



# 2022 ESG

## TOPCO SCIENTIFIC

### Sustainability (ESG) Report

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# About this report

## Report profile

This is the 2022 Sustainability (ESG) Report (this Report) published by TOPCO SCIENTIFIC Co., Ltd. (TOPCO) to disclose the planning and practice of its corporate social responsibility (CSR) and sustainable development for all stakeholders to understand its achievements in realizing sustainable development. The reporting and releasing periods, scope, contact information, and other relevant information of this report are as follows:

### Report boundaries and scope

This Report discloses TOPCO's CSR practices and achievements. In addition to TOPCO, part of the information disclosed in this Report also covers engineering and other affiliates of TOPCO, including domestic affiliates ECO Technical Services Co., Ltd. and Jia Yi Energy Co., Ltd., overseas affiliates Topco Scientific (Shanghai) Co., Ltd., Suzhou TOPCO Construction Ltd., TOPSCIENCE(S) PTE Ltd., and health-related affiliates Anyo Biotechnology, Inc., Anyo Freshmart, Inc., and Yilan Anyo Lohas Co., Ltd., to demonstrate TOPCO's management performance. For more information, please refer to our annual report or visit the "Stakeholders" section of our corporate website.

### Report release date and cycle

This is the seventh CSR report published by TOPCO, presenting its economic, social, and environmental performance in 2022 (January 1 to December 31, 2022). We release the CSR report every year; the previous report was released in June 2022.

### Report compilation principles

This report has been prepared in accordance with the AA1000 (2018) Accountability Principles

and the Core options of the GRI Standards published by the Global Reporting Initiative (GRI). The 2021 edition is compiled and written to cope with the conversion of the GRI version, and there is no data re-editing. Additionally, the GRI content index, SASB Standards, and Recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) have also been appended to the end of this Report.

### Report verification and assurance

To improve information transparency and reliability, this Report has been verified by the third-party verification body AFNOR Group from France by adopting the Moderate Assurance in Type 1 of the AA1000AS v3 (2020) and the requirements for principle of the GRI Standards. The Assurance Statement is also appended to the end of this Report. All financial data disclosed in this report is extracted from the financial statements certified by certified public accountants.

Report verification and assurance	Third-party inspection agencies	Standards
ESG report	AFNOR ASIA LTD.	Type 1 of the AA1000AS (2020) GRI Standards (2021) SASB Standards Sustainable Development Goals SASB index FSC Sustainability Disclosure Index—Electronic Channel Industry
TCFD report	SGS Taiwan Limited	TCFD Standards
GHG report	AFNOR ASIA LTD.	ISO14064-1 : 2018
financial information (annual report, financial statement)	KPMG Taiwan	The Financial Supervisory Commission has recognized and issued effective IFRSs Financial reporting standards for securities issuers

## Comment and feedback

If you have any comments for our 2021 CSR Report, please feel free to contact us.

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Email: CSR@topco-global.com



Report download:  
<http://csr.topco-global.com>



## From the Chairman

# Science and Technology for Excellence and Sustainability

## Success in operations: Record-breaking revenues at **NT\$52.98 billion**

In 1990, TOPCO started operations in a humble office on Fuxing North Road in Taipei. Thanks to the support of customers and the concerted efforts and dedication of all employees, we have devoted ourselves to the high-tech sector and extended to the circular economy and health industry for diversification. Our territory has expanded from Taiwan to China, Japan, the United States, and Southeast Asia, with a total number of employees exceeding 1,000 persons. In 2022, our consolidated revenue reached NT\$52.98 billion, with a new record high in both revenue and profit.

### Investing in forward-looking industries to find solutions for global issues

Through long-time engagement in the semiconductor, optoelectronics, and solar power industries, we provide customers with excellent, precise, efficient, and quality services to create corporate core value. Besides continuously developing products and services in the semiconductor sector, in response to the rising awareness of environmental sustainability and food safety, in environmental engineering, we actively strive to win big wastewater treatment contracts, develop recycling technology for industrial waste, and implement the total quality management (TQM) system in order to realize environmental sustainability and add new growth momentum through re-investment in, integration with, and expansion to sectors such as renewable energy and the circular economy. Anyo, our investee, aims to develop a health care industry with technology and introduce the concept of healthy diet to promise a future of sustainable health for the public.

Adhering to the role of industry integrator and technology provider, we create common good with suppliers and customers. Through diversifying talent recruitment and training, taking care of employees, creating benefits for shareholders, practicing corporate governance, and fulfilling corporate social responsibility, we aim to pursue sustainable business development.



Chairman  
Mr. Jeffery C.L. Pan

A handwritten signature in black ink, appearing to read 'Jeffery C.L. Pan'.

## From the CSO



TOPCO VP and CSO  
Dr. Robert Lai

Aiming to become a happy and sensible business, TOPCO Vice Chairperson and Chief Sustainability Officer Dr. Robert Lai states: “Care for the mental and physical health of employees and helping employees recognize self-value can increase employees’ sense of achievement and thereby enhance efficiency and productivity.”

### Linking partners with sports and repaying local communities through resource integration

At TOPCO, we promote sports and make sports part of the daily life of employees and customers. We have established internal sports clubs and open sports classes to encourage employees to develop sports habits. Each year we organize a number of softball and golf matches and invite customers and suppliers to exercise and work out with us on the sports ground. We also promote sports to local communities. Apart from being commissioned to manage and operate the Taipei University Sports Center, the Bade Social Housing Sports Center in Taoyuan, the swimming pool of Rongxing Garden Park, Taipei Xinyi Sports Center, and Yongchun Gym, we also promote gymnastics facilities and smart fitness centers for seniors, co-construct multifunctional sports facilities that can be shared by old and young people, established the XPORTS sports training brand, and build quality baseball training bases. We also integrate the resources of , a first division baseball team -XPORTS, to plan and promote community elderly baseball starting from communities in Sanxia to engage in sports promotion for community seniors.

### Encouraging R&D and innovation and enhancing Taiwan’s competitiveness with the TSC Thesis Award

Praised as the “Oscars of Management”, the TSC Thesis Award is currently the biggest thesis and dissertation award in Taiwan, which has already been around for 15 years since it was established in 2008. In the remarks given at the TSC Thesis Award ceremony, President Tsai Ing-Wen recognized the Award’s achievement in developing higher energy for national development by encouraging innovation and research and developing management talent in Taiwan.

TOPCO will continue to invest resources in organizing and marketing the TSC Thesis Award in order to make a joint effort with the power of private enterprise and the strength of government, to promote industry-academia

## From the CEO

collaboration, improve academic research capability, and promote Taiwan's industrial transformation and upgrade. To repay society for cultivating talent to help TOPCO gain success over the past 30 years, we will develop more talent for society in order to make Taiwan even greater.

In internal management, we began to implement ISO 14064 GHG Inspection in 2018. This year, we further implemented the Recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) for the first time and officially signed up to be a TCFD supporter to include climate-related issues in corporate governance and operational strategy to enhance the integrity and transparency of climate-related information in report disclosure, respond to the expectations of stakeholders, and voluntarily address the risks and opportunities brought by climate change.

As net-zero emissions has become a global consensus and challenge, we have also signed up to the Science-Based Targets initiative (SBTi) to combine carbon reduction targets with climate and science and set the "Net-Zero 2030" target as our commitment to connect with the world and establish long-term targets for our climate strategy. In 2022, we were rated one of the Top 100 Large Enterprises at the Excellence in Corporate Social Responsibility by CommonWealth Magazine and awarded the Bronze Prize at the Asia-Pacific Sustainability Action Awards (APSAA), TCSA Top 100 Sustainability Model Awards, TSCA Corporate Sustainability Report Awards - Silver, and Medium-Size Enterprises M&A Deal Award at the MAPECT Taiwan M&A Awards, recognizing our continuous efforts in implementing the UN SDGs in environmental, social, and governance (ESG) aspects.

## Excellence via Perfection

Upholding the sustainable development spirit of "Excellence via Performance", we invest in forward-looking industries, develop toward the circular economy and health care industry, and create value for society with products and services, while maintaining sustainable governance and corporate operational growth at the same time. Fulfilling corporate social responsibility is our never-changing goal.



CO-CEO  
Simon Tseng



CO-CEO  
Charles Lee



Upholding the sustainable development spirit of "Excellence via Performance", we accomplished a range of ESG achievements in 2022 to demonstrate our efforts in pursuing sustainable development and responding to stakeholders.





## I. TOPCO-Corporate governance

- ▶ Consolidated group revenue: NT\$52.98 billion
- ▶ Standalone revenue: NT\$28.23 billion, up by 18% from last year. Cash dividend: NT\$10/share, new historical high
- ▶ EPS: NT\$16.61, up by 34% over last year.
- ▶ Submission of the SBTi net zero pathway target, joining the RE10x10 initiative, commitment to renewable use in 2024.
- ▶ Joining initiatives including “TALENT, in Taiwan”, Tamsui River Convention, Earth Day, World Vegetarian Day.
- ▶ Top 100 Enterprises of Excellence in Corporate Social Responsibility by Common Wealth Magazine.
- ▶ APSAA Bronze
- ▶ Top 100 Sustainability Model Awards and Corporate Sustainability Report Awards - Silver of TCSA.
- ▶ Gold Award and Long-Term Sponsorship Award of the Sports Activist Awards of the Sports Administration, Ministry of Education.
- ▶ Medium-Size Enterprises M&A Deal Award at the MAPECT Taiwan M&A Awards.
- ▶ Excellent Supplier Award of Nanya Technology Corporation.
- ▶ Passed ISO 45001 certification.

# 1.1 Current status and development

## Corporate history

Year	Major Events
2022	Invested in SHUNKAWA Co., Ltd. and Ping Yue Technologies
2021	Invested in Top Vacuum, Tai Ying Industrial Corporation, Unitech Engineering Corporation and Topco Scientific USA Corporation; created the professional sports training brand "XSPORTS"; and Topchem Materials passed the IATF 16949 certification.
2019	Commissioned operations of National Taipei University Sports Center.
2018	Grand opening of ANYO Biotechnology's Mituo Plant.
2017	Grand opening of "ANYO Museum" in Yilan.
2016	Invested in YILAN ANYO LOHAS.
2012	Reinvested in Ching Yang Energy, Topchem Materials, ANYO Biotechnology, and ANYO Freshmart.
2011	Started TOPCO Scientific, a Grade-A amateur baseball team.
2010	Won "Outstanding Contribution Award" by DuPont in the USA and awarded with Annual Taiwan Golden Root Award.
2009	Passed the certification for ISO-9001 international quality management system.
2008	Invested in ECO Technical Services. Reinvested in Jia Yi Energy and KuanYueh Technology Engineering.
2007	The Environmental Engineering Business Unit passed the certification of OHSAS 18001 Occupational Health and Safety Management System.
2006	The Neihu Corporate HQ Building was commissioned on June 24.
2005	Invested in Chongzhi International Investment, Chongsheng International Investment, and reinvested in Suzhou TOPCO Construction.
2004	Reinvested in TOPSCIENCE(S) Pte Ltd. in Singapore.
2003	Became a TWSE-listed company on August 25. Reinvested in TOPCO Scientific (Shanghai). Awarded with the 11th ITA Award by the Ministry of Economic Affairs.
2002	Awarded with the 2nd R.O.C Golden Torch Award.
2001	Invested in Taiwan E & M Systems.
2000	Went public and listed in OTC on May 24.
1997	Passed the certification of ISO-9002 international quality management system.
1995	Invested in Shin-Etsu Handotai Taiwan and Shin-Etsu Optoelectronic.
1993	Invested in TOPCO Quartz Products.
1990	TOPCO Scientific was established on February 17.

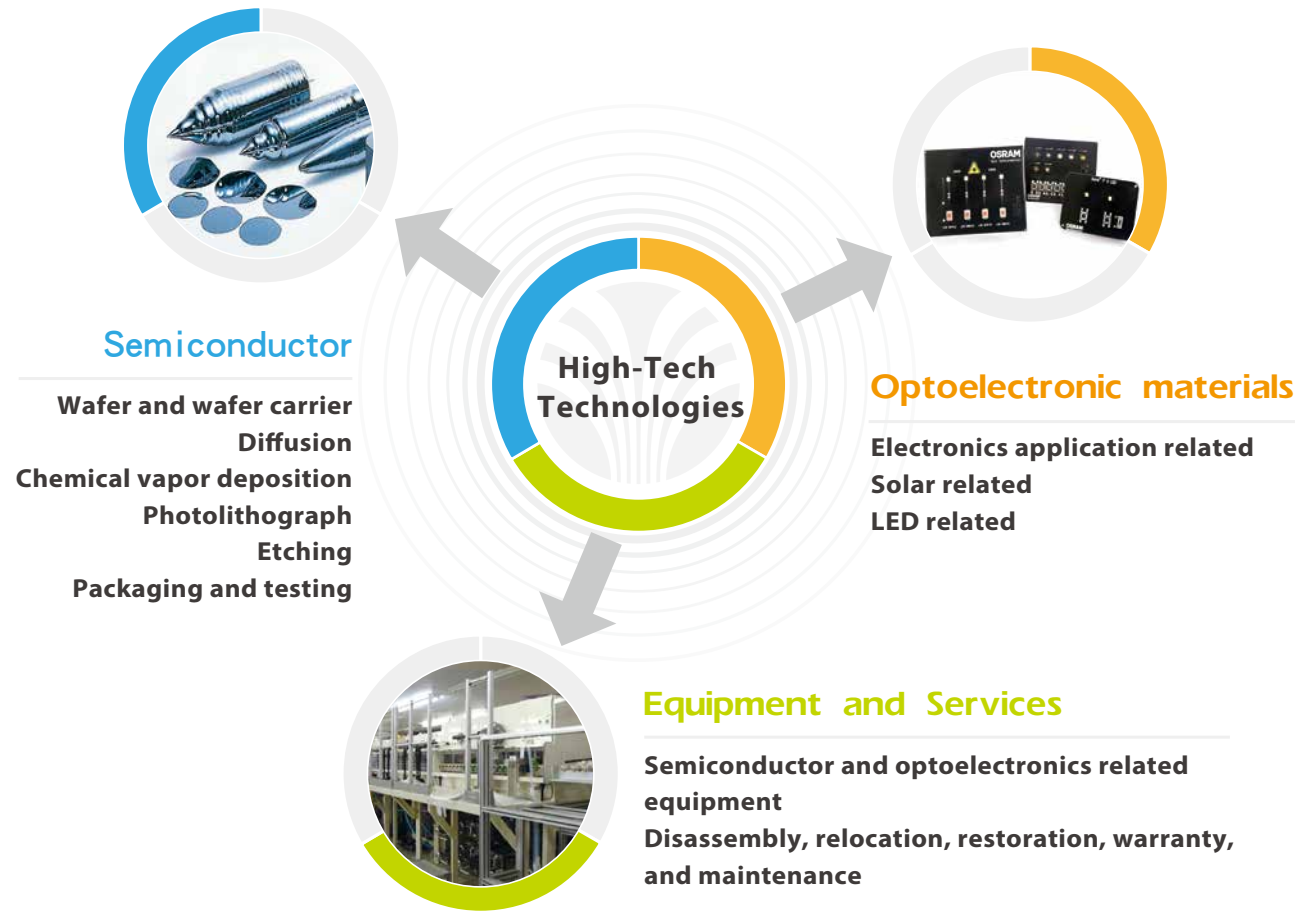
勤信為本  
專業為用  
成果共享



▲ Figure 1-1 TOPCO business philosophy

## Constant business development in depth and in breadth

To offer comprehensive services, we have expanded the scope of services to trading materials, components and equipment for manufacturing, covering various products required by upstream manufacturing and downstream packaging of the semiconductor industry, as well as the optoelectronics (LED/LCD), and electronics industries.



▲ Figure 1-2 Materials, equipment, and services for high-tech industries from TOPCO.

In response to the dispersion and transfer of the global supply chain, in addition to Taiwan and China, the new locations in the U.S. and Japan will be the key operating locations. Additionally, with Singapore as the center of operations, we will cultivate overseas markets in Singapore, Malaysia, Vietnam, and other countries, to provide warehousing services and water treatment services and build regional supply chain platforms.

## Ongoing talent cultivation and connection development

By building a talent cultivation system, we develop the professional competencies of employees with a complete series of fundamental training courses. We have also designed a learning passport mechanism that covers various learning channels, including on-the-job training, internal training, external training, and



▲ Figure 1-3 Training courses for the development professional competencies.

e-learning, to improve the quality and professional skills of employees. We also encourage senior officers to enroll in EMBA or other programs to strengthen their expertise and interdisciplinary leadership. To enhance the competitiveness of talent in Taiwan and catch up with ESG trends which features the talent development and corporate social responsibility of global businesses, we announced joining the “TALENT, in Taiwan” alliance at this critical moment to keep promoting and advocating relevant topics for the better career development and future of all workers.

## Business diversification

TOPCO and its subsidiaries are collectively called TOPCO Group. In response to the global trends of environmental protection and health preservation, we have progressively extended our operations to environmental protection, food, sports, and leisure industries relating to life, hoping to get a foothold in each area

Table 1-1 Organizational profile

Name of company	TOPCO SCIENTIFIC Co., Ltd.
Date of establishment	February 17, 1990
Location of headquarters	No. 483, Section 2, Tiding Boulevard, Taipei City, Taiwan.
Date of listing	2003 (stock code: 5434)
Authorized capital	NT\$1.817 billion
Number of employees	533 persons (by 2022/12/31)
Total number of group employees	1,381 persons (by 2022/12/31)

and thereby become a trusted, indicative group in society that provides consumers with sincere services and safe products.

TOPCO was officially listed on the Taiwan Stock Exchange in 2003 under

stock code 5434. Operating locations include Taiwan, China, Singapore, Malaysia, Vietnam, Japan, and the U.S. TOPCO is headquartered at No. 483, Section 2, Tiding Boulevard, Taipei City, Taiwan.

## High-Tech

Semiconductor Related Products

IC Foundry Service

Photoelectric Related Products

Equipment and Services



## Health and Welfare

Recreation

Sports and Leisure



## Environment Protection and Green Energy

Environmental Assessment  
and Monitoring

Environmental Engineering

Green Energy

Green Products



## Food Technology

Processing and Quality Control

Retailing and Channels

Health and Nutrition



▲ Figure 1-4 Development roadmap of TOPCO's four business pillars.

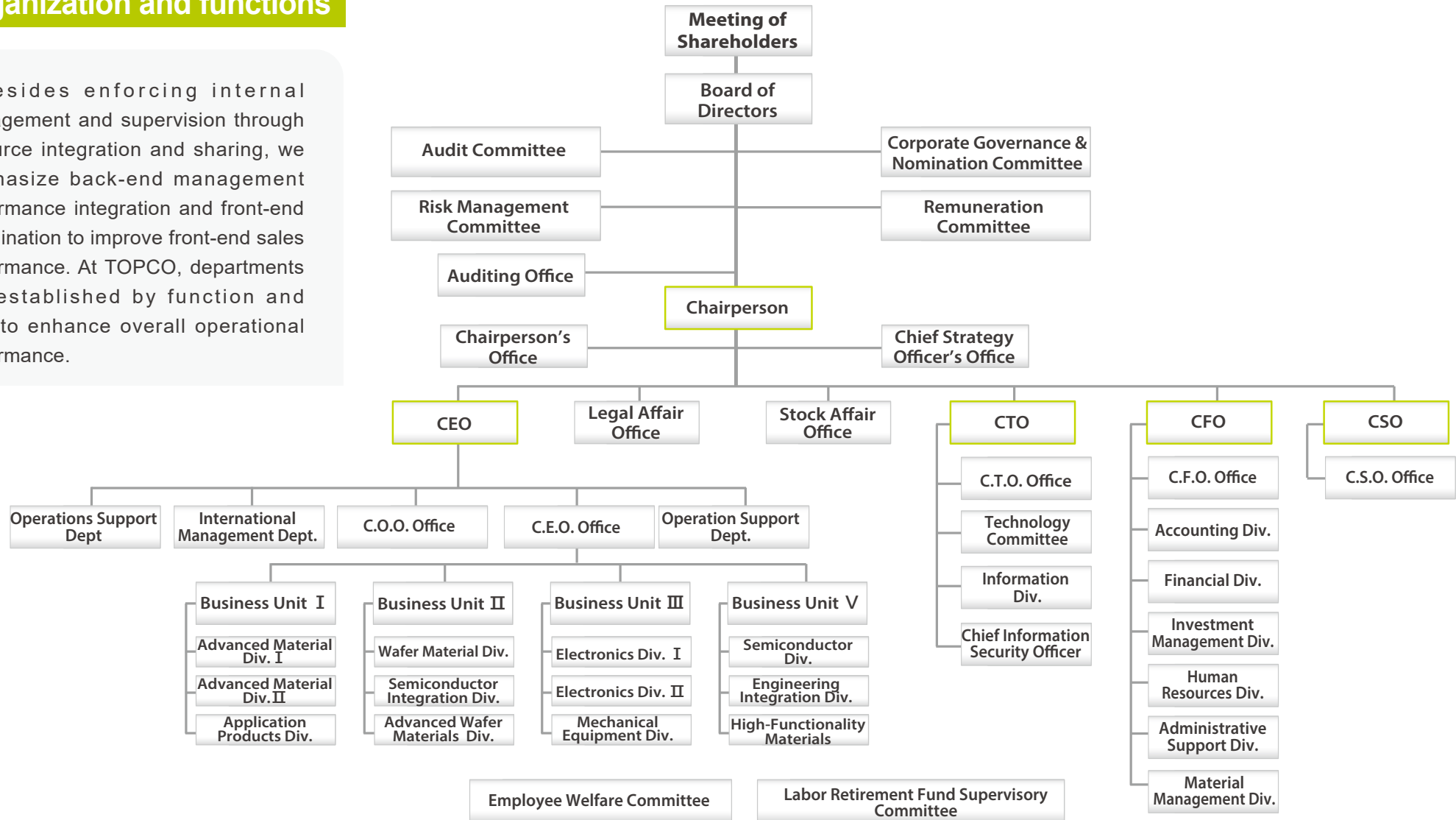
## Locations of affiliates



▲ Figure 1-5 Worldwide service locations

## Organization and functions

Besides enforcing internal management and supervision through resource integration and sharing, we emphasize back-end management performance integration and front-end coordination to improve front-end sales performance. At TOPCO, departments are established by function and duty to enhance overall operational performance.



▲ Figure 1-6 Organizational chart

## Functions of major departments

Table 1-2 Functions of departments

Department	Scope of Services
Audit Office	Conduct, examine and assess deficiencies in the internal control system, evaluate the efficiency of operations, and offer timely recommendations for improvements as well as assist the Board of Directors and managerial officers to fulfill their responsibilities; conduct special audits on the basis of the Company' s policy and demand by the managerial staff.
Chairman Office	Responsible for the formulation, management, and supervision of the direction of business operations and business targets.
Chief Strategic Officer Office	Formulate medium to long-term directions and strategies; build and maintain media relations; safeguard the corporate image and prepare internal and external public relation contents/releases; Compile the annual plans of all departments and conduct analysis of the operating performance of all units; plan and propel the Company's regular corporate events and internal improvement projects; performance appraisal and strategic development planning.
Office of the Chief Sustainability Officer	Promote practices of corporate social responsibility policies, integrate environmental, social and governance (ESG) principles into operations, management flows and corporate culture.
Cyber security officer	Plan and execute cyber security policy and goal, including: plan and implement maintenance schedule, supervise, review and monitor actual practice, examine responsibility levels, plan and implement audit schedule, manage and review audit result, and plan and promote of other cyber security matters.
Legal Affair Office	Draft, review and prepare contents of contractual agreements and manage the contract files; provide legal opinions and handle litigated and non-litigated events.
Stock Affair Office	Handle media release related to shareholders' meetings and dividends, manage shareholder services and corporate governance practices.
C.E.O Office	Assist all business units and departments in improving operating performance and process efficiency.
C.O.O Office	Responsible for the strategic analysis, and planning and management of the operations of the Group's companies and business units.
Occupational Safety and Health Office	Formulating, planning, supervising, and implementing safety and health management measures, and guiding relevant departments to implement them accordingly.
International Management Dept.	Operation and management of offshore business units.
Operation Support Dept.	Assist the Group's companies in collecting and analyzing operational data.



Table 1-2 Functions of departments

Department	Scope of Services
Technical Committee	Build the platform for new product development and technology information exchange to strengthen the integration of the Company's internal resources and research capabilities; as well as stimulate the drive of the Company's employees to proactively develop new markets.
C.T.O Office	Developing the Group's overall core technology plan and monitoring the implementation of the technology development strategy.
C.F.O Office	Assist the various departments and units in conducting management different types of risks to improve operational efficiency; provide project-based risk evaluation report.
Accounting Div.	Carry out accounting operations; control the preparation of the annual budget reports; evaluate and executive tax planning; execute payroll, bonus adjustments and distribution.
Financial Div.	Plan the long-term and short-term funding requirements and utilization; manage loans to others and endorsements/guarantees; monitor and project cash flows and manage treasury operations.
Investment Management Div.	Conduct investment evaluation and project-based analysis; conduct investment management and quality operation events.
Human Resources Div.	Responsible for people management and organizational development. Formulate human resources strategy and policy, execute, and control the human resources system. Plan and execute the human resources development strategy and employee training.
Administrative Support Div.	Manage office equipment, fixed assets, and miscellaneous equipment; manage land, buildings, renting (loaning) and leasing (loaning) of dormitory; formulate and execute administrative policies and procedures.
Material Management Div.	Execute procurement, import/export operations, logistics control and ensure normal warehouse operations; responsible for supplier management.
Business Unit	Plan and execute the annual operation policy and business strategies of the business unit; manage targets of the business unit to be met and business activities; manage accounts receivable and inventory. Under the blueprint of the Company's business goals and business strategies, lead all employees of the business unit divisions to achieve the set business targets.

## Corporate governance

### Board of Directors

The Board of Directors formed by directors and independent directors is TOPCO’s highest governance body. The highest governance unit is the chairman. The 11th Board was elected on June 22, 2020, in accordance with the Company’s Articles of Incorporation. Currently, the Board has nine directors, including three independent directors. The term of office of each director is three years, and each director is eligible for re-election. We have purchased liability insurance for all directors within the scope of their duties. The term of the current Board is from June 22, 2020, to June 21, 2023.

TOPCO abides by the integrity policy, has established the code of integrity management, ethical code of conduct, and clearly established the policy of avoiding conflicts of interest. Directors should explain the important content of their interests at the current board meeting. If it is harmful to the interests of the company, they must not Participate in discussions and votes, and should be avoided, and disclose the avoidance of interests in the board of directors' proposals in the annual report to ensure that the highest governance unit avoids conflicts of interest. In 2022, no major conflicts of interest occurred.

To strengthen corporate governance, we have established the “Corporate Governance Best Practice Principles” to enforce Board members are equipped with the operational management, business administration, financial, and recycling expertise and related work experience, and a policy for Board composition diversity has been established based on the Company’s operations, business model, and development needs, including but not limited to gender, age, and educational background.

The 11th Board was elected based on the diversity policy. The table below shows the professional knowledge and independence of each Board member. Such information is also disclosed in our annual report and the Stakeholders section of the corporate website. (<http://www.topco-global.com/webfront/pages/Invertor2.aspx>)

Table 1-3 Summary of sustainability governance in 2022

1	Established the Board performance self-assessment system.
2	Established the term of office of directors.
3	Appointed two female directors, accounting for 22% of all directors.
4	Appointed three independent directors, accounting for 30% of all directors.
5	Over half of independent directors served less than three terms consecutively.
6	No spouses or relatives within the second degree of kinship among directors.
7	Established the succession plan for board members and important officers.
8	Disclosed the remunerations of individual directors and supervisors (please refer to the annual report)
9	Disclosed the remunerations of the president and vice presidents individually (please refer to the annual report)
10	Amended the “Sustainable Innovation Proposal System” and included it in the ESG proposal reward to link with the salary
11	Established the “Procedures for Preparation and Verification of Sustainability Reports”
12	Established the Procedures for Sustainable Investment included in the ESG assessment and analysis of investment targets
13	Included “climate risks” in the risk management policy.
14	Set the internal carbon pricing at US\$250/tCO2e for carbon risk management and assessment.
15	Submitted to the SBTi for review, set the 2050 net zero pathway, joined the RE10x10 initiative, and made commitment of renewable use in 2024.

Table 1-4 List of directors

Job Title	Name of Director	Gender	Major Experience (Education)
Chairperson	Jeffery C. L. Pan	Male	MBA, EMBA Program, National Chengchi University
Director	Dr. J. W. Kuo	Male	DBA, National Taipei University MBA, EMBA Program, National Taipei University
Director	Dr. Robert Lai, Legal Representative of Jia Pin Investment Development Co., Ltd.	Male	DBA, National Taipei University, Taiwan MBA, Indiana University of Pennsylvania, USA Chairperson, CSBC Corporation, Taiwan Director-General, Small and Medium Enterprise Administration, MOEA Deputy Director, Department of Commerce, MOEA
Director	Simon Tseng	Male	MBA, EMBA Program, National Taipei University.
Director	Charles Lee	Male	MBA, EMBA Program, China Europe International Business School BS in in Physics, Chung Yuan Christian University.
Director	Pei-Fen Chang	Female	Section of Accounting and Statistics, Chungyu Junior College of Business Administration Chairperson, Zhi Jia Investment Co., Ltd. Supervisor, TOPCO SCIENTIFIC Co., Ltd. Securities Specialist, Taiwan Securities Co., Ltd.
Independent Director	Lin-Sen Chen	Male	MBA, National Taipei University. President, Joint Credit Information Center. Lawyer, Linsen Law Firm
Independent Director	Pi-Chuan Sun	Female	DBA, National Taipei University. Professor, Department of Business Management, Tatung University. Dean, College of Management, Tatung University.
Independent Director	Jen-Wei Cheng	Male	PhD, Organization Management, National Taiwan University. Professor, Department of Business Administration, National Taiwan University of Science and Technology

**Proportion of independent directors: 3/9 (33.3%), proportion of female directors: 2/9 (22.2%)**

\* Term: 2020.6.22–2023.6.21

The chairperson convenes at least one Board meeting quarterly or extraordinary meetings as necessary for extraordinary issues. In 2022 a total of 8 Board meetings were held, with 100% director attendance. Please refer to pages 13-16 of the company's annual report for details of the latest annual directors' and senior management's remuneration.

(<https://www.topco-global.com/wp-content/uploads/2023/05/ANNUAL-111CHN.pdf>)

Besides setting the directions and objectives of business operations, the Board also establishes the risk management system and discusses and draws up the risk management policies and guiding principles for the Company to enforce the guidelines for risk management. The Board manages and supervises the Company's overall operations and affairs in order to maximize interests for shareholders.

To effectively capture the credit risk of customers, we have established the customer alert query system on the corporate website to periodically update information such as financial statements, credit, and risk level of customers. Each year the Financial Division periodically audits the fairness of customers' credit limits to assess, measure, and manage the risks of customers.

To implement corporate governance and improve the Board's functions, the Board passed the establishment of the "Evaluation of the Board of Directors" in December 2018 to perform internal performance evaluation each year and hire independent organizations or expert teams to perform external performance evaluation every three years. The scope of Board performance evaluation covers the whole Board, individual board members, and individual functional committees. The Board meeting attendance and performance evaluation of directors are all disclosed in the Company's annual report and on the corporate website. (<https://www.topco-global.com/succession-planning>)

## Corporate Governance and Nomination Committee

The Committee is formed by five directors (including three independent directors) with legal, sales, and business administration expertise and includes corporate governance, CSR promotion, ethical corporate management, environmental sustainability, and risk management teams to promote and implement the relevant operational plans.

## Remuneration Committee

The Committee helps the Board periodically establish and assess the performance, salary, and reward of directors, supervisors, and officers, as well as the Company's overall remuneration policy and welfare system. Incorporate the flexibility of sustainable management goals into the consideration items for the approval of directors' remuneration, and exert a substantial linkage effect with variable remuneration. The salary adjustments, bonuses and other remuneration of senior managers are based on the company's operating performance, personal performance and contribution, and include the contributions and performance in the three aspects of economy, environment and society. After the approval of

the chairman, they will be submitted to the salary committee for discussion. The Remuneration Committee is formed by three Board members (all independent directors) and held four committee meetings in 2022. Please refer to our annual report and corporate website for the data, attendance, and operation of the committee and committee meetings.

## Risk Management Committee

The Risk Management Committee was formed by resolution of the Board on November 6, 2020, with five directors (including three independent directors) with legal, sales, and business administration expertise. Under the Committee there are the emergency response, operational risk, financial risk, information security risk, and climate change risk teams. Two committee meetings were held in 2022. The president assigned related unit supervisors to chair each team and implement the relevant operational plans.

When COVID-19 broke out in 2020, the Group defined the scope of business continuity management (BCM) at the beginning, assessed and analyzed risks, and drew up emergency recovery plans. The Group also enforced and followed the Business Continuity Plan (BCP) to ensure that the Company could ensure the continuous provision of key services for important customers at the acceptable lowest operation level. Through drills and tests, we optimize response efficiency and preparedness to maintain steady progress during emergencies in order to respond to the trust of all stakeholders in TOPCO.

We maintain proper preparedness to optimize response efficiency. In consideration of the response measures against more anomalies, we integrate the Company's development policies in advance in order to maintain business continuity during emergencies. Each year, we arrange drills periodically to demonstrate our corporate resilience. In 2022, we performed seven test items in the drills to smoothly complete the resilience test.

Table 1-5 Simulated scenarios of drills

	Simulated scenario	Frequency
1	Fire-Firefighting drill	1 to 2 times
2	Typhoons - Typhoon drill	1 time
3	Natural disasters - Earthquake evacuation drill	1 time
4	Serious infectious diseases - Rapid test drill	Subject to the epidemic situation
5	Serious infectious diseases - Offsite operation drill	Subject to the epidemic situation
6	Information security - Phishing mail alert drill	Irregularly
7	Information security - Firewall protection drill	1 to 2 times

Table 1-6 Test Targets

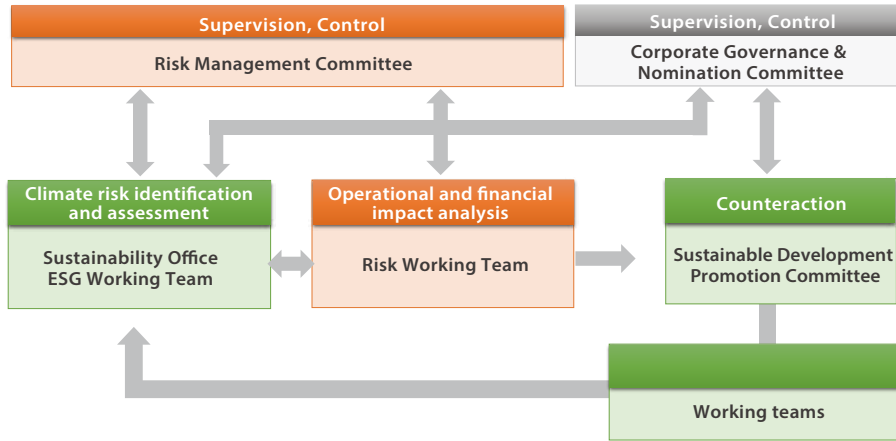
<b>Fires and typhoons</b>	Scenarios on holidays and weekdays are simulated in the drill to demonstrate the efficiency of emergency mobilization during emergencies.
<b>Earthquake evacuation drill</b>	The evacuation scenario is simulated at the office building on weekdays to improve hazard judgment and evacuation smoothness.
<b>Rapid test and offsite operation drill</b>	Operations are arranged by zone, by group, and by turn to respond to epidemics to ensure epidemic control and business continuity.
<b>Information security drill</b>	Social engineering drill is performed. Re-education is arranged for those who accidentally click the link to enhance their awareness of information security and capability of emergency response.
<b>Firewall protection drill</b>	After the handling by firewall administrators, if it is impossible to restore and reactivate the firewall within a short time, administrators will immediately switch to the backup firewall.

## Climate change governance (please refer to the 2022 TCFD Report)

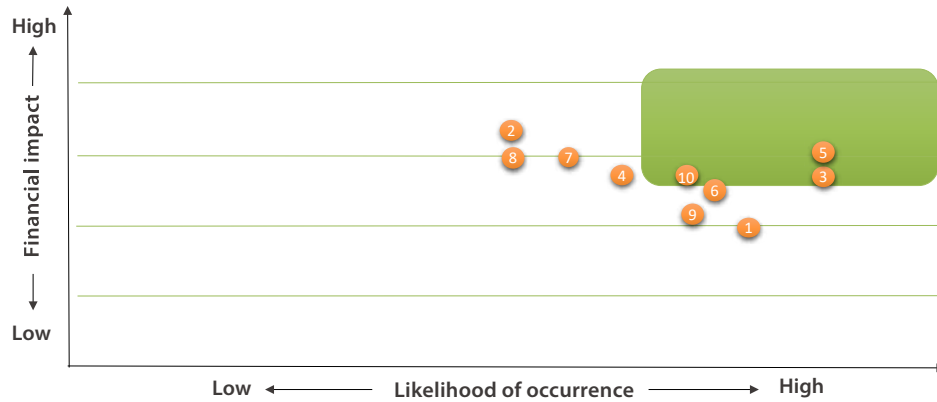
[https://esg.topco-global.com/wp-content/uploads/2023/03/TSC\\_2022\\_TCFD\\_C.pdf](https://esg.topco-global.com/wp-content/uploads/2023/03/TSC_2022_TCFD_C.pdf)

To fulfill CSR and keep up with the international trends, we actively address stakeholders' concerns about ESG risk assessment and countermeasures in order to achieve sustainable operations.

After the successive announcement and passage of the UN Sustainable Development Goals (SDGs) and Paris Agreement, adaptation to and mitigation of climate change have become key missions of global economic development. In recognition of the physical and transitional risks and opportunities brought by climate change, we carried out a full inventory of policy and legal, technology, market, and reputation risks and opportunities as countermeasures, and progressively disclosed our actions taken to address climate change in terms of the TCFD core elements of governance, strategy, risk management, and metrics and targets in order to optimize the control of climate-related risks year after year.



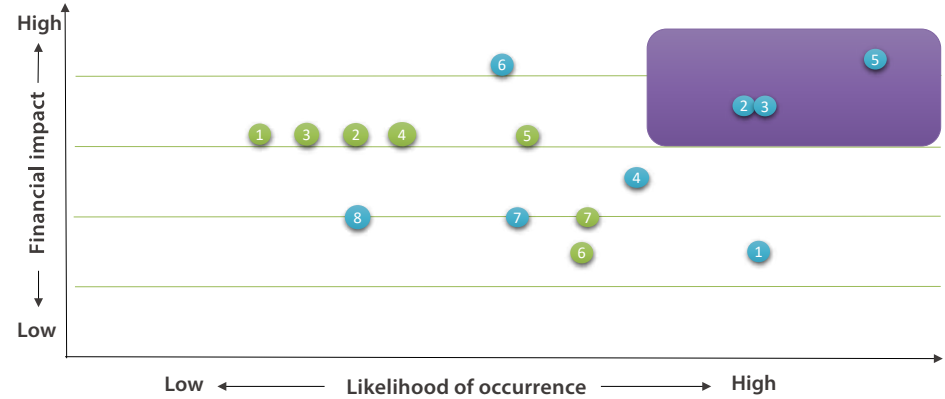
▲ Figure 1-7 Process of division of risk management



- |  |   |
|--|---|
| 1. Promote green, low-emission production                    | 6. Development of low emission goods and services/Increased efficiency of customer products |
| 2. Build green buildings                                     | 7. Access to new markets  |
| 3. Participation in renewable energy programs                | 8. Increased diversification of financial assets (e.g., green bonds and infrastructure)"    |
| 4. Carbon emission offset to obtain public-sector incentives | 9. Enhancement of resilience against disasters  |
| 5. Participation in carbon market                            | 10. Improvement of business reputation  |

▲ Figure 1-9 Opportunity hot zones

### Identification of climate-related risks and opportunities, financial impacts, and countermeasures



- GHG total volume control and carbon tax, carbon fee.
- Net-zero emission trend.
- Substitution of existing products and services with lower emissions options
- Uncertainty in the development of new energy conservation and carbon reduction technology
- Increased cost of raw materials
- Decreased production capacity (e.g., production suspension, supply chain interruptions)
- ESG investment transition risk
- Reputation impact



- Flood (own operations)
- Flood (supply chain)
- Drought (own operations)
- Drought (supply chain)
- Tropical cyclone (typhoon)
- Increased insurance premiums for disasters
- Temperature rise

▲ Figure 1-8 Risk hot zones

Table 1-7 Financial impacts of risks and countermeasures

Risk	Potential financial impacts	Key Counteractions
<ul style="list-style-type: none"> <li>Increased cost of raw materials</li> <li>Uncertainty in the development of new energy conservation and carbon reduction technology</li> </ul>	<ul style="list-style-type: none"> <li>Increased input prices due to the increased cost for carbon reduction of suppliers</li> <li>Difficulties in capturing cost rise trends to affect previously order deployment.</li> <li>Increased input prices when suppliers are fined for violations due to ineffective energy conservation and carbon reduction pathways.</li> </ul>	<ul style="list-style-type: none"> <li>Close capture of carbon reduction performance of suppliers and the relevant laws, regulations, and policies.</li> <li>Active review of up/downstream order demands and supply capacity to facilitate early communication and planning (including costs) of supply chain.</li> <li>Regular contacts with customers to understand production line condition and materials demand and prompt and reliable responses to customer demands and reflection of material costs.</li> </ul>
<ul style="list-style-type: none"> <li>Substitution of existing products and services with lower emissions options</li> </ul>	<ul style="list-style-type: none"> <li>Reduced product and service demand due to worries about the quality and supply stability of low-carbon raw materials.</li> <li>Increased uncertainty in procurement deployment for seeking low-carbon materials suppliers to affect the portfolio and source of revenues.</li> <li>Uncertainty in profit space of low-carbon raw materials.</li> </ul>	<ul style="list-style-type: none"> <li>Increased sources for low-emission goods.</li> <li>Enhanced supplier communication for low-emission transition.</li> <li>Strengthened education and training on low emissions for purchasers to facilitate sourcing and screening low-emission goods.</li> <li>Enhanced customer communication for early capture of the exact demand (item, quantity, and budget) for low-emission goods.</li> </ul>
<ul style="list-style-type: none"> <li>Net-zero emission trend</li> <li>GHG total volume control and carbon tax, carbon fee.</li> </ul>	<ul style="list-style-type: none"> <li>Increased operating costs (e.g., higher compliance costs, increased costs resulting from fines and judgments) due to unclear carbon tax policies of different countries and pressure from doubts about practice.</li> <li>Impacts of existing assets due to policy changes.</li> <li>Increased costs for green power procurement and carbon credit.</li> </ul>	<ul style="list-style-type: none"> <li>Continuous GHG reduction actions.</li> <li>Allocation of low-emission risk assets.</li> <li>Planning for long-term deployment of carbon credit</li> <li>Green power investments and green power platform development</li> </ul>
<ul style="list-style-type: none"> <li>ESG investment transition risk</li> </ul>	<ul style="list-style-type: none"> <li>Reduced return on investments from low revenues due to immature innovative technologies of green investees.</li> </ul>	<ul style="list-style-type: none"> <li>Assessment of technology innovation teams in greater detail.</li> <li>Increased investments in and guidance for innovation teams with integrated group resources.</li> </ul>
<ul style="list-style-type: none"> <li>Reputation impact tax, carbon fee.</li> </ul>	<ul style="list-style-type: none"> <li>Negative influence on market presence due to high emissions of imported materials.</li> </ul>	<ul style="list-style-type: none"> <li>Increased proportion of low-emission goods.</li> <li>Continuous green economy development</li> </ul>
<ul style="list-style-type: none"> <li>Decreased production capacity</li> </ul>	<ul style="list-style-type: none"> <li>Unbalanced supply and demand due to decreased capacity and prevention of normal supply resulting from severe weather events of suppliers, such as hurricanes, floods, droughts, and heat waves. Risk of fines for breaches of supply contracts resulting from the damages cause to customers.</li> <li>Increased stock to increase pressure on cash flow</li> </ul>	<ul style="list-style-type: none"> <li>Enhanced capture of the climate adaptation measures and response capacity of suppliers.</li> <li>Appropriate stock increase.</li> <li>Appropriate fund allocation to relieve cashflow pressure.</li> </ul>

Table 1-8 Financial impacts of opportunities and countermeasures

Opportunity	Potential financial impacts – / +	Key Counteractions
<ul style="list-style-type: none"> <li>Participation in carbon market</li> </ul>	<ul style="list-style-type: none"> <li>+ Reduced exposure to GHG emissions</li> <li>+ Participation in carbon market together with professional environmental assessment and green power platforms to increase operational capacity and revenues.</li> </ul>	<ul style="list-style-type: none"> <li>Provision of methodologies for professional carbon accounting, emission allowance and CCSR trade, carbon assets, and carbon/emission reduction for businesses engaging in carbon trade to improve carbon management capability.</li> </ul>
<ul style="list-style-type: none"> <li>Participation in renewable energy programs</li> </ul>	<ul style="list-style-type: none"> <li>+ Extraction of biogas from livestock wastewater, construction of solar PV stations, investment in the solar energy industry, and returns on investment in low-emission technology.</li> <li>+ Reduced exposure to GHG emissions and therefore less sensitivity to changes in cost of carbon</li> </ul>	<ul style="list-style-type: none"> <li>Promotion of the green economy and environmental sustainability by implementing renewables with technologies including fishery and electricity symbiosis and smart culturing.</li> </ul>
<ul style="list-style-type: none"> <li>Improvement of business reputation</li> </ul>	<ul style="list-style-type: none"> <li>+ Active engagement in international climate actions, practice of low-emission strategies, and becoming the first-choice quality supplier of leading manufacturers resulting in increased demand for goods/services.</li> <li>+ Facilitating labor management and planning (e.g., employee recruitment and retention)</li> <li>+ Increased financing convenience/capital increase</li> </ul>	<ul style="list-style-type: none"> <li>Improvement of the green business image through engagement with recycling technology and green innovation.</li> </ul>
<ul style="list-style-type: none"> <li>Development of low emission goods and services/Increased efficiency of customer products</li> </ul>	<ul style="list-style-type: none"> <li>+ Cultivation of sources for low-carbon materials resulting in increased venues with low-emission products and services.</li> <li>+ Better competitive position to reflect shifting consumer preferences, resulting in increased revenues</li> <li>+ Development of recycling and reuse technologies to help implement low-carbon strategies in the value chain, resulting in better competitive position and increased revenues.</li> </ul>	<ul style="list-style-type: none"> <li>Assistance for businesses in realizing recycling and reuse through technology improvement: water recycling, smart culturing, biogas generation, calcium fluoride sludge recycling, solar PV station, and fishery and electricity symbiosis.</li> </ul>

In response to the SDGs and to further climate governance, in March 2022, we signed our support for the Task Force on Climate-related Financial Disclosures (TCFD) published by the Financial Stability Board (FSB), published

an independent report, and passed a third-party management audit. In April 2022, we joined the Science-Based Targets initiative (SBTi) and submitted the net zero emissions targets in November of the same year.



## ■ Ethical corporate management and business integrity

After Board approval in 2015, we established the “Code of Ethical Conduct” and “Ethical Corporate Management Best Practice Principles” to stipulate the laws, regulations, and principles required for compliance by employees when carrying out their duties and enable stakeholders to understand more about our ethical standards, provide employees with guidelines for ethical behavior, and prohibit employees from seeking personal interests with corporate assets or information or the power of their positions. TOPCO implements the education and publicity of the employee code of integrity and moral conduct every year, and the content of the publicity is directly sent to the inbox of each colleague's system. After reading, click to confirm. In 2022, a total of 561 copies will be issued, and 496 copies will be initially received after reading, with a recovery rate of 88.4%. Employees who fail to complete the publicity and confirmation will continue to be tracked.

We also have explained our business philosophy in the relevant internal regulations and on the corporate website in order to state our policy for ethical corporate management. Under the Board, we have established the Remuneration Committee, Corporate Governance and Nomination Committee, and Audit Office to supervise and audit the Company's compliance with ethical corporate management. We have also designated a chief corporate governance officer and established the Corporate Governance Team under the Stock Affairs Office to establish, supervise, and implement policies for ethical corporate management and prevention of unethical behavior and to periodically report to the Board and management. In corporate management, we follow the “Ethical Corporate Management Best Practice Principles” and “Code of Ethical Conduct”. In business operations, we have established various standard operating procedures to govern transactions. In internal management, we have established operating and management regulations and uploaded them to the employee information portal (EIP) to specify the Company's code of conduct and arrange related education and training for employees.

The operations and management regulations stipulate that employees must sign the Statement of Integrity Compliance after signing the employment contract. Additionally, we promote the Company's ethical corporate management concepts through meetings and activities in order to make ethical

corporate management part of the Company's corporate culture. Regular and irregular education and training: Education and training for new employees - Explanation of the importance of the Statement of Integrity Compliance and non-disclosure of trade secrets and the Company's discipline; Internal education and training - Courses on trade secrets and Personal Data Protection Act. A reporting email box has been established on the corporate website to report corruption and unethical behavior. All emails will be automatically forwarded to the chief auditor. With a stringent policy and through the continuous promotion of ethics and integrity, no significant non-compliance in the implementation of the Ethical Corporate Management Best Practice Principles and corporate regulations was reported in 2022.

## ■ Legal compliance

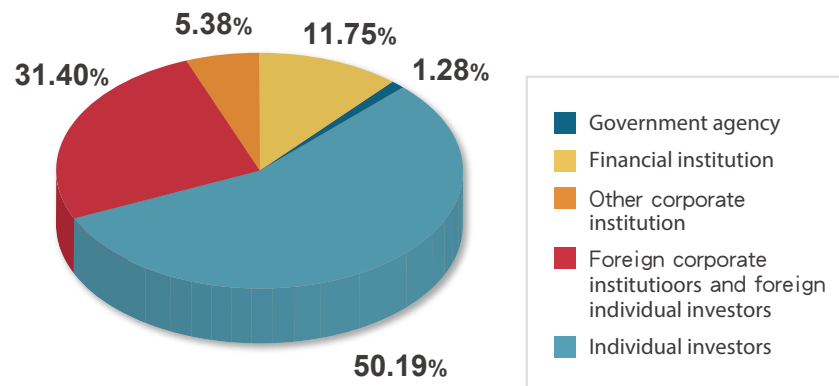
Compliance with various laws and regulations is exceptionally important to TOPCO. We have also established the Legal Office to help employees clarify various legal and regulatory uncertainties. In 2022, no sanctions or litigious activities related to the violation of economic, environmental, and social laws and regulations were reported.

## Stock information

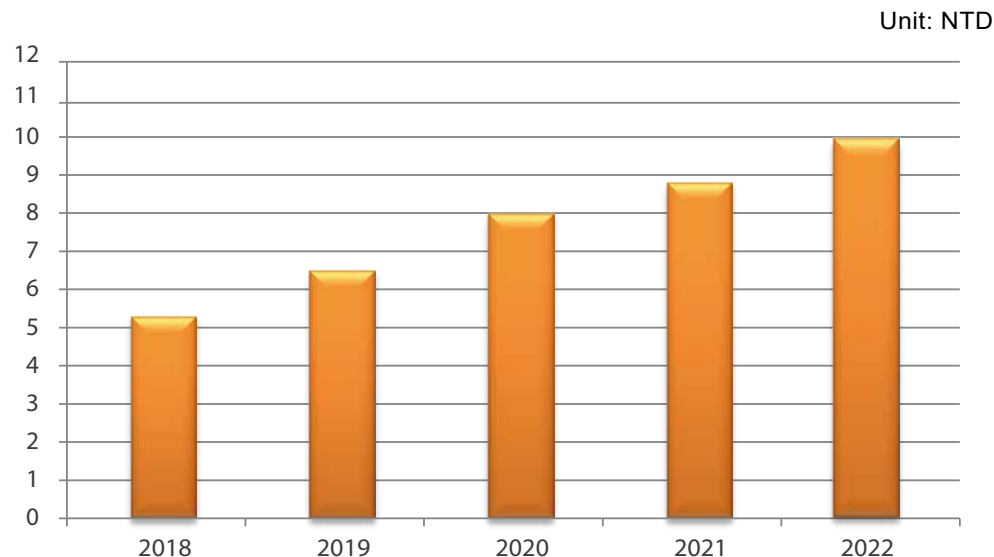
Table 1-9 Basic stock information of TOPCO

Authorized capital	NT\$1.817 billion
Circulating shares	181,699,567 shares
Number of shareholders	28,228 persons
Stock exchange	Taiwan Stock Exchange, stock code 5434
Director	Dr. Robert Lai, Legal Representative of Jia Pin Investment Development Co., Ltd.

Data period: Up to April 2022



▲ Figure 1-10 Shareholder structure



▲ Figure 1-11 Dividend distributions in the last five years

Table 1-10 TOPCO dividend distributions in the last five years Unit: NTD

Dividend/Year	2018	2019	2020	2021	2022
Stock dividend	0	0	0	0	0
Cash dividend	5.3	6.5	8.0	8.8	10.0
Total dividend	5.3	6.5	8.0	8.8	10.0

\* Source: TOPCO Market Observation Post System 2022

## Tax policy

1. Comply with the tax regulations of the operating locations and disclose tax information periodically to enhance the Company's information transparency.
2. Implement transactions among affiliates according to the arm's length principle.
3. No use of tax havens or tax planning for the purpose of tax avoidance.
4. No transfer of the Company's profit to low-tax-rate countries without substantive operations.
5. Consider the influence of tax in important corporate decisions.
6. Strengthen professional tax competency through continuous talent development.

## Tax governance

To align policy concepts with the international trend of tax governance, we implement stringent tax management to effectively control tax risks and enforce sustainable corporate development. We have set up a tax management unit. The chief accounting officer is in charge of the routine tax administration and management. Professional and well-experienced professional tax staff assist the chief accounting officer in performing the Company's tax obligations. The chief financial officer takes the ultimate responsibility for tax management. Additionally, facing the ongoing reform of tax regulations at home and abroad, we have adopted appropriate countermeasures and strategy adjustments. We also enrich professional knowledge through professional services provided by external tax consultation organizations.

## Tax risk management

Region	Tax type	Risk content
Taiwan	Corporate income tax Indirect tax Others	Tax disputes as a result of uncertainties in tax systems and regulations
China		• Countries in the world act in response to BEPS* promoted by the Organisation for Economic Co-operation and Development (OECD)
Asia		Increased tax compliance costs due to lead-time differences in policy interpretation and legislation procedures
U.S.		• Changes in tax laws or incentives may influence the Company's existing tax planning • Tax costs arising from failure in implementing tax management policies and assessing and addressing tax law changes or transaction model changes in a timely manner

\* BEPS (Base Erosion and Profit Shifting) is the tax reform directed by the OECD to establish an international tax system that favors global economic growth.

In 2022 we paid a total of NT\$680 million in taxes, including NT\$359 million in Taiwan, NT\$311 million in China, and NT\$10 million in other regions.

## **| Group vision**

We constantly invest in creating high-growth and high-value business. Based on the solid technology and experience in high-tech industries, we vertically integrate business models and horizontally connect industry resources to combine technology, environmental protection, green energy, daily life, sports, and health in TOPCO's meticulous business network in order to provide total daily life solutions.

### **Enhance visibility and deepen the sense of presence:**

We have been engaged in the semiconductor and optoelectronics industries for a long time to provide customers with excellent, accurate, and rapid service quality, actively integrate new technology applications, combine innovative business models, and create core business value to become the first-choice business partner of customers for pursuing innovation and improvement together.

### **Create a supply chain partner platform:**

Team up with micro, small, and medium suppliers to go beyond Taiwan and serve overseas customers and win contracts together. Provide supply chain partners with the things they are missing in the value chain, including market intelligence, marketing, logistics, and warehousing.

### **Actively develop new green services:**

In response to the global trends of environmental protection, green energy, energy conservation, and carbon reduction, we uphold our CSR to keep a constant track on environmental protection issues, and make long-term investments in the R&D of wastewater treatment technologies and products complying with the latest environmental protection laws and regulations to resolve the wastewater treatment problems of customers'

high-tech plants. Over the years, we have successfully developed wastewater treatment systems for the development process, copper process, grinding and cutting solvents, porous solid biological carrier, and fluorine-containing wastewater, and total recovery, zero emission technology. By offering solar energy, green construction materials, and sludge and wastewater treatment products, technical services, system integration services, and EPC services through subsidiaries such as Jia Yi Energy Co., Ltd. and ECO Technical Services Co., Ltd., we have been engaged in wastewater technology development for years to pursue the best human well-being in daily life and thereby achieve sustainable business development.

### **Continuously develop the healthcare industry:**

Upholding our advantages and core capabilities in high-tech industries accumulated over the years, we will extend technology to the food, aquatic product, tourism, sports, hospitality, and biomedicine industries; establish and operate sports centers; introduce professional services including healthy diets, scientific testing, and periodic consultation services to correspond to UN's sustainable agenda of health promotion and pursue public well-being in pace with the world based on an attitude of pursuing perfection in semiconductor manufacturing.

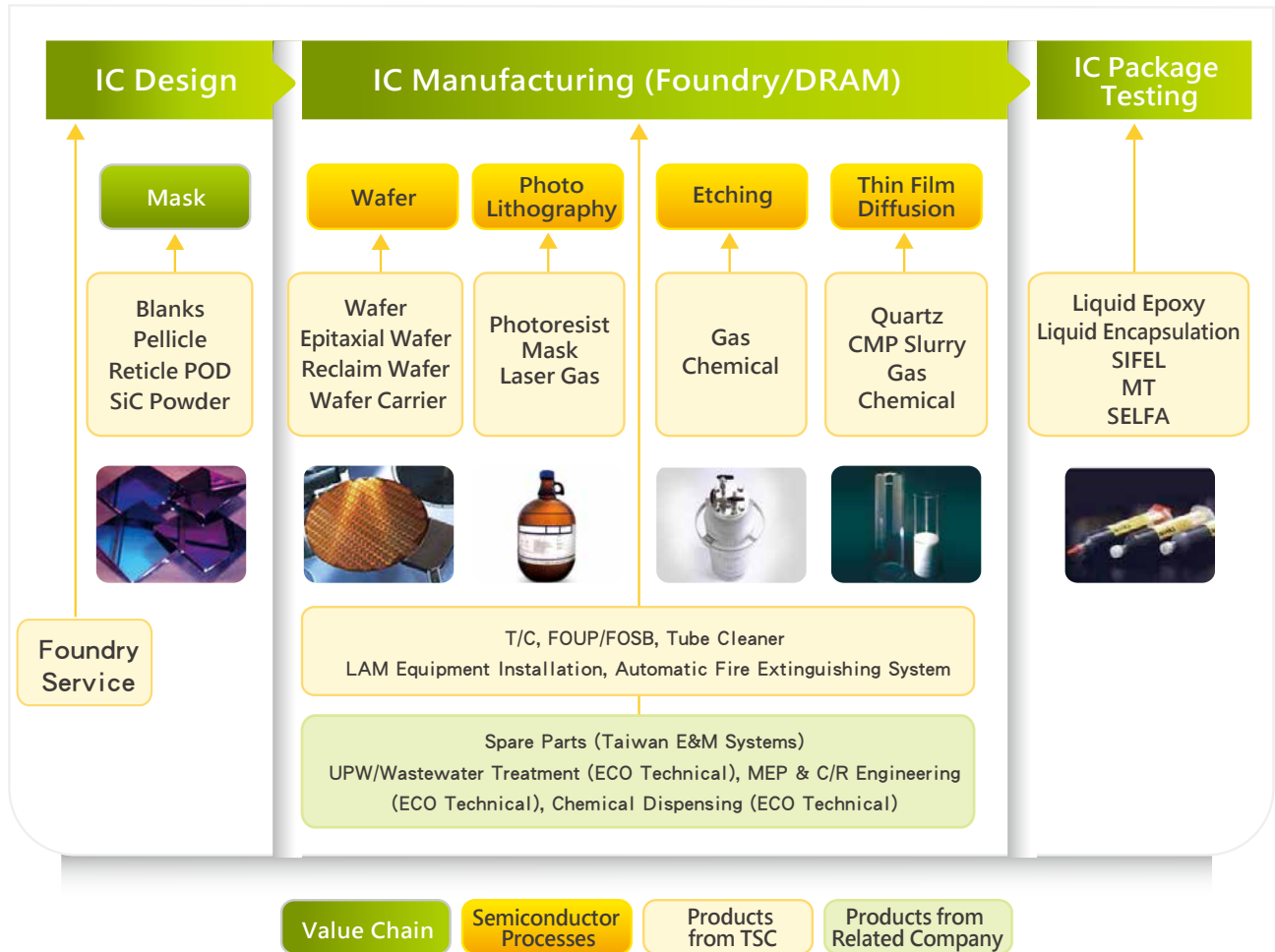
We will keep walking ahead of the times. From high-tech, environmental protection, and green energy to health industries, whether in terms of food and diet, health care, or sports and leisure, besides supporting one another, we wish each new branch industry can synergize the efforts of TOPCO, facilitate CSR practices, resolve important human issues, and create new directions and values for the world!

## 1.2 Products, services, and technologies

Since our establishment in 1990, we have been offering excellent, accurate, and rapid service quality to the semiconductor, optoelectronics, and solar power industries. We are a key supplier of semiconductor equipment and materials in Taiwan that helps customers create core corporate value.

We offer multifaceted and integrated services for high-tech industries such as semiconductor manufacturing and optoelectronics as an advantageous world-class agent with expertise and extensive industry connections to provide customers with custom solutions. We also make continual service and quality improvements toward performance in order to become the best business partner of customers.

In recent years, under the leadership of Chairperson Dr. J. W. Kuo, we have transformed from a traditional agent of semiconductor materials and equipment by entering the environmental engineering and optoelectronics industries and from the high-tech sector to the big health sector, as well as food processing and retailing. Upholding stringent production management, we have established Anyo Biotechnology to develop the food retail and food processing industries with mature scientific management to actively deploy for business diversification.

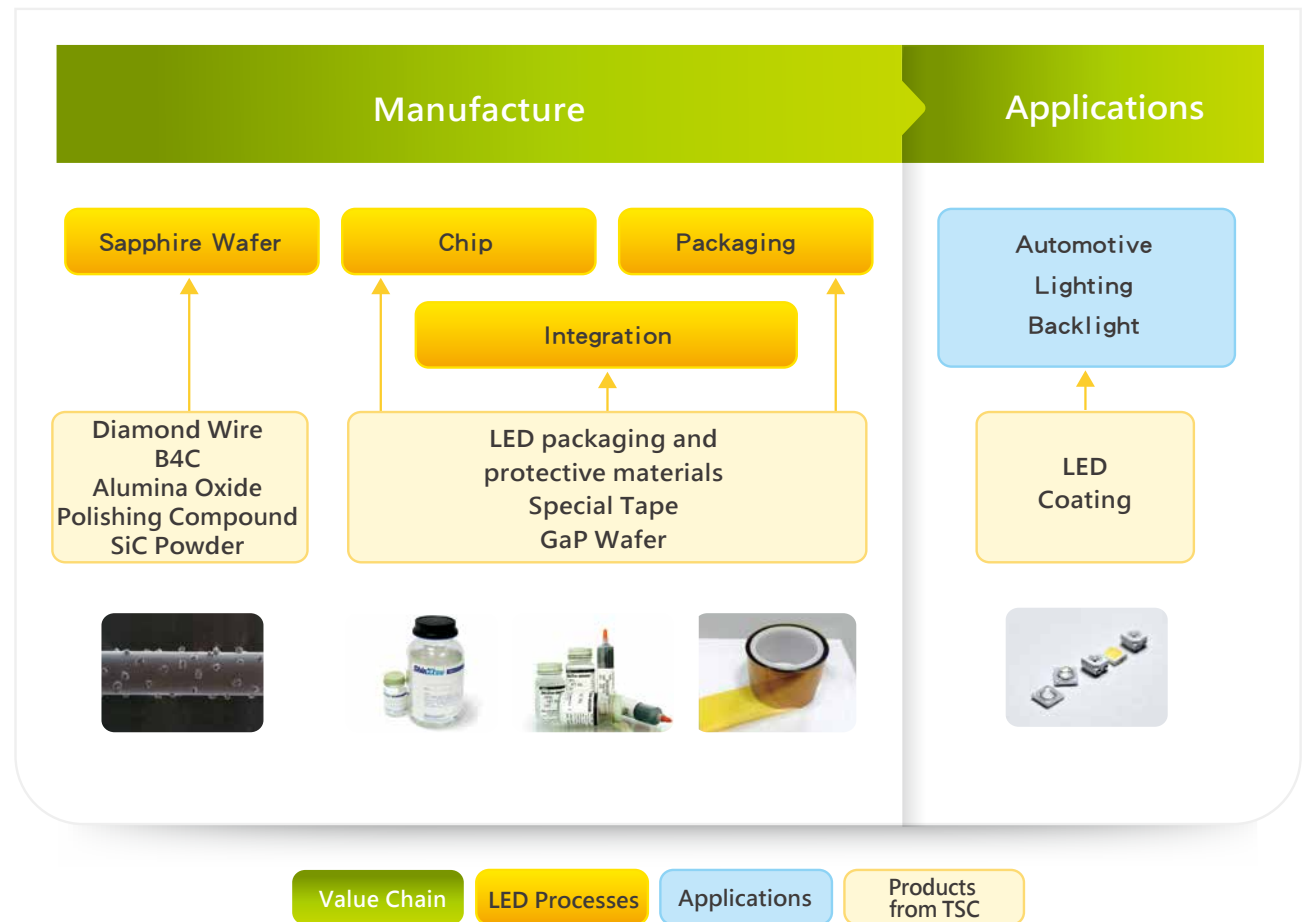


▲ Figure 1-12 Value chain materials of passive components

## Capturing global key materials

We have established a meticulous supply network for the semiconductor kingdom of Taiwan, with trusted partnership being the key to success. Following the advancement toward the nanoscale of Taiwan's semiconductor manufacturing processes, the demand for advanced materials such as photolithography chemicals like DUV photoresist and ArF photoresist increases significantly accordingly.

As an agent of the products from the Japanese Shin-Etsu Chemical, we have become a leading supplier of photolithography chemicals, accounting for about 50% of Taiwan's photoresist market, because of the excellent quality of Shin-Etsu products. In silicon wafer, we are even the sole agent in China and Taiwan of Shin-Etsu Handotai, the leader of the industry in Japan. Additionally, we have established a joint-venture company in partnership with the Japanese Shin-Etsu Quartz Products Co., Ltd. With the best clean processing shop in the industry, we have become the principal supplier of quartz equipment in Taiwan and the leader in the semiconductor quartz materials market.

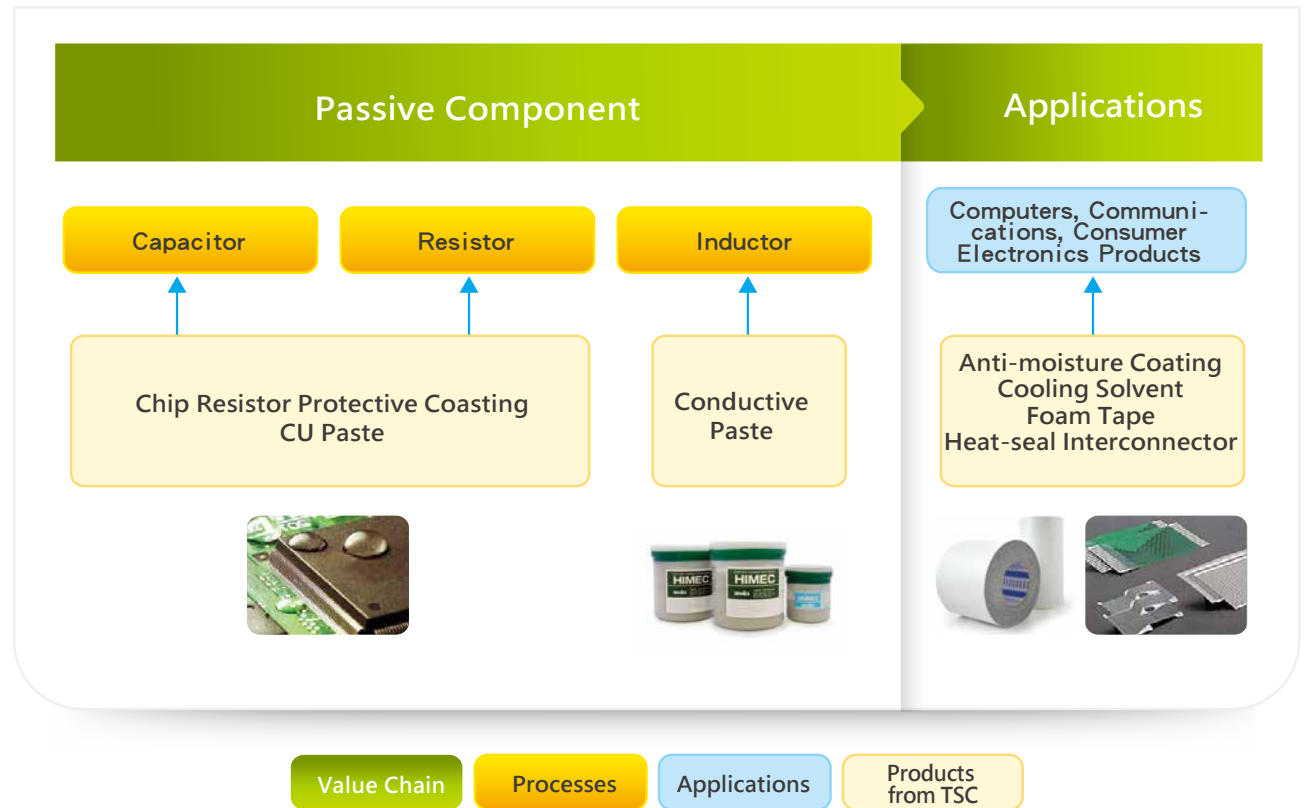


▲ Figure 1-13 Materials related to LED and solar power industries

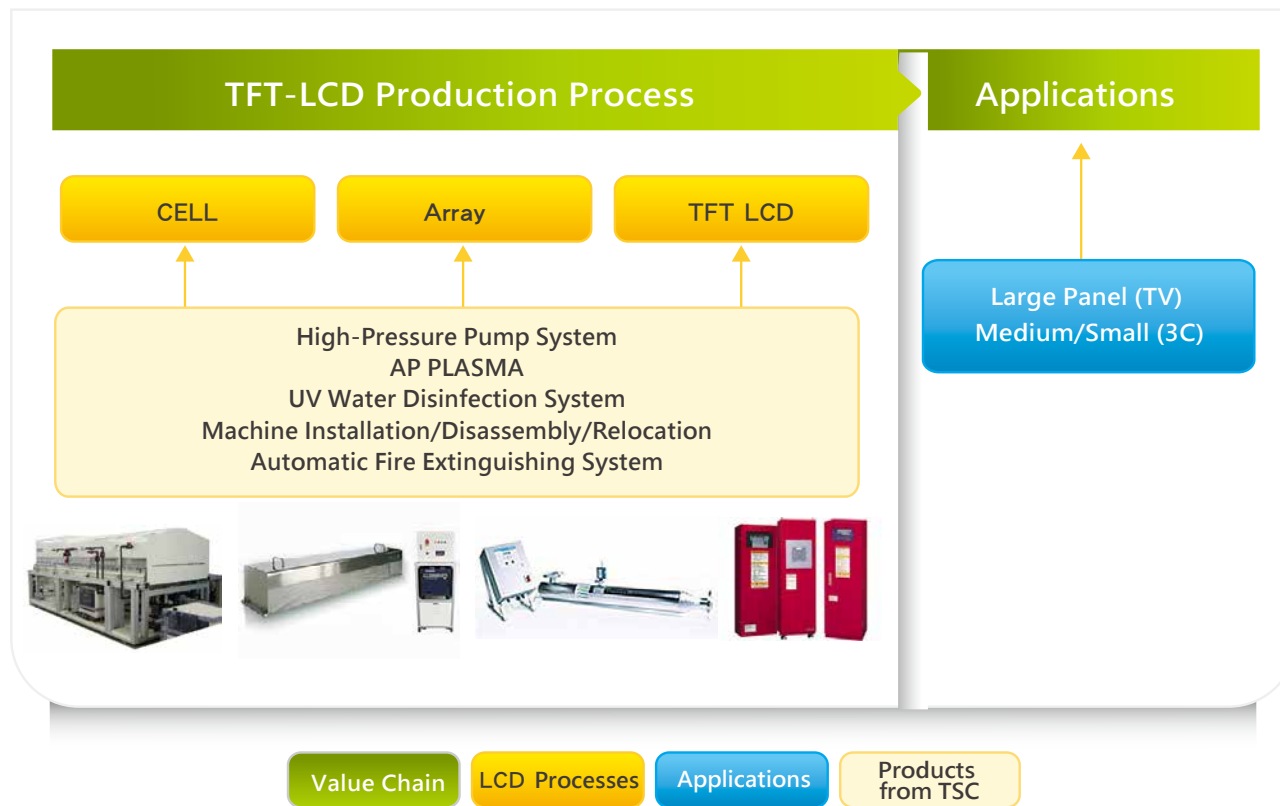
## Optoelectronic materials

### TOPCO products, services, and markets

- (1) Semiconductor materials: Provide various precision materials and related products required for the semiconductor manufacturing process.
- (2) Optoelectronic materials: Provide various materials required for electronic applications, LED, and LCD; low Dk/Df materials for RFPCBs; and materials for the production and application of the solar power industry.
- (3) Equipment and services: Provide equipment and services required for the semiconductor and LCD manufacturing processes.



▲ Figure 1-14 Value chain materials of passive components



▲ Figure 1-15 Equipment and services required by the LCD manufacturing processes.

We have enhanced the foundry service platform to help IC design houses in China to find the suitable foundry technology and accelerate product launch. In 2018, we began to promote the service platform. In 2019, we implemented the CRM cloud system to optimize customer management for sales personnel to update product information, engineering requirements, and market intelligence in a timely manner over the CRM cloud application for back-end technical service teams to quickly introduce solutions and thereby significantly enhance transaction rates. In 2020, we further introduced the web crawler to accelerate customer cultivation by searching for potential customers using the digital tool Python and data comparison and analysis to significantly enhance customer cultivation rates. Through process standardization, we can cultivate customers from new IC design houses in China and systematically organize data to achieve high-efficiency expansion of customer scale and customer management in order to boost growth in sales achievements. The foundry service platform was awarded the Growth Through Innovation Award of the 2021 TCSA.



## 1.3 Operation performance

Semiconductor-related precision materials are a major source of our revenue, accounting for about 80%. According to statistics of the Industry, Science & Technology International Strategy Center (ISTI), Industrial Technology Research Institute (ITRI), Taiwan’s 2022 IC industry output exceeded NT\$4.7 trillion, up 15.6% from 2021. This amount included the output of foundry services accounting for NT\$2.5563 trillion, up 31.7% from 2021. Benefited from the ongoing advancement and ceaseless capacity expansion of the advanced semiconductor process, the demand for advanced process materials, such as photoresists, silicon wafers, and chemicals, continues to grow. Through the combined effort of the management team and all employees, we will continuously assess and introduce new products and develop value-added technology and services, including new 5G key materials developing business opportunities in the third-generation semiconductor and EV market. We will also seek appropriate partners for strategic alliances and collaboration, expand agency services and strengthen local

development, and address the dispersion and transfer of the global supply chain by turning the U.S. and Japan into key operating locations to respond to the needs of nearby customers. At the same time, with Singapore as the center of operations, we will cultivate overseas markets in Singapore, Malaysia, and Vietnam, and other countries, to provide warehousing services and water treatment services, and build regional supply chain platforms.

In the thriving semiconductor market, our revenue has continued to grow over the last three years (2020-2022). Whether gross profit, net operating profit, or net income after tax, the performance is brilliant.

Table 1-11 Operating performance in the last three years

Unit: NT\$ thousand

	2020	2021	2022
Revenue	20,607,815	23,916,564	28,231,985
Gross profit	2,624,388	2,884,370	3,617,101
Net operating profit	1,261,558	1,355,559	1,704,386
Net income of the year	2,068,350	2,294,458	3,018,478
EPS (NT\$)	<b>11.38</b>	<b>12.63</b>	<b>16.61</b>

\* Source: 2022 TOPCO (standalone) financial statements

### Brilliant operating performance and significant revenue growth

We believe that the pursuit of outstanding financial performance is a prerequisite for sustainable operations in order to constantly create higher economic value. In 2022, our revenue increased by 18% over 2021 to NT\$28.23 billion, with net income after tax at NT\$3.0 billion and EPS at NT\$16.61. The Group’s consolidated revenue also reached a new high of NT\$52.98 billion with a significant sales growth. In the future, we will

continue cultivating the high-tech field and accelerate market expansion in China to maintain high operating performance.

Table 1-12 Group operating performance in the past three years

Items	2020	2021	2022
Operating income (NTD million)	36,167	42,669	52,978
Net profit after tax (NTD million)	2,065	2,301	3,075
R&D investment (NT\$ million)	10,023	10,117	15,641
Return on shareholders' equity (%)	20.53	20.48	24.58

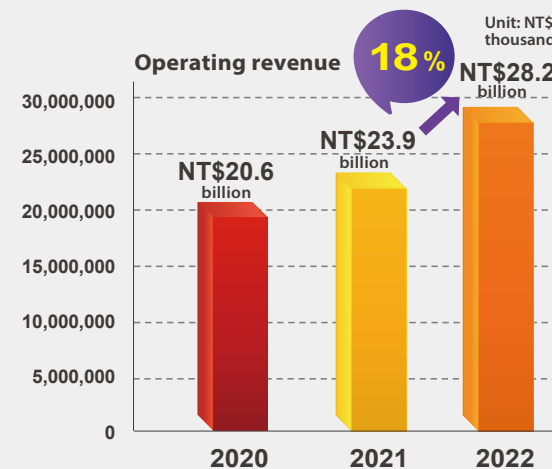
\* Source: 2022 TOPCO (merge) financial statements

## Green investment

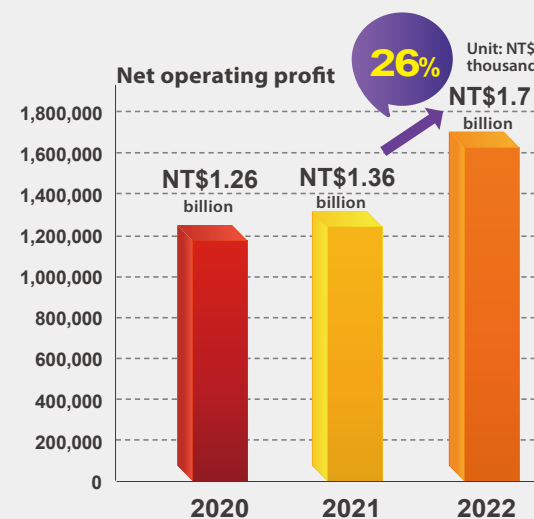
In 2022, the Board approved the inclusion of ESG assessment and analysis in both short-term or long-term investments. Our current green investments cover environmental engineering projects such as pure and waste water treatment, waste disposal, and cleanrooms; and renewable projects such as solar power stations, fishery and electricity symbiosis; and self-owned power stations of about 40MW. The macro investment proportion in the last three years increased year after year.

Table 1-13 Statistics on green investment amounts

	2020	2021	2022
Total amount of investment (thousand NT\$)	5,929,239	6,929,475	7,883,215
Amount of green investment	1,758,831	2,403,323	2,294,747
Proportion	30%	35%	29%



▲ Figure 1-16 2020-2022 revenue



▲ Figure 1-17 2020-2022 net operating profit

We have acquired 78.6% stake in Unitech New Energy Engineering Co., Ltd. with NT\$440 million to enter the offshore wind power environmental assessment and monitoring market to extend the scope of services to the circular economy and increase the growth momentum of the Group, earning Taiwan's most authoritative M&A award: Medium-Size Enterprises M&A Deal Award at the MAPECT Taiwan M&A Awards.

## ESG Index-Linked Loans

By signing ESG Index-Linked Loans with E.SUN Bank, cooperating banks will voluntarily reduce the loan interest rate when we meet the contractual requirements for GHG emission inventory each year during the loan period, so that we can invest in sustainable development with greater flexibility. Apart from demonstrating the value of sustainable development, we also enjoy financial incentives.

## Green deposit

Actively participate in green finance, create positive impacts and long-term benefits on the environment and society through deposits, and use this to incorporate sustainable projects into the company's strategic planning to demonstrate the importance of sustainable development. Set up a green deposit with Cathay United Bank to support the use of funds in green financing and refinancing.

## 2022 honors and credits

### CommonWealth Top 2000: 35th in the service industries and 12th in the IC retail industry.

According to the Top 2000 Enterprises Survey published in Volume 773 of CommonWealth Magazine in May 2023, we were ranked 12th in the "ICT and IC Retailing Industry" and 35th among the Top 2000 Service Businesses in Taiwan, showing our ongoing ranking each year. From the 94th in 2013, our ranking in the Top 2000 has been rising annually.



▲ Figure 1-18 Chairman Jeffery C. L. Pan (right) received the Medium-Size Enterprises M&A Deal Award at the MAPECT Taiwan M&A Awards



▲ Figure 1-19 CommonWealth Top 2000: 35th in the service industry and 12th in the IC retail industry

Source: 2023 Top 2000 Enterprises Survey.  
CommonWealth Magazine, vol. 773

Table 1-14 CommonWealth Top 2000 rankings over the years

Top 2000 Enterprises in Service Industries						ICT and IC retailing					
2017	2018	2019	2020	2021	2022	2017	2018	2019	2020	2021	2022
63	58	54	48	40	35	15	14	12	12	12	12

### "Average Salary" Revealed for Thousands of Listed Companies Ranks 2nd among 20 Listed Electronics Retail Companies

In the 2022 "Information on Salaries of Full-time Employees" of local listed companies announced by the Taiwan Stock Exchange (TWSE) on June 30, 2023, the "average earnings" and "median earnings" of employees in non-management positions are disclosed to make information more transparent and strengthen CSR. According to the data announced by the Financial Supervisory Commission (FSC), the "average earnings" of the Company's employees increased by 19.2% from NT\$1.89 million in 2022 to NT\$2.25 million in 2023, ranking 2nd among 20 domestic listed electronics retailers and suggesting that our employee salary is one of the highest in the industry.

### Asia-Pacific Sustainability Action Awards (APSAA) for low carbon emissions and sustainable development

Our ongoing efforts in developing green energy were rewarded, and our environmental engineering business unit earned word of mouth for enforcing sustainable corporate development. We also earned the bronze award in the environmental sustainability category at the APSAA 2022 organized by the Taiwan Academy of Corporate Sustainability (TACS).

### Top 100 Enterprises of Excellence in Corporate Social Responsibility by CommonWealth Magazine

We have spared no efforts in ESG engagement and were recognized as one of the 2022 Top 100 Enterprises of Excellence in Corporate Social Responsibility by CommonWealth Magazine for being the



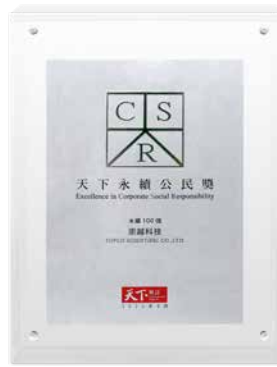
▲ Figure 1-20 Earned the bronze award at the APSAA 2022



▲ Figure 1-21 Top 100 Sustainability Exemplary Award and Corporate Sustainability Report Award - Silver

most important private business that brings Taiwan towards net-zero emissions, social prosperity, and common good.

We offer a competitive remuneration system and bonus system. Apart from giving employees a raise each year based on the Company's operational performance and employees' personal performance, we also provide birth allowance and dependent scholarships for employees, and one free health checkup for mid- and old-aged employees to provide employees with "total care" from individual to family.



◀ Figure 1-22 Top 100 Enterprises of Excellence in Corporate Social Responsibility by CommonWealth Magazine in 2022



▲ Figure 1-23 ISO 45001 certificate.

### ISO 45001 for OH&S Practice

Facing the keen competition in the global market, businesses require active risk management, implement ESG, and protect the occupational health and safety (OH&S) of employees. In 2022, we passed the certification of the ISO 45001 occupational health and safety (OH&S) management system, demonstrating our determination to practice active "workplace health and safety management" and continue realizing sustainable development.

### Awarded the Gold Award and Long-Term Sponsorship Award of the Sports Activist Awards of the Sports Administration, Ministry of Education

Besides sponsoring baseball and developing excellent baseball players over time, we have actively built well-equipped sports and training venues, and were thus awarded the Gold Award and Long-Term Sponsorship Award of the Sports Activist Awards by the Sports Administration, Ministry of Education, in 2022. Since 2019, we have been recognized by the organizer for four consecutive years.

In 2021, we created the "XPORTS" professional sports training brand. By importing Beginning Movement Load Equipment from Tottori from Japan and integrating it with scientific sports tests and strength training and conditioning, we have established a set of professional sports training and sports recovery mechanisms and built sound training bases, hoping to promote the dreams of athletes in Taiwan.



▲ Figure 1-24 Received the Gold Award and Long-Term Sponsorship Award of the Sports Activist Awards from Vice President Lai Ching-te



▲ Figure 1-25 Excellent Supplier Award from Nanya Technology and Outstanding Supplier Award from Huahong Grace Semiconductor

▲ Figure 1-26 TOPCO HQ Employee Canteen passed the certification of Green Dining Pledge

### Excellent Supplier Award of Nanya Technology and Outstanding Supplier Award of Huahong Grace Semiconductor

Through providing customers with excellent, accurate, and prompt services, continuously distributing best-selling products, optimizing integrated professional services, actively discovering customer demands, and capturing future trends, we have earned unanimous word of mouth from partners, thus earning the Excellent Supplier Award from Nanya Technology and the Outstanding Supplier Award from Huahong Grace Semiconductor in 2022.

### Sustainable Dining: Green Dining Guide Certification for Employee Canteens

We practice green diet and environmental sustainability. In 2022, the employee canteen at HQ passed the Green Dining Guide (GDG) certification, becoming a member of the GDG.



## Award-winning records for product and engineering performance



▲ Figure 1-27 ECO Technical was awarded the Gold Award at the FIABCI-Taiwan Real Estate Excellence Awards



▲ Figure 1-28 ECO Technical passed the i-Sport Certification of the Sports Administration, Ministry of Education



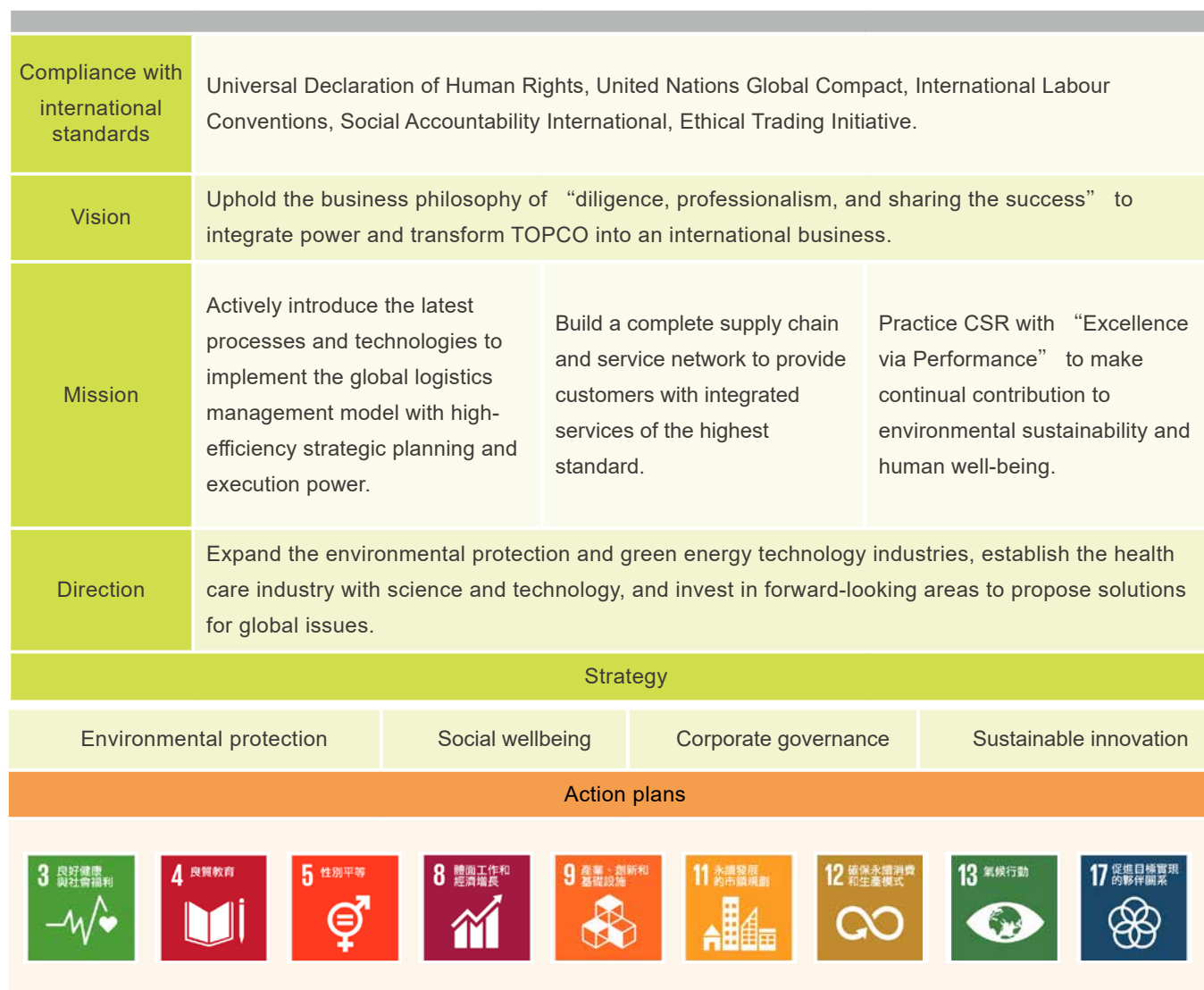
▲ Figure 1-29 Anyo Santé Premium Silver Perch Essence was recognized by the Bronze Award of the National Biotechnology and Medical Care Quality Award and SNQ National Quality Mark



▲ Figure 1-30 In 2022, Anyo Freshmart was recognized by nine awards, including the Eatender Award and Fun Food Taiwan Award

## 1.4 TOPCO sustainable development strategic roadmap

Starting out from our core business capacity, we engage in CSR with innovative thinking and transform ESG concepts into business missions. Besides strengthening business resilience, we have also created new paths in business models to benefit people and ourselves in order to synergize group profit, sustainable development, and environmental protection.



▲ Figure 1- 31 TOPCO sustainable development strategic roadmap

Since TOPCO was established in 1990, we have been maintaining high growth in both operations and profit. As a multifaceted supplier for high-tech industries, we have always adhered to our core services while extending to new areas at the same time. In response to the future global trends of environmental protection, energy conservation, and carbon reduction, we uphold our commitment to CSR to actively develop the green energy business by integrating the three core capabilities of technology R&D, engineering management, and system planning to focus on areas such as industrial wastewater treatment, urban wastewater treatment, waste disposal, cleanroom construction, air conditioner engineering, and mechanical engineering and provide comprehensive services covering engineering, procurement, and construction (EPC), system processing unit installation and sales, and waste disposal and recycling, aiming to practice “recycling”, “purification”, and “reengineering”. To develop the health care industry with



science and technology, we placed huge investments in building a food safety system and promoted correct food education concepts to promise a future of sustainable health for the public and set a model for happy life. By combining group strengths and integrating innovative OEM technology, quality shopping space, science and technology, leisure, and food education, we expand domestic and overseas markets through diversified marketing, shorten the gap between people and health, and thereby promote regional industrial revitalization and promote socioeconomic prosperity to create a quality standard for Taiwan's food science industry, aiming to realize the service goals of "safety, freshness, and convenience". To advance marine environmental education and life aesthetics and promote food safety education, we spent billions of Taiwanese dollars to build a diamond grade green-building tourism factory. Inside the factory, there are fun high-tech interactive activities to




learn about marine dietary education, and DIY activities for visitors to understand safe food making processes. The factory also provides a farm-to-table experience. Ingredients are preserved with Japan's latest food preservation technology, Cells Alive System, to ensure freshness and cooked with the exquisite culinary skills of the chef to present perfectly cooked dishes. To promote the total health care plan, healthy sports are introduced through a complete training model integrating "scientific analysis, professional training, and effective recovery". As a promoter, we include sustainable development goals in all marketing and business activities and cleverly blend them with daily life to advocate healthier dietary habits that are more beneficial to sustainable development.

In 2015, the United Nations (UN) announced the 17 Sustainable Development Goals (SDGs) as the guiding principles for short-, medium-, and long-term sustainable development. In terms of four macroscopic trends—environmental sustainability, social well-being, corporate governance, and sustainable innovation—we set our strategic goals for sustainable development as the guidelines for responsive action.



▲ Figure 1-32 TOPCO demonstrates the resilience of cross-industry sustainable development

Table 1-15 Short-, medium-, and long-term planning of TOPCO

		 Short-Term Goals	 Medium-Term Goals	 Long-Term Goals
Focus of sustainable development promotion		Actively develop the green economy and continuously increase green investment proportion	Support all demands of advanced processes and engage in low-emission supply chain transformation	Make breakthroughs in low-emission technologies and become an agent of market-competitive products
Practice	Environmental protection	Introduce the renewables consolidated reports and implement GHG inventory at subsidiaries Optimize and continuously promote the OH&S management system	Accomplish net-zero emissions by 2030 (Scopes 1+2) Assist subsidiaries in establishing the OH&S management system	Achieve carbon neutrality by 2050
	Social wellbeing	Continue to improve SDG 4 Quality Education and promote talent development	Assist with local development based on core competencies	Offer job opportunities and promote economic development through cross-industry development with TOPCO's services
	Corporate governance	Supply chain sustainability management	Strengthen the resilience in risk response (including climate risks)	Enforce business continuity management
	Sustainable innovation	Develop optimized products, enhance production efficiency, and extend the carbon reduction effect of the value chain in collaboration with customers	Integrate and position green energy technologies	Build the supply chain partner platform to go beyond Taiwan and serve overseas customers together

## 1.5 TOPCO's corresponding actions to SDGs






Besides job opportunities, we also create future opportunities for like-minded partners to demonstrate their talent. For employees to achieve greater happiness and the Company to ensure sustainable development, we have introduced measures for employees to balance family life and work. These measures cover work, health, and family, offer a friendly system and support, provide a healthy and safe working environment, and create a friendly workplace with positive support. To create a sound learning environment, we actively understand current learning trends and employee needs, make the best use of learning resources and platforms, increase interaction with employees, and lift their learning motivation to improve their competitiveness.

We are also committed to promoting gender equality in employment and building a gender-friendly workplace to realize our commitment for female employees to demonstrate their biggest potential. We constantly enforce youth career empowerment through college/university talent recruitment and training to help promote "employment and economic growth". The TSC Thesis Award and Marketing Award have been established to encourage outstanding talent to engage in innovation and R&D and enhance the theory-practice connection between industry and academia.






Strengthening sustainable economic growth: Our revenue increases annually. Besides distributing precision materials, components, and equipment of the semiconductor, LCD, and optoelectronics industries as an agent, we also engage in environmental engineering, solar power

and facility system engineering, water recycling, and inorganic calcium fluoride sludge recycling to focus on the promotion of the circular economy and green energy business and extend them to the daily life, food, health, and leisure industries in order to constantly expand our scale of operations through linking and integrating the power of various industries. Whether practicing ESG or addressing SDGs, we promote environmental and social development with our core services to fulfill corporate social responsibility and continuously innovate services.

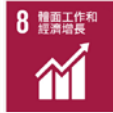







Strategy	Action plans	Completed and ongoing	Medium- and long-term plans	Corresponding SDGs
<p><b>Environmental sustainability</b></p>	<ol style="list-style-type: none"> <li>1. Climate change and energy-saving effectiveness</li> <li>2. Safe and healthy working environment</li> <li>3. Career development and training</li> <li>4. Talent recruitment and retention</li> </ol>	<ol style="list-style-type: none"> <li>1-1 Obtain ISO14064 Scope 1 and Scope 2 validation</li> <li>1-2 Join SBTi and submit the science-based net-zero targets.</li> <li>1-3 Implement ISO14001 environmental management system in ECO Technology.</li> <li>1-4 Join RE10x10</li> <li>2-1 For ECO Technical to pass ISO 45001:2018 occupational health and safety management system</li> <li>2-1 For TOPCO to pass ISO 45001:2018 occupational health and safety management systems</li> <li>2-3 HQ employee canteen passes “Green Employee Canteen” certification</li> <li>2-4 For Anyo Museum to obtain EEWH</li> <li>2-5 To pass Taiwan i Sports</li> <li>2-6 Established a health consultation center / Employee EAP assistance</li> <li>2-7 Set up a lactation room</li> <li>3-1 TOPCO e-Academy - employee further education and diverse learning subsidies</li> <li>4-1 Established incentives for (innovation) innovative products</li> <li>4-2 Established a Labor-Management Committee (including a grievance mailbox)</li> <li>4-3 Employee Welfare Committee - Comprehensive benefit system (New Year means, year-end meal, travel, health examinations)</li> <li>4-4 Scholarships for employees’ children</li> <li>4-5 Joined the “TALENT, in Taiwan”</li> </ol>	<ol style="list-style-type: none"> <li>1-5 For subsidiaries to obtain ISO14064 inventory</li> <li>1-6 Promote ISO 50001 energy management system</li> <li>2-8 To pass the certification of the Badge of Accredited Healthy Workplace of HPA</li> <li>2-9 For Anyo Museum to attain the Environmental Education Venue certification</li> </ol>	    

▲ Figure 1-33 Realization of UN SDGs

Strategy	Action plans	Completed and ongoing	Medium- and long-term plans	Corresponding SDGs
<p><b>Social wellbeing</b></p>	<p>1. Brand management 2. Social engagement</p>	<p>1-1 For Anyo Freshmart to attain the SNQ label 1-2 For Anyo Biotechnology to pass FSSC 22000 food safety management system certification 1-3 For Anyo Biotechnology to pass HACCP food safety control system certification 1-4 For TopChem Materials Corporation to pass IATF 16949 quality management validation 1-5 Awarded the Sports Activist Award 1-6 Image reveal from promoting sustainable development - CSR section of CommonWealth Magazine 1-7 Implement ISO14067 in TopChem Materials 1-8 Implement ISO14067 in Anyo Biotechnology 2-1 Promoting sports with customers 2-2 Promoting young power - TSC Thesis Award, Marketing Award 2-3 Promoting cooperative education programs: Signed a memorandum of understanding (MOU) - Smart Culturing Technology and Development R&amp;D Talent Cultivation with National Taiwan Ocean University (NTOU) 2-4 Promoting reading: Working with Global Views Magazine - to encourage reading 2-5 Encouraging employees to be involved in social engagement: Superb Volunteerism Club</p>	<p>1-9 Anyo SDGs Concept Pavilion design 2-6 Donate Anyo Santé Premium Silver Perch Essence to encourage blood donation 2-7 Point-giving by Anyo's members for charity 2-8 Implement the SROI assessment mechanism</p>	    

▲ Figure 1-33 Realization of UN SDGs

Strategy	Action plans	Completed and ongoing	Medium- and long-term plans	Corresponding SDGs
<b>Corporate governance</b>	<ol style="list-style-type: none"> <li>1. Improve Board competence</li> <li>2. Enhance ESG information disclosures</li> <li>3. Ethical corporate management</li> <li>4. Supply chain sustainability management</li> <li>5. Customer service and management</li> <li>6. TCFD climate-related financial disclosure</li> </ol>	<ol style="list-style-type: none"> <li>1-1 Formulated the Evaluation of the Board of Directors</li> <li>1-2 Established various functional committees: Corporate Governance &amp; Nomination Committee, Risk Management Committee, Remuneration Committee, Audit Committee.</li> <li>2-1 Established the “Procedures for Preparation and Verification of Sustainability Reports” .</li> <li>2-2 Enhance and participate in various ESG ratings</li> <li>2-3 Established the Procedure for Sustainability Investment included in the ESG assessment and analysis of investment targets.</li> <li>3-1 Disclosure of various financial information</li> <li>3-2 Disclosure of the business continuity plan (BCP), set the internal carbon pricing at US\$250 tCO2e for carbon risk management and assessment.</li> <li>4-1 Work with suppliers to promote: To include provisions related to corporate social responsibility in the contract</li> <li>4-2 For all suppliers to pass the ISO 14001 certification, and manufacturing processes and products to meet the EU's Restriction of Hazardous Substances (RoHS) directive.</li> <li>4.3 Collaborate with upstream vendors to conduct audits</li> <li>5-1 Customer satisfaction survey</li> <li>6-1 Implemented the TCFD-recommended management framework and published independent TCFD reports.</li> </ol>	<ol style="list-style-type: none"> <li>3-3 Taiwan Intellectual Property Management System (TIPS) or similar intellectual property management system validation</li> <li>3-4 Implement the ISO 27001 Information Security Management System</li> </ol>	  
<b>Sustainable innovation</b>	Green energy and recycling for sustainable development	<p>Industrial wastewater treatment technology</p> <p>Waste solvent recovery technology</p> <p>Sludge removal technology</p>	<p>Fishery and electricity symbiosis technology</p> <p>Solar power station</p> <p>Biogas power generation</p>	  

▲ Figure 1-33 Realization of UN SDGs



Highlights  
2022

## II. Commitment on CSR realization

- ▶ Ranked within the top 6-20% of listed companies at the 2022 Corporate Governance Evaluation by the FSC.
- ▶ President Tsai Ing-Wen praise with the winners of the distinction and excellence awards of the 15th (2022) TSC Thesis Award.
- ▶ Donated over NT\$12.565 million in 2022, including NT\$6.3255 million for industry-academia collaboration.
- ▶ Built multifunctional facilities for young and old people in sports centers and organized senior workshops on Senior Health Management: Community Disabilities Prevention and Delay Service Program in coordination with the New Taipei City Government.
- ▶ Employees voluntarily formed the Superb Volunteerism Club to contribute to society with the Group's united strength.
- ▶ Donated reading resources to children and youth in 19 elementary schools in Yilan, Changhua, Kaohsiung, and Pingtung to support the Future Kids Charity Program of Global Views Monthly.
- ▶ Actively engaged with and promoted carbon reduction actions internally and externally: Distributed enzymes to stop burning rice straws, and teamed up employees to support World Vegetarian Day.

## 2.1 Enforcing sustainable (ESG) development

To fulfill CSR and keep up with international trends, we actively address stakeholders' concerns about ESG risk assessment and countermeasures in order to achieve sustainable operations. We have thus established the ESG Promotion Committee in accordance with the Company's "Sustainable Development Best Practice Principles" in December 2021. The committee is chaired by CSO, with senior officers as the conveners of respective strategic teams. The committee holds at least one meeting quarterly or extraordinary meetings as necessary. The Chief Sustainability Officer reports the committee status to the Board from time to time.

The committee has been established to assist the Board in constantly

promoting CSR and improving corporate governance in order to achieve sustainable operations. Its duties include:

1. Set the direction and goals of CSR and sustainable development and draw up the relevant management approaches and specific implementation plans.
2. Communicate and implement tasks relating to ethical corporate management and risk management.
3. Follow up, review, and revise the status and effectiveness of CSR implementation.
4. Other matters assigned by the Board.



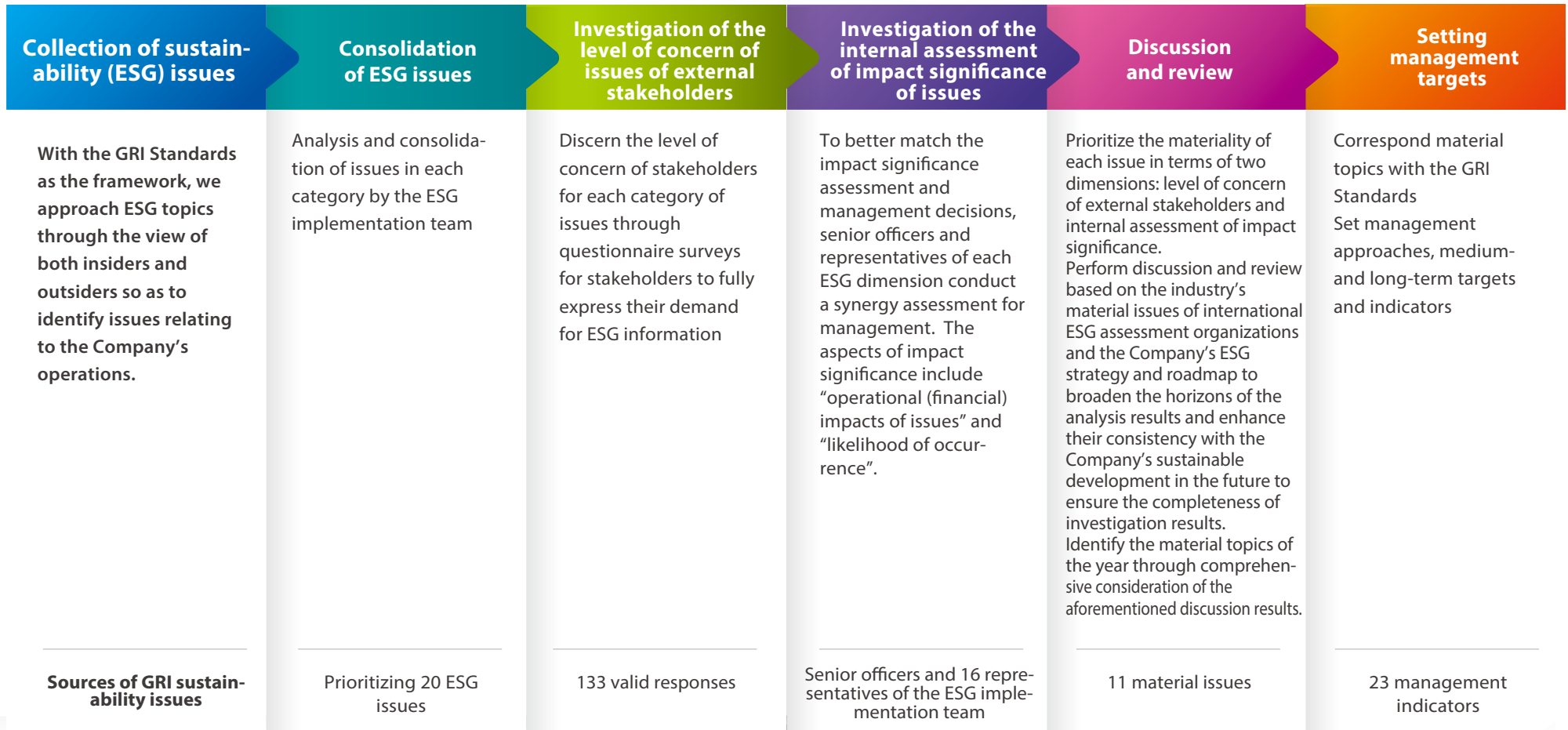
▲ Figure 2-1 ESG Promotion Committee – Organizational framework



## 2.2 Identifying stakeholder groups

At TOPCO, we value communication with stakeholders. Besides maintaining sound communication and interaction with stakeholders, we also identify, prioritize, validate, and review the management processes of material topics based on the principles of sustainability context, materiality, integrity, and inclusiveness as stated in the GRI Standards.

The ESG Promotion Committee is convened cross-department meetings, with senior Group officers participating in the identification process. After multiple discussions, senior officers and unit supervisors identified the potential principal stakeholders for communication. The methods and processes of identification are as follows:



▲ Figure 2-2 Methods and processes of identification

## 2.3 Stakeholder communication and material issues

Personnel of each department discussed the stakeholders involved in business activities, interaction, and exchange to determine the types and targets of stakeholders. Then, they assessed stakeholder groups in terms of the attributes of stakeholders as specified in AA-1000SES: dependency, responsibility, influence, diverse perspectives, and tension. After the discussion between the ESG Implementation Team and senior officers, the following five

stakeholder groups were identified: shareholders, customers, employees, suppliers, and external parties (the general public, the government, local communities, the media, NGOs, and academic units). To address the issues that concern stakeholders, we have established various communication mechanisms to reliably address stakeholders with the information they expect.

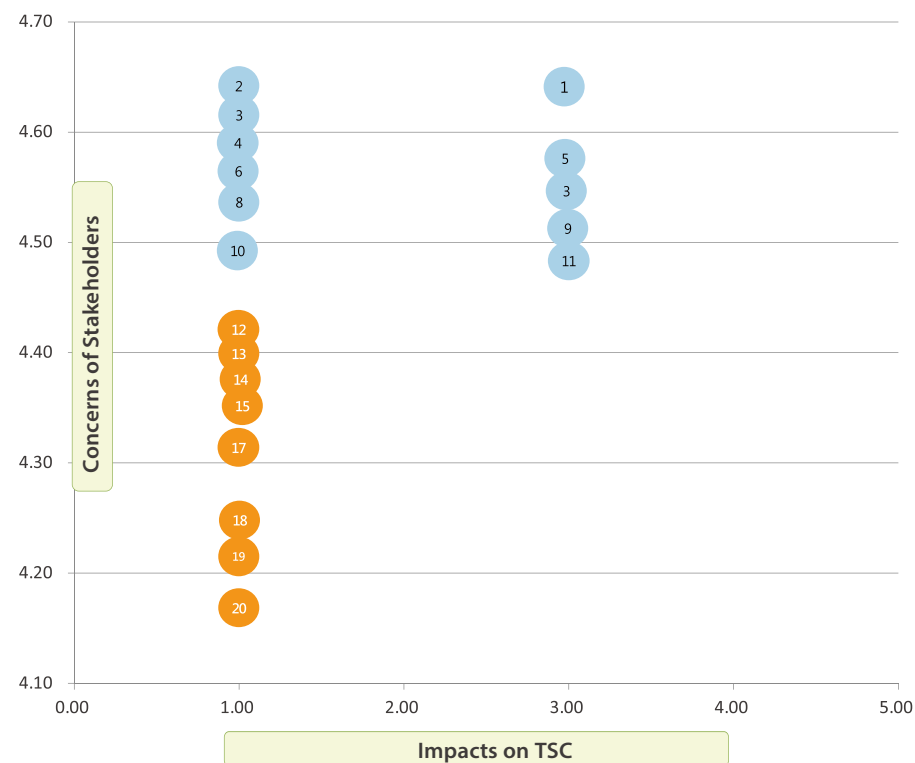


▲ Figure 2-3 Results of stakeholder identification

## Process of materiality assessment

### (1) Identification

By following the framework of the GRI Standards, we assessed materiality in terms of three aspects: economic, environmental, and social. Through online survey, we gathered the issues that concern the five stakeholder groups—shareholders, customers, employees, suppliers, and external parties (the general public, the government, local communities, the media, NGOs, and academic units)—and included them in the CSR routine work and annual plan. We gathered 20 related ESG issues through different channels to present the complete sustainability context.



▲ Figure 2-4 Matrix of material issues

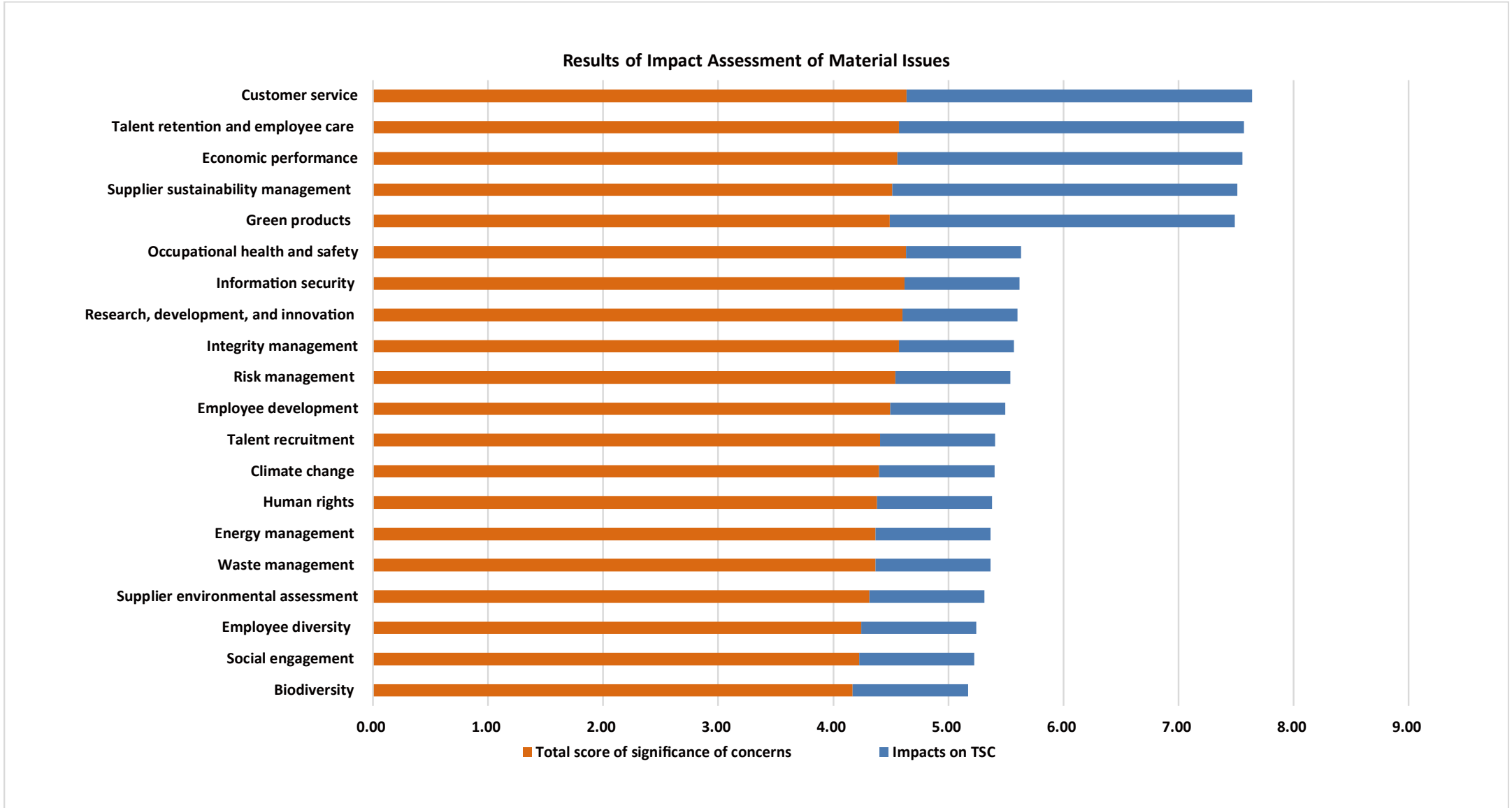
### (2) Prioritization

To better understand the needs of stakeholders, their expectations of TOPCO, and the matters that concern them, we designed a questionnaire based on two constructs: the stakeholders' level of concern and the significance of impact on corporate operations. Stakeholders were surveyed online, and a total of 133 responses were collected. After cross screening, issues of external concerns and issues with internal impacts were selected and visualized in a matrix of material issues.

In this report, a total of 20 economic, environmental, and social issues were included. A process for identifying materials issues affecting sustainable development was established for the reference of CSR information disclosure in order to realize our commitment to sustainable operations.

Table 2-1 Prioritization of the level of concern of primary and secondary issues






1	Customer service	11	Green products
2	Occupational health and safety	12	Talent recruitment
3	Information security	13	Climate change
4	Research, development, and innovation	14	Human rights
5	Talent retention and employee care	15	Energy management
6	Ethical corporate management	16	Waste management
7	Economic performance	17	Supplier environmental assessment
8	Risk management	18	Employee diversity
9	Supplier sustainability management	19	Social engagement
10	Employee development	20	Biodiversity



▲ Figure 2-5 Impact assessment of material issues

Fulfilling the expectations of stakeholders is an important goal of our CSR policy. We communicate and interact with stakeholders in different ways. The communication methods and channels are as follows:

Table 2-2 Issues of stakeholder concern and results of stakeholder engagement

Stakeholder	Issue of concern	Communication Channel	Communication Frequency	Response/Engagement result
 <b>Shareholders</b>	<ul style="list-style-type: none"> <li>Ethical corporate management</li> <li>Research, development, and innovation</li> <li>Economic performance</li> <li>Risk management</li> <li>Climate change</li> <li>Waste management</li> <li>Biodiversity</li> <li>Talent recruitment</li> </ul>	<ul style="list-style-type: none"> <li>Annual general meeting of shareholders (AGM)</li> <li>Periodic publishing of financial statements/annual report</li> <li>Investor conferences and presentations</li> <li>MOPS</li> <li>Corporate website/Investor email</li> <li>Establishment of biodiversity policy</li> <li>Sustainability reports</li> <li>TCFD reports</li> </ul>	Annually/Quarterly	<ul style="list-style-type: none"> <li>Board meetings: 8</li> <li>AGM: 1</li> <li>Investor conferences: 4</li> <li>Revenue reports: 16</li> <li>Publishing material information: 27 times</li> <li>Production of TCFD reports</li> <li>ESG promotion reports to the Board: 4 times</li> <li>Submission of net-zero target to SBTi</li> <li>Joining RE10x10 initiative (use 10% renewables in 2024)</li> <li>Joining TALENT, in Taiwan.</li> </ul>
 <b>Customers</b>	<ul style="list-style-type: none"> <li>Customer service</li> <li>Supplier sustainability management</li> <li>Information security</li> <li>Human rights</li> </ul>	<ul style="list-style-type: none"> <li>Customer satisfaction</li> <li>Business visits</li> <li>Establishment of human rights policy</li> </ul>	Annually/irregularly	<ul style="list-style-type: none"> <li>Implementation of the cloud CRM system</li> <li>Customer satisfaction score: 9.14</li> <li>Customer complaints: 19, 49% less than in 2021.</li> <li>Sanctions or fines for violation of laws or regulations: 0</li> </ul>
 <b>Employees</b>	<ul style="list-style-type: none"> <li>Employee development</li> <li>Occupational health and safety</li> <li>Talent retention and employee care</li> </ul>	<ul style="list-style-type: none"> <li>Employee Welfare Committee (EWC)</li> <li>Employee complaint box</li> <li>Occupational Safety Committee</li> <li>Resident medical specialist consultation</li> </ul>	Irregular/Quarterly (OH&S Committee meetings)	<ul style="list-style-type: none"> <li>Labor-management meetings: 4</li> <li>EWC meetings: 8</li> <li>OH&amp;S Committee meetings: 4</li> <li>In-house consultation by traditional Chinese medicine and Western medicine physicians: 29 times</li> <li>Complaints from various channels: 0</li> </ul>
 <b>Suppliers</b>	<ul style="list-style-type: none"> <li>Customer service</li> <li>Supplier sustainability management</li> <li>Information security</li> <li>Energy management</li> <li>Supplier environmental assessment</li> </ul>	<ul style="list-style-type: none"> <li>Periodic supplier evaluation</li> <li>Periodic supplier meetings</li> <li>Contractor OH&amp;S performance assessment</li> <li>Information Security Committee</li> </ul>	Annually	<ul style="list-style-type: none"> <li>Reiteration of the “sustainable supply chain development strategy”</li> <li>Introduction of the Joint CSR Declaration</li> <li>Inclusion of the Human Rights Assessment in 2022: 97.6% return rate</li> <li>No material cybersecurity incidents in 2022</li> <li>Onsite audit and communication in 2022: 7 suppliers</li> <li>Tracking net-zero planning of three major suppliers</li> </ul>
 <b>External parties (government, media, NGOs, academic units)</b>	<ul style="list-style-type: none"> <li>Green products</li> <li>Employee diversity</li> <li>Social engagement</li> </ul>	<ul style="list-style-type: none"> <li>Periodic regulatory audits</li> <li>Establishment of the diversity and inclusivity policy</li> <li>Corporate website</li> <li>Periodic press release</li> <li>Industry-academia exchange</li> </ul>	Irregularly	<ul style="list-style-type: none"> <li>ESG reports</li> <li>Corporate press room publications: 37 releases</li> <li>Group chairperson column</li> <li>Sanctions or fines for violation of laws or regulations: 0</li> <li>Exhibitions: Semiconductor shows, sustainable development expo, Green Festival</li> </ul>

### (3) Validation

After identifying the material issues, we further verified the internal and external impacts of material aspects on the organization and disclosed them in this report in terms of their scope, boundaries, and time. We also discussed material issues with senior officers and established strategic approaches and countermeasures to strengthen communication with stakeholders. Explanation of the difference from the previous year: This year's inclusion of key issues of concern to external ESG assessment units and the blueprint of sustainable strategies are for discussion and consideration, and the survey results in 2022 are different from those of the previous year. Differences include increased attention to issues such as "Research, development, and innovation", "Talent retention and employee

care", "Risk management", and "Green products", and related issues have been included in the company's long-term management considerations.

### (4) Review

The working team reviewed the differences of material issues in the previous report, improved the understanding of stakeholder needs, and addressed and communicated such needs. The working team reviewed the report after completion, included the compilation results as an important reference for the next year's report, and ensured that the issues of stakeholder concern were fully disclosed with correct and appropriate information.

Table 2-3 Material issues, GRI topics, and impact boundaries identification table

Material Issue	Corresponding Section	Significance to TOPCO	Corresponding GRI Topics	Boundaries of value change impact (topic boundaries)			Significance of financial impact			Potential impact	Performance Indicators	2022 KPI	2023 KPI	2028 KPI
				Upstream	Operations	Downstream	High	Medium	Low					
Integrity management	Ethical corporate management and business integrity	Establish a sound corporate governance system, such as the code of conduct, anti-corruption policy, procedure and training development, and disclose non-compliance are essential to maintain sustainable corporate operations and create value.	GRI2 2-23/2-24/2-26 GRI205/206	■	■	■			■	Establishing good business conduct and ethics can ensure sustainable operation and avoid operational risks caused by illegal or operation risk	Serious violation Corruption case Violation of employee labor ethics cases Antitrust case	0 case 0 case 0 case 0 case	0 case 0 case 0 case 0 case	0 case 0 case 0 case 0 case
Research, development, and innovation	Product quality	Make continual improvement and quality control of products and engage with innovation and improvement, and smart assets; plan and provide customers with high value-added solutions to maintain competitiveness.	GRI2 2-6		■	△		■		Continuous R&D innovation and breakthroughs can increase revenue	Amount of research and development of new products and new technologies	(Budget) 104 million dollars (Actual cost) 156 million dollars	(Budget) 129 million dollars	(Budget) >2%

Material Issue	Corresponding Section	Significance to TOPCO	Corresponding GRI Topics	Boundaries of value change impact (topic boundaries)			Significance of financial impact			Potential impact	Performance Indicators	2022 KPI	2023 KPI	2028 KPI
				Upstream	Operations	Downstream	High	Medium	Low					
Customer service	Product quality Valuing customer privacy	Understand customers' opinions, capture customer needs, provide multifaceted customer service, and so to enhance customer satisfaction and improve market presence.	GRI416/417/418	△	■	■		■		Operating performance directly affects the company's costs and profits	Customer satisfaction rating (full score 10 points) Customer Complaints	9.14 points 19 cases	>9 points <19 cases	>9 points <19 cases
Supplier sustainability management	Implementation of environmental protection policy Sustainable supply chain development strategy	Set quality, delivery time, capability, flexibility, environmental protection, and labor condition as the requirements for supplier management and become the best partner of suppliers to seek a sustainable future together.	GRI308/408/409	■	■	■		■		Products rely on stable support from suppliers, and supplier issues may affect sales	Return rate of "Assessment of Human Rights Standards" On-site audit communication	97.6% 7 mfr.	>95% 7 mfr.	>95% 7 mfr.
Economic performance	Operational performance, annual report	Ensure the maintenance of growth potential and profitability, strengthen long-term competitiveness, secure stable the dividend policy and taxpaying, and create a quality workplace environment.	GRI201		■			■		Failure to maintain long-term competitiveness will affect profitability	Legal person briefing shareholders meeting	4 sessions 1 session	4 sessions 1 session	4 sessions 1 session
Risk management	Policy commitments, practice, risk management	Establish and maintain an effective risk management mechanism, including the management of economic, environmental, and social risks and BCP, to achieve sustainable corporate operations.	GRI2 2-23/2-24/2-26	■	■	■			■	Failure to properly respond to various risks will increase operating costs	Regular rehearsal of resilience tests	7 items	7 items	7 items

Material Issue	Corresponding Section	Significance to TOPCO	Corresponding GRI Topics	Boundaries of value change impact (topic boundaries)			Significance of financial impact			Potential impact	Performance Indicators	2022 KPI	2023 KPI	2028 KPI
				Upstream	Operations	Downstream	High	Medium	Low					
Information security	Valuing customer privacy Risk management	Protect various types of data and maintain data confidentiality to strengthen information security and so to ensure smooth operations and earn trust from suppliers and customers.	GRI418	△	■	△			■	Failure to effectively prevent, monitor, and respond immediately may cause operational impact	Execute stress tests and drills Major information security incident	2 times 0 case	2 times 0 case	2 times 0 case
Green products	Products, services, and technologies	Seek (develop) more new-generation energy-efficient products, green products, and suppliers of energy-efficient equipment to maintain market competitiveness.	GRI416/417		■	△			■	Violation of relevant international environmental protection laws and regulations may affect the competitiveness of business sales	Customer complaints for violations	0 case	0 case	0 case
Employee development	Promoting the development of knowledge management capability and diversifying training and education	Strengthen the core technical competence of employees; focus on the contents, effectiveness, and KPI of training and development; and establish the career development system for employees to improve employee competitiveness.	GRI404		■				■	Having excellent talents who are loyal to the enterprise will be a competitive advantage and benefit Chongyue's sustainable operation	Course Optimization Course Satisfaction Survey (full score 5 points)	9 Items 4.3 points	10 Items 4.4 points	12 Items 4.5 points
Occupational health and safety	Healthy and safe workplace environment and labor-management harmony	Reduce the likelihood of work-related accidents through the continuous improvement of the safety and health management program to provide employees with a safe, healthy, and quality workplace environment.	GRI403		■				■	Any safety and health risks, in addition to causing injuries and physical and mental imbalances to colleagues, may also cause major economic or social losses to the company and reduce the company's competitiveness	Various complaint channels Occupational Safety and Health Committee Meeting	0 case 2 sessions	0 case 4 sessions	0 case 4 sessions



Material Issue	Corresponding Section	Significance to TOPCO	Corresponding GRI Topics	Boundaries of value change impact (topic boundaries)			Significance of financial impact			Potential impact	Performance Indicators	2022 KPI	2023 KPI	2028 KPI
				Upstream	Operations	Downstream	High	Medium	Low					
Talent retention and employee care	Transparent and impartial performance evaluation, salary and benefits	Build a happy and friendly workplace, including salary and benefits, maternity leave and paternity leave better than the legal requirements, employee care, employee engagement, and turnover rate survey, for employee to make continuous contributions and growth within the organization.	GRI401/402/405/406/407		■			■		The loss of excellent talents will directly affect the competitiveness of TOPCO	Annual employee satisfaction survey (full score 5 points) Hold regular labor-management meetings Turnover Analysis System Policy Optimization	4.18 points 4 sessions 14.8% 6 items	4.2 points 4 sessions 14% >6 items	4.3 points 4 sessions 13% >6 items

Note:

1. ■ Direct impact, △ Indirect impact.

2. Definition of significance of financial impact:

High: Impact with a value over NT\$200 million on the organization/company.

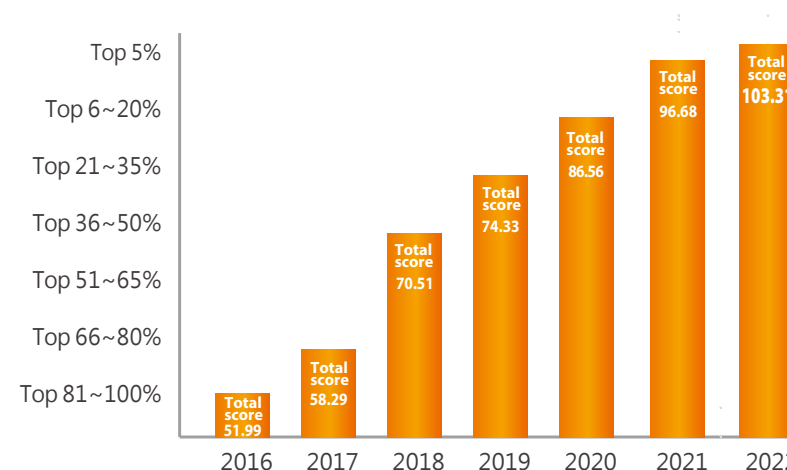
Medium: Impact with a value over NT\$50 million but under NT\$200 million on the organization/company.

Low: Impact with a value under NT\$50 million on the organization/company.

## 2.4 Commitment to CSR realization

We actively review and implement corporate social responsibility and integrate sustainable development into routine operations in order to correspond to sustainable development trends and commit to the sustainable development of the Company and society. At the 2022 Corporate Governance Evaluation of FSC, we were ranked in the top 6-20% of all listed companies, and our ranking is rising every year.

We offer high-quality and safe products and believe that talent is the Company's cornerstone. Besides maintaining the rights and interests of employees, we also ensure that suppliers must respect their employees, adopt environmentally-responsible manufacturing processes, and provide safe work conditions and benefits. We also care about and ensure the health and safety of suppliers' employees and regulatory



▲ Figure 2-6 Ranked top 6-20% of all listed companies at the Corporate Governance Evaluation

compliance of the working environment to constantly improve the social and environmental responsibilities of the supply chain and proactively understand the risks and opportunities of environmental impacts in order to keep going as an eco-friendly business.

Besides pursuing our own sustainable operations, we also join associations related to our scope of services or support the associations of other industries or non-profit organizations to enhance information exchange among industries or with other industries to promote connections among industries. Organizations participated in by the Company are as follows:

Name of Association	Role	Name of association	Role
Taiwan Semiconductor Industry Association	Member	High-Tech Facility Association	Member
Electronic Components Suppliers' Association	Member	Taiwan Academy of Management	Chairperson
Taiwan Electronic Equipment Industry Association	Member	MIH Consortium	Member
Taiwan Electrical Contractors Association	Member	Corporate Operating and Sustainable Development Association	Member
Taiwan CIO Association	Member	Chinese Professional Management Association	Director
Taiwan Computer Emergency Response Team/Coordination Center (TWCERT/CC)	Member	Global Brands Management Association	Chairperson
Information Management Association	Member	Chinese Life Science Law Society	Chairperson
Straits Economic and Cultural Interchange Association	Supervisor	Taiwan Global Eastbound Association of Launching American	Chairperson
Importers and Exporters Association of Taipei	Member	Institute for Biotechnology and Medicine Industry	Director
Chinese National Association of Industry and Commerce	Member	Kung - Hwa Management Foundation	Chairperson
Taiwan Institute of Chemical Engineering	Director	Taiwan First Division Senior Baseball Promotion League	Chairperson
Chinese Society for Management of Technology	Member	CommonWealth Sustainability League	Member

## TOPCO CSR policy and commitment

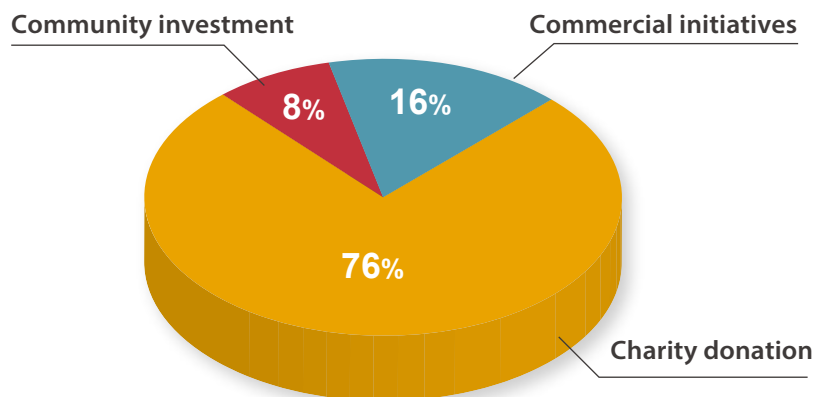
-  Draw up the CSR Declaration.
-  Conduct all business activities in conformity with the social norms and standards related to legal, environmental, and safety aspects.
-  Ensure business information transparency, improve operational performance, and maintain the rights and interests of shareholders.
-  Emphasize corporate governance and enforce internal audits and internal control.
-  Provide a safe and healthy working environment and enforce cultivation and development of professional competencies.
-  Enhance the social and environmental responsibilities of the supply chain through partnerships with customers and suppliers.
-  Enforce energy conservation and carbon reduction, build energy-efficient central control systems, and digitize paperwork.
-  Care for and repay society, participate in social welfare, and sponsor the talent cultivation of industries.

## Fund investment and use for charitable activities

To constantly and effectively manage the benefit of social input and output, we continue to use the systematic analysis, assessment, and quantification of the LBG Model introduced by the London Benchmarking Group (LBG), hoping to enhance the efficiency of resource allocation and plan the sustainable

development of social engagement in the future. We practice social engagement in terms of the following four pillars: industry-academia collaboration, social welfare and contribution, community building, and sports promotion. Based on the three motivations of charity donation, community investment, and commercial initiatives for promoting social engagement and contribution under the LBG Model, we initiate and assess social engagement and contribution.

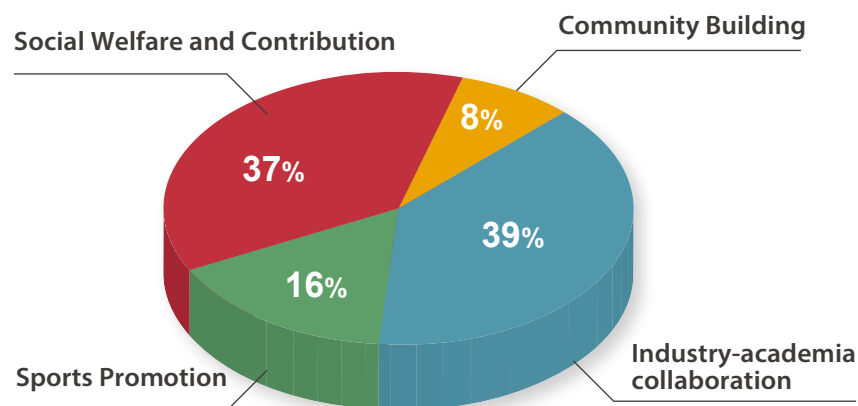
### Three motivations for social engagement under the LBG Model



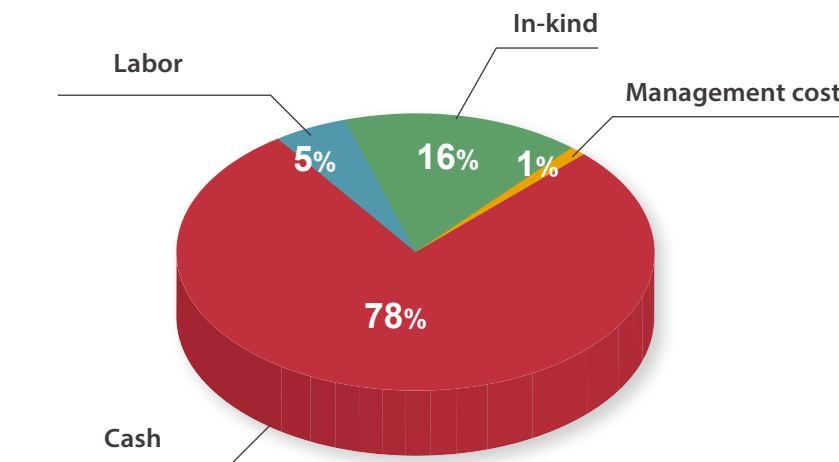
Motivation	2021		2022	
	Amount (NT\$10 thousand)	Percentage	Amount (NT\$10 thousand)	Percentage
Charity donation	780	86%	1,221.66	76%
Community investment	20	2%	135.28	8%
Commercial initiatives	111	12%	254.33	16%
Total	911		1,611.27	

Industry-academia collaboration (NT\$6.3255 million)	Social welfare and contribution (NT\$5.8911 million)
<p>Cash: Sponsoring the TSC Thesis Award/Scholarship, Yung Ran Law Foundation, and Extension Culture and Education Foundation and organizing academic activities</p>	<p>Cash: Reading resource donation under the Future Kids Charity Program and association development funds</p> <p>Labor: Co-organizing the Yilan Children's Dreamworks Art Competition and the value-added training courses of Asia Agri-Tech Expo &amp; Forum</p> <p>In-kind: Sponsored Food Taipei 2022</p>
Community building (NT\$1.3528 million)	Sports promotion (NT\$2.5433 million)
<p>Labor: Building sports facilities for young and old people and engaging in the Mazu Pilgrimage of Nantian Temple</p>	<p>Cash: U23 Baseball World Cup 2022</p> <p>Labor: Strength training camp - Training Taiwanese baseball players and sponsoring school sports teams with professional equipment and training</p> <p>In-kind (coupons): Event sponsorship - Run to Fly</p>

## Amount and proportion of monetary inputs for the four pillars of social engagement



## Amount and proportion of resource inputs for the four pillars of social engagement



Pillar input	2021		2022	
	Amount (NT\$10 thousand)	Percentage	Amount (NT\$10 thousand)	Percentage
Industry-academia collaboration	247	27%	632.55	39%
Sports promotion	121	13%	254.33	16%
Social welfare and contribution	523	57%	589.11	37%
Community building	20	2%	135.28	8%
Total	911		1,611.27	

Resource	2021		2022	
	Amount (NT\$10 thousand)	Percentage	Amount (NT\$10 thousand)	Percentage
Cash	352	39%	1,256.51	78%
Labor	54	6%	79.66	5%
In-kind	505	55%	251.81	16%
Management cost	0		23.29	1%
Total	911		1,611.27	

( Because the first year of introduction, the statistics of management costs are not complete, so the investment records of degrees do not include management costs )

## 2.4.1 Encouraging innovative thinking through industry-academia collaboration

We proactively undertake CSR and voluntarily engage in creation and sharing. Hence, we are devoted to R&D and innovation, academic development, and industry-academia alliances in order to broaden the international horizons of the next generation, encourage outstanding students and innovative research, strengthen the connections between industrial practice of academic theories, stimulate industrial reforms and innovation, and enhance industry competitiveness.

In 2022, we donated over NT\$12.565 million to organizations such as the Taiwan Management Institute, Extension Culture and Education Foundation, and Friends of the Police Association to encourage R&D, talent cultivation, and culture and education development in order to enhance Taiwan's global competitiveness. NT\$6.325 million of the sum was spent on industry-academia collaboration to cultivate excellent talent in academic research, innovative branding, and marketing planning.



▲ Figure 2-7 President Tsai Ing-Wen attended the 15th TSC Thesis Award and thanked TOPCO for organizing the TSC Thesis Award over the years

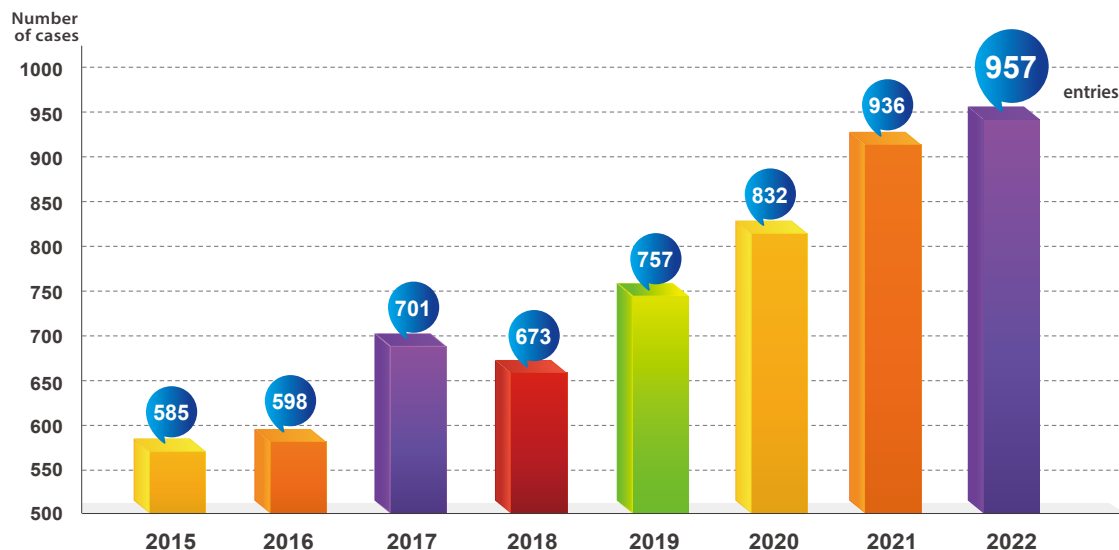
### TSC Thesis Award

Recognizing that human resources are the basis of business competitiveness, and quality talent is the cornerstone for business growth, we established the TSC Thesis Award in 2008 as a platform for effective industry-academia exchange, hoping to channel Taiwan's management research to meet the industry's requirements in order to cultivate business management talent that can solve problems in the field. In response to the rapid changes in industry, the TSC Thesis Award also adjusts the competition topics to keep up with the times to ensure that theses and dissertations can better meet the needs in the field and provide businesses with operation and management solutions.

To ensure the principles of rigor, professionalism, fairness, and impartiality, theses and dissertations of the TSC Thesis Award are reviewed by means of double-blind review and avoidance of conflicts of interest. With three reviews at three levels—preliminary, semi-final, and final reviews—the TSC Thesis Award has become the most authoritative and best-known

thesis and dissertation competition in Taiwan, being praised as the “Oscars of Management”

In 2022 students from 82 universities in 12 countries, including Russia, Japan, Cambodia,



▲ Figure 2-8 Number of entries in 2015-2022

Table 2-4 Investments in industry-academia collaboration in the last three years

Year	2020	2021	2022
Donation for TSC Thesis Award/Scholarships	NT\$3.3 million	NT\$1.27 million	NT\$2.205 million
Donation for TSC Marketing Symposium	NT\$610,000	NT\$680,000	NT\$382,000
Donation for Extension Culture and Education Foundation and IJCS	NT\$1.3 million	NT\$0.52 million	NT\$3.738 million
<b>Total investment in industry-academia collaboration</b>	<b>NT\$5.21 million</b>	<b>NT\$2.47 million</b>	<b>NT\$6.325 million</b>

Ghana, Indonesia, Malaysia, Thailand, Vietnam, Myanmar, and others, submitted 957 theses and dissertations to participate in the 15th TSC Thesis Award. After the four-stage stringent evaluations, a total of 150 theses and dissertations were selected, and five of them were awarded the Distinguished Thesis Award. President Tsai Ing-Wen was invited to the prize presentation ceremony. Apart from congratulating the award winners, President Tsai also thanked TOPCO for organizing the TSC Thesis Award over the years to help develop energy for national development through encouraging innovation and research and developing management talent in Taiwan.

## TSC Marketing Symposium

In 2016, we organized the TSC Marketing Symposium for the first time for active students of college and university across Taiwan to demonstrate their marketing ideas and connect practical needs with team creativity through this marketing plan competition in order to solve the actual problems of businesses. In 2022, a total of 168 student teams from 31 colleges and universities participated in the 7th TSC Marketing Symposium. A total of 14 teams were selected for the final to run for the Best Marketing Planning Award.

## 2.4.2 Cultivating base-level baseball talent as a sports promoter

In response to the government baseball revitalization plan, we formed a first division baseball team in 2011 to cultivate baseball talent for Taiwan, continue organizing international baseball exchanges, and introduce the scientific MLB baseball training of the U.S. Over the years, we have continued to organize Taiwanese-Japanese baseball exchanges and offered free admission to the public to promote baseball watching and development in Taiwan. In 2014, we began to organize the little falcon baseball camp to develop little baseball players for the country and encourage children to develop sports habits and learn sportsmanship.

In addition to forming a first division baseball team, we sponsored and implemented two strength and conditioning training camps for the baseball team of Taitung County Beinan Junior High School in October 2021 and January 2022. By introducing sports testing, we help players to develop strength and condition systematically and receive specialized training in order to improve their basic baseball skills. In 2022, we organized professional training for 30 persons.

### Sponsoring school sports teams with professional equipment training

We sponsored the men's volleyball, women's volleyball, and archery school teams of National Taipei University with the range of motion exercise, offered them professional sports training, and built perfect training venues, environments, measures, and teams for the sports circle to become an important support for athletes. The men's and women's volleyball teams of the National Taipei University took the champion title of the men's and women's categories at the 2022 National Volleyball Championship. In 2022, over 450 persons received professional training.



▲ Figure 2-9 Sponsoring and training base-level baseball players with scientific training

### Sponsoring sports events to encourage sports

To support the Run to Fly, a traditional classic marathon event of National Taipei University, and encourage sports, we sponsored the Run to Fly organized in March 2022. All 2,500 participants could redeem one free ticket for the Fitness Center or Swimming Pool and Inbody Test at the Taipei University Sports Center with their bibs.



▲ Figure 2-10 Sponsoring school sports teams with professional training



▲ Figure 2-11 Sponsoring the Run to Fly



▲ Figure 2-12 Building sports facilities for young and old people

### 2.4.3 Building multifunctional facilities for young and old people

The XPORTS brand created by XPORTS Sports Co., Ltd., a TOPCO subsidiary, currently manages and operates the following sports facilities on commission: Taipei Xinyi Sports Center, Yongchun Gym, the swimming pool of Rongxing Garden Park, Taipei University Sports Center-Sanxia Campus, and the Bade Social Housing 3 Sports Center in Taoyuan. The subsidiary aims to promote sports to communities and all-out health and LOHAS.

The statistics on demographic changes in Sanxia and Yingge districts show that the local ageing population has been increasing, intensifying

concerns to delay disability and dementia. Apart from providing services for elderly people in Sanxia, Yingge, and Shulin districts under the “(Senior) Sports University City” project organized in collaboration with the New Taipei City Department of Health for two consecutive years, we also organize various health, sports, and spiritual talks by integrating government and enterprise resources to build senior-friendly sports spaces. In 2022, over 809 persons used these facilities.



## 2.4.4 Repaying society through charitable activities across Taiwan

Adhering to the spirit of “repaying society”, we emphasize “social participation and local repayment”. The Superb Volunteerism Club, our employees’ volunteerism team, participated in the volunteerism activities organized by organizations such as the Spring Sunshine Center for Intellectual Development to share and spread fraternity. We are also eager to participate in and support emergency relief for victims of typhoons and earthquakes to demonstrate humanitarian concern and provide professional technology to fully support the emergency needs of customers to help them recover production as quickly as possible.

In 2022, we supported the Future Kids Charity Program of Global Views Monthly by donating magazines to children and youth in remote townships for children and youth each month. We also followed up and recorded the reading and learning status of students from schools in order to reduce the time difference in information based on the children’s needs in order to make the books to close children with children create unlimited possibilities for them. This program has been promoted to 19 elementary schools in Yilan, Changhua, Kaohsiung, and Pingtung.

The statistics produced with the project questionnaire survey in 2022 are as follows:

- Over 94% of teachers affirm that magazine donation can help children develop reading habits.
- Over 94% of teachers affirm that magazine donation can help teachers teach.
- Over 98% of teachers affirm that magazine donation can help children broaden their horizons.

The satisfaction of all recipient schools is higher than the population average.



▲ Figure 2-13 Donations of reading resources under the Future Kids Charity Program

To support the art competition organized by Yilan Children’s Dreamworks, Anyo Museum, a TOPCP subsidiary, organized a call for works based on the tourism factory on Children’s Day in April 2022 to promote family travel and promote parent-child relationships. Apart from selecting excellent works, Anyo Museum also selected the tourism factory ambassador to present the awards to invigorate local tourism activities. (About 176 persons joined the event)



▲ Figure 2-14 Anyo Museum participated in the Yilan Children’s Dreamworks art competition to invigorate local tourism.

In June 2022, we donated ready-to-eat food to the Ai-Heng Training Center for Mental Retardation in Hsinchu and St. Theresa Opportunity Center in Tainan to support the “Love: Food Sponsorship” activity at the Food Taipei event.



▲ Figure 2-15 TOPCO integrates resources to take care of social welfare group.

## 2.4.4 Environmental protection for sustainable development

Participation in the Changhua “Stop Burning Rice Straws for Clean Air and Better Field Action”: In recent years the government has been actively promoting replacing the of burning rice straws with rice straw degrading microorganisms. To help famers understand the use and benefits of using



▲ Figure 2-16 Magistrate Wang Huei-Mei joined the event to show farmers how to use rice straw degrading microorganisms

rice straw degrading microorganisms, we support the rice straw degrading microorganism donation by local businesses and urge farmers to use them so as to protect Earth together by reducing carbon emissions. In this project we sponsored and adopted 20 hectares of rice field to reduce 180 tCO<sub>2</sub>e of emissions.

On November 25, employees of TOPCO HQ and TOPCO restaurants supported World Vegetarian Day. Nearly 1,100 employees promised to take at least one vegetarian meal on World Vegetarian Day, aiming to reduce 800 kgCO<sub>2</sub>e of emissions together. Statistics showed that employees reduced nearly 900 kgCO<sub>2</sub>e on that day, demonstrating employees’ enthusiastic support for green dining and showing that the ESG DNA has been ingrained in our corporate culture. Blue Fish, the first fish burger label of TOPCO, and Anyo Freshmart also introduced various events to support World Vegetarian Day. Blue Fish: Mushroom burger buy one get one free Anyo Freshmart: Vegetarian cake combo at special offer



▲ Figure 2-17 TOPCO supported World Vegetarian Day with the Group's resources on November 25

## 2.4.6 Providing total solutions with recycling

To resolve the problem of resource depletion and lower the impact of environmental pollution, ECO Technical, Suzhou TOPCO, Jia Yi Energy, Unitech New Energy Engineering, and Tai Ying Resource Industrial enforce the “symbiosis with Earth” business philosophy, actively engaging in green industries and establishing environmental countermeasures and energy mechanisms for sustainable development to create new opportunities for Earth.

In environmental engineering and water treatment technology, we actively build pure water and wastewater reclamation projects, develop recycling solutions such as chemicals and equipment related to water treatment, waste disposal, and calcium fluoride sludge into fluxes for

metalworks. Environmental assessment and monitoring and enterprise carbon inventory sectors. In the environmental assessment sector, we extend offshore wind farm environmental assessment and monitoring services to environmental impact assessment, monitoring, and design services.

We hope to expand the circular economy service and strengthen the sustainable supply chain through mergers and acquisitions in order to become a benchmark business providing total engineering and technology services featuring environmental sustainability, zero pollution, and resource recycling.





Highlights  
2022

## III. Integrity and Professional Services

- ▶ In 2022, the overall score of customer satisfaction was 9.14, the score of personnel service satisfaction was 9.34 (out of 10). Over 92% of customers were more satisfied with our services than those of other suppliers.
- ▶ Requested suppliers to sign the “TOPCO CSR Declaration”, with a return rate of 97.6%, and enhanced on-site supplier audits.
- ▶ Invited important suppliers to abide by the Code of Conduct of the Responsible Business Alliance (RBA).
- ▶ Insisted that all suppliers must respect workers and include Human Rights Assessment in new supplier selection. Requested suppliers to respect employee human rights in accordance with international standards, such as the Universal Declaration of Human Rights (UDHR), Social Accountability International (SAI), and Ethical Trading Initiative (ETI), for employees to work in a friendly working environment without worries.
- ▶ Implemented the cloud CRM system to understand important customer information at all times.

## Sustainable supply chain development strategy

Recognizing the mutual effect of sustainable supply chain growth and sustainable corporate development, we actively input the relevant resources and collaborate with suppliers, hoping to continuously promote the sustainable growth of the overall supply chain through the development of a sustainable supply chain. With sustainability standards, sustainability risk surveys, sustainability onsite audit/improvement, and supplier competence development, we control supply chain risks through a set of sustainable management processes so as to lead suppliers to demonstrate greater shared value and influence.

Besides offering multifaceted integrated services for high-tech industries such as semiconductor manufacturing and optoelectronics, we also uphold professional operations and introduce operational strategies for new products, technologies, and services to develop materials and equipment for semiconductor and optoelectronics, electronics materials, pre-owned equipment system integration, equipment maintenance and repair, part and component investment, and other specialties to earn trust and recognition from the industry and customers.

Risk control of the sustainable supply chain	Enforce the risk assessment of the supplier self-assessment questionnaire and strengthen supplier risk management through audit and improvement follow-up
Supply chain cooperation and exchange	Based on cooperation and collaboration, we guide suppliers to improve the social, economic, and environmental performance through supplier evaluation so as to achieve sustainable supply chain development.
Enhancement of supply chain sustainability	When pursuing economic performance, we also concern ourselves with environmental and social sustainability issues and continuously implement projects addressing sustainability issues in collaboration with suppliers.
Conflict-free minerals	We are committed to conflict-free mineral management and responsible procurement together with suppliers to meet current and future market, legal, and regulatory expectations.

▲ Figure 3-1 Sustainable supply chain development strategy

1. Sustainability standards	RBA code of conduct Supplier code of conduct Regulations and requirements for conflict-free minerals
2. Voluntary risk assessment and survey	Design checklists for management systems based on the RBA-CoC Checklist items include labor, health and safety, environment, ethics, and management systems
3. Sustainability risk assessment questionnaire	Distribute self-assessment questionnaires to major suppliers Determine high-risk suppliers
4. Sustainability onsite audit/improvement measures	Onsite audit Document review Issue correction action reports (CARs) for audited defects Follow up improvement of audited defects

▲ Figure 3-2 Management process of the sustainable supply chain

As an agent, we distribute the quality semiconductor and advanced materials from Shin-Etsu, a leading Japanese manufacturing group, to become the first-choice partner of customers. We also established the joint-venture Topco Quartz Products Co., Ltd. with the Japanese Shin-Etsu Quartz Products Co., Ltd. In 1995, we further established Shin-Etsu Opto-Electronic Co., Ltd. and Shin-Etsu Handotai Taiwan Co. Ltd. to steadily supply quality semiconductor and optoelectronic materials to world-leading domestic semiconductor manufacturers such as TSMC, UMC, PSMC, and Nanya to help them enhance process yield rate and reduce production costs. We also collaborate with the R&D teams of customers to co-develop optimal products to enhance production efficiency in order to extend the overall service chain. Over the years, our efforts have earned praise and recognition from global customers.



▲ Figure 3-3 Supplier logos

## 3.1 Quality commitment for products and services with international quality management

We passed the certification of the ISO 9001 quality management system in 2009. To conform to the latest international quality management principles and ensure the provision of products and services in conformity with customer requirements, we implemented the version change of ISO 9001:2015 in 2017-2018 and successfully passed certification at the end of 2018. In 2021, we passed the triennial re-verification of ISO 9001 and obtained the three-year certificate. In 2019, we successfully extended certification to our major subsidiary TOPCO Scientific (Shanghai) Co., Ltd. In the future, we will continue to expand the scope of ISO 9001 certification to all overseas TOPCO locations for a total upgrade of product and service quality.

To meet the requirements of customers in the automotive industry and our own expectation for higher quality, TOPCO and the subsidiary TopChem Materials Corporation took on the challenge of obtaining IATF 16949 certification. The project was launched in 2019H2, the preparation and application were made in 2020, the actual certification took place in January 2021, and we obtained the certificate in 2021Q2.



▲ Figure 3-4 ISO 9001:2015 certificate



▲ Figure 3-5 ISO 9001:2015 certificate of Topco Scientific (Shanghai) Co., Ltd.



▲ Figure 3-6 TOPCO and subsidiary TopChem Materials Corporation passed IATF 16949 certification

## 3.2 Promotion of supplier collaboration and management

As a multifaceted agent of high-tech materials and equipment, our scope of services covers semiconductor materials, optoelectronic materials and equipment, and electronic materials. In 2022, we maintained transactions with amounts over NT\$1 million with about 88 suppliers.




Starting out with value creation, we created service quality as expected by customers with stable quality, punctual delivery, quick service, and stringent supplier management through supply chain management. We maintain close collaboration with

suppliers to achieve mutual growth, which is an essential part of our sustainable operations.

### 3.2.1 Important ESG partners

Currently, all three major suppliers uphold CSR and actively engage in the relevant actions. All products we distribute comply with the relevant regulations, and conflict products are banned. We also request suppliers to comply with these principles to become our important ESG partners.

Table 3-1 ESG actions of three major suppliers

Supplier	CSR-related actions
<b>Shin-Etsu Chemical Co., Ltd.</b> 	<p>Shin-Etsu Chemical has passed the certification of the ISO 14001 environmental management system and is dedicated to environmental protection and chemical substance management. It has also launched Responsible Care activities under its environmental and safety self-improvement program.</p> <p>Shin-Etsu Chemical has achieved environmental protection, including zero pollution, reduction of annual energy consumption by 1% to reduce GHG emissions, reduction of waste production, reduction of pollutant emissions, and reduction of annual water consumption by 1%. Emission reduction by 45% in 2025 and carbon neutrality in 2050.</p>
<b>NAMICS CORPORATION</b> 	<p>NAMICS has passed the certification of the ISO 14001 environmental management system (EMS) and declared compliance with the EU Restriction of Hazardous Substances (RoHS) directive for both processes and products.</p> <p>Additionally, it has established EMS performance indicators for comparing annual performance. These indicators include: green procurement, eco-friendly products, communication of environmental awareness, chemicals use regulations, resource recycling and reuse, and energy management. The 1.5° C scenario GHG emissions (Scopes 1 and 2) by the end of FY2030 will be 46% less than those of FY2019.</p>
<b>FUJIMI INCORPORATED</b> 	<p>FUJIMI passed the ISO14001 certification in March 2000. The plant energy conservation committee implemented energy management to reduce carbon emissions and promoted the recycling and reuse of plastic containers</p> <p>The targets of FUJIMI's 2023 Environmental Action Plan for saving resources and energy and reducing industrial waste are as follows:</p> <ol style="list-style-type: none"> <li>1. Reduce energy consumption: 1.0% (compared to 2022)</li> <li>2. Reduce sludge-producing products: Maintain current status (compared to 2022)</li> <li>3. Prevent pollutant spills: Zero spills</li> </ol>



## 3.2.2 Supplier collaboration management policy

To ensure the stable and sound quality of products, we adopt the New Product (Supplier) & Transaction Change Evaluation Sheet in coordination with the Annual Supplier Evaluation mechanism to ensure conformity to customer requirements and the environmental standards for the sustainable development of products and processes. We also adopt the Joint CSR Declaration, Human Rights Assessment, and Supplier Self-Assessment Questionnaire as commitments to implement sustainable development in routine supply chain management together with suppliers. To achieve sustainable development, besides assessing the risks of suppliers, we persistently conduct onsite audits of suppliers with higher transaction amounts.

Table 3-2 Supplier audit rate in 2022

Transaction amount (NT\$)	Suppliers	With audit records	Audit rate	Onsite audit
>10 million	46	42	91%	7
5-10 million	7	2	29%	0
3-5 million	16	4	25%	0
1-3 million	19	2	11%	0

The onsite audit items include quality system, supplier management, hazardous substance process management, environmental health and safety policy, sustainable development indicators, and supplier self-assessment and onsite crosscheck. After audits, we issue audit reports and corrective action and preventive action reports to request suppliers to make improvements.

### Selection of quality and integral suppliers

We prioritize new suppliers and new products emphasizing environmental protection. We insist that the sales unit evaluates new products or new suppliers with the New Product (Supplier) & Transaction Change Evaluation Sheet. Apart from filing supplier information, product development status, transaction mode, and projected customers, our QC Center reviews items including the supplier basic data sheet, certificate of analysis (COA), safety data sheet (SDS), ISO 9001 and ISO 14001 certificates, and supplier CSR/ESG implementation strategies to understand the preliminary performance of suppliers in sustainable development.

We voluntarily adhere to the United Nations Convention against Corruption (UNCAC) and agree to abide by the anti-corruption regulations of operating locations. To set the standards for corporate governance and CSR and establish the risk control mechanism, we uphold the principle of zero-tolerance for bribery and corruption. From May 2019, we requested all new suppliers to sign the CSR Declaration. At the end of the year, we followed up the performance. In 2022, 97.6% of suppliers already signed the declaration (including suppliers already that implemented CSR).

Engineering suppliers are requested to provide the “Supplier Ethical Transaction Declaration” for the purchasing unit to conduct investigation, create files, and assess their capacity.

Table 3-3 Return rate of CSR Declaration by suppliers

Year	Collection rate
2022	97.6%
2021	93.5%
2020	96.0%

Note: The 2021 return rate was lower than that of 2020 mainly because suppliers did not really understand the content of the CSR Declaration. After active communication and awareness education, the return rate increased in 2022.

### Periodic assessment

To meet the demand for innovative and high-quality products of the advanced processes of customers, we distribute products from world-leading materials suppliers, such as Shin-Etsu Group. While products are produced and manufactured at the location of the original manufacturer (e.g., Japan), to undertake CSR, we perform onsite audits of suppliers together with customers periodically to ensure that the manufacturing and services of suppliers comply with local laws and production line regulations.

In December of each year, we conduct the Supplier Evaluation for suppliers having transactions with us within one year. The evaluation items include “quality anomalies, delivery punctuality, and service”, and “frequency and causes for delivery anomalies and delays” are recorded. The engineering unit and purchasing unit will

evaluate engineering suppliers together in terms of “quality anomalies, delivery punctuality, and service”. Unqualified suppliers will be alerted by mail to make improvements.

### Joint commitment of TOPCO and suppliers: Implement sustainable development in routine supply chain management

We adopt the Joint CSR Declaration for important suppliers, invite important suppliers to abide by the RBA Code of Conduct, commit to enforcing corporate governance, develop environmental sustainability, maintain social welfare, and enhance CSR information disclosure.

Building Internal and External Communication Channels  
Protecting Personal Data of Suppliers and Employees



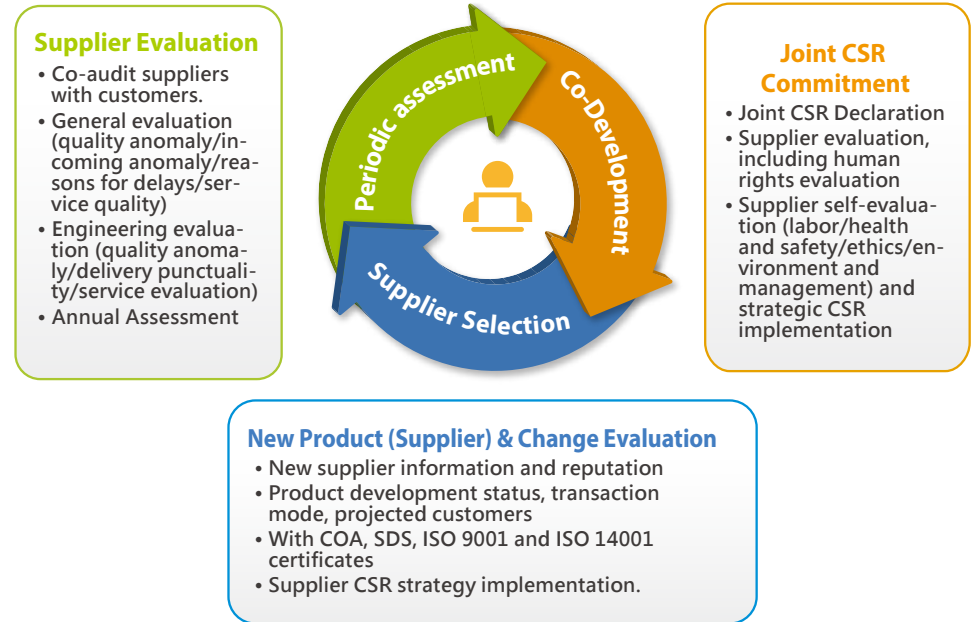
▲ Figure 3-7 Supplier code of conduct

We insist that all suppliers must respect workers and include Human Rights Assessment in new supplier selection, request suppliers to respect employee human rights in accordance with international standards, such as the Universal Declaration of Human Rights, Social Accountability International, and Ethical Trading Initiative, and behave in conformity to human rights in issues including voluntary labor, no child labor, statutory working hours, statutory wage, humane working environment, no discrimination due to gender/nationality/race/disabilities, and freedom of association. We request all suppliers to respect employee human rights for employees to work in a friendly working environment without worries.

To further ESG implementation in suppliers, we ask suppliers to answer the “Supplier Self-Evaluation Questionnaire” before the onsite audit. The questionnaire is established in accordance with the latest RBA Code of Conduct, covering five aspects: labor, health and safety, ethics, environment, and management. Suppliers are requested to carefully review all required sustainability issues to increase the positive influence on society and the environment of the overall supply chain. After the audit, we issue an audit report on the audited defects for suppliers to make improvements.

### **Promoting supply chain localization**

Suppliers are important partners in our sustainable business operations. To reduce the supply risks and costs of the supply chain, we actively engage in supply localization with suppliers. Apart from shortening delivery times and lowering transportation risks, this can also reduce carbon emissions from transportation and create local job opportunities. The major suppliers Shin-Etsu Chemical, NAMICS, TRI



▲ Figure 3-8 Trustworthy supplier management

CHEMICAL, and Fujimi have increased made-in-Taiwan products in addition to made-in-Japan products in the past. By growing together with suppliers and customers, we continuously promote supply chain localization based upon the win-win principle.

Additionally, the proportion of local procurement of office supplies and general merchandize in 2022 was 95%, while it was 10% in the green procurement requirements for the “Types 1 and 2 Green Mark” of the Environmental Protection Administration.

## 3.3 Strengthening customer service

We are primarily a product agent, and customer trust supports our growth. To maximize value for customers, besides focusing on materials and equipment sales, we are also dedicated to providing a sound service system to periodically review the product use of customers and thereby ensure the smooth operation of their production lines. We implement continual innovation and improvement of materials and maintain close collaboration with customers' R&D teams to co-develop optimal products and grow together with customers.

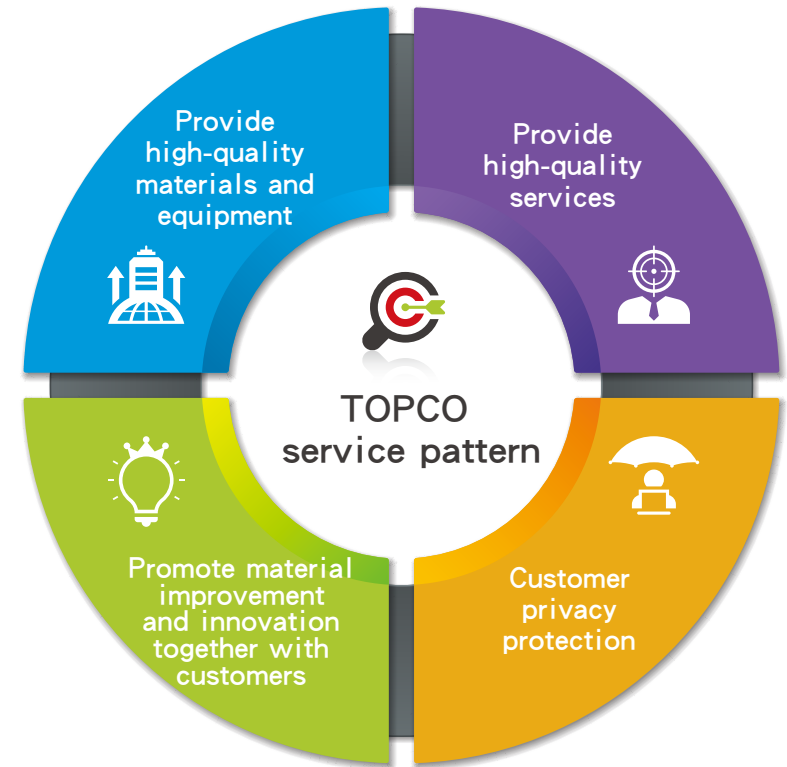
### Our service model is as follows

- 1 Offer high-quality materials and equipment
- 2 Create customer service value with high-quality services.
- 3 Maintain continual innovation and improvement of materials in collaboration with customers
- 4 Value customer privacy.

### 3.3.1 Product quality

To provide customers with high-quality, high-stability materials and equipment, we distribute products produced by world-leading manufacturers such as Shin-Etsu Group, NAMICS, TRI CHEMICAL, and Fujimi.

Based on international environmental legal and regulatory requirements, we stringently examine the restricted/banned hazardous substances contained in the products we distribute and perform strict control through new product/supplier control.



▲ Figure 3-9 Customer service

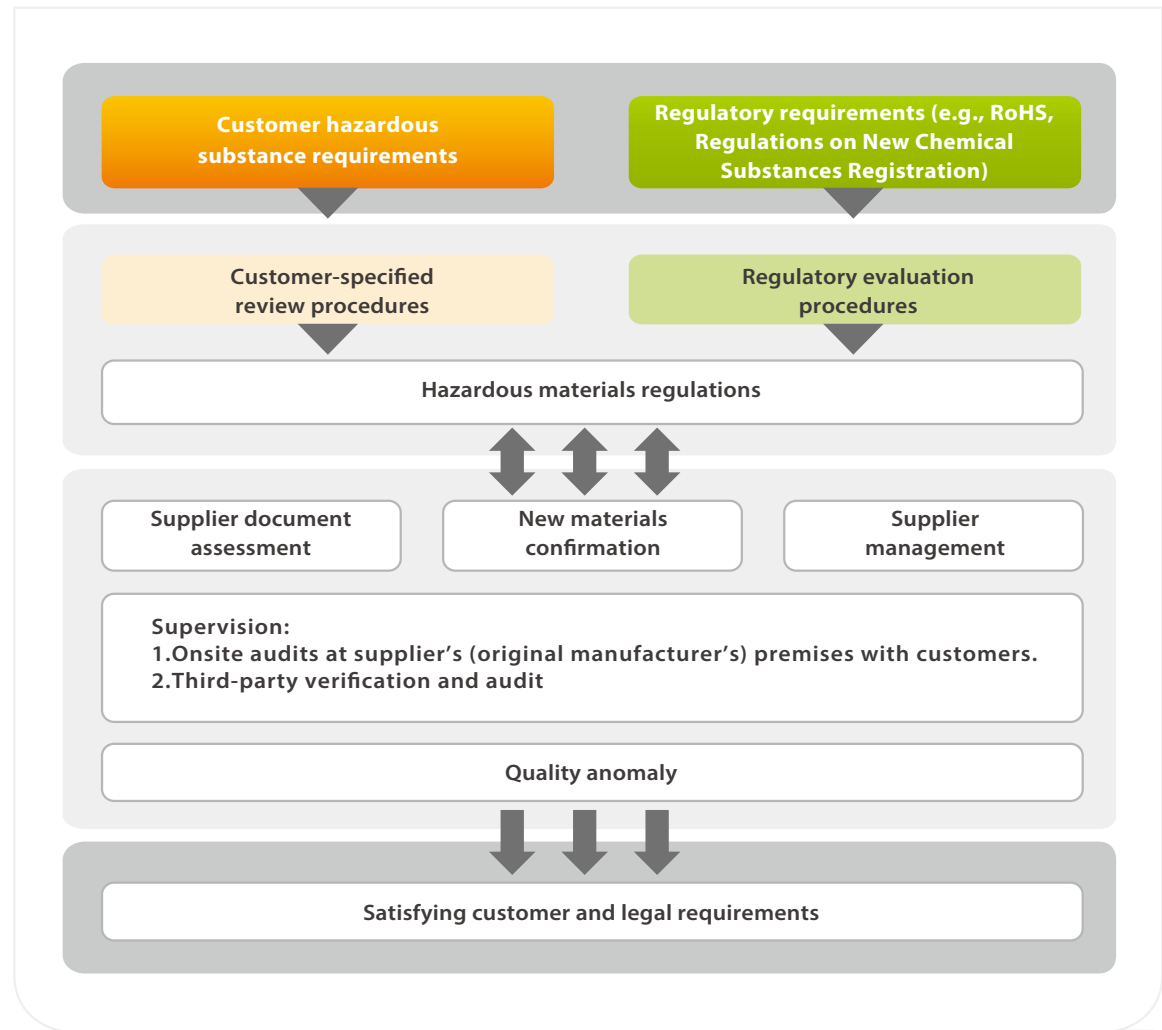
We also put labels with clear information on all products and distribute them with their COA and specifications from original manufacturers to ensure the conformity of all products to environmental, social, and safety requirements and disclose all relevant service information and labels with 100% compliance

Additionally, to ensure smooth distribution of products to customers, we maintain conformity to all customer quality requirements of all materials and products and disclose the relevant information according to the customer's specifications, including compliance with green procurement, existence of chemicals restricted/banned/required for disclosure by law or customer requirements, and the intensity and purpose of chemical substances. All disclosed information is supported with relevant documents to ensure conformity to the regulatory and customer requirements.

At TOPCO, legal compliance is a basic requirement. In 2022, no significant fines for non-compliance with environmental laws and regulations of products or services were reported. Legal compliance in 2022:

- (1) Laws and regulations relating to product/service labelling.
- (2) Laws and regulations relating to product sales and marketing activities (including adverts, promotions, and sponsorships).
- (3) No complaints or reports of customer data losses.
- (4) No reports of significant fines and non-monetary sanctions.
- (5) No non-compliance with consumer health and safety laws and regulations of products or services.





A fine of NT\$60,000 was imposed for carrying out the entrusted transport of the toxic chemical precursor across two municipalities and counties (cities) without joining the national joint defense organization; this incident has no major impact and has been improved.



▲ Figure 3-10 Substance evaluation flowchart

### 3.3.2 Creating customer service value with high-quality services

Putting customers first, we value the quality of customer service and thus proactively develop talent with professional knowledge and emphasize customer relationship management to enhance customer efficiency, while maintaining steady corporate growth at the same time.

-  We periodically communicate with customers to understand the production line status and direction for materials improvement. Through the efficient and accurate reporting of customer requirements and product use recommendations and operating instructions by the responsible sales personnel, we create differentiated services to enhance customer satisfaction.
-  By reliably consolidating customer requirements and the opinion exchange results with customers in the journal, we create a complete customer database to optimize customer service management and provide a reference for insider experience sharing and succession.
-  By optimizing the internal purchase, sales, and stock management processes, we create higher customer service value.
-  By implementing the cloud CRM system, we maintain effective CRM, understand important customer information at all times, and accelerate new customer cultivation.



▲ Figure 3-11 Cloud CRM system

### 3.3.3 Maintaining continual innovation and improvement of materials in collaboration with customers

Establishing long-term partnerships with customers is our prime mission. With such close, long-term partnerships, we help customers make continual improvement of process efficiency and quality to grow together with customers.

To provide customers with the best solutions, we engage in collaborative development with customers, modify the production equipment of optoelectronic products to enhance process efficiency, promote the application of materials to innovative processes, and help customers apply for certification after mass production. To extend the depth and value of services and integrate new materials and technologies, we established the Technology Committee in 2016 to actively assist customers in solving process-related problems. We also hold meetings to discuss the trends of new materials, new products, or markets to constantly promote creativity beyond traditional channels toward sustainable operations.

In response to the green trend of the global electronics industry, apart from

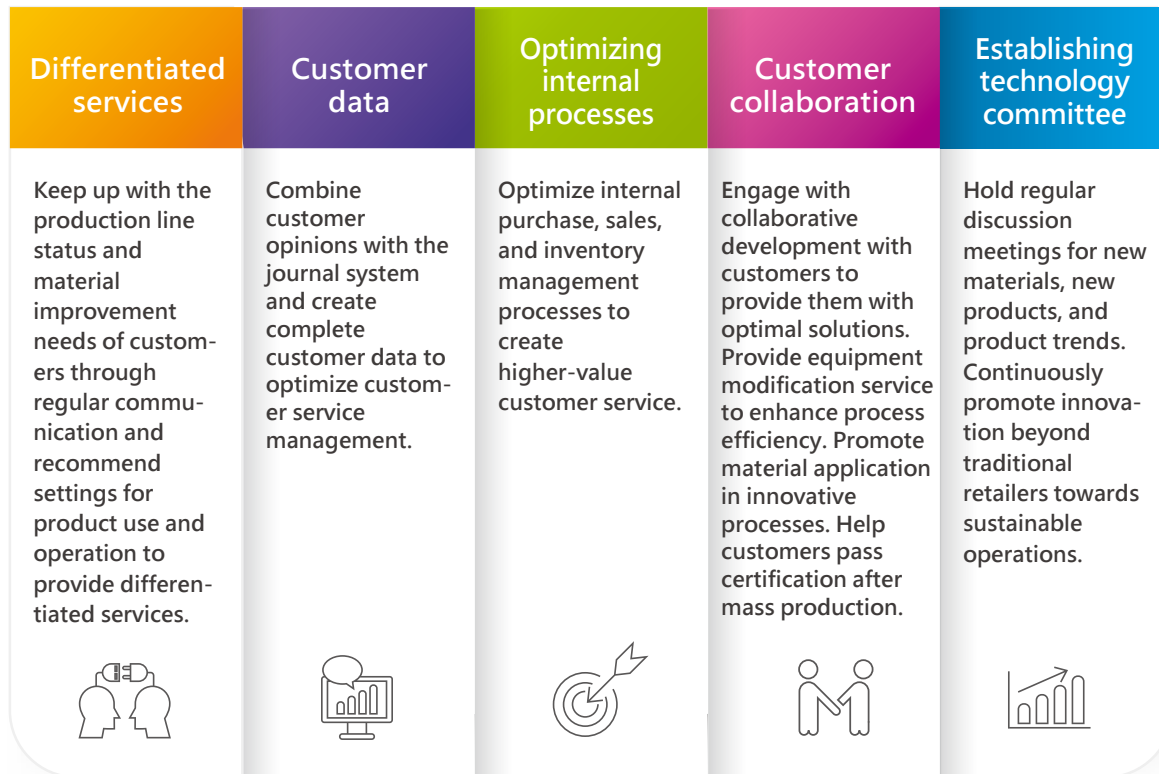
integrating advanced environmental engineering and continuously developing and distributing important relevant equipment and materials, we also import green chemical substitutes through collaboration with the world-leading science and technology company Merck. Merck has been engaged in the R&D of green chemical substitutes for a long time. So far it has introduced 1,400 sustainable products to the market that comply with the 12 principles of green chemistry, design for sustainability, and carbon footprint reduction. Products are developed primarily to replace commonly used organic solvents that are hazardous to the environment and human beings so as to bring new opportunities for the green transformation of the electronics industry.

### 3.3.4 Valuing customer privacy

We understand the importance of personal data and privacy protection and technology confidentiality. Therefore, we spare no efforts in promoting and implementing data protection and request all employees to carefully protect the confidential and exclusive information that customers hand to us. We have also established the Information Security Policy and relevant regulations to ensure information security. We review the policy and relevant regulations at least once a year to ensure conformity to the latest regulatory requirements and technology and business development to ensure the safe provision of information-related services. No complaints regarding breaches of customer privacy and losses of customer data were reported in 2022.

Our measures to protect technology confidentiality include:

1. Each business unit creates own its file folders that can only be accessed by authorized personnel.
2. As each business unit is located on a different floor of the building, access control is implemented on each floor.



▲ Figure 3-12 Continual improvement and innovation

Additionally, we protect customer privacy with the following measures:

- (1) Maintenance of customer privacy: We have established the “Personal Data Safety Maintenance Regulations” according to government regulations and the Personal Data Protection Act.
- (2) Stringent internal control mechanisms have been established to ensure that computer-related operations conform to the “Computer Operation Internal Control”, privilege application and setup conform to the “Computer Privilege Management Regulations”, and other computer-related

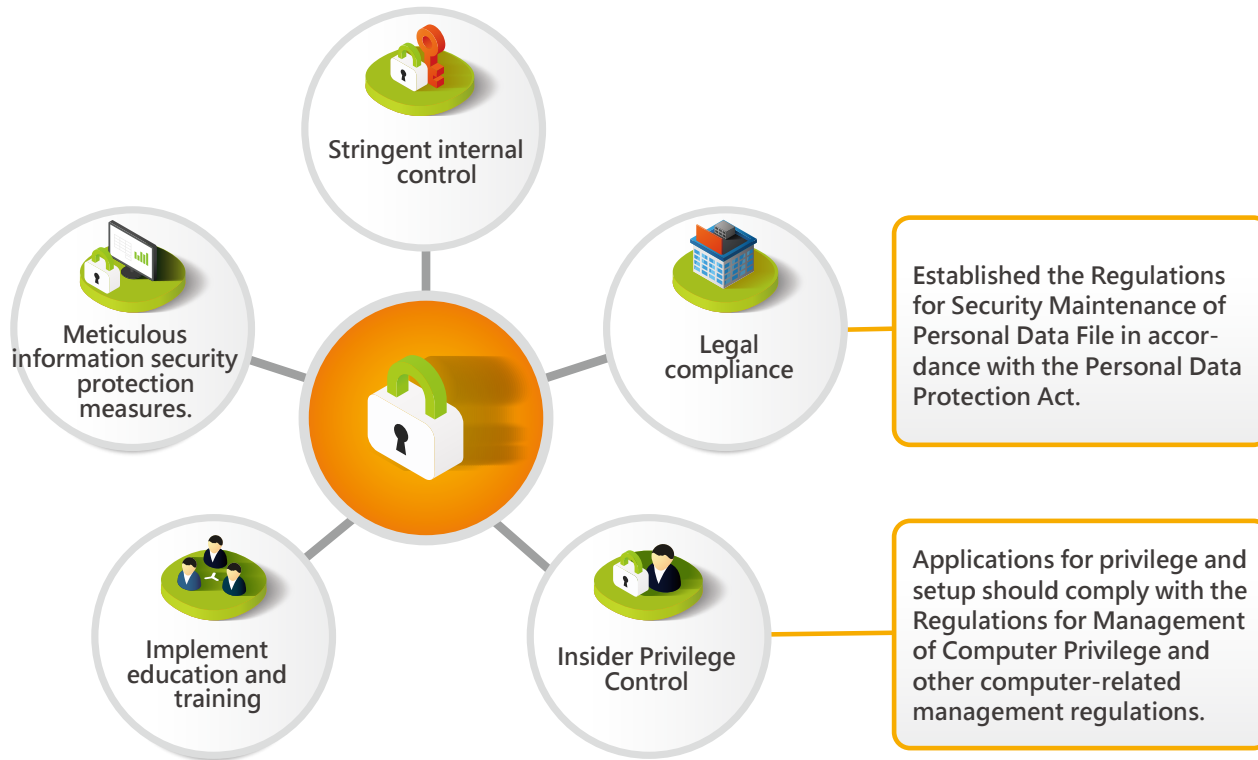
management regulations. Prohibit the transmission of emails containing personal data, and if necessary, sensitive data shall be encrypted prior to transmission.

- (3) Protection of information security hardware and software: Full-range protection and tracking are applied from personal computers to servers and network equipment.

- (4) The drilling topics in 2022 were as follows; the results of all drills met the requirements:

A. Phishing email alert training: The level of difficulty of email identification was medium. This was a common type of emails (medium level). The click tolerance for the drill was <10%.

B. Firewall protection drill: The level of system crash was medium. It was an uncommon type of attack. After intervention, the firewall administrator found that the system could not be restored and restarted within a short time and switched service to the backup firewall. The troubleshooting tolerance of the drill was 30 minutes.



▲ Figure 3-13 Measures for customer privacy protection.



## 3.4 Customer satisfaction survey and customer complaint handling

### 3.4.1 Customer satisfaction survey

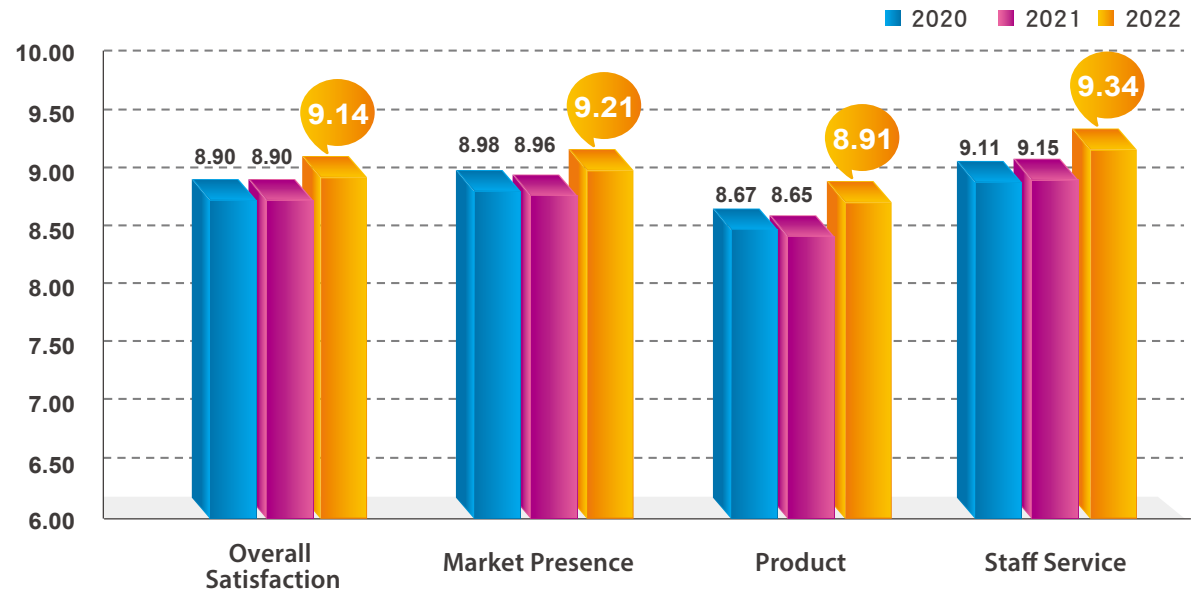
Each year we conduct a customer satisfaction survey. Each business unit provides the contact information of important customers in the previous year to facilitate the online survey or personal visit for customers to reflect their opinions for the reference of TOPCO to make continual improvement of products and service processes.

The survey covers customers' satisfaction in three aspects: corporate image, products, and attitude and professional service of personnel. The survey also includes customers' satisfaction with our competitors.

Besides analyzing customers' satisfaction in the three aspects of corporate image, products, and attitude and professional service of personnel with statistical techniques, we also request business units to propose corrective action and preventive action (CAPA) for the opinions and problems reflected by customers and state CAPA in the Customer Satisfaction Survey Follow-up Sheet to complete the customer satisfaction handling procedure.

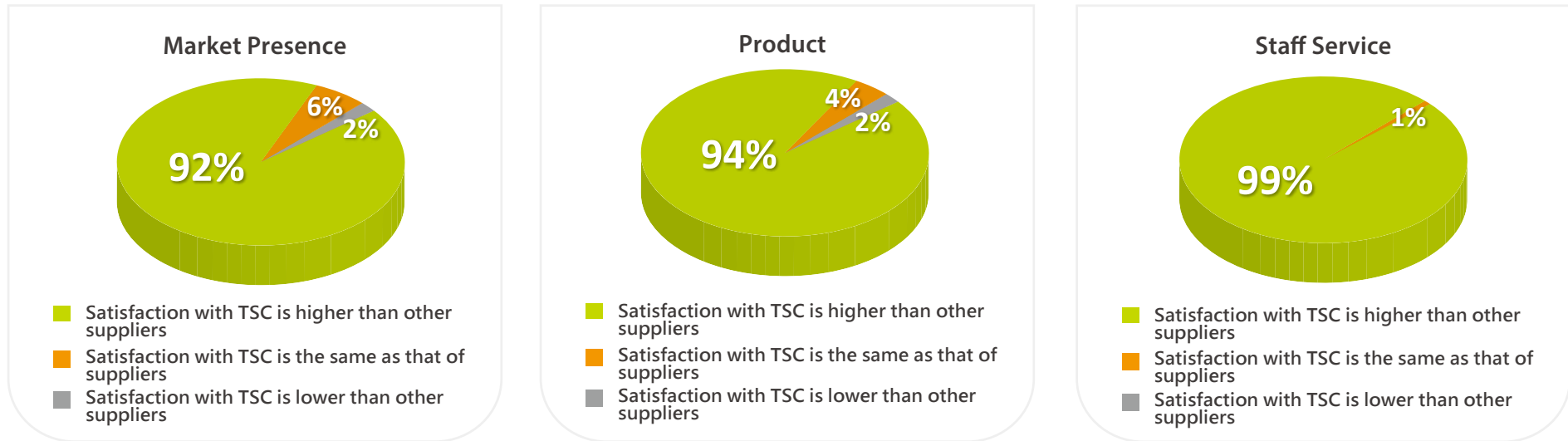
Between April 26 and June 7, 2022, we distributed a total of 329 survey questionnaires to important

customers in the previous year and collected a total of 147 responses. At a 95% confidence interval, the overall score was 9.14 out of 10. Evaluation showed that the 2022 satisfaction with products and personnel service was significantly higher than that of the previous two years. Among all aspect, satisfaction with personnel service was the highest at 9.34.



▲ Figure 3-14 Customer satisfaction by aspect over the years

In the satisfaction survey on TOPCO products versus products from competitors in the previous year, over 92% of customers were more satisfied with TOPCO in all aspects of corporate image, products, and personnel services.



▲ Figure 3-15 Customer satisfaction survey versus other suppliers

In 2022, a total of 11 respondents expressed other opinions. We valued their opinions and reviewed each of them. We then proposed relevant corrective and preventive action, including assistance in shortening product delivery times, capacity expansion and supply increase through coordination with original manufacturers, safety stock maintenance, and so on. The opinions of each customer have been maintained in the Customer Satisfaction Survey Follow-up Sheet for control and follow-

up. CAPA solutions provided by the sales unit were reviewed by the supervisor before implementation. CAPA solutions included increasing communication with original manufacturers to prevent supply disruptions, discussing investment projects such as future capacity expansion with original manufacturers, and communication with customers to place orders earlier.



▲ Figure 3-16 Customer satisfaction follow-up flowchart

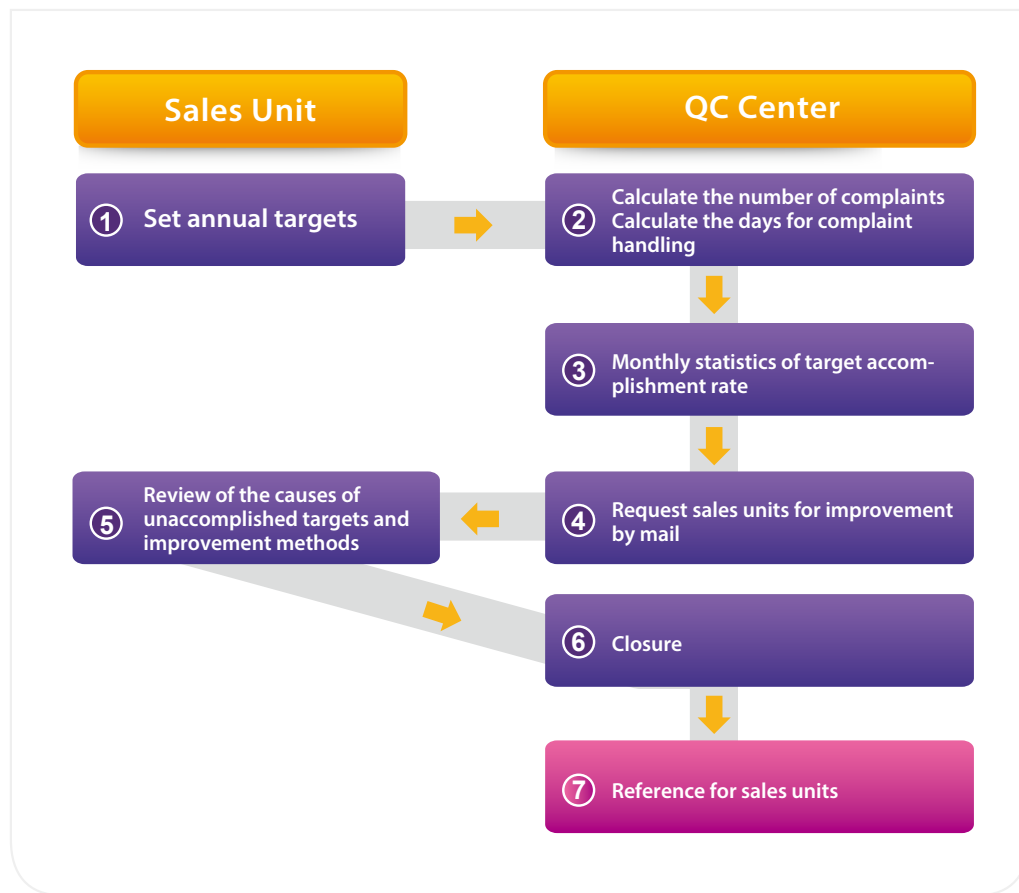
### 3.4.2 Customer complaint handling

“Stable quality, punctual delivery, quick service” is our policy for maintaining long-term development. Besides understanding customer needs through the satisfaction survey, we have also established a complete follow-up mechanism to ensure customer complaints are properly handled and resolved.



▲ Figure 3-17 Customer complaint handling process

In 2017, we implemented the version change to ISO 9001:2015. To accelerate and improve the quality of customer complaint handling, each year the sales unit establishes the standard length (days) for handling each customer complaint. The QC center consolidates the number of complaints and length of handling of each unit to calculate the achievement rate of complaint handling and urge the sales unit to make continual improvement.



▲ Figure 3-18 Quality management procedure of customer complaint handling

In 2022, we continued to enhance communication with customers to make continual improvement in quality, operations, and services. Through product testing and analysis, comparing the use of the same batch of products, confirming the delivery process, etc. To analyze the causes of problems, and discuss with the original factory to propose preventive improvement measures, explain to customers in time, follow-up and continuous tracking of improvement results, and the improvement results are finally recognized by customers. In 2022, there were 19 customer complaints, 49% less than that in the previous year.

Table 3-4 Statistics on customer complaints in the last three years

Cause of Complaint	2020	2021	2022
Quality specifications	48	36	19
Operation quality	2	1	0
Delivery problem	0	0	0
Poor service	0	0	0
Total number of complaints	50	37	19



Highlights  
2022

## IV. Creating a friendly and happy working environment

- ▶ Implementation of ISO45001 to protect employees and provide them with a safe and reliable workplace to reduce the possibility of work-related accidents and disease.
- ▶ The HQ employee canteen passed the certification of Green Dining Declaration - Green Employee Restaurant.
- ▶ Arranged medical specialists to provide employees with in-house mental and physical health consultation and hired professional nurses to promote labor health protection.
- ▶ Equipped emergency rescue devices in breastfeeding rooms
- ▶ Arranged one health checkup for middle- and elderly employees each year, employee health management, and case care.
- ▶ Developed healthy exercise facilities and organized various exercise courses for employees to exercise more conveniently with discounts.
- ▶ Increased birth allowances to 10,000 Anyo Benefit Points, one box of silver perch essence (100 packs) for female employees or the spouses of male employees to develop strength after pregnancy.

## Diversity and inclusion policies



Through strategy and approach, we have developed a workplace culture featuring diversity, equity, and inclusion and a working environment of diversity and inclusion to provide employees with a space for demonstrating their talent and include themselves in the working environment.

Performance is our primary concern for employee employment and promotion. By eliminating all forms of bias and discrimination, we provide equal opportunities to maintain diversity. Employee talent development is our goal. Apart from benefiting employees, this is also a wise way for business operations.

We are committed to creating an inclusive working environment with mutual support for all employees, regardless of age, gender, family status, disabilities, race, ethnicity, nationality, religion, or political affiliation. Creating a working environment for employees to work without worries and demonstrate their talent is one of our corporate missions.

We endeavor to include the diversity and inclusivity principles in employment-related policies, and it is also the responsibility for all employees to create an inclusive environment together. This is a group policy applicable to all TOPCO employees. All subsidiaries can establish their own diversity and inclusivity policies based this policy.

## Human rights and OH&S policies

We support and follow the spirit of human rights protection as disclosed in international standards such as the Universal Declaration of Human Rights, United Nations Global Compact, and International Labour Conventions. Hence, we have established the “TOPCO SCIENTIFIC Co., Ltd. Human Rights Policy” that is applicable all employees of TOPCO and its affiliates.

We actively review and implement CSR. In supplier selection, we include the “Human Rights Standard Assessment” and refer to and follow the spirit of human rights protection as disclosed in international standards such as the Universal Declaration of Human Rights, Social Accountability International, and Ethical Trading Initiative.

Additionally, we have established management regulations in accordance with Taiwan’s labor-related laws and regulations, including the Labor Standards Act, Act of Gender Equality in Employment, and Employment Service Act. We arrange Labor Insurance and National Health Insurance and contribute pension funds for employees in accordance with law. Apart from establishing an employee retirement system, we have also announced the relevant personnel regulations on the employee portal for employees to work in a friendly working environment without worries.

To create a friendly and happy working environment exclusive to TOPCO, we hope to create a working environment for employees to feel safe and confident to work and grow happily with the company in terms of the following five aspects: well-established recruitment system, diversity for capability and talent development, transparent and impartial evaluation, superior salary and employee benefits, and workplace safety and labor-management harmony.



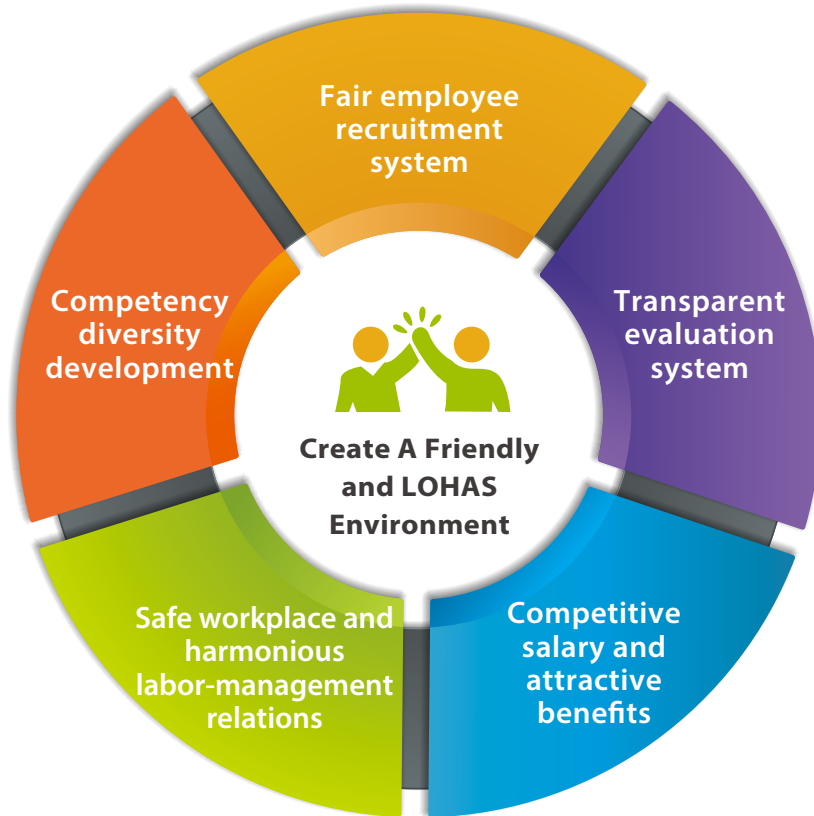
## 4.1 Sound employee and recruitment mechanisms

We have established a well-planned human resources information system to manage personnel basic data with high efficiency and high quality and clearly understand the development status of members within the organization. Additionally, through value-added analysis, the system assists administrators in planning talent development strategies.

### 4.1.1 Employment status

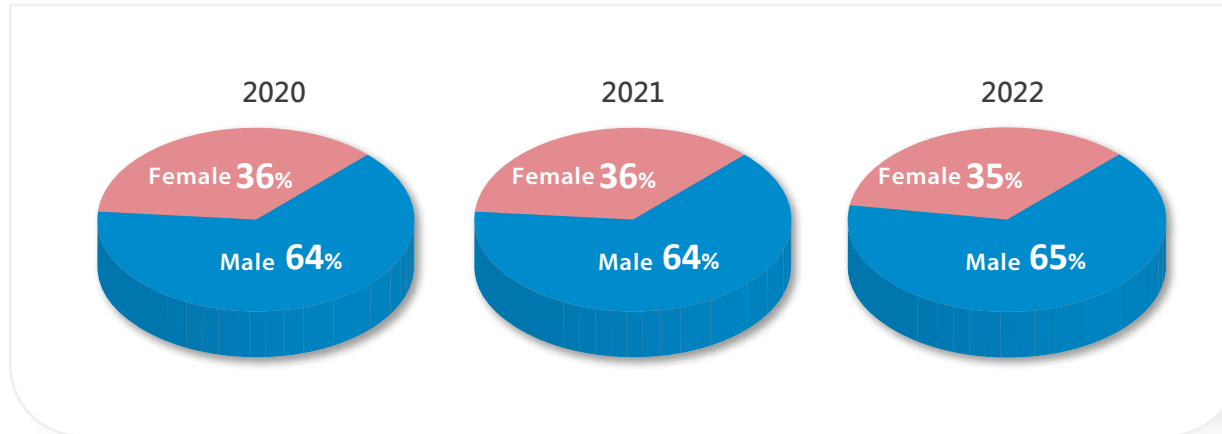
Besides abiding by the Labor Standards Act and the Act for Gender Equality in Employment, we hire employees based on open and fair principles and engage in neither differential treatment nor discrimination based on gender, race, marital status, family condition, language, religion, nationality, appearance, facial features, disabilities, or other factors. Additionally, we also maintain fairness and impartiality in employment, remuneration and benefits, training, evaluation, and promotion/transfer to ensure equality in employment and provide a workplace free of harassment and unlawful discrimination.

In response to the constantly expanding scale of operations, we hire more employees each year. By the end of 2022, we had a total of 533 employees, including 314 full-time male employees, 30 contractor male employees, 183 full-time female employees, and 6 contractor female employees.



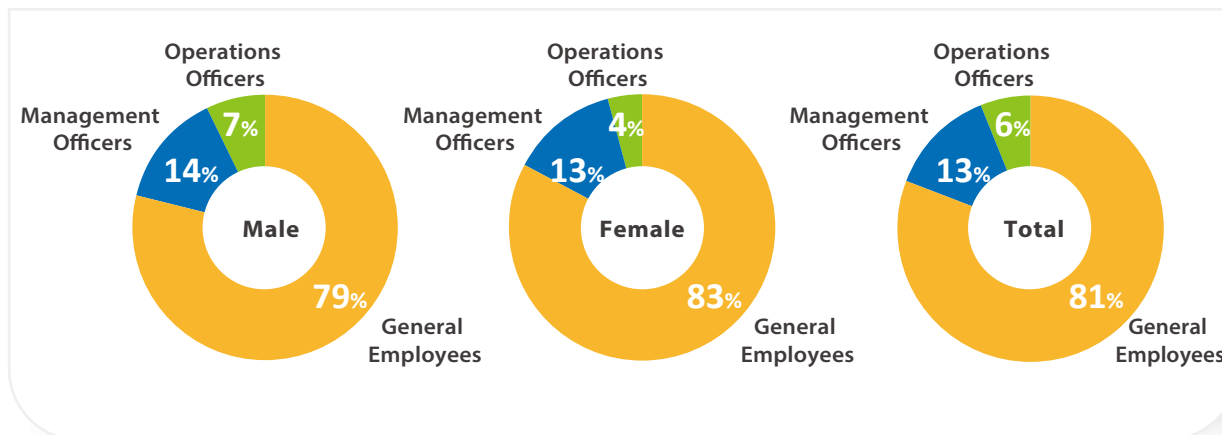
▲ Figure 4-1 Five aspects of TOPCO' s friendly and happy workplace environmentEvaluation.





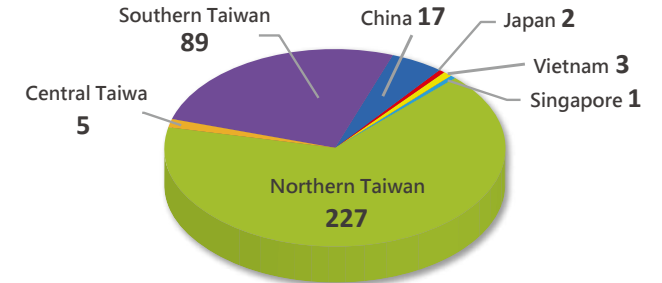
▲ Figure 4-2 Employee proportion by gender 2020-2022

We emphasize gender equality and engage in neither discrimination nor differential treatment based on gender to ensure workplace gender equality. In 2022, the members of the advanced management are all R.O.C. citizens. In 2022, the members of the advanced management were all R.O.C. citizens. Of the total number of employees, 81% were ordinary employees, 13% were management members, and 6% were management officers, including 16% female officers.

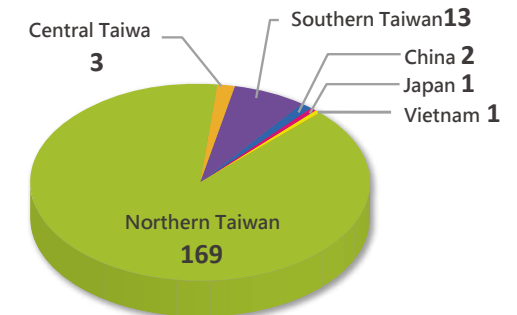


▲ Figure 4-3 Staffing composition by gender

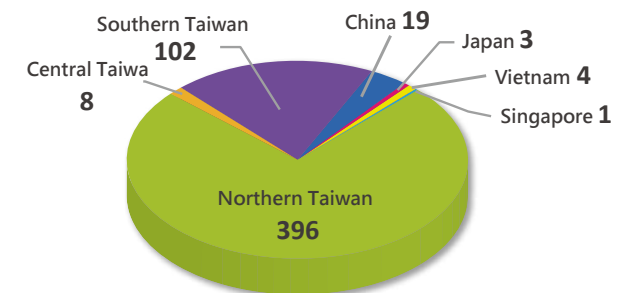
The figure below shows the employee composition by gender at the end of 2022:



▲ Figure 4-4 Distributions of male employees by region

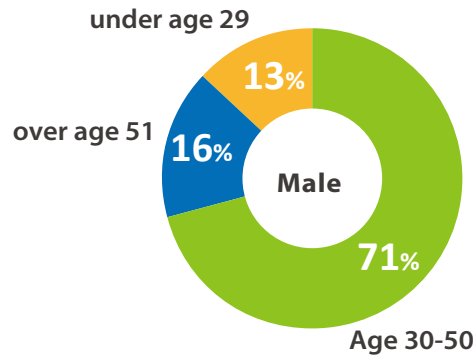


▲ Figure 4-5 Distributions of female employees by region

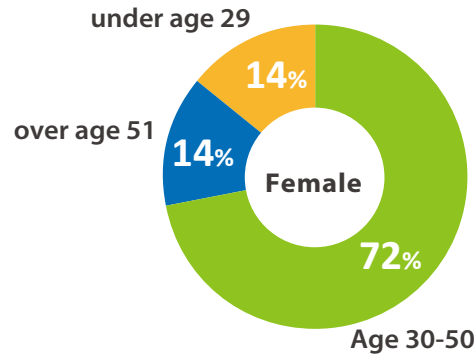


▲ Figure 4-6 Distributions all employees by region

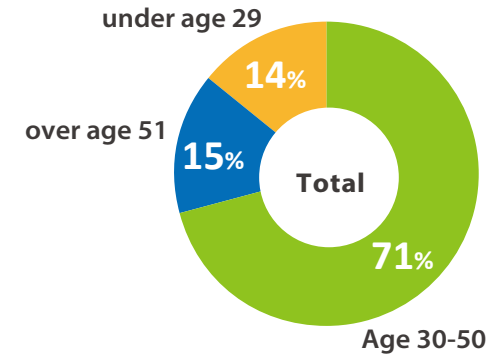
The figure below shows the employee composition by age at the end of 2022. The majority are 30-50 years old, with a total of 379, accounting for about 71%.



▲ Figure 4-7 Age distribution of male employees.

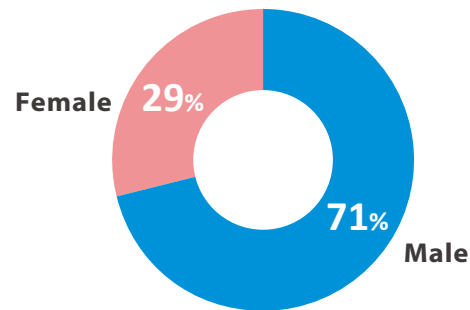


▲ Figure 4-8 Age distribution of female employees.

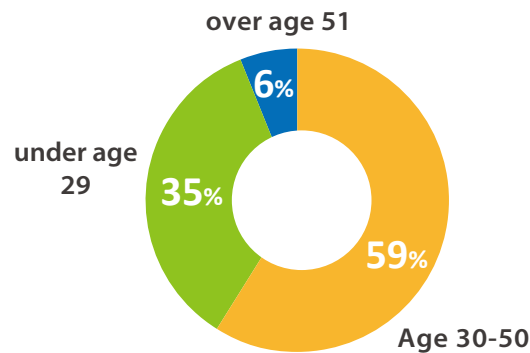


▲ Figure 4-9 Age distribution of all employees.

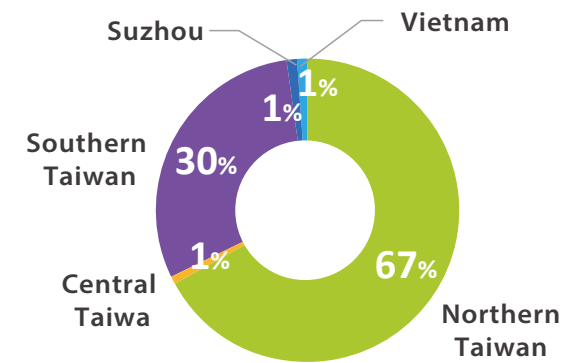
There were 141 new employees in 2022, and the male-to-female ratio was 71:29. In terms of age composition of new employees, the majority are 30-50 years old (82, accounting for 59%), followed by those under 29 years old (43, accounting for 35%).



▲ Figure 4-10 Distributions of new employees by gender.



▲ Figure 4-11 Distributions of new employees by age.



▲ Figure 4-12 Distribution of new employees by region.

In 2022, a total of 62 full-time employees resigned, with a turnover rate of 14.08%, down by 1.19% over last year. The overall turnover rate was lower than the average in the past three years. The in-depth interviews and analysis before resignation showed that “personal career planning” was the reason for resignation of most employees. The overall turnover was healthy and stable. In the follow-up, measures such as (leaving) career interviews, employee opinion surveys, and employee assistance programs (EAP) will continue to improve the fit between employee career development and organizational development.

Due to the nature of work, our employment of persons with disabilities was insufficient, accounting for only 0.38% of all employees. Although we were unable to hire persons with

disabilities at the statutory rate of 1%, we have paid the statutory difference subsidies and constantly offer related job openings to attract more potentially eligible persons with disabilities to join us.

In 2022, a total of 31 employees (23 males; 8 females) were entitled to parental leave, and 4 (2 males; 2 females) employees applied for parental leave and stayed at their original position after returning to work.

Table 4-1 Employee turnover in the last three years

Year	2020	2021	2022
Number of resigned full-time employees	63	77	62
Turnover rate	14.77%	15.27%	14.08%

Table 4-2 Status of unpaid parental leave in the last three years

Year	2020	2021	2022
Number of employees applying for unpaid parental leave	1	1	4
Total number of employees due to return to work after taking unpaid parental leave	1	1	3
Total number of employees returned to work after unpaid parental leave	1	1	3
Return to work rate (returned to work/due to return to work)	100%	100%	100%
Retention rate (retained service after returning to work/returned to work)	0%	100%	100%

## 4.1.2 Talent recruitment and recruitment channels

We hire employees in compliance with labor laws and regulations and maintain fair employment. Employees are recruited through open and fair screening and selected based on their credentials. Besides avoiding discrimination based on race, social status, nationality, gender, age, political party, religion, political affiliation, and disabilities, we also ensure no use of child labor, right place for the right person, and talent focus in order to recruit diverse outstanding talent. If there are substantive changes in operations, we will notify affected employees according to local laws and regulations.

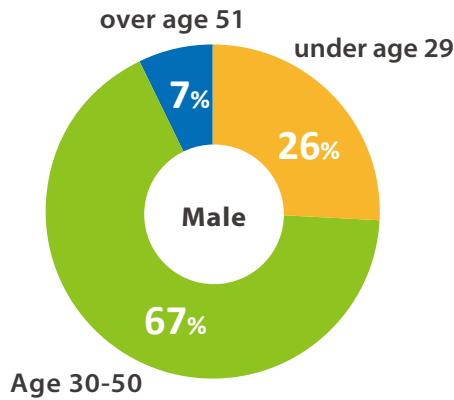
Through open channels, professional talent in the relevant fields is constantly recruited and evaluated with aptitude tests, language tests, math tests, and expertise tests based on the required competencies. By optimizing the recruitment process, we enhance the recruitment efficiency to ensure that each TOPCO

employee can fully demonstrate their potential at each position.

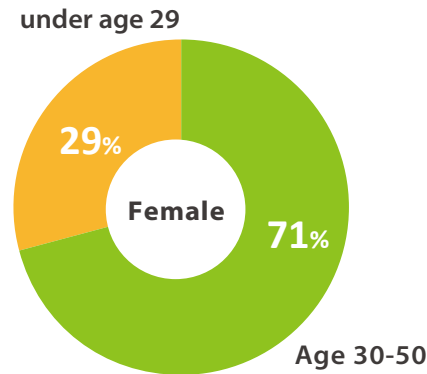
In response to our constantly expanding territory, we actively recruit talent based on the concept of best demonstration of talent. Through research and development substitute services, campus talent recruitment, human resources agencies, 104 Job Bank, internal talent recommendation, employee recommendation, or social media (e.g., Facebook), we recruit

like-minded talent.

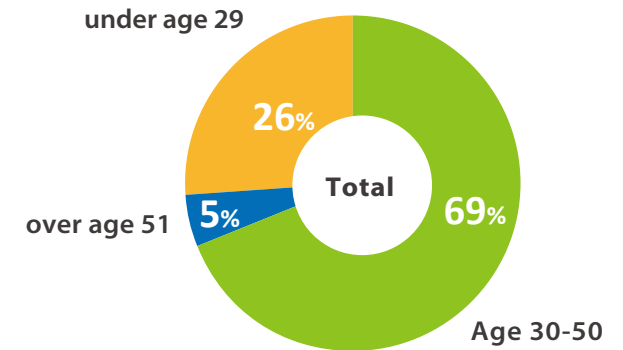
By the end of 2022, 102 employees recruited in the year were still in service, including 74 male employees and 28 female employees, with most of them (70) aged 30-50 years. Overall, 19% of new employees recruited in 2022 remained in service by the end of 2022.



▲ Figure 4-13 Age distribution of new male employees still in service by the end of the year



▲ Figure 4-14 Age distribution of new female employees still in service by the end of the year



▲ Figure 4-15 Age distribution of all new employees still in service by the end of the year

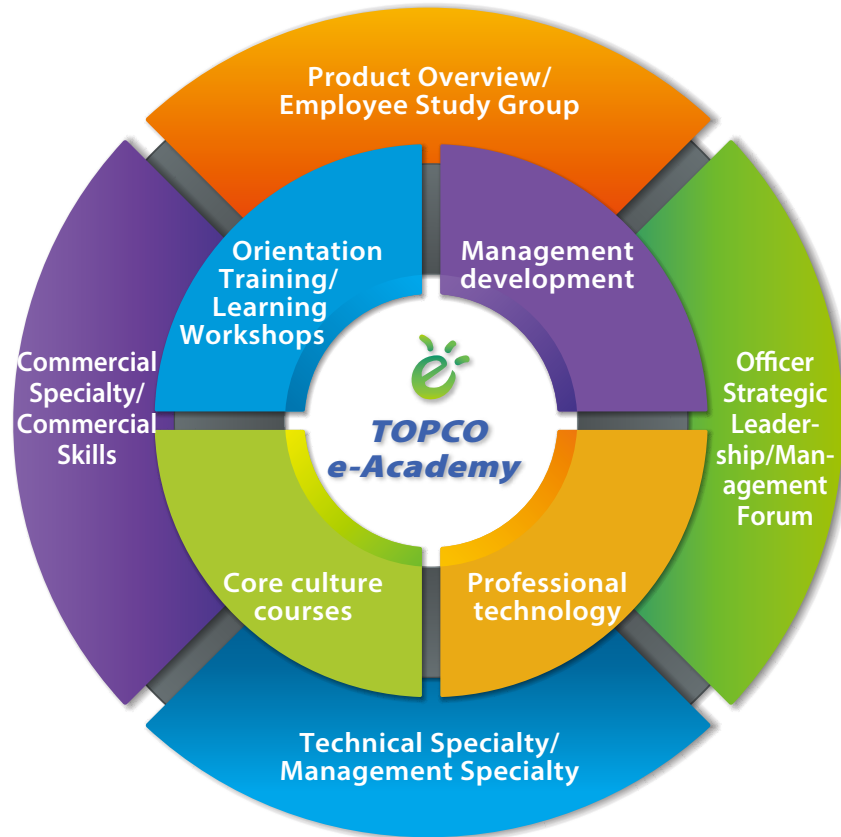
## 4.2 Cultivate talent with diverse capabilities

We value talent. To continuously develop employee talent, we make constant efforts in learning development and personnel development. Since TOPCO was established in 1990, we have provided an environment for continuous learning and growth. Enforcing professional competence development, developing complete employee education and training plans,

and supporting employees to receive professional training, continuing degree education, and professional license training are our key to success in significantly improving human capital.

Through various meetings and activities, we advocate our business philosophy and social responsibility. Based on the direction of strategic

development, we draw up the annual education and training plans and organize regular and irregular employee education and training activities. In 2008, we organized the TOPCO e-Academy and established employee training records. Through internal training courses and the e-learning and knowledge management (KM) platforms, we offer general education training to develop the management, sales, marketing, and basic skills of employees and develop their various common skills and concepts. In 2022, we offered new professional courses including OH&S, ergonomic hazard



▲ Figure 4-16 E-learning course planning

prevention, and health promotion to improve the workplace safety and health care awareness and capabilities of employees. E-learning courses were arranged for employees of branches and operating locations to ensure unrestricted learning.

In 2018, we actively promoted the KM system to improve employee capability. We were subsidized by IDB under the Knowledge Management Value-Added Project to progressively complete the construction of the new version of the KM Platform and knowledge document output, assist the HR



▲ Figure 4-17 TOPCO e-Academy portal

課程ID	課程名稱	開始日期	課程時數	作業	點數	人次	課本
W00003	01 課程中規ISO認證的作業程序	2021/02/18	16:00		17	10	1.0
PO4006	03 員工履歷辦法	2020/12/14	17:04		302	151	4.0
PO4015	04 生活輔導與執行辦法	2020/11/10	10:16		101	50	3.0
PO4025	03 獎勵管理辦法	2020/10/26	13:06		289	160	2.0
PO4012	15 員工日報及總務管理辦法	2021/10/26	19:11		1323	440	4.0
PO8007	01 研習休業管理辦法	2020/10/21	13:55		52	23	4.0
W08002	02 福利申請與審核作業程序	2020/10/20	14:52		16	11	2.0
PO4008	05 工作條件與環境改善辦法-事故及急修辦法	2020/10/12	10:42		107	50	4.0
PO8004	02 福利卡與福利卡運作管理辦法	2020/09/10	10:46		100	40	2.0

▲ Figure 4-18 TOPCO KM platform.

department with competence development and planning, and gather information related to the growth trends of industries, products, and markets. The KM Platform is highly beneficial to the externalization and systemic, effective management of the inherent knowledge of employees. The construction of the KM system can enhance the structuring and accuracy of knowledge management and thereby accelerate talent formation and improve innovative management capability.

In response to the introduction and progress of the KM mechanism and to provide a guide for the collection, categorization, storage, comparison, and reuse of knowledge articles and the assessment of knowledge processes, we established the Knowledge Article Management Regulations in April 2019 to encourage employees to upload and read knowledge articles.

### ■ Career Mentor Program

To develop talent for society, we collaborated with National Taipei University in the Career Mentor Program to provide students with more comprehensive learning opportunities. Through internship programs, we guide students to make in-depth workplace observation for them to understand business operations and operational models. We also arrange mentoring and experience sharing with senior officers to help students explore career development and develop a correct work attitude and value. Through experiencing and learning business practices, students can broaden their career vision.

### ■ Funding for external professional training

We also improve the professional skills of employees through external professional training and introduce external e-learning platforms to offer more comprehensive self-learning channels to enhance the efficiency in learning professional and general

education courses of employees. Additionally, we have also established related subsidization policies to encourage senior officers to enroll in EMBA program and other programs. In 2022, we financed five senior officers enrolled in EMBA programs for about NT\$1,050,000 to strengthen their professional and interdisciplinary capabilities and expand business connections.

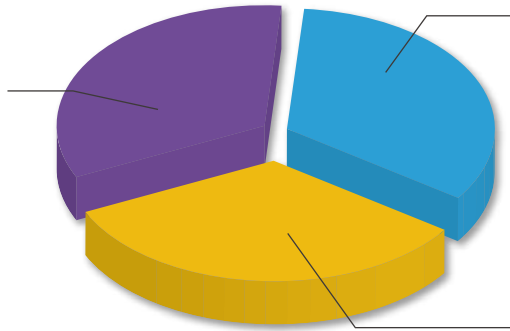
Table 4-3 Status of continuing education of senior officers in the last three years

Year	2020	2021	2022
Number of officers receiving continuing education	3	5	5
Sum of funding (NT\$)	1,831,356	736,644	1,059,038

In consideration of organizational strategies, job descriptions, job requirements, and personal performance and development, based on the investigation and analysis of employee training needs, the HR Division plans intensive development and training courses based on job development from the moment new employees arrive. Besides offering guidance courses for employees, we also arrange mentors to provide them with counseling services. Alongside our comprehensive learning channels spanning on-the-job training, internal training, external training, and e-learning, we hope that employees can better understand the requirements of their jobs and their expectations for future growth.

Besides hoping all employees to learn happily, we also build the successful competence DNA for employees through the arrangement of comprehensive courses. Particularly, each year we plan a budget to subsidize the continuing education of employees. Each year general employees and junior supervisors will receive an allowance of NT\$10,000 and other supervisors NT\$20,000. Employees in need of a higher amount of allowance may apply for the sum individually. With this policy, we hope to encourage employees to undertake self-management, be responsible for improving their competence, and maintain lifelong learning.

- Certificate further education courses
- Language courses funding
- Long-term continuing education (EMBA) funding
- Cross-department internal courses



- Senior officer: Operations meetings
- Intermediate officers: Intermediate officer training
- Junior officer: Junior officer training and management forum
- Orientation training for new employees
- Workshops for new employees
- Professional training for new employees
- Learning workshops (health education, community, negotiation)
- Professional courses (PMP, external training)
- Industry courses (semiconductor-related)

▲ Figure 4-19 Comprehensive learning courses

## Complete planning of on-the-job training courses for employees

Based on organizational strategies, job requirements, and personal performance, we emphasize talent cultivation and divide talent education into different stages, including the orientation training stage, competence development stage, immediate management stage, and core management stage. Besides setting individual training foci for different stages, in combination with the program credits and performance in the learning passport, we enable employees to expect learning growth. Course contents also change from time to time. To keep up with the pace of corporate growth, the HRD department changes courses from time to time to create a diversified learning environment for employees.

### (1) Professional certification training

Entering the third decade, we have expanded our scope of services from the wafer industry to forward-looking industries such as green energy, solar power systems, LED lighting applications,

green construction materials, and water recycling and reuse. Facing the complex requirements of professional training, we arrange internal and external training courses for employees to help them pass related professional license and certificate examinations.

### (2) Work skill cultivation

Based on the spirit of learning by doing, we help employees to put theory learned at school into practice in the field through on-the-job training, including semiconductor manufacturing processes, international trade practices, import and export practices, and practical courses on LCD, LED, green construction materials, and so on.

### (3) Engineering R&D training plan

This includes annual training courses for new products and new technologies, introduction to the semiconductor industry, introduction to the LCD/LED industries, development of third-generation semiconductor technology, development of the foundry and optoelectronics industries and technologies, green energy, and green construction materials.

#### (4) Foreign language improvement

To encourage employees to improve their foreign language ability after work, we promote language learning within the company. We hire foreign English teachers to offer the “Business English Course” using situational conversation learning to benefit employees engaging in business internationalization work. In addition to classroom courses, synchronous e-learning courses are also arranged for employees of operating locations to take the course.

#### (5) Competence-related education courses

We plan management-related courses to improve the workplace software power of employees. These courses include leadership development, business management, ethical corporate management, and general education. The courses offered in 2022 were as follows:

- ✔ Leadership development strategy: Problem analysis and solving, execution power and performance, innovation, and development courses.
- ✔ Business management training: Business negotiation skills, work management, and risk management courses.
- ✔ Ethical management courses: Understanding laws and regulations, internal control promotion, information security, and other courses.
- ✔ General education professional seminars: Health management seminars, new employee and MA seminars.

#### (6) OH&S education and training

We value the service and OH&S policy. Hence, we assign employees holding certificates for OH&S personnel and specialist in accordance with the Labor Safety and Health Act to implement various OH&S training and duties. We also arrange OH&S education and training for new employees and organize regular fire drills and talks.

### ■ Mentoring system

From the first day of arrival, each new employee is assigned a senior employee of the department as mentor. As both the new employee and mentor work on the same floor, the latter can provide the



▲ Figure 4-20 Mentor training

former with support at work and in daily life to help new employees smoothly adapt to the new environment.

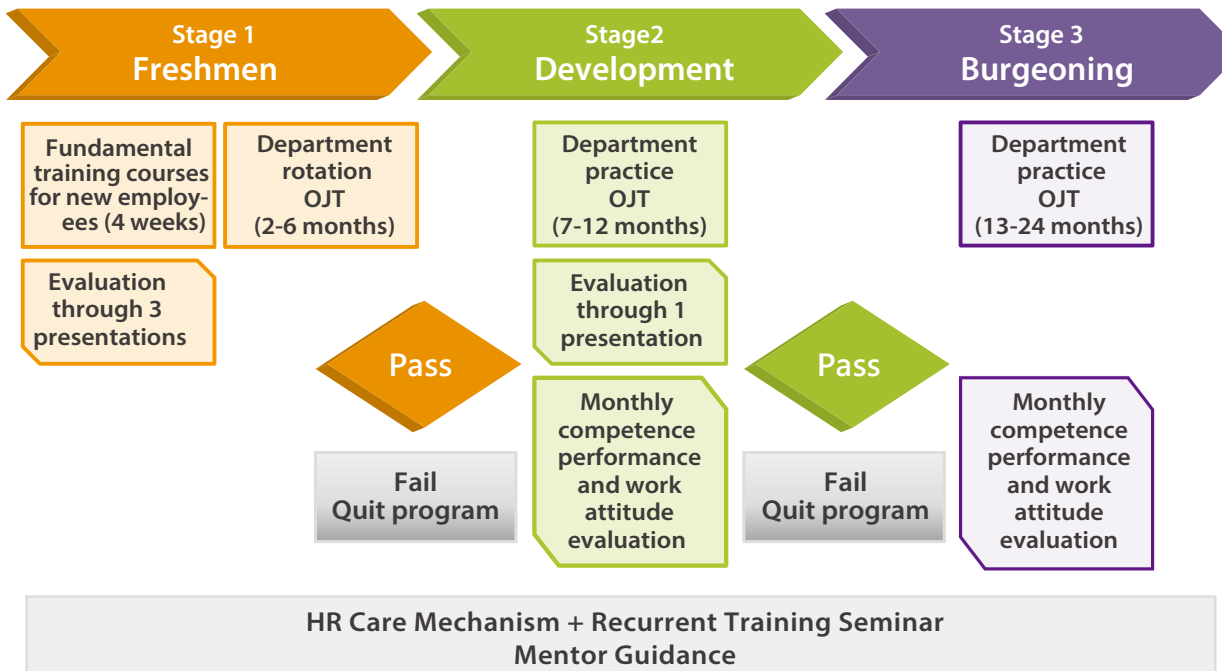
### ■ MA Training Program

We began the Management Associate (MA) Program in 2002. Over the years we have developed many outstanding creative talents in different countries. Besides helping TOPCO to develop its business and expand its territory to the present-day scale, the program also helps talent develop themselves. Under the guidance of unit supervisors and senior employees, employees participating in the MA Training Program can quickly develop professional skills and management abilities and accumulate practical field experience.



## Program features

- ※ Further professional knowledge and technology for senior employees through the work instructions by unit supervisors.
- ※ Continuous improvement of professional competencies by offering a series of professional practical courses.
- ※ Provide opportunities for relevant projects and missions for employees to broaden their horizons and challenge personal potential.
- ※ Assign senior employees to be instructors to share experience and provide career guidance with their rich workplace experience and professional competencies.



- Skip the rotation stage with the head of the employment department recruits employees in the retention program.
- The evaluation distribution of general employees does not apply to MAs.

▲ Figure 4-21 MA Training Program

## Job rotation mechanism

For the adaptive development of employees, we offer and plan a job rotation mechanism. Employees may apply for job rotation and switch to the target job with the approval of the supervisors of both units.

## Gelling employee engagement

We value corporate culture, encourage employees, and gel employee engagement. Each year we organize a staff consensus camp and employee workshop to cohere understanding and establish communication mechanisms.



▲ Figure 4-22 Commendation of senior employees

## Achievements in education and training

We value talent cultivation. Hence, we disclose the learning efficacy of employees in the last three years. The statistics of the education and training expenses are as follows:

Table 4-4 Education and training expenses in the last three years

Year	2020	2021	2022
Education and training expenses (NT\$)	2,314,187	1,027,196	1,287,786

Table 4-5 Total hours of employee training in the last three years

Year	2020	2021	2022
Total hours of training	15,016	17,593	21,689
Face-to-face courses	3,865	4,735	4,611
e-Learning courses	11,151	12,858	17,078
Average hours of training per employee	31.3	34.43	40.69

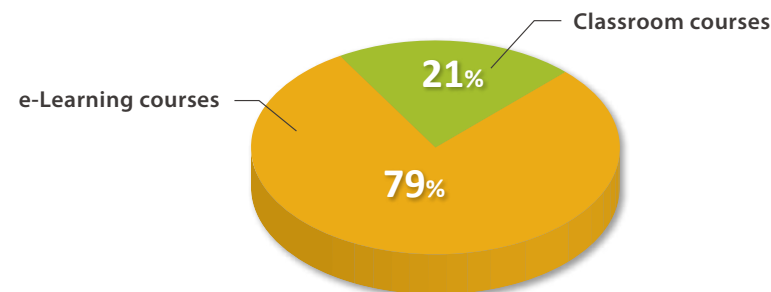
\*Remarks: Statistics of training hours include those who have left

Target

15,000 hours of continuing education and greater proportion of e-learning courses for 2022

Achievement

21,689 hours of continuing education in total (target accomplished) and 79% of e-learning courses.



▲ Figure 4-23 Total hours of employee education and training in 2022

In 2022, we arranged education and training for a total of 21,689 hours; the training hours per person were about 40.69 hours. These included 4,611 hours of physical courses and 17,078 hours of e-learning courses.

We design different education and training courses. Senior management officers, management officers, and general employees can all take these courses to develop high-quality human resources in accordance with the organizational goals and operational strategies to enhance and sustain corporate competitive strength.

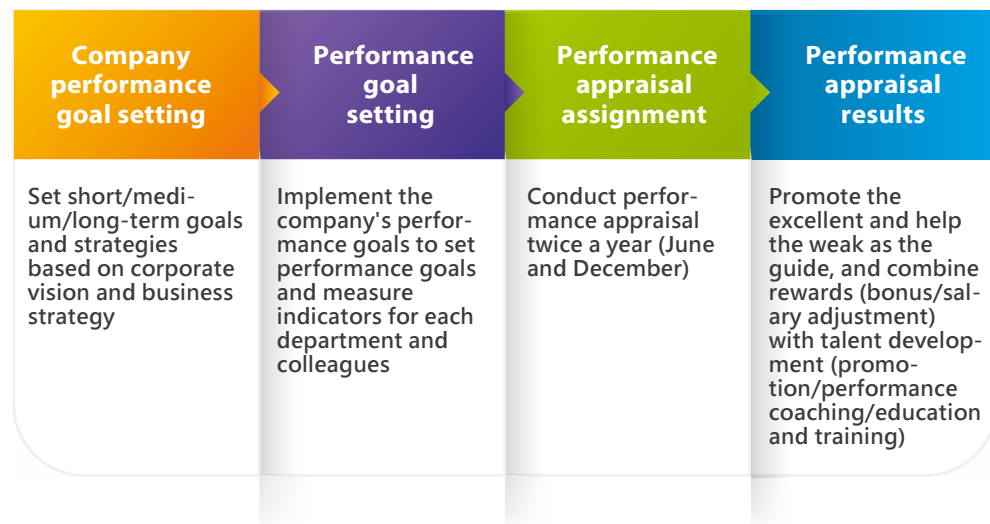
In 2022, general employees received 18,334 hours of training (average training 42.54 hours/person), management officers received 1,798 hours of training (average training 25.68 hours/person), and senior management officers received 203.76 hours of training (average training 6.37 hours/person). The average training hours for male employees were 35.65 hours, while the average training hours for female employees were 40.71 hours.

The overall education and training performance in 2022 was as follows:

- (1) A total of 202 staffing employees received over 1147.5 hours of professional and external training.
- (2) Over 50 engineering employees received over 276 hours of external training.
- (3) Over 12 new technical employees received over 29.5 hours of external training

### 4.3 Transparent and open evaluation system

We have an open and fair performance evaluation system. Through reviewing career development and after communicating with the immediate supervisor, each employee can set their annual performance targets. Performance evaluation will be conducted on these targets each year for the reference of salary adjustment, bonus distribution, and future promotion. In 2022, the percentage of employees who has been employed for 3 months receiving regular performance and career development reviews was 100%.



▲ Figure 4-24 Commendation of excellent employees

### 4.4 Generous salaries and employee benefits

To attract and retain talent and reward employees for creating performance and long-term contributions, we offer a competitive overall remuneration system and performance bonuses to ensure a reasonable and fair salary structure. Besides protecting living quality, our system also encourages employees to improve competence and create better performance.

To take care of the retirement life of employees and promote the labor-management relationship, we have established the Employee Retirement Regulations according to Article 56 of the Labor Standards Act to contribute to the labor pension fund and labor pension reserve each month in order to give pension to employees meeting the retirement requirements. (Please refer to financial report P44 for pension provision)

[https://www.topco-global.com/wp-content/uploads/2023/03/2022\\_Q4\\_Consolidated.pdf](https://www.topco-global.com/wp-content/uploads/2023/03/2022_Q4_Consolidated.pdf)

## 4.4.1 Employee remuneration

We have established a comprehensive remuneration policy and framework and performance bonus regulations for salary employees based on their education, seniority (service length), experience, and

Table 4-6 Range of employee basic salary

Year	Non-supervisor employees		Basic Wage
	Bachelor's degree	Master's degree	
2022	36,500	44,500	25,250
v.s. Basic Wage	145%	176%	

Table 4-7 Annual average earnings and median earnings of non-supervisor employees

Year	2020	2021	2022
Annual Average Earnings of Non-Supervisor	1,463,000/person	1,529,000/person	1,787,000/person
Annual Median Earnings of Non-Supervisor Employees	1,105,000/person	1,179,000/person	1,345,000/person
Annual total remuneration ratio (1)	14.03	15.91	16.86
Salary Change Ratio (2)	7.04	3.14	1.48

Note 1: Annual total remuneration ratio (times) = the ratio of the highest paid individual's annual total compensation / the median annual total compensation of other employees

Note 2: Salary Change Ratio (times) = the change rate of the annual total salary of the highest paid individual/the change rate of the median annual total salary of other employees

duties in order to attract, encourage, reward, and retain outstanding talent. Besides ensuring no differential treatment of employees based on gender, we also meet the CSR employee safety and the Company's regulations to maintain a reasonable and fair salary structure and thereby encourage employees to improve competence and create better performance.

We have introduced a reasonable performance evaluation system and combined it with promotion and rewards in order to reward or punish employees appropriately based on their performance. We have also established management regulations related to rewards and punishments and announced them on the EIP for employees to inquire and follow in order to provide them with a dependable system for reward and punishment.

In terms of the offers for employment, our pay standard for base-level employees is higher than that of the statutory requirements, and there is no gender difference.

In 2019, we began to disclose the "average earnings" and "median earnings" of non-supervisor employees in the previous year to make information more transparent and strengthen our CSR. According to the FSC

data, the 2022 “average earnings” of our non-supervisor employees were NT\$1.787 million, and the “median earnings” were NT\$1.345 million, that our overall salary is among the best in class.

Inconsideration of the Company’s operating profit and the performance evaluation results and encouragement for the long-term development of employees, we make an overall adjustment of salary each year to thank employees for their efforts and contributions in the year and encourage them to stay and share success with the Company with a raise, hoping to incentivize them to make better personal performance and create better operational performance for the Company. The range of salary adjustment in the last three years was as follows:

Table 4-8 Range of salary adjustment in the last three years

Year	2020	2021	2022
Overall salary adjustment	0%~7.5%	0%~7.5%	0.8%~24.9%
non-supervisor employees	0%~7.5%	0%~7.5%	1.9%~24.9%
supervisor employees	0%~4.5%	0%~4.5%	0.8%~8.5%

Note: This year's promotion rate has increased, and the salary adjustment rate has increased.

Profit sharing is our basic commitment to employees. To enforce our profit sharing philosophy, we offer stock ownership, stock option, and year-end bonus systems. In accordance with Article 20 of the Company’s Articles of Incorporation, “If there is profit, no less than 4% shall be appropriated as the reward for employees”. A performance bonus system has been introduced and bonuses are distributed based on the Company’s status of operations to reward employees for their efforts and performance at work.

Besides the said salary and rewards, to encourage employees to focus on the Company’s long-term operational performance to achieve the Company’s sustainable operations, we have also established the employee stock ownership trust (ESOT) to trust the management and utilization of the shares owned by employees to help the ESOT committee to accumulate wealth for employees and make the retirement life or resignation life of members more stable.

## 4.4.2 Employee benefits

The health, safety, and the rights and interests of all employees are extremely important to us. Besides arranging insurance for employees according to the Labor Standards Act and Labor Insurance Act and contributing employee pensions according to the Labor Standards Act and Labor Pension Act, we also arrange health checkups, group accident insurance, and group medical insurance for employees and announce the related personnel regulations on the EIP for all employees to inquire. Additionally, in 2022

we organized health talks including “What is Dysautonomia?” and arranged Western and traditional Chinese medical consultation to express care for employees.

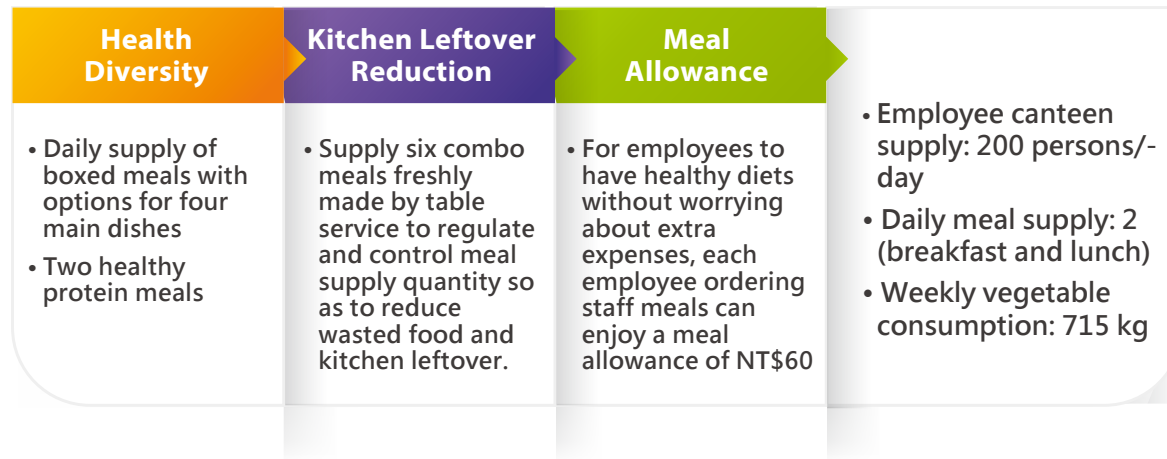
Besides the regulatory standards, we offer more benefits that employees need to help employees balance work, mental and physical health, and life.

Hence, we have designed a flextime policy, new employee mentor systems, and entertainment allowances for various employee club activities, employee travel, family days, and arts and culture appreciation. There are also other benefits, including marriage allowance, birth allowance, bereavement support payment, monthly birthday parties, nursery/daycare benefits, rewards for outstanding employees, and rewards for senior employees. At the Taipei Headquarters, we have employee canteens and a health supermarket run by affiliates to provide employees with healthy low-oil and low-salt food. In 2022, we signed the “Green Dining Declaration” and joined the “Green Diet Guide” initiative. To blend green diet with the corporate culture and encourage employees to start green diet from themselves so

as to influence their family and friends, we have implemented the employee canteen transformation.

To provide employees with a safe working environment, we have launched female employee care and related family support mechanisms, such as menstrual leave, parental leave, paternity leave, family care leave, nursery service, and paid maternity leave. Paternity leave is also granted according to the Labor Standards Act to provide employees with basic benefits to ensure the rights and interests of employees.

Although COVID-19 blocked many travel opportunities, the EWC still planned cooperation with travel platforms and offered travel points to employees for employees to travel to any destination they liked together with their family.



▲ Figure 4-25 Performance in promoting the green employee canteen

Table 4-9 Employee benefit plans

Plan Type	Item	Contents
Flexitime	Flexible work time	✔ Employees can adjust the time they start and finish work.
	Regular days off	✔ On duty five days a week and two days off.
Comprehensive EWC activities	Activities not using EWC funds	<ul style="list-style-type: none"> <li>✔ Group activities (e.g., Spring Festival celebration, year-end party, family day, sports meeting, leisure sports, and competitions), employee club activities (e.g., badminton club), and service activities (e.g., charitable activities).</li> <li>✔ Gifts on three folk festivals and specific festivals.</li> <li>✔ Obligatory or voluntary activities of employees.</li> </ul>
	Activities using EWC funds.	<ul style="list-style-type: none"> <li>✔ Self-support activities (e.g., employee travel, health checkups, group buying, and other leisure entertainment).</li> <li>✔ Event expenses can be claimed within the limit of personal EWC funds (employees must pay the full amount at contract stores). Employees pay the balance exceeding the limit.</li> </ul>
Regulatory benefits	Regulations-related benefits	<ul style="list-style-type: none"> <li>✔ Contributions for Labor Insurance, National Health Insurance, and pensions.</li> <li>✔ Allowances and support payments: birth, marriage, and bereavement.</li> </ul>
Other benefits	Mental and physical health and career development	<ul style="list-style-type: none"> <li>✔ Personal car and motorcycle parking spaces for employee application.</li> <li>✔ Breastfeeding (lactation) rooms: A safe, comfortable, and friendly breastfeeding environment is established to maintain the rights of breastfeeding female employees.</li> <li>✔ The employee canteen at headquarters supply low-oil and low-salt healthy food to employees.</li> <li>✔ Dormitories for female employees and expatriates.</li> <li>✔ Financial support for education, training, and on-the-job training.</li> <li>✔ Health checkups and health consultation services.</li> <li>✔ Scholarships and grants for the children of employees</li> <li>✔ Nursery/daycare benefits</li> <li>✔ Commendation and rewards for senior employees.</li> <li>✔ Rewards for foreign languages.</li> <li>✔ Employee stock ownership trust (ESOT).</li> <li>✔ Commendation and rewards for outstanding employees.</li> </ul> 

## 4.5 Workplace safety and labor-management harmony

We respect human rights, equality, and non-discrimination; value labor-management harmony; and continue to improve OH&S performance to build a working environment that meets humanitarian needs and physical and mental health. We are committed to improving human rights protection. Apart from providing an equal and safe working environment free from discrimination and harassment, we also organize various events and education and training activities to maintain the mental and physical health of employees and their work-life balance and promote the relevant concepts over the EIP periodically. Our practices on human rights protection include:

1. Abide by the laws and regulations of the location of operations and provide a safe and healthy working environment.
2. Provide equal employment and ensure no differential treatment (non-discrimination) based on race, gender, sexual orientation, age, nationality, political affiliation, religion, marital status, and disabilities.
3. Forced labor, child labor, and any behavior that can constitute child labor are not allowed. Youth labor aged between 16 and 18 is not allowed to engage in work with potential dangers or that may be hazardous to health, including working night shifts or overtime.
4. Respect employees' rights to freedom of association, participation in peaceful assembly, labor-management meeting, and collective bargaining.
5. Build unfettered communication channels and hold regular labor-management meetings and OH&S Committee meetings to protect the rights and interests of both parties.

### Gender-equal workplace

We have established the Measures for Prevention, Correction, Complaint and Punishment of Sexual Harassment in the Workplace and grievance channels. Related information

including management regulations, grievance hotline, and grievance email is disclosed at the workplace to protect employees from the threat of sexual harassment and create a friendly workplace. In 2022, no sexual harassment was reported.

### Employee health care

As employees are the Company's important intangible asset, we value the mental, physical, and spiritual health of employees. We have established an infirmary equipped with a sphygmomanometer and scale for employees to measure blood pressure and body weight. We have also installed first-aid kits and beds there to provide first responses to accidents that need minor medical care. In maternal health care, we have established breastfeeding rooms equipped with dedicated refrigerators. In 2022, we added emergency rescue devices to the breastfeeding rooms to ensure timely treatment in emergencies.

Each year we team up with local leading healthcare institutions and fund the health checkup of all employees every two years and employees aged over 40 years old every year. Apart from offering care for middle- and elderly employees better than the regulatory requirements, we also show our much care for the health of all the employees. In 2022, we funded the health checkup of 430 employees over 40 years old, and a total of 280 employees, about 65%



of full-time employees, and the total expenses for all the employee health checkup were about NT\$3.39 million. Due to COVID-19, the checkup rate has been lower in the last three years because employees avoided visiting healthcare institutions.

In 2022, we introduced various health checkup plans to employees in collaboration with medical institutions such as the Taipei Medical University Hospital, Cathay General Hospital (Dunnan, Neihu, Hsinchu), Chi Hsin Health Service, Full Health Clinic, Lin Shin Hospital, China Medical University Hospital, Chi Mei Medical Center, and E-Da Dacheng Hospital. In addition to the general labor physical examination items, the health

examination plan is also aimed at cardiovascular and gastroenteroscopy. In 2022, according to the Labor Health Protection Regulation of TOPCO employees, the health checkup of 496 employees and actually a total of 425 employees, about 86% of full-time employees; the other employees who didn't receive the health checkup were new employees (they had submitted a health checkup report on their arrival) and the ones with no need for the health checkup that year.

Based on the checkup results, we implement graded health management for employees and case management and care for those with health problems. Additionally, we arrange health talks based on the physical and mental health conditions and needs of employees, particularly for middle- and elderly employees, to strengthen the mental adaptation needs and care of employees in daily life and health. We began to arrange medical specialists to provide in-house individual consultation on health checkup reports or mental/physical health. In 2022, we invited Dr. Happy Kuy-Lok Tan, contract physician at Linkou Chang-Geng Memorial Hospital and psychiatrist at Taoyuan Psychiatric Center, and traditional Chinese medicine physicians to provide in-house health consultation services for about 109 employees.

Table 4-10 Status of employee health checkups in the last three years

Year	2020	2021	2022
Number of participants	213	210	280
Sum of funding (NT\$)	192	307	339

Note: In 2020, we funded the health checkup of employees aged over 40 years old. In 2021, we funded the health checkup of all employees. Due to COVID-19, the checkup rate in the last two years was lower because employees avoided visits to healthcare institutions.

Table 4-11 Status of health consultation of employees in the last three years

Year	2020	2021	2022
Number of Employees	112	128	109



◀ Figure 4-26 Physicians were invited to provide in-house professional mental and physical health consultation for employees

Table 4-12 Statistics on contract physicians and physical and mental health consultation

2022	Occupational specialist consultation	Mental and physical health consultation
Service frequency	6	23
Persons receiving service	18	91

In addition to health management and care, we also provided healthy exercise facilities and organized various exercise courses for employees in 2022. Employees could make smart use of their time by exercising conveniently after work to avoid traffic congestion and enjoy discounts for taking exercise courses.

When COVID-19 began to slow at the end of 2022 after affecting our normal lives in recent years, we restarted TOPCO Family Day. On the event day, we arranged various experience and challenge activities and challenging games for adults and children to exercise to promote physical and mental health. Apart from enabling employees to have a great time with their family and develop friendships with other employees, this one-day event also let employees and their family understand more about TOPCO's corporate culture and identify with TOPCO's core values so as to demonstrate teamwork and cohere morale.



▲ Figure 4-27 XPORTS healthy exercise courses



▲ Figure 4-28 TOPCO Family Day 2022



▲ Figure 4-29 Fun games on TOPCO Family Day

## Valuing safety and health quality

For employees to work without worrying about safety and health, we have established the Occupational Safety Office in accordance with law and implemented the ISO 45001 OH&S Management System which covers the headquarters, Hsinchu and Hukou offices, a total of 312 participants, about 60%, not include the long-term overseas employees, and we passed ISO 45001 certification in Oct. 2022. According to Hazard and Risk assessment control process to assess the risk, all the risk levels are acceptable, and the advanced action is to apply the emergency rescue training plan to increase EMG resues. Through the incident and investigation management procedure, we continuously improve the OH &S management.

To practice a workplace safety culture, we begin with employee safety education. For new employees, we arrange OH&S education and training on the date of arrival. For in-service employees, we plan workplace fire training and drills periodically. Additionally, apart from posting notices at points prone to danger according to customer requirements, we also organize labor safety and health workshops for in-service employees periodically to ensure the safety of employees, environment, and equipment.



▲ Figure 4-30 Event Investigation threatment Process



▲ Figure 4-31 Hazard Identification and Risk Assessment Process

Table 4-13 OH&S training records in 2022

Course name	Number of participants	Hours of training
ISO 45001: Description of Hazard Identification and Risk and Opportunity Assessment	17	34
ISO 45001: Description of Management System Standards, Organization Situation Identification, and Stakeholder Information Collection	17	34
ISO 45001 Guidance	17	204
ISO 45001 Guidance: Internal Audit Training	24	144
Human Factors and Ergonomics: Introduction to Ergonomic Hazard Prevention Plans and Practice	65	65
Human Factors and Ergonomics: Introduction to Office Human Factors and Ergonomics	73	73
Health Promotion: Building Friendly Workplaces Together	75	75
Health Promotion: Eye Health Protection - Seeing a Needle in the Haystack	79	79
Health Promotion: Eat Cleverly for Better Health	74	74
Health Promotion: Metabolic Syndrome- The Invisible Health Killer	84	84
Introduction and Practice of Workplace Labor Safety and Health	222	684
2022 Accident Prevention and Rescue Workshop and Drill	47	188
Hazard Identification and Risk Assessment Training	48	144
Fire Prevention Management Education and Training	73	110
Occupational Safety and Health Act	152	164
Occupational Safety and Health Management Regulations	161	124
Fire Watcher Education and Training	113	75
Health Talks (What is Dysautonomia? A Brief Introduction to Common Cancer Types in Taiwan, A Brief Introduction to Workplace Stress, Overwork Prevention, Understanding Influenza)	462	268
Contractor Occupational Safety and Health Education and Training (6 hours)	4	24
Occupational Safety and Health Education and Training (6 hours)	3	18
Safety and Health Education and Training for Class 1-3 Managers of Occupational Safety and Health Affairs	9	206
Safety and Health Education and Training for First Responders (including recurrent training)	22	356

## Unfettered comprehensive communication channels

To improve unfettered communication channels between the Company and employees, we have set up a public mailbox and email managed by senior supervisors for employees to freely make constructive proposals and to make recommendations for the Company and complaints to ensure the timeliness and effectiveness of communication. Labor representatives will reflect the issues and needs for occupational safety and health at the Occupational Safety and Health Committee meeting.

TOPCO has an OH&S Committee, 15 persons in total, which consists of Dept. supervisors, EHS personnel, medical staff, and labor representatives who should be more than 1/3 of the above. The OH&S Committee meeting is presided over by the management representative, held once a quarter to discuss OH&S issues, performance management, and suggestion, etc. The employees can make suggestions and demand about OH&S by mail box, e-mail or contact directly with Occupational Safety Depts. or the labor representatives.

Based on the Company's "Code of Ethical Conduct" and "Whistleblower Policy", we encourage employees to report any unethical or unlawful behavior.

Besides handling all reports confidentially and protecting the information and safety of whistleblowers, we will reward them based on the situation. Additionally, we have established a special mailbox for sexual harassment complaints to provide employees with a working environment free of sexual harassment. We also take appropriate precautionary action and corrective action and give necessary punishment.

Additionally, we have established the workday weekly report system for employees to reflect and communicate opinions with management at any time and to provide employees with comprehensive channels for communicating with the Company. By publishing the internal TOPCO Family Digital Journal, we enable employees understand the activities of the Company.

## Employee care

We have implemented the Employee Assistance Program (EAP) to help employees solve problems and regain happiness in order to demonstrate the best work capacity. The scope of EPA covers psychological, legal, health and medical, and financial consultation services.

TOPCO has not established a labor union, so no group agreement has been signed. To realize a friendly workplace for employees to work without worries, labor-management meetings and Occupational Safety and Health Committee meetings are held quarterly. Representatives elected by employees and appointed by the Company discuss labor-management relations, labor-management cooperation, and occupational safety and health issues. In 2022, no environmental impacts, labor problems, or offences against human rights were reported, handled, or resolved through official grievance mechanisms. Also, there were no labor-management disputes. The labor-management relationship was harmonious, and no impacts or losses due to labor-management disputes were reported.



▲ Figure 4-32 TOPCO Family Digital Journal



Highlights  
2022

## V. Care for sustainable environmental development

- ▶ Join the SBTi initiative, commit to 2050 as the net zero goal, and plan short-term and long-term reduction strategies.
- ▶ Join the Greenpeace "RE10x10" initiative and promise to introduce and use renewable energy in 2024.
- ▶ Introduce the ISO14001 environmental management system, build an integrated environmental management system, and use saving and pollution reduction as the method.
- ▶ Use the ESCO system to gradually develop building digitization.
- ▶ Taoyuan A7 Water Recycling Center was awarded the Special Award, Best Design Category, FIABCI-Taiwan Real Estate Excellence Awards.
- ▶ Anyo Santé Premium Silver Perch Essence was
  - (1) awarded the Bronze Award at the 24th National Biotechnology and Medicine Care Quality Award and Symbol of National Quality (SNQ) Mark.
  - (2) awarded the Gold Award at the Monde Selection Quality Awards for five consecutive years.
  - (3) passed the Health Food Mark certification of the Taiwan FDA for effective fatigue prevention.

## TOPCO biodiversity policy

Biodiversity has been supplying the daily necessities for human survival over time. For example, food, medication, construction materials, clothes, chemicals, and various daily life substances are all supplied by various living organisms, and human beings enjoy the multiple values and achievements brought by biodiversity.

The over-consumption of the Earth's resources during the high development of human society has brought forth crises of ecological imbalance and biodiversity loss. Maintaining biodiversity also means protecting cultural diversity. Seeking environmental protection and maintaining biodiversity are the only way for human beings to enjoy social progress and economic balance. TOPCO's policy is to:



### Our policy practice is committed to

1. Ensuring all subsidiaries engaging with biodiversity relating to their business operations demonstrate the influence of responsible procurement.
2. Continuously joining various initiatives and activities for employees to understand more about the potential crises of biodiversity through different ways and care about and practice biodiversity.
3. Promoting and arousing concerns about environmental protection and climate change in employees and their families and encouraging the use of natural resources that are most important to biodiversity.
4. Raising the awareness of biodiversity and conservation affairs in employees, customers, suppliers, and those having business with the Company.
5. Strengthening the development of recycling technology in environmental engineering and fulfilling CSR with core competencies.



▲ Figure 5-1 Review of TOPCO's impact on biodiversity

In view of the global situation, climate change, resource depletion, and energy shortages have become important issues for enterprises. Upholding the commitment to environmental sustainability, we began to use the new green corporate identity in 2015 to represent vitality and announced our determination to maintain environmental protection.

As a materials and equipment distributor, we provide knowledge and technical services and engage in no manufacturing activities. Although we do not produce wastewater or exhaust, we still uphold our responsibility for environmental sustainability. By constantly implementing energy conservation and carbon emissions reduction at the HQ building through energy conservation, water conservation, and paper conservation, we deeply understand the significant environmental impact of products and services. Hence, from the selection of product sources, packaging, and recycling, we carefully consider their potential environmental impacts in order to reduce their environmental burdens to contribute to our environment.



## 5.1 Energy conservation and management

### Energy management strategy and carbon reduction management

Committed to enhancing the energy efficiency of operational sites, we set the ISO international environmental standard as the standard for the annual management approach and various energy conservation measures. To realize smart energy conservation, we monitor and manage air conditioning,

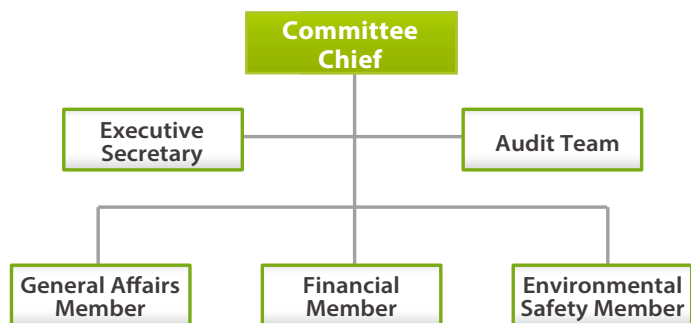
lighting, electricity consumption, and electricity-using equipment with the Internet of Thing (IoT) using the energy service company (ESCO) system. Through building digitization, we implement electricity management, save energy, and cut expenses.

Table 5-1 Energy management strategy and carbon reduction management

Employee Consensus on Energy Conservation	Energy management Item	Monitoring Methods	Action plans	2023 Targets
1. Turn off lights after use. 2. Save water. 3. Take the stairs more often. 4. Use paper on both sides. 5. Report anomalies immediately.	ESCO building digitization Management of electricity consumption	Lighting facility monitoring Space temperature and CO2 monitoring Equipment automation control	Build the thermal-sensing lighting system Keep the aircon and chiller filter clean. Purchase Green Mark products	-3%
	ESCO building digitization Water consumption management	Water meter reading monitoring	Use two-stage flush Use pressured water-efficient taps	-1%
	Company car fuel management	Mileage management	Carpooling for business trips Optimal route planning Smart use of videoconferencing	-3%
	Paper consumption management	OA equipment login control	Use e-document with the ERP system Registration for claiming paper	-2%
	Wastewater management	Discharge of domestic sewage only		N/A
	Waste management	Recycling-Green Procurement Zero Waste-Lease POS management system	Professional recovery and disposal of waste cartons Professional destruction (incineration) of expired documents Accurate of the number of employee meals to reduce kitchen leftover Discounts for using own cups	-1%
GHG emissions				-4.2%
Carbon reduction management	1. Internal carbon pricing for 2022: US\$250/t. Review annual performance based on the annual linear reduction by 4.2% of SBTi. Calculate the carbon cost for the amount not meeting the reduction target for the reference of carbon risk management and assessment. 2. Use of carbon fee income: R&D of low-emission items and education and training for carbon management. 3. Signed the ESG Index-Linked Loan with E.SUN Bank to link index performance with the loan interest rate. 4. Established the “Regulations for Management of Sustainability Innovation Proposals” to encourage employees to brainstorm innovation for sustainable development and reward their efforts.			

## GHG verification and management

Out of concern about global climate change, smart use of resources, and CSR fulfillment, besides performing GHG emission inventory and establishing an emission data system according to the ISO standards, we have also established documented verification procedures for the reference of effective GHG emissions and improvement in the future. Hence, we began to develop the GHG management system and implement GHG verification in 2018 to effectively manage GHG emission risks and further improve our sound environmental protection image.



▲ Figure 5-2 Organization of the GHG Inventory Promotion Committee

To ensure the effective operation of the GHG management system, we have established the GHG Inventory Promotion Committee to effectively implement the GHG management system through the committee chief, executive secretary, audit team, environmental safety member, financial member, and general affairs member. Figure 5-2 shows the organizational chart of the Committee:

We began to persistently inventory GHG emissions in 2019, produce the “GHG Inventory Report” every year, and obtained the GHG verification statement. In accordance with ISO 14064-1, we inventoried and reported GHG emissions based on the verification standards of the protocol. The verification data was reasonably measured and calculated, and the verification results found no nonconformities with the substantial limits, and the verification data met the reasonable level of assurance.

Table 5-2 Statistics on GHG emissions in the last three years

Verification period	2020	2021	2022
Direct GHG emissions(Category 1)	385.6206 tCO <sub>2</sub> e	334.2366 tCO <sub>2</sub> e	334.2371tCO <sub>2</sub> e
Energy indirect GHG emissions (Category 2)	315.5690 tCO <sub>2</sub> e	791.7695tCO <sub>2</sub> e	741.2594tCO <sub>2</sub> e
Transport indirect GHG emissions (Category 3)	-	2362.2033 tCO <sub>2</sub> e	2,788.5488 tCO <sub>2</sub> e
Use products indirect GHG emissions (category 4)	-	227.2711 tCO <sub>2</sub> e	233.8426 tCO <sub>2</sub> e
Total GHG emissions	1,177.390 tCO <sub>2</sub> e	1,075.496 tCO <sub>2</sub> e	1,140.2234 tCO <sub>2</sub> e
Carbon emission intensity	0.0000048%	0.0000052%	0.0000042%

Note: 1. Carbon emission intensity = carbon emission / revenue

2. In 2020, the scope of category 3 and category 4 has not been checked; from 2021, the verification standard should be converted to: ISO14064-1:2018, and category 3 and category 4 inventory data will be added

Electricity and fuel for transportation are the main sources of our GHG emissions. In response to the UN SDGs and CSR development, we enforce our environmental protection and energy conservation measures featuring “environmental protection, energy conservation, and love Earth” in routine operations. In response to the SBTi 1.5°C scenario, we draw up countermeasures (base year 2021) to achieve linear reduction of GHG emissions by 4.2% each year and to achieve carbon neutrality by 2050. Total emissions in 2022 will increase by 6% compared to 2021. The main reason is that during the epidemic period in 2021, there will still be shunt work, and the energy consumption will be greatly reduced. This highlights that the overall energy consumption will increase after returning to normal attendance in 2022, and

the power factor will also increase this year. (The carbon emission coefficient of electricity in 2021: 0.502 kg CO<sub>2</sub>e/kWh; the carbon emission coefficient of electricity in 2022: 0.509 kg CO<sub>2</sub>e/kWh); but if viewed in terms of carbon emission intensity, there will be a significant decline in 2022.

### Short-, medium-, and long-term mitigation and adaptation plans

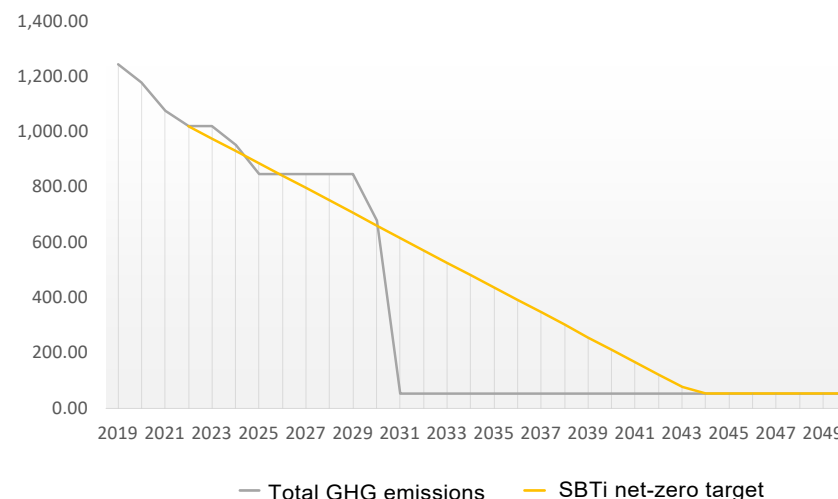
In 2022, we began to set the annual GHG reduction at 4.2% based on the Science-Based Targets initiative (SBTi) as the pathway to achieve net-zero emissions in the future. Carbon reduction targets (based year 2021):

**Target 1: Reduce Scope 1 and 2 emissions by 95% (base year 2021) by 2030 and achieve carbon neutrality by 2050.**

**Target 2: Reduced emissions from “Upstream Transportation and Distribution” of Scope 3 by 63% over 2021 until 2035.**

Table 5-3 Response planning for Net-Zero 2050 action

Base Year 2021	2030	2035	2050
Scope 1	-95%		-100%
Scope 2	-95%		-100%
Scope 3 (Upstream Transportation and Distribution)		-63%	-100%
Net-Zero Action Plan	<ul style="list-style-type: none"> <li>(1) Replace all company cars with EVs by 2030.</li> <li>(2) Green power implementation plan: 10% in 2040, 25% in 2025, 100% in 2030</li> </ul>	<ul style="list-style-type: none"> <li>(1) Encourage upstream supplier to build plants nearby to shorten transportation distance.</li> <li>(2) Centralize procurement to reduce transportation frequency.</li> <li>(3) Reduce inventories by direct purchase as much as possible.</li> <li>(4) Use electric vehicles for inland transportation.</li> <li>(5) National policy: Use 50% of electric trucks.</li> <li>(6) Strengthen transportation mode change of the three major suppliers: from air into sea.</li> </ul>	<ul style="list-style-type: none"> <li>(1) 50% sustainable fuels for flight fuels.</li> <li>(2) Carbon neutrality for net-zero.</li> </ul>



▲Figure 5-3 Net-Zero 2050 roadmap.

## Electricity consumption management

Progressive development of building digitization using the ESCO system. In electricity consumption for lighting, to enforce environmental protection and energy conservation, we began to progressively replace all lamps with LED lamps in 2013. Also, we installed sensor lighting fixtures at the motorcycle parking lot and turn off office lighting for 1.5 hours each day. In terms of air conditioning, we set the startup sequence through the remote monitoring devices under the energy conservation project. Besides automatically turning air conditioning on and off at 07:00 and 19:00, and the temperature of each floor is set to reduce electricity consumption. Additionally, chillers, elevators, and air conditioner fans are maintained regularly, and some elevators are shut down on Saturdays, Sundays and national holidays to reduce electricity consumption.

The total electricity consumption in 2022 will increase by 14% compared with that in 2021. The main reason is that during the epidemic in 2021, there

Table 5 4 Total electricity consumption in the last three years

Unit: kWh

Electricity consumption information (year)	2020	2021	2022
Total electricity consumption of telecommunication facilities	2,161	2,391	2,067
Total electricity consumption of public facilities	580,000	535,606	649,518
Total electricity consumption of 1-9F	771,840	734,434	771,891
Other business locations	108,245	143,846	197,567
Total	1,462,246	1,416,277	1,621,043
energy consumption density	0.0061%	0.0068%	0.0057%

Note: energy consumption density = total electricity consumption / revenue

will still be shunt work, which highlights the increase in 2022 in comparison. However, if viewed in terms of energy intensity, there will be a significant drop in 2022. In the following year, we will continue to require electricity consumption management and regularly collect electricity consumption data to report to the supervisor. At the same time, we will educate and educate colleagues to achieve the effect of saving electricity and energy, and manage and adjust reasonable contracted electricity consumption capacity at any time. Set an energy-saving target for the next year: electricity consumption will be reduced by 3% compared to 2022.

## Transportation

At TOPCO, we have a total of 77 company cars divided into officer (personal) cars and business cars. Besides equipping all company cars with GPS (except for officer cars), we also set mileage limits and maintain regular maintenance as necessary to ensure vehicle condition to maximize their efficiency. Additionally, the better the vehicle condition is, the less environmental impact company cars will cause. For vehicles exceeding the mileage limits, breaking traffic regulations, and having abnormal fuel consumption, we will follow up and manage them and make improvement to ensure the annual reduction of fuel consumption. In 2022, due to business needs, 3 more vehicles will be added, and the fuel consumption of vehicles will increase slightly by 0.7%. However, if viewed in terms of energy intensity, there will be a significant drop in 2022.

Table 5-5 Total fuel consumption in the last three years

Unit: liter

Company car use	2020	2021	2022
Fuel consumption	144,871	125,782	126,741
Number of company cars	79	77	80
energy consumption density	0.00061%	0.00061%	0.00045%

Note: energy consumption density = total oil consumption / revenue

## Paper consumption management

Through centralized procurement, we unify the lease of multi-function printers on all floors of the HQ building and replace them with new equipment when the three-year lease is due to maintain equipment in the best condition and enhance equipment efficiency and performance. All multi-function printers on each floor are equipped with access control to facilitate management units to effectively manage paper consumption through system setup and analyzing the paper consumption of each department with statistical techniques.

In the future, we can make continual improvement through constant monitoring and provide correct data management reports for all units to review the fairness of paper consumption in order to request users to take self-control through this transparent model for machine paper consumption management to avoid a waste of resources. We will also enhance the promotion of energy conservation, carbon reduction, and paper conservation.

In 2022, total paper consumption was 6% less than in 2021. Annual target for paper consumption in 2023: 2% less than in 2022.

Table 5-6 Total paper consumption in the last three years

Unit: pieces

Paper use	2020	2021	2022
Paper consumption	725,000	692,500	650,000

## Water management: water and effluent

We have no factories and all operational sites are office buildings. Hence, the water consumed by all of our facilities is tap water 100% supplied by the Taipei Water Department and Taiwan Water Corporation. All water is domestic water use. As our services do not engage in production process

that produce industrial wastewater, we discharge only domestic sewage. As most of our operational sites are connected with the buildings of local communities, domestic sewage is discharged in accordance with law, and the total discharge cannot be exactly measured. In water consumption, we enhance control at the source. For example, we install water-efficient shower heads and taps in the pantries and toilets on each floor of the HQ building, enhance internal promotion of the concept and knowledge of water saving, and post “save water” slogans near water-using equipment.

The total water consumption in 2022 will increase by 11% compared with 2021. The main reason is that during the epidemic in 2021, there will still be diversion to work, which highlights the increase in 2022 in comparison. Set an annual goal for the next year: save 1% of water consumption compared to 2022.

Table 5-7 Total water consumption in the last three years

Unit: MT

Water sources	2020	2021	2022
Domestic water	5,775	4,967	5,098
Other business locations	329	301	736
Total	6,104	5,268	5,834

## Waste management

Waste sorting, food waste recycling, and resource recycling are implemented within the office. By sorting and recycling the waste produced in the office, the environmental impact is reduced. To implement “cradle to cradle” for waste, we rent office automation machines, e.g., photocopiers, computers, and company cars, to achieve waste to producers.

In addition to supplying boxed meals, we offer “made to order” table

service for six types of set meals each day to regulate and control order quantity, prevent food waste, and reduce kitchen waste. Through this, we aim to reduce carbon and love Earth with real action by protecting the environment from daily food consumption. We also encourage employees to prepare their own tableware to reduce the consumption of single-use products.

As we do not have our own factory, we do not produce industrial waste, and only produce domestic waste. Domestic waste is cleaned up by professional cleaning companies and transported either for landfilling or incineration. Recyclable waste is sorted or recycled by cleaning companies.

Compliance with the Environmental Protection Act: No non-compliance with the Environmental Protection Act was reported in 2022.

Table 5-8 Statistics on waste in the last three years

Unit: MT

Year	2020	2021	2022
Recyclable	3.00	2.60	2.5
Non-recyclable	20.15	19.10	15.92
Document destruction	1.22	1.90	0.95
Recycling and reuse rate	12%	11%	13%

### Carbon reduction with digital technology: Smart use of videoconferencing

We have business and service locations across the globe. In routine operations, we promote and encourage employees at different locations to communicate and discuss using videoconferencing in order to enhance operational efficiency and save time and cost for traveling between locations to achieve energy conservation and carbon reduction. Currently, there are

five sets of videoconferencing equipment under the central control and regular maintenance of the administrative unit to ensure their optimal condition.

### “Be Green” actions

#### Business process digitization

Improve operating procedures and approve documents electronically to reduce paper consumption in the office.

#### e-Marketing resources

Promote digital company introductions in traditional Chinese, simplified Chinese, English, and Japanese to reduce paper publicity materials.

#### Light clothes and no neckties in summer

To support the government’s energy conservation and carbon reduction measures, male employees only need to wear shirts and do not have to wear neckties between May and September each year to support energy conservation and carbon reduction through real action.

## 5.2 Implementation of the environmental protection policy

Apart from upholding the Company’s environmental maintenance responsibility, we also support energy conservation and environmental protection. Hence, we assist customers in carrying out their responsibility, using eco-friendly products, and promoting recycled products. We also encourage employees to take courses relating to corporate environmental management to enforce the environmental management policy. We further continue to capture climate change risks to progress towards the milestones of eco-friendly and sustainable business operations.

## 5.2.1 Partner strategy

Request suppliers to supply products that comply with environmental regulations to meet customer requirements with safe, eco-friendly, and best-quality products.

Major suppliers must pass the ISO 14001 certification. The manufacturing processes and products of major chemical suppliers must comply with the EU Restriction of Hazardous Substances (RoHS) directive.



▲ Figure 5-4 ISO 14001 Certification Mark and RoHS Directive Mark

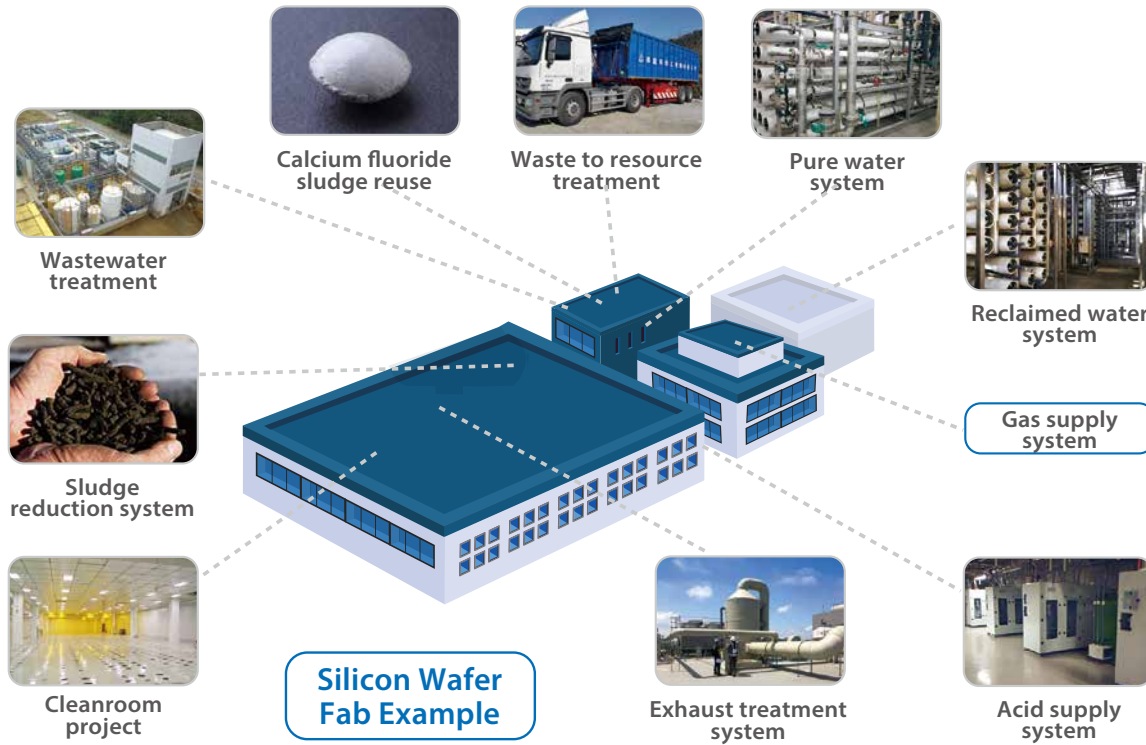
## 5.2.2 Self-actualization

We actively maintain the certification of the ISO 9001:2015 Quality Management System. In 2022, we implemented the ISO 45001:2018

OH&S Management System and integrated it into the ESH system certification. Currently, we are implementing the ISO 14001 Environmental Management System. We are confident to provide customers with the best-quality service and complete EPC guarantee. Additionally, ECO Technical also provides employees with a safe and trustworthy working environment. With a proactive and creative attitude, ECO Technical will always be committed to environmental engineering to realize the corporate responsibility to serve people and love Earth. In environmental management courses, we continued to plan the Introduction and Practice to OH&S course in 2022 for employees to understand the current international green product standards and specifications and the OH&S management system.

## 5.3 Green energy and recycling for sustainable innovation

Since our establishment 30 years ago, we have specialized in the fields of semiconductors and optoelectronics. Over 90% of our sales are semiconductor materials, and the rest includes semiconductor cleaning equipment, high-tech plant environmental engineering, calcium fluoride sludge recovery and recycling, and solar power integration services. In solar system engineering, we have a complete solar product supply chain, EPC capacity, an operation and maintenance team, and a cloud monitoring system. So far, we have completed an installed capacity of up to 40MW. To develop fishery and electricity symbiosis, we have signed MOUs with Taipei University of Marine Technology, National Penghu University of Science and Technology, and National Kaohsiung University of Science and Technology to cultivate future talent. We have initiated the research and development of smart aquaculture. By integrating the solar power stations and environmental engineering services, we develop fishery and electricity symbiosis to connect with the international trend of net-zero emissions.



▲ Figure 5-5 TOPCO's recycling engineering technology

### 5.3.1 Taiwan's first low-impact development Wenqing Water Park for sustainable ecology

After the Taoyuan Metro started service in 2017 and Linkou urban development, Linkou has become a transportation hub linking Taoyuan City, New Taipei City, and Taipei City. The affordable housing in Zone 4 at station A7 in Linkou Special District has been completed and

handed over. To solve the domestic sewage problem in the area around station A7 and reduce the burden of river pollution, it is necessary to build a water recycling center to recycle and reuse water resources, reduce environmental pollution, and improve living quality.

Wenqing Water Recycling Center revolutionizes the stereotype of traditional sewage treatment plant by building sewage treatment facilities underground to effectively use the overground space. By designing the center into a park, we have totally flipped the neighbors' negative image about sewage treatment plants: dirty and odorous. Besides purifying water, Wenqing Water Recycling Center also provides residents with a leisure space and creates a local landscaping image.

This is Taiwan's first water recycling center with a low-impact development, smart, low-carbon design to effectively improve the domestic sewage production of the population moving into the area around Station A7, reduce the burden on rivers, and improve the water permeability and water preservation capacity up to 1,593m<sup>3</sup> of rainwater. Besides reducing surface runoff, this can make the water resource center become a small reservoir during droughts. So far, the average sewage treatment capacity of phase I is 4000CMD. As the project advances, besides providing water for citizens to irrigate and wash, the output water is also supplied to Hwa Ya Technology Park and Linkou Industrial Park III and IV.

Subsidiary ECO Technical improves the water permeability and water preservation capacity of the site to store up to 1,593m<sup>3</sup> of rainwater in rainfall to reduce





▲ Figure 5-6 Front look of the Taoyuan Metro Station A7 Water Recycling Center



▲ Figure 5-7 Taoyuan Metro Station A7 Water Recycling Center



▲ Figure 5-8 Received the 5th Public Construction Project Golden Quality Award organized by the Taoyuan City Government from Taoyuan City Mayor Cheng Wen-tsan.



▲ Figure 5-9 Received the 5th Public Construction Project Golden Quality Award organized by the Taoyuan City Government from Taoyuan City Mayor Cheng Wen-tsan and the 21st National Public Construction Project Golden Quality Award from by the Executive Yuan.

surface runoff and turn the water recycling center into a small reservoir during droughts. The park implements low-impact development, smart, and low-carbon design concepts, becoming a model for Taiwan's water recycling center. The park management center carries a clean and curved wall design. On the ground, a landscaping park is designed in a loop shape symbolizing a Möbius loop to correspond to the design concept of the water recycling center of co-existence with nature and endless circulation, as well as circular water recycling and reuse.

- After completion, the capacity of the A7 Water Recycling Center can reach up to 12,500CMD.
- After the completion of phase I, the sewage treatment capacity is 4,000CMD.
- Awarded the 2020 Special Award, Best Design Category, FIABCI-Taiwan Real Estate Excellence Awards.

- Awarded the 2021 Design Award and Construction Award in the Facility Category of the 5th Public Construction Project Golden Quality Award.
- Awarded the Public Building Landscaping Category of Yuan Ye Awards 2021.
- Awarded the Healthy City Award-Resilience and Innovation Award at the 13th Taiwan Healthy and Age-Friendly City Awards in 2021.
- Awarded the Best Public Construction/Best Space Renovation/Construction awards at the Chinese Architectural Golden Stone Award in 2022.
- Awarded the Gold Award in the Construction Category and Environmental Culture Category at the FIABCI-Taiwan Real Estate Excellence Awards in 2022.
- Awarded the Gold Award in the Public Construction/Construction/Sewage Treatment Engineering categories at the National Golden Award for Architecture in 2022.

Table 5-9 ECO Technical water treatment/recycling system performance

Year	Client	Location	Project name	Treatment volume (CMD)
2022	United Microelectronics Corporation (UMC)	STSP Park	UMC DI ACF-ACTIVE CARBON (consumable replacement service, no treatment volume was measured)	N/A
2022	United Microelectronics Corporation (UMC)	STSP Park	UMC 12AP5 Nitrogen Wastewater Treatment Plant Operations	905
2022	United Microelectronics Corporation (UMC)	STSP Park	U UMC NH3 SYSTEM CATALYST (consumable replacement service, no treatment volume was measured)	N/A
2022	United Microelectronics Corporation (UMC)	STSP Park	UMC WWT Ammonia Nitrogen System NH3IA-712 Calibration and Maintenance (maintenance service, no treatment volume was measured)	N/A
2022	United Integrated Services Co., Ltd. (UISCO)	Houli Fab	Micron Houli Fab A3 IPAL & SLS SYSTEM (MW57.0) - Phase 1 Project	1,240
2022	United Integrated Services Co., Ltd. (UISCO)	Houli Fab	Micron Houli Fabb A3 WWT	16,552
2022	United Integrated Services Co., Ltd. (UISCO)	Houli Fab	UNISCO-Micron F16 IPAL Water Pollution Control Measures Change (maintenance service, no treatment volume was measured)	N/A
2022	Tainan City Water Resources Bureau	Tainan City	Jisui River and Yansui River Upstream-Water Purification Plant Operations and Technical Services (Sinsi Drainage Water Purification Plant)	4,281.42
2022	Tainan City Water Resources Bureau	Tainan City	Jisui River and Yansui River Upstream-Water Purification Plant Operations and Technical Services (Hutou River Drainage Water Purification Plant)	5,257.87
2022	Tainan City Water Resources Bureau	Tainan City	Jisui River and Yansui River Upstream-Water Purification Plant Operations and Technical Services (Dajaotui Drainage Water Purification Plant)	1,547.76
2022	Micron Technology, Inc. Taiwan (Micron Taiwan)	Hwa Ya Technology Park	Micron Taiwan A1 AWT MBR C/A Set Membrane Replacement (consumable replacement service, no treatment volume was measured)	N/A
2022	Micron Technology, Inc. Taiwan (Micron Taiwan)	Hwa Ya Technology Park	WWT Stationary Crane Annual Inspection (maintenance service, no treatment volume was measured)	N/A

Year	Client	Location	Project name	Treatment volume (CMD)
2022	Micron Technology, Inc. Taiwan (Micron Taiwan)	Hwa Ya Technology Park	Micron Taiwan MTB copper wastewater concentration system	2
2021	Micron Technology, Inc. Taiwan (Micron Taiwan)	Houli Fab	Micron MTB Fab Copper Wastewater Concentration System Expansion Project (copper wastewater treatment volume was lower)	2
2021	United Microelectronics Corporation (UMC)	STSP Park	UMC 12A P6 Ammonia Nitrogen Wastewater Treatment Plant Construction Project	990
2021	United Microelectronics Corporation (UMC)	STSP Park	UMC 12A P6 General Wastewater and Hydrofluoric Acid Treatment Plant Construction Project	1500
2021	Powerchip Semiconductor Manufacturing Corporation (Powerchip)	Tongluo Park	Powerchip P5 Fab Phase I IPAL Wastewater Treatment System Construction Project	264
2021	Powerchip Semiconductor Manufacturing Corporation (Powerchip)	Tongluo Park	Powerchip P5 Fab Phase I Ammonia Nitrogen Wastewater Treatment System Construction Project	384
2021	Powerchip Semiconductor Manufacturing Corporation (Powerchip)	Tongluo Park	Powerchip P5 Fab Phase I Wastewater Treatment System Construction Project	10230
2021	Micron Technology Taiwan, Inc.	Hwa Ya Technology Park	Micron F11 Water Treatment System Maintenance Service (maintenance service, no treatment volume was measured)	N/A
2021	Micron Technology Taiwan, Inc.	Hwa Ya Technology Park	Micron F11 Ammonia Nitrogen Wastewater Treatment System Construction Project	1320
2021	Micron Technology Taiwan, Inc.	Hwa Ya Technology Park	Micron F11 WWT Bio System Reliability Improvement Project (reliability improvement service, no treatment volume was measured)	N/A
2019	United Integrated Services Co., Ltd. (UISCO)	Taichung	Micron Houli Fab A3 WWT (MW54.0) - Phase 1 Project	16,800

Year	Client	Location	Project name	Treatment volume (CMD)
2019	United Integrated Services Co., Ltd. (UISCO)	Taichung	Micron Houli Fab A3 IPAL & SLS SYSTEM (MW57.0) - Phase 1 Project	840
2018	United Integrated Services Co., Ltd. (UISCO)	Taichung	Micron Houli Fab A2 E100 IPAL Reclaim System (MW37.0) Project	680
2018	United Integrated Services Co., Ltd. (UISCO)	Taichung	Micron Houli Fab A2 E100 WWT (MW34.0)	8,400
2018	Micron Taiwan	Taoyuan	Fab-B MBR#4 Expansion Project	7,000
2018	TSEC Corporation	Hsinchu Science Park	Wastewater System Phase II Expansion Project	1,320
2018	Taoyuan City Government	Taoyuan	Taoyuan Metro Station A7 Water Recycling Center	4,000
2018	Pingtung County Government	Pingtung	Pingtung Neipu Water Recycling Center	2,500
2018	Changhua County Government	Changhua	Lugang River Renovation Project-Water Quality Purification and Improvement	6,000
2017	Tainan City Government	Tainan	Zhu River Basic Landscape Improvement Plan-Water Purification Plant Project	22,000
2017	Integrated Service Technology Inc. (iST)	Hsinchu Science Park	SPIL Plant Wastewater and Reclamation Project	1,500
2015	L&K Engineering	Xiamen	United Semi Whole Plant Wastewater and Reclaimed Water Treatment System	24,800
2015	United Microelectronics Corporation (UMC)	South Taiwan Science Park (STSP)	FAB-12A Hydrofluoric Acid Wastewater Treatment System	1,000

Year	Client	Location	Project name	Treatment volume (CMD)
2015	United Integrated Services Co., Ltd. (UISCO)	Taichung	Micron Taiwan A2 FAB 25%+50% Expansion WWT	1,400
2014	Neo Solar Power Corporation (NSP)	Hsinchu Science Park	NSP FAB 2 Ammonia Nitrogen and Nitrate Nitrogen Reduction Project	1,600
2014	United Microelectronics Corporation (UMC)	South Taiwan Science Park (STSP)	UMC 12A P5 General Wastewater and Hydrofluoric Acid Treatment Plant Construction Project	1,500
2014	Winbond Electronics Corporation	Central Taiwan Science Park (CTSP)	Winbond Electronics Ammonia Nitrogen Wastewater Treatment System	1,000
2014	Tatung Company	Taoyuan	Chunghwa Picture Tubes, Ltd. Wastewater Zero Discharge Total Reclamation Project	19,500
2011	AUO Crystal Corporation	Taichung	Wastewater System Construction Project	4,200
2011	United Microelectronics Corporation (UMC)	South Taiwan Science Park (STSP)	FAB 12A P4 Rinsing Wastewater Treatment and Reclamation System Project	3,600
2011	HannsTouch Solution Incorporated	South Taiwan Science Park (STSP)	Reclaimed Water System Construction Project	4,200
2010	AUO Corporation	Central Taiwan Science Park (CTSP)	Process Discharge Collection Pipeline Project	33,000
2008	Innolux Corporation	South Taiwan Science Park (STSP)	Innolux T2 Wastewater System Construction Project	20,800
2008	Rexchip Electronics Corporation	Central Taiwan Science Park (CTSP)	FAB R2 Wastewater and Reclaimed Water Treatment System Construction Project	12,000

### 5.3.2 Emission reduction, deodorization, zero waste, and no pollution with circular pig farms: Towards net-zero 2050

As awareness of environmental protection, animal well-being, and resource recycling becomes increasingly widespread and important, subsidiary ECO Engineering won the “Smart Energy-Efficient Pig Farm EPC Contract” from Taiwan Sugar Corporation (TSC). This project with a total contract cost of NT\$10.7 billion aims to transform 17 traditional TSC pig farms into modernized, circular animal farms. The first one in Huwei already started operations in July 2022. This farm raising 20,000 pigs is equipped with an elevated, water-efficient, strip floor that feces can leak through and excrement scraper system, and rainwater and sewage diversion design to reduce water consumption by one third of traditional pig farms. Pig droppings are used for biogas generation to reduce the biogas discharge and increase the green power supply of the livestock and agriculture sectors to help achieve the goal of net-zero emissions.



▲ Figure 5-10 Modernized circular farms: TSC Circular Pig Farm Huwei

### 5.3.3 Enforcing the circular economy - Inorganic calcium fluoride sludge recycling and reuse

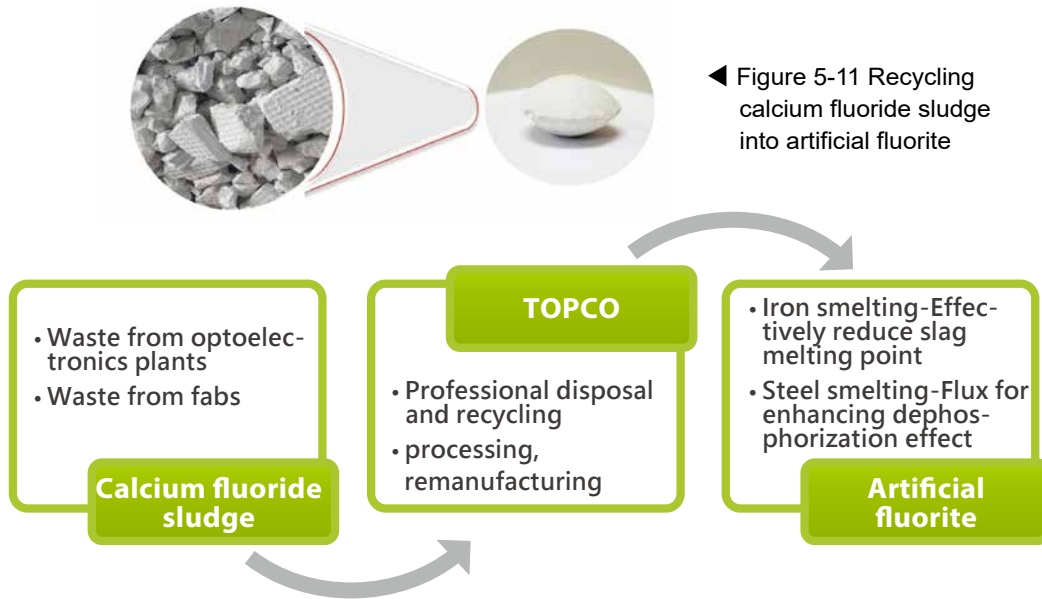
Hydrofluoric acid is used for surface treatment, washing, and etching in the production process of the semiconductor, panel, and optoelectronics industries. It becomes hazardous spent hydrofluoric acid after use. Through the wastewater treatment process, it becomes inorganic calcium fluoride sludge.

Inorganic calcium fluoride sludge is industrial waste produced by semiconductor, panel, and optoelectronics production processes. As a government-regulated industrial waste, it is necessary to transport and dispose of it by means of reuse or landfilling by licensed transporters and disposal companies.

ECO Technical helps customers dispose of inorganic (calcium fluoride) sludge at a high priority. Each month, ECO Technical successfully recycles 1,875 MT of calcium fluoride sludge into 1,125 MT of artificial fluorite to supply to steelworks at home and abroad as flux to effectively reduce the energy demand of the steelmaking process, improve steelmaking quality, and reduce waste disposal costs to implement the circular economy and improve social image.

Table 5-10 Performance in artificial fluorite production

Processing performance	Calcium fluoride sludge recycling (MT/month)	Artificial fluorite production (MT/month)
2022	1875	1125
2021	1800	1080
2020	900	540



▲ Figure 5-12 Link to TOPCO core competence: Recycling waste into gold

### 5.3.4 Expanding the green energy business- Complete solar power supply chain

To expand the green, renewable energy business, we invested in Unitech New Energy Engineering Co., Ltd. which provides services for government agencies and public and private businesses and offers environmental assessment and monitoring services to science and technology parks, water recycling industries, and energy industries. Besides being the consulting company with the most environmental assessment cases, Unitech New Energy also has a grasp on the global trend of renewable energy policies and undertakes many offshore wind farm environmental assessment

and monitoring projects, having become a leading offshore wind farm environmental assessment company in Taiwan. Subsidiaries Jia Yi Energy and ECO Technical, which integrate energy creation, energy conservation, energy storage, and system integrated services, have accumulated an actual performance of up to 50MW in the solar industry and built over 100 stations at home and abroad. They are expanding their system construction scale to extend to smart, green energy eco-friendly pig farms and develop fishery and electricity symbiosis projects. Jia Yi Energy specializes in building electricity stations of all specifications, aiming to become a promotor of green alternative energy engines. It offers the most suitable solutions for those with green energy needs, helps them realize their dreams, builds a low-carbon, pollution-free environment, and promotes eco-friendly clean energy to contribute to environmental protection.

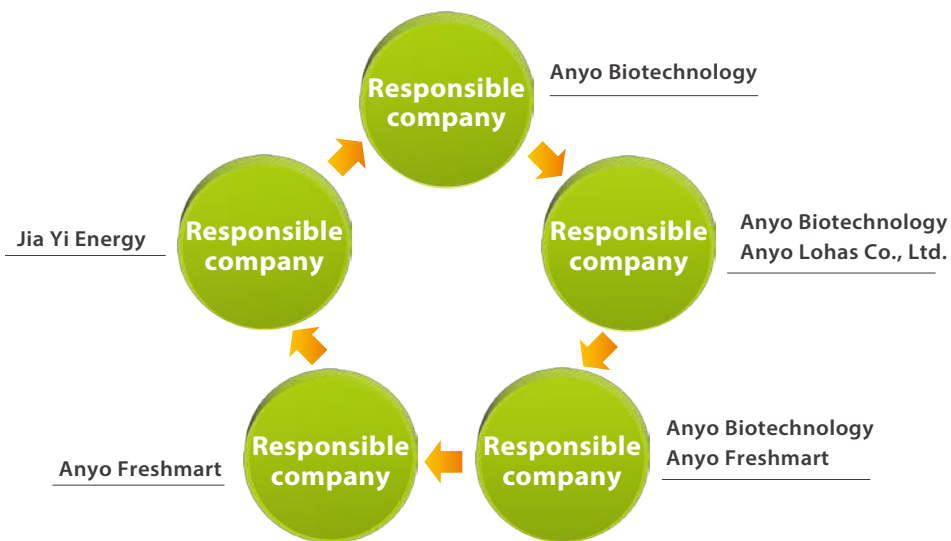
Table 5-11 Development goals of green energy recycling for sustainable innovation

Short- and medium-term	Reproduce Taiwan's experience of success to introduce advanced technologies and special chemicals, such as ammonia nitrogen wastewater treatment, zero emissions, and eco-friendly chemicals, to overseas markets; promote class A waste disposal services and develop sludge and solvent transportation and disposal services in collaboration with waste disposal service providers; and engage in process optimization and capacity expansion of new factory buildings to achieve environmental sustainability and fulfil corporate social responsibility.
Long-term	Integrate advanced environmental engineering technologies, actively cultivate Southeast Asian markets, such as Vietnam, independently research, develop, and distribute related equipment, materials, and chemicals to provide multifaced services and engage with various operational models, such as BOT, BOO, ROT, and OT.

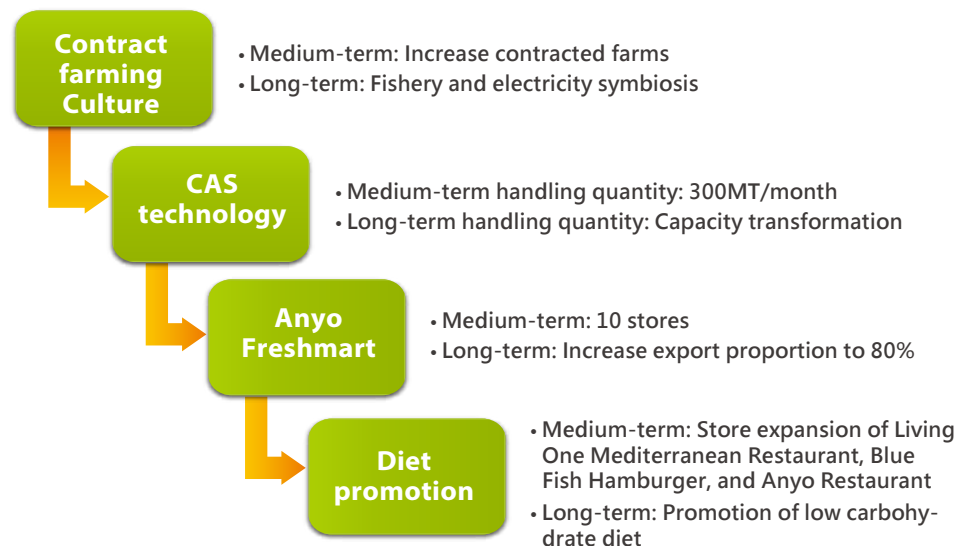
## 5.4 Sustainable innovation for health care

By developing a health care industry with technology, we systematically establish various quality control processes; enter the food science, health, and LOHAS domains; and create an innovative sports and nutrition brand Betery to develop functional food. To promote a safe food culture for a sustainable marine table, we integrate the resources of affiliates including Anyo Biotechnology, Anyo Freshmart, and Anyo Lohas to promote restaurants such as Anyo Freshmart health food supermarket, Richard's Shop, Blue Fish, and M.D. Restaurant. At the end of 2022, Anyo Freshmart

opened the Xinyi Composite Store. In the new fiscal year, we also plan to set up new locations to fulfill the social responsibility of sustainable supermarkets with Taiwan's quality local seafood. In 2022, we launched two restaurant brands: Blue Fish and M.D. Restaurant. Apart from using fresh local fishery products, they feature low-carbohydrate diets to shape a healthy food culture to emphasize eating healthy and tasty food to promote TOPCO's health care business philosophy. Integrating innovative modern technology, bright shopping space, high-tech leisure and food education, Anyo engages in overseas marketing through diversified channels to bridge the gap between Taiwanese citizens and health and thereby lead local industrial production and promote economic prosperity, wishing to become a new model for Taiwan's food technology industry.



▲ Figure 5-13 TOPCO Green Economy: Integrated production-sales deployment



▲ Figure 5-14 Medium- and long-term planning for integrated production and sales



### 5.4.1 Expanding New Southbound business opportunities with smart technology

We established Anyo Biotechnology to address the problem of food safety. With the high standard of high-tech industries, we built an integrated production-sales food safety system. In our world-class aquatic product processing factory, all production lines have passed FSSC 22000 and HACCP certification. Anyo Biotechnology is also Taiwan's first aquatic product processing factory using the Cell Alive System, Japan's top smart food storage technology. This has also opened another food business dedicated to supplying consumers fresh, tasty, safe, convenient, and high-quality ingredients and foods. This new business also introduces the new dietary philosophy of quality foods to the daily lives of consumers to upgrade their dietary culture. In response to the needs of customers, Anyo Biotechnology also expanded to other food-related areas to provide consumers with an innovative, quality dietary environment from ingredient selection, food processing, to retail and restaurants: Fresh & Safe, Fast & Fun and All You Can Cook. Particularly, the giant grouper has been awarded the Seafood Excellence Award of the Fisheries Agency.

### 5.4.2 Running high-quality healthy food supermarkets to promote correct food education concepts

Anyo Freshmart is a high-quality community-based health food supermarket chain. Through food safety control at the source, apart from assembling Taiwan's best-quality and safest agricultural and livestock products and premium aquatic products guaranteed by national grade inspection, Anyo Freshmart also carefully selects natural ingredients required for cooking. Whether children, elderly people, or subhealth groups, Anyo Freshmart offers the best disease prevention and healthcare products for all family members to enjoy health and happiness every day.

### 5.4.3 Zero waste with circular economy

To enforce the spirit of using the whole fish, apart from making fish steak with fish meat, we recycle fish bone and scale that are normally considered as waste for reuse. With golden formulas, we extract fish meat, fish skin, fish scale, and fish bone into the functional food silver perch essence and fish skincare products including collagen facial mask and collagen rejuvenation gel to stimulate business opportunities in the circular economy.

### 5.4.4 Responsible production

#### (1) Insistence on no additives

Through the quality control of dieticians, we have independently developed nearly 300 items. In addition to passing the certification of traceable agricultural products (TAP), the nutrition facts have also passed scientific validation. Most importantly, all are additive-free. In 2022, the Anyo Vegetarian Turnip Cake was recognized by the Eatender Award and Fun Food Taiwan Award. In 2023, we plan to launch the "Ocean Fresh Fish Turnip Cake" and "Black Diamond Truffle Turnip Cake". By blending Western specialty ingredients and culinary techniques with oriental dishes, these creative products will overturn the stereotype of ordinary street food.

## (2) Guarantee for premium quality, realization of low-carbohydrate diets

Anyo Santé Premium Silver Perch Essence, a star product of Anyo under TOPCO, contains nutrients extracted from fish meat, fish bones, and fish scales decomposed using biotechnology into peptide and amino acid with smaller molecules to facilitate human absorption. It earned the Bronze Award of the 24th National Biotechnology and Medicine Care Quality Award and passed the Symbol of National Quality (SNQ) certification by the Institute for Biotechnology and Medicine Industry (IBMI).

Anyo Santé Premium Silver Perch Essence was also ranked the No. 1 Trusted Brand in Fish Products by readers of CommonHealth Magazine. In 2022, the product passed the Health Food Mark certification of the Taiwan FDA for effective fatigue prevention. Additionally, it was awarded the Gold Award at the Monde Selection Quality Awards for five consecutive years.

To enforce low-emission production and promote the concept of low-carbon consumption, Anyo Santé Premium Silver Perch Essence will obtain Taiwan's first "Silver Perch Essence Carbon Footprint Label". To implement carbon footprint inventory, we have also assisted the EPA in establishing the PCR standard for "extraction", hoping to start the norm of responsible production with our pioneering efforts for consumers to pay attention to the issue of carbon emissions.



▲ Figure 5-15 Anyo Santé Premium Silver Perch Essence was recognized by the Bronze Award of the National Biotechnology and Medical Care Quality Award and SNQ National Quality Mark

### 5.4.5 Exercise in communities

XSPORTS, the professional sports training brand created by XSPORTS Sports Co., Ltd., a TOPCO subsidiary, has imported the "Beginning Movement Load Equipment" from Tottori of Japan to build well-equipped training bases, hoping to promote the dreams of athletes in Taiwan. In addition to helping professional athletes improve competition performance, XSPORTS also aims to provide the public with quality exercise environments, turning XSPORTS into the exercise partner of communities. In the future, we will plan physical education, talks, and competitions to promote exercise in communities.



▲ Figure 5-16 TOPCO builds a good training base

## [ Appendix 1 ] GRI Content Index (GRI)

Statement of Use	This report (2022) has been prepared in accordance with the GRI Standards, with a reporting period of January 1 to December 31, 2022.
GRI 1 Version	GRI 1: Foundation 2021
GRI Sector Standards	None

### GRI 2

Indicator	Disclosure requirements	Report section or description	Description of omission	Page
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#### Organization and reporting

2-1	Organizational details	Current status and development		9
2-2	Entities included in the organization's sustainability reporting (boundaries)	About this report		2
2-3	Reporting period, frequency and contact point	About this report		2
2-4	Restatements of information	About this report		2
2-5	External assurance	About this report		2-3

#### Activities and workers

2-6	Activities, value chain and other business relationships	Products, services, and technologies		28
2-7	Employees	Sound employee and recruitment system		87-91
2-8	Workers who are not employees	Sound employee and recruitment system		87

## Governance

2-9	Governance structure and composition	Corporate governance	17-19
2-10	Nomination and selection of the highest governance body	Corporate governance	17-19
2-11	Chair of the highest governance body	Corporate governance	17
2-12	Role of the highest governance body in overseeing the management of impacts	Corporate governance	17-19
2-13	Delegation of responsibility for managing impacts	Corporate governance	18
2-14	Role of the highest governance body in sustainability reporting	ESG Promotion Committee	47
2-15	Conflicts of interest	Corporate governance	17
2-16	Communication of critical concerns	ESG Promotion Committee	49-51
2-17	Collective knowledge of the highest governance body	Corporate governance	18
2-18	Evaluation of the performance of the highest governance body	Corporate governance	18
2-19	Remuneration policies	Corporate governance, Annual report	18
2-20	Process to determine remuneration	Corporate governance, Annual report	19
2-21	Annual total compensation ratio	Corporate governance, Annual report, Employee remuneration	100

## Strategy, policies and practice

2-22	Statement on sustainable development strategy	From the Chairperson, From the Chief Sustainability Officer	4-5
2-23	Policy commitments	Ethical corporate management and business integrity	24
		Tax policy	26
		Green investment	34
		TOPCO sustainable development strategic roadmap	39
		Sustainable supply chain development strategy	68
		Human rights and OH&S policies	86
		Biodiversity policy	110

2-24	Embedding policy commitments	Ethical corporate management and business integrity Tax policy		24
2-25	Processes to remediate negative impacts	Valuing customer privacy Satisfaction survey, Customer complaint handling Labor-management meeting, Grievance channels Report box for corruption and violation of professional ethics		78-79 80-82 103 Corporate website
2-26	Mechanisms for seeking advice and raising concerns	Ethical corporate management and business integrity		24
2-27	Compliance with laws and regulations	Legal compliance		24,76
2-28	Membership associations	Commitment to CSR realization		57

### Stakeholder engagement

2-29	Approach to stakeholder engagement	Stakeholder communication and material issues		49-56
2-30	Collective bargaining agreements	Creating an environment with respect for human rights, equality, non-discrimination, labor-management harmony		108

### GRI 3

Indicator	Disclosure requirements		Description of omission	Page
3-1	Process to determine material topics		Methods and processes of identification	49-56
3-2	List of material topics		Material topic analysis	49-56
3-3	Management of material topics		Material topic analysis	49-56

## Topic Standard

### GRI 201 Economic Performance 2016

201-1	Direct economic value generated and distributed	Operational performance, Annual report	32-34
201-2	Financial implications and other risks and opportunities due to climate change	TCFD Report - Scenario resilience analysis	20-21
201-3	Defined benefit plan obligations and other retirement plans	Salary and benefits	98-100
201-4	Financial assistance received from government	NTD\$37,420,000	

### GRI 202 Market Presence 2016

202-1	Ratios of standard entry level wage by gender compared to local minimum wage	Salary and benefits	98
202-2	Proportion of senior management hired from the local community	Employment status	88

### GRI 203 Indirect Economic Impacts 2016

203-1	Infrastructure investments and services supported	Fund investment and use for charitable activities	58
203-2	Significant indirect economic impacts	Honors and credits	34-38

### GRI 204 Procurement Practices 2016

204-1	Proportion of spending on local suppliers	Promoting supply chain localization	74
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### GRI 205 Anti-corruption 2016

205-1	Operations assessed for risks related to corruption	Ethical corporate management and business integrity	24
205-2	Communication and training about anti-corruption policies and procedures Governance: Ethical corporate management	Ethical corporate management and business integrity	24 72
205-3	Confirmed incidents of corruption and actions taken	Selection of quality and integral suppliers	24

## GRI 206 Anti-competitive Behavior 2016

206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	Legal compliance		24
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## GRI 207 Tax 2019

207-1	Approach to tax	Tax policy		26
207-2	Tax governance, control, and risk management	Tax risk management		26
207-3	Stakeholder engagement and management of concerns related to tax	Tax governance		26
207-4	Country-by-country reporting	Taxpaying condition		26

## GRI 301 Materials 2016

301-1	Materials used by weight or volume		TOPCO does not engage in manufacturing.	
301-2	Recycled input materials used	Waste management		116-117
301-3	Reclaimed products and their packaging materials	Waste management		116-117

## GRI 302 Energy 2016

302-1	Energy consumption within the organization	Energy conservation and management		112
302-2	Energy consumption outside of the organization	Energy conservation and management GHG inventory report		113-114
302-3	Energy intensity			113-114
302-4	Reduction of energy consumption			112

### GRI 303 Water and Effluents 2018

303-1	Interactions with water as a shared resource		TOPCO operates in offices, and water withdrawal and discharge comply with the regulations of the local government.	
303-2	Management of water discharge-related impacts		TOPCO operates in offices, and water withdrawal and discharge comply with the regulations of the local government.	
303-3	Water withdrawal Workplace	Water management: water and effluent		116
303-4	Water discharge		TOPCO operates in offices, and all types of wastewater are discharged into the sewer system designated by the government. Hence, no water discharge or water consumption is measured.	
303-5	Water consumption		TOPCO operates in offices, and all types of wastewater are discharged into the sewer system designated by the government.	

### GRI 304 Biodiversity 2016

304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas		No part of TOPCO is located in protected areas.	
304-2	Significant impacts of activities, products, and services on biodiversity	TOPCO biodiversity policy	None, not applicable.	110
304-3	Habitats protected or restored			
304-4	IUCN Red List species and national conservation list species with habitats in areas affected by operations		None, not applicable.	



## GRI 305 Emissions 2016

305-1	Direct (Scope 1) GHG emissions		Energy conservation and management GHG inventory report	113
305-2	Energy indirect (Scope 2) GHG emissions		Energy conservation and management GHG inventory report	113
305-3	Other indirect (Scope 3) GHG emissions		GHG inventory report	113
305-4	GHG emissions intensity			113
305-5	Reduction of GHG emissions		Energy management strategy and carbon reduction management	114
305-6	Emissions of ozone-depleting substances (ODS)		TOPCO does not have related process, thus this is not applicable.	
305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions		TOPCO does not have related process, thus this is not applicable.	

## GRI 306 Waste 2020

306-1	Waste generation and significant waste-related impacts	Waste management		116-117
306-2	Management of significant waste-related impacts	Waste management		116-117
306-3	Waste generated	Waste management		116-117
306-4	Waste diverted from disposal	Waste management		116-117
306-5	Waste directed to disposal	Waste management		116-117

## GRI 308 Supplier Environmental Assessment 2016

308-1	New suppliers that were screened using environmental criteria	Implementation of the environmental protection policy		117-118
308-2	Negative environmental impacts in the supply chain and actions taken	Sustainable supply chain development strategy		68-69

## GRI 401 Employment 2016

401-1	Total number and rate of new employee hires and employee turnover by age group, gender and region.	Employment status		87-90
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	Employee benefits		100-101
401-3	Parental leave	Status of unpaid parental leave		90

## GRI 402 Labor/Management Relations 2016

402-1	Minimum notice periods regarding operational changes		The minimum notice period for significant operational changes should be one month.	
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## GRI 403 Occupational Health and Safety 2018

403-1	Occupational health and safety management system	Valuing safety and health quality		106
403-2	Hazard identification, risk assessment, and incident investigation	Valuing safety and health quality		106
403-3	Occupational health services	Workplace safety and labor-management harmony		106
403-4	Worker participation, consultation, and communication on occupational health and safety	Workplace safety and labor-management harmony	All subsidiaries follow the local laws and regulations and comply with the collective bargaining agreements. TOPCO respects the collective bargaining rights and freedom of association of employees. In Taiwan where the headquarters are located, TOPCO holds quarterly labor-management meetings in accordance with law to coordinate labor-management relations and promote labor-management cooperation to enhance the work efficiency of employees.	106
403-5	Worker training on occupational health and safety	OH&S education and training.		107

403-6	Promotion of worker health	Workplace health workshops	104-105
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Workplace safety and labor-management harmony	103-108
403-8	Workers covered by an occupational health and safety management system	Workplace safety and labor-management harmony	104-105
403-9	Work-related injuries	Workplace safety and labor-management harmony	106
403-10	Work-related ill health	Workplace safety and labor-management harmony	106

### GRI 404 Training and Education 2016

404-1	Average hours of training per year per employee	Promoting the development of knowledge management capability and diversifying training and education	97
404-2	Programs for upgrading employee skills and transition assistance programs	Promoting the development of knowledge management capability and diversifying training and education	91-98
404-3	Percentage of employees receiving regular performance and career development reviews	Transparent and impartial performance evaluation	98

### GRI 405 Diversity and Equal Opportunity 2016

405-1	Diversity of governance bodies and employees	Board of Directors Employee structure and talent recruitment	17-18 90-91
405-2	Ratio of basic salary and remuneration of women to men	Salary and benefits	99

### GRI 406 Non-discrimination 2016

406-1	Incidents of discrimination and corrective actions taken	No incident of discrimination	
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### GRI 407 Freedom of Association and Collective Bargaining 2016

407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk		All subsidiaries follow the local laws and regulations and comply with the collective bargaining agreements. TOPCO respects the collective bargaining rights and freedom of association of employees. In Taiwan where the headquarters are located, TOPCO holds quarterly labor-management meetings in accordance with law to coordinate labor-management relations and promote labor-management cooperation to enhance the work efficiency of employees.	
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### GRI 408 Child Labor 2016

408-1	Operations and suppliers at significant risk for incidents of child labor	Common commitment of TOPCO and suppliers: Supplier Code of Conduct		72-73
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### GRI 409 Forced or Compulsory Labor 2016

409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor		No incidents of forced or compulsory labor at operational sites and suppliers.	
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### GRI 410 Security Practices 2016

410-1	Security personnel trained in human rights policies or procedures	Post policy publicity materials in the employee lounge.		
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### GRI 411 Rights of Indigenous Peoples 2016

411-1	Incidents of violations involving rights of indigenous peoples		No incidents of violations were reported in 2022.	
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### GRI 413 Local Communities 2016

413-1	Operations with local community engagement, impact assessments, and development programs		Report box for corruption and violation of professional ethics. No related incidents were reported in 2022.	
413-2	Operations with significant actual and potential negative impacts on local communities		Report box for corruption and violation of professional ethics. No related incidents were reported in 2022.	

## GRI 414 Supplier Social Assessment 2016

414-1	New suppliers that were screened using social criteria	Selection of quality and integral suppliers		72
414-2	Negative social impacts in the supply chain and actions taken	Supplier collaboration management policy		72-74

## GRI 415 Public Policy 2016

415-1	Political contributions		No political contributions	
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## GRI 416 Customer Health and Safety 2016

416-1	Assessment of the health and safety impacts of product and service categories	Product quality		75-76
416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	Product quality		75-76

## GRI 417 Marketing and Labeling 2016

417-1	Requirements for product and service information and labeling	Product quality		75-76
417-2	Incidents of non-compliance concerning product and service information and labeling	Product quality		75-76
417-3	Incidents of non-compliance concerning marketing communications	Product quality		24

## GRI 418 Customer Privacy 2016

418-1	Substantiated complaints regarding concerning breaches of customer privacy and losses of customer data	Valuing customer privacy	No complaints regarding breaches of customer privacy and losses of customer data were reported in 2022.	78
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## [ Appendix 2 ] Sustainability Accounting Standards Board Index (SASB)

**Table 1 Sustainability Disclosure Topics & Accounting Metrics**

Topic	Code	Accounting metric	Corresponding Section	Page
Environmental Footprint of Operations	RT-IG-130a.1	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	Energy conservation and management	113-117
Employee Health & Safety	RT-IG-320a.1	(1) Total recordable incident rate (TRIR) (2) Fatality rate (3) Near miss frequency rate (NMFR)	Healthy and safe working environment and labor-management harmony	106
Fuel Economy & Emissions in Use Phase	RT-IG-410a.1	Sales-weighted fleet fuel efficiency for medium- and heavy-duty vehicles.	Not applicable, there were no sales of fuel equipment.	N/A
	RT-IG-410a.2	Sales-weighted fuel efficiency for non-road equipment		
	RT-IG-410a.3	Sales-weighted fuel efficiency for stationary generators.		
	RT-IG-410a.4	Sales-weighted emissions of: (1) nitrogen oxides (NOx) and (2) particulate matter (PM) for: (a) marine diesel engines, (b) locomotive diesel engines, (c) on-road medium- and heavy-duty engines, and (d) other non-road diesel engines.		
Materials Sourcing	RT-IG-440a.1	Description of the management of risks associated with the use of critical materials	Sustainable Supply Chain Development Policy	68
Remanufacturing Design & Services	RT-IG-440b.1	Revenue from remanufactured products and remanufacturing services	Strengthening customer service	75-76

**Table 2 Activity metrics**

Topic	Code	Accounting metric	Corresponding Section	Page
Number of units produced by product category	RT-IG-000.A		Not applicable, no engagement in production.	N/A
Number of employees	RT-IG-000.B	(1) Full time and part time (2) Temporary and (3) contract-based employees	Employee structure and talent recruitment	87-89

## [ Appendix 3 ] FSC Sustainability Disclosure Metrics - Electronics

Code	Accounting metric	Category	Annual disclosure	Unit of measure	Note
1	Total energy consumed, percentage grid electricity, and percentage renewable	Quantitative	1,621,043*3.6*1000000 = 5,835,754,800,000 J =5835.7548GJ	Gigajoules (GJ), percentage (%)	Not using renewable energy
2	Total water withdrawn and total water consumed	Quantitative	126.741	Cubic meter (m <sup>3</sup> )	
3	Amount of hazardous waste from manufacturing and percentage recycled	Quantitative		Metric tons (t), percentage (%)	None in 2022
4	Types of occupational accidents, number of persons, and rate	Quantitative		Rate (%), quantity	None in 2022
5	Product lifecycle management: Weight of end-of-life materials and e-waste recovered, percentage of recovered materials that is recycled (Note 1)	Quantitative		Metric tons (t), percentage (%)	None in 2022
6	Discussion of the management of risks associated with the use of critical materials	Qualitative description	Sustainable Supply Chain Development Policy	Not applicable.	68-69
7	Total amount of monetary losses as a result of legal proceedings associated with anti-competitive regulations	Quantitative		Reporting currency	None in 2022
8	Output of principal products by product category	Quantitative		no manufacturing production	

Note 1: Including the sale of scrap and other forms of recycling and disposal. Please specify.

## [ Appendix 4 ] List of tables

TABLE 1-1	ORGANIZATIONAL PROFILE	11	TABLE 4-4	EDUCATION AND TRAINING EXPENSES IN THE LAST THREE YEARS	97
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TABLE 1-3	SUMMARY OF SUSTAINABILITY GOVERNANCE IN 2022	17	TABLE 4-6	RANGE OF EMPLOYEE BASIC SALARY	99
TABLE 1-4	LIST OF DIRECTORS	18	TABLE 4-7	ANNUAL AVERAGE EARNINGS AND MEDIAN EARNINGS OF NON-SUPERVISOR EMPLOYEES	99
TABLE 1-5	SIMULATED SCENARIOS OF DRILLS	20	TABLE 4-8	RANGE OF SALARY ADJUSTMENT IN THE LAST THREE YEARS	100
TABLE 1-6	TEST TARGETS	20	TABLE 4-9	EMPLOYEE BENEFIT PLANS	102
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# [ Appendix 6 ] Certificate

Certificate TW22/0000979

The management system of  
**TOPCO SCIENTIFIC CO., LTD.**




No.43, Sec. 2, Teping Blvd., Neihu, Taipei City 11493, Taiwan  
has been assessed and certified as meeting the requirements of  
**ISO 45001:2018**

For the following activities:  
The scope and basis of materials for semiconductor, solar, LCD, LED, electronic and photoelectric related industries.  
Sales, installation management and maintenance service of equipment for semiconductor, solar, LCD, LED, electronic and photoelectric related industries.

This certificate is valid from 21 October 2022 until 21 October 2025 and remains valid subject to satisfactory surveillance audits.  
Issue 1. Certified since 21 October 2022.  
Certified activities performed by additional sites are listed on subsequent pages.

*Jonathan Hill*

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This document is issued by the Topco Group in compliance with ISO 9001:2015. Details of certification can be accessed at: [www.iso.org](http://www.iso.org) and [www.iso.org/iso/45001](http://www.iso.org/iso/45001). E-mail: [cert@sgs.com](mailto:cert@sgs.com).  
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**afaq** **Independent Assurance Statement**  
TOPCO SCIENTIFIC CO., LTD.'s 2022 SUSTAINABILITY REPORT

AFNOR GROUP was established in 1926. We are the National Standardization Body of France, a permanent council member in ISO and one of the leading certification bodies in the world. This verification work was carried out by AFNOR ASIA LTD., a subsidiary of AFNOR GROUP. All the members of the verification team have professional backgrounds and have accepted AA1000 AS, AFAQ 26000, ISO 9001, ISO 14001, ISO 14064, ISO 45001, ISO 50001, and other sustainability-related international standard trainings. All assigned verifiers have been approved as the lead auditors or verifiers. AFNOR Group hereby provides a summary of TOPCO SCIENTIFIC CO., LTD.'s Sustainability Report of 2022 (hereinafter referred to as "the Report") but was not involved in any way in its preparation.

AFNOR Group and TOPCO SCIENTIFIC CO., LTD. (hereinafter referred to as "TOPCO") are independent entities. AFNOR ASIA LTD., was commissioned by TOPCO to conduct the assessment and assure the Sustainability Report of 2022 was in accordance with AA1000 Assurance Standard (v3) and the Global Reporting Initiative Sustainability Reporting Standards (GRI Standards).

**SCOPE**

The disclosure scope of the Report covers the economic, environmental and social activities and operational performance of TOPCO and its affiliated companies operating bases in Taiwan and overseas.

AFNOR Asia is responsible for:

1. According to the Type 1 of the AA1000 Assurance Standard v3, evaluate TOPCO's compliance with the AA1000 Accountability Principle (2018). The reliability verification of the revealed sustainability performance information and data was not included. The verification scopes include sustainability issues, response mechanism, performance information, management systems of information, and the processes of materiality evaluation and stakeholder participation.
2. In accordance with the GRI Standards, we verified the statement options and material topics disclosed in the Report compiled by TOPCO.

**afnor**  
GROUPE

**afaq** **ASSURANCE OPINION**

In our opinion, the information and data presented in the Report by TOPCO provides a fair and balanced representation. We believe the focuses on economic, environmental, and social aspects of TOPCO in 2022 are well represented.

AFNOR Group has developed a set of process for the Assurance of Sustainability Reports based on current practice guidance provided in the AA1000 Assurance Standard (v3) and GRI Standards. We believe that the evidence collected by onsite assessment has exhibited that TOPCO did follow the guidance of AA1000 Assurance Standard (v3) and GRI Standards, and their self-declaration in response to the Global Reporting Initiative.

**ASSURANCE LEVEL**

In accordance with the AA1000 Assurance Standard (v3), we verified this assurance statement corresponding to a moderate level. The scope and methods are as described in this statement.

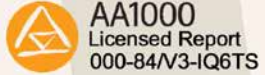
**LIABILITY**

This assurance statement is intended for the use of TOPCO SCIENTIFIC CO., LTD. only. AFNOR is not responsible for any other uses. Our responsibility is only based on the scope and methodology described, and to provide stakeholders an independent assurance statement.

For and on behalf of AFNOR :

*Trevor Wilmer*

Trevor Wilmer  
The Director for Certification and Assessment  
Jun.02.2023



AA1000  
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