GIANT GROUP ESG REPORT

2022

GIANT GROUP

Table of Contents

Message from the Chairperson

Giant Group was founded with a small capital in 1972. It has been fifty years since its establishment at the end of the cycling boom in the 20th century. Starting from scratch, King Liu, our founder, leads Giant Group through countless hurdles and challenges, and transforms the Company from an OEM into a multinational brand company with a complete value chain. With the mission of "Raise the Bar: Advancing the entire cycling world", the Group not only provides a full range of bicycle products, but also devotes itself to the promotion of a new cycling culture over the years. We are committed to spreading the joy of cycling, providing innovative products and services, and creating wonderful riding experiences for people. Founded on our expertise in manufacturing, we expand our presence from R&D, manufacturing, distribution and retailing to a cycling lifestyle, and communicate directly with the end customers to build a complete bicycle ecosystem. As we enter our next 50 years, we are facing the end of COVID-19, which has wreaked havoc around the world for three years, and the peak of a cycling boom. The pandemic and climate change raise environmental awareness of health and extreme weathers and even affect people's lifestyles. However, they also allow us to reflect on how we can use bicycle to facilitate the lifestyle changes and overcome the challenges of extreme weathers. In 2022, we announced Giant Group's ESG manifesto - "Cycling for a Better Future," focusing on the three pillars of climate, circulation, and diversity to cover topics including Innovating a clean future, Mobilizing for DEI and Transforming for circularity.

We believe that one of the most effective ways to expand and promote carbon reduction initiatives is to increase the adoption of sustainable transportation means with joint efforts from the public. That is why our founder began advocating YouBike in 2009. Through innovative low-carbon services, bicycles become a means of transportation for daily life and commuting. Today, YouBike, the public bicycle rental system in Taiwan, operates in partnership with 11 city and county governments. Having more than 81,000 bicycles available to accumulate 97.66 million rides annually, it reduces more than 16,000 metric tons of CO_2 equivalent per year.

Being a female leader, Bonnie shoulders the responsibility to create a female friendly environment in the Company as well as the industry. The Liv brand is dominated by females, ranging from the founder to the management team, engineers and the marketing team. It is the only brand dedicated to women's cycling needs throughout the entire process from R&D, design, manufacturing to production, ensuring each bicycle conforms to the concept of "female exclusive". Not only do we create the brand, but we also have traveled around Taiwan on our Liv bicycles numerous times, and even rode up to Wuling, a cycling mecca in Taiwan. In July 2022, we were invited to participate in the first Women's Tour de France, which Liv sponsored, and took part in the fourth stage of a 66-kilometer gravel road ride through the vineyards with an ascent of 990 meters. The ride was more than a rare experience as it promoted diversity and demonstrated Taiwan's bicycle craftsmanship and culture to the world.

Only a sustainable earth can support the sustainability of the entire industry and companies. Upholding our corporate culture of being pragmatic over the past 50 years, we drive green production and resource circularity from manufacturing and supply ends, consider low-carbon and waste-reducing production and sales models from design end, and integrate the value of sustainable development into our daily operations. With staying environmentally friendly as the starting point, we offer diverse and innovative green mobility solutions, and lead partners sharing the same beliefs to create new values together in the journey towards a grand sustainable future.

GIANT GROUP Chairperson

Chairperson
Bonnie Tu

Message from the CEO

Looking back on 2022, the industry was confronted by severe impact from unfavorable market conditions including worsening global inflation, weak consumption in Europe and the U.S., and shortage of high-end components. While these factors put operational resilience of enterprises to the test, threats such as COVID-19, extreme weathers and geopolitical conflicts increased operational risks and uncertainties for enterprises and called for immediate environmental, social and governance (ESG) actions. In addition to drawing up action plans as a team internally, Giant Group, as a key member in the global cycling industry chain, called on upstream and downstream partners to take practical and proactive actions and march towards the challenges and opportunities on the road to sustainability.

Giant Group celebrated its 50th anniversary in 2022. As we embark on the next 50 years, sustainability would be a major strategy for the Group. At present, we have implemented energy data management and completed organization-level greenhouse gas inventories at 16 factories in Taiwan and China. Our scientific-based inventory revealed that the carbon emissions per million dollars of revenue in our Taiwan factories dropped 17.7% in 2022 compare to 2021. Our next step will be to progressively increase the use of renewable energy, build smart power and water grids, and introduce high-efficiency and energy-saving equipment. We will also engage in researches on the sustainability of raw materials, delivering new solutions with the spirit of innovative research and development. Product packaging has been redesigned according to the principle of recycle and reuse. By eliminating large quantities of single-use plastics while proactively carrying out researches on various recycled materials, we expect to increase the use of recycled and environmentally friendly materials every year. In 2022, we completed the carbon footprint inventory for Stance 29 1, our full suspension mountain bicycle. The manufacturing of one Stance 29 1 with the existing supply chain generates approximately 159 kilograms of carbon emissions. During data collection, we accurately calculated the carbon footprint of the product throughout its lifecycle, i.e., from cradle to grave. We examined suppliers' carbon emissions data and comprehensively disclosed and analyzed the carbon hotspots in the manufacturing process. We have obtained ISO14067 certification.

For the sustainable transformation of the entire cycling industry chain, Giant took the initiative to launch the "Bicycling Alliance for Sustainability (BAS)", inviting industry partners to fight together for the sustainability of the earth. We also serve as the first BAS chairman and work with peers on carbon deduction opportunities through choices in production, manufacturing, design and materials. We continue to drive the "carbon footprint" certification of individual products while fighting for the carbon rights of bicycles.

Social welfare is also an integral part to Giant Group's ESG work. We advocate climate philanthropy by incorporating climate issues into public welfare. In practice, we launched the "Cycling and Planting for Environmental Protection" campaign in 2022, calling on employees to plant trees at the Taichung Metropolitan Park and restore native forests in the Dadu Mountain, so as to enhance the effectiveness of carbon sequestration and increase the forest carbon sinks. We also signed a Memorandum of Understanding on Firebreaks with the Fire Bureau of Taichung City Government and the Taiwan Reforestation Association. We plan to adopt forest buffer zones to achieve carbon reduction as well as prevent the risk of forest fires. The Group will continue to organize employee volunteer days for every employee to become a ESG practitioner.

Giant Group delivered impressive result and ranked 51st in Corporate Knights' 2023 Global 100. Moving forward to the next 50 years, Giant Group will push for low-carbon life, circular economy, and DEI; build the sustainable vision of Cycling for a Better Future; and make changes the driving forces for a better future.

GIANT GROUP CEO

Chief Executive Officer
Young Liu

Recognition and Awards

May-22

2022 BikeRadar Bike of the Year
(Giant Revolt Advanced Pro 0)

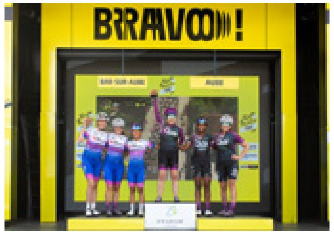
Jun-22

2022 United Nations' World Bicycle Day - Special Lifetime Achievement Award
(King Liu, the Founder)

Jun-22

Leadership and Outstanding Contribution to Cycling Award
(Vicky Liu, the Chairperson of Cycling Lifestyle Foundation and YouBike Co., Ltd.)

Jul-22



Bonnie Tu, the founder of Liv, successfully completed the Women's Tour de France Amateur Challenge

Oct-22

Sunshine A+ Competition of the Taichung City - Green Energy Contribution Award

Nov-22

Ranked 6th in the Best Taiwan Global Brands

Nov-22

The 31st Taiwan Excellence Award - Gold and silver awards
(Momentum won the Taiwan Excellence Silver Award with the cargo e-bike PakYak E+)

Dec-22

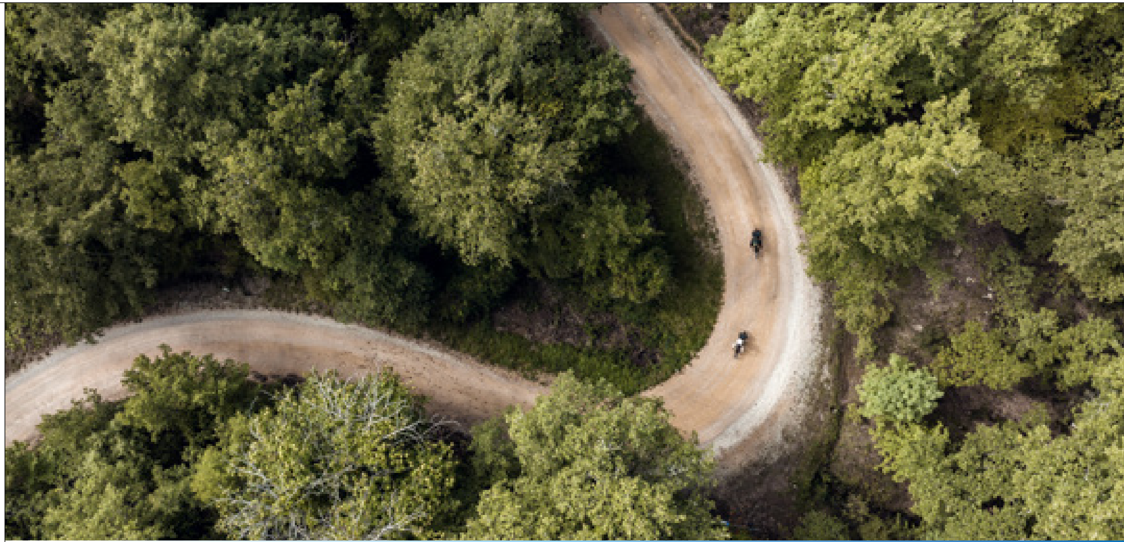
The 16th National Distinguished Accomplishment Award
(Young Liu, the CEO)

Dec-22

2022 National Sustainable Development Award

Environment
Social
Governance

2022 Sustainability Highlights



Environmental aspect

5,060 metric tons of CO_2e

Carbon reduction from the 29 energy-saving measures in 2022, which reduced power consumption by 7,767 MWh

12,939,622 kWh

Electricity generated from solar systems in 2022

7.4%

Percentage of green power in 2022

Social aspect

122%

Recruitment rate for disabled people in 2022

31 sessions

Bicycle safety sessions in primary and secondary schools in 2022

100%

Completion rate of occupational safety and health proposals in 2022

Governance aspect

920.4 billion

Consolidated revenue in 2022

97%

Average attendance rate of directors in 2022

0 incidents

Zero information security incidents in 2022

About Giant Group

1.1 Company Profile

Giant Manufacturing Co., Ltd. (hereinafter referred to as Giant Group, the Group or we) was established in 1972. Through continuous efforts and innovations, we insist on the finest quality since establishment and vertically integrate bicycle design, technology R&D, manufacturing and brand sales to provide one-stop-shop services for customers.

In recent years, global turmoil brought by climate change drives gradual changes in lifestyles. Bicycles are an excellent solution for overcoming the challenges of extreme climate. With the mission of “Raise the Bar”, Giant Group is committed to advancing the entire cycling world through continuous improvement in value-added products and services and pursuit of brand value enhancement. In 2022, the Group’s consolidated revenue set a record high with NT$92.04 billion, an increase of NT$10.2 billion and a year-over-year growth rate of 12.5%. As Giant Group embarks on the next 50 years, we would team up with stakeholders including employees, shareholders/investors, customers and suppliers in embracing sustainability, and stive to integrate ESG into our core business for corporate sustainability.

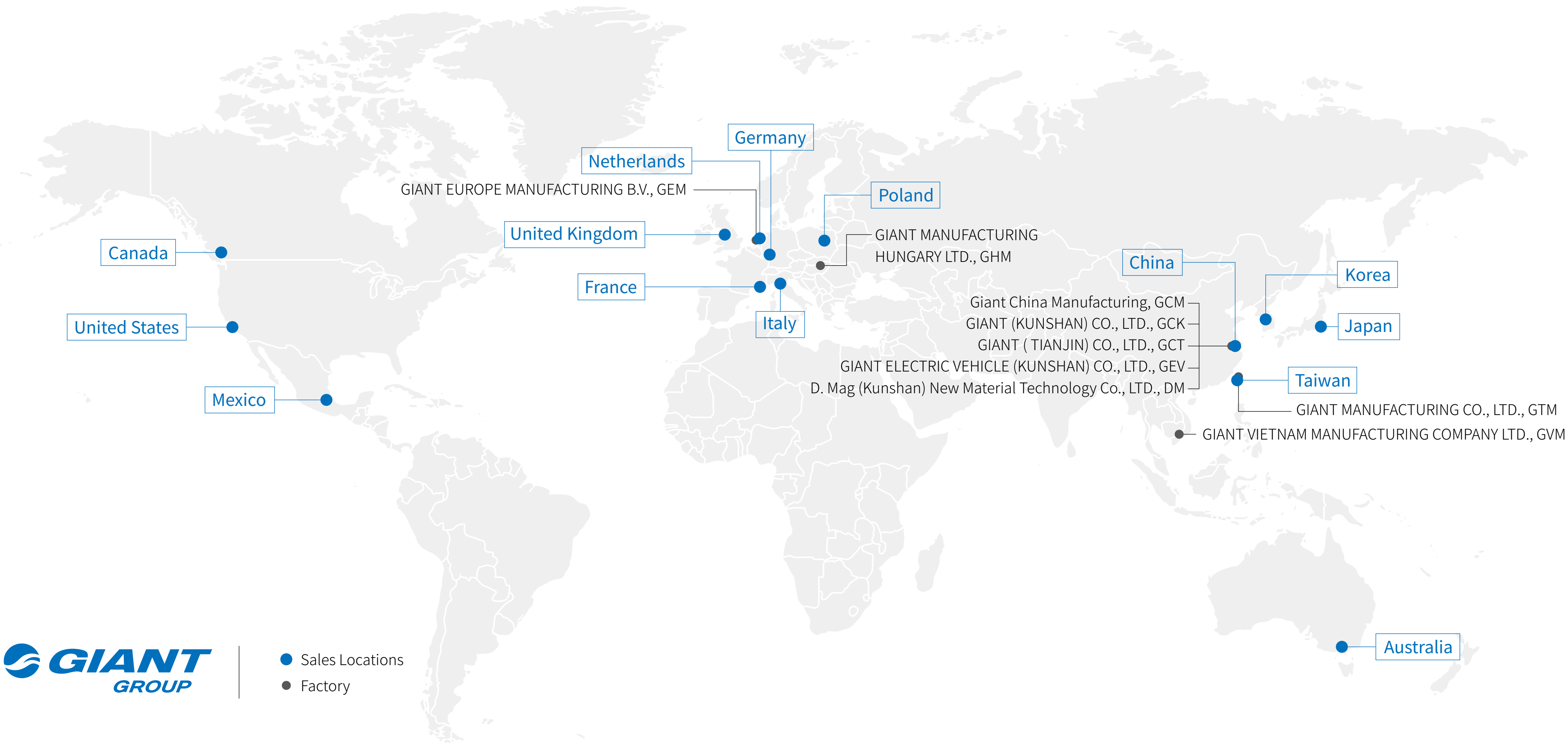
Giant Group has manufacturing factories and sales companies in Taiwan, Asia, America, Europe, and Oceania to provide the most comprehensive bicycle products and services to different consumer groups around the world.

Headquarters at the	Founded in	Total number of employees worldwide
Central Taiwan Science Park (No. 999, Sec. 1, Dongda Rd., Xitun Dist., Taichung City)	1972	11,107 persons

NT$5,844 million	Net income
US$746 million	Ranked 6th in the 2022 Best Taiwan Global Brands with a brand value of US$746 million, setting a new record of brand value and being the highest brand value in the health and sports industry
3 years	Revenues hit record highs for three consecutive years
40%	A long-term market leader in Taiwan with 40% market share, the No. 1 cycling brand in China; and one of the top three brands in Europe and North America
37%	The overall percentage of female employees in Taiwan is 37.12%, with women in managerial positions account for 26.95%

1.2 Global Network

As a global leader in the cycling industry, Giant Group focuses on not only bicycle design and technology development, but also manufacturing and brand sales. We own 9 factories, 14 sales companies, and over 10,000 sales channels worldwide, providing the most timely and comprehensive services to consumers around the world. As we concentrate on advancements for bicycles, e-bikes and related components under private brands, we place equal importance on customer brands, bringing customers' products to the next level to create an environment for fair competition.



	9	14	10,000+
Strategy of parallel development of OEM business and private brands Bicycle/E-bike/Bicycle components	factories	sales companies	sales channels

1.3 Brand Architecture

With "Raise the Bar" as our mission, Giant Group is committed to advancing the entire cycling world. We own four major brands, including GIANT, the world's leading brand of high-end professional bicycles; Liv, the world's one and only women exclusive cycling brand; Momentum, the brand for urban commuting and leisure bicycles; and CADEX, the brand for performance bicycle components. With brand-specific products and services targeting different consumer groups, we aggressively build a strong brand portfolio. Furthermore, based on the beliefs of cultural transmission, life exploration, and environmental friendliness, Giant Group has been active in promoting the new cycling culture. Having established the Cycling Lifestyle Foundation, Giant Adventure, YouBike and the Cycling Culture Museum to offer diverse cycling services, Giant Group hopes to bring the public closer to and be more familiar with bicycles and thereby striving for a sustainable future.

We execute a multi-brand strategy to strengthen and satisfy the expectations of different consumer groups. With the goal of building a strong brand portfolio, we coordinate Group resources for activation management of our four major brands, ensuring each brand retains its distinct characteristics and product differentiation, and leveraging the synergies of multi-brand management from a macro perspective. In 2021, we conducted in-depth researches on consumer journey for insights into the various touchpoints between consumers and the brand, thereby creating a unique brand experience for consumers. In 2022, we ranked 6th in the Top 25 Best Taiwan Global Brands with a record-setting brand value of US$746 million.

In order to build the concept of brand value internally, the Group organizes quarterly business consensus forum, monthly mobilization meetings and weekly meetings for senior executives to communicate with employees on the brand value of "authenticity" through appropriate case studies when the occasion arises.

Brand	Targeted Customers
GIANT	Being the first brand launched by Giant Group, it successfully transforms and accomplishes the ambition of building a global brand ahead of schedule. GIANT will lead the advancement in the bicycle world and be the ultimate professional bicycle brand in the world.
Liv	Being the cycling brand dedicated to women, Liv offers professional bicycles and related accessories for women, and expands its services to meet all the riding needs of women for them to enjoy a novel cycling experience.
Momentum	Momentum integrates bicycles into everyday lives. It offers regular and electric bicycles for urban commuting and leisure activities.
CADEX	CADEX delivers the best-performing cycling components and focuses on the riding dynamics of professional cyclists. It adopts the latest materials, and creates the most ergonomic saddle, wheelsets and tires, making it the new favorite for professional riders.

Sustainability Vision and Practice

2.1 Sustainability Governance Organization

Giant Group is committed to building a sustainable future, and our goal is to become the best cycling company in utilizing circularity. We are ahead of peers in implementing solutions with a sustainable mindset to take on environmental challenges testing our industry and the world. With the sustainability drive, we have brought together our Chairperson, CEO and top executives of units to reach the consensus of Innovating a clean future, Transforming for circularity and Mobilizing for DEI as our guiding principles. We continue to propel advancements in the cycling world for the next generation to benefit from the actions we take and build a better future.

Through the Group's three sustainable strategy pillars: Innovating a clean future, Transforming for circularity and Mobilizing for DEI, we pursue efficient operations with a professional and flat ESG organization. The organization includes a carbon governance team, an ESG team, and an external resources team to integrate internal and external resources and carry out sustainability tasks. It establishes reporting and communication mechanisms externally while setting up an ESG Council internally to coordinate the Group's sustainability tasks and plans. Progresses are reported directly to the highest authorities of the Group, i.e., the Chairperson and the CEO, through the monthly ESG PDCA meetings for them to understand the Group's sustainability performance and strengthen relevant management.

ESG Council	It integrates internal resources and external expert teams, promotes strategies through collaboration across units, and regularly reviews the progress of short-, medium- and long-term sustainability goals.
Carbon governance team	It realizes the Group's carbon reduction targets through energy-saving and carbon reduction projects among internal units such as R&D, manufacturing, sales and business management, and external parties, i.e., the supply chain partners, as well as greenhouse gas (GHG) inventory.
ESG team	Each functional unit appoints representatives to form the ESG team, which collects metrics for various ESG issues and discusses topics of concern to stakeholders in order to formulate the Group's response strategies.
External resources team	A team of external experts assists with technology researches and works with our internal R&D and design departments to develop green production/materials/recycling technologies.

2.2 Sustainability Vision and Strategy Blueprint

Cycling for a Better Future
Fulfill our sustainability commitment with three key strategies: low-carbon future, circular economy, and diversity and inclusion

2030 sustainability blueprint

To provide innovative products and services in the spirit of "Raise the Bar - Advancing the entire cycling world".
Our goal is to be the best cycling company in utilizing circularity.
In recent years, the Company incorporates ESG into its core business and promotes sustainability with the theme of Cycling for a Better Future under the three ESG strategy pillars of Innovating a clean future, Transforming for circularity and Mobilizing for DEI.

	Sustainability Blueprint	Significance to Giant	External and Internal Directions of ESG Strategy	Achievements	SDGs
Innovating a clean future	**Promote green production, and circular supply and regeneration of resources** Our goal and vision are to reduce the carbon footprint of our products and the Company's overall GHG emissions, and to re-engineer our production processes. The Group plans to build a low-carbon and waste-reducing bicycle manufacturing model from R&D to production and to accelerate the adoption of renewable energy. At present, all of the Group's factories have conducted inventories of GHG, energy and water resources, and adopted roof-mounted solar systems and other renewable energy sources. We gradually switch to green power, construct smart power and water grids, and introduce high-efficiency and energy-saving equipment. With reduced layers and baking during bicycle assembling, our energy consumption declines year after year. We adopt new ways to optimize our efficiency from logistics to production and sales.	**Provide low-carbon cycling services** At Giant Group, we take sustainability seriously. We believe that the popularization of sustainable transportation means is particularly important for mitigating carbon impact on urban environment, and bicycles, being energy-saving and low-carbon, are the best option for commuting in the future. We are committed to promoting the cycling industry in Taiwan and hope to lead the world in developing green mobility solutions. For this reason, Giant Group operates YouBike, the public bicycle rental system, under the commission of city governments. Since the system was launched in 2012, the rides have delivered a cumulative distance of 1.46 billion kilometers and reduced carbon emissions by 333,406 metric tons. The Group will continue to promote the use of bicycles as a commuting tool for urban areas.	**External - Establish the Bicycling Alliance for Sustainability and adopt responsible sourcing** We team up with our supply chain partners to establish an alliance focusing on sustainability issues. We call on 33 cycling industry leaders in Taiwan to form the Bicycling Alliance for Sustainability (BAS), taking the lead in addressing climate change crisis through joint efforts on developing and promoting innovative, sustainable, and green mobility solutions, and carrying out ESG actions with supply chain partners. We will invite more companies to join the Alliance in the future, expanding the cycling industry's influence on sustainability. **Internal – Promote climate philanthropy and be an ESG advocate** Starting internally with our employees, we have made every employee an ESG advocate with the launch of Sustainable 22-Micro Eco Actions. Examples include cycling to work, going paperless in the office, stopping the use of bottled water, and using reusable cups. Also, forest restoration activities and Ride99 for employees worldwide are organized on the Employee Day. We set carbon reduction and carbon footprint standards, and expect these micro actions of all employees would build up enormous momentum. In addition, we support local communities and discuss climate-related issues with local organizations.	Establish low-carbon bicycle manufacturing model with industry players Expand the promotion of bicycles as a means of commuter transportation Map out green supply chain and carbon management mechanisms Incorporate climate issues into the theme of public welfare	6 CLEAN WATER AND SANITATION 7 AFFORDABLE AND CLEAN ENERGY 12 RESPONSIBLE CONSUMPTION AND PRODUCTION 13 CLIMATE ACTION 17 PARTNERSHIPS FOR THE GOALS

	Sustainability Blueprint	Significance to Giant	External and Internal Directions of ESG Strategy	Achievements	SDGs
Transforming for circularity	**Circular supply and regeneration of resources and materials** Our vision is to extend the use of recyclable materials and product lifecycle, reduce waste, eliminate conventional plastic packaging and implement positive changes in the value chain from supplier to end consumer. Giant Group has reduced the use of plastic packaging materials with 95% of packaging materials being recyclable. The Group also engages in the research and development of raw materials sustainability. We expect to increase the use of recycled materials, such as recycled tires, recycled carbon fibers, and recycled aluminum alloys, every year and apply them to the products. As for E-bikes, the Group will promote a variety of innovative solutions such as recycling and maintenance of batteries and service batteries.	**Promote brand value services** We are increasing the accessibility of cycling to reduce daily carbon footprint in urban areas. Giant Group has been providing cities with a more eco-friendly and convenient way of commuting through public bicycles and bicycle rentals. Since 2009, Giant Adventure has organized over 2,800 bicycle tours for 90,000 riders by 2022, saving approximately 54,000 metric tons of carbon emissions, and continues to promote similar service models around the world.	**External - Promote the extension of product lifespan** We improve the quality and performance of our products to extend their lifecycles. Giant Group offers easy maintenance and DIY kits to extend the lifespan of products. We also reuse second-hand bicycles and launch the Pre-loved Bicycle Certification Program. The service of certifying and selling pre-loved bicycles was launched by Giant Taiwan many years ago and will be adopted by more sales companies next year. **Internal - Improve resource efficiency** We construct a circular supply chain to optimize the overall resource efficiency of our manufacturing processes. Giant Group increases the recycling and reuse of resources at different stages of production to reduce total waste from our production lines. The Giant Headquarters opened in 2019 was built in compliance with green building regulations. It achieves energy-saving and carbon reduction, maximizes greening through designs such as Low-E glass, skylights, and sun shading on the terrace, and recycles rainwater to conserve water resources.	· Focus on the development of recyclable and decomposable materials · Expand the cycling services and rental models · Extend the lifecycle of products and components	8 11 12 13 17
Mobilizing for DEI	**Encourage diversity in riding** Our vision is to champion inclusion in communities through bicycle features in an inclusive and diverse society, and to promote inclusive cycling initiatives in various communities. With our four brands of GIANT, Liv, Momentum, and CADEX to satisfy different consumer groups, we continue to introduce innovative products and services for more consumers to enjoy the fun and satisfaction brought by cycling. The Group has long been sponsoring riders of different genders, ethnic groups, and backgrounds, or community opinion leaders, hoping that through their influence, more people would be attracted to take on cycling.	**Strengthen supply chain resilience and diverse services** Currently, Giant Group has 14 sales companies and 9 factories in Taiwan, China, the Netherlands, Hungary, and Vietnam, with production personnel from all over the world. With our global production and sales network, we implement diverse and decentralized short supply chain strategy and provide consumers products and services that are close to them to minimize carbon footprint. This is why we are committed to supporting our local suppliers to build a more diversified supply chain. Giant Group builds positive partnerships and adopts workplace safety and human rights practices with high standards. We actively promote a healthy work environment across the supply chain.	**External - Encourage diverse learning and initiatives** We collaborate with a wide variety of communities to promote healthy exercise and the benefits of living with people of all ages. Giant Group maps out a series of programs such as organizing cycling tours as a coming-of-age ceremony for students in primary and secondary schools, and promoting the concept of healthy riding through education for young people to participate in our community and enjoy cycling. We are in the process of developing bicycle models for the elderly. With the opening of Cycling Culture Museum in 2020, we hope that more people will fall in love with cycling and start to ride bicycles through the promotion of cycling science and culture. **Internal - Diverse and open workplace** We empower women to go beyond cycling and support women-oriented initiatives. Giant Group aims to lower the barriers of the cycling industry by encouraging women of all ages to fulfill their potential and pursue their passions. We respect employees of all races and genders, and our global workforce is a mini-United Nations in terms of diversity. We have our first female executive over 40 years ago, and as of now, women account for 40% of our global workforce and the proportion of women in managerial position exceeds 30%.	· Bring the public to embrace cycling in their lives · Build the best employer brand · Develop a diverse and decentralized supply chain · Take an active role in community activities to promote an inclusive society	4 5 8 10 17

2.3 Materiality Analysis

Materiality Analysis Process

Giant Group follows GRI 3: Material Topics 2021 of the GRI Universal Standards 2021 and integrates the Value Balancing Alliance (VBA), the Impact-Weighted Accounts research program of Harvard Business School, and the assessment methodology of impact on the economy, environment and people developed by the Business for Societal Impact Framework (B4SI) to construct an impact-based materiality analysis methodology, identify material issues and determine the boundaries and scope of sustainability disclosures. During our preparation of 2022 Sustainability Report, we collected feedback on the level of concern of sustainability issues from 1,607 stakeholders. For the measurement of impact of sustainability issues on the Group's operation and sustainability, employees and managers from nine units participated in identifying the impact of each sustainability issue. Based on the analysis results, 12 major issues were identified from 23 sustainability issues for the Sustainability Report.

Stage 1.

Sustainability context

With reference to international standards and norms, sustainable investment ratings, global bicycle industry, and stakeholder communications, we identify the sustainability context of Giant Group and compiled a list of 23 sustainability issues.

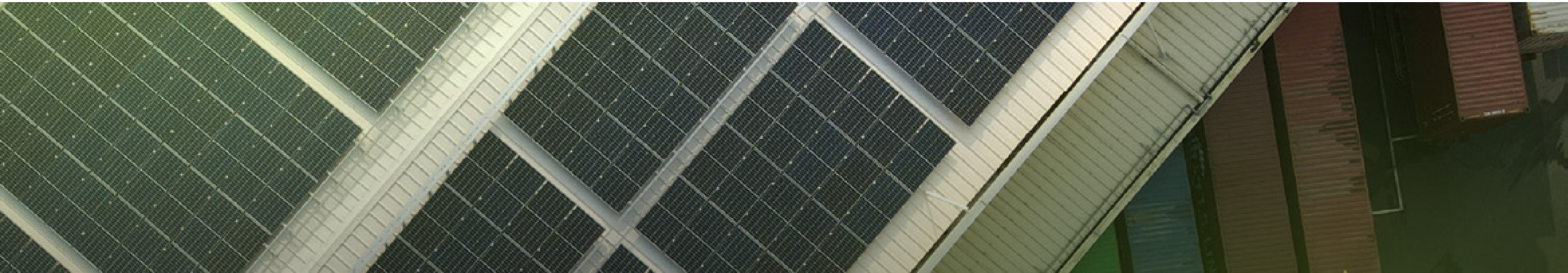
Step 1: Identify stakeholders	6 types of stakeholders	Employees, investors, consumers/distributors/brand customers, suppliers/contractors, government, and social groups (community, non-profit organizations, media, academic institutions and others) are the key stakeholders of Giant Group.
Step 2: Collect sustainability issues	23 issues	Sources of sustainable issues: International standards and norms: GRI Standards, Sustainability Accounting Standards Board (SASB), and United Nations Sustainable Development Goals (SDGs) Global bicycle industry: Study the contents and practices of sustainability disclosures by companies in the global cycling industry chain Stakeholder communications: Gather stakeholder feedback on sustainability issues

Stage 2.

Materiality analysis

Giant Group performed the materiality analysis for 2022 Sustainability Report from three aspects: "stakeholders' level of concern", "impact on operation", and "impact on sustainability".

Step 3: Stakeholders' level of concern	1,607 questionnaires	Understand stakeholders' level of concern for each sustainability issue through questionnaires. A total of 1,607 stakeholders 1,204 including employees; 99 suppliers/contractors; 20 investors; 209 customers/distributors; 11 government; 64 social groups
Step 4: Impact on operation	9 senior executives	A total of nine employees, including senior executives, task force of the ESG Sustainability Committee, and entry-level employees, were invited to participate in the materiality analysis. The impact of each sustainability issue on the four aspects of "revenue growth," "customer satisfaction," "employee cohesion," and "operational resilience" was measured. Issues were then ranked by their level of impact on operation in order to determine their materiality.
Step 5: Impact on sustainability	9 significant impacts	Determine the significance of sustainability issues based on their impact on economy, environment, and people (human rights). Using the methodology of sustainability impact assessment, colleagues and managers from nine units assisted in the identification of significant impacts and sustainability issues from the perspectives of positive and negative, actual and potential, and remedial or non-remedial.
Step 6: Material issues	13 material issues	Analysis was conducted based on the stakeholders' level of concern, and the impact of sustainability issues on the Company's operation and sustainable development. Thirteen sustainability issues were identified as being material and would be the basis for disclosures of the 2022 Sustainability Report.



Sustainability Impact Assessment Process of Giant Group

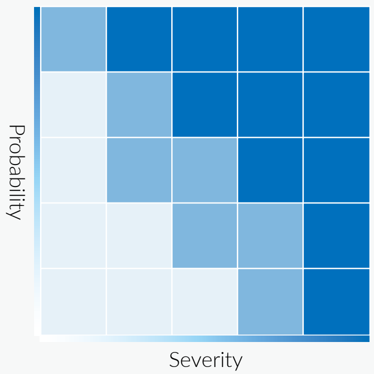
Identify Positive and Negative Impact → Analysis on Significant Impact → Sustainability Issues with Significant Impact

Identify impact

Impact	Positive	Negative
Economy	4	1
Environment	2	2
People/ Human Rights	4	2

Source of Impact:
(1) Value Balancing Alliance (VBA)
(2) Impact-Weighted Accounts (IWA) by Harvard Business School
(3) Business for Societal Impact (B4SI)
(4) Giant Group

Impact Matrix



Severity=(1)+(2)+(3)
(1) Scale
(2) Scope
(3) Irremediability

9 Significant Impacts

- ⊕ Industry Technology Development
- ⊕ Creation of Upstream Production Value
- ⊕ Increases in Profits for Investors
- ⊖ Data Privacy
- ⊕ Preservation of Planet Resources
- ⊕ Product Environmental Benefits
- ⊖ Exacerbation of Climate Change
- ⊖ Resource Consumption
- ⊖ Occupational Injury

■ Economic Impact
■ Environmental Impact
■ People/Human Rights Impact
⊕ Positive Impact
⊖ Negative Impact

Impact on Sustainability	ESG Issues
Very High	■ Innovative Products and Services
	■ Risk Management
	■ Sustainable Supply Chain
	● Green Products
High	● Climate Strategy
	■ Customer Relationship Management
	■ Code of Conduct
	● Energy Management
	● Biodiversity
	▲ Talent Attraction and Retention
	■ Financial Performance
	■ Corporate Governance
	■ Brand Management
	■ Regulatory Compliance
	● Waste Management
With Impact	■ Information Security
	● Water Management
	▲ Diversity and Inclusion
	▲ Human Rights and Labor/ Management Relations
	▲ Occupational Safety and Health
	▲ Talent Development

Note:
■ Economic Impact
● Environmental Impact
▲ People/Human Rights Impact

Ranking of ESG Issues

Impact on Giant Group's Operation	ESG Issues	Stakeholders' Level of Concern	ESG Issues	Impact on Sustainability	ESG Issues
Very High	■ Innovative Products and Services	Very High	■ Innovative Products and Services	Very High	■ Innovative Products and Services
	■ Brand Management		■ Brand Management		■ Risk Management
	■ Sustainable Supply Chain	High	■ Customer Relationship Management		■ Sustainable Supply Chain
High	■ Customer Relationship Management		■ Sustainable Supply Chain		● Green Products
	● Climate Strategy		▲ Occupational Safety and Health	High	● Climate Strategy
	▲ Talent Development		▲ Human Rights and Labor/Management Relations		■ Customer Relationship Management
	▲ Talent Attraction and Retention		▲ Talent Attraction and Retention		■ Code of Conduct
With Impact	■ Financial Performance	With Concern	▲ Talent Development		● Energy Management
	■ Risk Management		▲ Social Participation		● Biodiversity
	■ Information Security		■ Regulatory Compliance		▲ Talent Attraction and Retention
	■ Regulatory Compliance		■ Financial Performance		■ Financial Performance
	● Green Products		■ Code of Conduct		■ Corporate Governance
	▲ Diversity and Inclusion		■ Risk Management		■ Brand Management
	▲ Occupational Safety and Health		● Waste Management		■ Regulatory Compliance
No Significant Impact	■ Corporate Governance		● Green Products		● Waste Management
	■ Code of Conduct		▲ Diversity and Inclusion	With Impact	■ Information Security
	■ Tax	No Significant Concern	■ Information Security		● Water Management
	▲ Human Rights and Labor/Management Relations		■ Corporate Governance		▲ Diversity and Inclusion
	▲ Social Participation		■ Tax		▲ Human Rights and Labor/Management Relations
	● Biodiversity		● Climate Strategy		▲ Occupational Safety and Health
	● Energy Management		● Biodiversity		▲ Talent Development
	● Waste Management		● Energy Management	No Significant Impact	▲ Social Participation
	● Water Management		● Water Management		■ Tax

Note: ■ Economic Impact ● Environmental Impact ▲ People/Human Rights Impact

Material Issues of Giant Group

Material ESG Issues	Ranking	Level of Impact on Operation	Stakeholders' Level of Concern	Impact on Sustainability
■ Innovative Products and Services	1	★★★	★★★	★★★
■ Sustainable Supply Chain	2	★★★	★★	★★★
■ Brand Management	3	★★★	★★★	★★
■ Customer Relationship Management	4	★★	★★	★★
▲ Talent Attraction and Retention	5	★★	★★	★★★
■ Risk Management	6	★	★	★★★
● Green Products	7	★	★	★★★
● Climate Strategy	8	★★	★	★★
▲ Talent Development	9	★★	★★	★
▲ Occupational Safety and Health	10	★	★★	★
■ Financial Performance	11	★	★	★★
■ Regulatory Compliance	12	★	★	★★
▲ Diversity and Inclusion	13	★	★	★★

Note: ★ represents the level of impact and concern: ★★★very high; ★★high; ★with impact or concern.
Note: ■ Economic Impact ● Environmental Impact ▲ People/Human Rights Impact

Stage 3:
Responsiveness

Based on the topics and indicators of the GRI Guidelines, the materiality analysis results are expanded to cover the needs and expectations of different stakeholders concerning sustainability disclosures. Giant strengthens the transparency of sustainability issues on different communication platforms such as sustainability reports and corporate website to cover policies, organizations, practices, effectiveness, and goals.

Step 7: Determine the disclosure boundary	**4 stages** of the value chain	The four stages of Giant Group's value chain: design, manufacturing, assembly, and sales are used to determine the sustainability disclosure boundaries in order to understand the impact of sustainability issues on upstream and downstream stages.
Step 8: Review the disclosures	**11 specific** topics	The 13 material issues identified are matched to 11 specific topics in the GRI Guidelines. Sustainability information is collected and disclosed based on the reporting requirements and management approaches for each topic.

Material Issues and Giant's Value Chain

Aspect	Material Issues	Impact on Giant's Operation				Stage of Impact				Impact on Sustainability								
		Revenue Growth	Customer Satisfaction	Employee Cohesion	Operational Resilience	Design	Manufacturing	Assembly	Sales	Industry Technology Development	Creation of Upstream Production Value	Increases in Profits for Investors	Data Privacy	Preservation of Planet Resources	Product Environmental Benefits	Exacerbation of Climate Change	Resource Consumption	Occupational Injury
Economic	Financial Performance	○					●			○		○						
	Risk Management				○		●						○			○	○	○
	Customer Relationship Management	○	○				●	◆		○			○				○	
	Innovative Products and Services	○	○	○			●	◆		○	○	○	○		○	○	○	
	Brand Management						●	◆	◆		○							
	Sustainable Supply Chain	○	○		○	◆	●			○	○			○	○	○		
	Regulatory Compliance	○	○	○	○		●		◆				○			○		
Environmental	Climate Strategy		○		○		●		◆					○	○	○	○	
	Green Products		○				●	◆		○				○	○	○	○	
Social	Diversity and Inclusion			○			●											○
	Occupational Safety and Health			○		◆	●											○
	Talent Development			○	○		●		■									○
	Talent Attraction and Retention			○			●			○	○							○

*○: Issue with impact on operation or sustainability; ●: Causes; ◆: Contribution; ■: Directly related

Material Issues and GRI/SASB Index

Aspect	Material Issue	GRI Topic-specific Standard	SASB Index	Corresponding Chapter
Economic	**Financial Performance**	GRI 201: Economic Performance		3.1.2 Operating Performance
	Risk Management	GRI General Disclosures		3.2.1 Risk Management
	Customer Relationship Management	Giant Self-defined Topics		3.3.2 Customer Relationship Management
	Innovative Products and Services	GRI 416: Customer Health and Safety		3.4.3 Advanced Technology
	Brand Management	GRI 417: Marketing and Labeling		3.4.3 Advanced Technology
	Sustainable Supply Chain	GRI 308: Supplier Environmental Assessment, GRI 414: Supplier Social Assessment	CG-TS-430a.1, CG-TS-430a.2	4.2.1 Supply Chain Management
	Regulatory Compliance	GRI General Disclosures		3.1.3 Business Ethics and Integrity
Environmental	**Climate Strategy**	GRI 305: Emissions, GRI 201: Economic Performance		4.1.1 Climate and Energy 4.1.3 Wastes
	Green Products	GRI 416: Customer Health and Safety	CG-TS-250a.1, CG-TS-250a.2, CG-TS-250a.3, CG-TS-250a.4	3.3.2 Customer Relationship Management 3.4.3 Advanced Technology 5.1.2 Hazardous Substance Management
Social	**Diversity and Inclusion**	GRI 405: Diversity and Equal Opportunity		6.1.1 Workforce Overview
	Occupational Safety and Health	GRI 403: Occupational Health and Safety		6.1.4 Building a Safe Workplace 6.1.5 Occupational Safety Risk Management 6.1.6 Employee Health Management
	Talent Development	GRI 404: Training and Education		6.1.2 Talent Development and Retention
	Talent Attraction and Retention	GRI 401: Employment, GRI 202: Market Presence		6.1.1 Workforce Overview 6.1.2 Talent Development and Retention

2.4 Stakeholder Communication

Stakeholder	Significance of Stakeholder to Giant	Means and Frequency of Communication	Important Issue of Concern	Communication in 2022
Employee	Employees are an important asset and the foundation of a company. Giant Group works with employees to create a safe, healthy and friendly work environment. We not only safeguard the rights of employees, but also grow with employees. Through internal education and training as well as performance evaluation systems, we enhance employee competence and strengthen our competitiveness.	· Chairperson and CEO mobilization meeting for communication and sharing / Monthly · Chief functional officer mobilization meeting for communication and sharing / Weekly · Employee Welfare Committee (EWC) meeting / Monthly · Performance evaluation and feedback / Annually · Employee Commitment Survey / Biannually · Employee complaint or counseling channels / Always	· Labor/Management Relations · Employee Benefits · Talent Development and Retention	· 12 Chairperson and CEO monthly mobilization meetings for sharing · 12 chief functional officer weekly mobilization meetings for sharing · 12 EWC meetings for the execution and confirmation of EWC activities · All regular emloyees underwent performance evaluations and feedback to define and optimize work targets
Investor	Shareholders and investors provide capital for long-term developments of companies, and their assessments and recommendations affect corporate value and directions of business strategies. Giant Group plans to generate returns to shareholders and investors through sustainable development and profitability.	· Shareholders' meeting / Annually · Investor Conference / Annually · Annual report and sustainability report / Annually · Disclosure of revenue on the Market Observation Post System (MOPS) / Monthly · Two-way communication with investors / As needed · Corporate website in Chinese and English and stakeholder section / Always	· Risk Management · Financial Performance	· Shareholders' meeting was held on June 23, 2022 · Investor conferences are organized at least once every quarter in both Chinese and English to interact with investors and share our status and market dynamics · Due to cash capital increase and the issuance of convertible bonds in 2022, a prospectus was issued for investors to gain better insights into the Company's operations · Monthly revenue and quarterly financial reports are released accordingly for investors to understand the Company's operating performance · Annual report in both Chinese and English is available to investors with sections on ESG actions and carbon inventory results · Quarterly and annual financial reports in both Chinese and English are available on the corporate website for domestic and foreign investors, effectively increasing our channels of information disclosure
Social Groups (community, non-profit organizations, media, academic institutions, and others)	Giant Group's operation co-exist and prosper with the society. In addition to engaging in social welfare proactively and taking the lead to raise environmental awareness within the community through interactions with social groups including the community, local opinion leaders, non-profit organizations, and academic institutions, we need to build a sound relationship with the media as well as diverse communication channels. Media is vital for external communication as it helps to fully convey the Company's philosophy and brand value and present them to more stakeholders. Thus, Giant Group shall collaborate with social groups while strengthening its interactions and communications with the media, so as to drive local prosperity and social progress.	· Community care activities / As needed · Regional charity events / As needed · Cooperation with NGO or NPO / As needed · Academic exchanges / As needed · Press releases on monthly operational highlights and Board resolutions / Periodically · Press releases for other external communications / Instantaneously · Release of material information / As needed · Media interviews / As needed · Giant Group official website / Instantaneously · Giant Group social media / Instantaneously	· Corporate Governance and Brand Value · Group Operation and Corporate Image · Sustainable Developments and Actions of the Group · Innovative Products and Services · Significant Investments of the Group · Promotion of Cycling Culture	· We respond to and collaborate according to project and regional needs. Please refer to the section on "Public Welfare" for more details. · 32 press releases · 2 press conferences · 56 posts on the Group social media · The Giant Group official website is updated as needed

Stakeholder	Significance of Stakeholder to Giant	Means and Frequency of Communication	Important Issue of Concern	Communication in 2022
Supplier/Contractor	Giant Group focuses on technology development of new process, quality improvement, environmental, safety and health (ESH) standards, and ESG developments where suppliers and contractors are an integral part of the operation. We plan to achieve sustainable supply chain management by implementing the Supplier Code of Conduct.	· International bicycle exhibition and conferences (Taipei Cycle & Taichung Bike Week) / Annually · Supplier communication and meetings / As needed · BAS general meeting / Annually · BAS member discussion / Monthly	· Supplier Management	· A total of 40 suppliers have joined the BAS to jointly promote ESG affairs
Consumers / Distributors / Brand Customers	Giant Group meets the needs of consumers and distributors with innovative products and comprehensive after-sales services. We also make on-time delivery of products with stable quality to brand customers. Through sustainable management, we achieve win-win by facilitating the growth of customers. Giant is committed to creating win-win solutions where consumers, distributors and brand customers can enjoy a wide range of quality products and services to fulfill different needs, thereby achieving mutual success and developments.	· Distributor communication and meetings / Always · Distributor conference / Annually · Diverse online and offline service experience for consumers · Consumer service hotline / Always · Corporate website in Chinese and English / Always · Brand customer communication and meetings / Always	· Product and Technology Innovation · Green Process and Product	· Distributor meetings are organized regularly at each region for troubleshooting and communication. There are also online training courses for distributors. · Distributor conferences are organized periodically at each region for product launches, strategy sharing and distributor recognition · Promote our mobile apps which notify consumers of the latest activities and spending records with easy access · Ride Life App in China had 886.7 thousand new members · Cycling Map has 273.2 thousand users. · Cycling Race has 22.9 thousand users · Customer service hotlines at each region to provide timely feedback on customer issues and assign complaints to responsible units · Official websites in local languages at each region to provide consumers with real-time product information · Diverse communication channels available for our operations in China · WeChat: 673.8 thousand users with 602 articles/videos posted · Weibo: 355.4 thousand users with 2,162 articles/videos posted · Xiaohongshu: 12.8 thousand users with 317 articles/videos posted · WeChat Channel: 7.7 thousand users with 100 articles/videos posted · Douyin: 123 thousand users with 143 videos having over 10 thousand views · Satisfaction rate remained high in 2022 · Assisted customers in handling excess stocks to minimize losses
Government	Giant Group adheres to the spirit of regulatory compliance and corporate governance, and operates in line with government policies and laws. It releases material information and responds to relevant questionnaires and inquiries pursuant to relevant regulations.	· Official correspondences and visits / As needed · Government meetings and communiations (e.g. briefings, public hearings, symposia, seminars, meetups) / As needed · Release of material information / As needed	· Human Rights and Labor/ Management Relations · Innovative Products and Services · Brand Management · Occupational Safety and Health	· Respond immediately to inquires via official correspondence or requests for visits from the competent authorities · Participate in promotional sessions or seminars on the latest laws and regulations organized by the competent authorities and tax authorities · Meet information filing and material information requirements of the Taiwan Stock Exchange in accordance with the laws · Meet filing requirements of the tax authorities in accordance with the laws

Management and Governance

3.1 Management and Governance

3.1.1 Corporate Governance

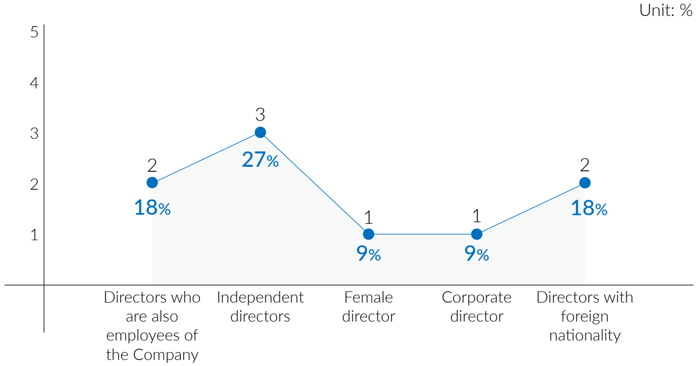
3.1.1.1 Operation of the Board of Directors

Board composition

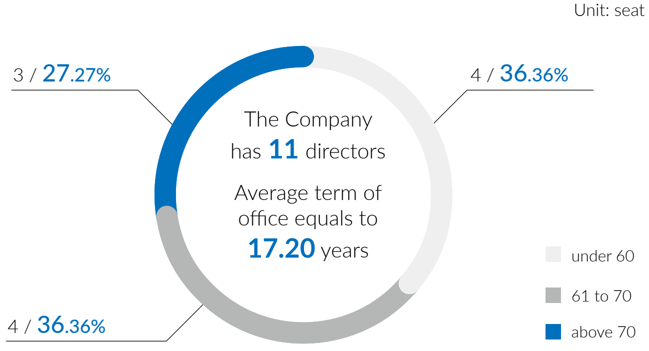
The Board of Directors is the highest governance body of Giant Group. Adhering to the principle of transparent governance, the Board respects shareholder rights and performs its duties in a sound and effective manner. Under the same principle, the Audit Committee and the Remuneration Committee are established to assist the Board with fulfilling its duties of overseeing the business operation. The committees report to the Board on a regular basis.

Giant Group's Articles of Incorporation stipulates that the Board shall have 9 to 11 directors with a term of three years. The number of independent directors shall not be less than three nor less than one-fifth of the total number of directors. Chairperson of the Company does not concurrently assume managerial positions in the Company. Of the current Board, there are two directors (18%) who are also employees of the Company, three independent directors (27%), one female director (9%), one corporate director (9%), and two directors with foreign nationality (18%). As for age distribution, three directors are above 70 years old, while four of them are between 60 to 70 years old and four directors are under 60 years old. As of December 31, 2022, the Company has 11 directors with an average term of office equals to 17.20 years. Regular Board meetings are held at least once every quarter while special Board meetings may be convened at any time. We had seven Board meetings in 2022, and the average attendance rate of directors was approximately 97%.

Attribute distribution



Age distribution



Organization and Operation of Functional Committees

Audit Committee	
Composition	· Convener: Jui-Lin Lo · Committee members: Hilo Chen and Chun-Sheng Ho
Main Duties	Strengthen the supervisory function of the Board and be accountable for overseeing the fair presentation of financial statements; the appointment (discharge), competence, independence and performance of the certified public accountants; the effective implementation of internal controls; regulatory compliance; and controls over existing or potential risks of the Company
Meeting Frequency	At least once every quarter
2022 Attendance Rate	A total of seven meetings with an attendance rate of 100%

Remuneration Committee	
Composition	· Convenor: Hilo Chen · Committee Members: Jui-Lin Lo and Chun-Sheng Ho
Main Duties	Assist the Board with formulating the Company's compensation policies and structures in order to attract, motivate, reward and retain outstanding talents
Meeting Frequency	At least twice every year
2022 Attendance Rate	A total of two meetings with an attendance rate of 100%

Director independence and diversity

The Group adopts the candidate nomination system where directors are elected from a list of candidates by the shareholders' meeting. The Group values Board diversity and stipulates in the "Corporate Governance Best Practice Principles" and "Director Election Procedures" that the Board composition shall take into account basic criteria including gender, age, nationality and culture, as well as professional background, professional competence and industry experience. The 17th Board as a whole possesses competence in business judgement, operation management, crisis management, global market perspective, leadership and decision-making along with professional knowledge and expertise. There are seven directors with accounting or finance expertise and five directors with operation management skills of different industries and expertise across technology and medical fields (including information, medical science, philosophy, chemical engineering, electrical engineering and business administration). They can offer unique recommendations to our operation.

For Board diversity and operational needs, we set specific management targets including at least one female director, at least one director with accounting or finance expertise, at least one director with non-bicycle professional background, and at least three independent directors. Please access the Corporate Governance section on our website for Board diversity policy and implementation thereof.

Board Diversity and Industry Experience

Title	Name	Age	Seniority (Year)	Independence Status of External Director (Note)	Professional Competence							Industry Experience
					Business Judgement	Accounting and Financial Analysis	Operation Management	Crisis Management	Industry Knowledge	Global Market Perspective	Leadership and Decision-Making	Global Industry Classification Standard (GICS Level 1)
Chairperson	Bonnie Tu	above 70	50.5		✓	✓	✓	✓	✓	✓	✓	Consumer Discretionary
Director	Young Liu	61 to 70	25.4		✓	✓	✓	✓	✓	✓	✓	Consumer Discretionary
Director	Kinabalu Holding Company Representative: Tzu-Sing Tho	under 60	1.5	✓	✓		✓	✓		✓	✓	Consumer Discretionary
Director	King Liu	above 70	50.5	✓	✓	✓	✓	✓	✓	✓	✓	Consumer Discretionary
Director	Ta-Peng Chiu	above 70	25.4	✓	✓	✓	✓	✓	✓	✓	✓	Consumer Discretionary
Director	Huai-Ching Yang	61 to 70	16.4	✓	✓		✓	✓	✓	✓	✓	Healthcare
Director	Ta-Wei Chiu	under 60	4.5	✓	✓		✓	✓	✓	✓	✓	Healthcare
Director	Tzu-Chien Tho	under 60	1.5	✓	✓		✓	✓		✓	✓	Industrials
Independent Director	Hilo Chen	61 to 70	7.5	✓	✓	✓	✓	✓	✓	✓	✓	Information Technology
Independent Director	Jui-Lin Lo	under 60	4.5	✓	✓	✓	✓	✓		✓	✓	Industrials
Independent Director	Chun-Sheng Ho	61 to 70	1.5	✓	✓	✓	✓	✓	✓	✓	✓	Information Technology

Note: Independence criteria for non-employee directors are set out below. To be qualified as being independent, the director shall satisfy at least four of the nine criteria and meet at least two of the first three criteria:

1. The director was not a senior executive of the Company in the past one year.
2. The director or his/her family members did not receive more than US$60,000 from the Company or any of its subsidiaries during the year, except as permitted by Rule 4200 of the U.S. Securities and Exchange Commission.
3. The director's family members are not senior executives of the Company or any of its subsidiaries.
4. The director is not a consultant of the Company or the management team nor a party with an interest to consultants of the Company.
5. The director is not a party with an interest to major customers or suppliers of the Company.
6. There are no personal service contracts between the director and the Company or the management.
7. The director is not a party with an interest to non-profit organizations which receive significant donations from the Company.
8. The director is not an employee nor partner of the Company's external auditing firms in the past one year.
9. The director does not have any conflict of interest with the Board independence.

3.1.1.2 Board efficiency and performance evaluation

The Group has established the "Board Performance Evaluation Method", which stipulates that the internal performance evaluation of the Board and the functional committees shall be conducted at least once a year, and an external one shall be conducted at least once every three years. The evaluation shall cover the entire Board, individual Board members, the Audit Committee and the Remuneration Committee. The 2022 Board Performance Evaluation Report indicated a sound operation of the Board as a whole. None of the directors were found to be unsatisfactory and needing a review on their compensation packages or nominations. The results were reported in the Board meeting on March 10, 2023 and disclosed in the Company's annual report and corporate website. The evaluation results of individual directors would be used as a reference for the selection of Board members or nomination of independent directors.

In addition, the Group engaged EY Business Advisory Services Inc. to perform the 2022 external Board performance evaluation in December 2022. Method adopted included document reviews, self-evaluations of directors and the in-charge unit of Board meeting as well as interviews with directors on three dimensions - Structure, People, and Process and Information. The scope encompassed the following eight elements: the structure and process of the Board, Board members, legal entities and organizational structure, roles and responsibilities, behaviors and culture, training and development of directors, oversight on risk control and oversight on filing, disclosure and performance. Evaluation outcome is rated as: Basic (with practices that comply with basic requirements of the competent authorities and laws and regulations), Advanced (with practices that not only comply with basic requirements of the competent authorities and laws and regulations but also are effective or take the initiatives to improve the performance of such dimensions), and Benchmark (with practices that not only exceed the basic requirements of the competent authorities and laws and regulations but also can serve as the benchmark).

Giant Group rated "Advanced" for the comprehensive evaluation on Board structure, people, and process and information. The results are disclosed on the corporate website. Comments are summarized as follows:

"Giant Group has a complete Board operation system and establishes a culture of openness and honesty for Board members to apply their expertise on business needs. The Company is also committed to Board diversity, enhancing Board decisions with diverse professional backgrounds and experiences. The Company's performance in terms of structure, people, and process and information was rated "Advanced" upon the comprehensive evaluation."

In order to enhance the competence of directors and thus the quality of oversight, the Board of Directors Council would notify directors to attend refresher courses of professional knowledge hosted by relevant organizations on important trends of governance-related topics, such as finance, risk management, business, commerce, legal affairs, accounting, and sustainability management, or courses related to the internal control system and the accountability of financial reporting. The average number of hours of directors' continuing education in 2022 was 7.1 hours. Details are as follows:

Course	Number of Attending Directors	Number of Hours
Operation and M&A Strategies of Taiwanese Businessmen from the Perspective of Global Political and Economic Status	11	3
The 19th Corporate Governance and Business Sustainability Workshop	11	3
Corporate Governance and Securities Regulations	1	3
How to Execute Anti-Money Laundering Measures	1	3
Equity Planning	1	3
Latest Amendments to the Profit-seeking Enterprise Income Tax Act	1	3

3.1.1.3 Avoidance of conflict of interests

Giant Group has set forth provisions on recusal of directors to avoid conflict of interest in both the Rules of Procedure for the Board of Directors' Meeting and the Charter for Audit Committee with multiple procedures in place to avoid the situation. For agenda items of which the director, the juridical person represented by the director, the spouse or a blood relative within the second degree of kinship of a director, or any company which has a controlling or subordinate relation with a director has a personal interest which may impair the interest of the Company, the director shall not participate and shall recuse himself/herself from the discussion and voting of the agenda items. One of the examples was the proposal concerning the additions of two items to the undertakings issued for the listing of the subsidiary, D. Mag (Kunshan) New Material Technology Co., Ltd., at the stock exchange in China in the first special meeting of the 17th Board, where related parties and Board members with conflicts of interest had recused themselves from the discussion.

The Group has also disclosed directors' concurrent positions in other companies in the Annual Report, including but not limited to being a director or an independent director in other companies, holdings of more than 5% of the Company's outstanding shares or being one of the top ten shareholders of the Company, and the cross-shareholdings of top ten shareholders. None of the directors has cross-shareholdings with any of our major suppliers.

3.1.1.4 Internal audit

Giant Group's Internal Audit Office is an independent unit under the Board, reporting directly to the Chairperson and the Audit Committee, and the chief auditor reports in every Board meeting. It conducts independent and objective investigation and evaluation of all internal control systems of the Group and its subsidiaries, and provides timely recommendations for improvement to ensure our internal control measures stay effective. It also assists the management with fulfilling its responsibilities to achieve management objectives. Audits are performed in accordance with the Board-approved audit plan, which is drawn up based on the risks identified. Ad hoc audits or reviews are performed when needed. Internal auditors review self-inspections performed by each unit and disclose audit findings in the audit report. Improvements on these findings are monitored regularly and reported to the Board. The appointment, dismissal, evaluation, and compensation of internal auditors are carried out in accordance with the Company's rules (e.g., the rules for engagement evaluation and promotions) and submitted by the chief auditor to the Chairperson for approval. The communication between independent directors and chief auditor and accountants in 2022 is disclosed on the Group's website.

Giant Group has established the Procedures for Handling Internal Material Information pursuant to relevant laws and regulations. The Procedures regulate the handling and disclosure of internal material information. Insiders are not allowed to disclose such information unless otherwise provided in relevant rules, nor use information not available in the market in trading the Company's stocks for profit. Once a leakage of internal material information is detected, the dedicated unit shall formulate action plans and the internal audit unit shall perform audits accordingly.

3.1.1.5 Remuneration policy for directors and managers

For corporate governance, the Group has formulated the "Enforcement Rules for Management of Compensation to Directors, Members of Functional Committees and Managers" with a view to making the compensation of directors, functional committee members and managers transparent, rationalized and standardized. In accordance with Article 24 of the Articles of Incorporation, remuneration to directors is paid on a monthly basis and the Board is authorized to determine the amount based on the directors' level of involvement and contribution to the business operation of the Company. In addition, Article 27 of the Articles of Incorporation states that if the Company makes a profit for the year, it shall appropriate 6% to 12% as compensation to employees and no more than 2% as remuneration to directors, unless the Company has accumulated losses, in which case the profits shall be used to offset the losses first. The aforementioned employee compensation may be distributed in the form of stock or cash. Parties eligible to receive the said compensation shall include employees in affiliated companies who met certain conditions. Both the compensation to employees and remuneration to directors shall be resolved by the Board and reported in the shareholders' meeting.

The performance evaluation and compensation of managers are determined by the Remuneration Committee after taking into account the industry standards as well as the reasonableness of the correlation between the individuals' performance, the Company's performance and future risk exposure.

3.1.2 Operating Performance

3.1.2.1 Financial performance and shareholders' equity

As the demand of cycling market remained robust in 2022, Giant Group's revenues and profits in Europe, the U.S. and China grew significantly, generating record-high consolidated revenue and profits with consolidated revenue of NT$92.04 billion and an earnings per share of NT$15.51.

Consolidated financial information for the past four years

Unit: NT$ thousands

	2019	2020	2021	2022
Operating revenues	63,449,533	70,010,849	81,839,870	92,043,675
Operating costs	49,792,589	53,842,103	62,075,731	71,219,652
Employee salaries and benefits	8,859,279	9,311,947	11,072,895	12,735,502
Cash dividends (NT$)	4.6	8	10	7.8

Composition of shareholders

As of January 4, 2023; Unit: Persons; shares; %

Type / Quantity	Government Agencies	Financial Institutions	Other Juridical Persons	Domestic Natural Persons	Foreign Institutions and Natural Persons	Total
Number of Shareholders	4	39	95	14,662	696	15,496
Shareholding	947,187	33,261,560	40,797,170	124,191,265	192,867,444	392,064,626
Shareholding percentage	0.24	8.48	10.41	31.68	49.19	100.00

Shareholders owning 5% or more of the Company's shares or rank among the top ten shareholders

As of January 4, 2023; Unit: Shares; %

Name of Major Shareholder \ Shares	Shareholding	Shareholding Percentage
Kinabalu Holding Company	18,238,183	4.65
Hongkong and Shanghai Banking Corporation Limited in custody of HSBC	17,453,817	4.45
Young Liu	16,296,026	4.16
Bonnie Tu	8,406,668	2.14
Singapore Government Investment Account in custody of Citibank Taiwan	8,043,453	2.05
Chunghwa Post Co., Ltd.	7,065,223	1.80
Su-Hua Liu	7,051,777	1.80
King Liu	6,852,498	1.75
Huai-Ching Yang	6,418,720	1.64
Fubon Life Insurance Co., Ltd.	6,208,236	1.58

3.1.2.2. Production volume of main products for the past four years

Unit: NT$ thousands; thousand units

Main products \ Production Volume and Value \ Year	2019			2020			2021			2022		
	Production Capacity	Production Volume	Production Value	Production Capacity	Production Volume	Production Value	Production Capacity	Production Volume	Production Value	Production Capacity	Production Volume	Production Value
Bicycles	5,057	4,537	54,180,048	5,500	4,901	55,883,736	6,200	6,061	59,397,534	6,203	5,843	75,133,572
Materials	-	-	4,551,090	-	-	4,455,825	-	-	6,102,091	-	-	6,344,896
Total	5,057	4,537	58,731,138	5,500	4,901	60,339,561	6,200	6,061	65,499,625	6,203	5,843	81,478,468

Note 1: Production capacity represents the quantity that can be produced using existing facilities under normal operation and in compliance with the tightening local regulations while taking into account necessary factors for the Group's global operations.

Note 2: The production value of bicycle includes both bicycles and frames.

3.1.2.3 Tax governance

Giant Group regards sound tax governance as an integral part of its operation and fair taxation as a cornerstone for sustainable development. We comply with tax laws and regulations of the countries where we operate, and minimize the tax risk while maximizing the tax saving effect under a legal and compliant framework. We regularly disclose tax-related information to stakeholders through public channels, such as the financial reports and the annual reports, to ensure information transparency. In 2023, we establish the Group's tax policy and management rules which have been approved by the Board as the foremost guiding principle for tax governance. Our commitments include:

- The primary purpose of tax planning is to ensure that our business and business strategies are in compliance with the tax laws and regulations of all countries where we operate.
- We would not take actions for the sole purpose of reducing tax liabilities or shifting profits to low-tax jurisdictions or tax havens.
- We would not make inappropriate tax arrangements that are not justifiable on economic and business grounds.
- Our transfer pricing policy is drawn up based on the transfer pricing report and the conventional trading principles derived from the benchmarking analysis.
- We establish sound and transparent relationships with the tax authorities.

In terms of tax governance, the Board has appointed the Audit Committee to oversee the quality and integrity of the Company's accounting, auditing and financial reporting processes and financial controls, and to regularly review significant matters including accounting policies and procedures, internal control systems, regulatory compliance, and corporate risk management. Tax compliance is also included in regulatory compliance.

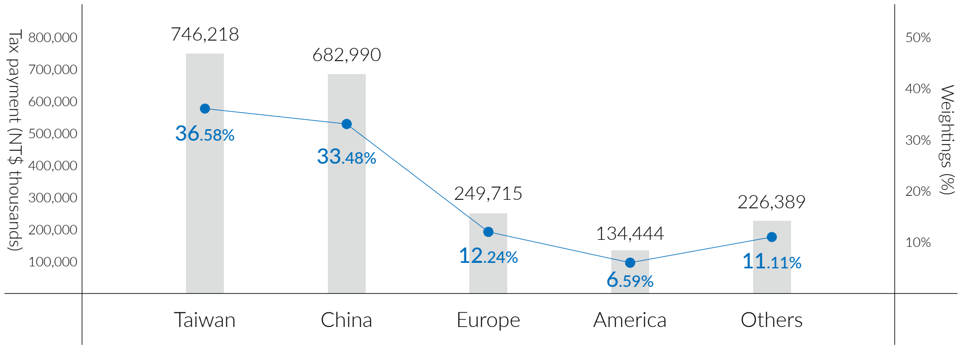
The Chief Financial Officer of Giant Group is ultimately responsible for the Group's tax management. A dedicated tax management unit is set up in Taiwan, where the assistant finance manager performs day-to-day tax administration and management with support from experienced financial personnel to fulfill the Company's tax obligations. As for the Group's overseas subsidiaries, daily tax matters are managed by local finance officers. In the face of the ever-changing domestic and international tax laws and regulations, we strengthen our professional knowledge through professional consulting services provided by external tax experts or organizations at home and abroad.

Externally, we continue to build mutual trust with the tax authorities and communicate with honesty. Timely communication and interpretation of tax issues allow us to better understand relevant tax provisions for compliance, thereby avoiding tax disputes and risks. When necessary, we would solve major tax-related issue through channels including accountants and trade associations in public policy initiatives.

2022 Giant Group income tax expense by location

Unit: NT$ thousands

	Taiwan	China	Europe	America	Others
Tax payment (NT$ thousands)	746,218	682,990	249,715	134,444	226,389
Weightings (%)	36.58%	33.48%	12.24%	6.59%	11.11%



Note:
Source: Consolidated financial statements of the Group over the years
Weightings: Tax payment by region/Amount of income tax paid in the consolidated statements of cash flows

Tax-related information of Giant Group for the past four years

Unit: NT$ thousands

Year	2019	2020	2021	2022
Operating revenues	63,449,533	70,010,849	81,839,870	92,043,675
Pre-tax profit	4,809,703	6,832,866	8,728,460	8,738,019
Income tax expense	1,215,006	1,656,957	2,420,951	2,561,488
Effective tax rate	25.26%	24.25%	27.74%	29.31%
Income tax paid	1,473,244	1,139,507	1,681,353	2,039,756
Cash tax rate	30.63%	16.68%	19.26%	23.34%

Source: Consolidated financial statements of the Group over the years

Giant Group's effective tax rate and cash tax rate for 2022 were 29.31% and 23.34%, respectively. The effective tax rate was above the average effective tax rate of 23.6% for the "Leisure Equipment & Products and Consumer Electronics" industry released by the Global Industry Classification Standard (GICS) while the cash tax rate was lower than the industry average of 25.43%. The difference was caused by the statutory tax rate of 20% under the Profit-Seeking Enterprise Income Tax Act of the Republic of China, where the Company's major operations are located, and the timing differences in the remittance of our overseas earnings.

3.1.3 Business Ethics and Integrity

Giant Group upholds the corporate values of "Integrity, Partnership, Passion and Challenge" and sets "Integrity" as the first and foremost principle of business operation. We are committed to be a trusted partner of the community and act with integrity in all transactions with the Group's shareholders, customers, employees, suppliers, business partners, competitors, and governmental agencies, as well as other people or organizations affected by the Group.

3.1.3.1 Code of conduct and commitments

In addition to the "Guidelines on Ethical Behaviors of Giant Group" for all employees, Giant Group has established the "Code of Ethics", "Corporate Code of Integrity" and "CSR Supplier Code of Conduct" as ethical guidelines for the Company's directors, managers and suppliers. These Codes contain provisions of bans on unethical conducts (e.g., corruption and bribery), regulatory compliance, fair trade, recusal to avoid conflict of interest, and information confidentiality. We expect all internal and external stakeholders to comply with the laws and fulfill corporate social responsibilities. The establishment and amendments of relevant rules and regulations have been approved by the Board. In addition, we have announced our Human Rights Policy in 2020, explicitly stating our respect and support for internationally recognized human rights standards and principles, such as the Universal Declaration of Human Rights, the United Nations Global Compact (UNGC) and the Declaration on Fundamental Principles and Rights at Work of International Labour Organization (ILO). Risk assessments are conducted regularly to prevent any invasion or violation of human rights.

As a demonstration of our commitments, we release and disclose our codes of conduct associated with stakeholders. Internal parties including new hires, regular employees, management, and the Board; and external parties such as investors, suppliers, non-governmental organizations, and the general public can all access and download our rules and regulations from the official website.

3.1.3.2 Anti-corruption and regulatory compliance

Regulatory compliance is the basic requirements for all of our employees in conducting business activities worldwide. We take the most appropriate measures in a responsible manner for any problems that may occur. We have a dedicated legal unit responsible for the application and maintenance of our trademarks and patents, the planning and execution of product liability insurance and litigations, and the handling of legal disputes and litigations. It also reviews changes from time to time in domestic and foreign regulations to ensure our legal compliance.

In order to instill the culture of ethical business practices and values, we have established the "Corporate Code of Integrity" as a reference framework for the business operations of the Group and all subsidiaries. An audit unit is in place to oversee and execute the integrity policy, assist with incorporating integrity and ethical values into the Company's business strategies, formulate preventive measures in accordance with laws and regulations to ensure integrity management, drive and coordinate the promotion and training of integrity policy, and establish a reporting system to secure the effectiveness of implementation. It reports to the Board of Directors on a regular basis. Also, the Group announced the "Guidelines on Ethical Behaviors of Giant Group" in 2016 for all employees of the Group as well as all subsidiaries and branch offices to follow. The Guidelines provides basic guidance on ethical behaviors with respect to regulatory compliance, business integrity, conflict of interest, and fair employment. Furthermore, our Corporate Code of Integrity clearly and thoroughly defines the Group's practices of business integrity and the prevention of dishonest behaviors. It stipulates that none of the Group's directors, managers, employees, appointees, or persons with substantial control shall directly or indirectly offer, promise, request or accept any improper benefits. We prohibit any form of bribery and kickbacks. In 2022, we did not have major regulatory violations with a fine exceeding NT$1 million, and there were no corruption incidents between 2019 and 2022.

Article 7 of our Corporate Code of Integrity prohibits unlawful political donations and improper charitable donations or sponsorships. We made no political donations in 2022; however, we encourage our employees to fulfill their civic responsibilities and to freely express their political inclinations.

3.1.3.3 Anti-competitive behavior

Adhering to the principles of being just, fair and regulatory compliant, Giant Group abides by the fair competition principle and refrains from engaging in illegal monopoly practices to safeguard fair competition in the marketplace and the interests of consumers. The Group also organized regulatory compliance training on competition laws periodically in 2022. There were no cases for violation of the competition law between 2019 and 2022.

3.1.3.4 Consultation and reporting mechanism

The "Guidelines on Ethical Behaviors of Giant Group" has set out consultation channels for concerns of ethical standards or conflicts in relevant practices. Employees can seek advice from their immediate manager, managers two levels up, or legal and audit personnel, or through the iCare mailbox. Moreover, complaints can be filed through the investor relations section of our corporate website (https://www.giantgroup-cycling.com/en/ir-contact) for both internal and external stakeholders. As the in-charge unit, the Human Resources unit would assign the complaint/case to relevant units in order to ascertain the intention of the complaint and specific evidence. Cases that may involve a violation of law or unethical or dishonest behavior shall be submitted, along with evidence, to the President. In principle, anonymous reporting would not be processed unless there is a need to investigate the individual(s) reported, in which case, the complaint would be handled separately and used as a reference for internal review. The Group shall handle complaints in a confidential manner and conduct investigations through independent channels to protect the identity of the complainant, which shall be kept strictly confidential. Where complaints are raised by a colleague, we guarantee that they would not be subject to retaliation as a result of the complaints.

Between 2019 and 2022, the Group Headquarters did not receive any reporting on violations of the code of conduct or the laws through the external complaint mailbox and the iCare mailbox.

3.2 Risk Control

3.2.1 Risk Management

3.2.1.1 Risk management system

In order to implement governance and maintain our sustainability objectives, as well as to manage possible internal and external risks in operation, Giant Group's Board of Directors has approved the Risk Management Policy in 2023, establishing a risk response task force at the group level. The task force contains a convener, who is either the Chairperson or a representative appointed by the Chairperson; a business planning unit, which formulates and updates the risk management rules and maps out the promotion and execution of risk management plans; and an audit unit which assesses the execution of risk management in order to ensure the implementation of and compliance with the system. Through processes of risk identification, risk assessment, and risk analysis and based on the risk analysis results and the cost-effectiveness of the Company's resource allocation, we prioritize risks, and establish control standards and action plans for timely implementation of risk prevention measures. The in-charge units or persons are accountable to the business undertaken. Business shall be conducted in accordance with relevant internal control systems and internal regulations with preliminary risk identification, followed by reviews and assessments of major risks related to market, investment, credit, operation, laws, hazards and climate changes in operation or management meetings presided over by the CEO or relevant chief functional officers. Finally, an independent internal control system, i.e., the audit unit, would conduct risk audits and report to the Board on significant potential risks to the Company's operations or sustainable development.

Giant Group performs SWOT analysis in areas of operation and ESG (GHG & reuse) through the goal setting process of the Management by Objectives (MBO) approach every year as a reference for financial and non-financial risk management and control. In addition, risk stress tests and sensitivity analyses are conducted from time to time, for example, we performed stress test on funding management for the 45-day payment extension incident in 2022. We also have emergency response rules covering emergencies that may result in a suspension of operation, such as fires, typhoons, rainstorms, earthquakes, infectious disease, information security risk, geopolitical emergencies, major public relations crisis, etc., in order to enhance our risk management for business continuity.

Risk identification →	Existing Risk Assessment →	Planning Action plan →	Residual Risk Assessment →	Improvement tracking
Identify Risk items	Use the "Risk Consequence Severity and Probability Assessment Method" or the Risk Quantification Index Method to confirm the rating of the total risk	Development Improvement plan	Evaluate the Remaining risks after completing the improvement plan	Improvement plan progress tracking Evaluate the effectiveness of improvement plans

3.2.1.2 Risk culture promotion

In the face of the ever-changing global business environment, a positive risk culture has become an integral part of corporate management. Giant Group proactively enhances risk culture through various channels to raise employees' risk awareness and management skills, and to strengthen the organization's ability in risk prevention and response. Use information security risk as an example, we regularly promote information security to enhance employees' awareness. In addition, the Group takes stock of past abnormalities and market competitions by product features during the R&D process to list out relevant risk factors beforehand. We review the confirmation results of risk factors and propose improvement measures for abnormalities during the process. Actions taken are as follows:

1. Propose production possibilities curve (PPC) (Utilize warranty process system (WPS) to discover abnormalities in the history of competing products or market recall cases)
2. Participate in design failure mode and effect analysis (DFMEA) discussions to propose and improve relevant risk factors and countermeasures.
3. Track and monitor the status of DFMEA, and participate in feedback and improvement review.

3.2.1.3 Emerging risks

In view of the increasing impact of emerging risks around the world, Giant Group develops a risk management policy which identifies the types of key emerging risks and their impacts on the Company through risk identification, risk measurement and risk monitoring and by making reference to external sources such as the Global Risks Report of the World Economic Forum (WEF). Once the risks are identified, appropriate measurement methods would be established accordingly as the basis for risk improvement assessment:

Risk	Infectious disease risk	War-induced livelihood risk	Tax compliance risk
Risk Category	○ Economic ○ Geopolitical ○ Technology ○ Environmental ● Social ○ Others	○ Economic ● Geopolitical ○ Technology ○ Environmental ○ Social ○ Others	○ Economic ○ Geopolitical ○ Technology ○ Environmental ○ Social ● Others
Risk Identification and Description	Highly contagious disease within the communities or even a global pandemic where office or production line workers are cross-infected and have to be suspended or quarantined	Global or regional wars caused by geopolitics	Possible risks and tax costs due to non-compliance with relevant tax regulations/requirements of Organization for Economic Co-operation and Development (OECD)
Impact on Operation	Surging number of confirmed cases, major hit on the global economy, volatile fluctuations in the financial markets, and the shutdown of companies and factories would have adverse impact on operation and financial stability	As the economy is bound to suffer negative impacts, people's main concern would be their livelihood where safety and food are sought after, resulting in a declining end-demand of bicycles	Possible risk of being penalized by the competent authorities and negative impact on the Company's operation and goodwill
Risk Mitigation Measures and Response Strategies	Monitor the global pandemic status and observe policies of each country in response to the situation. When the risk of infection is found to be rising, production workforce shall be properly allocated with measures including rotational shifts and access control to minimize the possible impacts and losses.	Closely monitor international geopolitical issues. When the risk level is rising, production capacity and locations shall be adjusted to minimize the possible impacts and losses.	· Establish internal operating procedures in accordance with relevant laws and regulations for compliance, and implement internal controls · Assess the impact of laws and regulations in advance and examine/adjust the investment structure · Monitor changes to laws and regulations, and strengthen the internal education and training

3.2.2 Information Security

3.2.2.1 Information governance

Giant Group incorporates information security risk into the overall risk assessment scope of the Group, and formulates relevant risk management strategies based on the assessment results. Where information security risk is concerned, our vision is to "build a sound information management system, adopt multiple controls to safeguard network information security, and strengthen active protection and warning capabilities of the information security system." We also formulate information security policies and goals to ensure thorough implementation of information security management.

Information Security Vision	Information Security Objectives
· Enhance employee awareness · Prevent corporate data leakage · Implement daily information security maintenance · Ensure the availability of information services	· Implement information security promotion campaigns and training programs to strengthen employees' awareness on information security and responsibility · Protecting the Group's business data, monitor network behaviors and avoid unauthorized access and modification to ensure data accuracy and integrity · Regularly perform internal and external audits and technical reviews to ensure that relevant operations are carried out · Ensure the Group's information systems operate with a certain level of availability

3.2.2.2 Information security management unit

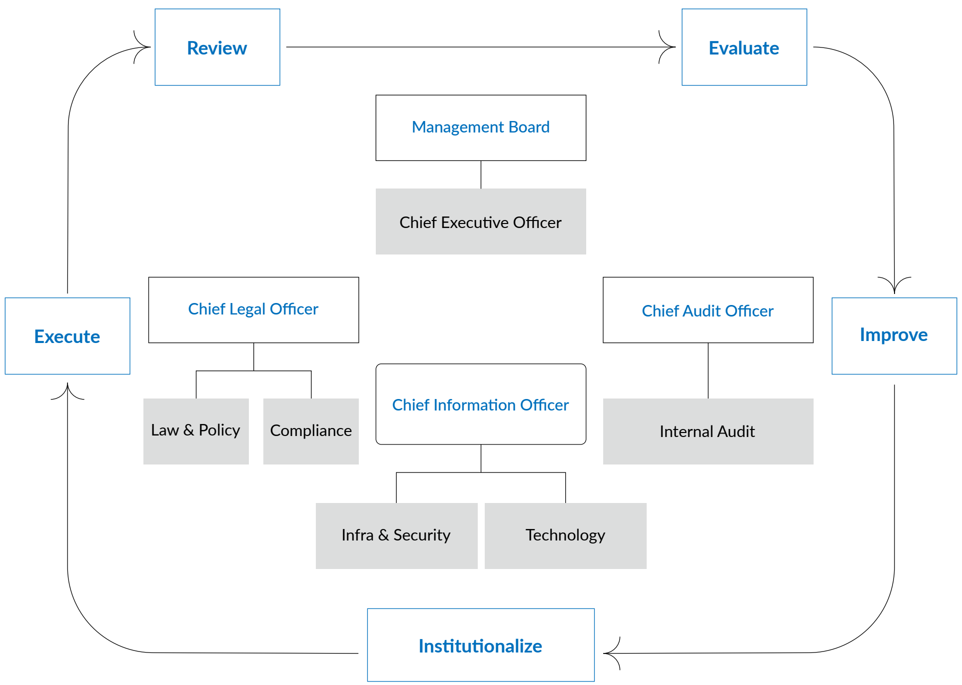
In order to ensure the confidentiality, integrity and availability of the Group's important information property and to comply with relevant laws and regulations, we have established the Global Information Center as the unit accountable for the Group's information security. The Center is composed of one chief information officer and a dedicated staff, and is in charge of formulating internal information security management policy, organizing and executing information security operation as well as promoting and implementing information security policy. The in-charge personnel would hold meetings to report to the CEO and the Board on matters related to information security management. In the event of a major information security incident or material information, the Group's media contact person would be assigned to explain and disclose information to external parties.

The Internal Audit Office oversees the information security operation. It is responsible for overseeing the implementation of internal information security measures and reports regularly to the Audit Committee on the outcome of safety audits. Where deficiencies are identified, it would request the audited unit to submit improvement and action plans, and tracks the improvement effectiveness regularly to mitigate information risk.

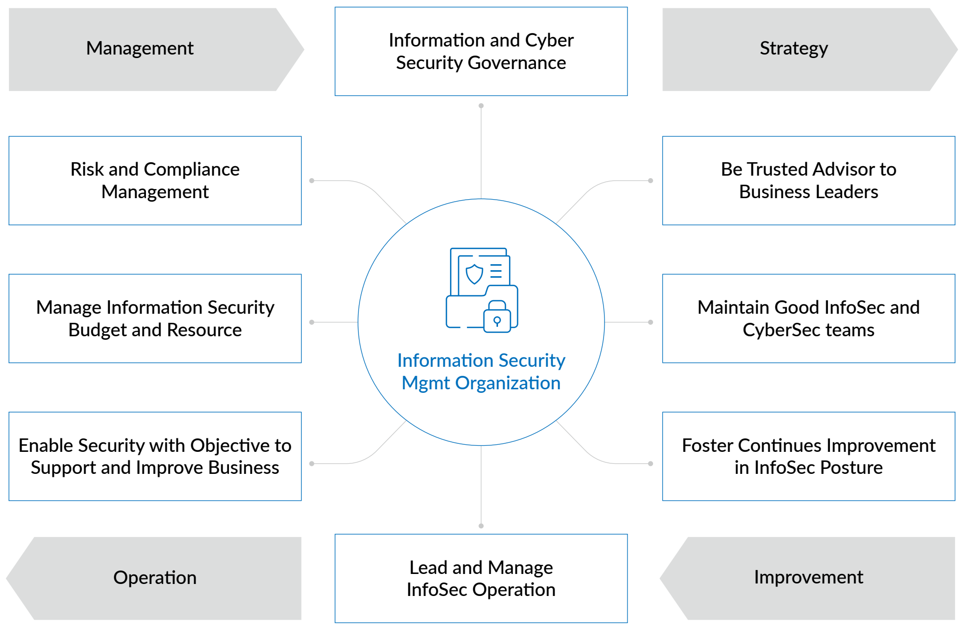
Information Security Objectives	Year of Completion	Progress in 2022
Availability of information and communication system exceeds 99.99% (Downtime/Total operation hours) ≤ 0.1%)	2022	No service interruption
Zero major information security incidents (Level-3 and Level-4 incidents)	2022	No information security incidents
A passing rate of 97% for social engineering exercise (No. of employees with clicks/Total number of employees tested) ≤3%)Note 1	2025	Evaluation on the adoption of tools for information security awareness enhancement

Note 1: The tool assessment was not adopted until 2022, and exercises were undertaken by our Headquarters employees in the Central Taiwan Science Park first. The rate had yet to meet the threshold.

Information Security Unit - Global Information Center



Information Security Operation



3.2.2.3 Information security management plan

In order to advance and strengthen our information security management, we have drawn up relevant procedures for step-by-step implementation to protect the information security of the Group's operations and minimize the impact on operation.

Timeline	Measures
Short-term	· Establish an information security task force to formulate relevant management policies and implementation plans to ensure information security. · Handle personal information prudently in accordance with the Personal Data Protection Act. · Passwords and anti-virus software are required for both personal computers and servers. Passwords and virus patterns shall be updated regularly. · Comply with regulations pertaining to intellectual property rights and ensure all computer software programs installed are licensed copies. · Carry out backup and inventory of important data, and regularly verify the validity of the backup files. · Promote information security regularly to increase employees' awareness of relevant matters and legal issues.
Long-term	· Carry out regular drills in accordance with the "Business Continuity Plan" to facilitate rapid recovery of system in the event of an information security incident. · Conduct assessments on cyber insurance.

3.2.2.4 Reporting of information security incident

In order to prevent/mitigate the risks and impacts of information security incidents, Giant Group has established the "Information Security Incident Reporting Procedures", which defines various types of information security incidents and assigns them with a security level between 1 to 4. Incidents with a higher level means they come with greater impacts. Employees shall immediately notify the information security unit of any irregularities or suspected information security incidents for the information security personnel to take immediate actions and determine the security level of the incident. There was no reporting of information security incident in 2022.

3.2.2.5 Information security measures

The Group has established standard operating procedures for information operation. Daily business shall be conducted pursuant to the standard. External and internal audits on risk assessments of information environment and necessary control tests are performed regularly for factors including the operation of existing information system, information environment security and risk management to assess the effectiveness of internal controls on the Group's information operation. We carry out quarterly disaster recovery exercises on specific systems, such as systems associated with the e-invoice value-adding center, i.e., the database, the host of e-invoice value-adding center, and related network facilities. Disaster recovery drills and third-party vulnerability scans with a coverage rate of 100% are conducted on an annual basis. Also, the information security maturity assessment under 10EP is employed to examine Giant's security status. The scope of assessment focuses on our operation in Taiwan along with some overseas offices. The coverage rate of the assessment is initially estimated to be about 70%.

2022 Results of Information Security Maturity Assessment under 10EP

	Current Maturity Level	Target Maturity Level
EP1	1.2	3
EP2	1.2	3
EP3	1.0	3
EP6	2.2	3.2
EP9	1.4	3
EP10	1.2	3

Information security incidents

Item	2019	2020	2021	2022
Information security breach or other network security incidents	0	0	0	0
Data breach	0	0	0	0
Number of customers and employees affected by data breach	0	0	0	0
Amount of fines for information security breach	0	0	0	0

3.2.3 Privacy and Personal Data Protection

3.2.3.1 Privacy protection management mechanism

Giant Group upholds the protection of privacy and the rights and interests of personal information. The Group complies with the "Personal Information Collection Statement", the "Personal Data Protection Act" and relevant laws and regulations in the use of personal data. There are internal rules governing the collection, processing, use, retention and disclosure of personal data, and the "Privacy Policy" is established as the guiding principle for privacy protection.

3.2.3.2 Data use and protection management

To enhance user experience and maintain supply chain/customer relationship, we would analyze customer data within the authorized scope to provide tailored services of better quality, enhance or improve supply chain efficiency, and implement data protection measures.

Data Protection Measures

1. Permissions are granted based on the principle of minimum permission required to perform the work.
2. Apply data masking to fields of personal data.
3. Data access records of employees are retained to ensure there is no misuse.
4. Establish procedures for the collection, use, processing, and deletion of consumer personal data.
5. Adopt a Zero Tolerance Policy on the use and compliance requirements.

In terms of data use, the Group does not use customer information for secondary purposes, nor does it exchange, rent, or otherwise disclose the personal information of users to a third party unless customers have given their consents or otherwise required by laws. Thus, the percentage of secondary use is 0%.

3.2.3.3 Consultation and reporting channels

Upon receiving complaints and reports concerning privacy protection, the Human Resources unit would assign the complaint/case to relevant units in order to ascertain the intention of the complaint and specific evidence. Cases confirmed to be violations of personal information would be submitted with evidence for processing. In principle, anonymous reporting would not be processed unless there is a need to investigate the individual(s) reported, in which case, the complaint would be handled separately and used as a reference for internal review. We are committed to handle complaints in a confidential manner, and do our best to protect the identity of the complainant, whose identity would be kept strictly confidential. Where complaints are raised by a colleague, we guarantee that they would not be subjected to retaliation as a result of the complaints. Consultation and reporting can be done through email (gtwebmaster@giant.com.tw) or phone (04-4055-9555) by both internal and external parties.

3.2.3.4 Privacy violation

	2019	2020	2021	2022
Complaints from competent authorities for personal data protection or other government agencies (cases)	0	0	0	0
Complaints by individuals or other units (cases)	0	0	0	0

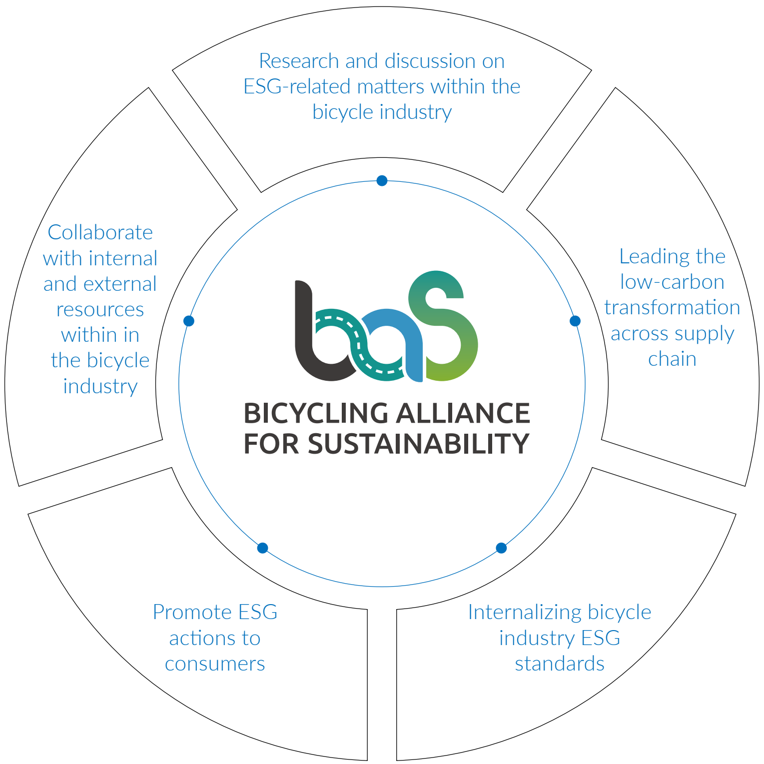
3.3 Relationship Management

3.3.1 Participation in Industry Associations and Policy Implications

In response to the Paris Agreement and other major international trends and initiatives, Giant Group is committed to fulfilling its corporate responsibility towards environmental protection, and closely monitors regulations and issues related to climate change and management. In addition to conducting GHG inventory to have an accurate understanding on GHG emissions, we further promote the GHG voluntary reduction program based on the inventory results, to not only effectively control GHG emissions, but also gradually achieve the net-zero sustainable goal through climate-related advocacy activities or participation in relevant industry associations. One of the examples is the establishment of Bicycling Alliance for Sustainability (BAS). Due to the Carbon Border Adjustment Mechanism (CBAM) of European Union, the cycling supply chain faces high carbon tariffs for goods to EU. Giant Group therefore invited 32 bicycle industry leaders to convene the BAS preliminary meeting, putting forward the industry's ESG initiatives and establishing the BAS as a dedicated platform for the industry chain. The five major tasks of the BAS were set out to be "coordinating the industry's internal and external resources", "leading low-carbon supply chain transformation", "adapting ESG standards to the bicycle industry", "promoting ESG actions to consumers", and "researching and discussing ESG issues associated with the bicycle industry".

Moreover, Giant Group actively participates in domestic and international industry-related organizations in order to advance industry developments through inter-industry and cross-industry exchanges with the international community. We also join external sustainability organizations, taking part in various sustainability initiatives and work.

Five Objectives for BAS



2022 Giant Group's Participation in Industry Associations

Association	Description
Taiwan Bicycle Association	For Taiwan to be the center of R&D, innovation, production and supply of premium bicycles
CommonWealth Sustainability Council (CWS)	An all-round platform for entrepreneurs to communicate, share and learn together, and a sustainable community for new opportunities
Bicycling Alliance for Sustainability (BAS)	Giant Group teams up with key leaders in the cycling industry to put forward ESG initiative for the industry and create a dedicated platform for the industry chain. Members elected Young Liu, the CEO of Giant Group, to be the chairman of the alliance.
Alliance for Corporate Sustainability Impact of Tunghai University	· Environmental sustainability: Environmental Profit & Loss (EP&L) and Task Force on Climate-Related Financial Disclosures (TCFD). · Economic sustainability: ESG responsible investment rating guidelines (DJSI and CDP), and establishment of sustainable supply chain management model and database. · Social sustainability: Participation in social innovation designs for placemaking, strategic social investments and shared value, and sustainable human resource management by companies. · SDGs strategy and governance: Assistance in the preparation and certification of corporate social responsibility reports, design and adoption of sustainable governance mechanisms, and planning of SDGs-based corporate sustainability strategy.
World Federation of the Sporting Goods Industry (WFSGI) (Europe)	We have long been a member of the World Federation of the Sporting Goods Industry (WFSGI), a non-governmental organization recognized by the National Olympic Committee as a representative of the global sporting goods industry, to understand the trends of international sporting goods industry and to enhance the international visibility of Taiwan's cycling industry.
Confederation of the European Bicycle Industry (CONEBI)	Comprehensive representation of its members' interests in Europe and at the international levels: Its current mission is to continue to be part of the commissions under the regulatory and advisory forums in Europe, the European Parliament, the European Council, and the European Economic and Social Committee, and to continue to cooperate with other organizations that share common values or goals.

Association	Description
Taiwan Business Association in the Netherlands (TBA-NL)	To receive invitations to events such as courses and seminars on corporate management or taxation in the Netherlands, and share and exchange information
Technical Committee for Standardization of Bicycle - sub-Technical Committee of E-bikes (China)	Participate in drafting and revising e-bike standards, strengthen the exchange and learning between peers, and contribute to the technological advancements of the industry
Association of Work Safety and Environmental Protection in Kunshan Economic and Technological Development Zone (China)	Exchange on safety and environmental protection work
We Ride Australia	A non-profit charitable organization whose vision is to create a positive, healthy and safe cycling environment for children and adults in Australia
Bicycle Industries Australia	A group representing the interests of the cycling industry
Australian Packaging Covenant Organisation (APCO)	Support responsible packaging initiatives in business activities
RAI Association	Being a part of the CONEBI, it speaks for the cycling industry at national and EU level. It is dedicated to topics including security, battery safety, theft, and policy development
Traxio	It represents the bicycle industry and influences local government policies on issues such as security, theft, bicycle promotion, and rentals. It collects and publishes bicycle-related analysis reports.

Association	Description
Danish Bike Industry	It represents the bicycle industry at the national level, and collects and publishes bicycle-related analysis reports among members.
Asopartes (Asociacion Del Sector Automotriz Y Sus Partes)	An organization based in Colombia that brings together all the major components of vehicles, including bicycles. The organization communicates and negotiates directly with the local government and assists bicycle manufacturers with initiatives concerning important issues such as e-bikes, taxes and business agreements.
Bicycle Association Japan	Giant takes part in the Bicycle Import Committee and the E-bike Committee
Taichung City Bicycle Association	Exchange information with peers and jointly organize regional cycling events
Taiwan Chain Stores and Franchise Association (TCFA)	Exchange ideas on chain operation and jointly create an ideal business environment for robust developments in the chain and franchise industry
North Shore Mountain Bike Association (NSMBA)	A Vancouver-based non-profit organization for the maintenance of mountain biking trail. It speaks for mountain biking and takes the lead in trail preservation and maintenance
Zweirad-Industrie-Verband (ZIV) (German Bike Association)	It actively participates in national bicycle-related issues, takes part in bicycle and e-bike committees, and exchanges ideas with a network of related organizations. Our participation in the organization gives us access to the latest industry knowledge and promotes industry interests.
Bicycle Association of Great Britain (BA)	It represents the industry interests of its members in the UK and advocates for the developments in the cycling industry at government level.

3.3.2 Customer Relationship Management

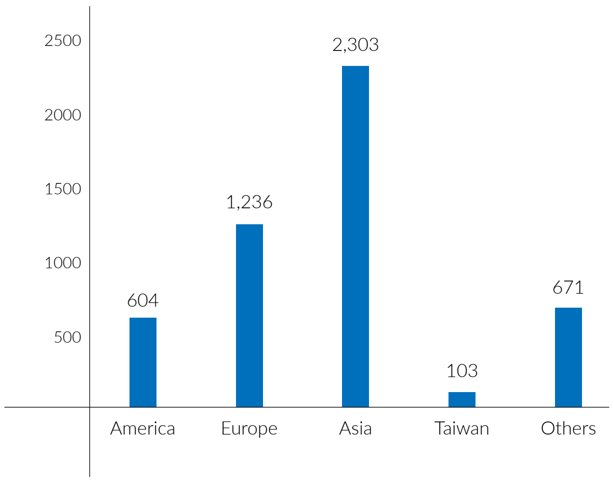
Since our establishment in 1972, Giant Group has been committed to the developments of its core business, aiming to become the best bicycle company and brand in the world. We started from OEM sales, and gradually moved to create our own brands such as the "GIANT", "Liv" - a brand targeting the female market, "Momentum" - a brand positioned as city bicycles, and "CADEX" - a bicycle component brand. With global operations, we are now one of the most successful bicycle companies in the world. We have set up 9 production bases and 14 sales companies over the years and sell our products in more than 50 countries with over 10,000 sales channels. Our continuous development in Taiwan has successfully transformed our Headquarters into our global operation center, covering a comprehensive value chain of technology R&D, production and manufacturing, global marketing, brand management, retail channels, sales service, and operation management.

Technology R&D → Production and manufacturing → Global marketing → Brand management → Retail channels → Sales service → Operation management

Giant Group has built its presence in the bicycle markets all over the world. The Group's business can be divided into manufacturing and marketing. The former covers proprietary brands and OEM services while the latter serves proprietary brands exclusively. Our brands were founded in Taiwan and ventured into global markets in 1986. At present, Europe, the United States and China are the major markets of our private brands.

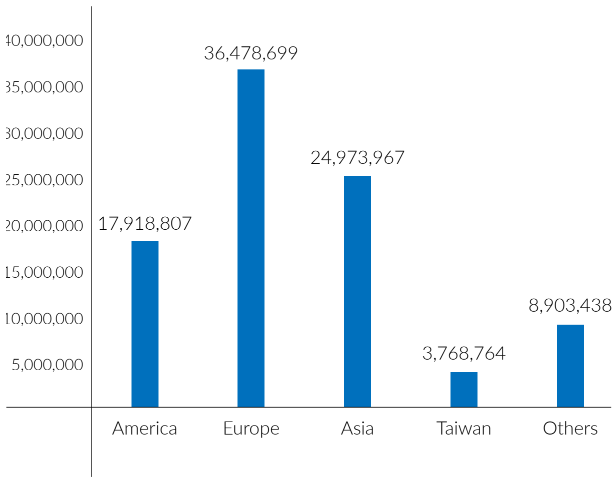
Sales Volume

(thousand units)

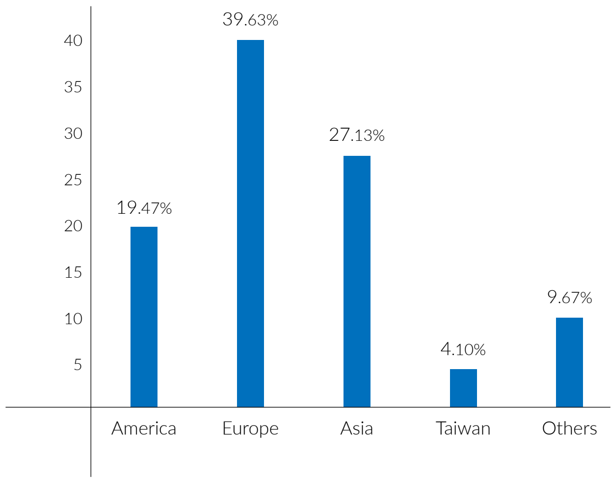


Sales Value

(NT$ thousands)



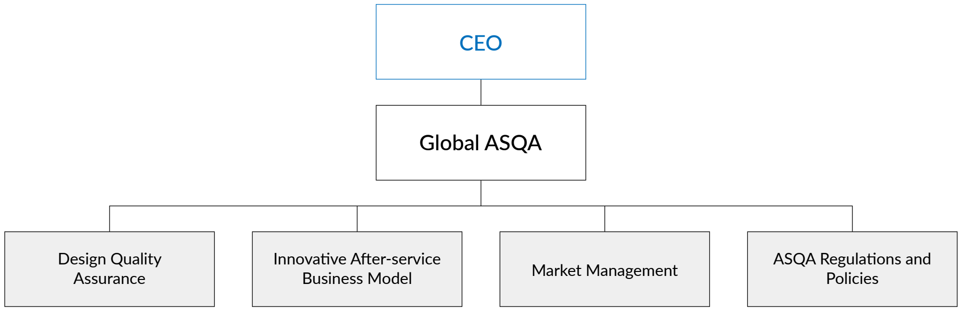
Sales Value as a % to Total



3.3.2.1 Product quality

Giant Group strives to provide consumers with a higher quality riding experience. With "Total Customer Orientation (TCO), Compliance, and Sound Products" as our quality policy, we, being customer-oriented, set reasonable quality standards and implement them thoroughly to achieve the goal of 100% sound products. We establish the Global After Service & Quality Assurance (Global ASQA), which contains four core businesses of "Design Quality Assurance", "Innovative After-service Business Model", "Market Management", and "ASQA Regulations and Policies". Global ASQA maps out the Company's overall quality management policies, strategies, and development plans; integrates and manages cross-country and cross-factory quality assurance operation and systems; and monitors the timely resolution of major quality issues.

Organization Chart of Global ASQA

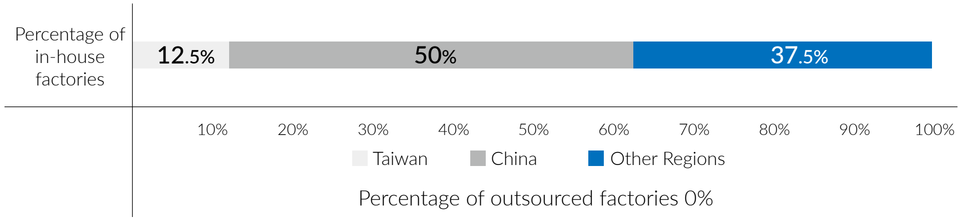


Between R&D reviews to mass production, products of Giant Group would go through processes of product planning, product design, final product planning and final product design. Each stage is subject to strict quality management and safety testing. In the product design stage, for example, product quality features and related analyses would be formulated for the product, including the drafting of quality function deployment, computer aided engineering (CAE) analysis, and related engineering evaluations. In the final product design stage, the design would be subjected to related validation, including product performance certification, PPC failure inspection, and trial review meeting (accuracy/appearance/structural review), as well as the analysis and improvement of disqualified items. At last, the product enters the engineering review stage for reviews on quality, cost and level of achievement on production targets before mass production commences. In the past four years, the Group's products have not violated any health and safety regulations nor voluntary codes that resulted in fines/warnings.

	2019	2020	2021	2022
Number of incidents with fines	0	0	0	0
Amount of fines (in NT$)	0	0	0	0
Number of warnings	0	0	0	0
Number of non-compliance with voluntary codes	0	0	0	0

Giant Group has production bases in Taiwan, China, and Europe to meet sales demand worldwide. Our Headquarter in Taiwan has obtained ISO9001 Quality Management System certification back in 1996 with our factories in other regions followed suit to maintain the stability of our products and services.

Number of bicycle factories	Taiwan	China	Other Regions
Number of in-house factories	1	4	3
Number of outsourced factories	0	0	0
Total	1	4	3
Percentage of in-house factories	12.5%	50%	37.5%
Percentage of outsourced factories	0%	0%	0%



Manufacturing factories	Quality System Certification
Giant Manufacturing Co., Ltd.	ISO9001:2015
Giant (Kunshan) Co., Ltd.	ISO9001:2015
Giant (China) Co., Ltd.	ISO9001:2015
Giant (Tianjin) Co., Ltd.	ISO9001:2015
Giant Electric Vehicle (Kunshan) Co., Ltd.	ISO9001:2015
Giant Europe Manufacturing B.V.	ISO9001:2015
Giant Manufacturing Hungary Ltd.	ISO9001:2015
Giant Vietnam Manufacturing Co., Ltd.	N/A (New factory)

Note: Giant Vietnam is expected to be certified in 2025.

We establish our product inspection mechanism in accordance with the ISO4210 Safety Requirements for Bicycles. The ISO4210 series is the most widely adopted safety standards in the global bicycle industry, and all of our products, from components to bicycles, comply with relevant specifications requirements and testing standards. Before the launch of a new product, the local sales company needs to undergo complete education and training of the new product, which include important information in terms of after-sale services, ordering of parts, maintenance, etc., or practical technical guidance. Also, the product manuals would be available on our Group website for distributors to have correct understanding on the product and related maintenance information.

2022 New Products Education and Training

Training Program	Trainee	Number of Participants
Battery System	Giant Bicycle Co., Pty Ltd., Giant Benelux B.V., Giant Europe International, Giant International, Giant Korea Co., Ltd., Giant Bicycle México S. de R.L. de C.V., Giant Bicycle Canada Inc., Giant Polska Sp. z o.o., Giant Italy S. R. L, Giant Taiwan Sales Company	3,489
Brakes System	Giant Benelux B.V., Giant Europe International, Giant International, Giant Korea Co., Ltd., Giant Bicycle Canada Inc.	1,208
CADEX TRI Series	Giant Bicycle Co., Pty Ltd., Giant Europe International, Giant Deutschland GmbH, Giant International, Giant Korea Co., Ltd., Giant Taiwan Sales Company, Giant UK Ltd., Giant Polska Sp. z o.o.	1,664
Derailleur System	Giant Benelux B.V., Giant Europe International, Giant International	976
Electronic Control System	Giant Bicycle Co., Pty Ltd., Giant Benelux B.V., Giant Europe International, Giant International, Giant Italy S. R. L, Giant Korea Co., Ltd., Giant Bicycle Canada Inc., Giant Polska Sp. z o.o., Giant Bicycle México S. de R.L. de C.V.	2,399
Suspension System	Giant Bicycle Co., Pty Ltd., Giant Benelux B.V., Giant Europe International, Giant Deutschland GmbH, Giant International, Giant Korea Co., Ltd., Giant Bicycle México S. de R.L. de C.V., Giant Bicycle Inc., Giant UK Ltd., Giant Bicycle Canada Inc., Giant Polska Sp. z o.o.	9,311
Transmission System	Giant Benelux B.V., Giant Europe International, Giant International, Giant Korea Co., Ltd.	769
Wheel System	Giant Bicycle Co., Pty Ltd., Giant Benelux B.V., Giant Europe International, Giant Deutschland GmbH, Giant International, Giant Italy S. R. L, Giant Korea Co., Ltd., Giant Taiwan Sales Company, Giant UK Ltd., Giant Polska Sp. z o.o.	6,986
Others	Giant Bicycle Co., Pty Ltd., Giant Benelux B.V., Giant Europe International, Giant Deutschland GmbH, Giant International, Giant Korea Co., Ltd., Giant Bicycle México S. de R.L. de C.V., Giant Taiwan Sales Company, Giant UK Ltd., Giant Bicycle Canada Inc., Giant Polska Sp. z o.o.	1,245

In order to quickly and effectively deal with quality-related complaints to achieve customer satisfaction and prevent a recurrence, investigations of such cases under the GIANT brand are initiated by local sales companies while the factories analyze the issue and make improvements. The in-charge factory shall put forward contingency measures within two working days after the customer complaint has been validated, and management measures for defects within seven working days. If the complaint happens after the improvement measures are in place, the in-charge units shall propose actions to prevent another reoccurrence, and list the case for improvement tracking. For abnormality which cannot be resolved quickly, we would keep in touch with the customer during the entire process until the case is closed.

For consumer product safety, we voluntarily recalled 20,800 bicycles in 2022 due to possible loosening of the adjustable handlebar stems - a product from component supplier. Consumers were asked to go to our retail stores for a replacement. For this recall, we immediately performed root cause analysis to ensure problems were fixed instantly, and included process assurances of safety-related component suppliers as a key item of our regular audits to avoid a repeat of similar incident and to proactively protect the rights and interests of consumers.

Number of Product Recalls for the Past Four Years

	2019	2020	2021	2022
Number of product recalls (voluntary)	0	0	0	1
Number of product recalls (involuntary)	0	0	0	0
Total	0	0	0	1
Total quantity of product recalled (voluntary)	0	0	0	20,800
Total quantity of product recalled (involuntary)	0	0	0	0
Total	0	0	0	20,800
Financial losses due to product recalls (in NT$)	0	0	0	20 million

3.3.2.2 Dealer management

Giant Gorup operates a global network with products and brands well recognized and loved in worldwide markets. We have established 100%-owned sales companies in major markets around the world, developed our own sales network, and stayed committed to market and consumer management. We formulate the "Global Retailing Channel Policy & Guideline" as Giant's global management policy for enhancing the quality of sales channel services, and our sales companies would evaluate distributors through regular visits and consumer feedback. The outcome of such evaluations would affect contract renewals and product allocations. In addition, through the annual distributor conference, the sales companies would introduce new products, corporate strategies, and support services and guidelines as well as discuss the market and future trends.

Channel overview and management

Giant Group's sales channels include direct sales and partnership with dealers. Direct sales are Giant Own Stores whereas partnership with dealers can be franchise stores (Giant Store) where 100% of the merchandises shall be Giant bicycles and bicycles of other brands; Giant Partner Store where at least 80% of the merchandises shall be Giant bicycles; Giant Experience Center which is mostly located in multi-brand stores or sports shop; and Giant Authorized Dealer which are channels other than the ones described above. Currently, the Company's products are mainly sold through authorized professional bicycle stores.

In order to ensure the quality of our channels, our sales companies formulate local channel policies and regulations in accordance with our global channel policy and principles, and perform regular audits. Audits on channels are performed based on three major aspects: sales contribution, credit rating and future potential, to review the performance of existing retail channels and serve as a basis for evaluating whether each channel has implemented our global policy.

In addition, the Group would run a support project on one sales company each year in order to strengthen the retail services of sales companies, provide retail support with a sound operation structure, and ascertain the implementation of our global retail channels policies and guidelines. It would provide on-site assistance and follow up on the progress as well as share successful experience and cases with other sales companies. However, due to the pandemic, the support project was suspended in 2022.

Dealer education and training

Our sales companies communicate regularly with dealers through a variety of channels, including telephone and e-mail. The sales companies would organize annual dealer conference to introduce new products, business strategies of the Company, and support and guidelines from the Group, and discuss forward-looking opportunities in the market.

Giant Group also provides distance training on topics such as pre-launch product education and essential sales knowledge and skills to dealers and store staff through the online Giant Retail Academy (GRA). The GRA plus in-classroom workshops or skills training activities organized by our sales companies in various locations build a close-knit Giant sales training ecosystem.

GRA is a platform for our global channel partners to learn and exchange ideas. It plays a crucial role in communications between the Group and its retail partners by delivering the core values and information of our four brands: GIANT, Liv, Momentum, and CADEX to our channel partners and consumers around the world. Course categories include product introduction, user and repair manuals, new product technology, material design application, business operation, brand introduction, sales service, store management, digital tools applications in stores, sports science, and cycling training. Among them, the repair clip for customer safety is mandatory, while the rest of the courses are electives arranged by subsidiaries via offline or online training based on the needs of local markets. By the end of 2022, GRA was used in 7,788 stores across 52 countries.

Global retail stores introduced	Coverage
7,788 stores	52 countries

3.3.2.3 Customer service

Giant Group has a worldwide sales network. Out of confidence in our private brands and commitments to consumers, we provide the most comprehensive and thoughtful services through our service network at each region. We have product manuals and after-sales service information for all of our products on the corporate website, giving consumers clear and transparent product information. They can therefore have a thorough understanding of product specifications, performance and user instructions as a way to protect their interests. We have repair and maintenance centers at close to 10,000 sales channels worldwide to provide prompt services to all customers. Furthermore, all bicycle frames have been covered by lifetime warranty while non-consumable parts enjoyed one-year warranty since 2012, and the Company maintains a US$10 million product liability insurance for global consumers to have the best product assurance available.

Satisfying consumers' every need with Right Ride, the professional bicycle fitting system

The Right Ride system is a concept based on Giant Cycling World and Cycling Science. It consists of four major steps: right bike, right size, right fit, and right ride. It is more than just measurements and calculations as it takes into account conditions such as psychology, body size, and mind-muscle connection for riders to maintain the correct riding postures and skills, thereby reducing sports injuries and fatigue, increasing pedaling efficiency and comfort, and experiencing the joy of riding. At present, the system is available at more than 200 Giant stores in Taiwan to help consumers find the right bike through body mechanics measurement. We now use big data to develop a dynamic simulation of riding measurement. In the future, we will adopt a more humanized approach to provide consumers with more professional and caring sales service experience.

GIANT consumer official website

Liv official website

CADEX Taiwan official website

New retail experience

Retail channel developments shall keep pace with the times. The Group's e-commerce operation strictly adheres to the principle of buy online, pick up in store. As we protect consumers' rights and interests, we also aim to build steady retail support. In addition to physical sales channels, the Group is committed to developing a sales model that incorporates e-commerce for consumers to have an integrated experience across both online and offline mediums. In view of the differences in the operating capabilities of each sales company and the dynamics of competitors, the adoption of e-commerce is adjusted to suit local needs. Giant Group has been running e-commerce in Canada, Germany and the United Kingdom on a small scale since 2013 while the third-party platform came online in China in 2014 and gradually implemented by sales companies in other countries from 2015. As for our operation in Taiwan, e-commerce was launched in 2020. We expect e-commerce will be adopted by all of our own sales companies by 2024.

	2019	2020	2021	2022
Percentage of online revenue (e-commerce/OBM)	1.73%	2.52%	2.99%	4.1%
Note	E-commerce in 8 locations	E-commerce in 9 locations	E-commerce in 13 locations	E-commerce in 13 locations

Listening to the customers

Our regional sales companies have set up consumer complaints channels, whereby consumer issues can be resolved immediately by the in-charge personnel. In accordance with the Group's procedures, after investigating the complaint received, the in-charge personnel shall create a case file and log it into the Group's system for administrative purposes.

Take our private brand GIANT as an example. There is a feedback section on the official website, where consumers can enjoy after-sale consultation services or file complaints. They can voice their opinions through hotline and e-mails, or in stores. Upon receiving a complaint, we would assign a case number via the customer complaint management system and then categorize the complaint by type into one of the six categories: major issue, quality, service, out-of-stock, and consultation and suggestion. Next, we further differentiate the issue by product category into bicycles, e-bikes, merchandises, components, and damage in transit to determine the next process, which includes requesting the consumer to provide more information, replying immediately, replying after enquiries, and handling by the stores. After the unit responsible is confirmed, investigations would be conducted and a deadline would be set depending on the complexity of the case. Customers would receive prompt responses for cases that can be resolved immediately while our standard process is to close a case within seven days. For major issues, however, we would determine the deadline with customers based on the severity of the issue. Replies to complaints are given via the initial complaint channels used by the consumers. The handling process and result of each case would be documented in the customer complaint system for future references. Special cases would be shared internally to avoid the reoccurrence of customer complaints.

Six categories					
Major issue	Quality	Service	Out-of-stock	Consultation	Suggestion

Customer complaints received by Giant Taiwan Sales Company in 2022 is summarized below. All cases have been closed, with major cases concluded by mutual agreements after our legal team reviewed the compensation agreement.

2022 Customer Complaints Statistics of Giant Taiwan Sales Company

Category	Non-customer Complaints	Customer Complaint	Total
Major issue (Note 1)	-	3	3
Quality	-	50	50
Service	48 (Note 2)	61	109
Out-of-stock	-	24	24
Consultation and suggestion	2,068	-	2,068
Total	2,116	138	2,254

Note 1: Major issue are incidents involving customer injuries.

Note 2: Cases where products needing repairs or parts replacement outside the warranty period are not classified as customer complaints.

3.4. Innovations

Giant Group has long been a catalyst in the evolution of the cycling world with "innovation" in our DNA. The combination of innovation and our manufacturing expertise makes us the global leading brand for high-end bicycles and components.

3.4.1 Innovative R&D

3.4.1.1 R&D strategy and organization

In terms of our R&D strategy, we set our Taiwan Headquarters as the technology center and integrates R&D resources from Europe, the U.S. and China. We listen to consumer needs and develop products meeting such needs. Besides researches on product performance, materials and engineering technology and external designs, we continue to roll out quality and attractive products. We also incorporate Intelligence into our design to explore the multi-dimensional applications of consumer services.

The Group also continues to accumulate innovation potential internally. The subsidiary, AIPS Technology Co., Ltd., enhances the application and production of innovative smart products, extending our product range to include indoor cycling. We also develop Internet of Bike (IoB) ahead of others for e-bikes to be connected to not only hardware such as motors, batteries, controllers, and screens, but also the E-bike App as well as the Service Platform for inspection services, bringing consumers a complete riding experience from cycling, social community to after-sales service.

As for R&D expertise, we have set up the i-WOW Center for the integration of innovative technologies and smart products. With key technologies such as smart algorithm, information and communication technology, mechatronics system design, sports science and material researches as well as the core areas of advanced process developments, we persistently consolidate studies on the applications of technologies and materials across different fields in new products to enhance the Group's core technologies and to cultivate professional R&D talents.

	2019	2020	2021	2022
R&D expense (NT$ thousands)	873,655	939,896	1,041,133	1,531,809
R&D expense as a percentage of revenue (%)	1.38%	1.34%	1.27%	1.66%
Number of patents applied	80	72	68	20
Number of patents granted	90	77	82	34

3.4.2 Digital Transformation

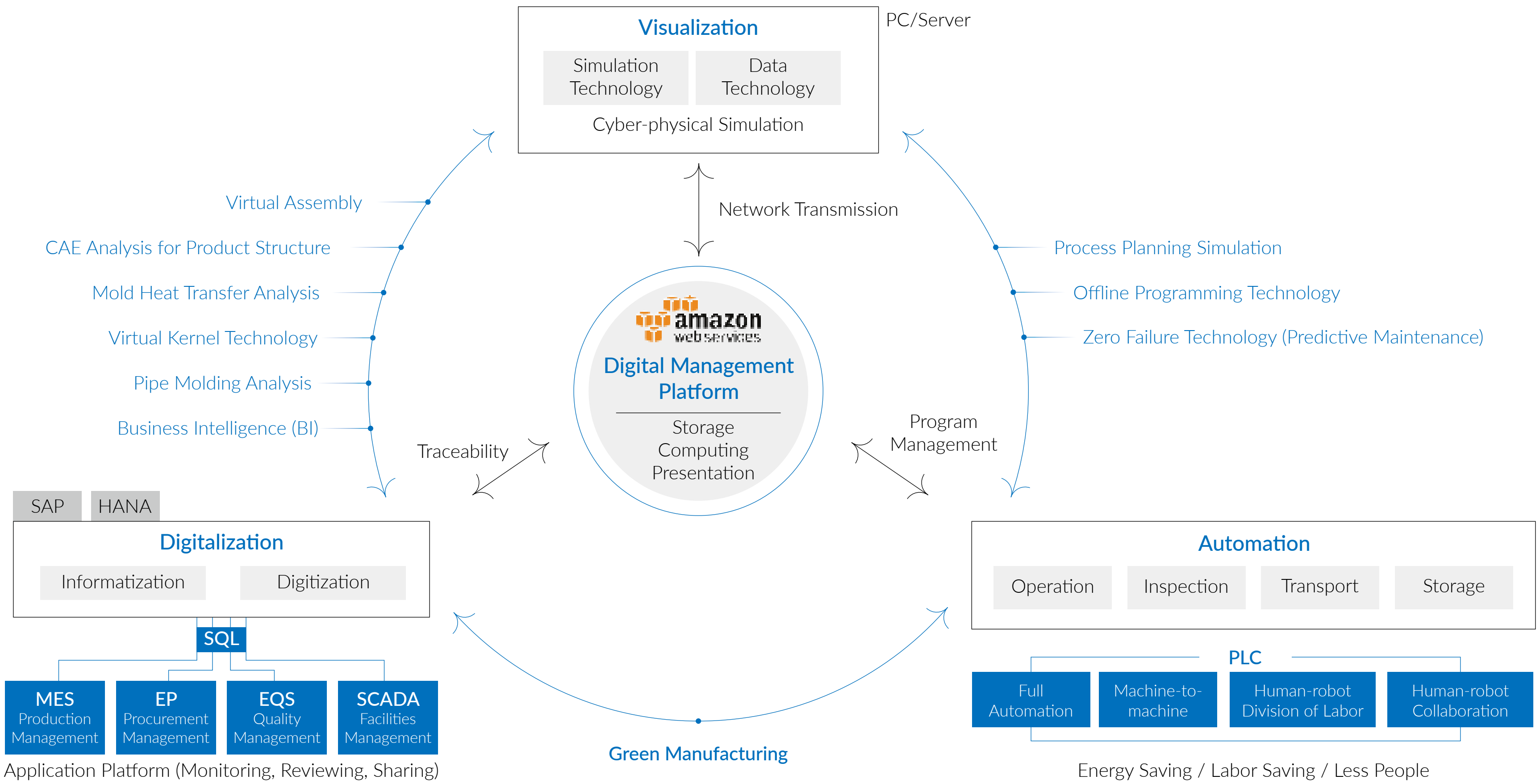
3.4.2.1 Smart manufacturing

Our manufacturing factories specialize in the production of bicycles and electric-assisted bicycles. Bicycle production belongs to the traditional manufacturing sector, which combines manpower and software and hardware facilities to carry out production activities. Our transition from traditional to smart manufacturing includes the adoption of brand-new smart facilities and the installation of basic components with IoT functions which transforms our traditional facilities into ones with data sensing and information feedback functions. Industrial changes and competitions within and outside the industry prompt manufacturers to accelerate their transformation progress and innovations. We build our smart manufacturing system by the four stages of automation and data technology, which have been gradually put into practice since 2017.

Four stages of automation

Based on the degree of machinery replacing human labor, automation can be divided into four stages: human-robot collaboration, human-robot division of labor, machine to machine, and full automation; and the manufacturing processes can be grouped into four categories: operation (forming, processing, and manipulating), inspection (monitoring and judgment), transport, and storage. The levels of automation can be matched with manufacturing categories to create different combinations. Automated processes adopted in our production lines include welding and transport of aluminum alloy, laser cutting and automatic loading and unloading of aluminum alloy tubes, grinding and processing of carbon fiber products, automatic spraying of coatings, and assembly lines with AGVs.

Intelligent Manufacturing System



Data technology

It consists of Supervisory Control and Data Acquisition (SCADA) framework, cyber-physical simulation and integration, and digital management platform.

SCADA	Cyber-physical simulation and integration	Data management platform
Sensors are installed in specific equipment and critical processes to capture real-time operation status and estimate production efficiency. Real-time data are sent back to the database as a management and analysis tool.	We collaborate with software companies to develop our own simulation software and apply mature simulation or planning software to our development flows and process planning in order to enhance development and mass production efficiency and reduce the number of trial and error. Software used include the virtual 3D kernel and CAE simulation for weld run which improve process yield, thereby reducing failure cost and abnormality loss in production line.	Data from sensors on the production facilities; the MES, EP, TPM and EQS platforms; and the ERP database are analyzed and utilized. The ongoing construction and improvement of digital platforms, such as SCADA monitoring, production efficiency management, energy management and quality management are included.

3.4.3 Advanced Technology

3.4.3.1 Materials technology

Aluminum-alloy technology

Giant Group has been leading the aluminum-alloy engineering and innovation in the cycling industry. More than 40 years of experience and unparalleled production competence enable us to develop exclusive technology which controls every step of the aluminum-alloy production process. From grain refinement to advanced molding and welding, we endeavor to create lighter, stronger and tougher aluminum-alloy bicycles. Furthermore, our solid manufacturing experience supports our involvement in the development of suspension components for mountain bicycles.

Carbon-fiber components

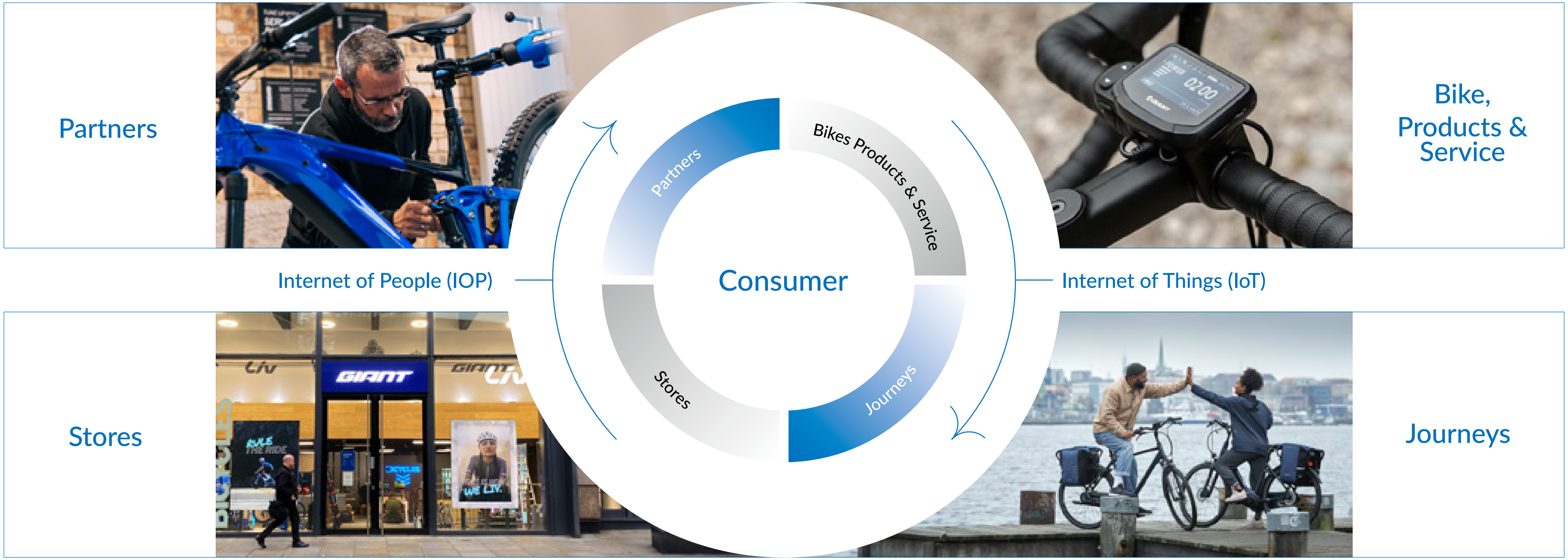
With years of experience in the manufacturing of carbon-fiber bicycles, Giant Group has sophisticated ability to manufacture carbon-fiber components, in addition to our well-known carbon-fiber bicycle frames. At present, our product range covers wheel sets, tires, and saddles, and will continue to rollout other components in the future.

Applications of aluminum-alloy and carbon-fiber frames

2022	Number of Units	Description
Aluminum-alloy Frame	2,298,153	With our in-house ALUXX aluminum alloy technology, we combine structural technology and advanced material from the micromanipulation of atomic surface structures to the introduction of materials for hydro-formed tubes, leading the way in technology.
Carbon-fiber Frame	146,138	Built with the precision reinforced layup technology which CADEX is proud of, carbon fiber of the highest grade (T1000) is placed in key areas to enhance tensile strength, allowing CADEX Tri frame to deliver significantly better pedaling and torsional stiffness than other brands with a weight of only 4,577 grams. In 2022, Kristian Blummenfelt, a triathlon and an Olympic champion, completed the SUB7 challenge with a CADEX Tri prototype and finished the 180km distance with a time of 3:24:22 for the bicycle stage to ultimately be the first triathlete to complete the 226km in under 7 hours!

Smart bicycle and E-bike ecosystem

We have seen rapid changes in the global bicycle industry in recent years with ever-changing consumer needs. Giant Group keeps abreast of technological development and puts consumers at the core of our business. With years of research in Cycling Science, our innovative R&D in different fields continue to bring the joy of cycling to consumers in different environments and with different goals. We connect partners, bikes, stores and journeys with the Internet element to build a cycling ecosystem:



Electric-assisted bicycle

With our in-depth knowledge in cycling science accumulated over 50 years in bicycles and 20 years in e-bikes as well as joint R&D efforts with first-tier component manufacturers, Giant Group has developed SyncDrive, a smart electronic control system, and an e-bike with a frame geometry that stays intact even with a battery installed. In recent years, the Group has created an e-bike ecosystem following its bicycle ecosystem structure, connecting online and offline through partners, bikes, stores, journeys and internet to comprehensively enhance consumers' riding and after-sales service experience. Furthermore, we continue to optimize new model developments through big data algorithms. With pioneering innovations in e-bike, we bring smart riding to consumers.

Indoor cycling

In order to extend the cycling pleasure, besides outdoor riding which is familiar to everyone, Giant Group has started to study solutions for indoor cycling, allowing more cyclists to freely enjoy riding even if they cannot go out. Using precision instruments, Giant's R&D team collects the dynamic performance of cyclists during outdoor riding, analyzes the changes in force that comes with each pedal stroke, and cross-analyzes the data of cyclists of different races, genders, and ages based on sports science to provide cyclists with the most accurate data reports through power devices and apps for performance enhancement. We also apply the technology to smart indoor fitness products. Considering the limitations of indoor space and noise, we create a quiet and immersive smart indoor training platforms and stationary bicycles, where cyclists stay connected with friends online while enjoying the fun of cycling when they are in the comfort of their own homes.

3.4.3.2 Product innovation

Being the industry leader, Giant Group continues to focus on consumer needs and industry trends. We invest in the research and development of innovative products and technologies, integrate resources and processes, enhance efficiency, and strengthen product and brand marketing activities. Also, we continue to observe the application of new technologies in the cycling industry in order to enhance our sales and service quality, thereby strengthening our market competitiveness.

In view of the fact that the bicycles, components and related sales services of our four private brands have carved out a place for themselves in the bicycle markets around the world, our product/service information and labeling shall be clear and accurate for consumer safety and quality. We are also required to comply with the laws and regulations/voluntary codes around the world in this regard.

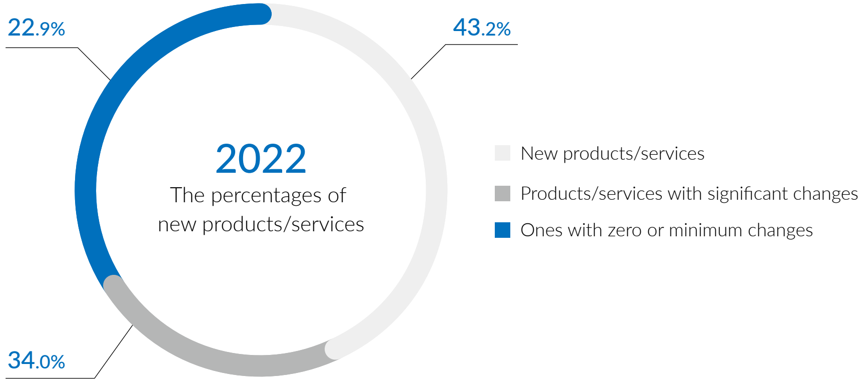
In 2022, there was no incident involving a violation of the health and safety regulations or voluntary codes regarding products and services.

3.4.3.3 Process innovation

In order to enhance manufacturing precision, accelerate production efficiency, and stabilize production quality, Giant Group constantly delves into the existing processes. Besides gradual improvements, we also look for brand-new processes that can bring about disruptive innovations - a belief that emerged in 2017 and has been increasingly put into practice in the production line in recent years. We also invest enormous resources on product design, new materials, new engineering, and integrated processes in line with Article 10 "Research and Development" of the government's Statute for Industrial Innovation, and deliver good results in the annual R&D tax credit applications. The adoption of automated operation, inspection, and transport software and hardware at each factory brings about stable quality as well as labor efficiency. By the end of 2022, we reduced the workforce by 157 workers, which was 36.5% of the original workforce for the process.

By the end of 2022, labor saved	Proportion of original layout
157 workers	36.5%

For bicycles and e-bikes, new products/services are defined as ones that are within 12 months since their rollouts. For 2022, the percentages of new products/services, products/services with significant changes, and ones with zero or minimum changes were 43.2%, 22.9% and 34.0%, respectively.



Innovating a Clean Future

4.1 Innovating a Clean Future

4.1.1 Climate and Energy

The main products of Giant Group, i.e., bicycles and e-bikes, are eco-friendly, healthy and green transportation tools which can effectively reduce GHG emissions and air pollutants produced by fossil fuel vehicles. In addition to promoting human health and minimizing environmental impact when in use, the manufacturing of bicycles also adheres to the principles of green manufacturing and environmental friendliness, reducing the impact of the product lifecycle through controlling raw materials, saving energy and resources consumption, reducing emissions, and enhancing climate resilience.

4.1.1.1 Environmental management system

The environmental impact of human activities is irreversible. To meet the expectations of stakeholders, the Group places equal importance on ESG and EPS, and cares about environmental benefits in the pursuit of economic performance. Giant Group is bound by the following environmental policies:

Regulatory compliance	Gather, identify, comply and conform with all environmental laws and requirements that are applicable given Giant's products, activities, and services, and communicate relevant information to employees.
Impact mitigation	Provide appropriate protective facilities and equipment, and establish standards for related activities in order to effectively control environmental impacts caused by hazardous substances, wastewater, and waste management.
Continuous improvement	Implement environmental policies that target Reduce, Reuse, Recycle, and Pollution Prevention as the basis for performance evaluation in order to achieve continuous improvement.
Education	Enrich employees' skills and knowledge to enhance their competence, identify skills required to achieve better work performance, bring employees to understand their individual responsibilities, and encourage them to participate in the implementation of the environmental management system. We will continue to implement environmental management in accordance with our plan, and share relevant experience and techniques across our factories to enhance employees' environmental and safety management capabilities in order to obtain relevant ISO certifications.

In 2022, our China factory was fined RMB200,000 for exceeding the fluoride standard. There were no significant environmental fines in our Taiwan and other factories. (Giant Group defines a significant fine as one that exceeds NT$300,000 or equivalent.)

Subsidiary	Event	Year	Improvement Measures
Giant (Kunshan) Co., Ltd.	A fine of RMB200,000 for exceeding the fluoride standard. Per penalty notice No. 83-245 issued by the Suzhou Municipal Bureau of Ecological Environment in 2022, the fluoride concentration at the discharge point was 12.7mg/L	2022	Wastewater with high concentration of fluoride is pre-treated in intermediate bulk containers (IBC) before receiving chemical treatment in the wastewater treatment plant. Real-time online monitoring facilities with early warnings on abnormalities. Wastewater is sampled daily and discharged when meeting the standards. These samples are retained and sent to a third-party company for testing and data comparison every Wednesday.

International Environmental Standard	Domestic	Overseas
ISO14064-1 Standards for GHG inventory	· Giant Group Headquarters · Giant Taiwan Sales Company · AIPS Technology Co., Ltd. · YouBike Co., Ltd. · Giant Manufacturing Co., Ltd. · Youth Logistics Center	· D. Mag (Kunshan) New Material Technology Co., Ltd. · Giant (Kunshan) Co., Ltd. · Giant (China) Co., Ltd. · Giant (Tianjin) Co., Ltd. · Giant Electric Vehicle (Kunshan) Co., Ltd.
ISO45001 Occupational health and safety management systems	· Giant Manufacturing Co., Ltd.	· D. Mag (Kunshan) New Material Technology Co., Ltd. · Giant (Tianjin) Co., Ltd.
ISO9001 Quality management systems	· Giant Manufacturing Co., Ltd.	· D. Mag (Kunshan) New Material Technology Co., Ltd. · Giant (China) Co., Ltd. · Giant (Kunshan) Co., Ltd. · Giant (Tianjin) Co., Ltd. · Giant Electric Vehicle (Kunshan) Co., Ltd. · Giant Europe Manufacturing B.V. · Giant Manufacturing Hungary Ltd.
ISO14001 Environmental management systems	· Giant Manufacturing Co., Ltd.	· D. Mag (Kunshan) New Material Technology Co., Ltd. · Giant (Kunshan) Co., Ltd. · Giant (Tianjin) Co., Ltd.

4.1.1.2 Climate change mitigation and adaptation

Climate change has been ranked by the World Economic Forum (WEF) as one of the top three global risks for many years, and the frequency and severity of climate-related disasters have continued to rise. Giant Group has established the "ESG Council and ESG Task Force" under the management level to work with the management of subsidiaries in setting annual targets for various aspects of corporate sustainability and monitoring the progress regularly. In 2021, we included the Group's carbon inventory in our annual target with results reported to the Board upon completion of the inventory. Giant Group refers to the proposed framework of Task Force on Climate-Related Financial Disclosures (TCFD) for the assessment and response plans of climate change risks and opportunities. Our sustainability achievements and reduction performance would be communicated to stakeholders through the annual sustainability report.

Core Element		Action
Governance	Board oversees climate-related risks and opportunities	· List climate change issue as a regular agenda item in Board meeting. Three meetings were held in 2022. · Report the planning and execution of GHG inventory to the Board at least once every year. In the case of our Vietnam factory, the site was selected with reference to long-term statistical data to avoid high-risk areas such as low-lying areas or areas prone to natural disasters. · In Giant Group, the CEO from top management would include climate risk, opportunities and action plans in the business report to the Board on behalf of the management team when the need arises, and add climate-related targets to the Group's objective management. During the Board's budget review, ESG capital expenditure would be listed as a separate item. For example: The significant impact of regulations and local subsidies on e-bike sales of the region is included in the targets of sales companies.
	Role of management in assessing and managing climate-related risks and opportunities	· The Group's Strategy Planning Office presents business reports or objective management on behalf of the management through the CEO to the Board. Principal members of the Strategy Planning Office include the Chairperson, the CEO, the Chief of Staff, and the Corporate Governance Officer. · Daily operation is summarized by the President of each location in the monthly management reports. For major issues, such as the EU carbon tax, ESG projects, etc., the in-charge functional unit would initiate investigations. · Regulatory issues are reported by the Legal Affairs Center, ESG (both internal and external) is reported by the Strategy Planning Office, and local business environment is reported by the Sales Center.
Strategy	Identify short-, medium- and long-term climate-related risks and opportunities	· Giant Group defines short-, medium- and long-term to be 1 to 3 years, 4 to 10 years and over 10 years, respectively. Please refer to the "Risk and Opportunity Management" section for details on the Group's short-, medium- and long-term climate-related risks and opportunity identified.
	Climate-related risks and opportunities that have a significant impact on business, strategy and financial planning	· For details, please refer to the "Risk and Opportunity Management" section.
	Take into account different scenarios of climate change	· Adopt multiple climate models such as GCM and ESM to simulate physical climate risk under four scenarios: RCP2.6, RCP4.5, RCP6.0 and RCP8.5. · Transitional risk takes into account three external scenarios: Government's net zero pathway, SSP1-1.9 and SBT-NZ. · For details, please refer to the "Strategy" section.
Risk Management	Processes for identifying and assessing climate-related risks	· All units work together to identify the Group's climate-related risks and opportunities. The chief functional officers then conduct matrix analysis and evaluation based on the likelihood of occurrence and the level of impact. For details on the identification and assessment processes and results, please refer to the "Risk and Opportunity Management" section.
	Processes for managing climate-related risks	· Please refer to the "Risk and Opportunity Management" section.
	How to incorporate the processes for identifying, assessing and managing climate-related risks into the overall risk management	· We incorporate climate change risks into our corporate risk management policy, and continue to monitor the Climate Change Response Act and other laws and regulations, such as the carbon border tax.
Metrics and Targets	Metrics used to assess climate-related risks and opportunities in line with the strategy and risk management process	· Giant Group has included carbon inventory in the Group's 2021 KPIs as one of the assessment factors for dividend payment · The Group uses GHG reduction rate, green energy percentage and cycling efficiency improvement rate as metrics for assessing the performance of risk and opportunity management. For details, please refer to the "Metrics and Targets" section.
	Scopes 1, 2 and 3 emissions and associated risks	· Please refer to the "Metrics and Targets" section.
	Targets for climate-related risk and opportunity management, and performance against those targets	· Giant Group plans to set emission reduction targets based on the internationally accepted Science Based Targets initiative (SBTi). · In addition to GHG reduction, the Group will set other environmental targets, such as electricity consumption, renewable energy, water consumption and waste volume.

Governance

Giant Group is well aware of the impact of climate change on corporate sustainability, and has listed climate change issue as one of the regular agenda items in the Board meeting. In 2022, three Board meetings were held on climate change-related issues. During the meetings, discussions on "incorporation of physical climate risks into considerations for our construction of Vietnam factory (with reference to long-term statistical data to avoid high-risk areas such as low-lying areas or areas prone to natural disasters)", "impacts of EU carbon border tax on Giant Group", and "vigorous promotion of ESG initiatives at Group operations around the world" were held. In addition, the planning and execution of the Group's GHG inventory shall be reported to the Board at least once every year.

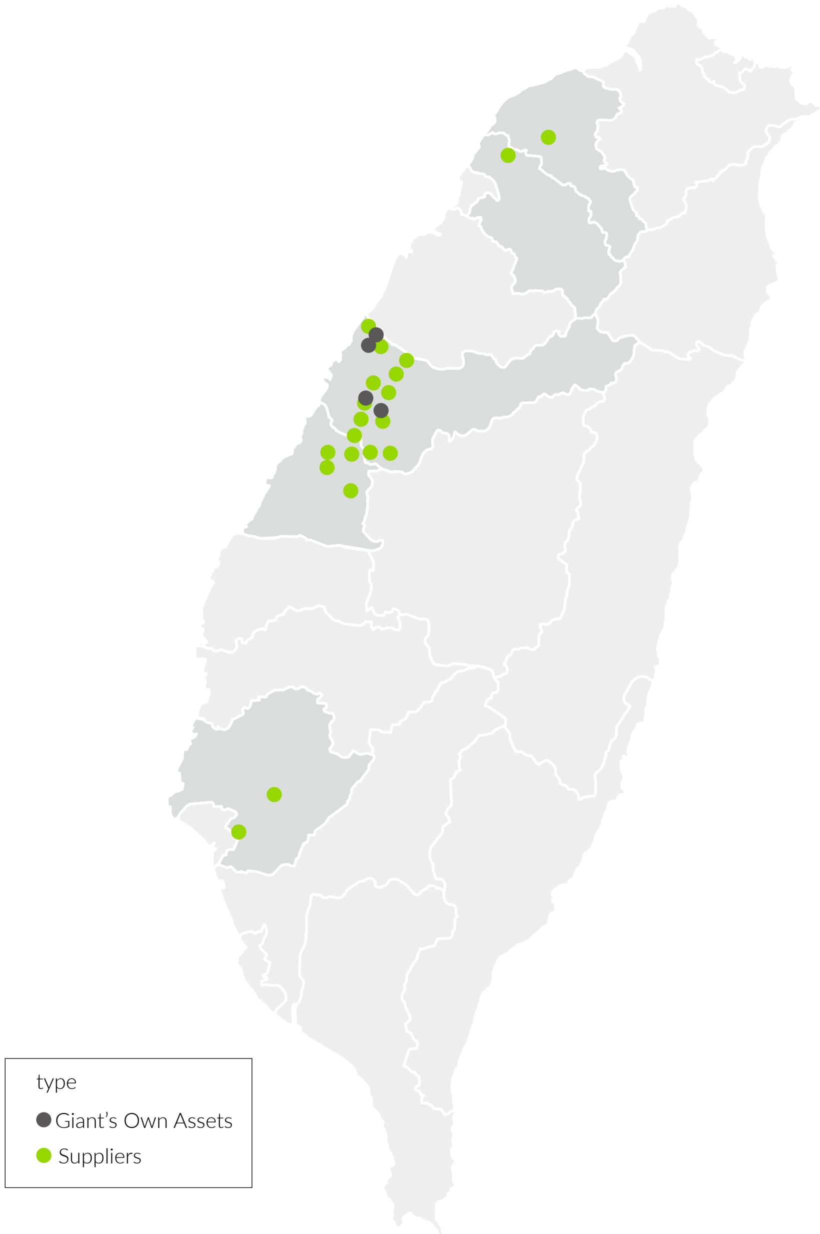
In Giant Group, the CEO would include climate risk, opportunities and action plans in the business report to the Board on behalf of the management team and add climate-related targets to the Group's objective management. During the Board's budget review, ESG capital expenditure would be listed as a separate item. For example: The significant impact of regulations and local subsidies on e-bike sales of the region is included in the targets of sales companies.

Strategy

Giant Group incorporates climate change-related risks and opportunities in the scope of corporate sustainability and defines short-, medium- and long-term to be 1 to 3 years, 4 to 10 years and over 10 years, respectively. The Group's operational strategies and mitigation and adaptation plans are drawn up based on the results of its physical and transitional scenario analysis.

Physical Risk Scenario Analysis

Giant Group performs physical risk analysis of each operation using extreme rainfall due to climate change for level of hazard, extreme rainfall-induced floods, landslides, and mudslides for level of vulnerability, and location for level of exposure. For the hazard assessment, we adopt several climate models (GCM/ESM) to simulate climate risks under four scenarios: RCP2.6, RCP4.5, RCP6.0 and RCP8.5 to avoid extreme results. As for the vulnerability level, we analyze the extend and degree of disasters based on map data published by the government. The level of exposures is based on a total of 53 locations, including the Group's own assets and suppliers. We then categorize the risk scores of the three vulnerability levels at each location by the risk matrix into four risk levels: no risk, low risk, medium risk and high risk, with the total risk represented by the vulnerability level with the highest risk score. A description of the risk levels of Giant Group's own assets and suppliers under different RCP scenario is as follows:



Locations of Giant Operations

Physical Risk Analysis Results of Giant Group's Own Assets Under RCP2.6:

Under RCP2.6/RCP4.5/RCP6.0/RCP8.5, as our assets are not exposed to potential floods, mudslides or landsides, they are classified as No-risk. Nevertheless, the Group formulates contingency plans and risk management measures, including the establishment of emergency response procedures, such as plans for evacuation and material salvage, to protect employee safety and property. We also consider to further improve the water resistance of building structures and the risk management systems to minimize potential risks and losses in the future. The short-term vulnerability of each location and the distribution of overall risk are summarized in the table and figure below.

Risk Level	Countermeasure	RCP2.6				RCP4.5				RCP6.0				RCP8.5			
		Short-term	Medium-term	Medium to long-term	Long-term	Short-term	Medium-term	Medium to long-term	Long-term	Short-term	Medium-term	Medium to long-term	Long-term	Short-term	Medium-term	Medium to long-term	Long-term
● No Risk	Stay at the same location	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
● Low Risk	Stay at the same location	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
● Medium Risk	Stay at the same location and closely monitor changes in potential disasters	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
● High Risk	Avoid setting up operations and relocate existing ones to locations with medium risk or below	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

RCP2.6 / RCP4.5 / RCP6.0 / RCP 8.5 Risk distribution in scenario:

Flood Risk Distribution of Giant's Own Assets

● No Risk (0) ● Medium Risk (5-10)
● Low Risk (1-4) ● High Risk (11-25)

Mudslide Risk Distribution of Giant's Own Assets

● No Risk (0) ● Medium Risk (4-9)
● Low Risk (1-3) ● High Risk (10-20)

Landslide Risk Distribution of Giant's Own Assets

● No Risk (0) ● Medium Risk (1-2)
● Low Risk (0-1) ● High Risk (2-3)

Overall Risk Distribution of Giant's Own Assets

● No Risk ● Medium Risk
● Low Risk ● High Risk

Note: Short-term, medium-term, medium to long-term and long-term represent 2021 to 2040, 2041 to 2060, 2061 to 2080, and 2081 to 2100, respectively.

Physical Risk Adaptation Plan for Giant's Own Assets:

Short-term (1-3 years)	Medium-term (4-10 years)	Long-term (10 years)
· Rolling review: Conduct annual disaster risk assessments on Giant's own assets to achieve the risk management objectives. · Contingency plan: Establish emergency response procedures, including plans for evacuation and material salvage, to protect employee safety and property.	· Risk warning system: Establish a risk warning system for timely notification of risks and corresponding countermeasures during periods of high rainfall frequency. · Flood prevention system: Study the geographic and hydrological conditions of the area and establish an appropriate flood prevention system to minimize the impact of potential flood. · Water resistance enhancement of buildings: Improve the water resistance of building structures to minimize flood damage.	· Office reconstruction or relocation: We consider the options of office reconstruction or relocation for operations at high-risk areas to avoid risks in hazardous areas. · Sustainable development plan: We consider the option of establishing a sustainable development plan to minimize environmental impacts. Examples include the adoption of energy conservation, emission reduction and material circularity measures to secure long-term economic and environmental stability.

Supplier Physical risk analysis results

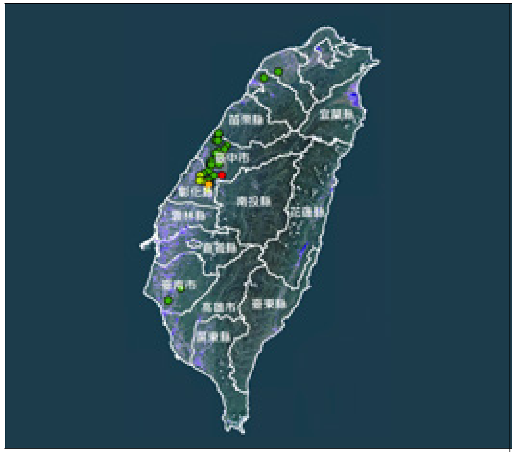
The statistical distribution of the short-term vulnerability and overall risks of Giant Group's suppliers under the PCR2.6/PCR 4.5/PCR 6.0/PCR 8.5 scenario, as well as the response measures are as follows:

Risk Level	Countermeasure	RCP2.6				RCP4.5				RCP6.0				RCP8.5			
		Short-term	Medium-term	Medium to long-term	Long-term	Short-term	Medium-term	Medium to long-term	Long-term	Short-term	Medium-term	Medium to long-term	Long-term	Short-term	Medium-term	Medium to long-term	Long-term
No Risk	Stay at the same location	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24
Low Risk	Stay at the same location	4	5	5	5	5	3	3	5	5	4	5	5	5	5	4	2
Medium Risk	Stay at the same location and closely monitor changes in potential disasters	1	0	0	1	0	2	2	1	0	1	0	0	0	0	1	3
High Risk	Avoid setting up operations and relocate existing ones to locations with medium risk or below	1	1	1	0	1	1	1	0	1	1	1	1	1	1	1	1
Total		30				30				30				30			
Description		Our suppliers at 24 locations are at the no risk level while 6 locations are exposed to various degrees of flood risk. The numbers of suppliers with low and medium risks are 4-5 and 0-1, respectively, and have remained flat in the short- and medium-term ranges. All of these suppliers are in the Changhua County and they are exposed to possible floods due to extreme rainfall. The number of suppliers with a high-risk level is between 0 and 1 and they are mainly exposed to possible floods in the Taichung City. The short-term vulnerability of each location and the distribution of overall risk along with countermeasures are summarized in the table and figure below.				Our suppliers at 24 locations are at the no risk level while 6 locations are exposed to various degrees of flood risk. The numbers of suppliers with low and medium risks are 3-5 and 0-2, respectively, and have remained flat in the short- and medium-term ranges. All of these suppliers are in the Changhua County and they are exposed to possible floods due to extreme rainfall. The number of suppliers with a high-risk level is between 0 and 1 and they are mainly exposed to possible floods in the Taichung City. The short-term vulnerability of each location and the distribution of overall risk along with countermeasures are summarized in the table and figure below.				Our suppliers at 24 locations are at the no risk level while 6 locations are exposed to various degrees of flood risk. The numbers of suppliers with low and medium risks are 4-5 and 0-1, respectively, and have remained flat in the short- and medium-term ranges. All of these suppliers are in the Changhua County and they are exposed to possible floods due to extreme rainfall. There is one supplier with a high-risk level and it is mainly exposed to possible floods in the Taichung City. The short-term vulnerability of each location and the distribution of overall risk along with countermeasures are summarized in the table and figure below.				Our suppliers at 24 locations are at the no risk level while 6 locations are exposed to various degrees of flood risk. The numbers of suppliers with low and medium risks are 2-5 and 0-3, respectively, and have remained flat in the short- and medium-term ranges. All of these suppliers are in the Changhua County and they are exposed to possible floods due to extreme rainfall. There is one supplier with a high-risk level and it is mainly exposed to possible floods in the Taichung City. The short-term vulnerability of each location and the distribution of overall risk along with countermeasures are summarized in the table and figure below.			

Note: Short-term, medium-term, medium to long-term and long-term represent 2021 to 2040, 2041 to 2060, 2061 to 2080, and 2081 to 2100, respectively.

Risk distribution：

RCP 2.6

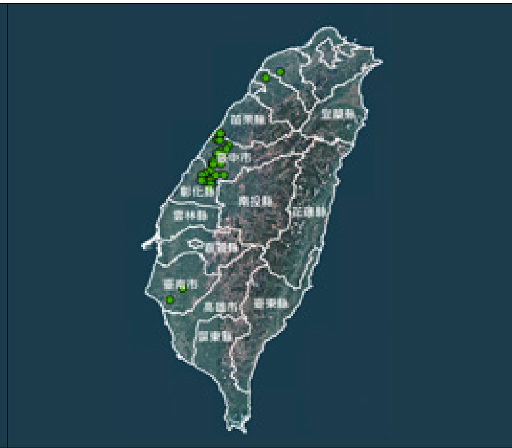


Flood Risk Distribution of Giant Suppliers

- No Risk (0)
- Medium Risk (5-10)
- Low Risk (1-4)
- High Risk (11-25)

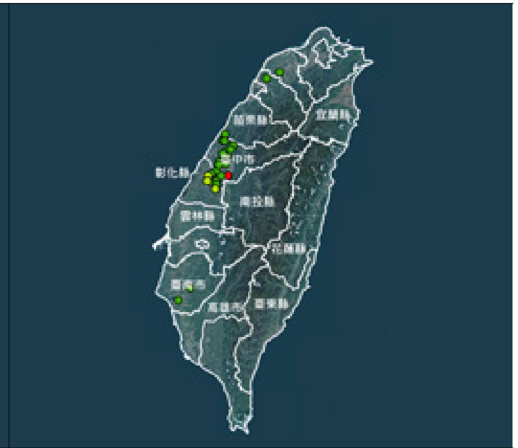
Mudslide Risk Distribution of Giant Suppliers

- No Risk (0)
- Medium Risk (4-9)
- Low Risk (1-3)
- High Risk (10-20)



Landslide Risk Distribution of Giant Suppliers

- No Risk (0)
- Medium Risk (1-2)
- Low Risk (0-1)
- High Risk (2-3)



Overall Risk Distribution of Giant Suppliers

- No Risk
- Medium Risk
- Low Risk
- High Risk

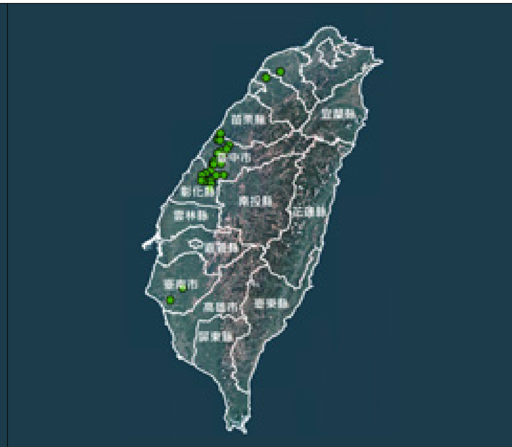
PCR 4.5

Flood Risk Distribution of Giant Suppliers

- No Risk (0)
- Medium Risk (5-10)
- Low Risk (1-4)
- High Risk (11-25)

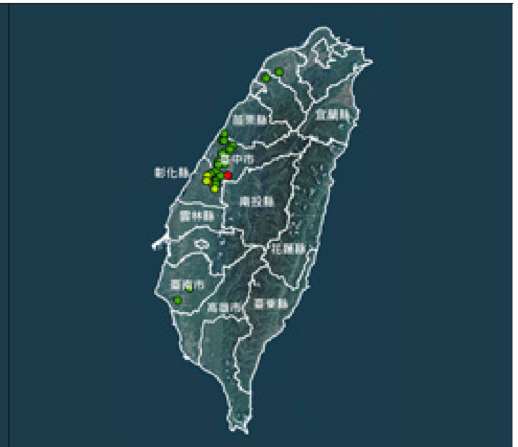
Mudslide Risk Distribution of Giant Suppliers

- No Risk (0)
- Medium Risk (4-9)
- Low Risk (1-3)
- High Risk (10-20)



Landslide Risk Distribution of Giant Suppliers

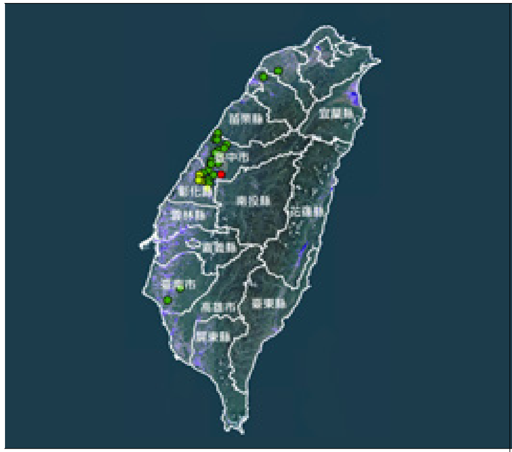
- No Risk (0)
- Medium Risk (1-2)
- Low Risk (0-1)
- High Risk (2-3)



Overall Risk Distribution of Giant Suppliers

- No Risk
- Medium Risk
- Low Risk
- High Risk

PCR 6.0

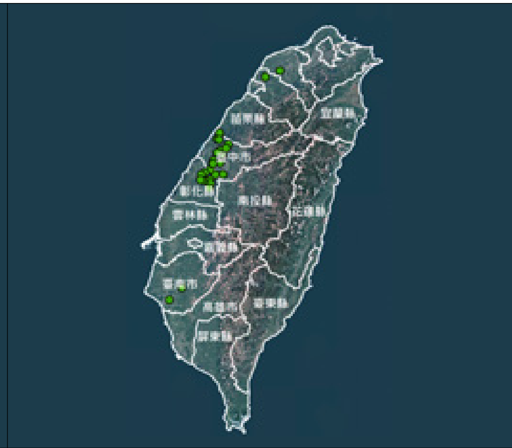


Flood Risk Distribution of Giant Suppliers

● No Risk (0) ● Medium Risk (5-10)
● Low Risk (1-4) ● High Risk (11-25)

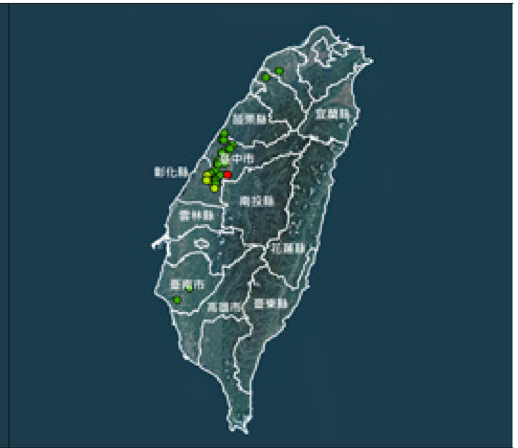
Mudslide Risk Distribution of Giant Suppliers

● No Risk (0) ● Medium Risk (4-9)
● Low Risk (1-3) ● High Risk (10-20)



Landslide Risk Distribution of Giant Suppliers

● No Risk (0) ● Medium Risk (1-2)
● Low Risk (0-1) ● High Risk (2-3)



Overall Risk Distribution of Giant Suppliers

● No Risk ● Medium Risk
● Low Risk ● High Risk

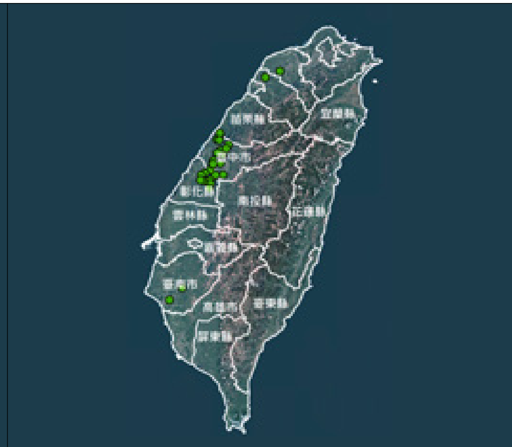
PCR 8.5

Flood Risk Distribution of Giant Suppliers

● No Risk (0) ● Medium Risk (5-10)
● Low Risk (1-4) ● High Risk (11-25)

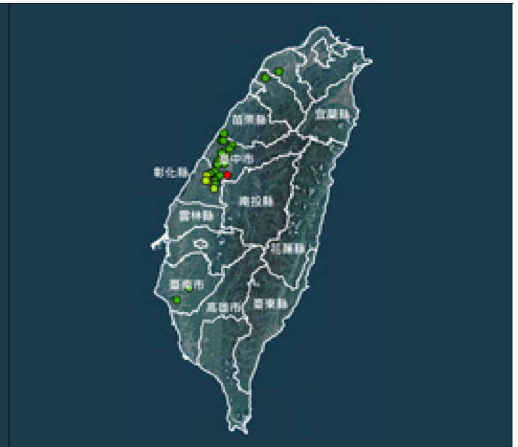
Mudslide Risk Distribution of Giant Suppliers

● No Risk (0) ● Medium Risk (4-9)
● Low Risk (1-3) ● High Risk (10-20)



Landslide Risk Distribution of Giant Suppliers

● No Risk (0) ● Medium Risk (1-2)
● Low Risk (0-1) ● High Risk (2-3)



Overall Risk Distribution of Giant Suppliers

● No Risk ● Medium Risk
● Low Risk ● High Risk

Physical Risk Adaptation Plan for Giant Group's Suppliers:

Short-term (1-3 years)	Medium-term (4-10 years)	Long-term (10 years)
· Rolling review: Conduct annual disaster risk assessments on Giant suppliers to achieve the risk management objectives. · Contingency plan: Establish emergency response procedures, including plans for evacuation and material salvage, to protect employee safety and property.	· Risk warning system: Establish a risk warning system for timely notification of risks and corresponding countermeasures when risks occur. · Assessment on building structures: Work with suppliers to assess the building structures and terrains at the suppliers' premises, understand their abilities to withstand extreme weather events and make necessary reinforcements and adjustments. · Preparation of supplies: Enhance preparation of supplies to ensure the basic needs of employees are met during extreme weather events.	· Expand risk management plan: We consider the option of expanding our risk management plan by means such as incorporating risk management into supplier contracts, and communicating and coordinating with suppliers to ensure the feasibility and effectiveness of risk management.

Transition Risk Scenario Analysis

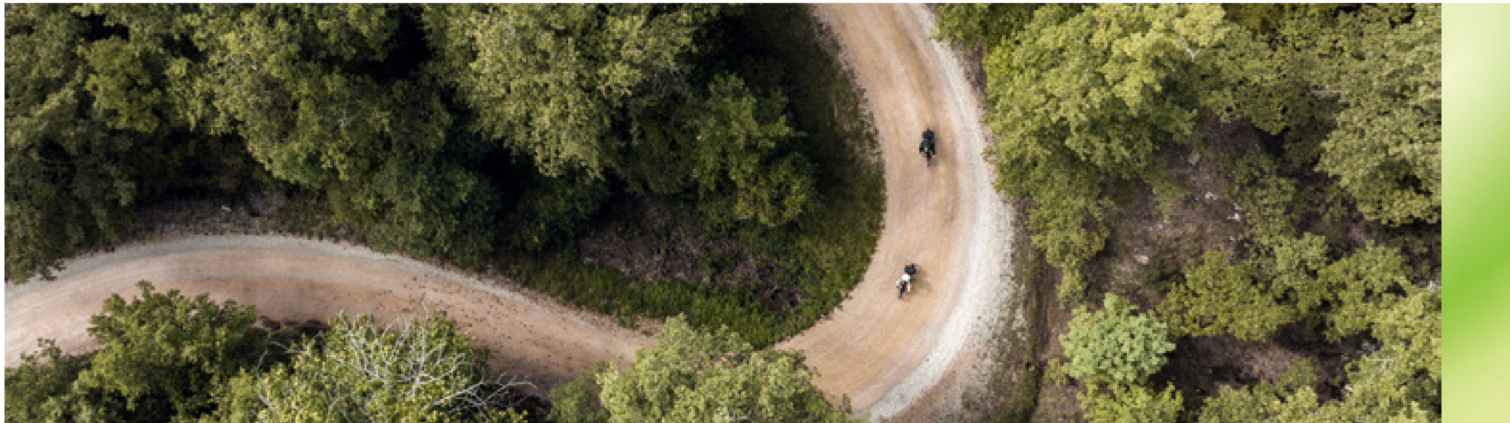
The simulation of transition scenarios uses Giant Group's basic data to estimate the possible future emissions and explore the risks encountered by the Group based on these emissions (i.e., Giant Group's BAU strategy). Next, we analyze the differences in management costs for the three transition scenarios in order to understand the possible financial impacts of different strategies under different scenarios. The following scenario analysis results are produced sequentially:

- Financial impacts of BAU (business as usual) under the three external transition scenarios
- Management costs for achieving the targets of the three external transition scenarios

The three external scenarios often used in the study of transition risk are: the government's net zero pathway, the SSP1-1.9 pathway of IPCC AR6, and the SBT-NZ target, which is the most severe transition scenario as it aims to reduce emissions by 42% by 2030 in order to reach SBTi net zero by 2050.

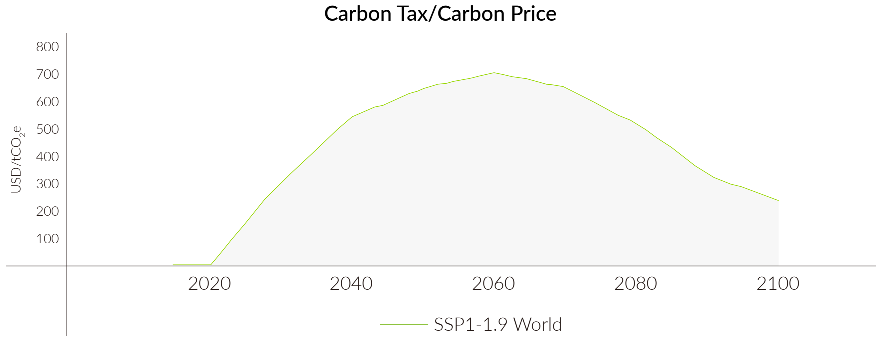
Scope and Boundary of Giant Group's Transition Scenario Analysis

External Transition Scenario	Description	Scope	Risk	Emission Source
Government's net zero pathway	Based on Taiwan's net zero target	Giant Group	Regulatory Risk Market Risk Technology Risk	Scope 1 + Scope 2
SSP1-1.9	Based on the SSP1-1.9 pathway of IPCC AR6			Scope 1 + Scope 2
SBT-NZ	Estimated based on the SBTi net zero scenario			Scope 1 + Scope 2



Parameters for Scenario Simulation

Factors and assumptions of transition scenario analysis

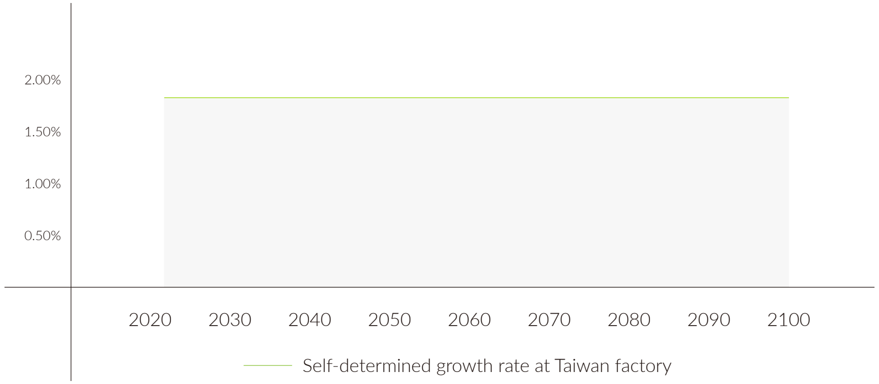
	Risks	Description	Cost Type
Regulatory	Carbon tax	Tax is levied based on a company's units of carbon emissions under different scenarios. Carbon tax has a high level of uncertainty due to significant differences between tax systems. This assessment focuses on carbon tax under three scenarios: Government's net zero pathway: Carbon tax of NT$300/t$CO_2$e (approximately US$10/tCO_2e) SSP1-1.9 and SBT-NZ: Carbon price of SSP1-1.9 (about US$650/t$CO_2$e by 2050) 	Operating costs
	Cap-and-trade and carbon fine	At present, international regulations and trends tend to favor carbon taxes over carbon fines or the cap-and-trade approach. Thus, only the government's net zero pathway would take into account carbon fines (the regulation of not exceeding NT$1,500/t$CO_2$e).	Operating costs
Technology	Installation costs of renewable energy	The costs to install renewable power systems by the Group and the amount is to be fully recognized as capital expenditure for the year. The installation cost is available in the Renewable Energy Statistics 2022 by the International Renewable Energy Agency (IRENA).	Capital expenditure
	Operating costs of renewable energy	The operating cost of renewable energy is available in the Renewable Energy Statistics 2022 by the IRENA.	Operating costs
	Purchase cost of renewable energy	The purchase cost of renewable energy in Taiwan is the average wholesale renewable energy price from the Taiwan Power Company plus the electricity charge on shared facilities (from the Taiwan Power Company) in New Taiwan dollars.	Operating costs
	Cost of purchasing from Taiwan Power Company	The costs and benefits of purchasing from the Taiwan Power Company is calculated at NT$3.785/kWh of industrial high-voltage electricity.	Operating costs
	Cost of carbon removal	According to data of the International Energy Agency (IEA), the cost varies with the CCUS adopted under different scenarios. As our analysis uses carbon removal as the ultimate mean to achieve net zero, it adopts the most expensive technology - direct air capture, with a cost of about US$85-345/t$CO_2$e. The assumptions for three different scenarios are as follows: Immature technology: US$340 /t$CO_2$e Average price: US$235/tCO_2e Mature technology: US$130/t$CO_2$e	-
Market	Risk of decreasing market share of low carbon products	Not considered	Expected revenue

Emission Estimates of Basic Scenario

A. Giant Group's parameters for emission estimates of basic scenario:

- Scope 1 emission growth rate: Estimated with a growth rate of -0.36%
- Electricity consumption growth rate: The growth rate is estimated based on a linear increase of 1.82% per year in Taiwan. The changes are as follows:

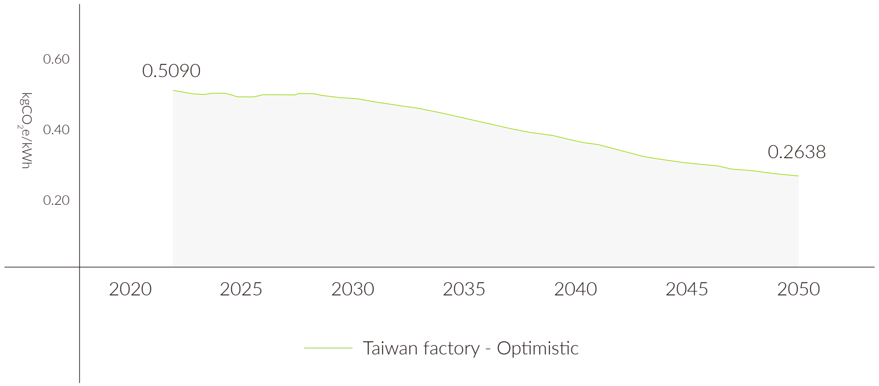
Giant Group's Electricity Growth Parameters for Future Emissions

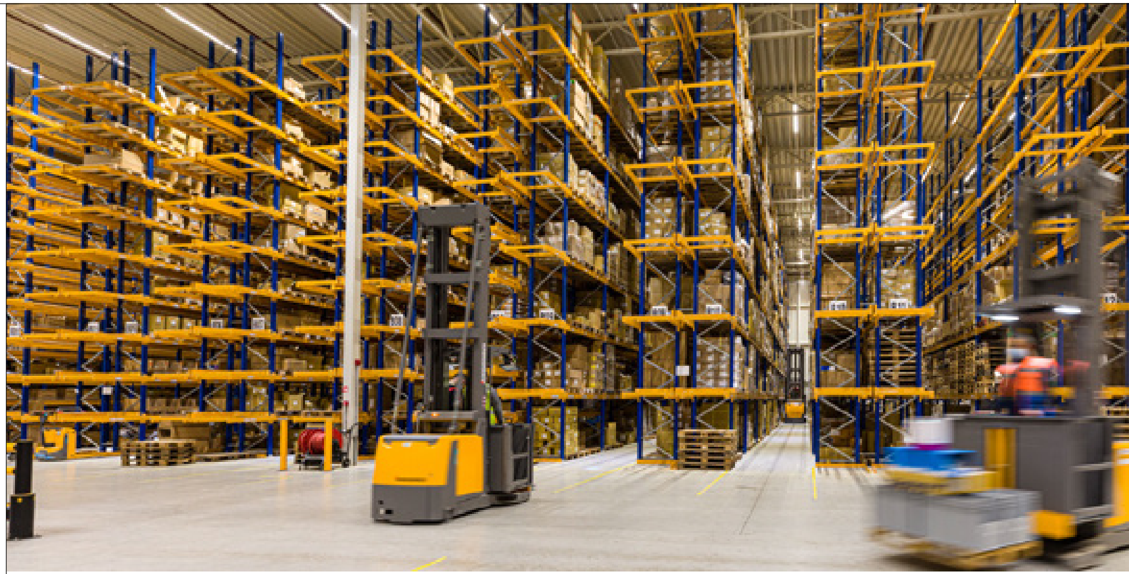


- We use Taiwan's carbon emission coefficients of electricity and steam to calculate changes in electricity coefficients under different scenarios between 2019 and 2050 based on the government's energy policy. We aim to achieve the current projected targets of the government by 2030 (i.e., a power mix of 30% coal, 50% natural gas, and 20% renewable energy), and continue to increase the proportion of renewable energy to 50% and replace coal-fired generation by 2050 (i.e., a power mix of 50% natural gas and 50% renewable energy).

Electricity Coefficient Simulation

(without considering the government's net zero policy)



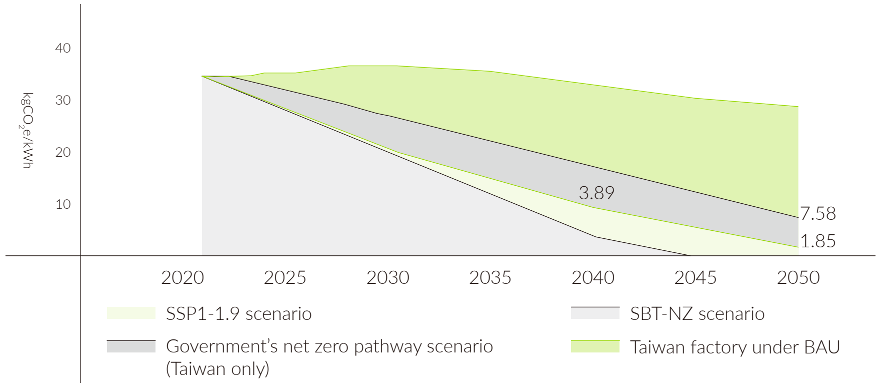


B. Giant Group's results for emission estimates of basic scenario

- Giant Group under the scenarios of government's net zero pathway, low-carbon transition and 1.5°C objective

  The analysis estimates Giant Group's emission allowances for three different ambition levels, namely the government's net zero pathway, SSP1-1.9 and SBT-NZ, as well as the emission for keeping the current practice (with no electricity savings and no renewable energy purchases). Results are illustrated in the figure below. Under the SBT scenario with 2021 as the base year and an annual electricity consumption growth rate of 1.82% (linear estimate), Giant Group's emissions would reach 2.857 metric tons CO_2e in 2050.

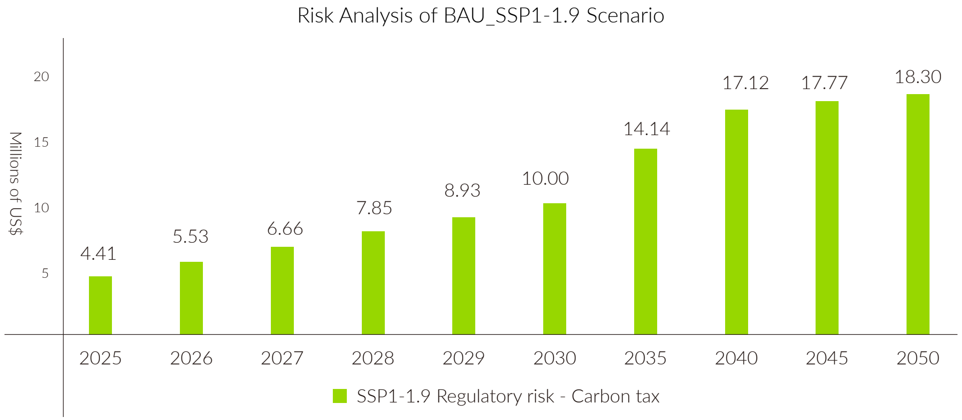
Carbon Emission Allowances Under Different Scenarios and the Estimated GHG Emission under BAU

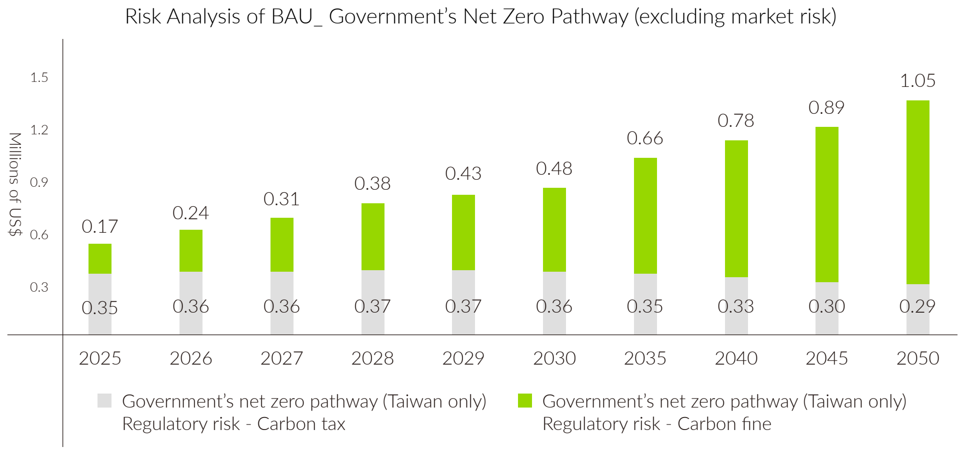


- Financial impact on Giant Group with existing strategy (BAU, excluding RE100 strategy)

  The assessments of financial impacts on Giant Group under BAU with future emission estimates under different external transition scenarios are as follows: Under the scenario of the government's net zero pathway, carbon tax will gradually decrease around 2050 due to diminishing carbon emissions. However, the increasing gap between actual and targeted emission levels would result in greater financial impact from carbon fines. Overall, the financial impact under the government's net zero scenario with the BAU strategy is about US$1.25 million. As for the SSP1-1.9 path, please refer to the graph below.

Financial Impact on Giant Group under Two External Scenarios with BAU





1. Cost of Capacity Obligation

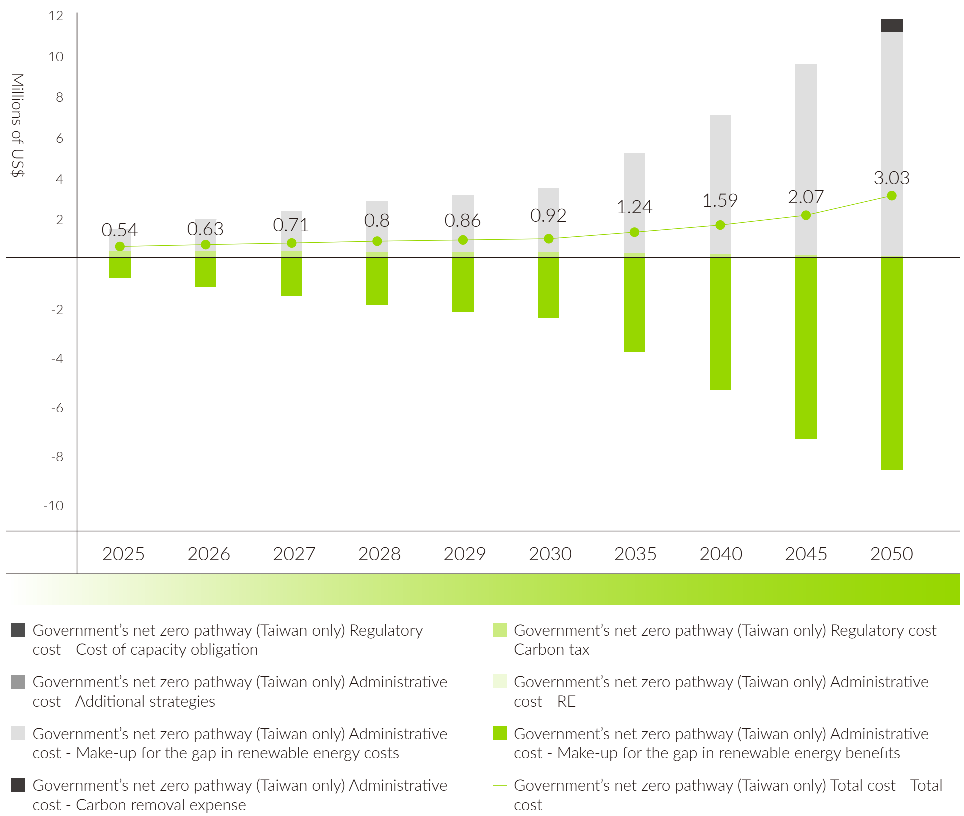
   With a contracted capacity below the 5,000kW threshold, Giant Group does not have to perform the calculation.

2. Management Cost Analysis for Achieving the Climate Change Transition Scenarios

   a. Management cost analysis for meeting the government's net zero target

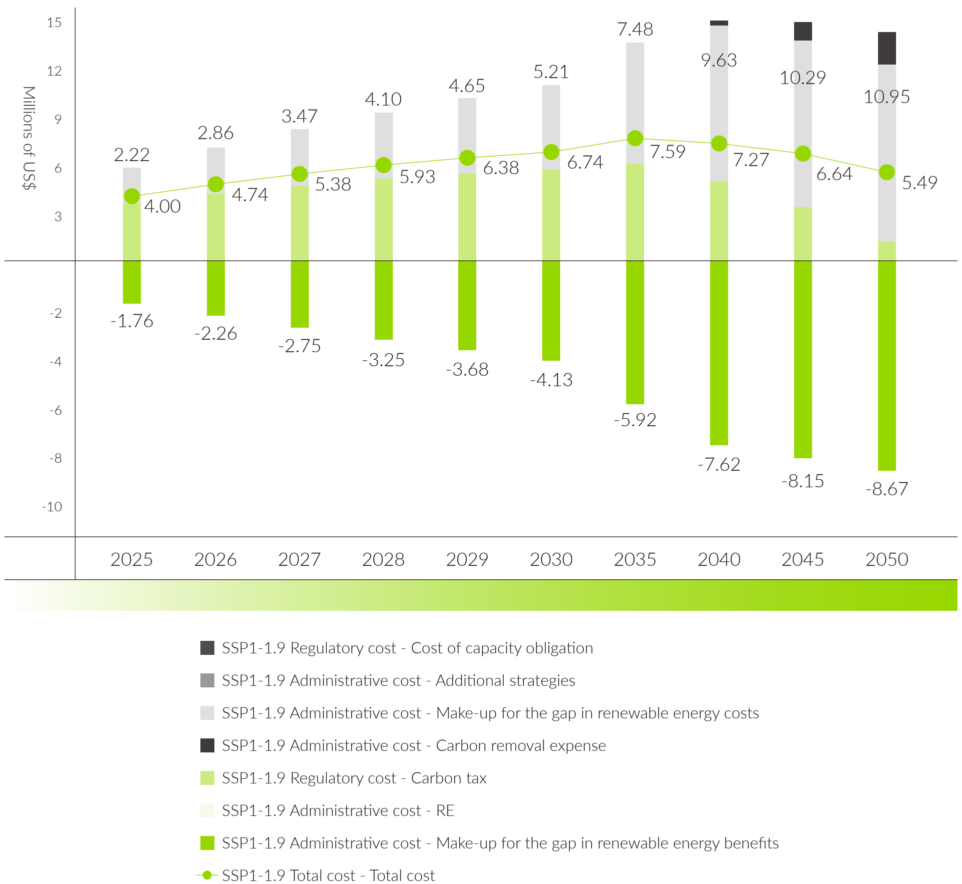
   In order to satisfy the carbon emission allowances under the government's net zero target, Giant Group has to purchase renewable energy and adopt carbon removal measures to avoid all carbon fines in 2025. In other words, to be mandatorily required to achieve the transition scenario target, our renewable energy cost will increase gradually to be US$3.03 million by 2050.

Management Cost Analysis for Achieving the Government's Net Zero Plan



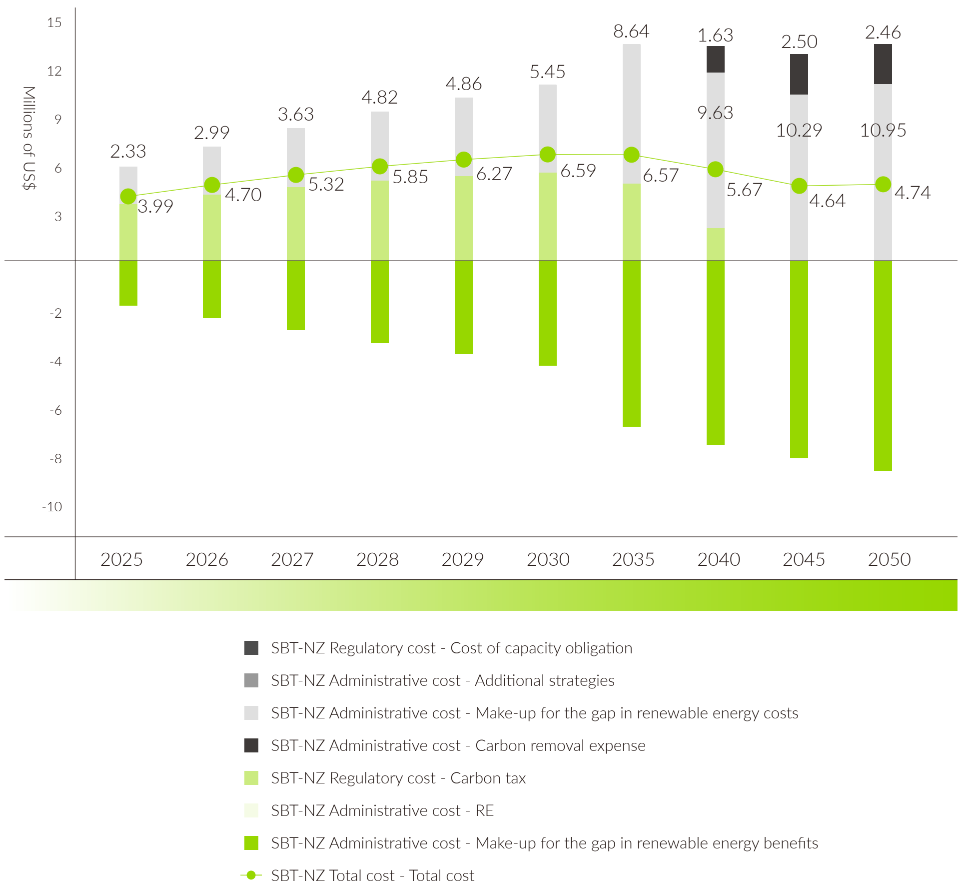
To achieve the SSP1-1.9 target, we need to purchase more renewable energy; therefore, the additional purchase cost of renewable energy remains the highest among all. Moreover, due to carbon emissions, the cost structure is composed mainly of carbon tax and renewable energy purchases. The total cost will reach a maximum of approximately US$7.59 million in 2035, and then, as carbon emission gradually reduces, the carbon tax will decrease. Also, Giant Group needs to adopt carbon removal measures to remove Scope 1 emissions after 2040 in order to meet the allowance under SSP1-1.9 scenario.

Management Cost Analysis for Achieving SSP1-1.9



As SBT-NZ aims to achieve net zero by 2040, the most significant difference in financial cost comes from the adoption of carbon removal measures after 2040. By then, there will be no regulatory costs, such as carbon tax, with only additional purchase costs of renewable energy and carbon removal cost left around 2045. The total cost is US$4.74 million.

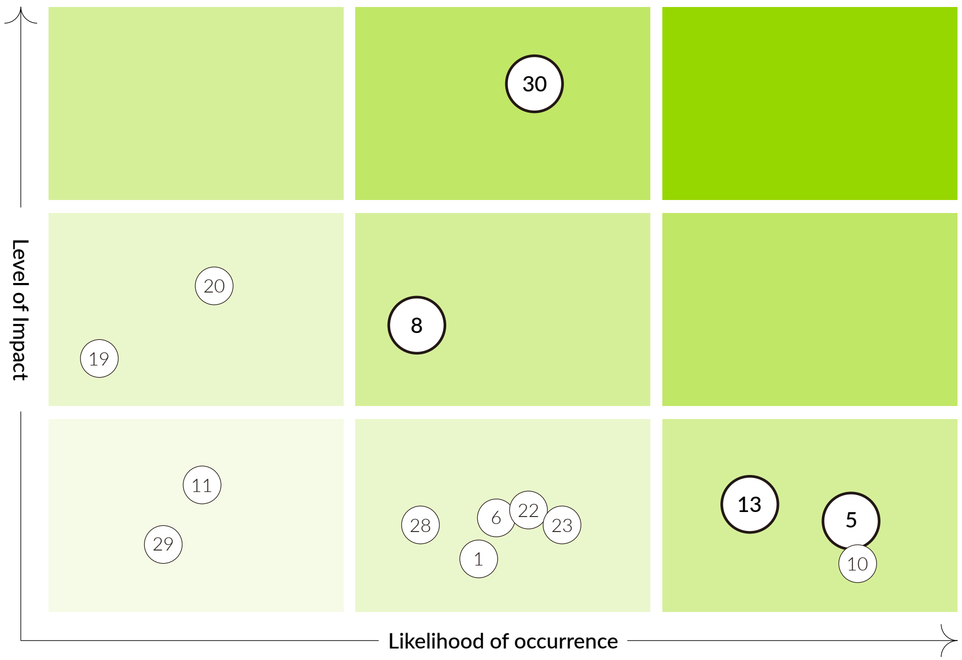
Management Cost Analysis for Achieving SBT-NZ

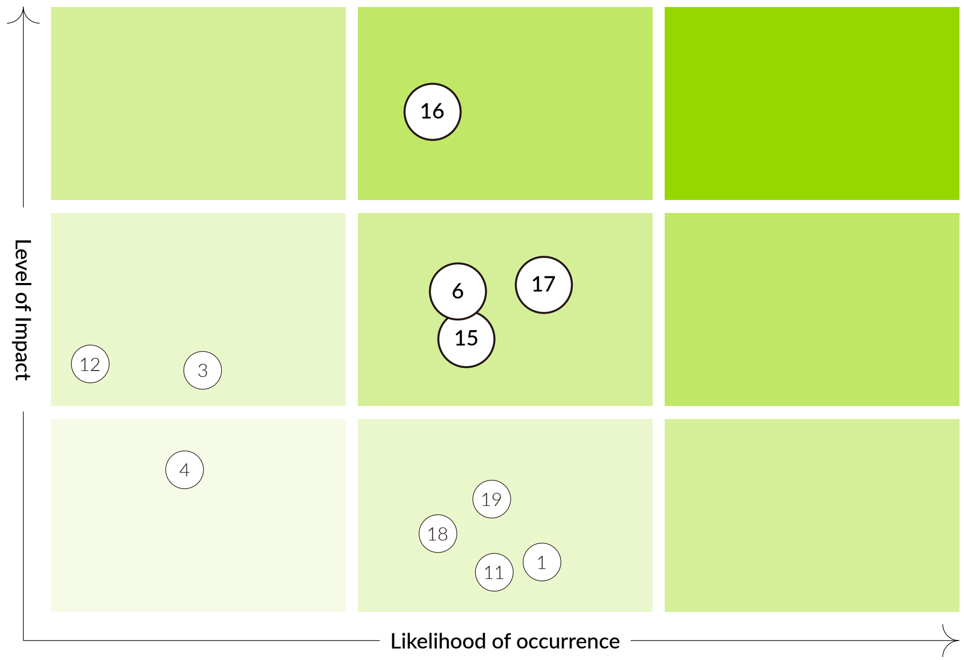


In summary, the cost is lower the earlier Giant Group can achieve net zero under the more challenging scenarios of SSP1-1.9 and SBT-NZ by avoiding high carbon tax.

Risk and Opportunity Management

Based on the disclosure structure recommended by the TCFD, our ESG Council and ESG Task Force have developed risk identification process to identify climate change risks and opportunities for the upstream and downstream companies in the value chain as well as our organization. Both transition and physical risks were identified, including current regulations, emerging regulations, technology, markets, goodwill, litigation, acute disasters, and chronic disasters. The ESG Council and ESG Task Force collect aforementioned issues and team up with all units to identify climate-related risks and opportunities with considerations to current and emerging regulatory requirements associated with climate changes. They conduct matrix analysis and evaluation based on the likelihood of occurrence and the level of impact, and report to the CEO in the highest management level, who supervises and monitors climate-related issues and integrates them into the Company's overall risk assessment on operation.





Significant carbon risks:

30: Product efficiency regulations and standards
08: Cap-and-trade
05: Carbon Tax
13: Mandatory filing

Other risks:

19: Product labeling regulations and standards
20: Uncertainty of new regulations
11. Extreme temperature changes
29: Demand for low-carbon products and services
01: Fuel tax / Energy tax
28: General environmental regulations
22: International conventions or agreements
23: Voluntary agreement
06: Changes in rainfall patterns and distribution
10: Air pollution control

Significant carbon opportunities:

16: Customer behavior change
15: Diversity in operation
06: Transportation mode
17: Identification of new opportunities

Other opportunities:

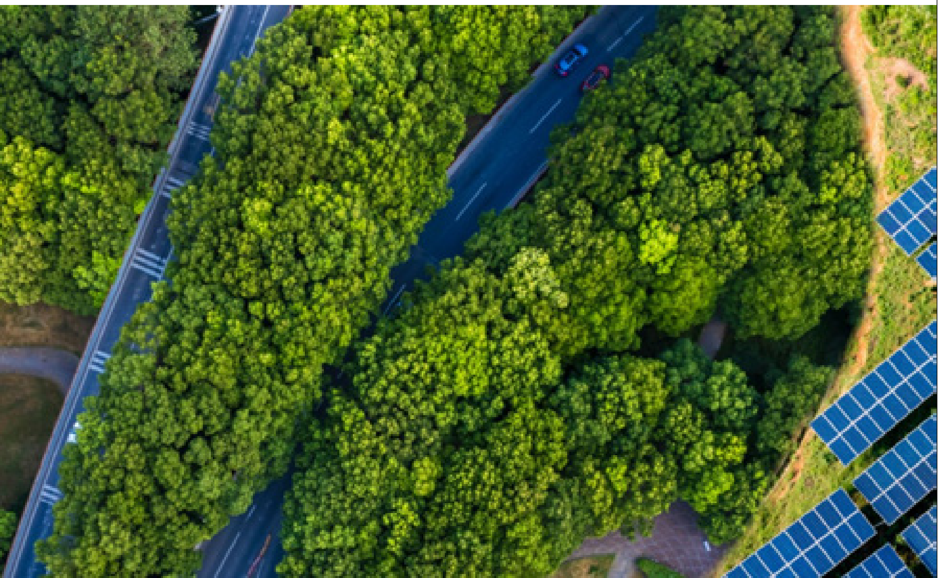
12: Low carbon products or services
03: Manufacturing process
04: Low carbon energy
18: Government cooperation
19: Participation in the carbon market
01: Use of water resources
11: Passive house

	Key Risks and Opportunities	Impact Range	Time of Occurrence	Potential Impacts on Finance (financial impacts without interference, e.g., higher costs, lower revenue, reduced access to capital, etc.; and vice versa for opportunities)	Management Practices (how to minimize financial impacts and the approximate annual administrative cost; and vice versa for opportunities)
Risks	**Product efficiency regulations and standards**	Within Giant Downstream customers	Short-term	Increasing R&D costs to meet new product quality requirements	· Acting ahead of regulatory requirements, Giant Group proactively maps out ESG tasks and assigns a dedicated unit, committing to the Sustainable Development Goals of the United Nations. We continuously invest in R&D to deliver products with environmental performance superior to the mandatory requirements.
	Cap-and-trade	Upstream suppliers Within Giant	Medium-term	Higher operating costs due to downtime loss from power rationing or additional emissions trading costs	· We proactively discuss carbon rights of bicycles or the developments of zero-carbon certifications for transport with relevant agencies in order to initiate industry developments. We also install solar power systems for in-house use and as backup power supply to reduce our dependence on power grid.
	Carbon tax	Upstream suppliers Within Giant	Medium-term	Higher operating costs due to carbon tax payments according to local regulations	· Include carbon emission reduction in performance assessment under objective management with monthly reviews. · Lead the industry in energy conservation and emission reduction, and advocate the use of carbon tax on promoting carbon reduction technology or management.
	Mandatory filing	Upstream suppliers Within Giant	Short-term	Higher operating costs due to regulatory compliance costs	· Higher operating costs due to regulatory compliance costs
Opportunities	**Customer behavior change**	Downstream customers	Short-term	With more people taking on riding due to promotion on bicycle travelling and customers' inclination towards companies or brands with good environmental performance, both revenue and profits would increase	· Promote inclusive cycling, e.g., the sales weighting of Liv, the industry's one and only cycling brand tailored for women. · Increase the accessibility of bicycle through public bicycle-sharing or rental services to reduce the daily carbon footprint in urban areas and offer a more eco-friendly and convenient way for commuting. · Lead the industry in energy saving and emission reduction, and use carbon labels to deliver the message of low-carbon manufacturing to consumers. Transform into sustainable products and brands through open, transparent and steady sustainable developments.
	Diversity in operation	Within Giant	Medium-term	Capture more innovative circular economy business models to boost revenues	· Rediscover revenue growth engines from a circular economy perspective
	Transportation mode	Upstream suppliers Within Giant	Medium-term	High-emission transportation loses competitiveness as external costs have gradually been internalized. People turn to the low-carbon bicycle as a mobility solution, which boosts revenues.	· Continue to develop e-cargo and new mobility products to meet the low-carbon transportation demand.
	Identification of new opportunities	Within Giant	Long-term	Advantages from cutting-edge low-carbon manufacturing technology boost revenues and profits	· We are committed to industry-leading low-carbon materials and processes, and work together to create low-carbon competitiveness in the supply chain: · Circular supplies and regeneration - We change product designs to emphasize circularity and carbon reduction technologies. We source biodegradable and recyclable materials and reduce plastic and petrochemical products to create a game-changing impact. · Green production – We re-engineer our production process and methodology, and carry out energy control measures throughout the production process to effectively reduce carbon emissions. In addition, we use energy-efficient facilities to achieve optimal production efficiency. · Responsible procurement – We team up with our supply chain partners to create the BAS, a supply chain alliance for sustainability issues, and set enforceable standards for carbon reduction and our overall carbon footprint together.

Metrics and Targets

Since 2021, Giant Group has included carbon inventory in the Group's KPIs for climate change management as one of the assessment factors for dividend payment and planned to formulate emission reduction schemes based on the internationally accepted Science Based Targets initiative. The following metrics and targets are established to track climate change adaptation and management performance:

Metric	Target		
	2023	2025	2030
GHG reduction (%)	3%	9%	25%
Percentage of green power to total electricity (%)	5%	10%	15%
Percentage of green power at our China factories (%)	16%	18.5%	18.5%
Key suppliers with ISO14064 certifications (%)	35%	70%	100%
Carbon reduction rate of BAS key suppliers (%)	3%	9%	25%
Enhancement on average energy efficiency of e-bikes (%)	80%	85%	90%
Increases in number of public bicycle rentals/mileage (cumulative)	700 million	850 million	1.2 billion
Percentage of participants of climate education (%)	70%	80%	90%



4.1.1.3 Energy consumption and conservation

Climate change is a critical and urgent issue in today's world and Giant Group is committed to reducing its energy consumption and carbon footprint. The Group (excluding sales channels outside of Taiwan and China) mainly uses electricity and steam with fuels including natural gas, diesel and a small amount of liquefied petroleum gas (LPG). In accordance with ISO14064-1:2018, Giant has built its own solar systems in four of its factories since 2021, generating 12,939,622 kWh of electricity in 2022. Green power accounts for 7.33% of the Group's total electricity consumption.

Energy		Unit	2019	2020	2021	2022
Electricity	In-house renewable generated	kWh	10,251,302	10,583,293	11,765,060	12,939,622
		MJ	36,904,686	38,099,855	42,354,217	46,582,639
	Non-renewable purchased	kWh	140,203,738	146,632,857	171,825,194	163,490,293
		MJ	504,733,457	527,878,287	618,570,697	588,565,054
Steam		MT	41,032	43,985	51,074	51,242
		MJ	13,704,554	14,690,990	17,058,716	17,114,828
Natural gas		m3	21,825,547	22,882,126	26,256,688	24,402,156
		MJ	820,640,567	860,367,943	987,251,480	917,521,066
Petrol		L	125,012	99,028	135,901	106,649
		MJ	4,075,390	3,228,309	4,430,367	3,476,755
Diesel fuel		L	327,290	374,150	543,280	488,566
		MJ	11,487,875	13,132,673	19,069,143	17,148,664
LPG		Kg	15,130	19,140	22,540	18,280
		MJ	380,066	480,797	566,205	459,194
Total						
Production (Bicycle)		Set	4,537,000	4,901,000	6,061,000	5,843,000
Total renewable energy consumption		MJ	36,904,686	38,099,855	42,354,217	46,582,639
Energy intensity (renewable)		MJ/set	8.13	8.4	9.34	10.27
Total non-renewable energy consumption		MJ	1,355,021,909	1,419,778,998	1,646,946,607	1,544,285,560
Energy intensity (non-renewable)		MJ/set	298.66	312.93	363	340.38

Note 1:

Thermal conversion factor for electricity: 1 kWh = 3.6 MJ

Thermal conversion factor for steam: 1 MT of steam = 334 MJ

Thermal conversion factor for natural gas: 1 m3 = 37.6 MJ

Thermal conversion factor for diesel fuel: 1 L = 35.1 MJ

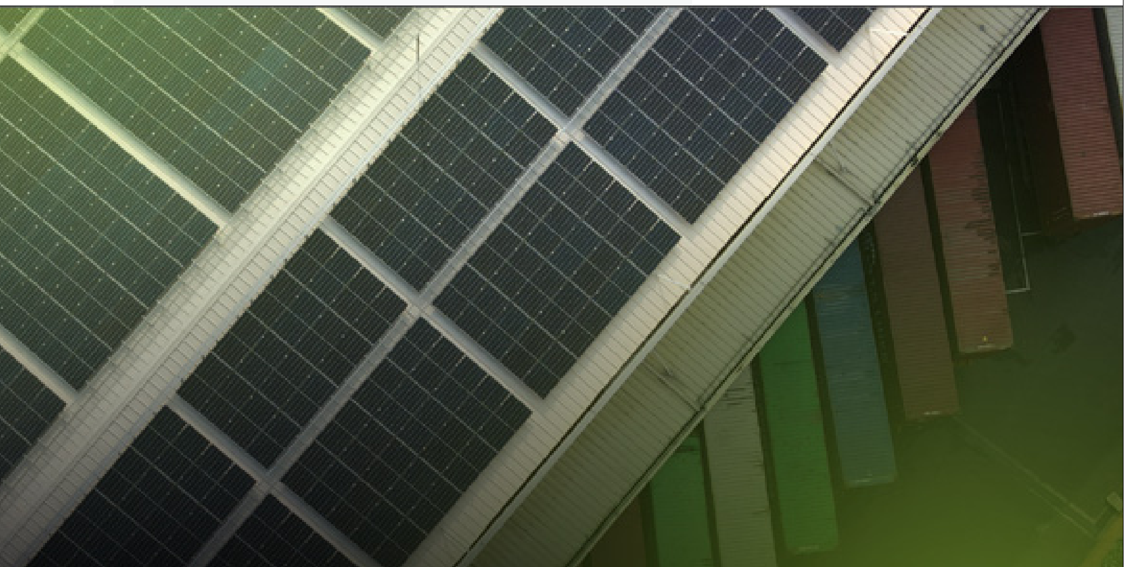
Thermal conversion factor for petrol: 1 L = 32.6 MJ

Thermal conversion factor for LPG: 1 L = 25.12 MJ

Since 2021, Giant Group has followed the GHG emission requirements at the organization level (ISO14064-1:2018) and GHG Protocol to establish a comprehensive GHG inventory list for our global manufacturing sites. The list contains the 15 categories of Scope 3 emissions except for "upstream and downstream leased assets", which are not applicable to the Group and are therefore not calculated. The inventory results are verified by a third party. In 2022, the total GHG emissions (Scope 1 and 2) of Giant Group (all operating sites in Taiwan) were approximately 34,702 metric tons CO_2e with the primary sources being electricity and fuels needed for the Company's operation, which accounted for more than 98% of the Company's total emissions. Besides our Taiwan factory, five of our operating sites in China (i.e., Giant (Kunshan) Co., Ltd., Giant Electric Vehicle (Kunshan) Co., Ltd., Giant (Chengdu) Co., Ltd., Giant (Tianjin) Co., Ltd., and Giant (China) Co., Ltd.) had also completed the 2021 and 2022 GHG inventories and obtained third-party certifications. The total GHG emissions (Scope 1 and 2) of these five locations were approximately 749,788 metric tons CO_2e (please refer to the inventory list in appendix for details). With 2021 as the base year, the Group has set short-term targets of reducing Scope 1+2 emissions by 3% in 2023, 9% in 2025 and 25% in 2030.

Calendar year 2021 as the base year for set short-term emission reduction goals

Scope 1/ Scope 2 of 2023	3% Reduction
Scope 1/ Scope 2 of 2025	9% Reduction
Scope 1/ Scope 2 of 2030	25% Reduction



Scope 1 and 2 Emissions (metric tons CO_2e)		2021	2022
Scope 1	Stationary combustion	8,045.74	7,734.62
	Mobile combustion	2,944.52	3,213.40
	Process emissions	0	0.03
	Fugitive emission	600.57	601.56
Subtotal	11,590.83	11,549.62	
Scope 2	Location-based	22,425.55	23,152.80
	Market-based	22,425.55	23,152.80
Scope 1+2 Total	Location-based	34,016.38	34,702.41
	Market-based	34,016.38	34,702.41

Note 1: Scope 1+2 emissions increased by 2% in 2022 compared to the base year due to a change in the Scope 2 boundary, where two additional warehouses were included in the electricity data calculation.

Note 2: The boundary of GHG inventory data in this table is Giant Group's operating sites in Taiwan. Emissions of our China operations can be found in the appendix.

Seven categories of Scope 1 emissions:

Category of GHG Emissions (metric tons CO_2e)	2021	2022
CO_2	10,929.42	10,881.38
CH_4	11.19	12.03
N_2O	49.76	54.65
NF_3	0	0
HFC	544.65	601.56
PFC	0	0
SF_6	0	0
Total	11,590.83	11,549.62

Note: The boundary of GHG inventory data in this table is Giant Group's operating sites in Taiwan. Emissions of our China operations can be found in the appendix.

Scope 3 Emissions (metric tons)	2021	2022
Purchased products and services	1,623,591.73	291,657.11
Capital goods	5,604.14	16,818.30
Fuel- and energy-related activities	6,866.18	7,002.62
Upstream transportation and distribution	1,199.81	6,016.27
Waste generated in operations	646.96	577.39
Business travel	3.16	14.24
Employee commuting	1,242.26	1,173.55
Upstream leased assets	-	-
Downstream transportation and distribution	2,397.34	4,881.50
Processing of sold products	1,655.17	2,057.33
Use of sold products	47,129.87	71,588.92
End-of-life treatment of sold products	874.99	296.92
Downstream leased assets	-	-
Franchises	955.19	0
Investments	45.45	61.00

Note: The boundary of GHG inventory data in this table is Giant Group's operating sites in Taiwan. Emissions of our China operations can be found in the appendix.

In order to mitigate the impact of energy consumption on global warming, Giant Group has formulated GHG reduction programs. We save energy through practices such as process optimization, facilities replacement, and behavioral management in order to achieve the goal of GHG reduction.

Type of Reduction	Major Projects	2022 Energy Savings (mWh)	2022 Energy Savings (GJ)	2022 Emission Reductions (metric tons CO_2e)
Process Optimization	· Remove tire air compressor · Reengineer the server of hard film coating machine · Integrate supply pipe network of air compressor · Reduce coating space to minimize exhaust air and switch to inverter motors · Recover heat from air compressors	2,567.89	9,244.40	1,801.23
Facilities Replacement	· Introduce laser cutting machine to replace the traditional energy-consuming equipment for pipe processing · Introduce robot arms · Introduce welding robot · Adopt digital control to replace traditional facilities	2,488.96	8,960.27	1,750.99
Illumination	· Replace bulbs with LED lights	215.48	775.72	109.68
Energy Transformation	· Photovoltaics	2,375.87	8,553.14	1,337.08
Behavioral Management	· Reduce the duration of external building lighting · Smart elevator management · Air conditioning temperature control · E-invoice · Smart surveillance system	119.27	429.37	61.47
Total		7,767.48	27,962.92	5,060.46

4.1.1.4 Raw materials management

In order to implement management strategies with considerations to product lifecycle, Giant Group endeavors to reduce environmental burden in terms of sourcing raw materials and improving material efficiency. With the objective of managing significant impacts, figures of key raw materials and packaging materials for bicycle manufacturing are summarized below:

Type of Raw Materials (metric tons)	2019	2020	2021	2022
Aluminum products	96,164	103,793	119,860	169,533
Recycled aluminum products	29,432	30,803	37,733	33,827
Percentage of recycled aluminum used (%)	23.43%	22.89%	23.94%	16.63%
Paper	264,643	227,527	152,614	269,593
Recycled paper	950,930.5	735,397	575,031	1,042,020
Percentage of recycled paper used (%)	78%	76%	79%	79%
Iron products	859	1,265	1,779	1,550
Steel	1,034	1,457	1,875	1,660
Carbon fiber	269.1	260	336	410.6
Rubber	7,371	8,223	9,749	8,973
Total	1,350,086.20	1,108,724.30	898,976.43	1,527,566.12

*A decrease in the percentage of recycled aluminum: Recycled aluminum comes from scraps, which are subject to yields of finished goods.

4.1.2 Water Management

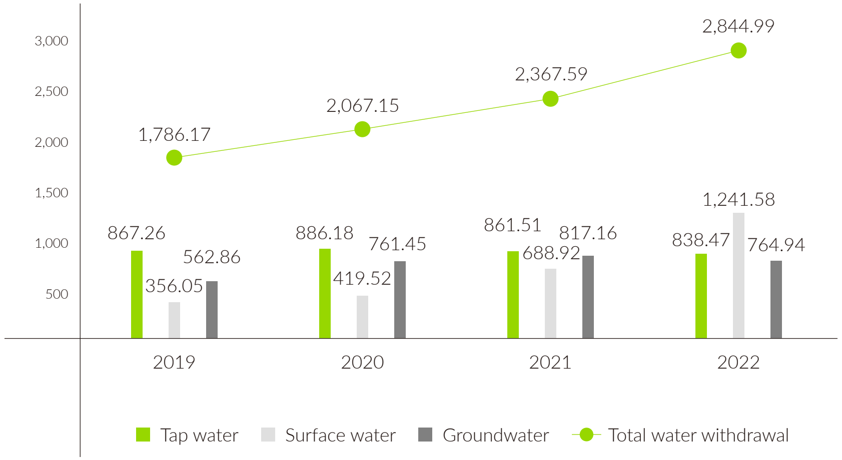
4.1.2.1 Protection of water resources

Giant Group has incorporated the concepts of clean production and environmental protection at the early stage of product design. Industrial wastewater from manufacturing at each site is treated in our in-house wastewater facilities and discharged after meeting the local effluent standards. Domestic wastewater is discharged through municipal sewage pipes. In 2022, the total water withdrawal of our global manufacturing sites was approximately 2,844.99 megaliters, and the total water discharge was around 1,906.98 megaliters. The sources of water withdrawal at our manufacturing factories include tap water, some surface water (water for our Kunshan factories comes from the Shaojing River and the Jingwang River), and groundwater. For water resource management purpose, each manufacturing site would constantly monitor the use of tap water. The average water withdrawal per bicycle was 0.48 metric tons in 2022. Wastewater generated from production is discharged through the government's sewerage system while effluents from our China factories are discharged directly into the municipal sewer system. As the destinations of both effluents are the sewerage system, the effluents would not directly affect the waterbody nor land. As for the quality inspection on effluent discharged, our Taiwan factory delivers results that are above the standard of the industrial zone (Note). All of the Group's manufacturing factories are located within the industrial zones. The Group does not own, lease or manage any factories located in ecological protection areas or water protection zones; nor does the Group engage in any activities that may adversely affect biodiversity. Our product manufacturing and service processes do not have any impact on the ecological environment.

Note: Taiwan: The minimum effluent standards are COD:480mg/L and SS:200mg/L.

Water Volume (megaliters)	2019	2020	2021	2022
Tap water	867.26	886.18	861.51	838.47
Surface water	356.05	419.52	688.92	1,241.58
Groundwater	562.86	761.45	817.16	764.94
Total water withdrawal	1,786.17	2,067.15	2,367.59	2,844.99
Water discharge (megaliters)	850.38	1,009.51	1,390.69	1,906.98
Water consumption (megaliters)	935.79	1,057.64	976.90	938.01
Water recycled (megaliters)	326.00	359.36	400.25	370.60

Note 1: Water consumption = Total water withdrawal - water discharge



4.1.3 Wastes

4.1.3.1 Waste recycling

Giant Group adopts the source management strategy for waste management. Through ongoing waste reduction efforts, we proactively implement resource recycling from the source to significantly cut down waste generated and increase the volume of resources recycled in order to achieve the goal of waste reduction. In the past three years, the Group's percentage of general waste recycled has continued to climb. In 2022, with a total production of 5,843,000 bicycles, the amount of hazardous waste incinerated has dropped by 85% compared to the previous year due to our efforts to recycle hazardous waste that was incinerated previously. In order to optimize waste management, the Group has established waste management procedures, which include the engagement of qualified vendors for waste disposal, recycling processes, waste disposal processes, and resource recycling management. Action plans and targets are reviewed at the monthly ESG meetings to achieve long-term monitoring and control.

Waste (metric tons)		2019	2020	2021	2022
General Waste	Recycled	7,802	7,612	9,412	13,646
	Landfill	193	191	404	296
	Incineration (with energy recovery)	161	188	211	289
	Incineration (without energy recovery)	3,549	3,298	3,609	3,489
	Total weight of general waste (including landfill and ones without energy recovery) (a+b+c+d)	11,705	11,289	13,636	17,720
	Total weight of general waste (excluding landfill and ones without energy recovery) (a+c)	7,963	7,800	9,623	13,935
	Percentage of general waste recycled (a/e)	67%	67%	69%	77%
Hazardous Waste	Landfill	726	778	825	505
	Incineration (without energy recovery)	3,865	3,436	4,840	698
	Recycled	1,356	992	1,004	7,270
	Total weight of hazardous waste (g+h+i)	5,947	5,206	6,669	8,473
	Percentage of hazardous waste recycled (i/j)	23%	19%	15%	86%
Total (General + Hazardous)	Total waste generated (including landfill and ones without energy recovery) (e+j)	17,652	16,495	20,305	26,193
	Excluding landfill and ones without energy recovery (f)	7,963	7,800	9,623	13,935

4.1.3.2 Pollutants

Types of Volatile Organic Gases (metric tons)

	2019	2020	2021	2022
SOx	0.6	1.5	1.1	0.8
NOx	9.7	16.5	10.3	16.4
VOCs	84.5	108.9	109.9	76.4
Xylene	19.7	25.9	26.1	18.0

4.2 Responsible Procurement

4.2.1 Supply Chain Management

4.2.1.1 Bicycle industry chain

With the strategy of parallel development of OEM/ODM and private brands, Giant Group designs and produces products for reputable brands around the world while actively developing its own brands. Being in the mid- and downstream of the bicycle industry chain, we engage in the manufacturing, assembling and sales of bicycle components, and develop premium carbon fiber components and private brands. We will continue to lead the transformation of Taiwan cycling industry chain by example and maintain our advantage in the global bicycle industry.

Giant Industry Chain

Upstream	Giant	Downstream
· Components suppliers · Giant component design	· Components and parts manufacturing · Bicycle assembly	· Bicycle sales

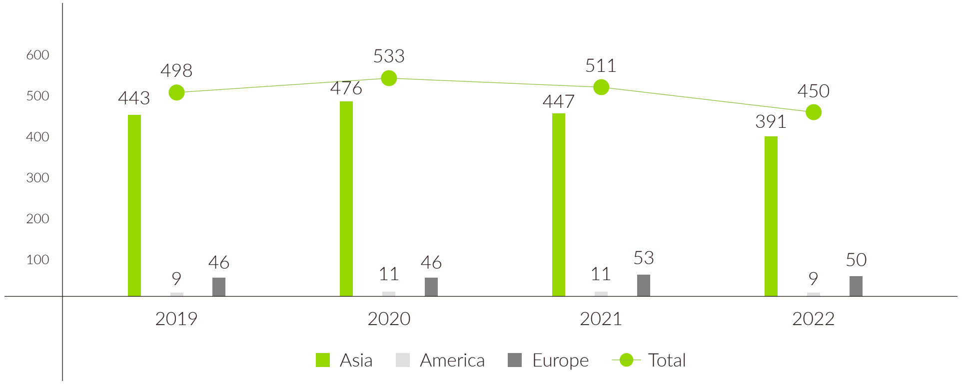
4.2.1.2 Supply chain overview

Taiwan is a major supplier of bicycles in the world, and Giant is in a dominant position in the industry. To offer more timely products and thoughtful services, we have established a comprehensive global production and service network to support customers around the world. By the end of 2022, Giant had a total of 449 suppliers worldwide.

Giant Group Suppliers worldwide	449 in total

First-tier Supplier				
Number of suppliers	2019	2020	2021	2022
Asia	443	476	447	391
America	9	11	11	9
Europe	46	46	53	50
Total	498	533	511	450

Notes: First-tier suppliers are ones (1) we conduct business directly with, (2) not engaging in one-off transactions, and (3) with annual transaction amounts exceeding NT$500,000.



Key suppliers

The Group has suppliers all over the world. We group our suppliers into ten categories for management purpose, including derailleur system, frame system, suspension system, wheel system, steering system, transmission system, physical prompting system, brakes system, electronic control system and others. Taking into account the differences in procurement amounts, we define first-tier suppliers as ones not engaging in one-off transactions and having transaction amounts exceeding NT$500,000 within a year. There were 449 tier-one suppliers in 2022. We then identify key suppliers (Note) from the first-tier suppliers by the percentages of purchase amounts. There were 95 first-tier key suppliers in 2022, accounting for 21.1% of the total number of suppliers and 90% of the overall procurement amount.

Note: First-tier key suppliers are ones (1) we conduct business directly with, (2) not engaging in one-off transactions, (3) with annual transaction amounts exceeding NT$500,000, and (4)

Number and Percentage of Purchase Amount of First-tier Suppliers and Key Suppliers

Type of Purchase		2019	2020	2021	2022
Derailleur System	Number of first-tier suppliers	9	7	6	6
	Number of first-tier key suppliers	3	3	4	4
	Percentage of first-tier key suppliers in terms of number (%)	0.6%	0.5%	0.7%	0.9%
	Percentage of first-tier key suppliers in terms of purchase amount (%)	30.3%	28.3%	29.9%	25.5%
Frame System	Number of first-tier suppliers	35	38	35	30
	Number of first-tier key suppliers	21	24	18	20
	Percentage of first-tier key suppliers in terms of number (%)	4.2%	4.5%	3.5%	4.4%
	Percentage of first-tier key suppliers in terms of purchase amount (%)	11.4%	11.3%	10.6%	10.7%
Suspension System	Number of first-tier suppliers	8	9	9	9
	Number of first-tier key suppliers	5	5	5	5
	Percentage of first-tier key suppliers in terms of number (%)	1%	0.9%	1%	1.1%
	Percentage of first-tier key suppliers in terms of purchase amount (%)	6.2%	5.4%	6%	5.9%
Wheel System	Number of first-tier suppliers	38	36	35	35
	Number of first-tier key suppliers	11	12	13	12
	Percentage of first-tier key suppliers in terms of number (%)	2.2%	2.2%	2.5%	2.7%
	Percentage of first-tier key suppliers in terms of purchase amount (%)	7%	6.4%	6.3%	7.2%
Steering System	Number of first-tier suppliers	25	26	25	25
	Number of first-tier key suppliers	7	8	8	9
	Percentage of first-tier key suppliers in terms of number (%)	1.4%	1.5%	1.6%	2%
	Percentage of first-tier key suppliers in terms of purchase amount (%)	4.5%	4.6%	4.4%	4.6%
Transmission System	Number of first-tier suppliers	22	18	20	18
	Number of first-tier key suppliers	6	6	6	7
	Percentage of first-tier key suppliers in terms of number (%)	1.2%	1.1%	1.2%	1.6%
	Percentage of first-tier key suppliers in terms of purchase amount (%)	2.2%	2.4%	2.5%	3%

Type of Purchase		2019	2020	2021	2022
Physical Prompting System	Number of first-tier suppliers	9	12	10	9
	Number of first-tier key suppliers	5	6	5	5
	Percentage of first-tier key suppliers in terms of number (%)	1%	1.1%	1%	1.1%
	Percentage of first-tier key suppliers in terms of purchase amount (%)	2.7%	2.8%	2.5%	2.7%
Brakes System	Number of first-tier suppliers	10	12	13	13
	Number of first-tier key suppliers	2	2	2	2
	Percentage of first-tier key suppliers in terms of number (%)	0.4%	0.4%	0.4%	0.4%
	Percentage of first-tier key suppliers in terms of purchase amount (%)	2.4%	2.5%	2.8%	3%
Electronic Control System	Number of first-tier suppliers	46	55	55	52
	Number of first-tier key suppliers	10	9	11	13
	Percentage of first-tier key suppliers in terms of number (%)	2%	1.7%	2.2%	2.9%
	Percentage of first-tier key suppliers in terms of purchase amount (%)	16.5%	19.2%	19.7	22.6%
Others	Number of first-tier suppliers	296	320	303	252
	Number of first-tier key suppliers	30	34	22	18
	Percentage of first-tier key suppliers in terms of number (%)	6%	6.4%	4.3%	4%
	Percentage of first-tier key suppliers in terms of purchase amount (%)	6.9%	7.2%	5.5%	4.8%
Total	Number of first-tier suppliers	498	533	511	449
	Number of first-tier key suppliers	100	109	94	95
	Percentage of first-tier key suppliers in terms of number (%)	20%	20.5%	18.4%	21.1%
	Percentage of first-tier key suppliers in terms of purchase amount (%)	90%	90.1%	90%	90%

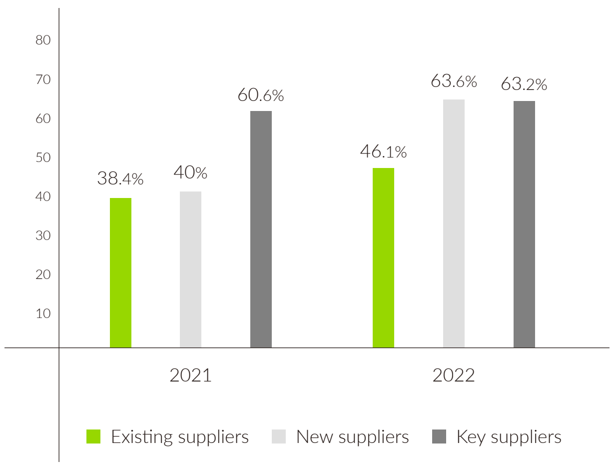
4.2.1.3 Sustainable supply chain management

Supplier CSR Code of Conduct

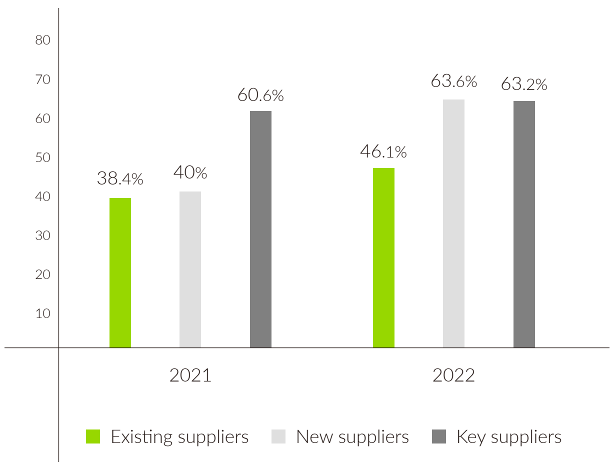
The Group is well aware that our pursuit of sustainable growth shall take into account social and environmental influence and impact. Therefore, we formulate the Supplier CSR Code of Conduct as the basic principles for suppliers. Compliance with the labor laws and avoidance of environmental hazards are mandatory statements in our supplier contracts, and we ask suppliers to strictly comply with the EU's Regulation on the registration, evaluation, authorization and restriction of chemicals (REACH), Restriction of Hazardous Substances (RoHS) and other countries' regulations on the restriction of environmentally hazardous substances. We are also committed to fulfilling relevant corporate social responsibilities. In the event of any suppliers' violations with significant impact on the environment and community, we may terminate or cancel the contracts at any time. Furthermore, we take the level of compliance with the Code as one of the supplier evaluation items.

Signing and Training of the Code of Conduct (Purchase Contracts)		2021	2022
Existing suppliers	Number of suppliers signing the Code	196	207
	Percentage of suppliers signing the Code (%)	38.4%	46.1%
	Training coverage rate (%)	38.4%	46.1%
New suppliers	Number of suppliers signing the Code	4	7
	Percentage of suppliers signing the Code (%)	40%	63.6%
	Training coverage rate (%)	40%	63.6%
Key suppliers	Number of suppliers signing the Code	57	60
	Percentage of suppliers signing the Code (%)	60.6%	63.2%
	Training coverage rate (%)	60.6%	63.2%

Code of conduct Signed



Code of conduct learning and training



The Group has established supplier evaluation procedures and conducted regular evaluations (on seven major aspects: "ideas and philosophy of the executives", "quality and delivery", "cost and price", "company scale and talents", "development potential", "key technologies", and "brand and added-value"). We provide counseling to suppliers with unsatisfactory results and monitor their improvement progress. Past performance of suppliers is also used as a reference in supplier selection.

On seven major aspects						
Ideas and philosophy of the executives	Quality and delivery	Cost and price	Company scale and talents	Development potential	Key technologies	Brand and added-value

Enhance supplier sustainability

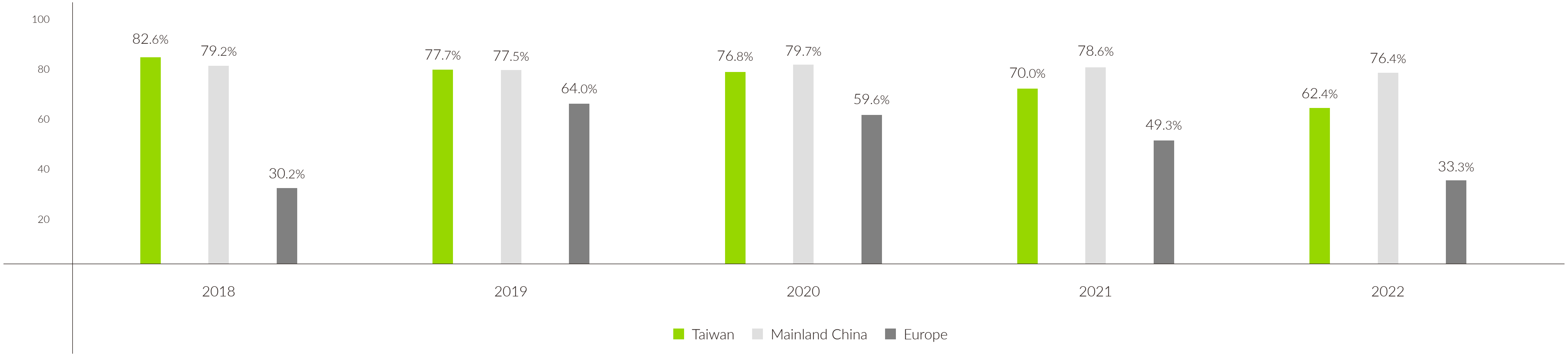
Giant Group continuously enhances supplier sustainability through communication and collaboration, driving greater benefits from the actions taken to further enhance suppliers' sustainability awareness and competence. Through these projects, we aim to work with suppliers in forging a promising future.

Projects with Supplier	Description	Corresponding Item in Sustainable Supply Chain Management Policy/Strategy	Qualitative Benefit	Quantitative Benefit
Involvement in carbon footprint inventory of Stance 29 1	We team up with six key suppliers to inventory the carbon emissions of components from suppliers and obtain an overview on suppliers' carbon emission data at an organization level.	Disclosure of suppliers' carbon inventory at an organization level Promotion of carbon reduction plans for components and products	Establish suppliers' carbon inventory awareness and competence Carbon emission intensity analysis and the focus of subsequent carbon reduction efforts	Obtain carbon footprint of components for STANCE 29 1 and establish database Rocker arm & derailleur hangers: 39.29 kg CO_2e Disc wheel set: 6.1 kg CO_2e Tire: 16.32 kg CO_2e Saddle: 3.72 kg CO_2e Decal: 2.72 kg CO_2e

4.2.1.4 Local procurement

While building a flexible supply chain, Giant Group also aims to indirectly assist regional economy through local procurement. Therefore, we actively collaborate with local suppliers to reduce the overall supply chain carbon emissions and create local employment opportunities.

Region	Type of Purchase	2018	2019	2020	2021	2022
Taiwan	Local purchases (%)	82.6%	77.7%	76.8%	70.0%	62.4%
Mainland China	Local purchases (%)	79.2%	77.5%	79.7%	78.6%	76.4%
Europe	Local purchases (%)	30.2%	64.0%	59.6%	49.3%	33.3%



4.3 Low Carbon Services

4.3.1 Sharing Economy

4.3.1.1. Diverse rental models

Giant Group promotes the rent instead of buy model, turning our products into services. The pilot program started with 500 public bicycles at 11 stations in the Xinyi District on March 11, 2009. By gradually combining the service with the MRT network, bicycle has turned into the tool bridging communities and MRT stations. YouBike has been established as a quality public bicycle sharing service. It integrates public transportation platforms, reduces the use of private transport, mitigates the environmental impact of traffic, increases the use of public transport and becomes a subset of the public transportation system. The system is easy to register and use, offering comfortable rides along with quality services. YouBike is now available in 11 counties and cities with more than 80,000 bicycles at 6,000 stations for an average of more than 300,000 rides per day. The total number of rides has exceeded 600 million so far. We plan to invite corporations in raising public awareness and bringing more people to use the YouBike service, further expanding their participations in net zero green living.

Due to the fast spread of COVID-19 in Taiwan, the number of YouBike rides declined in 2021 as companies embraced work-from-home and people reduced outdoor activities. In 2022, as more people got vaccinated and the pandemic stabilized, companies and the public returned to normalcy and the number of rides rebounded and gradually increased.

Reduction of carbon dioxide equivalent emissions through the YouBike public bicycle sharing service in 2022	16,007 ton CO_2e

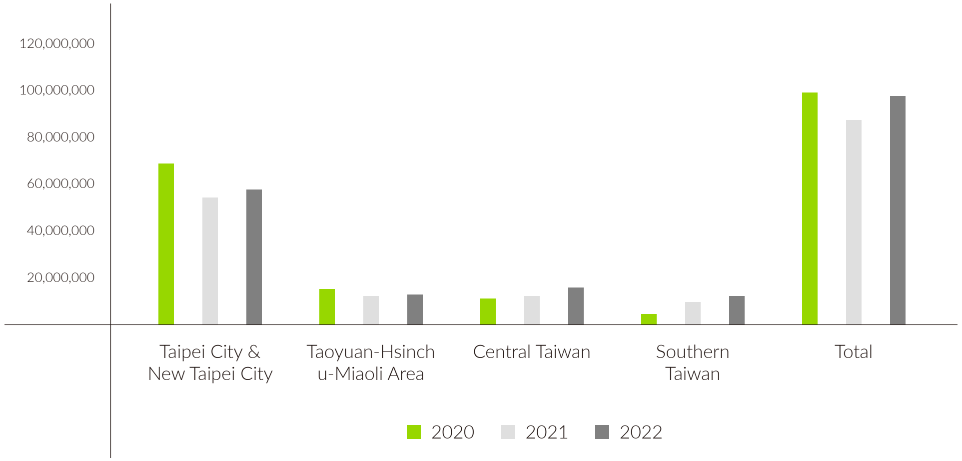
*Method of calculation:

In consultation with the British Standards Institution (BSI), which is one of the two third-party verification company certified by the Environmental Protection Administration for certifications in the transportation categories, the calculation uses Tool 18 (Baseline emissions for model shift measures in urban passenger transport) of the "Lightweight two and three wheeled personal transportation" under "B-7 transportation category" of the UN Clean Development Mechanism for a model shift to public transit. The reduction of carbon dioxide equivalent emissions from a single YouBike ride was approximately 0.164011 kg CO_2e.

Reduction of carbon dioxide equivalent emissions per YouBike rides (0.164011 kg CO_2e) x Number of rentals in 2022 (97,600,000 rides) = 16,007 metric tons CO_2e /year

A successful PPP model, making YouBike a common property of citizens

Annual YouBike Rides by Region



Transforming for Circularity

5.1 Circular Supply and Regeneration

5.1.1 Circular Products

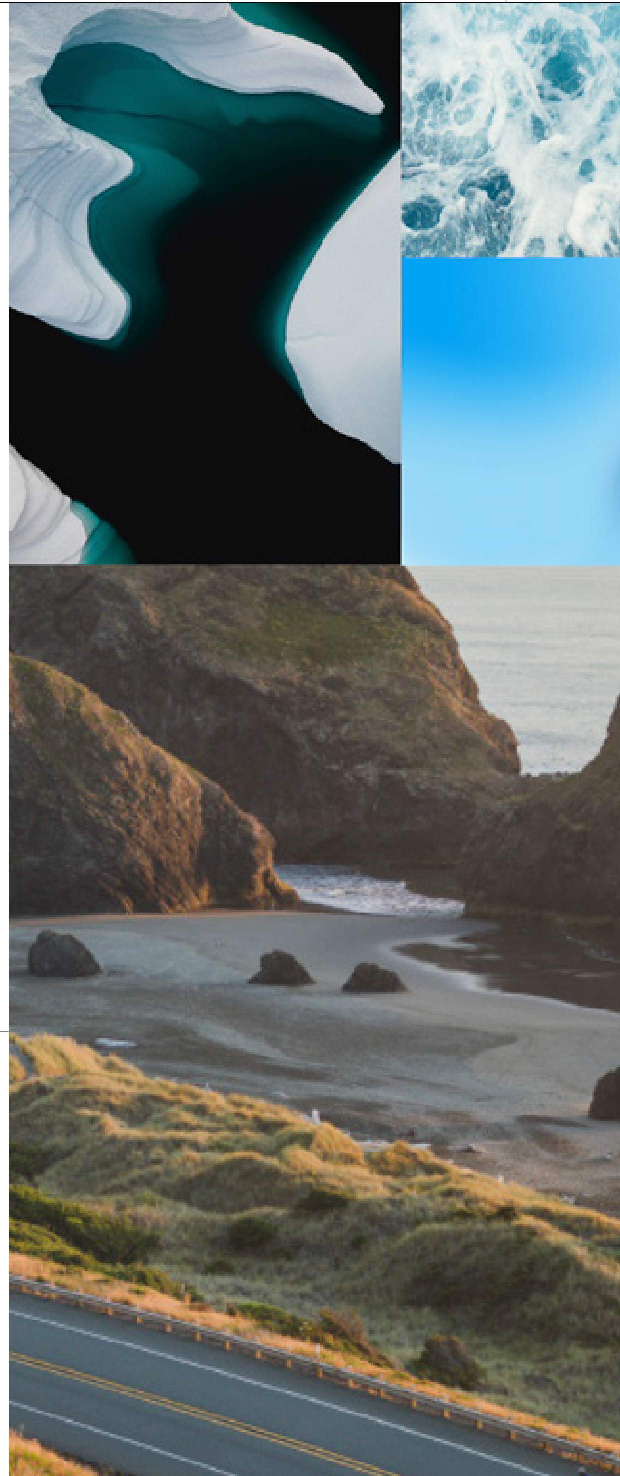
“Cycling for a Better Future” is Giant Group’s sustainability vision, which aims to work with partners in the cycling industry to provide innovative products and services through innovating a clean future, transforming for circularity, and mobilizing for DEI, and create a better cycling life experience. Our key strategies are to offer low-carbon services, promote green production as well as resource and material circularity and regeneration, improve resource efficiency, extend product lifespan, and expand cycling services and rental models. We set the target of 100% circular products by 2030, which includes commitments of disclosing product carbon footprint, adopting 3R practices, using non-toxic and non-hazardous substances, and banning plastic packaging materials.

KPI	2023	2025	2030
Improve service and repair revenue (%)	0.9%	15%	26%
Percentage of recycled carbon fiber (%) (with 200t of new carbon fiber per year as the basis)	3% (Link)	5% (other components)	10% (frame)
Recycling rate of carbon fiber scraps (%) (with 20t of carbon fiber scrap per year as the basis)	30% (6t)	50% (10t)	100% (20t)
Percentage of recycled aluminum alloy (extrusion) (%)	30%	75%	100%
Percentage of recyclable materials in OBC saddles (%)	90%	100%	100%
Percentage of recycled materials in OBC saddles (%)	10%	20% (GRS certified)	50% (C2C certified)
RoHS/REACH compliance (%)	100%	100%	100%
Use of water-based coating (%)	59%	62%	88%
Ban on plastic packaging materials (%)	85%	96%	100%
Reduced coating layers and baking	(EB) 5-Coat-6-Bake (Single color) 7-Coat-8-Bake (Two-tone)	(EB) 4-Coat-5-Bake (Single color) 6-Coat-7-Bake (Two-tone)	(EB) 3-Coat-4-Bake (Single color) 4-Coat-5-Bake (Two-tone)
Replacement of solvent-based decals with UV resin decals	15%	50%	100%
Commercialization of uncoated carbon fiber process technology	Rim	Other components	Frame
Reuse of service battery (pcs)	1,000	5,000	10,000

5.1.1.1 Product design strategy

Giant Group's product design strategy incorporates the concept of life cycle. At product development, we evaluate the environmental impact of every stage within the product life cycle, including raw material acquisition, manufacturing, transportation and distribution, use of product, and waste disposal. We set out ten themes and establish a sustainable design matrix to push forward various mitigation and transformation programs, ensuring our products contain circular sustainable characteristics such as low carbon emissions and being non-toxic, energy-saving, and renewable.

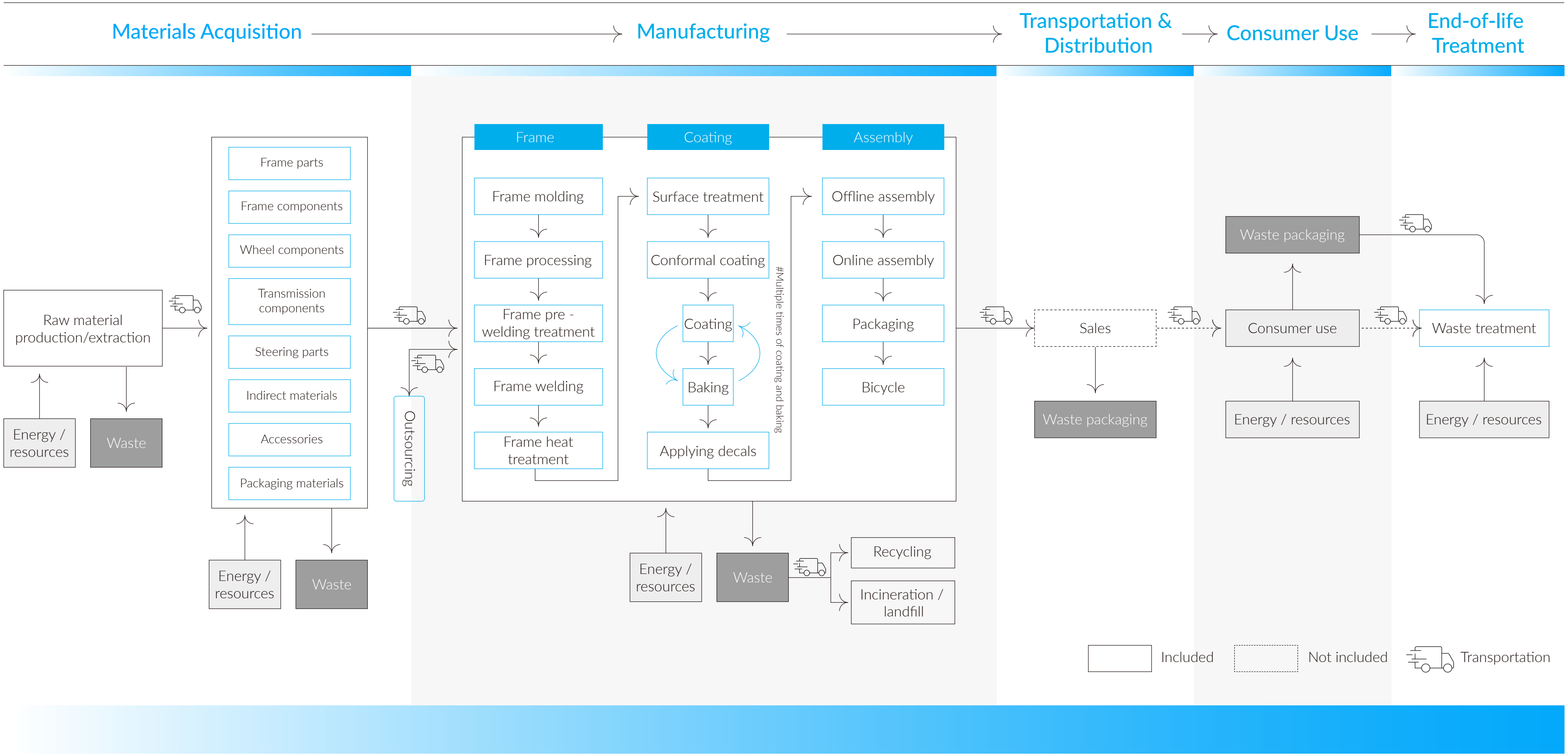
Theme	Key Action	Materials Acquisition	Manufacturing	Transportation and Distribution	Use	Disposal
Life cycle assessment	· Product carbon footprint analysis · Establish a carbon emission coefficient database	✓	✓	✓	✓	✓
Hazardous substance management	· Monitor regulatory trends · Establish management processes	✓	✓			
Recycled materials	· Develop recycle and reuse technology	✓				
Green transition of process	· Optimize process for energy conservation and emission reduction		✓			
Sustainable packaging design	· Simplify design and be plastic free			✓		
Product energy efficiency	· Improve the efficiency of battery and motor				✓	
Extend product lifespan	· Certify used bicycles for sale				✓	
Battery recycling service	· Local services and recycling systems					✓
Sharing economy model	· YouBike public bicycle-sharing service				✓	
Expansion of riding services	· Giant Adventure				✓	



5.1.1.2 Life cycle assessment (LCA)

Life cycle assessment (LCA) is a systematic analysis on the environmental impacts of stages within the product life cycle, from materials acquisition, manufacturing, transportation and distribution, use to disposal. In order to mitigate such impact, Giant Group establishes an assessment method for product carbon footprint pursuant to ISO14067, systematically conducting carbon footprint analyses on each product model by phases to build a carbon emission coefficient database for the bicycle industry. Improvement plans for environmental hotspots in the product life cycle are the priorities. Starting with material design and manufacturing technology, we team up with supply chain partners to achieve the low-carbon transition, and work towards the vision of circular sustainability.

In 2022, we selected our iconic Stance 29 1 full suspension mountain bicycle for carbon footprint analysis, calculating the carbon dioxide equivalent emission of the product's entire life cycle from raw material acquisition to disposal (also known as Cradle to Grave), and the results were certified by a third party.



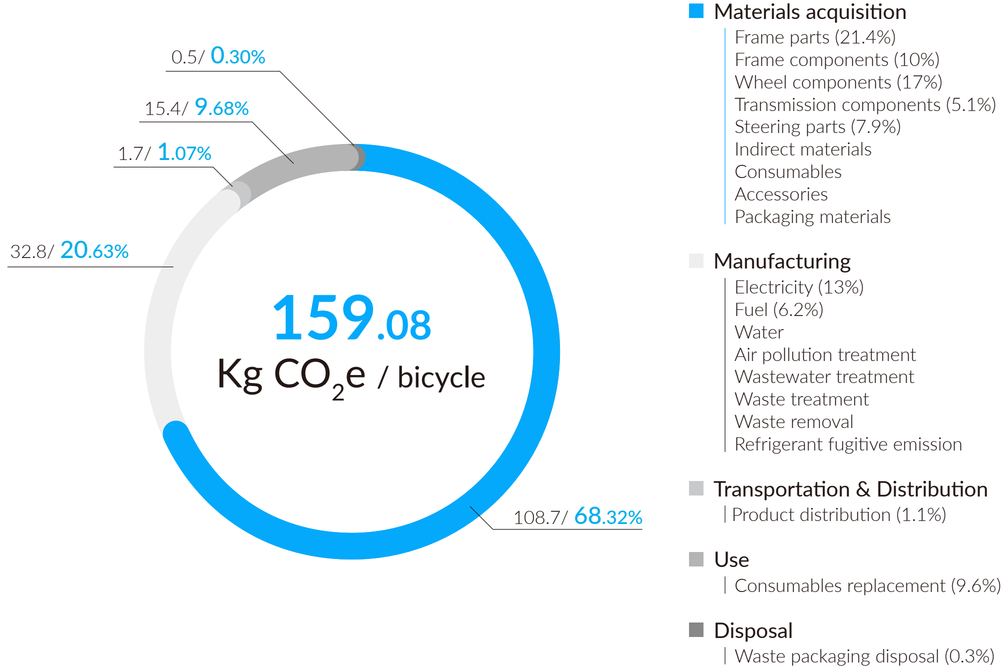
Carbon Footprint Boundary for Bicycle Products

The analysis shows that the carbon footprint of a Stance 29 1 during its entire life cycle is 159.08 kg CO_2e, of which raw material acquisition accounts for about 68.3% while manufacturing takes up 20.6%, with the remaining 11% comes from the transportation and distribution, use, and disposal stages. The three most significant hotspots for GHG emissions are aluminum alloy materials, tires (including new tires and replacements in the use stage), and electricity in the manufacturing process, with emissions of 65.5 kg CO_2e, 30.6 kg CO_2e and 20.7 kg CO_2e, respectively, accounting for 73.2% of the total product carbon footprint. Based on the results of our analysis, these three major sources of emissions are top priorities for management. We have developed related reduction and action plans, and would track their effectiveness on a regular basis for continuous improvement.

Materials acquisition →	Manufacturing →	Transportation & Distribution →	Use →	Disposal
108.7	32.8	1.7	15.4	0.5

Unit: Kg CO_2e

Target product: Stance 29 1



Percentage of Carbon Footprint by Stages in the Life Cycle of Stance 29 1

Product Carbon Footprint Hotspots and Improvement Measures

	Aluminum Alloy	Tire	Electricity Consumption
Percentage of carbon footprint	41%	19%	13%
Reduction and action plans	Feasibility assessment of recycled aluminum materials	Development of tire recycle technology	Reduction of coating layer and baking in coating design

5.1.2 Hazardous Substance Management

5.1.2.1 Giant Group's continuous improvement model for hazardous substances

PDCA Cycle of Hazardous Materials Management

	Key Tasks	Actions in 2022
Plan	**Identification and compliance of regulatory requirements** lant would identify regulatory requirements and amendments thereof concerning hazardous substances in each market to perform necessary adjustments, and announce action plans to suppliers. List of prohibited substances: Revisions based on hazardous substance regulations and customer requests.	• GB3565 standard added new items to hazardous and toxic substances management, i.e., dosage requirements of 8 heavy metals and 6 plasticizers. Giant conducted material inventory for regulatory compliance. • For new substances of very high concern in EU REACH, Giant updated the management content simultaneously for regulatory compliance.
Do	**Verification of new parts** New suppliers, new materials, and parts with new specifications must undergo the verification process. Third-party hazardous substance inspection reports shall be submitted at the sampling stage to confirm compliance with relevant regulations before they can be used in the mass production stage.	• For new parts verification, 226 new parts were examined, and all of which complied with the regulatory requirements. There was no violation of banned substances.
Check	**Hazardous substance testing of raw materials** Suppliers must ensure that their products comply with the hazardous substances regulations (declaration of conformity) and obtain verification (third-party testing). Giant takes inventory of suppliers' hazardous substances management to ensure the compliance of raw materials. Hazardous substance testing of products: Sample testing of heavy metal content for new models.	• A total of 1,344 parts from 177 suppliers were inspected, and all suppliers conducted inspections in accordance with the established management rules. The use of related raw materials complied with the hazardous substances regulations. • A total of 293 new bicycle models were inspected with no non-compliance with the heavy metal standards.
Action	**Management** The quality control unit conducts inspections on hazardous substances.	• Supplier audits did not identify any cases of non-compliance with the hazardous substance regulations. • Supplier underwent the third-party testing.

At present, bicycle products need to comply with regulations such as REACH, RoHS, CPSIA, EN 71-3, ASTM F963, and GB 3565. Giant Group constantly monitors the regulatory requirements and amendments concerning hazardous substances in each market and makes adjustments where necessary. We would also announce changes to our suppliers to ensure our incoming supplies comply with the requirements. Where the incoming goods or products shipped fail to meet the regulatory requirements, the products would be handled in accordance with our nonconformity management process in the production and market ends. In the case of non-conformity products in the market, we would suspend the sales and have qualified products ready for replacement in the market.

GIANT exercises tight control over products for regulatory compliance.	We have a compliance rate of 100%

Regulation or Directive	GIANT Product
REACH	100% compliance
RoHS	100% compliance
CPSIA	100% compliance for products to the U.S.
EN71-3 of EU	100% compliance for kid's bicycles to Europe
ASTM F963 of the U.S.	100% compliance for kid's bicycles to the U.S.
GB 3565	100% compliance for products to China

5.1.3 Recycled Materials

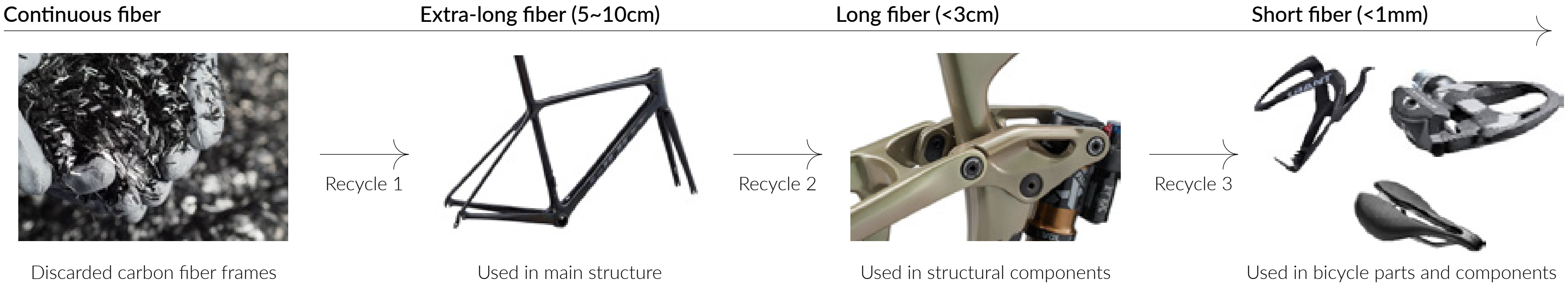
5.1.3.1 Circular carbon technology for tires

In view of the fact that tire production is a hotspot with higher carbon emissions, Giant Group has started to develop circular carbon technology with tire suppliers since 2022. In either motor or non-motorized vehicles, tires are not just consumables, but also the only part of the vehicle that touches the ground, providing the most direct performance in traveling, maneuvering and braking for deceleration. Due to multiple performance limitations, tire recycle technology has not been a focus in the automobile and motorcycle industries, and the developments have been slow. Now, with the cycling industry pushes advancements of tire recycle technology, although with a small influence, we look forward to having the industry as the leader in innovative applications of recycled tires.

The Giant Group confirms the technological maturity of recycled tires with tire suppliers and the Industrial Technology Research Institute (ITRI) before applying the recycled tires to appropriate products (leisure bicycles and commuter bicycles are our first choices) based on their performance. We are now in the process of returning recycled tires back to the state of being "natural rubber" (before vulcanization) through chemical reduction and decomposition and conducting comparative analysis on the performance of the "natural rubber" with that of brand-new rubber. We plan to start by securing stable sources of waste tires from automobiles and motorcycles in order to generate stable recycled rubber.

5.1.3.2 Multi-stage recycling of carbon fiber

The current practice for recycling carbon fiber composites is to break them down and transform them into pieces with short carbon fibers for injection molding. The process significantly reduces their performance, limiting their applications to produce non-structural peripheral parts for one-off use with no reuse value. High-end carbon fiber bicycles are made of high-grade, high-strength continuous carbon fiber prepreg; however, the manufacturing process generates high carbon emissions (at 50 kg CO_2e/kg or more). The only way to achieve maximum carbon reduction benefits and environmental friendliness is to create products which can be recycled multiple times while retaining as much strength as possible. Starting from 2023, we have decided to take on the challenge of advanced multi-stage recycling technology. The ultimate goal is for the recycled carbon fibers to deliver optimal length and strength with minimum losses at each stage for multiple recycling and reuse. Losses are inevitable during the recycling of discarded frames with continuous fibers. The objective, however, is to retain fibers of 5cm to 10cm whenever possible for frames, forks, rims, and other major structural parts, which, when recycled again, can be applied to long-fiber structural parts, such as rocker arms. When these fibers are recycled for the last time, they are then used on peripheral parts that require only short fibers. The process thus allows full use of fibers at multiple downcycling stages.



We are currently able to apply our in-house molding technology on recycled carbon fibers from discarded bicycle frames to create high-strength, long-fiber structural components such as rocker arms. However, we are working on advancing the technology to produce composites with at least twice the strength. We schedule to deliver performance close to brand-new long-fiber injection molding used by the industry in 2023 and gradually apply the material to the production of frames or other major structural parts, which require a larger amount of carbon fibers with proportionally greater carbon emissions, by 2024. In order to ensure product quality, it is necessary to test the discarded carbon fiber frames. Starting from 2023, recycling shall be the first option for discarded frames; and in the future, even damaged carbon fiber products from consumers at market end will be recycled instead of disposed through incineration or landfill, as are the current practices.

5.1.3.3 Recycled materials for Own Brand Component (OBC) saddles

Since 2022, Giant Group has worked with saddle suppliers to develop circular carbon technology. We carry out studies on the options of recycled materials, the application ratio, and the impact on functionality for the eight key materials used in the four major components in a saddle, i.e., the synthetic cover, form, shell and rails, evaluating the adoption of appropriate recycled materials in actual products. As of now, key materials of the four major components in a saddle can be recycled to minimize environmental pollution.

Our next step is to evaluate the impact of recycled materials in OBC saddles in terms of saddle performance, and study the optimal design for using recycled materials in products. Our current studies have shown that the recycled material solutions for synthetic cover and shell are close to be completed.

Parts	Whether current materials can be recycled
Synthetic cover	PU leather: 100% recyclable PVC leather: 100% recyclable
Form	PU: 100% recyclable EVA: 100% heat moldable
Shell	Nylon: Recyclable (with strength not suitable for saddle) PP: 100% recyclable
Rail	Metal rail: 100% recyclable

5.1.3.4 Recycled aluminum for frame plates

Giant Group upholds the principles of Recycle, Reuse, and Reduce, and constantly looks for recyclable materials in the coating process. In 2022, we initiated the reuse of recycled aluminum program and began mass production in the same year. Currently, recycled aluminum is adopted by 2 bicycle types (12 models) with an estimated annual usage of about 150kg. We expect the total weight of frame plates from recycled aluminum will reach 300kg by 2024.

Model Year	Model Series	Full Model Name	Color	Carton Label Color Description
MY23	Flourish	Flourish 0 Disc	Color A	Silver Pine
MY23	Flourish	Flourish 1	Color A	Charcoal Plum
MY23	Flourish	Flourish 2	Color A	Ocean Storm
MY23	Flourish	Flourish 3	Color A	Pulp Gray
MY23	Flourish	Flourish 3 Disc	Color A	White
MY23	Flourish	Flourish 3 Disc	Color B	Muscat Blanc
MY23	Flourish	Flourish FS	Color A	Estoril Blue
MY23	Flourish	Flourish FS	Color B	Red Enamel
MY23	Flourish	Flourish FS Disc	Color B	Early Espresso
MY23	Flourish	Flourish FS Disc	Color A	Red Enamel
MY24	Glory Advanced	Glory Advanced	Color A	Shoreline
MY24	Glory Advanced	Glory Advanced-FF	Color A	Legends Edition

5.1.4 Green Transition of Process

5.1.4.1 Cut down coating layers and materials to reduce process time

Bicycles require multi-layer coating, and a normal coating process consists of five steps: Cathodic Electro-deposition (CED), primer, basecoat, labeling and clearcoat. For energy saving and emission reduction, the future developments in coating will focus on eliminating the primer. Without compromising color performance, we would combine CED with the primer or the primer with the basecoat to eliminate one baking process for emission reduction. We schedule to eliminate primer in 88% of our new color developments in 2023 and set the target at 100% by 2026. The elimination is expected to lower VOCs emissions and energy consumption of process.

Average number of coatings over the years

Model Year	MY19	MY20	MY21	MY22	MY23
Coating (Layer)	4.58	4.45	4.34	4.19	4.17

Note: The MY23 model was released in 2022.

5.1.4.2 Development and application of water-based environmental paint

Considering that the volatile organic compounds (VOCs) in traditional solvent-based paints are hazardous to human health as well as flammable and explosive, Giant Group has gradually introduced eco-friendly coating materials and processes since 2015. Initially, we developed environmentally friendly paints for clearcoat and CED, and began mass production in 2019. In 2020, we focused on the development of eco-friendly paints for primer and basecoat. By the end of 2021, clearcoat, CED and basecoat have all adopted water-based paints, and more than 360,000 bicycles used water-based paints in 2022. With the reduction of approximately 30 grams of VOCs per bicycle using the water-based paint, we reduced 10,800 kg of VOCs emissions in 2022. We plan to introduce powder coatings, which have an even lower environmental impact, and initially apply them to CED, kid's bicycles and commuter bicycles.

Water-based coating	Powder coating
It is a resource-saving coating as it uses pure water as thinner. Its VOCs emission is 1% of that from water-soluble coatings and 0.1% from solvent-based coatings.	With high coverage rate, we can reduce the coating layers, thus lowering energy consumption. It does not lead to issues involving the treatment of wastewater or waste solvents and has zero VOCs emission. Sprayed powders can be recycled, which reduces waste and avoids environmental pollution.

Aspect	Oil-based	Water-based	Powder
Health hazard	High (It irritates eyes, skin and respiratory system. A high concentration may cause dizziness, nausea, or a loss of consciousness)	Minor	None
Environmental protection	Hazardous substance emissions	Minimal hazardous substance emissions	Zero hazardous substance emissions
Flammability	Highly flammable and explosive	Nonflammable	Nonflammable

5.1.4.3 Development and application of UV resin decals

In order to reduce energy consumption and VOCs emissions in the production process, Giant Group started the research of UV resin decals in 2018 and began mass production in 2021. Unlike traditional decals with solvent-based inks, UV resin decals do not contain solvents and therefore do not produce VOCs emissions. Besides, the production process adopts curing instead of oven drying, making the products more energy-efficient than the traditional ones.

5.1.5 Sustainable Packaging Design

5.1.5.1 DCF packaging reform

Dynamic Cycling Fit (DCF) is an excellent product of the Giant Group. The smart system is mostly used in stores, helping customers to quickly and accurately understand the best riding positions for them. The system also provides accurate data, such as crank length, saddle height, etc., so that consumers can get a better riding experience directly through the data. DCF is not just a product, but also a part of our product-service chain for better services to consumers. The project uses recyclable paper as the packaging material. The traditional foams and cable ties are replaced by specially designed paper structures to support and prevent the product from moving.

In terms of process efficiency, the reduction in packaging materials adds paper folding and pleating to the process; however, we can thoroughly examine the product quality at this point in the process, and the reduction cuts down plastic waste and time consumed for the traditional auxiliary packaging materials. We started to negotiate with suppliers in the fourth quarter of 2022 and expected to commence mass production in the second quarter of 2023. Going forward, we would consider alternative uses for auxiliary materials and parts in packaging, e.g., as a tool pads for maintenance, a record of purchase, etc. We would also continue to think about other sustainable packaging designs. We aim to not only reduce but also completely ban the use of foams and other materials for more environmentally efficient packaging designs.

5.2 Resource Efficiency

5.2.1 Product Energy Efficiency

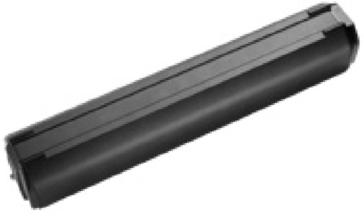
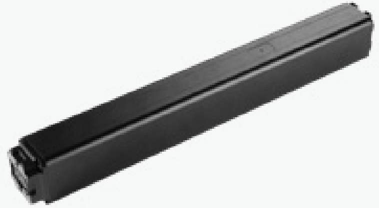
5.2.1.1 Improvement on the average energy efficiency of e-bikes

Bicycle weight is crucial to riding burden. An additional kilogram of bicycle would bring an additional kilogram of burden. Giant Group is committed to improving the performance of batteries and motors, increasing the capacity of batteries and the torque of motors under the same weight to improve the overall efficiency for cyclists and reduce the burden of riding.

Three Cycling Scenarios		
City bike	Trekking	Mountain Bike
Under the same weight 82% battery capacity up 56% motor torque up	Under the same weight 50% battery capacity up 30% motor torque up	Under the same weight 50% battery capacity up 22% motor torque up

Improvements in battery and motor efficiency are summarized by bicycle type as follows:

Type	Year	Battery	Wh/Kg	Capacity Improvement	Year	Motor	Nm/Kg	Torque Improvement
City bicycle	2016	EnergyPak Carrier 300	100	82%	2020	SyncDrive Core series Core	17.2	56%
	2021	EnergyPak Integrated 800	182		2022	SyncDrive Sport series Sport 2	26.8	
Trekking	2016	EnergyPak Side Release 400	121	50%	2019	SyncDrive Sport series Sport	20.6	30%
	2021	EnergyPak Integrated 800	182		2022	SyncDrive Sport series Sport 2	26.8	
Mountain bicycle	2016	EnergyPak Side Release 400	121	50%	2018	SyncDrive Pro series Pro	25.8	22%
	2021	EnergyPak Integrated 800	182		2021	SyncDrive Pro series Pro 2	31.5	

EnergyPak Carrier			EnergyPak Side Release			EnergyPak Integrated			EnergyPak Smart Intube		
											
Capacity	Weight	Wh/Kg	Capacity	Weight	Wh/Kg	Capacity	Weight	Wh/Kg	Capacity	Weight	Wh/Kg
300	3	100	400	3.3	121				250	1.9	132
400	3.2	125	500	3.3	152				400	2.4	167
500	3.3	152				500	4.1	122			
						625	3.9	160			
						800	4.4	182			

SyncDrive Core series				SyncDrive Sport series				SyncDrive Pro series			
											
Model	Torque	Weight	Nm/Kg	Model	Torque	Weight	Nm/Kg	Model	Torque	Weight	Nm/Kg
Life	60	3.4	17.6	Sport	70	3.4	20.6	Pro	80	3.1	25.8
Core	50	2.9	17.2	Sport 2	75	2.8	26.8	Pro 2	85	2.7	31.5

5.3 Extend Product Life Cycle

5.3.1 Extend Product Lifespan

5.3.1.1. Certify used bicycles to expand service scope

In order to achieve circular economy, Giant Group employs trade-in arrangements to enhance consumer repurchase rate and brand loyalty while increasing service revenue of stores. The used bicycle trading service started in 2022. Giant own stores in Taiwan adopt the model of collecting used bicycles for sales in the stores, while sales companies in other regions collaborate with designated platforms through discussions. The third-party platforms would contain links to our corporate websites for sales of certified used bicycles. We choose to test run the program in Europe for our overseas sales with Germany being the pioneer. We have reached preliminary agreements with professional online platforms, and will continue to expand the program to the entire Europe.

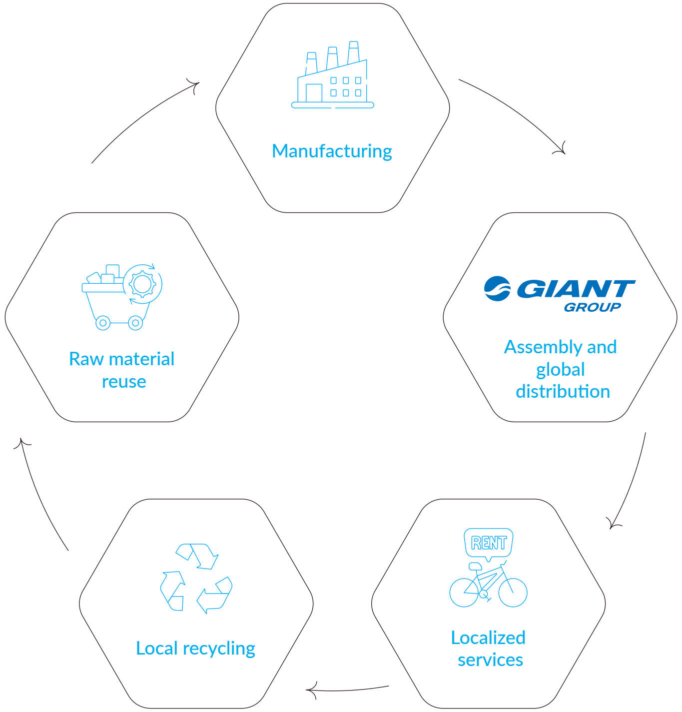
Program comparison:

	Taiwan	Global
Collection points	31 Giant own stores	Third-party retail partners
Sales locations	8 Giant own stores	Online or retail partners
Warranty provider	Giant own store	Third-party
Business model	Giant own stores would collect, evaluate and repair the bicycles and sell them at a price at least 30% lower than the price of a new bicycle. Lifetime warranty is provided by Giant own stores the same as for new bicycles.	We work with platform partners to make referrals and collect service fees. The platform would provide extended warranty after the standard warranty expires.
Note	Revenue of NT$6.8 million in 2022 Revenue target of NT$8 million in 2023	With Germany being the pioneer, we choose Rebike/ BuyCycle as our first platform partner.

5.3.2 Battery Recycling Service

5.3.2.1 Battery circularity and services for e-bikes

The process of electrifying bicycles involves many new technologies, including motor control, battery management, developments of bicycle electronic components, and cycling safety solutions. Because lithium batteries have a huge environmental impact, we examine the entire life cycle of batteries in order to reduce carbon emissions from production, extend their life spans, and recycle the batteries after use for raw materials to be reused.



Value Chain Cycle of Giant Battery

Manufacturing	We select suppliers practicing net-zero production. Currently, Giant's e-bikes sold in most parts of the world adopt net-zero production processes to ensure environmental sustainability.
Assembly and global distribution	We simplify production and transportation process and reduce carbon emissions through consolidated shipments.
Localized services	A. Provide local stores with tools to examine battery performance and identify the real cause of the problem, thereby preventing a normal battery from being recycled due to false complaints which shortens its life span. B. Provide local stores with battery firmware update service for problems to be solved directly at the market-end, which not only extends the battery life span, but also avoids the carbon emissions from transporting the battery to and from the maintenance center.
Local recycling	We cooperate with third-party waste treatment plants in our markets around the world so that end-of-life batteries can be recycled by these treatment plants to enter the next value chain cycle.
Raw material reuse	Waste treatment plants would break down waste batteries into raw materials, which would then enter the next value chain cycle.

5.4 Product as a Service

5.4.1 Expansion of Riding Services

5.4.1.1 Services of Giant Adventure

"We aim to be the best provider of cycling tours in the world."

Besides manufacturing premium bicycle products, Giant Group is also committed to the promotion of a new cycling culture. Established in 2009, Giant Adventure aims for the public to easily experience the joy of cycling tours. With the most professional and all-inclusive tour services around the world, we strive to deliver "Fulfillment, Exploration, Joy, Sensation, and Relaxation" through our domestic and overseas tours. We arrange different journeys and services for beginners and advanced riders, conveying a new lifestyle and taste through cycling tours and expanding the services and rental operation of cycling.

Travelling by bicycles not only improves personal health, but also reduces environmental pollution and carbon emissions, achieving low-carbon green travel which is eco-friendly. By the end of 2022, Giant Adventure has offered more than 2,900 cycling tours for about 92,000 riders, saving approximately 585 metric tons of carbon emissions. We will continue to promote similar operations and service models around the world.

Five commitments of the Giant Adventure

Fulfillment	I, the world, pedaling, dreaming of composing a waltz between each inhale and exhale.
Joy	Use your feet, your eyes and your heart to discover the deepest joy in your heart.
Relaxation	Lead rider, sweep rider, support vehicles, professional skills, troubleshooting, bicycle supply, and friends you can trust.
Exploration	Secret spots, local culinary delights and the fun of riding in the mountains as well as along the seacoast.
Sensation	Friends and family, challenges, sharing, capture every moment for you to keep in your memory box.

Reduction of carbon dioxide equivalent emissions from services provided by Giant Adventure in 2022	585 metric tons CO_2e

*Method of calculation:

1. Carbon Emissions = Distance traveled x Emission coefficient of transport mode
2. Distance traveled - The distance for one lap around Taiwan is estimated to be 900 km while other cycling tours are around 300 km. In 2022, 3,873 people took on the round the island trip and 5,327 people signed up for other cycling tours. The total distance travelled is estimated to be 5,083,800 km.
3. Transport assumption: Zero emission from cycling tours and assuming these tours were originally planned to be completed by cars.
4. The carbon emission coefficient of domestic private car (gasoline) is 0.115 kg CO_2e/pkm.
5. Reduction of carbon dioxide equivalent emissions for tours with bicycles instead of cars = 5,083,800 x 0.115= 584.637 metric tons CO_2e

Mobilizing for DEI

6.1 Diverse and Open Workplace

6.1.1 Workforce Overview

6.1.1.1 Workforce structure

Employee Composition

An integral part of Giant Group's global management insight is built on the inclusion strategy of using local talents to operate in different markets, and our corporate vision of "making cycling accessible to people all over the world" brings all employees together towards a common goal. Nationality is not crucial in being a Giant employee. Instead, innovative ideas and positive thinking as well as integrity and down-to-earth character are valued above all. As for our global network, we grant full authority for resource allocation to our local operations at different markets and drive continuous improvement through feedback and learning to accumulate brand value. Currently, Giant Group's major operations and employees are mostly located in Taiwan and China with 9,836 employees, including both permanent and fixed-term contract employees, and 1,057 non-employees, such as dispatched employees from staffing agencies, contractors, suppliers, and other on-site personnel. We have a total of 11,107 employees worldwide. The majority of our employees is in the range of 30-50 years old, which account for nearly 60%. In line with our technology-oriented production mode, half of our employees have high school and college degrees.

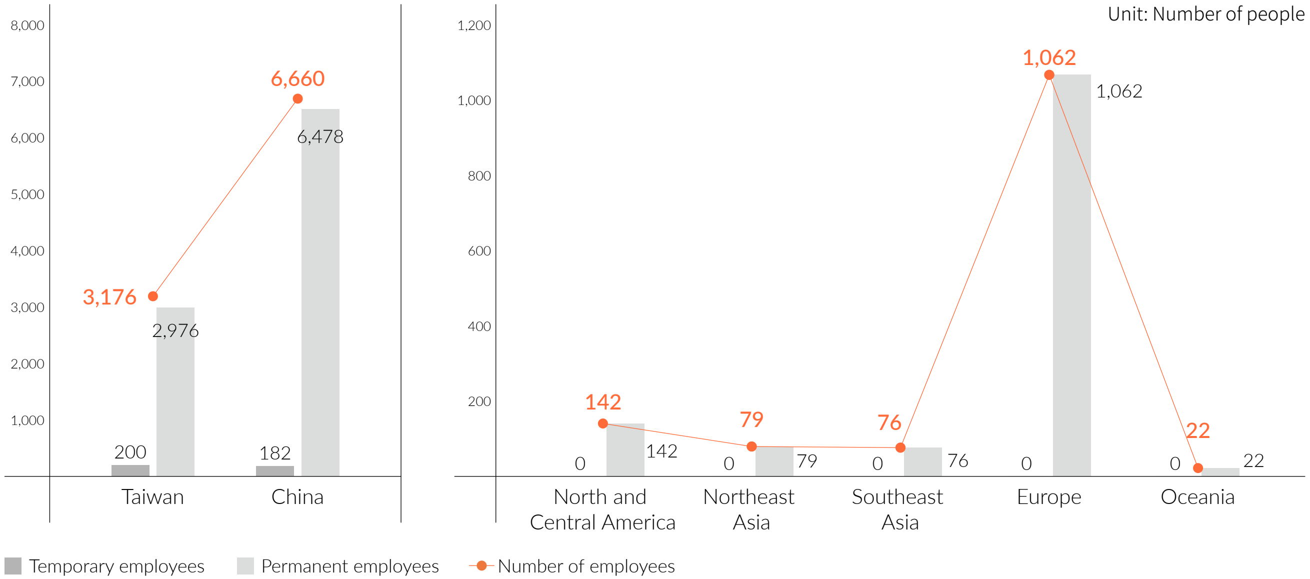
The total number of employees worldwide	11,107

Employee Category

2022 - Employee

Region	Taiwan	China	North and Central America	Northeast Asia	Southeast Asia	Europe	Oceania
Number of employees	3,176	6,660	32	79	76	1,062	22
Permanent employees	2,976	6,478	32	79	76	1,062	22
Temporary employees	200	182	0	0	0	0	0

Unit: Number of people



Note:
* Temporary employees: Employees with fixed-term contracts.
* Source:

Taiwan: Giant Group Headquarters/Giant Manufacturing Co., Ltd./Giant Taiwan Sales Company/AIPS Technology Co., Ltd.

China: Giant China Headquarters/Giant China Sales Companies/Giant (China) Co., Ltd./Giant Electric Vehicle (Kunshan) Co., Ltd./Giant (Tianjin) Co., Ltd.

North and Central America: Giant Bicycle Inc./Giant Bicycle México S. de R.L. de C.V.

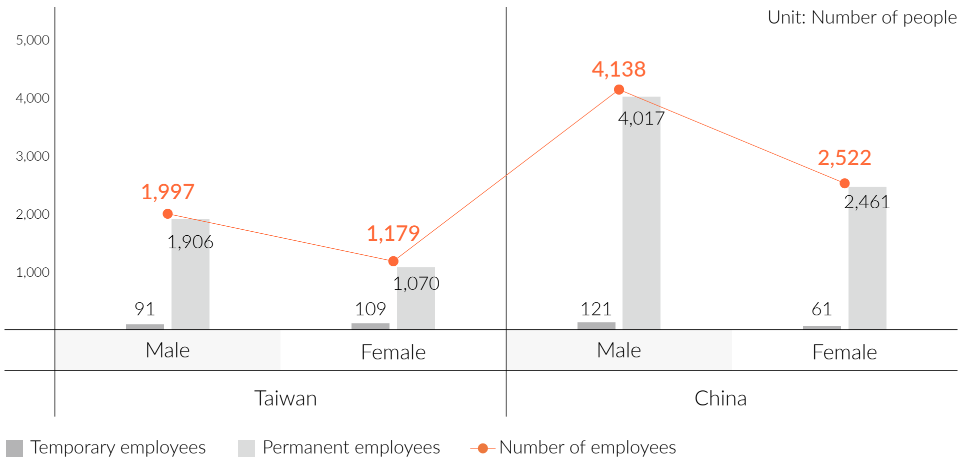
Southeast Asia: Giant Vietnam Manufacturing Company Limited

Northeast Asia: Giant (Japan) Co., Ltd./Giant Korea Co., Ltd.

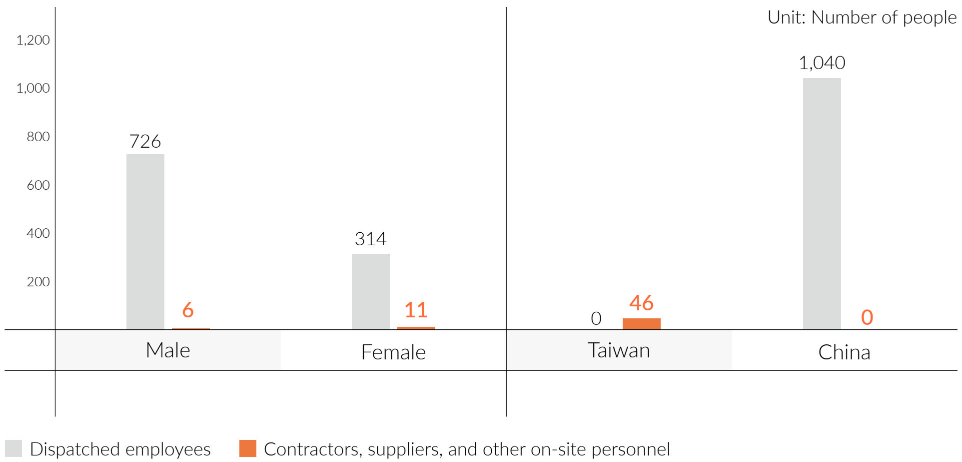
Europe: Giant Manufacturing Hungary Ltd./Giant Benelux B.V./Giant S.A.R.L France/Giant Deutschland GmbH/Giant UK Ltd./Giant Polska Sp. z o.o./Giant Italy S. R. L

Oceania: Giant Bicycle Co., Pty Ltd.

2022 - Employee					
Region	Taiwan		China		Total
Category	Male	Female	Male	Female	
Number of employees	1,997	1,179	4,138	2,522	9,836
Permanent employees	1,906	1,070	4,017	2,461	9,454
Temporary employees	91	109	121	61	382



2022 - Indirect Hires					
	Male	Female	Total	Taiwan	China
Dispatched employees	726	314	1,040	0	1,040
Contractors, suppliers, and other on-site personnel	6	11	17	46	0



Note:

* Dispatched employees from staffing agencies:

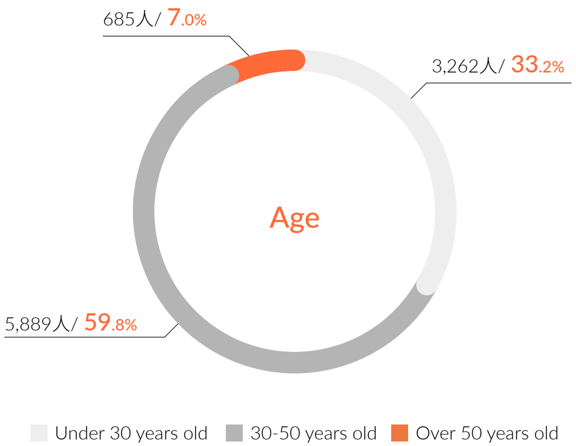
  Dispatched employees are needed for our China factories, including: Giant (Kunshan) Co., Ltd./Giant (China) Co., Ltd./Giant Electric Vehicle (Kunshan) Co., Ltd./Giant (Tianjin) Co., Ltd.

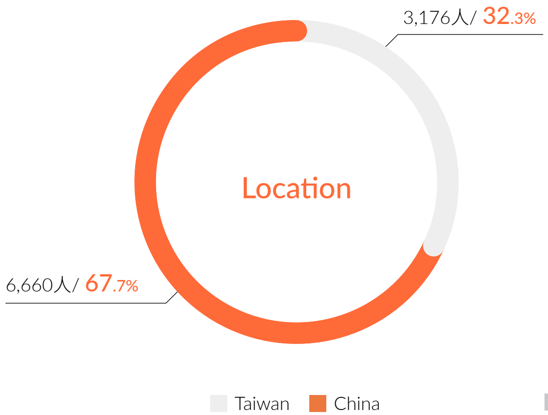
* Contractors, suppliers, and other on-site personnel:

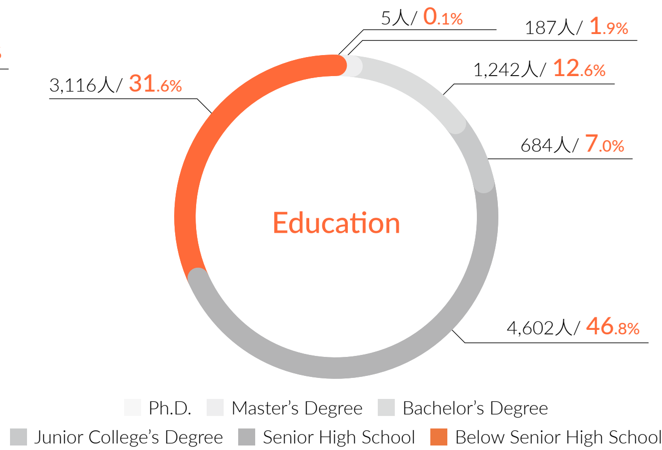
  Global headquarters: 7 cleaners, 2 receptionists, 2 cooks, 6 security guards; Giant Manufacturing Co., Ltd.: 8 cleaners, 9 cooks, 6 security guards, 5 waste treatment personnel; AIPS Technology Co., Ltd.: 1 security guard; Giant Taiwan Sales Company: None.

2022 Breakdown of Employees by Age Group and Gender at Major Operations (Taiwan and China)

Category	Group	Male		Female		Subtotal and Percentage by Group	
		Number of Employee	Percentage to Group Total	Number of Employee	Percentage to Group Total	Number of Employee	Percentage to Total Employees at Major Operations
Age	Under 30 years old	2,147	65.8%	1,115	34.2%	3,262	33.2%
	30-50 years old	3,539	60.1%	2,350	39.9%	5,889	59.8%
	Over 50 years old	449	65.5%	236	34.5%	685	7.0%
Location	Taiwan	1,997	62.9%	1,179	37.1%	3,176	32.3%
	China	4,138	62.1%	2,522	37.9%	6,660	67.7%
Education	Ph.D.	4	80.0%	1	20.0%	5	0.1%
	Master's Degree	123	65.8%	64	34.2%	187	1.9%
	Bachelor's Degree	639	51.4%	603	48.6%	1,242	12.6%
	Junior College's Degree	390	57.0%	294	43.0%	684	7.0%
	Senior High School	2,967	64.5%	1,635	35.5%	4,602	46.8%
	Below Senior High School	1,795	57.6%	1,321	42.4%	3,116	31.6%







Note: Method of calculation: Percentage to Group Total = Number of (male or female) employees / Number of employees in the group; Percentage to total employees at major operations = Number of employees in the group / Number of employees at major operations

Senior executives recruited locally at major operations (Taiwan and China)

Major Operations	2019	2020	2021	2022
Taiwan	100%	100%	100%	100%
China	33%	33%	33%	33%

Note:
* Method of calculation: Number of senior executives recruited locally / Total number of senior executives at major operations (%)
* Senior executives: Taiwan: Chief functional officers and the President; China: the President

The Giant Group main operations and manufacturing sites are in Taiwan and China

Senior executives in Taiwan
100% of senior executives are locals

Senior executives in China
33% of senior executives are locals

Employee Diversity

A diverse and inclusive workplace is built on respect for each individual, regardless of gender, race, nationality, and ethnic minority. In Taiwan, the overall percentages of female employees and female in management are 37.12% and 26.95%, respectively. Also, our employees come from different countries with different cultures. Through constant interactions with mutual respect, we create the most inclusive workplace for employees to unleash their full potential. In terms of ethnic minorities, we continue to employ disabled people and indigenous people in Taiwan; and the top five ethnic minorities in our China factories are Yi, Tujia, Miao, Lisu and Mongolian.

In Taiwan	
The overall proportion of female employees is	37.12%
Female in Management reaches	26.95%

2022 Female employees and female in management in Taiwan

	Number of Employees	Percentage
Total number of employees	3,176	
Percentage of female employees	1,179	37.12%
Percentage of female in management	38	26.95%
Percentage of female in entry-level management	26	31.67%
Percentage of female in mid-level management	7	36.84%
Percentage of female in top-level management	6	31.58%
Percentage of female in management at revenue related departments	16	50%
Percentage of female employees in STEM (Science, Technology, Engineering, Mathematics) related positions	22	20.95%

Note:
* Revenue related departments: Sales, Production, Supply and Marketing, and Giant Taiwan Sales Company; STEM related departments: Technology, R&D and Quality Assurance
* Top-level management: Assistant vice president or above; Mid-level management: Managers; Entry-level management: Senior specialist, section manager, assistant manager.
* Method of calculation:
  Percentage of female employees: (Number of female employees / Total number of employees); Percentage of female in management: (Number of female in management / Total number of management); Percentage of female in entry-level management: (Number of female in entry-level management / Total number of entry-level management); Percentage of female in mid-level management: (Number of female in mid-level management / Total number of mid-level management); Percentage of female in top-level management: (Number of female in top-level management / Total number of top-level management); Percentage of female in management at revenue-related departments: (Number of female in management at revenue-related departments / Total number of management at revenue-related departments); Percentage of female employees in STEM related positions: (Number of female employees in STEM related departments / Total number of employees in STEM related departments)

Nationalities of management and employees at major operations (Taiwan and China)

Nationality	2019				2020			
	Management		Employee		Management		Employee	
	Number of People	Percentage	Number of People	Percentage	Number of People	Percentage	Number of People	Percentage
American	1	0.17%	0	0.00%	1	0.16%	0	0.00%
Thai	0	0.00%	55	0.55%	0	0.00%	40	0.39%
Vietnamese	0	0.00%	532	5.30%	0	0.00%	588	5.76%
Malaysian	2	0.34%	1	0.01%	2	0.32%	0	0.00%
Dutch	0	0.00%	0	0.00%	0	0.00%	1	0.01%
Canadian	1	0.17%	1	0.01%	1	0.16%	1	0.01%
Taiwanese	194	32.61%	3,316	33.06%	171	27.49%	3,585	35.11%
Chinese	397	66.72%	6,125	61.07%	447	71.86%	5,997	58.73%

Nationality	2021				2022			
	Management		Employee		Management		Employee	
	Number of People	Percentage	Number of People	Percentage	Number of People	Percentage	Number of People	Percentage
American	1	0.16%	0	0.00%	1	0.2%	0	0.0%
Thai	0	0.00%	113	1.11%	0	0.0%	303	3.1%
Vietnamese	0	0.00%	505	4.96%	0	0.0%	349	3.5%
Malaysian	2	0.31%	0	0.00%	2	0.3%	0	0.0%
Dutch	0	0.00%	1	0.01%	0	0.0%	1	0.0%
Canadian	2	0.31%	0	0.00%	2	0.3%	0	0.0%
Taiwanese	206	32.24%	3,589	35.28%	231	35.9%	2,287	29.9%
Chinese	428	66.98%	5,966	58.64%	419	63.4%	6,241	63.5%

Note: Method of calculation: Percentage of management = Number of management by nationality / Total number of management; Percentage of employees = Number of employees by nationality / Total number of employees

Employee diversity at major operations (Taiwan and China)

	2019		2020		2021		2022	
	Number of Employee	Percentage to Total Employee	Number of Employee	Percentage to Total Employee	Number of Employee	Percentage to Total Employee	Number of Employee	Percentage to Total Employee
Disabled employees	52	0.5%	58	0.5%	62	0.5%	55	0.56%
Indigenous people	17	0.2%	18	0.2%	18	0.2%	18	0.18%
Ethnic minorities	97	0.9%	109	1.0%	175	1.6%	185	1.88%

Note: Method of calculation: Number of employees / Total number of employees

Percentage of disabled employees at Taiwan factory

	2019				2020				2021				2022			
	Required Number of Disabled Employees	Actual Number of Disabled Employees	Number of Vacancies	Achievement Rate (%)	Required Number of Disabled Employees	Actual Number of Disabled Employees	Number of Vacancies	Achievement Rate (%)	Required Number of Disabled Employees	Actual Number of Disabled Employees	Number of Vacancies	Achievement Rate (%)	Required Number of Disabled Employees	Actual Number of Disabled Employees	Number of Vacancies	Achievement Rate (%)
Disabled employees	40	52	0	130.00%	43	58	0	134.88%	44	62	0	140.91%	45	55	0	122%

Note: Method of calculation: Achievement rate = Actual number of disabled employees / Required number of disabled employees x 100%

Statistics on ethnic minorities at China factories

Ethnic Minorities	Headcount in 2019	Headcount in 2020	Headcount in 2021	Headcount in 2022
Yi	35	35	60	48
Tujia	10	9	6	7
Miao	10	12	16	10
Lisu	5	9	17	21
Mongolian	5	3	5	5
Others (21 ethnic minorities)	32	50	86	94
Total	97	118	190	185

6.1.1.2 Talent Recruitment

Diverse Recruitment Pipelines

Establishing diverse recruitment pipelines is an important strategy to enhance corporate image and attractiveness. We use a variety of channels to recruit talents, including employment agencies, online talent platforms, internal referrals, newspaper pamphlets, job fairs, campus recruitment, social media, collaborations with schools and headhunters. Through these channels, we can be more efficient in identifying suitable talents while enhancing our corporate image and attractiveness in the eyes of job seekers, thereby attracting more talented people to join our team.

Recruitment pipeline at major operations (Taiwan and China)

Recruitment Pipeline	Practice
Employment agencies	Employment agencies offer candidates according to the job vacancies and requirements of factories (generally used for direct labor recruitment)
Online talent platforms	Job vacancies are posted on various online talent platforms (e.g., 104 Job Bank and Yourator) where job seekers would submit their resumes or the system would perform job matching. Our recruiting personnel then perform preliminary screening through document reviews, phone interviews, and assessments before arranging candidates for face-to-face interviews.
Internal referrals	Employees may recommend suitable candidates and interviews would be arranged if the candidates meet the job requirements.
Newspaper pamphlets	Recruitment information is published on newspaper pamphlets detailing job requirements. We choose appropriate candidates based on resumes submitted by the applicants for interviews.
Job fair	We set out job vacancies and requirements at job fairs and interview job seekers directly at the event.
Campus recruitment	We set out job vacancies and requirements at campus recruitment event and interview job seekers directly at the event.
Social media	Recruitment information is posted on FB for interested parties to submit their resumes.
Collaboration with schools (trainee-students)	Industry-academia collaboration with schools
Headhunters	We send out job vacancies and requirements for headhunters to recommend suitable candidates for interviews.

Recruitment expense at major operations (Taiwan and China)

Recruitment Expense	2019	2020	2021	2022
Total recruitment expense (NT$)	2,285,991	3,083,012	5,118,872	2,090,893
Total number of recruits (persons)	6,066	4,867	4,328	4145
Recruitment cost per hire (NT$)	377	633	1183	504

Note:

* Recruitment expense includes agency and advertising fees.
* Method of calculation: Recruitment cost per hire = Total recruitment expense / Total number of recruits
* Reason for the significant variation between 2020 and 2021: Due to the pandemic, recruitment was more difficult at our China factories. The largest increase in recruitment costs fell on direct labor recruitment. The additional recruitment expenses included transportation costs, medical checkups, and others.

New recruits at major operations (Taiwan and China)

		2019		2020		2021		2022	
Total number of new recruits		6,066		4,867		4,328		4,487	
Total number of employees		8,573		9,326		9,347		9,836	
Percentage of new recruits % (New recruits / Total number of employees)		70.76%		52.19%		46.30%		45.62%	
		Number of Employees	Percentage (%)	Number of Employees	Percentage (%)	Number of Employees	Percentage (%)	Number of Employees	Percentage (%)
Gender	Male	4,107	67.71%	3,237	66.51%	2,834	65.43%	2,668	59.46%
	Female	1,959	32.29%	1,630	33.49%	1,494	34.52%	1,819	40.54%
Age	Under 30 years old	3,294	54.30%	2,389	49.09%	1,764	40.76%	1,986	44.26%
	30-50 years old	2,730	45.00%	2,439	50.11%	2,515	58.11%	2,465	54.94%
	Over 50 years old	42	0.69%	39	0.80%	49	1.13%	36	0.80%
Location	Taiwan	1,064	17.54%	1,012	20.79%	1,050	24.26%	1,146	25.5%
	China	5,002	82.46%	3,855	79.21%	3,278	75.74%	3,341	74.5%
Management Position	Entry-level management	8	0.13%	8	0.16%	9	0.21%	5	0.22%
	Mid-level management	4	0.07%	3	0.06%	9	0.21%	10	0.11%
	Top-level management	6	0.10%	6	0.12%	5	0.12%	9	0.20%
	Not in management position	6,048	99.70%	4,850	99.65%	4,305	99.47%	4,463	99.47%

Note: Method of calculation: Number of Employees / Total number of employees

Internal talent supply

Job rotation is a talent development mechanism employed by Giant Group. By empowering employees to unleash their full potential in different positions and maintain their competitive edges, we create management values such as organizational viability, business success, and talent retention. At the same time, we use the cross-functional rotation experience as a reference for employee promotion, thereby motivating employees to take learnings seriously and promoting talent development. The feasibility of rotation is discussed between employees and their immediate supervisors to ensure the rotation meets the organizational needs.

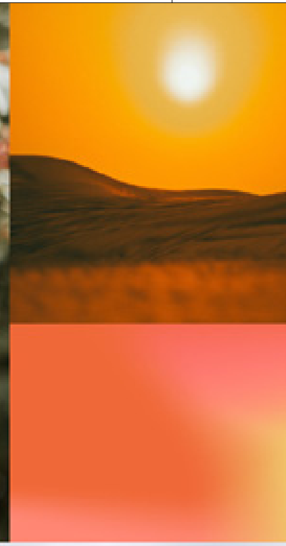
Giant Group's promotion system includes regular promotion reviews. Depending on our development plans, two to three promotion review meetings are organized annually to ensure the fairness and impartiality of promotions, and to drive career development and performance enhancement of employees. Regular promotion reviews: Functional officers and team supervisors have a clear understanding of the Company's promotion system, and perform regular talent development evaluation and planning. Promotion recommendations are based on evaluations of individual performance and strengths. Through the promotion review mechanism, immediate feedback can be given for top talents to take on more challenging tasks. It would be a win-win situation for organizational and talent development, where employees have career paths for continuous growth, and the organization can ensure excellent competency-based performance from employees.

The internal replacement rate increased from 25% in 2019 to 59% in 2022, representing an impressive growth of 136% which demonstrates the effectiveness of Giant Group's internal talent cultivation and promotion mechanism and contributes to the Company's overall performance in talent retention.

Category		2019		2020		2021		2022	
		Number of Employees	Percentage	Number of Employees	Percentage	Number of Employees	Percentage	Number of Employees	Percentage
Total internal replacement		337	25%	450	35%	376	23%	274	59%
Gender	Male	214	64%	316	70%	279	74%	142	51.8%
	Female	123	36%	134	30%	97	26%	132	48.2%
Age	Under 30 years old	99	29%	97	22%	87	23%	63	23.0%
	30-50 years old	211	63%	334	74%	275	74%	200	73.0%
	Over 50 years old	27	8%	19	4%	14	4%	11	4.0%
Management	Entry-level management	40	12%	144	32%	48	13%	43	9.2%
	Mid-level management	18	5%	44	10%	17	5%	10	2.1%
	Top-level management	28	8%	14	3%	8	2%	12	2.6%

Note:

* Method of calculation: Internal replacement rate = (Number of vacancies filled by employees + Number of promotions) / (Number of internal vacancies + Number of promotions)
* The two major factors contributing to the significant variance between 2020 and 2021: In the post-pandemic period between 2020 and 2021, we see severe labor shortage and thriving social and economic environment as well as businesses. Thus, the replacement demand surged (a larger denominator), leading to a drop in the 2021 internal replacement rate.



6.1.2 Talent Development and Retention

6.1.2.1 Build an environment for cultivation and development

Training and Development System

Giant Group adheres to the principles of creating well-rounded talents and putting knowledge into practice, and has drawn up three training and development strategies: to develop and train employees' competence in line with the Company's growth and strategy, to facilitate the cultivation of key talents to meet the future needs of the Company, and to strive to shape and provide an environment for employees to grow. In order to meet the real demand, an annual survey on training needs is conducted in the fourth quarter of each year to formulate the annual training and development programs. After the programs are discussed and approved by senior management, the education and training courses would be launched in February of the following year.

We build a fault-tolerance culture because we believe that failures pave the path to success and innovations come from trial and error. Giant Group has built a learning organization within, where ideas are exchanged through discussions, which stimulates creativity that dares to think outside of the box. "Innovate or Die" - we make corrections through constant experimentation. Under the leadership of management team with open mind, tolerance and vision, our corporate culture exhibits a high tolerance for failure, which brings out employees' potential to take on challenges and generates unceasing energy to innovate.

In Giant Group, we do not practice individualism, but team spirit, and there is no heroic leadership, only teamwork. This spirit is deeply rooted in Giant's corporate culture, which has long been shaped by our philosophy and the ways we conduct businesses. Full authorization from our leaders adds on to create a culture of active communication, and to establish an organization that is capable of communicating openly and honestly across all levels and regions. This management philosophy is the foundation of Giant Group's team spirit and one of the key elements of our sustainable operation.

Training and Development System

Category	Purpose and Details of Training
Newcomer Orientation	· Purpose: To give new recruits a basic understanding of the Company and help them to quickly be a part of the daily operation. · Details: (1) Domestic orientation: The human resources unit shall give new recruits a summary on the basic HR systems and occupational safety, and arrange advanced training courses (e.g., the basic knowledge of bicycles and the use of IT system) for indirect personnel depending on the job requirements. (2) Orientation for foreign workers: One-day orientation is arranged for every batch of foreign workers coming on board with the help of translators from the staffing agency. (3) Orientation program covers business overview, corporate culture and values, personnel rules and regulations, occupational safety, quality awareness, product briefing, and other related courses.
On-the-Job Training	· Purpose: To emphasize the practices of learning by doing, passing down experience and sharing. · Details: (1) Business meetings: To learn work-related knowledge and information from business consensus meetings. (2) Job coaching: Supervisors or senior operators give guidance during daily work or project improvement. (3) Job rotation: To cultivate internal talents through horizontal job rotation. (4) Job coaching is arranged by unit supervisors. (5) On-the-job training for job rotation is arranged by the unit supervisors.
Self-Development	· Purpose: To encourage employees to take the initiative to learn for personal growth. · Details: (1) Book study: Subsidize annual magazine purchases in accordance with the "Employee Welfare Rules." (2) School education: Subsidize foreign language tutoring, on-the-job training, and study leaves for continuing education in accordance with the "Employee Continuing Education Policy." (3) Learning eNewsletter (4) Sharing activities: Expand the effect of self-learning through learning experience sharing among employees.
Off-the-Job Training	· Purpose: For trainees with the same training needs to temporarily leave their posts for off-the-job training. · Details: (1) External training: Employees may attend courses organized by external training organizations according to their own job requirements. (2) Internal training: Training organized by the Company. Currently, our internal training units include the Giant Academy, TDC, and various departments.

In light of the Group's long-term development and global operations, we encourage our employees to pursue further studies in order to enhance their professionalism and develop their potential. In accordance with our "Employee Continuing Education Policy", employees may apply for subsidies when the studies are confirmed to be relevant to their jobs or the Company's future development, both their unit chiefs and the President have approved, and they have met the criteria for subsidies.

	Category	Subsidy
On-the-job Training	Foreign language tutoring	Half of the tuition fee, up to a maximum of NT$10,000 per year (regardless of language)
	Online professional courses or ones organized by government-certified Institutions	Half of the tuition fee, with a maximum of NT$5,000 for the same course
	Continuing education centers of domestic universities, night schools, tutoring centers, etc.	1/3 of the tuition and fees
	Domestic graduate institutes (excluding EMBA)	1/3 of the tuition and fees
	Domestic EMBA	Case-by-case review based on market prices
Study leaves for continuing education	Domestic graduate institutes (including EMBA) and overseas studies	Case-by-case review based on market prices

Key programs for talent development

Program	Content	Trainee	Operational Benefits	Learning Effectiveness by the Four Levels of Kirkpatrick Model
2021 Global Value Up Project	Proposal and execution of group projects	Global Headquarters	· A company with cross-functional project objectives · For employees to have cross-team collaboration experience	Members of the project team achieved Level 3 Behavior effectiveness. They rolled out five projects for implementation, including: · GF value up project · Global orientation platform · Global GRA Program · Build up regional business management model · Online training for direct labor
2021 Giant Talk	Knowledge/experience sharing by chief functional officers Industry trend analysis	Global Headquarters	Establish and promote internal mentoring system	A total of 194 supervisors and employees took part in the program, and achieved Level 2 Learning effectiveness. Trainees learned about the knowledge passed on by the speakers, and the ability to apply it to their work in the future, including: · Understand market trends of the industry · How to develop team leadership · Enhance R&D competence · Self-awareness for career development

Program	Content	Trainee	Operational Benefits	Learning Effectiveness by the Four Levels of Kirkpatrick Model
2021 Cross-industry seminar - The Purpose of Manufacturing is to Create Joy for Consumers - Speaker Chung-jen Hsu	Cross-industry learning of service benchmark for organizational transformation	Open seminar to all employees	Build a common mindset and work towards being a brand that communicates with the end consumers and provides modern cycling services	· A total of 194 supervisors and employees attended the seminar. · The main objective of the seminar is to diffuse the concept of service-oriented organization. The effectiveness was not analyzed in depth.
2022 Cross-industry seminar - ESG topic -Recycling and Green Riding - Speaker: Arthur Huang, CEO of Miniwiz	Cross-industry learning of global ESG trends and corporate cases	Open seminar to all employees	· Understand the global ESG game rules · How to recycle bicycle products · Corporate examples on recycling and carbon reduction practices	· A total of 116 supervisors and employees attended the seminar. · We collaborate with Miniwiz through ESG-based experience sharing and projects, including: green building development and exchanges on carbon emission calculation
2022 Excellent Customer Experience Management - Moving Forward with Consumers	Brand management and consumer experiential marketing	Open seminar to all employees	· Case study on brand management · Understanding of brand management strategies and techniques	A total of 110 domestic and overseas supervisors and employees attended the seminar.

Training effectiveness evaluation method

Level	Evaluation Item	Use of Tools	Time of Evaluation
L-I	Reaction	· Internal training: Post evaluation form, course records/on-site observation records, attendance statistics · External training: External education and training review sheet	During and after the course
L-II	Learning	Conduct examinations/competency tests Review sharing/assignment presentation Practical exercises/field operations	Before, during and after the course
L-III	Behavior	Effectiveness evaluation form after the course Action checklist Action plan	3 to 6 months after the course
L-IV	Result	Project implementation results Supervisor interviews and feedback	Approximately 1 to 3 years after the course

The average training hours at our major operations for the last three years were 86 hours. The number increased by 37.2% to 93 hours in 2022 compared to 2021, returning to the pre-pandemic level. In 2021, in-class training courses were suspended and non-essential trainings were postponed due to COVID-19, resulting in a decrease in the average training hours compared to the previous year. However, all departments in Taiwan and China have carefully assessed the need for education and training to ensure employee safety and compliance with the pandemic policies of local governments. Also, they have taken this opportunity to build online tools and resources, preparing more diverse technological tools for education and training in the post-pandemic era. Furthermore, departments of our China factories launched subsidy programs for skills training and certificates, and received positive responses. The top three certificates acquired were professional training for welders (entry-level/ advanced), hazardous substance management, and forklift. Over the past three years, a total of 355 employees were certified, leading to a gradual easing of training demand at our China factories after 2021.

In terms of average training expenses, the total training expenses exceeded NT$10 million in 2022, as we launched the Group's leadership program for high-level talents. Chief functional officers and potential talents of each function are given coaching leadership training, with an emphasis on professional, people and pioneering leadership. The two major factors contributing to the larger variance in average training expenses between 2020 and 2021 are as follows: Our subsidiaries in China organized two large-scale courses: EAP sessions and salon lectures to build management's mindset and ability on employee care and employee assistance; and MAP talent assessment tools and courses for management at the section manager level or above to understand organizational development and capability gaps.

Average training hours at major operating sites in the past three years	86hrs
Growth in 2022 compared to 2021	37.2%
Training hours reached	93hrs

Hours of education and training at major operations (Taiwan and China)

Item		2019	2020	2021	2022
Training hours	Total training hours	835,657	874,619	664,902	912,081
	Average training hours	97	94	71	93
Gender	Male - total training hours	558,695	598,931	456,060	619,385
	Female - total training hours	276,962	275,688	208,842	292,696
Age	Under 30 years old - total training hours	238,349	292,809	175,391	191,264
	30-50 years old - total training hours	580,902	569,946	481,464	648,987
	Over 50 years old - total training hours	16,406	11,864	8,047	71,830
Type of training	Type of training - management - total training hours	5,697	8,533	49,818	9,502
	Type of training - professional - total training hours	462,267	696,822	502,936	214,796
	Type of training - general (external training / orientation) - total training hours	367,693	169,264	112,148	687,783

Note:
* Method of calculation:
Average training hours = (Total training hours / Total number of employees at Taiwan & China factories)
* Management courses:
Management and leadership and pursuit of excellence in performance; Professional courses: Foreign language proficiency and personal skills; General courses: Orientation and beautiful life seminars.

Training costs at major operations (Taiwan and China)

Item		2019	2020	2021	2022
Training costs	Total training costs (NT$)	4,387,508	3,874,076	8,860,656	11,162,174
	Average training costs (Total costs / Total number of employees in Taiwan & China)	512	415	948	1,135
Gender	Male - total training costs	3,141,365	2,821,286	6,150,747	9,373,473
	Female - total training costs	1,246,143	1,052,790	2,709,909	1,788,701
Age	Under 30 years old - total training costs	1,495,163	920,086	1,854,460	1,215,775
	30-50 years old - total training costs	2,679,746	2,711,467	6,727,870	6,922,773
	Over 50 years old - total training costs	212,599	242,523	278,325	3,023,626
Type of training	Type of training - management - total training costs	1,247,122	945,071	4,358,857	6,888,259
	Type of training - professional - total training costs	2,439,698	2,741,878	3,887,430	2,491,973
	Type of training - general (external training / orientation) - total training costs	700,688	187,127	614,369	1,781,942

Note:
* Training costs:
Tuition + Lecturers' fee + Service fee + Miscellaneous administrative fees
* Management courses:
Management and leadership and pursuit of excellence in performance; Professional courses: Foreign language proficiency and personal skills; General courses: Orientation and beautiful life seminars.

Human capital ROI

Unit: In thousands of NT$

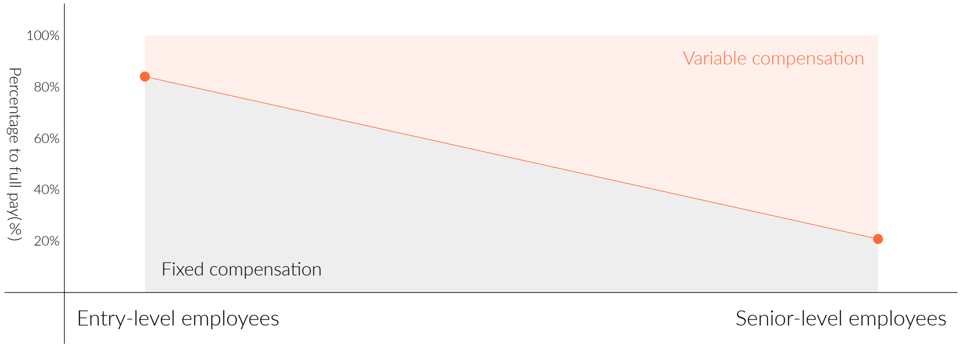
	2019	2020	2021	2022
Total Revenue (a)	63,449,533	70,010,849	81,839,870	92,043,675
Total Operating Expenses (b)	58,717,250	63,152,576	73,130,583	84,129,236
Total employees - related expenses (salaries + benefits) (c)	8,859,279	9,311,947	11,777,734	12,735,502
ROI (a - (b-c)) / c	1.53	1.74	1.74	1.62

Note: Source: Giant Group

6.1.2.2 Competitive compensation

The compensation system takes into account the link between the organization's operational needs and employee contributions, and provides a high percentage of fixed compensation for entry-level employees and a high percentage of variable compensation for senior-level employees. The objective of this system is for "suitable" talents to be the Company's most important asset. We build an environment of differentiated rewards and a sense of accomplishment using high pays but low personnel costs. We have a long-term incentive program for our employees, and pay out annual bonuses in accordance with the Group's profit-sharing system. We also conduct global market surveys on a regular basis to review the Company's compensation system and salary levels for our compensation package to be competitive in attracting and retaining talents.

The ratio of our direct labor pay to the local minimum wage at our main production bases is 1.1 times in Taiwan; 1.4 times in Kunshan, China; and 1 time in Tianjin, China. We would work on raising the salary level and deliver a win-win solution for both our employees and the Company to achieve stable growth.



* Main production bases:
  Giant Manufacturing Co., Ltd. / Giant (Kunshan) Co., Ltd. / Giant (China) Co., Ltd. / Giant Electric Vehicle (Kunshan) Co., Ltd. / Giant (Tianjin) Co., Ltd.
* Offices:
  Giant Group Headquarters, Giant Taiwan Sales Company, AIPS Technology Co., Ltd., Giant China Headquarters and Giant China Sales Companies are offices with no production-related operations.
* Fixed compensation:
  Salaries paid regardless of the organization's operational performance, including wages, basic pays, and other salaries paid on a regular basis.
* Variable compensation:
  Payments based on employee's contributions or performance in the form of allowances, profit sharing, performance pay, target bonuses, and year-end bonuses.

Full-time non-managerial employees at the Giant Group Headquarters in Taiwan

	2020	2021 (a)	2022 (b)	Percentage of Changes in 2022 (b-a)/b
Number of employees	328	305	324	
Average compensation (NT$)	758,548	846,847	847,392	0.06%
Median compensation (NT$)	650,000	758,548	744,900	-1.83%

Note:
* Source:
  Giant Group Headquarters. We focus on the Group Headquarters as each SBU has different compensation structures and business models.
* Average and median compensation:
  Average compensation: The average compensation of non-managerial employees in the Giant Group Headquarters includes the fixed monthly salary + fixed year-end bonus. For new recruits, the data is prorated based on their time with the Company.
  Median compensation: The median compensation of non-managerial employees in the Giant Group Headquarters includes the fixed monthly salary + fixed year-end bonus. For new recruits, the data is prorated based on their time with the Company.

6.1.2.3 Welfare system

Welfare policy

The Group strives to build a quality welfare policy, retaining talents through a positive cycle and allowing employees to reduce stress and achieve work-life balance.

1. Flexible work hours	· We implement flexible work schedules to enhance employee autonomy. Employees are able to adjust their work schedules to meet their needs, so long as they comply with the working hours regulations.
2. Employee relations	· Family Day events are organized every year to promote family harmony and relationships. · A broad variety of domestic and overseas trips are arranged to improve employee interactions and as a form of stress relief. · In recognition of employees' long-term contribution, the Company fully subsidizes the round-the-island cycling tours for employees who have completed 25 years of service. · Bicycle-related activities are organized for employees to experience our products and the joy of cycling. · Others: Club activities, year-end parties, etc.
3. Employee welfare	· A broad range of subsidies: Subsidies for weddings, funerals, celebrations, childbirth, illness or injury, major festivals, birthday, reference book, club activities, and childcare as well as scholarship for children of employees. · Employee discounts on Company products and subsidies for cycling tours. · Special discounts at contracted shops. · Free visits to the Cycling Culture Museum with employee badges.
4. Day-to-day care	· Health is vital to everyone, which is why the Company organizes health checkups and promotes health awareness on a regular basis. · The Company provides and assists with group insurance to safeguard employees' personal safety. · Corporate cafeteria provides a variety of nutrition-balanced meals. · Shuttle bus service is available for the convenience of employees living nearby. · Counseling sessions are provided regularly. Employees can make online reservations and relieve emotional stresses through counseling.
5. Retirement system	· The Group's retirement system has been developed in compliance with the laws and regulations of the places our subsidiaries operate in. Employees located within the Republic of China are subject to the pension policy established in accordance with the Labor Standards Act, where monthly contributions are made to the pension fund held under the name of the Labor Pension Fund Supervisory Committee. From July 1, 2005 onwards, the Company has adopted the "Labor Pension Act" and implemented the following rules: · Employees who join the Company on or after July 1, 2005 are subject to the "Labor Pension Act". The Company contributes an amount equivalent to 6% of employees' monthly salary into their personal pension accounts held with the Bureau of Labor Insurance. · Employees who join the Company before July 1, 2005 can choose between the pension system under the "Labor Pension Act" or the one under the "Labor Standards Act" within 5 years starting from July 1, 2005. · Pension benefits under the "Labor Standards Act": Two basis points are awarded for every full year of service up to 15 years and one basis point is awarded for every full year of service completed beyond 15 years with a maximum of 45 basis points.
6. Honorary retirement benefits	· We have established rules governing the compensations for honorary retirements to express our gratitude towards employees for their devotion during their years of services. The rewards include a commemorative bicycle valued at NT$13,500 to NT$50,000 depending on the employees' rankings, trophies, and a permanent membership card entitling employees to special discounts at Giant own stores.

Salaries and benefit expenses

The Group has formulated a profit-sharing scheme linking compensation with operational performance to build mutual trust. The Group's Articles of Association stipulates that 6% to 12% of the Company's profits for the year, if any, shall be appropriated as employee compensation. The percentage and dollar amount of compensations appropriated over the years are as follows:

Percentage	
2019	7.5%
2020	7.2%
2021	7.2%
2022	7.1%

Salaries and benefit expenses (NT$)	
2019	312,080,675
2020	455,893,309
2021	558,392,774
2022	538,258,062

Note: Source: Giant Group.

LOHAS at workplace

1,500 Employees Joined the Night Run Event in Celebration of Giant Group's 50th Anniversary

The Employee Welfare Committee of Giant Group organized the "Giant 50 Together We Ride" night run event in celebration of the Group's 50th anniversary. Hundreds of local residents and 1,500 Giant employees took part in the seven-kilometer jogging/walking activity from our factory to Songbo Fishing Port. Accompanied by autumn breeze, participants took a break from work and enjoyed the natural countryside and beautiful sunset along the Sihaoqiao Ditch to Songbo Fishing Port. We encouraged employees to improve their health and immunity through exercise in order to cope with the new post-pandemic lifestyle, and took the opportunity of our 50th anniversary to invite employees in taking a short run or a walk to relieve stress and appreciate the beauty of nature after work.

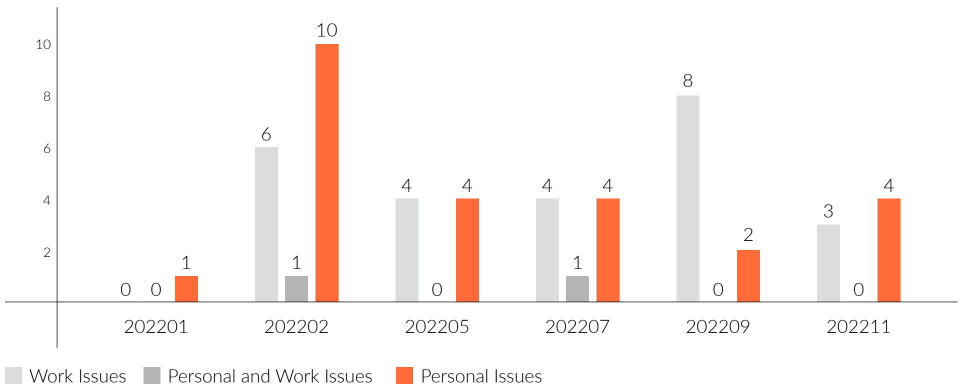
2022 "Health Consultation at Workplace" - Collaboration Between Giant Group and Bydo Life Design for Online Counseling

Giant Group Headquarters have partnered with Bydo Life Design Co., Ltd. to provide employees at Headquarters with online health counseling services. Bydo Life School is founded by a group of industrial and organizational psychologists who advocate the application of positive psychology in the "workplace" and the "business world", and develop services that can be effectively applied to individual career planning and mental health counseling to assist business leaders in creating positive organizations.

Employees can seek health counseling services when they have either life or workplace adaptability issues. With professional knowledge, counselors can help employees exploring their own emotions and thoughts to make changes and decisions meeting their own needs. Employees shall look for help from a counselor when faced with difficult psychological or emotional problems in life or workplace. This demonstrates that we are tackling the problems head-on and willing to deal with them. It is common to see employees suffering from emotional distress at workplace. Thus, it is necessary to use workplace health counseling services to promote the need to care for workers' emotions and reduce psychological distress.

Employees in need of the service can enroll through online registration, which is available regularly. Consultation is provided via video conference. Exchanges during the sessions are kept strictly confidential and only the types of issues being discussed would be known by the Company.

2022 Number of Participants and Consultation Topics



participants in 2022	Work issues	Personal issues	Both
52	48.08%	48.08%	3.85%

Note: This serves as a reference for the physical and mental care of employees within the organization, and we would continue to optimize the management system.

2022 "Blind Massage Service by the Taiwan Foundation for the Blind" - Safeguard Health for Happy Life

Our Group Headquarters collaborates with the Taiwan Foundation for the Blind in providing blind massage service to employees at Headquarters on Fridays. The collaboration began in October 2022, giving two visually impaired masseurs in Taichung the opportunities to be stationed at the Headquarters to provide services every Friday. A total of 144 employees enjoyed the service in 2022 with a cumulative participation rate of 96%.

Cumulative number of employee participants in 2022	144
Cumulative activity participation rate	96%

Unpaid parental leave - Taiwan

Item	2022		
	Female	Male	Total
Number of eligible unpaid parental leave applicants for the year	39	149	188
Actual number of unpaid parental leave applicants for the year	27	7	34
Number of employees expected to return from parental leave for the year (A)	41	3	44
Actual number of employees returned from parental leave for the year (B)	8	4	12
Number of employees returned from parental leave and stayed for one year	7	4	11
Return rate for the year % (B/A)	19.5%	133.3%	27.3%
Retention rate for the year (%)	87.5%	100.0%	91.7%

Note:

1. "Number of employees expected to return from parental leave for the year": excluding employees who have applied for continuous unpaid leave during the year.
2. "Actual number of employees returned from parental leave for the year": including employees who return to work prior to the end of the parental leave during the year.
3. "Retention rate" refers to the percentage of reinstated employees who have stayed for more than one year after their returns.

6.1.2.4 Employee engagement

Employee Commitment Survey

In 2021, Giant Group's biannual global employee commitment survey was conducted by the HR unit of the Headquarters through online anonymous surveys, targeting our indirect employees around the world. The response rate was 66%, with a participation score of 75, which was in line with the global benchmark. According to the survey results, we have 11 items above the benchmark and 9 items below the benchmark. The survey revealed that our relative strengths lie in purpose, manager, and prospect, and our relative opportunities are communication, collaboration, and hiring. We will implement improvement measures to strengthen aspects with lower scores through a variety of tools and training exercises. A score of 82 where employees believe that the Company will initiate improvement measures based on the survey results indicated that employees believe the survey is helpful and shall have internal surveys more frequently.

2021 global employee commitment survey

Category	Item	2021
Number of respondents		1,644
Response rate		66%
Age	Under 30 years old	351
	30-50 years old	1,105
	Over 50 years old	188
Management	Entry-level management	383
	Mid-level management	91
	Top-level management	36
Survey items	Percentage of high employee commitment	75%
	Percentage of 20-30 years old with high employee commitment	74%
	Percentage of 30-40 years old with high employee commitment	75%
	Percentage of 40-50 years old with high employee commitment	74.5%
	Percentage of 50-60 years old with high employee commitment	78%
	Percentage of over 60 years old with high employee commitment	84%

Note:
* High employee commitment: An average score between 75 and 100 is defined as high employee commitment.
* Low employee commitment: An average score between 0 and 25 is defined as low employee commitment.

4 regions	12 survey aspects
Survey area: Taiwan, China, Europe and the U.S.	Work-Life Balance, Manager, Corporate Culture, Purpose, Collaboration, Communication, Job Roles, Hiring, Customer Focus, Prospect, Leadership, and Values

Turnover analysis

In 2022, Giant Group had an overall turnover rate of 42.67%, mainly due to non-managerial employees in our China factories. In order to reduce the turnover rate, the Group has put forward measures targeting different groups. For new recruits, we organize free talk sessions to understand how well they adapt to their works and integrate with the organization. There are also exit interviews to identify the causes for voluntary termination with feedback given to relevant departments to seek improvement solutions. One of the reasons for leaving the Company was retirement, where employees have reached the mandatory retirement age and applied for retirement in accordance with the law.

Giant adopts various approaches to improve the turnover rate. The first is an effective exit interview. HR personnel would communicate with the departing employees as a work buddy to understand the real reasons for their changes in personal career plans, and to determine whether there are chances for continuous development within the Group as there are opportunities in different professional fields to promote employee longevity and prosperity. The second is the free talk sessions for new recruits. We regularly communicate with employees during different stages of their careers, which helps employees of the same stage to share their experiences, have a clearer blueprint for their path within the organization, identify with the organization's management values, and enjoy the work atmosphere for their long-term development in the Company.

Employee turnover analysis at major operations (Taiwan and China)

Category	Item	2019		2020		2021		2022	
		Number of Employees	Percentage	Number of Employees	Percentage	Number of Employees	Percentage	Number of Employees	Percentage
Total termination		5,336	34%	4,730	31%	4,468	30%	4,197	42.67%
Voluntary termination		5,299	33.3%	4,675	29.7%	4,410	28.7%	4,175	42.45%
Involuntary termination		37	0.69%	55	1.16%	58	1.30%	22	0.22%
Gender	Male	3,638	68.18%	3,006	63.55%	2,836	63.50%	2,745	65.40%
	Female	1,698	31.82%	1,724	36.45%	1,630	36.48%	1,452	34.60%
Age	Under 30 years old	2,854	53.49%	2,390	50.53%	1,906	42.66%	1,785	42.53%
	30-50 years old	2,324	43.55%	2,171	45.90%	2,346	52.51%	2,360	56.23%
	Over 50 years old	158	2.96%	169	3.57%	216	4.83%	52	1.24%
Location	Taiwan	1,289	24%	1,570	33%	1,599	36%	1,010	24.06%
	China	4,047	76%	3,160	67%	2,869	64%	3,187	75.94%
Management	Entry-level management	38	0.71%	36	0.76%	40	0.90%	7	0.17%
	Mid-level management	8	0.15%	6	0.13%	11	0.25%	7	0.17%
	Top-level management	8	0.15%	14	0.30%	7	0.16%	6	0.14%
	Non-managerial employees	5,282	98.99%	4,674	98.82%	4,410	98.70%	4,177	99.52%

Note:
Method of calculation: Overall turnover rate = Number of departed employees during the year / Total number of employees at the end of the year + Number of departed employees during the year
Involuntary termination: Expiration of contract, employees at mandatory retirement age, etc.

Performance appraisal management

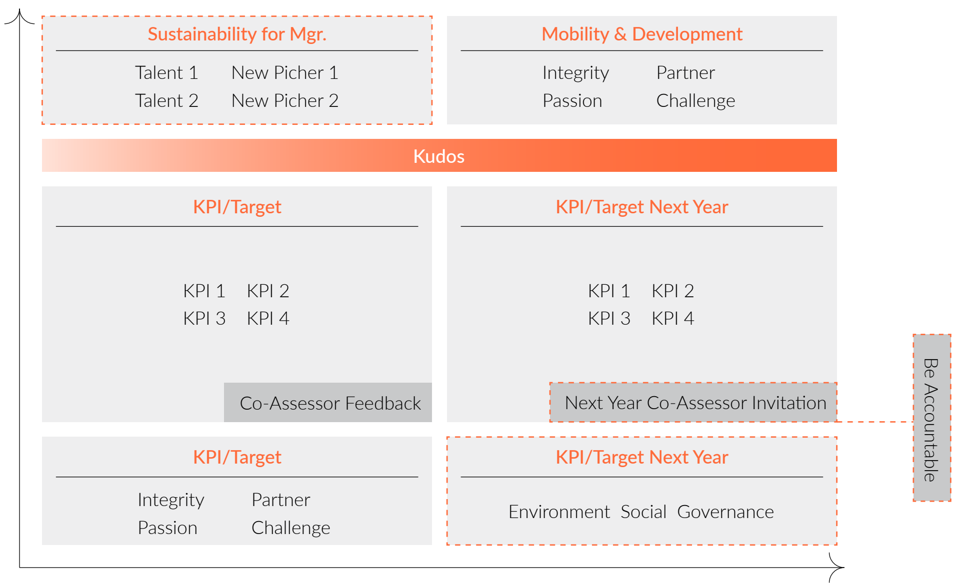
Through periodic appraisal and talent inventory, high potential talents would have the opportunities to be trained and put in important positions with greater responsibilities and more room for development. The Group conducts a group-wide performance evaluation in the fourth quarter of each year. Except for employees in the probation period, who are subject to the probation period standards, all regular employees are required to take part in the annual performance appraisal (vitality appraisal). The appraisal details can be localized by regional business units according to their management systems. The appraisal framework and details of the Global Headquarters are set out as follows:

Positive performance appraisal is at the core of Giant Group's performance management, which utilizes Kudos Recognition to create a culture of appreciation in the workplace and to honor those who are recognized. The performance appraisal process includes:

1. Employee self-commitments	2. Future improvements	3. Guiding, mentoring, and correcting to encourage self-learning and development	4. Behaviors and results
Employees initiate performance interviews and management with an organizational commitment to continuous growth and engagement. Employees maintain a positive mindset of continuous growth and pursuit of work fulfillment. Supervisors share experiences and allocate resources with the aim of creating a win-win between employees and the Company.	Reach a consensus on areas of self- improvements as well as improvement plans, improvement targets, and resources required through discussions and assist employees with areas requiring improvement.	In the process of improvement or talent development, supervisors shall be guiding, mentoring and correcting to encourage self-motivation in employees in order to build a learning organization. For employees scored B- (improvement required) in the appraisal, unit supervisors shall propose a 3-month counseling program and assessment forms. Retraining would be given to address failings in order to improve competence and performance for appraisal. If the employees still fail to fulfill job requirements after counseling, adjustments may be made. Where a termination of employment is necessary, procedures shall be carried out pursuant to local laws and regulations.	After going through the aforementioned management stages, work performance is reviewed again at the time agreed or through regular performance appraisal to achieve a positive cycle.

Performance Appraisal Model

Employee Appraisal Method	Object	Description
Multidimensional performance appraisal (e.g., 270-degree feedback)	Giant Group Headquarters	The 270-degree performance appraisal of Giant Group is applicable to employees in the Global Headquarters. Besides feedback from direct supervisors, it also includes: 1. Co-Assessment People who have worked with the employee recently would co-assess the employee. These associates would provide specific examples and feedback on businesses they work together as one part of the multidimensional assessment. 2. Kudos Recognition Employees can give Kudos to their upstream and downstream colleagues who they have frequent contacts in daily operations, or representatives of such groups (mainly cross-departmental associates). Based on actual experience, they can provide feedback on the collaboration and effectiveness thereof as part of the multidimensional assessment. 3. Peer/Customer Feedback (Optional) Employees can invite their upstream and downstream colleagues who they have frequent contacts in daily operations, or representatives of such groups to give feedback for bonus points in the vitality assessment! Based on actual experience, they can provide feedback on the collaboration and effectiveness thereof as part of the multidimensional assessment.
Annual vitality assessment	Each business unit can formulate their own assessment rules with reference to the Group's assessment standards. Regular employees ranked as assistant vice president or below are subject to the assessment.	1. Determine annual assessment score: After a review on the overall assessment results for the year between supervisors and their subordinates, assessment scores would be determined for all employees within the department. 2. For subordinates with poor results and in need of improvements, the unit supervisors shall propose a 3-month counseling program and assessment forms. Retraining would be given to address failings in order to improve competence and performance for appraisal. If the employees still fail to fulfill job requirements after counseling, adjustments may be made. Where a termination of employment is necessary, procedures shall be carried out pursuant to local laws and regulations.



6.1.3 Human Rights and Employee Communication

6.1.3.1 Human rights management and policy

The Company has formulated a human rights policy which states that the Company respects and supports international human right standards and principles, including the Universal Declaration of Human Rights of the United Nations, the UN Global Compact and the Declaration on Fundamental Principles and Rights at Work of International Labour Organization (ILO). We comply with regulations of countries where we operate and establish as well as disclose our human rights policy in accordance with the UN Guiding Principles on Business and Human Rights. We prevent actions that infringe or violate human rights, make explicit statements to respect and treat all employees in a fair and equal manner, and protect the legal rights and interests of our employees with no differential treatment in our employment policy. We also conduct regular risk assessments to provide job security and stability to our employees.

The following objectives are set in response to our human rights policy:

Labor rights	Labor contracts signed by employees are in compliance with local laws and regulations to secure employees' economic benefits. Also, the Company provides group insurance and welfare measures in addition to social insurances required by law to care for our employees.
Diversity, inclusion and equal opportunities	The Company provides a workplace with gender equality and diversity. We treat all employees equally without discrimination on the basis of gender, race, religion, sexual orientation, age, health condition, political affiliation or pregnancy. We have zero tolerance for harassment and respect privacy. The Company strives to create a workplace with equal opportunities, dignity, safety, and fairness and free of discrimination and harassment.
Employee welfare	We establish various welfare policies that take into account the rights and interests of our employees. We are devoted to have employees enjoying health and work-life balance.
Healthy and safe workplace	We stress the important of a safe and healthy workplace and for that purpose, we establish the Occupational Safety and Health Committee to improve the working environment and sanitary conditions on an ongoing basis. We are devoted to lower occupational injuries and safeguard the physical and mental health of our employees.
Strengthen labor-management communications	We are committed to building a harmonious workplace for employees and employers, protecting employees' rights, and establishing a two-way communication channel as well as a complaint mechanism, so that employees can fully express their opinions and receive timely responses and assistance.

Human rights due diligence (HRDD) procedures

We began our HRDD planning in 2022 where the Legal Affairs, Audit, Human Resources and other units set up a short- and medium-term HRDD implementation process for our first-tier suppliers with the management value of working with our supply chain partners in enhancing the human rights management competence and creating industrial competitiveness/brand ESG sustainable developments. The procedures include:

Define key human rights management issues of Giant Group	Govern through internal audit for human rights management	Develop human rights management education and training resources	Share/diffuse human rights management practices with suppliers	Regular supplier HRDD
Identify our human right management boundary with reference to human right management aspects of peers and brand customers.	The second stage involves reviewing the actual management effectiveness of each unit and identify areas of improvement through internal self-audits regarding the management boundary established.	The third stage is to establish standardized model and related instructional materials concerning internal human rights management issues and practical measures, and deploy them through training.	In the fourth phase, we share the standardized human right management system and related instructional materials with suppliers as the starting point of human rights management.	In the fifth stage, we regularly review human rights management practices with suppliers.

Human rights program

The introduction of Unconscious Bias at our House Show in 2022 was our first attempt in establishing a diverse and inclusive management culture with the concept of unconscious bias.

During the 2022 House Show, we explained the unconscious bias management culture to Giant Group executives and employees worldwide through online presentation.

We expect our partners not to be affected by "unconscious bias", and thereby enhancing fairness, transparency, efficiency and other positive benefits of operations within the organization.

The Company's HR rules and policies complied with the government's labor regulations. Employees are treated equally within the Company, regardless of their nationality, race, gender or age. We respect each employee's right to work, and allow every employee to learn and grow at work as well as have the stage and opportunity to unleash their full potential. Employees may approach unit supervisors, the HR department, or industrial unions or use other means to raise complaints and seek resolutions for any unfair treatment. At the Headquarters, each gender accounts for no less than one-third of total employees, and no less than 30% of chief functional officers and above. At local offices, more than two-thirds of the Presidents in our proprietary brand companies are of local nationalities. As pandemic slowed down, in-classroom training increased in 2022 compared to 2021.

Year	2021		2022	
Gender	Female	Male	Female	Male
As a percentage of total employees	36.20%	63.80%	37.12%	62.88%
Average training hours	4.09	4.00	11.08	9.2
As a percentage of chief functional officers and above	33.30%	66.70%	31.58%	68.42%

Note: Source: Giant Group

Non-discrimination and harassment

Reporting and investigation procedures	Education, training and promotion	Case statistics - Taiwan
All employees are responsible for ensuring a work environment free of workplace violence. Employees who experience, witness, or are aware of discrimination or harassment in the workplace may notify the Company's HR unit or call the complaint hotline. The HR unit would set up an investigation task force upon receiving a complaint to conduct investigations in a confidential manner. Disciplinary measures would be taken for substantiated incidents.	Regular education and training are provided to all employees and are also a part of the orientation program for new recruits. We have set up a dedicated sexual harassment mailbox at 113@giant.com.tw. The information is available at the bulletin on the intranet and can be seen clearly at workplace.	(see table below)

	2019	2020	2021	2022
Discrimination cases	0	0	0	0
Sexual harassment cases	0	0	0	0

Protection of freedom to participate in trade unions

Giant Group respects employees' freedom of assembly and association, and their participation in labor unions. In Taiwan, employees can join our own industrial union, i.e., the Industrial Union of Giant Manufacturing, on their own initiative. The Union serves as a communication channel between employees and the Company, and protects employees' legal and reasonable rights and interests. All of our employees are members of the Union. In our factories in China, there is also a labor union, and all employees are union members. Although we have unions in both of our Taiwan and China factories, the Company has not entered into any collective bargaining agreements between 2019 and 2022 as the unions have yet to raise any relevant requests.

6.1.3.2 Open communication channels between management and employees

The Company emphasizes labor harmony and holds regular labor-management meetings. We establish an open communication channel within the Company for immediate response and handling of employees' concerns and opinions. Our policies have taken into account and safeguarded the rights and interests of employees. In addition to creating diversity at workplace, we encourage our employees to strike a balance between life and health, and proactively build a sound relationship of mutual trust between management and employees. In the event where we have to terminate the employment relationship with some of our employees due to significant operational changes, we would give notice in advance in accordance with the laws and regulations of the jurisdiction where we operate.

There were no labor disputes between 2020 and 2022.

Communication channels

Human Rights-Related Complaint Channels	Complaints	In-charge Unit
iCare mailbox	The website accepts reporting of employee misconducts. Information submitted would be kept confidential and passed directly to the Group's senior management.	HR unit manages the mailbox, and assigns cases to the in-charge unit based on case details.
Sexual harassment mailbox 113@giant.com.tw	Sexual harassment	HR unit

6.1.4 Building a Safe Workplace

6.1.4.1 Occupational safety and health management system

Occupational Safety and Health Committee

Employees are our most important assets. Giant Group is committed to creating a work environment with zero occupational accidents by standardizing safety and health management, protecting the environment, preventing occupational injuries, protecting corporate property and ensuring the safety and health of our employees. The Company has set up the Occupational Safety and Health Committee to manage and oversee the works of environment, safety and health (ESH). The Committee is headed by the President of each factory with professional personnel accountable for ESH management, including the supervision, inspection and implementation of improvement measures pursuant to laws and regulations, and the coordination between relevant departments to comply with the laws and regulations, standards, and norms. The Committee formulates the occupational safety and health policy in accordance with the Occupational Safety and Health Act, organizes safety and health education and training, and implements operating environment monitoring programs. It reviews, coordinates and makes recommendations concerning the monitoring results, measures adopted, health management, prevention of occupational diseases, and health promotion. Labor unions established by law in our Taiwan and China factories would appoint labor representatives to the Occupational Safety and Health Committee.

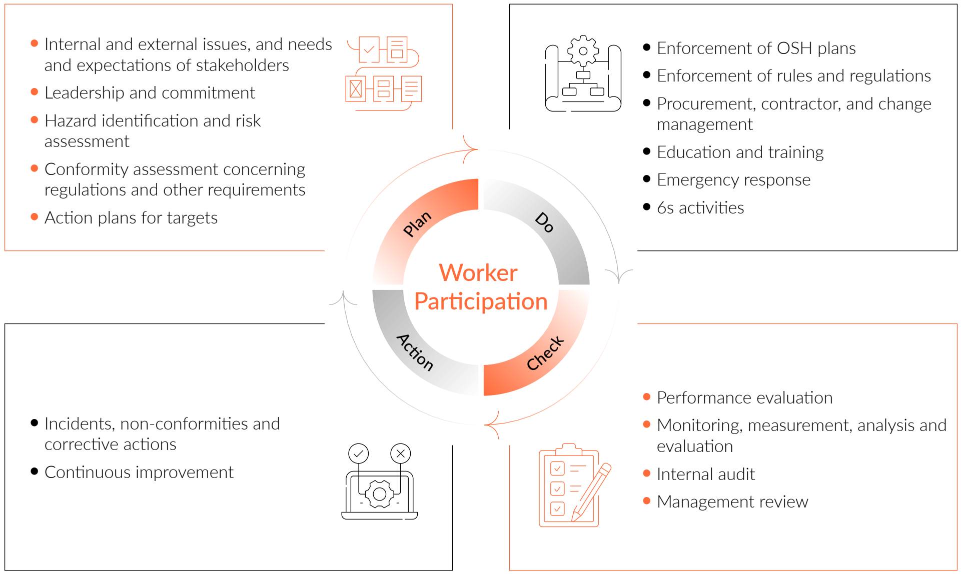
Giant Manufacturing Co., Ltd.	Members: President/Union representative/Department heads/ESH personnel Number of members: Of the 20 Committee members, there are 7 union representatives (35%) Meeting frequency: Quarterly
Giant (Tianjin) Co., Ltd.	Members: President/Administration Department/ESH Council/Department heads Number of members: Of the 12 Committee members, there is 1 union representative (8%) Meeting frequency: Weekly
Giant (Kunshan) Co., Ltd.	Members: President/ Department heads/ESH personnel Number of members: Of the 11 Committee members, there are 2 union representatives (18%) Meeting frequency: Weekly /Monthly
Giant (China) Co., Ltd.	Members: President/Safety Director/ESH Section/Department heads Number of members: Of the 15 Committee members, there are 2 union representatives (13%) Meeting frequency: Monthly
Giant Electric Vehicle (Kunshan) Co., Ltd.	Members: President/Safety Director/ESH Council/Section officers of each department/ Labor representative Number of members: Of the 17 Committee members, there is 1 union representative (6%) Meeting frequency: Monthly

Occupational Safety and Health (OSH) Management System and Operation

Our Taiwan factory obtained TOSHMS:2007 (OHSAS 18001:2007) Occupational Safety and Health Management Systems certification in March 2012, and achieved continuous improvement through the Plan-Do-Check-Act (PDCA) management process. In March 2020, it obtained the certification and switched to the ISO45001:2018 (CNS 45001:2018) certification system. The Giant (Kunshan) Co., Ltd. passed Level 3 review of the "Work Safety Standardization" and the ISO45001 Management System certification in 2020 and 2022, respectively, and is now pushing to satisfy Level 2 requirements. Giant (China) Co., Ltd. and Giant Electric Vehicle (Kunshan) Co., Ltd. passed Level 3 review of the "Work Safety Standardization" in April 2020 while the management system of Giant (Tianjin) Co., Ltd. serves as the basis for main management systems as required by the local competent authorities. All of our China factories file OSH-related information, including the annual reporting of occupational hazards projects and status report of occupational diseases, with local governments in accordance with local laws and regulations for risk control and management. The OSH management system in our Taiwan and China factories cover all employees.

Giant Group's OSH management system is regularly maintained by the labor safety/environmental safety/general affairs units. In order to maintain and enhance system effectiveness, the Group adopts PDCA approach and practices, including annual revisions for document adequacy, compliance audits, education and training, operating environment monitoring, health management, hazard identification, and internal audits, to ensure that risks are within a tolerable level and to reduce the occupational incident rate.

PDCA cycle



6.1.4.2 Internal audit of OSH management system

For regulatory compliance and to mitigate potential risks and safety concerns, Giant Group conducts internal audits regularly, examining the operation of the OSH management system. Regular audits ensure the effectiveness and efficiency of the management system and provide valuable insights and recommendations for continuous improvement.

2022 internal audits and improvement measures

Location	Number of Deficiencies	Deficiencies	Improvement Measures
Taiwan factory	6	8.1 Operational Planning and Control	· Issue an incident report for OSH corrections and preventive measures, and track the improvement progress to close the case · Employee education and training, and equipment protection enhancement
China factories (Excluding Giant Electric Vehicle (Kunshan) Co., Ltd.)	12	6.1.2 Hazard identification and evaluation of risks and opportunities, 7.2 Capabilities, 8.1 Operational planning and control Failure to update safety operations as required	· Employee education and training · Continuous implementation of P-D-C-A improvements · New workflow format and modifications

The OSH Management System shall be maintained and refined by all employees. In addition to high-risk issues which requires immediate attention, we continue to look for low-risk improvement opportunities. Giant Group has established a pipeline for improvement proposals, which come from activities such as employee and stakeholder surveys, hazard identification, and the 6S method for occupational safety. Proposals related to improvements of the 6S and TOSHMS can be submitted. They would be registered online after being verified by the supervisors for effectiveness and feasibility. A hard copy shall also be handed in to the Improvement and Standardization Committee for review. Our Taiwan factory uses TOSHMS to identify risks and implement improvement mechanisms. Immediate improvement is required for risks identified to be Levels 4 or 5, which are high risks. For risks at Level 3 or below, employees can submit proposals if an opportunity for improvement is identified, and track the plan progress for management purpose. Our Taiwan and China factories actively implement the 6S mechanism, emphasizing occupational safety proposals and continuous improvement. From 2019 to 2022, all proposals have been effectively improved, delivering an improvement rate of 100%. This achievement demonstrates our factories' emphasis on workplace safety and commitment to continuous improvement.

All proposals from 2019 to 2022 have been effectively improved

Improvement rate reaches 100%

TOSHMS improvement plans - Taiwan factory

	2019	2020	2021	2022
Number of management plans	8	13	7	4
Number of management plans completed	7	12	6	4
Completion rate of management plans	87.5%*	92%*	85.7%*	100%

Note 1: Reasons for failing to achieve 100% completion rate:

In 2019, the plan for using ice for cooling was canceled after we carried out further studies on the cooling improvement method and considered the work sequence.

In 2020, the plan of improving the unpleasant odors of equipment during testing was canceled after we opted for alternative equipment.

In 2021, the auto-molding plan was decided against after further studies.

6S improvement cases

Taiwan and China				
Item	2019	2020	2021	2022
5S	794	635	754	630
Safety	574	498	442	697
6S	1,368	1,133	1,196	1,131

Note 1: 6S method: 5S (Sort, Set in order, Shine, Standardize and Sustain) + Safety = 6S method

Note 2: Giant (Tianjin) Co., Ltd. amended the Rules for Improvement Proposals Implementation in 2018 to strengthen the incentive mechanism for teams and individuals. The degree of cooperation from employees had improved significantly, as was evidenced by the larger number.

Note 3:Giant (China) Co., Ltd. was excluded from the 5S statistics between 2019 and 2022.

6.1.4.3 Occupational safety and health training

In order to enhance the occupational safety awareness of all new recruits, existing employees and supervisors, we have developed an annual education and training program and established the OSH education and training rules based on the standard operating procedures to meet internal needs and regulatory requirements. These training programs are designed to raise everyone's awareness of occupational safety for compliance and to establish a safe working environment.

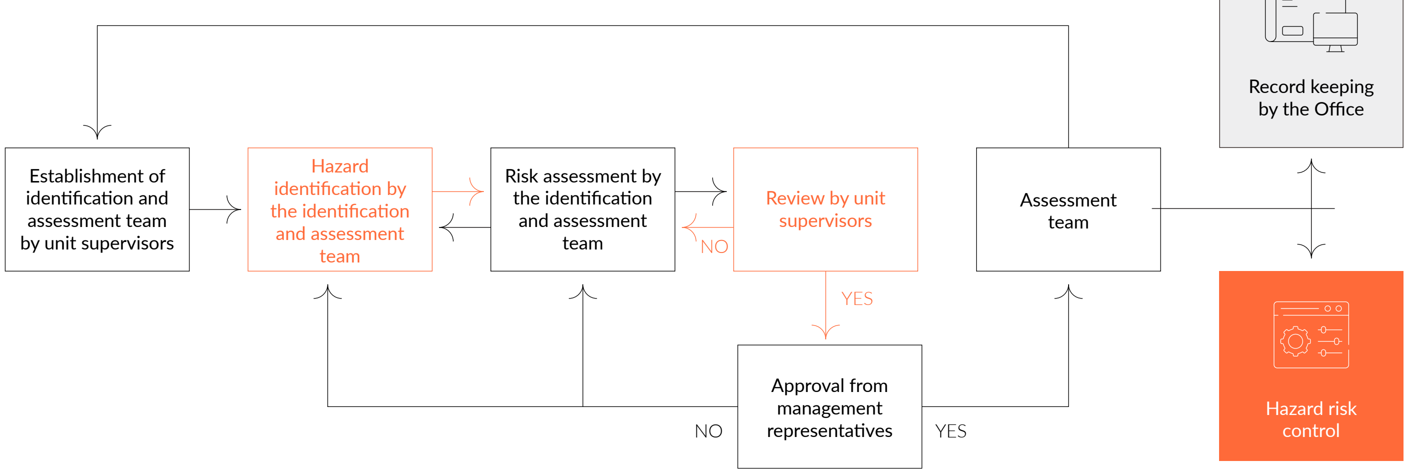
Category	Location		Quantitative Statistics							
			2019		2020		2021		2022	
			Total Number of Attendances	Total Number of Hours	Total Number of Attendances	Total Number of Hours	Total Number of Attendances	Total Number of Hours	Total Number of Attendances	Total Number of Hours
Safety and Health Training	Taiwan Factory		19,174	14,884.5	12,200	6,697.497	10,820	6,111.077	33,421	12,953
	China Factories	Giant (Tianjin) Co., Ltd.	128	256	190	380	298	596	1,002	711
		Giant (Kunshan) Co., Ltd.	2,134	4,654	2,032	5,102	2,110	6,828	2,196	6,970
		Giant (China) Co., Ltd.	196	3,594	207	3,794	319	6,190	89	1,284
		Giant Electric Vehicle (Kunshan) Co., Ltd.	644	14,660	772	11,813	1,146	21,354	883	15,483

6.1.5 Occupational Safety Risk Management

6.1.5.1 Risk assessment and hazard identification

In our Taiwan factory, we carry out hazard identification and risk assessment, and formulate internal management procedures and rules pursuant to ISO45001 OHS management system and government regulations. Unit supervisors shall undergo risk assessment training every year, and conduct potential hazard identification and risk assessment on the workflow, operating environment, facilities and equipment, energy, and chemicals. As for the risk management mechanism of our China factories, risk controls are implemented to reduce the occurrence of hazards in accordance with local laws on occupational diseases prevention and control, security risk classification and control, investigation and management of potential dangers, and the internal rules concerning security risk assessment and control.

Hazard identification and risk assessment process



Occupational Hazard Risk Classification Management

Our Taiwan factory has implemented TOSHMS for more than 10 years, utilizing TOSHMS for hazard identification. The assessment results are classified into five levels with Level 5 being extremely high risk and Level 1 being low risk. We also carry out continuous improvement on operational risk. In 2022, there was no risk identified as Level 4 or above, while there were 2 risks below Level 3 with improvement opportunities, where the control measures were the establishment of standard operating procedures and education and training, respectively. As for our China factories, on-site inventory of risk spots was performed according to local regulations to cover hazardous materials, equipment and facilities, operational activities, and risk levels of the premises. Risks were rated between Level 1 (low risk) to Level 4 (significant risk). Different analysis approaches were used for different inventory items and locations, including the job risk analysis, risk level assessment, job hazard analysis, and safety check list. According to the latest assessment results of each factory, there were no significant risks, 60 cases of higher risks, 1,844 cases of moderate risks, and 1,248 cases of low risks in 2022. Emergency and management measures were formulated for each risk.

Number of Improvement Cases from the 2022 TOSHMS Hazard Identification - Taiwan Factory

Level of Impact	Quantity	Risk Issues
5 Extremely high risk	0	None
4 High Risk	0	None
3 Moderate to High risk	0	None
2 Moderate risk	1	Add new process and enhance awareness to the mold manufacturing process
1 Low risk	1	Employees may experience upper respiratory discomfort due to toner powders from photocopiers

2022 Risk Assessment Results - China Factories

China Factories	Significant Risks	High Risk	Moderate Risks	Low Risk
Giant (China) Co., Ltd.	0	32	93	175
Giant (Kunshan) Co., Ltd.	0	15	682	1,040
Giant Electric Vehicle (Kunshan) Co., Ltd.	0	13	1,069	33
Total	0	60	1,844	1,248

Note: Giant (Tianjin) Co., Ltd. was excluded as it was evaluated once every three years and the next evaluation will start in 2023.

6.1.5.2 Occupational hazard reporting and occupational accidents investigation

Occupational hazards are handled and investigated in accordance with management rules established by each factory. Our Taiwan factory follows regulations and internal rules, i.e., the Rules on Reporting and Investigation of Incidents and Article 37 of the Occupational Safety and Health Act, while our China factories comply with internal rules, i.e., the Work-Related Injuries Handling Procedures and the Emergency Response Plan for Work Place Accidents. Occupational injuries that occurred in our Taiwan factory in 2022 can be categorized into seven types, with cut, slash, or scrape being the top three categories. As for false alarms, they were mainly involved with unwanted fire alarms where corrections and improvements had been completed. If an employee is in a working condition that poses immediate danger or may cause injury or illness, he or she may stop working and retreat to a safe place in accordance with local regulations, the Occupational Safety and Health Act, and the Occupational Disease Prevention and Control Act; and promptly report the incident to his or her immediate supervisor. The Company would not take disciplinary actions against him or her.

Occupational Hazard Reporting Process for Giant Group Factories

Step 1 Transport injured employees to hospital for immediate medical attention

Step 2 Report to the in-charge person on site, unit supervisor, occupational safety department, and competent authorities

Step 3 Establish a task force for rescue and handling of the situation

Step 4 Conduct incident investigations, analyze the causes of incidents, formulate improvement measures and implement accordingly

Step 5 Prepare investigation reports and fill out internal forms to close the case

6.1.5.3 Safety and health management performance

Number of False Alarms and Occupational Injuries

In 2022, there were four false alarms at our Taiwan factory and five similar incidents at our China factories, all of which have been investigated and corrected accordingly. Based on the nature of these incidents, they were categorized as fire alarms, thermal burns, fire and mechanical injuries. The incidents reminded the organization of the importance of OSH management and prompted Giant Group to further strengthen relevant safety measures to ensure the safety and health of employees.

Number of false alarms

Year	Taiwan Factory	China Factories			
		Giant (China) Co., Ltd.	Giant Electric Vehicle (Kunshan) Co., Ltd.	Giant (Tianjin) Co., Ltd.	Giant (Kunshan) Co., Ltd.
2019	1	2	1	5	11
2020	1	1	2	3	2
2021	0	1	1	6	3
2022	4	1	0	1	3

Improvement measures for 2022 false alarms

Factory	Type of Incident	Cause of Incident	Improvement Measures
Taiwan Factory	4 fire alarm incidents	1. Smoke from switch box for not using crimp terminals 2. Smoke from battery module due to scratches from case fixing screws 3. Unsafe behaviors of employees 4. Alarm triggered by damaged lamp ballasts due to water/acid gas in the environment	1. Inspect and consolidate switch boxes 2. Modify the fixing of battery case 3. Employee education and training 4. Replacement of fluorescent lamps with LED lamps
China Factories	1 thermal burn incident	Neglect to drill the water draining hole on frames	Operators would wear leather aprons, and full inspection on frames
	1 fire alarm incident	Possible short circuit of aging fan motor	Plan to replace fans with air-conditioning system
	3 mechanical injuries	Unsafe behaviors of employees	Improve the mistake-proofing mechanism of equipment, and employee education and training

Note: False alarms excluded traffic accidents from commute.

In 2022, there were 18 and 34 occupational injuries at our Taiwan and China factories, respectively. These incidents have been investigated with improvement measures implemented. The main types of injuries included cut, slash, and scrape, mechanical injuries, and crushed or rolled up accidents. These statistics remind the Company of the importance of OSH, and motivate Giant Group to strengthen relevant safety measures in order to safeguard the safety and health of its employees.

Number of occupational injuries

Year	Taiwan Factory	China Factories			
		Giant (China) Co., Ltd.	Giant Electric Vehicle (Kunshan) Co., Ltd.	Giant (Tianjin) Co., Ltd.	Giant (Kunshan) Co., Ltd.
2019	13	22	4	7	11
2020	11	18	5	5	10
2021	10	13	5	9	15
2022	18	17	8	3	6

Improvement measures for 2022 occupational injuries

<table>
<tr><th colspan="2">Factory</th><th>Type of Injury</th><th>Cause of Incident</th><th>Improvement Measures</th></tr>
<tr><td colspan="2" rowspan="7">Taiwan Factory</td><td>7 incidents of cut, slash, or scrape</td><td>Improper operation / Equipment malfunction</td><td>Equipment improvement, employee education and training, and correction of operating standards</td></tr>
<tr><td>2 incidents of falling objects</td><td>Unsafe behaviors of employees</td><td>Operating standards</td></tr>
<tr><td>4 incidents of crushed or rolled up</td><td>Safety deficiency of equipment
Unsafe behaviors of employees</td><td>Operating standards, equipment improvement, and employee education and training</td></tr>
<tr><td>2 incidents of bumping</td><td>Unsafe behaviors of employees</td><td>Equipment improvement, employee education and training</td></tr>
<tr><td>1 incident of tripping</td><td>Failure to pay attention to surroundings</td><td>Layout rearrangement for storage area and employee education and training</td></tr>
<tr><td>1 incident of fall and rolling</td><td>Failure to pay attention to surroundings</td><td>Correction of operating standards</td></tr>
<tr><td>1 incident of collision</td><td>Failure to pay attention to surroundings</td><td>Equipment improvement and employee education and training</td></tr>
<tr><td rowspan="14">China Factories</td><td rowspan="5">Giant (China) Co., Ltd.</td><td>5 incidents of crushed or rolled up</td><td rowspan="5">Non-compliance, lack of protection, improper operation, etc.</td><td rowspan="5">Employee education and improvement on intrinsic safety of equipment</td></tr>
<tr><td>4 traffic accidents</td></tr>
<tr><td>2 injuries from heavy objects</td></tr>
<tr><td>1 incident of thermal burns</td></tr>
<tr><td>5 other accidents</td></tr>
<tr><td rowspan="7">Giant Electric Vehicle (Kunshan) Co., Ltd.</td><td>2 incidents of crushed or rolled up</td><td>Non-compliance and unsafe behaviors of employees</td><td rowspan="7">Employee education, improvement on intrinsic safety of equipment, traffic inspection and warning signs on relevant facilities</td></tr>
<tr><td>1 on-site traffic accidents</td><td>Low safety awareness</td></tr>
<tr><td>1 off-site traffic accidents</td><td>Low safety awareness</td></tr>
<tr><td>1 mechanical injury</td><td>Inadequate safety devices</td></tr>
<tr><td>1 incident of falling</td><td>Non-compliance and unsafe behaviors of employees</td></tr>
<tr><td>1 incident of being smashed by objects</td><td>Non-compliance and unsafe behaviors of employees</td></tr>
<tr><td>1 other incident</td><td>Non-compliance and unsafe behaviors of employees</td></tr>
<tr><td>Giant (Tianjin) Co., Ltd.</td><td>3 mechanical injuries</td><td>Non-compliance</td><td>According to the standard of operation</td></tr>
<tr><td>Giant (Kunshan) Co., Ltd.</td><td>6 mechanical injuries</td><td>Unsafe behaviors of employees</td><td>Improve the mistake-proofing mechanism of equipment, and employee education and training</td></tr>
</table>

Note 1: Statistics from our Taiwan factory were grouped together with ones from the Headquarters until 2020 (inclusive).

Occupational injury statistics between 2019 and 2022

Item \ Factory	Taiwan Factory				China Factories							
					Giant (Tianjin) Co., Ltd.				Giant (Kunshan) Co., Ltd.			
Year	2019	2020	2021	2022	2019	2020	2021	2022	2019	2020	2021	2022
Total hours worked	5,402,904	5,507,328	5,142,112	5,327,040	927,440	1,375,289	1,705,618	1,952,695	-	6,053,367	6,739,693	6,095,567
Number of fatal occupational injuries (persons)	0	0	0	0	0	0	0	0	-	0	0	0
Fatality rate of occupational injuries	0	0	0	0	0	0	0	0	-	0	0	0
Number of serious occupational injuries (persons)	1	0	0	0	0	0	0	0	-	0	0	0
Severity rate of occupational injuries	0.19	0	0.19	0	0	0	0	0	-	0	0	0
Number of recordable occupational injuries (persons)	13	11	10	18	5	0	0	3	-	11	16	6
Recordable disabling injury frequency rate (FR)	2.41	2.00	1.94	3.38	5.39	0	-	1.54	-	1.82	2.37	0.98
Number of working days lost (days)	104	98	132	107	23	0	-	26	-	224	714	162
Disabling injury severity rate (SR)	19.25	17.79	25.67	20.29	28.69	0	-	145.95	-	37.00	105.98	26.58
Frequency-severity indicator (FSI)	0.22	0.19	0.22	0.26	0.24	0	-	0.13	-	0.26	0.50	0.16

Item \ Factory	China Factories							
	Giant (China) Co., Ltd.				Giant Electric Vehicle (Kunshan) Co., Ltd.			
Year	2019	2020	2021	2022	2019	2020	2021	2022
Total hours worked	1,607,375	2,281,343	2,626,058	5,346,078	2,326,650.50	2,298,793.50	2,678,099.49	2,891,189.00
Number of fatal occupational injuries (persons)	0	0	0	0	0	0	0	0
Fatality rate of occupational injuries	0	0	0	0	0	0	0	0
Number of serious occupational injuries (persons)	0	0	0	0	0	0	0	0
Severity rate of occupational injuries	0	0	0	0	0	0	0	0
Number of recordable occupational injuries (persons)	16	20	13	17	5	7	6	9
Recordable disabling injury frequency rate (FR)	20.90	65.87	29.26	3.18	2.15	3.05	2.24	4.50
Number of working days lost (days)	179	292	185	305	338	98	171	61
Disabling injury severity rate (SR)	342.86	1092.69	499.78	57.05	145.27	42.36	63.66	20.93
Frequency-severity indicator (FSI)	2.25	6.56	3.17	0.43	0.56	0.36	0.38	0.26

Note 1: Serious occupational injuries in Taiwan factory were incidents of trip and fall.
Note 2: - indicates data loss due to equipment upgrade.
Note 3: Number of serious occupational injuries (persons): Occupational injuries resulting in death or inability of the worker to return to pre-injury health within 6 months.
Note 4: Number of recordable occupational injuries (persons): Occupational injuries or illnesses resulting from any of the following: death, absence from work, work restriction or change of job, beyond first aid medical treatment, loss of consciousness, or major injuries or illnesses diagnosed by a physician or other licensed health care professional.
Note 5: Number of working days lost (days): Number of persons × Number of working days
Note 6: Total hours worked: 8 hours × Number of persons × Number of working days
Note 7: Fatality rate of occupational injuries: Number of recordable occupational injuries (including the number of fatality) / Total hours worked × 1,000,000
Note 8: Severity rate of occupational injuries: Number of serious occupational injuries (excluding the number of fatality) / Total hours worked × 1,000,000
Note 9: Recordable disabling injury frequency rate (FR) = Number of disabling injury / Total hours worked x 1,000,000
Note 10: Disabling injury severity rate (SR) = Number of working days lost / Total hours worked × 1,000,000
Note 11: Frequency-severity indicator (FSI) =

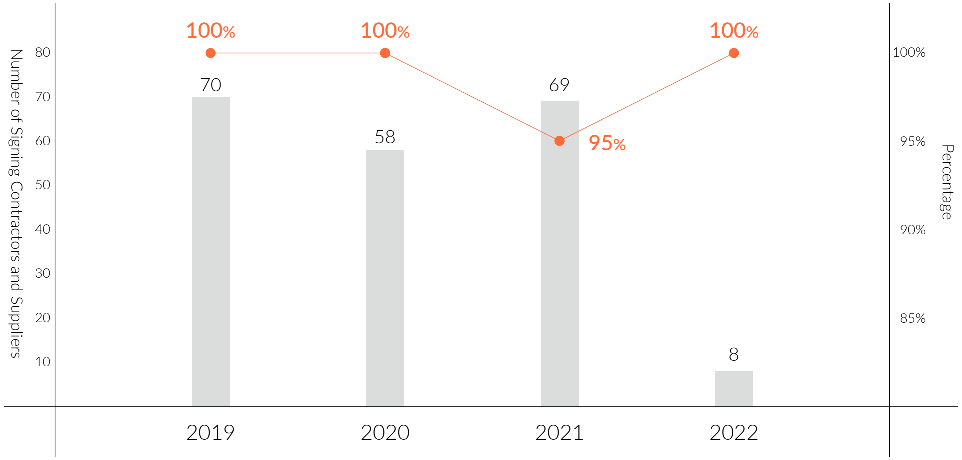
6.1.5.4 Contractor occupational safety management

Management Principle

Contractors are important partners of Giant Group and we attach great importance to the safety and health of each and every worker. Therefore, we have set up contractor management program in accordance with our standard operating procedures. In our Taiwan factory, contractors are required to sign the Rules Governing Safety and Health of Suppliers and Contractors. As for our China factories, we have Rules Governing Works by Contractors in place to safeguard the safety of the Company and all personnel and property involved. Furthermore, associated personnel shall clearly understand their own rights and responsibilities, as well as the Company's requirements and regulations to ensure work quality and discipline. The occupational safety personnel at our Taiwan factory collect regulatory requirements, cases of occupational accidents, and deficiencies from on-site audits on an ongoing basis, and conduct hazard education and training for the seeded personnel, in-charge persons, and supervisors of contractors on an annual basis. In 2022, a total of 35 seeded personnel of contractors in our Taiwan factory underwent contractor safety and health education and training. Suppliers are informed of relevant hazards and being asked to sign the hazard notification at the guardhouse prior to entering our premises. Our occupational safety personnel would enforce compliance with factory rules and conduct audits on factory access and the work of suppliers and contractors. In 2022, we identified six cases of non-compliance through the audits, with damage to wall, smoking in non-designated areas, and non-compliance with work regulations being the major items. Suppliers were immediately notified of the violations and improvements were made.

Number of contractors and suppliers signed the safety and health management rules - Taiwan factory

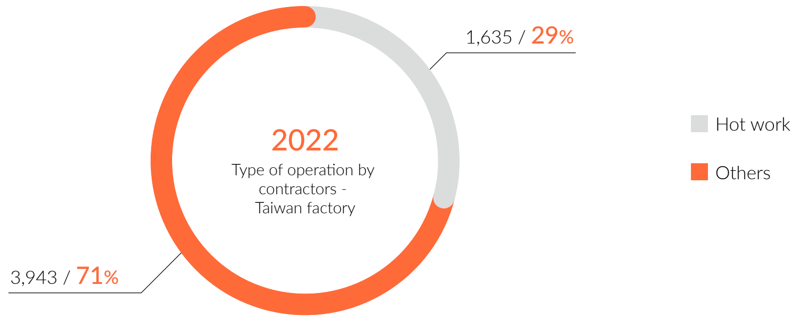
Year	Number of Signing Contractors and Suppliers	Percentage
2019	70	100%
2020	58	100%
2021	69	95%
2022	8	100%



In order to carry out safety management measures in high-risk areas where our contractors operate, such as the coating areas, we hold a preliminary meeting for hot work where we verify the operation and the need for hot work, and evaluate and discuss related protective measures to ensure the work is carried out in safe conditions, thereby minimizing potential hazards and risks.

2022 Type of operation by contractors - Taiwan factory

Type of Operation	Number of Operation	Percentage
Hot work	1,635	29%
Others	3,943	71%



2022 Contractor management and assistance programs

We demand and assist our on-site contractors (e.g., security guards, cleaners, waste vendors, shops, catering staffs, etc.) to strictly comply with local laws and regulations as well as safety and health management rules. In order to raise safety awareness, we organize regular safety and health education and training every year to ensure all personnel have sound safety and health knowledge. Also, we provide assistance programs for caterers to have health checkups in our factories, enhancing the convenience and willingness of people to participate in health checkups.

Location	Number of Personnel	Security Guards	Cleaners	Waste Vendors	Shops	Catering Staffs
Taiwan		6	8	5	0	9
China	Giant (Tianjin) Co., Ltd.	0	5	0	2	18
	Giant (Kunshan) Co., Ltd.	0	18	6	3	31
	Giant (China) Co., Ltd.	10	8	6	2	24
	Giant Electric Vehicle (Kunshan) Co., Ltd.	0	4	6	0	24

Note 1: Giant (China) Co., Ltd. and Giant Electric Vehicle (Kunshan) Co., Ltd. share the same catering staffs.

Requirements and assistance practices
1. Security guards: 1-1 Requirement: National police certificates are required prior to employment 2. Cleaners /waste vendors: 2-1 Requirement: (1) Reflective safety vests for safety reasons. Certificates for operating the forklifts. (2) Certificates for operating the equipment and machinery, regular inspection of equipment, and proper use of safety equipment to prevent occupational accidents. 3. Shops: 3-1 Requirement: Business licenses for operating the shops 4. Catering staffs: 4-1 Requirement: (1) Vendors shall perform inspections to examine the operating environment and practices. (2) To ensure personnel health, health checkup information shall be submitted annually: Catering staffs in our Taiwan factory can have their health checkups on-site. They shall also have the Hazard Analysis and Critical Control Point (HACCP) certificates. As for catering staffs in our China factories, health checkup certificates are required. (3) Protective gears are required for meal services and cooking (4) Catering staffs shall provide health certificates and take temperature measurements before entering the factories 4-2 Assistance program: The catering staffs of our Taiwan factory can have health checkups with our employees, eliminating the transportation risk and increasing the convenience and willingness.

Contractor Education and Training

In order to raise contractors' awareness of work safety, we regularly organize safety and health education and training for contractors. Through these training, contractors are able to understand the safety requirements and communicate them to their employees. This ensures that contractors have the proper safety awareness, which in turn improves the overall safety level of workplace.

2022 Contractor education and training (Taiwan Factory and China Factories)

Trainees	Direction and Purpose
Contractor's seeded personnel, in-charge persons and internal and external supervisors	Contractor education and training: Hazard notification - Our Taiwan factory provides safety and health education and training, targeting contractors' seeded personnel, who then pass on the training to their colleagues to achieve operational safety with zero accidents. Contractors of our China factories would watch video recordings of safety requirements and restrictions at our "contractor training base" before entering the factories. They shall sign statements confirming that they have completed the training before they can enter the premises. Work safety agreement - clarify the responsibilities of parties involved Internal regulations on operation management - clarify operational process and safety requirements

Training Effectiveness in 2022				
Giant Manufacturing Co., Ltd.	Giant (Tianjin) Co., Ltd.	Giant (Kunshan) Co., Ltd.	Giant (China) Co., Ltd.	Giant Electric Vehicle (Kunshan) Co., Ltd.
10 contractors attended with 35 participants	0 contractors attended with 0 participants	44 contractors attended with 70 participants	42 contractors attended with 69 participants	14 contractors attended with 26 participants

6.1.6 Employee Health Management

6.1.6.1 Occupational health services

Giant is committed to creating a safe and healthy work environment. Not only do we have a comprehensive health management strategy, but we also provide a quality health screening mechanism that goes beyond regulatory requirements. We ask all employees to undergo health checkups every three years, including both general and special health checkups, in accordance with the laws and regulations. Through data analysis, we are able to understand and track the health status of our employees on a regular basis. Maintaining good health not only improves work performance, but also helps to retain good talents.

Management Principles				
Employee health care and health promotion	Occupational injury and disease prevention	Employee physical and mental health protection	Prevention of infectious diseases	Enhancement of employee health quality

Health Checkups

General Health Checkups

Item	Factory		2019	2020	2021	2022
Health checkups for new recruits	Giant Manufacturing Co., Ltd.	Number of eligible employees	254	193	245	359
		Number of employees examined	254	193	245	359
		Participation rate	100%	100%	100%	100%
Health checkups for employees	Giant Manufacturing Co., Ltd.	Number of eligible employees		2,437		
		Number of employees examined		2,437		
		Participation rate		100%		
	Giant (Kunshan) Co., Ltd.	Number of eligible employees			331	129
		Number of employees examined			331	129
		Participation rate			100%	100%
Health checkups for management	Giant (Kunshan) Co., Ltd.	Number of eligible employees	10	10	10	9
		Number of employees examined	10	10	10	9
		Participation rate	100%	100%	100%	100%

Note 1: General health checkups are carried out once every three years at the Giant Manufacturing Co., Ltd. and the Giant (Kunshan) Co., Ltd.

Note 2: Special health checkups were not carried out at Giant (Tianjin) Co., Ltd. prior to 2019 (inclusive).

Note 3: Employee data are based on employees of these companies before December 31 of the year.

Special Health Checkups

Factory		2019	2020	2021	2022
Giant Manufacturing Co., Ltd.	Number of eligible employees	887	940	908	1,038
	Number of employees examined	887	940	908	1,038
	Participation rate	100%	100%	100%	100%
Giant (Tianjin) Co., Ltd.	Number of eligible employees		711	678	855
	Number of employees examined		711	678	855
	Participation rate		100%	100%	100%
Giant (Kunshan) Co., Ltd.	Number of eligible employees	473	537	559	651
	Number of employees examined	473	537	559	651
	Participation rate	100%	100%	100%	100%
Giant (China) Co., Ltd.	Number of eligible employees	1,027	912	811	966
	Number of employees examined	1,027	912	811	966
	Participation rate	100%	100%	100%	100%
Giant Electric Vehicle (Kunshan) Co., Ltd.	Number of eligible employees	326	339	345	421
	Number of employees examined	326	339	345	421
	Participation rate	100%	100%	100%	100%

Classification Management for Special Health Checkups

Giant Group provides employees in Taiwan and China special health checkups based on hazards they are exposed to during operations pursuant to regulatory requirements. Employees with health concerns identified during the checkups would be subject to classification management. In our Taiwan factory, health management is divided into four levels and implemented in accordance with regulatory guidelines.

2022 Classification management for special health checkups -Taiwan factory

Hazard Category	Health Management							
	Level 1		Level 2		Level 3		Level 4	
	Persons	%	Persons	%	Persons	%	Persons	%
Noise	553	60.3%	247	26.9%	0	0%	109	11.8%
Dusts	390	83.6%	74	15.8%	0	0%	0	0%
n-Hexane	11	100%	0	0%	0	0%	0	0%
Manganese and its compounds	103	98%	2	2%	0	0%	0	0%
Ionizing radiation	3	60%	2	40%	0	0%	0	0%

Improvement Schemes
Health guidance - For employees classified to be in Level-2, personal health guidance shall be provided in accordance with the law when occupational physicians offer on-site services. For Level-3 employees, they shall be arranged for reexaminations at occupational medicine department in hospital together and be reclassified. Their results shall be reported as required by law. For Level-4 employees, we would emphasize the importance of protective gears and regularly report to the safety committee for the management to assist with project improvement, thereby reducing the source of noise.

Note 1:

Description of each level: Level 1 management: The results of special health checkups or follow-up examinations are normal in all items or abnormal in some items, and the results are deemed as normal by doctors upon comprehensive reviews. Level 2 management: The results of special health checkups or follow-up examinations are abnormal in some or all items, and the results are deemed as abnormal and unrelated to work by doctors upon comprehensive reviews. Level 3 management: The results of special health checkups or follow-up examinations are abnormal in some or all items, and the results are deemed as abnormal by doctors upon comprehensive reviews. However, the relevance between abnormality and work cannot be confirmed and shall be further evaluated by occupational medicine specialists. Level 4 management: The results of special health checkups or follow-up examinations are abnormal in some or all items, and the results are deemed as abnormal and work-related by doctors upon comprehensive reviews.

Hazard types in our China factories are different due to different operations. To protect the health of our employees, we conduct health management by individuals based on their operating environment. In 2022, a total of 2,620 employees were under the health management system.

2022 Classification management for special health checkups - China factories

Location	Factory	Persons
China	Giant (Tianjin) Co., Ltd.	855
	Giant (Kunshan) Co., Ltd.	378
	Giant (China) Co., Ltd.	966
	Giant Electric Vehicle (Kunshan) Co., Ltd.	421
Total		2,620

Improvement Schemes			
Add dust hood	Change from oil-based paints to water-based paints	Add cooling unis	Wear protective gear

Note 1: Special health checkups were not carried out at Giant (Tianjin) Co., Ltd. prior to 2020.

Prevention of Occupational Diseases

In order to protect the physical and mental health of employees, we have established four major programs for labor health protection pursuant to laws and regulations at our Taiwan factory, namely the “high risk of illness induced by excessive workload”, “prevention of ergonomic hazards”, “prevention of rights infringement at work” and “maternal health protection at workplace.” We regularly track and monitor employees at risk; prevent cardiovascular disease due to long working hours, musculoskeletal disorders, and workplace violence; and implement maternal health protection. To prevent diseases induced by abnormal workloads such as working in shifts, working at night, and working for an extended period of time, we use assessment models to evaluate high-risk employees for cerebrovascular, cardiovascular, and musculoskeletal disease risks over a 10-year period. In 2022, there were no cases of occupational diseases identified at our Taiwan and China factories in 2022.

Four major labor health protection programs - Taiwan factory

Item	Actions	Follow-up Items/People			
		2019	2020	2021	2022
High risk of illness induced by excessive workload	Workload assessments for “overworking assessment and preventive counseling” were carried out for employees with more immediate risks, such as a risk level > 20% based on the Framingham Risk Score or three-hypers from the regular health checkups of the Company. * Follow-up item: Risk level of work-induced cerebrovascular and cardiovascular disease at 20% or above	0 people	17 people	12 people	5 people
Prevention of ergonomic hazards	Selection of high-risk (i.e., unacceptable risk) identified through ergonomic hazard risk assessment on the basis of annual safety and health hazard identification and risk assessment. * Follow-up item: Hazard level based on the musculoskeletal injury survey at possible hazard or above	0 people	0 people	1 person	1 person
Maternal health protection at workplace	Labor safety personnel and factory nurses would conduct hazard assessments at the workplace of employees during pregnancy and within one year after childbirth, and assist them in self-health assessment for the occupational physicians to perform comprehensive hazard assessments at the end. * Follow-up item: Hazard risk of maternal health protection at Level-2 management or above	14 people	19 people	20 people	16 people
Prevention of rights infringement at work	The Company conducts hazard identification and risk assessment for rights infringement at work on the basis of annual safety hazard identification and risk assessment. * Follow-up item: Hazard identification and risks for the prevention of rights infringement at work at medium risk or above	0 item	0 item	0 item	0 item

Health Promotion

We care for the physical and mental health of employees through health promotion activities, including in-person consultation and seminars. Tungs' Taichung Metroharbor Hospital is our contracted hospital for Taiwan factory. Their occupational physicians provide on-side health services six times a month. Their time of service is announced monthly through the bulletin board for employees needing the service to come freely. We also arrange several employees to carry out hygiene guidance and assessment each time. In 2022, we set up the online counseling appointment platform for employees to have easy access to health counseling and the Employee Assistance Program (EAP). A total of 52 employees in the Headquarters at the Central Taiwan Science Park have used the counseling service.

Taiwan Factory

Programs	Description	Year/Effectiveness			
		2019	2020	2021	2022
On-site occupational physicians	General health education and counseling, health promotion, interviews of abnormal cases, follow-up management, tracking of blood pressure and glucose	623 participants	614 participants	443 participants	396 participants
Injury and disease management	Monitoring of occupational disaster cases	7 participants	6 participants	7 participants	2 participants
Ergonomic hazards prevention program	Investigation of musculoskeletal pain and monitoring of abnormal cases	Monitoring: 71 participants	Monitoring: 31 participants	Monitoring: 4 participants	Monitoring: 25 participants
Prevention of illness induced by excessive workload	Risk assessment and monitoring of high-risk cases	Monitoring: 32 participants	Monitoring: 15 participants	Monitoring: 50 participants	Monitoring: 44 participants
Health protection program for female employees	Employee during pregnancy and within one year after childbirth: Operation risk assessment, health consultation, and health risk assessment and health education by occupational physicians	Health interview: 74 participants	Health interview: 77 participants	Health interview: 48 participants	Health interview: 50 participants
Health seminar	Seminars on AED and health-related topics	76 participants	0	0	0
Prevention of infectious diseases	Understanding and control of COVID-19	We have implemented the following measures since 2020: Strengthen employee education in line with government policies Record the number of employees returning from high-risk areas and stay in self-isolation Establish the "Employee Epidemic Response Measure and Management Guideline" Employees report body temperature and health status on a daily basis Adopt automatic temperature measuring instruments for monitoring purpose			

Note 1:

The decrease in the number of participants for on-site occupational physicians in 2021 was due to the change of physicians, who stress the importance of employees' overall well-being rather than a single health condition and allow a longer consultation time per person; thus, the total number of participants had decreased.

Factory		Programs	Year			
			2019	2020	2021	2022
China Factories	Giant (Kunshan) Co., Ltd.	On-site health services	N/A	40	30	0
		First aid training	40	45	51	16
	Giant (China) Co., Ltd.	Health seminar	32	25	26	10
	Giant Electric Vehicle (Kunshan) Co., Ltd.	Occupational health training	678	725	762	870
		First aid training	N/A	N/A	N/A	10

Note 1: These programs have yet to be implemented in Giant (Tianjin) Co., Ltd.

6.2 Supply Chain Diversity

6.2.1 Bicycling Alliance for Sustainability (BAS)

As global climate change intensifies and the risk of extreme weather rises sharply, ESG has become an inevitable issue for all enterprises and even the mankind. The energy-saving and eco-friendly bicycle industry plays a vital role in the discussion of sustainable development of the earth, and being in a dominant and influential position in terms of the future trends and directions of the global cycling industry, the cycling industry chain of Taiwan shall certainly be part of the discussion. In order for us to remain a key player in the global bicycle industry and for the sustainable operation of the industry, Giant Group is committed to supporting local suppliers to establish a more diversified supply chain, and actively implements high supply chain standards to grow together with the suppliers.

In June 2022, Giant Group and key leaders in the cycling industry jointly proposed ESG initiatives for the industry and established the Bicycling Alliance for Sustainability (BAS), an exclusive platform for the industry chain.

At the end of the same year, the BAS inaugural meeting was officially held on December 22, with 66 key players in the cycling industry chain committing to fulfill the six BAS responsibilities, which cover the three major aspects of ESG:

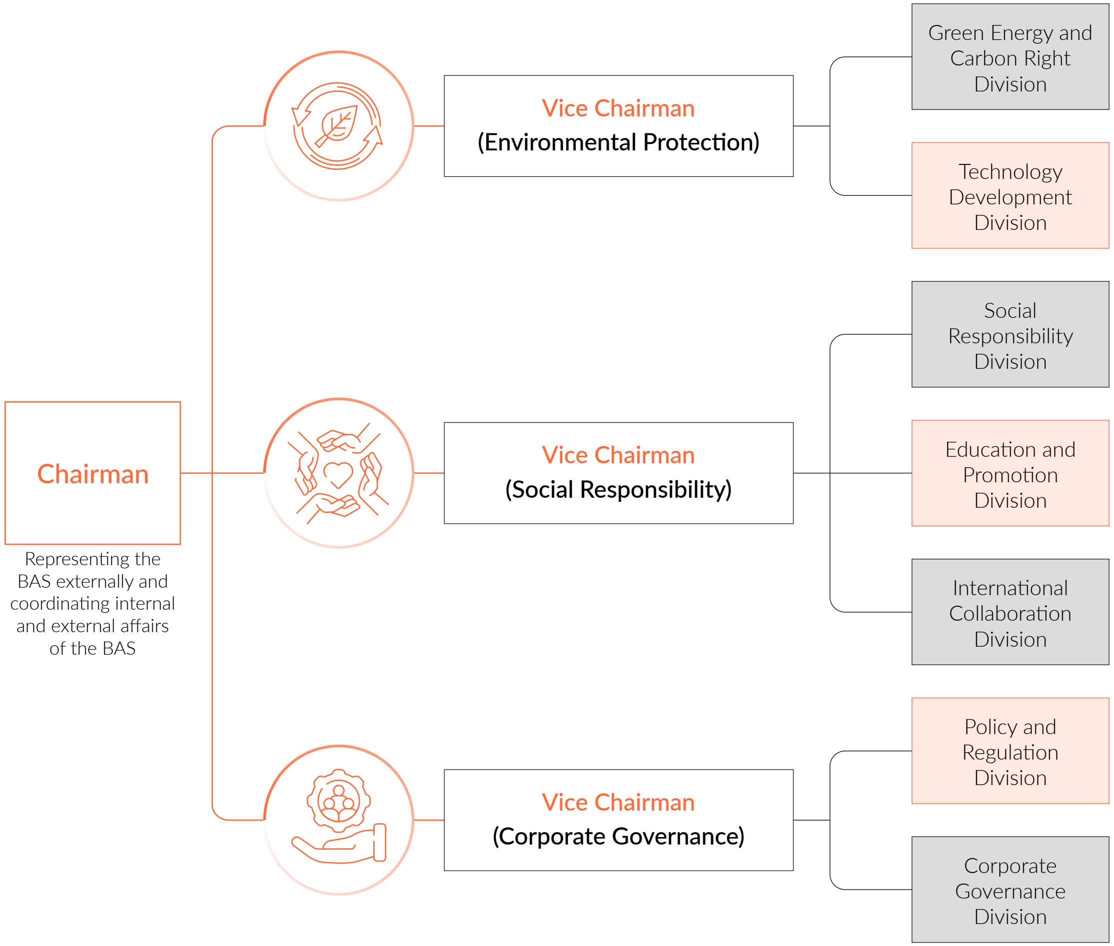
BAS Mission and Tasks

- Guiding the bicycle industry to become a green and sustainable industry
- Prioritizing efforts to reduce carbon emissions from bicycle consumption and production
- Making bicycles true green products

- Collaborating with internal and external resources of the industry
- Leading the supply chain in low carbon transition
- Internalizing ESG standards for the bicycle industry
- Promoting ESG initiatives to consumers
- Research and discussion on other ESG issues of the cycling industry

Environmental	Social	Governance
· Perform GHG inventories (for Scopes 1 and 2 at least) covering no less than all factories controlled by the Group or 70% of the Group's business activities. · Commit to annual carbon reduction of 3% at least, with the reduction target of 25% or 40 kilograms per bicycle by 2030.	· Sign the International Bill of Human Rights (protection of the rights to humane treatment and working environment, freedom of association, gender equality, free of discrimination, forced labor, harassment and child labor, promotion of physical and mental well-being of employees, etc.), and safeguard the rights and interests of employees through regular audits. · Involve in the maintenance of bikeways.	· Disclose ESG information on the English official websites of BAS member companies, presenting open, transparent, and stable sustainable developments. · Supply chain engagement every year, where members request ESG promotions by upstream companies.

While encouraging members to fulfill their responsibilities as members and develop sustainability actions, the BAS also assists members in learning and implementing ESG work through the seven functional units within the organization. Members would elect a chairman and three vice chairmen to promote BAS works. In the inaugural meeting which was also the first general meeting of the BAS, Young Liu, the CEO of Giant Group, was elected by all members to be the first chairman of the Alliance. As of the end of March 2023, the BAS members have completed the education and training related to GHG inventory, and more than 50% of the members have completed or are in the process of conducting a GHG inventory. Comparing to our two-year targets, we have progressed significantly ahead of schedule.



- **Green Energy and Carbon Right Division**
  Promote and establish the Alliance's response strategies on various environmental issues such as climate change, natural resources, GHG emissions, product carbon footprints and environmental risks; acquire carbon rights of bicycle; discuss carbon neutrality plans including green electricity, carbon rights, and carbon offsets
- **Technology Development Division**
  Collect data on sustainability-related international standards and norms and international benchmarking cases; discuss the sequence of sustainability-related actions, feasibility plans, and execution methods
- **Social Responsibility Division**
  Promote and establish the responsibilities of members on social issues such as human resources, products and services, customer participation, community participation, and supplier management
- **Education and Promotion Division**
  Collect and manage knowledge related to sustainability; organize activities such as lectures, education and training, and visits
- **International Collaboration Division**
  Promote international exchanges and build the industry's international image
- **Policy and Regulation Division**
  Collect information on sustainability-related policies, laws and enforcement rules; assist the government in amending relevant policies and laws
- **Corporate Governance Division**
  Promote and establish mechanisms for corporate governance issues such as corporate governance, corporate behavior, and business sustainability

The BAS collects policies and laws, provides professional counseling courses, initiates technical discussions on industry sustainability, promotes carbon rights and carbon neutral solutions for bicycles, establishes corporate governance mechanisms, and organizes visits to leading companies as well as cross-border communications for members. These actions align the cycling industry chain with the trends and realize the goals of carbon reduction in product design and manufacturing for low-carbon transition of the industry.

With domestic regulations and international standards both set the goal of environmental sustainability, we hope to build a comprehensive ESG ecosystem for the bicycle industry through ESG actions of our members and the work of the BAS.

6.3 Diverse Environments

6.3.1 Diverse Sponsorship of the Cycling Teams

As a leading cycling company, we believe it is our social responsibility and mission to sponsor cycling teams and cyclists. Our vision is to build a society that promotes gender equality and culture inclusiveness, and provides equal sporting opportunities. By sponsoring a cycling team, we strongly believe that we can promote gender equality, encourage women to participate in cycling and break down conventional restrictions of gender. Through sponsorship, we hope to inspire more women to discover their potential in sports and provide them with equal resources and support for everyone to realize their dreams in cycling. At the same time, this sponsorship also promotes culture inclusiveness. We encourage cyclists of different ethnicities and backgrounds to participate in order to promote understanding and respect for different cultures. We believe that such cultural diversity can enrich the sporting world, foster international exchange and cooperation, and break down barriers among races and cultures. Through our continued support of cycling teams, we strive to create a more equal and inclusive social environment. We believe that everyone shall have an equal opportunity to participate in sport, regardless of gender, race or background. We hope that this kind of sponsorship would ignite people's passion for sports, conveying the values of equality and diversity for a more harmonious and united society.

In addition to cycling, we began sponsoring triathletes (swimming, cycling, and running) back in 2014. After we sponsored Gustav, the current Ironman Kona world champion, at the end of 2019, we started to sponsor athletes of different distances, including the Olympic distance of 51.5 kilometers, the 70.3 Half Ironman and the Ironman. We also sponsor triathletes in different categories, such as cross-country triathletes and triathletes with disabilities. Through CADEX, our premium component brand, we sponsor cyclists sponsored by other cycling brands. These athletes use our triathlon bicycles - Giant Trinity and Cadex Tri and ride with CADEX wheelsets, CADEX tires and GIANT helmets. In the last three years, they have won two IRONMAN world championships, three IRONMAN 70.3 world championships, one Olympic gold medal, the Sub7 Challenge, and numerous victories.

1. Giant Sponsors the Black Foxes (Multi-Ethnic Cycling Team)

learn more

Cycling Team	Introduction/Sponsorship
Giant Columbus Cycling Team	Introduction: The Columbus Cycling Team was founded in 1996 by Sean Huang, the former national cycling champion. Over the years, the team has nurtured a number of top riders, and is one of the well-known origins of cycling sport in northern Taiwan. Based at the Tianmu Gaochang bicycle shop, it is the only club team that continues to dedicate itself to this competitive sport on a store basis.
Team Jayco Alula	In 2022, Giant announced its return to professional road racing as a partner of Team BikeExchange-Jayco, a UCI WorldTour-registered cycling team. Giant would sponsor bicycles and gears for the men's team with a focus on the Grand Tours, one-day classic and other top-tier road races, while the women's team is sponsored by Liv, the female cycling brand of the Group. Sponsorship: Team Jayco AlUla would race with Giant bicycles for all competitions, including the TCR Advanced SL Disc road bike, Propel Advanced SL Disc aero road bike, and Trinity Advanced Pro (TT bike). All bicycles would be equipped with CADEX WheelSystems while riders would use Giant helmets, including the Rev Pro and Pursuit TT. The athletes will work with Giant engineers in the future to develop and test more brand-new bicycle products.

Cycling Team	Introduction/Sponsorship
Giant Factory Off-Road Team	As the MTB races continue to grow and evolve with the world, so does the Giant Factory Off-Road team. This year the team has 12 riders competing in a variety of races, including downhill, enduro, XC, Gravel and E-MTB.
Triathlon	We began sponsoring triathletes in 2014. After we sponsored Gustav, the current Ironman Kona world champion, at the end of 2019, we started to sponsor athletes of different distances, including the Olympic distance of 51.5 kilometers, the 70.3 Half Ironman and the Ironman. We also sponsor triathletes in different categories, such as cross-country triathletes and triathletes with disabilities. Through CADEX, our premium component brand, we sponsor cyclists sponsored by other cycling brands. Sponsorship: GIANT Trinity, CADEX Tri, CADEX Wheelset, CADEX Tires, GIANT Helmet, etc.
Gravel	From remote deserted highways to unmapped singletrack, they're out there. In the middle of nowhere and on their way to somewhere new. Giant's gravel collective is a group of privateers with diverse sporting backgrounds that have all answered the call of Gravel - the newest frontier in cycling. A band of racers united by a love for wide-open spaces, grandiose routes, and the camaraderie of a sport that is often as much about overcoming a course and conditions as it is about outlasting the competition. All of them train and race on Giant's Revolt range of gravel bicycles.
The Black Foxes	The Black Foxes is an international collective of Black cyclists - group brought together by a love of the outdoors and a mission to welcome more Black people into outdoor spaces. It's a mission we can all get behind. Together, the Black Foxes and its partners are taking the necessary steps to create a cycling industry where Blackness is normalized, leadership is reflective of the multicultural world we live in, and pathways exist for Black people to connect and experience the joy of cycling.
Ambassador Community	From the roads to the trails and across the globe, our team of ambassadors is all about community and connections. These riders come from a wide variety of backgrounds and cultures, but they all have one thing in common: sharing their passion for cycling. From advocacy to education and to sharing inspiring stories from around the world, we can always count on them to get us motivated to ride.
Freeride	From the steep cliffs of the Utah desert to urban street contests around the world, Giant Freeriders travel the globe in search of the best trails and competitions to showcase their skills. They compete, they do film and magazine shoots, and they ride to inspire us.




2. Liv Sponsors the Women's Team

learn more

Cycling Team	Introduction/Sponsorship
Taichung Women Cycling Team	With more than 20 years of experience as a cyclist, Ke-Xin Tseng is not only an athlete but also a cycling coach at the National Taiwan University of Sport. She continues to challenge herself after getting married and becoming a parent. Despite having the dual identities of a mother and an athlete, she keeps on proving her competence in the cycling field with exceptional performance. Sponsorship: Switching to Liv's brand-new aero road bike, EnviLiv, in March 2023 for the new season, the Liv-sponsored cyclist - Ke-Xin Tseng immediately won the first victory in the 96CyclingRace on the 19th.
Team Jayco Alula	Liv continues its commitment to women's cycling and becomes a technical partner of Team Jayco AlUla (women's team). Sponsorship: Liv provides the women of BikeExchange-Jayco with the finest road racing products, including the Langma Advanced SL Disc, Rev Pro helmet, and Attacca TT helmet. The athletes will work with Liv in the future to develop the latest female cycling products.
Liv Factory Racing	Liv Factory Racing is our UCI World Cup cross-country (XCO, XCC) mountain bicycle team. Sponsorship: These women will compete on the world stage with the Liv Pique.
Liv Racing TeqFind	Liv Racing TeqFind is a professional UCI-registered women's cycling team competing in top-level road and cyclocross races. Sponsorship: In 2021, Liv became the title sponsor of the team, designing the team's striking new aubergine kit which is manufactured by Cuore, a top Swiss cycling kit company. The Liv Racing TeqFind will be riding Langma, EnviLiv and Brava models and use CADEX components for all the major and minor races throughout the year.
Liv Racing Collective	Sponsorship: The women of Liv Racing Collective would be riding Liv bicycles including EnviLiv, Avow, Langma, Devote, Brava, Hail, Pique, and Intrigue.
The Black Foxes	The Black Foxes is an international collective of Black cyclists - group brought together by a love of the outdoors and a mission to welcome more Black people into outdoor spaces. It's a mission we can all get behind. Together, The Black Foxes and its partners are taking the necessary steps to create a cycling industry where Blackness is normalized, leadership is reflective of the multicultural world we live in, and pathways exist for Black people to connect and experience the joy of cycling.
Liv Ladies AllRide	Ladies AllRide is a movement dedicated to growing the community of female mountain bikers across the globe. Professional mountain biker and skills instructor Lindsey Richter travels the globe helping women to face fears, believe in themselves and get RAD on their mountain bikes. Together with her business partner Meredith Brandt (Grit Clinics, LLC), they run a series of energizing and inspirational mountain bike skills camps for women: Liv Ladies AllRide. Complete with the best coaches in the business, these events bring women together in a welcoming environment to enhance their lives on and off the bicycles. There are signature Ladies AllRide events in epic riding locations across the U.S and around the world.

GIANT Grassroot Program

The Grassroot Program started in 2023 with seven athletes from six countries, including ones from Africa, Asia and Europe. They were sent for two weeks of intensive training with Team Kern Pharma/Team Finisher in the Basque Country in northern Spain. By spending time with athletes from different countries and cultures during training, living together, exchanging ideas and learning from each other, athletes would gain increasing understanding and respect for different cultures. Through the potential riders training program, cyclists from countries that are less developed and have fewer growth opportunities can enjoy a better environment and training as well as more opportunities to be seen by top-level teams. The cycling sport can also be further promoted around the world.

6.4 Diverse Initiatives

6.4.1 Blueprint for Welfare Strategy

Theme	Vision	Focus	Target and Partner	Social Impact
Climate philanthropy	We advocate for climate related welfare programs that educate people about climate change.	Environmental action and education	· Colleagues · Cyclists · The government and non-profit organizations · Communities	· Energy saving and carbon reduction · Ecological diversity
Female riders	Giant Group aims to lower the barriers to the cycling industry by encouraging women of all ages to realize their potential and pursue their passions.	Self-realization of women	· Cyclists	· Increase the visibility of female athletes · Promote self-realization of women
Promote cycling	Giant Group brings young people to enjoy the fun of cycling through community involvement, and develops bicycles for all ages to initiate the cycling trend.	Promotion of cycling activities	· Children · Teenagers · The public	· Promote healthy living · Promote cycling culture
		Bicycle education	· Students	· Enhance safety education and awareness
		Industry talent development	· Students · Taipei Bar Association	· Nurture talents · Assist with employment opportunities · Enhance work competencies

6.4.2 Climate Philanthropy

Promote climate philanthropy, accumulating enormous force through small actions.

Support local communities, having in-depth discussions on climate issues with local organizations.

We promote climate-related charity initiatives that help to better educate people about climate change. Through publicity and awareness campaigns, we can convey important messages about climate changes to the public to generate interests and actions on environmental issues. These initiatives include promoting energy conservation and carbon reduction, advocating the use of renewable energy, and supporting climate protection organizations. Through these efforts, we can work together to protect the Earth and promote sustainability for future generations to enjoy a better living environment.

Climate Initiatives for Giant's 50th Anniversary

G'Day	Sustainable 99 - Green to Work	Green Ride
All partners were invited to ride from the office, passing through the Squirrel Slope of Taichung Bikeways to arrive at the Taichung Metropolitan Park. During the guided tour, participants gained better insights into ecological restoration. They started with identifying and preparing the soil, moved on to actually touch the land, and later took part in planting saplings and tidying up the Taiwan lily garden.	Cyclists from all over Taiwan were invited to participate in green commuting. The campaign promoted cycling to work once a week to achieve at least 100,000 kilometers in distance, which was equivalent to planting 1,000 trees. The activity expanded participation in a carbon-reducing lifestyle.	The activity called on nearly 600 cyclists to ride back "home" (the Giant Group Headquarters). The concepts of reuse and simple packaging were implemented throughout the event. For food preparation, we communicated with contracted stores to avoid extra packaging and use reusable boxes for delivery. Riders may also use their own containers for food. The objective was to reuse existing resources through proper planning. Riders were also invited to use the utensils distributed as well as their own water bottles. For every event that requires a lot of resources, Giant, as the organizer, would be more proactive in planning and working with all participants to have fun riding while working together for sustainability.

Sustainable 22

The year 2022 was the 50th anniversary of Giant Group and our first year of ESG as well, which meant that Giant Group encouraged every employee to implement ESG actions in their lives and at work, in order to achieve true "sustainability". The Group started with forging consensus among employees in June by launching the Sustainable 22 initiatives within the Group. By the end of 2022, we formally established the "Giant Group Sustainability Seeded Team" in order to expand and sustain the sustainability spirit within the organization. The Team aims to unite the creativity and strength of employees in creating a more profound sustainability impact.

Sustainable 22

1	Turn the lights off when leaving the work station	12	Car-pool commuting
2	Turn the power off when getting off work	13	Set computers to power saver mode (e.g., battery efficiency, hibernate mode when going idle, etc.)
3	Set air conditioners at 25 degrees Celsius or above	14	Eco setting for printing (e.g., printing in black and white, use reduced size printing, duplex printing, etc.); reuse printing papers
4	Take the stairs instead of elevators for distance within three floors	15	Exchange second-hand items
5	Finish all food	16	Share office supplies
6	Use recyclable utensils	17	Reuse packaging materials such as cardboard boxes and envelops
7	Have one less hand-shaken drink every week	18	Use digital business cards instead of paper ones
8	Ban the use of disposable straws	19	Use eco-friendly dishwashing detergent and apply effective dishwashing skills
9	Go digital instead of printing	20	Turn off the lights during the one-hour lunch break
10	Use reusable shopping bags instead of plastic bags	21	Refill ballpoint pens
11	Cycling to work one day every week	22	Use rechargeable batteries

Local forest restoration

In 2022, we signed a "Memorandum of Understanding on the Establishment of Firebreaks in Taichung City" with the Fire Bureau of Taichung City Government and Taiwan Reforestation Association. Through the tripartite cooperation, the Giant Group provides fundings for the Fire Bureau to evaluate and select the location of firebreak while the Office of Disaster Management coordinates various land control units to agree on the use of firebreak. The Taiwan Reforestation Association provides guidance on the planting of fire-retardant plants to improve the fire safety of the mountain slopes. We all work together to contribute to environmental conservation. We protect the natural forests of Dadu Mountain and Tieh-Chen Mountain in Taichung, where the Group is located, to achieve forest restoration and mitigate air pollution of hill fires to create a livable and excellent cycling environment.

In response to the call for environmental protection, our Taiwan factory proactively creates friendly community environment

The Company regularly organizes community cleanup since 2017. In 2022, our President, Huo-Ming Wang, led 400 employees to clean the area within a 3-kilometer radius of our factory for community engagement and environmental protection as part of our corporate social responsibilities. Employees bent down to pick up cigarette butts hidden in the bushes on the roads around the factory, removed thick weeds, and scooped up the garbage floating in the ditches. It took more than 2 hours for 400 employees to clean and tidy up the environment. Although the weather was hot and everyone was sweaty, the participating employees said that they learned the importance of environmental protection through the cleanup, and that it was a hard but rewarding experience. Residents in the vicinity also appreciated Giant's actions of being neighborly and caring for the environment.

Column Story

The Giant Forest - Tree Planting Program

Giant Group has been paying close attention to environmental issues for many years and continues to improve the ecological environment via different means.

Our sales company in Italy, Giant Italy S. R. L, found an ideal partner in Treedom, who provides an online platform for sustainable and environmental projects in an innovative way. Users can plant trees remotely and bring long-term benefits to the society and the environment.

This time, Giant Group and Treedom have started a project called "The Giant Forest". Initially, the Giant Forest is consisting of 500 trees that are planted in different parts of the world to redevelop the environment. The trees planted are monitored on an ongoing basis and can be viewed at any time through the online website.

More information on "The Giant Forest" is available at https://lnkd.in/dY6KmVb4

6.4.3 Female Riders

Achieve more equality in cycling
Encourage women to ride, explore themselves, and be resilient, determined and confident

Whether it's for fun, adventure or freedom, everyone shall have the opportunity to ride a bicycle. However, when Bonnie Tu, our Chairperson, failed to find suitable bicycles and gears in the market, she realized that she would not be the only woman who encountered this problem. We established Liv Cycling in 2008, following Giant's longtime dedication in Taiwan. Being the world's first female cycling brand, it provides cycling-related products, services, and trainings from a female perspective, and strives to make cycling friendly to women all over the world.

Designed exclusively for women, we want every woman's cycling experience to be perfect from the start

Liv is the only female-driven brand from research and development, design, manufacturing to production of bicycles, ensuring that each bicycle is fully in line with the concept of "exclusively for women". We start with women's data in our designs of frame sizes, focus on the selection and development of female-friendly components and suspension adjustments, and emphasize the design of women's bicycles and apparels. Liv actively works with many professional female riders around the world, inviting them to test the bicycles in person and give suggestions and feedback until the finished product is close to perfection and riders can enjoy a better riding experience as they feel relieved and relaxed during cycling. At the same time, we have developed a team of engineers, product designers, and marketing team, where women are in crucial positions to improve the cycling conditions and provide the right equipment for all women. In the past, Asian women have to be taller than 163cm to ride a road bike with curved handlebars. Thanks to the efforts of Liv's engineers and industry partners, women can now safely ride road bikes with curved handlebars if they are 153cm or taller, making it easier for women to enjoy the beauty of cycling.

Introduce female role models to help girls fall in love with cycling

It is true that most road cycling and mountain biking sports are still dominated by men, and we rarely see coverage and information about female strength and female athletes on the mainstream media, which implicitly conveying the idea that women are more fragile. We have long been sponsoring female professional cyclists and teams, encouraging girls to take on cycling. We also keep them involved and stop comparing the performance of different genders. We find the right information on female cycling and sports from non-mainstream books and articles, provide interview details of professional female riders and athletes to hear about their inner thoughts and courage as well as how they do amazing and impressive things on their own terms, and build a healthy environment for girls to ride and enjoy sports. After all, cycling builds courage, resilience and confidence.

Liv assembled to create a friendly women's cycling club (Liv Cycling Club)

A total of 740 members at present and growing

To realize your dreams, you need to "hope" constantly, and hope requires positive thinking and not giving up. The key to active living and removing obstacles is to find a welcoming community that empowers and provides diversity and camaraderie. Therefore, we have established a friendly women cycling club. With invitations to rides or introductions to cycling clothing by a number of opinion leaders, we encourage members to share their experience, exchange the skills and training needed for cycling and bicycle maintenance, etc. Through safe interpersonal connections, we can attract more cycling activities and participations in competitions, laying the foundation for a women's cycling environment. We believe in supporting each other to enhance women sports, extend the warmth of the cycling community, and enjoy all the positive benefits of exercise, whether physical, mental, or social ones. We can be top athletes, working moms, and faithful partners. We take every opportunity that comes our way and also encourage women to grasp every opportunity.

Liv Committed

Liv Founder Bonnie Tu successfully completed the Women's Tour de France Amateur Challenge

Ms. Bonnie Tu, Liv's Founder and Chairperson of the Giant Group, demonstrated her tenacity and strength in joining the Women's Tour de France Amateur Challenge and completed the 66-km challenge which finished in Bar-sur-Aube, France. She was well prepared beforehand. Although most of her training rides were done on a trainer, she practiced multiple segments before arriving in France. The participation had been very important to her as it demonstrated her commitment to women's cycling. She was fully committed to the challenge and encouraged herself whenever she was faced with a challenge. She was widely recognized for her role and the brand as Liv sponsored the Women's Tour de France and the white jersey. She believes that anything is possible if you set your mind to it and give it your all.

LivDay Event

It was a perfect mix of cycling and fun where all riders enjoyed a great weekend of riding. Participants completed each challenge safely, and were able to enjoy the supportive and inspiring atmosphere during the ride and at the finish line. We organized three rides in 2022, i.e., one each in the northern, central and southern Taiwan, and the average participation rate of female riders climbed up to over 50% for all three events.

learn more

2022 Liv Iron Girl Taitung and 2022 Liv*Lava Queen Duathlon in Taipei

In order to promote women's cycling and encourage more women to participate in triathlon, Giant has been a partner to Ironman Taiwan with Liv being a title sponsor since 2017, and organizes women's triathlon every year. We provide women's changing rooms, sunscreen sprays, hair bands, and sanitary products in the transition area as a thoughtful gesture. There was a total of 500 enthusiastic iron girls signed up for the "2022 Liv Iron Girl Taitung", and the first "Liv*LAVA Queen Duathlon in Taipei" was held in 2022, with a special arrangement - the "duo team", which allowed male partners to accompany women in the race as "escorts". We hope that every woman can gain self-confidence in sports and realize their goals.

Column Story

Diversity in Workplace for Female Bicycle Mechanics

At Giant Group and Liv, we support women like Paige who continues to break the mold and push boundaries.

Behind every successful cyclist is a trusted bicycle mechanic. The Cape Epic, an eight-day bicycle race that has been described as one of the toughest in the world, is equally challenging for bicycle mechanics. In the Liv's women's teams, Paige Stuart is the star behind the professional team.

Women make up only 8.6% of bicycle mechanics in the U.S. Being one of those rare female mechanics, Paige knows this needs to be changed. For Paige, cultural gender norms and an education system that stigmatizes "blue-collar" jobs are significant barriers to women becoming bicycle technicians or other technical professionals.

Giant Group will always support and encourage more women to join the industry.

6.4.4 Promote Cycling

We are committed to building a safe, healthy and sustainable cycling community and industry by promoting cycling, providing comprehensive safety education and nurturing industry talents. By encouraging cycling, we aim to reduce urban traffic congestion, lower carbon emissions and improve people's physical and mental health. We value safety education and provide professional training to ensure rider safety. At the same time, we nurture industry talents, focus on innovation and sustainability, and promote the prosperity of the cycling community and industry. Our goal is to build a better future where bicycles are the ideal choice in people's lives.

Cycling Life Style Foundation

Vision	To promote Taiwan as a cycling paradise: Cycling Island of Taiwan
About the Foundation	Giant Manufacturing Co., Ltd., the manufacturer of the world-famous Giant bicycles, established the "Giant Sports Foundation" with generous donations from the founder, King Liu, and a number of directors and supervisors in 1989. Being the first non-profit organization dedicated to the promotion of recreational cycling in Taiwan, the Foundation promotes and organizes cycling activities to develop the habit of cycling and improve the cycling environment in Taiwan. After more than a decade of hard work, the seeds of cycling have gradually blossomed in various counties and cities, and been supported by the government and the public. Sensing that the depth and breadth of social welfare shall be expanded to integrate more social resources, the former "Giant Sports Foundation" was renamed the "Cycling Life Style Foundation" in August 2000. Besides inviting like-minded companies and professional scholars in the bicycle industry to join the Board of Directors and promote the new cycling culture, the Foundation also donates bicycles to the Taipei City and Taipei County Governments for rent at the Riversides. Through the Riversides bicycle rentals and a variety of cycling activities every year, the Foundation increases the cycling population, raises awareness on bicycle safety, and improves transportation facilities.

6.4.4.1 Promote cycling activities

We promote cycling with the goal of encouraging people to use cycling as an eco-friendly and convenient mean of transportation. We believe that cycling generates positive social and environmental impacts and contributes to a more sustainable urban environment.

Date	Theme	Participant	Link and Event
2022/07/09 - 2022/07/17	2022 Parent-child Round-island Tour as Come of Age Ceremony	Teenagers	As a coming-of-age ceremony for children, the round-island tour develops children's perseverance, endurance to achieve their goals, interpersonal interaction and communication skills, teamwork, and independence. Witnessing children's transformation during the nine-day tour is a rite of passage that cannot be missed. In 2022, we cooperated with the Jacana Ecological Education Park for the first time and extended our former route by at least six to seven kilometers to Guantian, Tainan where the Park is located. There was a bonus course on Jacana restoration results at dinner.
2022/07/12	2022 iCrazy Bike Summer Camp for Kids	Children	At long last, we organized another summer camp at the Iron Hill Cycling Sport Village in Taichung. This year's program set a clear goal of safe outdoor cycling, with children's bicycle safety being our top priority. The day-1 course was basic lessons such as riding on a straight line, braking, and cornering as well as experiencing shifting. Day-2 focused on how to keep a safe distance and control bicycles in a group ride on country roads in Waipu. In the afternoon, all team members successfully completed the famous Tieh-Chen Mountain bikeway in central Taiwan, passing the challenge of extreme uphill and downhill of outdoor riding in advance. Day-3 was a tour to Yuehmei Tourism Sugar Refinery while Day-4 was a visit to the Cycling Culture Museum where all participants had more in-depth understanding of the cycling culture and knowledge on top of physical challenges during the summer camp.
2022/11/12	2022 Formosa 900	The Public	In order to welcome domestic and overseas cyclists after the pandemic, the Tourism Bureau, Ministry of Transportation and Communications (MOTC) scaled up the "World Bicycle Day in Taiwan" to "Taiwan Cycling Festival" with more tourism elements. The main event, "Formosa 900", was officially commenced on November 12, 2022. The event is entering its 11th year. Since its inception in 2012, a total of 210 groups with 5,800 cyclists from all over the world have participated in the event. In addition to the 9-day round the island trip, there are also a variety of in-depth theme tours, encouraging people to visit rural country towns and coastal landscape on bicycle and discovering the joy of cycling.
2022/12/10	2022 Crown Coast Ride - Cycling Around Taiwan	The Public	As an extension of the World Bicycle Day, the "2022 Crown Coast Ride - Cycling Around Taiwan" was held in Keelung Huhai Bay with more than 200 cyclists led by Yen-Po, Chen, the Political Deputy Minister, MOTC. In addition, a total of 1,919 bikers from the MOTC, local governments and bicycle associations were called upon to ride at the same time in 45 locations across Taiwan, lighting up Taiwan with their trails.
2021/10/01 - 2022/09/30	Ride On - Cycling Exhibition for the 50th Anniversary	The Public	The "Ride On - Cycling Exhibition for the 50th Anniversary" video exhibition through joint efforts from 16 Taiwanese bicycle tycoons such as Giant, Merida, and KMC (Kuei Meng) was opened at the Cycling Culture Museum in October 2021. The exhibition not only detailly explained the history of Taiwan's cycling development over the past 50 years through devices, chronologies, and videos, but also outlined the new cycling culture of Taiwan - the Cycling Paradise through great experiences at the exhibition. During the exhibition, several "RIDE ON - MEET UP!" sessions on inner power development were held, featuring keynote speakers sharing corporate philanthropy and personal riding experience, psychologists sharing the training of a young Ironman with parents, etc. The contents were diverse and enticing. Five sessions were held with a total of 198 participants and connected with 175,000 potential customers.

6.4.4.2 Bicycle education

Our activities aim to combine the concepts of bicycle safety education and personal growth, promoting safety awareness and skill development for cycling. We believe that through proper safety education, we can increase the safety awareness of riders and reduce the number of traffic accidents. We also encourage continuous growth during cycling where riders learn how to tackle challenges, and develop self-confidence and decision-making skills. Based on this philosophy, we are committed to creating a safe and healthy cycling culture with room for growth.

Date	Theme	Participant	Link and Event
April-November, 2022	2022 Bicycle Safety Program	Students	Audience: Students of public and private junior high schools, elementary schools, and senior high schools in Taipei City and New Taipei City (senior-year students in elementary schools are given priority). Thirty-one sessions were held (10 sessions in Taipei City, 19 sessions in New Taipei City, and one session each in Taoyuan City and Keelung City). Program: Each session lasted 90 minutes. Course details were as follows: · Introduction of bicycle types (including electric-assisted bicycles and e-bikes) · Components of a bicycle · Pre-ride safety checks and adjustments · Tips for cycling · Common mistakes in cycling · Guidelines for using a YouBike · Cycling etiquette for urban and riverside rides
2022/10/15 - 2022/11/06	Taichung Learning Program by the Education Bureau of Taichung City Government	Students	From manufacturing to museums - Decoding bicycles Starting with a European antique bicycle dated back to 1817, the session contains the evolution of bicycle design, industrial development and cycling science. Students can learn about bicycles from different aspects and angles and fall in love with cycling. · The mystery of craft design and production technology · Physics behind bicycles · Introduction to the racing culture and different riding styles · Planning for a bicycle-friendly world · Virtual reality (VR) and videos of cycling at the immersive theatre

6.4.4.3 Talent development

We value our collaborations with schools because we understand the importance of nurturing students. We are committed to pass on professional knowledge and develop practical skills with a focus on shaping students' values through our partnership with school. This not only helps to promote the development of the industry as a whole, but also provides students with valuable internship opportunities and good career prospects, working together to build a prosperous and sustainable cycling industry.

Date	Theme	Participant	Link and Event
2022	Industry-academia collaboration	Students	To root and nurture tech talents for local industries, vocational high schools and industries joined efforts in cultivating industrial engineering, process equipment management and professional management talents required by the regional industries through the model of "learning by doing" On-site technical personnel: Dah-Chin Commercial and Industrial Vocational High School, Taichung Municipal Dajia Industrial Senior High School, National Chinyi University of Technology (NCUT), and Chih-Yung Senior High School Mechanical and electro-mechanical/AI vision personnel: Talents from the Academy of Broadcasting Science of NRTA, and graduate students of National Cheng Kung University and National Taiwan University of Science and Technology Management personnel: National Taichung University of Education, National Chung Cheng University, and National Changhua University of Education
2022	Experience sharing in legal practice of global brands	Taipei Bar Association	With the focus on "Experience Sharing in Legal Practice of Global Brands", the speakers helped audiences understand the experience and development of legal practice from the ESG perspective. There were also exchanges with professionals in law for mutual learning and resource sharing.
2022	Exchange and discussion on intellectual property rights issues	Students	With the theme of "Intellectual Property Management of Global Brands", the speech helped students from the University of Minnesota Law School to understand the operational practices and challenges of managing cross-border intellectual property rights. There were exchanges on the legal systems of intellectual property rights in different countries, so as to achieve a win-win situation for both the industry and the students.
2022	Exchange on multinational enterprises and international human rights (ESG) issues	Students	Speaking at the College of Law, National Taipei University, the speaker not only shared his experience in multinational corporate law practice and provided professional guidance in related areas, but also helped students understand the challenges of corporate law practice and human rights protection from an ESG perspective. He also detailed the professional competencies required/that shall be cultivated for corporate law practice.
2022	Exchange on international economics, trade and law in the era of AI and digital technologies	Students	The majority of audiences of the speech at the International Trade Negotiations Program, LL.M., Soochow University School of Law, were high-ranking civil servants. The speaker hoped to provide better understanding on the challenges and future development of international economics, trade and law in the era of digital technologies and AI, along with ESG issues. Also, the negotiation skills of our civil servants and practitioners in international trade can be further enhanced through mutual learning and exchanges.



Column Story

SiiHasin - On a Journey to Hope

"If you can conquer that one hill, you can conquer anything in life" shared by Claudia Jackson, a founding member of the SiiHasin Bike Program of the Navajo Nation, which is a semi-autonomous Indian reservation in the U.S.

Among the Navajo people, the suicide rate is 3.5 times the national average. Giant Group's U.S. sales subsidiary cares about this issue and supports SiiHasin's annual Tour de SiiHasin (Journey to Hope), which raises participants' mental health awareness through their passion for cycling.

From six participants in the first year to more than 200 riders in 2022, the cycling team has become a haven where people can share their pain. One participant and domestic violence survivor even described the team as their source of strength.

The Giant Group will always support events that promote the power of cycling.

Column Story

Oddaj Rower Second-hand Bicycle Donation

Giant Group has always been concerned about environmental issues and social charitable activities. Helping children realize their dream of owning a bicycle is one of our missions.

Since 2017, Giant Benelux B.V., Giant Group's sales subsidiary in Poland, has been supporting the "Oddaj Rower" Foundation. Every year before Christmas, people can donate used bicycles to the Foundation, where we inspect and repair these bicycles and then deliver them to orphanages and foster families all over Poland free of charge.

Initially, Giant financially sponsored the initiative. However, we deepen our involvement over the years and become a strategic partner of the Foundation. In 2022, we included our retail stores to the program so that people could bring the bicycles they wanted to donate to Giant's stores. Our retail stores alone repaired and donated more than 100 bicycles.

We truly believe that by reducing waste we can help protect our planet. More importantly, we are committed to putting smiles on children's faces.

Appendix

About the Report

Giant Group is committed to building a future that rides towards Gung Ho, with the goal of helping the next generation to build a sustainable society. We continue to provide sustainability solutions in order to achieve our goal. This report is Giant Group's first sustainability report in which we have set out our sustainability strategy and revealed our past performance in Environment, Social and Governance (ESG) as well as our management approaches and practices on major topics in each chapter. Through this Sustainability Report, we aim to communicate with our stakeholders and work together to build the vision and blueprint for a sustainable society. In order to ensure the transparency and accuracy of the report, this report has been verified by a third party to convey more accurate and specific information to all stakeholders who are concerned about our Group's sustainable development.

Reporting Period

This report disclosed data and performance for the period from January 1, 2022 to December 31, 2022. It will be issued on a yearly basis. The first report is released in June 2023 and the next report is scheduled to be released in June 2024.

Reporting Boundary

This report covers the Giant Group, with a focus on our major operations and manufacturing factories in Taiwan and around the world, including Asia, Europe and North America. The scope is set out as follows:

- Offices:
  Giant Group Headquarters, Giant China Headquarters
- Subsidiaries:
  Youth Logistics Center, Giant Adventure Co., Ltd., AIPS Technology Co., Ltd., YouBike Co., Ltd.
- Manufacturing factories:
  Giant Manufacturing Co., Ltd., D. Mag (Kunshan) New Material Technology Co., LTD., Giant (Kunshan) Co., Ltd., Giant (Tianjin) Co., Ltd., Giant Electric Vehicle (Kunshan) Co., Ltd., Giant (China) Co., Ltd., Giant Europe Manufacturing B.V., Giant Manufacturing Hungary Ltd., Giant Vietnam Manufacturing Co., Ltd.
- Sales companies:
  Giant Taiwan Sales Company, Giant China Sales Companies, Giant Bicycle Co., Pty Ltd., Giant (Japan) Co., Ltd., Giant Korea Co., Ltd., Giant Bicycle Inc., Giant Bicycle Canada Inc., Giant Bicycle México S. de R.L. de C.V., Giant UK Ltd., Giant S.A.R.L France, Giant Benelux B.V., Giant Deutschland GmbH, Giant Polska Sp. z o.o., Giant Italy S. R. L

Internal Management Approach for the Report

In order to better grasp sustainability-related information of the Giant Group, we have established ESG Council and ESG Task Force within the Strategy Planning Office under the CEO, to verify sustainability information and report progress through regular PDCA meetings. We are committed to ensuring the reliability and accuracy of the information and data disclosed. The disclosure process is carried out in three stages. At first, the in-charge contacts of each factory would submit information and confirms it with the department heads. Next, the ESG Task Force at the Headquarters reviews and compiles the information and presents it in the PDCA meetings. In the third stage, the ESG Council confirms the completeness and reliability of all information and prepare the report, which would be submitted to the CEO and Chairperson for review and approval prior to its release.

Report Verification

Information and data in this report are based on statistics compiled and surveys conducted by Giant Group's factories. We have commissioned AFNOR Asia Ltd., a third-party certification company, to undertake assurance in line with the AA1000 Assurance Standard (AA1000AS v3), using Type 1 at a moderate level of assurance, to ensure that the contents of this report comply with the GRI Standards and the AA1000AP (2018) Account Ability Principles. The assurance statement is attached as an appendix to this report. The financial data is based on our annual reports audited by Deloitte & Touche.

Contact Information

If you have any suggestions regarding this report or the sustainable development of Giant Group, please feel free to contact us by the following methods:

- Contact:
  ESG Council, Giant Group Headquarters
- E-mail: ESG@giant.com.tw
- Tel: +886-4-24609099
- ESG website: https://www.giantgroup-cycling.com/50th/next50.html
- Address of Giant Group Headquarters:
  No. 999, Sec. 1, Dongda Road, Xitun District, Taichung City 407727, Taiwan (R.O.C.)

Data Collection Boundaries for Sustainability Issues

● Collects complete data ◐ Collect partial data – The issue is not significant to the entity; thus, it is not included in the data collection boundaries

Topics \ Boundary	Offices		Subsidiaries				9 Factories								
	Giant Group Headquarters	Giant China Headquarters	Youth Logistics Center	Giant Adventure Co., Ltd.	AIPS Technology Co., Ltd.	YouBike Co., Ltd.	Giant Manufacturing Co., Ltd.	D. Mag (Kunshan) New Material Technology Co., Ltd.	Giant (Kunshan) Co., Ltd.	Giant (Tianjin) Co., Ltd.	Giant Electric Vehicle (Kunshan) Co., Ltd.	Giant (China) Co., Ltd.	Giant Europe Manufacturing B.V.	Giant Manufacturing Hungary Ltd.	Giant Vietnam Manufacturing Co., Ltd.
	INC	GCHQ	YS	GAC	AIPS	YouBike	GTM	DM	GCK	GCT	GEV	GCM	GEM	GHM	GVM
Financial Performance	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Risk Management	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Customer Relationship Management	●	–	–	–	–	–	●	–	●	●	●	●	●	●	●
Innovative Products and Services	●	–	–	–	–	–	●	–	–	–	–	–	–	–	–
Brand Management	●	–	–	–	–	●	–	–	–	–	–	–	–	–	–
Sustainable Supply Chain	●	–	–	–	–	–	●	●	●	●	●	●	●	●	●
Regulatory Compliance	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Climate Strategy	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Green Products	●	–	–	◐	◐	◐	●	–	–	–	–	–	–	–	–
Diversity and Inclusion	◐	◐	–	–	◐	–	◐	–	◐	◐	◐	◐	–	–	–
Occupational Safety and Health	–	–	–	–	–	–	●	–	●	●	●	●	–	–	–
Talent Development	●	●	–	–	●	–	●	–	●	●	●	●	–	–	–
Talent Attraction and Retention	◐	◐	–	–	◐	–	◐	–	◐	◐	◐	◐	–	–	–

● Collects complete data ◐ Collect partial data – The issue is not significant to the entity; thus, it is not included in the data collection boundaries

Boundary / Topics	14 Sales Companies															
	Giant Taiwan Sales Company	Giant China Sales Companies			Giant Bicycle Co., Pty Ltd.	Giant (Japan) Co., Ltd.	Giant Korea Co., Ltd.	Giant Bicycle Inc.	Giant Bicycle Canada Inc.	Giant Bicycle México S. de R.L. de C.V.	Giant UK Ltd.	Giant S.A.R.L France	Giant Benelux B.V.	Giant Deutschland GmbH	Giant Benelux B.V.	Giant Italy S. R. L
	GTS	GCES	GCNS	GCC/ GCWS	GA	GJ	GKR	GU	GV	GMX	GUK	GF	GB	GG	GW	GIT
Financial Performance	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Risk Management	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Customer Relationship Management	●	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐	◐
Innovative Products and Services	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Brand Management	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Sustainable Supply Chain	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Regulatory Compliance	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Climate Strategy	●	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Green Products	◐	–	–	–	–	–	–	–	–	–	–	–	–	◐	–	–
Diversity and Inclusion	◐	◐	◐	◐	–	–	–	–	–	–	–	–	–	–	–	–
Occupational Safety and Health	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Talent Development	●	●	●	●	–	–	–	–	–	–	–	–	–	–	–	–
Talent Attraction and Retention	◐	◐	◐	◐	–	–	–	–	–	–	–	–	–	–	–	–

Management Approach

Giant Group's Management Approach to Material Topics

Financial Performance	
Commitment	In order to maintain the stability and growth of financial performance, we enhance our competitiveness through diversification, product/service innovation and R&D, and ESG development to achieve sustainable operation
Long-term goals	2030 goal: Maintain stable long-term growth in revenue and profitability
Achievements in 2022	· Record-high consolidated revenue of NT$92.04 billion in 2022, up 12.5% with a gross margin of 22.6% · Consolidated income before income tax of NT$8.74 billion, remaining flat compared to 2021; net income attributable to shareholders of the parent amounted to NT$5.84 billion, with an earnings per share of NT$15.51
In-charge department	Global Finance Center
Management metrics	· Prepare annual budgets and set financial KPIs for each SBU · Review operating results and progress against annual budget of each SBU in the monthly business performance meeting · SBU's achievement of financial KPIs as one of the criteria for performance appraisal
Positive and negative impacts	· Positive: Product or technology R&D and innovation facilitate the development and application of industry technology · Positive: Paying taxes help to support infrastructure and social welfare · Positive: Business integrity improves net income and profits of investors

Risk Management	
Commitment	Integrate internal and external risk data and trends and strive to improve the Group's risk management system and control mechanism in order to enhance risk detection capability and resilience
Long-term goals	· 2030 goal: Integrate the Group's risk control structure · 2030 goal: Refine the implementation of operational impact analysis and risk assessment
Achievements in 2022	Established the Group's risk management policy to ensure consistency in Group strategy and immediate response to disaster and risk issues
In-charge department	Strategy Planning Office
Management metrics	Regular weekly/monthly meetings
Positive and negative impacts	· Positive: Business integrity improves net income and profits of investors · Negative: Misuse of data and invasion of privacy · Negative: The Company's operational activities affect climate change and extreme weather · Negative: Resource consumption leads to pollution emissions which affect human health, species or ecosystems · Negative: Human rights impact from violation of labor conditions · Negative: Occupational injuries result in permanent physical and mental impairment

Customer Relationship Management	
Commitment	Provide customers with high-quality, low-carbon, eco-friendly and safe products and services, control the process and details of manufacturing, sales and after-sales service, and attend to customer needs while protecting their privacy
Long-term goals	· 2030 goal: Closure rate of customer complaints within 7 days · 2030 goal: Continuously implement measures to protect customers' personal information
Achievements in 2022	· The in-charge unit followed the standard procedure and provided an initial response to consumers within 24 hours of receiving a complaint to reach a consensus on how to handle the case · Measures implemented to prevent a recurrence of customer complaints: · Internalize customer complaint cases for case studies in training and share them in the complaint system · Directions of internal process improvements based on cases · No customer privacy violations
In-charge department	Customer Service and Technical Support Group / Business Division / Global Quality Assurance Center
Management metrics	· Customer satisfaction survey · Customer complaint investigation form
Positive and negative impacts	· Positive: Product or technology R&D and innovation facilitate the development and application of industry technology · Negative: Misuse of data and invasion of privacy · Negative: Resource consumption leads to pollution emissions which affect human health, species or ecosystems

Innovative Products and Services	
Commitment	· Through cooperation with external experts and internal innovations, we continue to cultivate our R&D momentum and strengthen R&D investment to promote the development of new products, technologies and services, and lead the industry in cross-innovation
Long-term goals	· 2030 goal: Disclose carbon footprint data (model/frame/coating/OBC) when designing new products · 2030 goal: Expand the operation and increase the rides of public bicycles
Achievements in 2022	· Carbon inventory of Stance 29 1 (GTM) and TCR SL (GCK) was completed in 2022 to serve as a research basis for the future developments of carbon footprint data calculation models of new products · YouBike: 81,000 public bicycles in service and 97.66 million rides in 2022 · YouBike operates in 11 cities/counties in Taiwan, i.e., Taipei City, New Taipei City, Taoyuan City, Hsinchu City, Hsinchu Science Park, Hsinchu County, Miaoli County, Taichung City, Chiayi City, Tainan City, Kaohsiung City and Pingtung County)
In-charge department	Global R&D and Design Center / YouBike
Management metrics	· ISO14067 Carbon footprint of products verification · Cumulative number of YouBike rentals · Continuous tracking and correction through monthly ESG PDCA meetings at Headquarters
Positive and negative impacts	· Positive: Product or technology R&D and innovation facilitate the development and application of industry technology · Positive: Continuous value creation for upstream or the industry · Positive: Product or service contributes to environmental benefits (energy saving/carbon reduction/water saving/pollution reduction/recyclability) · Negative: Misuse of data and invasion of privacy · Negative: The Company's operational activities affect climate change and extreme weather · Negative: Resource consumption leads to pollution emissions which affect human health, species or ecosystems

Brand Management	
Commitment	Implement the Group's brand development strategy and establish a consistent and coherent brand image to enhance brand awareness and strengthen consumer trust in the Group's brand
Long-term goals	2030 goal: · Continuously provide innovative and diverse bicycle products for different consumer segments to maintain our leading position in the industry · Actively promote the new cycling culture movement, provide diversified bicycle services, and work together with the public to create a sustainable future · Stay in the top 10 of "Best Taiwan Global Brands" with continuous growth in brand value
Achievements in 2022	· Ranked in the top 10 of "Best Taiwan Global Brands" for 14 consecutive years · Ranked No. 6 in 2022 Best Taiwan Global Brands with a brand value of US$746 million, up 11% (an increase of US$76 million) from 2021; A new high in brand value, and the highest brand value in Taiwan's health and sports industry
In-charge department	Global Branding and Marketing Center
Management metrics	· Review and adjust marketing program priorities every year · Improve the exposure and precision of disclosures from the Group and product marketing communications · Enhance the planning and execution of key projects based on internal and external feedback
Positive and negative impacts	· Positive: Continuous value creation for upstream or the industry · Positive: Business integrity improves net income and profits of investors · Positive: Invest resources to improve the environment or quality of life for the community or disadvantaged groups

Sustainable Supply Chain	
Commitment	· Continue to lead our supply chain partners in fulfilling the BAS commitments and tasks, and strengthen ESG improvement activities to promote a green, low-carbon supply chain
Long-term goals	· 2030 goal: All key suppliers with ISO14064 certifications · 2030 goal: All key suppliers join the BAS · 2030 goal: 25% carbon reduction by key suppliers of the BAS · 2030 goal: Local suppliers exceeding 90% · 2030 goal: 90% of first-tier suppliers complete the ESG/human rights risk assessment · 2030 goal: 85% of first-tier suppliers complete the ESG/human rights risk audit
Achievements in 2022	· 9 key suppliers have obtained ISO14064 certification · 40 key suppliers have joined the BAS · Local suppliers accounted for 54.7%
In-charge department	Global Manufacturing Center - Integrated Procurement
Management metrics	· Supplier data management, including contracts, audit results, ISO verification reports, etc. · BAS member information · Continuous tracking and correction through monthly ESG PDCA meetings at Headquarters
Positive and negative impacts	· Positive: Product or technology R&D and innovation facilitate the development and application of industry technology · Positive: Continuous value creation for upstream or the industry · Positive: Reduce the use of non-renewable resources, preserve resources, and restore important habitats · Positive: Product or service contributes to environmental benefits (energy saving/carbon reduction/water saving/pollution reduction/recyclability) · Negative: The Company's operational activities affect climate change and extreme weather · Negative: Human rights impact from violation of labor conditions

Regulatory Compliance	
Commitment	Comply with laws and regulations of various countries externally and implement management rules and the code of conduct internally to minimize operational risks
Long-term goals	2030 goal: Continue to implement regulatory compliance and enhance employees' regulatory awareness
Achievements in 2022	· Organized regulatory compliance courses on competition laws periodically in 2022 · There were no cases for violation of the competition law between 2019 and 2022
In-charge department	Global Legal Affairs Center
Management metrics	· Promotion at weekly/monthly meetings · Education and training records · Announcement and implementation of relevant systems
Positive and negative impacts	· Positive: Paying taxes help to support infrastructure and social welfare · Negative: The Company's operational activities affect climate change and extreme weather

Climate Strategy	
Commitment	Align with international standards, identify risks and opportunities in light of climate change trends, strive to reduce GHG emissions from manufacturing processes, and proactively implement carbon reduction targets
Long-term goals	2030 goal: 25% reduction of GHG
Achievements in 2022	Completed GHG Scope 1, 2 and 3 inventory and obtained ISO14064-1:2018 certification in 2022; a total emission of 436,847.56 tCO_2e with 11,549.62 tCO_2e from direct GHG emissions and removals, 23,152.80 tCO_2e from indirect GHG emissions due to purchased power, and 402,145.15 tCO_2e from other indirect GHG emissions
In-charge department	Strategy Planning Office
Management metrics	· ISO14064 GHG emission verification · Carbon Disclosure Project (CDP) score · Continuous tracking and correction through monthly ESG PDCA meetings at Headquarters
Positive and negative impacts	· Positive: Reduce the use of non-renewable resources, preserve resources, and restore important habitats · Positive: Product or service contributes to environmental benefits (energy saving/carbon reduction/water saving/pollution reduction/recyclability) · Negative: The Company's operational activities affect climate change and extreme weather · Negative: Resource consumption leads to pollution emissions which affect human health, species or ecosystems

Green Products	
Commitment	Develop energy-saving and recyclable products from design, enhance the environmental friendliness of products or services, and implement hazardous substances management
Long-term goals	· 2030 goal: Reduce coating layers and baking of products · 2030 goal: 100% recyclable materials in OBC saddles · 2030 goal: 50% recycled materials in OBC saddles · 2030 goal: 88% water-based coating · 2030 goal: Replaced solvent-based decals with UV resin decals · 2030 goal: 10,000(pcs) reused service batteries · 2030 goal: Continuous improvement on the average energy efficiency of e-bikes
Achievements in 2022	· Reduced coating layers and baking of products: The average coating layers of MY23 was down to 4.17 layers · Recyclable materials in OBC saddles: Key materials of the four major components (synthetic cover, form, shell and rails) were recyclable · Recycled materials in OBC saddles: Continued to carry out the application of recycled materials in the four major components and the solutions for synthetic cover and shell were close to be completed · Water-based coating: Water-based coatings were used on all bicycles from our China factories, except for MMT and kid's bicycles, which had switched to powder coatings · Decals: Except for kid's bicycles, bicycles from our China factories had all switched to UV resin decals · Reuse of service battery: · Provided firmware update function for five models of service battery and developed wireless / wired update tools · Launched 3 new battery designs that can be repaired · Improvement in average energy efficiency for e-bikes: Depending on the bicycle types, we achieved a minimum of 83% improvement (MTB) and a maximum of 183% (City bike)
In-charge department	Global R&D and Design Center /HPB Business Division
Management metrics	· ISO14067 Product carbon footprint verification · Continuous tracking and correction through monthly ESG PDCA meetings at Headquarters · New products meet standards and goals, and are launched on time
Positive and negative impacts	· Positive: Product or technology R&D and innovation facilitate the development and application of industry technology · Positive: Reduce the use of non-renewable resources, preserve resources, and restore important habitats · Positive: Product or service contributes to environmental benefits (energy saving/carbon reduction/water saving/pollution reduction/recyclability) · Negative: The Company's operational activities affect climate change and extreme weather · Negative: Resource consumption leads to pollution emissions which affect human health, species or ecosystems

Diversity and Inclusion	
Commitment	Respect the uniqueness of each employee and uphold the values of diversity, inclusiveness and equality to create an equal and inclusive workplace
Long-term goals	2030 goal: Build a diverse and inclusive work culture with agile and efficient organizational operation
Achievements in 2022	The on-line unconscious bias course was held to explain the culture of unconscious bias management to the Group's management and employees worldwide
In-charge department	Global HR Center
Management metrics	Employee commitment survey
Positive and negative impacts	· Positive: Invest resources to improve the environment or quality of life for the community or disadvantaged groups · Negative: Human rights impact from violation of labor conditions · Negative: Occupational injuries result in permanent physical and mental impairment

Occupational Safety and Health	
Commitment	Establish a comprehensive occupational health and safety as well as environmental hygiene management mechanism to provide employees with a safe and healthy work environment, and strive to deliver zero accident
Long-term goals	2030 goal: Frequency-severity indicator (FSI) down by more than 30% compared to the average in 2021/2022 for all factories
Achievements in 2022	· Implemented self-inspection and self-audit (STOP6 - classification and audit of potential hazard), and solved problems of each category to reduce the occurrence of potential hazards · Introduced vertical/horizontal lifelines safety facilities, and maintained zero major safety accidents from working at heights · Connected SCADA with the ESH monitoring data to trigger mistake-proof safety alerts · Introduced safety enhancements on automated facilities to improve the mistake-proof measures and eliminate unsafe behaviors of employees
In-charge department	Global Manufacturing Center / Manufacturing factories
Management metrics	· Continuous tracking and correction through monthly ESG PDCA meetings at Headquarters · Monthly review of FSI · EHS monthly meeting - project progress review
Positive and negative impacts	· Negative: Human rights impact from violation of labor conditions · Negative: Occupational injuries result in permanent physical and mental impairment

Talent Development	
Commitment	Assist employees in career planning and continuous education, and strengthen employees' personal skills to build up the Group's talent pool
Long-term goals	2030 goal: Build organizational competitiveness in responding to market changes swiftly
Achievements in 2022	· The average training hours increased to 81 hours in 2022, up 32.7% compared to the previous year · The total training expenses exceeded NT$10 million in 2022; we strengthened the leadership competencies of the organization's core talents and promoted cross-functional knowledge sharing in 2022
In-charge department	Global HR Center
Management metrics	Employee commitment survey
Positive and negative impacts	· Negative: Human rights impact from violation of labor conditions · Negative: Occupational injuries result in permanent physical and mental impairment

Talent Attraction and Retention	
Commitment	Maintain stable industry-academia collaboration, and continue to cultivate industry talents; provide a safe and friendly work environment for employees and strengthen employee commitment
Long-term goals	2030 goal: Increase employee commitment and the retention rate of key personnel
Achievements in 2022	· Retention rate of talent recruitment in the Headquarters was about 80% · Organized free-talks for employees with 2 to 3 years of service
In-charge department	Global HR Center
Management metrics	· 3% increase in global employment commitment rate (comparing to the previous year) · 3% increase in retention rate (comparing to the previous year)
Positive and negative impacts	· Positive: Product or technology R&D and innovation facilitate the development and application of industry technology · Positive: Continuous value creation for upstream or the industry · Positive: Invest resources to improve the environment or quality of life for the community or disadvantaged groups · Negative: Human rights impact from violation of labor conditions · Negative: Occupational injuries result in permanent physical and mental impairment

Environmental Data - GHG Emissions

Unit: metric tons		Giant (China) Co., Ltd.		Giant (Kunshan) Co., Ltd.		Giant (Tianjin) Co., Ltd.		Giant Electric Vehicle (Kunshan) Co., Ltd.		Giant (Chengdu) Co., Ltd.	
Year		2021	2022	2021	2022	2021	2022	2021	2022	2021	2022
Total GHG Emissions		294,654	215,978	278,442	238,584	152,417	173,611	115,818	120,951	610	664
Direct GHG Emissions		7,557.61	6,329.35	8,218.35	6,724.89	6,515.44	6,118.18	1,541.57	1,386.20	27.46	18.05
Indirect GHG Emissions	Purchased energy	21,075.87	20,762.26	18,382.57	16,401.81	8,557.22	8,644.73	6,222.55	6,049.96	73.81	61.69
	Transportation	511.28	445.4	731.92	823.81	256.52	291.18	294.84	426.32	161.04	184.79
	Products/services used by the organization	262,826.33	185,873.16	249,265.86	212,967.24	136,418.49	157,536.45	107,155.37	112,494.56	347.3	399.75
	Process of using the products	2,683.11	2,567.69	1,843.46	1,666.26	669.34	1,020.42	603.92	593.91	0	0

Unit: metric tons		Giant (China) Co., Ltd.		Giant (Kunshan) Co., Ltd.		Giant (Tianjin) Co., Ltd.		Giant Electric Vehicle (Kunshan) Co., Ltd.		Giant (Chengdu) Co., Ltd.	
Year		2021	2022	2021	2022	2021	2022	2021	2022	2021	2022
GHG Emission Categories	Carbon dioxide (CO_2)	291,174.27	213,169.15	276,944.89	237,675.44	151,534.81	173,445.55	115,110.24	120,339.48	605.18	661.28
	Methane (CH_4)	3,126.37	2,696.01	1,382.05	861.69	844.67	159.74	648.98	596.15	3.03	2.37
	Nitrous oxide (N_2O)	87.39	93.44	66.85	44.91	5.39	5.05	14.88	13.95	0.95	0.62
	Hydrofluorocarbons (HFCs)	266.16	19.26	48.37	1.97	32.15	0.62	44.16	1.38	0.44	0

Note: Giant (Kunshan) Co., Ltd. includes Giant Investment Co., Ltd., Jiangsu Giant Adventure Co., Ltd. and GIANT (Jiangsu) Co., Ltd.

Global Reporting Initiatives (GRI) Index

Statement of use: The report is prepared in accordance with the GRI Standards for the period from January 1, 2022 to December 31, 2022.

GRI 1 used: GRI 1: Foundation 2021

GRI 2: General Disclosures

GRI Standard	Disclosure Title		Corresponding Chapter	Page	Omitted / Note
GRI 2: General Disclosures 2021	2-1	Organizational details	1.1 Company Profile	07	
	2-2	Entities included in the organization's sustainability reporting	1.2 Global Network	08	
	2-3	Reporting period, frequency and contact point	Appendix - About this Report	143	
	2-4	Restatements of information	Appendix - About this Report	143	
	2-5	External assurance	Appendix - External Independent Assurance Statement	162	
	2-6	Activities, value chain and other business relationships	1.2 Global Network	08	
	2-7	Employees	4.2.1 Supply Chain Management	68	
	2-8	Workers who are not employees	6.1.1 Workforce Overview	89	
	2-9	Governance structure and composition	6.1.1 Workforce Overview	89	
	2-10	Nomination and selection of the highest governance body	3.1.1 Corporate Governance	24	
	2-11	Chair of the highest governance body	3.1.1 Corporate Governance	24	
	2-12	Role of the highest governance body in overseeing the management of impacts	3.1.1 Corporate Governance	24	
	2-13	Delegation of responsibility for managing impacts	2.1 Sustainability Governance Organization	11	
	2-14	Role of the highest governance body in sustainability reporting	Appendix - About this Report	143	
	2-15	Conflicts of interest	3.1.1 Corporate Governance	24	
	2-16	Communication of critical concerns	3.1.1 Corporate Governance	24	The Company has established the “Procedures for Handling Internal Material Information”. For the nature and total number of material events in 2022, please refer to the material information announced by the Company at the Market Observation Post System (MOPS).

GRI 2: General Disclosures					
GRI Standard		Disclosure Title	Corresponding Chapter	Page	Omitted / Note
GRI 2: General Disclosures 2021	2-17	Collective knowledge of the highest governance body	3.1.1 Corporate Governance	24	
	2-18	Evaluation of the performance of the highest governance body	3.1.1 Corporate Governance	24	
	2-19	Remuneration policies	3.1.1 Corporate Governance	24	
	2-20	Process to determine remuneration	3.1.1 Corporate Governance	24	
	2-21	Annual total compensation ratio	Undisclosed	-	Classified information
	2-22	Statement on sustainable development strategy	Overview - Message from the Chairperson	02	
	2-23	Policy commitments	3.1.3 Business Ethics and Integrity 6.1.3 Human Rights and Employee Communication	30 110	
	2-24	Embedding policy commitments	3.1.3 Business Ethics and Integrity 6.1.3 Human Rights and Employee Communication	30 110	
	2-25	Processes to remediate negative impacts	Undisclosed	-	We have completed our human rights policy and been working on processes to remediate negative impacts
	2-26	Mechanisms for seeking advice and raising concerns	6.1.3 Human Rights and Employee Communication	110	
	2-27	Compliance with laws and regulations	3.1.3 Business Ethics and Integrity	30	
	2-28	Membership associations	3.3.1 Participation in Industry Associations and Policy Implications	35	
	2-29	Approach to stakeholder engagement	2.4 Stakeholder Communication	21	
	2-30	Collective bargaining agreements	6.1.3 Human Rights and Employee Communication	110	

GRI 3: Material Topics					
GRI Standard		Disclosure Title	Corresponding Chapter	Page	Omitted / Note
GRI 3: Material Topics 2021	3-1	Process to determine material topics	2.4 Stakeholder Communication	21	
	3-2	List of material topics	2.4 Stakeholder Communication	21	
	3-3	Management of material topics	2.4 Stakeholder Communication	21	

* Material topic

GRI 200: Economic Series					
GRI Standard	**Disclosure Title**		**Corresponding Chapter**	**Page**	**Omitted / Note**
*GRI 201: Economic Performance 2016	201-1	Direct economic value generated and distributed	3.1.2 Operating Performance	27	
	201-2	Financial implications and other risks and opportunities due to climate change	4.1.1 Climate and Energy	49	
	201-3	Defined benefit plan obligations and other retirement plans	6.1.2 Talent Development and Retention	98	
	201-4	Financial assistance received from government	-	-	
*GRI 202: Market Presence 2016	202-1	Ratios of standard entry level wage by gender compared to local minimum wage	6.1.2 Talent Development and Retention	98	
	202-2	Proportion of senior management hired from the local community	6.1.1 Workforce Overview	89	
GRI 203: Indirect Economic Impacts 2016	203-1	Infrastructure investments and services supported	6.3.1 Diverse Sponsorship of the Cycling Teams	129	
	203-2	Significant indirect economic impacts	6.4.4 Promote Cycling	137	
GRI 204 Procurement Practices 2016	204-1	Proportion of spending on local suppliers	4.2.1 Supply Chain Management	68	
GRI 206: Anti-Competitive Behavior 2016	206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	3.1.3 Business Ethics and Integrity	30	
GRI 207: Tax 2019	207-1	Approach to tax	3.1.2 Operating Performance	27	
	207-2	Tax governance, control, and risk management	3.1.2 Operating Performance	27	
	207-3	Stakeholder engagement and management of concerns related to tax	3.1.2 Operating Performance	27	
	207-4	Country-by-country reporting	3.1.2 Operating Performance	27	

GRI 300: Environmental Series					
GRI Standard	**Disclosure Title**		**Corresponding Chapter**	**Page**	**Omitted / Note**
GRI 301: Materials 2016	301-1	Materials used by weight or volume	4.1.1 Climate and Energy	49	4.1.1.4
	301-2	Recycled input materials used	4.1.1 Climate and Energy	49	4.1.1.4
	301-3	Reclaimed products and their packaging materials	4.1.1 Climate and Energy	49	4.1.1.4

GRI 300: Environmental Series					
GRI Standard	Disclosure Title		Corresponding Chapter	Page	Omitted / Note
GRI 302: Energy 2016	302-1	Energy consumption within the organization	4.1.1 Climate and Energy	49	
	302-2	Energy consumption outside of the organization	Undisclosed	-	Planning for future implementation
	302-3	Energy intensity	4.1.1 Climate and Energy	49	
	302-4	Reduction of energy consumption	4.1.1 Climate and Energy	49	
	302-5	Reductions in energy requirements of products and services	5.1.1 Circular Products	74	Cycling does not consume energy; please refer to “Circular Products” section for product design strategy
GRI 303: Water and Effluents 2018	303-1	Interactions with water as a shared resource	4.1.2 Water Management	66	
	303-2	Management of water discharge-related impacts	4.1.2 Water Management	66	
	303-3	Water withdrawal	4.1.2 Water Management	66	
	303-4	Water discharge	4.1.2 Water Management	66	
	303-5	Water consumption	4.1.2 Water Management	66	
*GRI 305: Emissions 2016	305-1	Direct (Scope 1) GHG emissions	4.1.1 Climate and Energy	49	
	305-2	Energy indirect (Scope 2) GHG emissions	4.1.1 Climate and Energy	49	
	305-3	Other indirect (Scope 3) GHG emissions	4.1.1 Climate and Energy	49	
	305-4	GHG emissions intensity	Undisclosed	-	Planning for future implementation
	305-5	Reduction of GHG emissions	4.1.1 Climate and Energy	49	
	305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	4.1.3 Wastes	67	
GRI 306: Waste 2020	306-1	Waste generation and significant waste-related impacts	4.1.3 Wastes	67	
	306-2	Management of significant waste-related impacts	4.1.3 Wastes	67	
	306-3	Waste generated	4.1.3 Wastes	67	
	306-4	Waste diverted from disposal	4.1.3 Wastes	67	
	306-5	Waste directed to disposal	4.1.3 Wastes	67	
*GRI 308: Supplier Environmental Assessment 2016	308-1	New suppliers that were screened using environmental criteria	4.2.1 Supply Chain Management	68	
	308-2	Negative environmental impacts in the supply chain and actions taken	4.2.1 Supply Chain Management	68	

GRI 400: Social Series					
GRI Standard	Disclosure Title		Corresponding Chapter	Page	Omitted / Note
*GRI 401: Employment 2016	401-1	New employee hires and employee turnover	6.1.1 Workforce Overview 6.1.2 Talent Development and Retention	89 98	
	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	6.1.2 Talent Development and Retention	98	
	401-3	Parental leave	6.1.2 Talent Development and Retention	98	
GRI 402 Labor/Management Relations 2016	402-1	Minimum notice periods regarding operational changes	6.1.3 Human Rights and Employee Communication	110	
*GRI 403: Occupational Health and Safety 2018	403-1	Occupational health and safety management system	6.1.4 Building a Safe Workplace	113	
	403-2	Hazard identification, risk assessment, and incident investigation	6.1.5 Occupational Safety Risk Management	115	
	403-3	Occupational health services	6.1.6 Employee Health Management	122	
	403-4	Worker participation, consultation, and communication on occupational health and safety	6.1.4 Building a Safe Workplace	113	
	403-5	Worker training on occupational health and safety	6.1.4 Building a Safe Workplace	113	
	403-6	Promotion of worker health	6.1.6 Employee Health Management	122	
	403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	6.1.5 Occupational Safety Risk Management	115	
	403-8	Workers covered by an occupational health and safety management system	6.1.4 Building a Safe Workplace	113	
	403-9	Work-related injuries	6.1.5 Occupational Safety Risk Management	115	
	403-10	Work-related ill health	6.1.5 Occupational Safety Risk Management	115	
*GRI 404: Training and Education 2016	404-1	Average hours of training per year per employee	6.1.2 Talent Development and Retention	98	
	404-2	Programs for upgrading employee skills and transition assistance programs	6.1.2 Talent Development and Retention	98	
	404-3	Percentage of employees receiving regular performance and career development reviews	6.1.2 Talent Development and Retention	98	
*GRI 405: Diversity and Equal Opportunity 2016	405-1	Diversity of governance bodies and employees	6.1.1 Workforce Overview	89	
	405-2	Ratio of basic salary and remuneration of women to men	Undisclosed	-	Classified information
GRI 406: Non-discrimination 2016	406-1	Incidents of discrimination and corrective actions taken	6.1.3 Human Rights and Employee Communication	110	No related incidents

GRI 400: Social Series					
GRI Standard	Disclosure Title		Corresponding Chapter	Page	Omitted / Note
GRI 407: Freedom of Association and Collective Bargaining 2016	407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	6.1.3 Human Rights and Employee Communication	110	
GRI 408: Child Labor 2016	408-1	Operations and suppliers at significant risk for incidents of child labor	-	-	Please refer to page 60 to 63 of Giant's 2022 Annual Report for details on prevention of invasion and violation of human rights
GRI 409: Forced or Compulsory Labor 2016	409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	-	-	
GRI 413: Local Communities 2016	413-1	Operations with local community engagement, impact assessments, and development programs	6.3.1 Diverse Sponsorship of the Cycling Teams 6.4.2 Climate Philanthropy 6.4.3 Female Riders 6.4.4 Promote Cycling	129 133 135 137	
	413-2	Operations with significant actual and potential negative impacts on local communities			
* GRI 414: Supplier Social Assessment 2016	414-1	New suppliers that were screened using social criteria	4.2.1 Supply Chain Management	68	
	414-2	Negative social impacts in the supply chain and actions taken	4.2.1 Supply Chain Management	68	
* GRI 416: Customer Health and Safety 2016	416-1	Assessment of the health and safety impacts of product and service categories	3.4.3 Advanced Technology	45	
	416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	3.4.3 Advanced Technology	45	
*GRI 417: Marketing and Labeling 2016	417-1	Requirements for product and service information and labeling	3.4.3 Advanced Technology	45	
	417-2	Incidents of non-compliance concerning product and service information and labeling	3.4.3 Advanced Technology	45	
	417-3	Incidents of non-compliance concerning marketing communications	3.4.3 Advanced Technology	45	
GRI 418: Customer Privacy 2016	418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	3.2.3 Privacy and Personal Data Protection	35	
GRI 419: Socioeconomic Compliance 2016	419-1	Non-compliance with laws and regulations in the social and economic area	3.1.3 Business Ethics and Integrity	30	No major social or economic offenses

Task Force on Climate-Related Financial Disclosures (TCFD) Reference Table

Aspect	TCFD Disclosure Recommendation	Corresponding Chapter	Page
Governance	The board's oversight of climate-related issues	4.1.1.2	50
	Management's role in assessing and managing climate-related issues	4.1.1.2	50
Strategy	Climate-related risks and opportunities the Company has identified over the short, medium, and long term	4.1.1.2	50
	Impact of climate-related issues on the Company's businesses, strategy, and financial planning	4.1.1.2	50
	Scenario analysis (including a 2˚c or worse scenario)	4.1.1.2	50
Risk Management	Processes for identifying and assessing climate-related risks	4.1.1.2	50
	Process for managing climate-related risks	4.1.1.2	50
	Describe how the above processes for identifying and managing risks are integrated into the Company's overall risk management system	4.1.1.2	50
Metrics and Targets	Evaluate wither the metrics are in line with the Company's strategy and risk management	4.1.1.2	50
	Disclose Scope 1, Scope 2, and if appropriate, Scope 3 GHG emissions, and the related risks	4.1.1.2	50
	Management objectives and related performance	4.1.1.2	50

Sustainability Accounting Standards Board (SASB) Index

Topic/Code	Category	Metric	Corresponding Chapter	Page
Chemical & Safety Hazards of Products				
CG-TS-250a.1	Quantity	(1) Number of units to be recalled (2) Total units recalled	3.3.2 Customer Relationship Management	38
CG-TS-250a.2	Quantity	Number of notifications from the U.S. Consumer Product Safety Commission (CPSC)	0	-
CG-TS-250a.3	Amount (NT$)	Total amount of monetary losses as a result of legal proceedings associated with product safety	3.3.2 Customer Relationship Management	38
CG-TS-250a.4	-	Description on the processes of assessing/managing risk/hazards associated with chemicals in products	5.1.2 Hazardous Substance Management	78
Labor Conditions in the Supply Chain				
CG-TS-430a.1	Quantity	Number of facilities audited to a social responsibility code of conduct	The establishment of BAS in 2022 had completed the phase of supply chain environmental audits. Please refer to 4.2.1 Supply Chain Management for details. In the future, we plan to promote audits on Supplier CSR Code of Conduct.	68
CG-TS-430a.2	Percentage	Direct suppliers' social responsibility audit (1) non-conformance rate and (2) associated corrective action rate for (a) priority non-conformances and (b) other non-conformances		68
Activity Metric				
CG-TS-000.A	Quantity	Annual production	3.1.2 Operating Performance	27
CG-TS-000.B	Quantity and percentage	(1) Number of manufacturing facilities (including outsourced manufacturing facilities) (2) Percentage outsourced facilities (%)	3.3.2 Customer Relationship Management	38

External Independent Assurance Statement

Independent Assurance Statement

GIANT MANUFACTURING CO., LTD.'s Sustainability Report of 2022

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

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

SCOPE

The disclosure scope of the Report covers the economic, environmental and social activities and operational performance of GIANT's major operating bases in Taiwan and the world.

AFNOR Asia is responsible for:

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

REFERENCES

The scope of the assurance includes an assessment of the source adequacy of specific performance information and an assessment of adherence to the following reporting criteria：

- AA1000 Accountability Principles (2018)
- GRI Standards
- TCFD (Task Force on Climate-related Financial Disclosures)
- SASB Standard

METHODOLOGY

- Review the process and management of the principles of inclusivity, materiality, responsiveness and impact described in the Report related to the AA1000 Accountability Principles (2018).
- The Report is reported in accordance with the GRI Standards, and the content of the Report is reviewed for general disclosures and specific topic disclosures that comply with the GRI Standards.
- Conduct interviews with the management team to confirm stakeholder communication and response mechanisms.
- The qualitative and quantitative information produced, collected, and disclosed by the Report was reviewed through a validated sampling plan.
- Interviews with members of the organization related to sustainable development management and report writing, including representatives of all levels and departments.
- The verification team inspected and reviewed the documents, materials and information related to the report by interviewing the responsible personnel of each group of GIANT.
- Check the sufficiency and completeness of supporting materials and evidence for the content of the Report.

CONCLUSION

◆ **AA1000 Accountability Principles**

Inclusivity

GIANT have established and implemented extensive stakeholder engagement programs to identify and understand the important information generated by issues of concern to stakeholders. The report has fairly reported and disclosed economic, environmental and social information, which is sufficient to support appropriate plans and goals. In the future, the organization will continue to strengthen the identification mechanism of stakeholders and materiality issues to truly reveal the focus of stakeholders and demonstrate the organization's operational performance.

Materiality

GIANT has released relevant information on sustainable management to enable stakeholders to judge the company's management and performance, and develop and implement a decision-making mechanism for material issues to accommodate issues from all parties. In the future, the organization can strengthen the decision-making process of material themes and incorporate them into the company's management operations, so that material issues can be updated in a timely manner and develop corresponding strategies, and spread to various regional departments for performance monitoring and response.

Responsiveness

GIANT has developed and implemented a stakeholder response mechanism, clearly declaring relevant policies and communicating with stakeholders, and responding to expectations and opinions from stakeholders. In the future, on the basis of the headquarters, the organization can strengthen the communication and planning of the various regions within the group, and further improve the collection of information related to sustainable management, so as to strengthen the depth, breadth, and context of the disclosed information to respond to stakeholders.

Impact

GIANT has developed and implemented a process for understanding, measuring, evaluating and managing the impact of the organization, and provided the necessary capabilities and resources, and committed to making a comprehensive and balanced disclosure of the measurement and evaluation of the organization's impact on stakeholders and itself. In the future, the organization will continue to invest resources and carry out effective and appropriate management actions in response to environmental conditions and constraints in different regions; through communication and exchange of management measures and performance in different regions, the impact of operations on the overall ecology will be continuously improved.

◆ **Global Reporting Initiative Sustainability Reporting Standards**

Based on the results of the review, we confirm that the Report complies with GRI reporting requirements in terms of general disclosure items and specific topic disclosures, including material topic management and disclosure items. In the future, the organization will continue to improve the quality of reports, so that stakeholders can easily obtain and understand relevant information such as the organization's response to impact and operational performance, and support sustainable operations.

◆ **Task Force on Climate-related Financial Disclosures**

Based on the results of the review, GIANT has disclosed the impact of climate change on the company's operations and the measures to deal with risks and opportunities; at the same time, it has also formulated and disclosed the goals and achievements in response to risks and opportunities based on the TCFD guidelines. In the future, organizations can follow the scenario settings of different climate impacts guided by TCFD to strengthen the resilience of enterprises in the face of climate factors.

◆ **Sustainability Accounting Standards Board Standards**

Based on the results of the review, GIANT has disclosed with reference to the SASB standards, including the requirements of accounting metrics and activity metrics, and quantified relevant information that is crucial to creating corporate value to support its comparability; in the future, the organization can continue to integrate with the organization's process planning and performance analysis according to the requirements of the standards.

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ASSURANCE OPINION

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

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

ASSURANCE LEVEL

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

LIABILITY

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

For and on behalf of AFNOR：

Patrick Ni

Patrick Ni
The Director for Certification and Assessment
Jul.13.2023

AA1000
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