



2022

PHIHONG
Sustainability Report

Phihong 50

—— 深耕 50 永續飛宏 ——

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About this Report

Welcome to PHIHONG Technology Co.’s 2022 Sustainability Report. The Chinese and English versions of this report are published simultaneously on the PHIHONG ESG website for public download. We have compiled this report based on the principles of honesty and transparency to faithfully disclose PHIHONG’s medium & long term strategy, practices and performance on our stakeholders communication and sustainability issues. We look forward to working together with you, our long-time stakeholders, towards a sustainable, beautiful future through this report.

Report Scope

The scope of this report is based on the sustainable management and performance of the key business locations of PHIHONG. These include PHIHONG Taiwan (headquarters and Tainan plant), PHIHONG Dongguan (China) and PHIHONG Haiphong (Vietnam). Compared with the previous report, in response to the strategic consideration of the group's transformation and global layout, PHIHONG split and transferred the electric vehicle energy business group (Tainan plant) to " Zerova Technologies Taiwan Limited (Zerova)" on September 1, 2022. The financial data in this report cover the overall operating performance of the parent and subsidiary companies. Other indicators do not cover other branches, factories and reinvested companies. Material topics and management are disclosed for entities that have a significant impact on PHIHONG's operations. The impact on stakeholders (customers, investors, communities, suppliers and employees, government agencies, NPO/NGO) is also included in the external boundaries of the organization.

Material Topic Information Collection Areas

● Complete info. ● Partial info. ○ Topic is not material to the entity's organization. No info collected.

Aspects / Material topic		Location	PHIHONG Taiwan (HQ, Tainan plant)	PHIHONG Dongguan (China)	PHIHONG Haiphong (Vietnam)
Environmental sustainability	Climate Change Strategy		●	●	●
	Energy and Greenhouse Gases		●	●	●
	Product R&D and Innovation		●	●	○
	Low-carbon Product Design		●	○	○
Social Inclusion	Talent Selection, Training and Retention		●	●	●
	Employee Care and Support		●	●	●
	Occupational Health and Safety		●	●	●
Corporate Governance	Integrity management		●	●	●
	Operational Performance		●	●	●
	Sustainable Supply Chain Management		●	●	●
	Customer Relationship Management		●	○	○
	Product Quality and Safety		●	○	○

Internal Management

This report mainly discloses the environmental, social, corporate governance and economic impacts and responses of PHIHONG. The information and data are collected and compiled by each responsible department and approved by the unit manager. Then, submitted to the Corporate Sustainability Working Group for editing and revision. Next, sent to the heads of the committees for review and approval, and finally submitted to the Group CEO and Board of Directors for review through administrative procedures before official release. The disclosed information covers specific actions and relevant performance data in environmental, social, corporate governance, and economic aspects. The financial information is consistent with the financial report data certified by the accountant. The data are quoted from annual reports, government agencies, and public information on related websites.

Reporting Period and Publication

This report is published on an annual basis. The reporting period is January 1 to December 31, 2022. For completeness and comparability of performance, some information will be backdated to the year 2020.

Initial report: released in June 2009

Previous edition: released in July 2022

Current report: released in June 2023

Next edition: scheduled for June 2024

Reporting basis and guarantee

Item	Standards	Verification unit	
 Non-financial information	<ul style="list-style-type: none"> ✓ GRI Sustainability Reporting Guidelines 2021 ✓ ISO 26000 Social Responsibility Guidelines ✓ SASB Electrical and Electronic Equipment and Components Industry Indicators ✓ Climate-Related Financial Disclosure TCFD Framework ✓ Carbon Disclosure CDP Climate Change/Water Safety ✓ UN Sustainable Development Goals (SDGs) ✓ Code of Practice for Sustainable Development of Listed OTC Companies 	<ul style="list-style-type: none"> ✓ British Standards Institution (BSI) ✓ This report is verified in accordance with GRI Standards and AA1000AS (v3) accountability principle standards 	
	 Financial information	<ul style="list-style-type: none"> ✓ IFRSs approved and published by the Financial Supervisory Commission ✓ Financial Reporting Standards for Securities Issuers 	<ul style="list-style-type: none"> ✓ Deloitte Taiwan

Feedback

In line with our commitment to environmental protection and to go paperless, this report is simultaneously published in electronic form on the ESG website. If you have any suggestions or inquiries about the contents of this report, please feel free to contact us.

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PHIHONG Group official website



PHIHONG Group ESG Website



PHIHONG ESG Facebook

Message from the ESG Committee Chair

The year 2022 marked the 50th anniversary of PHIHONG. In the past year, the epidemic continued to rage, affecting global economic activities and work patterns. Business operations faced negative impacts from the Russo-Ukrainian War, interest rate hikes by the Federal Reserve, inflation, high inventory in the supply chain and so on. Thanks to the efforts of our management team and all colleagues, we not only demonstrated our responsiveness and integration power, but also broke through the adversity with our customers and supply chain partners. We achieved consolidated revenue of NT\$14.018 billion for the year, an increase of 14.11% over the previous year. Not only we did turn a loss into a profit, but we also achieved a record operating result. We expect to continue to deliver economic success and give back to the community under the leadership of our clear corporate mission and vision.

In the face of an ever-changing environment, PHIHONG not only focuses on the core business, but also invests in various sustainable development issues related to the company's operation with innovative thinking and technology. While pursuing operational success, we are also actively practicing sustainable development. To concretely apply PHIHONG's cutting-edge technology for a sustainable future, and in the wave of global electric vehicle (EV) development driven by the green industry revolution, we spun off our 12-years-long EV energy business group into a subsidiary, ZEROVA Technologies, in September last year. We provide integrated charging solutions for the development of the global EV industry, and contribute to the reduction of overall carbon emissions.

Meanwhile, to bring sustainable development deeper into the core of our operations, we have adopted the "Sustainable Development Committee" as the highest-level ESG decision-making center, chaired by me. We work together with our senior and middle managers to promote the "Sustainable Strategy Blueprint" through the Sustainable Development Office. In 2022, PHIHONG launched the "ESG Sustainability Vision Project", which sets out 56 short-, medium- and long-term sustainability indicators based on 12 major themes across the three ESG dimensions. Monthly target reviews are conducted to confirm progress, demonstrating PHIHONG's commitment to sustainability. Through the implementation of the Vision Project, we are actively cultivating our internal sustainability and carbon management talents, and planting the spirit of sustainable development in our domestic and overseas plants. We support the advocacy and promotion of global sustainability issues through practical actions, participation, and implementation. In this past year, our efforts have been recognized with awards such as "TCSA Taiwan Corporate Sustainability Reporting Gold Award", "Happy Enterprise - Gold Award", and "TTQS Talent Quality-management System - Silver Medal". On the other hand, PHIHONG Dongguan's first introduction of RBA 7.0 VAP audit has also been recognized with silver-level achievements.



In terms of sustainability, we continue to develop sustainable products, participate in the Carbon Disclosure Project (CDP), sign on to support the Climate Related Financial Disclosure Framework (TCFD), and join the Science Based Targets Initiative (SBTi) for carbon reduction. PHIHONG has set a goal to reduce carbon emissions by 42% by 2030 and to reach net zero by 2050. To create low-carbon products. We actively invest in the installation of solar power systems. The first phase of the photovoltaic system in Dongguan was completed and formally operated in 2022. Later, we will set up the system in Dongguan and Tainan (ZEROVA) plant, with a cumulative capacity of 2,495 kW, providing approximately 2.63 million kWh of green power annually. We will continue to increase our investment in energy saving, carbon reduction and renewable energy.

With a sustainable management philosophy of social integration, PHIHONG has been working on 3 main axes of social welfare: "Neighborhood Friendly", "Disadvantaged Care" and "Environmental Education". During the peak of the epidemic, we continued to support sports development and the Taoyuan Guishan Little League baseball team. Through regular monthly donations and nutritional product donations, we hope that the children can continue to shine on the field and win glory for the country. In addition, with the joint strength of PHIHONG and our employees, we launched a series of disadvantaged care activities, including the "Muhsiang Home Adoption", "Nursery Environmental Cleanup", "Across the World - Blind Massage Service", and "Old Shoes Save Lives - Sending Love to Africa", etc. Through the participation of employees in volunteer services, we support disadvantaged groups and provide resources and light up hope for students' sports development.

PHIHONG has entered our 50th year of operation. In the face of increasingly severe challenges, we will not only build up our strengths and momentum, but will also continue to implement sustainable corporate values from the environmental, social and corporate governance perspectives. We will continue to develop green design, create a friendly workplace, and exert more social influence. We will inject new vitality into the pursuit of a sustainable future and build a comprehensive corporate resilience. We will continue to create value for our stakeholders and society as a whole by implementing our corporate social responsibility and sustainable management philosophy, and steadily advance towards becoming a 100-year enterprise.

CEO at PHIHONG

林澤宏



Sustainable Development Performance



Environment (E)

Sustainability topic	Implementation Performance in 2022	Sustainable Goals
Climate Change Strategy	<ul style="list-style-type: none"> Disclosure of TCFD climate change related financial information report (9 risks and 3 opportunities identified). CDP Questionnaire Climate Assessment: rating B-. 	<ul style="list-style-type: none"> With the risks and opportunities brought by TCFD disclosures, PHIHONG demonstrates our responsibility and strategy to allocate capital in a rational and effective manner in order to achieve the vision of low carbon economic transformation. The overall carbon reduction target submission is scheduled for completion by Q3 2023.
Energy and Greenhouse Gases	<ul style="list-style-type: none"> Overall GHG (Scope 1+2) emissions are reduced by 11.2% compared with 2021. Construction of the first and second phase of solar power system (0.9 MW) in PHIHONG Dongguan is completed. Taiwan PHIHONG Lin Kou Headquarters: 13.08% electricity saving in 2022 compared to the base year of 2016 	<ul style="list-style-type: none"> Reduce the Group's annual carbon by 4.2% (Scope 1 and 2, with 2021 as the base year). This corresponds to a total reduction of 42% by the end of 2030. Continuing SBTi's scientific carbon reduction pathway towards the 2050 net zero goal. 2023 Phihong Dongguan continues to complete the construction of 1.1 MW solar power system, Phihong Taiwan's Tainan plant to build solar power system & green building certification. (Diamond Class).
Product R&D and Innovation	<ul style="list-style-type: none"> Boosts power output of Gaming Power by 50%. Same size but up to 150% power output and meets safety requirements. New POE60W model is 1.1% more efficient, saving 1,110,067MJ of energy annually. New model of 40W tool charger increases efficiency to 88%, saving 21,394MJ of energy annually. 	<ul style="list-style-type: none"> Introduce the 3rd generation of semiconductor to all general power supply products to increase the efficiency by more than 90%. Towards the high power, miniaturization and light weight trend. Promote the goal of reducing standby power consumption to 0mW.
Low Carbon Product Design	<ul style="list-style-type: none"> The introduction and development of 3rd generations of semiconductors are used to reduce the heat generation of components and reduce the size of products. The 140W PD model is 5% lower and 0.6% more efficient (TEA) than the previous model. 	<ul style="list-style-type: none"> Introduce the 3rd generation of semiconductor to all general power supply products to increase the efficiency by more than 90%. PCR material utilization rate to reach 70%. 30% reduction in overall volume and 3% increase in energy efficiency.
Transition to Circular Economy	<ul style="list-style-type: none"> The entire product casing is made of 100% Recyclable plastic. The DC charging pile is introduced into a buckle-type wooden box for repeated use and is easy to disassemble and assemble, reducing the use of 6,000 sets of wooden boxes. Recover "test power consumption" and feed it into the grid for reuse, greatly reducing the waste of electric energy. Each DC charging pile can save 87% of electricity. 	<ul style="list-style-type: none"> Increase the proportion of PCR (recycled material) in all products. EV charging pile products are 100% packed in recycled wooden boxes. The recovered DC charging pile testing power consumption is fed into the grid for reuse, and the power saving ratio can be recovered to more than 90%.



Social (S)

Sustainability topic	Implementation Performance in 2022	Sustainable Goals
Talent Selection, Training and Retention	<ul style="list-style-type: none"> In 2022, 25,855 learning hours and 39.9 training hours per capita. In 2022, a record number of 78 female supervisors at the division level or above, accounting for 27.27% of all supervisors. In 2022, Taiwan PHIHONG's overall average salary increased up to 7.46%. 	<ul style="list-style-type: none"> Continue to implement the education and training system to improve the overall quality of human resources, so as to strengthen the competitiveness of enterprises. Gender equality, employing talents on their merits, and realizing gender equality planning for talents. Optimize the remuneration system and take into account the concept of "equal pay for equal work and pay according to ability".
Employee Care and Support	<ul style="list-style-type: none"> Three times winner of the Gold Award for Happy Company in 2022, as voted by Human Resources Bank. For the first time, PHIHONG held 50th Anniversary Games & Family Day in conjunction with Family Day. Employee engagement reached a record high in 2022, scoring 4.59 for both employee engagement and satisfaction. 	<ul style="list-style-type: none"> Continue to pay attention to local labor laws and regulations, optimize the employment environment, and create a multi-smooth labor-management exchange platform. Create a friendly workplace environment and create an enterprise that makes employees feel happy and belonging.
Occupational Health and Safety	<ul style="list-style-type: none"> No occupational injury-related worker fatalities occur in 2022. No occupational disease or serious occupational injury cases at PHIHONG's plants in 2022. 	<ul style="list-style-type: none"> Promote ISO 45001, implement safety culture and control risks. Zero major accidents and occupational accidents, zero fines.



Governance (G)

Sustainability topic	Implementation Performance in 2022	Sustainable Goals
Integrity Management	<ul style="list-style-type: none"> No ethical incidents involving integrity and corruption in 2022. 	<ul style="list-style-type: none"> Ensure that colleagues conduct themselves in a manner consistent with the company's values and the spirit of integrity and honesty, and implement them consistently. Continuous improvement towards the "Top 5%" corporate governance rating
Operational Performance	<ul style="list-style-type: none"> Consolidated revenue for 2022 reached NT\$14.018 billion, an increase of 14.11% over the previous year. This not only turned a loss into a profit, but also set a record high operating result. 	<ul style="list-style-type: none"> To establish a complete corporate strategy and management as a means to improve operational performance and achieve sustainable business success.
Sustainable Supply Chain Mangement	<ul style="list-style-type: none"> In 2022, 85% of our 177 core suppliers signed the Integrity Pledge, a 3% increase over the previous year. The percentage of new suppliers selected using environmental and social standards is 100%. 	<ul style="list-style-type: none"> 100% supplier sign-up rate by 2025. Implement supplier ESG risk assessment and management.
Customer Relationship Management	<ul style="list-style-type: none"> The overall customer satisfaction rate was 84.1%, up 2.3% from 2021 and higher than the industry's 79.0%. Technical service and problem solving were highly recognized by customers, outperforming the industry by 10.1% and 8.4% respectively. In 2022, there were no customer complaints about information, privacy breaches or loss of customer data. 	<ul style="list-style-type: none"> Continue to improve our quality and establish a close partnership with our customers to achieve a win-win situation and mutual prosperity. Overall customer satisfaction maintained at >80%, moving towards >85% target. No incidents of leakage of company trade secrets and customer information.
Product Quality and Safety	<ul style="list-style-type: none"> EV products are EV READY certified, indicating that they are manufactured, installed and set up in compliance with regulatory standards. No health and safety regulatory violations and fines in 2022. 	<ul style="list-style-type: none"> EV product waste handling complies with the EU WEEE standard. EVT products are made of raw materials that meet international environmental standards.
Honors and Awards	<ul style="list-style-type: none"> Received the 2022 Taiwan Corporate Sustainability Report Gold Award. Awarded the silver medal of 2022 TTQS Talent Development Quality Management System, with a record high score in the evaluation. PHIHONG Dongguan implemented the RBA 7.0 specification and received a silver certification with a total score of 161.2 for its first introduction. 	<ul style="list-style-type: none"> By running for various awards, we are able to refine our corporate connotation and enhance our corporate image. Continued implementation of the "RBA Responsible Business Alliance and its Code of Conduct" to promote human rights protection management policies

COVID-19 Epidemic Prevention

Since the outbreak began, PHIHONG has always prioritized the health and safety of our employees and the sustainability of our operations. We follow the latest development in the COVID-19 epidemic, and take prudent and flexible measures in accordance with the local government's epidemic prevention regulations at each overseas plant. The PHIHONG COVID Prevention & Response Team has held epidemic prevention meetings across regions and departments for many times. New measures were launched in April 2022. In addition to the quarantine (care) leave required by the government, employees are also allowed to apply to work from home when their work nature permits. Our employees take turns coming to the office to reduce social contact and cross-infections. Paid vaccination leave was provided to encourage employees to get vaccinated, to improve vaccine defense rate. External visitors are required to present a quick antigen-test certificate within 48 hours before entering the plant to reduce the spread of unknown infection sources. In the second half of the epidemic prevention period, we continued to protect the health and safety of each employee and work together towards sustainable management. PHIHONG's specific epidemic prevention and management measures are as follows:

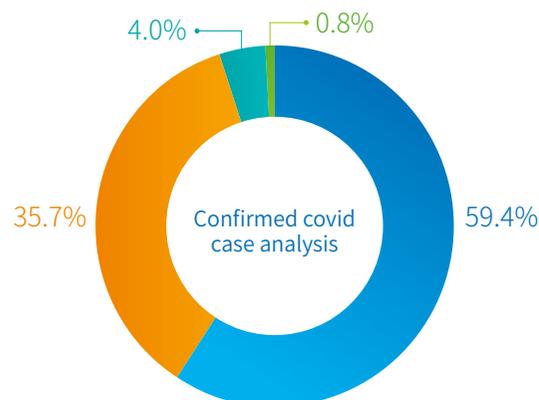
Staff Epidemic Prevention Plan:

Implement epidemic prevention management in response to emerging risks

A cross-department PHIHONG COVID Prevention & Response Team is formed to review and implement COVID prevention measures at all stages according to the epidemic level. We promote epidemic prevention, enhance employees' concept of independent health management to pay attention to their physical condition. We set up an internal COVID notification mechanism. If an employee has a confirmed case, the COVID Prevention & Response Team will be notified immediately for follow-up management. We recommend home quarantine for colleagues in the same office area or those who have been in close contact within 48 hours of the patient. In 2022, there were 249 confirmed cases among PHIHONG employees. Among them, 148 cases were confirmed for unknown sources, 89 cases due to family infection, 10 cases due to colleague infection, and 2 cases were confirmed for the second time. The pie-chart shows that the company's internal control and epidemic prevention strategies are effective. Only 4% of the total number of cases were diagnosed by colleague infection, which is relatively low.

Respond to government policies and encourage all employees to prevent COVID

To encourage our employees to receive vaccinations, they can apply for paid vaccination leave on the day of vaccination or the next day. This effectively raise the vaccination rate and expands the effect of vaccination prevention. In addition, we also provide vaccine insurance for all employees for them to receive vaccines with peace of mind. We provide our employees and their families with the greatest support, who become a solid backing for our employees.



Confirmed covid case analysis	%	Persons
Unknown sources	59.4%	148
Family infection	35.7%	89
Colleague infection	4.0%	10
Second-time infection	0.8%	2
Total number of confirmed cases	100%	249



Dismissing the virus. Disinfection equipment upgrade

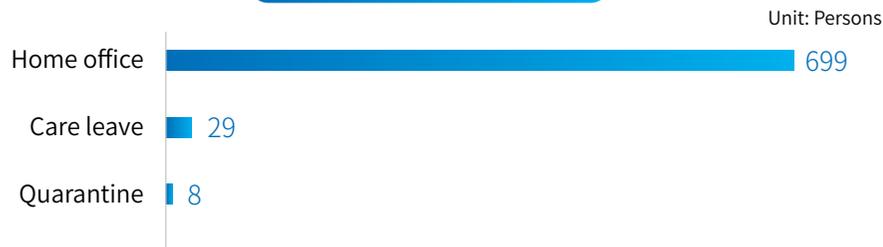
The level of disinfection in public areas (pantries, toilets, etc.) is upgraded. Cleaners wipe regularly 75% alcohol to reduce the risk of virus infection. Restaurants, toilets, elevators and other public areas are equipped with automatic alcohol disinfection machines. Medical-grade ultraviolet light sterilization machine was purchased, and the resident guards assisted in irradiating the office area every day after work hours, taking turns to ensure a clean and disinfected environment.



Home isolation. Taking turn to office for epidemic prevention

In line with government policy, employees are provided with unpaid quarantine (care) leave for epidemic prevention. If the nature of work permits, and if the employee is physically capable, he/she may apply to work from home. In 2022's statistics, 249 PHIHONG employees were diagnosed with COVID, 221 family members of employees were diagnosed, and 89 people had to take care of their children due to school suspension. However, 699 people applied to work from home, while only 29 people applied for isolation leave, and only 8 people applied for care leave. Colleagues who work from home can plan their working hours more flexibly, while taking care of family needs at the same time. The personal salary will not be affected, and the company's operation can be maintained. From the number of times colleagues apply to work from home, it can be seen that the company provided employees with a variety of working methods during the epidemic, and generally received positive feedback from employees.

Home Office VS. Quarantine



Epidemic Prevention Care. Health Protection

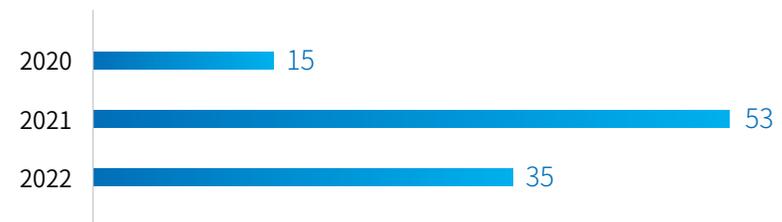
During the COVID period, PHIHONG only approved necessary business trips. If a business trip is deemed necessary by the supervisor, the company provides resources such as travel COVID-care kits for colleagues on business trips. We always care about the physical and mental health of our colleagues even when they travel, and provide all-round care. Also, in response to the COVID outbreak, if an employee is quarantined due to a confirmed diagnosis, the company not only provides "quarantine leave", but also takes the initiative to deliver a care package. In addition to quick test-kits, sanitizers, and masks, the care package contains fresh fruits, instant noodles, and a letter signed by the board of directors of encouragement. We work together with our colleagues to overcome COVID challenges.

Peace of mind in the workplace

- Taking turn to dine: The cafeteria let our colleagues to dine in turns. Epidemic-proof partitions are placed. If necessary, individual lunch boxes can be collected to reduce the risk of infection via social contacts.
- Meeting control: Meeting with more than 10 people is prohibited in the factory. Meetings are held by video instead to avoid group gatherings.
- Duties of factory-nurses: Provide daily health and education care for colleagues with "3 highs" identified in the annual health checkup. During the epidemic, they are responsible for compiling the statistics of confirmed cases among colleagues. Providing care and education, assistance in work from home applications, guidance for medical treatment, and recovery status tracking, etc.
- Medical doctor on-site: There is a monthly medical doctor on-site service. We also provide remote video medical consultation for our employees to reduce the risk of our employees going to medical facilities.

Occupational Specialist Doctor Service (PHIHONG Taiwan)

Year	2020	2021	2022
On-site service visits (person)	15	53	35



Visitor epidemic prevention plan:

- 1 Hosting units must apply for visitor entry to the factory. General Affairs will approve it according to the epidemic situation. Except for equipment maintenance and special circumstances, ordinary visitors are not allowed.
- 2 To maintain employee health and safety, visitors and vendors are required to provide proof of quick antigen-tests within 48 hours.
- 3 Before entering the factory, take the body temperature, disinfect the hands with sanitizers and wear a mask throughout the process.
- 4 Receipt of visitors, courier or goods will be done at the counter on the 1st floor or in the B1 guard room.

In 2022, COVID-19 is in its third year. Countries around the world have been unblocked and returned to normal life. Taiwan has also begun to relax the strict control of the novel COVID epidemic, opening its doors and gradually moving towards coexistence with the virus. This has led to an increasing number of confirmed cases and a more serious epidemic. Fortunately, PHIHONG has continued to revise our epidemic prevention measures on a rolling basis. Internally, PHIHONG has increased the protection rate. We provide paid leave to encourage employees to get vaccinated, and taking out vaccination insurance to give employees peace of mind. A two-pronged approach to increase the vaccination rate of employees, to reduce the rate of employees diagnosed with severe illness and physical discomfort; Externally, we strengthen the prevention rate. We strictly control the entry and exit of employees to prevent the spread of the virus, so that employees can go to work with peace of mind. When necessary, our employees took turns to go to work, so that indirect employees can work from home. We promote epidemic-friendly care measures that are better than what is required by laws and regulations. We accompany employees in the fight against COVID and go through the most difficult time of the epidemic together. Based on the confirmed cases statistics in 2022, the company's efforts on various strategies for epidemic prevention have been effective. The company has been able to minimize the rate of cross-infection in the plants by tracking and managing suspicious footprints and confirmed infected employees, and by planning the prevention of epidemics ahead of the requirements of the health authorities. Moreover, understanding the possible discomfort of employees after vaccination, we planned paid vaccination leave for employees. Our employees receive vaccine with peace of mind, which improved the rate of vaccination. There are only 2 cases of second-time infections in the company. No serious cases has been reported. Thanks to the concerted efforts of all the staff, we were able to deliver a good result in the second half of the epidemic prevention period.

In the past year, PHIHONG has always prioritized the health and safety of our employees and the sustainability of our operations. We follow the latest development in the COVID-19 epidemic, and take prudent and flexible measures. Through the operation of the PHIHONG COVID Prevention & Response Team and meetings, new COVID prevention measures were launched in April 2022. These include additional measures to the government requirements: Quarantine (care) leave, let employees to apply to work from home when their work nature permits, to take turns to work from home offices to reduce the chance of cross-infections, and paid vaccination leave to encourage employees to receive vaccines to improve the prevention rate, etc. As a result, the proportion of people diagnosed with suspected infection from colleagues in the company was limited to only 4% of all confirmed cases, effectively controlling the epidemic. In the second half of the epidemic prevention period, we will continue to work together to protect the health and safety of our employees, and work together toward sustainable corporate management.



1 Drawing a Sustainable Blueprint

1.1 Sustainable Development Strategy

1.2 Stakeholder Communication

1.3 Identification of Material Topics

1.4 Sustainability Development Goals (SDGs)

1.1 Sustainable Development Strategy

PHIHONG's mission is: "Take environmental protection and loving the earth as our responsibility. We provide a full range of electrical energy solutions, and become a quality enterprise with shared prosperity for customers, employees, shareholders, and manufacturers". In line with the spirit of corporate social responsibility, PHIHONG has been publishing CSR reports since 2009. In 2014, the "Sustainable Development Committee" was established. In 2021, to implement and promote our sustainable development policies, and combine ESG with the company's core development strategy, a "Sustainable Development Office" was set up under the Sustainable Development Committee to collect information on corporate sustainable development. The Office responds and discloses Stakeholders' concern on material topics. We have set up a sustainability strategy blueprint with 3 major aspects: environmental (E), social (S), and governance (G). We take the United Nations sustainable development goals as the aspects of implementing sustainable strategies. We continue to improve sustainable strategies and goals. In 2022, we revised the "Regulations on the Establishment of the Sustainable Development Committee" to meet legal and practical needs, with our Group's president serves as the committee chairman.

PHIHONG's Sustainability Committee is composed of 7 functional groups, with the first-level supervisors of each group (division) serving as members. "The Office of Sustainable Development is the core unit for promoting ESG, incorporating major ESG themes into management strategies and setting short-, medium-, and long-term goals for specific actions by the responsible teams. In 2022, the Sustainability Office will submit four sustainability proposals to the Board of Directors. The topics of communication include the Group's greenhouse gas inventory targets, green power investment plans, and the approval of major ESG topics and the issuance of reports for the current year.

Sustainable Development Committee's Main Responsibilities

- Formulate and promote sustainability policies and help integrate corporate sustainability values into company business strategies.
- Review the objectives, strategies and action plans of the company's sustainability policy, and review their effectiveness.
- Directs and tracks the progress and performance improvement of each sustainable development action plan.
- Responsible for the compilation and publication of ESG sustainability reports.

PHIHONG ESG Sustainable Governance Operation Model



Vision

Taking environmental sustainability (E), social integration (S), and corporate governance (G) as the blueprint for sustainable development strategies, and in line with international sustainable standards, the SDGs are used as the driving force to achieve the goal of sustainable development. Integrated into the corporate culture and operation strategy, and integrated with the Group's internal and external resources to continuously improve and innovate to create sustainable value for all stakeholders.

Strategy

With a commitment to sustainable corporate development, we will promote sustainable and inclusive economic growth, social development and environmental protection through 7 major aspects: green operations, climate change strategy, employee care, social engagement, corporate governance, sustainable supply chain management and customer partnership, to realize our strategic blueprint for sustainability.

Sustainable Development Policy and Vision Project

To implement sustainable development, PHIHONG has established the "Code of Practice for Sustainable Development", which clearly defines the 4 principles of (1) implement corporate governance, (2) develop a sustainable environment, (3) safeguard social welfare, and (4) enhance disclosure of corporate social responsibility information. This has been approved by the Board of Directors as the highest guiding principle for PHIHONG to promote sustainable development.



PHIHONG is deeply committed to sustainable management and regards ESG as an important corporate commitment. In order to paint a picture of the future and outline a forward-looking strategy, the "ESG Sustainability Vision Project" will be fully launched from 2022 onward, with 12 major themes in the 3 major components of ESG and 56 short-, medium- and long-term sustainability indicators. The spirit of corporate sustainability is deeply rooted in all of our domestic and overseas plants. Our strategy to promote sustainability is integrated with the core functions of the power supply industry. Each department is committed to promoting better sustainable practices. The "Sustainable Development Office" is the main unit for promoting the plan. Each functional committee member carries out their tasks separately, and monthly meetings are held to check the progress of the goals and demonstrate the determination to fulfill the commitment to sustainability. Moreover, through the promotion of the Vision Project, we are cultivating talents for organizational sustainability and carbon management in the hope of achieving a sustainable future together with the times and friendly cooperation.

PHIHONG Sustainable Vision Project



Environmental

21 indicators

- Product R&D and innovation
- Energy and greenhouse gases
- Climate change management
- Low carbon product design



Social

20 indicators

- Occupational health and safety
- Employees care and support
- Talent selection, training, and retention



Governance

15 indicators

- Integrity management
- Operational performance
- Sustainable supply chain management
- Customer relationship management
- Product quality and safety



Sustainable Training. Shaping ESG Culture

2022 ESG Training Series Summary

Aspects	Course title	Hours	Persons	Total
 Environment sustainability (E)	Webinar on Green and Sustainable Development Solutions for the Automotive Industry	2	3	6
	2022 Green Power Trading Summit (Business Week ESG)	5.5	2	11
	Taise 30 Sustainable Net Zero Summit Online Forum	5.5	1	5.5
	ISO14064-1: 2018 Greenhouse Gas Inventory	14	1	14
	The first step in carbon reduction for enterprises: how to reduce carbon in companies and products	7	2	14
	Global Symposium on Green Product Regulations	4	1	4
	Seminar on Low Carbon Green Technology and Environmental Regulations	2.5	1	2.5
	Briefing session on the latest international environmental protection regulations and Phihong control standards and parts recognition platform	2	4	8
	REACH SCIP database creation practical exercise	3	10	30
	TCFD scenario setting and risk opportunity assessment education and training	6	46	276
 Social inclusion (S)	Introduction of environmental regulations and application for technical documents	3	24	72
	Presentation on the PHIHONG ESG Sustainability Vision Project	2.5	28	70
	Work Life Balance Counseling and Promotion Seminar	9	3	27
	International Conference on Sustainable Health and Safety in the Workplace	4	1	4
	The role and tasks of human resources in ESG	1	3	3
	PHIHONG Corporate Social Responsibility Practice Sharing	1.5	184	276
	ESG Talk: Traveling in Africa with Old Shoes (Online)	1	76	76
	Labor law knowledge that auditors should have - from recruitment to resignation	6	1	6
ESG Seminar: Working Together to Safeguard the Health of All	1	27	27	

Aspects	Course title	Hours	Persons	Total	
 <p>Corporate governance (G)</p>	2022 Annual Corporate Governance Evaluation Promotion Course	3	2	6	
	Corporate Sustainability Manager License Training Course, the 22nd session	80	1	80	
	Points to note and legal relationship in the use of bills	6	1	6	
	Trade secret protection, non-competition and personal security internal audit practices	6	1	6	
	Explanatory Meeting on Trademark Act	3	4	12	
	Understanding trademark infringement starts with understanding the relationship between company names and trademarks	2	1	2	
	Audit Practice of Subsidiaries	6	1	6	
	Business contract review and revision skills	6	1	6	
	Auditing and control practice of "information security" by internal auditors	6	1	6	
	Continuing education courses for accounting executives of issuers, securities firms and stock exchanges	16	1	16	
	Analysis of common deficiencies in "financial report review" and important internal control laws and regulations	6	1	6	
	PHIHONG Code of Ethics and Business Conduct	1.5	184	276	
	Total		222	617	1,360

In recent years, COVID has spread around the world, posing severe threats and impacts on human health, economic growth, and social development. It has also made the world realize that "sustainability" is the key to corporate development. Employees play a critical role in initiating, igniting organizational culture, and driving companies toward sustainability. Therefore, we hope that all PHIHONG employees can have a deep understanding of the company's sustainable development concept and practice. So the topic of "PHIHONG Sustainable Development and Practice" is included in the compulsory pre-employment training courses for new recruits. The concept is reinforced through in-depth and simple explanation; Moreover, we also advocate the use of specific actions to practice sustainability and lead all employees to practice ESG-related actions such as energy saving and carbon reduction, environmental protection, and social care in their lives. We also share the activity records on our website and ESG fan group (FB) to strengthen the awareness of CSR among all employees. The ESG knowledge that employees learn at work often becomes a topic of conversation with their families, thus expanding the influence of ESG.



1.2 Stakeholder Communication

PHIHONG is committed to pursuing sustainable corporate development and has established transparent and smooth communication channels with stakeholders. These include the "ESG Sustainable Development" section on the company's official website, the "Stakeholders" section, and the PHIHONG ESG Fan Group. PHIHONG collects a wide range of sustainability topics of concern to our stakeholders, discloses the information and opinions they require in a timely manner through this report, and responds and takes appropriate measures in a timely manner.

Stakeholder Identification

To make the information disclosed in the report more in line with the expectations of the stakeholders, through the definition of stakeholders by including 3 major topics: "those for whom the organization has responsibility, those who are affected by the organization's operations, or those who affect the organization's operational performance", we collected a list of stakeholders related to PHIHONG. With reference to the GRI Sustainability Reporting Guidelines, and in accordance with the five principles of the AA1000SES stakeholder agreement standard (responsibility, influence, tension, multiple perspectives, and dependence), the 7 major stakeholders of PHIHONG were finally identified.



Who do we have obligations to?

Whom we are legally, financially or operationally liable

➔ Government / Investors (shareholders) / Customers / Employees



Who are we going to influence externally?

Stakeholders who will be affected by the organization operation

➔ Customers / Investors (shareholders) / Suppliers / Government / Local Community / Industry / NPO/NGO



Who will influence our business?

Stakeholders who will affect the organization's business performance

➔ Customers / Suppliers / Employees / Investors (shareholders) / Community / Government / Media



Stakeholder Communication System

Through multiple communication channels, PHIHONG communicates with its 7 major stakeholders to understand their concerns about sustainability topics. We respond through the communication channels listed in the table below and in this report. We also regularly report to the Board of Directors at the end of each year on our communication with each stakeholder, including the results of a survey on the level of stakeholder concern about sustainability topics.

Stockholders	Importance to PHIHONG.	TOP 5 Sustainability Topics.	Communication Methods & Channels.	Frequency.	2022 Performance.
<p>Shareholders, investors</p>	<p>To protect the rights and interests of investors and shareholders and to ensure fairness. Implement corporate governance. Continuously monitor and communicate with our investment partners. Enhance information transparency.</p>	<ul style="list-style-type: none"> Financial Performance and Profitability / Dividend Policy. Business Strategy and Outlook/ Industry Changes. Integrity management and anti-corruption. Climate-related Financial Risks Report (TCFD). Product quality and technology R&D. 	<ul style="list-style-type: none"> Announcement of operating performance. Convening regular shareholders meeting, issuing annual report and sustainability report. Disclose information in public information observatory announcements. Hold or participate in corporate briefing sessions. Set up an investor zone on the Chinese and English websites. 	<ul style="list-style-type: none"> Monthly Annually Irregular Irregular Permanent 	<ul style="list-style-type: none"> Hold the annual Shareholder's Meeting. Hold a legal conference. Hold an extraordinary shareholders' meeting. Regularly announce financial and corporate governance information.
<p>Customers</p>	<p>We listen to the voice of our customers, focus on their needs. Continue to provide them with better services and enhance their value.</p>	<ul style="list-style-type: none"> Product quality and technology research and development. Customer health and safety. Customer privacy. Emission of greenhouse gases. RBA Code of Conduct. 	<ul style="list-style-type: none"> Customer service hotline / Company official website. Customer audit. customer complaint or email. ESG disclosure platforms such as CDP, EcoVadis. Self-Assessment Questionnaire (SAQ) and On-site Audit. 	<ul style="list-style-type: none"> Irregular Annually Instant Annually Irregular(a few times / year) 	<ul style="list-style-type: none"> Customer Satisfaction Survey 100 % return rate (46 questionnaires in total). The overall project customer satisfaction rate is 84.1%.
<p>Employees</p>	<p>Employees are the most important partners of PHIHONG's sustainable development. We are committed to creating a diversified, equal, and healthy working environment. We expect to grow and develop together with our employees.</p>	<ul style="list-style-type: none"> Economic performance. Occupational health and safety. Training and education. Happy workplace. Employee opinion and suggestions. 	<ul style="list-style-type: none"> Labor-management meeting. Group meal communication meeting. Employee welfare committee meeting. Employee complaint mailbox. CI improvement promotion platform. 	<ul style="list-style-type: none"> Quarterly Bi-annually Monthly Permanent Permanent 	<ul style="list-style-type: none"> Hold regular quarterly labor-management meetings and employee welfare committee meetings. The overall satisfaction rating of the Employee Satisfaction and Engagement Survey is 4.59 marks, an increase of 1.77% compared to last year. Organize annual performance appraisal, employee promotion and salary adjustment operations.
<p>Suppliers</p>	<p>PHIHONG's supply chain partners provide high quality materials and services. We expect to establish a sustainable partnership with our partners to move forward together towards sustainable corporate development.</p>	<ul style="list-style-type: none"> Supplier ESG assessment. Supplier human rights assessment. Material quality management. Raw material management. 	<ul style="list-style-type: none"> New supplier review, audit and interview. QBR or quality meeting. ESG questionnaire. Self-assessment questionnaire (SAQ) and on-site audit. 	<ul style="list-style-type: none"> Irregular At least 4 times per year Annually Irregular 	<ul style="list-style-type: none"> 85% of core suppliers signed the Integrity Pledge, a 3% increase from the previous year. Conducted 34 new supplier reviews (QSAs); and 85 supplier reviews (QPAs).

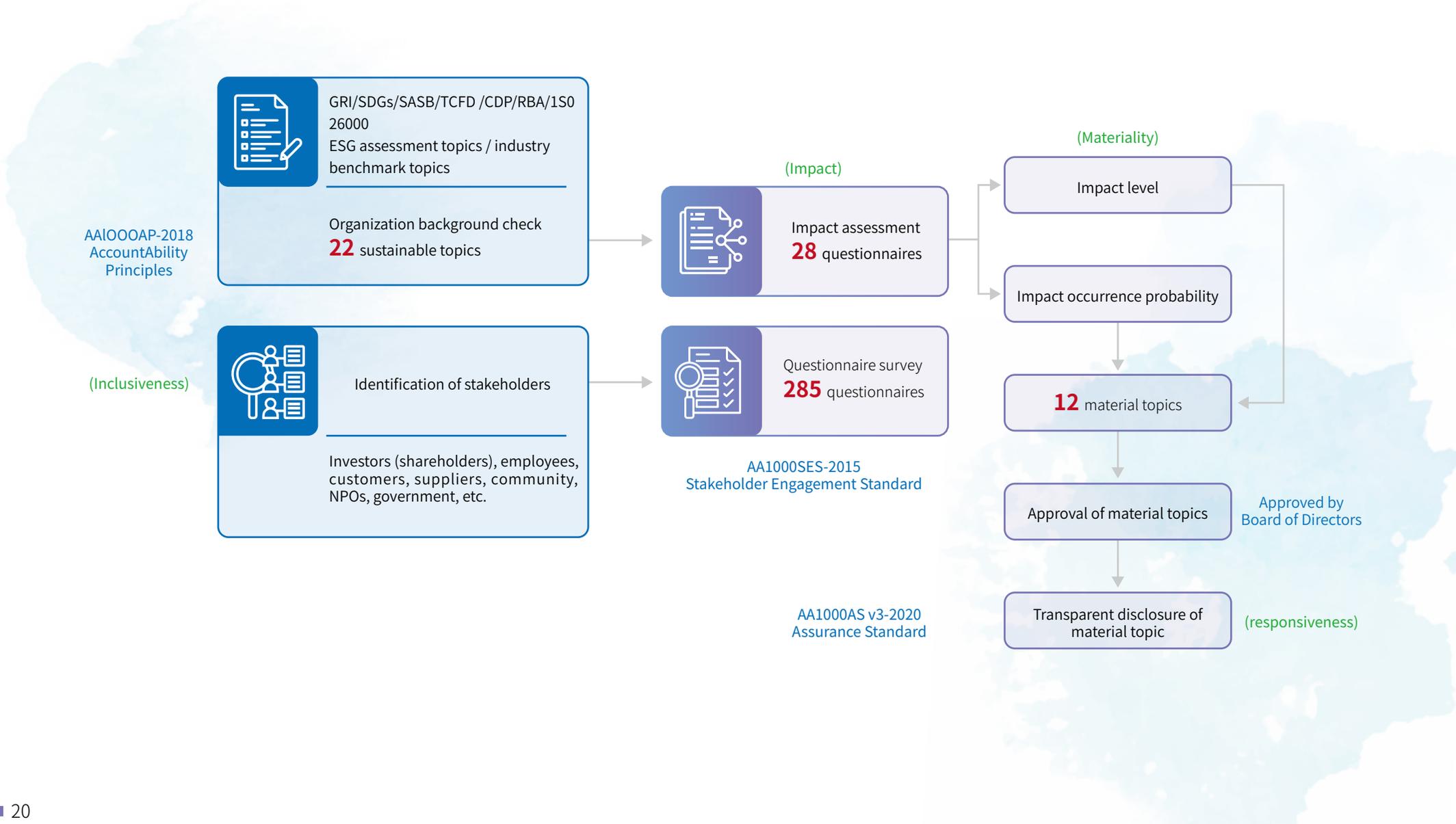
Stockholders	Importance to PHIHONG.	TOP 5 Sustainability Topics.	Communication Methods & Channels.	Frequency.	2022 Performance.
 Local community	Through active community participation, interaction, response, and care for the disadvantaged, we aim to achieve the goal of social inclusion and fulfill our responsibility as a sustainable citizen.	<ul style="list-style-type: none"> Wastewater discharge and waste treatment. Environmental issues such as air pollution. Charity. Community service. 	<ul style="list-style-type: none"> Official website. Industrial park management center regular meeting. ESG questionnaire survey. Stakeholder complaint box. 	<ul style="list-style-type: none"> Irregular Annually Annually Permanent 	<ul style="list-style-type: none"> The environmental monitoring rate of wastewater discharge reached 100%, in line with the requirements of regulations. Continuous donations and environment clean-up for Muhsiang Sweet Home, nutrition and donations for the Guishan Elementary School Little League team, donations from the 100-dollar club, sending love to Africa and other charity activities.
 Government	We follow relevant government regulations and proactively cooperate with the implementation of policies. We gain the government's trust, support, and cooperation through transparent two-way communication.	<ul style="list-style-type: none"> Corporate governance and operational performance. Integrity management and compliance with laws and regulations. Investor protection. Climate change. 	<ul style="list-style-type: none"> Report information on the website of the competent authority. Participate in the policy promotion meeting of the competent authority. Send staff to the factory for inspection in accordance with the law. Official correspondence. 	<ul style="list-style-type: none"> Regularly Irregular Irregular Irregular 	<ul style="list-style-type: none"> Regularly disclose operational information on the Market Observation Post System. Ranked 31-35% in the 9th Annual Corporate Governance Rating.
 NGO / NPO	Integrate resources with nonprofit organizations to build long-term sustainable partnerships for environmental, carbon reduction and social issues	<ul style="list-style-type: none"> Environmental management and climate change. International Carbon Disclosure Project (CDP). Issues related to ESG corporate sustainability. Social participation and charity. 	<ul style="list-style-type: none"> Project advocacy and disclosure & reporting. Attend events related to sustainability issues. Donation or sponsorship. 	<ul style="list-style-type: none"> Annually Irregular Irregular 	<ul style="list-style-type: none"> Respond to the CDP Carbon Disclosure Project. Climate change questionnaire rated B-. Follow SASB/TCFD Guidelines, Response and Disclose. TCSA Taiwan Corporate Sustainability Award Gold Award Recognition. Old Shoes for Lives Fundraising/ Sunshine Social Welfare Foundation.

Due Diligence

Through the stakeholder communication mechanism, PHIHONG uses regularly or irregularly different platforms to communicate with stakeholders to perform due diligence on topics related to the environment, society (including human rights) and corporate governance. We hope that the actual or potential negative and positive impacts of various topics can be identified, prevented, mitigated and explained. The target of due diligence in the reporting period was the value chain of PHIHONG and subsidiaries. If PHIHONG identifies a situation that has already caused an impact, response measures will be evaluated. For example, addressing actual negative impacts through remediation, or addressing potential negative impacts through prevention or mitigation.

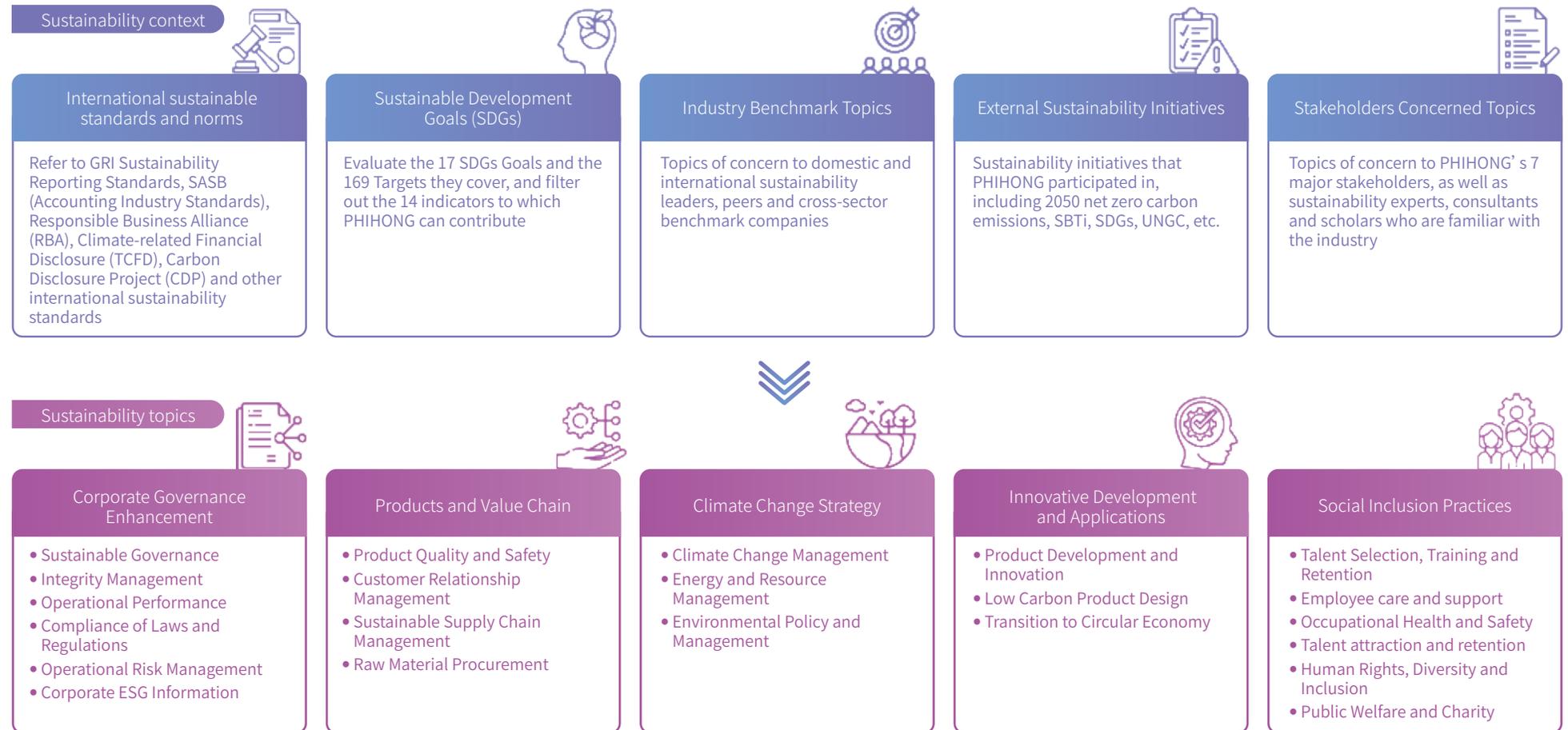
1.3 Identification of Material Topics

To understand the extent to which stakeholders are concerned about PHIHONG's sustainability topics and to examine the results of the organization's corporate sustainability efforts, we conduct stakeholder communication and critical theme identification through the following steps:



Organizational background research

External issues such as international sustainability standards and norms, Sustainable Development Goals (SDGs), industry benchmark sustainability topics, external initiatives, and topics of concern to stakeholders. Internal topics include PHIHONG's management philosophy, sustainable development policies, and organizational goals, with a total of 84 related topics collected. After discussion with the top executives of each business group, we finally compiled 22 ESG sustainability topics.



Impact Evaluation

Follow the definition of materiality in the 2021 new version of the GRI General Guidelines. This year, we re-examined the materiality of the 22 sustainable topics "for PHIHONG" and "for the external economy, environment, and people" from the perspective of impact. The impact index of PHIHONG's internal assessment is the main basis of evaluation, and the perspective of stakeholders is included to help us understand the external impact of PHIHONG.



Stage 1

Key stakeholder survey

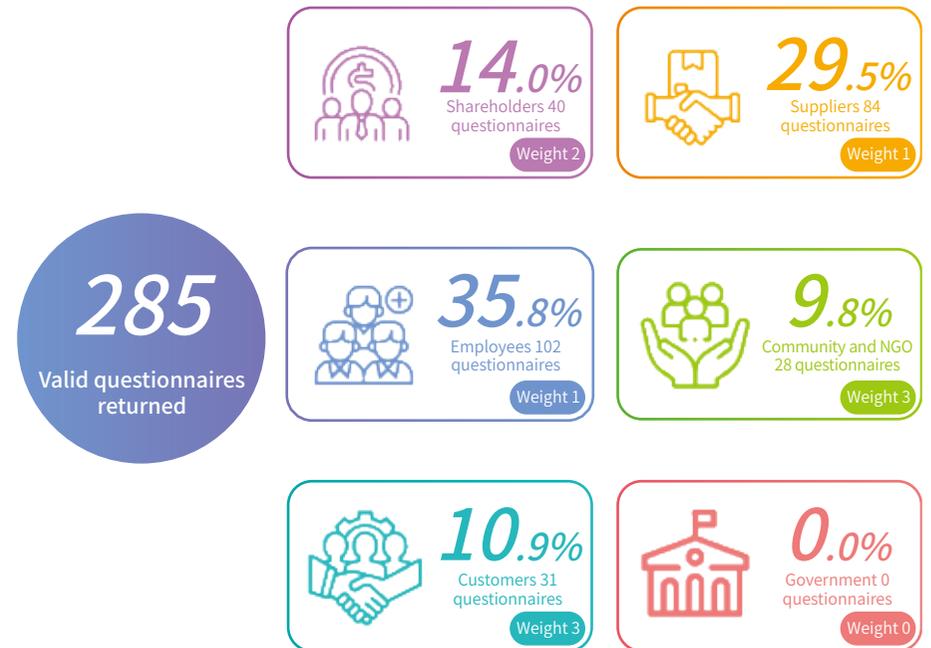
In the past, PHIHONG has used stakeholder surveys to collect stakeholders' concerns about sustainability topics. To make the survey targets and results more representative and meaningful, we have adjusted the criteria for determining whether an issue is material or not to use "impact level". In view of this, this year, we focused on conducting surveys on key stakeholders who have close interactions with PHIHONG or who have forward-looking insights into sustainable topics, to ensure that the opinions of stakeholders adopted are based on a full understanding of PHIHONG. Then, based on their opinions, we can understand the impact of PHIHONG on the outside world (economy, environment, and people). Therefore, the total number of questionnaires sent has decreased by nearly 450 compared with the previous year.

A total of 285 stakeholder questionnaires were collected in this survey. The results of the questionnaire are used as the basis for adjusting the materiality of the topics and understanding the substantive impact of the topics, as well as potential and sustainable topics that need to be managed.

Definition of Key Stakeholders

Key stakeholders	Representatives
Investors (shareholders)	Senior PHIHONG shareholders (holding shares for over 2 years, including employee shareholders), directors, supervisors and major shareholders
Employees	Senior employees over 5 years, and outstanding employees in the past 5 years, who have a high degree of recognition for the company's operations
Customers	Top 10 customers or international brand customers, or customer partners with long-term cooperation for over 3 years
Suppliers	Top 50 suppliers or key components, or suppliers with long-term cooperation for more than 3 years
Community	The local park management center where the factory is located and representatives of social welfare groups with frequent interactions
NPO/NGOs	Academic institutions, non-profit foundations, etc., non-profit organizations, experts or consultants with expertise in the field of sustainability
Government	Local competent authorities related to environment, society and corporate governance

Survey on Issues Concerned by Stakeholders





Stage 2

Organizational impact assessment

The PHIHONG Sustainability Team refers to the daily operation assessment and the development trend of sustainability topics to identify actual and potential impacts on the economy, the environment and people, including impacts on human rights. In addition, the Corporate Sustainability Committee conducts impact analyses on 22 PHIHONG -related sustainability topics to assess the potential positive and negative impacts on the economy, the environment, and people.

The materiality of actual and potential negative impacts is assessed based on the severity and likelihood of occurrence of the impact; the materiality of actual and potential positive impacts is assessed based on the size and scope of the impact and the likelihood of occurrence of the impact. Negative and positive impacts with above medium-high impacts are material. PHIHONG ESG material topics and their ranking are as follows:



Questionnaire

Overview of key stakeholder concerns and levels of interest



Consolidation

Integrate and understand the views and opinions expressed by key stakeholders



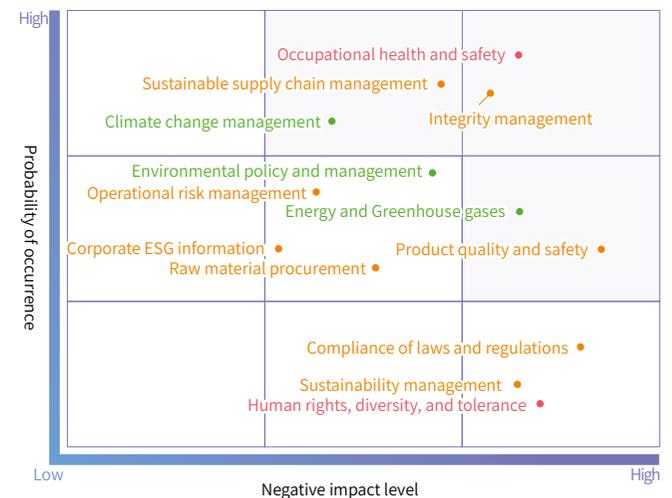
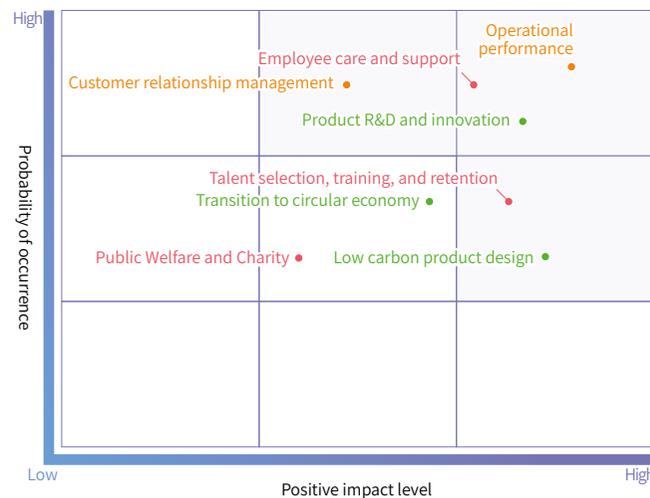
Summary

Summarize the suggestions that are highly related to PHIHONG as a reference for material topics in 2022. For example, in 2022, some shareholders proposed that PHIHONG should disclose climate-related financial reports (TCFD)

Materiality Analysis Matrix

PHIHONG has identified 22 sustainability issues of concern to stakeholders. After analyzing the matrix of material topics and discussing with the Sustainable Development Committee and the promotion group, based on the 12 most influential and significant major sustainable topics of high and medium-high impact, the report fully discloses its management methods and performance outcomes. Compared with the report issued in the previous year: sustainable supply chain management was added as a material topic this year; raw material procurement and implementation of laws and regulations were adjusted as secondary topics.

ESG Topic	ESG Aspect	Priority
Operational performance	E	Positive-01
Product R&D and innovation	E	Positive-02
Employees care and support	S	Positive-03
Talents selection, training & retention	S	Positive-04
Low carbon product design	E	Positive-05
Customer relationship management	G	Positive-06
Occupational health and safety	S	Negative-01
Integrity management	G	Negative-02
Energy and greenhouse gases	E	Negative-03
Product quality and safety	G	Negative-04
Sustainable supply chain management	E, S	Negative-05
Climate change management	E, G	Negative-06



List of Material Topics



E

nvironment

- Product R&D and innovation
- Energy and greenhouse gases
- Climate change management
- Low carbon product design



S

ocial

- Occupational health and safety
- Employee care and support
- Talent selection, training, and retention



G

overnance

- Operational performance
- Customer relationship management
- Integrity management
- Sustainable supply chain management
- Product quality and safety

List of sustainability topic changes

Sustainable topic	Impact to PHIHONG	Adjustments compared to the 2022 topics
Raw material procurement	Implement the control of raw material composition. Control the product development and design, production and subsequent recycling above the statutory environmental requirements.	<p>Topic of medium-high → medium concern</p> <p>PHIHONG has implemented the control of raw material ingredients for a long time. In addition, the degree of concern of stakeholders has decreased, so concern is reduced from medium-high to medium. PHIHONG will continue to observe the future development and impact of this topic.</p>
Compliance to laws and regulations	It is Phihong's role and responsibility as a global citizen to abide by relevant local laws and moral principles, and build a sustainable enterprise that is socially responsible.	<p>Topic of medium-high → medium-low concern</p> <p>PHIHONG follows the rules and prides itself on being a law-abiding company. In addition, the degree of concern of stakeholders has decreased, so concern is reduced from medium-high to medium-low. PHIHONG will continue to observe the future development and impact of this topic.</p>
Sustainable supply chain management	The implementation of corporate sustainability management should not be limited to the enterprise itself, but should also properly manage the indirect environmental and social impacts that may be caused by the supply chain.	<p>Topic of medium-low → medium-high concern</p> <p>In recent years, the impact of climate change and human rights issues have become more important and stakeholders are more concerned. So the importance of supply chain environmental and social topics has increased compared to previous years.</p>

Impact boundary identification of material topics

● Actual impact ● Potential impact ○ Direct impact from facilitation or business relationships

Material topic	Aspects	Corresponding standard	Significance of material topics to PHIHONG	Positive /negative impact	Internal impact	External impact						Corresponding section
						Supplier	Customer	Community	Shareholder	Government	NGO	
Operational performance	G	GRI 201:2016 Economic performance	Stable business performance is the foundation for sustainable development. Through economic performance, companies attract talent to create economic value and reward stakeholders.	+	●	○	○	○	●	●	●	2.2 Operational overview and economic performance: Operational overview
Integrity management	G	GRI 205:2016 Anti-corruption	Integrity is the core of PHIHONG's business, the central thinking of all activities, and the top of the business philosophy.	-	●	○	●	○		●	●	2.3 Integrity and compliance with laws: anti-corruption and anti-bribery
Sustainable supply chain management	E, S	GRI 308: 2016 Supplier Environmental Assessment, GRI 414: 2016 Supplier Social Assessment	Work with suppliers to implement corporate social responsibility. Promote sustainable development of the environment and safeguard basic human rights.	-	●	○	○	●		●	●	3.3 Sustainable Supply Chain Management: Supplier coaching
Product quality and safety	G	GRI 416: 2016 Customer Health and Safety	Provide customers and users with convenient, safe, energy- saving and non-hazardous green power supply-related products. This is the basis of our sustainable management.	-	●	○	○	●		●	●	3.1 Product quality and safety
Customer relationship management	G	GRI 418:2016 Customer Privacy	Good data flow control and information security management are essential to protect customer privacy and company information confidentiality.	-	●	●	○	●		●		3.2 Customer Relationship Management: Customer Privacy
Climate change management	E, G	GRI 201:2016 Economic performance	Identify the financial impact of climate change on operations and effectively manage risks.	-	●	○	○	●		●	●	4.1 Enhancing Climate Resilience (TCFD)
Energy and greenhouse gases	E	GRI 302:2016 Energy, GRI 305:2016 Emissions	Energy resources management is a sustainable business strategy and motivation. Institutionalized management to promote environmental performance to save carbon; Also, through the greenhouse gas inventory quantified supervision report to promote greenhouse gas emissions control and reduction.	-	●	○	○	●		●	●	4.2 Energy and resource management: energy use and intensity
Product R&D and innovation	E	Self-defined topic	Green design with product life cycle thinking to develop green and low carbon products.	+	●	○	○	●			●	5.1 R&D and Innovation
Low carbon product design	E	Self-defined topic	Use low-carbon and recyclable materials for product recycling and innovation. Product design to improve energy efficiency as much as possible.	+	●	○	○	●		●	●	5.3 Low-carbon product design

Material topic	Aspects	Corresponding standard	Significance of material topics to PHIHONG	Positive/negative impact	Internal impact	External impact						Corresponding section
						Supplier	Customer	Community	Shareholder	Government	NGO	
Talet selection, training, and retention	S	GRI 404: 2016 Training & Education, GRI 202: 2016 Market presence	Employees are the most important asset of a company's operation. The growth of employees is an important part of a company's competitiveness and innovation.	+	●	○	○	○	○	○	○	6.1 Talent selection and cultivation: training & development
Employees care and support	S	GRI 401: 2016 Employment	According to the annual company goal and salary policy, we evaluate the internal and external salary, and provide competitive salary and well-benefits to our employees.	+	●	○	○	○	○	○	○	6.2 Employee Care and Support
Occupational health and safety	S	GRI 403: 2018 Occupational Health & Safety	Employees are the most important asset of PHIHONG. Building a healthy and safe workplace environment for employees is the key to sustainable management of the company to maximize human efficiency and productivity.	-	●	○	○	○	○	○	○	6.3 Occupational health and safety

1.4 Sustainability Development Goals (SDGs)

As the concept of corporate sustainability continues to evolve, investors are promoting the Principle of Responsible Investment (PRI), which incorporates Environment, Society and Governance (ESG) performance of investment targets into their investment analysis. In addition, as the world faces the challenges of climate change, economic growth, social equality, and the wealth gap, the United Nations announced the Sustainable Development Goals (SDGs) in 2015, which include 17 SDGs, including eradicating poverty, mitigating climate change, and promoting gender equality. The SDGs guides the world to work together to move towards sustainability.

PHIHONG supports and responds to the 17 core concepts of the SDGs proposed by the United Nations, following the 169 specific practice indicators of the "SDGs Compass". We evaluate the risks and opportunities of SDGs caused by the activities in the value chain and include the positive and negative impacts of our current and future operations in our business objectives.

We have identified 17 SDGs targets and listed 14 SDGs sustainability indicators corresponding to the PHIHONG' S material topics for the year, demonstrating our commitment to the spirit of SDGs and integrating them into our actual business processes and setting targets. Performance tracking is conducted regularly by the Sustainability Promotion Team. In the future, we will continue to work together with all our stakeholders, to actively play our role as a social citizen by aligning our sustainability strategy with international standards. We will consider social responsibility as an integral part of our operations and strike a balance between the economy, the environment and society. In this way, we expect to make a significant impact on the actual improvement of global sustainability issues.



SDGs Goals	SDGs Sub-goals	PHIHONG's Target	Our responds to SDGs	Corresponding section
 <p>No Poverty</p>	<p>1.5: Empower poor and vulnerable communities to recover from disasters. Reduce the frequency and severity of their exposure to climate extremes and other disasters.</p>	<p>With our "Neighborhood friendly. Caring for the disadvantaged" philosophy, we continue to help and care for disadvantaged groups.</p>	<p>Regular monthly monetary and nutritional products donations to the Taoyuan "Muhsiang Home" nursery and the Guishan Elementary School Little League team. Responding to "old shoes save lives", over 30 volunteers participated in the service and raised small donations for container shipping.</p>	<p>6.4 Public service and social influence</p>
 <p>Zero Hunger</p>	<p>2.1: Zero Hunger. Ensure that all people, especially the poor and vulnerable (including infants), have access to safe, nutritious, and sufficient food throughout the year.</p>	<p>With our "Neighborhood friendly. Caring for the disadvantaged" philosophy, we continue to help and care for disadvantaged groups.</p>	<p>Regular monthly monetary and nutritional products donations to the Taoyuan "Muhsiang Home" nursery and the Guishan Elementary School Little League team. Responding to "old shoes save lives", over 30 volunteers participated in the service and raised small donations for container shipping.</p>	<p>6.4 Public service and social influence</p>
 <p>Good Health and Well-being</p>	<p>3.8: Achieve health care goals, including financial risk protection, and access to high quality primary health care services.</p>	<p>Promote a healthy workplace. Create a healthy and safe workplace for our employees.</p>	<p>In accordance with the labor health protection rules, we allocate full-time nurses and arrange doctors to provide medical consultation and health promotion activities for employees in our factories. PHIHONG provides free annual health checkups for all employees, in addition to the statutory requirements.</p>	<p>6.3 Occupational Health and Safety</p>
 <p>Quality Education</p>	<p>4.4: Enhancing corporate managerial capabilities, including technical and professional skills. 4.5: Ensure access to education and vocational training for disadvantaged groups at all levels, including the physically and mentally challenged, Aboriginal people, and disadvantaged children.</p>	<p>We are committed to providing our employees with the space to learn and grow. In line with the company's overall strategy, we have developed a comprehensive education and training development system corresponding to our organizational structure and vision.</p>	<p>Supervisory management training to strengthen management skills. Functional professional courses to enhance work efficiency. General courses in language and health. We provide a variety of learning resources for self-development. In addition to career development-related skills and professional training, we also emphasize personal health and spiritual growth.</p>	<p>6.1 Talent selection and cultivation</p>
 <p>Gender Equality</p>	<p>5.5: Ensure women's full participation in political, economic, and public decision-making. Ensure that women have equitable opportunities to participate in decision-making leadership at all levels.</p>	<p>Promote the proportion of women in management, for example by promoting gender equality and women's empowerment in their published guidelines, educational training, or activities.</p>	<p>Human Resources Development Policy – place the right person. We primarily consider management skills, and actively promote colleagues with excellent performance regardless of their gender. In 2022, PHIHONG has 82 female supervisors at or above the team level, accounting for 48.24% of the supervisors. In addition, there are over 78 middle-level managers, showing an increase for 4 consecutive years.</p>	<p>6.1 Talent selection and cultivation</p>

SDGs Goals	SDGs Sub-goals	PHIHONG' s Target	Our responds to SDGs	Corresponding section
<p>Clean Water and Sanitation</p>	6.4: Raise the efficiency of water use by industry, to ensure sustainable freshwater supply and recycling to address water shortage.	Water saving strategy by improving water facilities.	Taiwan' s Tainan plant introduced a rainwater recovery system. PHIHONG Dongguan built a rainwater diversion renovation project to improve the efficiency of water use.	4.2 Energy and resource management
<p>Affordable and Clean Energy</p>	7.2: Significantly increase the sharing of global renewable energy 7.3: Improve energy use efficiency.	Enhanced management through regional power usage monitoring system. Reduction of energy consumption through energy saving improvements.	PHIHONG Taiwan's Tainan plant is equipped with a solar power generation system that uses renewable energy for self-consumption. Energy saving is achieved by replacing energy-intensive equipment. Also, implement diversified power saving measures at plants and office areas.	4.1 Enhancing Climate Resilience (TCFD) 4.2 Energy and resource management
<p>Decent Work and Economic Growth</p>	8.5: Achieve full productive employment with equal pay for equal work regardless of gender. 8.7: Prohibit child labor policy. 8.8: Safe and healthy work environment.	Pay for equal work regardless of gender in accordance with the RBA Code of Responsible Business Practices. Prohibit child labor policy. Workplace Safety and Health Policy.	Follow the RBA Code of Responsible Business Practices to prohibit child labor and equal pay for equal work without gender discrimination. Establish an Occupational Safety and Health Committee under the Environmental Safety and Health Policy. Implement the ISO 45001 Occupational Safety and Health Management System.	3.3 Sustainable Supply Chain Management 6.2 Employee Care and Support 6.3 Occupational Health and Safety
<p>Industry, Innovation, and Infrastructure</p>	9.1: Create a high-quality, safe, sustainable, and resilient infrastructure that supports economic development and human well-being; and provides affordable and equitable opportunities for all. 9.4: Upgrade infrastructure and transform industry and commerce so that they can grow sustainably. Improve energy efficiency and move towards cleaner and greener technologies and processes.	Commit to the research and development of high-power charging products to accelerate the charging energy and shorten the charging time. Target for outstanding achievements in the fields of smart life, medical electronics, e-sports, 5G, industrial control, etc.	Collaborate with local communities to build more fast charging stations to create a more EV-friendly environment where EV owners no longer have to worry about traveling distance and can save more time on charging. New technology platform with high conversion efficiency. By increasing the conversion efficiency and reducing the heat generation of components to reduce the size of the product e.g., ultra-high power GaN chargers.	4.1 Enhancing Climate Resilience (TCFD) 5.1 R&D and Innovation 5.3 Low-carbon product design
<p>Reduced Inequalities</p>	10.3: Ensure equal opportunity and reduce inequality. This includes laws, policies, and practices that eliminate discrimination and promote appropriate legislation, policies, and actions.	Respond to and support the "United Nations Universal Declaration of Human Rights", "United Nations Guiding Principles on Business and Human Rights", "RBA Code of Responsible Business Conduct".	PHIHONG' s global human rights policy implements the RBA Code of Responsible Business Conduct. We also conduct third-party verification.	6.2 Employee Care and Support

SDGs Goals	SDGs Sub-goals	PHIHONG' s Target	Our responds to SDGs	Corresponding section
 <p>Sustainable Cities and Communities</p>	11.6: Reduce the harmful effects of urban areas on the environment, including special attention to air quality, urban management, and waste management.	Incorporate waste disposal into management to effectively reduce the amount of waste and prevent environmental impacts.	We comply with the environmental laws and regulations of our operations and thoroughly implement a waste management system. We also reduce the amount of waste generated by acquiring and reusing scraps and paying for cleanup. Define the scope of product inventory and introduce product carbon footprint inventory and management.	<p>3.1 Product Quality and Safety</p> <p>3.3 Sustainable Supply Chain Management</p> <p>4.3 Sustainable Environmental Management</p> <p>5.2 Transition to circular economy</p>
 <p>Responsible Consumption and Production</p>	12.6: Integrate Sustainability Information into the reporting cycle.	We continue to promote environmental, social, and corporate governance-related sustainability issues into our business processes and include them in our regular reporting and disclosures.	Prepared the Phihong Sustainability Report based on GRI 2021 General Standards and Sustainability Accounting Standards Board (SASB) Standards for Disclosing Climate Change-related Risks and Opportunities (TCFD).	<p>3.1 Product Quality and Safety</p> <p>4.1 Enhancing Climate Resilience (TCFD)</p> <p>5.1 R&D and Innovation</p> <p>5.3 Low-carbon product design</p>
 <p>Climate Action</p>	13.3: Improve education, awareness, and human and institutional capacity for climate change risk reduction, adaptation, impact reduction, and early warning.	Disclosure of climate change related risks and opportunities (TCFD).	<p>Disclosure of Climate Related Risk and Opportunities (TCFD) Information.</p> <p>Develop and promote low carbon products to enhance the growth of green industries.</p> <p>Committed to SBTi's goal of 4.2% annual carbon reduction.</p>	<p>4.1 Enhancing Climate Resilience (TCFD)</p> <p>4.2 Energy and resource management</p> <p>5.1 R&D and Innovation</p> <p>5.3 Low-carbon product design</p>
 <p>Peace and Justice Strong Institutions</p>	16.5: Significantly reduce all forms of corruption and bribery; 16.7: Ensure that decision-making at all levels is responsive to public opinion and is inclusive, participatory, and representative.	PHIHONG' s "Code of Business Ethics and Business Conduct": Anti-corruption and anti-bribery policy. Establish good and harmonious labor relations and respect the freedom of association of employees.	<p>Implement PHIHONG' s "Code of Business Ethics and Conduct": Anti-corruption and anti-bribery policy. There was no corruption or bribery at PHIHONG in 2022.</p> <p>The Labor-management meeting is held quarterly to discuss the welfare and rights of the labor force. Through reports or proposals to communicate fully.</p>	<p>2.3 Integrity and compliance with laws</p> <p>6.2 Employee Care and Support</p>

2 Corporate Governance Enhancement

- 2.1 Sustainable Responsible Governance
- 2.2 Operation Overview and Economic Performance
- 2.3 Integrity Management and Compliance with the Law
- 2.4 Risk Management and Information Security

2.1 Sustainable Responsible Governance

Composition of the Board of Directors

The Board of Directors is PHIHONG's highest governing body and the center of major operational decisions. The founder, Mr. C.M. Lin, has been the Chairman of the Board since the Company's establishment in 1972 and is also the Chief Executive Officer, who is responsible for setting operational guidelines and major strategies and directions of the Group. If a meeting of the Board is called by the chairman of the Board, the chairman of the Board shall be the chairman of the meeting. However, if the first meeting of the Board is called by the director who receives the most votes from the shareholders, the chairman of the meeting shall be the person who has the right to call the meeting; If there are over 2 persons with the right to convene, one of them shall be elected from among themselves. The 14th Board of Directors shall continue to be chaired by Mr. C.M. Lin, the founder.

To deepen and realize the vision of sustainable development, PHIHONG established the "Sustainable Development Committee" in 2014, with Mr. Yang-hong Lin, Group President, as the chairman and senior managers of each business unit as members. In 2021, the "Sustainable Development Office" was established under the Committee to coordinate the formulation of corporate social responsibility, sustainable development direction and goals, or the formulation and implementation of related management policies and specific promotion plans, and report to the Board of Directors on a regular basis. In Sep 2022, the Office of Sustainable Development completed the revision of the Code of Practice for Sustainable Development in accordance with the requirements of the competent authorities and was approved by the Board of Directors to supervise the operation of sustainable development and review the effectiveness of implementation and continuous improvement from time to time to ensure the implementation progress. The Board of Directors authorizes senior management to deal with economic, environmental and social issues or risks arising from operational activities and reports to the Board of Directors on the handling of such issues.

The election of directors is based on a candidate nomination system. The Board of Directors and shareholders holding 1% or more of the outstanding shares may nominate candidates for election as directors in writing to the Company. The number of nominees shall not exceed the number of directors to be elected. The Nominating Committee and the Board of Directors shall examine the qualifications of the candidates, and shall announce the candidates' academic qualifications and operating policies before the shareholders' meeting for the reference of all shareholders, so that shareholders can have sufficient time to understand the candidates' profile before the election. The Board of Directors consists of 12 directors, 3 of whom are independent. Each director has a professional background in business management, finance and accounting, business, law, and information technology, which is in line with the Board of Directors' diversity policy. Board meetings are held at least quarterly to oversee internal control policies and procedures, review operating performance and discuss major strategic issues. 6 board meetings were held in 2022, with a high attendance rate of 90.63% of directors. At each board meeting, the directors and the management will fully communicate and discuss the content of motions, and the directors also provide professional advice to the management for reference in making operational decisions.



The industrial experience and professional competence of the directors of the Company are listed below:

Item Name of director	Basic information				Industry experience				Expertise			
	Gender	Nationality	Part-time employee	Age	Electronic technology	Product design	Asset management	Others	Business management	Accounting & Finance	Law	IT
Director	Chung-Min Lin	Male	ROC	✓	71~80	✓		✓	✓	✓		✓
	Fei-Hung Lin	Male	ROC	✓	41~50	✓	✓	✓	✓	✓		
	Jia-Kun Wang	Male	ROC		61~70	✓		✓	✓	✓		✓
	Ming-Zhi Zhou	Male	ROC		51~60	✓		✓	✓	✓		✓
	Da-Ren Zhou	Male	ROC		61~70	✓		✓	✓	✓	✓	✓
	Wei Feng Jiang	Male	ROC		51~60	✓		✓	✓	✓		✓
	Yang-Hong Lin (Representative of Guanfeng Investment)	Male	ROC	✓	41~50	✓		✓	✓	✓		✓
	Shi-Xiong Yang (Representative of Guanfeng Investment)	Male	ROC		71~80	✓		✓	✓	✓		✓
	Jian-Quan Wang (Representative of Taiwan Cement)	Male	ROC		61~70	✓		✓	✓	✓		✓
Independent director	Yu-Yuan Hong	Male	ROC		51~60	✓		✓	✓	✓		✓
	Kui-Hong Lin	Male	ROC		51~60	✓	✓	✓	✓	✓		
	Xian-Da Zhang	Male	ROC		41~50	✓	✓	✓	✓	✓		

Please refer to the corporate governance of PHIHONG's website for the Board of Directors' profile and related background.

The CEO of PHIHONG is appointed by the Board, and the other supervisory positions are authorized to be appointed and dismissed by the CEO. In the event of a conflict of interest, the Board will fully explain the director's or CEO's interest in the meeting and ask the director or CEO to recuse himself/herself from the discussion and voting on the motion. After the meeting, the minutes of the Board meeting shall disclose the content of the motion, the names of the directors, their self-interest, and the voting situation in order to comply with the spirit of independent operation of the Board of Directors. Please refer to pages 11-15 of the Company's 2022 Annual Report on Shareholders' Meeting for information on the concurrent appointment of directors and independent directors.

The CEO regularly attends the board of directors' meetings to report on the operating status and financial business overview. The internal auditor is appointed by the board of directors and is responsible to the board of directors. He/she also attends the board of directors' meeting to report the results of quarterly audits and abnormal improvements to ensure the effectiveness and efficiency of operations (including profitability, performance, and safety of assets), the reliability of financial reporting, and compliance with laws and regulations, and to fulfill the responsibility of the highest governing body for supervision. In addition to checking or reviewing the financial statements, the certified accountants of the company also conduct random checks on internal control, and attend the board of directors to explain the critical audit items or significant abnormalities in the financial statements to the directors to ensure the fair presentation of the financial statements and the effectiveness of the internal control system, and to fulfill the responsibility of external supervision.

Functional Committee Operations

Committee	Established since	Duties	Members	2022 Committee Operations			
				Required frequency	No. of Meetings	Attendance rate	Important Resolutions
Audit Committee	2017.6	Supervise the proper expression of the company's financial statements, the selection (dismissal) and independence of certified accountants, the effectiveness of internal control, compliance with laws and regulations, and the management and control of the company's existing or potential risks.	Composed of 3 independent directors, with independent director Yu-Yuan Hong as the chairman	Quarterly	5	93.33%	<ul style="list-style-type: none"> Annual and quarterly financial reports Annual budget and capital expenditure proposal Revisions to internal control systems and management practices Major capital loans and endorsement guarantees
Remuneration Committee	2011.12	To establish and regularly review the policies, systems, standards and structures for performance evaluation and compensation of directors and managers, and to regularly evaluate and set the compensation of directors and managers.	Composed of 3 independent directors, with independent director Yu-Yuan Hong as the chairman	Annually	3	100%	<ul style="list-style-type: none"> Review and adjustment of directors' operating expenses Manager salary adjustment and year-end bonus proposal
Nominating Committee	2017.8	To nominate and confirm the qualifications of director candidates, to establish the organizational structure of functional committees, and to review the rules and regulations related to the operation of the board of directors and functional committees, and to establish and amend the code of corporate governance practices.	Composed of 3 independent directors, with independent director Yu-Yuan Hong as the chairman	Bi-annually	2	100%	<ul style="list-style-type: none"> Nomination of director candidates Evaluation of Directors' Performance Revision of the Code of Corporate Governance Practices
Sustainable Development Committee	2014.12	To coordinate the formulation of corporate social responsibility, sustainable development direction and goals, or the proposal and implementation of related management policies and specific promotion plans, and to report regularly to the Board of Directors.	Mr. Yang-Hong Lin, the General Manager of the group, serves as the chairman. The first-level supervisor is the convener of the 7 sustainable topics	Bi-annually	5	100%	<ul style="list-style-type: none"> Set 56 ESG KPIs and Review of Sustainability Goals Approved ESG Key Themes and Report for 2021 Progress report on the Group's greenhouse gas inventory Revised "Code of Practice on Sustainable Development"

Remuneration Policy and Performance Appraisal

The remuneration of PHIHONG's directors and the CEO is governed by the "Regulations of the Remuneration Committee". Directors are paid for their travel expenses based on the actual number of meetings attended. The annual remuneration of the CEO is based on the monthly salary and the performance evaluation of the Board of Directors, Directors and the CEO at least once a year. The results of the performance self-evaluation are used as the basis for measuring the individual compensation of Directors and the CEO, and are reviewed by the Remuneration Committee and submitted to the Board of Directors for approval. In 2022, the total remuneration of directors is NT\$39,719,000, accounting for 55.70% of net income after tax. The total remuneration of the CEO is NT\$40,851,000, accounting for 57.27% of the net income after tax.

The 5 Aspects of Board Performance Self-Assessment

1. The degree of participation in the company's operations.
2. Improve the quality of decision-making of the board of directors.
3. Composition and structure of the board of directors.
4. Selection and continuing education of directors.
5. Internal control.

The 6 Aspects of Board Members Performance Self-Assessment

1. Master the company's goals and tasks.
2. Responsibilities of directors.
3. The degree of participation in the company's operations.
4. Internal relationship management and communication.
5. Professional and continuing education of directors.
6. Internal control.

Director training

In response to the development trend of corporate governance and legal compliance, PHIHONG provides a variety of external education programs for the board members to strengthen their abilities in performing their duties and keep pace with the times. In 2022, the members of the Board of Directors continued their education in accordance with the guidelines set forth in the "Directions for the Implementation of Continuing Education for Directors and Supervisors of TWSE Listed and TPEX Listed Companies" of the Taiwan Stock Exchange Corporation. 12 members of the Board of Directors, all of whom were re-elected directors, had 87 hours of continuing education, with an average of 7.25 hours per person. In general, the program is better than the 6-hour limit set by the "Directions for the Implementation of Continuing Education for Directors and Supervisors of TWSE Listed and TPEX Listed Companies". The topics of the directors' training courses include corporate governance, corporate social responsibility, net zero carbon emissions, ESG sustainability and financial risk, etc., in order to strengthen the professional functions of directors and supervisors and optimize corporate governance. 2022 directors' training is also disclosed on the Market Observation Post System and PHIHONG's annual financial report.



Internal Audit Organization and Process

PHIHONG's internal audit is an independent unit directly subordinate to the Board of Directors, with 1 full-time audit supervisor and 1 audit agent. The appointment and removal of the audit supervisor shall be approved by the Audit Committee and submitted to the Board of Directors for resolution. The appointment, dismissal, annual evaluation, and salary and compensation of the audit staff shall be signed by the audit supervisor and submitted to the chairman for approval. The audit office performs audits in accordance with the audit plan, which is prepared based on the risk assessment results and approved by the Audit Committee and the Board of Directors. Also ad hoc audits are performed as needed. The results of the audit plan shall be reported to the Audit Committee and the Board of Directors on a regular basis or as necessary. The Audit Office shall supervise each internal unit and subsidiary to regularly evaluate the effectiveness of the internal control system on an annual basis. The Audit Office shall review the self-assessment reports of each unit and subsidiary and consolidate the self-assessment results. This is used as the basis for the Board of Directors and the President to issue a statement on the internal control system in order to implement the spirit of corporate governance.

The audit scope of the Audit Office includes financial, business and other operational and management functions. The audit is divided into 10 major cycles as stipulated by law. The audit targets include all units of the Company and all legal subsidiaries. The purpose of the audit is to assist the board of directors and the managerial department to check and review the deficiencies of the internal control system, and to measure the effectiveness and efficiency of the operation. The Internal Audit also provides timely suggestions for improvement to ensure that the internal control system can be implemented effectively and consistently, which serves as the basis for reviewing and revising the internal control system. In 2022, the audit focused on the 10 major internal control cycles and 15 key operating procedures. A total of 151 check items completed by Phihong Taiwan, Phihong Dongguan and Phihong Haiphong, and 57 improvement recommendations were made. These were communicated to all units and subsidiaries under investigation, and appropriate improvement measures were taken in a timely manner in accordance with the recommendations.

2022 Audit focus

- | | |
|---|--|
| 1. Sales and Receipt Operations | 10. Audit Committee and Board of Directors |
| 2. Procurement and Payment Operations | 11. Engagement in Derivatives Trading |
| 3. Property, plant, and equipment Operations | 12. Endorsement guarantees for others, fund loans and other work |
| 4. Payroll & Compensation Committee | 13. Information Security and Compliance |
| 5. Financing | 14. Annual self-assessment of operations |
| 6. Investment Operations | 15. Continuous promotion of internal control system |
| 7. Electronic Computer Operations | |
| 8. Research and Development Cycle | |
| 9. Supervision of Subsidiaries - Mainland Subsidiary, USA Branch, Vietnam, Japan Office | |



Region	No. of audits	No. of faults	No. of Improvements
PHIHONG Taiwan	52	14	14
PHIHONG Dongguan	74	25	25
PHIHONG Haiphong	25	18	18

2.2 Operation Overview and Economic Performance

About PHIHONG

Founded in 1972 and headquartered in Hwa-Ya Technology Park, Taoyuan City, Taiwan, PHIHONG is one of the top 10 power supply suppliers in the world. We specialize in the development and manufacture of high efficiency power supply products. With the world-renowned power conversion technology, we are dedicated to the market of electric vehicle charging station equipment. Our products are mainly developed for power supply products, including power adapters, battery chargers, PoE (Power over Ethernet), electric vehicle charging stations, and construction site audio. We are also involved in consumer electronic products such as POE network smart home, AR/VR, e-Sports, POS machine, small home appliances, home medical equipment, e-bike, construction, industry, 5G, electric vehicles, and other industrial fields. During the reporting period, the ownership of PHIHONG and its subsidiaries underwent major changes in Sep 2022. On the occasion of the 50th anniversary of PHIHONG Group, the electric vehicle energy business group was split and established as a subsidiary Zenova Technology, which provides integrated electric vehicle charging solutions for the global electric vehicle market.

PHIHONG provides a wide range of power supply products to meet customers' needs. In addition to ISO 9001 quality management system certification and product safety certification for general industrial products, our medical power supply products have also passed ISO 13485 medical device quality management system certification to meet the requirements of medical device end-users. Moreover, PHIHONG has been working hard in the field of electric vehicles and e-bikes. Our automotive power supplies and related in-vehicle products have been certified by IATF 16949, and obtained the high-standard certification of EV Ready, leading the industry and taking the lead in entering the supply chain of international car manufacturers. The subsidiary Zenova Technology further develops integrated electric vehicle charging solutions to provide customers with excellent product quality and perfect after-sales customer service. With the vigorous development of the electric vehicle market, the demand for electric vehicles on the grid (Vehicle-to-Grid, V2G) and energy storage is also one of the key developments of Zenova Technology. In the future, PHIHONG Group will use energy conservation, energy storage, and energy creation as three indicators, and provide global energy transformation services through the integration of smart systems.



ISO 13485:2016

Medical devices
Quality management system



IECQ QC080000: 2021

Hazardous substance process
Management system



ISO 9001:2015

(Phihong Groups/ Vietnam Factory)
Quality management system



IATF 16949:2016

Automobile
Quality management system

In recent years, we have gradually integrated and updated our information platform, collected internal data and market intelligence, analyzed potential problems for improvement, and tracked the market trend to plan green and sustainable business opportunities in advance. In addition, we have integrated the issue of sustainable development into our business strategy to improve our competitiveness and overall gross profit margin, maintain a stable financial structure and operating quality, and achieve our core values of "energy saving, environmental protection, innovation, and service" to become the world's best power supply provider.

Basic information

 Company name	Phihong Technology Co. Ltd.	 Industry	Electronic Components
 Founded on	December 12, 1972	 Listing date	September 17, 2001
 Stock Code	Taiwan Stock Exchange 2457	 Paid-in capital	NT\$3,752 million (as of December 31, 2022)
 Headquarters	No.568, Fuxing 3rd Rd., Guishan Dist., Taoyuan City (33383),Taiwan, R.O.C. (Hwa-Ya Technology Park)	 Operating income	NT\$14.018 billion
 No. of employees	4,766 (As of December 31, 2022 globally)	 Main products	Development, manufacture, and sales of high efficiency power supplies
 Management	CEO: Zhongmin Lin / President: Yanghong Lin	 Website	https://www.phihong.com.tw

• Our MISSION

We are committed to environmental protection. We provide a full range of electrical energy solutions and becoming a quality enterprise with shared prosperity for customers, employees, shareholders, and manufacturers.

• Our VISION

With the core values of energy saving, innovation and service, we aim to become the world's best power supply provider.

• Our VALUES



Globalization Strategy

PHIHONG strengthens its core strengths through the integration of global resources and expands the marketing of its products in major markets around the world. Through our business locations or R&D centers in Taipei, China, Japan, the United States, and Europe, as well as our manufacturing center in Dongguan, China, we provide global services to our customers. In response to changes in international economic trends, the threat of trade war between the US and China, and the risk of concentrating production centers in Dongguan, China, PHIHONG invested and established a Vietnamese subsidiary in Haiphong, North Vietnam, and built a new overseas production base. In addition to expanding the production capacity of the group, it can further solve the tariff issues arising from the Sino-US trade war and satisfy customers with more flexible operations. demand, which will help enhance the competitiveness of the Group's products.

Meanwhile, the development of EV has become an irreversible trend due to the wave of global green industry revolution triggered by global warming. Phihong spined off the electric vehicle energy business group, which has been developing for more than 12 years, to establish a subsidiary, Zenova Technology, to provide integrated electric vehicle charging solutions for the development of the global electric vehicle industry. With the accelerated development of the EV market, Zenova has been in line with the international car manufacturers and has developed and produced its own DO360 series, which not only provides 360kW DC high power output, but also the power conversion control hub, Central Signal Unit (CSU), which is developed by the Taiwan team from hardware to software. The cloud platform is designed to interface with the platforms of European and American car manufacturers. To quickly serve global customers with lithium and lead-acid battery charging solutions, PHIHONG has service locations in Taiwan, California, New York, Europe, China, Japan, and Vietnam. With the OEM and ODM capabilities accumulated over the years and the high standard of production quality, we have the ability to provide highly customized development for different fields for international customers. This attracts the attention of large international charging operators. At present, in America, Europe, Southeast Asia and other regions, products from Zenova can already be seen, and more than 30,000 charging sites around the world have used Zenova charging solutions.

Global operating locations



Operational Economic Performance

Material topic: Operational Economic Performance (GRI 201: Economic Performance 2016)



Policy and Commitment

Financial performance is a demonstration of the stability and efficiency of a company's operations. By strengthening the financial structure and implementing cost control, we aim to achieve the goal of sustainable development.



Responsible parties

Head of Corporate Governance, CEO's Office, Finance Division, Audit Office



Target setting

2022 target

By adjusting the product mix and improving the gross profit structure, we can achieve the operating goals set by the company.

Achieved performance

- Consolidated operating income NT\$14.018 billion
- Net profit for the period NT\$71,306,000
- Earnings per share NT\$0.19

Future target

- Short-term (2023-2024)
 - » Assist in the financial planning of group companies and develop group financial integration plans to continue to strengthen the value of commodities and continue to pursue profitability and growth.
- Mid- to Long-term (2025-2030)
 - » Strengthen corporate governance and maintain good relations with investors.
 - » To grasp the market trend and pursue the company's sustainable management based on the principle of customer orientation.



Management approach

We have a sound corporate governance structure with a Board of Directors, an Audit Committee, a Remuneration Committee and a dedicated Internal Audit Unit to effectively control the overall operation and development of the company.



Annual performance highlights

Product mix optimized. Revenue up 14.11% from previous year. Operating from loss to profit



Evaluation and Grievance Mechanism

- Evaluation: Internal audit accountant's check and signature
- Grievance: general meeting of shareholders legal person briefing

PHIHONG's consolidated revenue for 2022 is NT\$14.018 billion, up 14.11%. Gross profit is NT\$2.142 billion, up 45.36%. Consolidated gross profit margin is 15.28%, up 3.29%. EPS is NT\$0.19. The Company's profit after tax is NT\$71.32 million. Successful turnaround to profit in 2022. The electric charging pile business is expected to grow in volume from 2022, benefiting from the accelerated construction of electric vehicle infrastructure in various countries. With the maturing of charging pile technology and business, global green consciousness becoming apparent. With the trend of increasing penetration of electric vehicles, there will be greater growth potential in gross margin and profitability, which will contribute to overall profit growth.

2022 Consolidated Financial Statement

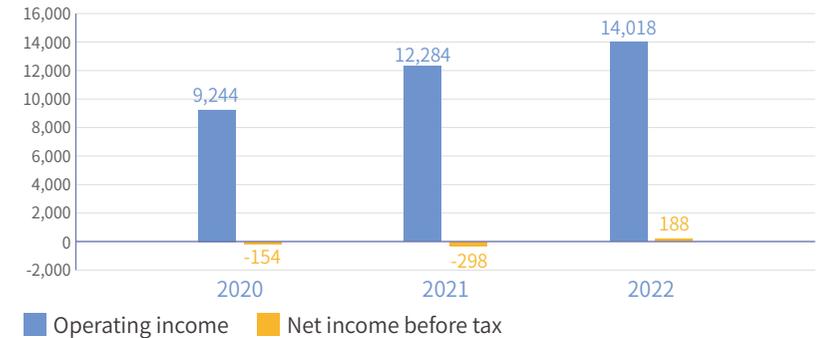
Unit: NT\$ million

Year	2020		2021		2022	
	Amount	%	Amount	%	Amount	%
Accounting items						
Operating income	9,244	100.00	12,284	100.00	14,018	100.00
Operating profit	1,177	12.73	1,473	11.99	2,142	15.28
Operating expenses	1,550	16.77	1,812	14.75	2,128	15.18
Net operating profit (loss)	(373)	(4.04)	(339)	(2.76)	14	0.10
Non-operating income and expenses	219	2.37	41	0.33	174	1.24
Net profit (loss) before tax	(154)	(1.67)	(298)	(2.43)	188	1.34
Income tax expense	(1)	(0.01)	(15)	(0.12)	(117)	(0.83)
Net profit for the period	(155)	(1.68)	(313)	(2.55)	71	0.51
Employee Benefit Expenses	2,030		2,392		2,604	

Note: The financial data in this report are based on the annual financial statements certified by the accountants (Deloitte Taiwan). The related financial information has been disclosed on the Investor's Corner of the Company's website.

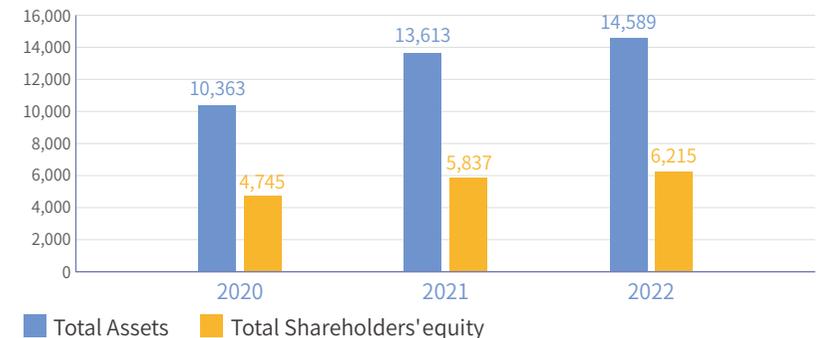
Operating income and net income before income tax

Unit: NT\$ million



Total assets and shareholders' equity

Unit: NT\$ million



Notes:

- The chart shows the consolidated revenue, gross profit and net income. For detailed operating conditions and financial performance, please refer to the 2022 Annual Report disclosed on the Company's website. (www.phihong.com.tw)
- Please refer to the 2022 Annual Report for the Company's assets and liabilities, equity and product-related data.
- Please refer to the 2022 Annual Report for the earnings related information. PHIHONG Taiwan has applied to the government for R&D tax credits under the Industrial Innovation Ordinance.

2022 sales quantity and profits

Unit: 1000 NTD

Product type	Sales quantity	Profit	Profit ratio
Power supply device	85,791,499	14,004,250	99.90%
Non power supply products	29,760	13,325	0.10%
Total	85,821,259	14,017,575	100%

Remark:

power supply device: the main operating items are the R&D, design, production and sales of power supply device and electric vehicle charging piles. Non power supply device: the main operating items are the income from peripheral projects and software services.

Tax payments overview

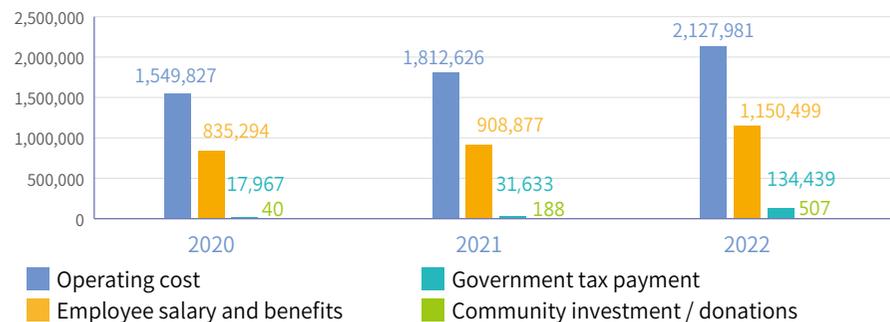
Unit: 1000 NTD

Items	Year	Year		
		2020	2021	2022
Income tax (cost) profit		-1,171	-14,668	-116,834
Income tax payment		24,516	12,473	22,191
Income tax payment as a proportion of total operating income		-0.01%	-0.12%	-0.83%
Operating cost		1,549,827	1,812,626	2,127,981
Investment costs	Employee salary and benefits	835,294	908,877	1,150,499
	Government tax payment	17,967	31,633	134,439
	Community investment costs / donations	40	188	507
	Total	853,301	940,698	1,285,445
As a proportion of total operating cost		55%	52%	60%

Remark:

- Operating cost includes the booked operating cost, employee salary and benefits, government tax payments, and community investment cost / donations.
- Government tax payment (not including late submission fee) including tax on all booked operating cost and income tax payment.

Unit 1000 NTD



Sales Regions

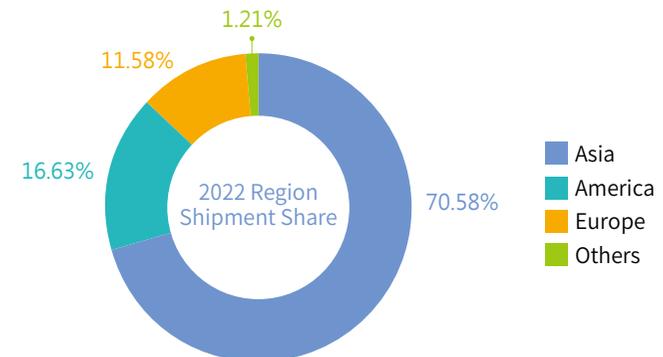
Due to the affirmation of our customers, Asia accounted for 70.58% of our total sales, the Americas accounted for 16.63%, and Europe and other regions accounted for 12.79%. In the future, we will continue to strengthen cooperation with customers in different regions and devote ourselves to product development to ensure stable growth in the medium and long term. During 2022, PHIHONG did not have any prohibited sales or controversial products.

2022 Region Shipment Share

Unit: NT\$1000

Sales region	Year	2020		2021		2022	
		Amount	%	Amount	%	Amount	%
America		1,827,046	19.77%	980,923	7.99%	2,331,342	16.63%
Asia		6,399,200	69.23%	10,435,398	84.95%	9,892,905	70.58%
Europe		984,836	10.65%	800,649	6.52%	1,622,631	11.58%
Others		32,536	0.35%	67,071	0.54%	170,697	1.21%
Total		9,243,618	100.00%	12,284,041	100.00%	14,017,575	100.00%

2022 Region Shipment Share



2.3 Integrity Management and Compliance with the Law

Material topic: Integrity Management (GRI 205: 2016 anti-corruption)



Policy and Commitment

- To create a company-wide corporate culture of integrity and provide customers with the highest quality products and services.
- To implement corporate ethics and business conduct standards. Establish a corporate culture of integrity and sound corporate sustainable development.



Management approach

- Training through the corporate ethics and business code, and the Responsible Business Alliance (RBA) Code of Conduct.
- Establish reporting channels and reward and punishment systems. Fully implement preventive measures for dishonest behavior.



Evaluation and Grievance Mechanism

- Internal Audit
- Corporate Governance Assessment



Responsible parties

Audit Office



Annual performance highlights

In 2022, there were no incidents of corruption or bribery that led to corporate image damage or financial loss.



Corresponding SDGs



Target setting

2022 target

In 2022, no corruption incidents caused losses to the company.

Achieved performance

In 2022, no corruption incidents caused losses to the company.

Future target

- Short-term (2023-2024)
 - » Continued to refine our corporate governance ratings to move into the top 5%.
 - » No corruption and bribery incidents
- Mid- to Long-term (2025-2030)
 - » Achieved the "Top 5%" corporate governance rating.
 - » No corruption and bribery incidents.

Integrity Management

Integrity is the core of PHIHONG's business and is the central thought behind all activities. We established the "Code of Business Ethics and Business Conduct" and require all of our employees to understand PHIHONG's expectations on each of them. This Code provides them with the basic concepts of ethics and moral codes, as well as general knowledge, good judgment, and integrity to deal with all business issues. We ensure that employees' decisions and actions are consistent with PHIHONG's values and the spirit of integrity and honesty in this Code, so that all employees can implement them consistently. In 2022, based on 52 audits conducted by the Audit Office and feedback from internal and external stakeholders, we did not have any confirmed incidents of corruption nor actions taken.

- In accordance with the "Code of Conduct for Integrity", PHIHONG conducts integrity management risk assessments and identifies significant risks in the area of procurement, such as inappropriate acceptance of gifts or exchange of benefits by entertainment expenses. Therefore, PHIHONG has designed a favor-returning mechanism for gifts from manufacturers to facilitate timely prevention of corruption, bribery, and extortion.
- Integrity and ethics clauses are included in the relevant contracts with suppliers. We establish anti-corruption and integrity requirements, explicitly oppose actions that undermine the company's integrity and corporate image. We require the signing of an "Integrity Pledge". Insider trading is strictly prohibited to enforce anti-corruption in our ordinary management and business practices.
- We have established a corporate culture of integrity management and implemented ethical and clean policies. In addition, we have established a "Code of Conduct for Employees" covering performance evaluation and reward/punishment of employees, so that our employees clearly know the rules of conduct and receive rewards/punishment following these rules.
- PHIHONG has established a "Code of Conduct for the Board of Directors" to regulate the operation of the Board of Directors and the recusal of interests. The "Code of Corporate Ethics and Business Conduct" is used to regulate employees to prevent conflicts of interest. The manager of the Audit Office under the Board of Directors is responsible for receiving complaints from stakeholders, handling and responding to them. We implement integrity management in a proactive manner.
- Engage in business activities in accordance with the relevant competition laws and regulations and to prohibit unfair competition practices, such as bid rigging, quota restriction, etc.
- Develop and implement a specific whistleblower system, taking into account confidentiality and reward/punishment measures.



Anti-corruption and anti-bribery

In order to improve integrity management, the PHIHONG Audit Office conducts an annual assessment of the top 10 corruption risks for all Group business locations. The major risks identified are inappropriate acceptance of gifts and money in the area of procurement risk, or the exchange of exchange expenses for preferential treatment of suppliers' goods and service bids. The PHIHONG Code of Business Ethics and Business Conduct has also been established as a mandatory annual course for all employees. New employees are required to sign the "Code of Business Ethics and Business Conduct" and the "Intellectual Property Rights and Confidentiality Agreement" when they report for work. For issues related to employee ethics, such as anti-corruption and malfeasance or intellectual property rights protection, we regularly educate new employees every 6 months through education and training, and from time to time through internal bulletin boards, in order to convey the company's high regard for integrity and ethics.

In the overseas factory, PHIHONG Dongguan has implemented "Responsible Business Behavior (RBA)" training and included it in the training module for new employees. In addition, we require all warehouse and cashier employees to sign an "employee guarantee", so that new employees can feel PHIHONG's dedication to the implementation of RBA as soon as they join the company. PHIHONG Haiphong has incorporated anti-corruption and anti-bribery policy into the company's management philosophy and corporate culture curriculum for new employee training.

In addition, for business partners, PHIHONG sends quarterly promotional emails to suppliers who have business dealings during the year, explaining anti-corruption communication and reporting channels. We disclose social responsibility policies on B2B websites, so that 100% of anti-corruption policies are communicated to business partners.

PHIHONG Taiwan Anti-Corruption Training Topics	Course hours	Participants	Passing ratio
Internal audit practices for trade secrets, non-competition and personal data security	6	1	100%
2022 Online Course - Intellectual Property Foundation Class	12	3	100%
Newcomer Training: PHIHONG CSR Practice Sharing	1.5	184	100%
Newcomer Training: PHIHONG Code of Business Ethics and Business Conduct	0.5	184	100%
Taiwan Intellectual Property Management Practices (TIPs) Explanation and Case Analysis	3	117	100%
Analysis of trade secrets and contract review issues and promotion of intellectual property confidentiality	2	71	100%

PHIHONG Dongguan	Staff Category	Participants	Course hours	Passing ratio
Responsible Business Alliance Code of Conduct (RBA) and Corporate Social Responsibility Promotion	New hires	7,378	118,048	100%
	Existing	1,094	2,036	100%

PHIHONG Haiphong	Staff Category	Participants	Course hours	Passing ratio
Introduction of Social Responsibility System. Corporate Philosophy and Culture	New hires	1,820	910	100%

Reporting System

PHIHONG operates our business with honesty and integrity. We comply with the local legal and ethical standards of our operating locations. To strengthen compliance with laws and regulations and corporate governance, PHIHONG has established the "Code of Conduct for the Board of Directors" to regulate the operation of the Board of Directors and the "Code of Business Ethics and Business Conduct" to regulate employees to prevent conflicts of interest. In addition, we have established a channel for stakeholder complaints. The Audit Office Manager under the Board of Directors serves as the dedicated contact point to receive stakeholder complaints, and to handle and respond to them in a proactive manner to implement honest management.

Stakeholder Complaint Channel

PHIHONG's reporting channel is managed by the Audit Office Manager, who is a member of the Board of Directors. The Audit Office Manager is responsible for receiving and processing complaints and reporting the results of investigations to the relevant supervisors. The identity of the complainant and the content of the complaint will be kept confidential. The complaint will be actively investigated and handled. If you find that a person has violated the code of conduct or the relevant code of conduct, you can make a complaint through the following hotline and complaint mailbox:

 Telephone: [+886-3-327-9008](tel:+886-3-327-9008)

 Email: Charles_Wang@phihong.com.tw

Reporting channels for illegal and unethical or dishonest conduct

Internal staff can also report to the Audit Office through the internal hotline by calling ext. 1340. or by e-mail at Charles_Wang@phihong.com.tw.

Handling Process

Those who do violate the rules of honest management in reported complaint cases will be subject to administrative penalties, recovery of improper benefits or legal action, depending on the severity of the case

Internal Control Measures

To strengthen internal control management, internal audits and related education and training are conducted on a regular basis. The company's "Code of Conduct for Integrity" is regularly promoted every year so that directors, managers and employees can fully understand and comply with the Code of Conduct for Integrity. Relevant education and training courses are held to strengthen employees' awareness of compliance. To enhance the concept of integrity and self-discipline, new recruits sign the Introduction to the Code of Business Ethics and Business Conduct and the Agreement of Recognition form when they report to work, and all employees are required to sign the Intellectual Property Rights and Confidentiality Agreement, so that they understand the importance and necessity of honest business practices.

2022 Complaint Processing Status

During the year 2022, there were no complaints at any of PHIHONG's plants.



Compliance with laws

Compliance with laws and regulations is a fundamental requirement of corporate governance. PHIHONG attaches great importance to the compliance of the company and all employees with all laws and regulations. From time to time each year, we reaffirm internally the ethical standards of business ethics, corporate governance, and employee moral conduct. In addition, PHIHONG is committed to comply with local laws and regulations of our operation locations with integrity. This is the role and responsibility of PHIHONG as a global citizen. PHIHONG Taiwan headquarters has a legal office to assist employees in clarifying various legal issues. If employees violate laws, labor safety rules or regulations, labor contracts and business ethics, PHIHONG will follow the relevant laws and disciplinary measures to pursue the case.

Domain	Description.	Management System.	2022 Implementation Result.
Violation of Social and economic regulations	Penalties for violating social and economic related laws or regulations.	The company's operational management emphasizes compliance with laws and regulations and domestic and international policies, and legal trends that may have a significant impact on the company's business and finances. Also, we regularly review the latest international standards and laws and regulations and update the company's rules and regulations to reduce the risk of legal violations and fines.	<ul style="list-style-type: none"> There are no cases of administrative fines or criminal fines imposed by the competent authorities, or of being a defendant in lawsuits, for products and services that violate social and economic regulations. The financial statements have been prepared in accordance with the laws and regulations for listed companies, and there have been no violations, irregularities, or fines by the competent authorities.
Environmental Protection	Penalties for violating environmental laws and regulations.	In terms of product service and marketing, PHIHONG complies with international standards and customer requirements, such as EU REACH and RoHS, with a 100% compliance rate. Also, we regularly review the latest international standards and laws and regulations and update the company's rules and regulations to reduce the risk of legal violations and fines.	<ul style="list-style-type: none"> No major violations of environmental laws and regulations have occurred, and no environmental violations have been punished or fined.
Anti-corruption and anti-bribery	The Company suffers financial or reputational damage or image damage as a result of employee corruption or suffers losses from the termination of cooperation with customers or business partners due to corruption violations.	The Audit Office conducts annual corruption-related risk assessments for PHIHONG Taiwan, Dongguan, and Haiphong, accounting for 100% of the company's total business locations. From time to time each year, we reaffirm internally the ethics of business ethics, corporate governance, and employee conduct.	<ul style="list-style-type: none"> Significant corruption risks are identified through the Risk Report, primarily from inappropriate gifts, money, or exchange of entertainment expenses in return for preferential treatment of suppliers' goods and services and bids. No employee corruption or bribery related incidents have been received or occurred.
Anti-competitive behavior	Anti-competitive, antitrust, and monopolistic practices.	Engage in business activities in compliance with relevant competition laws and regulations. Unfair competition, such as joint pricing, bid rigging, quota restriction, or abuse of market position for exclusive use, is prohibited.	<ul style="list-style-type: none"> No anti-competitive or anti-trust conduct (fair trade) has occurred.
Prohibition of Child Labor and Forced Labor	Punishment for violating the local minimum employment age labor law; punishment for forced labor or inhumane treatment of employees.	We take effective measures to verify the age of any job applicant before hiring him/her. Potential employees must provide proof of identity to the company for verification, and the hiring process will be conducted only after confirmation of accuracy. We strengthen the education and training of employee's human rights protection. We also provide complete occupational safety and health education and training.	<ul style="list-style-type: none"> No major violations of labor laws and regulations resulting in disciplinary actions or lawsuits. We do not use child labor or engage in employment discrimination. The labor contract is signed by both parties at the time of employment, and the rights and obligations are clearly stated.

Domain	Description.	Management System.	2022 Implementation Result.
Occupational safety and health	To create a healthy and safe workplace for employees, to prevent occupational injuries, and to thoroughly review and monitor workplace safety in compliance with policy and regulatory requirements.	There are no fines for non-compliance. The Occupational Safety and Health Committee was established in accordance with the Occupational Safety and Health Management Act to promote the occupational safety and health management system, and is certified annually by the Occupational Safety and Health Management System.	<ul style="list-style-type: none"> No violation of any regulation or voluntary agreement resulting in fines or warnings.
Product liability and Marketing label	No violation of health and safety regulations during the life cycle of products and services.	From product design to manufacturing, we take strict and careful control to ensure product safety and compliance with relevant health and safety regulations.	<ul style="list-style-type: none"> There were no significant product or serious injury or fatality-related recalls; and there were no financial losses resulting from legal proceedings related to product safety. No violation of any regulation or voluntary agreement resulting in fines or warnings.
Customer Privacy and Intellectual Property Rights Protection	Disclosure of customer privacy and intellectual property rights due to human negligence or poor hardware.	We provide training to new employees on business secrets and intellectual property rights. We have signed contracts with our customers that require the recipient to keep the trade secrets confidential and not to divulge them to third parties in the event of disclosure or mutual disclosure. We also strengthen information security risk control and the ability to manage and protect confidential personal information documents.	<ul style="list-style-type: none"> No breach of contract due to disclosure of customer's business secrets or personal privacy.

Organizational External Initiatives

PHIHONG actively responds to external initiatives, echoes international standards, and participates in international, national, and regional advocacy organizations to contribute to the environment, society, and the economy through more interactions, and to jointly implement sustainable development.

Climate Action Initiative

In response to the Paris Climate Agreement's goal of keeping global warming to under 1.5° C, in Nov 2022, PHIHONG announced its 2050 "Net Zero Emissions" target and will gradually implement the "Net Zero Initiative". To achieve Net Zero Emissions by 2050, PHIHONG will implement the Net Zero Initiative by focusing on direct emissions from operations (Area 1), indirect emissions from energy use (Area 2), and indirect emissions from the value chain (Area 3). In addition, PHIHONG has also participated in various international platforms to communicate with each other and to gain new knowledge and valuable experience for the company's sustainable development. The specific action plan includes participating in the International Carbon Disclosure Project (CDP), actively participating in the CDP investor questionnaire and committing to set a Science-Based Carbon Target (SBTi) to evaluate the carbon reduction pathway scientifically, and setting a pragmatic science-based carbon reduction target. We plan to complete the target submission by Q3 2023, demonstrating our determination to reduce carbon.

Since 2018, PHIHONG has been responding to the risks and opportunities brought about by global climate change and water resources, and reporting on climate change with integrity and transparency. At the same time, PHIHONG will sign the "Task Force on Climate-related Financial Disclosure (TCFD)" in 2022 to align with international standards. Through the establishment of a comprehensive climate change risk and opportunity identification process, we will continue to understand the potential impact of climate change risks and opportunities on our business processes and strategies through quantitative information on financial impacts. By effectively monitoring, controlling, and responding to climate related issues, we are able to grasp opportunities for operational development and innovation, and implement sustainable management practices to actively move toward the goal and vision of a low carbon economic transformation.

Taiwan Net Zero Initiative

The 2050 “Net Zero Emissions” target was announced in 2022, and the Net Zero Initiative will be implemented step by step. To achieve Net Zero Emissions by 2050, PHIHONG will implement the Net Zero Initiative by focusing on direct emissions from operations (Scope-1), indirect emissions from energy use (Scope-2), and indirect emissions from the value chain (Scope-3).



Participate in the Science Based Carbon Targeting Initiative (SBTi)

To ensure that our low carbon transformation is consistent with climate science, to help prevent the increasing risk of climate change, and to increase our competitive advantage in the transition to a low carbon economy, PHIHONG has submitted a commitment to the Science Based Carbon Targets Initiative (SBTi). The application for confirmation of the target is expected to be completed by Q3 2023, in order to comply with the Paris Agreement target and work together towards the 1.5° C global warming target.



CDP(Carbon Disclosure Project)

Since 2018, our Carbon Disclosure Project (CDP) has responded to the risks and opportunities brought by global climate change and water resources. In 2022, we are recognized for the first time with a management level (B-) for the domestic rating of the Climate Change Disclosure Questionnaire.



Signing to support the Task Force on Climate-Related Financial Disclosure, TCFD

To understand the risks and opportunities of climate change on our operations, PHIHONG has been identifying and evaluating climate related financial disclosures (TCFD) since 2021. Phihong signed up to support climate change related financial disclosure (TCFD). In Oct 2022, PHIHONG signed the TCFD initiative and joined the Climate Action to actively respond to the international trend of carbon reduction to mitigate the impact.



List of PHIHONG' s participation in External Organization Initiatives

Aspects	Advocacy Organizations or Conventions	Duties/Advocacy	PHIHONG Taiwan	PHIHONG Dongguan	PHIHONG Haiphong
 Environment (E)	Responding to Climate-related Financial Disclosures (TCFD)	Advocate	✓	✓	✓
	Participate in the International Carbon Disclosure Project (CDP)	Advocate	✓	✓	
	Science-Based Carbon Reduction Target (SBTi)	Advocate	✓	✓	✓
	Taiwan Smart Electric Vehicle and Green Energy Technology Association (TECA)	Member	✓		
 Social (S)	Global Sustainability Reporting Initiative (GRI)	Advocate	✓	✓	✓
	Responsible Business Alliance Code of Conduct (RBA)	Member	✓	✓	✓
	Eden Social Welfare Foundation	Donations	✓		
	Muhsiang Home, Taoyuan City	Donations	✓		
	Step30.Org: Old shoes save lives	Advocate & Donations	✓		
 Governance (G)	TCSF Taiwan Business Sustainability Forum	Advocate	✓		
	Taiwan Industrial Holdings Association	Member	✓		
	Taiwan Business Council for Sustainable Development	Advocate	✓		
	Sustainability Accounting Standards Board (SASB)	Advocate	✓	✓	✓
	Internal Audit Association of the Republic of China	Member	✓		
	Taiwan Electrical and Electronic Industry Association	Member	✓		
 Economic	Taiwan Plastics Industry Association	Member	✓		
	Taiwan Advanced Automotive Technology Development Association	Member	✓		
	Open Charge Alliance	Member	✓		
	Taipei Computer Association	Member	✓		
	Tainan County Industrial Association	Member	✓		
	Taoyuan City Hwa Ya Technology Park Manufacturer Promotion	Founding member	✓		
	Guangdong Guangzhou Baoguan Association	Member		✓	
	Dongguan Taiwan Chamber of Commerce, Qingxi Branch	Member		✓	

2.4 Risk Management and Information Security

Risk Management Policy

To strengthen corporate governance and promote stable operation and sustainable development of the company, PHIHONG has established a sound Enterprise Risk Management (ERM) mechanism with a complete risk management organization structure and cross-organizational cooperation. Through risk assessment, identification, integration and management of various strategic, operational, financial and hazard potential risks (Climate change, water and power supply, earthquake, fire) that may affect the sustainable development and profitability of the enterprise, and through risk reduction, avoidance and transfer management strategies and measures, the potential risks are controlled within tolerable limits and even turned into business opportunities.

Risk classification, countermeasures and opportunity management

Aspects	Type of Risk	Impact on operations	Response strategies	Business opportunities
 Environmental (E)	Environmental and Climate Change Risks	<ul style="list-style-type: none"> Greenhouse Gas Emissions Management Energy and Resource Management Air, water, waste, and noise emission management 	<ul style="list-style-type: none"> Review international environmental trends and formulate environmental protection policies to meet operational needs. Conduct disaster prevention and monitoring, and practice emergency response and recovery capabilities. Please refer to the "Climate Change Risks and Opportunities" section for more information on impacts or threats and response strategies. 	<ul style="list-style-type: none"> Refer to the "Climate Change Risks and Opportunities" section for more information on potential opportunities.
 Social (S)	Occupational Safety Risks	<ul style="list-style-type: none"> Occupational injuries and public safety incidents can impact the normal operations of a company. Depending on the severity of the incident, it may even result in damage to personnel, property, and plant shutdown. 	<ul style="list-style-type: none"> Review the operations with occupational disease hazards. Carry out engineering control and prepare protective devices to avoid the exposure of employees to hazardous factors. Raise daily safety awareness and organize drills. In case of emergency disasters and public security incidents, immediately activate the task force to perform rescue to control personnel safety and property loss. Strengthen labor-management negotiation channels and establish harmonious labor-management relations. Implement employee health checks. 	<ul style="list-style-type: none"> Reduce and prevent the possibility of occupational accidents, ensure the safety of employees' property to increase stakeholders' confidence in the company's continued operation.
	Information Security Risks	<ul style="list-style-type: none"> Abnormalities of company, personal information, and internal/external communication systems caused by human factors such as leakage, theft, destruction, or natural disasters, resulting in operational losses or even damage to the Company's reputation. 	<ul style="list-style-type: none"> Enhance information system off-site recovery exercises, twice a year, to simulate any natural disasters (such as earthquakes, fires, floods, etc.); or when there is data damage caused by human factors, ensure that system operations can be restored in the shortest possible time. Maintain 2 telecom operators' dedicated backup lines at all times to ensure normal external operations. Strengthen system encryption and password management. Organize employee education and trainings to prevent the loss of important information and strengthen information security management and employee compliance concepts. 	<ul style="list-style-type: none"> Build a highly reliable information security management system to prevent any communication interruptions, data loss and leakage, in order to gain the trust and support of all stakeholders.

Aspects	Type of Risk	Impact on operations	Response strategies	Business opportunities
 Governance (G)	Ethical Risks	<ul style="list-style-type: none"> Violations of the Code of Conduct and Integrity have resulted in losses to the Company. In 2022 we conducted a corruption risk assessment for each plant and identified significant risks in the area of procurement by improperly accepting gifts, money, or exchanging entertainment expenses for preferential treatment of suppliers' goods and services bids. 	<ul style="list-style-type: none"> Starting in 2019, all new PHIHONG employees are required to receive training on "Corporate Ethics and Business Conduct" and sign the agreement after the training. From time to time, we promote the importance and practice of honest management through education and training and employee awareness. 	<ul style="list-style-type: none"> All employees adhere to corporate ethics and business conduct standards and operate with integrity.
	Financial Risks	<ul style="list-style-type: none"> Changes in interest rates and exchange rates affect financial income and expenses, impacting financial leverage and inflation risk. Tariff barriers reduce customers' willingness to place orders and increase production costs. Supply chain is hampered. 	<ul style="list-style-type: none"> Evaluate the impact of interest rate exposure and floating interest rates Adopt natural hedges against exchange rate risk. Short-term idle funds are invested mainly in liquid, principal- and yield-safe capital-protected bank products and time deposits. We do not engage in high-risk, high-leverage investment activities. Support working capital and long-term capital expenditure through cash inflow from disposal of idle assets and financing facilities from financial institutions. Proactive expand our Vietnam production base for effective and flexible deployment to reduce the impact of trade tariffs. 	<ul style="list-style-type: none"> Manage the impact of changes in interest rates and exchange rates on assets and cash flows. Strengthen the company's financial operations. Strengthen the responsiveness of operations and production models. Expand supply chain partnerships and sustainable operations. Continue to strengthen R&D capabilities and technology talent at our headquarters in Taiwan in line with government investment incentives; expand production bases outside of China.
 Economic	Statutory infectious diseases	<ul style="list-style-type: none"> Due to the spread of the contagious disease, the company's employees were unable to work, and materials could not be transported to the company on time. This results in production lines being shut down and the company unable to meet customer demand. 	<ul style="list-style-type: none"> Set up the organizational mechanism and SOPs to effectively confirm the safety of personnel on the production line in the shortest possible time, to restart production line operations. Separate work time and work in different locations to reduce risks. Strengthen supply chain partnership, share, and cooperate with supply chain epidemic prevention mechanism. 	<ul style="list-style-type: none"> Resume normal output quickly and with careful planning to demonstrate crisis management capabilities and gain customer trust and additional business opportunities.
	Supplier Risks	<ul style="list-style-type: none"> Shortage or interruption of material supply leads to plant shutdown and non-operational crisis, resulting in failure to meet customer demand and even breach of promised customer shipment schedule. 	<ul style="list-style-type: none"> Establish a sustainable supply chain partnership to ensure a stable source of raw materials. Set up an inventory mechanism and a "timely supply alert system". Replacement material supplier backup mechanism to ensure a stable source of materials and no risk of supply interruption. Require suppliers to follow the Responsible Business Alliance Code of Conduct. 	<ul style="list-style-type: none"> Strengthen the sustainable partnership with our suppliers. Communicate and interact with them in a positive way, to meet the needs and expectations of our customers and to create a win-win situation together.

Organizational risk warning

The relevant units of PHIHONG are constantly reviewing the changes and risks of the domestic and international business environment. We comply with government regulations and PHIHONG's system, and continue to effectively control risks as follows:

Financial Risk Control

We do not engage in high-risk, high-leverage investment activities. PHIHONG uses natural hedges and borrowings in U.S. dollars to reduce its exposure to exchange rate risk. Short-term idle funds are invested mainly in liquid, principal- and yield-safe capital-protected bank products and time deposits. In addition, cash inflows from the private placement of common stock and the issuance of five-year fixed-rate corporate bonds, as well as financing facilities from financial institutions, were used to fund working capital and long-term capital expenditures.

Operational Risk Control

PHIHONG is deeply aware of the significant impact and influence of natural disasters and accidents and other uncertain risk items on the company's production and operation and employee safety. Therefore, we take a proactive approach to disaster risk management and pursue the highest standards of safety in the power supply industry through rigorous risk management plans and implementation of safety regulations. To ensure that the company can resume normal operation quickly after a disaster (including fire, earthquake, typhoon, water and power outage, war, political unrest, terrorist attack, food poisoning, statutory infectious disease, environmental pollution, etc.), to reduce the loss of company and customer property, and to protect the company's reputation and employee safety, we respond to and avoid risks with insurances. In 2021, PHIHONG has taken out the following insurance policies to ensure that the risk of damage to or loss of covered property caused by unexpected and unforeseen accidents will be covered during the insurance period. Through insurance planning and fixed insurance premiums, the operational risk is transferred, and the potential loss is minimized.

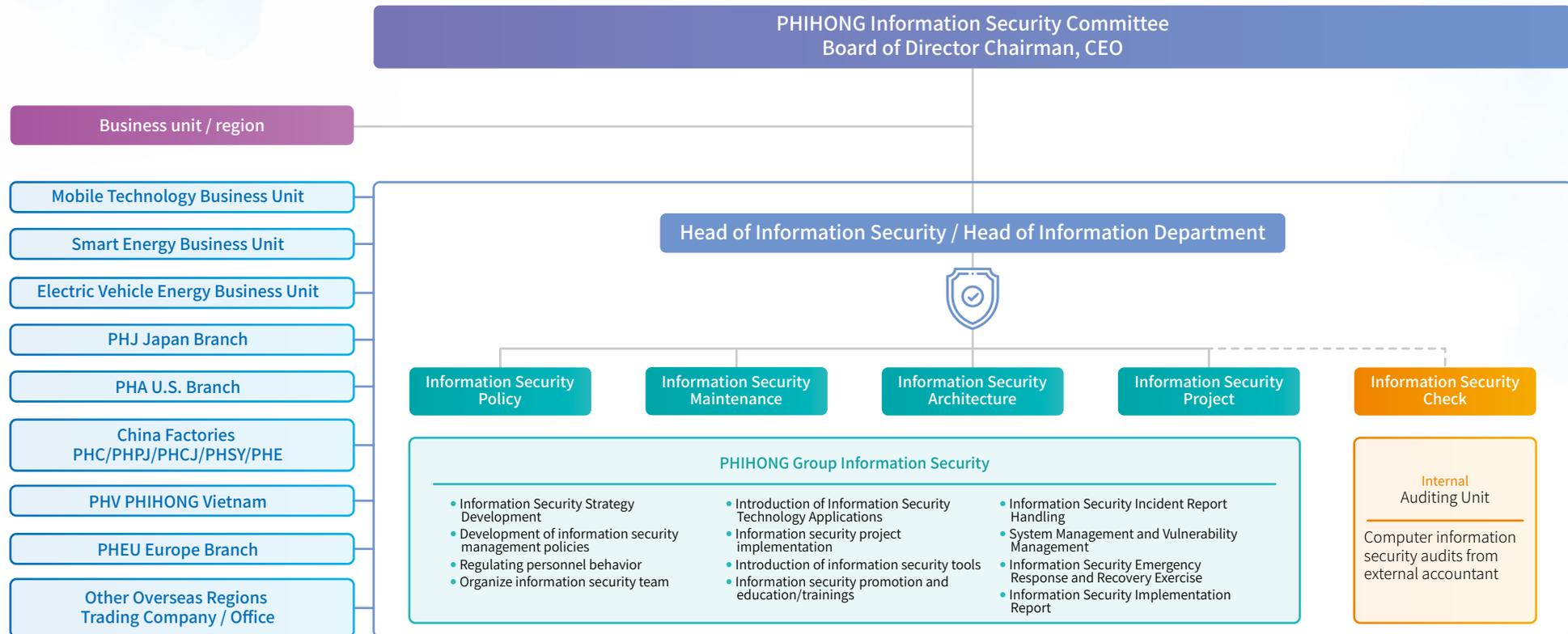
Information security management:

To protect the company and personal information and internal/external communication systems from loss caused by human factors such as leakage, theft, destruction, and natural disasters, and to reduce the impact on operations, PHIHONG adopts the PDCA (Plan-Do-Check-Act) cycle management model to ensure the achievement of reliability targets and continuous improvement. In 2021, we established the Information Security Committee, which is led by the company's management, and the responsible unit is the Information Department, with information officer and professional information personnel. It is responsible for planning, formulating, and executing information security strategies, regularly reviewing information security policies, promoting the implementation of various information security projects, and strengthening information security management measures. If the audit finds deficiencies, we will immediately ask the inspected unit to propose relevant improvement plans, with specific actions and regularly track the effectiveness of improvements to reduce internal security risks. Moreover, we cooperate with an external accounting firm to conduct regular audits on information security related to information units and track the effectiveness of improvements every year. The organization is regularly audited and managed in a cyclical manner to ensure the achievement of reliability targets and continuous improvement.

In 2022, specific measures for information security are as follows:

1. Conduct two off-site preparedness drills (one in Mar and one in Oct).
2. Revised access control regulations (Item 5.1.2) and issued an announcement: Starting from 14th Mar this year, PHIHONG Taiwan controls employees to bring personal laptops, tablets and USB flash drives into the company. The use of the aforementioned items must be first applied for approval through the BPM system form (Personal Information Device Entry Form) before entering the factory.
3. We subscribe to “Tenable Nessus third-party security vendor vulnerability scanning software” to strengthen internal security risks. Schedule weekly vulnerability scans for internal systems and network environments to identify system vulnerabilities for system remediation. We produce regular reports and implement effective audits to meet internal and external regulatory requirements.
4. Invited Deputy Director Pan from the Bureau of Investigation of the Ministry of Justice to give a lecture at PHIHONG, focusing on the topic of corporate information type crimes. (Compulsory for all Taiwan PHIHONG staff)

PHIHONG Information Security Management Solution



Specific measures for information security management

Managed item	Information security management measures	Specific implementation details
 Account Management	<ul style="list-style-type: none"> • Management measures for personnel account authorization and password 	<ul style="list-style-type: none"> • Authorization management of staff entry, change or departure accounts • Account and password specification and management
 Access Control	<ul style="list-style-type: none"> • Control measures for personnel access to internal/external systems and data transmission channels 	<ul style="list-style-type: none"> • Internal/external access control measures • Control Measures for Data Leakage Channels • Operation behavior track record analysis
 External Threats	<ul style="list-style-type: none"> • Potential weaknesses in internal systems, virus infected channels and protective measures 	<ul style="list-style-type: none"> • Firewall setup, update and automatic defense function activation • Vulnerability detection, update and upgrade measures for operating systems, applications or software and databases of host/computer/laptop equipment • Implement virus protection, malware detection
 Weakness Analysis	<ul style="list-style-type: none"> • Regular scanning and inspection of PC and server systems for weaknesses and remedial measures 	<ul style="list-style-type: none"> • Regular execution
 Social Engineering Walkthroughs	<ul style="list-style-type: none"> • Strengthen information security measures for personnel access to external email messages 	<ul style="list-style-type: none"> • Regular rehearsals
 Education & Training	<ul style="list-style-type: none"> • Regularly publicize the concept of information security to users and employees • Implementation of account, equipment and data management for users 	<ul style="list-style-type: none"> • Regular execution

3

Product and Value Chain



3.1 Product Quality and Safety

3.2 Customer Relationship Management

3.3 Sustainable Supply Chain Management

3.1 Product Quality and Safety

Material topic: Product Quality and Safety (GRI 416: Customer Health and Safety 2016)



Policy and Commitment

Provide healthy and safe products.



Responsible parties

Technical Support Division



Target setting

2022 Target

- Quality verification according to ISO development process.
- Establish the Green Energy Research Institute to develop energy creation and storage technologies.

Archived performance

- 100% quality verification according to ISO development process.
- Established the Green Energy Institute.

Future Target

- Short-term (2023-2024)
 - » PHIHONG confirms 100% that the sources of conflict minerals of all manufacturers are smelters certified by RBA
- Mid-Long Term (2025-2030)
 - » EV product waste disposal complies with EU WEEE standards.
 - » The raw materials of EVT products comply with international environmental protection indicators.



Management approach

- Restrictions on the use of hazardous substances. Suppliers' materials are controlled according to international environmental standards.
- The product has been certified by the safety standard of each country and marked with the safety symbol on the product



Annual performance highlights

- EV products are EV READY certified, indicating that they are manufactured, installed and set up in compliance with regulatory standards.
- There were no health and safety violations or fines in PHIHONG in 2022.



Evaluation system

- Internal audit
- PDM system control (suppliers must be qualified to be included as official suppliers)
- New Supplier Conflict Minerals Commitment and Survey Form Filling



Corresponding SDGs



PHIHONG holds the concept of product life cycle thinking, incorporating environmental impact reduction and customer health and safety protection. According to the environmental management substance control standards, we select materials that comply with environmental regulations for product development and manage the design process strictly. Through product testing and quality assurance, we are certified by a third party to meet the requirements of national environmental regulations. Subsequent sales, manufacturing, supply chain and lifecycle operations all comply with legal requirements, to ensure customer expectations and data privacy, and to consider the health and safety of users.

Also, to achieve a healthy and safe life for our customers or product users, we have appropriate management practices in each stage of the product life cycle. At the design concept stage, we consider customer requirements, "environmental management substance control standards" and national regulations. We use qualified materials in the subsequent product design to ensure that our products are HSF (Hazardous Substance Free) green products. Our products have above standard recycling rates at the end of their life cycle. During the product development process, PHIHONG uses conservative design specifications (e.g., introduction of higher than standard safety margin) to ensure safety compliance after mass production. Through rigorous project management, quality verification and design phase audits are conducted at each design stage. We also obtain regulatory testing and certification from a third-party certification unit prior to mass production. In 2022, PHIHONG had no health and safety violations nor fines.

Restricted Use of Hazardous Substances

According to the international environmental protection standard, and with reference to the customer's hazardous substance control standard, PHIHONG has formulated the self "Hazardous Substance Free Management Standard". New products are designed, and materials are selected according to the standard from the development stage. The selection of subsequent components, the product and quality requirements of our suppliers, and the production and sales of our products are strictly controlled by these standards. This ensures that the products we supply to our customers are environmentally friendly, healthy, and safe, and fully compliant with international environmental regulations.

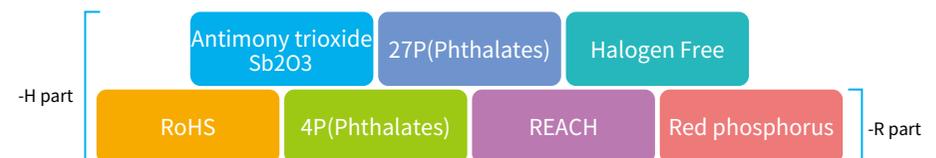
The "Hazardous Substance Free Management Standard" includes RoHS, REACH, prohibition of red phosphorus flame retardants, control of halogen-free specification products, and the EU RoHS Extension Directive 2015/863 to ban 4 plasticizers (Phthalates), (BBP, DBP, DIBP, DEHP). From the end of 2017, it is mandatory for suppliers to provide test reports for the 10 banned substances in RoHS when they perform part recognition and update their reports. For the REACH Substances of Very High Concern (SVHC) established by ECHA, a new list of substances is added every six months. As of January 17, 2023, 28 batches of substances have been updated, for a total of 233 substances under control, all of which have been immediately updated to our standard and be implemented. In addition, the U.S. Environmental Protection Agency (U.S. EPA) announced that the Toxic Substances Control Act (TSCA) includes 5 persistent, bio-accumulative, and toxic substances (PBT): decabromodiphenyl ether (DecaBDE), isopropylated triphenyl phosphate (PIP (3:1)), 2,4,6-senior (tertiary butyl) phenol (2,4,6-TTBP), hexachlorobutadiene (HCB), and pentachlorothiophenol (PCTP). Although PHIHONG is not included in the IEC 62474 specification framework, for the IEC 62474 regulated substances, excluding some controlled substances for

Phihong Material Numbers and control standard definition

-R material number (RoHS)



-H material number (Also including meeting above requirements of -R material)



applications other than the company's products, our halogen-free specification products can meet 100% of the IEC 62474 specification.

In addition to the updated control of hazardous substances, the company follows the WEEE regulations as the minimum requirement for product development to ensure the reuse, recycling, and recovery of products in their post-life cycle. All the above management and control of product materials not only meet the needs and expectations of customers and end-users; but are also the expectations and responsibilities of PHIHONG as a global citizen.

Product recyclability and environmental impact

The business model of PHIHONG is mainly B2B. To promote circular economy, in addition to meeting the WEEE recycling threshold for 100% of its models, the company is also committed to increasing the proportion of recyclable materials in its products to reduce the burden on the environment at the end-of-life stage. PHIHONG mainly produces power supply products, and the main raw materials used are metals and plastics. Taking the top 5 models in 2022 as an example, the combined output has already accounted for 30% of the total amount of all models. A total of 602.48 metric tons of recyclable metals, 1,544.53 metric tons of plastics, and 572.54 metric tons of other raw materials are used, with an average total recyclable rate of 96.46%.



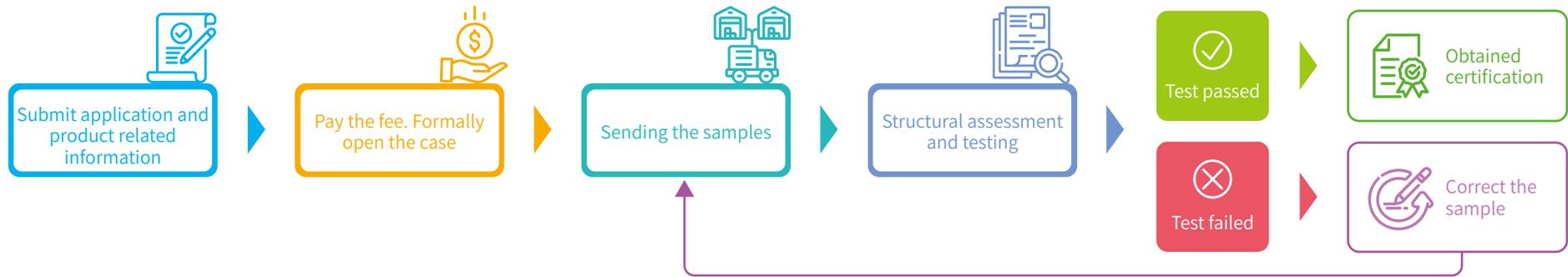
Responsible Consumption and Production

Providing healthy and safe products is PHIHONG's commitment to our customers. PHIHONG also advocates the concept of "responsible consumption and production", which is the 12th of the 17 Sustainable Development Goals (SDGs) released by the United Nations, with the mission of producing safe and healthy products. Our quality requirements are implemented in the product design and development process, and even extend to product sales and after-sales services. Every step of the process is strictly controlled to ensure that our products meet international safety standards and environmental regulations to meet the expectations of our customers and users.

Moreover, all PHIHONG products, publicity items, product catalogs, foreign media promotions, or domestic / foreign exhibitions, as well as the marketing and labeling of PHIHONG's official website, all comply with the regulations of the trademark labeling Law and related standards. We make sure that the labeling is correct and clear. In the product labeling, power supply products for electrical applications must first comply with relevant national and international safety standards and regulations and obtain certification before they can be sold and marketed in that country. There are clear statements and definitions of the devices, electronic components, and tests of power supply products in the safety regulations to test whether they will cause harm to human body. In particular, the product is tested under abnormal use conditions to avoid the risk of disaster due to poor design or improper use of the product, which may result in loss of life and property. According to the country of sale and certification, the procedure for filing an application for certification is shown on the right:

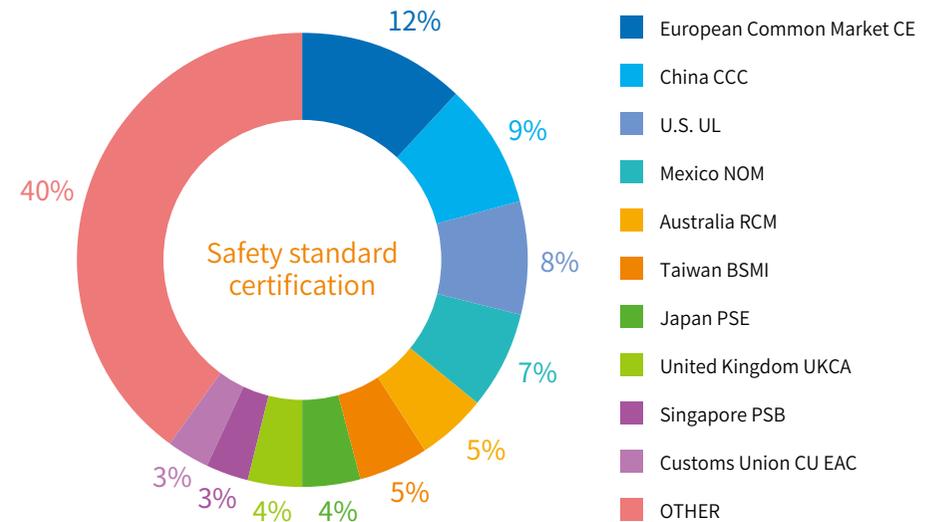
"Safety Standard Certification" is the safety certification, which can be marked on the product or product label only after passing the inspection and certification. Common safety certification labels are as follows: U.S. UL, Canada CSA, Mexico NOM, European Common Market CE, Taiwan BSMI, Japan PSE, China CCC, Singapore PSB, Australia RCM, Customs Union EAC (CU) and United Kingdom UKCA, etc. In 2022, the majority of our products were shipped to Europe and the U.S., all of which complied with the requirements of the respective countries' laws and regulations and were certified as safe before shipment. No violations or fines have occurred.

Safety verification process



For medical power supply products, PHIHONG uses IEC 60601-1 as the main safety standard, and then applies for European CE or North American UL certification according to customer requirements. For power supplies for e-sports laptops, IEC 62368-1 is the main safety standard. The safety regulations for lithium battery chargers for e-bike are mainly IEC 60335 in Europe and UL 1310, UL 1012, and IEC 62368-1 in North America. Our charger products are designed with complete safety certification in mind, depending on the product application and customer's sales region. We also verify the reliability of our products before mass production to improve the safety of our products.

European Common Market CE		Taiwan BSMI	
China CCC		Japan PSE	
U.S. UL		United Kingdom UKCA	
Mexico NOM		Singapore PSB	
Australia RCM		Customs Union CU EAC	

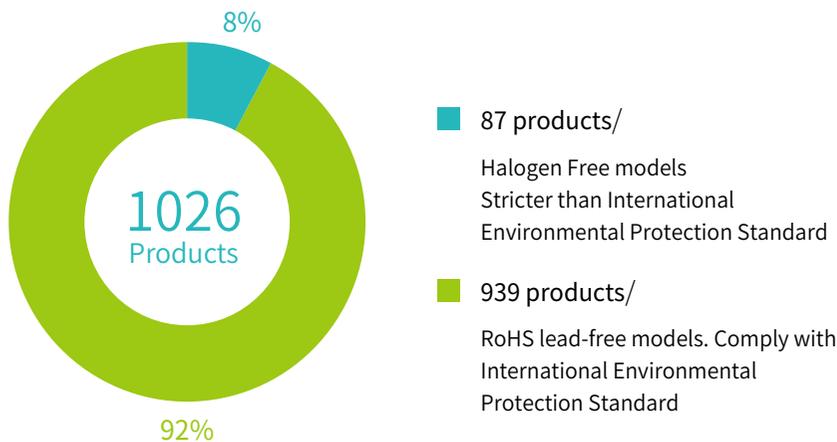


Eco-friendly and energy-saving design

In 2022, PHIHONG has designed and developed a total of 1026 models (products), including 331 models of power supply and 695 models of EV charger product. The development results of lead-free (RoHS) and halogen-free (Halogen Free) models are as follows:

- The number of cases of lead-free RoHS (compliant with the International Green Directive benchmark) models: 939. An increase of 394 newly developed cases compared to 2021.
- The Number of Halogen Free (above the International Environmental Directive benchmark) models: 87. In 2022, EV products accounts for 67% of new model development. Many materials are newly designed and required to comply with international environmental directives at this stage. In the future, we will continue to move toward the goal of environmental friendliness and halogen-free requirements.
- All machine parts are WEEE compliant. The total recycling rate (recyclable materials) can reach more than 80%. The total recycling rate of some models can even reach 90% or more.

In addition, in response to corporate sustainability, ESG has become a global consensus in the industry. Carbon reduction, net-zero carbons emissions, and carbon neutrality are the future trends. Under the wave of energy saving, carbon reduction and sustainable management, it is the direction for all enterprises to think and work hard to leave a bright future for the next generation.



PHIHONG Green Product Lifecycle

01. Raw material use

- Comply with international environmental standards.
- Comply with RoHS, REACH and Substances of Very High Concern SVHC and other relevant regulations.
- According to the environmental standards of exporting countries, such as California Proposition 65, TSCA, or to meet the requirements of halogen-free specifications of customers' products, etc.
- Promote local sourcing and supply chain for environmental sustainability and ban conflict minerals.

02. Production planning

- All plants are certified to ISO 14001/ISO 45001 Environmental Health Management System or equivalent. Compliant emissions.
- Improve energy efficiency to reduce energy consumption and greenhouse gas emissions.
- Comply with production process volatile organic compounds (VOCs) specification.

03. Transportation

- Optimize transportation route dispatch planning and reduce transportation trips.
- For frequent transport routes, the transportation distance and the use of packaging materials are evaluated and recycled for reuse.

04. Consumer safety

- Comply with the safety certification of electronic products, including UL, CE, BSMI, etc.

05. Recycling redesign

- PHIHONG's full range of electronic products comply with the EU WEEE requirements.

3.2 Customer Relationship Management

Material topic: Customer Relationship Management (GRI 418:2016 Customer Privacy)



Policy and Commitment

Customer satisfaction is one of the core values of PHIHONG's operation. Through various communication methods and frequencies, we can bring more benefits to our customers and provide better services to create a win-win situation.



Responsible parties

Centralized quality control center



Target setting

2022 Target

- Group average customer satisfaction score > 80%
- Zero incidents of leakage of company trade secrets and customer information

Archived performance

- The Group's average customer satisfaction rate was 84.1%
- No breach of trade secrets and customer information

Future Target

- Short-term (2023-2024)
 - » Sustained satisfaction level of 80% or more
 - » Zero incidents of leakage of company trade secrets and customer information
- Mid-Long Term (2025-2030)
 - » Sustained satisfaction >80% towards >85% target
 - » Zero incidents of leakage of company trade secrets and customer information



Management approach

- Implemented in accordance with the "Contract (Order) Management Procedures" and "Customer Feedback Handling Procedures".
- Maintain good and close communication channels for key customer business relationships, service experience, and customer expectations.
- Customer feedback is incorporated into quality planning activities to ensure product quality, enhance communication, and improve customer satisfaction.



Annual performance highlights

- The Group's average customer satisfaction rate was 84.1%. Up 2.3% from 2021 and higher than the industry average of 79.0%.
- Technical service and problem solving were highly recognized by customers, outperforming the industry by 10.1% and 8.4% respectively.
- There were no customer complaints about information, privacy breaches or loss of customer data in 2022.

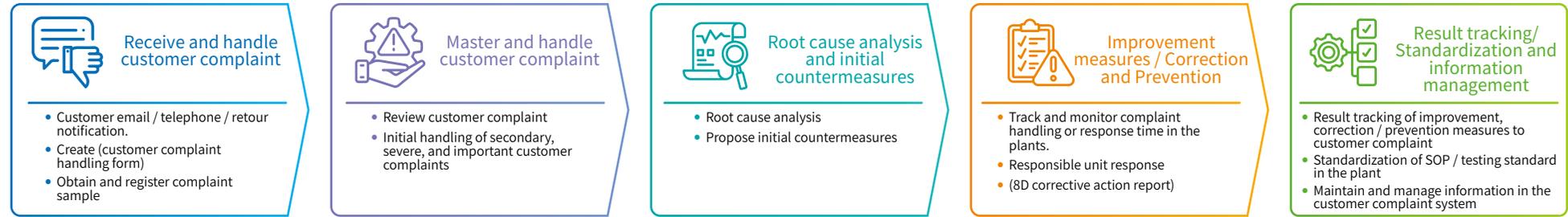


Evaluation system

- Customer satisfaction survey
- Internal audit

Customer Service and Satisfaction

Customer satisfaction is the core value of PHIHONG. We provide excellent products and services with high standard of quality policy and expect to be the best partner for our customers. To fully understand our customer's needs in terms of quality, delivery, price, technology and service, and other requirements, we propose correct and prompt responses and total solutions to customer problems and feedback through multiple communication methods.



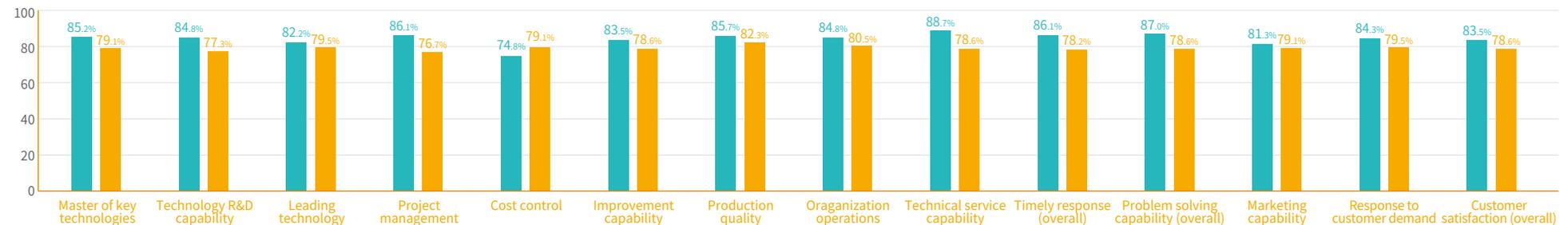
Satisfaction Survey Result

Customer satisfaction is an important basis for PHIHONG to continuously improve our products and services. Through multiple channels, we understand customers' needs and feelings and return the results to them. In 2022, PHIHONG proactively sent out customer satisfaction surveys to major customers, and the questionnaire return rate reached 100% (46 valid questionnaires out of 46 total questionnaires), and the average customer satisfaction rate of the Group was 84.1%, 5.1% better than the industry. Among them, technical service and problem solving were highly recognized by customers, outperforming the industry by 10.1% and 8.4% respectively. As for cost control, the Group's satisfaction rate was slightly lower than the industry by 4.3% due to the continuous impact of COVID, inflation and shortage of raw materials, which led to the overall cost increase. It is clear that customers' expectations and demands for cost control have increased, and this is a target that we will continue to work hard to improve in the future. In 2022, the overall average customer satisfaction rate continued to improve by 2.3% compared to 2021, which shows that internal improvements have continued to have a comprehensive effect.

Customer satisfaction survey results for the past 3 years

Year	2020		2021		2022		
	PHIHONG	Industry	PHIHONG	Industry	PHIHONG	Industry	Target
Questionnaire recovery rate	100%	-	100%	-	100%	-	100%
Avg. customer satisfaction	75.8%	71.1%	81.8%	71.7%	84.1%	79.0%	80%

14 assessment results of customer satisfaction



■ 14 assessment results of customer satisfaction of 2022 (PHIHONG) ■ 14 assessment results of customer satisfaction of 2022 (Industry)

Quality Policy and Commitment

With the management philosophy of "Integrity, Creativity, Challenge", PHIHONG continues to improve its innovative technology and provide customers with satisfactory products and services. Through a high standard quality policy and the self-commitment and consensus of all employees on quality requirements, we set consistent quality goals through the operation of the quality management system with the participation of all employees as the basis for PDCA continuous improvement to provide customers with better quality products and services.

Quality Policy



Customer Privacy

To protect our competitive advantage, intellectual property, and customer information, we have established the "Company Information Handling and Customer Data Protection Procedures" to regulate the principles of information handling of employees, customers, legal requirements, government, shareholders, and the public. For customer data protection, we follow this procedure for information security management. We not only implement it in our operation process, but also promote it from time to time to raise employees' awareness of information security.

In addition, new employees are required to receive training on "Corporate Ethics and Business Conduct" and sign an "Intellectual Property Rights and Confidentiality Agreement" to assume the obligation of confidentiality and data protection. For customer orders and business-related confidential information and documents, all business and customer-related personnel are required to strictly observe the Code of Business Ethics and Business Conduct. Except for internal circulation and transmission for business needs, they shall not disclose, distribute, or transmit to peers, business partners, suppliers or unrelated third parties. All documents provided by the customers: product technical data (e.g., product specifications, circuit diagrams, drawings, etc.), software, intellectual property, and other data files (including paper document, CD, USB flash drive and any other storage type information and documents) shall be properly registered, stored, maintained, and updated in a timely manner. The "Technical Document Control Regulations" and "Document Handling Procedures" shall be followed. The protection, management, and use of all electronic data media in the company are based on the "Electronic Information Management Procedures". PHIHONG insists on a strict and thorough protection mechanism to manage customers' confidential information and privacy, to build trust and long-term cooperation with customers and create a win-win situation for both PHIHONG and customers. In 2022, there were no complaints from customers about information, privacy breaches or loss of customer data.

3.3 Sustainable Supply Chain Management

Material topic: Sustainable Supply Chain Management (GRI 308: 2016 Supplier Environmental Assessment, GRI 414: 2016 Supplier Social Assessment)



Policy and Commitment

Ensure that sustainability is integrated into the procurement process. Take responsibility for the social, economic and environmental impact of procurement practices



Responsible parties

Global Strategic Procurement Division



Target setting

2022 Target

- Emission reduction awareness training for main suppliers
- Localization of procurement. Increase the ratio of local procurement in China to 78%, and in Vietnam to 3%

Achieved Results

- Promote carbon emission awareness and investigate carbon emission implementation status with 8 main suppliers, 24 participants, 8 hours in total
- China's local procurement ratio is 72%, and Vietnam's local procurement ratio is 3%

Future Target

- Short-term (2023-2024)
 - » Increase the proportion of localized procurement: 80% in China and 5% in Vietnam
 - » Promote SBTi Carbon Reduction Targets to 10 suppliers
- Mid-long term (2025-2030)
 - » Increase the proportion of local procurement: 85% in China and 15% in Vietnam
 - » Promote SBTi Carbon Reduction Targets to 30 suppliers



Management approach

Require suppliers to sign the "Integrity Pledge", "Confidentiality Agreement", "Environmental and Social Responsibility Pledge", and "Conflict Minerals Investigation Form"

Understand and control the labor rights, environmental protection, ethics, safety and health risk control of the supply chain



Annual performance highlights

- In 2022, 85% of the total 177 core suppliers signed the "Integrity Pledge", a 3% increase over the previous year.
- The percentage of new suppliers selected using environmental and social standards is 100%.



Evaluation system

- Supplier performance appraisal
- supplier conference



Corresponding SDGs



Supply Chain Management Policy

1. Supplier evaluation and risk management:
new supplier operation review and existing supplier risk assessment.
2. Conflict-Free Minerals Statement:
The use of conflict minerals from unknown sources or from smelters that have not been verified by the RBA is absolutely prohibited.
3. Localized procurement:
Localized procurement reduces the logistics and transportation process to achieve cost and carbon reduction benefits.
4. Green procurement:
Purchasing goods and services that meet the requirements of environmental regulations to reduce the impact on the environment.
5. Supplier Sustainability Commitment:
A commitment to declare that the supplier's operations are in compliance with local regulations and to jointly abide by the RBA Code of Business Conduct.

PHIHONG Sustainable Supply Chain Management Policy



PHIHONG values the importance of establishing a sustainable supply chain. Through the "Procurement Management Procedures" and other related systems, we regulate the various procedures of supplier management. We also require our suppliers to sign the "Integrity Pledge", "Confidentiality Agreement", "Environmental and Social Responsibility Pledge", and "Conflict Minerals Investigation Form" to understand and control labor rights, environmental protection, ethical regulations, safety, and health risk management in the supply chain, to reduce operational risks and costs for ourselves and our suppliers. We work together with our suppliers to achieve a stable and sustainable future.

PHIHONG Supply Chain Organization

In response to the continuous development of the Vietnam plant, the Global Procurement Office recruited local buyers in Vietnam to facilitate the localization of material sources. PHIHONG's rights and responsibilities in the supply chain are divided into 3 parts:

Global Strategic Procurement Division:

responsible for new supplier development, arrange new supplier review, price negotiation, order allocation, supplier relationship, supplier collaboration, new technology and new process exchange and introduction, etc.

Factory procurement:

from scheduling incoming materials, chasing materials, collaborative handling of quality issues, to deal with factory payment problems, etc.

Supplier Quality Management SQM:

Assist in the evaluation of new suppliers and be responsible for the annual review of qualified suppliers, counseling, and supply quality improvement.



Supply Chain Management

PHIHONG has been cooperating with quality suppliers for a long time, based on quality, capability, and environmental protection policy, to fulfill corporate social responsibility and move towards sustainable development. We also communicate environmental policies and information to our suppliers in accordance with ISO 14001 and comply with RoHS regulations to strengthen the performance of our suppliers' environmental management.

PHIHONG 's supply chain management is divided into the following aspects

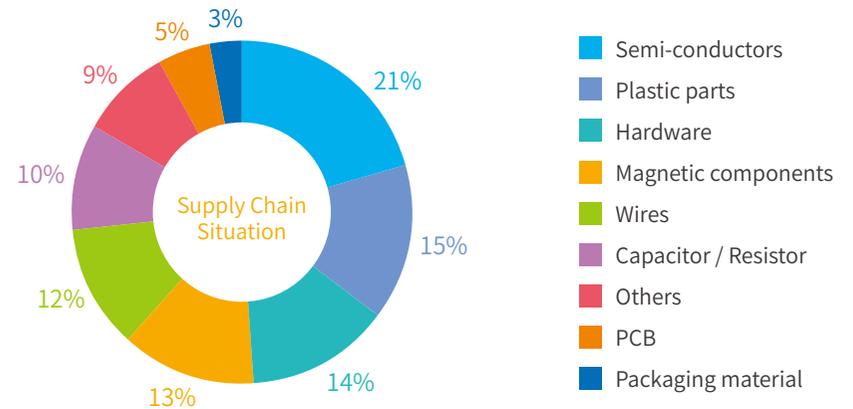
- Price competitiveness
- Supply risk management
- Green Procurement
- Conflict Minerals
- Implementation of Corporate Social Responsibility
- Strategic partnership between companies in the green supply chain

PHIHONG upholds a strict, fair, just, and open supplier management system. We comply with laws and social regulations. We continue to keep up with the times and actively develop excellent suppliers. Following the relevant assessment methods, we conduct investigations and evaluations, and establish a supplier classification management system. We ensure that our supply sources meet the quality, delivery, price, and after-sales service requirements to strengthen our supply chain risk management. Moreover, we integrate all our partner companies. Through the partnership between each other, we can raise the awareness of CSR and form a complete industry value chain.



Supply Chain Situation

In 2022, PHIHONG dealt with 800 manufacturers. The main categories of suppliers are semiconductors, plastic parts, hardware and magnetic components, accounting for nearly 60% of the total.



Price Competitiveness

In the face of global competition, not only PHIHONG must face it, but also our customers and suppliers. In such a competitive business environment, when demand exceeds supply, it is the responsibility of the supply chain to do its best to contain price increases. Conversely, when supply exceeds demand, it is the supply chain's responsibility to ensure that prices are competitive. Strategic procurement will be based on the changes in the market, to perform cost review of our product models, quarterly price negotiation (QPR), alternative material proposal and introduction, new supplier introduction, etc. to ensure price competitiveness.

Supplier Conference

To familiarize new suppliers with PHIHONG's environmental protection data system, and to provide advice and discussion opportunities for existing suppliers on the use of environmental protection data, we hold regular supplier conference every 6 months. In 2022, two supply conferences had been held online to ensure that our suppliers can keep pace with PHIHONG and protect the environment in a sustainable manner.

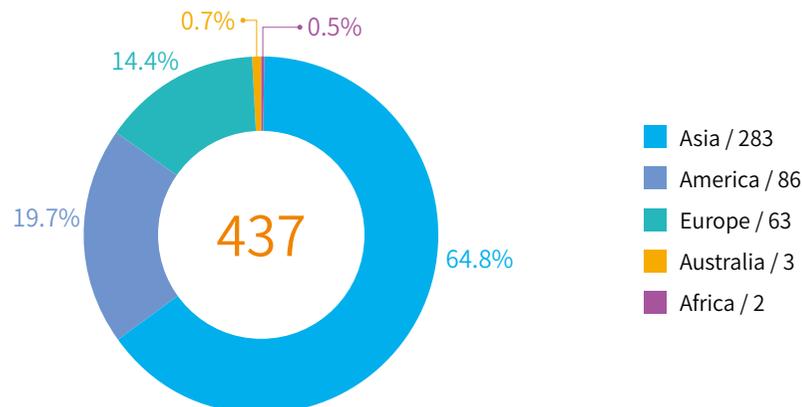
Conflict Minerals

PHIHONG advocates the RBA Conflict Free Mineral Policy. We promote it to our suppliers by disclosing the following Conflict Free Mineral Policy on the company's supplier Kanban board: follow the requirements of RBA (Responsible Business Alliance) and GeSI (Global e-Sustainability Initiative) for Conflict Free Minerals, and fulfill its corporate social responsibility by avoiding the use of conflict metals from the DRC and neighboring countries:

Before qualifying as a new supplier, a "Conflict Minerals Commitment" and "Conflict Minerals Investigation Form" must be completed by the supplier. PHIHONG then 100% confirms that the source of conflict minerals of this manufacturer is a smelter certified by RBA. In 2022, PHIHONG's supply chain uses a total of 437 smelters. According to the analysis, the suppliers' qualified smelters are mainly located in Asia, followed by the Americas.



Distribution map of smelters in PHIHONG supply chain



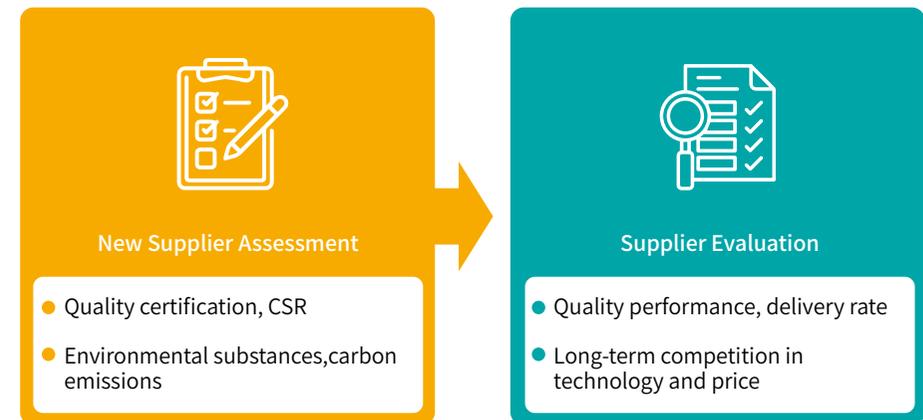
Supply Chain Risk Management

New Supplier Assessment

New suppliers are required to be assessed prior to adoption to ensure product compliance and the ability to supply products without interruption, and to identify possible ongoing operational risks. Through supplier audits to ensure quality and delivery performance, and to assess the supplier's ability to make cross-functional decisions. We will verify the supplier's financial health, ethics, environmental safety management system and other related social responsibilities. We consider the complexity of the products, materials, services and technologies to be procured, examine the supplier's capabilities in personnel, equipment, manufacturing, design development, and development project progress management, change management, logistics management, customer service management, etc. Moreover, we also examine environmental substances, including RoHS, REACH, and halogen-free product requirements compliance, and conduct carbon emission surveys to identify whether the overall resources of our suppliers are suitable for PHIHONG's suppliers.

Supplier Evaluation

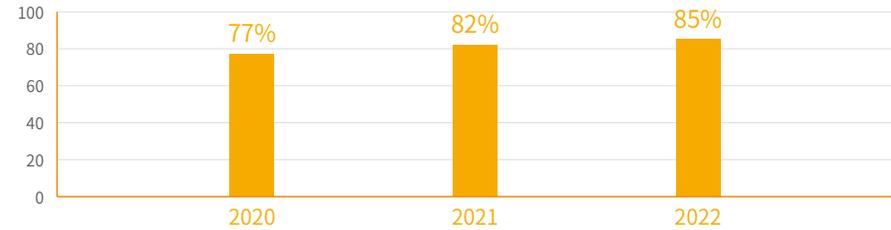
PHIHONG conducts core supplier evaluations every six months. We establish a supplier evaluation system to improve suppliers' ability to cooperate in various aspects, maintain high-quality supplier relationship management, and then improve the company's competitiveness. We also use the evaluation result as a reference for the formulation of procurement strategies.



Supplier Integrity Pledge

The biggest risk in the procurement process is that suppliers provide gifts, money, or entertainment expenses in exchange for preferential treatment of suppliers' goods and services bids. PHIHONG's Code of Business Ethics and Business Conduct specifies anti-corruption and anti-bribery policies for procurement staff and suppliers. In 2022, 85% of the 177 core suppliers signed the Integrity Pledge, a 3% increase from the previous year.

Integrity pledge sign-back rate



Supplier Counseling

PHIHONG conducts regular quality and environmental system audits and evaluations for new suppliers and qualified suppliers. We ensure that suppliers' quality of products, environmental systems, and corporate and social responsibility practices meet PHIHONG's requirements. The production sites of our suppliers are mainly located in China. To strengthen the management of our suppliers and reduce the loss caused by the risks of product quality, environmental protection system, corporate and social responsibility, we have delegated the function and authority of supplier management to the factory SQM, for a prompt response locally, on-spot, and close to the reality.

The Supply Chain Counseling Team consists of SQM, Technical and Purchasing. It is responsible for conducting the evaluation of new suppliers. The SQM unit conducts audits/coaching/evaluation of suppliers according to the actual situation. In 2022, a total of 33 new supplier audits (QSA, Quality System Audit) and 85 supplier audits (QPA, Quality Process Audit) were conducted with the following results:

Result of New Supplier Quality System Audit (QSA)

Item	Qualified Suppliers	Unqualified / suspended suppliers
No. of suppliers	26	7
%	78.79%	21.21%

Note: Disqualification and suspension of audit cases are not caused by CSR issues

Result of Quality Process Audit (QPA)

Audit type	Result	Total	%
ESG audit	Pass	18	21.18%
QPA & ROHS audit	Pass	28	32.94%
	Failed	2	2.35%
QPA audit	Pass	6	7.06%
Annual audit	Pass	11	12.94%
Review of new materials and processes	Pass	16	18.82%
	Failed, to be re-audited	3	3.53%
Supplier counselling	Pass	1	1.18%
Total		85	100.00%

Note: In the quality/environmental protection system audit and counseling evaluation, there are 80 times that the reviewed supplier is qualified, with 2 times failed and 3 times unqualified and to be re-audited.

Supplier Audit

PHIHONG conducts on-site supplier RBA audits for suppliers with transactions of over NT\$10 million and close relationships. The overall overview is shown in the table below. In 2022, no supplier has suspended their business relationship due to forced labor or child labor.

Aspect	Major deficiencies	Improvement action	Tracking Mechanism
Human Rights and Labor Protection	Weekly working hours (including overtime) exceed 60h during peak factory season	<ul style="list-style-type: none"> Develop a written program to control overtime and enhance training. Additional staff according to actual needs Improve the technical skills of employees through training. improve production efficiency, automation, and lean production 	<p>The improvement report of audit deficiencies should be in the standard format of SQE audit report. If there are deficiencies that require more time for improvement, a continuous improvement plan and estimated completion date will be proposed. The way to deal with this is to provide an improvement plan and complete the improvement of all deficiencies and compile the audit report for the supervisor to review. For the improvement status of the deficient items, the audit team will discuss and evaluate whether the case can be closed, or the improvement results need to be confirmed on site, and the case should be closed within two months. In the future, it will also be a priority item to be audited.</p>
	Factory policies, practices and codes do not contain anti-discrimination provisions	<ul style="list-style-type: none"> Develop factory policies, practices, and codes to prevent discrimination Conduct employee training and record keeping according to the training plan for anti-discrimination issues 	
Sustainability and Operational Risk Management	No anti-bribery, anti-corruption & information security control program in place	<ul style="list-style-type: none"> Conduct regular training and awareness-raising for employees and related stakeholders Understand the possible consequences and risks associated with a violation. Information security risk identification. Education and training on information security management policies to enhance information security capabilities and strengthen organizational resilience to information security incidents and threats. 	
Supply Chain Management	No investigation on conflict mineral use during new supplier introduction	<ul style="list-style-type: none"> Promise to suppliers that the company will conduct due diligence on the source of minerals and the chain of custody of production and sales in accordance with the "OECD Due Diligence Guidelines" 	
Occupational Safety and Health	Rotating parts and other potentially hazardous parts are not properly guarded, isolated and maintained	<ul style="list-style-type: none"> Install equipment and protection devices. Regularly organize safety production education, training and publicity for employees The medical kit is checked by a person to verify that the list of protective equipment is consistent with the physical 	

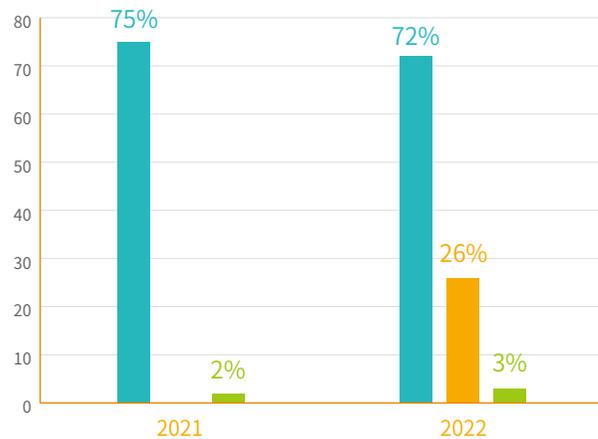
In summary, PHIHONG conducts a 100% audit of each new supplier's environmental and social standards for compliance when introducing new suppliers. If there are concerns, we do not introduce them. We conduct the same audit for existing suppliers. The number of suppliers found had no significant actual or potential negative impacts.

Local Procurement

To strengthen cooperation with suppliers, PHIHONG has made enhancing the sustainability of the local power supply industry an important part of its corporate social responsibility, replacing “long chain” with “short chain” and increasing the proportion of “localized” production. We have been promoting localized procurement for many years under the principle of local development and local supply. By actively developing local suppliers and implementing local procurement, we can enhance the flexibility of supply, reduce operational risks, and make the operation of production lines more stable. This not only ensures the quality and efficiency of service to customers, but also reduces carbon emissions and creates more local employment opportunities.

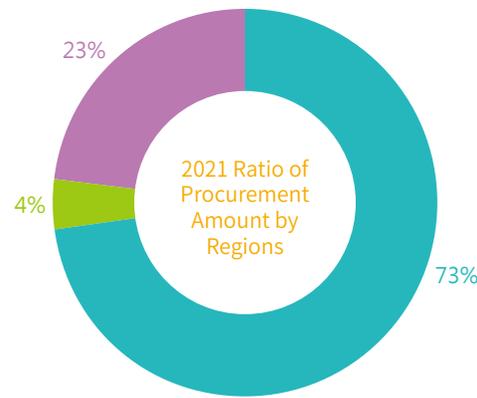
Currently, PHIHONG’s main production bases are in China and Vietnam. In 2022, PHIHONG’s Taiwan added a new electric vehicle charging pile assembly line, thus local manufacturers in Taiwan are included as a priority partner to implement the principle of local procurement. In 2022, the amount of local procurement and the amount of local procurement are shown in the chart below. China has the highest ratio of local procurement. Taiwan and Vietnam both continue to make efforts to import local materials. In the same year, the localization ratio of PHIHONG China declined slightly due to the increase of EV materials and semiconductor materials from Europe and the US. We are now introducing new suppliers of both institutional and electronic materials within 2 hours’ drive from our factories, and hope to increase the ratio more effectively. By localizing the procurement process, we can reduce the logistics of overseas procurement and reduce the impact of greenhouse gas emissions on the environment. If the materials need to be purchased from overseas, we also measure the delivery time and reduce the number of shipments, so as to reduce the cost of goods and suppliers’ delivery costs.

2021~2022 Localization Ratio



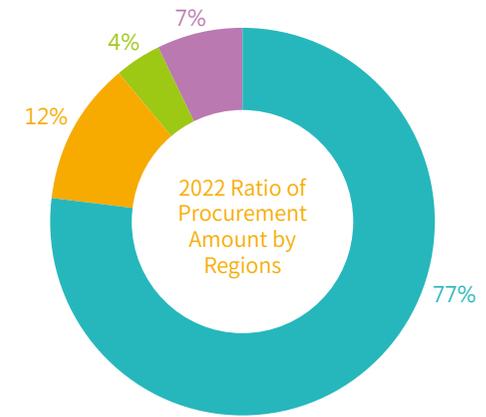
■ Phihong China ■ Phihong Taiwan ■ Phihong Vietnam

2021 Ratio of Procurement Amount by Regions



■ China ■ Vietnam ■ Other

2022 Ratio of Procurement Amount by Regions



■ China ■ Taiwan ■ Vietnam ■ Other

Key Material Risk Management

For key materials, key equipment and other important suppliers, PHIHONG takes the initiative to issue supplier self-assessment questionnaires, which are reviewed by the supply chain management team to implement risk control measures. In the past year, the U.S. has continued to raise interest rates to combat inflation, resulting in an economic recession and a severe impact on demand. In addition, the electronic industry is in a dilemma of excessive stocking during the epidemic, and the global economic climate has reduced demand, causing high inventory of components to emerge one after another, which has significantly eased the shortage of materials compared to 2021. Therefore, the risk management measures for key materials are as follows:

- Supplier Material meets Environmental Requirements

PHIHONG pays attention to the control of environmental substances in the materials. We always pay attention to changes in important international regulations such as RoHS2.0 (2011/65/EU & 2015/863/EU), REACH-SVHC, Halogen-Free, SONY SS00259, etc. and update our internal control documents accordingly. New control standards for environmental management substances will be published in the supplier's Kanban board download area at any time with the changes of international related organizations, so that suppliers can download and inquire. To emphasize the importance of environmental substance control, the system for suppliers to upload environmental substance information also be clearly displays a reminder.

In the material recognition stage, suppliers are required to attach the test reports of third-party impartial units during the validity period. Supplier should upload a guarantee to the PHIHONG Environmental Protection Document System, to ensure that the supplier's materials meet environmental requirements. New environmental management substance control standards are also published for suppliers to view and download along with the changes of international organizations. To promote the importance of environmental substance control, the environmental substance data uploading system is also clearly display a reminder to suppliers.

Key component	Risk type	Strategic measures	Common
 Semiconductor	<ol style="list-style-type: none"> Too many orders Factory inventory 	<ol style="list-style-type: none"> Strengthen control on excess inventory Follow suppliers' direction for special usage material 	<ol style="list-style-type: none"> price negotiation cross department project management team to strictly control production order quantity coordinate order cancellation or delay
 Plastics	<ol style="list-style-type: none"> Manufacturer stopped production to reduce capacity Inventory reduced at a slower rate 	<ol style="list-style-type: none"> Regularly verify inventory of ejection factory Regularly verify changes in production capacity of material 	
 Metal wires	<ol style="list-style-type: none"> Factory personnel adjustment Raw material over-inventory 	<ol style="list-style-type: none"> Regularly control manufacturer changes in personnel Regularly verify inventory of material producer 	
 PCB	<ol style="list-style-type: none"> Reduce factory manpower Reduce production capacity of raw material producer 	<ol style="list-style-type: none"> Regularly control manufacturer changes in personnel Regularly verify OEM production facilities 	

Environment-relevant Substance Management

In addition to requiring suppliers to meet environmental requirements, the SQM team verifies that suppliers meet PHIHONG's requirements as part of green supply chain management. Before PHIHONG introduces new suppliers, there is a review to make sure all suppliers meet our environmental standards. 100% of our new suppliers are screened using environmental criteria. In the new supplier audit, the following environment-relevant substance management items are reviewed:

1. Procedures and standards
2. Control lists, confirmation plans and confirmation methods
3. Traceability
4. Whether the management items are propagated to the suppliers and their implementation is confirmed
5. Whether production equipment and fixtures are managed
6. Document management
7. Division of labor and training of professional staff

Suppliers must check whether their environmental substance management complies with PHIHONG's standard before the audit. During the audit, the auditor must use the audit form to verify that the various actions taken by the supplier in environmental substance management are accurate, to avoid product contamination and possible loss and damage to the environment due to inadequate management.



When PHIHONG introduces new suppliers, it is required in the review that all suppliers are familiar with our Labor Practice Standards. 100% of our new suppliers are screened using the Labor Practice Standards. Just like the importance of environmental substance management, the requirements for suppliers' occupational safety and work environment are also indispensable. Suppliers must check whether their occupational safety management complies with PHIHONG's standards before the audit. The auditor must use the audit form to confirm whether the various actions of the manufacturer in occupational safety management are accurate, to avoid violating the law, such as causing harm to employees due to the imperfect management of the working environment, which in turn causes risks in goods supply. The contents of the audit form are summarized as follows:

1. Compliance with laws and regulations and implementation of labor contracts
2. Assurance of a complaint channel
3. Prohibition of child labor
4. Equality in the workplace
5. On-site management, supervision, and guidance system
6. Prevention of misconduct
7. Completeness and maintenance of occupational safety equipment

In response to the increasing concern of society, government, and the public about environmental issues, PHIHONG is also subjected to demands from various parties on environmental issues. To fundamentally solve the environmental problems in the supply chain, we must work closely with related companies in the supply chain to jointly improve environmental performance.

Supplier ESG Implementation and Commitment

PHIHONG conducts annual social responsibility audits of qualified suppliers to identify potential or existing deficiencies in the code of conduct, and then develops improvement plans and ensures continuous implementation and monitoring.

As a professional manufacturer of power supplies, PHIHONG does not fall behind in the promotion and maintenance of corporate social responsibility. We work together with suppliers.

PHIHONG's ESG policy is as follows:

1. Comply with all laws and regulations signed by the company in the production and operation of the company. Cooperate with the Occupational Safety and Health Management System / Quality Management System / Environmental Management System to manage the company.
2. Respect the rights of all persons. Prohibit discriminatory practices and forced labor and unlawful punitive measures.
3. Comply with customer and industry ethics and business conduct standards. We also select suppliers/outsourcers based on their ability to meet social responsibility standards.
4. Continuously improve management, standardize behavior, accept external review, and supervise employee in accordance with social responsibility standards.
5. Employee representatives have the right to communicate or negotiate with management representatives on social responsibility issues.
6. All employees can have access to information on our social responsibility system at any time and make suggestions, without any negative impact.

Supplier Carbon Emission Survey

With the trend of rapid global warming, the sustainable development of human society is under serious threat. With the global goal of net-zero carbon emissions by 2050, more and more companies have started to implement sustainable development and green low-carbon development strategies. In 2022, PHIHONG initially conducted a supplier carbon emission survey and conduct awareness training for major suppliers to reduce emissions, requiring them to inventory greenhouse gas and reveal carbon emission information, and to quantify and report on greenhouse gas emission information within the enterprise. This is for setting emission reduction targets and action plans, and gradually implementing carbon reduction work.

PHIHONG's social responsibility, environmental policy, occupational safety and health policy, and conflict-free metal policy are all displayed on the supplier's Kanban board. Our suppliers are selected according to the relevant policies:

1. Maintain good corporate governance. Adhere to a strict code of corporate ethics and business conduct.
2. Comply with local laws and regulations.
3. Provide a safe and healthy working environment where employees can fully utilize their talents, as well as getting a reasonable compensation and benefits.
4. Create company value and enhance shareholders' equity.
5. Develop and manufacture HSF-compliant and energy-saving products. Implement environmental management systems to reduce the impact on the environment.



4 Climate Change Strategy

An aerial photograph of a lush green forest with a winding river. The letters 'CO2' are formed by a dense thicket of trees in the middle of the river. The background is a bright green gradient with white, wavy borders.

CO₂

- 4.1 Enhance Climate Resilience (TCFD)
- 4.2 Energy and Resource Management
- 4.3 Sustainable Environmental Management

Material topic: Material Topic: Climate Change Risks and Opportunities (GRI 201: Economic Performance 2016)



Policy and commitment

- Identify and assess climate-related risks and monitor climate-related risk management.
- Follow the TCFD framework to reveal the risks and opportunities brought about by climate change



Responsible parties

- General (Factory) Affairs
- Accounting Department
- Sustainability Office



Target setting

2022 Target

Clearly understand the potential impact of climate change risks and opportunities on the company's operating processes and strategies through quantitative information on financial impact

Achieved Performance

- Greenhouse gas (GHG) (Scope 1+2) emissions are substantially reduced by 11.2% compared with 2021.
- CDP Questionnaire Climate Assessment B-/ Water Questionnaire Assessment C.

Future Target

- Short-Term (2023-2024)
 - » By developing high-efficiency power products through green design, we aim to actively reduce carbon emissions by 4.2% per year (Area 1/Area 2).
 - » By 2023 3Q, complete submission of overall carbon reduction target setting
- Mid-Long Term (2025-2030)
 - » In the mid/long term, the goal is to reduce carbon emissions by 4.2% per year, with a total reduction of 42% by the end of 2030.
 - » Ongoing disclosure of TCFD financial related information.



Management approach

Climate change and energy management is one of the major themes and key risk items for the sustainable development of PHIHONG. We continue to analyze and control, and we are committed to the adaptation and mitigation of greenhouse gases.



Annual performance highlights

- Disclosure of TCFD Climate Change Related Financial Information Report (Identifies Top 9 Risks and Top 3 Emerging Opportunities)
- CDP Questionnaire Climate Assessment B-



Evaluation system

- KPI target check
- CDP Questionnaire Evaluation
- EcoVadis Review
- Report the results of the greenhouse gas inventory to the competent authorities and disclose financial information related to TCFD climate change



Corresponding SDGs



4.1 Enhance Climate Resilience (TCFD)

Climate change and global warming have brought great impact to the global environment, economy, and society. PHIHONG believes that climate change will bring significant risks and opportunities financially to our business operations, both now and in the future. It is considered as one of PHIHONG 's key strategies for sustainable development. In response to the challenges brought by climate change and the international trend of deepening climate governance, PHIHONG signed the Task Force on Climate-related Financial Disclosure (TCFD) in 2022 to align with international standards. Through the establishment of a comprehensive climate change risk and opportunity identification process, we continue to understand the potential impact of climate change risks and opportunities on our business processes and strategies through the quantification of financial impacts. By effectively monitoring, controlling, and responding to climate related issues, we grasp opportunities for operational development and innovation, and implement sustainable management practices to actively move toward the goal and vision of a low carbon economic transformation.

Meanwhile, in order to reduce greenhouse gas emissions and transform operations to adapt to the future low-carbon economy, PHIHONG has signed up to the SBTi Science Based Targets initiative (SBTi), declaring a net-zero transformation carbon reduction plan and moving towards the Paris Agreement goals. However, due to the impact of COVID and the conversion of the old and new SBTi carbon reduction standards, PHIHONG chose to follow the methodology of the new SBTi standard in a more proactive manner to readjust the carbon reduction path, and set reduction targets for the scenario of controlling the temperature within 1.5° C. The plan is to submit the targets to SBTi for verification in 3Q 2023. Moreover, in line with the international industry trend, we will publicly disclose the achievement of 4.2% absolute greenhouse gas reduction every year and strive to move towards the net zero target in 2050 to express our determination to actively fight against climate change.

PHIHONG Zero pledge and Carbon Reduction Target Net Zero 2030 / 2050

- Introduce energy management system
- Accelerate replacement of high energy consumption equipment
- Invest in solar energy
- Low carbon product design
- Build product carbon footprint
- Green procurement, carbon rights

By 2030



Reduce by 4.2% annual carbon emission by the Group (Area1, 2, with 2021 as the base year). This is equivalent to the target of a total reduction of 42% by the end of 2030.

By 2050



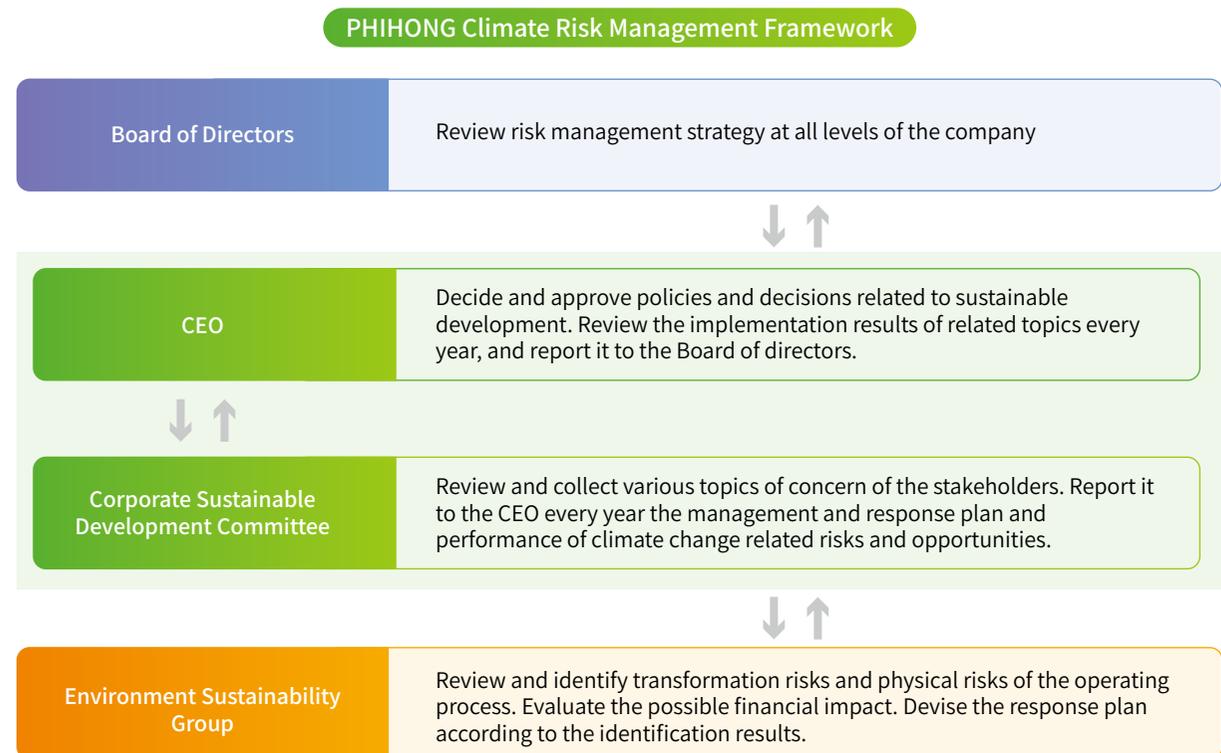
Continue to follow SBTi science-based carbon reduction towards the net zero target by 2050.



Governance structure and management responsibilities

To effectively manage and respond to the impact of climate change risks, PHIHONG has raised the issue to the Corporate Sustainability Committee, where the Environmental Sustainability Group drives the process and identifies significant opportunities and risks. The CEO, a member of the Board of Directors, serves as the chair of the Corporate Sustainability Committee and oversees sustainability-related policies and decisions, including those related to climate change, significant risks, and business opportunities. The Environmental Sustainability Group focuses on the four themes of Climate Change Carbon Disclosure Program (CDP), Greenhouse Gas Inventory (GHG), energy and water resource consumption reduction (quantity), and waste reduction, and adopts the Financial Stability Board (Financial Stability Board, FSB)'s Task Force on Climate-related Financial Disclosures (TCFD), which identifies transition risks and physical risks in the operation process, evaluates possible financial impacts, and sets a response plan based on the identification results. 9 major risk projects were identified through the TCFD method, and 3 major opportunity projects were identified from emerging opportunities brought about by climate change. The timing of occurrence is then differentiated and reviewed year by year to build a resilient climate change culture.

The Environmental Sustainability Group, through the Corporate Sustainability Committee, meets at least twice a year to keep abreast of climate related issues and the development of strategies and measures. After the meeting, the report is submitted to the CEO and the board of directors for their understanding; The Corporate Sustainability Committee is chaired by the CEO and meets regularly (annually) to review the progress and effectiveness of implementation. PHIHONG's climate risk management structure is shown on the right.



Climate Change Risk and Opportunity Management

PHIHONG follows the Climate Related Financial Disclosures (TCFD) proposal and conducts comprehensive climate risk management from four perspectives: governance, strategy, risk management, and indicators and targets. Firstly, we identify potential significant risks, evaluate the financial impact path and impact scale under different scenarios for each risk factor, take stock of countermeasures, and set targets for regular monitoring and tracking.

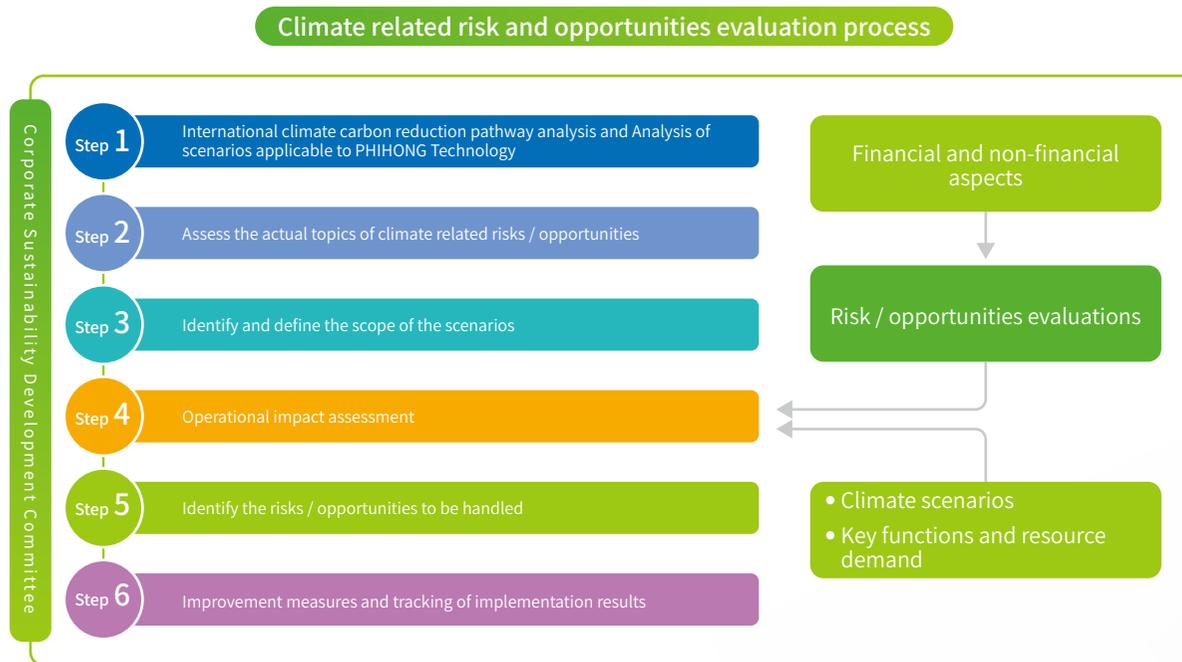
Climate-related Risks and Opportunities Identification and Assessment Process

PHIHONG has integrated the risk and opportunity identification of climate issues with the ISO 14001 program to effectively integrate the management mechanism. The implementation process starts with collecting information on international carbon reduction pathways, scientific methods, and unique phenomena caused by climate change in recent years, and then classifies and summarizes the information to identify possible topics related to PHIHONG, and further analyzes and evaluates possible risks and opportunities and their risk levels. The risk level considers the level of impact and the frequency or probability of occurrence and determines the opportunities and risks to be addressed and the countermeasures and measures to be taken based on the result of their multiplication and the fall of the risk matrix. The process of climate related identification and assessment is shown in the figure on the right.

Summarize and Evaluate Climate Related Topics

After discussions between the Corporate Sustainability Development Committee and various departments to clarify existing measures, possible solutions, forms of obtaining quantitative financial data, feasibility and sources, and other related issues, the possible climate change risks and opportunities for PHIHONG were compiled and the results of the discussions were categorized according to the actual content of each issue with reference to the risk and opportunity categories (transformation risks, physical risks and opportunities) proposed in the TCFD framework.

The climate risk assessment process is based on the impact of climate change on the company's overall operations and refers to the TCFD report framework and the climate-related risks issued by the Ministry of the Environment of Japan. Process design of opportunity situation import analysis guide ver2.0. We first identify the critical units and facilities of PHIHONG internal operations, such as energy demand, regulatory requirements, and carbon reduction targets, and assess their possible impact and degree of influence.

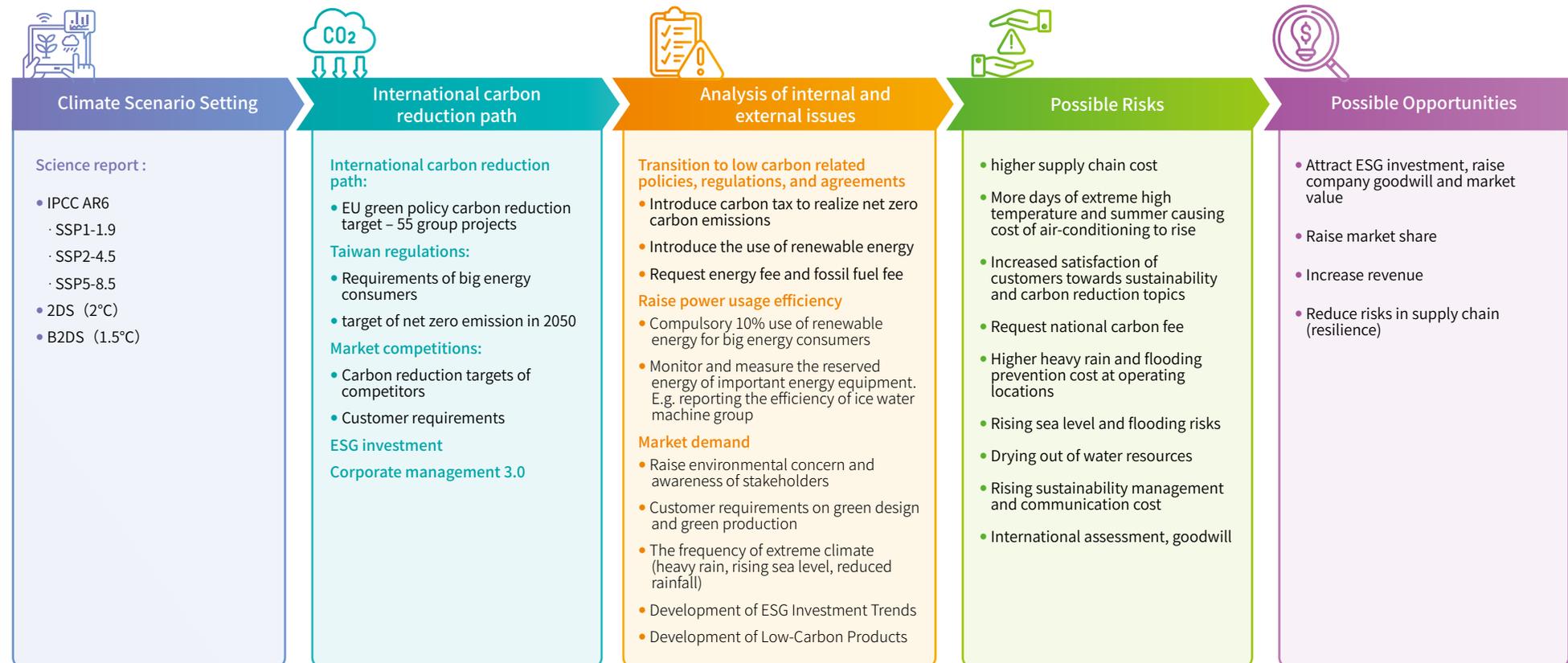


Integration of climate risk and opportunity management

For climate risks and opportunities, PHIHONG uses two factors, the degree of operational impact and the probability of occurrence, to rate the impact level and the probability of occurrence on a scale defined by the company. The degree of impact on the financial side is prioritized when scoring the degree of operational impact, and the degree of impact on the non-financial side is considered only when quantification is not feasible for financial information. After completing the impact and probability assessment, the risks and opportunities are further graded according to their ranking levels by referring to the "Risk and Opportunity Grading Matrix" to identify the risks and opportunities to be addressed and to formulate implementation strategies.

PHIHONG has integrated the risk and opportunity identification of climate issues with the ISO 14001 program to effectively integrate the management mechanism. Each year, the internal and external environmental issues are evaluated through a risk assessment process, mainly by the Environmental Sustainability Group, which examines and evaluates the relevance of each issue to the company's operational risks from various perspectives and the magnitude of the risks. The Corporate Sustainability Committee reports annually to the CEO on the implementation of climate risks and opportunities, and the CEO reports to the board of directors on the performance of the committee to continuously improve and implement various management practices.

Summary and Assessment of Climate-Related Issues

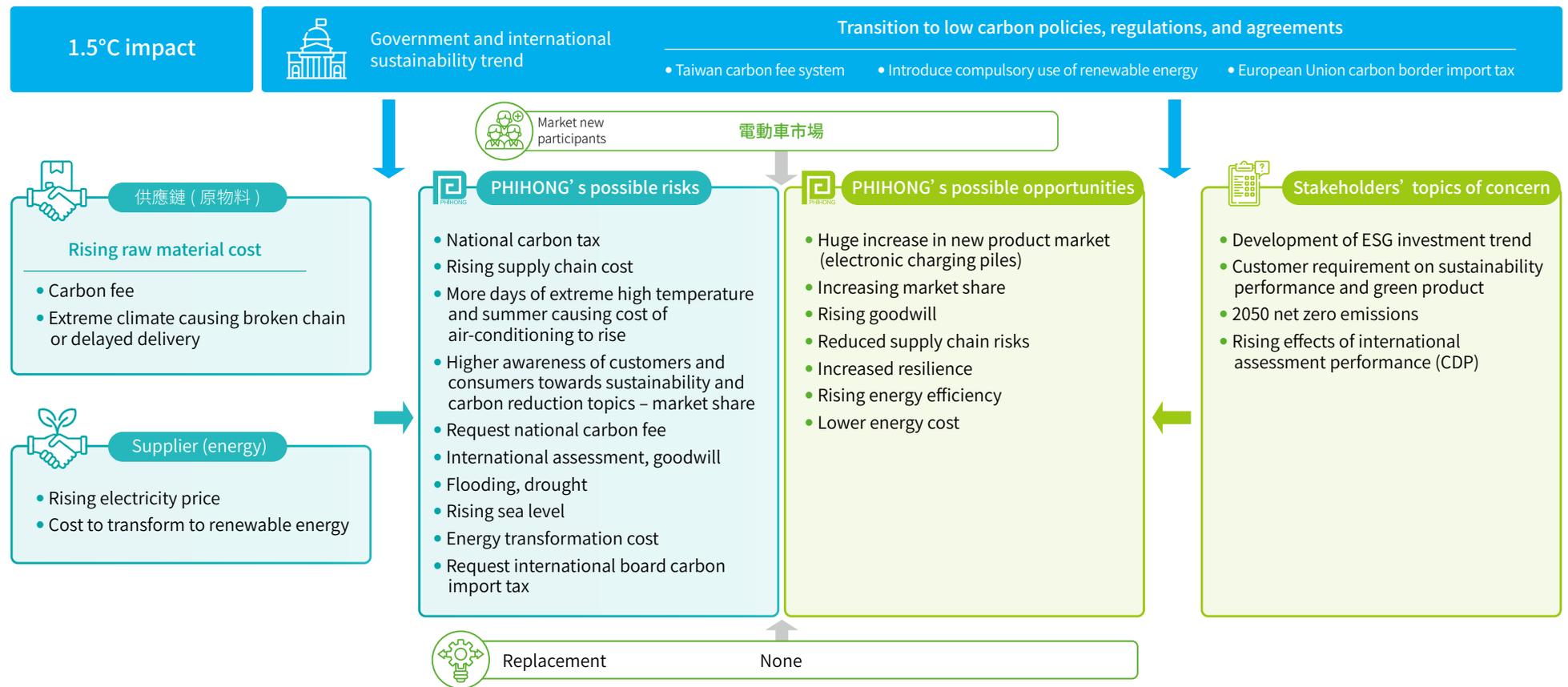


Strategy

Climate-related scenario simulation (1.5° C)

The PHIHONG 2022 TCFD adopts the IPCC's latest 6th assessment report (AR6), which uses a more detailed "Shared socio-economic pathways (SSP)". It integrates qualitative socio-economic conditions into an integrated assessment model, such as the real situation of basic elements and drivers such as population, human development, economy, lifestyle, policies and institutions, technology, environment, and natural resources. As a result, 5 scenarios ranging from negative to very high carbon emissions are generated: SSP1-1.9, SSP1.-2.6, SSP2-4.5, SSP2-7.0, and SSP5-8.5. The five scenarios range from negative to very high carbon emissions. Among the above 5 scenarios, there is little difference in the effects of SSP1-1.9 and SSP1.-2.6, and between SSP2-7.0 and SSP5-8.5. Therefore, 3 climate scenarios, SSP1-1.9, SSP2-4.5, and SSP5-8.5 were used for analysis considering the corresponding period of 1.5° C.

Analysis result of risks and opportunities of the 1.5° C scenario



Assessment of climate change operational impact topics

The assessment of the impact of climate change is based on the degree and probability of impact on profit or loss, capital expenditure and cash flow operations. However, since some risks and opportunities cannot be quantified as financial information, the non-financial impacts of the topics will be considered. The results of the operational impact assessment for different climate scenarios at 1.5° C are illustrated in the following graph.

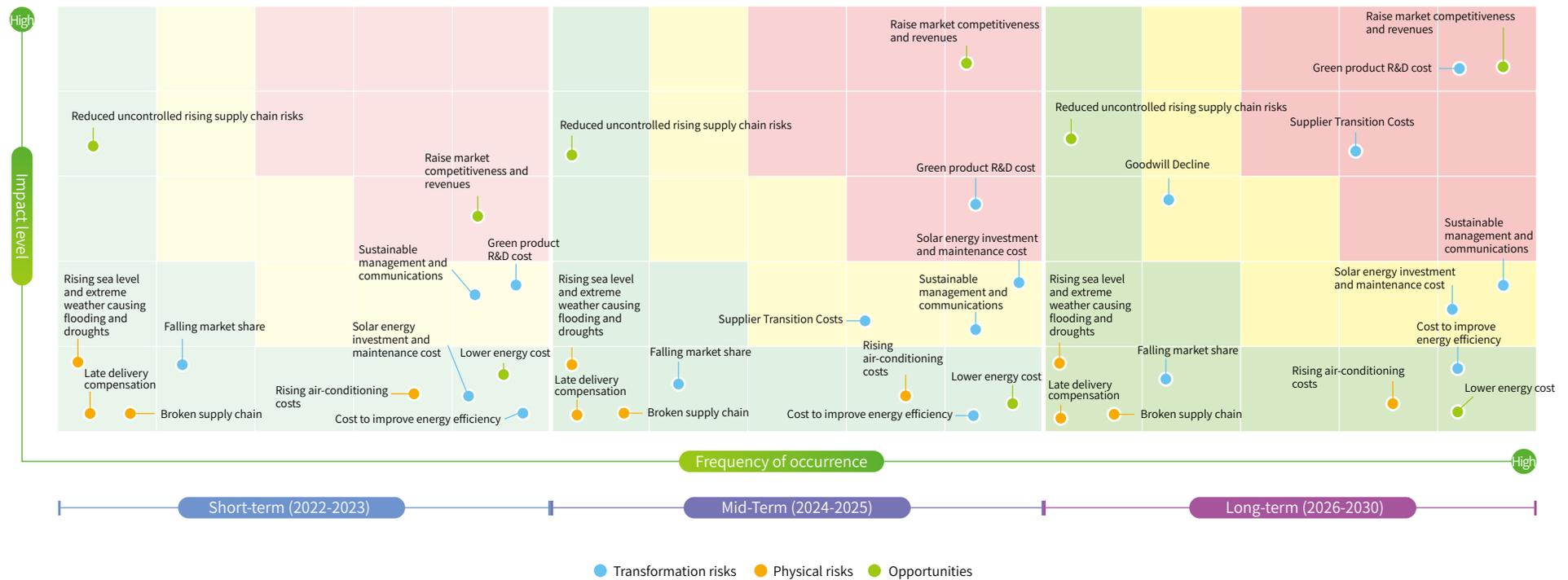
Risk Management

Short-, mid- and long-term climate risk and opportunity matrix

This evaluation set the short-term period at 2023, mid-term at 2024~2025, and long-term at 2026~2030. For the possible climate change risk and opportunity topics, the degree of impact on operations and the probability of occurrence were determined based on existing measures, scenario simulations, and the strength of issue associations, and a matrix of risk and opportunity was drawn. The green blocks are low risk and opportunity areas; the yellow blocks are medium risk and opportunity areas; and the pink and orange blocks are high risk and opportunity areas. The risk and opportunity response strategies were developed based on the score points of each topic and the time frame of occurrence.

- Topics with significant financial impact:

Short-term: no significant risk topics; mid-term: investment in green product R&D costs; long-term: investment in green product R&D costs and supplier transformation costs.



Financial impact of climate risks & opportunities on PHIHONG

- Financial Impact of Climate Change Topics:

The mid-term goal is to achieve a temperature rise below 1.5° C and an annual emission reduction of 4.2%. PHIHONG has adopted green product R&D, installed solar power generation systems, purchased green electricity, replaced old air-conditioning ice machines, and built green building factories. The impact of various climate risk topics on operating income in the short-, mid- and long- term is below 1.5%.

- The financial impact of the carbon reduction path:

PHIHONG plans to complete the SBTi reduction target by 3Q 2023. Based on the results of the climate risk assessment, topics that can be quantified as financial data will be analyzed as a percentage of its revenue.

PHIHONG Climate Transformation & Physical Costs as a Percentage of Revenue



Assessment of the financial impact of climate change on PHIHONG

Climate risk/opportunity topics	Operating income impact		
	Short-term	Mid-term	Long-term
Increase in revenue from low carbon products	<0.1%	<1.5%	<1%
Green Product Development Costs	<0.2%	<0.5%	<0.1%
Air Conditioning Costs	<0.01%	<0.01%	<0.01%
Upstream supplier transformation costs	-	<0.1%	<0.1%
Renewable Energy Investment - Solar	<0.01%	<0.01%	<0.01%
Sustainable management and communication costs	<0.01%	<0.01%	<0.01%
Replacement of high energy consumption equipment and installation of energy monitoring equipment	<0.01%	<0.01%	<0.01%

This assessment set the short-term period at 2023, mid-term at 2024~2025, and long-term at 2026~2030. Based on existing measures, scenario simulations and topic correlations, PHIHONG systematically identifies possible climate risks in its operations based on "risk management criteria". Climate risk types include transformation and physical, which are subdivided into regulatory, technology, market, goodwill, and immediate and long-term. Opportunities are divided into 5 categories: resource efficiency, energy sources, products and services, markets, and resilience. By evaluating and mapping the matrix of risks and opportunities based on the incidence and impact factors, the Environmental Sustainability Group discussed and determined the significant risks and opportunities that PHIHONG could face, and then adopted effective strategies and management measures to capture the potential opportunities in order to strengthen the Group's operational strength and competitiveness.

We have listed the main climate change transformation risks, physical risks, opportunities, financial impacts and responses in 2022 as follows:

Climate risk and opportunity analysis and response

Impact Events	Risk Type	Potential Financial Risk	Opportunity Type	Potential Financial Opportunities	Management Measures and Actions
Regulatory or agreement requirements	Transformation Risk - Compulsory Acts, Agreements - Technology risk	Laws, policies, reduction targets: 2050 net zero emission Corporate governance 3.0	Improve corporate resilience	Improve the company's ESG performance and market investment value	<ul style="list-style-type: none"> Introduce energy management system and construct solar power generation facilities. Self-owned factory roofs to build solar power generation facilities, the relevant plan is as follows: 2022 Q4 PHIHONG Dongguan built 2,000 KWp; 2023 PHIHONG Taiwan Tainan plant will build 496.8 KWp. Construct TCFD system and continuously manages short, medium & long-term ESG performance (ESG report) on a rolling basis. Actively cooperate with the FSC to strengthen corporate governance. Response and disclosure of sustainability disclosure indicators in "Taiwan Stock Exchange Corporation Rules Governing the Preparation and Filing of Sustainability Reports by TWSE Listed Companies". Install an energy monitoring system.
Supply disruption	physical risk - Immediate / long-term	Supply Chain Management: Suspension of Raw Material Supplies, Increased Sustainable Energy Costs in the Supply Chain	Resilience - supply chain risk reduction	Improve supply chain reliability and response resilience	Introduce BCM Management
Changing Market Preferences	Transformation Risk - Market - Technology	Changing Market Preferences: Customer Demands for Green Design	<ul style="list-style-type: none"> increase revenue increase market share 	Raise customer trust, competitiveness and operating income	Raise the cost of green product development.
Increased severity of extreme weather events such as typhoons and floods	physical risk - Immediate / long-term	Impact of extreme weather events: extreme weather, heavy rainfall, typhoons, etc. cause flooding	Improving the resilience of our own and the supply chain		Insure against related disasters.
Average temperature rise	physical risk - Immediate / long-term	Impact of high temperature: Due to high temperature, the demand for air conditioning in offices and factories increases, which increases power consumption			<ul style="list-style-type: none"> Introduce an energy management system, namely energy monitoring system, to improve electricity consumption efficiency. Update energy equipment to improve energy efficiency.
Rainfall (water) pattern changes and climate patterns	physical risk - Immediate / long-term	Extreme weather causes drought			No production process uses water, minimal impact. Purchase of drinking water and air conditioning water supply
Sea level rise	physical risk - Immediate / long-term	Flooding caused by sea level rise			Insure again related disaster risks

Indicators and Targets

Climate-Related Risks and Opportunities Indicators

To reduce the impact of climate change on operations, PHIHONG has set green operation goals, and carried out strategic planning and goal setting on projects such as energy conservation and carbon reduction, water conservation and waste management. The achievement is reviewed every year to further develop improvement plans.

Climate-related indicators

	Result (2022)	Short-term (2023-2024)	Mid-long term (2025-2030)
Power saving rate (%)	3.8%	-4.5%	-4.5%
Construction of renewable energy (cumulative kW)	900KW	2,100KW	6,000KW
Per capita water withdrawal (million liters/person)	0.0947	0.0900	0.0855
Plant water saving rate (%)	5%	5%	5%
General Business Waste Unit Revenue Generation (Metric tons / million)	0.1415	0.1344	0.1277



Greenhouse Gas Inventory

To implement energy saving and carbon reduction, and to fully disclose corporate carbon emissions and carbon reduction information, PHIHONG follows international standards to conduct GHG inventories to track carbon emissions. The results of the inventories not only serve as the basis for formulating internal GHG reduction strategies and carbon asset management, but also review the risks and opportunities of climate change, establish carbon reduction action plans and targets, and plan to incorporate them into the long-term management strategy. PHIHONG is conducting the Scope 1+2 GHG inventory according to the new ISO 14064-1:2018 with 100% operation control right method. In response to the needs of the Science-Based Carbon Reduction Target (SBTi), we start the assessment plan for Scope 3 GHG emissions in 2022. By including a wider range of upstream and downstream indirect emissions within the scope of our own greenhouse gas reduction, it is possible to truly grasp the source and amount of greenhouse gas emissions in each factory area. This year, due to the surge of the GHG verification market, the quantity of verification units is tight. PHIHONG has completed the third-party verification of GHG inventory of each plant in Q4 2023. The verification results will be separately disclosed. The progress and results of the relevant inventory operations has been reported in the board of directors' meeting on a quarterly basis.

In 2022, the total greenhouse gas category 1+2 emissions of PHIHONG Group is 26,040.02 T-CO₂e. The Group's total emissions is significantly reduced by 3,285.4 T-CO₂e compared with 2021, reaching 11.2%. The converted emission intensity is reduced by 0.53 T-CO₂e /million operating revenues. The reduction was attributable to three main factors, namely, strategic adjustments in product structure, changes in calculation methods, and a 14.11% increase in annual revenue compared to the previous year. which contributed to the overall decrease of the Group's emission intensity by 22.2%. Meanwhile, PHIHONG has carried out the SBTi science-based carbon reduction target counseling project in Q4 of 2022. It is expected that the goal setting will be completed in Q3 of 2023, requiring an annual carbon reduction of 4.2% to achieve the goal of lowering the average temperature rise of 1.5 ° C. Moreover, PHIHONG demonstrates our concern and proactive actions for climate change and sustainability goals by installing solar power generation systems, replacing old air-conditioning ice machines and building green factories.

Category 1-2 Greenhouse Gas Emissions

Unit: T-CO₂e

Emission Category/Year	PHIHONG Group			
	2020	2021	2022	Vs. base year (2021)
Category 1 - Direct emissions (T-CO ₂ e)	700.0	612.6	906.05	47.9%
Category 2 - Indirect emissions (T-CO ₂ e)	26,558.0	28,713.1	25,133.97	-11.8%
Total emissions / T-CO ₂ e	27,258.0	29,325.6	26,040.02	-10.7%
Emission intensity (T-CO ₂ e/million revenue)	2.95	2.39	1.86	-21.7%

Note: The GWP value for 2022 is from IPCC AR6; the electricity emission factor for PHIHONG Taiwan (0.495 tCO₂e/MWh) is from the Bureau of Energy, Ministry of Economic Affairs; for PHIHONG Dongguan (0.5810 tCO₂e/MWh) is from the Ministry of Ecology and Environment, China; and for PHIHONG Hai Phong (0.7221 tCO₂e/MWh) is from the Department of Climate Change Response, Ministry of Natural Resources and Environment, Vietnam.

Unit: T-CO₂e, emission data calculated for category 1 only

Greenhouse Gas Emission by gas type in 2022 (Category 1)								
Variety	CO ₂	CH ₄	N ₂ O	HFCs	PFCs	SF ₆	NF ₃	Total
Emissions	100.82	804.57	0.65	0.01	0.00	0.00	0.00	909.05
%	11.13%	88.80%	0.07%	0%	0.00%	0.00%	0.00%	100.00%

Category 3-5 Greenhouse Gas Emissions

Unit: T-CO₂e

Emission source	Description	Emissions
Category 3 (Transportation)	Business travel	169.0952
	Employee commuting	690.2332
Category 4 (Organizational use)	Use of the product	2009.3781
	Waste removal	180.6301

Note: Waste management only disclosing transportation as there is no applicable emission factors for waste disposal in overseas factories (Dongguan and Haiphong factories).

4.2 Energy and Resource Management

Material topic: Energy and greenhouse gases (GRI 302: Energy 2016, GRI 305: Emissions 2016)



Policy and Commitment

- Energy and resource management is the strategy and driving force for the sustainable operation of enterprises. An institutionalized management promotes environmental performance to save energy.
- ISO14001:2018 Environmental Policy and Commitment for Environmental Management System



Responsible parties

- General (plant) affairs unit
- EHS



Target setting

2022 Target

PHIHONG Dongguan Phase 1 and Phase 2 solar power system construction

Achieved performance

Construction has begun in late 2022 and will be completed in 2023 H1. The total annual generation capacity is expected to be 1.65 million kWh of green electricity. Annual carbon reduction of 1362.93 tons of CO₂e.

Future target

- Short term (2023-2024)
 - » Introduction of ISO 50001 energy management system certification (2023)
 - » Continuing to replace energy-consuming equipment to achieve an average annual energy saving of 4.8% and an annual carbon reduction target of 4.2%.
- Mid-Long Term (2025-2030)
 - » The Group's annual carbon reduction of 4.2% (Scope 1 and 2, with 2021 as the base year) is equivalent to a total emission reduction target of 42% by the end of 2030.
 - » Continuing the SBTi scientific carbon reduction pathway toward the 2050 net zero target.
 - » PHIHONG Taiwan Tainan plant built solar power system & green building certification (Diamond level).



Management approach

- Energy (resource) conservation management methods
- Greenhouse gas inventory management procedures



Annual performance highlights

- PHIHONG Taiwan Lin Kou Headquarters: 13.08% electricity saving in 2021 compared to 2016 base year
- Construction of PHIHONG Dongguan Phase 1 and Phase 2 solar power system (0.9 MW) completed.



Evaluation system

- Environmental Safety Management Supervisory Measurements
- KPI Target Checking
- Report the results of the greenhouse gas inventory to the competent authorities



Corresponding SDGs



Energy Consumption and intensity

PHIHONG is practicing green design and has implemented this policy throughout its main production facilities. While developing high efficiency and high-power density power supply products, we are strengthening the management through regional power usage monitoring systems in the manufacturing process. Through energy-saving improvements, we aim to reduce energy consumption, protect the environment, and achieve sustainable development. In terms of energy consumption, PHIHONG Taiwan uses electricity as the main source of energy, supplemented by renewable energy (solar energy is generated at Phihong Tainan Plant). The energy is for own use without external sales. The Dongguan plant uses electricity as the main source of energy and fossil fuels (diesel) as a supplement to ensure backup use in case of abnormal supply of electricity and natural gas. In 2021, the energy consumption statistics for the Dongguan plant decreased by 3.3% compared to 2016 (base year). The use of reserve oil-fired generators for electricity supply resulted in a 232.56% increase in diesel use compared to the base year; a 61% decrease in natural gas use compared to 2016; and a 95.86% decrease in the use of petrol compared to the base year. In 2022, the electricity supply in Vietnam was normal and no power outage occurred. Therefore, the main energy consumption in this year was purchased electricity, and diesel fuel was only used for the commissioning of generators.

The types of energy consumed by Phihong in its production activities are relatively simple. The primary energy source is electricity, and the secondary energy source is compressed air. At present, compressed air has not yet been evaluated. Since energy usage is positively correlated with production volume and operating income, we cannot fully identify the effectiveness of energy saving measures by comparing the absolute value of annual energy usage. Phihong uses energy unit intensity for annual target setting.

Energy Resource Consumption Table

Unit: Gigajoule (GJ)

Energy category	2020			2021			2022		
	Taiwan	Dongguan	Haiphong	Taiwan	Dongguan	Haiphong	Taiwan	Dongguan	Haiphong
Electricity	10,100	103,169	11,915	9954	107,409	17,973	11,201	100,327	38,331
Natural gas	-	165	-	-	117	-	-	57	-
Petrol	-	-	-	-	5,628	-	73.9	267	130.5
Diesel	-	310	1,180	-	452	32	11.75	656	7.55

Energy Consumption Intensity Table

Energy intensity	Unit	2021		2022		Energy intensity (2022 vs. 2021)	
		Dongguan	Haiphong	Dongguan	Haiphong	Dongguan	Haiphong
Electricity	kWh	29,835,965	4,992,636	27,868,580	10,647,384	-15.32%	113.26%
Output value	NTD (10k)	1,014,239	175,022	1,015,630	236,672	0.14%	35.22%
Energy intensity	kWh/10k	29.42	28.53	27.44	44.99	-6.73%	57.69%

Note: PHIHONG's production base is mainly located in Dongguan, and the Haiphong Phase 2 No.3 plant was officially put into operation in 2022, so the energy consumption will increase significantly. Taiwan is an R&D operation center without a production line, and most of the electricity is used for domestic consumption, so it is not included in the calculation of energy intensity.

Energy as a percentage of total usage

Unit: Gigajoule (GJ)

Type	Plant	Unit	Taiwan	Dongguan	Haiphong	Total (GJ)	% of each type of energy to total usage
Electricity		kWh	3,111,416	27,868,580	10,647,384	41,627,380	99.13%
		GJ	11,201	100,327	38,331	149,859	
Natural gas		kg	0	1,131	0	1,131	0.04%
		GJ	0	57	0	57	
Petrol		L	1,681	11,081	3,910	16,672	0.31%
		GJ	73.9	267	130.5	471.4	
Diesel		L	278	22,288	174	22,740	0.45%
		GJ	11.75	656	7.55	675.3	
Solar energy		kWh	31,620	-	-	31,620	0.08%
		GJ	114	-	-	114	
Total usage		GJ	11,401	111,307	38,469	151,177	100.00%
Total energy %		GJ	7.54%	67.01%	25.45%	100.00%	

Note 1: The source of heat value and emission coefficient in Taiwan refers to the 2019 power coefficient announced by the Energy Bureau of the Ministry of Economic Affairs on "2020/07/20, and the heat value of purchased electricity is 860kcal/kwh".

Note 2: Source of calorific value and emission coefficient in China. The purchased electricity adopts the "2019 China Regional Power Grid Baseline Emission Factor" announced by the Ministry of Ecology and Environment of China. The conversion coefficient of the southern regional power grid is 0.8042 metric tons CO₂e/MWh, the emission coefficient of petrol, diesel and natural gas = IPCC original coefficient x fuel calorific value, and the source of fuel calorific value is the PRC National Standard GB/T2589-2008 Comprehensive Energy Consumption Calculation General Rules. The calorific value of gasoline is 14,110kcal/L. The calorific value of diesel is 10,200kcal/kg. The calorific value of natural gas is 8,500kcal/M³.

Note 3: For the source of heat value and emission coefficient in Vietnam, the heat value of purchased electricity is based on the 2006 IPCC National Greenhouse Gas Inventory Guidelines; the heat value of petrol and diesel fuel is 0.0447GJ/KG from Cross Sector Tool; the heat value of diesel fuel is 0.0455GJ/KG.

Energy Saving and Carbon Reduction. Realize Carbon Neutrality

In the face of climate change, countries and companies around the world are actively making commitments to reduce carbon emissions. PHIHONG is responding to the trend of net-zero emissions and has chosen energy-efficient equipment for PHIHONG's plants based on the concept of circular economy, green production, and friendly environment. In 2022, we introduced ISO 50001 energy management system and intelligent management, from monitoring energy usage to establishing energy management system. The system is expected to be completed and certified by 2023, and we expect to reduce energy consumption in various ways, while lowering energy costs and carbon emissions. This helps to achieve sustainable development and contribute to environmental protection. The annual electricity consumption of Taiwan Lin Kou headquarters in 2022 is 245,000 kWh less than the base year. This is mainly due to the replacement of the 30RT air-conditioning chilled water machines in 2020, which continues to demonstrate power saving benefits. The following table shows the carbon reduction projects for each plant in 2022:

Plant	Energy Saving Type	Major Implementation Projects	Investment amount (NTD million)	Implementation Status	Benefits created (actual vs. expected)
Taiwan	Air-conditioning system	Replace energy-consuming 150RT air-conditioning ice machine	4.3	Project budgeted for Q4 2022. Construction in Q2 2023, to be completed in June of the same year for official operation	Expected to save 30,000 units of electricity per year and reduce carbon emissions by 15.2 tons of CO ₂ e per year
	Air-conditioning system	Ice and water lines are combined and regulated	1.8	Project budgeted for Q4 2022. Construction in May 2023, to be completed in the same month for official operation	
	Energy saving Software	Construction of energy management platform of Linkou headquarters	2.0	Project budgeted for Q4 2022. Construction in June 2023. Completion and official launch in July of the same year	Expected to save 20,000 units of electricity per year and reduce carbon emissions by 10.2 tons of CO ₂ e per year
	Green Power System	Tainan Phase 1 and 2 plant roof solar power system construction	17	Budgeting began in 2022. The decision is expected to be made in Q3 of 2023, and the construction will be carried out according to the progress of the plant.	Upon completion, the project is expected to generate 640,000 kWh of green electricity per year and reduce carbon emissions by 325.8 tons of CO ₂ e per year.
	Energy Monitoring	Tainan plant energy management platform repaired, and power monitoring function added	4	Planning began in Q3 2022. Construction is expected to be completed by the end of 2023	Data-based monitoring of energy management to improve the efficiency of energy management

Plant	Energy Saving Type	Major Implementation Projects	Investment amount (NTD million)	Implementation Status	Benefits created (actual vs. expected)
Dongguan	Air compressor	Air compressor energy-saving renovation plan	150	The project is budgeted for Q4 2022. The project is expected to be completed in August 2023 (including commissioning) and will be in operation in September of the same year.	Expected to save 800,000 kilowatt-hours of electricity per year and reduce carbon emissions by 464.8 tons of CO ₂ e. In addition, 25% government subsidies for equipment can be applied for
	Electrical Equipment	Energy-saving renovation plan for fan cabinet and blower mechanical and electrical equipment	Energy saving sharing model cooperation	The contract is completed. Completion (including commissioning) is expected in September 2023, with full operation in October of the same year.	Expected to save 200,000~250,000 kWh of electricity per year and reduce carbon emissions by 116.2 tons of CO ₂ e per year.
	Green Power System	Phase 1 & 2 solar power system construction	Energy saving sharing model cooperation	Construction of the first and second phases of the PV system began in 2022. Construction will be completed and grid-connected in 2023 H1.	The total annual generation capacity is expected to be 1.65 million kWh of green electricity. Annual carbon reduction is expected to reach 958.6 tons of CO ₂ e.
Haiphong	Air-conditioning system	The central air conditioner for the construction of the factory selects the main unit of the magnetic levitation ice water energy-saving air conditioner	2146.36	In operation after completion in Q2 2022	Expected annual electricity saving of 1.26 million kWh and annual carbon emission reduction of 909.8 tons of CO ₂ e
	Thermal Energy Recovery	Energy-saving full heat recovery air-conditioning system is selected to recover heat energy and provide domestic hot water for use	395.35	In operation after completion in Q3 2022	Expected to save 2.5 million kWh of electricity and reduce carbon emissions by 1,805 tons of CO ₂ e per year
	Lighting	The whole factory area adopts LED lighting fixtures and builds solar streetlights	206.17	In operation after completion in Q2 2022	Expected annual electricity savings of 7.5 million kWh and annual carbon emission reduction of 5,416 tons of CO ₂ e
Total investment in energy saving projects (NTD million)			5807.88	Total benefits of electricity saving (including green power)/carbon reduction	Upon completion of the above projects (Except new facilities being constructed in PHV), expected annual electricity savings of 3.34 million kWh. annual carbon reduction of 1,890 million tons of CO ₂ e

Air Conditioning Chilled Water Piping Integration (PHIHONG Taiwan-Linkou HQ)



Magnetic suspension ice and water host, central air conditioning system and air energy heat pump system (PHIHONG Haiphong)



Energy Saving Action and Advocacy

According to statistics, if we can implement energy-saving improvements in electricity, lighting, air conditioning, and office equipment in buildings, we can save about 20% of energy consumption. To reduce the energy consumption of buildings, PHIHONG Group has been promoting the management of electricity consumption in office buildings in each factory. In addition to the implementation of energy saving measures for energy-consuming equipment, we are also working to build consensus through internal communication and promotion.

Taiwan Power Saving Result Table (Lin Kou Headquarters)

Year	2017 (Base year)	2020	2021	2022	Compared to base year	
					Difference	Percentage
Power consumption (1KWH)	1,896,016	1,736,800	1,648,000	1,650,500	↓ -245,516	-12.90%
Electricity fee (NTD)	5,976,380	4,607,622	5,437,895	6,149,604	↑ 173,224	2.9%

Solar panel power system installation (Dongguan-PHCJ plant)



PHIHONG daily energy-saving specific actions

Energy saving design and specific measures	Content	Implementing plant area		
		Taiwan	Dongguan	Haiphong
Review contract capacity	Regularly review the reasonable electricity contract capacity value to reduce basic electricity expenses and excessive over-contract fines.	✓	✓	✓
Building energy saving improvement and renewal project	Continue to replace exit lights and evacuation direction lights with LED products	✓	✓	✓
Demand control, load management, and intelligent power management	Demand control, load management, and intelligent power management to avoid over-contract fines.			✓
Installation of lighting timing control equipment	Add timing control equipment to garden lights and pool lights	✓	✓	✓
Install sensor lighting & turn on only every other light	Install sensor lighting in toilets and art corridors; in places where the demand for passages in office areas is low, set to turn on every other light or reduce the number of lights	✓	✓	✓
Air conditioning temperature management and implementation of start/stop time control	The temperature of the ice and water main unit is set at 13 degrees (normally 10 degrees). The main unit will be unloaded when it reaches the set temperature to reduce energy consumption. Control the start/stop time of the air conditioner.	✓	✓	✓
Additional light steel frame circulating fan in the ceiling	Light steel frame energy-saving circulation fans are installed in office and meeting rooms to enhance the cooling effect to achieve energy saving.	✓		
Implement daily nighttime air conditioning and lighting inspections	After the end of each day, the security department will inspect the night air conditioning and lighting. The units that have not been turned off are recorded, and the General Affairs Department will issue reminders the next day.	✓	✓	✓
Replace old lighting fixtures with energy-saving T5 and LED	Continuous replacement of T5 or LED energy-saving lighting fixtures in the whole plant	✓	✓	✓
New buildings use high-efficiency air-conditioning and chilled water machines	Taiwan Tainan plant adopts evaporative air-conditioning unit; PHIHONG Dongguan and Hainan adopt heat recovery ice water unit to convert heat energy into hot water for daily use.	✓	✓	✓
Factory elevator power saving control	Freight elevators are registered and controlled. Passenger elevators and clubhouse elevators are set to operate with fewer units during non-peak hours.	✓	✓	✓

4.3 Sustainable Environmental Management

PHIHONG's vision in "sustainable environment management" is "energy saving, carbon reduction, and environmental impact reduction". We hope to help reduce environmental impact by establishing environmental management systems, responding to climate change, and developing green designs. As human civilization advances and activities increase, global energy and resource depletion and climate change have become key issues that the world must face. Air pollution caused by the accumulation of exhaust gas from the use of fossil fuels directly affects the greenhouse effect of climate change, which triggers extreme weather that brings serious natural disasters. In addition, excessive development and use of energy and water resources, emissions and substantial amounts of human waste pollute land, water & oceans, undoubtedly impacting human activities and life safety at a rapid rate. The frequency of extreme high and low temperatures and extreme heavy rainfall due to climate change has also increased. Mastering the risk situation and seeking potential opportunities is an indispensable part of a company's pursuit of sustainable development. Phihong is committed to promoting green energy, mitigating climate change, and responding to government environmental policies. We continue to promote energy saving, carbon reduction and water saving for the whole group. In addition to our mission to be a friendly land with a global perspective, we also fulfill our responsibility as a global citizen, caring for what we can do in our immediate area. Mastering the risk situation and seek potential opportunities is an indispensable part of corporate pursuit of sustainable development.

We actively promote the development and manufacture of green products with the goal of environmental sustainability. We strive to manage hazardous substances, improve the energy efficiency of power supply products, and increase the proportion of recycled products. Through cross-departmental division of labor, we are actively implementing various environmental protection measures and expecting all employees to raise their awareness of environmental protection. Through the promotion of environmental protection and the setting of performance targets, we recognize and actively participate in a corporate culture of environmental sustainability.

Environmental Management and Certification

In 1997, Phihong introduced and passed ISO 14001:2004 environmental management system, which is verified by a third party every year to ensure smooth operation and environmental responsibility. In response to the increasing global climate change and environmental risks and the revision of the International Organization for Standardization (ISO), Phihong applied for the new ISO 14001:2015 certification in 2018, a more sustainable international standard certification, to improve environmental performance and the environmental management system. We are working on 4 major aspects: climate change, green products, pollution control, and environmental protection from all employees. We also adopt the product lifecycle concept from product design, raw material supply, manufacturing process, factory operation, end product, after-sales service, and waste treatment for a comprehensive management. This reduces the negative impact of climate change and environmental hazards in the product lifecycle.

4 major aspects of Environmental Management



ISO 14001: 2018 certificates

Environmental Policy and Commitment

Environmental policy refers to the mission and belief of social responsibility and environmental protection. In the pursuit of maintaining the overall ecological environment and sustainable development, in addition to striving for technological advancement and breakthroughs, we actively promote our environmental management system and related activities in a prudent manner to implement pollution prevention, create an excellent working environment, protect the physical and mental health of our employees, comply with environmental laws and regulations, and fulfill our corporate responsibility for social responsibility and environmental protection. We also insist on the following commitments as the leading guideline for our environmental management decisions:

Environmental Policy

- ☑ Promote environmental management in the spirit of PDCA and CONFIRM to reduce and prevent environmental impacts.
- ☑ Systematic management to enhance environmental performance: energy saving, continuous improvement, and pollution prevention.
- ☑ Comply with environmental laws and regulations and customer environmental requirements regarding wastewater, waste gas, waste materials, noise, chemicals, banned substances and toxic substances, and promote the implementation of the necessary regulations.
- ☑ Regularly review environmental objectives and targets and disclose environmental results.

Water Resource Management

The main source of water resources in each of Phihong's plants is tap water, and the water consumption is mainly from the employees' daily life. Phihong Dongguan and Phihong Haiphong are electronic assembly plants, which do not use water resources and do not generate wastewater in their production process, so the wastewater from each plant comes from daily use. Phihong does not use any recycled water at present, and the main focus of water resource management in each plant is to promote water conservation. The implementation strategy is to improve water facilities, such as installing water-saving valves in toilets and introducing water-saving faucets as water conservation measures. As for the waste and drainage treatment, the drainage from the operation and each plant meets the discharge standards set by the local government. In addition, each production site is located in an industrial park, and the water quality is regularly checked to ensure that it meets the discharge standards of the wastewater treatment system of the local industrial area. In 2022, Phihong has not experienced any violations of wastewater discharge standards or penalties.

In 2022, the overall water intake of Phihong Taiwan was lower than that of 2021. According to the Bureau of Resources for the Northern Region of the Water Resources Administration, Ministry of Economic Affairs, the daily industrial water demand in the Lin Kou headquarters area is approximately 460 million m³ and the daily domestic water demand is approximately 1,565 million m³. According to the Bureau of Resources for the Southern Region of the Water Resources Administration, the daily demand for industrial water in the Tainan area of Phihong is approximately 634 million m³ and the daily demand for domestic water is approximately 778 million m³. The Ministry of Economic Affairs (MOEA) and the Department of Water Resources (DWR) confirmed that Tainan is not a water shortage area. The Worldwide Fund for Nature's (WWF) "Water Risk Filter program" also indicates that Phihong Taiwan is located in a low-risk area of the water stress zone. Phihong Dongguan is in a medium-risk area, while Phihong Haiphong is in a medium-low risk area. (Source: Water Resources Administration, Ministry of Economic Affairs/WWF).



Water consumption table

Energy Type (Unit)	2020			2021			2022		
	Taiwan	Dongguan	Haiphong	Taiwan	Dongguan	Haiphong	Taiwan	Dongguan	Haiphong
Water intake/water consumption (million L)	12.194	396.925	13.121	13.109	386.231	26.414	13.668	313.50	57.79
Number of employees	503	3,474	573	544	3,869	962	648	3,869	1,423
Water consumption intensity (Million L/person)	0.024	0.114	0.023	0.024	0.100	0.027	0.021	0.081	0.041
※ Waste water emissions (million L)	10.975	357.233	10.497	11.798	347.608	21.131	12.301	282.15	46.232

Note: The discharge coefficient of Phihong Dongguan is 0.9 times of the water intake (based on the evaluation coefficient in the environmental impact assessment report reviewed by the State Environmental Protection Administration of China). Phihong Taiwan also uses 0.9 times the water intake as the discharge coefficient. For Haiphong, the discharge coefficient is 0.8 times the water intake (based on the local municipal sewage charges).

Waste Management

For waste management, PHIHONG implements waste management system mainly through waste and carbon reduction and pollution prevention. We comply with environmental regulations in the place of operation. We have been promoting the necessary regulations for wastewater, waste gas, waste, noise, chemicals, banned substances and toxic substances to the relevant personnel. We also promote the concept of "resource recycling and reduction" in each plant and implement waste reduction actions for all employees. In addition, we pass the third-party inspection agency (LRQA) ISO14001 verification, conduct regular audits and disclose the environmental performance results every year. We are actively reducing the amount of waste generated by acquiring and reusing scraps and paying for cleanup. Waste generated in the course of operation includes 2 major categories: "domestic waste" and "industrial waste", which are properly disposed of by legal vendors in accordance with the laws and regulations of the place of operation. Domestic waste is disposed of by incineration or burial in a treatment plant; industrial waste is recycled or otherwise disposed of according to the category; and hazardous waste is disposed of in a non-hazardous manner in accordance with local regulations. In 2022, PHIHONG did not experience any major spills, nor did it experience any major violations of environmental laws or penalties or fines for environmental violations.

Waste Disposal Method

Plant	General waste	Industrial waste	
		General industrial waste	Hazardous industrial waste
Taiwan	100% incineration	55% incineration 45% scrap metal recycling	100% harmless treatment
Dongguan	100% incineration	100% recycle and re-use	100% harmless treatment
Haiphong	100% incineration	80% recycle, 20% incineration	100% harmless treatment

Note: PHIHONG follows the local environmental laws and regulations of Taiwan: Waste Disposal Act; Dongguan: China Solid Waste Pollution Prevention and Control Law; Haiphong: Vietnam Environmental Protection Law.

Waste Classification and Statistical Table

Waste type (tons)	2020			2021			2022		
	Taiwan	Dongguan	Haiphong	Taiwan	Dongguan	Haiphong	Taiwan	Dongguan	Haiphong
Domestic waste (tons)	25.60	1,861.14	87.63	20.27	345.60	18.72	26.49	410.04	311.42
Industrial waste (tons)	4.70	1,067.71	112.48	6.04	738.41	70.29	25.31	788.34	421.5
Hazardous waste (tons)	-	232.21	16.23	0.00	265.28	88.82	-	322.74	150.59
Total weight (tons)	30.30	2,928.85	200.10	26.30	1,349.29	89.01	51.8	1521.12	883.52
Waste intensity (total weight/person)	0.07	1.20	0.66	0.06	1.36	0.43	0.1	0.40	0.60
Domestic waste output per capita (tons)	0.06	0.76	0.29	0.05	0.35	0.09	0.05	0.11	0.21

註：2022 年台灣飛宏因台南廠整體產能及人員大幅擴增，故整體廢棄物較前一年增加 96.9%。

UL Zero Waste to Landfill (UL2799)

In line with the circular economy, Phihong has been promoting ESG green environmental protection in recent years. The key strategy is "circular economy". The purpose is to improve the efficiency of resource use. The core goal is to create a zero-waste plant, with zero waste to landfill as the key development direction. In Sep 2022, with the assistance of UL, Phihong started the zero-waste landfill project from the main factory in Dongguan, the Dahong Factory. A pre-qualification was conducted in December of the same year, which allowed us to rethink the whole process, from the selection of raw materials, manufacturing design, and waste reduction, to adopt a more proactive and circular mindset.

The project uses UL's Zero Waste to Landfill certification (UL ECVP 2799), which requires all waste streams in an enterprise to be managed, inspected and audited for compliance. Also, to confirm that the waste has been properly recycled, reused and converted, rather than directly buried, so that the overall waste conversion rate is at least 80% before certification can be obtained.

Therefore, PHIHONG's first priority will be to reduce the amount of waste. The effectiveness of zero waste to landfill will be evaluated in several aspects according to UL standards, including: the proportion of waste reduced or recycled inside the plant; the proportion of waste diverted to recycling, composting, anaerobic digestion, biofuel or converted to energy outside the plant; the proportion of waste that cannot be diverted to landfill or incineration, etc., to confirm the performance of waste diversion.

The certification scope of Dahong Factory, the main factory in Dongguan, covers factories, staff dormitories, sports venues, restaurants, and supermarkets, etc. The pre-certification results of recycling and incineration with energy accounted for 94%, of which incineration with energy recovery accounted for 4% and incineration without energy recovery accounted for 6%. The official certification is expected to be conducted in Q3 2023. In the future, we will continue to improve the waste conversion rate and aim to achieve a 100% conversion rate in platinum grade.



Environmental investment

In view of the increasing trend of environmental costs for companies in the future, the establishment of environmental expenditure benefit statistics can be an effective management tool for companies. In accordance with environmental accounting standards, environmental economic benefits are estimated based on the reduction in energy and water use or waste generation resulting from the implementation of environmental protection programs, plus the revenue generated from the recycling of waste. The environmental benefits presented in this report include real monetary income, such as proceeds from recycling of waste, and other cost savings resulting from the implementation of environmental programs. The environmental expenditure and benefit statistics of PHIHONG's plants are shown in the table on the right:

2022 Environmental Expense Statistics

Unit: NTD				
Types of environmental protection cost items	Description	Taiwan	Dongguan	Haiphong
1. Direct cost of reducing environmental load	(1) Pollution prevention cost	92,871	5943.40	688,837
	(2) Save resource consumption cost		568,671.31	
	(3) Disposal and recycling fees of industrial waste and general office waste	751,051	265,343.5	891,747
2. Reduce the indirect cost of environmental load (environmental management costs)	(1) Expenditure on environmental protection education	320,066	303,327.81	45,500
	(2) Environmental management system & certification acquisition fees			
	(3) Monitoring of environmental load costs	35,154		61,687
	(4) Staff costs related to environmental organizations			
	(5) Increases in costs for purchasing environmentally friendly products			
3. Other environmental related costs	(1) Expenses for soil remediation and natural environment restoration			
	(2) Environmental pollution damage insurance premiums and environmental protection taxes & fees levied by the government, etc.			
	(3) Reconciliation of environmental issues, compensation, fines and litigation costs			
Total		1,199,142	22,417,042	1,687,771

2022 Environmental Benefits Statistics

Item	Description	Taiwan	Dongguan	Haiphong
Industrial waste recycling (\$)	Electronic parts leftovers, waste computers, etc.		3,459,105	1,026,562

5 Innovative Development and Application



5.1 R&D and Innovation

5.2 Transition to Circular Economy

5.3 Low Carbon Product Design

5.1 R&D and Innovation

With 50 years of experience in power supply technology, PHIHONG is one of the top 10 power supply providers in the world. With a focus on power supply development, we offer a wide range of products, including adapter power, battery chargers, PoE (Power over Ethernet) and its system and cloud communication applications, 5G power applications and planning, and site audio; in addition, our end-use products include cell phone power, network power, mid-range and high-end smart phones, tablet PCs, power tools, POS machine, POE network smart home, printers, TV boxes, medical equipment, AR/VR, robots, e-sports, and e-bikes. In addition, our subsidiary, Zenova, focuses on electric vehicle charging technology, which is applied to electric vehicle charging piles and energy storage cabinets, and is further engaged in the research and development of green energy technology.

Material topic: Product R&D and Innovation



Policy and Commitment

In response to the global energy shortage and the rise of green energy, we will enhance the performance of our full range of power supplies to meet the needs of our customers and the environment.



Management approach

We continue to focus on a wide range of high-performance power products, including highly efficient and compact adaptor power supplies, smart battery chargers, PD (Power Delivery) power applications & planning, construction site audio, home medical equipment, medical beauty equipment, robots, e-bikes, and other diverse industries.



Evaluation system

- R&D KPI Target Management
- Performance Evaluation
- R&D Patent Award



Responsible parties

R&D units of each business group



Annual performance highlights

Apply the 3rd generation of semiconductor GaN/SiC in product design. Increase the power output by 50% from the current product size. This means 150% power output for the same size, with the advantage of light weight and higher power breakthrough design highlights.



Corresponding SDGs



Target setting

2022 Target

- The new POE60W model, with an estimated 0.8% efficiency improvement of 160K per year, is expected to save 807,321MJ per year under 8 hours/day usage conditions.
- The new 50W tool charger is 7% more efficient than its predecessor. 636 units were produced in 2022 and 1.5M units are expected to be produced annually in 2023. They save 18,719MJ of energy per year under 8 hours/day usage.

Archieved Performance

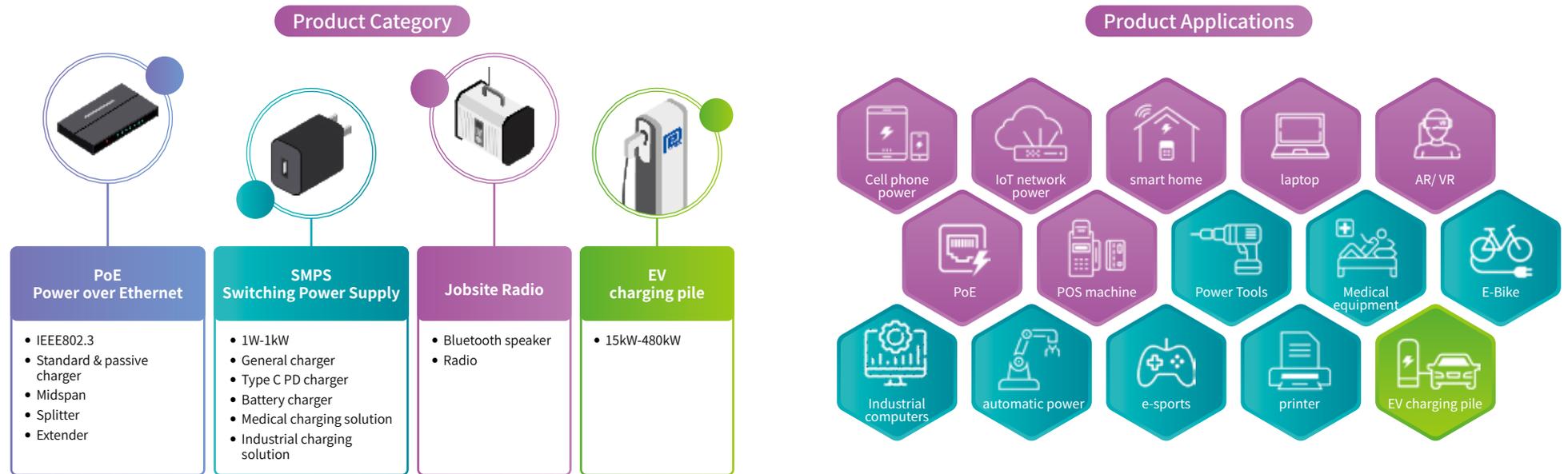
- The new POE60W model introduces a high efficiency solution with 1.1% higher efficiency, 160K annual output, and 1,110,067MJ of annual energy savings in the same usage scenario..
- The new generation of 40W tool charger models introduces a high-efficiency solution with synchronous output rectification, increasing efficiency from 80% to 88%. 636 units were produced in 2022, with an annual energy saving of 21,394MJ under the same usage conditions. 1.5M units are expected to be produced annually in 2023, with more significant energy saving benefits.

Future Target

- Short-term (2023-2024)
 - » Continuously improve the efficiency of POE series 15W/30W/90W by 1% each, which is estimated to save approximately 1,500,000 MJ of energy per year
- Mid-long term (2025-2030)
 - » Estimated to improve the efficiency of POE 15W/30W/60W/90W by 1% each, which is expected to save another 2,500,000MJ based on the same sales volume and usage scenario.

Phihong has been developing power supply products for many years. Our Smart Power business group continues to develop a wide range of high performance power supply products to meet customer and environmental needs, based on its existing power supply products. These include highly efficient and compact adaptor power supplies, smart battery chargers, PD (Power Delivery) power applications and planning, construction site audio, home medical equipment, medical beauty equipment, robots, e-bike electric bikes, and other diverse industrial fields.

In response to the trend of the times and the diverse needs of our customers, PHIHONG's power supply products have evolved with the times by adding software to do intelligent design, whether in power charger products, using MCU to write software has become a standard design concept. Moreover, the software can also be used in conjunction with factory production, using software combined with automated testing to reduce man-hours, which brings value not only to improve productivity and reduce costs to become a strong competitive force, but also to prevent manufacturing problems and stabilize quality.



3rd Generation Wide Bandgap Semiconductor GaN/SiC Design

In response to the global energy shortage and the rise of green energy, how to improve the performance of power supplies has become a key issue for various suppliers. The main components of power supply are mainly divided into semiconductor components, magnetic components, and passive components (capacitors/resistors, etc.). Significant changes in material science are necessary to improve the performance. In the semiconductor power component segment, the introduction of new GaN and SiC materials will bring power supply performance to a new level. GaN and SiC new materials have the advantages of ultra-high frequency, high voltage and high current resistance, and are suitable for small and high frequency product design applications. This cannot be achieved by the current Si material power components. However, the current GaN and SiC new material products are relatively high in unit price, and there is still much room for improvement, so that they can be fully introduced into the power supply design.

In recent years, PHIHONG has applied a large number of 3rd-generation semiconductor GaN/SiC in product design in terms of technological transformation. With the current size, the average energy efficiency of existing products is increased by at least 50% compared with 2018. This means having the same size, but 150% of the power output. The design highlights are advantageous lightweight and high power breakthrough. The new design of GaN adapters/chargers provides multiple safety protection mechanisms, significantly increasing the level of protection and complying with the industry standard safety requirements, moving toward the trend of high power, miniaturization and light weight.

In addition, PHIHONG's R&D team is continuously improving our R&D technology. New power products are introduced into the 3rd generation of wide bandgap semiconductors, such as SiC and GaN. These new semiconductor components have high switching speed, high efficiency, and low loss, but the accompanying problems are electromagnetic noise interference and difficult to design the surrounding driver circuit, which are bottlenecks in product development. In recent years, with the efforts of the R&D team, the problems have been overcome one by one, and it is believed that the future introduction of a large number of 3rd-generation semiconductor designs will be imminent.

Intelligent Power Supply (IPS) Related Products Application Diagram

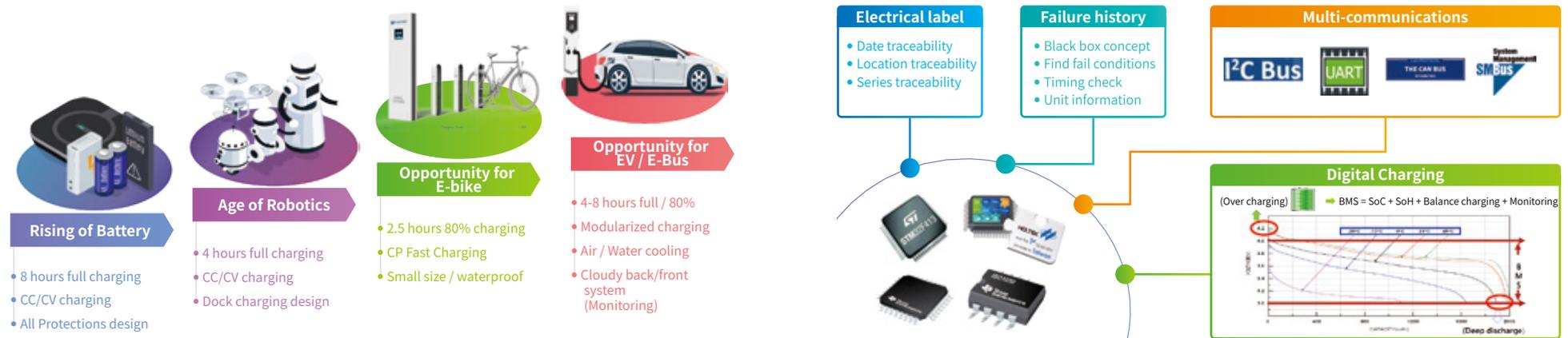


High efficiency product development

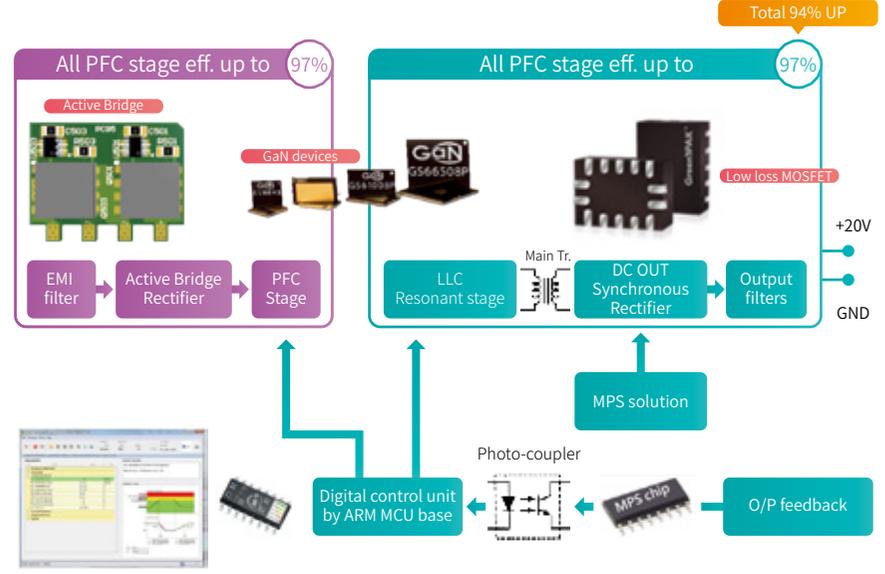
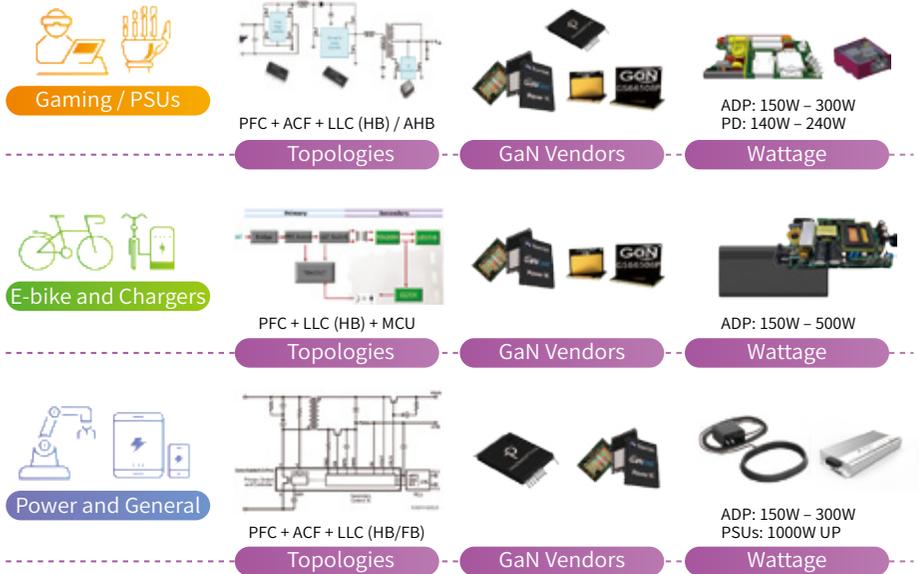
In recent years, most products have introduced ACF (Active Clamp Flyback) lines for PD applications. "ACF" topology differs from conventional flyback converters in that it reuses the energy stored in the transformer leakage, which would normally be dissipated in the clamping buffer resistor. This "recovered" energy is provided to the load during operation, to achieve high efficiency and low loss, and to do our part for the environment. As shown in the figure, the difference in efficiency between a 140W PD product in ACF and a conventional Flyback is compared.

In the case of full voltage input, the efficiency of the ACF structure is higher than that of the traditional Flyback. Especially under full load conditions, the efficiency can be increased by 0.67%, which can save nearly 1W of loss. The product is shown in the figure:

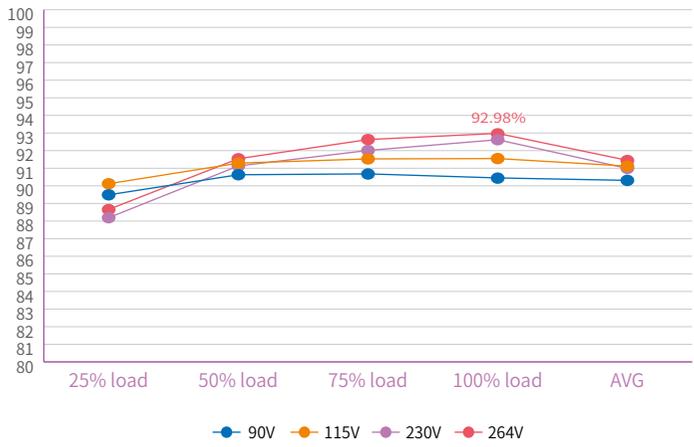
Process diagram of product integration with software design



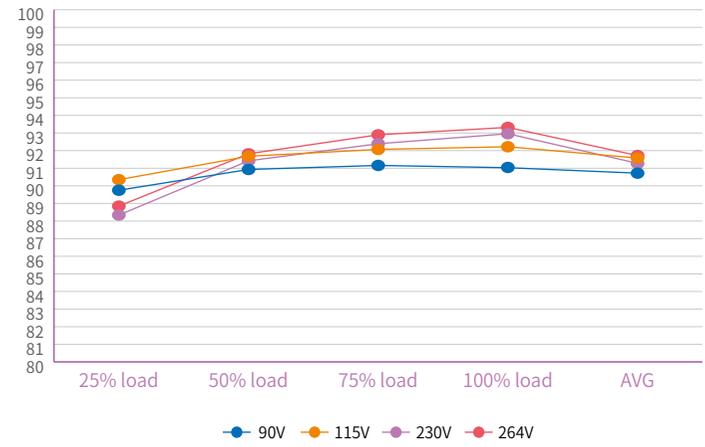
3rd Generation Semiconductor GaN Product Design



FLYBACK
Efficiency test (PCB).



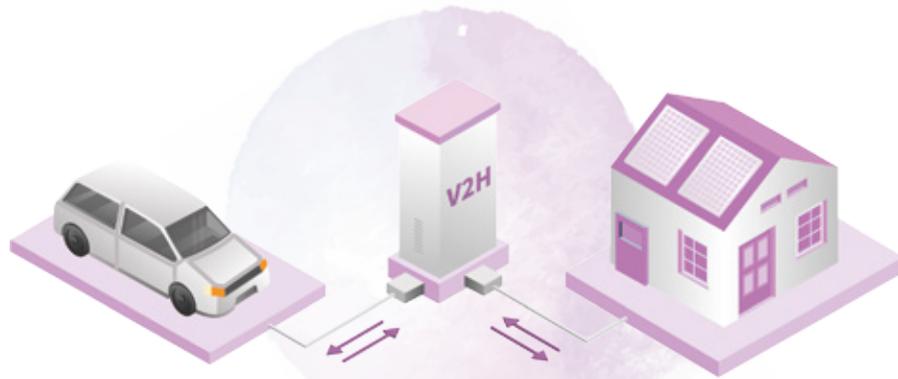
Active Clamp Flyback
Efficiency test (PCB).



All-round EV charging solution

Due to the global green industry revolution triggered by global warming, EV has become an irreversible development trend. From buses, passenger cars, logistics vehicles, and even ships and air carriers, the popularity of charging infrastructure has accelerated in recent years. With a significant increase in EV market penetration and a booming EV industry, the European Union has set a target of 3 million public charging piles by 2030. The U.S. Congress allocated \$900 million in charging station grants in 2021 to build 500,000 charging piles across the U.S. highway network within 5 years. In Asia, Taiwan, Japan and Shanghai, China have also set a clear target for the number of public charging piles to be built. PHIHONG proposes various AC/DC charging solutions for different usage scenarios, including large-scale charging products, water-cooled charging technology innovation, V2H / V2G product development, etc.

V2H (Vehicle to Home) technology for two-way power supply between the vehicle and the power grid



DC new generation charging pile

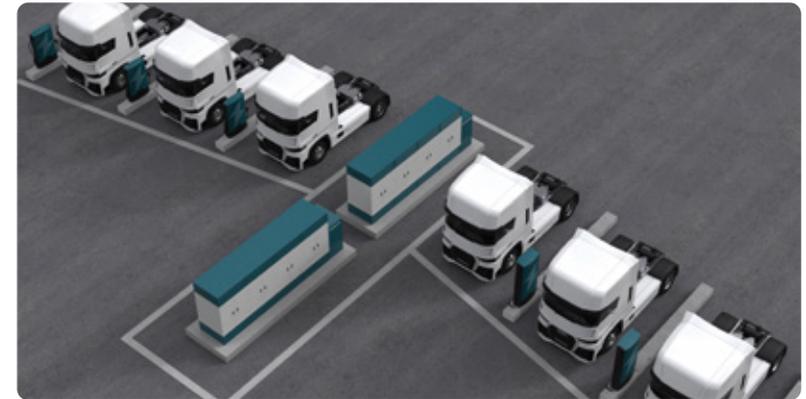


Large-scale charging product design (480KW):

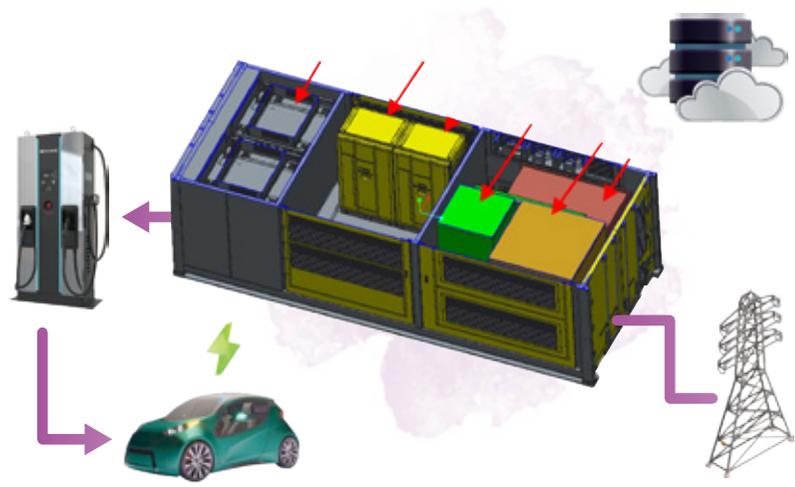
With the spirit of innovation, PHIHONG continues to develop new generation charging products with high efficiency and energy saving, from high power 480kW energy cabinets to 480kW integrated charging piles, or outdoor advertising charging piles with large screens for commercial areas. The development of larger charging systems and the simultaneous charging of multiple EVs can be enhanced by the "intelligent distribution" software technology designed by PHIHONG, which can effectively improve the charging distribution of multiple EVs more efficiently.

1. Research and development of water-cooled charging technology:
 Power module design and water-cooled cooling system research and development design. Water-cooled technology can improve heat dissipation, extend the life of the charging system, and reduce noise and sound pollution. Moreover, the water-cooled isolated air technology can achieve the safety level of application for explosion-proof Zone 2, which can be directly installed in the existing gas station area to facilitate future urban development.
2. V2H / V2G power development and bi-directional controller design:
 The next 2025 regulations require bi-directional charging systems that can be fed back into the grid or used for home/industrial energy storage charging. We will not only implement green design, but also extend this sustainable direction to R&D concept and manufacturing, and strengthen energy-saving management to achieve the purpose of reducing energy consumption, environmental protection and sustainable development.

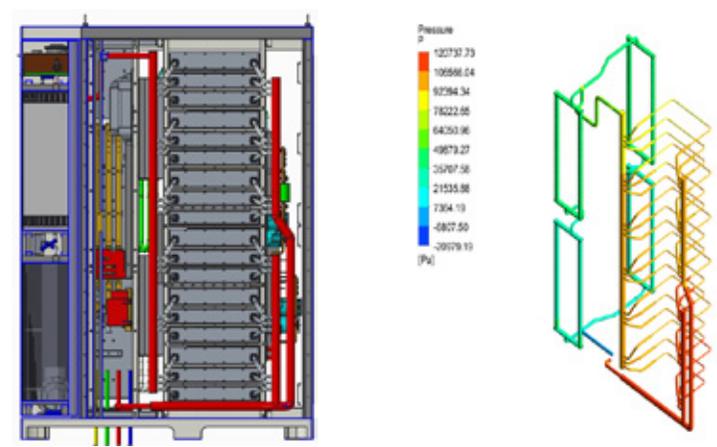
Simultaneous charging of multiple electric vehicles



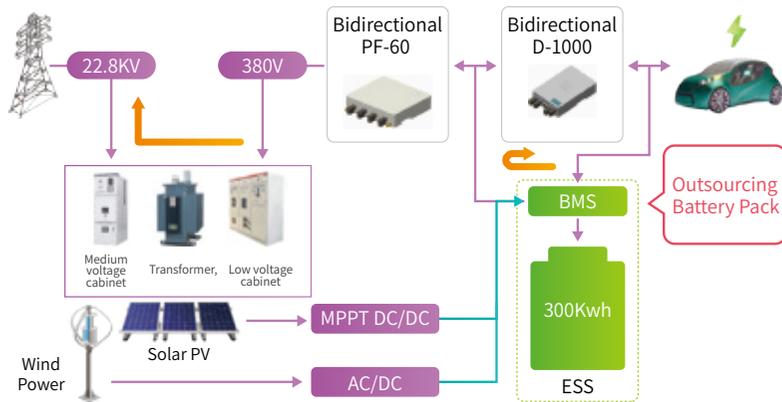
Intelligent distribution software technology



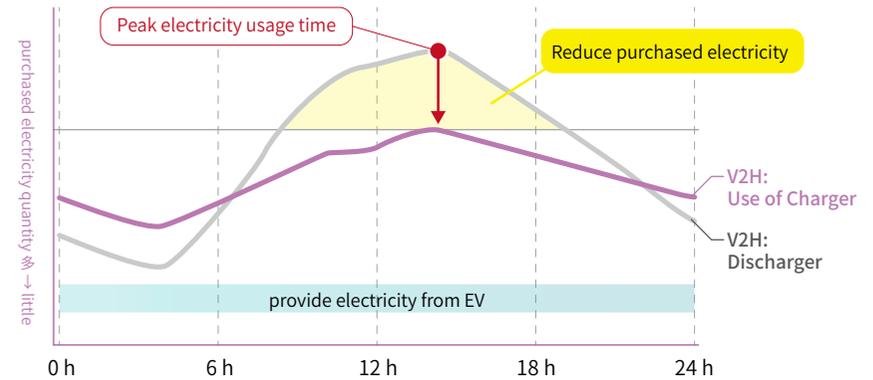
Water-cooled charging and cooling system design



R&D field development layout plan

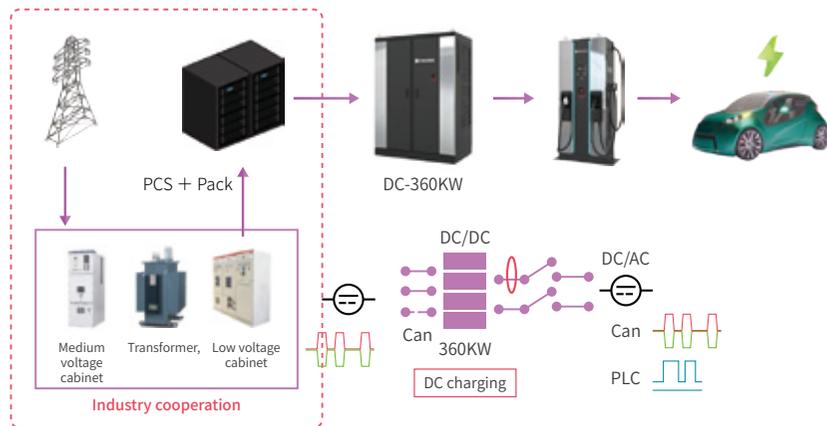


V2H/V2G saves electricity costs

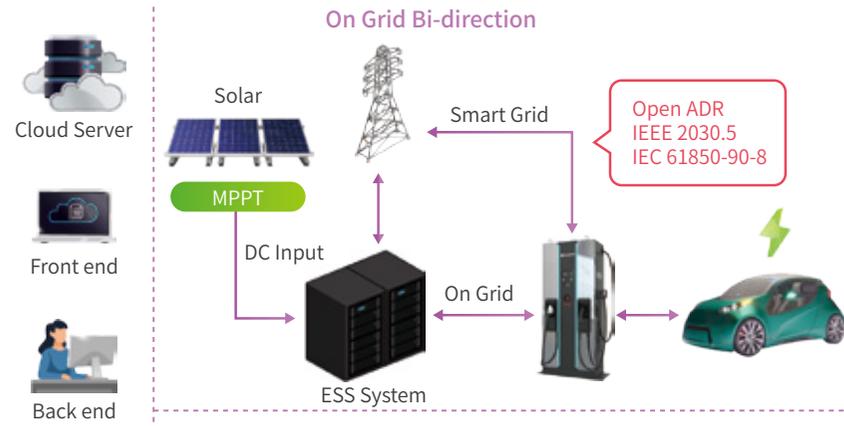


3. Research and development of energy storage technology: including control board design, active balancing design, power supply design, energy storage system and charging system integration design. Develop active balancing technology and combine energy storage & charging technology with software control.
4. Research and development of grid balancing technology: including power integration technology, small-scale energy storage grid management system algorithm. In the future, the electricity from electric vehicles will be fed back to the grid or fed back to the energy storage system, which will be used to become a regional power network and effectively use the electricity to become a smart grid.

R&D field development layout plan



Smart Grid + Energy storage system + two-way charging



Green product. Protect consumer health

In August 2022, PHIHONG Dongguan Da-Hong Factory passed the IECQ QC 080000 Hazardous Substance Process Management System to integrate the concept of green production into the daily management of the enterprise. According to the RoHS Directive announced by the European Union, the content of lead, cadmium, mercury, hexavalent chromium, polybrominated biphenyls (PBB) and polybrominated diphenyl ethers (PBDE) in electrical and electronic products must not exceed the standards to reduce the environmental hazards caused by waste electrical and electronic products. Strengthen the processes from business, research and development, procurement, manufacturing, quality control, warehouse management, etc. to ensure that products meet customer requirements, and at the same time comply with relevant laws and regulations and green product specifications, and meet quality requirements and customer satisfaction needs.



EV High Power Fast Charging and Two-Way Charging Trend

The Green Energy Research Institute's i-Green Charging Solution Technical Center (i-GCSTC) continues to develop advanced technologies and manufacture high value-added green energy products.

There are 3 main development plans as follows:

- Grid Balancing: Software Control for Smart Grid Balancing
- Green energy and energy storage: combination and application of green energy and energy storage
- Electric vehicle charging pile: water cooling and 3rd-generation semiconductors applied to electric vehicle charging pile solutions

One of the important factors in the popularization of electric vehicles is how to solve the user's anxiety about charging, and the direct water-cooled high-power power supply charging system meets the charging trend of customers. In addition, the electric vehicle power is fed back to the grid or storage system to form a smart power network, and the storage system and energy management system with active battery balancing can increase the green energy usage rate and regulate the peak/off-peak power to increase the power usage efficiency. The electric vehicle's power will be fed back to the grid or storage system to form a smart power network.

Short-term Plan 2021~2023

R&D Area	R&D Projects	R&D Objectives	Specific results
Material	Active Component Modularization	Sic-Mos / Sic-Diode	U-POWER ultra-high-speed charging station with 360kW charging pile
	Unidirectional Power Module	60KW-PFC / 30KW-DCDC	
System	Unidirectional water-cooled charging system	360KW Liquid Cooling Charger	
	Bi-directional charging system	V2H	
EMS	Network Communication	IEC2030.5 / Open ADR	
	Cloud platform	Backend platform / Power Balancing Algorithm	

STEP 1

- Unidirectional output cool water module charging pile
- Power storage system and introduce green energy
- EMS detection and management system

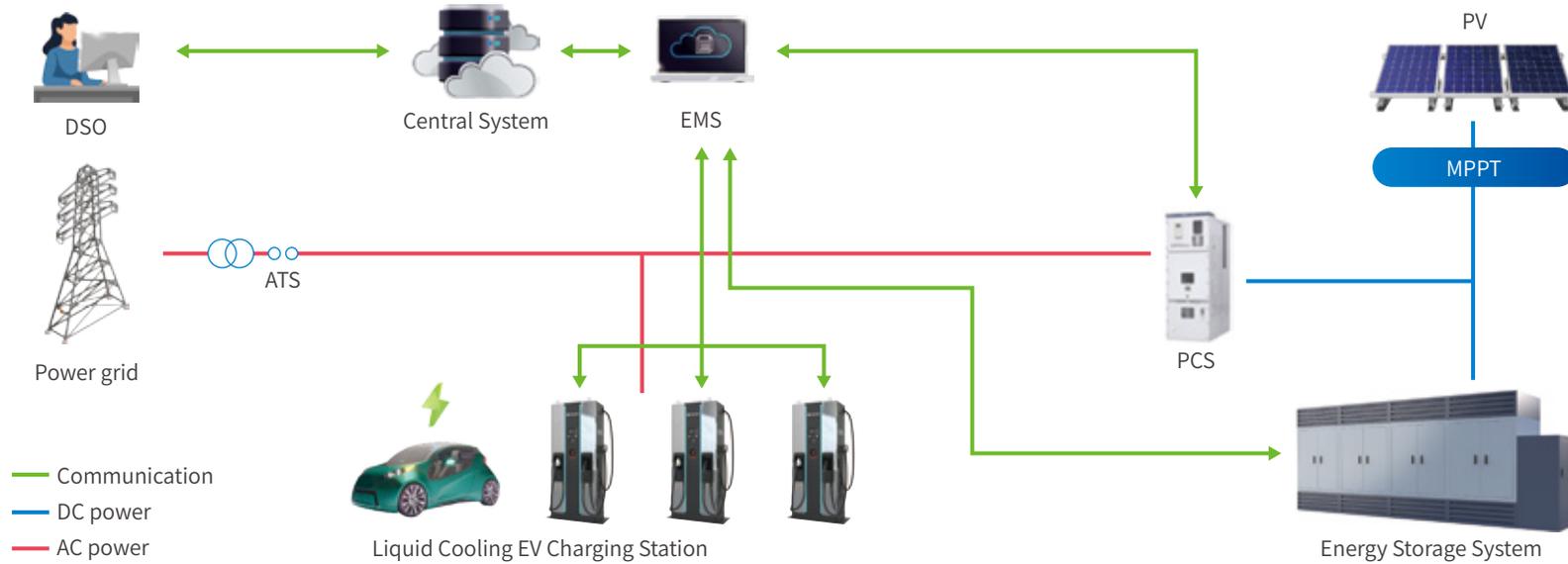
STEP 2

- Bi-directional cool water module charging pile
- Cloud centralized management system

STEP 3

- reflect demand
- automatic frequency control assistance service
- Deep learning prediction and set up operating mode

Energy storage and charging management system



The U-POWER ultra-high-speed charging station uses the world's highest power 360kW charging pile in a single-pile, double-shot configuration.



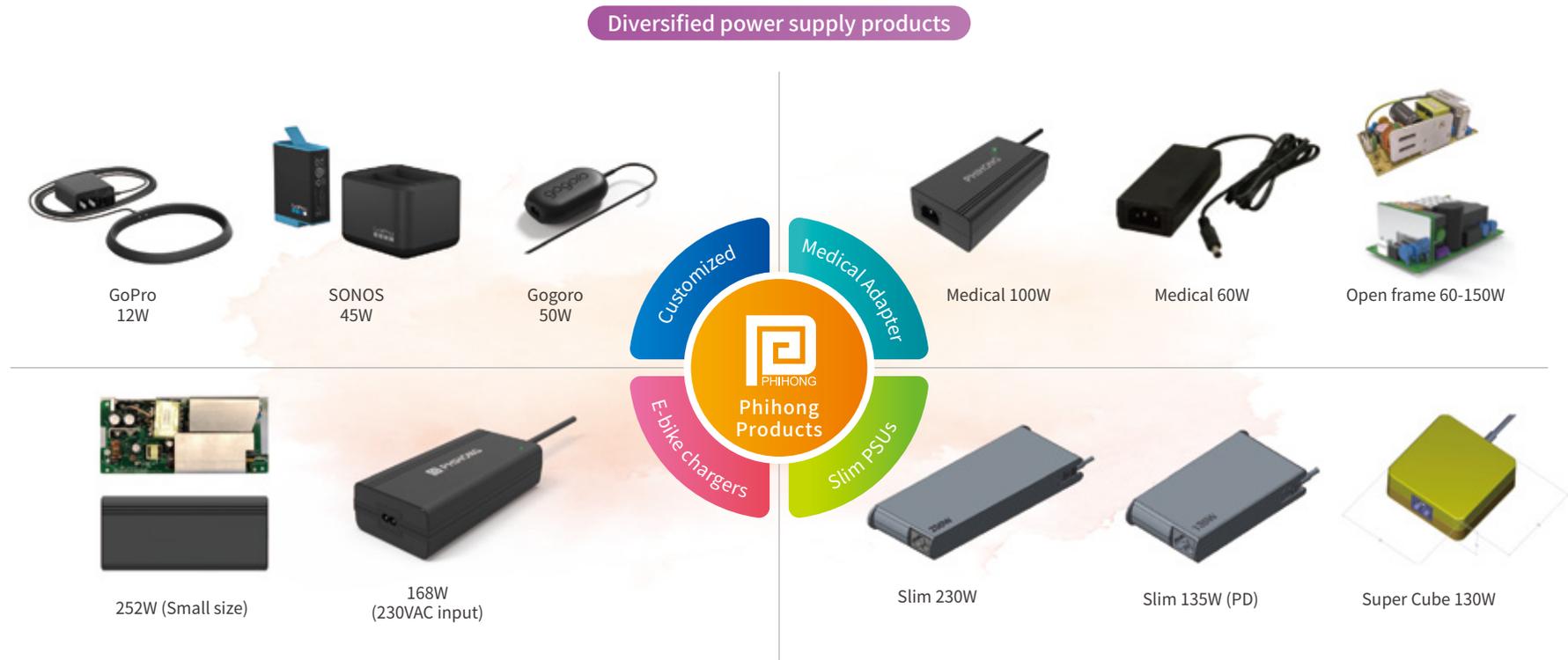
TCC Energy Storage Tainan Yawan Station uses PHIHONG's DC fast-charging piles, which are equipped with 1 fast-charging pile and 2 gun specifications

5.2 Transition to Circular Economy

With rapid development of the world economy, customer demands are increasing day by day, also product fields are not exactly the same. Yet, fulfilling customer expectations is always one of the core principle of PHIHONG. With decades of experience in power supply development and manufacturing, in addition to providing customers with high efficiency and high quality products and services, PHIHONG has been actively transforming into a circular economy. We upgrade the original pure power product ODM/OEM service to a one-stop service with leading technology, system application consultation, and product; becoming an all-round power technology service factory.

All-round power product integration

Based on 50 years of power supply product design and customer trust, PHIHONG has many different product lines ranging from general power adapters, advanced USB-PD (Power Delivery) adapters, chargers, ISO 13485 medical related products, open-frame power supplies, and various battery chargers and high performance, compact desktop gaming power products, POE, smart home appliances related applications, POE and smart home appliance related applications. PHIHONG has the capability to plan a series of power supply products for customers and provide product integration services.



PHIHONG Technology and System Application Consulting

Waterproof design (IPx5 UP)



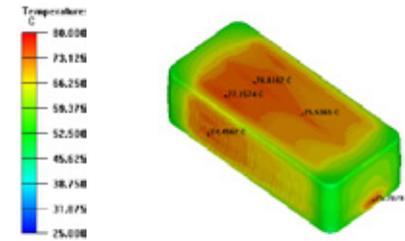
High Efficiency Power



PFC + LLC + SR

↑
94%

Thermal design

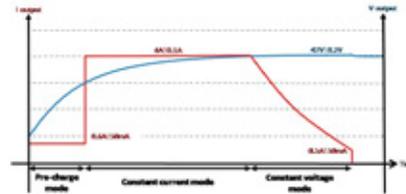


Digital thermal Control



Firmware design

- Adjustable charging profile
- Calibration



Digital communication

- CAN-bus interface
- UART interface
- One wire
- NTC feedback



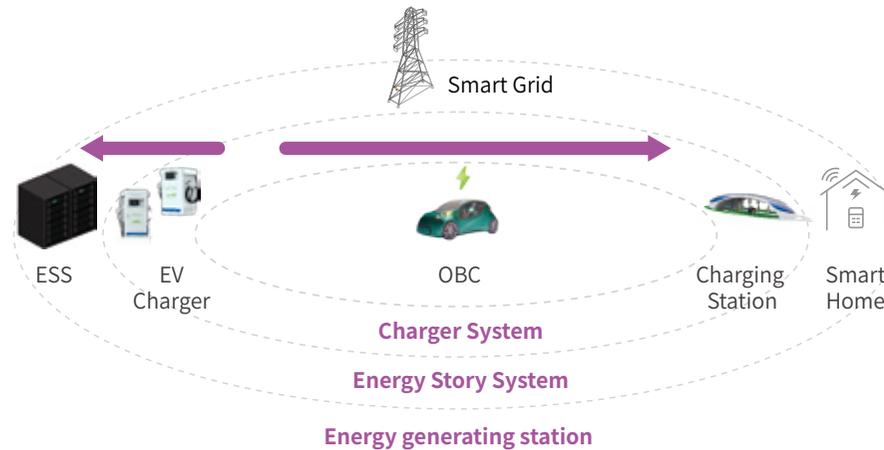
Cloud Server



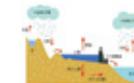
Front end



Back end



Solar Energy



Wind Power



Hydraulic Power



Nuclear Power

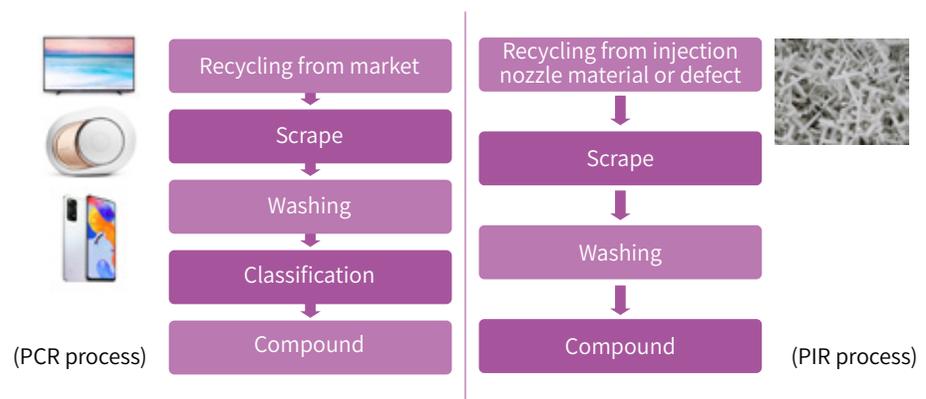


Firepower

Plastic recycling (PCR)

The full name of PCR is POST-CONSUMER RESIN, which means "reusable material after certain process", also known as renewed material (recycled material). Currently, all of PHIHONG's existing plastic materials are made from recycled materials. If we use PCR plastic (comply with the specification, and have a certain percentage in plastic), in addition to the price increase, its reliability and impact resistance will also be lower than the existing materials. After all, in the PCR materials are mostly composite materials. In the future, PCR will be widely used and PHIHONG will continue to follow up with green technology as our mission.

Plastic Recycling, Recycling (PCR) Flowchart



	kg CO ₂ eq. for 1kg resin material
Carbon reduce	PCR 30% Reduce 0.5~1 kg
	PCR 50% Reduce 1.25~1.7 kg
	PCR 70% Reduce 2~2.3 kg
	PCR 90% Reduce 2.5~3kg

	MJ(Mega joules) for 1kg resin material
Energy demand	PCR 30% Reduce 23~30 MJ (Saving 6.4~8.4 kWh)
	PCR 50% Reduce 40~45 MJ (Saving 11.1~12.5 kWh)
	PCR 70% Reduce 60~65 MJ (Saving 16.6~18 kWh)
	PCR 90% Reduce 70~80 MJ (Saving 19.4~22.2 kWh)

1 L Petrol=33~36 MJ
1 kWh=3.6 MJ

Packaging material recycling. Electric energy recovery

Introducing the use of reusable packaging materials and energy recycling equipment can help improve product competitiveness and reduce the impact of products on the environment. During the delivery process, the products will go through several stages of inspection, such as pre-shipment inspection, customer inspection and installation and delivery, and will need to be unpacked and inspected through different stages of inspection. In the past, the use of disposable wooden boxes required reassembly or remanufacture of packaging wooden boxes. PHIHONG introduces snap-lock wooden boxes that can be reused and easily disassembled. In addition to simplifying the nailing operation process to achieve productivity benefits, the same wooden box from a single use to 3-5 times to reduce resource waste and achieve huge practical benefits to protect forest resources.

In addition, in the face of the aging test, a large amount of energy consumption is introduced into the energy recovery cabinet to recover the power consumed in the test and feed it into the grid for reuse, which significantly reduces energy waste and effectively saves electricity costs, and each charging pile can reduce energy by about 87%. According to the actual test of 120kW charging pile, the power displayed by the pile (gun output) is 120.2kW. The power supplemented by the grid is 15.3kW. The energy recovered is 105 kWh, which means 87.3% of the energy is recovered.

Circular economy action

Action plan	DC charging pile wooden box packing material	DC test power recovery
Traditional practice	single use	no recycling
Circular Economy practice	Rework the packaging specification, use screws instead of nails to fix wooden boxes, and introduce a buckle-lock design to improve the protection of packaging materials, which can be recycled for over 3 times.	Recycling and testing power consumption is fed into the grid for reuse, greatly reducing power waste. Each charging pile can save about 87% of power.
2022 specific benefits	Reduce 6,000 sets of wooden boxes	Recover 315,000 kWh of electricity

5.3 Low Carbon Product Design

Material topic: Low Carbon Product Design



Policy and Commitment

- Continue to research and develop low-carbon products, and join hands with suppliers and customers to become the ultimate goal of low-carbon and environmentally friendly
- Compact, lightweight, efficient power supply and plastic ring use (PCR) power design



Management approach

- Implement green product design, provide high-efficiency power supply solutions and R&D design requirements to use related parts that meet environmental protection and energy saving concepts and standards (RoHS, REACH)
- Gradually use materials that comply with PCR plastic recycling and utilization, with the goal of jointly creating a clean, green, and low-carbon future



Evaluation system

- R&D KPI Target Management
- Performance Evaluation
- R&D Patent Award



Responsible parties

R&D units of each business group



Annual performance highlights

- Introduction and development of third-generation semiconductors to reduce the size of products by reducing the heat of components
- All of PHIHONG's existing plastic materials are made from recyclable materials.



Corresponding SDGs



Target setting

2022 Target

- Improve product energy efficiency, reduce product transportation volume and cost; gradually use materials that comply with PCR plastic recycling and utilization
- Reduce the size of the same power product by 5% and increase the efficiency by 0.5%.

Archieved Performance

- The same power specification products, 50% smaller, 30% lighter, 15% fewer parts, reduce transportation costs; all existing plastic materials are recycled.
- 140W PD model is 5% lower and 0.6% more efficient than the previous model

Future Target

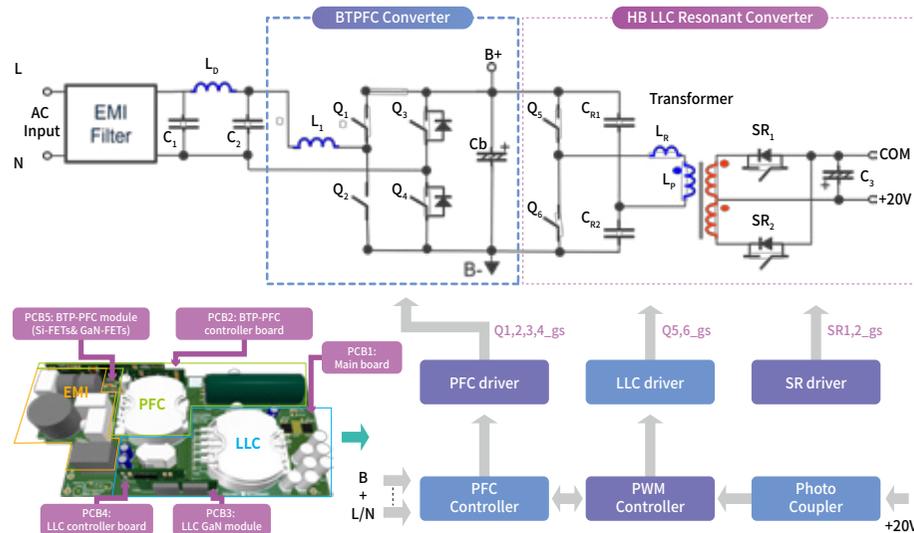
- Short-term (2023-2024)
 - » Improve product energy efficiency and reduce transportation costs; gradually use PCR-compliant plastics for recycling
 - » Reduce product volume by 5%, increase energy efficiency by 0.5%
- Mid-long term (2023-2024)
 - » Introduce 3rd generation semiconductor to all products, with an average efficiency of 90%; the utilization rate of PCR materials reaches 70%
 - » Reduce overall volume by 30%, provide energy efficiency by 3%

With the belief of green innovation, PHIHONG not only keeps its commitment to provide excellent products and services, but also puts the concept of environmental protection into green product design. By providing high performance solutions for power supplies, and by developing and designing components that meet the concept and standards (RoHS, REACH) of environmental protection and energy conservation, and by gradually using materials that comply with PCR plastic recycling and utilization, PHIHONG aims to create a clean, green, and low-carbon future together.

Compact, lightweight and efficient power supply

High performance power supply is definitely the key to improve the environmental consumption. The new technology platform with high conversion efficiency can improve the conversion efficiency of power supply, reduce the waste heat and loss generated during the operation of power supply, and increase the utilization rate of power supply. Therefore, the introduction and development of third-generation semiconductors to reduce heat generation and product size is the major direction of PHIHONG's R&D team in recent years. For example, the power density of the old product was about 8W/inch³, while the new product with GaN and high conversion efficiency technology has a maximum power density of 16W/inch³. This means that with the same output power specification, the new product is only 50% of the size of the old product, 30% lighter, and 15% less in the total number of parts. This not only significantly reduces the amount of related raw materials used, but also greatly reduces the weight and shipping cost of the product during delivery.

Intelligent Power Supply (IPS) High Performance Technology Application



PFC Improvement:



1.3% Eff. UP

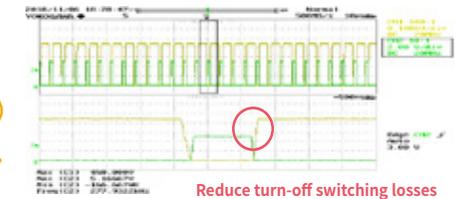


High performance GaN FET applied for PFC.

LLC Improvement:



0.5% Eff. UP



Reduce turn-off switching losses

High performance GaN FET applied for LLC.

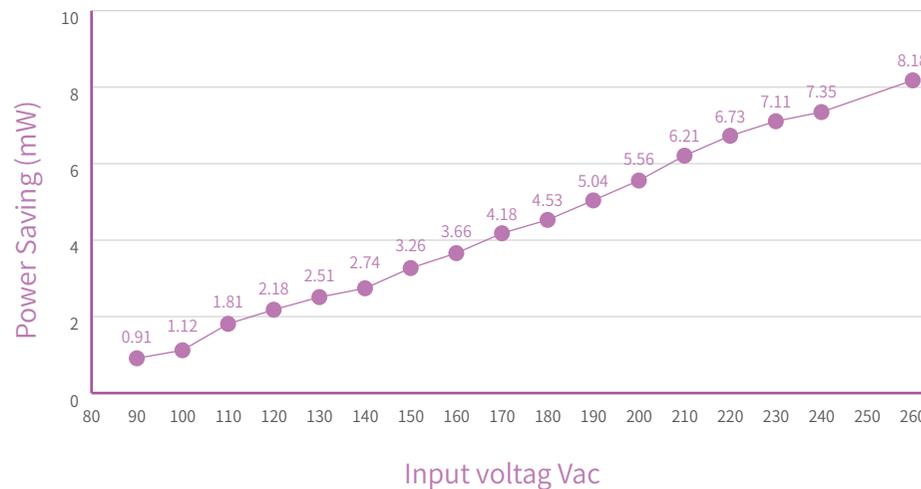
In addition to introducing 3rd generation of semiconductors to improve performance, how to reduce power consumption and improve efficiency from the design level is also the direction of PHIHONG's green research and development. Through 50 years of experience and technical advantages, we have changed the bridge rectifier, which is the most costly power supply, from the original diode rectifier to the power semiconductor (MOS) rectifier, reducing the overall loss by more than half. In addition, the bridge-less design is used to integrate with three generations of semiconductors to develop more efficient and low-pollution miniaturized products.

Low energy consumption, energy-saving products

European ErP has issued a draft revised version of the external power supply implementation rules No. 278/2009, announcing the expected new implementation regulations, which will adopt two-tier implementation requirements. The details are as follows:

1. Tier 1: Required to meet US DoE LEVEL VI by January 2017
2. Tier 2: CoC Version 5 Tier 2 compliance required by July 2018

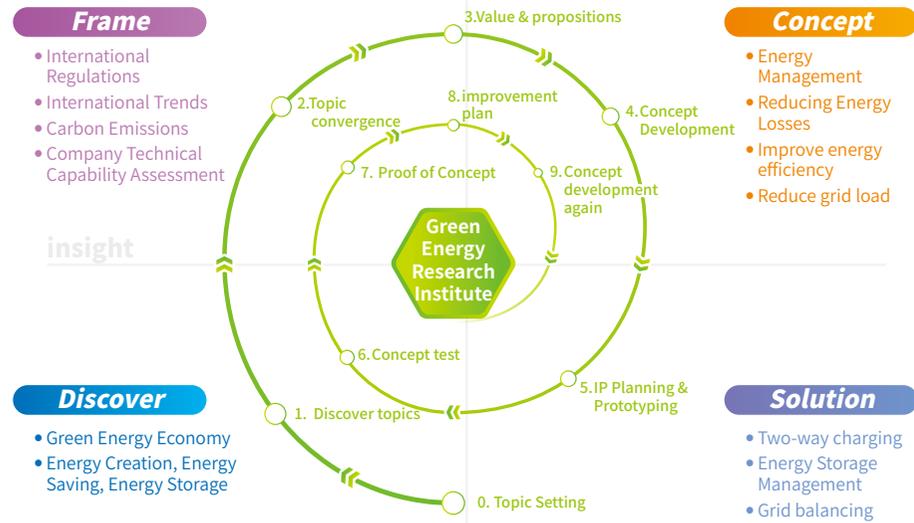
With the current external power supply of less than 50W, the standby power consumption needs to be less than 75mW. The energy consumption caused by high standby power consumption for a long time should not be underestimated. For 50 years, PHIHONG has been developing energy-efficient products. The whole series of products not only meet the regulatory standards but also consume far below the regulatory requirement of 75mW. In the future, we will continue to research and develop products with only 10mW consumption or less, so as to meet the needs of high-end customers (standby power consumption and products as shown in the figure).



In addition, according to the U.S. Environmental Protection Agency's May 2010 announcement, the External Power Supply and ENERGY STAR® programs ended in December of that year. PHIHONG's main products are external power supplies, so they adopt the energy efficiency specifications that are more common in the industry and expected by customers; that is, the DOE-VI class standard that was implemented by the U.S. Department of Energy in February 2016. For external power supplies sold in the European Union, the ErP (CE) standard is used. EV electric vehicle charging station products are primarily ENERGY STAR® certified. According to the 2022 shipment record, 85% of total revenue will come from products that meet DOE-VI, ErP (CE) energy efficiency regulations or ENERGY STAR® certification. At the same time, PHIHONG has evaluated multiple ways to reduce carbon emissions from its operations, including replacing energy-consuming air conditioners and lighting fixtures, building its own solar power system, and signing power purchase agreements. 2 MW of rooftop solar power (PV) equipment was completed at the end of 2022 at the Tie-Song plant in Dongguan, and will begin self-generation in March 2023. The third phase of the Tie-Song plant is scheduled to be completed in 2023. PHIHONG Taiwan's Tainan plant is also planning to install solar power generation equipment on the roof, which is expected to generate 496.8kwp of electricity. In the future, we plan to replace fossil fuels with renewable energy and reduce carbon emissions by self-generation.

From Energy Creation to Energy Storage - Green Energy Institute

In 2021, Green Energy Research Institute was established to grasp the market demand with green energy sustainability as the main focus, and to implement forward-looking low-carbon technology expansion to create maximum profits for the company. With the extension of the original AC/DC fast charging technology, the main research items are energy storage, conversion and management. Mainly effective energy management to achieve more efficient energy use to save energy waste and improve the efficiency of charging and energy storage.

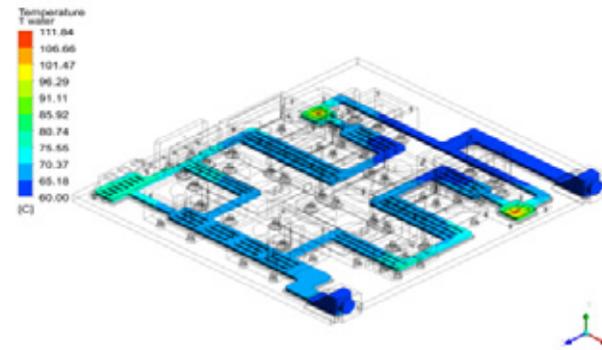
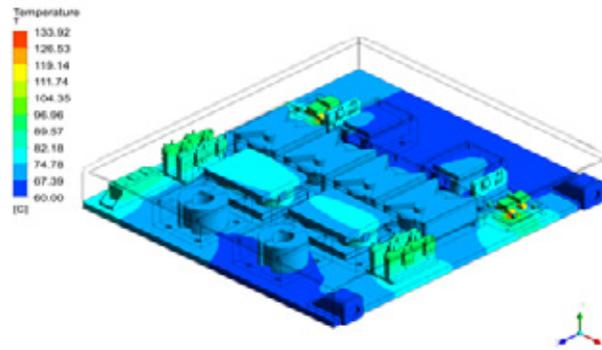


Green Energy Research Institute Focus Project

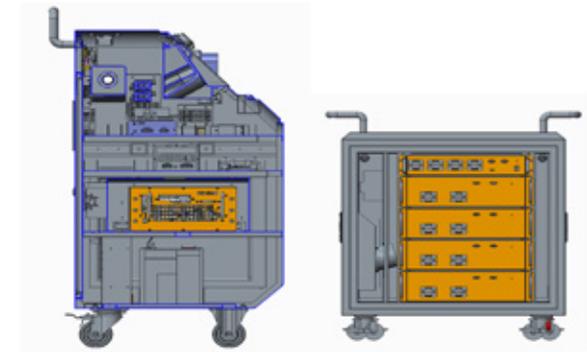
1. Green Research Institute's R&D focuses on the following main objectives: focusing on green energy and earth sustainability-related technologies, implementing the diffusion of advanced research technologies, and creating the company's maximum profit with new technologies.
2. Research and development of water-cooled charging technology to extend the service life of charging system products from the original 3 years to 5-8 years. Moreover, it is water-cooled instead of traditional air-cooled to reduce noise and reduce sound damage.
3. BESS energy storage + charging technology effectively reduces the power burden on the grid. Use BESS energy storage for solar energy, wind energy or excess power at night, and effectively use it in EV charging, reducing the power burden caused by a large amount of power directly pulling the national power system.

Two-way power technology to achieve V2H and V2G functions is the main R&D goal of PHIHONG in 2023. It can effectively utilize the power of EVs and allow the nationwide EVs to feed back into the national grid using bi-directional power technology in case of emergency. This can also be applied to EVs in home energy storage systems. The combination of these projects and grid balancing technology will allow for effective overall management of the power system for home power, small area grids or power company support.

Water-cooled charging temperature test



BESS charger



Industry-Academia Collaboration and Strategic Deployment in the Energy Storage Market

Taiwan announced the 2050 net-zero carbon emission roadmap and announced that the government will invest up to 900 billion NTD in the next 8 years, which will accelerate the pace of enterprises' pursuit of carbon reduction. Phihong has already developed 720KW product line and will be actively involved in energy storage charging. The pace of corporate pursuit of carbon reduction has accelerated. It is expected that Taiwan's related green energy installations will take off at a high speed, and this year, Taiwan power supply manufacturers have started to take a bold step in laying out "energy storage" business opportunities. PHIHONG has already developed 720KW product line and will be actively involved in energy storage charging.



In 2022, Phihong, Phoenix Battery and National Pingtung University of Science and Technology (NPUST) have jointly launched a high-voltage energy storage charging system. Phihong is mainly responsible for charging, energy storage and background EMS management system. Phoenix Battery is responsible for battery and battery management. NPUST will incorporate green energy and clean energy storage application and site application in the future. This product is called "High-Voltage Green Energy Storage Charging System". It combines Phihong's existing energy storage charging technology with Phoenix's battery solution to form a high-voltage energy storage charging system. In the future, it will merge with NPUST's green energy system, to complete a powerful integrated product with 3 major functions of green energy, energy storage and charging.

The "High Voltage Green Power Storage and Charging System" can directly use Taipower's 22.8KV / 11.4KV high voltage power as input, and internally convert it into low voltage DC power to be stored in Phoenix's 75KWh battery, and in the future, it will also be connected to NPUST's solar power or biogas power and other clean energy stored in the battery. The source of electricity needed for electric vehicles is still the power system, so it is necessary to return to the active development of renewable energy generation in order to significantly reduce CO₂ emissions. The "High Voltage Green Power Storage and Charging System" is expected to help Taiwan solve the problem of power shortage in the future by reducing power consumption during peak hours, and to store power at night and discharge it during the day, thus significantly increasing green energy and reducing carbon emissions. This is a big step forward in Phihong's ESG green sustainable development plan.

6 Social Inclusion Practice



- 6.1 Talent Selection and Cultivation
- 6.2 Employee Care and Support
- 6.3 Occupational Health and Safety
- 6.4 Public Service and Social Influence

6.1 Talent Selection and Cultivation

“Becoming the best power supply supplier in the world” is PHIHONG’s vision. We regard our employees as important partners for sustainable growth. We believe that “talent” is the key to sustaining PHIHONG’s core competitiveness. To stimulate employees’ innovative ability to sustain quality growth and to have the motivation for continuous improvement, PHIHONG strives to create a comfortable, safe, healthy and friendly working environment to create a sense of employee happiness. We provide competitive salary, benefits, talent training programs, and a sound performance appraisal system to raise job recognition. We look forward to bringing our talented people unlimited development space and possibilities, to grow together with the company and move towards the world, creating a future of sustainable development of talents.

Material topic: Material Topic: talent selection and retention (GRI 404: 2016 Training and Education, GRI 202: 2016 Market Position)



Policy and commitment

- PHIHONG insist on "choosing talents carefully and appointing them appropriately" regardless of gender.
- All appointments are made in a fair and open manner.



Management approach

- Education and training management procedures, internal instructor training and appointment management methods, and performance-linked reward system.
- We follow the TTQS Talent Development Quality Management System and complement it with a comprehensive education and training development system and e-learning platform.



Evaluation system

- Performance management system
- Internal audit
- Training satisfaction survey



Responsible parties

Human resources department



Annual performance highlights

- Awarded TTQS Silver Certification in 2022 with a record high score.
- In 2022, the number of learning hours is 25,855 hours. The number of employees is 648. The average hours per person is 39.9 hours.



Corresponding SDGs



Target setting

2022 Target

Continuously implement the education and training system and create a diversified learning platform. Achieve 36 hours of training per person to maintain human quality and corporate competitiveness.

Achieved result

Over 25,000 hours of online and offline diversified learning in 2022, with 39.9 hours per capita.

Future target

- Short-term (2023-2024)
 - » Annual performance appraisal, effectively linking to the remuneration management system
- Mid-long Term (2025-2030)
 - » The return rate of the employee satisfaction survey questionnaire is 95% and the satisfaction rate is over 80%. We are committed to listening to the voice of each employee, respect human rights and avoid discrimination and harassment.

Human Resource Development Policy

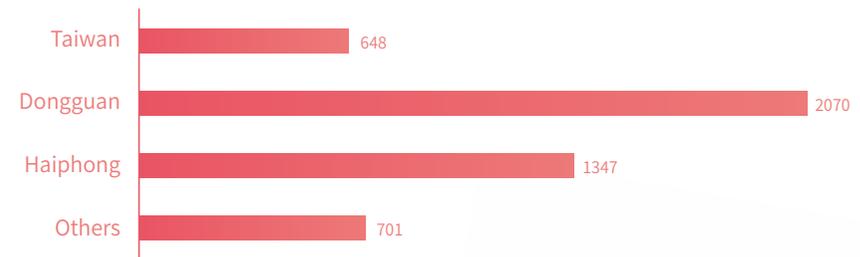


Employees are the most important asset of Phiohong. They are also the key power to maintain our company's sustainable operation and innovative R&D. We believe that cultivating employees is the source of corporate competitiveness. Through education and training, we can ensure continuous value-adding to our human capital. We transform our employees from "human resources" to "talents" and elevating them to "human assets". We proactively provide various learning and development resources for our employees to enhance their professional capabilities in line with the needs of the organization and to build a learning organization atmosphere. In addition to meeting employees' needs for self-improvement, we also adjust and arrange trainings according to organizational development or hierarchical needs, so as to create an active learning environment to cope with the fast-changing external environment, increasingly fierce international competition.

Human Resources Structure

In 2022, the total number of employees employed by PHIHONG worldwide is 4,065. The main manufacturing centers are PHIHONG Dongguan and PHIHONG Haiphong, with over 70% of the Group's employees in these two plants. In Sep 2022, PHIHONG Taiwan established a subsidiary, ZENOVA, as a result of the splitting of the electric vehicle energy business group. Thus, the staff composition of the R&D center increased by 19%. In all of our global operations, local employees are our top priority. The employment rate of local employees in Taiwan is 97.38%, and in Dongguan and Haiphong are both 100%, the same as in 2021.

Employee Structure



Male to female staff ratio	Male 51.81%	Female 48.19%
Local staff hiring rate	Taiwan 97.38%	Dongguan 100% Haiphong 100%

PHIHONG 2022 Manpower Structure

Category	Group	Male		Female		Group Subtotal & Ratio		
		Persons	Group %	Persons	Group %	Persons	All staff %	
Duty	Managers	208	72.73%	78	27.27%	286	7.04%	
	Other staff	1,898	50.22%	1,881	49.78%	3,779	92.96%	
Work location	PHIHONG Taiwan	365	56.33%	283	43.67%	648	15.94%	
	PHIHONG Dongguan	1,180	57.00%	890	43.00%	2,070	50.92%	
	PHIHONG Haiphong	561	41.65%	786	58.35%	1,347	33.14%	
Age	≤ 30	871	56.85%	661	43.15%	1,532	37.69%	
	31-40	716	48.91%	748	51.09%	1,464	36.01%	
	41-50	400	45.61%	477	54.39%	877	21.57%	
	≥ 51	119	61.98%	73	38.02%	192	4.72%	
Education	Doctors	4	100.00%	0	0.00%	4	0.10%	
	Masters	98	70.00%	42	30.00%	140	3.44%	
	Bachelor's	344	50.29%	340	49.71%	684	16.83%	
	Others	1,660	51.28%	1,577	48.72%	3,237	79.63%	
Nationality	Locals	2,093	51.70%	1,955	48.30%	4,048	99.58%	
	Foreigners	13	76.47%	4	23.53%	17	0.42%	
Employment Type	PHIHONG Taiwan	Permanent staff (Full-time)	352	55.61%	281	44.39%	633	97.69%
		Contractors (Part-time/Temp)	13	86.67%	2	13.33%	15	2.31%
	PHIHONG Dongguan	Permanent staff (Full-time)	671	56.34%	520	43.66%	1,191	57.54%
		Contractors (Part-time/Temp)	509	57.91%	370	42.09%	879	42.46%
	PHIHONG Haiphong	Permanent staff (Full-time)	6	30.00%	14	70.00%	20	1.48%
		Contractors (Part-time/Temp)	555	41.82%	772	58.18%	1,327	98.52%
Gender Subtotal		2,106	52.81%	1,959	48.19%	-		
Overseas Plant				701				
Total				4,065				

Note 1: Contractors (part-time/temporary) workers are defined as those having non-fixed working hours, and the working hours are less than those of permanent staff (full-time).

Note 2: Non-employee workers are outsourced workers, and their duties include: security personnel and cleaning personnel. In 2022, there is a total of 15 outsourced workers in PHIHONG Taiwan, 148 in PHIHONG Dongguan. In PHIHONG Haiphong are all regular employees, so there is no non-employee workers.

Recruitment

Through an open and transparent selection process, PHIHONG's recruitment and appointment policy is based on the job requirements of the vacancy, taking into account the job qualifications, potential and achievements of the applicants. We do not discriminate or treat job applicants or employees differently based on race, class, language, ideology, religion, party affiliation, origin, place of birth, gender, sexual orientation, age, marriage, appearance, facial features, or physical or mental disabilities in the recruitment, screening, hiring, distribution, deployment, evaluation, or promotion.

Preferential hiring of management from the local community

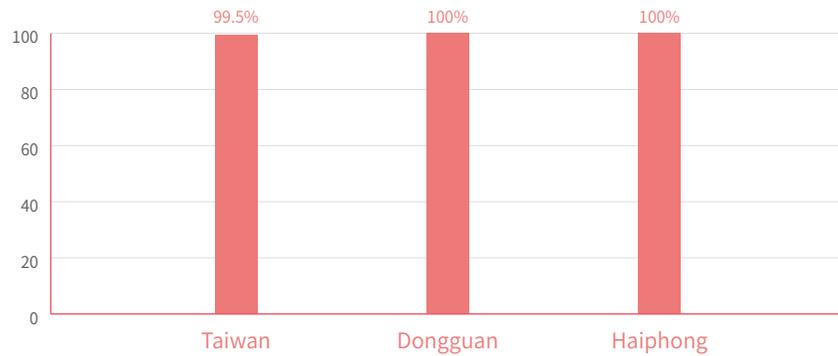
To effectively promote local employment and economic development in each of our operating bases, to enhance our understanding of local needs, and to strengthen our human capital, we not only provide numerous job opportunities for the locals, but also give priority to them for promotion. In 2022, the proportion of locals in management is 100% in PHIHONG Dongguan and PHIHONG Haiphong. In PHIHONG Taiwan, the percentage of management positions held by the locals is 99.53%.



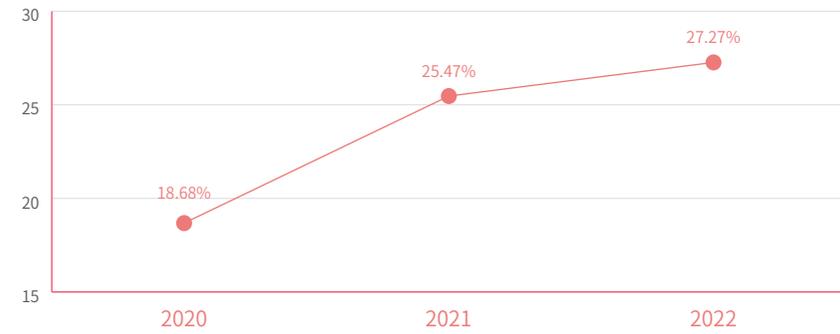
Gender Equality

PHIHONG's priority in hiring employees is gender equality. In 2022, the ratio of male to female employees will become equal year by year, the gender gap has decreased by 6.7% compared to 2021. The percentage of male employees is 51.81% and the percentage of female employees is 48.19%; In terms of cultivating management talents, PHIHONG emphasizes on management duties, especially on management traits and skills. We actively promote colleagues with excellent performance regardless of gender, encouraging and supporting their career advancement. In 2022, PHIHONG have a total of 78 female managers above the section level, accounting for 27.27% of all supervisors, setting a new high in the proportion of female supervisors over the years.

Proportion of Phihong Group's management staff hired locally in 2022



Proportion of female executives in Phihong Group



Male to Female Ratio of Management Staff of Phihong Group

rank \ Year	2020					2021					2022				
	Male	Ratio	Female	Ratio	Total	Male	Ratio	Female	Ratio	Total	Male	Ratio	Female	Ratio	Total
Basic to Section Level	68	71.58%	27	28.42%	95	74	69.81%	32	30.19%	106	61	67.78%	29	32.22%	90
Mid-level to Associate level	89	75.42%	29	24.58%	118	104	76.47%	32	23.53%	136	97	74.62%	33	25.38%	130
Intermediate to Division	43	82.69%	9	17.31%	52	16	80.00%	4	20.00%	20	42	73.68%	15	26.32%	57
Senior to Vice President or above	5	100.00%	0	0.00%	5	5	100.00%	0	0.00%	5	8	88.89%	1	11.11%	9
Total	205	75.93%	65	24.07%	270	199	74.53%	68	25.47%	267	208	72.73%	78	27.27%	286

Note: Calculation of the ratio of male to female in each management level = the number of male and female in each management level / the total number of male and female in each management level *100%.

Male to Female Ratio of Management Staff in PHIHONG Taiwan

Rank	Year	2020					2021					2022				
		Male	Ratio	Female	Ratio	Total	Male	Ratio	Female	Ratio	Total	Male	Ratio	Female	Ratio	Total
Basic to Section Level		33	73.33%	12	26.67%	45	30	65.22%	16	34.78%	46	33	58.93%	23	41.07%	56
Mid-level to Associate level		59	75.64%	19	24.36%	78	65	78.31%	18	21.69%	83	66	78.57%	18	21.43%	84
Intermediate to Division		13	76.47%	4	23.53%	17	12	75.00%	4	25.00%	16	17	77.27%	5	22.73%	22
Senior to Vice President or above		5	100.00%	0	0.00%	5	5	100.00%	0	0.00%	5	8	88.89%	1	11.11%	9
Per gender subtotal / Ratio		110	75.86%	35	24.14%	145	112	74.67%	38	25.33%	150	124	72.51%	47	27.49%	171
Ratio of employees in Taiwan accounted		22.45%		7.14%		29.59%	22.18%		7.52%		29.70%	24.55%		9.31%		33.86%

Note 1: Calculation of the ratio of men to women for each management level = the number of men and women in each management level / the total number of men and women in each management level *100%.

Note 2: Ratio of employees in Taiwan accounted = Total number of men and women in each management level / Total number of employees in Taiwan in each year *100%.

Male to Female Ratio of Management Staff in PHIHONG Dongguan

Rank	Year	2020					2021					2022				
		Male	Ratio	Female	Ratio	Total	Male	Ratio	Female	Ratio	Total	Male	Ratio	Female	Ratio	Total
Basic to Section Level		34	69.39%	15	30.61%	49	36	70.59%	15	29.41%	51	14	77.78%	4	22.22%	18
Mid-level to Associate level		30	75.00%	10	25.00%	40	31	70.45%	13	29.55%	44	49	77.78%	14	22.22%	63
Intermediate to Division		2	100.00%	0	0.00%	2	4	100.00%	0	0.00%	4	24	70.59%	10	29.41%	34
Senior to Vice President or above		0	0.00%	0	0.00%	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%	0
Per gender subtotal / Ratio		66	72.53%	25	27.47%	91	71	71.8%	28	28.2%	99	87	75.65%	28	24.35%	115
Ratio of employees in Dongguan accounted		0.46%		1.66%		1.24%	1.33%		0.52%		1.85%	1.63%		0.52%		2.15%

Note 1: Calculation of the ratio of men to women for each management level = the number of men and women in each management level / the total number of men and women in each management level *100%.

Note 2: Ratio of employees in Dongguan accounted = Total number of men and women in each management level / Total number of employees in Taiwan in each year *100%.

Male to Female Ratio of Management Staff in PHIHONG Haiphong

Rank	Year	2020					2021					2022				
		Male	Ratio	Female	Ratio	Total	Male	Ratio	Female	Ratio	Total	Male	Ratio	Female	Ratio	Total
Basic to Section Level		1	100.00%	0	0.00%	1	8	88.89%	1	11.11%	9	14	87.50%	2	12.50%	16
Mid-level to Associate level		0	0.00%	0	0.00%	0	8	88.89%	1	11.11%	9	5	83.33%	1	16.67%	6
Intermediate to Division		28	84.85%	5	15.15%	33	0	0.00%	0	0.00%	0	1	100%	0	0.00%	1
Senior to Vice President or above		0	0.00%	0	0.00%	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%	0
Per gender subtotal / Ratio		29	85.29%	5	14.71%	34	16	88.89%	2	11.11%	18	20	86.96%	3	13.04%	23
Ratio of employees in Haiphong accounted		4.11%		0.71%		4.82%	1.77%		0.22%		1.99%	2.21%		0.33%		2.54%

Note 1: Calculation of the ratio of men to women for each management level = the number of men and women in each management level / the total number of men and women in each management level *100%.

Note 2: Ratio of employees in Haiphong accounted = Total number of men and women in each management level / Total number of employees in Taiwan in each year *100%.

Appointing the right talent & Selecting carefully

PHIHONG insists on "selecting talents carefully and appointing the right ones". For PHIHONG to develop sustainably and to keep up with international trends and operational plans, we search for the right talents through fair, just and open channels such as online human resource bank, campus recruiting, job expo, industry-academia cooperation, job hunters and internal recruitment. By actively utilizing diversified recruitment channels, PHIHONG continuously recruit talents to raise the overall professional capabilities of our team. This contributes to the development of PHIHONG.

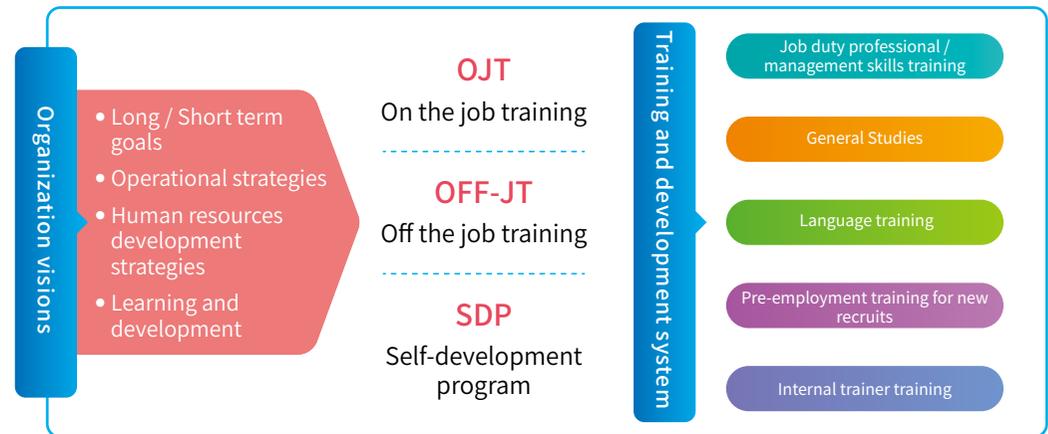
Our recruitment strategy focuses on expanding the employment of information data talents and overseas local talents. We promote the development and activation of the industry's employment market, to create and pursuit an excellence and superior quality technology life with PHIHONG's team.

We believe that quality and stable learning resources help PHIHONG to improve our productivity and competitive edge. We provide multiple channels for each employee to receive relevant learning resources at any time. We provide multiple education and training resources to stimulate the independent learning spirit of our employees. We hope that both the company and our employees will continue to improve, master the core values, and maintain the competitive edge. In the future, we will continue to plan and provide a learning environment suitable for the development of our employees and become an excellent employer for cultivating talents.

Training and Development

PHIHONG 50, learning accelerates! For 50 years, the training and development of our employees has been the key to our core competitiveness. We value each and every one of our employees and consider them as partners in our sustainable development. We encourage our employees to continuously enrich their professional knowledge and integrate it with their work practices to demonstrate their motivation to become successful. We have established the "Education, Training and Promotion System Framework", which incorporates career learning plans and growth hours into the promotion criteria. We hope that this will enhance the learning atmosphere of our employees and create a positive development of the learning environment so that individual learning and organizational contribution can be achieved.

PHIHONG Education and Training System



Winning the TTQS Silver Medal Again

We believe that human capital can be continuously enhanced through education and training. Therefore, PHIHONG Taiwan has been following the principles and spirit of TTQS (Talent Quality-management System) promoted by the Ministry of Labor, Executive Yuan, to continuously strengthen the organizational needs. We were awarded the silver medal of TTQS 2022 with a record high score. This honor is a testament to our dedication and efforts in talent development and training quality. We believe that quality and stable learning resources help companies improve their productivity and competitive edge. We provide multiple channels for each employee to receive relevant learning resources at any time, and use diversified education and training resources to stimulate employees' independent learning spirit and actively respond to the different needs of future industries.



Grade	Management job Position	Staff/Technical Position Training	Pre-employment Training system	Job duty Training system	Management Training system	Special topic series Training system
1A	CEO				M3 Senior manager management training Strategy planning skills Operation analysis skills Organization reform management	Internal instructor training Safety and Health training (Fire Safety Training and Drills, First Aid Training, Occupational Health and Safety Concepts) Quality control training (TL9000, ISO4001, ISO9000)
4B	Deputy CEO					
2A	BU Manager					
2B	BU Assistant Manager				M2 Mid-level manager management training M1 basic-level management training Management steps and procedures Team leading & performance management	
3	Department head, (Deputy) department head					
5	Manager	Lead specialist	Executive secretary	Lead Business representative	Expatriate staff pre-employment training	New hire pre-employment training
5	Project manager, Assistant project manager	Special Assistant				
6	Section manager	Senior specialist		Senior Engineer	On the job training	Specialist professional training OJT duty foundation training
7	Assistant section manager	Specialist	Secretary	Senior business representative		
8	Group leader	Specialist		Business representative	Management skills development and training	M1 Basic-level manager management training Basic management concept & skills Motivation theory & conflict management Staff hiring & interview skills Communications & team operations
9	Assistant group leader	Specialist		Business representative		
10	Team leader	Administrator		Assistant engineer	On the job training	Specialist professional training OJT duty foundation training
11	Assistant team leader	Assistant	Driver, Telephone Operator	Senior technician		
12				Technician	On the job training	Specialist professional training OJT duty foundation training
13				Operator		
14					On the job training	Specialist professional training OJT duty foundation training
15				Operator		

Internal Instructor System

Employees are the most important assets of PHIHONG and the key power to maintain the company's sustainable operation and innovative R&D. In line with the company's overall strategy, organizational structure and vision, we have developed a comprehensive education and training development system, and implemented various development courses in accordance with the training development system. The PDDRO process cycle is used as the framework to ensure the reliability and correctness of the training process. Our courses include:

1. Training for new employees to convey the basic culture of the company
2. Supervisory management training to strengthen management skills, functional professional courses to enhance work efficiency
3. Liberal studies courses that emphasize work-life balance
4. Language training to enhance competitive edge in the workplace
5. Internal instructor training to pass on company knowledge

We continue to strengthen the effectiveness of our training and development system with various courses. Employees not only can learn, share and create the required functional knowledge online and offline through the internal training development and knowledge management system platform, but also provides external training, micro-courses, internship activities and other learning resources to promote the implementation of a learning organization. The internal instructor system is an important key to enhance the company's overall talent development training. In the process of corporate development, the transmission of experience and know-how is a key competitive edge, and PHIHONG's internal instructor system helps to transmit knowledge within the company. Every year, on Teacher's Day, we publicly recognize and give a warm gift to the internal instructors who help to cultivate them. In the fast-changing digital era, talent cultivation needs to respond more quickly to new trends, reduce the gap between supply and demand, and maintain innovative thinking at all times. PHIHONG provides various learning resources to help employees enhance their skills and further improve their work engagement and self-worth, thus nurturing abundant human resources.



Non-Stop Learning during the Epidemic - Diverse Learning Channels

In an era of rapidly changing digital technology tools, we need more learning channels to bring more effective learning nutrients to our employees. Learning will not stop because of the epidemic, but will be guided by changes. In addition to the existing systematic e-Learning platform to promote training, we have also created a micro-learning platform, "Micro e-charge", in conjunction with our internal communication software Teams, to promote special learning activities for all employees. We have been working on the online implementation of the physical courses, online co-learning, and the promotion of external learning platforms and course enrollment to enrich digital tools as a powerful tool for teaching and learning, expand digital teaching capabilities, and lead colleagues to be learning designers for their own careers.

To establish long-term and harmonious labor relations, PHIHONG Taiwan will interview employees who are retiring or about to leave the company to understand their future plans. We also take the initiative to provide free information on external learning platforms to encourage them to stay competitive and learn as long as they live! For employees who have left the company involuntarily, in addition to the severance pay according to the law, we also provide 2 days of paid leave per week for employees to seek their next job opportunities. We also provide a window for continuous unemployment benefit applications and information on vocational training courses so that our employees can continue to maintain and improve their professionalism while seeking employment and contribute to their future.

2022 Statistics on Training Hours of Phihong Group Employees

Location Rank	PHIHONG Taiwan						Overseas joint factory (Dongguan + Haiphong)					
	Number of employees		Annual cumulative hours				Number of employees		Annual cumulative hours			
Total	648		25,855				7,868		208,002.5			
Hours per person	39.9						26.4					
Training Information for Men and Women	Male		Hours per person	Female		Hours per person	Male		Hours per person	Female		Hours per person
	Hours	Persons		Hours	Persons		Hours	Persons		Hours	Persons	
General Staff	10,318	241	42.8	9,473	236	40.1	12,5496	4544	27.6	78,237.5	3,161	24.8
Basic Supervisor	863	33	26.2	1,034	23	45	1,938	72	26.9	8,21.5	30	27.4
Mid-Level Supervisors	2,431	66	36.8	1,007	18	55.9	978	41	23.9	333.5	15	22.2
Mid- to senior-level executives	493	17	29	76	5	15.2	198	5	39.6	0	0	0
Senior Executives	137	8	17.1	23	1	23	0	0	0	0	0	0

Note:

1. Yearly cumulative hours in Taiwan include internal/external training, new hire training and e-Learning online learning. In Mainland China include internal/external training and new hire training.
2. The number of employees in Taiwan is calculated based on statistics in 2022.12 (including Taiwan expats). The number of employees in Mainland China and Vietnam is calculated based on statistics in 2022.
3. The average number of hours of male employees in Taiwan is significantly higher than that of female employees because most of the R&D engineering staff are Male, and the weekly internal R&D seminars are fixed.

Item	Description	Target participants	2021 learning achievements	2022 learning achievements
Micro e-charging	Provide micro-courses in all aspects of Work Life. Create a healthy career with colleagues	All employees	A total of 22 micro-courses have been launched since Apr 2021, with a total of 6,153 views.	A total of 24 micro-courses have been launched since Jan 2022, with a total of 6,915 views.
Digitalized physical courses	National epidemic prevention. Physical courses are conducted online to ensure a safe social distance.	All employees	In 2021, a total of 19 physical courses are converted to online courses, with a total of 664 participants.	In 2022, a total of 87 physical courses are converted to online courses, with a total of 3650 participants.
Top 100 CEOs Online Co-Learning	Top 100 external CEOs shared their management experience and business management tips.	Elite managers	A total of 9 courses were learned online, with a total of 275 participants.	A total of 33 courses were learned online, with a total of 1598 participants.
External Learning Platform Promotion	Share external learning platforms. Encourage all colleagues to learn independently without worrying about the epidemic. 1. TaiwanLIFE 2. www.smelearning.org.tw 3. portal.wda.gov.tw 4. TaiwanJobs 5. Hahow 6. YOTTA 7. dada-master.com (enrollment courses)	All employees	External independent study with 39 participants and 280.5 learning hours.	External independent study with 844 participants and 3545.8 learning hours.
Happy Learning Network - eLearning platform	In-company learning platform. In addition to online learning module courses, there are also functions such as training records, course-related notifications, and external training applications.	All employees	In 2021, the number of learning hours is 18,924.5, with 544 employees and 34.79 learning hours per person.	In 2022, the number of learning hours is 25,855, with 648 employees and 39.9 learning hours per person.



Connect to the World, Online Language Learning Resources

With the goal of international development, PHIHONG encourages its employees to enrich their foreign language skills and invites professional language training institutions to our company every year to conduct language learning classes. In recent years, in response to the epidemic, we have promoted the use of digital learning as the main method of self-learning through the Internet without any time limit. This not only increases the flexibility of learning for our employees, but also ensures a safe social distance. In addition, we provide subsidies for language training tuition and foreign language certification fees. Moreover, we set up language certification standards for different levels according to job categories. Those who pass the certification standards will receive administrative incentives based on the results to encourage employees to continuously improve their language skills and enhance their competitive edge in the workplace, thereby expanding their horizons and career development.



Item/Year	2020	2021	2022
Languages	Online English	Online English	Online English
Participants	40	50	67
Invest in funds	\$192,000	\$240,000	\$301,500

PHIHONG Reading Club - Team Reading

To create the atmosphere of a learning organization and establish an active learning culture, the "PHIHONG Reading Club" was established in 2020 under the leadership of the CEO, Mr Lin Yang-hong, and is vigorously promoted from top to bottom in person. We believe that by reading a book together, we can build a consensus among the team and explore the possibility of putting it into practice within the company by starting from the theory of the book. By the end of 2022, we have held 28 book reading gatherings with 731 participants. During the epidemic, we also used internal communication software to share, discuss, and interact online. Through the use of the digital environment, the book club can be held without restriction. The PHIHONG Book Club breaks the traditional one-way information transmission format of the book club and emphasizes multi-way interaction and communication. It provides a space for dialogue and stimulates diversified thinking, allowing members to learn from each other and to respect and tolerate each other. In addition to enhancing internal interpersonal interaction and achieving a virtuous cycle, the process of reading together cultivates colleagues' ability to listen and think. This stimulates each member's potential. In addition, we have established the information platform of PHIHONG Reading Association. Through the promotion of virtual and real integration of the platform, we create a knowledge service platform for lifelong learning.



Industry-Academia Collaboration, Campus Engagement

COVID rages, but PHIHONG saw the opportunity for change. In the face of the severe global epidemic, PHIHONG has not given up on cultivating talents on campus and providing students with quality internship opportunities. We believe that cultivating new seeds on campus can help the power supply industry grow sustainably, so we actively provide college and university students with the opportunity to validate the theories they have learned and work in the industry.

In 2021, together with the two tertiary institutions, we assisted 16 students to complete the internship program by the end of 2022.. From classroom learning taught by senior managers to hands-on experience in technical units, we aligned the professional needs of industry and academia. Through hands-on experience, students learnt about the development and manufacture of advanced technologies. Video teaching is also used during the epidemic so that learning will not be interrupted. The internship program is designed to cover 5 major components: get to know PHIHONG, in-depth learning of and build power supply design concept, build basic prototyping skills, establish a power supply design proof of concept, and learn the project documentation system.

The 5 stages of the course are compact. There was online teaching feedback with the instructors at each stage. We hope that through the complete professional internship, students can fully understand and experience the job content. So, students are prepared for work after graduation, and will be able to make effective use of what they have learnt to achieve a better work performance!



Performance Appraisal

Phihong holds the group annual meeting regularly every year to set the direction and goals of the operation strategy and implement the performance management system. Using the performance management system, employees set performance goals at the beginning of the year and discuss with their immediate supervisors whether the goals are in line with the organization's strategy. At mid-year and year-end, goals are regularly reviewed and evaluated for achievement. Through real-time interactive feedback from employees and supervisors, we provide coaching, encouragement and career consultation to help employees achieve their desired goals by objectively and truly controlling their work results.

Through regular evaluation of employees' contributions and abilities, which is an important basis for employee training and career development and linking the evaluation results to career planning such as promotion and job adjustment, we can make employees fit for the right position and achieve sustainable development. We also incorporate the performance appraisal process into daily work management. From the establishment and confirmation of the goals at the beginning of the year, the maintenance of the progress of the goals in the middle of the year, and the performance evaluation at the end of the year. Carry out key promotion and effective control according to each schedule to achieve the purpose and maximum effectiveness of performance appraisal.

Performance-linked rewards System

PHIHONG divides the appraisal into "probationary appraisal, mid-year appraisal and year-end appraisal". The probationary appraisal is mainly based on the learning situation and work performance of the new employees within 3 months of their arrival; the mid-year appraisal is for all employees to review the achievement of annual goals at the stage and to confirm whether the goals and tasks need to be adjusted; and the year-end appraisal is for the regular employees at the time to evaluate the annual goals of the regular employees. The year-end appraisal is conducted by the regular employees at that time to evaluate the achievement of the annual target. The results of the performance appraisal are linked to the bonus, which will be distributed in a reasonable and fair manner. This motivates employees to work hard as a team, improves employee productivity and to create good results, makes the performance management system more perfect, and thus increases the competitiveness of the company. In the annual settlement, when the company has a profit, the year-end bonus, employee bonus or stock will be paid to the current year's employees in accordance with the regulations of the company's bonuses, to motivate and retain outstanding employees.

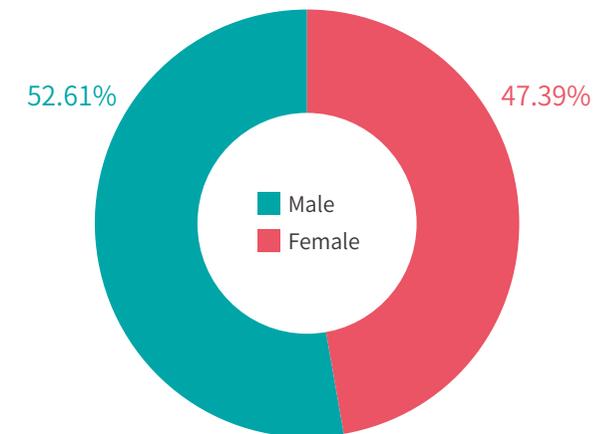
Performance Appraisal Process:

1. Target management: set Targets → supervisor confirmation
2. Inspect and review: Inspect targets → Review progress
3. Year-end appraisal: Mid-year appraisal → Year-end appraisal

Number & Ratio of employees' year-end performance evaluation in 2022

Factory	PHIHONG Taiwan				PHIHONG Dongguang				PHIHONG Haiphong			
	Male		Female		Male		Female		Male		Female	
Staff rank	Persons	Ratio	Persons	Ratio	Persons	Ratio	Persons	Ratio	Persons	Ratio	Persons	Ratio
Number & Ratio of Men and Women												
Manager (division level and above)	111	64.9%	45	26.3%	64	69.6%	28	30.4%	0	0%	2	8.7%
General employee	221	46.3%	211	44.2%	673	34.0%	596	30.1%	551	41.6%	759	57.3%
Total	332	51.2%	256	39.5%	737	35.6%	624	30.1%	551	40.9%	761	56.5%

Ratio of Male & Female Employees in 2022 Annual Performance Assessment at PHIHONG Group



Remuneration and Benefits

Remuneration Policy

- **Pay in accordance with ability:**
Salary is approved according to employee's duty fitness and in accordance with local laws and regulations.
- **Fairness and Reasonableness:**
The salary is paid based on the principle of fairness within the company and take into account the market salary.
- **Annual salary adjustment:**
The salary is adjusted based on the company's operational performance, current year's price index, employee performance, etc.
- **Rewards from operations:**
Each year, according to the overall business achievement rate, growth rate, and personal performance of the previous year, project bonuses, bonuses, year-end bonuses, etc. of the year are distributed to reward employees for their contributions and motivate employees to continue to work hard.

PHIHONG always upholds the philosophy that "the key to business success is to have good people". We offer competitive salaries that are better than the local base salary in order to attract, motivate and retain talented people and ensure the competitiveness of the organization and the sustainable development of the company. In 2022, the minimum salary of our indirect employees in PHIHONG Taiwan increased to 1.1 times the local basic wage compared to the previous year. All direct employees of PHIHONG Dongguan and PHIHONG Haiphong are hired at a salary level in line with the local basic wage.

Operating Entity	Median Ratio	Ratio of Median Increase
Phihong Taiwan	16.76: 1	5.73: 1

Note 1: Median ratio = ratio of annual total salary of the highest paid individual / median annual total salary of other employees.

Note 2: Ratio of median increase = Ratio of increase in annual total salary of the highest paid individual / Ratio of increase in annual total median salary of all employees (excluding the highest paid individual).

Note 3: The statistical scope does not include the subsidiary "ZENOVA Technology", which was spun off in September 2022.

Remuneration Incentive to Stay

In 2022, despite the impact of severe global supply chain shortages, Phihong's overall revenue still showed positive profit growth compared to 2021. Thus we continue to prioritize the well-being of our employees and care them. In 2022, we provide various career development opportunities. In addition, we adopt an open and transparent promotion mechanism to actively promote talents with good performance and development potential, and give them higher responsibilities and remuneration to drive the overall positive development of the organization. We also review and adjust the salaries of all employees, taking into account market salary levels and inflationary factors. In 2022, in order to effectively retain outstanding key personnel, we have planned for employee stock ownership benefits, and 100% of the stock ownership funds will be deposited into employees' personal accounts. In 2022, the average salary increase in Phihong Taiwan was as high as 7.46%. We hope to attract more talented people to join Phihong, and to retain and motivate our outstanding employees.

To implement and strengthen the corporate social responsibility, PHIHONG Taiwan regularly reviews the salary level and provides employees with motivating salary compensation. Every year, we appoint a certified public accountant to conduct a certification audit of the information related to "compensation for non-supervisory employees" in order to disclose compensation information in a fair, transparent, accurate and complete manner. The average annual salary of non-supervisory employees has increased slightly since 2018, and increased by 2.1% in 2022 compared to 2018. This shows that PHIHONG values and cares for our employees. In 2022, the statistical analysis of "Additional Disclosure Information" is listed on the right.

2020-2022 Taiwan Phihong additional disclosure information

Item	2020	2021	2022	Unit: 1000 NTD
				Vs. last year
Non-supervisory employees (persons)	481	517	369	↓28.63%
Non-supervisory employees (total salary)	411,038	451,204	339,138	↓24.84%
Non-supervisory employees (average annual salary)	855	873	919	↑5.27%
Non-supervisory employees (median annual salary)	744	744	794	↑6.72%

Note: Supervisory position means the manager (vice president level or above) as stipulated in the letter No. 920001301 of Securities and Futures Commission, Ministry of Finance, Taiwan No. 3 dated March 27, 2003.

Gender Equality and Fair Pay

The salaries of all employees at PHIHONG do not differ based on gender, age, education, nationality, political affiliation, etc. The base salary ratio is 1 for both male and female employees of the same position and grade. The salary level is paid in accordance with the salary adjustment and annual promotion. Taiwan PHIHONG is a R&D center; the total number of male Professional R&D and management employees is higher than that of female. Therefore, the ratio of base salary and base compensation for male employees are higher than that of female. The ratio of base salary for non-supervisory female employees to male employees has been decreasing year by year. In 2022, the base salary ratio of Female management positions decreased by up to 9.38% compared to Male management positions in 2021. This shows the fair and positive positioning of the overall remuneration policy.

PHIHONG Taiwan Female to Male Base Salary Ratio

Duties \ Year	2020		2021		2022	
	Female	Male	Female	Male	Female	Male
Middle/Senior Manager	1	1.20	1	1.26	1	1.41
Others	1	1.14	1	1.13	1	1.13

PHIHONG Taiwan Female to Male Base Remuneration Ratio

Duties \ Year	2020		2021		2022	
	Female	Male	Female	Male	Female	Male
Middle/Senior Manager	1	1.20	1	1.28	1	1.16
Others	1	1.08	1	1.13	1	1.14

PHIHONG Dongguan Female to Male Base Salary Ratio

Duties \ Year	2020		2021		2022	
	Female	Male	Female	Male	Female	Male
Middle/Senior Manager	1	1.21	1	1.06	1	1.35
Others	1	0.99	1	0.97	1	0.98

PHIHONG Dongguan Female to Male Base Remuneration Ratio

Duties \ Year	2020		2021		2022	
	Female	Male	Female	Male	Female	Male
Middle/Senior Manager	1	1.14	1	1.06	1	1.4
Others	1	0.97	1	0.98	1	0.99

PHIHONG Haiphong Female to Male Base Salary Ratio

Duties \ Year	2020		2021		2022	
	Female	Male	Female	Male	Female	Male
Middle/Senior Manager	1	NA	1	NA	1	NA
Others	1	1.05	1	1.05	1	1.08

PHIHONG Haiphong Female to Male Base Remuneration Ratio

Duties \ Year	2020		2021		2022	
	Female	Male	Female	Male	Female	Male
Middle/Senior Manager	1	NA	1	NA	1	NA
Others	1	0.95	1	1	1	1.03

6.2 Employee Care and Support

Material topic: Employee care and concern (GRI 401: 2016 Employment Relations)



Policy and Commitment

- Advocate glory sharing. Enterprise operating performance results come from every employee and should be shared with them.
- Protect the rights and interests of employees, optimize the working environment, strengthen the solidarity of employees, and solve the demands of employees to achieve a win-win situation for employer and employees.



Management approach

- Based on the company's objectives and compensation policy, we evaluate internal and external salaries and provide employees with competitive compensation and benefits.
- Pay to ability: Salary is approved according to the degree of employee's function.
- Annual salary adjustment: Based on the company's operation status and employee's performance.
- Operation feedback: The overall business achievement rate and growth rate of the previous year are used to determine the payment of project bonuses, bonuses, and year-end bonuses for the current year. We comply with labor laws and regulations and follow employee guidelines to provide a friendly workplace and implement human rights protection.



Evaluation System

- Internal Audit. Labor-management meeting system
- Employee satisfaction and dedication survey, New employee care questionnaire



Responsible parties

Human resources department



Year performance highlights

- Won the Gold Award of the 2022 Happy Company voted by the Job Bank for the third time.
- Phihong held the 50th Anniversary Sports Day & Family Day for the first time in combination with Family Day
- Employee engagement in 2022 hit a record high, with both engagement and satisfaction scoring 4.59



Corresponding SDGs



Target Setting

2022 Target

Create a friendly workplace, a company where employees feel happy and a sense of belonging.

Achieved Performance

Received the 1111 Human Resources Bank Gold Award for Happy Company.

Future target

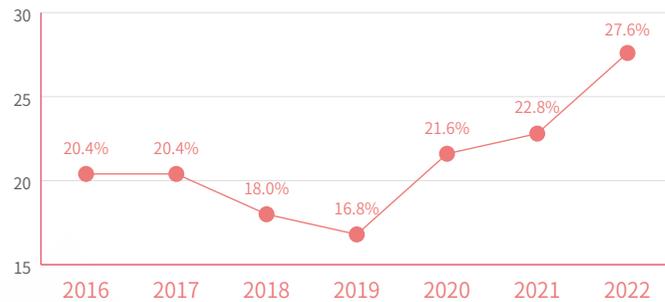
- Short Term (2023-2024)
 - » Create a friendly workplace, a company where employees feel happy and a sense of belonging.
 - » Continue to pay attention to local labor laws and regulations, optimize the employment environment, and create a multi-smooth labor-management exchange platform.
- Mid-Long Term (2025-2030)
 - » Create a friendly workplace, a company where employees feel happy and a sense of belonging.
 - » Optimize the salary system and take into account the concept of "equal pay for equal work, pay according to ability"

We care and value every new employee who joins PHIHONG. In addition to the training provided by the HR unit on the first day of employment and the 3-month professional training provided by their respective units, each new employee also has a dedicated mentor to provide assistance in work and life. Through the companionship and care of our mentors, we provide assistance in work and daily life, and help the new hires to understand the basic needs of work, including meals, commuting, company facilities and related employee welfare regulations. We hope our employees can quickly understand and adapt to PHIHONG's workplace and corporate culture in a unique environment.

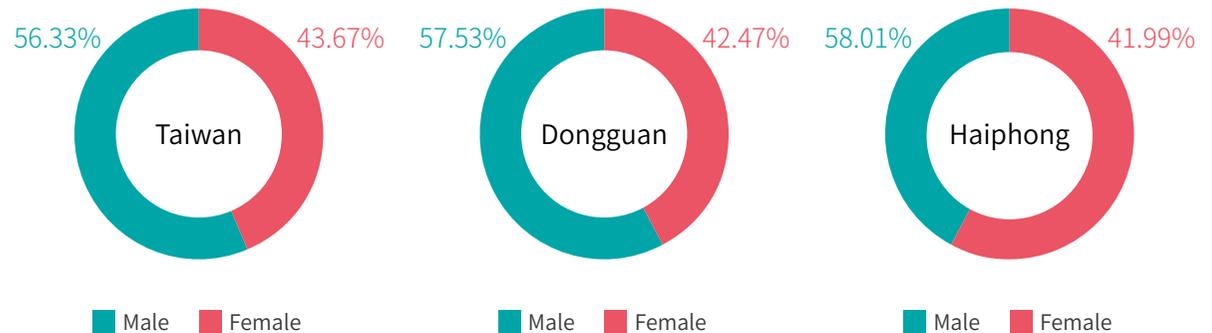
To implement the positive attitude of all-round care and concern for all employees, when employees apply for resignation, PHIHONG's human resources department tries to understand the problems the employee encountered at work through one-on-one interviews, helps them overcome their difficulties. Furthermore, work adjustments are coordinated. We proactively and diligently eliminate the main factors for employees to resign to reduce the resignation rate. In 2022, the average resignation rate increased to 27.6% due to the continued impact of the epidemic on operations. This is an issue of our continuous concern in 2023.



Phihong Taiwan's annual average resignation rate

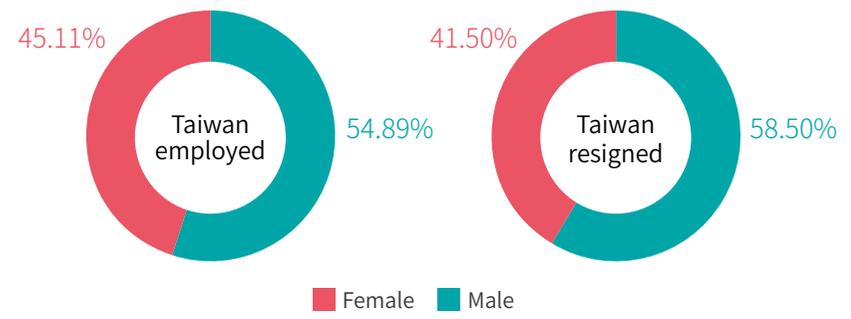


Gender ratio of Phihong's workforce in 2022

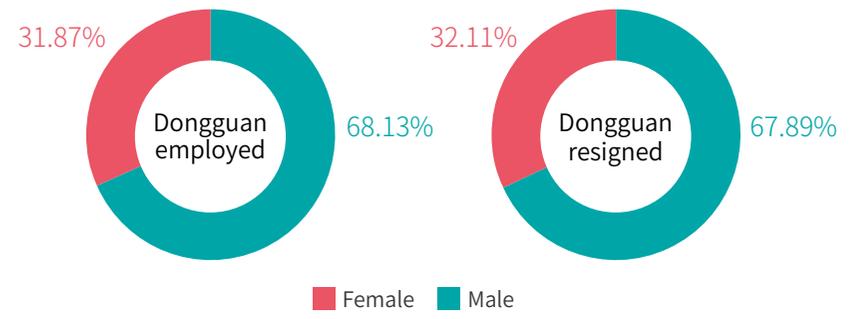


Note: The formula for calculating the average resignation rate is the current year (resignation + number of retained) / monthly average number of people.

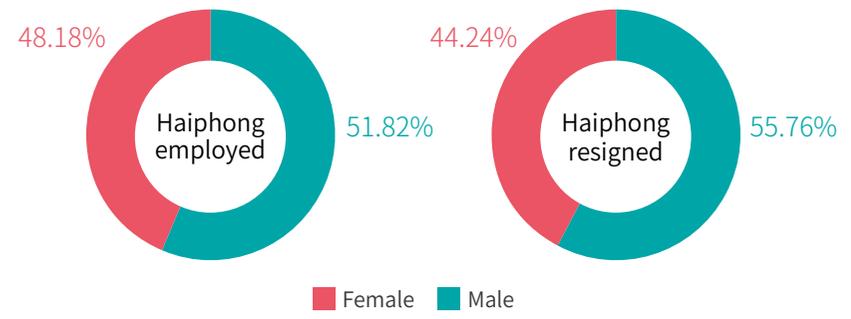
2022 Employment & Resignation Staff Structure – Male to Female Ratio



Note: Taiwan employed 146 males and 120 females; 86 males and 61 females resigned.

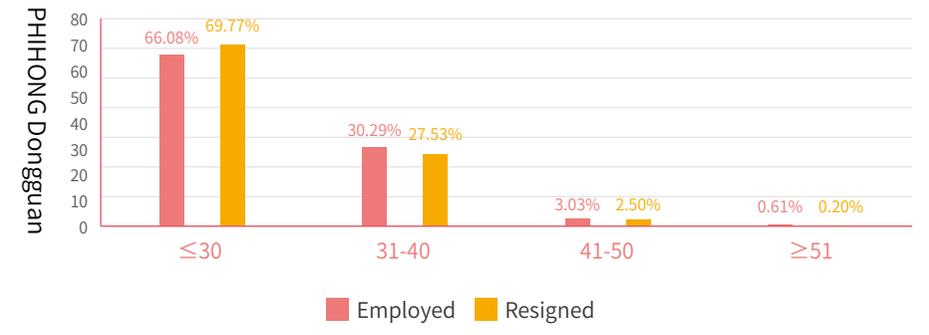


Note: Dongguan hired 5,033 males and 2,354 females; males 6,649 and females 3,145 resigned.



Note: Haiphong employed 941 males and 875 females; 557 males and 442 females resigned.

2022 Employed and Resigned Employee Structure - Age Ratio



Note 1: Calculation of each age group and ratio of men and women = number of men and women of each age/total number of employment (resignation) * 100%; the main reason for the high resignation ratio of factory-side employees is due to high demand in the labor market.
 Note 2: Phihong Taiwan has a total of 266 employees and 147 resignations; Phihong Dongguan has a total of 7,387 employees and 9,794 resignations; Phihong Haiphong has a total of 1,816 employees and 999 resignations

Termination Notice Period

PHIHONG Taiwan complies with the relevant provisions of the Labor Standards Law, which stipulates that an employee must submit an application for termination of employment within the notice period. The application procedures and processes are clearly defined and announced in the employee code of conduct to protect the rights and obligations of both parties. In accordance with the provisions of the Labor Standards Law, both employers and employees shall abide by the following notification regulations:

1. Those who continue to work for more than 3 months but less than 1 year shall be notified 10 days in advance.
2. Those who continue to work for more than 1 year, but less than 3 years will be notified 20 days in advance.
3. Those who continue to work for more than 3 years shall give notice 30 days in advance.

In accordance with the Labor Contract Law in Mainland China, PHIHONG Dongguan signs a labor contract on the day the employee arrives at work and specifies the notice period for termination in the labor contract and employee handbook: the employee should give 30 days' written notice of termination and 3 days' notice during the probationary period. In accordance with Vietnam's labor law, PHIHONG Haiphong signs a labor contract on the day the employee arrives and gives 45 days' notice to the employer of the employee's termination, and 3 days' notice during the probationary period. In the event of a significant change in the Company's operations, the Company will provide at least one month's advance notice to employees and related personnel.

PHIHONG' s contribution to pension as a percentage of salary

Location	Retirement Scheme	Contributor	% of salary
PHIHONG Taiwan	Old system: Company pension account	Employer	2%
	New system: Employee pension account	Employer	6%
		Employee	0-6%
PHIHONG Dongguan	Pension insurance: Employee pension account	Employer	13%
		Employee	8%
PHIHONG Haiphong	Social Insurance: Employee Pension Account	Employer	17.5%
		Employee	8%

Retirement and pension, PHIHONG cares

PHIHONG Taiwan handles employee retirement in accordance with the Labor Standards Law and the Labor Pension Act. The human resources department also regularly reviews the list of employees who have reached retirement age and understands their retirement preference in advance each year, so as to provide advice to employees on their career planning. PHIHONG Taiwan has established a Labor Retirement Fund Supervisory Committee to handle labor retirement applications and benefit standards. Employees who arrived at work before June 30, 2005 (inclusive) are entitled to the old system pension according to seniority. The old-system pension is paid at 2% of each employee's monthly salary to the Bank of Taiwan's retirement reserve account. An actuarial report is submitted by the actuary at the end of each year to ensure that the pension fund is fully funded to protect employees' rights and benefits. The total amount of pension contributions in 2022 is NT\$52,457,327. While an employee who is entitled to the new pension system contribute 6% of the monthly salary as pension to the employee's account, and the employee can voluntarily contribute an addition 0-6% of the monthly salary to the personal pension account. This allows employees to apply for personal pensions when they meet the retirement requirements, which protects the rights and interests of employees.

In accordance with local laws and regulations, PHIHONG's other operating locations have established retirement systems to provide retirement benefits for employees. In accordance with local laws and regulations, PHIHONG Dongguan insures employees with pension insurance and contributes the full amount; Phihong Haiphong's employees participate in social insurance so that they can enjoy peace of mind after retirement. Our human resources department regularly reviews the list of employees who are eligible for retirement and understands their retirement preference in advance so as to counsel them on career planning.

Awarded Happy Company for the third time

In 2022, Phihong won the "Happiest Employees" company in the eyes of office workers for the third time, and received the gold award! We believe that the key to corporate sustainability comes from the happiness of our employees. Therefore, we have always cherished, valued and treated our employees well, providing a safe, comfortable and friendly working environment. The company has set up the Phihong Art Corridor, which changes its theme every two months, so that employees can cultivate their temperament through the display of art and humanities while working. In the office environment, we provide green plants, installation art, gymnasium, basketball room and multi-functional creative space to increase the leisure and interactive space for employees while working, which enhances their happiness and productivity.

Thoughtful Benefits in PHIHONG

PHIHONG provides a number of welfare systems above the statutory requirements. In addition to the social insurance, medical insurance, and vacation system, we have established the Employee Welfare Committee (Welfare Committee) in accordance with the Employee Welfare Act, based on the principle of taking care of our employees and sharing profits. Based on the monthly revenue, we allocate a fixed amount of funds for various welfare measures, club activities, parent-child days, and competitions. In addition to basic wedding and funeral subsidies, emergency relief, and childbirth subsidies, we also provide cash-gifts for major festivals such as May Day, Dragon Boat Festival, Mid-Autumn Festival, and the Chinese New Year. In recent years, due to the impact of COVID-19, we have suspended some club and gathering activities. In the future, we will adjust and hold various activities depending on the epidemic situation to ensure employee safety and work balance.

Festival Subsidies (PHIHONG Taiwan)

The company never misses any of the employees' life events. In addition to the subsidies provided by the Welfare Committee, PHIHONG also provides a gift of \$12,000 for each employee's wedding, \$10,000 for a funeral, a childbirth subsidy for the birth of a child, and a condolence payment in case of injury or illness. PHIHONG is always ready to give support to employees when they need it as a token of our appreciation.

Paid Birthday Leave

In recent years, due to the impact of COVID and to avoid group gatherings, PHIHONG Taiwan's monthly birthday celebration Party is suspended. However, we allow each employee to take a day off to celebrate with family and friends in the month of their birthday to enhance the interaction of family life. The welfare committee also gives birthday red packets to employees, adding warmth and happiness to PHIHONG's workplace. The Dongguan plant also provides delicious birthday cakes gifts to the birthday kids as the company's birthday wishes.

In addition, we provide funds for socializing, and provide departmental teams to hold dinners and social events from time to time in the hope of building internal cohesion and increasing interactions among colleagues.

Travel subsidies (PHIHONG Taiwan)

To allow employees to travel with their families and enjoy leisure and happy family time, the welfare committee arranges, plans, and fully subsidizes domestic day-trips. In recent years, due to the impact of COVID, domestic travel activities have been suspended. However, the welfare committee still provides travel subsidies to allow employees to freely and flexibly arrange domestic and overseas travel itineraries, so that they can relax and balance their minds and bodies besides working.

Phihongg Taiwan 2022 Welfare Committee Activity Subsidies Statistics

Unit: NTD

Item	Applicable amount	Total Number of Subsidies	Total amount granted
Wedding & Funeral	1,500-2,100	27	43,900
Birthday Bonus	200-1,400	465	634,200
Childbirth gift	2,000	10	22,000
Injury/hospital condolences	2,000	1	2,000
Employee Travel - Allowance Subsidy	2000-5000	410	1,942,620
Employee domestic travel activities	4,000-8,000	459	3,497,670
New year festival cash	1,000-2,000	510	936,350
Dragon Boat festival cash	1,000-2,000	481	906,000
Mid-Autumn festival cash	1,100-2,000	0	-
Year-End party Lucky Draw	2000	185	370,000

Beitou Spring Hotel Offer

Beitou Spring Hotel is an affiliate of PHIHONG and offers various exclusive discounts for PHIHONG employees: New Year's Day special discount (New Year's dinner group purchase, set tickets) / wedding banquet special discount for family and friends / 20% discount and free service charge for staff meals / discounts for using other related facilities.



Diversified Clubs

Phihong has established various arts and sports clubs in its domestic and overseas plants. We have also obtained subsidies from the Welfare Committee for various clubs, to promote the social circle of our employees and cultivate their interests, as well as to encourage them to cultivate their temperament and balance their work life through the organization of leisure clubs while they are working.

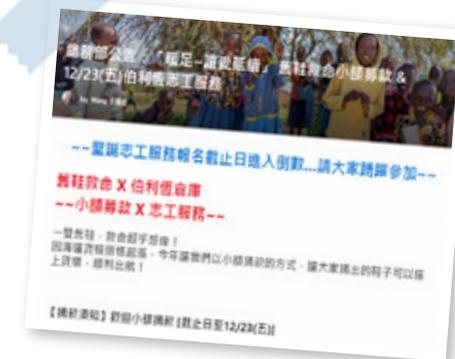


Double care for expatriates

To provide peace of mind for our staff on assignment, in addition to providing comprehensive group insurance and 24-hour overseas medical services, PHIHONG has also drafted the "Regulations for the Management of Expatriate Employees", which provides for various subsidies such as housing-rental, transportation, home visits and bringing family members.

Christmas season - Sending warmth with old shoes

In 2022, PHIHONG held a "Shoe Box for Love, Love in Christmas" charity event. We sent our employees' love materials and donations to the "Bethlehem Warehouse of Step30 International Ministries" to let people feel the overflowing warmth. On Christmas Day, Welfare Committee staff went to each unit of the company to deliver Christmas gifts and treats to celebrate the joy of Christmas with all employees, so that everyone can welcome the arrival of Christmas happily!



Year-end party. Have fun together

To thank our colleagues for their hard work and dedication in the year, even PHIHONG cancelled the arrangement of the annual table gathering during the epidemic, sufficient funds are allocated to plan and prepare a lot of fun activities, rich prizes and delicious refreshments in the afternoon of Christmas, so that every colleague could leave unforgettable and beautiful memories in the annual party at the end of the year.



Senior Role Model, R&D Patent. Memorial Recognition (PHIHONG Taiwan)

For nearly 50 years in Taiwan, we have made a commemorative gold coin for each senior employee who has worked for 5 years at PHIHONG in the year-end party to thank and recognize their hard work and dedication to the company. For excellent employees with outstanding performance in the year, we conduct an all-employee selection campaign. Everyone can vote for their “excellent employee representative” in an open election. At the end of the year, we reveal the winners of the awards, so that the excellent employee representatives can receive recognition from all employees and high bonuses, special vacations, and medals as encouragement. In addition, we are very appreciative of our R&D staff’s dedication to new technology and new product development and creation. Our CEO presented awards to employees who were awarded R&D innovations and patents in 2022 at the Year-End party, expressing the Company’s recognition and encouragement for their innovative ideas and technological advancement.



PHIHONG with Love. Accessible Environment

We welcome people with physical and mental disabilities to join the PHIHONG family. The Company provides and employs people with physical and mental disabilities with long-term and stable employment opportunities. PHIHONG Taiwan is equipped with barrier-free ramps at all entrances and interior floors, as well as multiple elevators for wheelchair access in the buildings. Moreover, we value the diversity of our employees and the culture of each ethnic group, and adopt fairness in the employment of all employees, especially those from disadvantaged groups. Every year, PHIHONG Taiwan employs more people with physical and mental disabilities than the legal quota of the “People with Disabilities Rights Protection Act”. We receive quarterly incentive payments for the extra hires. The Dongguan plants & Haiphong plant also employed individuals with disabilities.

PHIHONG Accessible Space



PHIHONG Taiwan hiring persons with physical or mental disabilities



Enhanced Facilities for Recreation and Enjoyment

There are gymnasiums, billiard rooms, basketball rooms, showers, libraries, and employee lounges in the PHIHONG plants. However, due to the epidemic, facilities are closed to reduce social contacts to ensure the health and safety of employees. Female breastfeeding rooms has a user-registration system, and cleaners are repeatedly asked to clean and disinfect the rooms. The staff cafeteria offers a variety of meal choices, such as buffets, noodle areas, simple meals, vegetarian meals, coffee machines, and beverage and food vending machines, etc. During the epidemic, meal boxes are distributed with quota meal sessions to maintain hygiene and safety.



Food, Clothing, Housing and Transportation. Factory-stationed Service

Although the epidemic has slowed down slightly in 2022, the PHIHONG Epidemic Prevention Team still prioritizes the protection of the health and safety of all staff and the elimination of the possibility of foreign infection. Foreign visitors are still strictly controlled. The original planning and arrangement of factory services, including festive food, group insurance, banks, travel agencies, merchandise sales, exhibition coupons, book fairs, etc., have all been suspended.

Parenting Care. Breastfeeding Support

To care for our mother colleagues, and to support and encourage breastfeeding, the company has set up a bright, spacious, safe, and comfortable breastfeeding room in the factory. A special refrigerator is equipped to ensure the hygiene of breast milk storage, so that mother colleagues can use it with peace of mind and confidence. Also, to relieve the burden of our employees, we have negotiated with the nearby childcare educational institutions to provide exclusive offers and more support to our employees, so that they can work with a piece of mind without worrying about childcare.

Parental Leave

In accordance with the "Gender Equality Act", PHIHONG has established the "Management Procedures for unpaid parental leave". Employees, regardless of gender, can apply for unpaid leave for up to 2 years before their children reach the age of 3, depending on their needs. In addition, we will assist our employees to return to their original units and duties when they apply for reinstatement after the leave, so that employees with childcare needs can take care of both family and work.

Work-life balance

PHIHONG also follows the regulations of the Gender Equality Act and promotes work-life balance by providing employees with statutory leave such as maternity leave, paternity leave, menstrual leave, COVID unpaid family care leave, family care leave, and tocolysis leave for pregnant women to help employees achieve a balance between work and family life.

PHIHONG Taiwan Gender ratio of Leave application related to Gender Equality Act

Item	Gender	2020	2021	2022
Maternity leave / persons	Female	80	68	43
Paternity (examination) leave / persons	Male	46	39	54
Menstrual leave/days	Female	150	104	88
Family care leave/days	Male	26	35	22
	Female	29	17	20

PHIHONG Taiwan Gender ratio of applications for parental leave

Item	Gender	2020	2021	2022
Number of people eligible to apply for parental leave in the current year	Male	28	24	18
	Female	27	23	20
	Total	55	47	38
Actual number of applicants for parental leave in the year	Male	0	0	1
	Female	7	5	5
	Total	7	5	6
The number of people who are expected to return to work in the current year on parental leave (A)	Male	0	0	0
	Female	4	4	7
	Total	4	4	7
The number of people returning to work in the current year of parental leave (B)	Male	0	0	0
	Female	4	2	4
	Total	4	2	4
Reinstatement rate (B/A)	Male	NA	NA	NA
	Female	100%	50%	57%
	Total			
The actual number of people returning to work on parental leave in the previous year (C)	Male	0	0	0
	Female	1	4	2
	Total	1	4	2
The number of people who continued to work for one year after returning to work after parental leave in the previous year (D)	Male	0	0	0
	Female	1	3	2
	Total	1	3	2
Retention rate (D/C)	Male	NA	NA	NA
	Female	100%	75%	100%
	Total			

Note 1: Retention rate = the number of people who have worked for more than one year after returning to work from parental leave / the actual number of people who returned to work in the previous year.

Note 2: Number of people applying for parental leave: the number of people who are still in the period of parental leave.

Note 3: The number of people eligible to apply for parental leave in the current year: the number of employees applying for maternity leave and paternity leave.

50th Anniversary Sports Day & Family Day

2022 marks the 50th anniversary of the Phihong Group. At the end of 2022, the "Phihong Group 50th Anniversary Sports Day & Family Day & ZENOVA Launch" was held at the Lin Kou Sports Complex. All staff members, families and children were invited to join the event. During the event, there were various fun competitions for the staff and athletes to compete for the glory. There was also a parent-child play area around the games area, where children and adults alike could have fun. Outside of the games, a variety of delicious food trucks were set up to serve delicious, freshly made food to keep families and children happy and entertained. Special invitations were extended to the Taoyuan Ruth Society For Disability Services, the Taipei Kanner Foundation of Taiwan (Autism Foundation) and the Visually Impaired Massage Centre to join the Phihong 50th Anniversary event.

It is the first time for Phihong Taiwan to hold a Sports Day in conjunction with Family Day. We not only hope to allow employees and their families to enjoy the wonderful parent-child time, but also to demonstrate the philosophy of "Inheritance, Innovation, and Sustainability" of Phihong Group, and to unite the solidarity of employees. Moreover, we also don't forget to take care of employees' families and give back to the society. We hope that everyone will work together to create the next 50 years.



Employee Satisfaction & Engagement Survey

PHIHONG values every employee's feedback to the company. Every year, we conduct a survey on the job satisfaction of new and all regular employees and collect opinions from employees in quarterly labor meetings. After analyzing and compiling the opinions, we pass the results to the relevant units for evaluation and response to create a friendly workplace, develop a competitive system, and improve company benefits so that both the company and employees can grow together. Moreover, important matters and promotional content will be announced to employees in real time through announcements. So that every employee can understand the company's latest policies immediately and accurately, in order to achieve the purpose of common good.

Objectives of the Satisfaction Survey

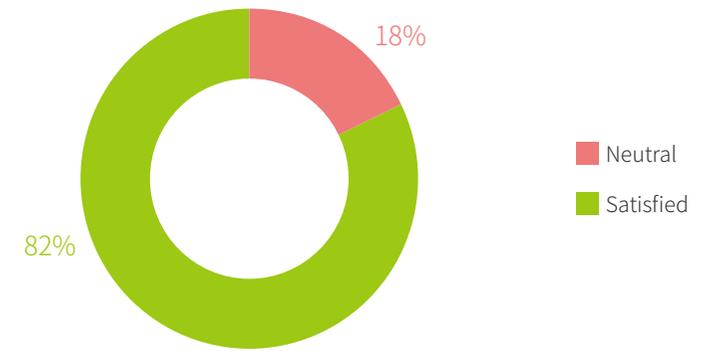
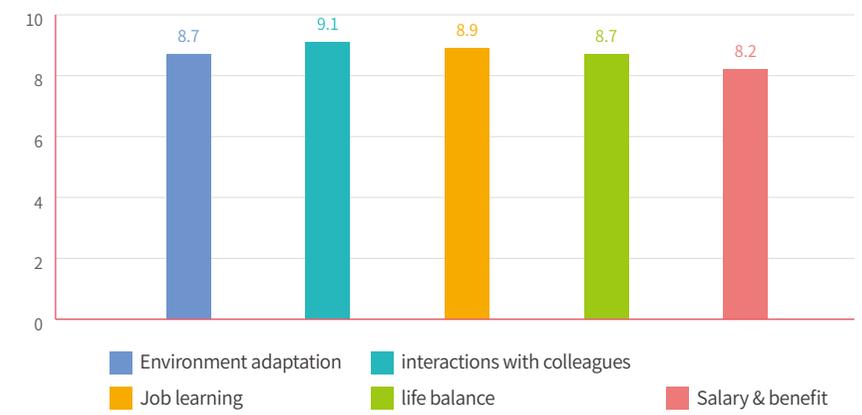
- Proactive care: to give employees a sense of participation and existence
- Expression of goodwill: employees can clearly feel the company's goodwill
- Two-way communication: let employees understand that the company is willing to listen to employees' voices
- Immediate handling: to let employees feel the company's determination to keep building a friendly environment
- Raise satisfaction: to make employees satisfied, so that they can work with peace of mind and enjoy their work

New Employee Satisfaction Survey (PHIHONG Taiwan)

PHIHONG arranges a dedicated tutor for each new employee, to enhance the new employee's sense of security, belongingness and stability. The tutor can provide appropriate guidance and assistance to the newcomers in terms of food, clothing, housing, transportation and any work-related needs and problems in the company. The HR unit arranges a one-on-one interview with the new employee when he/she reaches 3 months of employment to understand his/her adaptation to the work and environment, so as to help the company to keep up with the times in recruiting outstanding talents.

- Survey target: Employees who are hired after the probation period
- Survey period: Jan-Dec 2022
- Questionnaire completion rate: 100%
- No. of valid questionnaires: 129
- Full score: 10

2022 Results of New Employee Satisfaction Survey



Employee Satisfaction and Engagement Survey (PHIHONG Taiwan)

PHIHONG conducts regular surveys on the 6 major aspects of employee satisfaction and engagement during their employment through a professional employee satisfaction survey platform every year. By combining data analysis and statistics from the professional platform with the feedback and suggestions from the employees, we can better understand the needs of our employees and continue to create a better working environment and effectively enhance the satisfaction level of our employees and their sense of identification with the company. The 6 aspects of the employee satisfaction survey cover supervisors, colleagues, work, salary, development and corporate culture. In 2022, the average scores of all 6 aspects are improved compared with 2021. The overall satisfaction reaches 4.59 points, an increase of 0.02 points from last year, an increase of 1.77%. The engagement survey focuses on employees' commitment to value, hard work, and stay in the job in the company. In 2022, the employee engagement hit a record high, and the overall satisfaction score was 4.59. For items with low satisfaction scores in various aspects, feedback from colleagues is collected. Through the labor-management meeting, the representatives inspected the items one by one, discussed, communicated, and defined the responsible units. After the meeting, the relevant units were individually notified to formulate follow-up improvement measures and action plans.

- Survey target: All regular employees
- Survey period: Nov 2022
- Questionnaire completion rate: 86%
- No. of valid questionnaires: 438
- Full score: 6



Labor-Management Relations

Communication Channels

PHIHONG places foremost importance on humanized and flexible management and flat organization. To establish a harmonious relationship between the company and employees, PHIHONG has set up multiple communication channels for employees to maintain a smooth two-way communication, so as to listen and respond to employees' voices. In addition to the daily communication channels, we have established a comprehensive communication platform through regular departmental meetings, labor-management meetings, e-platform, employee grievance channels and satisfaction surveys, to make communication faster and more efficient. Also, company policies can also be communicated in a timely, correct, and effective manner. By constantly listening to employees' voices, we can optimize the working environment, strengthen employees' loyalty, and resolve employees' demands to achieve continuous improvement and a win-win situation for both employers and employees, thus laying the foundation for good employee relations.

From satisfaction surveys to feedback collection, through our professional and user-friendly online questionnaire design, colleagues are able to give immediate and comprehensive feedback, so that we may understand important internal issues, as well as colleagues' dedication to the company, etc. The effective response rate of the 2022 questionnaire is 93%, which is enough to show the participation of colleagues and the effectiveness of opinion collection.

Communication Channel	Board of Directors / Management	Managers at all levels	Human Resources Department	Employee Grievance System
<ul style="list-style-type: none"> • Communication methods 	<ul style="list-style-type: none"> • Senior Management Meeting 	<ul style="list-style-type: none"> • Internal notices • Email • Interdepartmental meetings for cross-level communication • Employee appraisal meeting 	<ul style="list-style-type: none"> • Electronic bulletin board • Employee Opinion Survey • Regular labor-management meetings • Human Resources Team • Non-regular communication meeting • Employee Welfare Committee Meeting • Other corporate activities 	<ul style="list-style-type: none"> • Employee Complaint Mailbox

Labor-Management Relations

PHIHONG has established good and harmonious labor relations. We respect the freedom of assembly and association of employees. We promise that employees and representatives participating in labor-management meetings will not be discriminated or labeled. In accordance with the Regulations for Implementing Labor-Management Meeting, PHIHONG Taiwan holds quarterly labor-management meetings to discuss the welfare, rights, and interests of employees through reports or proposals. We implement and improve the system of labour-management meetings, to forge consensus and pool the wisdom of all people to create a win-win vision for both employers and employees. In 2022, we received a total of 152 suggestions from employees. For overseas plants, PHIHONG Dongguan established an employee representative meeting to provide face-to-face communication between employees and managers. In 2022, a total of 37 employee representatives attended the meeting. We collected 20 topics in the meeting (including working environment, meals, accommodation, salary and benefits, etc.), all of which will carry out improvement reviews and countermeasure responses one by one and make announcements. PHIHONG Haiphong established a labor union after it is officially put into production in 2021. 100% of the regular employees have signed a group agreement to participate.

Case source	Total no. of case	No. of resolved cases
Labor-Management Meeting	5	5
Satisfaction survey	103	103
Employee suggestions	44	44
Employee Mailbox	0	0
Total	152	152

Item / Plant location	PHIHONG Taiwan	Dongguan	Haiphong
Freedom of association and the right to collective bargaining (%)	100	100	100
Number of violations of employee association and collective bargaining	0	0	0
Labor-Management Meeting	At least quarterly	Once a year	Once a year
Labor Union	No	No	Yes



Human Rights Due Diligence

Human Rights Management Policy

- Respond to and follow the United Nations "Universal Declaration of Human Rights", "Guiding Principles of Business and Human Rights", "International Labor Organization" and "RBA Responsible Business Alliance Code of Conduct" as the highest guiding principles for human rights protection.
- All operating sites of the group eliminate any infringements and violations of human rights, and implement human rights protection.
- Recognize and abide by the relevant laws and regulations of local human rights protection in each factory area, so as to enhance the human rights awareness of colleagues and stakeholders.
- Respect the differences of different individuals from all over the world, and treat all colleagues with dignity, regardless of race, gender, age, religion, nationality or political position.

Management Mechanism

We have adopted the Responsible Business Alliance (RBA) Code of Conduct as our management mechanism. Through the development of various management practices and auditing of internal control procedures, we conduct regular internal and external audits of social responsibility at each site in order to establish, implement and maintain a good social responsibility management system. In the future, we expect to extend this requirement to our suppliers and contractors.

Human Rights Due Diligence

In 2022, we conducted investigations to identify potential human rights issues in accordance with established human rights due diligence procedures. Through risk assessment, plan and develop mitigation or continuous improvement measures to meet our commitment and responsibility to uphold human rights.

- Identify human right risks:
A list of human rights risk issues, such as basic human rights, working environment and institutional security, is collected in accordance with international human rights guidance documents.
- Assess management risks:
Assess and discuss possible risk issues based on a list of human rights risk issues, such as human rights protection, child labor, freedom of assembly and association, discrimination, workplace health, etc.
- Reduce and track risks:
Based on the risk assessment of potential human rights issues, we plan and design a human rights due diligence questionnaire, compile the results and define human rights due diligence issues, responsible parties, propose improvement measures and follow-up.
- Regular supervisory disclosure:
This process is followed annually to monitor whether new potential human rights issues have arisen, are effectively avoided and resolved, and are regularly disclosed and explained to the public.



Human Rights Concerns	Response and Mitigation Measures	Compensation measures
Knowledge of Human Rights Protection	We respond to and support the relevant norms of the "United Nations Universal Declaration of Human Rights", "United Nations Guiding Principles on Enterprise and Human Rights", "Responsible Business Alliance Code of Conduct" and "United Nations International Labor Organization". The Group's operating bases eliminate any violations and violations of human rights, and implement human rights protection. PHIHONG agrees with and abides by the relevant laws and regulations on the protection of human rights in each factory area, so as to enhance the human rights awareness of colleagues and stakeholders. Phihong respects the differences of different individuals from all over the world, and treats all colleagues with dignity, regardless of race, gender, age, religion, nationality or political position.	1. Regular human rights training is provided to enhance employees' knowledge of human rights protection. 2. Regular monthly updates on attendance-related issues. To raise awareness of the prohibition of child labor and forced labor among employees and management.
Prohibition of child labor	Confirmation of identity and age is carried out upon recruitment. Identity checks are carried out at the same time as the check-in process. We comply with the Labor Standards Act, the United Nations International Labor Organization (ILO) and the labor-related regulations of the countries in which we manufacture. We do not employ anyone under the legal employment age. In 2022, and there were no incidents of child labor.	
Prohibition of Forced Labor	The working hours and holidays of employees are set in accordance with local labor laws. The HR attendance system is set up to prevent overtime work and holidays from occurring.	
Eliminate unlawful discrimination	Phihong's recruitment and appointment policies are based on an open and transparent selection method, which is evaluated based on the company's job vacancies and employment needs, taking into account factors such as the job applicant's work experience, potential and achievements. We do not discriminate or treat job applicants or employees differently on the basis of race, class, language, ideology, religion, party affiliation, origin, place of birth, gender, sexual orientation, age, marriage, appearance, facial features, physical or mental impairment.	1. Develop measures to prevent workplace abuse, sexual harassment, complaints and disciplinary action 2. Provide a work and workplace environment free from all forms of abuse and sexual harassment, and to take appropriate preventive, corrective, disciplinary and treatment measures.
Prohibition of discrimination against indigenous peoples	In 2022, there were no human rights-related cases involving discrimination against indigenous people, no formal complaints, no violations of the law, and no human rights-related audits or impact assessments. Each employee of PHIHONG signs a written employment contract on the day of employment, which stipulates that the employment relationship is established on the basis of mutual consent and is regularly reviewed and controlled to protect the rights and interests of both employers and employees.	
Ending Workplace Violence	Formulate a sexual harassment prevention policy statement, complaint window, telephone and mailbox, effectively implement the prevention of sexual harassment and violence in the workplace, and re-announce and release relevant norms and measures from time to time to prevent sexual harassment and violence from happening.	
Multiple communication channels	<ol style="list-style-type: none"> 1. Convene regular labor-management meetings to open up effective dialogue between employers and employees. Communicate and vote on issues such as labour rights, conditions, benefits, systems, employment conditions, working conditions and the promotion of labor-management harmony; 2. Fully respect the freedom of speech, assembly and association of employees. Protect employees from reprisals and threats for participating in any activities or organizations; 3. Conduct monthly surveys on the care and concern of new employees, to understand the adjustment situation of new employees in work and life. Provide timely feedback to the head of the employing unit and assist in solving related problems; 4. Conduct annual employee satisfaction and dedication surveys to understand the views of employees through the statistical results. Effectively understand and deal with employee problems through the content of employee feedback. 5. to specify the communication channels and grievance channels for staff in the work rules. 	1. Set up a staff complaint box to enable timely response to staff problems seen and heard to the responsible unit, and to understand the improvement measures and track the results; 2. to disseminate professional knowledge on physical and mental health to employees through the open platform from time to time to promote work-life balance.
Work life balance	<ol style="list-style-type: none"> 1. Arrange a monthly doctor stationed in the factory to provide health consultation, and provide a comprehensive care and management plan based on the results of the employee's health examination. 2. Build a variety of community activities so that employees can cultivate their bodies and minds through art, sports and other related activities after work. 3. Provide unit meal subsidies and handle multiple company activities to promote friendship among colleagues and effectively gather solidarity. 	

Human Rights Due Diligence Report

There have been no complaints of discrimination or sexual harassment of any kind by internal or external stakeholders, no incidents of child labour and no human rights violations against local indigenous peoples. The human rights risk assessment results were all low risk. In the future, we will continue to raise awareness of human rights issues among our employees through employee education and training to raise awareness of human rights protection among all employees and reduce the likelihood of risk occurrence. We also regularly review and examine the legality of our human rights policies and management mechanisms on an annual basis, and implement the progress and results of relevant improvement measures. We submit due diligence reports and follow-up results to our management team to effectively fulfill our social responsibilities and raise the human rights awareness of our managers and employees.

Social Responsibility Policy

Phihong is committed to establishing a corporate sustainability and social responsibility management system that goes beyond local regulations and social ethics. While continuing to develop high quality green products and services, we are committed to operating with integrity, protecting the rights of our employees, achieving environmental sustainability and creating a healthy and safe workplace, and promoting this spirit throughout our supply chain. We continue to maintain a social responsibility management system that meets the requirements of the law and our customers. We also follow the Code of Conduct of the Alliance for Responsible Business and the SA8000 international standard for social responsibility, and regularly review the implementation status of our systems and manage potential risks to achieve our commitment to sustainability. Phihong's social responsibility policy is as follows:

1. Manpower management system that meets the requirements of international organizations (international conventions), domestic labor laws and internal management needs.
2. Improve the recognition of customers and consumers on the company's products. Strengthen the brand image and corporate competitiveness.
3. Formulate rationalized labor conditions and humanized operating environment to attract talents, improve morale, and reduce occupational accidents.
4. Promote the long-term relationship between enterprise, trade union and interest groups.

Responsible Business Alliance (RBA)

The Responsible Business Alliance (RBA) is the largest corporate social responsibility alliance in the global industrial supply chain. It is committed to establishing standardized standards of socially responsible behavior in the global supply chain. In the current trend of countries emphasizing corporate social responsibility, obtaining RBA VAP is already an indicator of corporate social responsibility. With the belief of CSR and sustainable development, PHIHONG is committed to sharing the results with our employees, customers, suppliers and society. As part of our commitment to CSR, we have joined the Responsible Business Alliance (RBA) as an accredited member since 2022. Fully support RBA's vision and objectives and promote RBA's Code of Conduct.

In December of the same year, PHIHONG received the Validated Audit Process (VAP) audit from the RBA at its main factory (PHC/PHPJ) in Dongguan. Through the RBA VAP, we verified the compliance and implementation of our internal system, fulfilling our social responsibility values and implementing the RBA 7.0 specification. The company has been awarded the Silver certification with a total score of 161.2 on its first introduction. Phihong firmly believes that with the update of the RBA Code of Conduct and various sustainability indicators, the continuous improvement of the internal management system, convey the awareness of sustainable development to supply chain partners, and strengthen corporate risk management and resilience with upstream and downstream, Phihong will be recognized by global customers, so as to obtain more sustainable business opportunities.

Audit ID	Company	Facility	Audit Category	Audit Type	Status	QC Status	Scheduling Status	Score	Start Date	#of Findings	VAR	VAP Certification Level
G-AU-10009157	Phihong Technology	DONG GUAN PHITEK ELECTRONICS CO., LTD.	VAP	Initial Audit	VAR Released	QC Complete	Complete	161.2	11/21/2022	6	VAR-20221121-CN-01A01-4	

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6.3 Occupational Health and Safety

Material topic: Occupational Safety and Health (GRI 403:2018 Occupational Safety and Health)



Policy and Commitment

- Comply with labor safety and health requirements, continuously improve the working environment, prevent industrial safety incidents and reduce occupational safety risks.
- ISO 45001 Occupational Safety and Health Management System



Responsible parties

General (factory) affairs and EHS department of each factory



Target Setting

2022 Target

- Passed ISO 45001 occupational safety and health management system certification
- Zero major accidents and occupational accidents, zero fines

Achieved results

- Passed ISO 45001 occupational safety and health management system
- 2022 Occupational Accident Rate 0.27%
- In 2022, PHIHONG Taiwan and PHIHONG Haiphong had 0 major accidents, 0 occupational accidents and 0 fines. There were 7 occupational accidents in PHIHONG Dongguan, and the standardization of operation process was implemented to improve the concept of safety operation of employees.

Future target

- Short-term (2023-2024)
 - » Promote ISO 45001, implement safety culture and control risks.
 - » Zero major accidents and occupational accidents, zero fines
- Mid-long term (2025-2030)
 - » Promote ISO 45001, implement safety culture and control risks.
 - » Zero major accidents and occupational accidents, zero fines



Management approach

- Passed the ISO 45001 Occupational Safety and Health Management System
- An Occupational Safety and Health Committee was established to review and coordinate matters related to occupational safety and health.



Annual performance highlights

- No worker deaths due to occupational injuries in 2022
- In 2022, there were no occupational disease or serious occupational injury cases at PHIHONG's plants.



Evaluation System

- No significant deficiencies in external periodic audits
- Environmental monitoring exceeds the standard
- Labor meetings



Corresponding SDGs



Occupational Safety and Health Management

PHIHONG has incorporated occupational safety and health management into our corporate sustainable development strategy to maintain plant safety, work environment and employee health. PHIHONG Taiwan has established the "Environmental Safety and Health Policy" and the Occupational Safety and Health Committee according to the "Occupational Safety and Health Management Regulations", which is verified by the Occupational Safety and Health Management System every year. PHIHONG has created a healthy and safe workplace for employees, prevented occupational injuries, and thoroughly inspected and monitored workplace safety in compliance with local government regulations and company policies. In 2021, PHIHONG Taiwan, PHIHONG

Dongguan and PHIHONG Haiphong completed the Occupational Safety and Health Management System (ISO 45001:2018) conversion certification and auditor training, and received the certificate in the same year.

PHIHONG Dongguan's EHS Department is the first-level unit in charge of occupational safety and health, assisting in supervising and recommending occupational safety and health-related planning and considering occupational safety-related issues. The management system covers a total of 3,995 employees of PHIHONG Dongguan and contractors. All operations are carried out based on the occupational safety and health management system, including hazard identification, risk assessment, operation audit and accident investigation. In 2022, PHIHONG did not have any occupational injuries resulting in the death of workers, or any cases of occupational diseases or serious occupational injuries. We continue to provide a safe and carefree working environment for our employees, with the ultimate goal of achieving a zero-hazard workplace.



ISO 45001:2018 Certificates

PHIHONG Taiwan Employee's Lost work rate / Absence rate / No. of incidents

Item	2020		2021		2022		Formula
	Male	Female	Male	Female	Male	Female	
No. of employees	296	209	317	227	365	283	
Occupational injury rate	0.34	1.91	0.63	0.44	0.00	0.00	(Disa(Disability) No. of work-related injuries/total working hours*200,000
Employee lost workday rate	18.41	40.91	7.92	0.44	0.00	0.00	The total no. of days of work-related injury claims in the year/the total no. of employee attendance days in the year*200,000
Employee absence rate	0.01	0.01	0.01	0.04	0.01	0.01	Absence days in the year/Total attendance days in the year (Statistical scope of absence rate covers work injury leave, personal leave, and sick leave)
Number of employee accidents (cases)	1	4	2	1	0	0	No. of work-related injuries in the year

Note 1: GRI: 200,000 coefficients, which refers to 2,000 hours of work per 100 employees per year as the basis of calculation.

Note 2: In 2022, the total no. of work hours by Male employees is 724,160 and the total no. of work hours by Female employees is 561,472. The number of work hours by contractors is 29,880.

Note 3: The number of contractos in 2022 is 15, or 2.26%, and the total number of hours worked by contractos is 29,880.

Note 4: In 2022, there was zero accidental injuries to employees and contractors.

PHIHONG Dongguan Employee's Lost work rate / Absence rate / No. of incidents

Item	2020		2021		2022		Formula
	Male	Female	Male	Female	Male	Female	
No. of employees	2,523	1,505	2,792	1,693	1,180	890	
Occupational injury rate	0.83	0.26	0.32	0.18	0.25	0.45	(Disability) No. of work-related injuries/total working hours*200,000
Employee lost workday rate	13.06	7.84	5.25	1.71	4.16	6.00	The total no. of days of work-related injury claims in the year/the total no. of employee attendance days in the year*200,000
Employee absence rate	0.03	0.06	0.03	0.03	0.07	0.06	Absence days in the year/Total attendance days in the year (Statistical scope of absence rate covers work injury leave, personal leave, and sick leave)
Number of employee accidents (cases)	21	4	9	3	3	4	NNo. of work-related injuries in the year

Note 1: GRI: 200,000 coefficients, which refers to 2,000 hours of work per 100 employees per year as the basis of calculation.

Note 2: In 2022, the total no. of work hours by Male employees is 2,404,344 and the total no. of work hours by Female employees is 1,774,872. The number of work hours by contractors is 294,816.

Note 3: The number of contractos in 2022 is 148, or 6.67%, and the total number of hours worked by contractos is 294,816.

Note 4: In 2022, there were 7 employee accidents, 1 fall and 6 scratches injuries; There were no injuries to contractos.

Occupational Safety and Health Organization and Operation

In accordance with the Occupational Safety and Health Management Act, PHIHONG Dongguan has established an Occupational Safety and Health Organization. The Occupational Safety and Health Committee makes recommendations on the safety and health policies and management systems proposed by the company, and reviews, coordinates and recommends safety and health related matters. The committee consists of the chairman (assistant manager, plant manager) and members (department assistant manager/unit supervisor/ EHS section staff/labor representative). The labor representative is selected by the employees. The current selection committee consists of 17 managers and 52 members, for a total of 69 members. Managers account for 25% of the committee members. The committee meets quarterly, the labor representatives voice for all employees to discuss, coordinate, plan and make decisions on occupational safety and health related issues together with the management. This is a concrete measure to implement employee participation, consultation and communication.

Hazard Identification and Risk Assessment

PHIHONG Dongguan avoids endangering the safety and health of personnel due to operations, activities or services and facilities, which causes loss to the safety and health of plant personnel or company finances, the company takes appropriate preventive measures, implements necessary control methods or eliminates hazards through continuous safety and health, hazard identification, risk and opportunity assessment, and identifies improvement opportunities to control the risks to an acceptable level. Moreover, every 3 years, we conduct hazard identification and risk assessment for existing, potential future and temporary changes in the plant's various operations and the underground pipelines for transporting hazards outside the plant. A baseline review team, composed of unit supervisors trained in process safety assessment, uses semi-qualitative and quantitative descriptions to assess and select the risk level. According to the classification control, occupational safety and health objectives and management plan, a target plan is set to eliminate, replace, engineering control measures, labeling/warning or management control measures, and the improvement sequence of personal protective equipment. We aim to reduce the risk to an acceptable level, find the best improvement plan to reduce the risk, and continuously improve. For employees with high incidence and risk of occupational diseases, PHIHONG equipped them with appropriate personal protective equipment for protection, and arranges health checks for occupational disease prevention, and monitors the environment of the workplace. For those employees with abnormal test values, we will track and manage them and provide them with necessary individual health consultation and advice, so that they can grasp their own health status.

PHIHONG is equipped with appropriate personal protective equipment for protection against occupational diseases with high incidence and risk. We also arrange occupational disease prevention health checkups and implement work environment monitoring for the workplace. In the year 2022, there were no occupational disease cases in PHIHONG 's plants.

PHIHONG Haiphong Employee's Lost work rate / Absence rate / No. of incidents

Item	2020		2021		2022		Formula
	Male	Female	Male	Female	Male	Female	
No. of employees	225	313	362	542	561	786	
Occupational injury rate	3.11	0.32	0.00	0.23	0.00	0.00	(Disability) No. of work-related injuries/total working hours*200,000
Employee lost workday rate	3.11	0.32	0.00	35.55	0.00	0.00	The total no. of days of work-related injury claims in the year/the total no. of employee attendance days in the year*200,000
Employee absence rate	0.04	0.03	0.04	0.03	0.29	0.27	Absence days in the year/Total attendance days in the year (Statistical scope of absence rate covers work injury leave, personal leave, and sick leave)
Number of employee accidents (cases)	7	1	0	1	0	0	No. of work-related injuries in the year

Note 1: GRI: 200,000 coefficients, which refers to 2,000 hours of work per 100 employees per year as the basis of calculation.

Note 2: In 2022, the total no. of work hours by Male employees is 1,404,744. The total no. of work hours by Female employees is 1,968,144.

Note 3: The number of contractos in 2022 is 0.

Note 4: In 2022, there was zero accidental injuries to employees. There were no contractors.

Risk Assessment Levels and Management Principles

Risk class	Risk score	Risk level	Management principles
Class 1	>100	Listed as a significant source of risk and tracked for improvement	The risk level value greater than 100 and the severity of the consequences greater than or equal to 10: identified as an important risk source, included in the "List of Important Hazard Sources and their Control Measures". The methods of control and improvement are: elimination, replacement, engineering control improvement, etc.
Class 2	81-100	Significant risks that need to be controlled through corrective actions	Risk level values 81-100: If the hazard source has implemented operation control on the existing basis and there are improvement measures to control it, there is no need to upgrade the occupational safety and health OHS management plan. If the hazard source has not implemented operation control or can continue to reduce the risk of injury, Then it is necessary to raise the target improvement plan and control
Class 3	51-80	Risks that need to be controlled through training and production safety regulations	Risk level values 51-80: Control through education, training and production of safety practices
Class 4	21-50	Risks that need to be controlled by labeling	Risk level values 21-50: Controlled by warning signs and use of protective equipment
Class 5	≤ 20	Acceptable risks	Risk level value less than or equal to 20: Acceptable risk, just keep watching

Notification and Investigation Process for Occupational Accidents

The purpose is to deal with injuries as soon as possible when an occupational disaster occurs, to prevent the expansion of the disaster, and to review the basic causes as a basis for accident and disaster prevention measures and safety and health improvement.



Workplace Safety

To grasp the potential negative impact risks of high risks and hazards in the factory, PHIHONG manages the risks through safety and health hazard identification, education and training, disaster prevention simulation drills, and first aid training in cooperation with the local fire department. We manage the risk level of hazards and establish safety procedures and related safety protection measures to enhance workers' awareness of workplace safety and ensure workplace safety. The results of the intolerable risk assessment in 2022 are shown in the table below.

2022 PHIHONG "Significant Environmental Considerations and Intolerable Risks" Identification Results

Hazard Sources	Environmental impact or hazard factors	Existing control, protection or prevention methods
Product R&D	Solder heating produces toxic gas or disassembly causes battery abnormal risk	Provide safety and protective equipment, education and training, and establish standard operating procedures or specifications (SOPs)
Build an emergency reporting platform	Colleagues cannot obtain contingency measures immediately	Regular publicity and simulation training through the e-platform
Emergency Response	Inadequate response and awareness capacity of staff	Establish emergency response plans and hold regular semi-annual drills
Environmental safety of the plant	Poor air, lighting, and CO ₂ in the internal space of the factory	Conduct regular environmental monitoring and inspection operations for the plant
Microwave oven use	Improper use can cause overheating and smoke. Short circuit can cause fires and other sudden risks	Promote "Do not use out of sight", and post the correct operation method in a conspicuous place
Space for leisure activities	Fitness sports equipment failure leads to accident	Regular maintenance of machines and equipment

Health Promotion and Safe Workplace

Every year, PHIHONG 's domestic and overseas plants conduct safety, health and fire safety training. PHIHONG Taiwan holds two 3-hour occupational safety and health courses and lectures every year. New employees are also required to take an online course: safety and health education and training, to enhance occupational safety awareness and self-defense and disaster prevention mechanisms in fire management sites, and to ensure the safety of workers and staff in the event of a fire. The training includes comprehensive drills on self-defense and firefighting teaming, disaster notification, and evacuation. In 2022, PHIHONG Dongguan will complete 19 safety and health training sessions, with a total of 4,849 participants and 7,016 training hours. PHIHONG Vietnam employs professional government agencies to conduct occupational safety and health education and training to ensure that there are qualified and sufficient professional safety and health managers to protect production and life safety and prevent occupational injuries. There are 30 volunteer firefighters, 20 volunteer emergency health workers and 15 EHS auditors.



Employee Health Check

Employee health is not only about personal happiness and welfare, but also about corporate development and competitiveness. Phihong believes that the key to corporate sustainability lies in the physical and mental health of our employees, which is why we value their health. We provide annual health checkups for all employees regardless of age through professional health checkups that are better than the statutory standard. We also arrange the basic checkups items that are better than the statutory ones, especially the annual checkups of different cancer indicators. We hope to guard the health of our employees through the annual checkups, so that they can detect health problems as early as possible and receive treatment early. We believe that a healthy and energetic workforce brings the best performance. The Dongguan plant also provides free health checkups for all employees who have completed their probationary period every year.



Overview of Employee Health Check

Targets	Types	Period	Method	Description
New employee	General bodycheck	Completed during probation	New employees go to medical institutions on their own for examination	<ol style="list-style-type: none"> When a medical examination reveals that the employee is not suitable for a certain job, a job evaluation of the job selection is performed. Check records kept in accordance with the Occupational Safety and Health Management Act stipulated format and retention period. Body-check Fee: Maximum subsidy of NT\$600.
	Special bodycheck	Use only lead-free soldering since 2012, and there is no special health hazard in the factory.		
Regular employee	General health check	Once a year, additional to the statutory requirements	Arrange the qualified hospital designated by the Labor Affairs Commission to come to the factory	<ol style="list-style-type: none"> When a health check reveals that a worker is not suitable for a certain type of work, a job selection assessment is conducted. Check records kept in accordance with the Occupational Safety and Health Management Act stipulated format and retention period. Health-check fee: paid in full by the company.
	Special health check	No special health hazards in the operating environment		

Group Insurance

PHIHONG has always been adhering to the principle of "doing the best in everything we do". In addition to the employee's labor insurance, universal health insurance and labor pension contribution according to the law, we also have a perfect plan for the employee's medical group insurance. Every year, we review and evaluate the group insurance coverage for our employees and select the most suitable group insurance coverage and service team for them. This allows our employees to be more dedicated to their work. In this way, we are able to unite our employees' commitment to the company.

Physical and mental health seminars

We provide a wide range of health services. Seminars on health issues are held from time to time. Also, we post the latest health information on the company's internal electronic bulletin board, to promote new knowledge and concepts of self-health among employees. In 2022, due to the epidemic, the events were held online.

6.4 Public Service and Social Influence

Take from the society, contribute to the society. PHIHONG is committed to fulfilling our social responsibility with care and sincerity. In 2022, the Taiwanese government gradually relaxed COVID restrictions, resulting in a significant increase in the number of confirmed cases from April onwards, which greatly affected the pace of charity work. However, PHIHONG still continues to carry out various types of public services as far as we can. Our social service plan is based on 3 major areas of "Community Friendliness", "Care for the Disadvantaged" and "Ecological Environment". We actively participated in various charitable and public service activities without violating the epidemic prevention policy. The company invites disadvantaged groups to hold charity sales when it holds large events. In 2022, the company started to support the development of sports in Taiwan from a young age by supporting the Guishan Elementary School Little League team in Taoyuan. We hope that the young players can find their own interests and shine on the field without any worries.

2022 Community Service Achievement Statistics

Public Service Theme	Timeline	Activity Description	Social Influence
"Epidemic Prevention Me+1" - Sponsor nursery environmental disinfection	Year-long	Arrange a cleaning company to "Muhsiang Sweet Home" to assist in the environmental disinfection of the hospital area. Stay close to relatives and neighbors, and we do our best to disinfect the living environment of the children in the nursery.	Since the outbreak of COVID. We regularly assist in the environmental disinfection of the nursery area so far, providing a healthy and hygienic growing environment for the nursery area and children.
"Across the visual barrier" employs visually impaired masseurs to provide on-site services	Year-long	Encourage the employment of people with physical disabilities. We hire visually impaired massage therapists to work in PHIHONG Taiwan and provide them with stable job opportunities.	A total of 78 hours of visually impaired massage service was provided to our staff to relieve stress and fatigue through the skillful hands of our visually impaired massage therapists. Thereby enhancing their work efficiency, as well as promoting massage for the visually impaired and increasing employment opportunities for the physically challenged.
PHIHONG's "100 NTD donation with Love"	Year-long	The "PHIHONG 100 NTD donation with Love" campaign calls on colleagues to make regular and small monthly donations to help children who are boarding at Muhsiang Sweet Home due to family circumstances.	PHIHONG has established the "Hundred Dollar Club" for many years. Employees have made long-term donations from their monthly paychecks to the nursery. 991 people participated in the year 2022. Because of this regular donation, the nursery is able to keep up with the shortage.
Support the development of sports. Support Guishan Elementary School's Little League baseball team	Year-long	Fixed monthly monetary and nutritional supplements donations to the team, hoping that the children can continue to shine on the field.	We actively support the national sport. Since 2022, we have been donating and sponsoring nutritional products to support the sport. A total of 58 players have benefited from the sponsorship, playing in national tournaments, and will represent Taiwan at the Williamsport Asia Pacific Trials in Korea in June 2023.
Underprivileged Care Charity Sale	Staff Sports Day	Combined with the company's sports activities, we cared for the disadvantaged groups and invited the Autism Foundation and the Ruth Society For Disability Services to hold charity sales.	The 50th Anniversary Parent-Child Day and Charity Games invited charitable organizations to come in and hold charity sales. Nearly 500 employees and their families were called upon to give their love and care while exercising.
Old shoes send love to Africa. PHIHONG volunteers help pack	Dec	In the Christmas season, we are raising money for container shipments through the Bethlehem Warehouse volunteer service and small donations. Let's send warmth to Africa outside of Taiwan.	In addition to the 67 people who donated used shoes and other materials, another 21 people volunteered at the Bethlehem warehouse in Linkou to help sort and pack used shoes for delivery to Africa. So that all children in Africa can wear shoes and be free from the plague of sand flea disease.

Epidemic Prevention Me+1 – Sponsor Muhsiang Sweet Home’s environmental disinfection

In the third year of COVID epidemic, Taiwan is gradually moving towards coexistence with the virus, but wearing a mask is already a habitual routine for everyone. To be friendly to the neighbors and the disadvantaged, PHIHONG continues to take the initiative to provide a healthy environment for the “Muhsiang Sweet Home” nursery in the neighborhood to prevent the epidemic. Muhsiang provides a temporary refuge for children who have suffered from family problems and protects them from real-life persecution during their growth. Due to government regulations, Muhsiang is unable to actively raise funds externally and can only passively accept donations, so resources are quite limited. Based on PHIHONG’s philosophy of "Community Friendliness" and "Care for the Disadvantaged", PHIHONG has made Muhsiang a long-term beneficial target. In addition to the monthly donations from our staff, we also provide quarterly cleaning and disinfection services for the nursery environment, hoping that the children can learn and grow up in a good environment.



50 Years Inheritance of Sustainability without forgetting Charity

On the occasion of PHIHONG Group’s 50th anniversary, the "PHIHONG Group 50th Anniversary Sports Day x Family Day x Zenova Launch " was held at the Lin Kou Sports Complex at the end of 2022. This is our first time to hold a physical event for employees after Covid-19 has subsided. It is also the first Sports Day of PHIHONG. The event was combined with the Family Day, which had been suspended for two years due to the epidemic, and the Zenova Launch.

The event not only included energetic fun competitions and parent-child game areas, but we also invited charity organizations such as "Taoyuan Ruth Society For Disability Services", "Taipei Kenner Foundation of Taiwan (Autism Foundation)", and "Massage Hut for the Visually Impaired" to join the event. Over 800 employees and family members of PHIHONG and ZENOVA were led by senior managers of PHIHONG Group to join the event and demonstrate PHIHONG Group's philosophy of "heritage, innovation and sustainability". In addition to uniting all the employees, we also took care of their family members and gave back to the society.



Support sports. Support the Little League Baseball Team

PHIHONG first came into contact with the Guishan Elementary School baseball team in 2021. Head Coach Lee Jung-Tak told: His first requirement for the young players is character development. Knowing that most of the baseball players come from indigenous or disadvantaged families, the school fully supports young players who are passionate about baseball. The school raises all funds for baseball team, so there is no additional cost to the players. The school baseball team does not have other resources like professional baseball. It only has financial subsidies from educational institutions. It is very difficult to operate and needs the care and support of local companies like us. From 2022 onwards, with the support of the Group's CEO, PHIHONG has been making regular monetary and nutritional supplements donations to the baseball team. We hope that the children will continue to shine on the field and let the baseball spirit continue to exceed their limits and win victories. This also concretely implements Phihong SDGs United Nations sustainable development goals and corporate responsibility. Moreover, we also hope that PHIHONG's charitable deeds can inspire more companies to follow, helping to build the foundation of our national sports.



Response to Old Shoes Save Lives, sending Love to Africa

It is the season of spreading love at the end of the year. Every Christmas, PHIHONG encourages colleagues to participate in various charity activities. As a result of the COVID-19 epidemic, the shipping cost of shipping containers has increased. So in 2022, PHIHONG is once again participating in the Bethlehem Warehouse's "Old Shoes for Life" campaign. This time we are inviting colleagues to make small donations to help the Bethlehem Warehouse raise money for shipping containers. Let's join the volunteer service, roll up our sleeves and experience it, and repack each of the hard-won donated items, so that we can pass on our happiness to the people in Africa and let them feel the warmth of happiness brought by PHIHONG.



Overseas Factory Charity Services

PHIHONG has always spared no effort in participating in charity activities. Every year, we hold charity activities such as beach cleaning and community care activities to encourage our employees to go out of their workplace and put charity into action, experiencing the feeling of hand to heart.

Although some activities were suspended in 2022 due to the epidemic, the mission of serving the society in the corporate culture was still integrated into our life. To promote the traditional virtue of respecting and honoring the elderly in China, to raise the awareness of respecting the elderly in the society, and to create a good social atmosphere of loving and helping the elderly, PHIHONG Dongguan has organized a special "9th Sep Chung Yeung Festival" activity in the company, distributing milk, oil and grains to the elderly.



Appendix

Appendix 1 GRI Content Index

The following has been verified by the British Standards Institution (BSI), a third-party impartial body. The results of the verification are shown in the Statement of Assurance in Appendix 4.

Statement of use	PHIHONG publishes the 2022 sustainability report in accordance with the GRI guidelines. The data period is from January 1, 2022 to December 31, 2022.
GRI 1 used	GRI 1: Foundation 2021
Applicable GRI sector standards	None

Index	Disclosure	Corresponding section / description	Notes and omissions	External assurance	Page
GRI 2					
Organization and reporting					
2-1	Organizational details	Message from the ESG Committee Chair 1.1 Sustainable Development Strategy		✓	4 14
2-2	Entities included in the organization's sustainability reporting	About this Report		✓	2
2-3	Reporting period, frequency and contact point	About this Report		✓	2
2-4	Restatements of information	About this Report	PHIHONG has no restatement of information in 2022	✓	2
2-5	External assurance	About this Report Appendix 4		✓	3 170
Activities and workers					
2-6	Activities, value chain, and other business relationships	1.2 Identification of material topics: value chain analysis 2.2 Operational overview and economic performance: Operational overview 3.3 Sustainable Supply Chain Management		✓	20 36 64
2-7	Employees	6.1 Talent selection and cultivation: human resource structure		✓	118
2-8	Workers who are not employees	6.1 Talent selection and cultivation: human resource structure		✓	118
Governance					
2-9	Governance structure and composition	2.1 Sustainable Responsible Governance: Composition of the Board of Directors		✓	31
2-10	Nomination and selection of the highest governance body	2.1 Sustainable Responsible Governance: Composition of the Board of Directors		✓	31

Index	Disclosure	Corresponding section / description	Notes and omissions	External assurance	Page
2-11	Chair of the highest governance body	2.1 Sustainable Responsible Governance: Composition of the Board of Directors		✓	31
2-12	Role of the highest governance body in overseeing the management of impacts	2.1 Sustainable Responsible Governance: Composition of the Board of Directors		✓	31
2-13	Delegation of responsibility for managing impacts	2.1 Sustainable Responsible Governance: Composition of the Board of Directors		✓	31
2-14	Role of the highest governance body in sustainability reporting	2.1 Sustainable Responsible Governance: Composition of the Board of Directors		✓	31
2-15	Conflicts of interest	2.1 Sustainable Responsible Governance: Composition of the Board of Directors		✓	31
2-16	Communication of critical concerns	1.1 Sustainable Development Strategy		✓	13
2-17	Collective knowledge of the highest governance body	2.1 Sustainable Responsible Governance: Composition of the Board of Directors		✓	31
2-18	Evaluation of the performance of the highest governance body	2.1 Sustainable Responsible Governance: Performance Evaluation and Salary Ratio		✓	33-34
2-19	Remuneration policies	2.1 Sustainable Responsible Governance: Performance Evaluation and Salary Ratio		✓	33-34
2-20	Process to determine remuneration	2.1 Sustainable Responsible Governance: Performance Evaluation and Salary Ratio		✓	33-34
2-21	Annual total compensation ratio	6.1 Talent selection and cultivation: Remuneration and Benefits		✓	33-34
Strategy, policies and practice					
2-22	Statement on sustainable development strategy	Message from the ESG Committee Chair 1.1 Sustainable Development Strategy		✓	5 13
2-23	Policy commitments	Message from the ESG Committee Chair 1.1 Sustainable Development Strategy		✓	5 13
2-24	Embedding policy commitments	Message from the ESG Committee Chair 1.1 Sustainable Development Strategy		✓	5 13
2-25	Processes to remediate negative impacts	1.3 Identification of material topics: Double materiality analysis 1.3 Identification of material topics: materiality analysis matrix 4.1 Enhancing Climate Resilience (TCFD)		✓	21-26 76
2-26	Mechanisms for seeking advice and raising concerns	2.3 Integrity and compliance with laws: reporting mechanism		✓	45
2-27	Compliance with laws and regulations	2.3 Integrity and compliance with laws: compliance with laws		✓	46
2-28	Membership associations	2.3 Integrity and compliance with laws: external initiatives of the organization		✓	47
Stakeholder engagement					
2-29	Approach to stakeholder engagement	1.3 Stakeholders communication: Stakeholders communication mechanism		✓	18-19
2-30	Collective bargaining agreements	Conforms to the collective bargaining agreement in accordance to the laws and regulations of various countries. Agreement has been signed in Phihong Haiphong only.		✓	144

Index	Disclosure	Corresponding section / description	Notes and omissions	External assurance	Page
GRI3					
3-1	Process to determine material topics	1.2 Identification of material topics: Material topic identification process		✓	20
3-2	List of material topics	1.2 Identification of material topics: materiality analysis matrix		✓	23
3-3	Management of material topics	1.2 Identification of material topics: Double materiality analysis		✓	23

GRI Topic	Disclosure	Corresponding section / description	Notes and omissions	External assurance	Page
Material topic - GRI 200 series (Economic)					
*Economic performance					
	3-3 Management of material topics	2.2 Operational overview and economic performance: Economic Performance of Operations		✓	39
GRI 201 2016 Economic performance	201-1 Direct economic value generated and distributed	2.2 Operational overview and economic performance: Economic Performance of Operations		✓	39
	201-2 Financial implications and other risks and opportunities due to climate change	4.1 Enhancing Climate Resilience (TCFD)		✓	76
	201-3 Defined benefit plan obligations and other retirement plans	6.2 Employee Care and Support		✓	132
*Integrity management					
	3-3 Management of material topics	2.3 Integrity and compliance with laws		✓	42
GRI 205 2016 Anti-corruption	205-1 Operations assessed for risks related to corruption	2.3 Integrity and compliance with laws: compliance with laws		✓	46
	205-2 Communication and training about anti-corruption policies and procedures	2.3 Integrity and compliance with laws: anti-corruption and anti-bribery		✓	44
	205-3 Confirmed incidents of corruption and actions taken	2.3 Integrity and compliance with laws: compliance with laws		✓	46
*Sustainable Supply Chain Management					
	3-3 Management of material topics	3.3 Sustainable Supply Chain Management		✓	64
GRI 204 2016 Procurement Practices	204-1 Proportion of spending on local suppliers	3.3 Sustainable Supply Chain Management: green procurement		✓	70
GRI 308 2016 Supplier Environmental Assessment	308-1 New suppliers that were screened using environmental criteria	3.3 Sustainable Supply Chain Management: supply chain risk management		✓	67
	308-2 Negative environmental impacts in the supply chain and actions taken	3.3 Sustainable Supply Chain Management: Supplier coaching		✓	68

GRI Topic	Disclosure	Corresponding section / description	Notes and omissions	External assurance	Page
GRI 414 2016 Supplier Social Assessment	414-1 New suppliers that were screened using social criteria	3.3 Sustainable Supply Chain Management: Supplier audit		✓	69
	414-2 Negative social impacts in the supply chain and actions taken	3.3 Sustainable Supply Chain Management: Supplier audit		✓	69
*Customer relationship management					
3-3 Management of material topics		3.2 Customer Relationship Management		✓	61
GRI 418 2016 Customer Privacy	418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data	3.2 Customer Relationship Management: Customer Privacy No complaints about violation of customer privacy or loss of customer information		✓	63
*Product Quality and Safety					
3-3 Management of material topics		3.1 Product quality and safety		✓	56
GRI 416 2016 Customer Health and Safety	416-1 Assessment of the health and safety impacts of product and service categories	3.1 Product quality and safety: Restricted use of hazardous substances 3.1 Product Quality and Safety: Responsible Consumption and Production		✓	57-58
	416-2 Incidents of non-compliance concerning the health and safety impacts of products and services	2.3 Integrity and compliance with laws: compliance with laws 3.1 Product quality and safety		✓	46-47 56

GRI Topic	Disclosure	Corresponding section / description	Notes and omissions	External assurance	Page
Material topic - GRI 300 series (Environmental)					
*Climate Change Strategy					
Self-proposed topic		4.1 Enhancing Climate Resilience (TCFD)		✓	76
*Energy and Greenhouse Gases					
3-3 Management of material topics		4.2 Energy and resource management		✓	86
GRI 302 2016 Energy	302-1 Energy consumption within the organization	4.2 Energy and resource management: energy use and intensity		✓	87
	302-3 Energy intensity	4.2 Energy and resource management: energy use and intensity		✓	87
	302-5 Reductions in energy requirements of products and services	5.1 R&D and Innovation: High Efficiency Products and R&D 5.2 Transition to circular economy: Package material reuse. Electricity recycling 5.3 Low-carbon product design		✓	99 100 111

GRI Topic	Disclosure	Corresponding section / description	Notes and omissions	External assurance	Page
GRI 305 2016 Emissions	305-1 Direct (Scope 1) GHG emissions	4.1 Enhancing Climate Resilience (TCFD): Greenhouse Gas Inventory		✓	87
	305-2 Energy indirect (Scope 2) GHG emissions	4.1 Enhancing Climate Resilience (TCFD): Greenhouse Gas Inventory		✓	87
	305-3 Other indirect (Scope 3) GHG emissions	4.1 Enhancing Climate Resilience (TCFD): Greenhouse Gas Inventory		✓	87
	305-4 GHG emissions intensity	4.1 Enhancing Climate Resilience (TCFD): Greenhouse Gas Inventory		✓	87
	305-5 Reduction of GHG emissions	4.1 Enhancing Climate Resilience (TCFD) 4.2 Energy and resource management: Energy saving and carbon reduction. Carbon Neutral Practice		✓	76 89
*Product R&D and Innovation					
Self-proposed topic		5.1 R&D and Innovation		✓	99
*Low Carbon Product Design					
Self-proposed topic		5.3 Low-carbon product design		✓	111

GRI Topic	Disclosure	Corresponding section / description	Notes and omissions	External assurance	Page
Material topic - GRI 400 series (Social)					
*Talent selection, training and retention					
3-3 Management of material topics		6.1 Talent selection and cultivation		✓	117
GRI 404 2016 Training and Education	404-1 Average hours of training per year per employee	6.1 Talent selection and cultivation: training & deployment		✓	122
	404-2 Programs for upgrading employee skills and transition assistance programs	6.1 Talent selection and cultivation: training & deployment		✓	122
	404-3 Percentage of employees receiving regular performance and career development reviews	6.1 Talent selection and cultivation: implement performance appraisal		✓	128

GRI Topic	Disclosure	Corresponding section / description	Notes and omissions	External assurance	Page
*Employee Care and Support					
	3-3 Management of material topics	6.2 Employee Care and Support		✓	132
GRI 401 2016 Employment	401-1 New employee hires and employee turnover	6.2 Employee Care and Support		✓	132
	401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	6.2 Employee Care and Support: Thoughtful Benefits in Phihong		✓	136
	401-3 Parental leave	6.2 Employee Care and Support: Parental leave		✓	140
*Occupational health and safety					
	3-3 Management of material topics	6.3 Occupational health and safety		✓	149
GRI 403 2018 Occupational Health and Safety	403-1 Occupational health and safety management system	6.3 Occupational Safety and Health: Occupational Safety and Health Management		✓	150
	403-2 Hazard identification, risk assessment, and incident investigation	6.3 Occupational Health and Safety: Hazard Identification and Risk Assessment		✓	152
	403-3 Occupational health services	6.3 Occupational Health and Safety: Occupational Health Services and Promotion		✓	154-155
	403-4 Worker participation, consultation, and communication on occupational health and safety	6.3 Occupational Health and Safety: Occupational Health Services and Promotion		✓	154-155
	403-5 Worker training on occupational health and safety	6.3 Occupational Health and Safety: Occupational Health Services and Promotion		✓	154-155
	403-6 Promotion of worker health	6.3 Occupational Health and Safety: Occupational Health Services and Promotion		✓	154-155
	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	6.3 Occupational Health and Safety: Organization and Operation of Occupational Safety and Health		✓	152
	403-8 Workers covered by an occupational health and safety management system	6.3 Occupational Health and Safety: Occupational Safety and Health Management		✓	150
	403-9 Work-related injuries	6.3 Occupational Health and Safety: Hazard Identification and Risk Assessment		✓	152
	403-10 Work-related ill health	6.3 Occupational Health and Safety: Hazard Identification and Risk Assessment		✓	152

GRI Topic	Disclosure	Corresponding section / description	Notes and omissions	External assurance	Page
一般主題					
GRI 303 2018 Water and Effluents	303-3 Water withdrawal	4.3 Sustainable Environmental Management: Water Resources Management		✓	94-95
	303-4 Water discharge	4.3 Sustainable Environmental Management: Water Resources Management		✓	94-95
GRI 306 2020 Waste	306-3 Waste generated	4.3 Sustainable Environmental Management: Waste Management		✓	95-96
GRI 402 2016 Labor/ Management Relations	402-1 Minimum notice periods regarding operational changes	6.2 Employee Care and Support: Resignation notice period 6.2 Employee Care and Support: Termination notice period		✓	135
GRI 405 2016 Diversity and Equal Opportunity	405-1 Diversity of governance bodies and employees	6.1 Talent selection and cultivation: Human Resource Structure		✓	118
	405-2 Ratio of basic salary and remuneration of women to men	6.1 Talent selection and cultivation: emuneration and Benefits		✓	130
GRI 406 2016 Non-discrimination	406-1 Incidents of discrimination and corrective actions taken	6.2 Employee Care and Support: Human Rights Due Diligence		✓	145
GRI 407 2016 Freedom of Association and Collective Bargaining	407-1 Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	6.2 Employee Care and Support: Human Rights Due Diligence		✓	145
GRI 408 2016 Child Labor	408-1 Operations and suppliers at significant risk for incidents of child labor	6.2 Employee Care and Support: Human Rights Due Diligence		✓	145
GRI 409 2016 Forced or Compulsory Labor	409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labor	2.3 Integrity and compliance with laws 6.2 Employee Care and Support: Human Rights Due Diligence		✓	42 145
GRI 417 2016 Marketing and Labeling	417-1 Requirements for product and service information and labeling	2.3 Integrity and compliance with laws: compliance with laws 3.1 Product Quality and Safety: Responsible Consumption and Production		✓	47 58
	417-2 Incidents of non-compliance concerning product and service information and labeling	2.3 Integrity and compliance with laws: compliance with laws		✓	47
	417-3 Incidents of non-compliance concerning marketing communications	2.3 Integrity and compliance with laws: compliance with laws		✓	47

Appendix 2 SASB Index

Industry standard: Electrical & Electronic Equipment

Disclosure Topics & Accounting Metrics

Disclosure topic	Accounting metrics	Code	Category	Corresponding section	Page
Energy Management	(1) Total energy consumption (2) Ratio of grid power (3) Ratio of renewable energy	RT-EE-130a.1	Quantitative	4.2 Energy and resource management: energy use and intensity	87
Hazardous Waste Management	Amount of hazardous waste generated; percentage recycled	RT-EE-150a.1	Quantitative	4.3 Sustainable Environmental Management: Waste Management	95-96
	Number and aggregate quantity of reportable spills, quantity recovered	RT-EE-150a.2	Quantitative	4.3 Sustainable Environmental Management: Waste Management	95-96
Product Safety	Number of recalls issued; total units recalled	RT-EE-250a.1	Quantitative	2.3 Integrity and compliance with laws: compliance with laws	46-47
	Total amount of monetary losses as a result of legal proceedings associated with product safety	RT-EE-250a.1	Quantitative	2.3 Integrity and compliance with laws: compliance with laws	47
Product Lifecycle Management	Percentage of products by revenue that contains IEC 62474 declarable substances	RT-EE-410a.1	Quantitative	3.1 Product quality and safety	58
	Percentage of eligible products, by revenue, which meet Energy Star® criteria	RT-EE-410a.2	Quantitative	5.3 Low-carbon product design: low energy consumption and energy saving products	113
	Revenue from renewable energy-related and energy efficiency-related products	RT-EE-410a.3	Quantitative	5.3 Low-carbon product design: low energy consumption and energy saving products	114
Materials Sourcing	Description of the management of risks associated with the use of critical materials	RT-EE-440a.1	Discussion & analysis	3.3 Sustainable Supply Chain Management: supply chain risk management	67
Business Ethics	Description of policies and practices for prevention of: (1) corruption and bribery and (2) anti-competitive behavior	RT-EE-510a.1	Discussion & analysis	2.3 Integrity and compliance with laws: compliance with laws	46
	Total amount of monetary losses as a result of legal proceedings associated with bribery or corruption	RT-EE-510a.2	Quantitative	2.3 Integrity and compliance with laws: compliance with laws	46
	Total amount of monetary losses as a result of legal proceedings associated with anticompetitive behavior regulations	RT-EE-510a.3	Quantitative	2.3 Integrity and compliance with laws: compliance with laws	46

Activity Metrics

Disclosure topic	Accounting metrics	Code	Category	Corresponding section	Page
Activity Metrics	Number of units produced by product category	RT-EE-000.A	Quantitative	2.2 Operational overview and economic performance: about PHIHONG	36
	Number of employees	RT-EE-000.B	Quantitative	2.2 Operational overview and economic performance: about PHIHONG	36

Appendix 3 ISO 26000 Guidance on Social Responsibility

Core Subjects and Issues		Corresponding Section	Page	Remark
Organizational governance	System by which an organization makes and implements decisions in pursuit of its objectives	1.1 Sustainable Development Strategy	13	
		2.1 Sustainable Responsible Governance: Composition of the Board of Directors	31	
		2.2 Operational overview and economic performance: about Phihong	36	
	Due diligence	2.3 Integrity and compliance with laws	46	
	Human rights risk situations	6.2 Employee Care and Support: Human Rights Due Diligence	147	
Human rights	Avoidance of complicity	2.3 Integrity and compliance with laws: compliance with laws 2.4 Risk Management and Information Security	46 33	
	Resolving grievances	2.3 Integrity and compliance with laws: reporting mechanism	45	
	Discrimination and vulnerable groups	6.2 Employee Care and Support: Human Rights Due Diligence	145	
	Civil and political rights	6.2 Employee Care and Support: Human Rights Due Diligence	145	
	Economic, social and cultural rights	6.2 Employee Care and Support: Human Rights Due Diligence	145	
	Fundamental principles and rights at work	6.2 Employee Care and Support: Human Rights Due Diligence	145	
	Labor practices	Employment and employment relationships	6.2 Employee Care and Support: Employee welfare in Phihong 6.2 Employee Care and Support: Parental leave 6.2 Employee Care and Support: Employee Relationship Management	136 140 143
Conditions of work and social protection		6.1 Talent selection and cultivation: human resource structure	118	
Social dialogue		1.2 Stakeholders communication: Stakeholders communication mechanism	17	
Health and safety at work		6.3 Occupational Health and Safety: Occupational Safety & Health Management	150	
Human development and training in the workplace		6.1 Talent selection and cultivation: training & deployment	122	
The environment	Prevention of pollution	4.3 Sustainable Environmental Management: Waste Management 4.3 Sustainable Environmental Management: zero waste to landfill	95-96	
	Sustainable resource use	5.2 Transition to circular economy	75	
	Climate change mitigation and adaptation	4.1 Enhancing Climate Resilience (TCFD)	76	
	Protection of the environment, biodiversity and restoration		-	Due to the epidemic, beach cleaning activities were suspended in 2022

Core Subjects and Issues		Corresponding Section	Page	Remark	
Fair operating practices	Anti-corruption	2.3 Integrity and compliance with laws: compliance with laws	46		
	Responsible political involvement		-	PHIHONG has not participated in any political activities	
	Fair competition	2.3 Integrity and compliance with laws: compliance with laws	46		
	Promoting social responsibility in value chain	3.3 Sustainable Supply Chain Management: Supplier ESG Implementation and Commitment	73		
	Respect for property rights	2.3 Integrity and compliance with laws: anti-corruption and anti-bribery	44		
Consumer issues	Fair marketing, factual and unbiased information and fair contractual practices	2.3 Integrity and compliance with laws: anti-corruption and anti-bribery 2.3 Integrity and compliance with laws: compliance with laws	44 46		
	Protecting consumers health and safety	3.1 Product Quality and Safety: Responsible Consumption and Production	58		
	Sustainable consumption	3.3 Sustainable Supply Chain Management	64		
	Consumer service, support, and complaint and dispute resolution	3.2 Customer Relationship Management	61		
	Consumer data protection and privacy	2.3 Integrity and compliance with laws 3.2 Customer Relationship Management: Customer Privacy	42 63		
Community involvement and development	Community involvement	6.4 Public service and social influence	156		
	Education and culture	6.1 Talent selection and cultivation: industry-university cooperation, campus work	128		
	Employment creation and skills development	6.1 Talent selection and cultivation: training and development	122		
	Technology development and access		5.1 R&D and Innovation	99	
			5.2 Transition to circular economy	108	
			5.3 Low-carbon product design	111	
	Wealth and income creation	2.2 Operational overview and economic performance	36		
Health	6.3 Occupational Health and Safety: Occupational Safety and Health Management	150			
Social investment	6.4 Public service and social influence	156			

Appendix 4 AA1000AS Independent Assurance Opinion Statement



INDEPENDENT ASSURANCE OPINION STATEMENT

2022 PHIHONG Sustainability Report

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

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

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

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

Scope

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

1. The assurance scope is consistent with the description of 2022 PHIHONG Sustainability Report.
2. The evaluation of the nature and extent of the Phihong's adherence to AA1000 AccountAbility Principles (2018) in this report as conducted in accordance with type 1 of AA1000AS v3 sustainability assurance engagement and therefore, the information/data disclosed in the report is not verified through the verification process.

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

Opinion Statement

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

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

Methodology

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

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

Conclusions

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

Inclusivity

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

Materiality

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

Responsiveness

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

Impact

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

GRI Sustainability Reporting Standards (GRI Standards)

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

Assurance level

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

Responsibility

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

Competency and Independence

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

For and on behalf of BSI:

Peter Pu, Managing Director BSI Taiwan



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