



2022 Sustainability Report Highlights



2022 Sustainable Highlights



Governance

- Top 6%-20% at the Corporate Governance Evaluation
- Ranked the 46th among the Top 50 in the large enterprise category, “Excellence in Corporate Social Responsibility”
- Gold Award, TCSA - Corporate Sustainability Report Awards
- Merry Shenzhen obtained the certification of ISO 27001 energy management system.



Environment

- In response to the RE100 renewable energy initiative, the using ratio of renewable energy reached 16.31% in 2022.
- Merry Shenzhen obtained the green supply chain management enterprise certification
- Level C of awareness for the CDP climate questionnaire in 2022



Social

- The headquarters won the top ranking for the workplace enrollment group of over 100 persons for the Taichung City Healthcare Step Counting Competition
- The headquarters won the Taichung City Workplace Health Enterprise Award
- Won the honor of outstanding enterprise under the “workplace sustainable health and safety development promotion plan” by the Occupational Safety and Health Administration
- Organized a press conference for a minor hearing damage survey - “Damaged Hearing Ability Below the Age of 40”
- Merry Thailand participated in a soccer game in the suburb and a fundraising sports festival and won the excellence trophy

Message from the Chairman

The world entered into the post-pandemic era in 2022, the pressure on the global supply chain remained, and there were continual impacts of ultimate climate on earth. However, Merry adheres to the spirit of sustainable management and continues to face challenges. Since 2013, we have commenced preparing sustainability reports, and we joined RE100 in 2021 and continued to include sustainable management in our management system.

In 2022, our sustainable corporate policies continued to be realized. By adopting “profit optimization, revitalization, net zero carbon emission, and entrance to automotive field” as the management and linking sustainable indicators with CEO performance, we include sustainable philosophies into the organization from the management to employees.

In terms of the environment, we actively promote the use of renewable energy and make reductions from product design and use renewable materials in compliance with green product policy. For quality management, we listen to customers’ opinions, continue to introduce automated procedures and simplify procedures to reduce carbon emissions. As a material supplier of global hearing products, we continue to keep pace with the policy of “to hear for life, listen with care” of WHO in 2022 and cooperate with the CommonWealth Magazine for the first “minor hearing damage survey”; it is found that there are over three-fourths of people who encountered abnormal conditions of ears in the most recent three months and may have the risk of hearing damages and that people lack the knowledge to protect ears regardless of the generation. Via the press conference, “Damaged Hearing Ability Below the Age of 40,” we attracted extensive attention from society to minor hearing damage and realized the concept of hearing protection through earphone workshops.

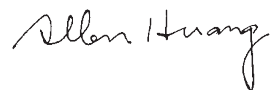
Merry prepared the 10th sustainability report this year, has received the recognition of Taiwan's Excellence in Corporate Social Responsibility Award nine times in prior years, and won the TCSA Corporate Sustainability Report Awards. However, such achievements never stopped us from moving forward. The target of net zero carbon emissions by 2050 is imminent; we will continue to promote various measures of sustainable development and commit to creating a merrier future. Merry will continue to promote the use of renewable energy, green product design, and optimization of quality management; meanwhile, it will include the concept of sustainable development into its management system and corporate culture. We are convinced that efforts will provide incentives for more enterprises to join the line of sustainable development and facilitate industrial upgrade, transformation, and the sustainable development of the global economy.

Lastly, I would like to extend our appreciation to all persons who support and help Merry to achieve sustainable development, including our partners, employees, and social sectors. Let us join hands and jointly create a glorious and sustainable future.

Chairman



President



About Merry Electronics

About



Merry Electronics Co., LTD.,

Headquarters location	Date of establishment	Stock Code
Nantun District, Taichung City	1975	2439
Year of listing	Group consolidated revenue	Group employees
2000	NT\$353.99billion 2022	5,438 persons As of December 31, 2022

Major Products

Headset products, speaker components, microphone components, battery products, and hearing amplification devices. Collaborative development with global brands, and export to Asia, Europe, and America.

Worldwide locations

18 locations including Taiwan (Taichung, Taipei, Hsinchu), China (Shenzhen, Suzhou, Huizhou, Hong Kong, Xiamen, Zhangzhou), Thailand, Vietnam, USA (California), Singapore, Canada, and Norway.

As a specialist manufacturer of electroacoustic products, Merry Electronics develops and manufactures various electroacoustic products for customers through the OEM/ODM models, covering over 100 models each year alongside new product R&D and extended model development. Based on the different electroacoustic and environmental protection requirements of customers, we develop products that meet the market demands to earn praise from leading global brands.

Major Events

Product Development Process	
1975-1985 (early products)	<ul style="list-style-type: none"> Wireless communication moving coil microphones. Taiwan's first manufacturer to successfully mass-produce speakers for Walkman headsets. Taiwan's first manufacturer to successfully mass-produce moving coil receivers for telephones.
1985-2000 (constant transformati)	Produced micro receivers and hands-free products for mobile phones and laptop speakers.
2000-2010	<ul style="list-style-type: none"> Expanded to the Bluetooth wireless market. Produced Bluetooth headsets and ANC headsets, Bluetooth portable stereo speakers, and power banks.
2010-2015	<ul style="list-style-type: none"> Produced advanced-level over-ear headsets, gaming headsets, and sports headsets. Ultra-slim wearable moving coil speakers and wireless power banks. Engaged in hearing amplification devices, such as personal sound amplification products (PSAPs).
2015-2020	Sensor fusion true wireless stereo (TWS) headsets, AI smart sports headsets, high-recognition smart speakers, high-power speakers, MEMS/ECM microphone components and modules, and wireless power banks. Also constantly engaged in medical hearing products, including hearing amplification earphones, smart PSAPs, and hearing aids.
2021	<ul style="list-style-type: none"> We have signed up to RE100 and undertook to use 100% of renewables by 2050. We have integrated with DfS to constantly improve the low-emission design of new products in terms of design, manufacturing, and planning. Actively developed automotive and medical products to pave the way for the next growth stage.
2022	<ul style="list-style-type: none"> Built the global R&D headquarters of Merry in Taichung Implemented the innovative spirit and formally set foot in video conference systems and automotive acoustic applications

Membership of associations

To understand the development trends and enhance information exchange in the industry, we actively participate in related associations and organizations that bring substantial benefits. In 2022, we were simply members of these associations or organizations without engaging in management or related working groups. We were a member of the EATD, International Institute of Acoustics and Vibration (IIAV), Micro Sensors and Actuators Technology Consortium, Taiwan Electrical and Electronic Manufacturers' Association, Taiwan Automation Intelligence and Robotics Association, Chinese National Association of Industry and Commerce Taiwan, Taichung Industrial Park Association, Taiwan Battery Association, and Taiwan Institute of Directors.

External initiatives



TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES

We have signed to support the “Recommendations of the Task Force on Climate-related Financial Disclosures Recommendations” (TCFD), and the risk management team has also convened the related departments to inventory the management status of climate-related risks and opportunities. While the potential financial impact is comparatively low, we are actively drawing up countermeasures.



RE 100

We already signed up for the RE100 initiative in 2021 to become the 13th enterprise in Taiwan to sign up for RE100. We also set the target to use 100% of renewables by 2050.

Financial performance

In 2022, the consolidated revenue decreased by NT\$784 million (or 2.17%) from 2021 to NT\$35.399 billion; the consolidated net profit before tax increased by NT\$467 million (or 29.51%) from 2021 to NT\$2.049 billion.

In 2022, as the global earphone market recorded a decline, Merry amended its market strategies. Despite the decrease in the overall revenue from 2021, it continues to invest in the development of new products for customers and R&D expenses. Moreover, due to the favorable factor of currency exchange, its non-operating income increased.

Historical revenue and profit or loss

Unit NT\$000'

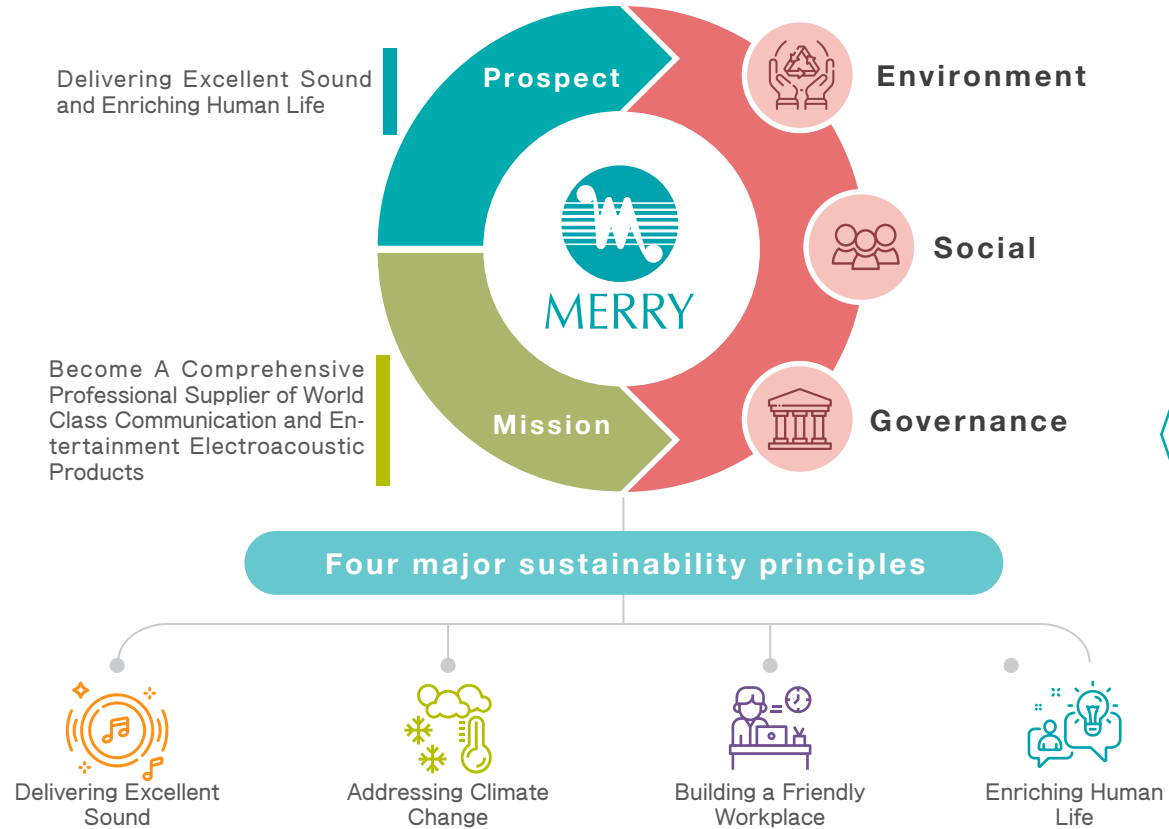
	2018	2019	2020	2021	2022
Revenue	35,494,808	36,397,793	34,444,819	36,182,719	35,398,690
Operating costs	30,769,740	31,357,874	30,126,271	31,807,621	30,846,138
Gross profit	4,725,068	5,039,919	4,318,548	4,375,098	4,552,552
Operating expenses	2,421,935	2,804,567	3,177,806	3,276,541	3,479,432
Marketing expenses	350,439	397,602	345,767	424,928	454,456
Management fees	968,491	1,101,580	1,127,403	1,152,137	1,224,246
R&D expenses	1,103,005	1,305,385	1,704,636	1,699,476	1,800,730
Operating gains	2,303,133	2,235,352	1,140,742	1,098,557	1,073,120
Non-operating income (expenses)	423,116	1,010,845	561,963	483,616	975,906
Net profit before tax	2,726,249	3,246,197	1,702,705	1,582,173	2,049,026
Income tax expenses	665,400	715,051	383,305	291,083	427,970
Net profit of the period	2,060,849	2,531,146	1,319,400	1,291,090	1,621,056
Other comprehensive income before tax	-2,583,113	926,128	-936,960	-919,953	38,221
Total comprehensive income	-522,264	3,457,274	382,440	371,137	1,659,277
Earnings per share	10.47	12.51	6.39	5.40	6.81
Expenditure items of disclosure specified by GRI					
Employees' salaries and benefits	2,930,132	2,729,703	3,306,368	3,364,588	3,342,556
Governmental grants	59,410	173,967	188,780	312,065	327,336
Direct/indirect political donation	0	0	0	0	0
Public donation expenditure	2,843	2,013	1,649	1,598	1,628

Note:

1. Please refer to our 2022 Annual Report disclosed on the corporate website (www.merry.com.tw) for the details regarding the operational status, financial performance, including liabilities, equity assets, retained earnings, dividend policy and status of execution, and rewards for employees and directors.

2. The cash dividend for 2022 will be NT\$4.50 per share. However, the actual amount will be subject to the announcement made after the 2023 annual general meeting (AGM) of shareholders.

Sustainable policy and operation



Starting from the vision of “delivering excellent sound and enriching human life,” we make continual improvements to the core business to achieve the mission of being “a global specialist provider of total solutions for electroacoustic applications in communication and entertainment.” We value the opinion of stakeholders and are committed to pursuing sustainable development through ESG. Hence, we established four major principles for sustainable development and set the short-, medium-, and long-term goals to strengthen our constitution for sustainable development, optimize the disclosure of ESG information, and create co-prosperity shared by shareholders, customers, employees, suppliers, society, and the environment.

Sustainable Development Promotion Team

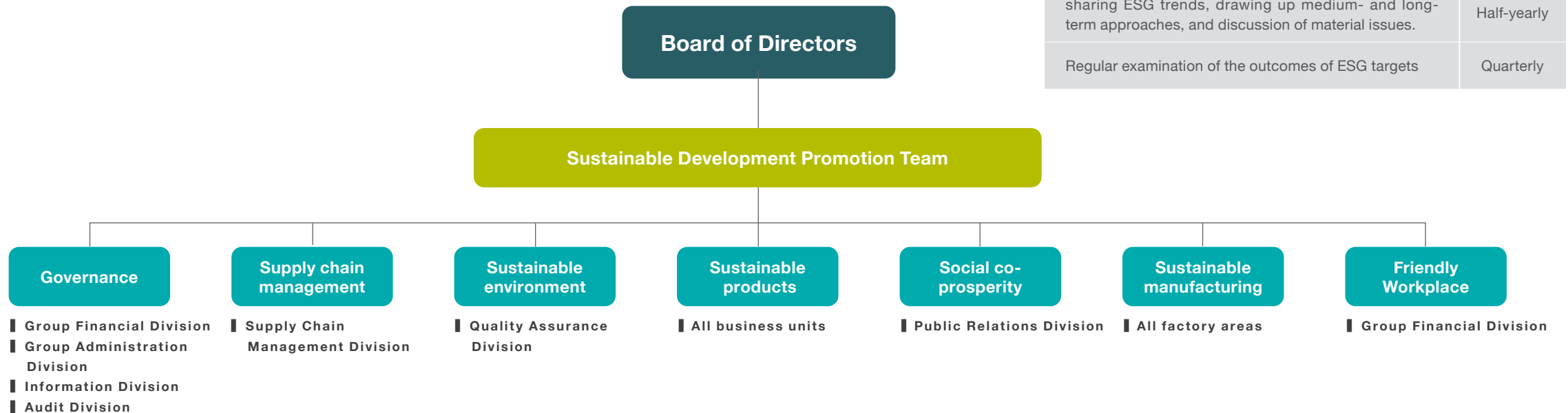
We established four promotion teams, including the Sustainable Development Promotion Team, under the Board. The Sustainable Development Promotion Team is chaired by the President, with the Public Relations Department as the executive secretary. Under the team, there are seven functional units to integrate policies and systems or propose and implement management approaches and specific promotion plans related to sustainable development, maintain constant communication and interaction with stakeholders, and periodically report to the board.

The Board supervises the Company in formulating various short-term, mid-term, and long-term sustainable development strategies, targets, execution plans, and promoting achievements; when necessary, it formulates examination and improvement plans to realize sustainable principles and targets. The promotion team reported to the Board in December 2022, and the content of the report was the execution achievements in 2022, the execution plan in 2023, various project plans initiated, and ESG performance indicators, and the execution status will also be reported from time to time.

Operating method :

Board of Directors	
Meeting Contents	Frequency
Annual ESG achievement report and plan, including sustainable development highlight schedule for the competent authority and responses to material issues concerned by stakeholders.	Half-yearly

Sustainable Development Promotion Team	
Meeting Contents	Frequency
Review of the outcomes of short-term ESG targets, sharing ESG trends, drawing up medium- and long-term approaches, and discussion of material issues.	Half-yearly
Regular examination of the outcomes of ESG targets	Quarterly



Task Force on Climate-related Financial Disclosures (TCFD)

Climate change is a challenge to be jointly faced by all sectors worldwide. The governance body of Merry understands the potential effects of climate change on operations and long-term development. It started promoting relevant management systems in 2020 and continued to improve the management operation and the awareness of risks and opportunities related to climate issues and climate in 2021. It continued

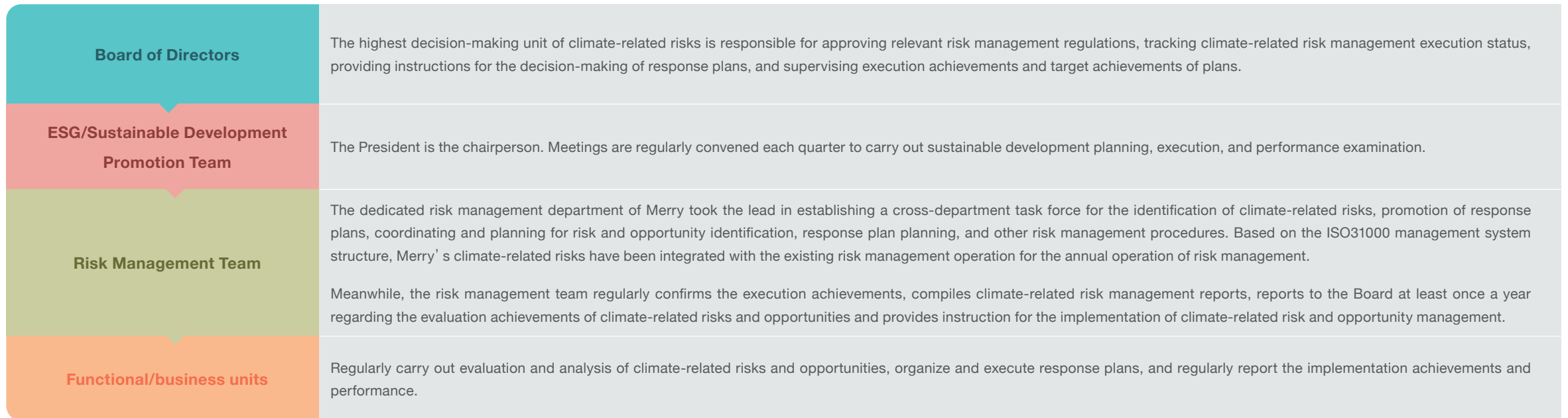
to implement climate governance, formulated policies and targets, and invested resources in evaluating and studying transformation plans. In the future, it will continue to track the achievement status of targets and adopt active action plans.

From the end of 2022 to 2023 Q1, the risk management team has convened two meetings and invited functional/business units to carry out the identification and confirmation of climate-

related risks and opportunities, financial impact evaluations, and discussion of response plans.

Evaluations and planning achievements will be included in the operating plans promoted by relevant units, and they will be reported to the Sustainable Development Promotion Team and the Board regularly as a reference for governance.

Climate change governance and structure



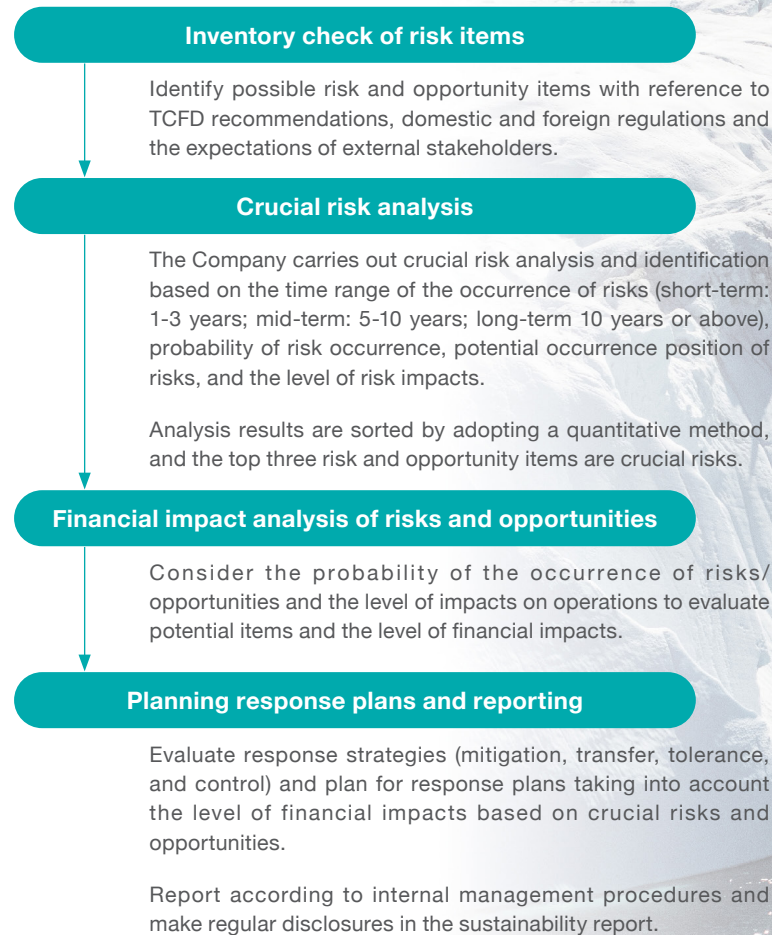
Scenario analysis

Merry is not in an industry with a high intensity of carbon emissions. However, global warming brought by climate change affects the material stakeholders of Merry. To instantly respond to market trends and potential requirements of customers, Merry identifies climate-related risks and opportunities via scenario analysis, and the evaluation results are closely examined by business departments and functional units to serve as the reference for daily operating adjustments. In addition, progress and achievements are regularly reported to the Sustainable Development Promotion Team and the Board to serve as the reference for operational decisions of the Group.

Under such considerations, Merry selected the RCP8.5 scenario for physical risks and the national target scenario for transformation risks and evaluated changes in policies, physical environments, society, technologies, and other external information to serve as the basis for the annual climate risk evaluation.

Management procedures for climate-related risks and opportunities

With reference to TCFD recommendations, Merry identifies risks and opportunities, evaluates response strategies and plans, and regularly carries out internal and external reporting based on the management procedures of climate-related risks and opportunities.



Climate-related risks and opportunities

For the evaluation of the time range of occurrence, level of impact, and financial impacts, Merry re-evaluated the evaluation results recorded in 2021 in 2022. With reference to the feedback from business units and functional units, it evaluated short-term (1-3 years) risk items and identified three crucial transformation risks and three crucial physical risks; meanwhile, it compiled and identified four major opportunity items to serve as factors of consideration for the transformation plan development and promotion of Merry. In 2022, the evaluation scope is limited to the headquarters in Taiwan without including plants in the evaluation. In the future, it will continue to expand the evaluation scope and reinforce the climate risk evaluation and governance of the Group.

	Transformation risk		
Risk factor	Failure in low-carbon material development and application	Consumers select low-carbon products or services	Increase in acquisition costs of low-carbon raw materials
Financial impact	<ul style="list-style-type: none"> Loss of capital investment Decrease in revenue due to a drop in demand 	Decrease in revenue due to a drop in demand	Increase in direct costs
Response strategies and plans	<ul style="list-style-type: none"> Develop industry-academy cooperation. Develop industry-academy cooperation. Seek cooperation with suppliers. 	Continue to focus on the international low-carbon trends, dynamics of companies within the industry, and customers' expectations and regularly carry out internal reports in terms of relevant achievements.	<ul style="list-style-type: none"> Continue to deepen supplier management. Continue to invest in the R&D of manufacturing procedures.
Corresponding opportunity	R&D and innovation to develop new products and services	Entry to new markets	Patent layout
Strategy to realize opportunities	<ul style="list-style-type: none"> Use environmental/low-carbon materials to increase products' competitiveness. Continue to promote low-carbon design by using better, lighter, and low-carbon materials. Continue to develop products in response to customers' demands and concurrently convey the message of Merry's low-carbon production to seek strategic cooperation and business opportunities. 	<ul style="list-style-type: none"> Continue to promote the development of self-owned brands and expand application fields. Light, thin, short, and small products of low-carbon designs allow Merry to enter new existing markets. 	<ul style="list-style-type: none"> Actively utilize the internal patent proposal system to assist in patent acquisition. Continue to promote business secret protection to prevent the leakage of carbon dioxide reduction technologies and procedures.

Indicators and Targets

Responding to the national trend and the national target of net zero carbon emissions by 2050, Merry identifies climate-related risks and opportunities and sets relevant indicators and objectives in combination with the existing sustainability promotion targets.

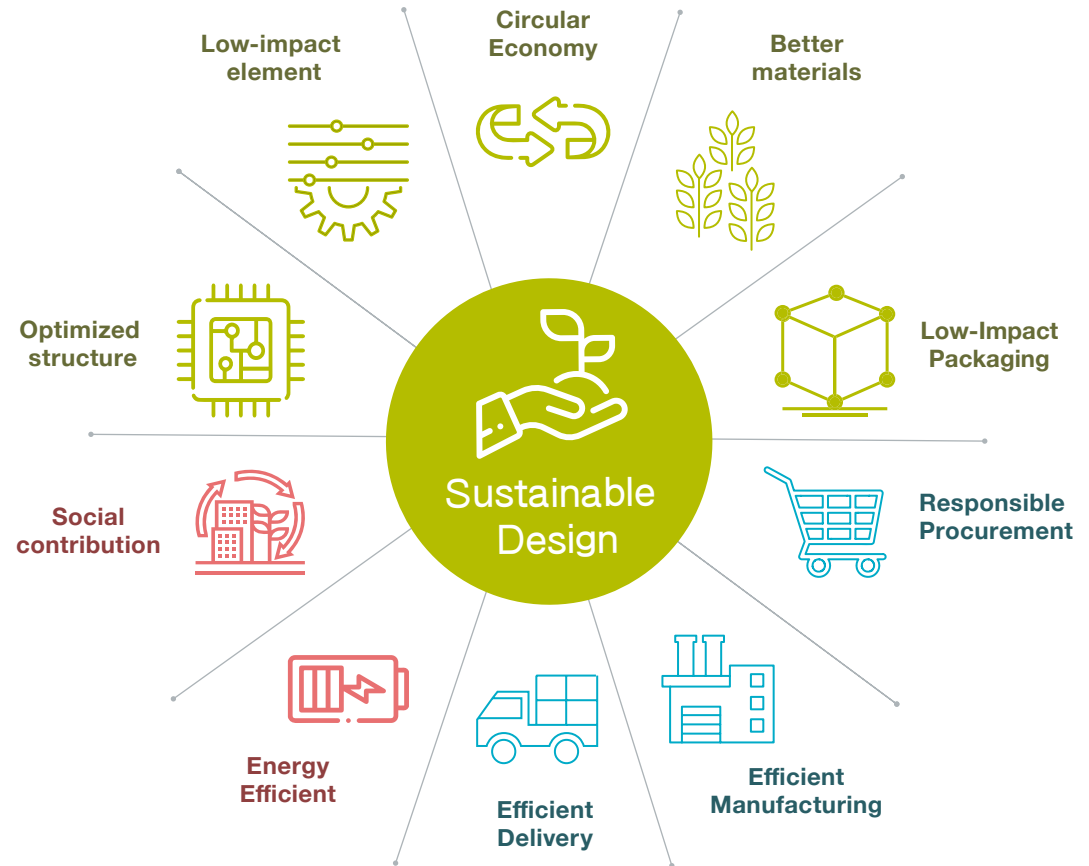
Physical risk			
Risk factor	Extreme weather results in operation suspension or interruption of employee's transportation	Extreme weather results in the interruption of supply chain transportation	Extreme weather results in production line suspension
Financial impact	<ul style="list-style-type: none"> Increase in capital investments Increase in asset losses 	Increase in indirect operating costs	Increase in capital costs
Response strategies and plans	<ul style="list-style-type: none"> Continue to enhance the internal emergency management ability. Regularly evaluate the placing venue of assets and equipment. Reduce possible property losses via insurance. 	<ul style="list-style-type: none"> Continue to deepen supplier management. Continue to reduce potential losses via commercial insurance. 	<ul style="list-style-type: none"> Continue to promote relevant ESG plans and obtain preferential loans related to sustainability to mitigate the pressure arising from the increase in capital costs.
Corresponding opportunity	Make use of production and distribution procedures of higher efficiency.		
Strategy to realize opportunities	<ul style="list-style-type: none"> Introduce automated production systems to improve product efficiency and reduce on-site labor requirements. Include the consideration of supply chain suspension brought by climate chain into production and sales planning. 		

	Indicator	2023	2025	2030
Governance	Group risk management and business continuity plan (BCP)	<ul style="list-style-type: none"> Optimize the risk management system and enhance climate governance and the level of participation of the governance body. 	Promote relevant systems to operating joints in China.	Promote relevant systems to all operating joints.
	Revenue of products with sustainable designs	<ul style="list-style-type: none"> Establish an environmental material database for product designs.(design map) New material feasibility completion rate: 20% 	New material feasibility completion rate: 30%	New material feasibility completion rate: 50%
Strategy	Ratio of the use of renewable energy(RE100)	<ul style="list-style-type: none"> Consumed 21% of renewable energy. Increase the use of renewable energy by 7% each year from 2021 to 2023; increase the use of renewable energy by at least 6% each year from 2024 to 2030. 	Consumed 33% of renewable energy.	Consumed 60% of renewable energy.
	Carbon emission intensity and energy intensity (base year of 2020)	<ul style="list-style-type: none"> Carbon emission intensity decreased by 8% as compared to the base year. Carbon emission (category 1) intensity and carbon emission (category 2) intensity decreased by 1% and 7% as compared to the base year, respectively. Energy intensity was reduced by 4% as compared to the base year. Guide the internal GHG inventory and plan certification for all plants according to ISO 14064-1. Plan and implement the carbon neutrality target for 2050 	<ul style="list-style-type: none"> Introduce SBT Carbon emission intensity decreased by 12% as compared to the base year. Energy intensity was reduced by 7.5% as compared to the base year. Plan and implement the carbon neutrality target for 2050 	<ul style="list-style-type: none"> In accordance with SBT Energy intensity was reduced by 15% as compared to the base year. Plan and implement the carbon neutrality target for 2050
Risk Management				

Sustainable Design and Innovative Management

Innovative management is one of the crucial driving factors for the Company to continue maintaining its advantages in the future. Merry has long been focusing on investments in R&D capacity and grasping new industrial opportunities. Regarding product innovation, procedure innovation, and open innovation, it combined the trends of sustainable designs and low-carbon transformation and focused on principles combining concepts of the product lifecycle and circular economy. Starting from the design stage of products, it consolidated micro-function, automated equipment, smart electroacoustic platform, battery integration, and other objectives to minimize the impacts of products on the environment and create sustainable values.


Merry combined the spirit of innovative management with ten aspects of sustainable designs to assist customers in producing advanced and effective products. It continues to improve the modulization of production and manufacturing and product design capacity, save manufacturing materials, use renewable materials and environmental-friendly packaging design, adopt stages to reduce electricity consumption to realize its green manufacturing commitments starting from the interior of the Company and realize the sustainable value of environment and society.



Innovation achievements of products and procedures

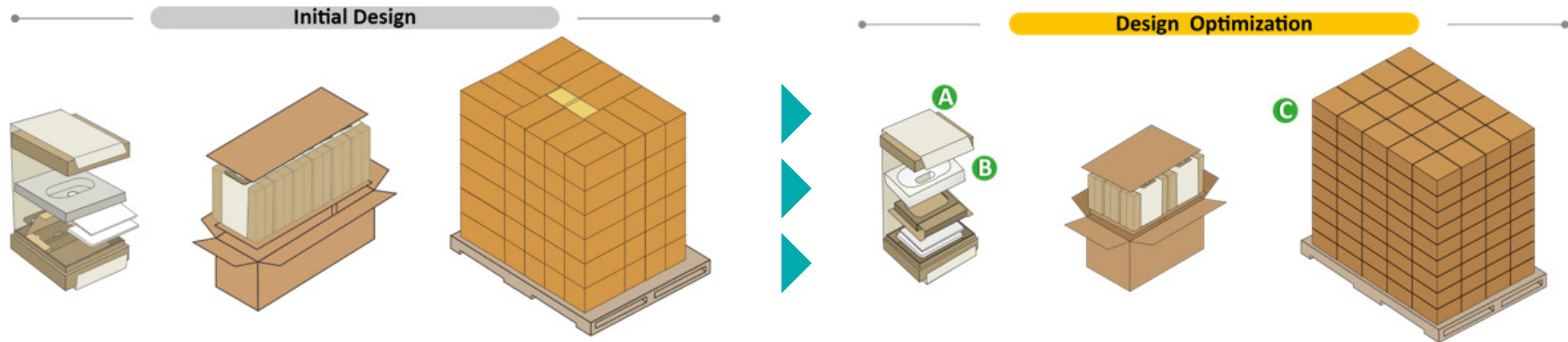
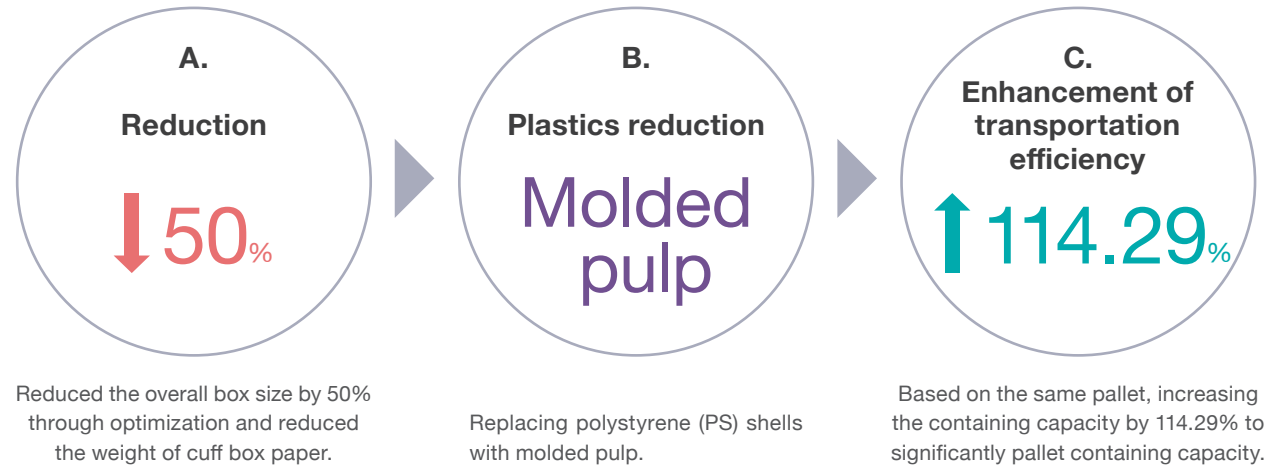
Type of Improvement	2022 Achievements
 Optimized structure	For the light new products, through the optimization of the structural design, the partial thickness of plastic parts was reduced, and the weight reduction accounts for approximately 15% of the overall materials and 4% of the total weight of earphones; delicate adjustments and screw locking positioning were made in response to the structure to for optimization, and the use of overall PCB plat materials reduced by 33%.
 Circular Economy	Introduced the use of renewable materials facilitated the number of customers' new products adopting post-consumer recycled (PCR) for the plastic covers; meanwhile, the ratio of PCR to materials also increased from 20% at the beginning of the target setting to 30%, continuing to expand the effects of Merry in terms of green products.
 Low-Impact Packaging	Continue to promote environmental-friendly packaging design and carry out designs and packaging material and printing ink reduction based on the philosophy of environmental protection and the reduction of resource waste, reduce the use of plastic materials by adopting recyclable or degradable packaging materials, and print the instruction on the inner side of the cover. After the overall optimization, the volume of paper boxes was reduced by 50%, which significantly reduced impacts on and damage to the environment.
 Energy Efficient	Improve the conversion efficiency of charging/discharging of battery products and reduce the energy consumption during charging/discharging; the charging/discharging conversion rate of energy storage products has reached 87%. As compared to products in 2020, the new generation mobile energy storage system may reduce approximately 8.4kWh of power for charging 120 times a year.
 Efficient Delivery	Fulfilling product protection, convenience, sales, and other functional conditions, the size of the overall packaging box was reduced, which improved the use efficacy of packaging and warehouse space and improved the number of products that may be loaded onto a single pallet. Taking entertainment earphone products as an example, the number of products that may be loaded increased by 114%, which significantly improved the loading efficiency of pallets and reduced the number of transportation containers and requirements for warehouse storage. With the same shipping quantity, approximately 63%of carbon emissions may be reduced for product delivery.
 Efficient Manufacturing	<p>Integrate OT and IT, the two major technologies, for production line intelligence upgrades.</p> <ol style="list-style-type: none"> 1.The modularized designs of automated machines reduced the workload of production line changeover design by 70% and reduced the cost of changeover by 50%. 2.The modularized designs of carriers reduced the workload of jig alteration by 60% and reduced the cost of jig by 60%. 3.The production line set-up time reduced from 8-12 weeks to 5 weeks, and the target is to reduce to 3 weeks by 2025.

Open innovation achievements

Type of Improvement	Engage in medical innovative products in 2022 - passive AI smart fetus sensor technologies
 Social Contributions	<p>Successfully developed the AI fetus sensor, which is developed by using the highly sensitive MEMS microphone and clinically verified in cooperation with medical institutions. The sensor is able to improve the deficiency of existing equipment to help pregnant women monitor fetuses' conditions.</p> <p>Deficiency of market equipment: Fetus sensors currently used by obstetrics and gynecology departments are active inspection that makes use of the theory of ultrasonic to detect fetal heart rates (FHR).FHR monitoring equipment used clinically is large and pricey and may not be used for real-time monitoring at home. If fetuses have any particular circumstances, pregnant women are unable to instantly acknowledge and respond.</p> <p>Advantage of innovative product: For the product, the Company will develop a passive fetus monitoring system that does not require ultrasonic monitoring technologies and simplify monitoring devices and operations. Users may operate the system themselves together with mobile apps and networks to provide information to doctors for subsequent analysis or diagnosis via home monitoring.</p>

Innovation of low-emission packages

Through the innovation and design of product packages, besides reducing the use of packaging materials and ink, we also reduced plastic use and used recyclable, degradable packaging materials. Additionally, to reduce the carbon footprint of product logistics (including warehousing, transportation, packaging, and distribution), we re-designed product packages to enhance packaging and warehousing efficiency while meeting requirements for product protection, convenience, and sales. This also increased the containing capacity of each pallet to reduce container use during transportation and storage space for warehousing.



Efficient Manufacturing

Integrate OT and IT, the two major technologies, for production line intelligence upgrades and carry out comprehensive improvements in terms of efficiency, accuracy rate, and product quality.

Information upgrade

With the arrival of Industry 4.0, in combination with 5G applications and Big Data collection, the Company converted data to “visualized data” via plant equipment to collect comprehensive production information (including supplies, workstations, equipment, and test data), together with automatic background calculation, and provide digital decisions rapidly.

Introduce the central situation room board to allocate tasks and the function of automatic message delivery to the mobile devices of technicians upon any malfunction of equipment to solve issues rapidly and provide crucial decisions to minimize operating costs.



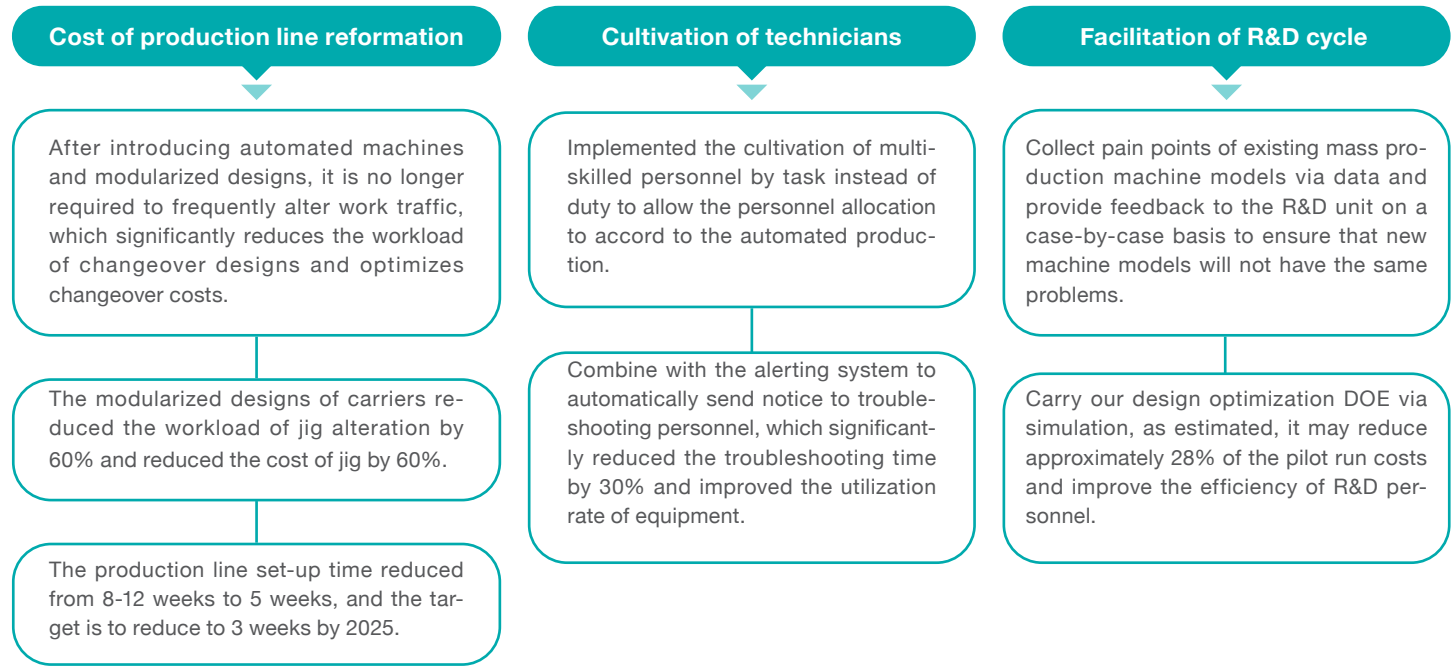
Upgrades of operating technologies

Optimize the SPK procedures, SMT and automated module assembly capacity, introduce SPK magnetic circuit automatic assembly machine, unmanned robotic arms, automated welders,

automated guided vehicles, and other automated solutions to reduce the workload of changeover designs by 70% and reduce the cost of changeover by 50% and significantly improve the product assembly capacity in order to achieve the optimal production efficiency alongside the increase in equipment utilization rate.

Production line of high flexibility

The life cycle of consumer products has shortened, and products are produced in small quantities but diverse models with a large demand during the initial marketing period. The output in the first three months may account for 50% of the total requirements of orders; therefore, production lines of high flexibility shall be created, combined with the introduction of automated equipment, to solve the costs of mass changeover and labor requirements at the initial period of mass production.



Green product management

Management policy

To safeguard the health and safety of end users of products and reduce the potential risks of environmental impacts on products, Merry has established its regulations for substance management and explicitly specified the content of all materials that contain environmental control substances based on the latest international regulations for hazardous substance management and customer requirements, and implemented relevant standards through internal promotions and educational training to provide products that comply with or more favorable than such standards and minimize external effects on the environment and ecosystem.

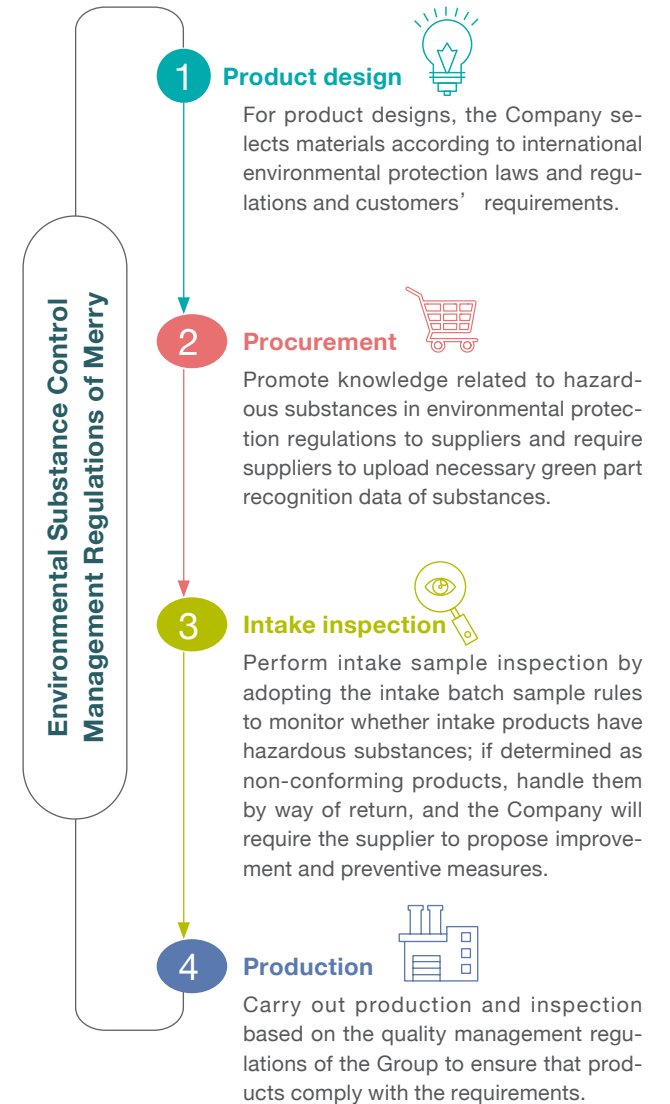
When developing and manufacturing various electroacoustic products for customers, we integrate green thinking with product design, materials procurement, product manufacturing, and product sales and servicing to ensure compliance with the

green product requirements throughout the process from suppliers to customers.

In materials management, mechanisms integrating the green product management system (GPMS), product lifecycle management (PLM), and enterprise resources planning (ERP by SAP) systems are applied to management, starting from part number assignment to eliminate unauthorized use of materials. We also monitor products according to the EU's WEEE directive and enhance the reuse and recycling rates (e.g., using recyclable plastics such as ABS and PC and actively developing and implementing recyclable metals, e.g., recycled aluminum/recycled steel) to reduce carbon emissions and mitigate the environmental impact throughout the product's lifecycle.

Environmental substance control and management procedures

- EU RoHS
- EU RoHS 2.0
- EUREACH (SVHC)
- EU Battery Regulation
- California Proposition 65
- China RoHS
- China VOCs
- EU PPWD
- EU WEEE II
- CMRT/Conflict Mineral Policy
- Phthalate-free plasticizers
- Free of lead, nickel, beryllium, antimony, and antimony oxide
- PVC-free

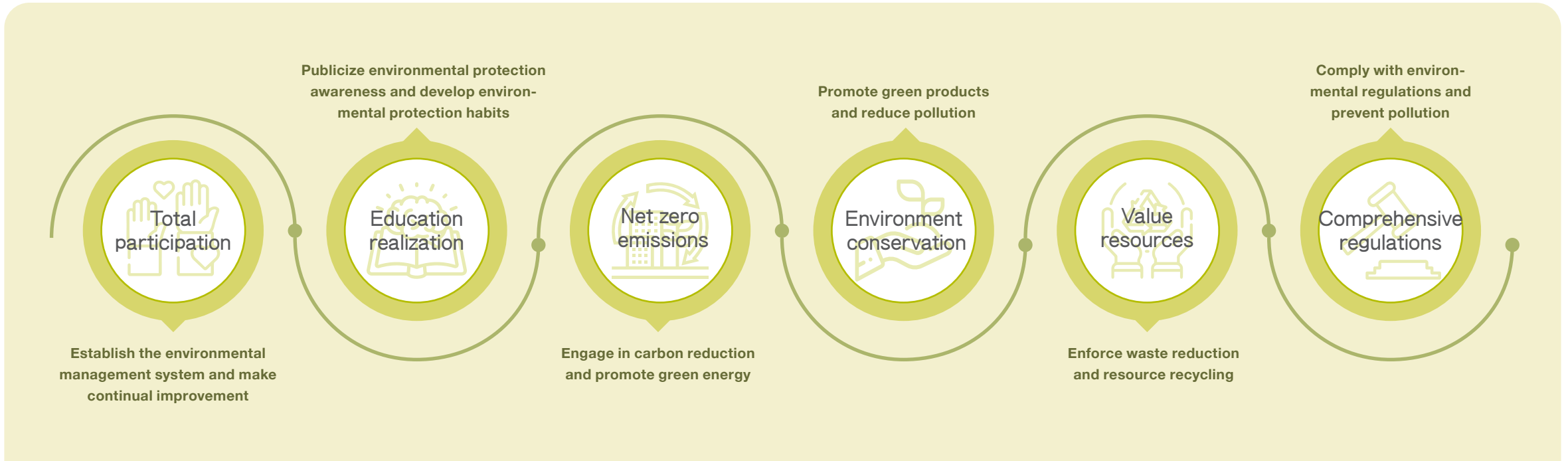


We audit new suppliers according to the “Supplier Management Regulations.” Management of qualified suppliers (vendors) is implemented according to GPMS-related SOPs.



- Evaluate the required green part recognition data (e.g., the declaration of conformity, material certificate, and test report) that suppliers upload to the GPMS according to the “Environmental Substances Control Regulations” to ensure compliance with the international environmental protection laws, regulations, and directives, and customer requirements of such parts. In 2022, 100% of Merry’s products complied with international environmental protection regulations.
- Publicize the REACH regulations and the knowledge of hazardous substances in the REACH annexes to suppliers and investigate and control if products contain SVHC in the REACH and the hazardous substances in the REACH annexes.
- Establish the hazardous substance examination system for incoming materials; perform sampling tests through random sampling according to the intake batch sampling rules; examine and verify incoming materials with instruments including the XRF, GC-MS, and FTIR to ensure no hazardous substance is contained in the parts. Request suppliers to provide support data for materials not complying with the “Environmental Substances Control Regulations” (nonconforming items), return all re-verified nonconforming items to suppliers, and request suppliers to propose corrective and preventive actions.
- Based on the labeling specifications of branded customers and the relevant certifications of product category, we completed package labeling confirmation right at the design phase to meet the legal requirements for product labeling of different regions. In 2022, no violation or customer claims relating to labeling were reported. In 2022, there was no event of product and service violating health and safety regulations.
- In 2022, the Company held three online supplier conferences to promote relevant CSR, RBA, and GP specifications of Merry on July 15, 2022, promote organizational carbon inventory and issues related to ESG trends on August 19, 2022, and promote relevant specifications under regulations of EU on September 23, 2022.
- According to the product structure principles and under the regulatory requirements of WEEE, the Company engaged a certified laboratory to disassemble its products. Based on the B2B operating model, products produced in 2022 can achieve a reuse rate of 55% and a renewable rate of 75% in terms of the recycling ratio, and the waste recycling at the end is executed by end brand customers.

Merry Environmental Protection Policy




【 Organization governance 】

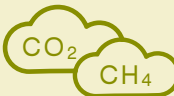




Under the Board, we have established the Sustainable Development Promotion Team and the responsible unit for environmental management to promote environmental resources management, corporate carbon management, energy management and renewables use, water and waste management, as well as strengthening environmental protection awareness.

The dedication unit of sustainable environment corresponds to the group's sustainable development commitment and global environmental issues; plans and establishes the group's short- and long-term environmental sustainability policies and goals; holds environmental sustainability meetings with all locations periodically; follows up the planning and implementation of their sustainability actions; and exchanges experience and the last trends of environmental sustainability issues in order to

strengthen the horizontal collaboration and communication across organizations and departments. In terms of execution, each business unit includes the relevant environmental policies and targets in the management systems, while the dedication unit of sustainable environment promotes the collection and consolidation of the relevant information within the group.

Climate strategies and achievements

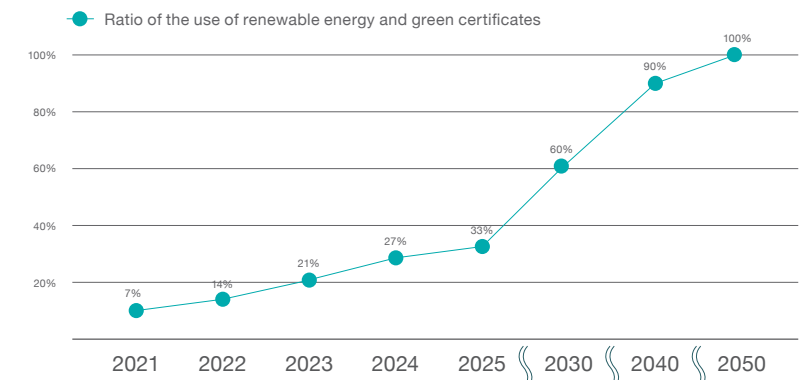
Issue	Strategy	Highlights of 2022 performance
 <p>GHG inventory</p>	<ul style="list-style-type: none"> GHG inventory: We constantly expand GHG inventory to all locations and enforce the inventory of other indirect (Scope 3: categories 3 to 6) GHG emissions. 	<ul style="list-style-type: none"> Taiwan HQ and Merry Shenzhen performed organizational GHG inventory in accordance with ISO14064-1:2018 standard and passed the third-party verification. Merry Vietnam and Merry Thailand completed internal organizational GHG inventory in accordance with the ISO14064-1:2018 standard. Completed the carbon footprint inventory of an earphone product (one piece) and passed the third-party verification of ISO14067:2018.
 <p>Enhancing energy efficiency</p>	<ul style="list-style-type: none"> Energy monitoring system and energy use analysis: Improved the energy efficiency of energy-consuming equipment. Paying attention to successful examples in corporate energy conservation: Through experience exchange talks and external successful examples in energy conservation, we actively learned new technology, concepts, and experience. 	<ul style="list-style-type: none"> Merry Shenzhen Plant 2 introduced electric meter monitoring and established an energy management system to automatically collect data by the system for improvement in abnormal power consumption immediately. Merry Vietnam installed a waste heat recycling system in its air compressor system to provide hot water to dormitories, which can save approximately 16,000kWh each year. Merry Thailand updated 14 inverter A/Cs to improve energy consumption efficiency, which can save approximately 66,600kWh each year.
 <p>renewables</p>	<ul style="list-style-type: none"> renewables use: Assess solar PV system construction and renewables transfer projects. renewables certificate (REC): Supported local renewables development by purchasing RECs. 	<ul style="list-style-type: none"> In 2022, under the boundary of RE100, Merry used a total of 5,506MWh of renewable energy, accounting for 16.31% of the total power ratio, in which 907MWh was the direct use of renewable energy, and 4,599MWh was through the purchase of renewable energy certificates. Merry Vietnam installed a rooftop solar power system, and it is estimated to be put into use in March 2023.
 <p>Internal carbon pricing</p>	<ul style="list-style-type: none"> Establishment of shadow pricing: Set internal carbon pricing to evaluate regulatory and transformation risks related to climate change that may be faced by the organization in the future. 	<ul style="list-style-type: none"> Plan for the establishment of the internal carbon pricing system of the Group and introduce and set up the short-term, mid-term, and long-term objectives and relevant promotion schedule of the internal carbon pricing system. Set up the internal carbon pricing system and establish relevant procedure documents.
 <p>Water and waste management</p>	<p>Water resources</p> <ul style="list-style-type: none"> While domestic water use was the major water consumption at plants, we used water-efficient equipment and enhanced employee awareness by adopting ISO 14001 as the basis for the water resource management of our plants. <p>Waste management</p> <ul style="list-style-type: none"> We periodically followed up on the plant's hazardous waste disposal and conducted real-time analysis and improvement of abnormal waste production by adopting ISO 14001 as the basis for the waste management of our plants. 	<p>Water resources</p> <ul style="list-style-type: none"> Merry Taiwan has installed a rainwater collection system, and the gathering volume is approximately 1,000 tons, and the maximum use volume is 60%. Merry Shenzhen has changed to use 37 water-saving faucets. Merry Thailand adjusted the water pressure of the faucets and the water level of the flushing equipment. <p>Waste management</p> <ul style="list-style-type: none"> Merry Shenzhen optimized the SMT procedures and reduced the generation of hazardous wastes by approximately 24% as compared to 2021. 100% compliance with local laws and standards for waste disposal.

Issue	2023 Targets	Medium-term targets and strategies
 <p>GHG inventory</p>	<ul style="list-style-type: none"> Taiwan HQ and Merry Shenzhen completed the third-party verification in accordance with ISO14064-1:third-party verification of ISO14067:2018. Merry Vietnam, Merry Thailand, Merry Hong Kong, Merry Singapore, and Merry USA completed the organizational GHG inventory in accordance with ISO14064-1:2018. 	<ul style="list-style-type: none"> All locations performed GHG inventory in accordance with the latest ISO14064-1 standard. We implemented the Science Based Targets (SBT) to implement carbon reduction and management more effectively.
 <p>Enhancing energy efficiency</p>	<ul style="list-style-type: none"> Reduce energy intensity by 7.5% (base year 2020) Constantly enhanced equipment efficiency to strengthen the energy use analysis and monitoring system. 	<ul style="list-style-type: none"> Constantly expanded the scope of energy management and enforced energy efficiency improvement plans.
 <p>renewables</p>	<ul style="list-style-type: none"> In 2023, the proportion of the use of renewable energy will reach 21% of total energy consumption. The headquarters in Taichung installed a rooftop solar power system, and it is estimated to be put into use in January 2024, and it is estimated to generate approximately 250MWh of power. 	<ul style="list-style-type: none"> In 2030, the proportion of the use of renewable energy will reach 60% of total energy consumption.
 <p>Internal carbon pricing</p>	<ul style="list-style-type: none"> Continue to carry out the internal promotion of shadow carbon pricing and implement the continual optimization of operating procedures. 	<ul style="list-style-type: none"> Introduce an internal carbon fee system to improve the internal awareness of carbon dioxide reduction of the organization.
 <p>Water and waste management</p>	<p>Water resources</p> <ul style="list-style-type: none"> Water consumption intensity was reduced by 6% as compared to the base year (base year 2020) <p>Waste management</p> <ul style="list-style-type: none"> Waste intensity was reduced by 6% as compared to the base year (base year 2020) Constant promoted reduction in waste production per unit output value and enforced resource recycling following source management. 	<p>Water resources</p> <ul style="list-style-type: none"> Enhanced water monitoring and analysis and constantly enhance water efficiency. <p>Waste management</p> <ul style="list-style-type: none"> Constantly implemented waste reduction and enforced resource recycling following source management

Supporting RE100 global renewables initiative.

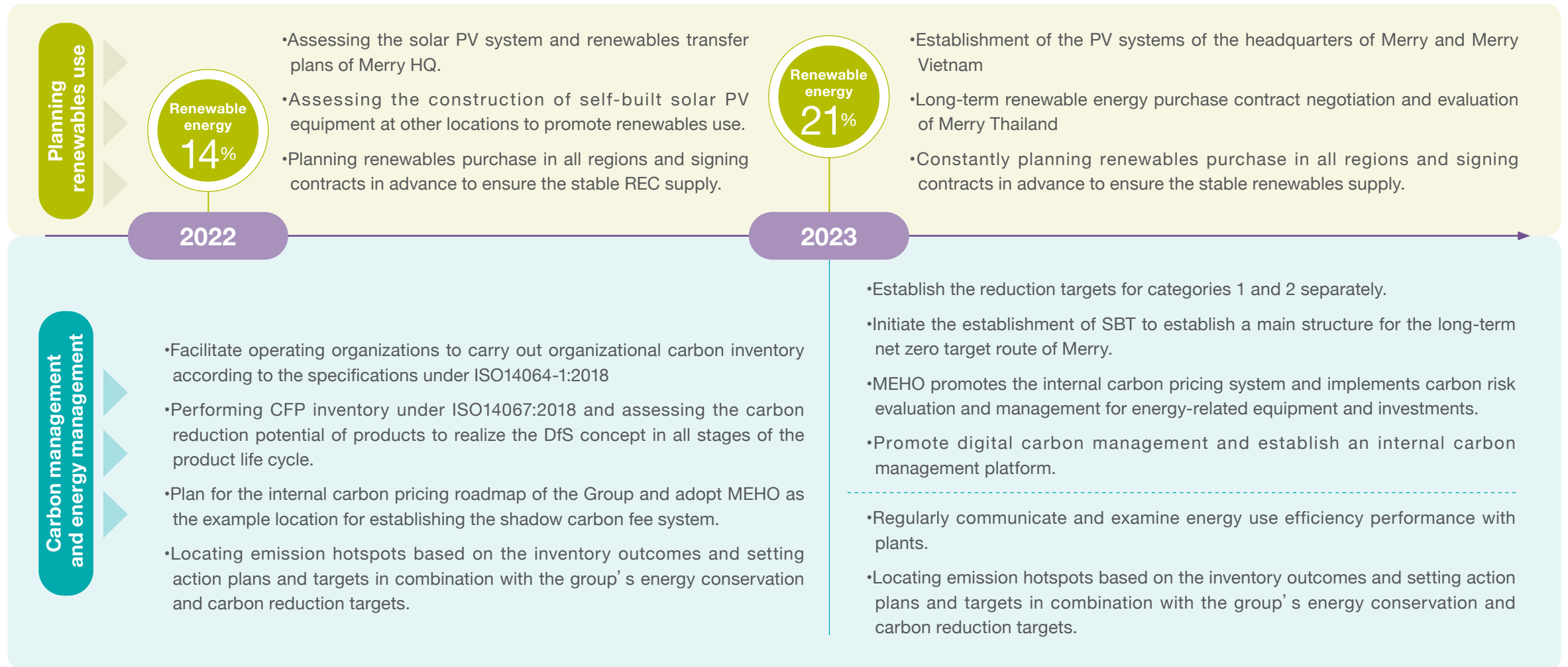
In response to SDG 13 Climate Action, in 2021, we officially signed up for the RE100 global renewables initiative advocated by the Climate Group and the Carbon Disclosure Project (CDP) and made a commitment to 100% renewables use by 2050 to advance the schedule of renewables use to the medium- and long-term goals. The boundary of RE100 will cover Merry Taiwan, Merry Shenzhen, Merry Huizhou, Merry Thailand, Merry Vietnam, Merry Hong Kong, Merry Singapore, Suzhou Merry, Fulicare (Qingdao), Fulicare (Xiamen), AST, SCI, and SEAS. To achieve the goal of renewables use, we will continue with the management and enhancement of energy efficiency, assess the feasibility of building rooftop solar PV at all locations, and actively source local renewable companies to sign electricity purchase agreements with them, and purchase international RECs to increase the proportion of renewables use each year in order to develop toward low-emission production. In 2022, under the boundary of RE100, Merry used a total of 5,506MWh of renewable energy, accounting for 16.31% of the total power ratio, in which 907MWh was the direct use of renewable energy, and 4,599MWh was through the purchase of renewable energy certificates.

Target the use of renewable energy of Merry



Merry Environmental Sustainability Goal: Net Zero Emissions in 2050

To support the climate action of net zero emissions, we set “Net Zero Emissions 2050” as an important roadmap of our action to reduce energy carbon emissions and use renewables for environmental sustainability to actively include the environmental sustainability concept in product design and development, enhance the efficiency of environmental resources, and lastly offset carbon emissions by means of carbon offsetting.



Merry Environmental Sustainability Goal: Net Zero Emissions in 2050



