

Corporate Sustainability- 2023 ESG Achievements

In alignment with the short-, medium-, and long-term ESG blueprint, the Board of Directors delegated the senior management to organize a CSR task force in May 2021 (Production Plant, Quality Assurance Department, Technology Department, Finance Department, Business Department, Administrative Management Department, and Labor Safety Office) to be responsible for promoting and implementing a sustainable development plan, and we renamed the CSR task force the ESG task force in March 2022 in alignment with the amendment to the law. It is responsible for integrating strategic policies and implementation results related to the environment, occupational safety, employee care, social care, corporate governance, and stakeholder communication generated by cross departmental operations of the company. Report to the board of directors at least once a year.

Convened by the Vice President of Technology and directed by the Chairman of the Board of Directors, a total of four meetings will be held in 2023, with motions that include (1) continuing to identify sustainability-related issues and formulate action plans to address them, such as the risks and opportunities of climate change (TCFD) and the enhancement of industry-specific indicators for disclosure (SASB); (2) the objectives of and policy revisions to sustainability-related issues, such as greenhouse gas inventories and verifications, carbon-neutral pathways, and energy sources; and (3) overseeing the implementation of sustainability issues, and the third-party certification of the report's planning and verification, with the completion of the verification scheduled for 2028.

On July 1, 2022, the Board of Directors of the Company approved the greenhouse gas inventory and verification schedule, and the implementation will be reported to the Board of Directors every quarter. The implementation of the Company's ESG sustainable development will be reported to the Board of Directors at least once a year, with the most recent report being filed on November 2, 2023. The task forces will modify their plans according to the Board of Directors' recommendations.

▲ ESG short-term 1-2 year sustainable development plan and goals

E environment	<ol style="list-style-type: none"> 1. Energy-saving processes and facilities have achieved a 3% reduction in energy and greenhouse gas emission intensity. 2. Set up smart meters to carry out smart energy-saving planning for equipment. Short-chain/continuous design of the process to achieve carbon reduction goals through low-carbon manufacturing 3. Set up a recycling water system to reduce tap water consumption by 5%. 4. For transportation fuel saving, we arrange the shipping in batches through the sales management plan to reduce the number of vehicles dispatched, thus reducing 3 vehicles dispatched every week.
S social objectives	<ol style="list-style-type: none"> 1. Village and Good Neighbor cares for the disadvantaged and donates more than 20 safety boxes to the village every year. 2. Provide employment opportunities in nearby villages, with more than 2 people per year. 3. To improve employee occupational safety and health, we have established a high/over-load human factors engineering promotion plan.
G governance	<ol style="list-style-type: none"> 1. Establish a risk management committee.

objectives	<ol style="list-style-type: none"> 2. Develop an intellectual property patent management plan. Supply chain management (suppliers, contractors) - ban on conflict minerals 3. Prepare the CSR report. 4. Select suppliers and contractors who share the common goal of corporate social responsibility and fully sign the "Corporate Social Responsibility Declaration" for cooperation. 5. Improve the corporate governance on a rolling basis and maintain the second level of corporate governance evaluation carried out by OTC.
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▲ ESG short-term 3-5 year sustainable development plan and goals

E environment	<ol style="list-style-type: none"> 1. Energy-saving processes and facilities have achieved a 6% reduction in energy and greenhouse gas emission intensity. 2. Work with specific customers and raw material suppliers to build a circular economy resource recycling model for precious metals (Au) and high-purity metals (Al, Cu). 3. Cooperate with the "Sewage Treatment Plant Reclaimed Water Promotion Plan", a certain proportion of process water uses recycled water. 4. Initiate ISO-14064 greenhouse gas inventory.
S social objectives	<ol style="list-style-type: none"> 1. Through organization initiation, we work with national organizations to organize social welfare activities, more than one event per year. 2. Work with neighboring companies to organize social participation activities and expand social participation. 3. Introduce the education and training management system and the job agent system, and establish a complete talent training system.
G governance objectives	<ol style="list-style-type: none"> 1. Prepare the ESG sustainability report and obtain third-party certification. 2. Prepare the English version of the annual report, shareholder meeting manual and interim/final financial report.

▲ ESG short-term 3-5 year sustainable development plan and goals

E environment	<ol style="list-style-type: none"> 1. Energy-saving processes and facilities have achieved a 10% reduction in energy and greenhouse gas emission intensity. 2. To generate and use green electricity, a solar power generation system with a total power of more than 300 kilowatts has been built. 3. Planning ISO-50001 energy management system. 4. The proportion of renewable energy (green energy) used reaches more than 10%. 5. In terms of transportation fuel management, 50% of diesel trucks under the fifth phase will be replaced, and more than 50% of official vehicles will be electric vehicles.
S social objectives	<ol style="list-style-type: none"> 1. Innovate and develop materials for advanced medical equipment, achieve high-end treatment equipment used in first-class large hospitals, and more than 1. 2. The promotion of career training for middle-aged and senior-aged people aims to create a silver-haired friendly workplace and create irreplaceable human value.
G governance objectives	<ol style="list-style-type: none"> 1. Links to the United Nations Sustainable Development Goals (SDGs), showing more than 7 of the 2030 sustainable development goals are linked. 2. Plan to join the Responsible Business Alliance (RBA). (TSMC supply chain indicators) 3. Independent directors account for more than half of the total number of directors.

▲ Implement achievements of ESG sustainable development in 2022

(1) Awards/Promotions

- Our 2023 ESG Promotion Achievement was honored with the 2023 Ministry of Labor's Occupational Safety and Health Administration's Recognition Award: Outstanding Enterprise with Public Occupational Health and Safety Indicators in Corporate Sustainability Report, which has been awarded for two consecutive years.
- 2023 Kaohsiung City Workplace Employee Health Service Promotion Program Award: Excellence Group (Level II).
- 2023 Workplace Health Management Case Study Experience Sharing.

(2) The objectives and implement achievements of ESG's short-term and medium-term sustainable development plan this year are briefly summarized in the following table:

E environment	Objective	Implementation results Data boundary: Information on the parent company's Taiwan plant area
Energy intensity	Decrease by 3%	Decreased by 0.72%
GHG emissions intensity	Decrease by 3%	Decrease by 8.72%
Achieving carbon reduction through low-carbon manufacturing (reducing electricity consumption)	Decrease by 1%	Decrease of 23.97% (decrease of 1,112,279 kWh of electricity)
Recycle the water system and reduce the usage amount of tap water	Decrease by 5%	Down 26.10%(Reduce 4194 tons of water)
Planned shipment in bulk to reduce vehicle dispatching and fuel for transportation	Vehicle number: 3	Up to 3 times per week / 49.64% decrease in gasoline / 11.14% decrease in diesel fuel
Business model of resource recycling in circular economy	<p>(1) We built a new high-purity recovery refining line for precious metals (Au) and officially started the Au recycling economy parts clean business model, and we have accomplished the target of recycling 20.5KG of gold (Au) in the plant.</p> <p>(2) In 2023, we also extended the development of the completed 5N Cu refining and recycling technology, and completed the small-volume trial production of 5N Cu slug products, adding a new circular economy business model.</p>	
Conduct ISO-14064 greenhouse gas inventory	<p>(1) In 2023, we will conduct a plant-wide greenhouse gas inventory, internal audit, and improvement of internal audit deficiencies, and finalize the first greenhouse gas inventory report in June.</p> <p>(2) In the next two years (2024 and 2025), we will follow the same operation pattern as in 2023: Organizational Inventory -> First Draft Report -> Internal Audit -> Defect Improvement -> Final Report.</p>	

	(3) Expected in the second quarter of 2026: Execute the first third-party external verification.
Environmental and ecological protection	In the 2022 Arbor Day activity, under the leadership of the Chairman and the President, hundreds of plants including podocarpus macrophyllus and hibiscus were planted, with a total of about 200 trees and 1500 shrubs planted. The total green area reaches 1440 square meters, and the greening rate of the plant area is about 4.8%, which can reduce approximately 2160 kilograms of carbon dioxide annually.

S social objectives	Implementation results															
Caring for the underprivileged and our neighbors, while making donations to help the nearby village children every year.	In 2023, approximately 20 households received some form of charity, and in the past eight years, a total of 260 marginalized families have received donations, in order to continuously improve society.															
Industry-university cooperation	On October 26, 2023, the company signed a letter of intent with the School of Design of National Cheng Kung University to develop 15 digital models of titanium and civil product designs, and to promote a platform for industry-academia collaboration and talent development.															
Social welfare activities	United Renewable Energy Co., Ltd. Representative: Pan, Lei-Lei															
Develop materials for advanced medical equipment	In order to localize and domesticate the materials for medical equipment, the Company completed the development of medical materials for domestic equipment and shipped two sets of finished products.															
Manpower development and occupational safety and health	<p>1.The Company participates in market salary surveys each year and adjusts salaries in accordance with market salary levels, economic trends and individual performance to maintain overall salary competitiveness. salary adjustments averaged 4.4% in 2022, and the Board of Directors approved salary adjustments averaging 3.45% in 2023. The Company has also adopted an average salary adjustment rate of 4.4% in 2022, and an average salary adjustment rate of 3.45% in 2023.</p> <table border="1"> <thead> <tr> <th>Average Employee Salary</th> <th>2022year</th> <th>2023year</th> </tr> </thead> <tbody> <tr> <td>Average employee salary</td> <td>Ntd948 thousand</td> <td>Ntd 983 thousand</td> </tr> <tr> <td>Average employee benefits</td> <td>Ntd 783 thousand</td> <td>Ntd 819 thousand</td> </tr> <tr> <td>Average full-time employee salary for non-supervisory positions</td> <td>Ntd 732 thousand</td> <td>Ntd 793 thousand</td> </tr> <tr> <td>Median salary of full-time non-supervisory employees</td> <td>Ntd 700 thousand</td> <td>Ntd 751 thousand</td> </tr> </tbody> </table> <p>2. 26% of female supervisors in management positions. 3. Number of occupational accidents: 1; occupational accident rate: 2.4%. 4. We conduct annual health checkups for all employees in compliance with</p>	Average Employee Salary	2022year	2023year	Average employee salary	Ntd948 thousand	Ntd 983 thousand	Average employee benefits	Ntd 783 thousand	Ntd 819 thousand	Average full-time employee salary for non-supervisory positions	Ntd 732 thousand	Ntd 793 thousand	Median salary of full-time non-supervisory employees	Ntd 700 thousand	Ntd 751 thousand
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	<p>regulations and conduct proactive questionnaire surveys through online questionnaires in the month of health checkups for human-caused hazards and overload hazards, and track them for continual improvement, and advocate preventive medicine for the promotion of health for all employees in the plant.</p> <p>5. At the end of 2023, the prevention of abnormal work overload hazards (including health abnormal inspection and tracking management) totaled 108 times.</p> <p>6. In 2023, there were 12 suspected hazardous persons in the Human Factors Engineering Hazard Questionnaire Survey with a score of more than 3 in any part of the plant, an increase of 9 compared to last year, and a preliminary analysis showed that the suspected hazardous parts were not the same in the same department, and the preliminary judgment was that the relationship with the operation might not be significant. On 21 September, the suspected workers were interviewed on site by an occupational medicine specialist.</p>
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G governance objectives	Implementation results
Rolling-type sound corporate governance and maintaining a second level gap in corporate governance evaluation	In 2023, the 2022 evaluation was announced, ranking among all TPEX Listed Companies in the second level gap (6% -20%) for four consecutive years. It is also higher than the average Level 2 score of all listed companies..
Preparation of the English version of the annual report, shareholders' meeting manual and final financial report.	In May 2023, we completed the first disclosure of the English version of the shareholders' meeting handbook, annual report, and 2022 annual financial report to comply with the FSC regulations and to enhance the understanding of the company's information by overseas shareholders and investors.
Establishment of Risk Management Committee (The third functional committee was established in 2021)	The Risk Management Committee scanned and reported to the Board of Directors in 2023 on information security risk, financial risk (overseas reinvested companies), raw material supply management risk, production risk (operation, production cost), international inflation risk (capital management, new product development risk), and environmental risk (Taiwan water risk).
Volunteer to prepare a "Sustainability Report" and receive awards	In 2023, we will continue to voluntarily prepare FY 2022 sustainability report of TTMC, uphold the belief in sustainable development, refer to the SASB and TCFD standards and disclose ESG-related information, and expect to complete the verification of third-party certification in 2028.
The completion rate of information security awareness education and training is 100%	<ol style="list-style-type: none"> 1. A total of 91 training sessions and 61 hours (100%) of training were provided, and there were no major security incidents. 2. Penetration tests were held for three consecutive years, effectively raising staff awareness of information security and reducing the rate of successful penetration from 3.6% to 1.8% year on year.

	<table border="1"> <tr> <td>year</td> <td>2021</td> <td>2022</td> <td>2023</td> </tr> <tr> <td>Number of Persons</td> <td>8</td> <td>9</td> <td>2</td> </tr> <tr> <td>Percentage of successful penetration</td> <td>3.6%</td> <td>4.1%</td> <td>1.8%</td> </tr> </table>	year	2021	2022	2023	Number of Persons	8	9	2	Percentage of successful penetration	3.6%	4.1%	1.8%
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Formulate a smart property patent management plan	<ol style="list-style-type: none"> 2023 Revamp the "Patent Management Practice" to optimize the practice of patent application, examination, and maintenance evaluation. 2023 Completion of annual personnel education on intellectual property management. The company has filed 11 patent applications worldwide, and 5 patents have been granted. The company continues to write patents, and 5 patents are in the process of examination. 11 confidential documents are listed in the company's technology research and development. 16 trademarks (11 in Taiwan, 3 in China, and 2 in Japan). 												
Board of Directors	<ol style="list-style-type: none"> 7 directors, of which 3 are independent directors. The number of female directors was 2 (28.57%). Attendance rate of directors at board meetings was 91.83%. 100% of Directors and Supervisors' training hours meet the training requirements. Investor communication: The Company held 2 legal meetings in a year. (On July 21, 2023, the Company was invited to participate in a corporate presentation organized by SinoPac Securities and on December 20, 2023, the Company was invited to participate in a group corporate presentation organized by Fubon Securities.) 												

▲The concrete benefits of investing in energy-saving or green energy-related environmentally sustainable machinery and equipment and investing in domestic green energy' s peripheral industries in 2023 are as follows:

Investment equipment	Investment amount	Investment benefits
Purchase of Oil-immersed Transformer for Hot Rolling Mill Power Supply System	NT\$4,987,000	In 2023, we will put into operation the target hot-machine molding equipment "hot rolling mill", the power supply system is a 600V transformer, transformer specifications (three-phase, 60Hz, 2500KVA), efficiency 99.15%, compared with the traditional type transformer efficiency 85%, a difference of about 14.15%, the power demand of the hot rolling mill is about 350KW, the oil-immersed type transformer can save 50 kWh of electricity/day, and the power cost is calculated at 5 yuan per unit, then it can save 250 yuan per day, and save about 5,000 yuan a month (20 working days/month), and save about 60,000 yuan a year in electricity costs. If the electricity cost per unit is \$5, then the daily saving is \$250, the monthly saving is about \$5,000 (20 working days/month), and the annual saving is about \$60,000 in electricity cost.