



泰鼎國際股份有限公司
APEX INTERNATIONAL CO., LTD

2022
ESG REPORT



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TWSE 4927

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1. Introduction

1.1 About This Report¹

Reporting Period

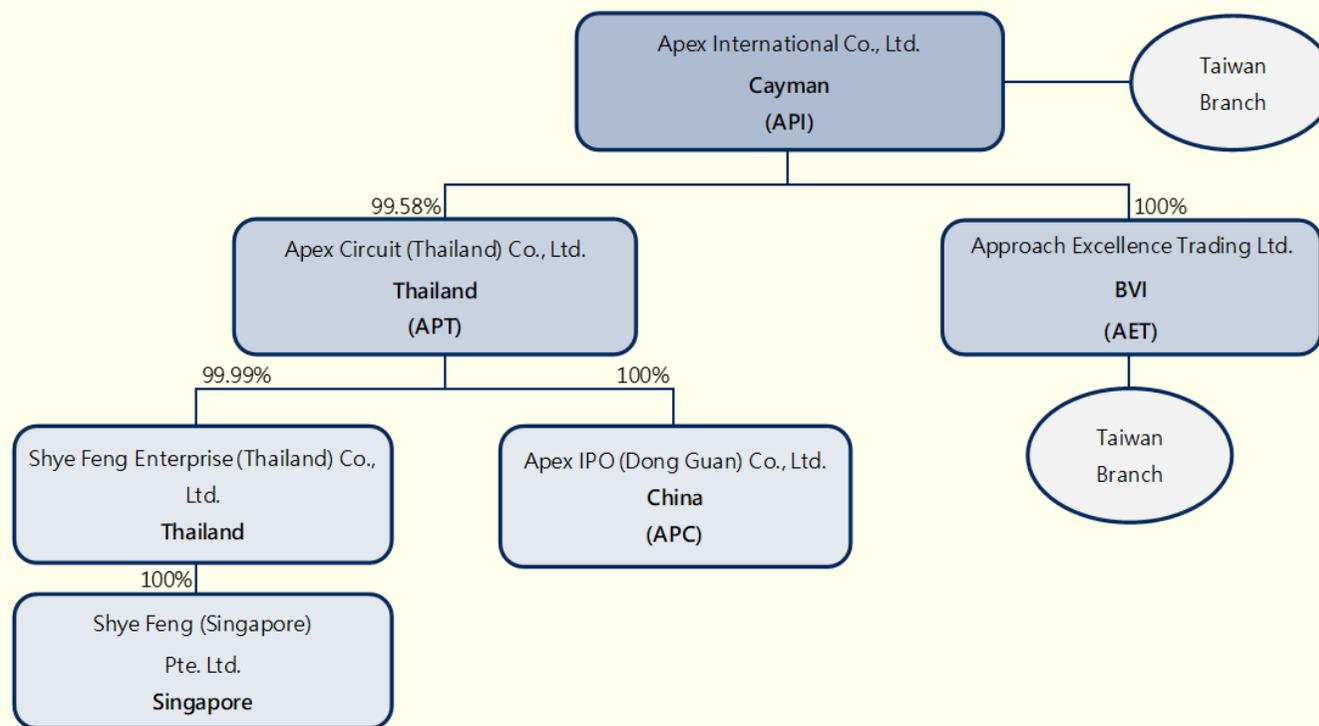
Apex International Co., Ltd. (hereinafter referred to as "Apex") has been publishing its seventh Environmental, Social and Governance (ESG) Report from 2016 to 2023, which will be published annually in both Chinese and English versions. The report will be disclosed on the company's official website. The previous edition was published in June 2022, and the next report for 2023 is scheduled to be published in June 2024. The data and content disclosed in this report primarily cover the year 2022 (from January 1, 2022, to December 31, 2022). For the sake of information completeness and comparability, certain performance data will be traced back to the year 2020 (from January 1, 2020, to December 31, 2020).

Reporting Scope and Boundary

The boundaries and scope of this report include Apex International Co., Ltd. and its subsidiaries, comprising a total of six operational locations. The operational regions encompass Taiwan, Thailand, mainland China, and Singapore. In 2022, the company's consolidated paid-in capital amounted to 1.899 billion NT dollars, and as of December 31, 2022, the company employed 7,417 individuals. During the reporting period, there were no significant changes, such as mergers or business transformations.

The information and statistical data presented in this report are derived from self-gathered statistics and surveys. The performance data in this report are compiled by relevant departments through the aggregation of operational management data, educational training, issue discussions, and unit interviews in accordance with the guidelines and indicators of the Global Reporting Initiative (GRI). The report adopts commonly used numerical descriptions to present the boundary selection principles, taking into account the nature of the business, industry relevance, and control.

Regarding financial data, it is obtained from the audited consolidated financial statements of Apex by KPMG, a joint accounting firm. The consolidated financial statements encompass six companies. The environmental and social data also correspond to the same consolidated financial statements and cover a total of six companies. Please refer to the diagram below or consult the 2022 consolidated financial report for more details.



¹ Based on the regulation of industry type and paid-in capital announced by Taiwan Stock Exchange Corporation (TWSE), Apex does not need to prepare ESG report, such report is voluntarily prepared by Apex.

Report Writing Guidelines

This report follows the Global Reporting Initiative (GRI) standards, using the Core option for disclosure principles. It also references the Task Force on Climate-Related Financial Disclosures (TCFD) framework established by the Financial Stability Board (FSB), as well as the Sustainability Accounting Standards Board (SASB) guidelines, as reporting principles.

Assurance Statement

This report has been subject to a limited assurance engagement by Crowe by the Accounting Research and Development Foundation in Taiwan. The engagement is based on the International Standard on Assurance Engagements 3000 (Revised): Assurance Engagement Other than Auditing and Reviews of Historical Financial Information. The scope of assurance covers specific disclosures in the report and is indicated in the accountant's limited assurance report, which is included in the report.

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Sustainable Development Committee

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1.2 Letter from The Sustainable Development Committee Chairperson

Industry and lifestyle are constantly changing, and change is sought for long-term development. What remains unchanged is that Apex always believes that in addition to focusing on its core business and pursuing revenue and shareholder returns maximization, companies must also consider their impact on the environment and social responsibility and become a force in society's positive cycle.

ESG importance has become a global consensus, and Apex is committed to bringing positive impacts to society. Since 2015, Apex has based its operations on sustainable management and formulated a sustainable management policy, which incorporates three major goals: "Corporate Governance," "Sustainable Environment," and "Social Welfare" into daily operations. To understand the major issues of concern to stakeholders, information is collected through internal units, strategies are developed, specific actions are taken, and information disclosure on sustainable management is strengthened.

Facing global climate change and responding to international trends, the company has launched the "Apex GREEN Project" to strengthen ESG development through the three main pillars of "renewable energy," "wastewater recycling," and "improving energy efficiency." The "renewable energy" development began in December 2021 and aims to increase the company's renewable energy substitution rate through the "Apex Solar Energy Program" to meet future factory electricity demand. "Wastewater recycling" introduces a new generation of wastewater treatment and recycling systems through the "Apex Wastewater Recycling Project" to increase the proportion of wastewater recycling. The GREEN Project is not only being constructed within the company's scope, but Apex is also taking resources to remote areas in northern Thailand to help local rural areas install solar panels and improve their water supply systems. Apex adheres to the business philosophy of putting people first and deeply cultivates Thailand. This project not only unilaterally brings clean energy and sustainable concepts to remote areas in northern Thailand but also reinforces the centripetal force of the Apex family by giving back to employees' hometowns, rooting deeply in local communities in Thailand, and establishing a mutually beneficial relationship with society.

Social engagement and employee welfare are two major areas on which Apex places great emphasis. Apex International is like a big family, and employees are our greatest asset. Therefore, the physical and mental well-being of employees and the workplace

environment are highly valued. In addition to ensuring the safety and hygiene of the work environment through various inspections and certifications, Apex also provides a large number of job opportunities and offers highly competitive salaries, diverse training courses, and various work-life balance measures to provide employees with a better present and a promising future.

In terms of corporate governance, Apex has been ranked among the top 6% to 20% of listed companies in corporate governance evaluations for eight consecutive years, and we are constantly striving for progress. We actively promote business integrity and management execution and fulfil our responsibilities through the operation of functional committees, ensuring that the company's operations comply with relevant laws and regulations and arranging relevant courses to ensure that directors, managers, internal personnel, and employees understand business integrity. More than one-third of the board of directors are independent directors, and in 2022, a female director was added to the board. All directors are outstanding figures in their respective fields, demonstrating the diversity of the Apex board of directors and leading Apex's sustainable business development together.

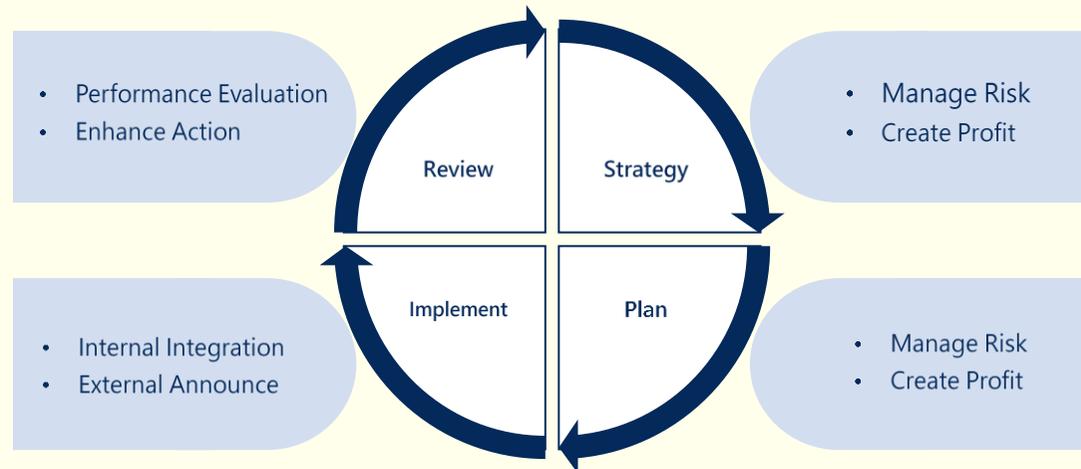
In 2023, Apex will continue to take the firmest steps towards sustainable development and strive to fulfil our responsibilities for sustainability.



1.3 Promoting and Managing Sustainability

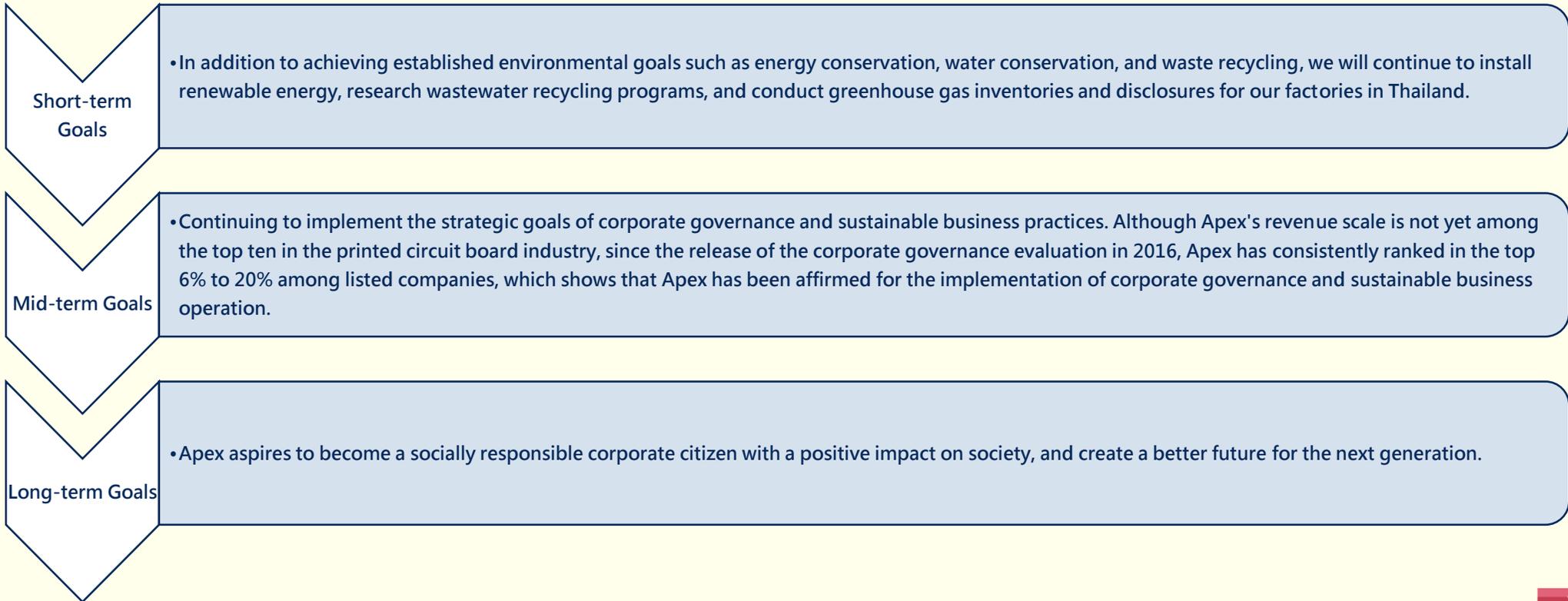


Sustainable Development Management Process



Strategic Objectives

Corporate sustainable development covers three major categories: economic, social, and environmental. In an era of drastic global economic and environmental changes, fulfilling the responsibilities of sustainable development helps accumulate operational expertise, effectively manage and mitigate risks, and share sustainable values with stakeholders.



1.4 Sustainability Performance

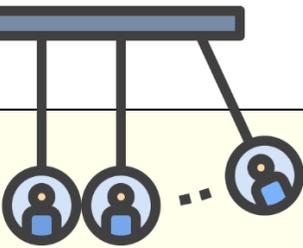
Environmental		
<p>GHG Management GHG Emission Intensity</p> <p>5%</p> <p>Base Year 2019</p>	<p>Water Stewardship Apex2 Water Recycling Rate</p> <p>10%</p>	<p>Renewable Energy</p> <p>1,490.71 MWh</p>

Governance		
<p>Board of Directors Foreign Directors 18% Independent Directors 36% Female Director 9%</p>	<p>Establishment of Sustainable Development Committee</p>	<p>No legal actions involving any infringement of anti-competitive behaviours, anti-trust, and monopoly practices and their outcomes</p>

Social		
<p>Total Global Employees</p> <p>More than 7000 people</p> <p>from more than 5 countries</p>	<p>Proportion of Female 57.49%</p> <p>Proportion of Female Above Manager 32.03%</p>	<p>Average Training Hours 31.57 hours pp.</p> <p>Female Participation 57.09%</p>



	Step	Content	Description																						
			<p>2. Uncertainty of market information</p> <p>3. Product quality management</p> <p>4. Customer behaviour changes</p> <p>5. Hazard of occupational safety and health</p> <p>6. Effectiveness of Board and corporate governance</p> <p>8. Energy management</p> <p>9. Harmed reputation</p> <p>10. Change of political and social environment</p> <p>11. Capital management</p> <p>(6) Material Topics Matrix (Table 2): Each participant considers the current status of each department, historical management experience, professional knowledge, and other factors to assess the risk factors. There are three evaluation indicators: risk likelihood, risk impact, and opportunity impact. After scoring, the product of risk likelihood and risk impact is multiplied to prioritise the risks and determine the risk ranking. After reviewing the actual scoring results and considering the financial impact in qualitative/quantitative indicators, a risk tolerance threshold of 4.25 is proposed based on the product of risk likelihood (X-axis) and risk impact (Y-axis). Risks with a product score greater than 4.25 are considered risks of significant importance, defined as the major themes reported in the ESG report, while risks with a score less than or equal to 4.25 are considered risks of general importance. The assessment of impact level is also completed through this process.</p>																						
4	Determining the significant themes to be reported.	Establish management indicators based on significant themes identified in the report and align them with the SDGs.	<p>(7) Determined Significant Themes for Reporting and Management Policies and Indicators</p> <p>Establishment of Management Indicators: In comparison to the significant themes selected in 2021, after reassessing positive and negative impacts and conducting due diligence investigations for the updated version, we have identified the following 11 additional significant themes in comparison to 2021.</p> <table border="0"> <tr> <td>1. Supply chain disruption and cost fluctuation</td> <td>7. Rising price of GHG emission</td> </tr> <tr> <td>2. Uncertainty of market information</td> <td>8. Energy management</td> </tr> <tr> <td>3. Product quality management</td> <td>9. Harmed reputation</td> </tr> <tr> <td>4. Customer behaviour changes</td> <td>10. Change of political and social environment</td> </tr> <tr> <td>5. Hazard of occupational safety and health</td> <td>11. Capital management</td> </tr> <tr> <td>6. Effectiveness of Board and corporate governance</td> <td></td> </tr> </table> <p>(8) We have compared these 11 significant themes with the United Nations Sustainable Development Goals (SDGs) to establish management indicators. In the end, we have selected the following SDGs:</p> <table border="0"> <tr> <td>SDG 3 : Good Health and Well-being</td> <td>SDG 10 : Reduced Inequalities</td> </tr> <tr> <td>SDG 5 : Gender Equality</td> <td>SDG 12 : Responsible Consumption and Production</td> </tr> <tr> <td>SDG 6 : Clean Water and Sanitation</td> <td>SDG 13 : Climate Action</td> </tr> <tr> <td>SDG 7 : Affordable and Clean Energy</td> <td>SDG 16 : Peace, Justice, and Strong Institutions</td> </tr> <tr> <td>SDG 8 : Decent Work and Economic Growth</td> <td>SDG 17 : Partnerships for the Goals</td> </tr> </table>	1. Supply chain disruption and cost fluctuation	7. Rising price of GHG emission	2. Uncertainty of market information	8. Energy management	3. Product quality management	9. Harmed reputation	4. Customer behaviour changes	10. Change of political and social environment	5. Hazard of occupational safety and health	11. Capital management	6. Effectiveness of Board and corporate governance		SDG 3 : Good Health and Well-being	SDG 10 : Reduced Inequalities	SDG 5 : Gender Equality	SDG 12 : Responsible Consumption and Production	SDG 6 : Clean Water and Sanitation	SDG 13 : Climate Action	SDG 7 : Affordable and Clean Energy	SDG 16 : Peace, Justice, and Strong Institutions	SDG 8 : Decent Work and Economic Growth	SDG 17 : Partnerships for the Goals
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2.2 Identification and Analysis

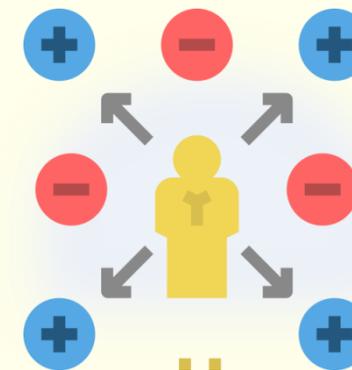
Table 1. Evaluation of Impact Level and Probability of Occurrence of Company's Operations

No.	Risk Factor	Identification of Positive and Negative Impact		
		Impact	Possibility	Risk Description
14	Supply chain disruption and cost fluctuation	2.73	2.55	<p>Negative: (1) Unstable plans and implementation of material preparation.; (2) Trends of fragmentation of the global market, pandemic disease, carbon cost and climate change make regional supply unstable. In addition, metal and material prices are affected by political and economic situations, resulting in significant fluctuations in both the range and frequency of material prices. The purchase department faces the significant challenge of cost control.</p> <p>Positive: The irreversible change of international politics has pushed the industry to move to south-east Asia which indirectly induces joint of suppliers.</p>
13	Uncertainty of market information	2.45	2.82	<p>Negative: Increasing uncertainty of market information would possibly lead to mistakes in planning of balancing production and sales which indirectly increase the risk of stock and cash flow.</p> <p>Positive: We have a scale advantage on the quantity of purchase and amount of financing, therefore if we could plan and utilize the scale advantage effectively, it could increase negotiation room.</p>
31	Product quality management	2.64	2.27	<p>Negative: Potential impacts are (1) difficulty in introducing a new product, which blocks business development; (2) present orders could drain.</p> <p>Positive: Catch the trend of movement of industry and then introduce more orders from European and American areas.</p>
12	Customer behaviour changes	2.09	2.82	<p>Negative: Loss of business orders</p> <p>Positive: Apex' s existing ESG foundation is good. We could take advantage of the trend of industry movement and then increase orders accordingly.</p>
26	Hazards of occupational safety and health	2.27	2.18	<p>Negative: Work safety accidents or occupational hazardous events, the impact could unlimitedly raise such as a closed factory, shut down, damage to the life or health of employees, difficulty to recruit etc.</p> <p>Positive: We have a scale advantage, if we provide a good occupational environment, it could generate a magnet effect being advantageous to attract talents contributing to the operation.</p>
1	Effectiveness of Board and Corporate Governance	4	1.18	<p>Negative: The potential impact of declining governance effectiveness is significant, which may result in strategic mistakes, major operation loss or compromised viability.</p> <p>Positive: Good governance effectiveness could increase scale, continuously growing profit and shareholder value.</p>

No.	Risk Factor	Identification of Positive and Negative Impact		
		Impact	Possibility	Risk Description
7	Rising price of GHG emission	2.45	1.91	<p>Negative: Carbon fee could be reflected in energy cost, material costs, management costs, regulation fee costs and transportation costs etc. which may increase operation costs gradually.</p> <p>Positive: Speed up innovation by reducing cost or increasing efficiency.</p>
22	Energy management	2.27	2	<p>Negative: The unstable supply of energy and its price would directly impact operating costs; the trend of increasing electricity prices is certain and clear; if the supply of electricity is not stable, the cost of shutdown is quite big.</p> <p>Positive: Speed up innovation by reducing costs or increasing efficiency; think of the possibility of a self-owned power plant in the future.</p>
15	Harmed reputation	2.18	2	<p>Negative: Possibly lead shut down, losing talents, losing capital.</p> <p>Positive: Based on the existing scale and goodwill advantage, keep input ESG relative improvement to enlarge operating advantage in the ASEAN area and inject momentum of growth.</p>
5	Change of political and social environment	1.91	2.27	<p>Negative: The rising uncertainty level of market demand will control the ability of orders to decline; population structure and social environment change will make recruiting harder, which affects integral competitiveness.</p> <p>Positive: Based on the existing scale advantage, strengthen linkage to society and counterparties, keep a competitive advantage, and inject new blood of orders and talents.</p>
34	Capital management	2.36	1.82	<p>Negative: Insufficient working capital will disrupt operations.</p> <p>Positive: The good management of capital can expand operation leverage and create room for business upgrades.</p>

Impact Assessment Scores: 1 = No impact, 2 = Minor impact, 3 = Moderate impact, 4 = High impact.

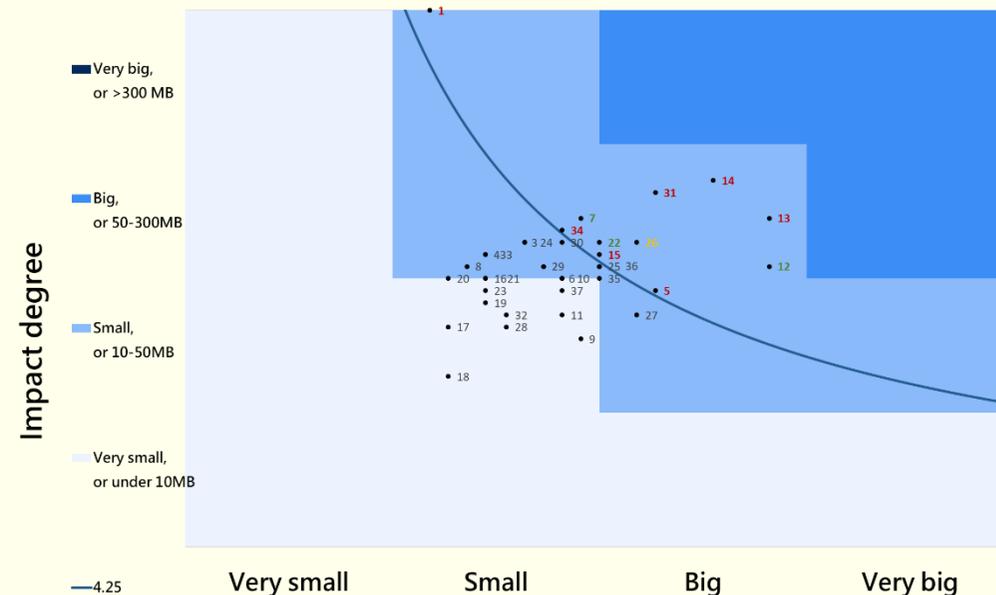
Probability Assessment Scores: 1 = Highly unlikely to occur, 2 = Occasional occurrence, 3 = Frequent occurrence, 4 = Always occur/Confirmed occurrence.



2.3 Impact Level Identification

Upon reviewing the actual scoring results and considering the magnitude of financial impact in both qualitative and quantitative indicators, it is proposed to set a risk acceptance threshold of 4.25 as the product of risk probability and impact. Risks with a product score greater than 4.25 are considered to be of significant importance and defined as major topics to be reported in the ESG report. Risks with a product score equal to or less than 4.25 are considered to be of general importance. This process also helps identify the level of impact.

Table 2. Material Topics Matrix



Impact List

Impact List				
1 Effectiveness of Board and Corporate Governance	9 A higher standard of present government supervisory and supply chain management ability	17 Rising sea level	24 Violation of pollution emission	31 Product quality management
2 Integrity	10 Research development and innovation	18 Fail of digital transformation	25 Sustainability management of suppliers	32 Product labelling management
3 Remuneration and appraisal system	11 Cost from investment failure on new technology or transformation	19 Invalid control of information safety	26 Hazards of occupational safety and health	33 Against laws and regulations
4 Vision and core value positioning	12 Customer behaviour changes	Inappropriate management of patent and intelligent property and customer privacy	27 Employee development and attraction to talents	34 Capital management
5 Change of political and social environment	13 Uncertainty of market information	20 Water resource management	28 Labour rights, diversity and equality	35 Exchange rate management
6 Sustainability risk	14 Supply chain disruption and cost fluctuation	21 Energy management	29 Social communication	36 Credit management
7 Rising price of GHG emission	15 Harmed reputation	22 Violation of waste management	30 Customer relationship management	37 Tax management
8 Strengthening of the reporting obligation	16 Change of climate pattern			

■ Environmental Sustainability
 ■ Social Sustainability
 ■ Corporate Governance

Changes in the list of material topics selected for 2022 compared to 2021 (GRI 3-2)

In 2022, a questionnaire was used to identify material topics for the first time. The analysis considered the probability of occurrence and the level of impact, and a risk threshold was set to select the material topics for 2022

	Material Topics Before 2021	Material Topics Before 2022	Correspondence of GRI
1	Supply Chain Management	Supply chain disruption and cost fluctuation	2-6, 204-1, 308-1, 308-2
2	Waste Water Treatment	Uncertainty of market information	2-6
3	Green Product	Product quality management	2-6, 204-1
4	Customer Service	Customer behaviour changes	2-6
5	Occupational Safety and Health	Hazards to occupational safety and health	403-1, 403-2, 403-3, 403-4, 403-5, 403-6, 403-7, 403-8, 403-9
6	Corporate Governance	Effectiveness of Board and Corporate Governance	2-9, 2-10, 2-11, 2-12, 2-13, 2-14, 2-17, 2-18, 2-22, 2-23, 2-24, 2-25, 2-26, 2-27
7	Environmental Protection	Rising price of GHG emission	302-1, 302-2, 302-3, 302-4, 302-5, 305-1, 305-2, 305-3, 305-4, 305-5
8	Employees' Welfare	Energy management	302-1, 302-2, 302-3, 302-4, 302-5
9	Regulation Compliance	Harmed reputation	2-9, 2-10, 2-11, 2-12, 2-13, 2-14, 2-17, 2-18, 2-22, 2-23, 2-24, 2-25, 2-26, 2-27
10	Competitive Advantage	Change of political and social environment	2-9, 2-10, 2-11, 2-12, 2-13, 2-14, 2-17, 2-18, 2-22, 2-23, 2-24, 2-25, 2-26, 2-27
11		Capital management	2-9, 2-10, 2-11, 2-12, 2-13, 2-14, 2-17, 2-18, 2-22, 2-23, 2-24, 2-25, 2-26, 2-27



2.4 Management of Material Topics

Material Topics and their Correspondence to SDGs, GRI, and Management Indicators

Material Topics	Correspondence of GRI			Correspondence of SDG	Impact Range			
					Employee	Customer	Society	Supplier
Supply chain disruption and cost fluctuation	2-6	204-1	308-1 308-2	SDG9 SDG12 SDG17	✓	✓		✓
Uncertain-ty of market information	2-6			SDG8 SDG17	✓	✓		✓
Product quality management	2-6	204-1		SDG9 SDG12 SDG17	✓	✓		✓
Customer behaviour changes	2-6			SDG9 SDG12 SDG17	✓	✓		✓
Hazards of occupational safety and health	403-1 403-2 403-3	403-4 403-5 403-6	403-7 403-8 403-9	SDG3 SDG4 SDG8 SDG16	✓		✓	
Effectiveness of Board and Corporate Governance	2-9 2-10 2-11 2-12 2-13	2-14 2-17 2-18 2-22 2-23	2-24 2-25 2-26 2-27	SDG3 SDG4 SDG8 SDG16 SDG17	✓	✓	✓	✓
Rising price of GHG emission	302-1 302-2 302-3 302-4	302-5 305-1 305-2	305-3 305-4 305-5	SDG13	✓	✓	✓	✓
Energy management	302-1 302-2	302-3 302-4	302-5	SDG7 SDG13	✓	✓	✓	✓

Material Topics	Correspondence of GRI			Correspondence of SDG	Impact Range			
					Employee	Customer	Society	Supplier
Harmed reputation	2-9	2-14	2-24	SDG3				
	2-10	2-17	2-25	SDG4				
	2-11	2-18	2-26	SDG8	✓			
	2-12	2-22	2-27	SDG16				
	2-13	2-23		SDG17				
Change of political and social environment	2-9	2-14	2-24	SDG4				
	2-10	2-17	2-25	SDG8				
	2-11	2-18	2-26		✓		✓	
	2-12	2-22	2-27					
	2-13	2-23						
Capital management	2-9	2-14	2-24	SDG8				
	2-10	2-17	2-25	SDG16				
	2-11	2-18	2-26		✓			
	2-12	2-22	2-27					
	2-13	2-23						

2.5 Stakeholder Communication

Stakeholder	Concerned topic	Response department	Way of communication and interaction	Frequency	Communication in 2022
Society	Compliance level; water resource management; pollution and waste management; social communication; occupational safety and health; labour rights; diversity and equality	RBA team, ADM, HR	Compliance with relative laws; social contribution activities; communication and interaction with local government	Irregular	Support social give-back activities; comply with environmental protection laws and regulations; promote solar solutions as a green energy-saving project to the community.
Customer	Supply chain sustainable management; quality management; customer relationship management; product labeling; labour rights, diversity and equality; CO2 emission and energy management	BIZ, QA, ADM, R&D, PUR	Telephone calls; emails; meetings; visit and interview; internal and external audit; customer satisfactory investigation; CO2 emission investigation	Daily frequent communication of routine affairs; customers execute audit plan, CO2 emission investigation and relative management policy; annual customer satisfactory investigation and conflict minerals questionnaire investigation per internal policy	Keep satisfying customers' expectations and improve satisfaction levels through managing quality and problem-solving processes; keep collaborating with vendors closely to reach customers' traceability requirements.
Employee	Remuneration and performance; employee development and attraction to talents; labour rights, diversity and equality; occupational safety and health.	Employee welfare committee, ADM, HR	Email notices; Facebook announcements; announcements on the intranet; welfare committee meetings; complaint box; internal irregular meetings.	In quarterly welfare committee meetings, usual announcements, promotions, and interactions were frequently communicated through routine work.	Annual appraisal inspection of the employee; quarterly welfare committee meeting; no significant complaints from the employee; annual physical health check for employees; regular and irregular training.
Government	Compliance level; sustainable risk; Board and corporate governance; integrity; patent and intelligence management; information safety; green supervisory.	Board, CG (corporate governance), F&A, ADM	Official letters with government and external institutions; media; website; emails; MOPS	Disclose public information by following the legislative schedule; communicate, if necessary, as usual and routine work.	Attend seminar held by TWSE; obtained AREA award of 2022; irregularly and proactively attended a seminar held by security supervisory; the result of Taiwan Corporate Governance Evaluation System was in the level of 6%~20%.
Shareholder	Board and corporate governance; integrity; remuneration and performance; reporting obligation; CO2 emission and energy management.	IR	Shareholders' meeting; investor conferences; spokesman window; MOPS; company website.	Annual shareholders meeting; more than 4 times investor conference; disclose information by following legislative requirements; irregular communication with media and investors if necessary.	Shareholders' meeting; In 2022, we've attended 6 investor conferences and issued the material information at MOPS; publish announcements and information by laws and regulations.
Supplier	Supply chain sustainable management; CO2 emission and energy management; quality management.	PUR, PD, QA	Supplier audit; incoming inspection; telephone calls; emails; meetings.	We follow an internal audit plan to audit suppliers every year; we communicate irregularly and often with suppliers about price, source of minerals, collaborative agreement, integrity, etc.	Contact suppliers frequently at least monthly through phone calls or email to ensure supply stability and status; request suppliers to follow CSR policy and framework of RBA (Responsible Business Alliance); execute supplier audit plan.

2.6 Risks and Opportunities Arising from Climate Change

Global warming is a serious environmental issue that everyone must address. As temperatures rise, abnormal weather patterns will worsen, resulting in stronger storms, irregular rainfall, and more frequent and severe droughts and floods. Bangkok, which was once a swampy area about 1.5 metres above sea level, is expected to become one of the world's most severely affected urban areas, prompting the Thai government to prioritise environmental issues in recent years.

Thailand has three seasons: the rainy season, the cool season, and the hot season. The rainy season receives the most rainfall, resulting in frequent flooding, whereas the cool and hot seasons can cause water shortages. According to a World Bank report, extreme rainfall and changes in weather patterns could cause up to "40%" of Bangkok to be submerged by 2030. Greenpeace's Tara Buakamsri also stated that Bangkok is sinking slowly, while sea levels in the nearby Gulf of Thailand are rising slowly but faster than the global average, potentially leading to large-scale flooding in the near future.

Apex has been operating in Thailand for over a decade and experienced the worst flooding in nearly ten years in 2011. Apex understands the risks and opportunities climate change brings and has begun to pay greater attention to environmental issues. Apex has identified climate change risks and opportunities and their response measures based on the TCFD² and Manufacturing Climate Change Adaptation Guideline³, as shown in the table below:

Risk Type	Disclosure	Identify the Risk	Corresponding Measures
Transitional Risk	Policy and Regulation Risks	Stricter environmental regulations from the Thai government	Apex's water discharge standards are higher than the regulations, and regular sampling before discharging. Apex has an Aqua Project and plans for the recycling rate of Apex2 wastewater to reach 40% in 2024.
	Technical Risk	Low-carbon equipment cost	The Solar Project has started the construction of solar power generation equipment since 2021, and some of the equipment has already been put into use. The solar system construction plan is divided into three phases and is expected to be completed in 2027.
Physical Risk	Immediate Risk	Flooding in the rainy season	The foundations of the newly built factories have been raised, and the drainage system has been improved.
		Water shortage in cool and hot seasons	The risk of water shortage in the area where the production plant is located is not high. Considering the possible impact of water shortage on production stoppage, the company has established a Business Continuity Plan to control the risk of water resource acquisition.
	Long-term Risk	Sea-level rise	The foundations of the newly built factories have been raised, and the drainage system has been improved.

² Task Force on Climate-related Financial Disclosures (TCFD) is officially published by Financial Stability Board (FSB) on June, 2017.

³ Manufacturing climate change adaptation guideline is established by the Taiwan Green Productivity Foundation, and directed by the Industrial Development Bureau, Ministry of Economic Affairs.

3. Company Overview

3.1 About Apex

Apex was established on October 28, 2009, and is registered in the Cayman Islands. The company and subsidiaries are primarily engaged in the manufacturing and sale of single-sided, double-sided, and multi-layer Printed Circuit Boards (PCBs), which are used in applications such as LCD TVs, Set-Top Boxes (STBs), hard drives, printers, satellite communication equipment, and in-car multimedia devices. In addition to joining the Taiwan Printed Circuit Association (TPCA) and participating in its related courses and activities, Apex actively receives information from various sources to serve as policy references for future development and operation. The company has passed multiple verifications, such as ISO, and actively supports sustainable development initiatives and engages with the community to form a virtuous cycle.

3.2 Operating Locations

Type	Country	Company Name	Acronym	Address
Headquarter	Taiwan	Apex International Co., Ltd.	API	Rm. 503, 5F., No. 205, Dunhua N. Rd., Songshan Dist., Taipei City 105, Taiwan
Subsidiary	Taiwan	Approach Excellence Trading Ltd.	AET	1F., No. 21, Ln. 1314, Chunri Rd., Taoyuan Dist., Taoyuan City 330, Taiwan
Operating Headquarters and Plants	Thailand	Apex Circuit (Thailand) Co., Ltd.	APT	APEX 1 : 39/234-236 Moo2, Rama 2 Rd., Bangkrachao, Amphur Muang, Samutsakhon 74000, Thailand APEX 2 · APEX3 : 30/101,102 Moo 1, Sinsakhon Industrial Estate Chetsadawithi Rd., Khok Kham, Muang, Samutsakhon 74000, Thailand
Subsidiary	China	Apex IPO (Dong Guan) Ltd.	APC	Room 103, Building 6, No. 5, Er Road, Shuixinwei Industry District, Hanxi, Chashan Town, Dongwan City, Guangdong Province
Subsidiary	Thailand	Shye Feng Enterprise (Thailand) Co., Ltd.	APS	88/1 MOO 2, Watphanthuwong Sethakij 1 Rd, Nadee, Amphur Muang, Samutsakhon, 74000, Thailand
Subsidiary	Singapore	Shye Feng (Singapore) PTE. LTD.	APSS	18 MANDAI ESTATE #05-07 MULTI-WIDE INDUSTRIAL BUILDING SINGAPORE (729910)

Main Business Operations of Each Subsidiary

- I. Apex is publicly listed on the Taiwan Stock Exchange Market. Its main function is holding company, and it conducts no actual business activities.
- II. AET is a wholly-owned subsidiary of Apex. A Taiwan branch was set up to be in charge of the procurement of machine equipment and raw materials and shipment in the Taiwan area.
- III. Apex owns 99.58% of APT, which was founded in September 2001. APT is the group's production and operating centre, with three factories: APEX 1, APEX 2, and APEX 3. APT's PCBs are mostly exported to Japan, Korea, and China, where they are used principally in consumer electronic products and office equipment and then in STBs, communications equipment, computer equipment, and auto parts.
- IV. APC is held by APT with 100% of shares, the main operation object is the procurement of supplies.
- V. APS is held by APT with 99.99% of shares, the main operation objective is to produce and trade PCBs. APS has a subsidiary Shye Feng (Singapore) Pte. Ltd. which was set up in



Singapore and her main operation objective is to explore the PCB business.

3.3 Apex Culture

Apex culture is based on "Oriental thinking, Western-style management". Oriental thinking refers to the belief in treating people with kindness, that is, Human Nature, which is from the oriental idiom "Human Nature, Ethical Reasoning and Legal Principle". "To be kind to people, and to keep gratitude" is the oriental virtue, and is also the soft power that Apex hopes to pursue. The foundation of this culture is people-oriented, convincing people with virtue, and keeping the teams' harmony with benevolence.

Western-style management refers to the belief of not taking things personally, that is Principle, which is a kind of norm, a constraint, and a discipline with a strict boundary and is also one of the indispensable elements and the hard power in the highly competitive electronics industry. Without the principle, the quality will not be good, the speed will not be fast, the cost of the product will not be low and the efficiency will be difficult to perform. The way to strike a balance between human nature and principles is to rely on ethical reasoning. "Ethical Reasoning" refers to truth and judgment. Apex culture pursues righteousness, reasoning, doing the right thing, seeking truth from facts, and no internal friction.

With a management culture that pays equal attention to both sensibility and rationality, Apex often holds activities to strengthen the connection and sense of participation between employees, and to achieve efficiency when conducting effective communication and a harmonious atmosphere in the team. Therefore, through various human resource management measurements, we have created and promoted a happy and safe workplace for our employees with the core idea of being "people-oriented".



4. Corporate Governance

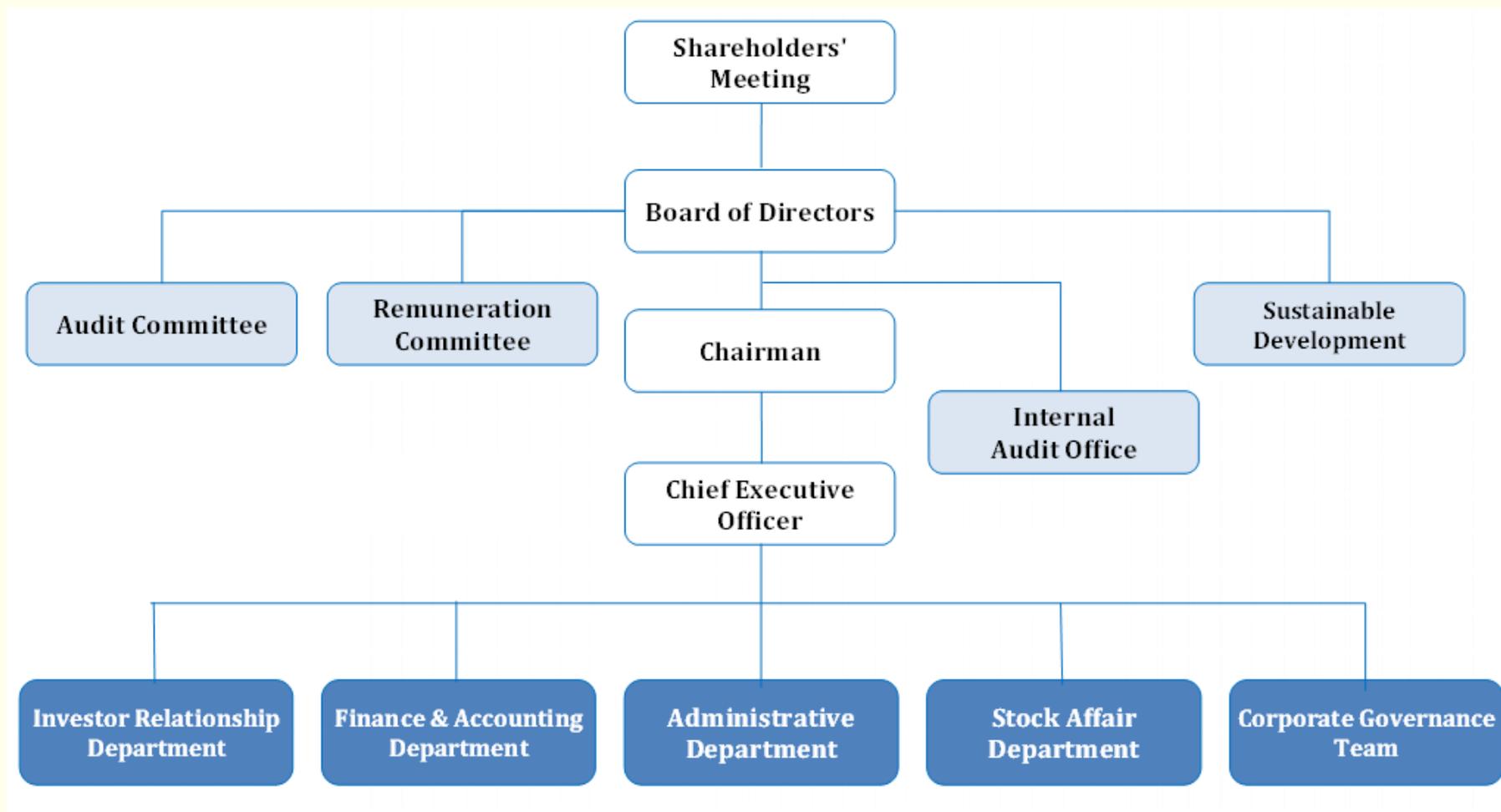
Management Policies for Material Topics: Effectiveness of Board and corporate governance

Impact Assessment	The major topic category related to the board of directors and corporate governance is "Board of Directors and Corporate Governance." If the decision-making process of the board of directors is not diverse and open, there may be a risk of decision-making errors.
Policies and Commitments	By establishing internal regulations, the operation of the board of directors and corporate governance is ensured. (1) Memorandum of Association and Articles of Association (2) Principle of Corporate Governance (3) Compliance with the Establishment of Board of Directors and the Board's Exercise of Powers (4) Ethical Corporate Management Best Practice Principles (5) Code of Ethics for Directors and Officers
Governance Structure	Corporate Governance Team, Remuneration Committee, Audit Committee and Internal Audit Unit
Management Actions	Short-term: based on existed good governance environment, introduce external evaluation. Mid-term: observe industry situation and keep upgrading appraisal system, risk management system and build up appropriate nomination system. Long-term: continuously improve the management system
KPI	ESG rating score
Evaluation Mechanisms	Disclosure of regular board performance evaluations Individual Director Self-Assessment: Once a year Internal Board Self-Assessment: Once a year Internal Board Evaluation of Functional Committees: Once a year Engagement of External Professional Firm for Comprehensive Board Performance Evaluation: Once every three years
Engagement Outcomes and Effectiveness with Stakeholders	2022 Achievements: 2022 Corporate Governance Evaluation Results in Taiwan: Ranked in the range of 6% to 20% among all listed companies. Ranked in the range of 11% to 20% among electronic companies with a market capitalisation of over 10 billion NT dollars.

4.1 Corporate Governance Structure

The Board of Directors is the decision-making level that substantially drives corporate governance. To enhance the efficiency of the Board, Apex has set up the Audit Committee, Remuneration Committee, and Sustainable Development Committee under the Board of Directors to assist in fulfilling its supervisory responsibilities, ensuring that all proposals are thoroughly discussed and reported or resolved by the Board. This effectively plays an independent supervisory and balance management mechanism. If a proposal involves the personal interests of a director or their representative legal entity, they should abstain from voting to ensure the maximum benefit of stakeholders.

In 2022, 8 meetings were held, with a 100% actual attendance rate of the entire Board of Directors.



Directors Introduction

Diversified Core Items Category /Name	Date Elected	Basic Requirements			Professional Background			Professional Knowledge and Skills		
		Nationality	Gender	Age	Bank	Securities	Accounting & Finance	Industry Experience	Marketing	Risk Management
Chairman Shu-Mu Wang	2022.05.24	R.O.C.	Male	63			v	v	v	v
Director Jui-Hsiang Chou	2022.05.24	R.O.C.	Male	63			v	v	v	v
Director Yung-Yuan Cheng	2022.05.24	R.O.C.	Male	64				v		v
Director Shun-Chung Lee	2022.05.24	R.O.C.	Male	53				v	v	
Director Sen-Tien Wu	2022.05.24	R.O.C.	Male	54	v		v	v	v	v
Director Somkiat Krajangjaeng	2022.05.24	Thailand	Male	61				v		
Director Tu-Chuan Chen	2022.05.24	R.O.C.	Male	62				v		
Independent Director Chau-Chin Su	2022.05.24	R.O.C.	Male	67				v		
Independent Director Yung-Tsai Chen	2022.05.24	R.O.C.	Male	62	v	v	v	v	v	
Independent Director Jesadavat Priebjivat	2022.05.24	Thailand	Male	66		v	v	v	v	v
Independent Director Ray-Hua Horng	2022.05.24	R.O.C.	Female	58				v		

Independence and Diversity of Board

Apex has established internal rules and procedures for the appointment and exercise of powers of the board of directors, such as the "Compliance with the Establishment of Board of Directors and the Board's Exercise of Powers" and the "Procedures for Election of Directors," to ensure rigorous regulation of the operations and membership of the board. The nomination of board members follows the provisions of the company's articles of incorporation, using a candidate nomination system. In addition to evaluating the qualifications and experience of each candidate, the "Principle of Corporate Governance" is also followed to ensure the diversity and independence of board members. Not only is the distribution of professional experience, gender, age, and educational background considered, but also a diverse perspective is employed to complement each other and enhance the overall functioning of the board.

The company's management objective for diversity policy of board members has appointed four independent directors in the sixth term, including one female independent director, achieving the goal of increasing the number of independent directors and promoting the appointment of female independent directors. The current board of directors consists of 11 members, including four independent directors. Foreign directors account for 18% of the total, independent directors account for 36%, and female directors account for 9%. All directors have no relationship between spouses or second-degree relatives.

Impact Management of the Highest Governance Unit

In the spirit of corporate sustainability, Apex has conducted multifaceted impact assessments on major issues and established relevant regulations to address potential negative impacts. Apex has also proposed visions and strategies to respond to these impacts and achieve sustainable development.

In recent years, with the rise of labour law requirements in Taiwan and Thailand, Apex has formulated a "Human Rights Policy Management Procedure" to protect and safeguard basic human rights, promote equal pay for equal work, and provide a safe and healthy workplace. Apex recognises and supports the spirit and fundamental principles of human rights protection outlined in various international human rights conventions, including the International Labour Organization's Declaration on Fundamental Principles and Rights at Work, International Labour Organization conventions, the OECD Guidelines for Multinational Enterprises, the Universal Declaration of Human Rights, and the Ten Principles of the United Nations Global Compact, while fulfilling the responsibility to respect and protect human rights and comply with labour-related laws and regulations in the countries where it operates.

Facing the risks of climate change has become an impact that listed companies must face. The development of green technology must be accelerated, and carbon fee regulations and inspections of carbon emissions will be legislated and clarified in the short term. To maintain continuous growth and meet market demands, environmental issues cannot be underestimated. In 2022, Apex held a total of 8 board meetings. During this period, the Sustainability Development Committee regularly tracked relevant actions and reported to the board, establishing mechanisms and internal audit systems for compliance and risk management to operate synchronously.

To fulfil the supervisory responsibilities, by the company's articles of association and Article 192-1 of the Company Law, and the board resolution and announcement on March 31, 2022, Apex accepted nominations for directors and independent directors from shareholders holding more than 1% of the total issued shares of the company through written submissions from March 8 to March 18, 2022. During the above-mentioned period, except for the board's nomination of the candidates for the sixth board of directors (including independent directors), no shareholder holding more than 1% of the total issued shares of the company nominated any candidates. The board nominated and decided on a list of 11 director candidates (including 4 independent directors) on March 31, 2022, and the board election was completed at the shareholders' meeting on May 24, 2022. The board of directors is composed of 11 members with professional backgrounds and technical expertise, including 4 independent directors who have considerable qualifications in professional knowledge, technology, and experience, providing the company with specialised advice in operations, technology, and finance with an impartial and independent spirit. They jointly shoulder the responsibility of the company's strategy, operation, and supervision.

The Performance Evaluation of the Apex Board of Directors

Apex conducted a comprehensive evaluation of the performance of its board of directors, including individual self-assessment, an internal evaluation of the board of directors, an internal evaluation of functional committees, and an external evaluation from the Taiwan Investor Relations Institute (TIRI) to ensure the proper operation of the board. The internal evaluation showed good performance results and was helpful in further implementing corporate governance and enhancing the functionality of the board. The attendance rate of members in each functional committee of the company was high, and each committee was composed of professionals who contributed relevant suggestions to the company's operations. The external evaluation suggested promoting diversity in board membership, improving the format of board meetings, and planning director training courses, among other things. After receiving the suggestions, Apex proposed measures to gradually improve and continuously strengthen the function of the board of directors.

Evaluation cycle.	Evaluation Period	Evaluation scope	Evaluation method	Evaluation content
Once a year	From: 2021.12.01 To: 2022.11.30	Individual Board	Self-Evaluation of Board Members	<ul style="list-style-type: none"> ● Mastery of company goals and tasks ● Acknowledged the Directors' responsibilities ● Participation in the operation of the company ● Internal relationship management and communication ● Director's professional and continuing education ● Internal control
Once a year	From: 2021.12.01 To: 2022.11.30	The Board of Directors as a Whole	Internal Evaluation	<ul style="list-style-type: none"> ● Participation in the operation of the company ● Improve the decision-making quality of the board of directors ● Composition and structure of the board of directors ● Selection of directors and continuing education ● Internal control
Once a year	From: 2021.12.01 To: 2022.11.30	Each Functional Committee	Internal Evaluation	<ul style="list-style-type: none"> ● Participation in the operation of the company ● Acknowledged the responsibilities of Functional Committee ● Improve the decision-making quality of the Functional Committee ● Composition of the Functional Committee and selection of members ● Internal control
At least once every three years	From: 2021.10.01 To: 2022.09.30	Engage an external professional firm to conduct an overall assessment of the board's performance.	Appointed TIRI to conduct the overall evaluation of the board's performance.	<ul style="list-style-type: none"> ● Composition and professional development of the board of directors ● Quality of decision-making by the board of directors ● Oversight of internal controls and risk management ● Involvement of the board of directors in corporate social responsibility

Directors professional development

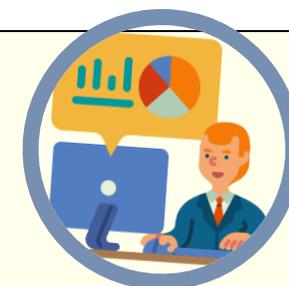
Directors and executives undergo professional development by Taiwan's legal regulations, with a 100% compliance rate. The total training hours for the year 2022 amounted to 76 hours.

Date	Organizer	Course	Hours	Total Hours
2022/12/20	Taiwan Corporate Governance Association	Ethical Business and Corporate Governance: Lessons from Japan	3.0	27
2022/11/10	Taiwan Corporate Governance Association	How to Create Corporate Value and Manage Risks by Implementing ESG Strategy?	3.0	27
2022/10/12	Securities and Futures Institute	Internal Insider Trading Compliance Briefing for the 111th fiscal year	3.0	3
2022/10/06	Securities and Futures Institute	Issuance of Reference Guidelines for the Exercise of Duties by Independent Directors and Audit Committees in 2022, along with Director and Supervisor Education and Promotion	3.0	3
2022/07/22	Taiwan Corporate Governance Association	Audit Committee Advanced Practice Sharing - The Role of Independent Directors in Enterprise Operation and Corporate Governance	3.0	3
2022/05/20	Securities and Futures Institute	2022 Insider Trading Prevention Seminar	3.0	3
2022/05/12	Taiwan Stock Exchange	International Twin Summit	2.0	4
2022/04/22	Taiwan Institute for Sustainable Energy	Taishin 30 Sustainability Net Zero Summit Forum 2030 Transform to Net Zero	3.0	6

Functional Committees

	Audit Committee	Remuneration Committee	Sustainable Development Committee
Chairman Shu-Mu Wang			
Director Jui-Hsiang Chou			√
Director Yung-Yuan Cheng			
Director Shun-Chung Lee			
Director Sen-Tien Wu			
Director Somkiat Krajangjaeng			
Director Tu-Chuan Chen			
Independent Director Chau-Chin Su	√	√	√
Independent Director Yung-Tsai Chen	√		
Independent Director Jesadavat Priebjrivat	√	√	√
Independent Director Ray-Hua Horng	√		
Independent Member Yang-Tzong Tsay		√	

Functional Committees	Authorities and Responsibilities of Functional Committees	The Execution Status in 2022
Audit Committee	<p>Following the "Audit Committee Charter," the Audit Committee convenes at least once per quarter. The functions and annual work plan of the committee include examining the Company's financial statements, auditing company operations and accounting policies and procedures, reviewing the Company's internal control system, evaluating transactions of important assets or derivative products, loans of funds, endorsements, or provision of guarantees of a material nature, fundraising or securities issuance, appointment, dismissal of accountants and their remuneration, appointment and dismissal of financial, accounting or internal audit officer and matters in which a director is an interested party.</p>	<p>The Audit Committee held 7 meetings in 2022. Please click and visit the company website: Communication of Independent Directors, Auditing Officers and Accountants</p> <p>The Execution Status of the Audit Committee in 2022</p>
Remuneration Committee	<p>The Compensation Committee of the Company, with its professional and objective position, evaluates the compensation policies and systems for the directors and executives of the Company. It holds at least two meetings annually and may convene additional meetings as necessary to provide recommendations to the Board of Directors for their decision-making. The committee's deliberations and annual work focus include:</p> <ol style="list-style-type: none"> I. Regularly review the regulations of the Compensation Committee and propose amendments if needed. II. Formulating and regularly reviewing the annual and long-term performance goals, compensation policies, systems, standards, and structures for the directors and executives of the Company. III. Regular evaluations of the directors' and executives' performance in achieving their performance goals are conducted, and the content and amount of individual compensation are determined based on the evaluation results derived from performance assessment criteria. 	<p>The Remuneration Committee held 2 meetings in 2022. Please click and visit the company website: The Execution Status of the Remuneration Committee in 2022</p>
Sustainable Development Committee	<p>The purpose of SDC is to assist the Board of Directors to promote sustainable affairs in the Company and its subsidiaries, which include:</p> <ol style="list-style-type: none"> I. Set up a sustainable development policy. II. Instruct, monitor and review the execution performance of sustainable development activities and report to the Board of Directors. III. Other matters are resolved and assigned by the Board of Directors. IV. After SDC sets up the preceding matters and reports them to the Board of Directors, the Chairperson or members of SDC are authorized to discuss and collaborate with the Company and its subsidiaries about subsequent practical executive plans. Collaborative patterns and executive organization structures could be designed based on practical demand. 	<p>The Sustainable Development Committee was established in 2022 and held 1 meeting this year. Please click and visit the company website The Execution Status of the Sustainable Development Committee in 2022</p>



4.2 Financial Performance

Management Policies for Material Topics: Capital management

Impact Assessment	Funds Management falls under the category of financial-related impacts. Potential risks may arise from: 1. Cash flow disruption.; 2. Fluctuations in financing costs eroding profitability.
Policies and Commitments	(1) Regularly conduct financial and internal systems audits and provide reports.
Governance Structure	Financial & Accounting Department, Audit Committee
Management Actions	Periodically review long-term/short-term capital arrangements and manage financing channels and financial tools.
KPI	Financial Ratios
Evaluation Mechanisms	The independent directors, audit executives, and accountants regularly communicate and conduct audit reports to examine and evaluate the reliability and completeness of financial and operational information. They review existing systems to ensure compliance with significant policies, plans, procedures, laws, and regulations. They also verify the methods of asset safeguarding and confirm the existence of assets. Additionally, they assess the economic efficiency of resource utilisation.
Engagement Outcomes and Effectiveness with Stakeholders	2022 Annual Achievements As shown in the consolidated statement of comprehensive income in this chapter.

Apex is a professional manufacturer of printed circuit boards (PCBs) with approximately 7,400 employees, the majority of whom are Thai nationals. Apex has two subsidiaries and three factories located in Samut Sakhon, southwest of Bangkok. Following the acquisition of APS in 2020, Apex has focused on the development of traditional rigid PCB products ranging from single-sided to 12-layer boards. As of 2022, the consolidated paid-in capital amounts to 1.899 billion NTD. For detailed financial information, please refer to the consolidated financial statements for the year 2022. The following table presents the consolidated statement of comprehensive income:

Consolidated Statement of Comprehensive Income in the Most Recent Two Years

Unit: Thousands of NTD

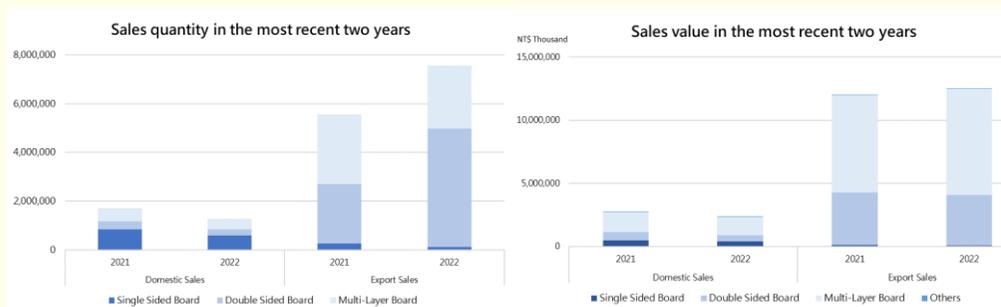
Subject \ Year	FY 2021	FY2022
Revenue	14,800,683	14,906,225
Operating cost	11,681,718	12,076,878
Gross profit	3,118,965	2,829,347
Operating expenses		
Marketing expenses	797,226	975,651
Administrative expenses	755,522	742,145
R&D expenses	45,440	53,600
Anticipated impairment loss of credit	43,369	46,627
Total operating expenses	1,641,557	1,818,023
Net profit	1,477,408	1,011,324
Total non-operating income and expenses	(41,380)	(65,685)
Profit before tax	1,436,028	945,639
Less: Tax expense	52,146	67,272
Current Year's Net Profit/Loss	1,383,882	878,367
Current Year's Other Comprehensive Income (after-tax net amount)	(1,040,596)	489,070
Total Current Year's Comprehensive Income	343,286	1,367,437
Basic earnings per share	7.25	4.60
Diluted earnings per share	7.25	4.60

Quantity and sales in the most recent two years

Unit: square meter, NT\$ thousand

Year	2021				2022			
	Domestic Sales		Export Sales		Domestic Sales		Export Sales	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Single Sided Board	836,876	482,135	266,347	128,040	590,383	400,686	122,192	77,426
Double Sided Board	337,873	642,562	2,434,547	4,165,153	240,537	501,758	4,857,307	3,987,960
Multi-Layer Board	525,456	1,618,655	2,848,684	7,700,623	453,168	1,476,331	2,584,541	8,410,608
Others	-	10,000	-	53,515	-	8,285	-	43,171
Total	1,700,205	2,753,352	5,549,578	12,047,331	1,284,088	2,387,060	7,564,040	12,519,165

Note: Others include processing services, including plating and trimming and purchasing moulds for new parts and consumables for customers.



4.3 Products and Services

Management Policies for Material Topics: Product quality management

Impact Assessment	Product Quality Management falls under the category of Quality Management. (1) Unclear assignment of quality control authority leads to the risk of quality defects and misplacements. (2) Insufficient knowledge in quality control results in incomplete decision-making processes. (3) Overemphasis on output indicators increases the risk of losing subsequent orders due to quality issues.
Policies and Commitments	(1) Enhance and improve the quality control personnel's quality management knowledge through employee training and education. (2) Regularly pursue ISO 9001 certification for quality management systems.
Governance Structure	Quality Assurance Department, Manufacturing Department, Management Information System Department · Research & Development Department, Business Department
Management Actions	Short-term: promote implementation of quality concept (14Q project) Mid-term: improve quality management system and innovate management method (method for handling different quality specs in the same factory).
KPI	Customer Complaint and Defect Rate, Internal Defect Rate
Evaluation Mechanisms	Conduct customer satisfaction surveys twice a year, covering quality, transportation, and service. The quality satisfaction score should account for 50% of the total score. Regularly pursue ISO 9001 certification for quality management systems.
Engagement Outcomes and Effectiveness with Stakeholders	2022 Annual Achievements All factory locations have successfully obtained ISO 9001:2015 certification. Customer satisfaction with quality ratings: APT Factory: 45 out of 50 APS Factory: 42 Out of 50.

Business of Apex and its Subsidiaries

Apex's business strategy focuses on understanding market demand and providing products with stable quality. It emphasises high standards in production management and forward-looking operational strategies, accompanied by an efficient and harmonious corporate culture, to offer diversified applications at the end consumer electronics market. The main business involves the production and sale of double-sided and multi-layer rigid printed circuit boards. Apex's products are not only manufactured and sold in Thailand but also expanded to become an international consumer electronics brand supplier, exporting to 23 countries worldwide, including North America, Central and South America, Europe, East Asia, Southeast Asia, Central Asia, and North Africa. The company actively expands the scope and scale of product applications and serves as a consumer electronics manufacturer for clients in the group, including Samsung, Arris, Technicolor, HP, Canon, Toshiba, and Western Digital. The printed circuit boards produced by Apex are mainly used in LCD TVs, set-top boxes, hard drives, printers, wireless transmission devices, TFT panels, and automotive multimedia products.

Main Products

The main application of the product at present, four major applications of the product are home application, computer application, communication application and automobile application.

Applications in End Products			
Electronic Products	Computer Accessories	Communications Equipment	Auto Parts
DVD, LCD TV, fax machine, air conditioner, digital camera, projector, photocopier, TV tuner, voltage converter	DVD player, recorder, printer, power supply, hard drive, motherboard, TFT panel, notebook	phone, communication box, satellite TV receiver, switch box	car audio, control panel and other accessories

Health Safety and Products

Apex is committed to producing products that meet health, safety, and quality requirements. The company strictly adheres to international regulations such as RoHS, REACH, and Halogen Free in inspecting materials, production processes, and emissions. The percentage of product sales complying with RoHS reaches 100%. Apex also incorporates these standards into employee training programs to ensure that employees have a thorough understanding of product ingredients and engineering manufacturing standards. (Please refer to [International Certifications and Awards](#) for relevant certifications.)

New Products and Upcoming Service Offerings

The consumer products such as LCD TVs, set-top boxes, and home entertainment continue to experience moderate growth, while almost all Japanese brand manufacturers are facing a shrinking market share. Apex has started developing new products such as automotive components, small-scale WI-FI and RF applications, and PCB transformers. By leveraging its new factories and upgraded production capacity, the company aims to gain an advantage in these product categories and expand its involvement beyond the existing orders for LCD TVs and set-top boxes from Korean customers. In addition to ongoing research and development efforts for new products and technologies, Apex will continue to focus on the traditional market for hardboard PCB to meet customer demands. On the other hand, Apex will establish a Product traceability system to enhance quality improvement processes and risk management. The company will also develop automated processes to improve quality stability.

Technologies and products developed

Year	Development Result
2018	<ul style="list-style-type: none"> ➢ 28-inch large-scale production process: Accurate size (accurate 10% uniform etching) fine line capability ➢ High-reliability automotive board drilling process: High-reliability drill (less than 150% of hole head)
2019	<ul style="list-style-type: none"> ➢ IOT for drilling process evaluation had been done ➢ Auto printing function for solder mask process and faster changing ability ➢ Lab for reliability ability ready for TCT / CAF / SIR / THB / Material thermal stress analysis
2020	<ul style="list-style-type: none"> ➢ Gold finger process had been done ➢ MES system implement ➢ Acquired ISO17025 Lab Certification
2021	<ul style="list-style-type: none"> ➢ Auto Plating line ➢ Micro PAD 160x200um product ➢ Zero emission micro etching process
2022	<ul style="list-style-type: none"> ➢ Micro PAD 180x200um function tester development ➢ Thicker copper (3-5oz) board process development ➢ Microvia (diameter < 0.15mm and aspect ratio 1)



Intellectual Property Management Plan

To ensure the Company's intellectual property, strengthen its competitive advantages, achieve operational goals, increase profits, and ensure sustainable operations, the Company will actively assist R&D personnel in the right of R&D results and strive to promote internal intellectual property management plans to continue accumulating the Company's intellectual property volume, and promote the Company to use intellectual property as an advantage to its customers.

The Company regularly reports matters related to intellectual property to the board of directors every year, and the latest submission date is December 20, 2022.

Patent Management:

The Company encourages employees to submit invention applications. R&D personnel conduct technology development. R&D supervisors convene review meetings to review proposals. The company commissions an external patent office to process the patent layout plan and applications and establishes an intellectual property management mechanism to manage patent cases and control procedures.

Trade Secret Management:

I. Information Security Management:

The employee's personal account and password identify all of the company's computer equipment.

II. Access Security Management:

All company employees are equipped with access control magnetic cards. Visitors should register their identity when visiting the Company. The scope of activities is limited in public spaces, and they must be accompanied by company employees throughout the tour.

III. The Regulation of Employment Contract is as follows:

- i. Employees are obliged to keep personal business and Company business secrets.
- ii. Employees shall not divulge any business secrets after taking up or leaving their posts. Otherwise, the Company not only has the right to expel an employee from the Company but also owns the retroactive legal right and compensation right of the Company for losses.
- iii. Employees of the Company shall not disclose or use the business secrets of their previous employer.

Patents

As of November 30, 2022, the performance of the intellectual property rights of the Company is as follows:

In 2021, a Republic of China invention patent titled "ANODE SLUDGE REMOVAL DEVICE, CLEANING METHOD, ELECTRONIC DEVICE AND CLEANING SYSTEM" has been granted under patent number No. I738115.

In 2022, a People's Republic of China invention patent titled "ANODE SLUDGE REMOVAL DEVICE, CLEANING METHOD AND CLEANING SYSTEM" was granted under patent number No. 5139485.

Certificates

Apex is committed to protecting the rights and interests of customers and labourers and maintaining the safety, hygiene, and quality management of the production process. It has also been recognised by inspection agencies and partners.

Certificates	Valid Period	Range
ISO 14001 : 2015	11 Oct. 2020 - 10 Oct. 2023	Apex 1
	28 Dec. 2022 - 27 Dec. 2025	Apex 2&3
	19 Mar. 2021 - 18 Mar. 2024	Apex S
ISO 9001 : 2015	29 Jul. 2020 - 28 Jul. 2023	Apex 1
	07 Jan. 2021 - 06 Jan. 2024	Apex 2&3
	19 Mar. 2021 - 18 Mar. 2024	Apex S
ISO 45001 : 2018	31 Jan. 2023 - 30 Jan. 2026	Apex 1
	31 Jan. 2023 - 30 Jan. 2026	Apex 2&3
IATF 16949 : 2016	29 Jul. 2020 - 28 Jul. 2023	Apex 1
	07 Jan. 2021 - 06 Jan. 2024	Apex 2&3
TLS 8001 : 2020	15 Feb. 2022 - 14 Feb. 2025	Apex 1
	15 Feb. 2022 - 14 Feb. 2025	Apex 2&3
Fire Drills Certificate	Issue Date: 25 Nov. 2021	Apex 1
	Issue Date: 01 Dec. 2021	Apex 2&3
	Issue Date: 03 Dec. 2021	Apex S
ISO/IEC 17025:2017	18 Nov. 2020 - 17 Nov. 2023	Apex 2&3
Canon Certificate of Supplier Environmental Evaluation	26 Dec. 2022 - 25 Dec. 2024	APT
Sony Green Partner Certification	28 Apr. 2022 - 30 Apr. 2025	APT

4.4 Industry Supply Chain

Management Policies for Material Topics: Supply chain disruption and cost fluctuation

<p>Impact Assessment</p>	<p>Supply chain disruptions and cost fluctuations fall under the category of supply chain sustainability management.</p> <p>The significant impacts of an unstable supply chain on operations include:</p> <ol style="list-style-type: none"> (1) Fluctuations in energy costs (2) Fluctuations in raw material costs (3) Unstable supply of raw materials (4) Increasing visible additional carbon costs (5) Previous occurrences of industrial cluster relocation.
<p>Policies and Commitments</p>	<ol style="list-style-type: none"> (1) Environmental Regulatory Compliance: Suppliers must comply with local government regulations concerning air pollution control, water pollution control, waste management, and toxic substance management. In the event of non-compliance, they are required to promptly submit improvement plans. (2) Green Products and Prohibition of Hazardous Substances in Raw Materials: Suppliers of process raw materials are required to provide declarations ensuring that their products do not contain internationally banned substances harmful to the environment. This ensures that the products comply with customer requirements and relevant international laws and regulations, such as the EU RoHS directive, the prohibition of perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOA), and the EU chemical regulation directive (REACH). During supplier environmental audits, significant deficiencies found will be addressed by the procurement supervisor requesting supplier improvements. (3) Establishment of Environmental Management System and Environmental Objectives: Suppliers are assessed during audits to determine if they have ISO 14001 or RC14001 certification. (4) Procurement of Conflict-Free Raw Materials: This promotes the humanitarian spirit and upholds social and ethical standards that

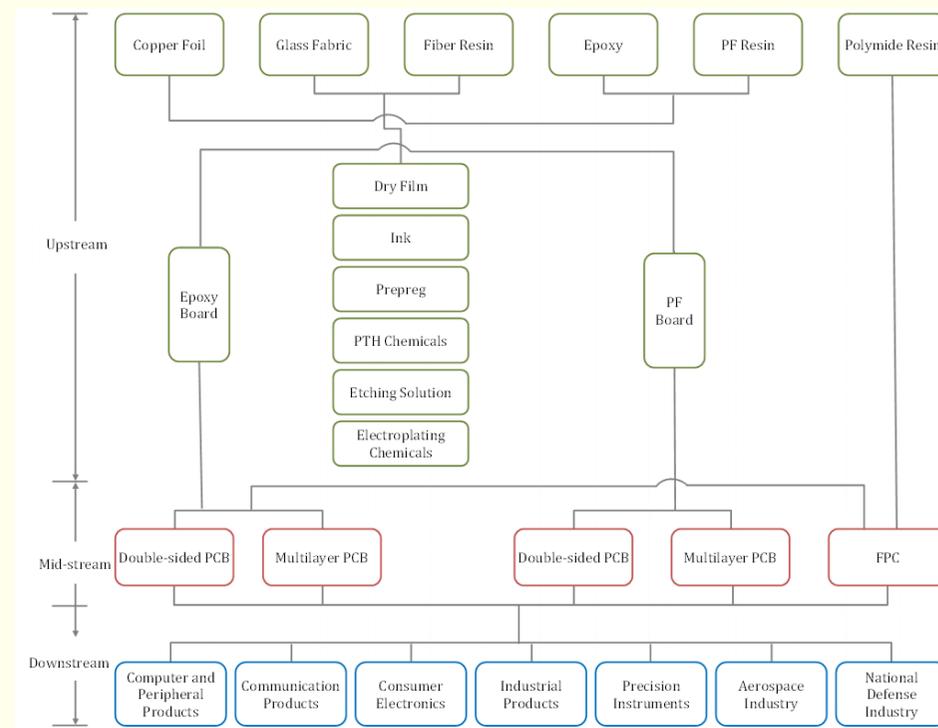
	<p>respect human dignity, fulfilling corporate social responsibilities.</p>
<p>Governance Structure</p>	<p>Management Information System Department, Business Department and Sustainable Development Committee</p>
<p>Management Actions</p>	<p>Short-term: raise management intensity of present process of production plan, purchase and business work, logistic management, adjust management organization to increase flexible options of digesting materials corresponding to sales plan.</p> <p>Mid & Long-term: observe industry movement status; increase choice and audit of local vendors and think of innovative collaboration model.</p>
<p>KPI</p>	<p>Percentage of Material To Price; Turnover Rate of Each Type of Inventory; Efficiency of Production Plan</p>
<p>Evaluation Mechanisms</p>	<p>The Apex Procurement Department conducts regular assessments, audits, and reviews of key suppliers once a year. The evaluation takes into account ESG sustainability aspects and refers to norms such as the Responsible Business Alliance (RBA) Code of Conduct, ISO 14001, ISO 9001, and ISO 45001 certifications. These certifications ensure both parties' commitment to quality, environmental protection, and actions taken to eliminate any form of forced or compulsory labour, among other social responsibilities.</p> <p>For suppliers who do not comply with our company's supplier management policies and standards, we provide continuous guidance, improvement support, and monitoring. If a supplier still fails to meet the requirements, we will assess the specific circumstances and consider reducing transaction volume or ceasing transactions.</p>
<p>Engagement Outcomes and Effectiveness with Stakeholders</p>	<p>65.01% of the suppliers are local suppliers from Thailand Accounting for 35.54% of the total annual procurement amount.</p>

The Roles in the Industry Value Chain

Printed Circuit Boards (PCBs) are the largest value-generating industry in the global electronic components sector and serve as a fundamental industry for the manufacturing of electronic information products. Apex primarily focuses on the production of double-sided and multi-layer PCBs, positioning itself in the midstream of the industry. Upstream, there are related components and materials such as various substrates, copper foils, and films. Downstream industries encompass information technology, communications, consumer electronics, semiconductor products, industrial control equipment, automotive, medical instruments, aerospace, and defence industries. The upstream raw material supply is not excessively concentrated, and there are long-term cooperative relationships with our company and its subsidiaries, ensuring stable and sufficient material sources. The downstream industry has a wide range of applications, and the development of both upstream and downstream sectors is fairly robust.

In recent years, the shipments of electronic terminal products, including smartphones, computers, and televisions, have not grown significantly, actually with a recession, while the overall PCB output value maintains its growth. 5G infrastructure in the early stage is a key point. In the future, as the application of high-end PCB products such as 5G and AI continues to be promising, it is expected that the market competition for high-end products will continue to intensify. In terms of product structure, the current multi-layer PCB market still dominates the market. With the rapid development of electronic circuit industry technology, the integrated functions of components have become more and more extensive. Electronic products have become more prominent in the high density of PCBs, and high-end PCB products such as high multilayer boards, HDI boards, flexible boards, and package substrates have gradually taken over market dominance.

Apex's major products, multi-layer board, are consumer electronic products, and its market will experience moderate growth. Because the Group's current revenue generation in this area is still relatively low. Therefore, if Apex can meet the requirements of the market for products and enhance process capability, there is considerable room for growth. The main competitors of such conventional hardboards are manufacturers located in Mainland China, including Taiwan-funded plants and China-funded plants. In recent years, companies in Mainland China have increasingly strengthened their competitiveness through government support, self-technology upgrading, and the gradual integration of upstream and downstream industries. However, in recent years, the increasingly stringent environmental protection ban in mainland China will lead to an increase in the cost of environmental protection.



Reference: Material and Chemical Research Laboratories, Industrial Technology Research Institute

Market Share

The Company's and its subsidiaries annual sales in 2022 is NT\$14,906,225,000 (approximately US\$499 million), accounting for a relatively low market share in the global output value of double-layer, 4-layer to 12-layer printed circuit boards. The Company is now ranked No. 1 in the printed circuit board industry for Taiwanese businessmen in Thailand.

Competitive Advantages

I. Excellent Corporate Management

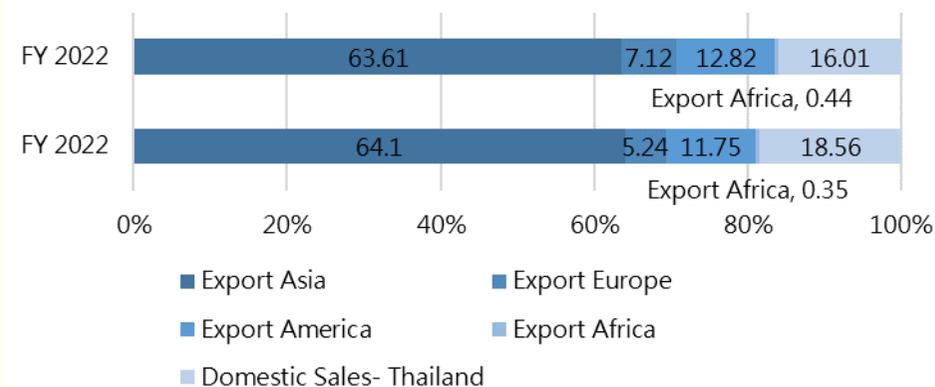
Apex' s management team is dedicated to the company, maintains business stability and growth, endeavours in the sustenance of internal communication channels, and also adheres to five major management concepts.



II. Diversity of Client Sources and Product Applications

Apex' s clients are spread around Japan, Korea, Europe, America and China and major international manufacturers are among the end customers. Diversification of client sources reduces the influence of the economic situation of a single country or region on Apex. In the meantime, diversification of product applications, including electronic products, computer-related, communications and automotive products, enables Apex to stand out as a company capable of meeting the various needs of clients and its product development can also create complementary effects.

Sales Area of Major Goods in the Last Two Years



III. Cost Control and Product Price

Complicated production processes and production according to orders are the characteristics of PCB manufacturing. Hence, precise and effective management are the foundation for the maintenance of competitiveness and the creation of profit. Whole production processes of PCB are in-house, so Apex can control the scrap rate of each workstation and thus decrease production costs. At the same time, Apex has centralised sales and procurement so as to reduce time lag. Finally, good cost control has resulted in competitive product prices.

4.5 Ethics and Integrity

Management Policies for Material Topics: Harmed reputation

Impact Assessment	Damage to reputation falls under the category of reputation impact. The potential impacts of reputation damage may include: (1) Loss of orders or customers. (2) Adverse effects on credit ratings, impacting financing capabilities. (3) Negative impact on recruitment and retention of talent.
Policies and Commitments	(1) Enhancing legal compliance and regulatory requirements knowledge through professional development courses and educational training. (2) Regularly obtaining ISO 9001 certification for quality management systems. (3) Establishing a Sustainable Development Committee to drive sustainable development initiatives. (4) Adhering to international conventions and standards regarding labour working conditions, such as TLS (The Labour Standards), Responsible Business Alliance (RBA) Code of Conduct, etc.
Governance Structure	Sustainable Development Committee, Business Department, Quality Assurance Department and Administrative Department
Management Actions	Short-term: keep effectively managing the operations and ESG works. Mid & Long-term: keep improving risk control system; study schedule of introducing international standards.
KPI	ESG rating score, significant violation case and penalty amount.
Evaluation Mechanisms	Regular communication with stakeholders Participation in ESG ratings by professional organisations The Sustainable Development Committee holds at least one meeting per year to assist the Board of Directors in driving sustainability initiatives for the company and its subsidiaries.
Engagement Outcomes and Effectiveness with Stakeholders	No significant incidents of integrity violations, infringement of customer privacy, or violations related to environmental protection or human rights occurred.



Reporting Channel
TEL : (02) 2717-0032
E-mail : ethics@apex-intl.com.tw

Ethical Corporate Management

Integrity and honesty have always been the core values of Apex's corporate culture and the foremost principle of our business philosophy. We are committed to conducting all business activities with integrity and strictly prohibit any form of corruption or fraudulent behaviour. The company has established integrity-related policies and regulations through the board of directors and consistently monitors the development of domestic and international corporate governance systems. Based on this, we review and improve the corporate governance framework to enhance its effectiveness.

Related Internal Policies

- Principle of Corporate Governance
- Ethical Corporate Management Best Practice Principles
- Procedures for Ethical Management and Guidelines for Conduct
- Measures to Prevent Insider Trading
- Principle of Sustainability Development
- Transaction Procedures for Related Parties, Specific Companies and Group Companies
- Code of Ethics for Directors and Officers

Promote and Implement

Our company has incorporated a clear policy to prevent conflicts of interest in our Code of Conduct, emphasising the importance of integrity in our business operations. Independent directors regularly review audit reports and engage with the audit manager to understand any instances of conflicts of interest within the company. We strive to maintain open and effective communication channels with stakeholders. We have established a reporting system to further support our commitment to ethical conduct. The reporting system is overseen by independent directors and the audit manager, and the channels for reporting are as follows:

- I. Internal: CEO BOX \ BROTHER BOX
- II. External: The audit manager's contact information is disclosed on the company's official website. Through the reporting system, no ethical issues were reported in 2022, and regular audit checks did not uncover any abnormal issues related to the following topics:
 - The benefits of external providers
 - Private transactions
 - commitments to external
 - Compliance with international regulations
 - Political donations
 - Insider trading
 - Large-scale donations
 - Customer/Supplier ethical issues
 - Protection of trade secrets and intellectual property

Investigation Procedures and Reporting Channels

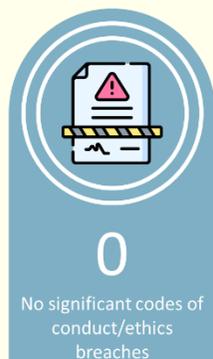
The company has established a standard operating procedure for reporting matters, and the process of receiving and investigating reports. All documentation related to the receipt, investigation process, and investigation results should be documented and retained for five years. If the reported matter involves general employees, it should be reported to the department supervisor. If the reported matter involves directors or senior executives, it should be reported to the independent directors.

For substantiated reports, the relevant units must review internal control systems and operational procedures and propose improvement measures to prevent the recurrence of similar incidents. The dedicated unit responsible for handling reports should report the reported matters, the handling process, and the subsequent review and improvement measures to the board of directors.

Compliance with regulations

Apex strictly adheres to local laws and actively practices various global initiatives or conventions in areas such as the environment and human rights. We have established multiple internal regulations through the Board of Directors to strictly govern our employees, leaving zero tolerance for any unlawful activities. In the event that any employee or representative of the company engages in suspicious behaviour or potentially violates the company's code of conduct, individuals can anonymously report such misconduct through Apex's official website in both Chinese and English. Reported matters will be directly handled by the company's audit manager.

In 2022, Apex did not experience any significant violations of ethical conduct, nor were there any major incidents related to environmental protection or human rights.



4.6 Supplier Management Policy

Apex maintains long-term and close relationships with its business entities and suppliers, aiming to achieve mutual trust and mutual benefit. As raw material suppliers have a significant influence on product manufacturing, Apex places great importance on their compliance with environmental protection regulations. Suppliers are required to comply with local government regulations related to air pollution control, water pollution control, waste management, and toxic substance management. In the event of any violations, suppliers must promptly submit improvement plans.

Furthermore, Apex also requests suppliers of processed raw materials to provide statements ensuring that their products do not contain internationally prohibited substances harmful to the environment. This ensures that the products meet customer and international regulatory requirements, such as the EU RoHS directive, the absence of perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOA), and compliance with the EU REACH chemical regulation. In the event of significant deficiencies identified during supplier environmental audits, the procurement supervisor requests the supplier to make improvements.

Establishing an environmental management system, setting environmental goals, and assessing suppliers for ISO 14001 or RC14001 certification are also part of Apex's supplier management policies. Apex strictly adheres to the Responsible Business Alliance (RBA) Code of Conduct and encourages suppliers to follow suit. Non-conflict minerals are procured, and the promotion of humanitarian spirit and the practice of human dignity are advocated as social and moral guidelines. Apex fulfils its corporate social responsibility by avoiding the use of raw materials obtained in armed conflicts or human rights violations.

The Supplier Management Implementation

The procurement department of Apex conducts regular assessments, audits, and reviews of key suppliers once a year. In 2022, following the company's supplier audit mechanism, audits were conducted on major suppliers, and comprehensive performance evaluations were carried out. The evaluations take into account ESG (Environmental, Social, and Governance) sustainability aspects and refer to standards such as the Responsible Business Alliance (RBA) Code of Conduct, ISO 14001, ISO 9001, and ISO 45001 certifications. These assessments ensure that both parties fulfil their responsibilities in terms of quality, environmental protection, and actions to eliminate forced or compulsory labour.

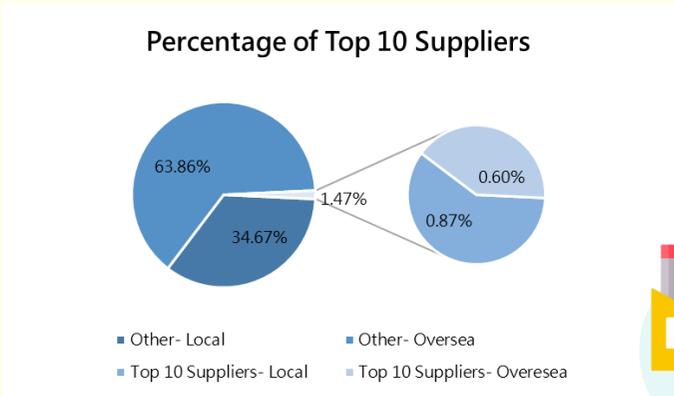
The company provides continuous guidance, improvement support, and monitoring for suppliers who do not comply with Apex's supplier management policy and standards. If a supplier still fails to meet the requirements, Apex will take appropriate measures based on specific circumstances, such as reducing transaction volume or ceasing transactions with the supplier.

Local Procurement

With the formal launch of the ASEAN Economic Community (AEC) and the advantage of zero-tariff border trade, Thailand has been enjoying the benefits of exporting to ASEAN countries. In recent years, Thailand has made significant improvements in its land transportation system. Transporting goods between Thailand and any region in mainland China now takes only 7-10 days. This has not only reduced delivery time but also lowered costs, thereby increasing competitiveness. In terms of local procurement, Apex has established partnerships with local suppliers in Thailand to procure raw materials and services, resulting in effective time savings.

In 2022, The procurement amount from Apex's suppliers in Thailand accounted for 35.54% of the total annual procurement amount, and the number of local suppliers reached 65.01%. Among the top ten suppliers, 40.82% of the procurement amount came from local suppliers.

In recent years, the supply chain in the PCB industry in Thailand has been growing. Considering the shorter transportation distance, reduced supply chain risks, support for local economic development, increased local employment opportunities, and the significant reduction in carbon emissions from using local materials, Apex continues to prioritise increasing the proportion of local procurement. This will be an ongoing procurement goal for the company.



4.7 Customer Service

Management Policies for Material Topics: Uncertainty of market information

Impact Assessment	Market information uncertainty is indeed a part of risk management. The operational impacts caused by market information uncertainty are as follows: (1) Misalignment of production and sales planning, increasing the risk of finished goods inventory and cash flow. (2) Misalignment of raw material inventory planning, increasing the risk of misaligned raw material planning and higher procurement costs.
Policies and Commitments	(1) Strengthening negotiation and communication skills, customer relationships, and market analysis through education and training. (2) Regularly engaging in stakeholder communication.
Governance Structure	Business Department, Manufacturing Department, Administrative Department and Financial & Accounting Department
Management Actions	Short-term: raise management intensity on present market analysis, management of customers, agents and logistic vendors in order to strengthen judge ability to market change. Mid & Long-term: to supplement training of communication and negotiation, customer relationship management and marketing analysis; to build up channel of summary of political and economic situations.
KPI	Capacity Utilization Rate, Monthly Production Value, Turnover Rate of Each Type of Inventory
Evaluation Mechanisms	Regularly conducting statistical evaluations of monthly production value and turnover rate of each type of inventory.
Engagement Outcomes and Effectiveness with Stakeholders	The total production value in 2022 was NT\$17,402,440,000.

Management Policies for Material Topics: Customer behaviour changes

Impact Assessment	<p>Changes in customer behaviour are part of customer relationship management. The inability to meet value chain/sustainable supply chain requirements can pose risks in the following ways:</p> <p>(1) Inability to meet customer requirements for carbon reduction effectiveness (pricing, carbon emissions reduction, low-carbon processes, etc.).</p> <p>(2) Increasing customer audit requirements in various ESG (Environmental, Social, and Governance) aspects. This may include RBA (Responsible Business Alliance) compliance, conflict minerals management, TCFD (Task Force on Climate-related Financial Disclosures) assessment, carbon reduction efforts, energy management capabilities, water resource management, etc. Time pressure to meet these requirements will escalate.</p> <p>(3) Audit scores may affect order acquisition.</p> <p>(4) Legal disputes or damage to corporate reputation in ESG aspects can also impact order acquisition.</p> <p>It is important for the company to address these challenges and align with customer expectations in terms of ESG compliance, carbon reduction, and overall sustainable practices to maintain and enhance customer relationships.</p>
Policies and Commitments	(1) Issuing an ESG annual report and disclosing ESG-related actions continuously throughout the year.
Governance Structure	Business Department, Corp. & Legal Department and Sustainable Development Committee
Management Actions	<p>Short-term: proactively exchange ideas with customers and vendors about ESG expectation in order to know schedule of realization in audit activities.</p> <p>Mid & Long-term: to seek opportunities for management innovation and transformation.</p>
KPI	Customer Satisfactory Score, Customer Annual Audit Result, Analysis of Sale Amount of Each Type
Evaluation Mechanisms	Conducting two customer satisfaction surveys per year, including quality, transportation, and service. Quality satisfaction accounts for 50% of the total score, transportation for 30%, and service for 20%. Participating in ESG ratings by professional organisations.

	The Sustainable Development Committee holds at least one meeting per year to assist the Board of Directors in promoting sustainable development initiatives for the company and its subsidiaries.
Engagement Outcomes and Effectiveness with Stakeholders	<p>2022 Results:</p> <p>Customer Satisfaction:</p> <p>APT: 93 points</p> <p>APS: 89 points (out of 100)</p>

Customer Satisfaction

Apex values customer needs and expectations and continuously strives to improve satisfaction. By addressing and improving internal processes based on customer feedback, Apex maintains its position as a supplier on customers' lists and drives business growth. Apex maintains regular contact with customers through day-to-day operations and conducts customer satisfaction surveys every six months.

These regular surveys cover Apex's top ten printed circuit board (PCB) product customers and assess product quality, delivery speed, and service. The survey results are analysed and reported directly to management, allowing for improvements in internal and external processes based on customer feedback.

A dedicated customer service team is in place to handle customer complaints promptly and provide comprehensive product information. Apex ensures that product labeling complies with relevant regulations and international standards such as RoHS and HF.

In 2022, Apex did not experience any significant legal violations, demonstrating its commitment to compliance and upholding regulations.



Note: APT' s score allocation is 50% for quality, 30% for service, and 20% for delivery. APS' s score allocation is 2019 H1: quality 50%, service 30%, delivery 20%. 2019 H2~2021H1: quality 40%, service 30%, delivery 30%. After 2021 H2: quality 50%, service 30%, delivery 20%.

5. Sustainable Environment

In late 2015, the United Nations Framework Convention on Climate Change (UNFCCC) held its 21st Conference of the Parties (COP 21) in Paris, France, where the "Paris Agreement" was negotiated and adopted. The aim of this agreement is to limit global temperature rise to well below 2 degrees Celsius and to strive for a temperature increase of no more than 1.5 degrees Celsius. The Paris Agreement has significant importance and impact on global efforts to reduce greenhouse gas emissions and address climate change.

The "Science-Based Targets Initiative" (SBTi), launched in 2015 by the United Nations Global Compact and organisations such as the Carbon Disclosure Project (CDP), has become one of the fastest-growing and most reputable climate action initiatives globally. Initially, limiting global warming to 2 degrees Celsius was considered the mainstream view. However, after the Intergovernmental Panel on Climate Change (IPCC) released its "Special Report on Global Warming of 1.5 degrees Celsius" in 2018, it became evident that efforts should be made to limit the temperature increase to well below 2 degrees Celsius and strive for 1.5 degrees Celsius. As a result, the reduction targets submitted to SBTi after July 15, 2022, were limited to 1.5 degrees Celsius.

As a leading printed circuit board (PCB) manufacturer in Thailand, Apex recognises the risks and potential impacts of climate change, as well as the importance of green sustainability for business development. Therefore, the company is committed to environmental protection and energy efficiency, aiming to integrate production with environmental conservation and optimise the use of energy and resources while reducing carbon emissions and waste generation.

Apex has proposed a Green Project with three key elements. Firstly, it plans to adopt ISO 14064-1, develop an internal carbon footprint information collection platform, establish a more comprehensive carbon inventory mechanism, and conduct greenhouse gas inventories. This will pave the way for the development of carbon reduction plans. Secondly, the company actively seeks alternative energy sources, building upon the foundation of the Sandbox Project and solar energy initiatives. It collaborates with energy-saving organisations and equipment suppliers to explore more energy-saving opportunities and expand the breadth of renewable energy programs, thereby strengthening its carbon reduction policies. Thirdly, in response to waste pollution management issues, Apex plans to reduce waste generation through new processes and developments. It will also enhance waste management and water resource management systems through the Apex wastewater recycling project, moving towards resource recycling. In addition to launching various large-scale projects to promote an environmentally friendly environment, the management team is committed to enhancing employees' carbon reduction awareness. Environmental sustainability and corporate social responsibility are integrated into the thinking patterns of employees, leading them to participate in green actions that protect the environment in their daily practices.

Apex aims to construct and explore sustainable strategies that align with its corporate culture and fully implement climate change management actions. By fulfilling its corporate social responsibility and striving for sustainable development, Apex believes it can become a driving force in promoting environmental sustainability within the industry.

5.1 Management of Water Resources and Wastes

With the increasing global population and the impact of climate change, the supply of water resources has become limited and unstable. Therefore, effective water resource management is necessary to ensure that we can meet current and future water demands. The objective of water resource management is to maximise the utilisation of existing water resources and ensure their proper protection and management. Through scientific, technological, and policy means, reducing waste and losses, increasing water supply, improving water quality, and water efficiency and effectiveness can be maximised. Managing water resources is a crucial issue for human survival and development, requiring global collective



In 2022, Apex experienced changes in its products, which decreased copper content in the etching solution. This, in turn, affected the recovery of both acidic and alkaline etching solutions, leading to the temporary shutdown of the alkaline etching solution recovery line. Additionally, due to product variations, we mixed low-copper content waste printed circuit boards with regular copper content waste PCBs, resulting in an increase in PCB waste. Furthermore, in February 2022, we implemented a new wastewater treatment system; however, as the new system was still in the testing phase, it led to a significant increase in the moisture content of the sludge.

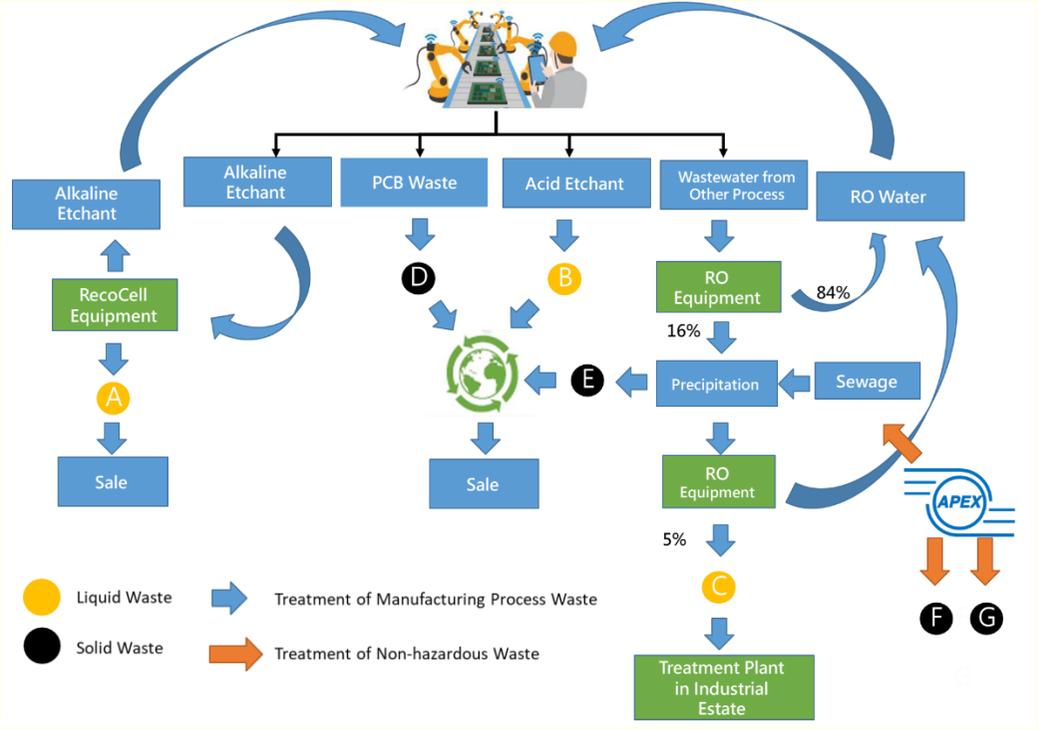
Liquid	Treatment Method	Recycled/Treatment Amount		
		FY 2021	FY2022	
Alkaline Etchant	Use RecoCell equipment for electrolytic recycling and reuse	1,022 Tons	684.14 Tons	A
Acid Etchant	Discharged by a qualified company in the industrial estate	10,580 Tons	9,509.90 Tons	B
Wastewater from Other Processes	Discharge to the wastewater treatment plant in the industrial zone	2.99 million m ³	2.78 million m ³	C
Sewage				

Solid	Treatment Method	Recycled/Treatment Amount		
		FY 2021	FY 2022	
PCB Waste	Discharged by a qualified company in the industrial estate	155 Tons	196.49 Tons	D
Precipitation	Discharged by a qualified company in the industrial estate	5,224 Tons	6816.12 Tons	E
Rubbish (note)	Garbage cleaning by the government	5,316 Tons	6043.68 Tons	F
Food Scraps (note)	Waste clearance agency	536 Tons	577.63 Tons	G
Copper	Sell it, after undertaking the processing procedures	-	123.46 Tons	

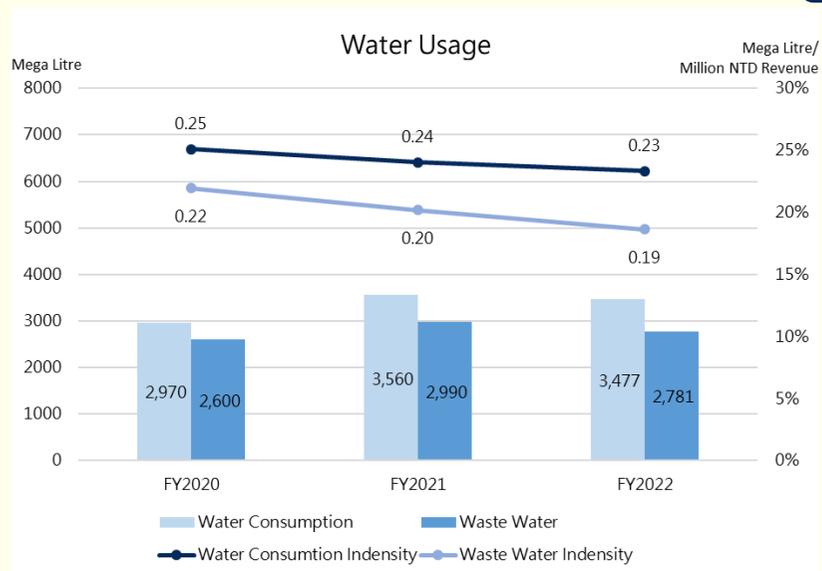
Note: Rubbish and Food Scraps in the 2021 ESG report are not included in APS, and APS is included in the statistics in 2022.

According to Sinsakhorn Industrial Estate, Apex is obligated to control wastewater in accordance with standard parameters prior to discharging wastewater to the wastewater treatment system of the Industrial Estate. The standard parameters and the water samples sent by Apex to the Industrial Estate Administration Bureau are shown in the attached table.

Parameter	Unit	Standard	Result	Detection Method
pH		5.5-9.0	Compliant	Electrometric Method
Total Dissolved Solids (TDS)	Mg/l	3,000	Compliant	Dried at 103-105°C
Suspended Solids (SS)	Mg/l	200	Compliant	Dried at 103-105°C
BOD	Mg/l	500	Compliant	5-Day BOD test, Azide Modification



Parameter	Unit	Standard	Result	Detection Method
COD	Mg/l	750	Compliant	Closed Reflux, Colorimetric Method
Copper (Cu)	Mg/l	2.0	Compliant	Nitric Acid Digestion and Direct Air Acetylene Flame: AAS
Oil & Grease	Mg/l	10	Compliant	Soxhlet Extraction Method



Note: In the past, the unit for water resources data was million cubic meters. To comply with the GRI guidelines, the unit for the 2022 water resources report has been changed from million cubic meters to million litres (1 million cubic meters is equivalent to 1,000 million litres).

Apex sourced all its water from third-party providers, including the local water company and industrial area treatment plants. The water intake for 2022 was 3,477 million litres, water consumption was 696 million litres, and wastewater generated was 2,781 million litres. In comparison, the water intake for 2021 was 3,560 million litres, water consumption was 570 million litres, and wastewater generated was 2,990 million litres. In 2022, there was a reduction of over 1% in both water consumption and wastewater generation compared to 2021.



5.2 Energy Efficiency and Policy

Management Policies for Material Topics: Energy management

Impact Assessment	Energy management falls under carbon emissions and energy management. Hazards may arise from: (1) Power shortages (2) Increased electricity costs and rising gasoline prices (3) Increased carbon fees (4) Addition of carbon-related regulatory requirements, thereby affecting production costs.
Policies and Commitments	(1) The goals of renewable energy usage ratio 2025: 5% 2035: 10% 2045: 30% 2060: 50%
Governance Structure	Sustainable Development Committee and Financial & Accounting Department
Management Actions	Short-term: set up solar cell equipment to generate electricity by ourselves. Mid-term: gradually expand scale of solar cell. Long-term: to study knowledge, type and source of talents and capital of installing a power plant..
KPI	Generated Electricity of Solar Cell, Ratio of Output to Energy Used
Evaluation Mechanisms	Regular statistics of solar power generation
Engagement Outcomes and Effectiveness with Stakeholders	2022 Results Use 1,490 MWh of solar energy and continue to build solar systems

In recent years, energy conservation and carbon reduction have become an international focus in order to mitigate the exacerbation of climate change. Our company's management team adheres to the concept of sustainable business and has officially launched the mid- to long-term Apex Solar Project. Building upon the initial success of the Apex Sandbox Project in energy usage, the solar energy solution will leverage Thailand's advantage of an average of 200 days of sunlight per year to expand and develop the use of renewable energy within the group, strengthening sustainable operations and addressing important global issues.

In 2022, the Apex Solar Project began construction gradually, and some solar equipment has been put into operation. The usage has increased by 3,164.81% compared to the previous year, amounting to 1,445 megawatt-hours. The proportion of energy usage has also increased by 0.5%. The utilisation rate of solar power will continue to increase in the future, with a short-term goal of solar energy accounting for 5% of total energy consumption by 2025 and reaching 10% by 2035. Apex is striving to produce clean and renewable energy sources. Reducing energy consumption is also imperative. In 2022, energy usage decreased by 3.55% compared to the previous year. Currently, Apex is implementing the FA Goal project internally, actively improving equipment operation efficiency and reducing energy usage through production equipment planning adjustments and component replacements. With only one Earth, proactive energy management, reduced energy consumption, and lowered carbon emissions are indispensable steps on the path to achieving net zero.

Energy-saving implementation in 2022:

I. FA Goal

Apex internally implements plans to improve equipment operational efficiency and reduce energy consumption through the planning adjustments of production equipment and the replacement of components. In 2022, the FA Goal aims to achieve energy savings of over 9,000 kWh per day through the improvement of production equipment planning and component utilization.

II. Lean Project

The implementation of this plan is scheduled from 2022 to 2023. With the guidance of external experts, six measures have been proposed to improve equipment operational efficiency. These measures include:

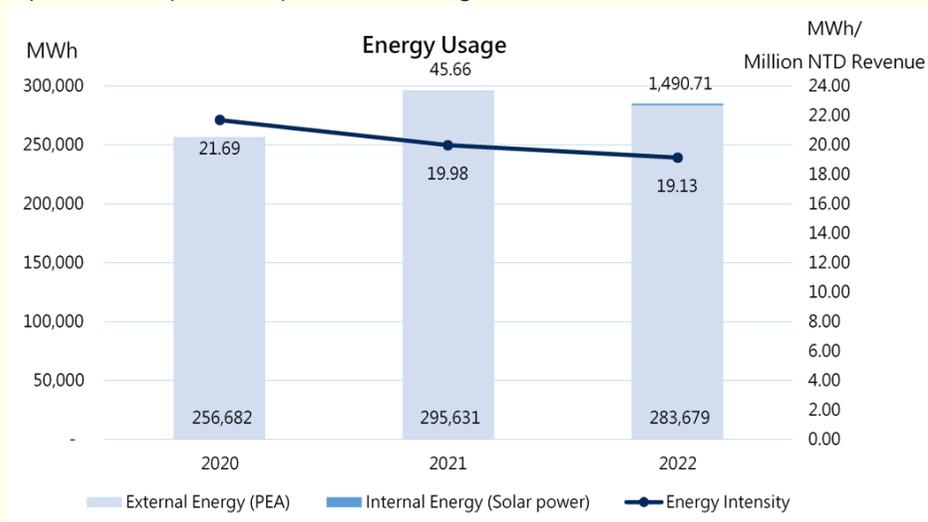
- i. Utilizing current optimisation technology to reduce power system energy consumption.
- ii. Addressing the unloading issues of the turbine compressor.
- iii. Installing high-efficiency vacuum blowers and implementing control systems.
- iv. Using temperature difference sensors to monitor and control hot water loads.
- v. Modifying the approach to heating hot water.
- vi. Implementing high-efficiency cooling systems and monitoring them.

Through effective system management and improvement, it is expected to achieve a 10% reduction in energy consumption associated with equipment operation.

Solar Project

The Solar Project is planned to be implemented in three phases from 2021 to 2027, gradually expanding to various plant sites in Thailand. Upon completion of all phases in 2027, the total installed capacity of our company's solar photovoltaic systems is projected to exceed 20,970 kilowatt-hours. This initiative is expected to reduce annual carbon dioxide emissions by over 15,000 metric tons, compared to the baseline year of 2021 as per the company's greenhouse gas inventory data. This reduction is equivalent to a decrease of more than 8% in carbon emissions.

In addition to our commitment to sustainable development, during the solar panel installation process, we engage professional vendors who prioritise safety and provide guidance through relevant training programs. These programs are open for participation by employees, fostering a sense of collaboration, unity, and pride as part of the Apex Family in our efforts towards energy sustainability and construction.



Phase	Solar plant (kWp)	FY2022	FY2023	FY2024	FY2025	FY2026-2027
Phase 1	Canteen	291.60				
	CPP + DRILLING	622.08				
	Warehouse	1,536.36				
	Office	321.01				
	New FG		908.60			
	Water plant		651.75			
	New Water plant		305.80			
	Rooftop Apex 2 (Project building floor 3)		3,200.00			
Phase 2	New Chemicals & Hazardous waste plants			370.60		
	Rooftop Apex 1 (Canteen)			207.00		
	Rooftop Apex 1 (Plan D)			254.10		
	Rooftop Apex 1 (Project building floor 3)			3,000.00		
Phase 3	New AREA (16+12 total 28 rai land)				4,500.00	
	Rooftop Apex 3				1,800.00	
Phase 3	Rooftop Apex 4 (New factory)					3,000.00
Solar Capacity (kWp)		2,771.04	5,066.15	3,831.70	6,300.00	3,000.00
Accumulate Solar Capacity (kWp)		2,771.04	7,837.19	11,668.89	17,968.89	20,968.89
CO2 Reduction (Tons)		2,021.70	5,719.28	8,515.86	13,113.94	15,303.51

Note: CO2 Reduction 1,000 kWp=729.85 Ton CO2/Year

Average of the Time That Can Receive Solar Radiation In 2022 :

1,000 kWp = 4 Unit

SGS Thailand suggested the emission factor for a carbon footprint for Organization (CFO) : 0.4999 kgCO2e

(1,000 x 4 x 365 x 0.4999) / 1,000 = 729.85 tonCO2e



5.3 Mitigating Global Warming

Management Policies for Material Topics: Material Rising price of GHG emission

Impact Assessment	The implementation of material rising price of GHG emission s under carbon emissions and energy management. Carbon taxes or regulations can result in increased costs, which can impact various aspects of business such as pricing quotations, procurement choices, freight rates, transportation modes, and accounting information gathering.
Policies and Commitments	(1) Solar Project (use of renewable energy) (2) Lean Project (system equipment energy saving, external assistance plan) (3) FA Goal (system equipment energy saving, internal independent plan) (4) Reduce GHG emissions by 5% by 2027 (base year 2022)
Governance Structure	Sustainable Development Committee and Financial & Accounting Department
Management Actions	Short-term: we have proceeded GHG inventory count and been installing ISO 14064-1; keep promoting energy-saving projects. Mid & Long-term: study schedule of installing carbon footprint and carbon pricing; adjust carbon strategy during the instalment.
KPI	Performance of Energy-Saving, Unit CO2 Emission
Evaluation Mechanisms	ISO 16064-1 Certified
Engagement Outcomes and Effectiveness with Stakeholders	2022 Results Scope 1 + Scope 2 GHG emissions reduced by 29,920 tons GHG emission intensity 10.41 tons CO2e / Million NTD Revenue

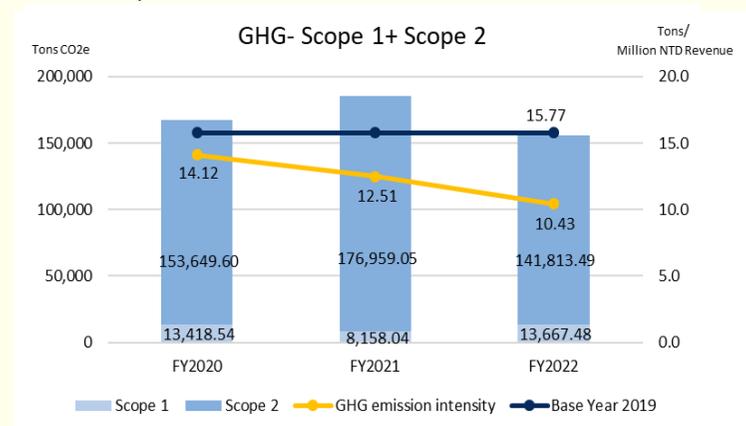
Apex has recognised the global concern for climate change and greenhouse gas (GHG) emissions and the importance of taking action across all departments to reduce GHG emissions. In 2016, the company established a GHG inventory as a list of targets for emission reduction, using 2019 as the baseline year. The plan is to reduce GHG emissions by 5% per million in revenue generated over the next five years (emissions are from Scope 1 and Scope 2 GHG emissions listed in the GHG inventory). By the end of 2022, Apex has successfully achieved this goal, reducing carbon intensity by 5.36%. The new short-term goal is to reduce GHG emissions by 5% based on 2022 over the next five years.

Apex primarily consumes electricity for manufacturing and power supply. Through the implementation of the FA Goal project, energy consumption and GHG emissions have gradually decreased. Additionally, the GREEN Project aims to increase the production and proportion of renewable energy. The first phase of the Solar Project was partially operational in 2022, reducing over 2,000 tons of CO₂e. The solar power generation project is divided into three phases, with the first phase still under construction, aiming to effectively reduce purchased electricity and carbon emissions in the coming three years. Apex utilises the TGO-CFO (Thailand Greenhouse Gas Management Organization - Carbon Footprint) program (equivalent to ISO14064-1:2006) as the reporting standard and has established the GHG inventory. This standard covers reporting CO₂, CH₄, N₂O, HFCs, PFCs, SF₆, and NF₃ emissions, collected regionally. If the company has no factories but only offices in a particular region, only the electricity consumed by the local office is collected, and the carbon emission factors are calculated based on the power carbon coefficients published by the Bureau of Energy, Ministry of Economic Affairs, Taiwan in 2022, the baseline emission factors published by the Ministry of Ecology and Environment of China in 2022 for emission reduction projects in southern China, and the emission factors published by TGO-CFO for Thailand. The global warming potential (GWP) values used are based on IPCC AR5. Other indirect GHG issues mainly come from the supply chain, so Apex has conducted Scope 3 GHG inventories in collaboration with suppliers to control Scope 3 GHG emissions and aims to expand the scope of inventory to further control.

5.4 Compliance with Environmental Regulations

All of our company's facilities comply with government regulations regarding environmental-related operations to ensure full compliance. We also conduct self-assessments based on various international standards. We continuously improve our production processes to reduce pollution sources and actively invest in pollution prevention and control equipment that is in line with environmental strategies. We entrust qualified professional environmental firms to handle and manage waste, aiming to minimise actual or potential environmental pollution in local communities.

In the fiscal year 2022, no major losses (including compensations) or disposals were incurred due to environmental pollution. Apex consistently operates at the highest standards, aiming to mitigate environmental costs during production and foster a harmonious relationship with the environment.



Unit: Tons CO₂e

Scope	FY2020		FY2021		FY2022	
	GHG	Scope ratio	GHG	Scope ratio	GHG	Scope ratio
Scope 1	13,418.54	7.41%	8,158.04	3.95%	13,667.48	7.86%
Scope 2	153,649.60	84.89%	176,959.05	85.73%	141,813.49	81.60%
Scope 3	13,932.89	7.70%	21,288.93	10.32%	18,312.04	10.54%
Biomass Fuel	5.89	0.00%	4.75	0.00%	4.99	0.00%
Total	181,006.92	1.00	206,410.77	1.00	173,798.00	100.00%
GHG emission intensity	14.12 Tons/ Million NTD Revenue		12.51 Tons/ Million NTD Revenue		10.43 Tons/ Million NTD Revenue	

Note : GHG emission intensity = (Scope1+Scope2) Tons CO₂e/ Million NTD Revenue

6. Social Prosperity

Management Policies for Material Topics: Change of political and social environment

Impact Assessment	<p>Changes in political and social environments fall under risk management.</p> <p>The interconnections between political and social changes and operations can have direct impacts on various aspects:</p> <p>(1) The stability of the political environment in a particular country can influence the development of tax policies, investment policies, environmental policies, industrial policies, carbon pricing policies, etc., directly affecting operations.</p> <p>(2) Changes in geopolitical dynamics can affect the migration of industrial clusters, impacting supply chains and influencing choices in procurement, delivery reliability, and stability.</p> <p>(3) Developments in carbon pricing and carbon tariffs can significantly affect raw material costs and supply chain dynamics, requiring continuous monitoring and appropriate adjustments to procurement strategies.</p> <p>(4) Changes in population structures can potentially impact the stability of the labour force supply at the entry-level.</p> <p>(5) Changes in societal values resulting from shifts in population structures can also impact the stability of the labour force supply at the entry level.</p> <p>(6) Investment developments in different regions of Thailand can lead to displacement effects on labour supply among different provinces.</p>
Policies and Commitments	<p>(1) Through the employee welfare committee, advocate for the rights of employees and ensure stability of personnel.</p> <p>(2) Implement a fair remuneration policy and enhance training and development opportunities to attract and retain talent.</p>
Governance Structure	Corp. & Legal Department, Management Information System Department and Administrative Department
Management Actions	Short-term: through interaction with external parties by PUR, BIZ, and F&A, market information is collected, analysed, and compared, and then fed back to the management for planning the management

	<p>activities.</p> <p>Mid & Long-term: set up channel of summarizing political and economic information; study mature educational operation plan with schools; to improve qualitative system of employee career skills.</p>
KPI	Recruit Percentage, Qualitative Index of Skill
Evaluation Mechanisms	Monthly staff turnover rate below 10%. Regular communication with stakeholders.
Engagement Outcomes and Effectiveness with Stakeholders	<p>Achievements in 2022:</p> <p>Total of 234,189 hours of education and training for directors, managers, and employees.</p>



6.1 Happy Workplace

Apex is a big family, where the senior management considers the safety, occupational health, and well-being of all employees and subcontractors working at Apex as a priority. Employees are crucial resources for Apex's successful operation; therefore, achieving zero occupational accidents is a business objective. Apex values its employees' physical and mental health, workplace rights, environmental hygiene, and safety. We are committed to creating a happy and safe work environment, providing employees with diverse and equal opportunities, equal pay for equal work, and fostering a relationship of mutual trust and respect between labour and management.

Apex's employees elect an employee welfare committee. Apex also organises regular donations and charity events to assist vulnerable groups. We have established internal company regulations in accordance with laws and various initiatives to ensure equal and fair treatment in human resource policies, regardless of gender, race, socioeconomic status, age, marital or family status. This also includes ensuring equality and fairness in employment, hiring conditions, compensation, benefits, training, performance evaluation, and promotion opportunities. A harmonious and pleasant working environment is required to reap the benefits of teamwork. To facilitate smooth communication and consensus among the management team and all employees, Apex prioritises reasonable salary levels, a good working environment, and effective communication channels.

Employees can provide suggestions and address issues to the management team through channels such as the CEO BOX and BROTHER BOX. Apex received no significant complaints in 2022. Apex maintains harmonious labour relations and has not experienced any major labour disputes. Apex has established a fair compensation policy, remuneration system, and performance evaluation mechanism. Performance assessments also include achieving sustainable business goals.

Apex has established a safety and occupational committee that conducts regular inspections to ensure that safety rules at work are followed and safety hazards are minimised. Employees are given regular medical check-ups to help them understand their health status and improve their physical and mental well-being. APT, an Apex subsidiary, has also received ISO 45001 certification for creating a good and safe working environment.

During the ongoing COVID-19, Apex actively engaged with hospitals to purchase vaccines, provided free vaccines and masks to all employees, and achieved a 100% vaccination rate among the entire workforce to prioritise their health and safety. Furthermore, Apex

complied with government policies to enhance quarantine areas, provided essential supplies and medical resources to high-risk and confirmed cases among the employees, and offered subsidies to support employees during the most challenging times, working together to overcome difficulties.

Personnel Distribution

All workforces are under a contractual agreement with Apex and there is no temporary or dispatched worker. The table below shows the number of employees' average seniority, average age and educational level etc. in Apex based on the date of 2022.12.31.

Year		FY 2020	FY 2021	FY 2022
Number of Employees	Manager and above	103	94	124
	Production Departments	4,666	5,722	4,535
	General Employees	2,606	2,850	2,758
	Total	7,375	8,666	7,417
Position	Manager and above	103 ⁴	94 ⁵	124 ⁶
	General Employees	7,272	8,572	7,293
Gender	Male	3,254	3,703	3,126
	Female	4,122	4,963	4,291
Regional	Taiwan	9	8	10
	China	3	4	3
	Thailand	7,363	8,654	7,404
Employee structure	Over 50 years old	97	98	123
	30-50 years old	3,005	3,437	1,390
	Under 30 years old	4,272	5,131	5,904
Average Age		29.93	29.60	30.5
Average Seniority		3.97	3.60	4.30
Education Level	Master and above	12	14	16
	University	467	544	575
	Senior High School	4,167	4,816	4,070
	Below Senior High School	2,730	3,292	2,756

Note: The number of personnel distribution in 2020 and 2021 is revised.

⁴ 63 persons are with Thailand nationality which is 61.17% of Manager and above.

⁵ 60 persons are with Thailand nationality which is 63.83% of Manager and above.

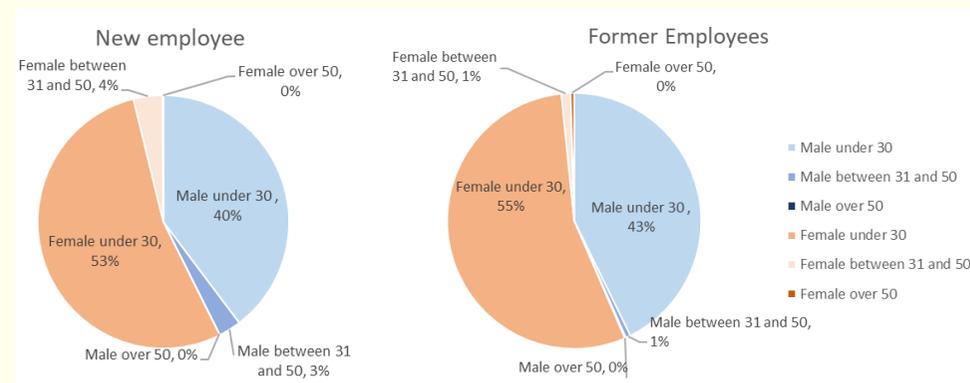
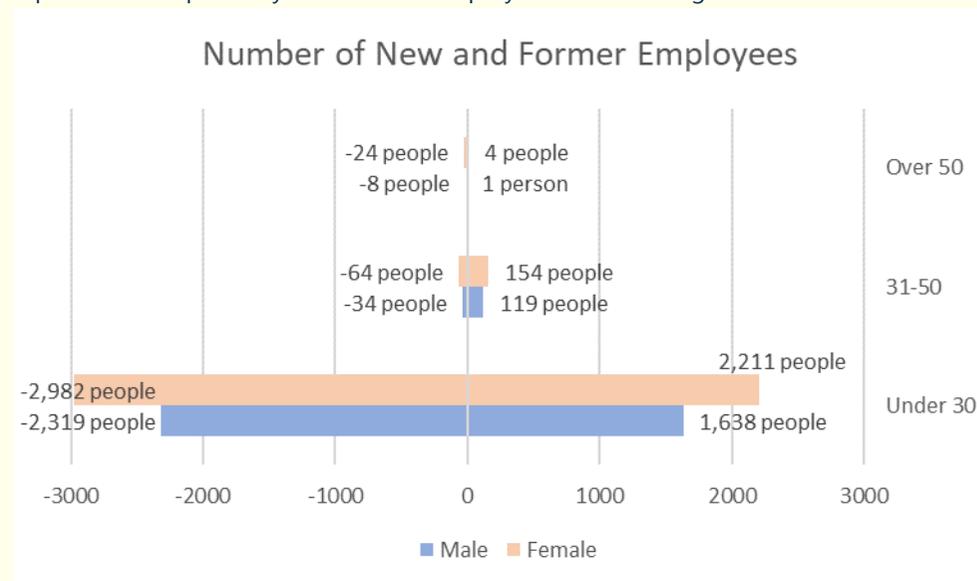
⁶ 86 persons are with Thailand nationality which is 69.35% of Manager and above.

Gender/People (%)	Y 2022								
	Male				Female				Sum
	Thai	Chinese	Korean	Others	Thai	Chinese	Korean	Others	
Manager and above	0.71	0.35	0.03	0.05	0.44	0.08	-	-	1.67
Engineer	3.49	0.18	-	-	1.43	-	-	-	5.10
R&D	0.07	-	-	-	0.11	-	-	-	0.18
IT	0.32	-	-	-	0.13	-	-	-	0.46
Others	37.01	0.27	0.04	0.01	55.14	0.11	-	0.01	92.60
Sum	41.61	0.80	0.07	0.07	57.26	0.19	0.00	0.01	100.00

Gender/People (%)	Y 2021								
	Male				Female				Sum
	Thai	Chinese	Korean	Others	Thai	Chinese	Korean	Others	
Manager and above	0.51	0.37	0.02	0.06	0.30	0.08	-	-	1.34
Engineer	0.39	-	-	-	0.16	-	-	-	0.55
R&D	0.16	-	-	-	0.08	-	-	-	0.24
IT	0.29	-	-	-	0.08	-	-	-	0.37
Others	40.57	0.32	0.03	0.01	56.37	0.17	-	0.01	97.50
Sum	41.92	0.69	0.06	0.07	56.99	0.25	-	0.01	100.00

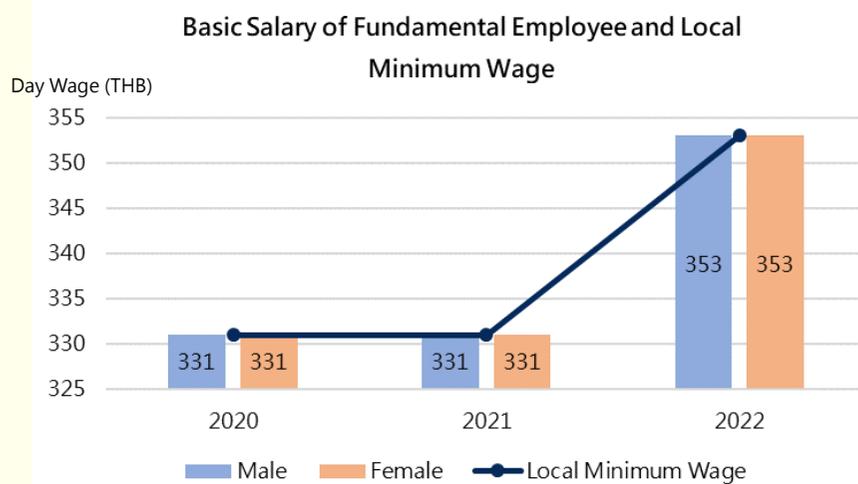
New and Former Employees

The average age of Apex employees in 2022 was 30.5 years old, with a percentage of 79.6% of employees being below the age of 30. Therefore, the proportion of new hires and departures also primarily consisted of employees below the age of 30.



Employee Remuneration Policy

In consideration of the company's profitability, performance evaluation results, and the long-term development of motivating employees, we provide fair and market-competitive compensation to attract, retain, and motivate exceptional talent, as well as reward employees who contribute to performance and long-term success. The company is committed to maintaining a stable employee livelihood through comprehensive compensation packages and creating a friendly work environment, which positively impacts employee morale and operational stability. We also prioritise fulfilling sustainability indicators and practising corporate social responsibility at all levels of the company. Every step we take aims to be environmentally friendly and beneficial to society, laying the foundation for sustainable business practices.



Note: The ratio of the starting salary of entry-level personnel to the local minimum salary is 1.00, which is the same for both male and female

The salary policy embodies the principle of sharing achievements. The company allocates no more than 2% of its profits as employee remuneration. Regular performance evaluations are conducted each year, taking into account individual performance, responsibility, and future development potential as the basis for salary adjustments and bonuses. Apex provides fair compensation based on employees' educational background, professional knowledge and skills, professional experience, and individual performance, without discrimination based on age, gender, race, religion, political stance, marital status, or union membership.

Retirement system and implementation

The employee retirement system is conducted in accordance to local regulations.

- I. **Thailand area:** The Company provides defined benefit retirement welfare to employees by following Section 118, Chapter 11 of the Thai Labour Protection Act. Employees who are qualified to criteria of retirement could get reasonable retirement fund with correspondent service years and salary level. The Company has booked related liability according to actuarial report issued by Thai certificated actuary.
- II. **Taiwan area:** The Taiwan Labour Pension Act applies to employees in Taiwan. The Company allocates 6% of each employee's salary to personal retirement fund under custody of Taiwan Bureau of Labour Insurance.

Continuing Education and Training

Apex recognises that a robust employee development program is essential not only for enhancing employees' skills and competencies but also for attracting top talent. From the first day of employment, Apex provides comprehensive educational training courses and development plans, aiming to foster a sense of belonging and a culture of teamwork among employees through a process of continuous learning. The company encourages employees to actively participate in various project initiatives, empowering them to set high expectations for themselves and contributing to the company's competitive strength.

- I. New employee training is internal training, and the weekly accomplishment rates reached over 95%.
- II. Professional Training including internal training and external training. According to the type of program, it could be divided into Law/Regulation, Quality System, Quality and Efficiency, Attitude Adjustment, Leadership, ESG and courses regulated by the competent authority.

Project		Hours	Amount	Number of Trainees
New Employee Training	Male	40,800	2,379,000	15,300
	Female	54,840		20,565
Professional Training	Male	57,702	NTD	10,338
	Female	80,739		14,521
Director and Manager Training	Male	94	34,000	28
	Female	14	NTD	5
Total	Male	98,596	2,413,000	25,666
	Female	135,593	NTD	35,091

Employees' Welfare System

As an industry that falls under labour-intensive manufacturing, the labour management relationship is crucial in the electronic components sector, and stakeholders within the supply chain also emphasise this issue greatly. Therefore, Apex has publicly disclosed regulations related to labour, which align with international conventions and requirements for working conditions, such as TLS and the Responsible Business Alliance (RBA) Code of Conduct, aiming to achieve zero complaints regarding labour-related matters. Apex ensures fair and equal treatment for all employees, and currently, overtime is voluntary and based on individual applications.

The Human Resources department works in collaboration with department managers to establish annual education and training plans based on departmental goals and competency requirements. Clear promotion assessment criteria for each job level are defined to promote talent development, retention, and utilisation. Apex takes a comprehensive approach to consider employees' compensation, benefits, and communication, enabling employees to not only pursue personal achievements and growth but also maintain a healthy work-life balance and foster their spiritual well-being.

Remuneration System	Welfare Policy	Employee Care and Communication
<ul style="list-style-type: none"> Employee compensation Seniority Award The employee retirement system is handled in accordance with the relevant laws and regulations of the local country 	<ul style="list-style-type: none"> Multiple shuttle bus routes providing transportation for employees to go to work and go home Employee uniforms Employee cafeterias providing three meals a day Full attendance rewards Sickness and funeral subsidies Employee loans Annual employee athletic events and parties Senior employee citations and awards Special treatment for pregnant employees 	<ul style="list-style-type: none"> Multiple communication channels: establish communication channels between employers and employees through employee welfare committees, weekly meetings, of official website, CEO BOX, BROTHER BOX, etc.

Apex's labour-management relationship is harmonious, with no major labour disputes occurring. The company prioritises employee welfare and recognises the significance of addressing subjective and objective changes in the workplace by implementing various welfare measures to meet employee needs. Apex does not have a labour union, but it has formed two major committees: the ISO 45001 (formerly OHSAS 18001) Committee and the Safety and Occupational Committee. These committees have 374 members in total, accounting for about 5.04% of the total workforce. Furthermore, the ISO 45001 Committee and the Safety and Occupational Committee are in charge of developing, implementing, and upholding all occupational health and safety regulations and related laws that apply to Apex's operations.

Apex does not have a labour union, but we have an Employee Welfare Committee. This committee allows employees to express their opinions, make suggestions, and advocate for a fair working environment, rights, and development opportunities, all while increasing the company's social engagement. The Employee Welfare Committee is made up of 43 employees from various factory locations. Every employee has the right to run for and vote for a position. The company also offers subsidies to all candidates, demonstrating its commitment to employee participation.

Committee	Safety & Occupational Committee:		ISO 45001 Committee:	
	APT	APS	APT	APS
Member distribution				
Assistant Manager Level or above	64	5	226	-
Others	67	12	-	-
Total	131	17	226	-

Human Rights Policy Commitment

To uphold and safeguard basic human rights, Apex acknowledges and supports the principles and rights outlined in various international human rights declarations and conventions, including the International Labour Organization's Declaration on Fundamental Principles and Rights at Work, International Labour Organization conventions, Tripartite Declaration of Principles concerning Multinational Enterprises and Social Policy, OECD Guidelines for Multinational Enterprises, Universal Declaration of Human Rights, and United Nations Guiding Principles on Business and Human Rights. Apex is committed to respecting and protecting human rights, fulfilling its responsibilities in this regard, and complying with labour-related laws and regulations in the countries where it operates. To ensure the implementation of these principles, Apex has established a "Human Rights Policy Management Procedure."

Concerns	Goal and Practice	Measures	Channel
Providing a safe and healthy environment	Implement workplace safety and occupational disease prevention measures, providing employees with a safe, healthy, and hygienic work environment.	By conducting safety and health work, educational training, employee health check-ups, and organizing various health promotion activities, we take care of the physical and mental well-being of our employees.	Welfare Committee
Prohibition of child labour	Strictly prohibits the employment of any child labourers under the age of 18.	In accordance with national regulations, our hiring process strictly adheres to the requirement that only candidates who are 18 years of age or older are eligible to apply for any position. During the recruitment process, we conduct thorough checks to ensure compliance and avoid any oversight.	The official website "Irregular Business Conduct Reporting", providing outsiders to report or appeal
Prohibition of Forced Labour	To adhere to the RBA Code of Conduct, which upholds the principles of free choice of employment. Also complies with local labour laws and international standards to eliminate any forms of forced or involuntary labour.	Comply with local government labour laws and regulations. Overtime work is carried out on a voluntary basis, and no form of forced overtime is allowed. In accordance with the law, we provide compensatory time off or overtime pay for employees who work overtime due to job requirements.	The official website "Irregular Business Conduct Reporting", providing outsiders to report or appeal
Prevention from unlawful discrimination	Regardless of race, class, language, ideology, religion, party, place of origin, place of birth, gender, sexual orientation, age, marriage, appearance, facial features, physical and mental disabilities, constellation, blood type or union membership for differential treatment or any form of discrimination. In order to ensure the human rights of employees in the workplace, and to provide a dignified, fair workplace environment.	Establish "Procedures of Human Rights Policy and Management" to safeguard the human rights of our employees and eliminate unlawful discrimination.	The official website "Irregular Business Conduct Reporting", providing outsiders to report or appeal
Improvement of physical and mental health of employees	Providing legitimate diversity activities to improve employee work-life balance	The Welfare Committee organises recreational activities for all employees at least once a year, aiming to enhance their sense of belonging and morale through interactive team-building games. Additionally, monthly care activities are conducted for new colleagues, where department managers are invited to participate, fostering a supportive and engaging work environment.	Welfare Committee, CEO Box, Brother Box
Harassment-free Workplace	Ensure a working environment free of sexual harassment for all employees	We have established a "Sexual Harassment Prevention Policy" and promote it through communication and public announcements to ensure that employees are aware of their responsibility to help prevent any occurrence of workplace sexual harassment during their job duties. We also provide information about reporting channels, such as hotlines and email addresses, to create a friendly work environment that encourages reporting and supports those who come forward with complaints.	CEO Box, Brother Box

Responsible Business Alliance (RBA)

The Responsible Business Alliance (RBA) is the world's largest corporate social responsibility alliance in the global industrial supply chain. Apex adheres to the highest standards of social, environmental, and ethical requirements, following the relevant guidelines from suppliers to internal factories. We take action to demonstrate our commitment to the physical and mental well-being of our employees and hold ourselves accountable to consumers through responsible product production and employee treatment.

In the year 2022, Apex accumulated a total of 1,074 person-hours in internal RBA-related training courses.

Course	Hours	People	Apex 1		APEX 2		APEX 3	
			Female	Male	Female	Male	Female	Male
Responsible Business Alliance & TLS Awareness & Requirement (TLS 2020)	6	18	3	1	10	4		
RBA:2021&TLS:2020 Awareness&Requirement	6	5	2		2	1		
Internal Audit RBA	6	36	21	13	2			
Internal Audit RBA	6	44	19	24	1			
Internal Audit RBA	6	36	1		22	6		7
Internal Audit RBA	6	40	1		23	8		8



6.2 Workplace Health and Safety

Management Policies for Material Topics: Hazard of occupational safety and health

Impact Assessment	The significant thematic category related to occupational health and safety hazards falls under occupational safety and health. The associated hazards may impact: (1) Operational disruptions (2) Impaired recruitment capabilities (3) Impaired financing capabilities (4) Fines/suspensions/plant closures (5) Contradiction to corporate culture.
Policies and Commitments	(1) Regular certification audits for ISO 14001 and ISO 45001. (2) Periodic inspections by the ISO 45001 Committee and Safety and Occupational Committee to ensure compliance with safety regulations in the work environment. (3) Control measures for the entry and exit of personnel in the factory premises. (4) Regular disaster and emergency response procedure drills.
Governance Structure	Safety & Occupational Committee, ISO 45001 Committee and Administrative Department
Management Actions	Short-term: we have good historical record in occupational-safety aspect and will keep control it by following present management procedures. Mid-term: maintain certificated control quality of ISO 14001 and ISO 45001; keep interacting and studying from external experts and governments.
KPI	Occurrence Rate of Accidents, Recruitment Rate
Evaluation Mechanisms	ISO 14001 and ISO 45001 Statistics on the Number of Occupational Injuries and Occupational Injury Rates
Engagement Outcomes and Effectiveness with Stakeholders	Achievements in 2022: ISO 45001 Certification ISO 14001 Certification No significant occupational accidents occurred.

Apex has formed an ISO 45001 committee as well as a Safety and Occupational Committee to inspect the workplace for compliance with safety regulations on a regular basis. Following the ISO 45001 standard, the committees identify and classify hazards based on severity, frequency, and scope. Apex provides work guidelines to employees and conducts ongoing daily awareness campaigns for high-risk processes and operations to reduce the likelihood of occupational accidents. Apex has also established an emergency response centre to standardise emergency procedures and holds quarterly disaster drills on the factory grounds to strengthen rescue personnel training.

The company provides regular health check-ups to all employees in order to raise health awareness and improve physical and mental well-being. Chemical splashes, cutting injuries caused by edges or operating tools, and crush and pinch injuries are the most common types of work-related accidents in our company. According to our company's criteria, none of the incidents that occurred this year resulted in serious injuries.

Access to the factory grounds is strictly controlled by both company employees and visitors. Employees must swipe their access cards to gain entry, whereas visitors must register at the security office or report to HR through the interviewed department. Incoming and outgoing personnel are subject to stringent screening. This year, there were no records of work-related injuries, accidents, or deaths among our suppliers at our company.

In addition to controlling high-risk operations, managing contractors' access and ensuring construction safety, and implementing chemical safety management and safety auditing systems, we also have proper plans for damage prevention, disaster emergency response procedures, and regular drills. Our goal is to minimise damage and impact on company property, personnel, society, and the environment in the event of a disaster.

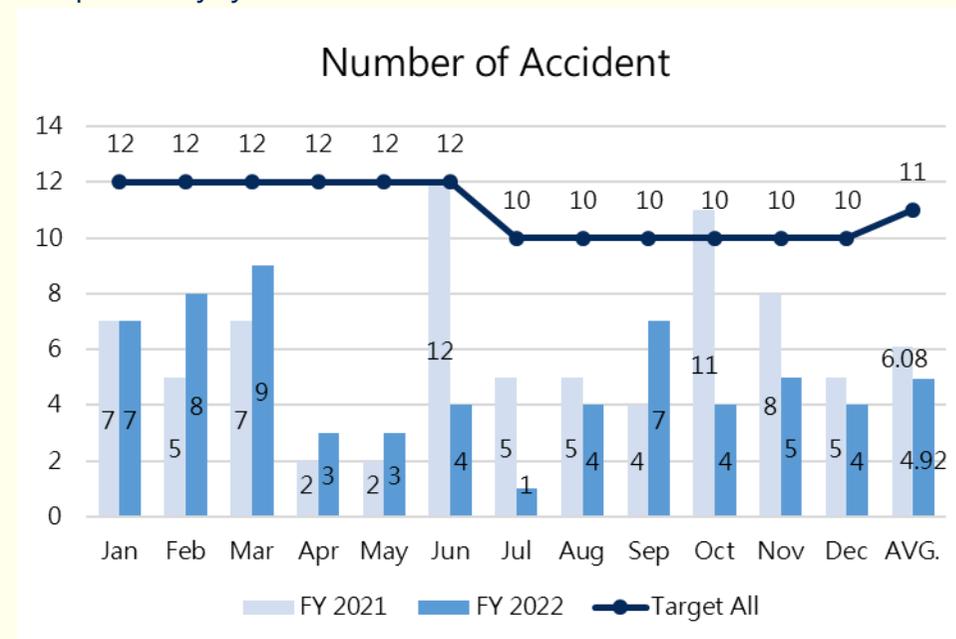
The Safety and Occupational Committee holds regular meetings to discuss environmental protection, safety, and health-related matters. They also analyse statistics on occupational accidents and prioritise units and types of accidents with higher occurrence rates or severity, as well as those that span multiple units or have a recurring nature, for educational training and management focus. These efforts aim to establish a safety culture and provide a safe and comfortable working environment.

⁷ Working Injury: All injuries caused by working are included in the calculation, including traffic accidents.

⁸ Occupational hazard: Diseases resulting from work.

⁹ Total Working Injury leave: The number of days employees applies for sick leave due to work-related injuries.

Occupational Injury



Number of Accident

Statistical Indicators	Gender	FY2021	FY2022	Unit
Working Injury ⁷	Male	41	37	case
	Female	32	22	case
	Total	73	59	case
Occupational Hazard ⁸	Male	0	0	case
	Female	0	0	case
Total Working Injury Leave ⁹	Male	451	450	day
	Female	295	188	day
Total Absence Days ¹⁰	Male	42,029	42,930	day
	Female	52,929	54,065	day
Total Working Hours ¹¹	Male	7,488,338.0	7,317,353.5	hour

¹⁰ Total Absence Days: Total Absence Days is the sum of sick leave, working injury leave, and personal leave, excluding annual leave, official leave, marriage leave, funeral leave, maternity leave and paternity leave.

¹¹ Total Working Hours: Sum of working hours in each year. For daily workers is the total working hours per month,

Statistical Indicators	Gender	FY2021	FY2022	Unit
Total Working Man Days ¹²	Female	9,496,770.5	9,707,517.0	hour
	Male	936,764	921,239	man day
	Female	1,187,486	1,216,656	man day
Death Toll	Male	0	0	person
	Female	0	0	person

Statistical Indicators	Gender	200,000 hours ¹³	
		FY2021	FY2022
Injury Rate ¹⁴	Male	1.10	1.01
	Female	0.67	0.45
Occupational Disease Rate ¹⁵	Male	-	-
	Female	-	-
Lost Day Rate ¹⁶	Male	96.36	98.40
	Female	49.70	30.99
Absentee Rate ¹⁷	Male	4.49%	4.69%
	Female	4.46%	4.46%

Resource: Data Source: Apex Administration Department

Note: Revision of total absence days, total working hours, and total working man days for the years 2021 and 2022 to include the attendance records of former employees during their employment tenure.

6.3 Social Participation

We embrace Eastern values at Apex, which emphasise emotional connections with others and a sense of gratitude. Apex seeks to pursue this Eastern virtue, which represents our soft power. Because our culture is based on putting people first, Apex is committed to making every effort in social activities. Apart from improving our employees' well-being and engagement internally, Apex actively contributes to society in areas such as education, healthcare, charity, and social welfare. Our presence is noticeable in these areas.

Apex has continuously invested resources in providing masks, vaccines, and daily necessities, as well as establishing sandbox programmes to prioritise the health and well-being of our employees and their families, since the outbreak of the COVID-19 pandemic. In the year 2022, as the pandemic situation improves, we will allocate more resources to the surrounding communities, assisting local hospitals in setting up quarantine stations and providing vaccines to protect nearby residents.

By combining proactive efforts in employee care and social participation, we aim to contribute to the United Nations Sustainable Development Goals (SDGs) 7 "Affordable and Clean Energy" and SDGs 11 "Sustainable Cities and Communities". Apex completed a solar energy community project in our employees' hometown in northern Thailand in 2022. We worked with residents to install solar panels and repair water facilities, allowing clean energy-powered water supply systems to operate. Simultaneously, we collaborated with schools to educate students on the operation of solar energy systems, promoted the avoidance of burning rice straw and agricultural waste to reduce carbon dioxide emissions, and committed to providing local residents with a rice straw bundling machine. This assistance is intended to assist residents in managing rice straw waste, thereby minimising negative environmental impacts.

Apex has an extensive record of corporate sustainability and strives to make a positive social impact through concrete actions. We aspire to make positive ripples in the vast ocean of society.

for monthly workers is the total working days*8hrs* the number of monthly workers in-service.

¹² Total Working Man Days: total working hours/ 11 hours

¹³ The coefficient of 200,000 is calculated from each 100 employees works 50 weeks a year and 40 hours a week.

¹⁴ Injury Rate: Total work injury (cases) / total working hours *200,000 hours

¹⁵ Occupational Disease Rate: total number of occupational diseases (cases) / total working hours *200,000 hours

¹⁶ Lost Day Rate: Working Injury leave days * 8 hours / total working hours *200,000 hours

¹⁷ Absentee Rate: total absence days * 8 hours / total working hours

Program	Resource	Remark
Scholarship Program	฿ 40,000	To support the National Children's Day activities, provide scholarships and living resources to support student education.
Employees' Children Scholarship	฿ 315,000	The company provides scholarships to employees' children. In the year 2022, a total of 105 scholarship positions were offered, with each scholarship amounting to 3,000 Thai Baht.
Temporary Teacher Hiring Program	฿ 180,000	By allocating economic resources, we aim to address the issue of teacher recruitment and promote educational development.
Support to Solve Student Lunch Problems	฿ 10,000	Sponsoring the construction of greenhouses to facilitate school cultivation and trade of crops, using the income generated as a sustainable solution to address the issue of student lunch budgets..
Covid-19	฿ 908,700	Donating 1300 doses of vaccines to community hospitals for public use and assisting in the establishment of Covid-19 testing stations is a commendable initiative.
Blood Donation	17 people participated	Responding to the service mission of "donating one bag of blood to save one life," to help address the issue of blood shortages in society.
Red Cross Donation	฿ 5,000	By making donations through the Red Cross, to help the family who is in need.
Support Local Religion	฿ 72,000	The majority of Thai people adhere to Buddhism, and Apex actively supports the Buddhist faith, working together to promote positive social energy.
Tree Planting Program	฿ 117,923	Coastal Areas: Assisting in the restoration of mangrove ecosystems. Company Surroundings: Actively planting 320 trees and collaborating with other businesses and schools to increase green spaces In industrial areas.
Charity Event Sponsorship	฿ 20,000	Collaborating with social security institutions and labour organisations to sponsor activities aimed at enhancing the welfare of relevant groups.
Disaster-affected Household Support	฿ 3,000	Providing financial assistance and essential supplies to families affected by fires and floods.
Solar Energy Public Welfare Construction	฿ 538,576	Installing a solar power module with a capacity of approximately 5kW to provide electricity for water pumping equipment, reducing residents' electricity costs by 30%. Repairing water facilities to extend their lifespan. A total of 121 households signed an MOU, committing to avoid burning straw and agricultural waste, and supporting the use of renewable energy, covering approximately 1.88 million square meters of farmland. Introducing solar energy systems to local vocational school students and promoting sustainable education practices.

In 2022, Apex invested about NT\$1,879,332 in social participation.

Note: The average exchange rate of Thai Baht to the New Taiwan Dollar in 2022 is 0.8503



7. Appendix

7.1 GRI Standards Table

Statement of use	Apex International Co., Ltd. has reported the information cited in this GRI content index for the period from 1 January 2022 to 31 December 2022 with reference to the GRI Standards. °
GRI 1 used	GRI 1 : Foundation 2021
Applicable GRI Sector Standard	N/A

GRI Standard	Disclosure Item	Chapter	Page Number
General Disclosure			
GRI 2 : General Disclosure 2021	2-1 Organizational detail	1.1 About This Report	2
	2-2 Entities included in the organisation' s sustainability reporting	1.1 About This Report	2
	2-3 Reporting period, frequency and contact point	1.1 About This Report	2-3
	2-4 Restatements of information	5.1 Management of Water Resources and Wastes	36
		6.2 Workplace Health and Safety	49
		7.4 Assurance Report	63
	2-5 External assurance	4.3 Products and Services	26
	2-6 Activities, value chain and other business relationships	4.4 Industry Supply Chain	29-31
	2-7 Employees	6.1 Happy Workplace	23-25
	2-8 Workers who are not employees	6.1 Happy Workplace	44-45
	2-9 Governance structure and composition	4.1 Corporate Governance Structure	19
	2-10 Nomination and selection of the highest governance body	4.1 Corporate Governance Structure	19
	2-11 Chair of the highest governance body	4.1 Corporate Governance Structure	19
	2-12 Role of the highest governance body in overseeing the management of impacts	4.1 Corporate Governance Structure	20-21
	2-13 Delegation of responsibility for managing impacts	1.3 Promoting and Managing Sustainability	4
	2-14 Role of the highest governance body in sustainability reporting	1.3 Promoting and Managing Sustainability	4
	2-15 Conflicts of interest	4.5 Ethics and Integrity	32-33
	2-16 Communication of critical concerns	2.5 Stakeholder Communication	15-16
2-17 The collective knowledge of the highest governance body	4.1 Corporate Governance Structure	19-20	
2-18 Evaluation of the performance of the highest governance body	4.1 Corporate Governance Structure	21-22	

GRI Standard	Disclosure Item	Chapter	Page Number
General Disclosure			
GRI 2 : General Disclosure 2021	2-19 Remuneration policies	4.1 Corporate Governance Structure 6.1 Happy Workplace	23-24 46
	2-20 Process to determine remuneration	2.5 Stakeholder Communication 4.1 Corporate Governance Structure	15-16 23-24
	2-21 Annual total compensation ratio	6.1 Happy Workplace	46
	2-22 Statement on sustainable development strategy	1.2 Letter from The Sustainable Development Committee Chairperson	3-4
	2-23 Policy commitments	6.1 Happy Workplace	48
	2-24 Embedding policy commitments	4.5 Ethics and Integrity 6.1 Happy Workplace	32-33 48
	2-25 Processes to remediate negative impacts	4.5 Ethics and Integrity	32-33
	2-26 Mechanisms for seeking advice and raising concerns	2.5 Stakeholder Communication 4.5 Ethics and Integrity	15-16 32-33
	2-27 Compliance with laws and regulations	4.5 Ethics and Integrity	32-33
	2-28 Membership associations	3.1 About Apex	17
	2-29 Approach to stakeholder engagement	2.5 Stakeholder Communication	15-16
2-30 Collective bargaining agreements	6.1 Happy Workplace	47	
Material Topics			
GRI 3 : Material Topics 2021	3-1 Process to determine material topics	2.1 Process for Analyzing Significance	7-9
	3-2 List of material topics	2.4 Management of Material Topics	13-14
Material Topics: Effectiveness of Board and corporate governance			
GRI 3 : Material Topics 2021	3-3 Management of material topics	4 Corporate Governance	18
Material Topics: Capital management			
GRI 3 : Material Topics 2021	3-3 Management of material topics	4-2 Financial Performance	25

GRI Standard	Disclosure Item		Chapter	Page
Material Topics: Capital management				
GRI 3 : Material Topics 2021	3-3	Management of material topics	4-2 Financial Performance	25
Economic performance				
GRI 201 : Economic Performance 2016	201-1	Direct economic value generated and distributed	3-1 About Apex 3-2 Operating Location 4-2 Financial Performance 4-3 Products and Services 4-4 Industry Supply Chain	17 17 25-26 27-28 30-31
	201-2	Financial implications and other risks and opportunities due to climate change	2-6 Risks and Opportunities Arising from Climate Change	16
	201-3	Defined benefit plan obligations and other retirement plans	4-1 Corporate Governance Structure 6-1 Happy Workplace	19-24 44-49
Market presence				
GRI 202 : Market Presence 2016	202-1	Ratios of standard entry level wage by gender compared to local minimum wage	6-1 Happy Workplace	46
	202-2	Proportion of senior management hired from the local community	2-5 Stakeholder Communication 6-1 Happy Workplace	15-16 44-45
Material Topics: Supply chain disruption and cost fluctuation				
GRI 3 : Material Topics 2021	3-3	Management of material topics	4-4 Industry Supply Chain	30
Procurement practices				
GRI 204 : Procurement Practices 2016	204-1	Proportion of spending on local suppliers	4-6 Supplier Management Policy	33-34
Material Topics: Harmed reputation				
GRI 3 : Material Topics 2021	3-3	Management of material topics	4-5 Ethics and Integrity	32

GRI Standard	Disclosure Item		Chapter	Page
Anti-corruption				
GRI 205 : Anti-corruption 2016	205-3	Confirmed incidents of corruption and actions taken	4-5 Ethics and Integrity	32-33
Anti-competitive behaviour				
GRI 206 : Anti-competitive behaviour 2016	206-1	Legal actions for anti-competitive behaviour, anti-trust, and monopoly practices	4-5 Ethics and Integrity	32-33
Material Topics: Uncertainty of market information				
GRI 3 : Material Topics 2021	3-3	Management of material topics	4-7 Customer Service	34
Material Topics: Customer behaviour changes				
GRI 3 : Material Topics 2021	3-3	Management of material topics	4-7 Customer Service	35
Material Topics: Energy management				
GRI 3 : Material Topics 2021	3-3	Management of material topics	5-2 Energy Efficiency and Policy	39
Energy				
GRI 302 : Energy 2016	302-1	Energy consumption within the organisation	5-2 Energy Efficiency and Policy	40-41
	302-2	Energy consumption outside of the organization	5-2 Energy Efficiency and Policy	40-41
	302-3	Energy intensity	5-2 Energy Efficiency and Policy	40-41
	302-4	Reduction of energy consumption	5-2 Energy Efficiency and Policy	40-41
	302-5	Reductions in energy requirements of products and services	5-2 Energy Efficiency and Policy	40-41
Water and Effluents				
GRI 303 : Water and Effluents 2018	303-1	Interactions with water as a shared resource	5-1 Management of Water Resources and Wastes	36-39
	303-2	Management of water discharge-related impacts	5-1 Management of Water Resources and Wastes	36-39
	303-3	Water withdrawal	5-1 Management of Water Resources and Wastes	36-39
	303-4	Water discharge	5-1 Management of Water Resources and Wastes	36-39
	303-5	Water consumption	5-1 Management of Water Resources and Wastes	36-39

GRI Standard	Disclosure Item		Chapter	Page
Material Topics: Rising price of GHG emission				
GRI 3 : Material Topics 2021	3-3	Management of material topics	5-3 Mitigating Global Warming	41
Emissions				
GRI 305 : Emissions 2016	305-1	Direct (Scope 1) GHG emissions	5-3 Mitigating Global Warming	41-42
	305-2	Energy indirect (Scope 2) GHG emissions	5-3 Mitigating Global Warming	41-42
	305-3	Other indirect (Scope 3) GHG emissions	5-3 Mitigating Global Warming	41-42
	305-4	GHG emissions intensity	5-3 Mitigating Global Warming	41-42
	305-5	Reduction of GHG emissions	5-3 Mitigating Global Warming	41-42
Waste				
GRI 306 : Waste 2021	306-1	Waste generation and significant waste-related impacts	5-1 Management of Water Resources and Wastes	36-39
	306-2	Management of significant waste-related impacts	5-1 Management of Water Resources and Wastes	36-39
	306-3	Waste generated	5-1 Management of Water Resources and Wastes	36-39
	306-4	Waste diverted from disposal	5-1 Management of Water Resources and Wastes	36-39
	306-5	Waste directed to disposal	5-1 Management of Water Resources and Wastes	36-39
Material Topics: Change of political and social environment				
GRI 3 : Material Topics 2021	3-3	Management of material topics	6 Social Prosperity	43
Employment				
GRI 401 : Employment 2016	401-1	New employee hires and employee turnover	6-1 Happy Workplace	45
	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	6-1 Happy Workplace	47
Material Topics: Hazard of occupational safety and health				
GRI 3 : Material Topics 2021	3-3	Management of material topics	6-2 Workplace Health and Safety	49
Occupational health and safety				
GRI 403 : Occupational health and safety 2018	403-1	Occupational health and safety management system	6-2 Workplace Health and Safety	50-51
	403-2	Hazard identification, risk assessment, and incident investigation	6-2 Workplace Health and Safety	50-51
	403-3	Occupational health services	6-2 Workplace Health and Safety	50-51

GRI Standard	Disclosure Item		Chapter	Page
GRI 403 : Occupational health and safety 2018	403-4	Worker participation, consultation, and communication on occupational health and safety	6-2 Workplace Health and Safety	50-51
	403-5	Worker training on occupational health and safety	6-1 Happy Workplace	46
	403-6	Promotion of worker health	6-2 Workplace Health and Safety	50-51
	403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	6-2 Workplace Health and Safety	50-51
	403-9	Work-related injuries	6-2 Workplace Health and Safety	50-51
	403-10	Work-related ill health	6-2 Workplace Health and Safety	50-51
Training and Education				
GRI 404 : Training and Education 2016	404-1	Average hours of training per year per employee	6-1 Happy Workplace	46,49
	404-2	Programs for upgrading employee skills and transition assistance programs	6-1 Happy Workplace	46,49
Diversity and Equal Opportunity				
GRI 405 : Diversity and Equal Opportunity 2016	405-1	Diversity of governance bodies and employees	4-1 Corporate Governance Structure	19-20
			6-1 Happy Workplace	44-45
	405-2	Ratio of basic salary and remuneration of women to men	6-1 Happy Workplace	46
Non-discrimination				
GRI 406 : Non-discrimination 2016	406-1	Incidents of discrimination and corrective actions taken	4-5 Ethics and Integrity	32-33
			6-1 Happy Workplace	47-48
Child labour				
GRI 408 : Child Labour 2016	408-1	Operations and suppliers at significant risk for incidents of child labour	4-5 Ethics and Integrity 6-1 Happy Workplace	32-33 48
Forced or compulsory labour				
GRI 409 : Forced or compulsory labour 2016	409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labour	4-5 Ethics and Integrity 6-1 Happy Workplace	32-33 48
Security practices				
GRI 410 : Security Practices 2016	410-1	Security personnel trained in human rights policies or procedures	4-5 Ethics and Integrity 6-1 Happy Workplace	32-33 48

GRI Standard	Disclosure Item		Chapter	Page
Local communities				
GRI 413 : Local communities 2016	413-1	Operations with local community engagement, impact assessments, and development programs	6-3 Society Participation	51-52
Supplier social assessment				
GRI 414 : Supplier Social Assessment 2016	414-1	New suppliers that were screened using social criteria	4-6 Supplier Management Policy	33
Material Topics: Product quality management				
GRI 3 : Material Topics 2021	3-3	Management of material topics	4-3 Products and Services	21
Customer Health and Safety				
GRI 416 : Customer Health and Safety 2016	416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	4-3 Products and Services 4-5 Ethics and Integrity	21-23 26-27
Marketing and labeling				
GRI 417 : Marketing and labeling 2016	417-1	Requirements for product and service information and labeling	4-3 Products and Services 4-5 Ethics and Integrity	21-23 32-33
	417-2	Incidents of non-compliance concerning product and service information and labeling	4-3 Products and Services 4-5 Ethics and Integrity	21-23 32-33
Customer privacy				
GRI 418 : Customer privacy 2016	418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	4-5 Ethics and Integrity	32-33

7.2 Sustainability Disclosure Indicators- Electronics Components Manufacturing

No.	Indicators	Types of Indicators	Annual Disclosure Status	Units															
1.	Total energy consumption, percentage of purchased electricity from external sources, and renewable energy utilization rate.	Quantification	The total energy consumption in 2022 is 1,026,612.73GJ, of which purchased electricity accounts for 99.48% of energy usage, and renewable energy accounts for 0.52% . Please refer to 5.2 Energy Efficiency and Policy	GJ %															
2.	Total water withdrawal and total water consumption.	Quantification	According to relevant calculations of wastewater treatment in Thailand, it is 80% of the water intake. In 2022, Apex's water intake will be 3,477,000 cubic meters, water consumption will be 696,000 cubic meters, and water discharge will be 2,781,000 cubic meters. In fiscal 2021, water intake will be 3,560 thousand cubic meters, water consumption will be 570 thousand cubic meters, and water discharge will be 2,990 thousand cubic meters. Please refer to 5.1 Management of Water Resources and Wastes .	thousand cubic meters															
3.	Weight and percentage of hazardous waste generated and recycled.	Quantification	Please refer to 5.1 Management of Water Resources and Wastes .	T %															
4.	Description of occupational accident categories, number of cases, and rates.	Quantification	Please refer to 6.2 Workplace Health and Safety	% Number															
5.	Disclosure of product lifecycle management: Including the weight of scrapped products and electronic waste, as well as the percentage of recycling. (Note)	Quantification	Our business model is B2B, so a product-waste recycling policy is not necessary. For details, please refer to 5.1 Management of Water Resources and Wastes .	T %															
6.	Description of Risk Management Related to the Use of Key Materials	Qualitative description	The risk of supplier concentration and countermeasures Apex's main products are double-sided and multi-layer PCBs, with copper-clad laminates, prepreg, and copper foil as the primary materials used. Apex has had positive relationships with its main material suppliers for many years. Apex, on the other hand, maintains at least two suppliers for each main material to ensure a consistent supply. There has never been a material shortage or a supply interruption.	N/A															
7.	The total amount of monetary losses incurred due to legal disputes related to the Anti-Monopoly Act.	Quantification	No this situation	Report Currency															
8.	Production volume by product category.	Quantification	<table border="1"> <thead> <tr> <th>Products</th> <th>FY 2021</th> <th>FY 2022</th> </tr> </thead> <tbody> <tr> <td>Single Sided Board</td> <td>1,175,702</td> <td>755,837</td> </tr> <tr> <td>Double Side Board</td> <td>3,422,521</td> <td>2,890,919</td> </tr> <tr> <td>Multi-layer Board</td> <td>4,071,156</td> <td>3,471,394</td> </tr> <tr> <td>Total</td> <td>8,669,379</td> <td>7,118,150</td> </tr> </tbody> </table>	Products	FY 2021	FY 2022	Single Sided Board	1,175,702	755,837	Double Side Board	3,422,521	2,890,919	Multi-layer Board	4,071,156	3,471,394	Total	8,669,379	7,118,150	m ²
Products	FY 2021	FY 2022																	
Single Sided Board	1,175,702	755,837																	
Double Side Board	3,422,521	2,890,919																	
Multi-layer Board	4,071,156	3,471,394																	
Total	8,669,379	7,118,150																	

Note: Including the sale of leftovers or other recycling, relevant instructions should be provided.

7.3 SASB Standard Table

Accounting Metric		
TC-HW-230a.1	Description of approach to identifying and addressing data security risks in products	Apex produces PCB as our products, PCB is one of the components of electronic products therefore there is no yet risk related to information of evaluation of the design of electronic products, pattern of use and production process of PCB. For information security management-related, please refer to 4.3 Promoting and Managing Sustainability.
TC-HW-330a.1	Percentage of gender and racial/ethnic group representation for (1) management, (2) technical staff, and (3) all other employees	For details, please refer to 6.1 Happy Workplace.
TC-HW-410a.1	Percentage of products by revenue that contain IEC 62474 declarable substances	At present, customers take RoHS as a management standard for controlled and prohibited materials. The percentage of revenues which meet this standard was 100%.
TC-HW-410a.2	Percentage of eligible products, by revenue, meeting the requirements for EPEAT registration or equivalent	Our product does not fit the specifications of EPEAT.
TC-HW-410a.3	Percentage of eligible products, by revenue, meeting ENERGY STAR® criteria.	Our product does not fit the specifications of ENERGY STAR® criteria.
TC-HW-410a.4	Weight of end-of-life products and e-waste recovered, percentage recycled	Our business model is B2B, so a product-waste recycling policy is not necessary. For the disposal of other wastes, please refer to 5.1 Management of Water Resources and Wastes.
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	We have a plan for the sustainable audit of suppliers to upgrade our social responsibility shortly.
TC-HW-430a.2	Tier 1 Suppliers (1) Percentage of Non-Compliance with RBA VAP (or similar audit) (2) Percentage of Corrective Actions by (a) non-compliance for priority level (b) non-compliance for other levels	We have a plan for a sustainable audit of suppliers to upgrade our social responsibility shortly.
TC-HW-440a.1	Description of approach to identifying and addressing data security risks in products	We have policies and procedures for the management of conflict minerals and hazardous materials to eliminate relative hazardous risks from purchase sources. At present, we use questionnaires to suppliers for confirmation.
Activity Metric		
TC-HW-000.A	Number of units produced by product category	For details, please refer to Number 8 of Sustainability Disclosure Indicators- Electronics Components Manufacturing .
TC-HW-000.B	Area of manufacturing facilities	Facilities of APT in Samutsakhon industrial zone are around 35 thousand sqm, and in Sinsakhon industrial zone is around 105 thousand sqm. The facility of APS, single-side PCB, is around 8.5 thousand sqm.
TC-HW-000.C	Percentage of production from owned facilities	We produce PCB by all processes from owned facilities, there is no outsourced capacity. Self-own productivity is 100%.

7.4 Assurance Report



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INDEPENDENT AUDITORS' LIMITED ASSURANCE REPORT

To Apex International Co., Ltd.

We have been engaged by Apex International Co., Ltd. ("the Company") to perform assurance procedures on the sustainability performance information identified by the Company (see Appendix 1) and reported in the 2022 Apex International ESG Report ("the Report"), and have issued a limited assurance report based on the result of our work performed.

Management's Responsibilities

Management is responsible for the preparation of the sustainability performance information disclosed in the ESG report in accordance with Taiwan Stock Exchange Corporation Rules Governing the Preparation and Filing of Sustainability Reports by TWSE Listed Companies and the GRI Standards published by the Global Reporting Initiative (GRI), and for such internal control as management determines is necessary to enable the preparation of the sustainability performance information that is free from material misstatement, whether due to fraud or error.

Our Responsibilities

We planned and conducted our work on the sustainability performance information in the Report in accordance with the International Standard on Assurance Engagements 3000 Assurance Engagements Other Than Audits or Reviews of Historical Financial Information, issued by the International Auditing and Assurance Standards Board to issue a limited assurance report on the preparation, with no material misstatement in all material respects, of the Report. The nature, timing and extent of procedures performed in a limited assurance engagement are different from and more limited than a reasonable assurance engagement and, therefore, a lower assurance level is obtained than a reasonable assurance.

Limited Assurance Procedures

We applied professional judgment in the planning and conduct of our work to obtain evidence supporting the limited assurance. Because of the inherent limitations of any internal control, there is an unavoidable risk that even some material misstatements may remain undetected. The procedures we performed include, but not limited to:

- Obtaining and reading the Report in 2022;
- Inquiring management and personnel involved in the preparation of the Report to understand the policies and procedures for the preparation of the Report;
- Analyzing and examining, on a test basis, the documents and records supporting the sustainability performance information.

Independence and Quality Controls

We have complied with the independence and other ethical requirements of the Norm of Professional Ethics for Certified Public Accountant in the Republic of China, which contains integrity, objectivity, professional competence and due care, confidentiality and professional behavior as the fundamental principles. In addition, the firm applies Statement of Quality Management Standard 1 "Quality Management for Public Accounting Firms" issued by the Accounting Research and Development Foundation of the Republic of China, and accordingly requires the firm to design, implement and operate a system of quality management, including policies or procedures regarding compliance with ethical requirements: professional standards, and applicable legal and regulatory requirements.

Inherent Limitations

The subject intonation included non-financial information, which was under more inherent limitations than financial information. The information may involve significant judgment, assumption and interpretations by the management, and the different stakeholders may have different interpretations of such information.

Conclusion

Based on the procedures performed and evidence obtained, nothing has come to our attention that causes us to believe that the sustainability performance information in the Report in 2022 is in all material respects, not prepared in accordance with the above mentioned reporting criteria.

Other Matters

The maintenance of the Company's website is the responsibility of the management. We shall not be responsible for conducting any further assurance work for any change of the sustainability performance information or the criteria applied after the issuance date of this report.

Crowe (TW) CPAs
Taipei, Taiwan
Republic of China

June 30, 2023

APPENDIX 1

SUMMARY OF SUSTAINABILITY PERFORMANCE INFORMATION

#	Sustainability Performance Information	Description of Indicators	Corresponding Section	Applicable Criteria
1	Taiwan Stock Exchange Corporation Rules Governing the Preparation and Filing of Sustainability Reports by TWSE Listed Companies Item 1 of Section 12 in Appendix 1 of Article 4	Total energy consumption, percentage of purchased electricity, and renewable energy utilization rate	5.2 Energy Efficiency	Total energy consumption, percentage of purchased electricity in relation to total energy consumption, and percentage of renewable energy in relation to total energy consumption in 2022
2	Taiwan Stock Exchange Corporation Rules Governing the Preparation and Filing of Sustainability Reports by TWSE Listed Companies Item 2 of Section 12 in Appendix 1 of Article 4	Total water withdrawal and total water consumption	5.1 Management of Water Resources and Wastes	Total water withdrawal and total water consumption in 2022
3	Taiwan Stock Exchange Corporation Rules Governing the Preparation and Filing of Sustainability Reports by TWSE Listed Companies Item 3 of Section 12 in Appendix 1 of Article 4	Total weight of hazardous waste generated and the percentage of recycling	5.1 Management of Water Resources and Wastes	The weight of hazardous waste generated and the percentage of recycling in 2022
4	Taiwan Stock Exchange Corporation Rules Governing the Preparation and Filing of Sustainability Reports by TWSE Listed Companies Item 4 of Section 12 in Appendix 1 of Article 4	Description of occupational accident categories, number of people, and rates	6.2 Workplace Health and Safety	The categories, number of people, and rates of occupational accidents in 2022

#	Sustainability Performance Information	Description of Indicators	Corresponding Section	Applicable Criteria
5	Taiwan Stock Exchange Corporation Rules Governing the Preparation and Filing of Sustainability Reports by TWSE Listed Companies Item 5 of Section 12 in Appendix 1 of Article 4	Disclosure of product lifecycle management: weight of discarded products and electronic waste, and percentage of recycling	5.1 Management of Water Resources and Wastes	The Company operates under a B2B model and does not have any relevant product waste recycling procedures in place.
6	GRI 305-1:2016	Direct (Scope 1) GHG emissions	5.3 Mitigating Global Warming	The total greenhouse gas emissions for Scope 1 (gasoline, diesel, liquefied petroleum gas, and refrigerants)
7	GRI 305-2:2016	Energy indirect (Scope 2) GHG emissions	5.3 Mitigating Global Warming	The total greenhouse gas emissions for Scope 2 (purchased electricity)
8	GRI 305-3:2016	Other indirect (Scope 3) GHG emissions	5.3 Mitigating Global Warming	The greenhouse gas emissions for Scope 3 (other indirect emissions)
9	GRI 305-4:2016	GHG emissions intensity	5.3 Mitigating Global Warming	Emission Intensity = (Scope 1 emissions + Scope 2 emissions) in tons of CO ₂ e / revenue in million New Taiwan Dollars