the frequency of hazards, likelihood of injuries and severity of injuries (by reference to the Judgment Criteria for Hazard Identification and Risk Assessment). For unacceptable risks (level 1 to level 3), measures such as elimination, substitution, engineering controls, educational training, personal protective equipment, etc. shall be taken, and the following improvement effectiveness shall be continuously tracked. Moreover, workers are allowed to leave the work conditions and places that they think may cause injury or ill health, without having to suffer punitive treatments such as pay deduction, salary cut or leave deprivation.

### ■ Procedures for Hazard Identification and Risk Assessment

#### 1. Targets for hazard identification & risk assessment

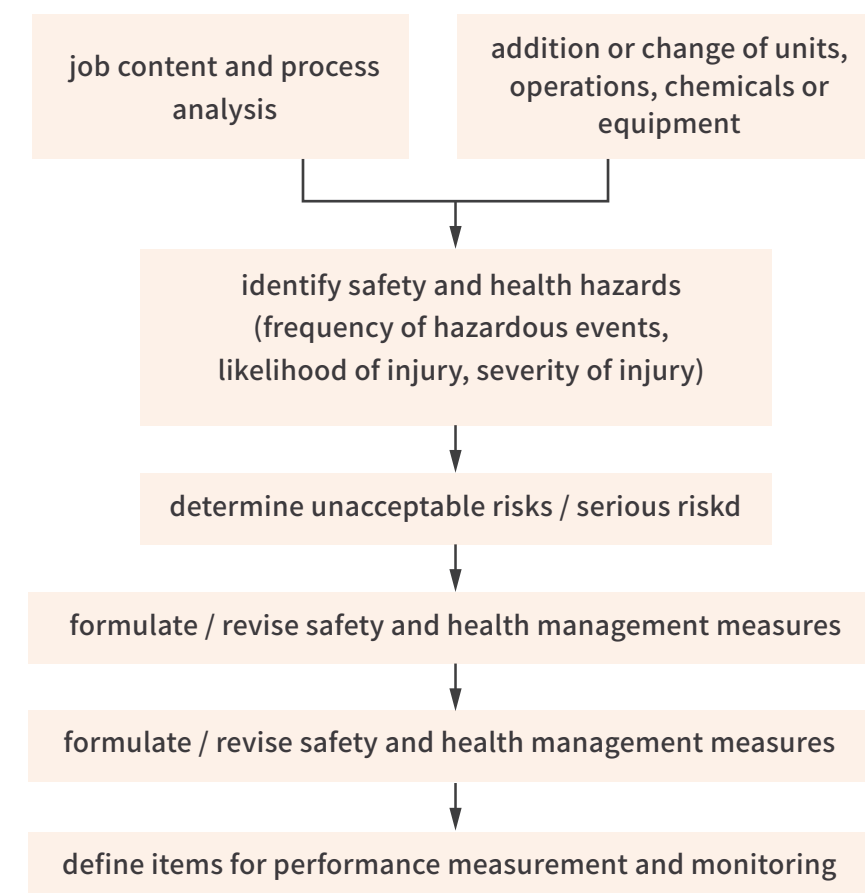
Personnel who are engaged in work tasks or work-related activities under the control of the organization. Such personnel may be workers employed by the organization or other personnel, including senior managers, managerial personnel, non-managerial personnel, personnel from external manpower dispatch companies, contractor workers, or individuals, and other personnel whose work or work-related activities is/are jointly controlled by the organization.

#### 2. Scope of hazard identification & risk assessment

(1) Identify potential hazard factors existing in the workplace's basic facilities, machinery / equipment, materials, substances, operating environment, manufacturing processes, operating procedures, operational activities, products, services, etc., and then assess the possible risks, determine levels of unacceptable risks, and take measures such as elimination, substitution, engineering controls, educational training, personal protective equipment, etc. for the unacceptable risks.

(2) In regards to contractor operators' risk identification and assessment, operations' risks and control methods shall be discussed in pre-construction safety meetings and consultative organization meetings.

(3) In the event of process change, new equipment addition, raw material change or operating environment conditions change, personnel shall follow the Procedures for Change Management Operation and conduct pre-change safety assessment to increase safety/protective measures, assess the use of low-hazard chemicals to substitute for high-hazard chemicals, etc. to ensure the safety and health of the organization's personnel.



## Judgment Criteria for Hazard Identification and Risk Assessment

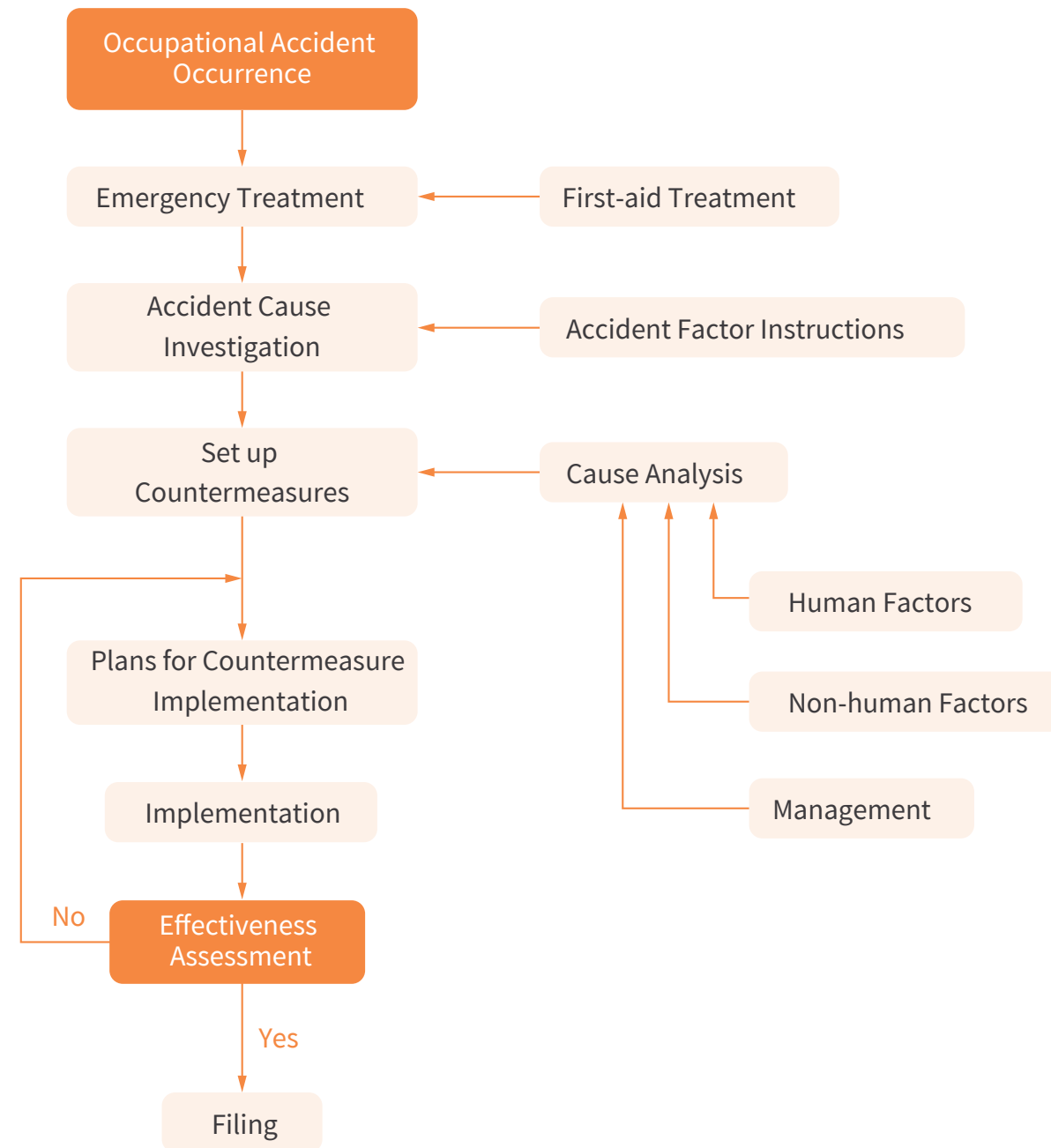
(1) Frequency of hazards:				
Score	8	4	2	1
Judgment criteria	Frequently happens	Occasionally happens	Rarely happens	Hardly happens
	Once/year	Once/1-3 years	Once/3-5 years	Once/5 years and more
(2) Likelihood of injuries: Take the higher score of soft/hard service scoring results as the parameter for ER calculation.				
Score	8 (Indeed happened)	4 (Very likely)	2 (Likely)	1 (hardly ever)
Hard services	Almost no safety measures have been implemented; even though signs have been set, there are still many deficiencies.	No guardrails, protection covers or safety devices have been installed; or there are some safety/protection devices, but rather incomplete. Facilities such as alarms, signs, emergency stop devices, etc. have been correctly installed.	Guardrails, protection covers or other safety devices have been installed; yet the guardrails are not safe enough as the height is too low, the gaps are too wide, etc., and thus personnel may enter dangerous zones and be in contact with sources of danger.	Guardrails and protection covers have been used to completely isolate the sources of danger, and safety devices have been installed to make it difficult to enter dangerous zones, or be in contact with sources of danger.
	Even if operating guidelines are followed, accidents shall occur if workers are not attentive enough; or, no guidelines are available at all.	Operating guidelines are available, yet they are hard to follow. Accidents are very likely to occur if workers are not attentive enough.	Operating guidelines are available, yet some of them are hard to follow. Accidents are likely to occur if workers overlook the guidelines.	Operating guidelines (safety and health rules, etc.) are easy to follow. Accidents won't occur even when special attention is not paid.
(3) Severity:				
Score	8	4	2	1
Judgment criteria	Fatal injury	Serious illness	Non-severe injury	Minor injury
	Benchmark: Severe injuries such as death, severed limbs, blindness, etc.	Benchmark: Injuries for which hospitalization is required (accidents where shutdown is required).	Benchmark: Injuries for which physician treatment is required (accidents where shutdown is not required).	Benchmark: Work can be continued after emergency measures are taken; or it is just a near miss.

Risk assessment scores (1) x (2) x (3)	Danger Degree	Risk Level
$\geq 73$	Extreme danger : Operations must be stopped	Level 1
51—72	High-level danger : Immediate rectification required	Level 2
36—50	Significant danger : Rectification required	Level 3
13—35	General danger : Attention required	Level 4
$\leq 12$	Minor danger : Acceptable	Level 5

## 2. Incident Investigation

Establish an Occupational Accident Reporting System according to ISO45001:2018 Occupational Safety and Health Management System, and designate dedicated units for the management of OSH performance and occupational accident indicators. The statistics of occupational accidents classified by accident type are shown in the table below. The accident type with the highest occurrence during 2019 to 2022 is "traffic accident", followed by "fall (trip)" and "falling/tumbling".

Compared with 2021, the total accident cases in 2022 increased by 8 cases, the major part of which were "traffic accidents". Therefore, the plants regularly conduct traffic safety advocacy activities to enhance personnel's safety awareness and reduce the incidence of traffic accidents. The occurrence of work-related accidents "object falling" and "being caught/being drawn in" shows that there is still room for improvement in plant areas' work environment safety and protection. Causes of the accidents have been comprehensively analyzed and examined by reference to similar accidents that happened in peer companies, and improvement measures have been taken in hope that the goal of "zero occupational accident" can be truly achieved in our workplace. Accident reporting procedures have been formulated in accordance with "Regulations on EHS Accident Investigation and Guidelines to Achieve Zero Serious Accidents", which are illustrated in the diagram below :



EMC Major Types of Occupational Injury	Plants in Taiwan			Elite Electronic Material (Kunshan)	Elite Electronic Material (Zhongshan)	Elite Electronic Material (Huangshi)
Hazard Category	2020	2021	2021	2021	2021	2021
Chemical spills	0	0	0	0	0	0
Fire accidents	0	0	0	0	0	0
Traffic accidents	5	6	11	0	0	0
Object falling	0	0	1	0	0	0
Object collapsing /toppling down	0	0	0	0	0	0
Object fracturing /rupturing	0	0	0	0	0	0
Being caught /being drawn in	0	0	2	0	0	1
Being pressed/smashed	0	0	0	0	1	1
Being pricked/gashed /scratched	0	0	0	0	0	2
Being hit	0	0	0	0	0	0
Fall (trip)	0	0	0	1	0	0
Electric shock	0	0	0	0	0	0
Contact with high (low) temperature	0	0	0	0	0	0
Contact with hazardous substances	0	0	0	0	0	0
Falling/Tumbling	1	0	0	1	0	1
Crash	0	0	0	0	0	0
Others	0	0	0	0	0	0
Total	6	6	14	2	1	5

EMC carries out comprehensive hazard identification every year for various department work items that may cause personnel's injuries or accidents, and further examine existing safety and health protection facilities and review their control effectiveness. By assessing the risk level of each hazard, the company actively explores the unacceptable risks, based on which objectives are set to improve the occupational safety and health risks. However, occupational accidents may still happen due to human, environmental, managerial and other factors. Therefore, in order to correctly grasp the causes and impacts of ESH accidents, relevant management directions are stipulated for accident investigation, analysis and control. In order to keep complete records of accident occurrences for the prevention of accident recurrences and company's losses of property and resources, activities that promote "zero major accidents" are also held to encourage employees to actively identify anomalies and report safety concerns and non-conformities to reduce the incidence of occupational accidents.

Guanyin Plant's Plant 3 was fined NT\$60,000 by a labor inspection agency in May 2022 due to a violation of subparagraph 5, paragraph 1, Article 58 of the "Rules for Occupational Safety and Health Facilities" (the provision states that protective equipment such as protection shields, enclosures, safety interlock switches, etc. shall be set for dangerous parts of computer numerical control (CNC) or other automated machinery). The accident occurred when personnel was performing maintenance operations and was accidentally hurt by the machine (an injury caused by being caught/drawn in). Inspections were conducted afterwards to check all equipment parts with similar and other hazards, for which safety light curtains were installed to prevent further incident occurrence.)

As indicated in the Company's accident reporting records and content, the work-related accidents that occurred in EMC's plants in Taiwan during 2019 to 2022 contained no fatal accident. The Occupational Disease Rate (ODR) was 0%. In 2022, males' loss of work days caused by disabling injuries were 50 days. The average Disabling Injury Frequency Rate (FR) was 1.60, and the Disabling Injury Severity Rate (SR) (rounding to the nearest integer) was 31.

In 2022, both the Disabling Injury Frequency Rate (FR) and the Disabling Injury Severity Rate (SR) in EMC's plants in Taiwan increased compared with the previous year (FR and SR in 2021 were both 0), which was a result of increased work-related injury cases and work hour loss. Therefore, in 2023, the Company will continue the advocacy of work safety, and assist on-site unit supervisors in implementing engineering controls or strengthening administrative management. More importantly, it is necessary to make "safety awareness" deeply rooted in employees' mind, and further internalized into daily habits, by which long-term effectiveness shall be realized. After all, a zero occupational accident and low-risk workplace is still our ultimate goal to achieve.

## Statistics of employees' work-related injuries in Taiwan and Mainland China plants in 2022

Summary of Work-related Injury Statistics	Plants in Taiwan		Elite Electronic Material (Kunshan)		Elite Electronic Material (Zhongshan)		Elite Electronic Material (Huangshi)	
	Male	Female	Male	Female	Male	Female	Male	Female
Total working hours (hrs)	1,877,749	379,115	2,787,636	696,909	2,004,888	518,483	1,531,281	316,213
Disabling Injury Frequency Rate (FR)	1.60	0	0.57	0	0.50	0	2.61	0.54
Number of Occupational Disease/Disorder	0	0	0	0	0	0	0	0
Occupational Disease Rate (ODR)	0%	0%	0%	0%	0%	0%	0%	0%
Disabling Injury Severity Rate (SR)	30.89	0	28.70	0	3.49	0	60.73	28.46
Absence rate (AR)	0	0	0	0	0	0	0	0
Death toll from work-related injury	0%	0%	0%	0%	0%	0%	0%	0%
Death rate from work-related injury	0	0	0	0	0	0	0	0
Gender	0%	0%	0%	0%	0%	0%	0%	0%

## Contractors (statistics of plants in Taiwan only)

Summary of Work-related Injury Statistics	2020		2021		2022	
Gender	Male	Female	Male	Female	Male	Female
Total persons-counts	-		-		7594	
Total working hours (hrs)	1,077,272		1,209,584		1,386,080	
Disabling Injury Frequency Rate (FR)	0	0	0	0	0	0
Number of Occupational Disease/Disorder	0	0	0	0	0	0
Occupational Disease Rate (ODR)	0%	0%	0%	0%	0%	0%
Disabling Injury Severity Rate (SR)	0	0	0	0	0	0
Death toll from work-related injury	0	0	0	0	0	0
Death rate from work-related injury	0%	0%	0%	0%	0%	0%

Note1: Disabling Injury Frequency Rate (FR) = (total work-related injury cases/total working hours) × 106

Note2: Disabling Injury Severity Rate (SR) = (total loss of work days/ total working hours) × 106

Note3: Occupational Disease Rate (ODR) = Total number of people with occupational diseases × 106 / total working hours

Note4: Serious Occupational Accidents = Fatal accidents caused by occupational injuries, or accidents where work-related injuries have made it impossible or difficult for workers to restore their pre-injury health state within six months.

Note5: Rate of Serious Occupational Accidents= (Number of serious occupational accidents /Total number of work-related injury cases) × 100%

Note6: Data included in occupational safety statistics: Employees' disasters caused by work-related injuries or ill health, not including approved leaves, maternity leaves, paternity leaves, funeral leaves, general sick leaves and traffic accidents during commuting.

Note7: EMC conducts employee health checks every year, implements "friendly work environment" testing, and actively eliminates potential workplace hazards through "Improvement Proposal", "Safety Observation", "Near Miss Reporting" and other systems. With respect to emergency response procedures, self-inspection, educational training on safety and health, operating environment testing and other related operations, ongoing reviews and improvements are carried out every year in the hope of creating a healthy and safe work environment for employees.

Note8: Non-employee workers refer to workers who are not EMC's employees, including outsourced personnel, dispatched labor, security guards, cleaners, canteen personnel, etc. The total number of such workers was 164 in 2022, accounting for 4% of the total number of employees of EMC's four plants, and showing no significant fluctuations in comparison with the previous year.

Plant	Plants in Taiwan	Elite Electronic Material (Kunshan)	Elite Electronic Material (Zhongshan)	Elite Electronic Material (Huangshi)	Total
Non-employee workers	26	44	38	56	164
Number of employees at the end of the year	1,032	1,144	867	669	3,712
Percentage of non-employee workers	3%	4%	4%	8%	4%



## ► 5.1.3 Educational Training on Occupational Safety and Health GRI 403-5

By complying with OSH educational training rules and related regulations, EMC provides new employees with OSH educational training which includes general educational training on safety and health and educational training on hazard communication. In addition, training courses are also organized in accordance with laws and regulations for the initial training and on-the-job re-training required for supervisors of various operations, which include occupational safety and health management staff, supervisors for hypoxia operations, supervisors for organic solvent operations, operators of forklift with capacity of one ton or more, first-aiders, etc., to maintain the validity of their certificates and reinforce their safety and health awareness. Besides, other educational training courses on safety and health are also conducted on an irregular basis. The educational training courses offered by the company are all conducted during normal hours of duty. Employees will not suffer punitive treatments such as pay deduction, salary cut or deprivation of leave for their participation in related training.

### 1. On-the-job Re-training for ESH Certificate Holders (Target: Personnel with ESH Certificate)

Type	Title of Certificate	Number of On-the-job Re-training Participants		
		2020	2021	2022
Occupational Safety	Class-1 Manager of Occupational Safety and Health Affairs	0	3	0
	Class-A Occupational Safety and Health Management Specialist	0	1	0
	Class-B Occupational Safety and Health Management Staff	1	3	1
	Operator of forklift with capacity of 1 ton or more	16	20	42
	First-aider	0	11	0
	Supervisor for organic solvent operations	2	3	10
	Supervisor for specified chemical substance operations	3	0	3
	Supervisor for roofing operations	0	0	1
	Supervisor for dusty operations	2	4	1
	Supervisor for hypoxia operations	2	1	2
	Personnel transporting dangerous goods by road (Truck)	0	0	0

Type	Title of Certificate	Number of On-the-job Re-training Participants		
		2020	2021	2022
Occupational Safety	Operator of fixed cranes with capacity more than 3 tons	3	0	0
	Operator of fixed cranes with capacity less than 3 tons	16	0	4
	Operators using cranes for slinging operations	14	6	1
	Class B Operator of boilers	12	6	3
	Operator of high-pressure gas vessels	0	0	0
Fire Safety	Security Supervisor	1	1	0
	Fire Safety Manager	0	0	0
	Radiation Protection Personnel	4	8	8

Type	Title of Certificate	Number of employees in Mainland China plants taking on-the-job re-training in 2022		
		Elite Electronic Material (Kunshan)	Elite Electronic Material (Zhongshan)	Elite Electronic Material (Huangshi)
Safety	Safety responsible person	3	1	1
	Safety management staff	15	3	4
	Occupational safety responsible person	1	1	1
	Occupational safety and health management staff	8	2	1
	Hazardous chemicals operator	38	0	28
	Team leader for highly hazardous operations	7	0	0
	Electrician	39	40	16
	Special equipment safety management	4	3	4
	Food safety management staff	0	2	0
	In-plant motor vehicle safety management	7	0	0
	Forklift	103	85	39

Type	Title of Certificate	Number of employees in Mainland China plants taking on-the-job re-training in 2022		
		Elite Electronic Material (Kunshan)	Elite Electronic Material (Zhongshan)	Elite Electronic Material (Huangshi)
Safety	Elevator operator	2	0	0
	Class 1 boiler operator	5	7	2
	Boiler operations	4	0	0
	Elevated operations	18	9	7
	Welding and thermal cutting operations	6	10	3
	Radiation safety and protection	2	10	0
	Refrigeration and air conditioning operations	2	2	2
	First-aider	0	0	40
Fire Safety	Fire facility operator (intermediate-level)	6	0	3
	Building (structure) firefighter (junior-level)	3	6	5

## 2. General Safety & Health and Emergency Response Training (Target: General Employees and Contractors)

In addition to the training courses conducted in accordance with the laws, Elite Material Co., Ltd. also gives importance to the overall safety of employees, contractors, visitors, etc. In order to actively eliminate potential hazards in the workplace, the whole-plant evacuation drills, fire and chemical accidents emergency drills, firefighting skills training conducted in Hsinchu Fire Training Base and educational training for contractors before entering the plant areas (for forklift operations, confined space operations, hot work, etc.) are regularly conducted on a yearly basis. With ongoing reviews and improvements carried out every year, it is hoped that the company shall create a healthy and safe work environment with all employees.

Plant Area Safety & Health Educational Training held in 2022 (plants in Taiwan)		
Training Item	Training Hours	Number of participants
General educational training on safety and health	3	169
Educational Training on Hazard Communication	3	136
Annual Fire and Chemical Accidents Emergency Drill (whole plant)	3	36
Emergency Evacuation Drill (whole plant)	0.5	300
Forklift Operation Hazards Prevention Advocacy	6	105
<b>Total</b>	15.5 Hours	-

Statistics of educational training conducted in Mainland China plants in 2022								
Elite Electronic Material (Kunshan)			Elite Electronic Material (Zhongshan)			Elite Electronic Material (Huangshi)		
Training Item	Training Hours	Number of participants	Training Item	Training Hours	Number of participants	Training Item	Training Hours	Number of participants
Industrial Safety Training	2	1000	Preplan knowledge and training for environmental safety emergency accidents	1	895	General safety and health educational training	2	423
Jinmao Plant's hazardous waste	0.5	18	Emergency grouping training for chemicals accidents	1	13	2022 Supervisor Training	1	239
leakage drill You-bi Plant's	0.5	18	First & second half fire accident emergency drill (whole plant)	1	860	Occupational Health Training in April 2022	1	29
hazardous waste leakage drill	0.5	20	Training on team safety management skills improvement	3	95	2022 first half in-plant fire drill	1	347

Statistics of educational training conducted in Mainland China plants in 2022								
Elite Electronic Material (Kunshan)			Elite Electronic Material (Zhongshan)			Elite Electronic Material (Huangshi)		
Training Item	Training Hours	Number of participants	Training Item	Training Hours	Number of participants	Training Item	Training Hours	Number of participants
Jinmao Plant's first-half fire drill	1	500	Training on EHS inspection skills	1	9	2022 second half in-plant fire emergency evacuation drill	1	435
Jinmao Plant's confined space emergency drill	0.5	18	Emergency drill for confined space accidents	1	28	ISO 14064 GHG Internal Auditor Training	16	22
You-bi Plant's fire drill	0.5	550	Safety training for construction supervising and managing personnel	1	129	Hazardous waste management training	1	33
Two plants' first-half dormitory fire safety and evacuation drills	0.5	350	Occupational health management training	1	38	Training on hazardous chemicals and precursor chemicals	1	21
Jinmao Plant's chemicals leakage drill	0.5	20	Fundamental knowledge for 6S management	1	20	Safety duty officer training	2	98
Two plants' hazardous chemicals training	1	200	Waste (hazardous waste) treatment training	2	20	EHS laws and regulations study	1	46
Jinmao Plant's emergency drill for mechanical injury accidents	0.5	16	Chemicals safety management training	1	45	Dormitory emergency evacuation drill	1	130
Jinmao Plant's electric shock emergency drill	0.5	16	Risk-based process safety management training	24	3	Injury prevention training for on-site employees	1	635
Jinmao Plant's second-half fire drill	1	500	First-aider training	16	41	-	-	-

Statistics of educational training conducted in Mainland China plants in 2022								
Elite Electronic Material (Kunshan)			Elite Electronic Material (Zhongshan)			Elite Electronic Material (Huangshi)		
Training Item	Training Hours	Number of participants	Training Item	Training Hours	Number of participants	Training Item	Training Hours	Number of participants
Two plants' second-half dormitory fire safety and evacuation drills	0.5	350	Typhoon BCM drill	1	20	-	-	-
You-bi Plant's confined space emergency drill	0.5	18	Operating instructions for fire emergency broadcast system host and fire equipment	1	9	-	-	-
You-bi Plant's second-half fire drill	1	550	Training on ISO 14064-1 GHG standards	14	25	-	-	-
-	-	-	ISO 14001 & 45001 Internal Auditor Training	14	25	-	-	-
-	-	-	New employee EHS training (6 sessions)	1	161	-	-	-
<b>Total</b>	11.5 Hours	-	<b>Total</b>	85 Hours	-	<b>Total</b>	29 Hours	-



Emergency Evacuation Drill (whole plant)



Annual Fire and Chemical Accidents Emergency Drill (whole plant)



## 3. Hazard Awareness for Contractors and Training on Consultative Organization Meetings (Target: Contractor)

Contractor management is complicated but is an essential part of the company's business. On the one hand, the personnel entering the plant areas must be properly controlled; on the other hand, as the contractor personnel are not employees of the company's plants, it is a matter of concern whether they have sufficient safety awareness or not. In addition to the safety meetings prior to each construction, Plant-entry Educational Training and Hazard Awareness Workshops are also held by the Safety and Health Department and project organizing units for contractors who enter the plant areas for the first time to ensure that the regulations applying to the plant areas are fully understood. Moreover, project organizing units are required to fill out "Construction Application Form" prior to contractors' plant-entry to confirm information including construction date and number of people being engaged, work content, construction location, etc. for the precise management of contractors' operations.

Moreover, a consultative organization is set up for multiple contractors who carry out projects at the same time and on the same site to coordinate matters with each other so that the contractors' responsible persons can be aware of the regulation violations and violators of the quarter, by which all organization members can be alerted. The Contractor Assessment has been conducted at the end of each year since 2020 to summarize contractors' violation cases during the year, based on which the contractors are classified into Class A, Class B and Class C. Contractors with more than five violations shall be assessed as Class C, whose contractorship shall be suspended and no further project shall be contracted for three months from the assessment date. The result of 2020 assessment (721 contractors were assessed): Class A: 716, Class B: 5, and Class C: 0

Contractor Assessment Result - Guanyin Plant

Contractor Class	2019	2020	2021	2022
Class A	221	291	343	381
Class B	3	3	1	2
Class C	0	0	0	0
Total	224	294	344	383



Contractor Assessment Result - Hsinchu Plant



Contractor Class	2019	2020	2021	2022
Class A	412	442	315	335
Class B	1	0	0	3
Class C	0	0	0	0
Total	413	442	315	338

area were explained for construction workers that enter the plant areas for the first time to be familiar with the work environment so as to improve workers' safety and health awareness of hazardous operations, and help them comply with laws and regulations. In addition, safety and health inspections are also conducted on an irregular basis to ensure all operations are carried out in compliance with regulations, hoping that the incidence of contractors' occupational accidents can be reduced, and a safe workplace can be created for employees, contractors, customers and all plant-entry personnel.

## ► 5.1.4 Prevention and Mitigation of Occupational Safety and Health Impacts GRI 403-7

In order to achieve the goals of the company's OSH planning and management, maintain the continuous operation of the management system, and prevent and mitigate business-related occupational safety and health impacts, EMC upholds the principles of its occupational safety and health policy to set annual OSH goals for the creation of safe and comfortable work environment for employees. Moreover, improvement goals of the next year are also formulated by fully considering the results of hazard identification & risk assessment, internal/external safety and health issues, stakeholders' demands and expectations, regulatory and other requirements, technical and financial issues, etc.

The Safety and Health Department shall supervise the heads of all departments to formulate safety and health management plans based on the Company's ESH policy, and fill the plan details in corresponding goal planners. Plans that can be completed within the planning year are viewed as short-term plans, while plans that take years (2-3 years) to complete are classified as long-term plans. With the aim of improving the overall safety and health of all plant areas, all departments of EMC have started setting annual safety and health improvement goals for the following year based on their potential hazards since 2012. Several risk control and protective measures were taken for manufacturing sites in 2022, including adding spray ball devices to glue-mixing tanks, and a hydraulic lifting function to the packaging work platform. The measures shall eliminate the risk of accidents during operations, and shall actively promote personnel's hazard awareness. The Company continued to implement contractors' plant-entry educational training in 2022, in which operation precautions in each

Add spray ball devices to glue-mixing tanks	Add a hydraulic lifting function to the packaging work platform	
		
Elite Electronic Material (Kunshan)	Elite Electronic Material (Zhongshan)	Elite Electronic Material (Huangshi)
		
Add safety light curtains to substrate cutting & packaging machine's stacking crane	Add foolproof air-operated (pneumatic) one-way flow control valve to glue-mixing tank's bottom valve	Install fire damper on plant's RTO main exhaust gas intake pipe



## ► 5.1.5 Worker Participation, Consultation and Communication GRI 403-4

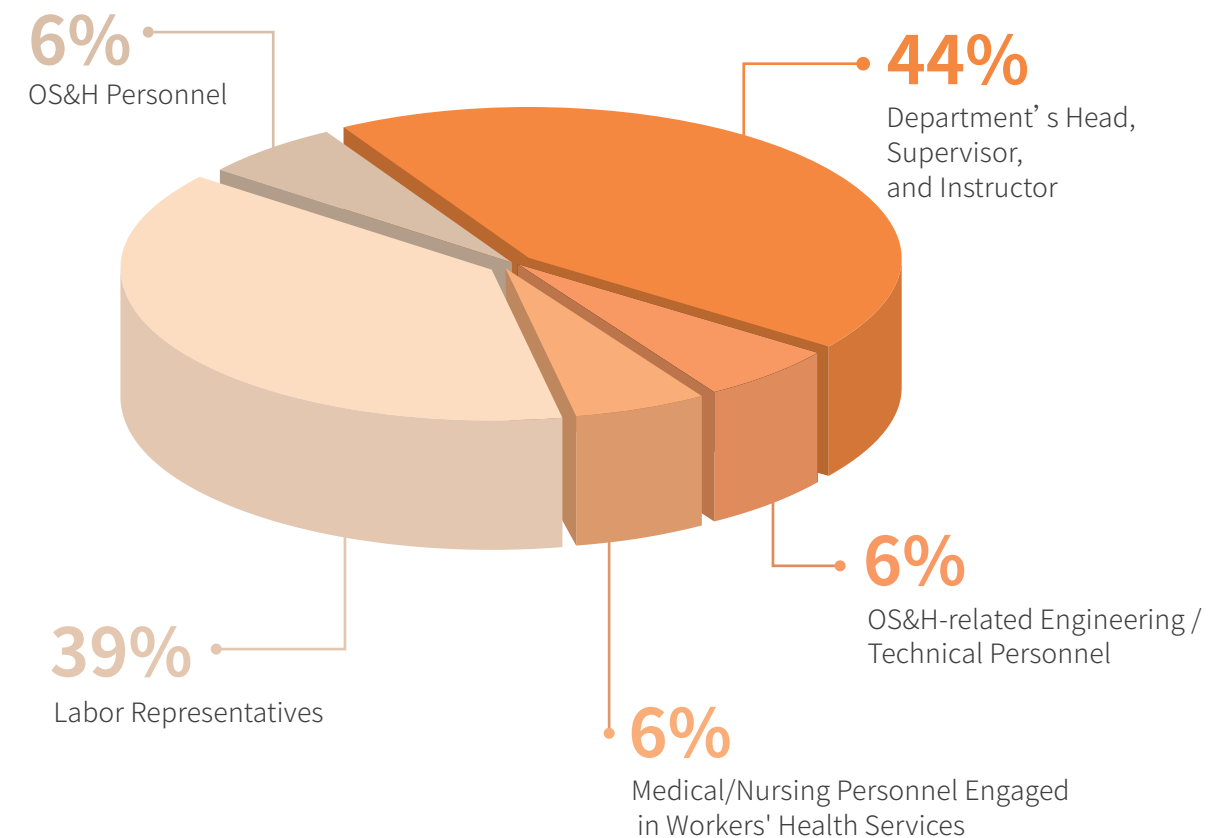
The "Consultation and Communication Management Procedure" has been established to facilitate the consensus in the company through the ESH management system and the company's various management mechanisms, and to establish channels for effective two-way communication with the company's internal employees and related external groups on the company's commitment to ESH management and various management mechanisms. Workers should be consulted when any of the safety and health conditions of the workplace changes, and the arrangement of consultation should be documented, for example, in the form of meeting notices or minutes and the interested parties should be notified.

Employees are an important asset of EMC; and health and safety are employees' primary wealth. EMC set up the "Occupational Safety and Health Committee" to ensure that employees can work in a healthy and safe environment and the company can carry out its safety & health policy. The committee meets every three months and makes suggestions on the following items :

- (1) Occupational safety and health policy
- (2) Occupational safety and health management plan
- (3) Implementation plan for safety and health educational training
- (4) Work environment monitoring plan, monitoring results and measures adopted
- (5) Matters in relation to health management, occupational disease prevention and health promotion
- (6) Various safety and health proposals
- (7) Business unit's self-inspection and items included in the safety & health inspection
- (8) Preventive measures against hazards arising from machinery/equipment or raw materials/materials
- (9) Occupational Accident Investigation Report
- (10) Assess on-site safety & health management performance
- (11) Matters in relation to the safety and health management of contracted businesses
- (12) Other matters in relation to occupational safety and health management

Labor representatives account for 39% of the total members of the Occupational Safety and Health Committee, the composition of which is as follows :

- (1) OSH personnel
- (2) Managers, supervisors or leaders of all departments/units
- (3) OSH-related engineering/technical personnel
- (4) Medical staff engaged in workers' health services
- (5) Labor representatives



## 5.2 Comprehensive Employee Health Management GRI 403-3

EMC is "people-oriented" and always attaches great importance to the health and safety of personnel. With respect to employee health management, besides providing health checks and graded health management in accordance with laws and regulations, nurses are appointed in plant areas and on-site services offered by occupational health specialists are arranged on a monthly basis to provide employees with work-related health consultations, medical guidance and improvement suggestions as well as follow-up attention to the improvement status after health checks. Maternal health protection programs are promoted for female employees to protect the health of pregnant or postnatal employees, which include the provision of Breastfeeding (Breast Milk Collection) Room, relevant health guidance and health education/consultation as well as assessments in relation to hazardous risks in operations, health status and fitness-for-work assessment.

The statistics of the number of employees participating in general health checks and special health checks in 2022 are as follows:

Item		EMC Guanyin Plant	EMC Hsinchu Plant
General Health Check	General Health Check	97	63
Special Health Check	Dusty operations	77	22
	Noise	133	25
	Ionizing radiation operations	12	31
	Operations related to manganese	-	4
Number of employees whose general health check results are categorized as Level 1 Management group		10	9
Number of employees whose general health check results are categorized as Level 2 Management group		38	19
Number of employees whose general health check results are categorized as Level 3 Management group		28	16
Number of employees whose general health check results are categorized as Level 4 Management group		21	19
Dusty operations (Level 2 Management)		8	2
Noisy operations (Level 2 Management)		44	9
Ionizing radiation operations (Level 2 Management)		6	8
Abnormal workload (Level 2 Management)		40	23
Abnormal workload (Level 3 Management)		12	8





In-plant health promotion activities



Occupational health specialists are invited to the plants every month to provide on-site services concerning employees' health check results, which include relevant health consultations, medical guidance and improvement suggestions as well as follow-up attention to the improvement status after health checks.

#### 1. EMC Guanyin Plant – Service items provided by onsite occupational health specialists and number of participants

Item	Quarter 1 (person)	Quarter 2 (person)	Quarter 3 (person)	Quarter 4 (person)
Review of new employees' physical examination reports	46	48	58	11
Review of foreign workers' entry and regular health examination reports	22	10	45	12
Consultation (about overload)	2	3	0	2
Consultation (about maternity protection)	2	1	3	0
Consultation (about special operations)	0	0	24	0
Consultation (about respiratory protection)	0	0	0	24
Consultation (about work-resumption assessment)	2	0	2	7
Consultation (about follow-ups to annual health checks)	4	2	7	3
Consultation (about other health issues)	11	2	0	2
<b>Total</b>	<b>355</b>			

#### 2. EMC Hsinchu Plant – Service items provided by onsite occupational health specialists and number of participants

Item	Quarter 1 (person)	Quarter 2 (person)	Quarter 3 (person)	Quarter 4 (person)
Review of new employees' physical examination reports	10	37	24	7
Review of foreign workers' entry and regular health examination reports	16	8	9	0
Consultation (about overload)	1	1	3	9
Consultation (about maternity protection)	0	0	2	2
Consultation (about special operations)	3	0	1	0
Consultation (about respiratory protection)	0	0	0	53
Consultation (about work-resumption assessment)	4	0	0	4
Consultation (about follow-ups to annual health checks)	2	2	2	16
Consultation (about other health issues)	6	2	4	2
<b>Total</b>	<b>230</b>			

# 06

► Employee Care

## 6. Employee Care

EMC believes that the key factor for a company's sustainable development lies in employees' happiness. Therefore, we always uphold the principles of appreciating, valuing and taking care of employees, and strive to provide employees with a safe, comfortable, quality and friendly working environment.

Dimension	Social (S)
Material Issues	Employment, Talent Development and Educational Training
Management Mechanisms	<ol style="list-style-type: none"> <li>1. Establish a learning blueprint with different modules, together with arrangements such as job rotation, knowledge sharing, soft power cultivation, etc. to create EMC's competitiveness.</li> <li>2. Set up different communication channels/complaint mechanisms for different stakeholders</li> </ol>
Responsible Unit	Human Resources Department
Commitment / Policy	<ol style="list-style-type: none"> <li>1. Enhance employees' management and professional competencies, improve team performance and exercise the team's synergy, and strengthen the organization's operational efficiency and momentum to achieve the Company's sustainable operation and development.</li> <li>2. Provide diversified benefits and activities for employees to balance their work and life.</li> </ol>
2022 Evaluation Mechanisms and Achievements	<ol style="list-style-type: none"> <li>1. EMC has more than 3700 employees. Most of the employees are under the age of 50, accounting for more than 90% on average.</li> <li>2. Expand the scope of educational training for operative level of management, middle level of management and top level of management to narrow the gap between the Company's managerial positions. The per capita training hours has reached 25 hours plus.</li> <li>3. Except for Huangshi Plant, the turnover rate of other plants was lower than 30%.</li> <li>4. Establish an employee care system to promote peace and reliance in workplace for employees.</li> </ol>

Dimension	Social (S)
Medium- / Long-term Goals	<ol style="list-style-type: none"> <li>1. Employees' educational training: The Company's employee training system is planned based on employees' job category and position level. Online training sessions have also been developed, and a blended learning model with both online learning and physical training have been offered. Moreover, a variety of courses including professional knowledge, general knowledge, management skills, etc. are delivered by internal/external professional lecturers, allowing the Group's employees to flexibly upgrade their professionalism without being restricted by time and location.</li> <li>2. Employee care: Help new employees adapt to the work environment, thereby promoting a sense of identity within the company; improve care for employees, provide appropriate advice on employees' situations; and establish an employee care system to promote peace and reliance in workplace for employees.</li> </ol>

## 6.1 Employment Status

### 6.1.1 Human Resource Structure GRI 2-7, GRI 202-2 and GRI 405-1

As a global corporate citizen, EMC upholds the Responsible Business Alliance (RBA), Social Accountability 8000 (SA 8000) and other internationally recognized human rights norms including "Universal Declaration of Human Rights", "International Labour Organization" and "UN Guiding Principles on Business and Human Rights." Moreover, the company formulates its fundamental labor standards and stipulates "Labor and Ethical Management Code of Conduct", "Corporate Social and Environmental Responsibility Policy Statement" and "Corporate Social Responsibility Best Practice Principles" as guidelines for practicing corporate social responsibility by reference to the above-mentioned guidelines and regulations applying in the places of business operations. The use of child labor is explicitly prohibited to ensure that no labor under the legal working age is employed. The physical and psychological health and safety of underage employees is protected, and it is prohibited to assign them to dangerous work. The "managerial position" refers to a position of a company's manager or above; the managerial position holders are all local residents.

As of the end of 2022, EMC has had more than 3700 employees. Most of the employees are under the age of 50, accounting for more than 90% on average. The sex ratio of the Company's manpower structure is relatively high due to factors such as industry characteristics, job market conditions, etc.



2022 Labor Composition in Taiwan and Mainland China Plants (statistics as of 2022.12.31)

Plant		Plants in Taiwan		Elite Electronic Material (Kunshan)		Elite Electronic Material (Zhongshan)		Elite Electronic Material (Huangshi)	
Number of employees at the end of the year		1,032		1,144		867		669	
Nationals	Male	725	70.25%	915	79.98%	682	78.66%	548	81.91%
	Female	165	15.99%	229	20.02%	185	21.34%	121	18.09%
	Others	0	0	0	0	0	0	0	0
Foreign nationals	Male	135	13.08%	0	0	0	0	0	0
	Female	7	0.68%	0	0	0	0	0	0
Non-fixed term contract personnel (Permanent employees)	Male	726	70.35%	295	25.79%	222	25.61%	46	6.87%
	Female	167	16.18%	92	8.04%	44	5.07%	2	0.30%
Fixed term contract personnel (Temporary employees)	Male	134	12.98%	620	54.20%	460	53.06%	502	75.04%
	Female	5	0.49%	137	11.97%	141	16.26%	119	17.79%
Casual employees	Male	0	0	0	0%	0	0%	0	0%
	Female	0	0	0	0%	0	0%	0	0%
Full-time employees	Male	860	83.33%	915	79.98%	682	78.66%	548	81.91%
	Female	172	16.67%	229	20.02%	185	21.34%	121	18.09%
Part-time employees	Male	0	0	0	0%	0	0%	0	0%
	Female	0	0	0	0%	0	0%	0	0%
Age structure (%)	<30	185	17.93%	324	28.32%	215	24.80%	178	26.61%
	30~50	726	70.35%	812	70.98%	650	74.97%	489	73.09%
	>50	121	11.72%	8	0.70%	2	0.23%	2	0.3%
Managerial personnel (positions of and above the manager level)	Male	89	8.62%	18	1.57%	8	0.92%	2	0.30%
	Female	11	1.07%	2	0.70%	3	0.46%	0	0
R&D personnel	Male	89	8.62%	43	3.76%	29	3.34%	0	0
	Female	10	0.97%	8	0.70%	4	0.46%	0	0
Onsite technical personnel	Male	561	54.40%	743	64.95%	563	64.94%	496	74.14%
	Female	95	9.21%	150	13.11%	116	13.38%	76	11.36%
Sales, administrative, and other personnel	Male	121	11.7%	111	9.70%	82	9.46%	50	7.47%
	Female	56	5.43%	69	6.03%	62	7.15%	45	6.73%
Personnel from minority or disadvantaged groups		3	0.29%	0		3		2	

## ► 6.1.2 New Employees and Employee Turnover Structure GRI 401-1

In terms of employee recruitment, all candidates should be treated equally regardless of gender, religion, political affiliation or marital status. Employees should be provided with a good work environment and be free from discrimination and harassment. The company also promotes free choice of employment, and all work is taken voluntarily. An Employee Complaint Management System is established to deal with cases related to employee complaints. Moreover, the Employee Mailbox is set to collect employees' suggestions for the expansion of communication channels.

The turnover rate statistics also included foreign employees' returning to their countries after contracts expired, and officially employed personnel's retirement at the age of 65 as regulated by the Labor Standards Act, or legally compliant voluntary resignation or retirement before scheduled timeframe. If a labor contract is terminated by the employer or the employee for any reason, the Company shall give an advance notice in accordance with relevant laws within the specified period.

## 1. 2022 New Employee Hiring Rate in Taiwan and Mainland China Plants

Plant		Plants in Taiwan		Elite Electronic Material (Kunshan)		Elite Electronic Material (Zhongshan)		Elite Electronic Material (Huangshi)	
End of the year	Number of employees	1,032		1,144		867		668	
	Number of employees under age of 18	0		0		0		0	
Number of new employees		299		219		122		226	
New Employee Hiring Rate		28.97%		19.1%		14.1%		33.78%	
Gender	Male	240	27.90%	192	20.98%	98	14.37%	183	33.39%
	Female	59	34.30%	27	11.79%	24	12.97%	43	35.53%
Age Structure	<30	96	51.89%	111	34.26%	58	26.98%	76	42.70%
	30~50	182	25.07%	107	13.18%	64	9.85%	149	30.47%
	>50	21	17.36%	1	12.50%	0	0.00%	1	50.00%

Note : New Employee Hiring Rate = Total number of new hires / Total number of employees of the year

Total number (percentage) of new hires = Total number of new employees / percentage of the current year's employees of the group

## 2. 2022 statistics of employees' turnover rate in Taiwan and Mainland China Plants

Plant		Plants in Taiwan		Elite Electronic Material (Kunshan)		Elite Electronic Material (Zhongshan)		Elite Electronic Material (Huangshi)	
Number of resigned employees		296		523		167		279	
Turnover Rate		28.68%		46.00%		19.00%		41.70%	
Gender	Male	229	26.63%	413	45.13%	131	19.20%	224	40.87%
	Female	67	38.95%	110	48.03%	36	19.46%	55	45.45%
Age Structure	<30	86	46.49%	261	80.56%	69	32.09%	107	60.11%
	30~50	195	26.86%	262	32.27%	98	15.08%	172	35.17%
	>50	15	12.40%	0	0.00%	0	0.00%	0	0.00%

Note: Turnover Rate = Number of resigned employees / Total number of employees of the year  
 Total number (percentage) of resigned employees = Number of resigned employees / percentage of the current year's employees of the group

## ◆ 6.2 Employee Benefits and Remuneration

### ► 6.2.1 Employee Benefits GRI 401-2

In order to become an excellent and sustainable enterprise, EMC upholds the people-oriented principle and is committed to providing employees with a remuneration system that is superior to that of peers. The company strives to improve employee benefits, cares about employees' physical and mental health and quality of life, and aims to create a friendly work environment that demonstrates gender equality, multicultural integration and multi-generational composition. The company develops various systems for employees' safety and provides employees with retirement benefits (labor pension) and labor insurance & health insurance as well as complete educational training and incentive compensation in accordance with the laws. The relevant remuneration policies are as follows :

- Employees' remuneration and year-end bonus are given based on the achievement rate of annual business goals
- Management bonuses are offered for management cadres based on the achievement rate of annual business goals and employees' performance achievements.
- Monthly performance bonus is given based on performance achievements.
- A retirement system is implemented in accordance with the Labor Standards Act.
- Provide labor insurance, national health insurance and employee group insurance (term insurance, accident insurance and medical & occupational accident insurance)
- Conduct regular health checks for employees
- Provide various employee training courses and hold reading workshops on a regular basis
- Offer healthy, nutritious and delicious free meals for lunch and dinner
- Free employee uniforms
- Provide parking for motorbikes (free) and parking for cars
- Provide dormitories
- Year-end banquets
- Assistive living supplies had been distributed on a quarterly basis during the COVID-19 pandemic period .

### ► 6.2.2 Employee Remuneration GRI 202-1, GRI 405-2 and GRI 2-21

The employee salary standards are formulated by human resource departments based on market salary, the company's financial status and organizational structure. The overall remuneration is determined according to employees' individual professional skills, job responsibilities, work performances and achievement status of the company's operating goals. The salaries of new employees will not differ on account of gender, race, political affiliation, ideology, religious beliefs, gender identity or marital status. The starting salary is higher than the basic salary regulated by the government. The core principle for salary calculation lies in a comprehensive consideration of employees' expertise and the positions being held.

Statistics of new hires' salaries by gender (Unit for disclosure: NT\$ hundreds)

Gender	Base-level employees' basic salary	
	Male	Female
Average starting salary (NT\$) / per month	32,077	33,945
Gender's salary ratio	1:1.06	
Ratio of the Company's entry level salary to the basic minimum wage (%)	121.5%	128.6%

Note 1: The ratio of the entry level salary to the basic minimum wage has been calculated by comparing the 2022 basic minimum wage NT\$ 26,400 announced by the Ministry of Labor with the Company's entry level salary.

Note 2: The statistics only covered plants in Taiwan, not including expatriate employees.

Note 3: Scope of entry level personnel: Including foreign workers, but not including supervisor positions of deputy supervisor and above.

Note 4: Including regular wages, but not including overtime pay.

Note 5: The ratio of EMC's highest personal annual total remuneration to the median of the organization's other employees' annual total remuneration was 21:1. The ratio of EMC's highest personal annual total remuneration to the average of the organization's other employees' annual total remuneration was 15:1. In addition, the ratio of the increased percentage of the highest personal annual total remuneration during 2021 ~ 2022 to the increased percentage of the median of the organization's other employees' annual total remuneration (not including the individual with the highest remuneration) was 10.2:1.

### ► 6.2.3 Unpaid Paternity Leave GRI 401-3

(Statistics of plants in Taiwan only)

	2022 EMC (Guanyin Plant)			2022 EMC (Hsinchu Plant)		
	Male	Female	Total	Male	Female	Total
Number of employees eligible for unpaid paternity leave in 2022	39	6	45	8	5	13
Number of employees who applied for unpaid paternity leave in 2022	2	0	2	2	1	3
Number of employees supposed to resume work in 2022 (A)	3	1	4	1	1	2
Number of employees who resumed work in 2022 (B)	3	1	4	0	1	1
Work resumption rate (B/A)	100%	100%	100%	0	100%	50%
Number of employees who resumed work in 2021 after unpaid paternity leave (C)	1	2	3	0	1	1
Number of employees who resumed work in 2021 after unpaid paternity leave and had been working for one year in 2022 after work resumption (D)	1	2	3	0	1	1
Retention rate (D/C)	100%	100%	100%	0	100%	100%

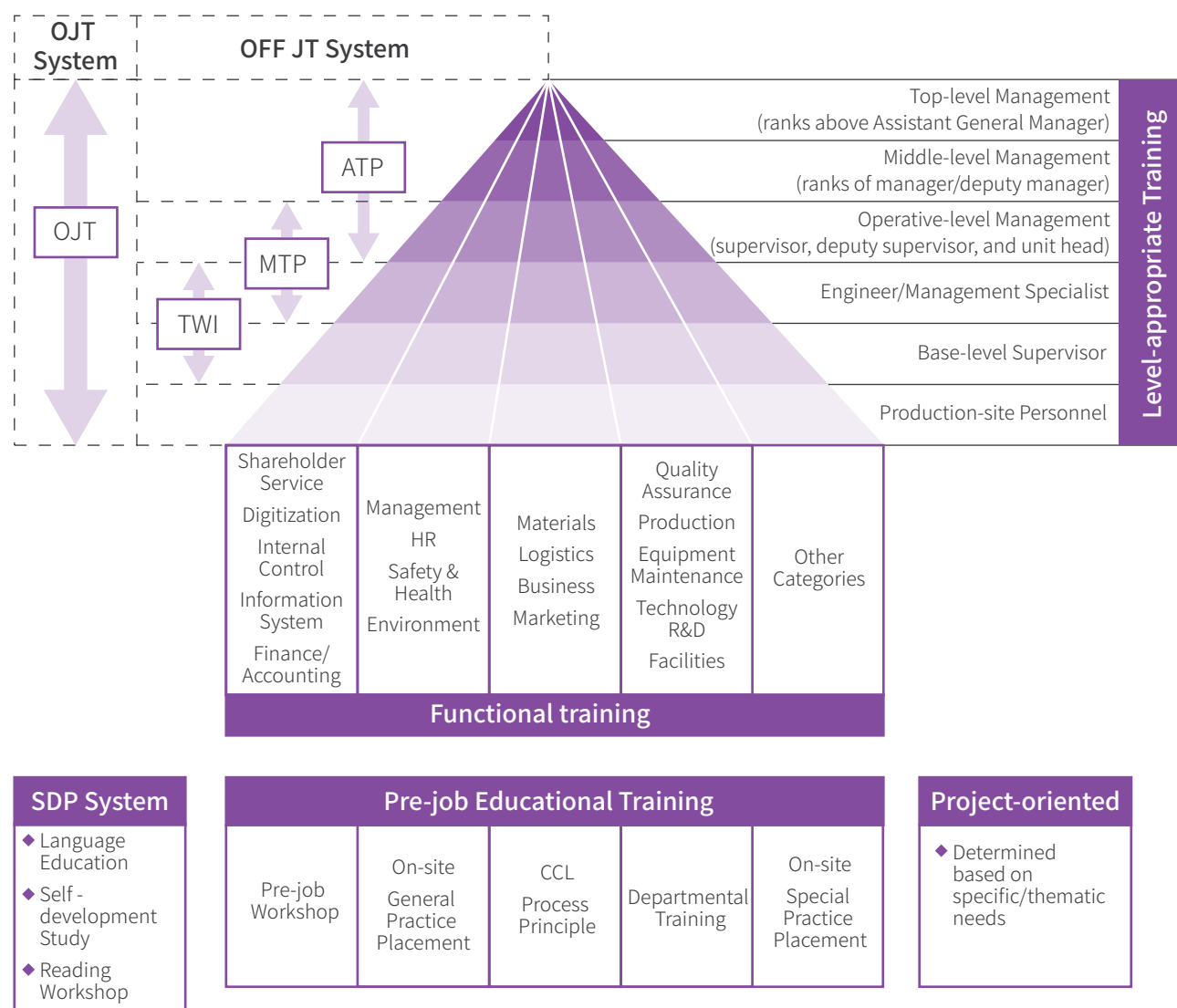
Note 1: The workforce statistics shown in this report only demonstrated data gathered from Taiwan area (including foreign workers).

Note 2: Employees taking unpaid leave are not included in turnover rate calculation.

### 6.3 Human Resource and Talent Development

#### 6.3.1 Employees' Further Education and Training GRI 404-1

EMC has formulated "Educational Training Operating Procedures" as guidelines and basis for the implementation of employees' educational training, which aim at enriching employees' knowledge and skills through educational training so as to improve work efficiency and quality. Besides, human resources are effectively utilized and explored to facilitate the integration of employee growth and corporate development goals. The company invests sufficient resources in different stages of employee training starting from the training for new employees and then various training programs such as on-the-job training and self-study programs, etc. for the achievement of best effectiveness. The "Directions for Employee Training Subsidies" are also stipulated to encourage employees to continuously improve themselves and keep progressing.



1. Statistics of 2020 ~ 2022 educational training hours in EMC's Taiwan plants (listed by position categories : managerial position and non-managerial position) Unit : hours

Year	2020			2021			2022		
Gender	Male	Female	Total	Male	Female	Total	Male	Female	Total
Managerial position	338.3	162.5	500.8	410	63	473	223.2	96.6	319.8
Average hours	2.42	9.56	3.19	5.13	9	5.44	2.69	10.73	3.48
Non-managerial position	15,108.7	2,910.3	18,019	14,634.7	2,970.8	17,605.4	12809.8	1886.2	14696
Average hours	24.17	20.5	23.49	18.86	17.27	18.57	16.49	11.57	15.63
Total	15,447.1	3,072.75	18,519.8	15,044.7	3,033.75	18,078.4	13033	1982.7	15015.7
Total average hours	20.19	19.33	19.98	17.58	16.95	17.47	15.15	11.53	14.55

2. Statistics of 2022 educational training hours in EMC's Taiwan plants (listed by training course categories) Unit: hours

Year	2020			2021			2022		
Gender	Male	Female	Total	Male	Female	Total	Male	Female	Total
Operational management	361.4	395.2	756.6	430.3	326.1	756.4	435.7	237.2	672.9
Marketing and R&D	1572.5	324.5	1897	1546.6	323.4	1870	1365.6	215.3	1581
Production & manufacturing	13513.1	2353.1	15866.2	13067.8	2384.2	15452	11231.7	1530.1	12761.9
Total	15,447.1	3,072.75	18,519.8	15,044.7	3,033.75	18,078.4	13033	1982.7	15015.7
Total average hours	20.19	19.33	19.98	17.58	16.95	17.47	15.15	11.53	14.55



Team Consensus Build-up Course



3. Statistics of 2022 educational training hours in EMC's Mainland China plants (listed by position categories: managerial position and non-managerial position) Unit: hours

Year	Elite Electronic Material (Kunshan)			Elite Electronic Material (Zhongshan)			Elite Electronic Material (Huangshi)		
Gender	Male	Female	Total	Male	Female	Total	Male	Female	Total
Operational management	29.7	6.8	36.5	43.0	3.5	46.5	53.5	0	0
Marketing and R&D	1.0	1.7	1.1	6.1	3.5	9.6	7.6	0	7.6
Production & manufacturing	143,588.0	19,452.0	163,040.0	25,454.0	5,361.0	30,815.0	34,180.5	6,327.0	40,507.5
Average hours	162.2	86.5	146.9	38.0	29.3	67.3	63.2	52.3	61.2
Total	143,617.7	19,458.8	163,076.5	25,497.0	5,364.5	30,861.5	34,234.0	6,327.0	40,561.0
Total average hours	157.0	85.0	142.5	37.7	29.2	66.9	62.5	52.3	60.6

4. Statistics of 2022 educational training hours in EMC's Mainland China plants (listed by training course categories) Unit: hours

Year	Elite Electronic Material (Kunshan)			Elite Electronic Material (Zhongshan)			Elite Electronic Material (Huangshi)		
Gender	Male	Female	Total	Male	Female	Total	Male	Female	Total
Operational management	3,528.0	696.0	4,224.0	2,561.5	727.0	3,288.5	5,602.0	1,571.5	7,173.5
Marketing and R&D	34.0	10.0	44.0	171.0	54.0	225.0	54.0	108.5	162.5
Production & manufacturing	140,055.7	18,752.8	158,808.5	22,838.5	4,583.5	27,422.0	28,578.0	4,647.0	33,225.0
Total	143,617.7	19,458.8	163,076.5	25,497.0	5,364.5	30,861.5	34,234.0	6,327.0	40,561.0
Total average hours	157.0	85.0	142.5	37.7	29.2	66.9	62.5	52.3	60.6

Educational training for supervisors of Elite Electronic Material (Zhongshan)



Educational training for supervisors of Elite Electronic Material (Kunshan)





Educational training for supervisors of Elite Electronic Material (Huangshi)



## ► 6.3.2 Performance Management GRI 404-3

Performance appraisal is a step that helps an organization understand the progress and status of the implementation of scheduled programs through objective performance standards and fair appraisal procedures, which can be used as a reference for organizational human resource planning such as salary adjustment, change, promotion and other operations. Performance appraisal can also provide employees with developmental feedback information for employees to understand the relationship between performance goals and organizational development strategies, by which employees can be guided and assisted in realizing their potential through performance appraisal feedback and be encouraged improve and develop themselves.

Appraisal items and frequency are determined based on the targets being appraised, and the content of which is summarized in the table below :

Structure of Employee Appraisal	Items for Appraisal	Appraisal Timing
Direct Labor	Work performance, work attitude assessment, competence and motivation	Monthly
Indirect Labor		Quarterly
Managerial Leaders	Work performance evaluation and competence development evaluation	Yearly

Appraisals are carried out according to scheduled timings during employees' tenure. All employees have completed 100% of the appraisals.

## Retirement System

In order to encourage employees' professional commitment and assure employees of stable living after retirement, EMC has formulated "Directions for Employee Retirement" and allocates pensions for all employees in accordance with regulations. In addition, a "Pension Supervisory Committee" has been set by law to take the responsibility for the implementation of pension management and retirement measures under the old system. According to the old pension system, 2% of the monthly pay of employees with tenure acknowledged by the old pension system will be allocated to the old-system retirement pension account in Bank of Taiwan on a monthly basis. Actuaries are appointed and actuarial reports are submitted on a yearly basis to ensure that sufficient fund has been allocated to protect the rights and interests of employees. Furthermore, in accordance with the new labor retirement system, the company allocates 6% of employees' monthly pays every month to the individual retirement account according to the employee's pension level. In addition to the regular allocation made by the company, employees can also choose to deposit 6% or less of their pension fund in special accounts for tax exemption.

Employees who meet the statutory retirement conditions may apply for retirement. After the retirement procedures are completed, those with tenure acknowledged by the old pension system can receive their pensions from the old system, and the pensions deposited in the individual special accounts can also be withdrawn by law when employees reach the age of 60. One employee applied for retirement in 2022, for whom the pension funds under the old pension system had been settled and paid by law.

Mountaineering/hiking activity



Strategy Consensus Camp





2022 year-end banquet



## 6.4 Employee Communication and Care

### Labor-Management Meetings GRI 2-30

Since no labor union has been set in EMC's Taiwan plants, no collective bargaining agreement has been signed. EMC has formulated "Regulations for Implementing Labor-Management Meeting" in accordance with Article 83 of Labor Standards Act and relevant regulations announced by Ministry of the Interior, based on which labor-management meetings are held regularly by law for labor-management negotiation and discussion on labor-related issues. The labor-management meeting participants include the same number of representatives of both labor and management sides, basing on a principle of minimum of 5 and maximum of 15 representatives of each side. Labor representatives are directly elected by all workers and serve a 4-year term. The representatives may serve a following term if reelected. Labor-management meetings are held every three months. Currently there are 10 management representatives and 10 labor representatives of the two plants. All employees can make suggestions on company's issues through management/labor representatives. With the quarterly held labor-management meetings, labor representatives can clearly learn about the Company's recent important operational information, workforce status, and labor-related communication issues, through which the establishment of harmonious labor-management relations and the promotion of labor-management collaboration shall be facilitated. Labor Unions have been set in EMC's plants in Mainland China. No collective bargaining agreement has been signed. Committee representatives have been elected in accordance with China's "Regulations on Labor Union's Fundamental Organization Election Affairs" to facilitate communication through regularly-held internal meetings. The Labor Union status of the plants is listed in the table below :

Plant	Union status
EMC's Taiwan Plants	No labor union has been set for EMC, so no collective bargaining agreement has been signed. The communication is carried out in the form of Labor-Management Meeting (composed of ten management representatives and ten labor representatives)
Elite Electronic Material (Kunshan)	1. A Labor Union has been set. 2. Meetings are held on a monthly basis by all union members, through which the establishment of harmonious labor-management relations and the promotion of labor-management collaboration shall be facilitated. (Seven meeting representatives have been set)
Elite Electronic Material (Zhongshan)	1. Personnel of each location hold communication workshops on a quarterly basis, and create meeting minutes for subsequent tracking and improvement. 2. The communication workshops shall facilitate harmonious labor-management relations, through which the opinions, suggestions, complaints, etc. proposed by employees to the company can be immediately received and promptly handled.
Elite Electronic Material (Huangshi)	The first member representative's conference of Elite Electronic Material (Huangshi) Co., Ltd. was successfully held on March 17, 2022, with a total of 41 representatives attending the conference. Through the conference, the plant's first Labor Union Committee, Budget Review Committee, and Female Employee Committee had been formed.

Moreover, the company has formulated "Measures for Employee Mailbox Management", according to which "Employee Opinion Form" can be filled out and submitted in the following situations:

1. Employees would like to make suggestions on issues in relation to the company's management, benefits, work and environment, etc. or something about individual's life.
2. Employees would like to report illegal practices or complain about inequality in the workplace.
3. Employees' doubts or expectations fail to be dealt with or transferred to a higher level of management after the issues are fully described and communicated with their team leaders; or the issues that concern the employees are related to their team leaders.

The Employee Mailboxes are placed in the employee canteens of the company's plants, the keys of which are kept by the heads of human resource departments to collect the mails once a week. Employees can send mails to [hr-emc@mail.emctw.com](mailto:hr-emc@mail.emctw.com) as well. The company maintains confidentiality about the employees who submit their opinions, and promises that the employees will not suffer from any reprisal or unfair treatment on account of this. If a submitted opinion is helpful to the company, the submitter shall be rewarded after the submission is recognized, and the case shall be handled in a public or confidential manner depending on the nature of the case. Submitters shall be replied in writing or by other means within two weeks after the submissions are received. One complaint was received through official channels in 2022, which had been handled and the case had been closed.

# Appendix

- ▶ Appendix 1 GRI Content Index
- ▶ Appendix 2 SASB Index
- ▶ Appendix 3 Assurance of the Report / Assurance Statement

## Appendix 1 GRI Content Index

Statement of Use	EMC has followed the GRI Standards to report relevant content of the period from January 1, 2022 to December 31, 2022.
GRI Standards	GRI 1: Foundation 2021
Applicable GRI Sector Standards	N/A

GRI 2				
Indicator	Disclosure Requirement	Corresponding Report Section or Description	Description Omission	Page No.
<b>1. Organization and reporting</b>				
2-1	Organizational details	2.1 Company Overview		35
2-2	Entities included in the organization's sustainability reporting	About this Report		04
2-3	Reporting period, frequency and contact point	About this Report		04
2-4	Restatements of information	About this Report		04
2-5	External assurance for the report	About this Report / Appendix 3		04
<b>2. Activities and workers</b>				
2-6	Activities, value chain and other business relationships	3.2.2 Local Procurement Principle		72
2-7	Employees	6.1.1 Human Resource Structure		159
2-8	Workers who are not employees	5.1.2 Hazard identification, risk assessment and incident investigation		130
<b>3. Governance</b>				
2-9	Governance structure and composition	2.2.1 Corporate Organizational Structure		38
2-10	Nomination and selection of the highest governance body	2.2.2 Operation of Board of Directors		40
2-11	Chair of the highest governance body	2.2.2 Operation of Board of Directors		40
2-12	Role of the highest governance body in overseeing the management of impacts	2.2.2 Operation of Board of Directors		40
2-13	Delegation of responsibility for managing impacts	2.2.2 Operation of Board of Directors		40

GRI 2				
Indicator	Disclosure Requirement	Corresponding Report Section or Description	Description Omission	Page No.
<b>3. Governance</b>				
2-14	Role of the highest governance body in sustainability reporting	2.2.5 Corporate Social Responsibility Governance and CSR Committee		55
2-15	Conflicts of interest	2.4.1 Ethical Management		60
2-16	Communication of critical concerns	2.2.2 Operation of Board of Directors		40
2-17	Collective knowledge of the highest governance body	2.2.2 Operation of Board of Directors		40
2-18	Evaluation of the performance of the highest governance body	2.2.2 Operation of Board of Directors		40
2-19	Remuneration policies	2.2.4 Remuneration Committee		52
2-20	Process to determine remuneration	2.2.4 Remuneration Committee		52
2-21	Annual total compensation ratio	6.2.2 Employee Remuneration		163
<b>4. Strategy, policies and practices</b>				
2-22	Statement on sustainable development strategy	Message from the Chairman		06
2-23	Policy commitments	Message from the Chairman		06
2-24	Embedding policy commitments	2.4.1 Ethical Management		60
2-25	Processes to remediate negative impacts	2.4.1 Ethical Management		60
2-26	Mechanisms for seeking advice and raising concerns	2.4.1 Ethical Management		60
2-27	Compliance with laws and regulations	2.4 Implementation of Ethical Management, Anti-corruption and Legal Compliance		60
2-28	Membership of associations	1.2 Stakeholder communication		30
<b>5. Stakeholder engagement</b>				
2-29	Approach to stakeholder engagement	1. Material Issues and Stakeholder Engagement		20
2-30	Collective bargaining agreements	6.4 Employee Communication and Caring	No collective bargaining agreement has been signed	172



GRI 3 Material Topics 2021				
Indicator	Disclosure Requirement	Corresponding Report Section or Description	Description Omission	Page No.
3-1	Process to determine material topics	1.1 Material Issue Analysis		20
3-2	List of material topics			20
3-3	Management of material topics			20

GRI Content Index Disclosures	Chapter	Page No.
Specific Standard Disclosure 200/300/400		
GRI 200 Economic		
GRI 201 Economic Performance (2016)		
201-1 Direct economic value generated and distributed	2.3 Operational Performance	57
GRI 204 Procurement Practices (2016)		
204-1 Proportion of spending on local suppliers	3.2.2 Local Procurement Principle	72
GRI 205 Anti-corruption (2016)		
205-1 Operations assessed for risks related to corruption	2.4 Implementation of Ethical Management, Anti-corruption and Legal Compliance	60
205-2 Communication and training about anti-corruption policies		
205-3 Confirmed incidents of corruption and actions taken		
GRI 300 Environmental		
GRI 302 Energy (2016)		
302-1 Energy consumption within the organization	4.1 Energy Management	91
302-3 Energy intensity	4.1 Energy Management	91
GRI 305 Emissions (2016)		
305-1 Direct (Scope 1) GHG emissions	4.2.1 Greenhouse Gas Management	103
305-2 Energy indirect (Scope 2) GHG emissions		
305-4 GHG emissions intensity		
305-7 Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions	4.3.1 Air Pollution Control	113

GRI Content Index Disclosures		Chapter	Page No.
Specific Standard Disclosure 200/300/400			
GRI 300 Environmental			
GRI 306 Waste (2020)			
306-1 Waste generation and significant waste-related impacts	4.3.2 Waste Management		116
306-2 Management of significant waste-related impacts	4.3.2 Waste Management		116
306-3 Waste generated	4.3.2 Waste Management		116
306-4 Waste diverted from disposal	4.3.2 Waste Management		116
306-5 Waste directed to disposal	4.3.2 Waste Management		116
GRI 308 Supplier Environmental Assessment (2016)			
308-1 New suppliers that were screened using environmental criteria	3.2.4 Supplier Management Procedures		57
GRI 400 Social			
GRI 401 Employment (2016)			
401-1 New employees and resigned employees	6.1.2 New Employees and Employee Turnover Structure		161
401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	6.2.1 Employee Benefits		1162
401-3 Parental leave	6.2.3 Unpaid Paternity Leave		165
GRI 403 Occupational Safety and Health (2018)			
403-1 Occupational safety and health management system	5.1.1 Occupational safety and health management system		127
403-2 Hazard identification, risk assessment and incident investigation	5.1.2 Hazard identification, risk assessment and incident investigation		130
403-3 Occupational health services	5.2 Comprehensive Employee Health Management		152
403-4 Worker participation, consultation and communication on occupational safety and health	5.1.5 Worker Participation, Consultation and Communication		150
403-5 Worker training on occupational safety and health	5.1.3 Educational Training on Occupational Safety and Health		140
403-6 Promotion of worker health	5.2 Comprehensive Employee Health Management		152

GRI Content Index Disclosures	Chapter	Page No.
Specific Standard Disclosure 200/300/400		
GRI 400 Social		
GRI 403 Occupational Safety and Health (2018)		
403-7 Prevention and mitigation of occupational safety and health impacts directly linked by business relationships	5.1.4 Prevention and Mitigation of Occupational Safety and Health Impacts	148
403-8 Workers covered by an occupational health and safety management system	5.1.2 Hazard identification, risk assessment and incident investigation	130
403-9 Work-related injuries	5.1.2 Hazard identification, risk assessment and incident investigation	130
403-10 Work-related ill health	5.1.2 Hazard identification, risk assessment and incident investigation	130
GRI 404 Training and Education (2016)		
404-1 Average hours of training per year per employee	6.3.1 Employees' Further Education and Training	166
404-3 Percentage of employees receiving regular performance and career development reviews	6.3.2 Performance Management	170
GRI 405 Diversity and Equal Opportunity		
405-1 Diversity of governance bodies and employees	6.1.1 Human Resource Structure	159
405-2 Ratio of basic salary and remuneration of women to men	6.2.2 Employee Benefits	163
GRI 414 Supplier Social Assessment		
414-1 New suppliers that were screened using social criteria	3.2.4 Supplier Management Procedures	79
GRI 418 : Customer Privacy (2016)		
418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data	2.6 Information Security Management	67

TWSE's "Rules Governing the Preparation and Filing of Sustainability Reports by TWSE Listed Companies" (2022.09.22)					
Appendix 1-12 Metrics for Sustainability Disclosure — Electronic parts and components industry					
NO.	Metric for Disclosure	Category	2022 Disclosure	Unit	Page No.
1	Total energy consumption, percentage of grid electricity, and renewable energy usage rate	Quantitative	4.1 Energy Management	GJ and %	148
2	Total water withdrawal and total water consumption	Quantitative	4.1.5 Water Management	m <sup>3</sup>	101
3	The weight of hazardous waste from manufacturing, and the recycling percentage	Quantitative	4.3.2 Waste Management	Metric ton (t) %	116
4	Explain the occupational accident categories, number of people being affected, and relevant	Quantitative	5.1 Occupational Safety and Health Management	%, Quantity	127
5	Disclosure of product life cycle management: Including weight of scrap products and e-waste, and	Quantitative	4.3.2 Waste Management	Metric ton (t) %	116
6	Description of the risk management associated with the use of critical materials	Qualitative description	3.1 The Use of Green Materials	N/A	76
7	Total amount of monetary losses as a result of legal proceedings associated with anticompetitive	Quantitative	N/A	Report currency	
8	Production volume of the main product under the company's product category	Quantitative	2.1 Company Overview	Varies by product type	35

TWSE's "Rules Governing the Preparation and Filing of Sustainability Reports by TWSE Listed Companies" (2022.09.22)	
Appendix 2 The risks and opportunities that climate change poses to the company and the related countermeasures taken by the company.	
Item	Implementation Status
1 Describe the Board's and the Management's supervision and governance for climate-related risks and opportunities.	4.2.2 Risks and Opportunities of Climate Change
2 Describe how the identified climate risks and opportunities affect the company's business, strategy and finance (short-, medium- and long-term).	4.2.2 Risks and Opportunities of Climate Change
3 Describe the financial impact of extreme climate events and transformation actions.	4.2.2 Risks and Opportunities of Climate Change
4 Describe how to incorporate climate risk identification, assessment and management procedures into overall risk management systems.	4.2.2 Risks and Opportunities of Climate Change
5 If scenario analysis is used to assess the resilience to climate change risks, the scenarios, parameters, assumptions, analysis factors and major financial impacts being used	Scenario analysis not used
6 If there is a transition plan for managing climate-related risks, describe the content of the plan, and the indicators and goals adopted to identify and manage physical risks	Transition plan not developed yet
7 If internal carbon pricing is used as a planning tool, the basis for price-setting should be stated.	Internal carbon pricing not used
8 If climate-related goals are set, information such as the activities covered, GHG emission scope, planned schedule, annual progress, etc. should be explained. If carbon offsets or renewable energy certificates (RECs) are used to achieve relevant goals, the source and quantity of carbon credits used for offset or the number of renewable energy certificates (RECs) should be stated.	4.2.1 Greenhouse Gas Management
9 GHG inventory and verification (separately indicated in 1-1).	4.2.1 Greenhouse Gas Management

Appendix 2 SASB Index (Industrial Machinery & Goods)

Code	Index Description	Measurement Unit	Chapter & Description
1. Energy Management			
RT-IG-130a.1	Total energy consumed, percentage of grid electricity, and percentage of renewable energy	GJ, % (Quantitative)	Total energy consumed: 117,539,775.43 GJ/year Percentage of grid (purchased) electricity : 100% Percentage of renewable energy : 0%
2. Employee Health & Safety			
RT-IG-320a.1	Total Recordable Incident Rate (TRIR), Fatality Rate and near miss frequency rate (NMFR)	Rate (Quantitative)	EMC's 2022 statistics of employees' work-related injuries in Taiwan and Mainland China plants are listed in 5.1.2 Hazard identification, Risk Assessment and Incident Investigation.
3. Fuel Economy & Emissions in Use-phase			
RT-IG-410a.1	Sales-weighted fleet fuel efficiency for medium- and heavy-duty vehicles	Gallons per 1,000 ton-miles (Quantitative)	N/A
RT-IG-410a.2	Sales-weighted fuel efficiency for non-road equipment	Gallons per hour (Quantitative)	N/A
RT-IG-410a.3	Sales-weighted fuel efficiency for stationary generators	Watts per gallon (Quantitative)	N/A
RT-IG-410a.4	Sales-weighted emissions of: (1) nitrogen oxides (NOx) and (2) particulate matter (PM) for: (a) marine diesel engines, (b) locomotive diesel engines, (c) on-road medium- and heavy-duty engines, and (d) other non-road diesel engines	Grams per KWh (Quantitative)	N/A

Code	Index Description	Measurement Unit	Chapter & Description
4. Materials Sourcing			
RT-IG-440a.1	Description of the management of risks associated with the use of critical materials	Discussion and analysis	EMC has required all major raw material suppliers to sign and return the "Conflict-free Metals Declaration", declaring and guaranteeing that none of the metals including gold (Au), tantalum (Ta), tungsten (W), cobalt, tin (Sn) or palladium are obtained through armed forces (militia groups) or illegal groups, or from mining areas in conflict sites of the Democratic Republic of the Congo, or through illegal smuggling. Metals exported from the following countries (i.e., "Conflict Areas") do not comply with the "Conflict-Free Specifications": Democratic Republic of the Congo, Rwanda, Uganda, Burundi, Tanzania, and Kenya. For detailed management procedures, please see 3.2.4 Suppliers Management Procedures.
3. Fuel Economy & Emissions in Use-phase			
RT-IG-440b.1	Revenue from remanufactured products and remanufacturing services	Reporting currency (Quantitative)	N/A

Activity Metrics

Code	Activity Metric	Chapter & Description		
RT-IG-000.A	Number of units produced by product category	EMC's major products include CCL, prepregs, multi-layer laminate, etc. The production volume and value are listed in the table below:		
		Major Products	Unit	Quantity
		CCL	Thousand sheets (SHT)	34,487
		Prepreg	Thousand meters (MTR)	108,678
		Multi-layer laminate	Thousand SF (S.F.)	3,358
RT-IG-000.B	Number of employees	The total number of employees is 3,712, including 3,005 male employees (accounting for 80.95% of the total number of employees), and 707 female		

Appendix 2 SASB Index (Hardware)

Code	Index Description	Chapter & Description
1. Product Security		
TC-HW-230a.1	Description of approach to identifying and addressing data security risks in products.	EMC has formulated its "Directions for Information Security Management" based on the three principles for information security management, which are "confidentiality, integrity, and availability". The information security management aims to provide an information environment for EMC Group's overall business to operate without interruption, and to establish relevant management systems and standard procedures. For details, please see 2.6 Information Security Management.
2. Employee Diversity &Inclusion		
TC-HW-330a.1	Percentage of gender and racial/ethnic group representation for (1) management, (2) technical staff, and (3) all other employees	As of the end of 2022, the total number of EMC's employees is 3,712, including 3,005 male employees (accounting for 80.95% of the total number of employees), and 707 female employees (accounting for 19.05% of the total number of employees). For details, please refer to 6.1.1 Human Resource Structure.



Code	Index Description	Chapter & Description
3. Product Lifecycle Management		
TC-HW-410a.1	Percentage of products by revenue that contain IEC 62474 declarable substances	In response to relevant domestic/international laws and regulations on environmental protection and prohibited substances, we keep updating EMC's "Hazardous Substance Management Procedures" on a regular basis, and comply with the requirements listed in the IEC 62474 Declarable Substance List (DSL). The revenue percentage of products with IEC 62474 declarable substances is 0 %.
TC-HW-410a.2	Percentage of eligible products, by revenue, meeting the requirements for EPEAT registration or equivalent	Since EMC's main products are not end products, the EPEAT Label aimed for end electronics/electrical products certification cannot be obtained.
TC-HW-410a.3	Percentage of eligible products, by revenue, meeting ENERGY STAR® criteria	Since EMC's main products are not end products, the ENERGY STAR® Label aimed for end electronics/electrical products certification cannot be obtained.
TC-HW-410a.4	Weight of end-of-life products and e-waste recovered, percentage recycled	No e-waste generated in end-of-life products
4. Supply Chain Management		
TC-HW 430a.1	Percentage of Tier 1 supplier facilities audited in the RBA Validated Audit Process (VAP) or equivalent, by (a) all facilities and (b) high-risk facilities	Currently EMC has not required suppliers to obtain the RBA certification, but has formulated "Suppliers Management Procedures" by consulting relevant standards set by the Responsible Business Alliance (RBA) and other international regulations, based on which suppliers shall be assessed/evaluated and audited.
TC-HW 430a.2	Tier 1 suppliers' (1) non-conformance rate with the RBA Validated Audit Process (VAP) or equivalent, and (2) associated corrective action rate for (a) priority non-conformances and (b) other non-conformances	Currently EMC has not required suppliers to obtain the RBA certification, but has formulated "Suppliers Management Procedures" by consulting relevant standards set by the Responsible Business Alliance (RBA) and other international regulations, based on which suppliers shall be assessed/evaluated and audited.
5. Materials Sourcing		
TC-HW 440a.1	Description of the management of risks associated with the use of critical materials	EMC has defined gold (Au), tantalum (Ta), tungsten (W), cobalt, tin (Sn), palladium and their derivatives as critical materials. For details on the management and performance of conflict minerals, please see 3.2 Supply Chain Management. All major raw material suppliers have been required to sign and return the "Conflict-free Metals Declaration", declaring and guaranteeing that none of the metals that they use are obtained through armed forces (militia groups) or illegal groups. For details on the management and performance of conflict minerals, please see 3.2.4 Suppliers Management Procedures.

Activity Metrics

Code	Activity Metric	Chapter & Description		
TC-HW-000.A	Number of units produced by product category	EMC's major products include CCL, prepregs, multi-layer laminate, etc. The production volume and value are listed in the table below:		
		Major Products	Unit	Quantity
		CCL	Thousandsheets (SHT)	34,487
		Prepreg	Thousand meters (MTR)	108,678
		Multi-layer laminate	Thousand SF (S.F.)	3,358
TC-HW-000.B	Area of manufacturing facilities (square feet)	<div>1. Elite Material Co., Ltd.- Guanyin Plant (including No. 18, Datong 1st Road, Guanyin District, Taoyuan City (plant area: 164,445.08 square feet) and No. 10 Yuanyuan Street, Guanyin District, Taoyuan City (Plant 1 and Plant 3) (plant area: 53,315.8 square feet) as well as No. 3, Jingjian 2nd Road, Shulin Village, Guanyin District, Taoyuan City (Plant 2) (plant area: 36,347.28 square feet)</div> <div>2. Elite Material Co., Ltd. - Hsinchu Plant (plant area: 149,069.04 square feet) (No. 14, Wenhua Road, Hukou Township, Hsinchu County)</div> <div>3. Elite Electronic Material (Kunshan) Co., Ltd. (plant area:1,183,183.59 square feet)</div> <div>4. Elite Electronic Material (Zhongshan) Co., Ltd. (plant area: 433,161.02 square feet)</div> <div>5. Elite Electronic Material (Huangshi) Co., Ltd. (plant area: 545,153.25 square feet)</div> <div>6. Arlon EMD in California, USA (plant area: 76,396 square feet)</div> <div>Total plant area: 2,641,071.06 square feet</div>		
TC-HW-000.C	Percentage of production from owned facilities	All products (100 %) are produced/manufactured at EMC's own premises.		





## INDEPENDENT ASSURANCE OPINION STATEMENT

### Elite Material Co., Ltd. 2022 Sustainability Report

The British Standards Institution is independent to Elite Material Co., Ltd. (hereafter referred to as EMC in this statement) and has no financial interest in the operation of EMC other than for the assessment and verification of the sustainability statements contained in this report.

This independent assurance opinion statement has been prepared for the stakeholders of EMC only for the purposes of assuring its statements relating to its sustainability report, more particularly described in the Scope below. It was not prepared for any other purpose. The British Standards Institution will not, in providing this independent assurance opinion statement, accept or assume responsibility (legal or otherwise) or accept liability for or in connection with any other purpose for which it may be used, or to any person by whom the independent assurance opinion statement may be read.

This independent assurance opinion statement is prepared on the basis of review by the British Standards Institution of information presented to it by EMC. The review does not extend beyond such information and is solely based on it. In performing such review, the British Standards Institution has assumed that all such information is complete and accurate.

Any queries that may arise by virtue of this independent assurance opinion statement or matters relating to it should be addressed to EMC only.

#### Scope

The scope of engagement agreed upon with EMC includes the followings:

1. The assurance scope is consistent with the description of Elite Material Co., Ltd. 2022 Sustainability Report.
2. The evaluation of the nature and extent of the EMC's adherence to AA1000 AccountAbility Principles (2018) and assessment of sustainability disclosure to be in conformance with the applicable SASB industry standard(s) in this report as conducted in accordance with type 1 of AA1000AS v3 sustainability assurance engagement and therefore, the information/data disclosed in the report is not verified through the verification process.
3. The assessment of disclosure to be in conformance with the applicable SASB industry standard(s) in this report as conducted in accordance with type 1 of AA1000AS v3 sustainability assurance engagement.

This statement was prepared in English and translated into Chinese for reference only.

#### Opinion Statement

We conclude that the Elite Material Co., Ltd. 2022 Sustainability Report provides a fair view of the EMC sustainability programmes and performances during 2022. The sustainability report subject to assurance is free from material misstatement based upon testing within the limitations of the scope of the assurance, the information and data provided by the EMC and the sample taken. We believe that the performance information of Environment, Social and Governance (ESG) are fairly represented. The sustainability performance information disclosed in the report demonstrate EMC's efforts recognized by its stakeholders.

Our work was carried out by a team of sustainability report assurers in accordance with the AA1000AS v3. We planned and performed this part of our work to obtain the necessary information and explanations we considered to provide sufficient evidence that EMC's description of their approach to AA1000AS v3 and their self-declaration in accordance with GRI Standards were fairly stated.

#### Methodology

Our work was designed to gather evidence on which to base our conclusion. We undertook the following activities:

- a review of issues raised by external parties that could be relevant to EMC's policies to provide a check on the appropriateness of statements made in the report.
- discussion with managers on approach to stakeholder engagement. However, we had no direct contact with external stakeholders.
- 7 interviews with staffs involved in sustainability management, report preparation and provision of report information were carried out.
- review of key organizational developments.
- review of the findings of internal audits.
- review of supporting evidence for claims made in the reports.
- an assessment of the organization's reporting and management processes concerning this reporting against the principles of Inclusivity, Materiality, Responsiveness and Impact as described in the AA1000AP (2018).
- an assessment of the organization's use of metrics or targets of SASB Standard(s) to assess and manage topic-related risks and opportunities.

#### Conclusions

A detailed review against the Inclusivity, Materiality, Responsiveness and Impact of AA1000AP (2018), GRI Standards and SASB Standard(s) is set out below:

#### Inclusivity

This report has reflected a fact that EMC has continually sought the engagement of its stakeholders and established material sustainability topics, as the participation of stakeholders has been conducted in developing and achieving an accountable and strategic response to sustainability. There are fair reporting and disclosures for the information of Environment, Social and Governance (ESG) in this report, so that appropriate planning and target-setting can be supported. In our professional opinion the report covers the EMC's inclusivity issues.

#### Materiality

EMC publishes material topics that will substantively influence and impact the assessments, decisions, actions and performance of Abbreviation and its stakeholders. The sustainability information disclosed enables its stakeholders to make informed judgements about the EMC's management and performance. In our professional opinion the report covers the EMC's material issues.

#### Responsiveness

EMC has implemented the practice to respond to the expectations and perceptions of its stakeholders. An Ethical Policy for EMC is developed and continually provides the opportunity to further enhance EMC's responsiveness to stakeholder concerns. Topics that stakeholder concern about have been responded timely. In our professional opinion the report covers the EMC's responsiveness issues.

#### Impact

EMC has identified and fairly represented impacts that were measured and disclosed in probably balanced and effective way. EMC has established processes to monitor, measure, evaluate and manage impacts that lead to more effective decision-making and results-based management within the organization. In our professional opinion the report covers the EMC's impact issues.

#### GRI Sustainability Reporting Standards (GRI Standards)

EMC provided us with their self-declaration of in accordance with GRI Standards 2021 (For each material topic covered in the applicable GRI Sector Standard and relevant GRI Topic Standard, comply with all reporting requirements for disclosures). Based on our review, we confirm that sustainable development disclosures with reference to GRI Standards' disclosures are reported, partially reported or omitted. In our professional opinion the self-declaration covers the EMC's sustainability topics.

#### SASB Standards

EMC provided us with their self-declaration of in accordance with SASB Standard(s) (INDUSTRIAL MACHINERY & GOODS Sustainability Accounting Standard). Based on our review, we confirm that the sustainability disclosure topics & accounting metrics of SASB Standard(s) (INDUSTRIAL MACHINERY & GOODS Sustainability Accounting Standard) are reported, partially reported or omitted. In our professional opinion the self-declaration covers disclosure topics, associated accounting metrics and activity metrics for applicable SASB industry standard(s).

#### Assurance level

The moderate level assurance provided is in accordance with AA1000AS v3 in our review, as defined by the scope and methodology described in this statement.

The moderate level assurance provided is in accordance with AA1000AS v3 in our review of SASB Standard(s).

#### Responsibility

The sustainability report is the responsibility of the EMC's chairman as declared in his responsibility letter. Our responsibility is to provide an independent assurance opinion statement to stakeholders giving our professional opinion based on the scope and methodology described.

#### Competency and Independence

The assurance team was composed of Lead auditors experienced in relevant sectors, and trained in a range of sustainability, environmental and social standards including AA1000AS, ISO 14001, ISO 45001, ISO 14064 and ISO 9001. BSI is a leading global standards and assessment body founded in 1901. The assurance is carried out in line with the BSI Fair Trading Code of Practice.

For and on behalf of BSI:



*Peter Pu*

Peter Pu, Managing Director BSI Taiwan

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