

# GIANT GROUP ESG REPORT

—  
2023





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## Message from the Chairman

Looking back at 2023, climate change and global warming continued to impact the environment and our lives while changes and upheavals remained in the post-pandemic era. As a responsible corporate citizen, Giant Group upheld the mission of “Raise the Bar: Advancing the Entire Cycling World” in providing a full range of cycling products and services with innovative values, and actively promoting cycling culture in the hope of creating a better experience for people to enjoy the fun and good health from cycling, injecting positive energy into the society.

Continuing the Giant Group’s ESG manifesto of “Cycling for a Better Future,” we focused on the three pillars of climate, circulation and diversity in 2023 with the corresponding three aspects - Innovating a clean future, Mobilizing for DEI and Transforming for circularity. Leveraging our expertise in manufacturing, we expanded our presence from R&D, manufacturing, distribution and retailing to innovations for a cycling lifestyle, and communicated directly with the end customers to build a complete bicycle ecosystem. Our commitment to Innovating a clean future was demonstrated through our efforts in using technology and designs to improve energy efficiency and reduce carbon emissions. As for Mobilizing for DEI, we respected different cultures and values to build an inclusive society. In terms of Transforming for circularity, we promoted the circular economy model and minimized resource waste to achieve sustainable development.

### Innovating a clean future

We believe that popularization of cycling is the most sustainable form of transportation. It can raise health awareness, prompt lifestyle changes and overcome the challenges of extreme weathers. We have a strong track record of promoting carbon

reduction, which starts within the Group and later extends to the supply chain. It has been 15 years since the Taipei City Government first launched the public bicycle system YouBike in 2009. With its coverage expanded to include Tainan City and Pingtung County in 2023, we now operate in partnership with 12 local governments and continue to progress every year.

Giant Group offers diverse cycling experiences. We promote cycling safety education, improve cycling skills, and fully support the development of cycling culture. At the Cycling Culture Museum in Taichung in particular, we organize cycling culture and history seminars, workshops, exhibitions and bike summer camps to demonstrate the undeniable competitiveness of Taiwan’s cycling industry to the world, and build a cycling ecosystem that is accessible to all. We took part in the “Creative Expo Taiwan 2023” to showcase the latest manufacturing technologies and innovative services, further instilling the concept of healthy and low-carbon transportation as well as the awareness of bicycle culture and green living in the hope of building a better and more sustainable future.

### Transforming for circularity

Being known for having the most comprehensive value chain in the bicycle industry, Giant Group linked the two core systems of Sustainable Value Chain and Sustainable Consumer Ecosystem in 2023 to create a circular economy model for Giant bicycles, in order to achieve recycling, reduce carbon emissions and optimize the use of resources. At the same time, Giant teamed up with suppliers, business partners and the community to forge an ecosystem of resource sharing and coexistence, mapping out a circular path towards sustainability.



### Mobilizing for DEI

As a female leader, besides creating a female-friendly work environment in the industry, it is with high hopes that we can break down gender boundaries, demonstrate female strength, and achieve inclusion and equality. Liv is the female-specific brand under Giant. It ensures that every bike conforms to the concept of “female exclusive” from R&D, design, manufacturing to production. As the lead sponsor of Tour de France Femmes avec Zwift and the sponsor of the white jersey for the best female young rider in 2023, Liv’s brand positioning and product design manifest its support for female cyclists, inspiring more women to take on cycling which empowers them with a sense of self-confidence and enjoyment. We will adopt a more proactive approach to promote women’s participation and advancement in the cycling community and to create a richer and more meaningful cycling experience for them.

As Giant Group embarks on its next 50-year journey, we will stay the course and commit to innovation, accountability and inclusion, taking concrete actions to drive the sustainable development of the Group. I am proud of each and every partner who has worked relentlessly for our sustainability mission, and I firmly believe that through the collective wisdom and actions of our team, Giant will return to glory and become a leader in the industry.

### Giant Group Chairperson

Chairperson  
Bonnie Tu

## Message from the CEO

Even after half a century, Giant Group is still profoundly influenced by the motto of our founder, Mr. King Liu, “You cannot be No. 1 without being the only one,” and always has abundant energy to forge ahead. In the past 50 years, we have taken on the mission of promoting bicycle culture and insisted on incorporating sustainable goals into our business development. We formulate environmental, social and governance action plans, and embrace the challenges and opportunities on the path to sustainability.

In 2023, Giant Group had the honor of being ranked in the sixth place for the Best Taiwan Global Brands with a brand value of US\$790 million, making it one of the top 10 international brands for 15 consecutive years. During the same year, our premium bicycle component brand CADEX won the Taiwan Excellence Silver Award with its CADEX TRI frameset in the 32nd Taiwan Excellence Award. The frameset is made of injection-molded composite materials, which is not only lightweight but also environmentally friendly. The ultra-lightweight carbon fiber effectively reduces the product weight, which minimizes waste generated during the transportation process. This feature conforms to the three Rs principle and pushes the limit of sustainability. In 2024, Giant Group further surged to an impressive ranking of 21st among the world’s 100 most sustainable corporations in the Corporate Knights’ Global 100.

In 2022, Giant Group took the initiative to establish the “Bicycling Alliance for Sustainability” (BAS), and united with more bicycle industry partners in 2023 to jointly promote ESG sustainability actions. We kept track of international sustainability regulations and committed to transparent disclosure of sustainability information. During the process, BAS members actively participated in courses organized by the alliance, and applied the knowledge into practical use, where 84% of the members carried out carbon inventory in the first year. In the same year, we completed our greenhouse gas inventory target ahead of schedule, and encouraged our

members to comply with the International Bill of Human Rights in creating a diverse and inclusive work environment. Furthermore, BAS encouraged members to actively participate in riverside clean-ups, take actions to promote climate education, and maintain the bikeways together. As the ESG ecosystem of the bicycle industry, BAS provides a comprehensive platform for the cycling industry chain, where members can work together to drive the industry towards sustainability.

As a global leader in the bicycle industry, we obtained the Taiwan Renewable Energy Certifications (T-RECs) and completed associated declarations in 2023, marking another important milestone for our commitment to sustainable development. We gradually increase our use of renewable energy, build smart power and water grids, and adopt energy-efficient equipment to realize sustainable energy use. These improvement measures had a significant effect on carbon reduction at our Taiwan factory, where the carbon emissions per million dollars of revenue dropped 22% in 2023 compared to 2021 with a 30% reduction in absolute emissions. At the same time, we are devoted to the study on raw material durability and explore new solutions with the spirit of innovations. In terms of our carbon-fiber road bikes, we conducted a carbon footprint inventory of our TCR Advanced Pro 0 in 2023, rethinking every step from manufacturing to product design to reduce carbon emissions. In addition, we redesigned our product packaging to follow the principle of recyclability. We eliminated large quantities of single-use plastics and actively carried out researches on various recycled materials in order to continuously increase the use of environmentally friendly materials.



Climate issues are at the heart of our sustainability efforts. We are committed to promoting climate action and adopting cycling carbon rights at the same time. In 2023, we continued our “Cycling and Planting for Environmental Protection” campaign. We planted trees and cleaned up beaches at the Taichung Metropolitan Park, Chushui Coasts at Yuanli in Miaoli County, Fazi River, Songbo Fishing Port, XiShi Shore and Giant Europe Manufacturing B.V. We also encouraged our employees around the world to participate in the Sustainable 22 campaign for sustainable development.

Moving forward to the next 50 years, I will lead the team in promoting low-carbon life, circular economy, and DEI relentlessly. We aim to build the sustainability vision of Cycling for a Better Future in the name of cycling, creating a better and more sustainable future for the society.

**Giant Group CEO**

Chief Executive Officer  
Young Liu

## Recognition and Awards



**2023 E-BIKE VAN HET JAAR**  
(Giant Stormguard E+2)



**Bicycling Magazine - Best Bikes Awards of 2023**  
(Liv Intrigue X Advanced E+ Elite)



**BikeRadar - Gravel Bike of the Year 2023**  
(Giant Revolt X Advanced Pro 1)

Jan-18

Feb-24

March-21

Apr-06

Apr-11

May

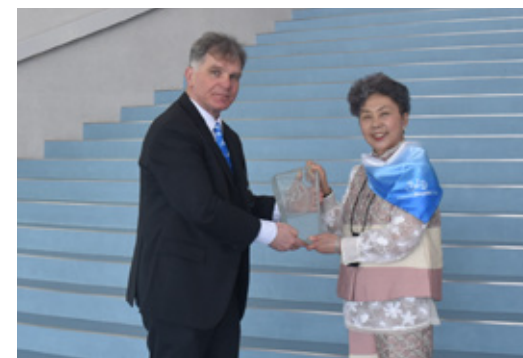
**Corporate Knights' 2023 Global 100 - The World's 100 Most Sustainable Corporations**  
(Giant Group Ranked 51st)



**TAIPEI CYCLE D&I Awards 2023**  
(CADEX won the Gold Award with the CADEX TRI frameset)



**2023 United Nations' World Bicycle Day - Special Lifetime Achievement Award**  
(Bonnie Tu, Chairperson)





Outside Editor's Choice Award - The Best Road Bikes of 2023  
(Giant Propel Advanced SL 0)



Finder Retail Awards 2023: Best-rated bicycle brand: Giant



Gold and silver awards of the 32nd Taiwan Excellence Award  
(CADEX won the Taiwan Excellence Silver Award with CADEX TRI frameset)

May

May-24

May-25

Jul-28

Nov-28

Dec-06

2024

BikeRadar - Aero Road Bike of the Year 2023  
(Giant Propel Advanced Pro 0 AXS)

Race Bike of the Year - 2023 Best Value Awards  
(Giant Propel Advanced Pro)

Ranked 6th in 2023 Best Taiwan Global Brands  
(A record-high brand value of US\$790 million)

Corporate Knights' 2024 Global 100 The World's Most Sustainable Companies Ranking  
(Giant Group Ranked 21st)



# Environment Social Governance

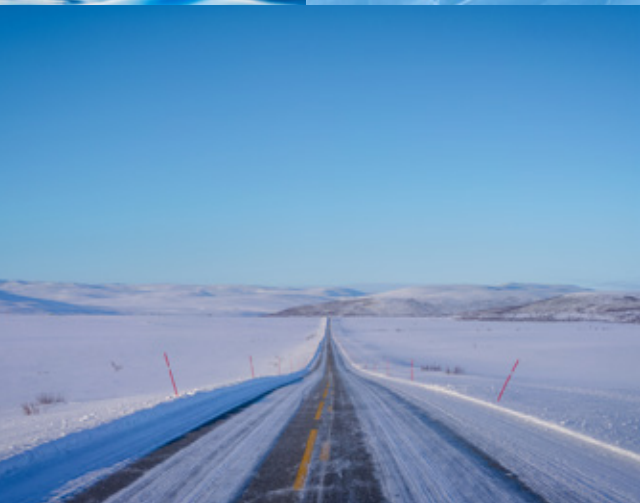
## 2023 Sustainability Highlights



### Environmental aspect

### Social aspect

### Governance aspect



**4,839.36** ton of CO<sub>2</sub>e

A saving of 86,937.71 GJ from 35 energy-saving measures in 2023

**100%**

Completion rate of occupational safety and health proposals in 2023

**Ranked 6th**  
in the Best Taiwan Global Brands

Ranked 6th in the 2023 Best Taiwan Global Brands with a brand value of US\$790 million, up 6% from the previous year

**2,057,129.14** kWh

Electricity generated from solar systems/ T-RECs in 2023 (Taiwan Factory)

**100%**

The 100% return to work and retention rates of female employees in the Group demonstrated our care for female employees

**Level A**

Taiwan Intellectual Property Management System (TIPS) Level A certification in promoting the use of intellectual property to generate operational benefits

**11.7%**

Percentage of green power in 2023 (All Giant Group factories)

**0 incidents**

Zero cases of occupational diseases in 2023

**0 incidents**

Zero information security incidents in 2023



# About Giant Group

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## 1.1 Company Profile

Founded in 1972, Giant Group is committed to advancing the cycling world with the brand mission of “Raise The Bar.” We integrate bicycle design, technology R&D, manufacturing and brand sales, and own four major brands - Giant, Liv, Momentum and CADEX, with brand-specific products and services targeting different consumer groups.

Combating the environmental impacts of climate change poses as the world’s biggest challenge. Bicycle is not merely a means of transportation but also a sport and the solution for energy saving and carbon reduction in the future. Giant Group is devoted to incorporating ESG into core business and promoting sustainable management with the theme of “Cycling for a Better Future.” We continue to provide diverse products and services to consumers, and pursue growth in brand value. In terms of brand management, the Group ranked No. 6 in 2023 Best Taiwan Global Brands organized by the Ministry of Economic Affairs with a record-breaking brand value of US\$790 million, up 6% from 2022; and the highest brand value in Taiwan’s health and sports industry. Looking forward, Giant Group works towards bringing Taiwan’s bicycle industry to the world stage, developing green transportation solutions, and realizing sustainable development goals.

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



Headquarters at the	Founded in
<b>Central Taiwan Science Park</b> (No. 999, Sec. 1, Dongda Rd., Xitun Dist., Taichung City)	<b>1972</b>
<b>NT\$76.95 billion</b>	2023 consolidated revenue of Giant Group
<b>60%</b>	Strong sales performance in China, delivering 60% year-over-year growth in revenue
<b>1</b>	A long-term market leader in Taiwan, the No. 1 cycling brand in China, and one of the top three brands in Europe and North America.
<b>US\$790 million</b>	No. 6 in 2023 Best Taiwan Global Brands with a record-breaking brand value of US\$790 million, and the highest brand value in Taiwan’s health and sports industry
<b>Ranked 21st</b>	Giant Group ranked 21st in Corporate Knights’ 2023 Global 100 - The World’s 100 Most Sustainable Corporations

## 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 innovations for bicycles, e-bikes and related components under our private brands, our OEM business unit places equal importance on customer brands, bringing their products to evolve to the next level, thereby allowing the industry to advance together and compete fairly.



9

Factories

14

Sales companies

10,000+

Sales channels

## 1.3 Brand Architecture

With “Raise The Bar” as our mission, Giant Group is dedicated to advancements in bicycle products. 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 performance bicycle components brand. With brand-specific products and services targeting different consumer groups, we aggressively build a strong brand portfolio. Furthermore, with beliefs of cultural transmission, life exploration, and environmental friendliness, Giant Group has been active in promoting the new cycling culture. Having established four service business units, i.e., 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, thereby striving for a better sustainable future.

Since our establishment 50 years ago, Giant Group has been providing products and services of innovative value in the spirit of “Raise the Bar - Advancing the Entire Cycling World.” In recent years, we channel our efforts to link ESG with our core business, and promote sustainability under the theme of Cycling for a Better Future with the three ESG strategy pillars - Innovating a clean future, Transforming for circularity and Mobilizing for DEI. In addition to the bicycle industry being a sustainable solution, our ESG investments in recent years (e.g., the popular YouBike, in-house solar power systems, developments of more eco-friendly technologies, and teaming up with our supply chain partners to form the BAS) have been recognized as “meaningful carbon-reduction investments.”

At Giant Group, we take sustainable development seriously. We believe that bicycles, being energy-saving and low-carbon, are the best option for commuting as well as a means of sport and fitness in the future. We look forward to bringing Taiwan’s bicycle industry to the world stage, developing green transportation solutions, and realizing the goals of environmental protection and sustainable development.

### Mission

Raise the bar

### Value

Sincere and enthusiastic: Care about others and stay the course

Tactical: Focus on details and accumulate success

Proactive: Challenge the status quo and reshape the future

Collaborative: Work with collective wisdom and efforts, and share achievements

### Means of Promotion

Innovating a Clean Future

Transforming for Circularity

Mobilizing for DEI

As the parent brand, Giant Group objectively supports the development of each sub-brand and creates the brand synergy of 1+1>2. We execute a multi-brand strategy to strengthen and satisfy the cycling expectations of different consumer groups. We coordinate corporate resources and actively manage our four major brands, ensuring each brand retains its distinct characteristics and product differentiation. In recent years, we focus on building brand value and enhancing digital marketing. Being customer-oriented, we improve consumer experience and integrate online and offline channels. With E-comm, Giant ID and digital marketing, we provide consumers a wide range of services, thereby creating a unique brand experience.

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

### Group Brand



### Product Brands



### Service Brands and Other Businesses





# Sustainability Vision and Practice

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## 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 different 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, and 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	<p><b>Promote green production, and circular supply and regeneration of resources</b></p> <p>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.</p> <p>The Group plans to build a low-carbon and waste-reducing bicycle manufacturing model from R&amp;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.</p>	<p><b>Provide low-carbon cycling services</b></p> <p>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.</p> <p>For this reason, Giant Group operates YouBike, the public bicycle rental system, under the commission of city governments. By 2023, there was a total of 750 million rentals. The Group will continue to promote the use of bicycles as a commuting tool for urban areas.</p>	<p><b>External - Establish a sustainability alliance and adopt responsible sourcing</b></p> <p>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.</p> <p><b>Internal - Promote climate philanthropy and be an ESG advocate</b></p> <p>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.</p>	<ul style="list-style-type: none"> <li>Establish low-carbon bicycle manufacturing model with industry players</li> <li>Expand the promotion of bicycles as a means of commuter transportation</li> <li>Map out green supply chain and carbon management mechanisms</li> <li>Incorporate climate issues into the theme of public welfare</li> </ul>	    

	Sustainability Blueprint	Significance to Giant	External and Internal Directions of ESG Strategy	Achievements	SDGs
Transforming for circularity	<p><b>Circular supply and regeneration of resources and materials</b></p> <p>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.</p> <p>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 products. As for E-bikes, the Group will promote a variety of innovative solutions such as recycling and maintenance of batteries and service batteries.</p>	<p><b>Promote brand value services</b></p> <p>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.</p> <p>Starting from 2009, Giant Adventure has organized over 2,800 bicycle tours for 90,000 riders by 2023, saving approximately 54,000 metric tons of carbon emissions, and continued to promote similar service models around the world.</p>	<p><b>External - Promote the extension of product lifespan</b></p> <p>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.</p> <p><b>Internal - Improve resource efficiency</b></p> <p>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.</p>	<ul style="list-style-type: none"> <li>Focus on the development of recyclable and decomposable materials</li> <li>Expand the cycling services and rental models</li> <li>Extend the lifecycle of products and components</li> </ul>	    
Mobilizing for DEI	<p><b>Encourage diversity in riding</b></p> <p>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.</p> <p>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.</p>	<p><b>Strengthen supply chain resilience and diverse services</b></p> <p>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.</p> <p>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.</p>	<p><b>External - Encourage diverse learning and initiatives</b></p> <p>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.</p> <p><b>Internal - Diverse and open workplace</b></p> <p>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%.</p>	<ul style="list-style-type: none"> <li>Bring the public to embrace cycling in their lives</li> <li>Build the best employer brand</li> <li>Develop a diverse and decentralized supply chain</li> <li>Take an active role in community activities to promote an inclusive society</li> </ul>	    

## 2.3 Materiality Analysis

### Materiality Analysis Process

Giant Group conducts a materiality analysis every two years. We follow GRI 3: Material Topics 2021 of the GRI Universal Standards 2021 and integrate 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. The preparation of 2023 Sustainability Report adopted the outcomes of 2022 materiality analysis. 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 outcomes, 13 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 identified the sustainability context of Giant Group and compiled a list of 23 sustainability issues.

Step 1: Identify stakeholders	<b>6 types of stakeholders</b>	Employees, investors, consumers/dealers/brand customers, suppliers/contractors, government, and social groups (community, non-profit organizations, media, academic institutions and others) were the key stakeholders of Giant Group.
Step 2: Collect sustainability issues	<b>23 issues</b>	<ul style="list-style-type: none"> <li>· Sources of sustainable issues: International standards and norms: GRI Standards, Sustainability Accounting Standards Board (SASB), and United Nations Sustainable Development Goals (SDGs)</li> <li>· Global bicycle industry: Studied the contents and practices of sustainability disclosures by companies in the global cycling industry chain</li> <li>· Stakeholder communications: Gathered stakeholder feedback on sustainability issues</li> </ul>

## Stage 2:

**Materiality analysis**

Giant Group conducted the materiality analysis for sustainability report from three aspects: “stakeholders’ level of concern”, “impact on operation”, and “impact on sustainability”.

		Understood stakeholders’ level of concern for each sustainability issue through questionnaires.						
		<b>A total of 1,607 stakeholders</b>						
Step 3: Stakeholders’ level of concern	<b>1,607 questionnaires</b>	<table border="1"> <tr> <td style="text-align: center;"><b>1,204</b> including employees</td> <td style="text-align: center;"><b>99</b> suppliers/contractors</td> <td style="text-align: center;"><b>20</b> investors</td> <td style="text-align: center;"><b>209</b> customers/dealers</td> <td style="text-align: center;"><b>11</b> government</td> <td style="text-align: center;"><b>64</b> social groups</td> </tr> </table>	<b>1,204</b> including employees	<b>99</b> suppliers/contractors	<b>20</b> investors	<b>209</b> customers/dealers	<b>11</b> government	<b>64</b> social groups
<b>1,204</b> including employees	<b>99</b> suppliers/contractors	<b>20</b> investors	<b>209</b> customers/dealers	<b>11</b> government	<b>64</b> social groups			
Step 4: Impact on operation	<b>9 senior executives</b>	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	<b>9 significant impacts</b>	Determined 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	<b>13 material issues</b>	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 in the sustainability report.						



# Sustainability Impact Assessment Process of Giant Group

## Identify Positive and Negative Impact

### Identify impact

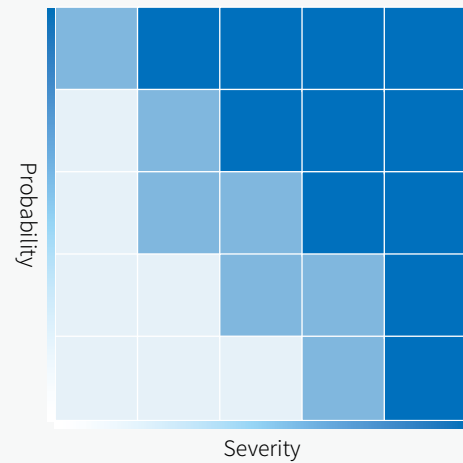
Impact	Positive	Negative
Economy	4	1
Environment	2	2
People/ Human Rights	4	2

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

## Analysis on Significant Impact

### 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

## Sustainability Issues with Significant Impact

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



### Stage 3: Responsiveness

Based on topics and indicators of the GRI Guidelines, the materiality analysis results were expanded to cover the needs and expectations of different stakeholders concerning sustainability disclosures. Giant strengthened 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 were 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

**10 specific**  
topics

The 13 material issues identified were matched to 10 specific topics in the GRI Guidelines. Sustainability information was 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 Standard	SASB Index	Corresponding Chapter
Economic	Financial Performance	Economic Performance (201-1 and 201-4)	CG-TS-000.A	3.1.2 Operating Performance
	Risk Management	GRI General Disclosures		3.2.1 Risk Management
	Customer Relationship Management	Giant Self-defined Topics	CG-TS-250a.1, CG-TS-250a.3, CG-TS-000.B	3.3.2 Customer Relationship Management
	Innovative Products and Services	Giant Self-defined Topics		3.4.3 Advanced Technology 5. Transforming for Circularity
	Brand Management	Giant Self-defined Topics		1.3 Brand Architecture
	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 302: Energy GRI 305: Emissions GRI 201-2: Economic Performance		4.1.1 Climate and Energy 4.1.4 Pollutants
	Green Products	Giant Self-defined Topics	CG-TS-250a.4	5. Transforming for Circularity
Social	Diversity and Inclusion	GRI 202-2: Market Presence 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 202-1: 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 2023
<b>Employee</b>	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.	<ul style="list-style-type: none"> <li>Chairperson and CEO mobilization meeting for communication and sharing / Monthly</li> <li>Chief functional officer mobilization meeting for communication and sharing / Weekly</li> <li>Employee Welfare Committee (EWC) meeting / Monthly</li> <li>Performance evaluation and feedback / Annually</li> <li>Employee Commitment Survey / Biannually</li> <li>Employee complaint or counseling channels / Always</li> </ul>	<ul style="list-style-type: none"> <li>Labor/Management Relations</li> <li>Employee Benefits</li> <li>Talent Development and Retention</li> </ul>	<ul style="list-style-type: none"> <li>12 Chairperson and CEO monthly mobilization meetings for sharing</li> <li>12 chief functional officer weekly mobilization meetings for sharing</li> <li>12 EWC meetings for the execution and confirmation of EWC activities</li> <li>All regular employees underwent performance evaluations and feedback to define and optimize work targets</li> </ul>
<b>Investor</b>	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.	<ul style="list-style-type: none"> <li>Shareholders' meeting / Annually</li> <li>Investor Conference / Annually</li> <li>Annual report and sustainability report / Annually</li> <li>Disclosure of revenue on the Market Observation Post System (MOPS) / Monthly</li> <li>Two-way communication with investors / As needed</li> <li>Corporate website in Chinese and English and stakeholder section / Always</li> </ul>	<ul style="list-style-type: none"> <li>Risk Management</li> <li>Financial Performance</li> </ul>	<ul style="list-style-type: none"> <li>Shareholders' meeting was held on June 21, 2023</li> <li>Investor conferences were organized at least once every quarter in both Chinese and English to interact with investors and share our status and market dynamics</li> <li>Monthly revenue and quarterly financial reports were released accordingly for investors to understand the Company's operating performance</li> <li>Annual reports and our first sustainability report were available in both Chinese and English and the latter was prepared in line with international standards such as GRI, SASB and TCFD</li> <li>Quarterly and annual financial reports in both Chinese and English were available on the corporate website for domestic and foreign investors, effectively increasing our channels of information disclosure</li> </ul>
<b>Social Group</b> (community, non-profit organizations, media, academic institutions, and others)	Giant Group's operations 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.	<ul style="list-style-type: none"> <li>Community care activities / As needed</li> <li>Regional charity events / As needed</li> <li>Cooperation with NGO or NPO / As needed</li> <li>Academic exchanges / As needed</li> <li>Press releases on monthly operational highlights and Board resolutions / Periodically</li> <li>Press releases for other external communications / Instantaneously</li> <li>Release of material information / As needed</li> <li>Media interviews / As needed</li> <li>Giant Group official website / Instantaneously</li> <li>Giant Group social media / Instantaneously</li> </ul>	<ul style="list-style-type: none"> <li>Corporate Governance and Brand Value</li> <li>Group Operation and Corporate Image</li> <li>Sustainable Developments and Actions of the Group</li> <li>Innovative Products and Services</li> <li>Significant Investments of the Group</li> <li>Promotion of Cycling Culture</li> </ul>	<ul style="list-style-type: none"> <li>We responded to and collaborated according to project and regional needs. Please refer to the public welfare section for more details.</li> <li>18 press releases</li> <li>2 press conferences</li> <li>53 posts on the Group social media</li> <li>The Giant Group official website is updated as needed</li> </ul>

Stakeholder	Significance of Stakeholder to Giant	Means and Frequency of Communication	Important Issue of Concern	Communication in 2023
<b>Supplier/ Contractor</b>	Giant Group focuses on new process technology development; quality improvement; environmental, safety and health (ESH) standards; and ESG development where suppliers and contractors are an integral part of the operation. Most of end products' carbon footprints is generated by the supply chain. We plan to achieve sustainable supply chain management by implementing the Supplier Code of Conduct.	<ul style="list-style-type: none"> <li>International bicycle exhibition and conferences (Taipei Cycle &amp; Taichung Bike Week) / Annually</li> <li>Supplier communication and meetings / As needed</li> <li>Specific ESG requirements for the BAS, e.g., GHG inventory within two years and annual carbon reduction of 3%, with the reduction target of 25% or 40 kilograms per bicycle by 2030</li> <li>BAS general meeting / Annually</li> <li>BAS monthly member meeting / Monthly</li> </ul>	<ul style="list-style-type: none"> <li>Supplier Management</li> </ul>	<ul style="list-style-type: none"> <li>Signing of the Code of Conduct by key suppliers at 100%</li> <li>Regular and unscheduled on-site verification by product planning, development and procurement teams</li> <li>A total of 75 suppliers of the cycling industry joined the BAS, along with 8 sponsor members, including internationally renowned brands, media and non-profit organizations, to jointly drive the developments of ESG initiatives</li> <li>12 monthly member meetings on sharing best practices and benchmarking, with instant feedback based on personal experience</li> <li>90 hours of ESG education and training for BAS members. 84% of BAS members had completed or were in the process of conducting GHG inventories</li> <li>2 riverside clean-ups by BAS members to fulfill their social responsibility</li> </ul>
<b>Consumer / Dealer / Brand Customer</b>	Giant Group meets the needs of consumers and dealer 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, dealers and brand customers can enjoy a wide range of quality products and services to fulfill different needs, thereby achieving mutual success and developments.	<ul style="list-style-type: none"> <li>Dealer communication and meetings / Always</li> <li>Dealer conference / Annually</li> <li>Diverse online and offline service experience for consumers</li> <li>Consumer after-sales service hotline / Always</li> <li>Corporate website in Chinese and English / Always</li> <li>Brand customer communication and meetings / Always</li> </ul>	<ul style="list-style-type: none"> <li>Product and Technology Innovation</li> <li>Green Process and Product</li> </ul>	<ul style="list-style-type: none"> <li>Dealer meetings were organized regularly at each region for troubleshooting and communication; and there were online training courses for dealers</li> <li>Dealer conferences were organized periodically at each region for product launches, strategy sharing and dealer recognition</li> <li>Promoted our mobile apps which notify consumers of the latest activities and spending records with easy access</li> <li>Ride Life App in China had 1,486 thousand new members</li> <li>Cycling Map had 626.8 thousand users.</li> <li>Cycling Race had 47 thousand users</li> <li>Customer service hotlines at each region to provide timely feedback on customer issues and assign complaints to responsible units</li> <li>Official websites in local languages at each region to provide consumers with real-time product information</li> <li>Diverse communication channels were available for our operations in China</li> <li>WeChat: 846.8 thousand users with 341 articles/videos posted</li> <li>Weibo: 146.1 thousand users with 386 articles/videos posted</li> <li>Xiaohongshu: 23.5 thousand users with 292 articles/videos posted</li> <li>WeChat Channel: 20.4 thousand users with 148 articles/videos posted</li> <li>Douyin: 203 thousand users with 149 videos having over 10 thousand views</li> <li>Satisfaction rate remained high in 2023</li> <li>Assisted customers in handling idle stocks to minimize losses</li> </ul>
<b>Government</b>	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 applicable regulations.	<ul style="list-style-type: none"> <li>Official correspondences and visits / As needed</li> <li>Government meetings and communications (e.g. briefings, public hearings, symposia, seminars, meetups) / As needed</li> <li>Release of material information / As needed</li> </ul>	<ul style="list-style-type: none"> <li>Human Rights and Labor/ Management Relations</li> <li>Innovative Products and Services</li> <li>Brand Management</li> <li>Occupational Safety and Health</li> </ul>	<ul style="list-style-type: none"> <li>Responded immediately to inquires via official correspondence or requests for visits from the competent authorities</li> <li>Participated in promotional sessions or seminars on the latest laws and regulations organized by the competent authorities and tax authorities</li> <li>Met information filing and material information requirements of the Taiwan Stock Exchange in accordance with the laws</li> <li>Met filing requirements of the tax authorities in accordance with the laws</li> </ul>



# Management and Governance

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## 3.1 Management and Governance

### 3.1.1 Corporate Governance

#### 3.1.1.1 Operation of the Board of Directors

##### Board composition and operation

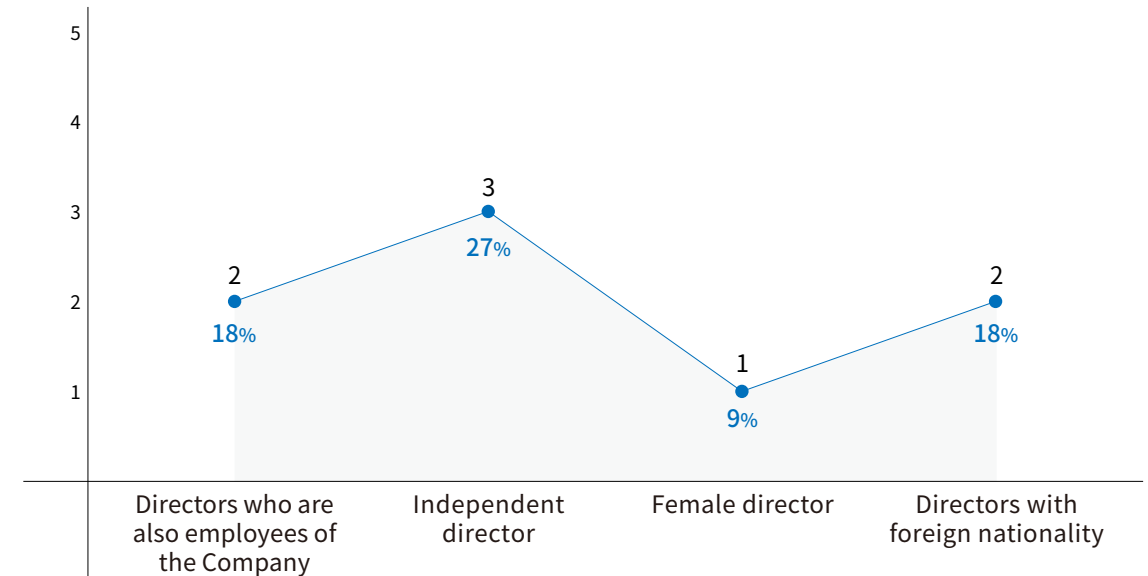
The Board of Directors is the highest governance body of Giant Group. Adhering to the principle of transparent governance, the Board respects shareholder rights and performs its duties in a sound and effective manner. Regular Board meetings are held at least once every quarter while special Board meetings may be convened at any time. We had seven Board meetings in 2023, and the average attendance rate of directors was 100%. Additionally, to enhance the Board's functionality and decision-making efficiency, the Audit Committee and the Remuneration Committee are established under the Board to assist with fulfilling its duties of overseeing the business operation. The committees report to the Board on a regular basis.

##### Organization and Operation of Functional Committees

	Audit Committee		Remuneration Committee
<b>Composition</b>	<ul style="list-style-type: none"> <li>Convener: Jui-Lin Lo</li> <li>Committee members: Hilo Chen and Chun-Sheng Ho</li> </ul>	<b>Composition</b>	<ul style="list-style-type: none"> <li>Convenor: Hilo Chen</li> <li>Committee Members: Jui-Lin Lo and Chun-Sheng Ho</li> </ul>
<b>Main Duties</b>	<ul style="list-style-type: none"> <li>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 (CPAs); the effective implementation of internal controls; regulatory compliance; and controls over existing or potential risks of the Company</li> </ul>	<b>Main Duties</b>	<ul style="list-style-type: none"> <li>Assist the Board with formulating the Company's compensation policies and structures in order to attract, motivate, reward and retain outstanding talents</li> </ul>
<b>Operation</b>	<ul style="list-style-type: none"> <li>At least one meeting every quarter</li> <li>A total of seven meetings with an attendance rate of 100% in 2023</li> </ul>	<b>Operation</b>	<ul style="list-style-type: none"> <li>At least two meetings every year</li> <li>A total of two meetings with an attendance rate of 100% in 2023</li> </ul>

Giant Group's [Articles of Incorporation](#) stipulates that the Board shall have 9 to 11 directors with a term of three years. As of December 31, 2023, the Company had 11 directors with an average term of office equaled to 18.20 years. Of the current Board, there are two directors (18%) who are also employees of the Company, three independent directors (27%), one female director (9%), and two directors with foreign nationality (18%).

##### Attribute distribution



## Board Composition

Title	Name	Gender	Nationality	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	Female	R.O.C.	51.5		✓	✓	✓	✓	✓	✓	✓	Consumer Discretionary
Director	Young Liu	Male	R.O.C.	26.4		✓	✓	✓	✓	✓	✓	✓	Consumer Discretionary
Director	Kinabalu Holding Company Representative: Tzu-Sing Tho	Male	Malaysia	3.5	✓	✓		✓	✓		✓	✓	Consumer Discretionary
Director	King Liu	Male	R.O.C.	51.5	✓	✓	✓	✓	✓	✓	✓	✓	Consumer Discretionary
Director	Ta-Peng Chiu	Male	R.O.C.	26.4	✓	✓	✓	✓	✓	✓	✓	✓	Consumer Discretionary
Director	Huai-Ching Yang	Male	R.O.C.	17.4	✓	✓		✓	✓	✓	✓	✓	Healthcare
Director	Ta-Wei Chiu	Male	R.O.C.	5.5	✓	✓		✓	✓	✓	✓	✓	Healthcare
Director	Tzu-Chien Tho	Male	Malaysia	2.5	✓	✓		✓	✓		✓	✓	Industrials
Independent Director	Hilo Chen	Male	R.O.C.	8.5	✓	✓	✓	✓	✓	✓	✓	✓	Information Technology
Independent Director	Jui-Lin Lo	Male	R.O.C.	5.5	✓	✓	✓	✓	✓		✓	✓	Industrials
Independent Director	Chun-Sheng Ho	Male	R.O.C.	2.5	✓	✓	✓	✓	✓	✓	✓	✓	Information Technology

Note: External 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 have received significant donations from the Company.
8. The director was 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.

### Director diversity and independence

The Group adopts the candidate nomination system where directors are elected from a list of candidates by the shareholders' meeting. Giant Group's Articles of Incorporation stipulates that the number of independent directors shall not be less than three nor less than one-fifth of the total number of directors. Also, the Company's independent directors shall not serve for more than three consecutive terms (9 years) to avoid having their independence reduced due to long tenure. Chairperson of the Company does not concurrently assume managerial positions in the Company.

The Company 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 and achieved 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 in 2023. As we continuously improve the diversified structure of the Board, we take one step further and set the targets of at least two female directors by 2024 and for independent directors to constitute over one-third of the Board by 2027.

Please refer to page 10 of the Company's 2023 Annual Report for details on Board members' main education/work experience and number of other public companies in which the members concurrently serve as independent directors, as well as the Board diversity policy and implementation thereof.

### 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 current performance evaluations of the Board and Board members have yet to include the performance procedure of the Board in overseeing the organization's management of impacts related to the economy, environment, and people as one of the evaluation indicators. It is proposed to incorporate the aspect of sustainable governance into the evaluation questionnaire for Board member performance evaluation. The 2023 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 13, 2024 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 election 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."

To enhance the competence of directors and thus the oversight quality, the Company's Corporate Governance Officer has drawn up governance learning maps since 2022, analyzing directors' continuing education status annually in the five areas of sustainability, governance, transformation and change, risk management, and taxation and finance; and offering recommendations on continuing education for the following year. The Board of Directors Council would notify directors to attend refresher courses of professional knowledge hosted by relevant agencies. Our directors had an average of 7.4 hours of continuing education in 2023, covering topics such as climate governance, corporate governance, sustainable management, digital transformation, risk management and industry trends.



### 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. 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 the 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. It reports directly to the Chairperson and the Audit Committee, and the chief audit executive reports in every Board meeting. The Office 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 communication between independent directors and chief audit executive and CPAs in 2023 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

To implement corporate governance, the Group has formulated the "Enforcement Rules for Management of Compensation to Directors, Members of Functional Committees and Managers" for such compensation to be transparent, rationalized and standardized. The Rules clearly stipulate that apart from expenses related to the execution of the Company's business (such as transportation expenses), directors are entitled to monthly compensation pursuant to Article 24 of the Articles of Incorporation, 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. Remuneration to independent directors includes monthly compensation, expenses related to the execution of the Company's business (such as transportation expenses,) and fixed compensation for functional committee members. Independent directors do not participate in earnings distribution.

The performance evaluation and compensation of directors and managers are determined by the Remuneration Committee with consideration to the industry standards, performance of individuals, business performance of the Company and reasonable correlation with future risk exposure. To strengthen the supervisory and management functions of the directors and managers in sustainable development, the Company plans to moderately incorporate corporate sustainability-related indicators into the performance indicators of directors and managers.

#### 2023 Annual Total Compensation Ratio

CEO annual total compensation (NT\$ thousands)	<b>57,066</b>
Average employee compensation (NT\$ thousands)	<b>686</b>
Average employee compensation as a percentage of CEO annual total compensation (%)	<b>1.20</b>

Note: The calculation of average employee compensation adopts the same basis as the calculation of employee benefits expenses. In 2023, there were an average of 2,793 employees, with 9 non-employee directors.

Note: Data extracted from page 16 of Giant's 2023 Annual Report.



## 3.1.2 Operating Performance

### 3.1.2.1 Financial performance and shareholders' equity

In 2023, the persisted inventory risk in the cycling market led to a significant decline of Giant Group's revenues and profits in Europe, the U.S.. The consolidated revenue amounted to NT\$76,953 million in 2023, a decrease of NT\$15,090 million from the previous year, with an earnings per share (EPS) of NT\$8.68.

#### Consolidated financial information for the past four years

	Unit: NT\$ thousands			
	2020	2021	2022	2023
Operating revenues	70,010,849	81,839,870	92,043,675	76,953,546
Operating costs	53,842,103	62,075,731	71,219,652	59,980,253
Employee salaries and benefits	9,311,947	11,072,895	12,735,502	11,006,604
Cash dividends (NT\$)	8	10	7.8	5

Note: Please refer to page 119 of the 2023 Annual Report for details on the Company's government grants.

#### Composition of shareholders

As of August 29, 2023; Unit: Persons; shares; %

Quantity	Type	Government Agencies	Financial Institutions	Other Juridical Persons	Domestic Natural Persons	Foreign Institutions and Natural Persons	Total
	Number of Shareholders		3	37	113	626	19,362
Shareholding		2,046,604	38,837,559	42,242,569	176,745,035	132,192,859	392,064,626
Shareholding Percentage		0.52%	9.91%	10.77%	45.08%	33.72%	100.00%

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

As of August 29, 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 Bank (Taiwan) Limited		17,453,817	4.45%
Young Liu		16,296,026	4.16%
Singapore Government Investment Account in custody of Citibank Taiwan		10,797,826	2.75%
Cathay Life Insurance Co., Ltd.		9,413,571	2.40%
Bonnie Tu		8,406,668	2.14%
Chunghwa Post Co., Ltd.		8,265,223	2.11%
King Liu		7,738,278	1.97%
Su-Hua Liu		7,051,777	1.80%
Fubon Life Insurance Co., Ltd.		7,013,236	1.79%

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

Unit: NT\$ thousands; thousand units

Production Volume and Value Main products	Year	2020			2021			2022			2023		
		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		5,500	4,901	55,883,736	6,200	6,061	59,397,534	6,203	5,843	75,133,572	5,517	4,198	65,292,161
Materials		-	-	4,455,825	-	-	6,102,091	-	-	6,344,896	-	-	4,980,590
Total		5,500	4,901	60,339,561	6,200	6,061	65,499,625	6,203	5,843	81,478,468	5,517	4,198	70,272,751

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 strive to minimize tax risk while maximizing tax saving effect under a legal and compliant framework. We periodically 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:

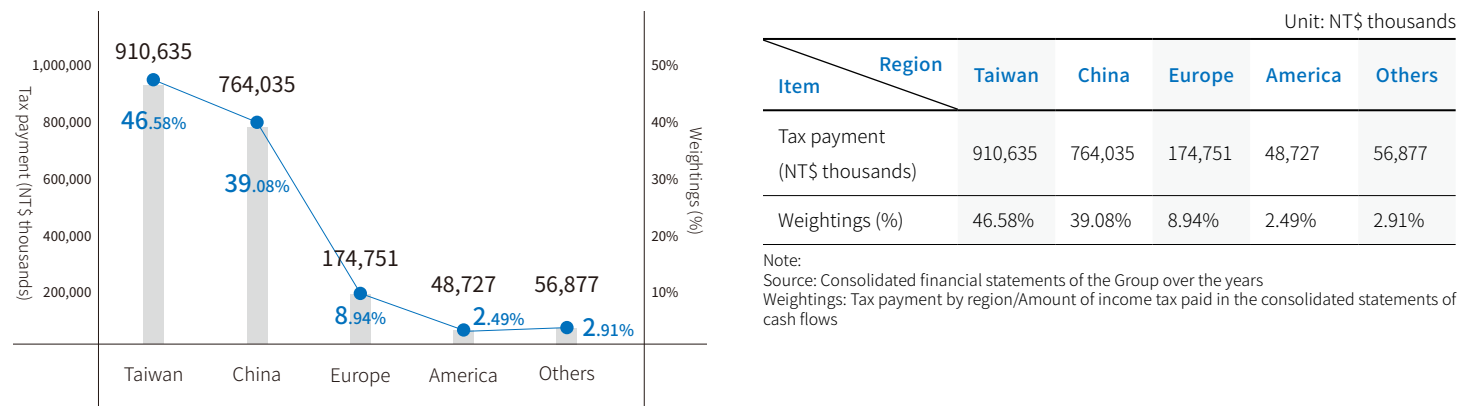
- The primary purpose of tax planning is to ensure that our business and business strategies are in compliance with the tax laws and regulations of all countries where we operate.
- We would not engage in tax planning solely for the purpose of reducing tax liabilities or shifting profits to low-tax jurisdictions or tax havens.
- We would not employ improper 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 encompassed within 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 address major tax-related issue through channels including accountants and trade associations in public policy initiatives.

### 2023 Income Tax Expense of Giant Group by Location



### Tax-related Information of Giant Group for the Past Four Years

Item	Year			
	2020	2021	2022	2023
Operating revenues	70,010,849	81,839,870	92,043,675	76,953,546
Pre-tax profit	6,832,866	8,728,460	8,738,019	4,799,134
Income tax expense	1,656,957	2,420,951	2,561,488	1,232,742
Effective tax rate	24.25%	27.74%	29.31%	25.69%
Income tax paid	1,139,507	1,681,353	2,039,756	1,955,025
Cash tax rate	16.68%	19.26%	23.34%	40.74%

Source: Consolidated financial statements of the Group over the years

Giant Group's effective tax rate and cash tax rate for 2023 were 25.69% and 40.74%, respectively. The effective tax rate was above the average effective tax rate of 21.23% for the "Leisure Equipment & Products and Consumer Electronics" industry released by the Global Industry Classification Standard (GICS), while the cash tax rate was higher than the industry average of 19.41%.

### 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 formulation and amendment of relevant rules and regulations have been approved by the Board. In addition, we have announced our human rights and integrity policies in 2022, explicitly stating our respect and support for internationally recognized human rights standards and principles, such as the Universal Declaration of Human Rights adopted by the United Nations, 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; 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. We regularly communicate and have all employees sign the Code of Conduct, while new hires are to sign the confidentiality and integrity agreements during the orientation programs. The signing rate was 100% in 2023. The promotion and implementation of the integrity policy are handled by the Human Resources and Legal Departments. They are responsible for assisting in integrating integrity and ethical values into the Company’s business strategy, as well as formulating preventive measures to ensure integrity management and organizing integrity policy advocacy and training pursuant to applicable laws and systems.

#### 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 in domestic and foreign regulations to ensure our legal compliance. In 2023, we did not have major regulatory violations with a fine exceeding NT\$1 million.

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 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 implementation effectiveness. 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. The Company conducts annual assessments of all operating sites through internal integrity management compliance measures and internal audit mechanisms. No corruption risks have been identified, and there have been no incidents of corruption between 2019 and 2023.

Article 7 of our Corporate Code of Integrity prohibits unlawful political donations and improper charitable donations or sponsorships. We made no political donations in 2023; however, we encouraged 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. In 2023, the Group formulated the “Global Antitrust Compliance Policy,” and summarized its past legal compliance practices to prepare documents such as the “Do’s and Don’ts of Global Antitrust Compliance” and other compliance policies and codes of conduct to further implement compliance with competition laws. Additionally, the Group organized regulatory compliance training on competition laws periodically in 2023. There were no violations of the competition law between 2019 and 2023.

#### 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. In addition, 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. We have established diverse channels for anonymous or formal complaints (from employees, other stakeholders, suppliers, and contractors). Each stakeholder has both the obligation and the right to report legal violations he/she discovers. We pledge to handle such reports in absolute confidence, ensuring the utmost protection of the whistleblower’s identity and keep the identity of the whistleblower strictly confidential. 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 colleagues, we guarantee that they would not be subject to retaliation as a result of the complaints. Between 2020 and 2023, there were no violations of the code of conduct at the Group Headquarters and no reports of violations of the code of conduct or the laws were received through the external complaint mailbox or the iCare mailbox.

## 3.2 Risk Control

### 3.2.1 Risk Management

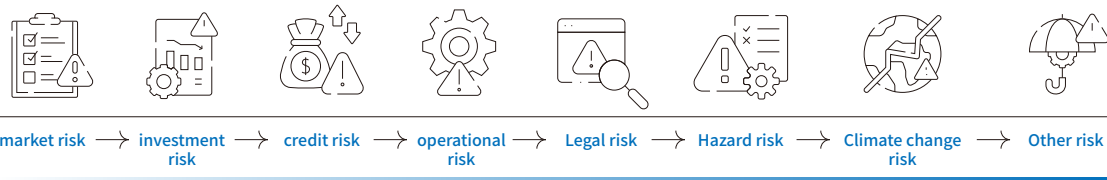
#### 3.2.1.1 Risk management system

##### Risk governance framework

In order to implement governance and maintain our sustainability goals, 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 unit at the group level with the Board serving as the Company’s highest decision-making body for risk management. The unit is chaired by the Chairperson of the Board with the CEO designated as the deputy convener; and the business planning unit is tasked with planning and updating risk management rules, developing and implementing risk management plans, and executing risk decisions made by the Board. The heads of units or businesses are responsible for risks associated with their respective operations, where market information analyses would be conducted every month with businesses and preliminary risk identification carried out pursuant to relevant internal control systems and internal regulations. Next, operation or management meetings, chaired by the CEO or relevant chief functional officers, are held once a fortnight to review and assess major risks including market, investment, credit, operational, legal, hazard, climate change, and other risks. Major risks identified during these meetings are regularly reported to the Audit Committee for tracking. The independent internal control system, i.e., the audit unit, conducts risk audits and reports the audit results to the Chairperson annually. Major potential risks affecting the Company’s operation or sustainable development are separately reported to the Board to ensure the implementation and compliance of the risk management system. In 2023, internal risk audit results revealed no significant deficiencies.

##### Risk management scope and process

The Group’s risk management system mainly covers market risk, investment risk, credit risk, operational risk, legal risk and hazard risk. Besides climate change risk, we also closely monitor other potential risks that may result in losses to the Company in order to maintain a comprehensive understanding of the overall risk environment and our ability to manage these risks.



Through procedures including risk identification, assessment, and analysis, we determine the orders of risks to be managed, relevant control standards and action plans based on the risk assessment results with consideration to the cost-effectiveness of the Company’s resource allocation, in order to execute risk control operations in a timely manner, thereby effectively managing various potential risks and protecting the long-term value of the Company.

Risk Identification	→	Current Risk Assessment	→	Formulation of Action Plan	→	Residual Risk Assessment	→	Improvement Tracking
Identify risk items		Confirm the overall risk rating using the “Risk Severity and Probability Assessment Method” or the “Risk Quantification Index”		Develop improvement plans		Assess residual risk upon completion of the improvement plans		Track the progress and assess the effectiveness of the improvement plans

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. We also have emergency response rules covering major emergencies that may result in a suspension of operation, such as fires, typhoons, rainstorms, earthquakes, infectious disease, information security risk, geopolitical emergencies, and major public relations crisis, in order to enhance our risk management for business continuity.

Upon identification and assessment, inventory risk was the Company’s main risk in 2023. To address the high inventory risk in the cycling industry, Giant Group adjusted shipments to align with the demand of European and American customers and continued to strengthen the Group’s R&D and innovation capabilities. For example, we launched high-end new models at the 2024 Taipei Cycle to stimulate market demand as part of our inventory digestion strategy. Additionally, through management meetings each fortnight, we continuously identify market trends, analyze residual risks, and adjust response strategies accordingly.



### 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 itemize relevant risk factors beforehand. We review the confirmation results of risk factors and propose improvement measures for abnormalities during the process.

### 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, measurement and 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	
<b>Risk Category</b>	<input type="radio"/> Economic	<input checked="" type="radio"/> Social	<input type="radio"/> Economic	<input type="radio"/> Social	<input type="radio"/> Economic	<input type="radio"/> Social
	<input type="radio"/> Environmental	<input type="radio"/> Technological	<input type="radio"/> Environmental	<input type="radio"/> Technological	<input type="radio"/> Environmental	<input type="radio"/> Technological
	<input type="radio"/> Geopolitical	<input type="radio"/> Others	<input checked="" type="radio"/> Geopolitical	<input type="radio"/> Others	<input type="radio"/> Geopolitical	<input checked="" type="radio"/> Others
<b>Risk Identification and Description</b>	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)	
<b>Impact on Operation</b>	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	
<b>Risk Mitigation Measures and Response Strategies</b>	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

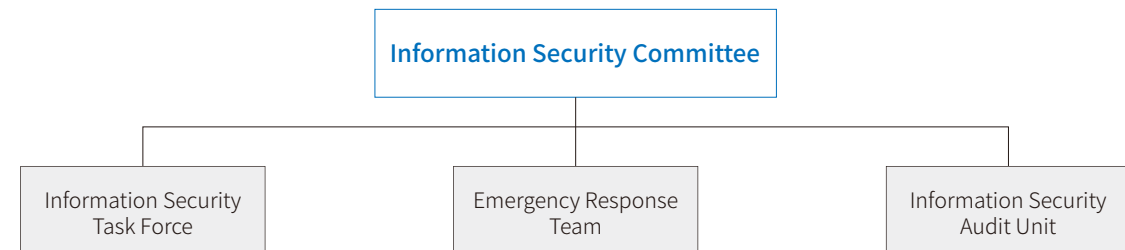
Giant Group incorporates information security risk into the Group’s overall risk assessment, and formulates relevant risk management strategies based on the assessment results. Where information security risk is concerned, we have set our vision and formulate relevant policies for all Giant Group employees and contractors to follow. Targets are also set to ensure thorough implementation of information security management.

Information Security Vision	Information Security Targets
<ul style="list-style-type: none"> <li>Enhance employee awareness</li> <li>Prevent corporate data leakage</li> <li>Implement daily information security maintenance</li> <li>Ensure the availability of information services</li> </ul>	<ul style="list-style-type: none"> <li>Implement information security promotion campaigns and training programs to strengthen employees’ awareness on information security and responsibility</li> <li>Protecting business data, monitor network behaviors and avoid unauthorized access and modification to ensure data accuracy and integrity</li> <li>Regularly perform internal and external audits and technical reviews to ensure that relevant operations are carried out</li> <li>Ensure the information systems operate with a certain level of availability</li> </ul>

### 3.2.2.2 Information security management unit

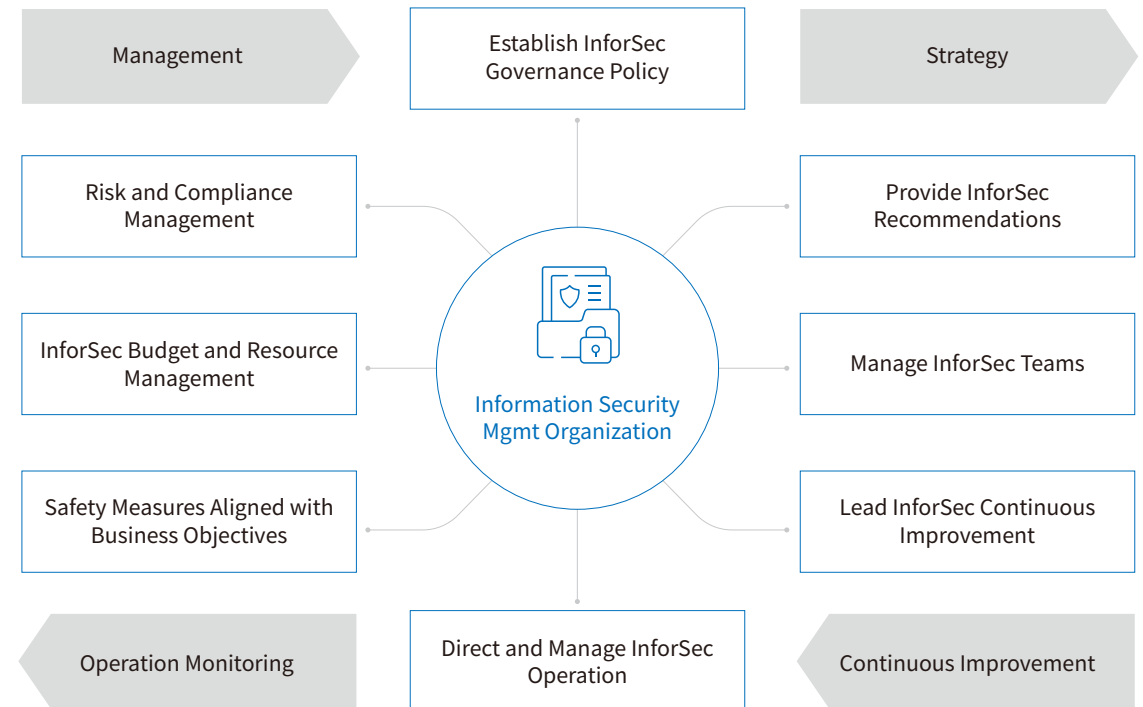
To facilitate the effective implementation of the Company’s information security management system, we have established an Information Security Committee. Chaired by the CEO with the Chief Information Security Officer as the vice-chair, the Committee includes the Chief Audit Officer and the Chief Legal Officer as ex-officio members. Meetings are held regularly each year to review matters related to information security management. Cross-departmental meetings for resource coordination are convened as needed to coordinate the allocation of resources required for the execution of the information security management system. Additionally, the Internal Audit Office oversees the information security operation. It is responsible for overseeing the implementation of internal information security measures and reports to the Audit Committee on the outcome of safety audits every year. 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.

#### Organization Chart of the Information Security Committee



2023 Information Security Targets	2023 Performance
Availability of information and communication system exceeds 99.99% (Downtime/Total operation hours) ≤ 0.1%)	To achieve a Service Level Agreement (SLA) of 99.99%, the downtime shall be less than 8.76 hours during the year. With a cumulative downtime of 4 hours in 2023, the target was achieved.
Zero major information security incidents (Level-3 and Level-4 incidents)	There were no Level-3 nor Level-4 information security incidents.
A passing rate of 97% for social engineering exercise (No. of employees with clicks/Total number of employees tested) ≤ 3%)	In 2023, the evaluation on tools for information security awareness enhancement and trainings targeting employees in the Headquarters at the Central Taiwan Science Park began. We had yet to achieve the target.

#### Information Security Operation



### 3.2.2.3 Information security management plan

To continuously enhance and strengthen our information security management, we have drawn up a series of measures and gradually implemented them to ensure the Group's operational information is fully protected while mitigating the potential impact of information security on operations. These measures cover information system enhancement, risk management, information security awareness enhancement, etc. to fully safeguard the Group's information assets.

Timeline	Measures	Implementation Results of Information Security Measures in 2023
Short-term	<ul style="list-style-type: none"> <li>Establish an information security task force to formulate relevant management policies and implementation plans to ensure information security.</li> <li>Handle personal information prudently in accordance with the Personal Data Protection Act.</li> <li>Passwords and anti-virus software are required for both personal computers and servers. Passwords and virus patterns shall be updated regularly.</li> <li>Comply with regulations pertaining to intellectual property rights and ensure all computer software programs installed are licensed copies.</li> <li>Carry out backup and inventory of important data, and regularly verify the validity of the backup files.</li> <li>Promote information security regularly to increase employees' awareness of relevant matters and legal issues.</li> </ul>	<ul style="list-style-type: none"> <li>With reference to ISO27001 Information security management systems, we established an information security task force to review and announce information security policies as well as related implementation management regulations. We had obtained the SGS certification.</li> <li>We complied with relevant laws and regulations regarding personal information and privacy.</li> <li>Personal computers and servers were equipped with passwords that were regularly updated, along with anti-virus software and virus patterns.</li> <li>Computer equipment was equipped with asset management software to ensure all computer software programs installed were licensed copies.</li> <li>We conducted quarterly inventory of important data and regularly performed core backups and recovery drills.</li> <li>We conveyed information security-related facts or legal requirements semi-annually to enhance the security awareness of our employees.</li> </ul>
Long-term	<ul style="list-style-type: none"> <li>Carry out regular drills for the "Business Continuity Plan" to facilitate rapid recovery of system in the event of an information security incident.</li> <li>Assess cyber insurances.</li> </ul>	<ul style="list-style-type: none"> <li>We developed and conducted drills for business continuity plans based on business impact analysis to ensure critical information operations can quickly return to normal.</li> <li>We evaluated the appropriateness of information security insurances with reference to the results of business continuity plan drills or business needs.</li> </ul>

### 3.2.2.4 Reporting of information security incident

In order to prevent/mitigate the risks and impacts of information security incidents, the "Security Incident Management Procedures" have been established for the Company to promptly report information security incidents accordingly, take necessary response measures, and establish an incident learning mechanism to minimize damage. We classify information security incidents into three categories: general incidents, major incidents, and abnormal incidents. Employees shall immediately notify the information security unit of any irregularities or suspected incidents for information security personnel to take immediate actions and determine the security level of the incident. There was no reporting of information security incident in 2023. Employees violating the information security regulations would be subject to disciplinary procedures.

### 3.2.2.5 Information security measures

The Group has established standard operating procedures for information operation. Daily activities shall be carried out pursuant to the standard. Regular internal and external audits are conducted for information security protection, while information environment risk assessments and necessary control tests are performed for information environment security and factors including risk management, in order to evaluate the effectiveness of the Group's internal controls for 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 vulnerability scans with a coverage rate of 100% are conducted on an annual basis. We currently adopt NIST CSF (2.0) to assess the maturity level of our information security governance, and receive a L1 to L2 with the CMMI ratings, while our target is set at L3.

To strengthen employees' information security awareness and enhance the organization's operational capability, we promoted social engineering to all employees in 2023, including information security policy and control measures. In 2024, we plan to organize general information security training and social engineering drills for all employees, continuously improving their awareness of information security.

#### Information security training courses in 2023

Course	Participant	Number of People	Number of Sessions	Number of Hours
ISO27001:2022 Lead Auditor Transition Training Course	Information security personnel	1	24	24
2023 Cybersecurity Talent Development Program - Phase II	Information security personnel	1	54	54
OWASP TOP 10 (2021)	IT Personnel	17	1	17
OWASP Dependence Check	IT Personnel	17	1	17
2023 Cybersecurity Awareness Training	IT Personnel	18	2	36
			Total	148

#### Information security incidents

Item	2020	2021	2022	2023
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 Personal data and privacy protection management mechanism

Giant Group places great importance on privacy protection and the rights of personal data. It follows the European Union's General Data Protection Regulation (GDPR) to formulate the "Global Personal Data Protection Policy" and corresponding management rules as the guiding principle for the collection, processing, use, retention and disclosure of personal data. The Group also complies with the Personal Data Protection Act of the Republic of China and relevant regulations in other countries to ensure that the Group and its affiliated companies, senior executives and managers, employees, consultants, and third-party companies comply with applicable laws and regulations when handling personal data (including but not limited to employees, customers, website visitors, suppliers, and contacts of third-party companies) in their daily business operations.

### 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 and enhance or improve supply chain efficiency, as well as implement data protection measures.

#### Data Protection Measures

- Permissions are granted based on the principle of minimum permission required to perform the work.
- Apply data masking to fields of personal data.
- Data access records of employees are retained to ensure there is no misuse.
- Establish procedures for the collection, use, processing, and deletion of consumer personal data.
- 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. We have established diverse channels for anonymous or formal complaints (from employees, other stakeholders, suppliers, and contractors). Each stakeholder has both the obligation and the right to report legal violations he/she discovers. Employees who believe that their behaviors or that of other employees or suppliers have violated the law can report through the complaint channel. We are committed to handle complaints in a confidential manner, and do our best to protect the identity of the complainant, which shall be kept strictly confidential. Where complaints are raised by colleagues, we guarantee that they would not be subject to retaliation as a result of the complaints. Consultation and reporting can be done through email (icare@giant.com.tw and gtwebmaster@giant.com.tw) or phone (04-4055-9555) by both internal and external parties.

### 3.2.3.4 Privacy violation

	2020	2021	2022	2023
Complaints from competent authorities or other government agencies concerning personal data protection (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 the BAS. Due to the Carbon Border Adjustment Mechanism (CBAM) of European Union in October 2023, the cycling supply chain faced high carbon tariffs for goods to EU. Giant Group therefore invited 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 transition," "adapting bicycle industry ESG standards," "promoting ESG actions to consumers," and "researching and discussing ESG issues associated with the bicycle industry." Since 2023, Giant Group has also actively responded to CDP questionnaires, quantifying and tracking its own environmental management performance every year to enhance the Group's ability in managing and adapting to climate change risks and opportunities as well as to demonstrate its commitment to net-zero sustainable transition.

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 works.

Initiative/Issue	Participating Role and Purpose of the Organization	2023 Input (Unit: NT\$)
U.S. - People for Bikes	The organization advocates for the country or industry to establish bicycle-related legislation, policies, trade, infrastructure, business intelligence, statistics, sustainable development and DEI, and e-bike.	Exceeding NT\$12 million
Europe - World Federation of the Sporting Goods Industry (WFSGI)	We have long been a member of the 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 visibility of Taiwan's cycling industry worldwide.	
Netherlands - Stichting EPAC	Stichting EPAC is a Dutch producer and importer of bicycle batteries. The foundation is responsible for producers' collection and recycling of e-bike batteries.	
Zweirad-Industrie-Verband (ZIV) (German Bike Association)	The association 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 association gives us access to the latest industry knowledge and promotes industry interests.	
Bicycling Alliance for Sustainability (BAS)	The CEO of Giant Group Young Liu 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 to be the chairman of the alliance.	
For others, please refer to 2023 Giant Group's Participation in Industry Associations	We join local organizations of bicycle industry and sports equipment in different countries to understand international trends in the sports equipment industry and enhance the visibility of Taiwan's cycling industry worldwide.	

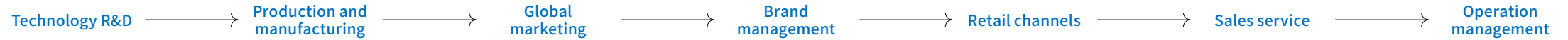
## 2023 Giant Group's Participation in Industry Associations

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
World Federation of the Sporting Goods Industry (WFSGI) (Europe)	We have long been a member of the 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 visibility of Taiwan's cycling industry worldwide
Confederation of the European Bicycle Industry (CONEBI)	Comprehensive representation of its members' interests in Europe and at the international levels: With missions of being 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 continuing to cooperate with other organizations that share common values or goals
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 to 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

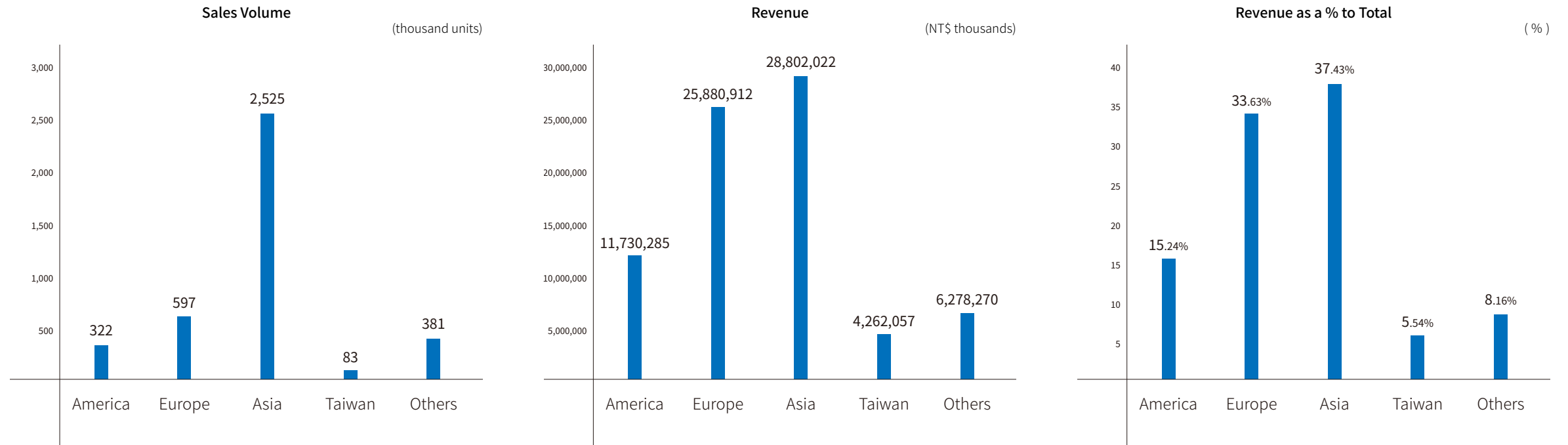
Association	Description
Australian Packaging Covenant Organisation (APCO)	Support responsible packaging initiatives in business activities
Stichting EPAC, Netherlands	Stichting EPAC is a Dutch producer and importer of bicycle batteries, responsible for producers' collection and recycling of e-bike batteries
RAI Association	Being a part of the CONEBI, it speaks for the cycling industry at national and EU level and is dedicated to topics including security, battery safety, theft, and policy development
Traxio (Netherlands Bicycle Industry Alliance)	Represent the bicycle industry and influence local government policies on issues such as security, theft, bicycle promotion, and rentals, as well as collect and publish bicycle-related analysis reports
Danish Bike Industry	Represent the bicycle industry at the national level, and collect and publish bicycle-related analysis reports among members
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, speaking for mountain biking and taking the lead in trail preservation and maintenance
Zweirad-Industrie-Verband (ZIV) (German Bike Association)	Actively participate in national bicycle-related issues, take part in bicycle and e-bike committees, and exchange 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)	Represent the industry interests of its members in the UK and advocate for cycling industry developments at government level
U.S. - People for Bikes	Advocate for the country or industry to establish bicycle-related legislation, policies, trade, infrastructure, business intelligence, statistics, sustainable development and DEI, and e-bike.

### 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.



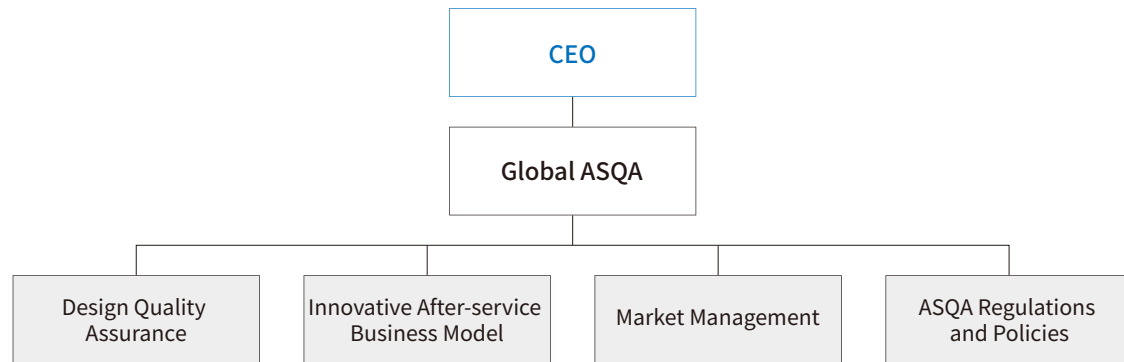
Giant Group has built its presence in the bicycle markets all over the world. The Group’s business can be divided into manufacturing and marketing. The former covers proprietary brands and OEM services while the latter serves proprietary brands exclusively. Our brands were founded in Taiwan and ventured into global markets in 1986. At present, Europe, the United States and China are the major markets of our private brands. The performance of our sales companies worldwide in 2023 was as follows.



### 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 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.

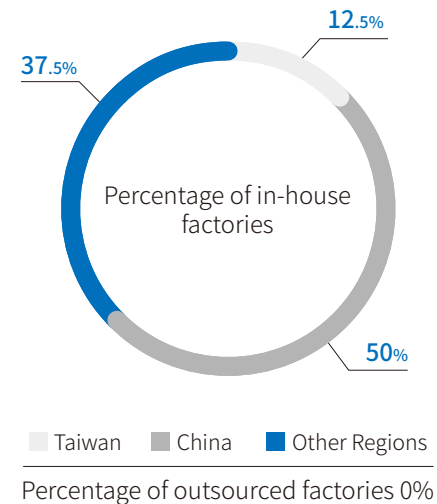
#### Organization Chart of Global ASQA



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. Between 2020 and 2023, the Group’s products did not violate any health and safety regulations nor voluntary agreements related to products and services.

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%	37.50%
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 Manufacturing Co., Ltd. is expected to be certified in 2025.

We establish our product inspection mechanism in accordance with the ISO4210 Safety Requirements for Bicycles, which is the most widely adopted safety standards in the global bicycle industry. All of our products, from components to bicycles, comply with relevant specifications requirements and testing standards. Before launching a new product, the local sales company needs to undergo complete education and training of the new product, which include important information pertaining to after-sale services, ordering of parts, maintenance, etc., or practical technical guidance. Also, the product manuals in multiple languages would be available on our Group website for dealers of different regions to access, ensuring that they can correctly understand the product and related maintenance information.

## 2023 New Products Education and Training

Training Program	Participating Sales Companies	Number of Participants
Battery System	Giant Bicycle Co., Pty Ltd., Giant Benelux B.V., Giant International (for sales of regions outside Europe where we do not have a subsidiary), Giant Europe International, Giant S.A.R.L France, Giant Italy S. R. L, Giant Korea Co., Ltd., Giant Bicycle México S. de R.L. de C.V., Giant Taiwan Sales Company, Giant Polska Sp. z o.o., Giant Bicycle Canada Inc.	1,013
Brakes System	Giant Bicycle Co., Pty Ltd., Giant Benelux B.V., Giant International (for sales of regions outside Europe where we do not have a subsidiary), Giant Europe International, Giant S.A.R.L France, Giant Italy S. R. L, Giant Korea Co., Ltd., Giant Bicycle México S. de R.L. de C.V., Giant Polska Sp. z o.o.	35,111
CADEX TRI Series	Giant Bicycle Co., Pty Ltd., Giant Benelux B.V., Giant (Kunshan) Co., Ltd., Giant International (for sales of regions outside Europe where we do not have a subsidiary), Giant Europe International, Giant Deutschland GmbH, Giant Italy S. R. L, Giant Korea Co., Ltd., Giant UK Ltd., Giant Bicycle México S. de R.L. de C.V., Giant Polska Sp. z o.o., Giant Bicycle Canada Inc.	599
Derailleur System	Giant Bicycle Co., Pty Ltd., Giant Benelux B.V., Giant (Kunshan) Co., Ltd., Giant International (for sales of regions outside Europe where we do not have a subsidiary), Giant Europe International, Giant Deutschland GmbH, Giant S.A.R.L France, Giant Italy S. R. L, Giant Korea Co., Ltd., Giant UK Ltd., Giant Bicycle México S. de R.L. de C.V., Giant Polska Sp. z o.o., Giant Bicycle Canada Inc.	37,171
Electronic Control System	Giant Bicycle Co., Pty Ltd., Giant Benelux B.V., Giant (Kunshan) Co., Ltd., Giant International (for sales of regions outside Europe where we do not have a subsidiary), Giant Europe International, Giant Deutschland GmbH, Giant S.A.R.L France, Giant Italy S. R. L, Giant Korea Co., Ltd., Giant UK Ltd., Giant Bicycle México S. de R.L. de C.V., Giant Polska Sp. z o.o., Giant Bicycle Canada Inc.	14,644
Suspension System	Giant Bicycle Co., Pty Ltd., Giant Benelux B.V., Giant (Kunshan) Co., Ltd., Giant International (for sales of regions outside Europe where we do not have a subsidiary), Giant Europe International, Giant Deutschland GmbH, Giant S.A.R.L France, Giant Italy S. R. L, Giant Korea Co., Ltd., Giant UK Ltd., Giant Bicycle México S. de R.L. de C.V., Giant Polska Sp. z o.o., Giant Bicycle Canada Inc., Giant Taiwan Sales Company	18,320
Transmission System	Giant Bicycle Co., Pty Ltd., Giant International (for sales of regions outside Europe where we do not have a subsidiary), Giant Italy S. R. L, Giant Korea Co., Ltd., Giant Bicycle México S. de R.L. de C.V., Giant Bicycle Canada Inc., Giant Polska Sp. z o.o.	40,042
Wheel System	Giant Bicycle Co., Pty Ltd., Giant Benelux B.V., Giant (Kunshan) Co., Ltd., Giant International (for sales of regions outside Europe where we do not have a subsidiary), Giant Europe International, Giant Deutschland GmbH, Giant S.A.R.L France, Giant (Japan) Co., Ltd., Giant Italy S. R. L, Giant Korea Co., Ltd., Giant UK Ltd., Giant Bicycle México S. de R.L. de C.V., Giant Polska Sp. z o.o., Giant Bicycle Canada Inc., Giant Taiwan Sales Company	2,055
others	Giant Bicycle Co., Pty Ltd., Giant Benelux B.V., Giant (Kunshan) Co., Ltd., Giant International (for sales of regions outside Europe where we do not have a subsidiary), Giant Europe International, Giant Deutschland GmbH, Giant S.A.R.L France, Giant (Japan) Co., Ltd., Giant Italy S. R. L, Giant Korea Co., Ltd., Giant UK Ltd., Giant Bicycle México S. de R.L. de C.V., Giant Polska Sp. z o.o., Giant Bicycle Canada Inc., Giant Taiwan Sales Company, Giant (Japan) Co., Ltd.	4,192

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, along with 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 recurrence, 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. There were no product recalls in 2023.

#### Number of Product Recalls for the Past Four Years

	2020	2021	2022	2023
Number of product recalls (voluntary)	0	0	1	0
Number of product recalls (involuntary)	0	0	0	0
Total	0	0	1	0
Total quantity of product recalled (voluntary)	0	0	20,800	0
Total quantity of product recalled (involuntary)	0	0	0	0
Total	0	0	20,800	0
Financial losses due to product recalls (in NT\$)	0	0	20 million	0

#### 3.3.2.2 Dealer management

Giant Gorup operates a global network with products and brands well recognized and favored 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 dealers through regular visits and consumer feedback. The outcome of such evaluations would affect contract renewals and product allocations. In addition, through the annual dealer conference, the sales companies would introduce new products, corporate strategies, 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. These audits are based on three major aspects, i.e., sales contribution, credit rating and future potential, to review the performance of existing retail channels and assess whether channels have implemented our global policy.

Furthermore, to strengthen the retail services of sales companies, provide retail support with a sound operation structure, and ascertain the implementation of policies and guidelines relevant to our global retail channels, the Group focused on channel transformation and digitization in China during 2023, and invited global sales companies to visit and learn together in January 2024.



### 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, corporate business strategies, and Group support and guidelines; 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 2023, GRA was used in 9,741 stores across 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 - Dynamic Cycling Fit (DCF)

Global bicycle leader Giant unveiled the Dynamic Cycling Fit (DCF) in 2023. Featuring an exclusive wireless Bluetooth simulator, dual-side 3D motion capture, single-side 2D App, custom insole, and innovative immersive experiences, DCF adopts a systematic approach to help riders finding the best combination of bike model, size, and components with personalized bicycle setups. The high-precision "AI Bike Fitting System" prevents cyclists from adapting to the wrong posture. Through AI visual recognition technology and high-precision simulation devices, the system can quickly identify 22 key joints of the cyclist and accurately measures the optimal angle and distance for each joint, with an accuracy of over 92%.



#### 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 consumer 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 onwards. As for our operation in Taiwan, e-commerce was launched in 2020. We expect all of our own sales companies to adopt e-commerce by 2024.

	2020	2021	2022	2023
Percentage of online revenue (e-commerce/OBM)	2.52%	2.99%	4.10%	3.74%
Note	E-commerce in 9 locations	E-commerce in 13 locations	E-commerce in 13 locations	E-commerce in 14 locations

### Listening to the customers

Our regional sales companies have set up consumer complaints channels, where 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 five 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. Once 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
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Customer complaints from dealers to our sales companies in Taiwan and China in 2023 were set out in the table below. All cases were closed, including major ones which were resolved through mutual agreements after our legal team reviewed the compensation packages.

### Customer Complaints to Giant Taiwan Sales Company in 2023

Category	Non-customer Complaints <sup>(Note 3)</sup>	Customer Complaint <sup>(Note 4)</sup>	Total
Major case <sup>(Note 1)</sup>	0	7	7
Quality	0	21	21
Service	53 <sup>(Note 2)</sup>	46	99
Out-of-stock	0	14	14
Consultation and suggestion	1,343	1	1,344
Total	1,396	89	1,485

### Customer Complaints to Sales Companies in China in 2023

Category	Non-customer Complaints <sup>(Note 3)</sup>	Customer Complaint <sup>(Note 4)</sup>	Total
Major case <sup>(Note 1)</sup>	2	21	23
Quality	1,942	29,851	31,793
Service	152	0	152
Out-of-stock	13	0	13
Consultation and suggestion	122	0	122
Total	2,231	29,872	32,103

Note 1: Major case 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.

Note 3: Major cases of non-customer complaints are complaints associated with consumer product-related injuries for reasons other than product quality issues. Giant is not held liable for such cases and they are not classified as customer complaints.

Note 4: Major cases of customer complaints are complaints where Giant is held liable.





To enhance our understanding of end-user experience with our products, since 2018, we have deployed the online customer review software, PowerReviews, on the official websites of Giant, Liv and Momentum, targeting sales companies in English-speaking countries such as Giant Bicycle Inc., Giant UK Ltd., Giant Bicycle Canada Inc. and Giant Bicycle Co., Pty Ltd. first, to collect feedback and experience of consumers who are willing to participate. In 2021, we conducted a pilot survey using Net Promoter Score (NPS), targeting online consumers in the Canadian market to help us understand the strengths and weaknesses of our brands and products. We scored 70%, i.e., extremely high satisfaction, in three categories: Bike/E-Bike/Rider Gear. Our PowerReviews results were as follows: Bicycles with an average rating of 4.21 stars, E-bikes with an average rating of 3.9 stars, Rider Gear with an average rating of 3.08 stars, and full satisfaction for services provided by our stores. In 2023, we expanded the review to 10 sales companies within the Group. By leveraging the information on consumer satisfaction with our products and sharing user experiences with potential customers, we are able to understand the extent to which customers are committed to the brand and the stories they tell about our products.

In late September 2023, we conducted a consumer survey for Giant & Liv, targeting collaborations between our global marketing department and selected sales companies worldwide (Giant Bicycle Inc., Giant UK Ltd. and Giant Bicycle Canada Inc.). The survey involved in-depth investigation and analysis to gather valuable consumer insights. The research aimed to explore the overall consumer experience and satisfaction throughout the entire purchasing process, and utilize these insights to fully understand consumer preference, behavior, pain point, and expectation. The data we collected not only revealed current trends, but also highlighted potential opportunities for innovation and growth of our brands and business, giving directions for future innovations, sustainable products, and types of non-product services.

Giant is a global brand with sales companies at different locations managing their dealers and consumers pursuant to local market conditions and consumption habits. In order to better understand the global market dynamics, we plan to start with a bicycle registration mechanism at the time of purchase and set the goal of establishing a centralized consumer satisfaction and communication system. Through interactions with consumers via standardized procedures, we aim to gain more direct understanding of consumer needs to improve our product and service quality.

## 3.4 Innovations

Giant Group has long been a catalyst in the evolution of the cycling industry 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, 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 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.

	2020	2021	2022	2023
R&D expense (NT\$ thousands)	939,896	1,041,133	1,531,809	1,455,205
R&D expense as a percentage of revenue (%)	1.34%	1.27%	1.66%	1.89%
Number of patents applied	72	68	20	69
Number of patents granted	77	82	34	45

### Level A Certification from Taiwan Intellectual Property Management System (TIPS)

Giant Group places great importance on intellectual property management. By adopting the TIPS framework and embracing the trinity of external validation concept, i.e., the integration of intellectual property strategy, research and development strategy, and business strategy, we have been able to efficiently utilize our business resources and reasonably manage the intellectual property risks, thereby concentrating resources, eliminating duplicate R&D investments, and enhancing the utilization of intellectual property energy. Consequently, it improves the Group's overall profitability and operational performance. The tiered standards of intellectual property management provide tailored resources for enterprises with different intellectual property strengths and system requirements for them to expand their understanding and system construction of the tiered and classified intellectual property management. In 2023, Giant Group received the Level A certification from TIPS and we plan to continuously participate in TIPS in 2024, aiming to further improve and deepen our practices to fully protect our R&D achievements and enhance the trust of both our customers and shareholders in the Company.



## 3.4.2 Digital Transformation

### 3.4.2.1 Smart manufacturing

Our manufacturing factories specialize in the production of bicycles and electric-assisted bicycles, which belongs to the traditional manufacturing sector. Facing industry changes and competitions from both similar and different industries, we integrate transmission, databases, digital twins, data management platforms, and the four stages of automation while committing to TPS flow technology and continuous improvement in order to constantly optimize our intelligent manufacturing system. Since 2019, the Group has been actively involved in smart machines, the fifth-generation mobile networks as well as cybersecurity products or services regulated in Article 10-1 of the Statute for Industrial Innovation promoted by the government. We have submitted applications every year with satisfactory results.

#### Transmission

It consists of sensor/perception technologies (e.g. SCADA, etc.), IoT transmission technology (e.g. fiber-optic communication, Ethernet, Wi-Fi, etc.), and identification technologies (e.g. QR code, Bar-code, RFID, CCD, etc.). The transmission format is illustrated at the bottom of the schematic diagram below.

#### Database

It includes infrastructure environment, IP address, information security, data usage frequency and computing tools.

#### Digital twins

We collaborate with software companies to develop our own simulation software, and apply mature simulation or planning software to development flows and process planning in order to enhance development and mass production efficiency as well as reduce the number of trial and error. The scope covers process planning simulation, virtual 3D kernel, etc. to accelerate development and reduce the cost of repetitive developments.

#### Data management platform

Data from sensors on the production facilities; the MES, EP, and TPM platforms; EQS; and the ERP database are analyzed and utilized, including the ongoing construction and improvement of digital platforms, such as SCADA monitoring, production efficiency management, energy management and GHG inventory management.

#### 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.

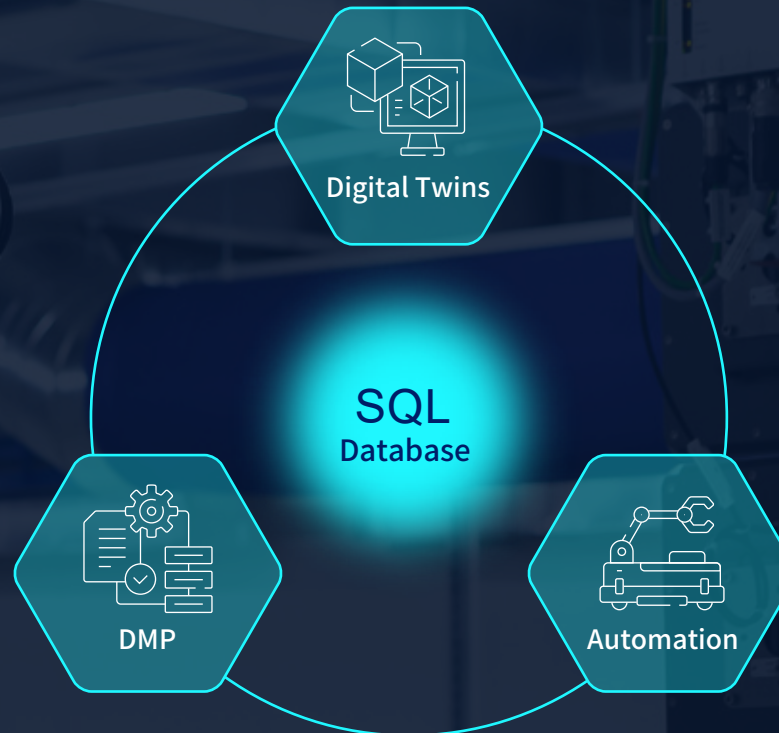
### Intelligent Manufacturing System

- Offline Programming
- Process Planning Simulation
- Product Structure CAE Analysis
- Auto-generation of Trial Traceability
- Auto-paving of Carbon Fiber Lining
- AL Pipe Molding Analysis
- Virtual Retrieval
- Virtual Kernel
- Virtual Assembly
- MES Production Management

## TPS

Flow Technology

- Facilities Management
- MES Production Management
- Energy Management
- Environmental Safety Management
- GHG Inventory Management
- Operational Performance Management
- Improvement Promotion Activities
- EQS Management
- Human Resource Management
- EP Management
- Inventory Management
- Product Development
- Production Efficiency Management
- Sales Planning
- Infrastructure
- Platform - System Architecture
- BI



## CI

### Continuous Improvement

- Operation
- Loading and unloading (single station)
- Storage
- Transport (multiple stations)
- Transport
- Inspection
- TPM
- Human-robot Collaboration
- Human-robot Division of Labor
- Machine-to-Machine
- Zero Failure
- SCADA
- Automation

## 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 is highly sophisticated in carbon-fiber components on top of our well-known carbon-fiber bicycle frames. At present, our product range covers wheel sets, tires and saddles, and we will continue to rollout other components in the future.

#### Applications of aluminum-alloy and carbon-fiber frames

2023	Number of Units	Description
Aluminum-alloy Frame	2,273,764	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	177,485	For professional cycling, Giant Group has developed the ultra-high-performance carbon fiber technology, ADVANCED. Each ADVANCED frame comes with super stiffness-to-weight ratio. Premium carbon fiber materials are used to produce lightweight, outstanding stiffness and excellent shock-absorbent products to satisfy the needs of various disciplines among professional cycling.

#### 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 continues 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 over 50 years in bicycles and 20 years in e-bikes, our in-depth knowledge in cycling science as well as joint R&D efforts with first-tier component manufacturers lead to the creation of 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 built an e-bike ecosystem following its bicycle ecosystem structure. By connecting online and offline through partners, bikes, stores, journeys and internet, we enhance consumers' overall 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.

#### Application of aluminum-alloy and carbon-fiber frames

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 applications of new technologies in the cycling industry in order to enhance our sales and service quality, thereby strengthening our market competitiveness.

We define products launched within one year as new products for our sales of bicycles and e-bikes. In 2023, our new products accounted for 9.61% of the overall sales in terms of volume and 19.83% in terms of revenue.

### 3.4.3.2 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 look for brand-new processes that can bring about disruptive innovations. 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 Statute for Industrial Innovation, and receive satisfactory results in our R&D tax credit applications every year. The adoption of automated operation, inspection, and transport software and hardware at each factory has delivered stable quality as well as labor efficiency. Our factories in different geographical regions adjust their processes according to their needs to lower the labor costs."



# Innovating a Clean Future

4.1 Innovating a Clean Future  
4.2 Responsible Procurement

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## 4.1 Innovating a Clean Future

Highlights	Factory	2023	Award in 2023
<b>Taiwan Renewable Energy Certifications (T-REC)</b>	Giant Manufacturing Co., Ltd.	Installed four solar power systems with a total capacity of 2,696.3KWp, and solar panels; and applied for T-RECs. At present, we have a cumulative renewable energy output of 2,057,129.14kWh and T-RECs for us to engage in energy-saving green production.	T-REC
<b>Management system certification</b>	Giant (China) Co., Ltd.	ISO45001 Occupational health and safety management system, ISO14001 Environmental management system, ISO50001 Energy management system, ISO14067 Carbon footprint of product	2022 Green Development Award of the Kunshan Economic & Technological Development Zone
<b>Technology for recycling aluminum</b>	D. Mag (Kunshan) New Material Technology Co., LTD.	Advancements in aluminum production technology: 1. Implemented a developed remelting process for recycling aluminum wires and aluminum chips, resulting in a recovery of 470 metric tons since September 2023. 2. A new ball milling process was implemented for smelting aluminum dross, reducing the average aluminum content in aluminum dross, which was considered hazardous waste, from 11% to 3%. Implemented since July 2023, aluminum recovery had increased by approximately 35 metric tons. The ball milling process was synchronously deployed at the Pengxi Factory in 2024, with operations set to commence in April 2024. 3. New bicycle frame tubes made from a blend of 50% recycled aluminum were developed with mass production underway, reaching production volume of 21 metric tons.	Green Factory Award in 2023
<b>Water-saving</b>	Giant (China) Co., Ltd.	Water-saving measures: Cancelled the use of sprinkler spray to cool containers at dock, improved water-saving efficiency in restrooms/water-cooled air conditioning/dormitories, reused concentrated water from water purifiers/cooling water from hydraulic machines at treatment line, used recycled water for mop tanks at stations/chemical formulation at wastewater treatment stations, and set process water targets per facility with daily meter readings. These initiatives resulted in an annual water savings of 20,860 metric tons.	
	Giant (Kunshan) Co., Ltd.	Increased the use of reclaimed water on-site: The gas scrubbers at a total of four coating lines had been switched to adopting recycling water, i.e., scrubbers at the saponification line, dewaxing line as well as carbon fiber line. Daily water usage was monitored via a Business Intelligence (BI) system, with immediate action taken for any abnormalities. These initiatives resulted in an annual water savings of 79,862 metric tons.	
	Giant Electric Vehicle (Kunshan) Co., Ltd.	Water-saving projects: (1) Improved water efficiency of sanitary sinks and flushing toilets by restricting flow rates, installing spray faucets, and adjusting the water level in flush toilets, resulting in an annual water savings of 1,058 metric tons. (2) Improved water replenishment and saving in powder coating booths by optimizing the connection between water supply pipes and automatic refill valves and adjusting the positions of refill valves to control the water replenishment level, resulting in an annual water savings of 1,056 metric tons.	
<b>Waste reduction</b>	D. Mag (Kunshan) New Material Technology Co., LTD.	Improvements in the process of anodic oxidation allowed sludge generated to be reclassified from hazardous waste to general solid waste since October 2023. Hazardous waste was therefore reduced by 804 metric tons in 2023, with an expected annual reduction of 3,000 metric tons. Additionally, innovation in the filtering process allowed for the reuse of tube lubricants and approximately 4.43 metric tons of lubricants were filtered and reused in 2023, i.e., the hazardous waste was down by 4.43 metric tons.	
	Giant (China) Co., Ltd.	(1) Waste paint residues were collected in ton bags and transferred to the sludge temporary storage area with the base suspended for drainage and the top dried using residual heat from air compressors in order to reduce the total hazardous waste, which was down by 25.40 metric tons in 2023 compared to 2022. (2) Solid waste classification management and collection General solid waste classification management involved source sorting and collection on-site, and tracking of recycled amounts off-site. Solid waste was reduced by 362.96 metric tons per factory in 2023 compared to 2022.	

## 4.1.1 Climate and Energy

The main product of Giant Group is bicycle, which is an eco-friendly mean of transportation. As a zero-carbon mode of transport, cycling contributes to improving air quality, reducing traffic congestion and promoting sustainable urban development. In addition to being environmentally friendly in use, its production process also follows green manufacturing principles. From raw materials control, energy and resources-saving, adoption of renewable energy, to waste reduction, we are committed to minimizing the environmental impact of our production process.

### 4.1.1.1 Environmental management system

The environmental impact of human activities is irreversible. The Group adheres to the philosophy of environmental friendliness and is committed to complying with the environmental policies below:

<b>Regulatory compliance</b>	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.
<b>Impact mitigation</b>	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.
<b>Continuous improvement</b>	Implement environmental policies that target Reduce, Reuse, Recycle and Pollution Prevention as the basis for performance evaluation in order to achieve continuous improvement.
<b>Education</b>	Enrich employees' techniques 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 2023, there were no significant environmental fines at GTM and other factories. (A significant fine is defined by Giant Group as one that exceeds NT\$300,000 or equivalent.)

International Environmental Standard	Domestic	Overseas
<b>ISO14001</b> Environmental management system	<ul style="list-style-type: none"> <li>· Giant Manufacturing Co., Ltd.</li> <li>· AIPS Technology Co., Ltd.</li> </ul>	<ul style="list-style-type: none"> <li>· D. Mag (Kunshan) New Material Technology Co., LTD.</li> <li>· Giant (Kunshan) Co., Ltd.</li> <li>· Giant (Tianjin) Co., Ltd.</li> <li>· Giant (China) Co., Ltd.</li> <li>· Giant Electric Vehicle (Kunshan) Co., Ltd.</li> </ul>
<b>ISO14064-1</b> Standards for GHG inventory	<ul style="list-style-type: none"> <li>· Giant Group Global Headquarter</li> <li>· Giant Taiwan Sales Company</li> <li>· AIPS Technology Co., Ltd.</li> <li>· YouBike Co., Ltd.</li> <li>· Giant Manufacturing Co., Ltd.</li> <li>· Youth Logistics Center</li> </ul>	<ul style="list-style-type: none"> <li>· D. Mag (Kunshan) New Material Technology Co., LTD.</li> <li>· Giant (Kunshan) Co., Ltd.</li> <li>· Giant China Sales Companies</li> <li>· Giant (China) Co., Ltd.</li> <li>· Giant (Tianjin) Co., Ltd.</li> <li>· Giant Electric Vehicle (Kunshan) Co., Ltd.</li> </ul>
<b>ISO14067</b> Carbon footprint of products	<ul style="list-style-type: none"> <li>· Giant Manufacturing Co., Ltd.</li> </ul>	<ul style="list-style-type: none"> <li>· Giant (China) Co., Ltd.</li> </ul>
<b>ISO 50001</b> Energy management system	<ul style="list-style-type: none"> <li>· Giant Manufacturing Co., Ltd.</li> </ul>	<ul style="list-style-type: none"> <li>· Giant (Kunshan) Co., Ltd.</li> <li>· D. Mag (Kunshan) New Material Technology Co., LTD.</li> </ul>

#### 4.1.1.2 Climate change mitigation and adaptation

In July 2023, the earth was boiling and climate disasters became a daily occurrence. Extreme climate events have been ranked among the top three global risks of the past two years and the past decade by the World Economic Forum (WEF) 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 carbon inventory of the Group in our annual target for the first time and the results were to be reported to the Board upon completion of the inventory every year. 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 are communicated to stakeholders through the annual sustainability report.

	Core Element	Action
Governance	Board oversees climate-related risks and opportunities	<ul style="list-style-type: none"> <li>List climate change issues as a regular agenda item of Board meeting. Three meetings were held in 2023.</li> <li>Report the planning and execution of GHG inventory to the Board at least once every year. When building a new 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.</li> <li>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.</li> <li>Directors attended 27 hours of continuing education courses related to sustainability and climate change in 2023.</li> </ul>
	Role of management in assessing and managing climate-related risks and opportunities	<ul style="list-style-type: none"> <li>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.</li> <li>Daily operation is summarized by the President of each location in the monthly management reports. For major issues, the in-charge unit would step forward to initiate investigations.</li> <li>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.</li> </ul>
Strategy	Identify short-, medium- and long-term climate-related risks and opportunities	<ul style="list-style-type: none"> <li>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.</li> </ul>
	Climate-related risks and opportunities that have a significant impact on business, strategy and financial planning	<ul style="list-style-type: none"> <li>Based on the material matrix analysis (likelihood of occurrence and level of impact), Giant Group’s major potential climate risks include product efficiency regulations and standards, carbon tax and mandatory filing; and the potential climate opportunities are customer behavior change and diversity in operation.</li> </ul>
	Take into account different scenarios of climate change	<ul style="list-style-type: none"> <li>Giant Group adopts 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.</li> <li>Transitional risk takes into account three external scenarios: Government’s net zero pathway, SSP1-1.9 and SBT-NZ.</li> <li>For details, please refer to the “Strategy” section.</li> </ul>

	Core Element	Action
Risk Management	Processes for identifying and assessing climate-related risks	<ul style="list-style-type: none"> <li>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.</li> </ul>
	Processes for managing climate-related risks	<ul style="list-style-type: none"> <li>Please refer to the “Risk and Opportunity Management” section.</li> </ul>
	How to incorporate the processes for identifying, assessing and managing climate-related risks into the overall risk management	<ul style="list-style-type: none"> <li>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.</li> </ul>
Metrics and Targets	Metrics used to assess climate-related risks and opportunities in line with the strategy and risk management process	<ul style="list-style-type: none"> <li>Giant Group has included carbon inventory in the annual Group KPIs as one of the assessment factors for dividend payment.</li> <li>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.</li> </ul>
	Scopes 1, 2 and 3 emissions and associated risks	<ul style="list-style-type: none"> <li>Please refer to the “Metrics and Targets” section.</li> </ul>
	Targets for climate-related risk and opportunity management, and performance against those targets	<ul style="list-style-type: none"> <li>Giant Group plans to set emission reduction schemes based on the internationally accepted Science Based Targets initiative (SBTi).</li> <li>In addition to GHG reduction, the Group will set other environmental targets, such as electricity consumption, renewable energy, water consumption and waste volume.</li> </ul>

## 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 2023, 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”, “impacts of EU carbon border tax on Giant Group,” and “vigorous promotion of ESG initiatives at Group operations around the world” were held.

In 2023, the EU’s Carbon Border Adjustment Mechanism (CBAM) was launched on a trial basis. Sectors regulated for carbon emissions in the first phase included iron and steel and its midstream and downstream products (such as screws, bolts, etc.), cement, electricity, hydrogen, fertilizers and aluminum. These industries were required to start reporting the carbon emissions of their products to EU importers. The impacts were immediately reported to the Board of Directors, with feedback from suppliers within the supply chain. We had taken inventory of whether our suppliers can meet the CBAM requirements. Preliminary assessments indicated that the impact on Giant Group was not significant, and the supply chain was able to provide CBAM-related data for sales of products with CN Codes. In addition, the planning and execution of the Group’s GHG inventory shall be reported to the Board at least once every year.

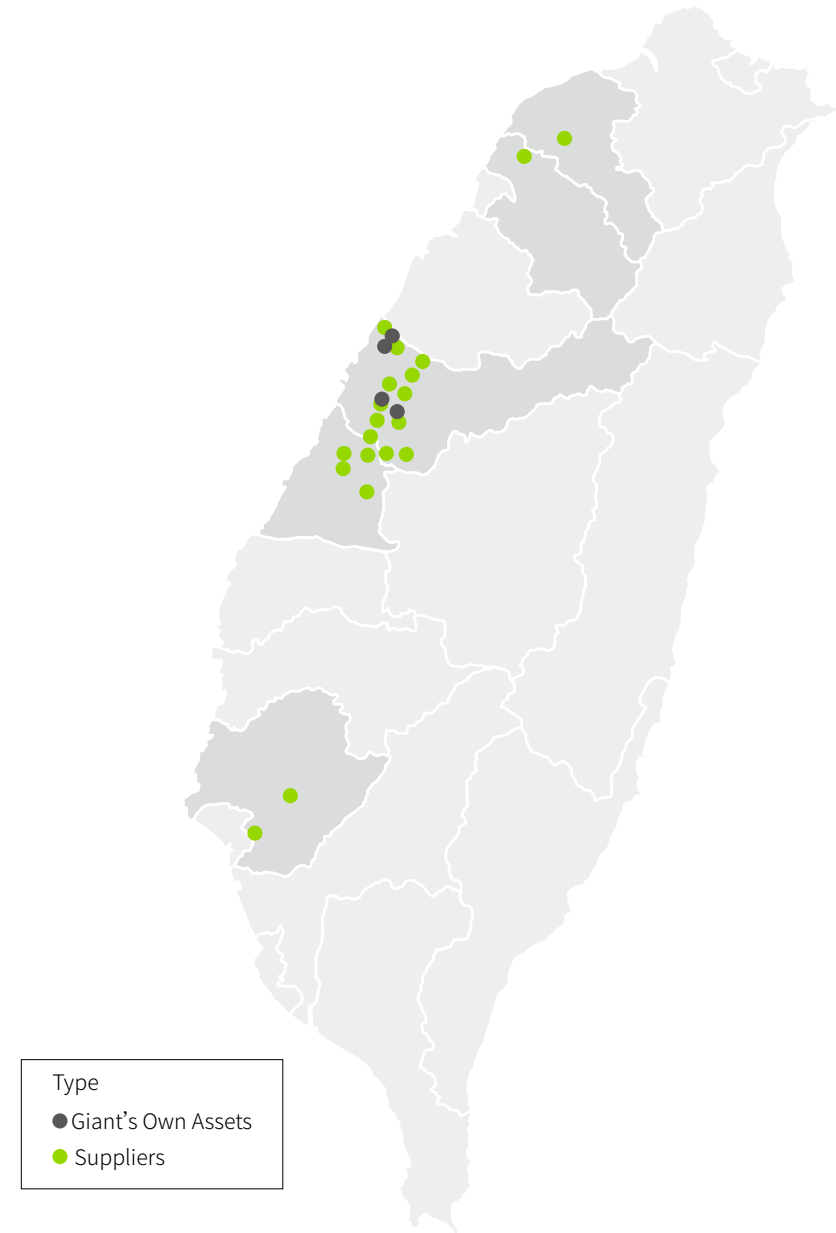
In Giant Group, the CEO would include climate risk, opportunities and action plans in the business report to the Board on behalf of the management team and add climate-related targets to the Group’s objective management. During the Board’s budget review, ESG capital expenditure would be listed as a separate item. One of the examples being 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 - analysis on operating sites in Taiwan

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 (RCP: Representative Concentration Pathways) to avoid extreme results. As for the vulnerability level, we analyze the extend and degree of disasters based on map data published by the Taiwan 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:



**Physical risk analysis results of Giant’s own assets under RCP2.6 / RCP4.5 / RCP6.0 / RCP 8.5:**

Under RCP2.6, as our assets are not exposed to potential floods, mudslides or landslides, 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 structure and the risk management system 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
Total		23				23				23				23			

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.

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



**Flood Risk Distribution of Giant’s Own Assets**

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

**Mudslide Risk Distribution of Giant’s Own Assets**

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

**Landslide Risk Distribution of Giant’s Own Assets**

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

**Overall Risk Distribution of Giant’s Own Assets**

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

圖：巨大集團自有據點 RCP2.6 / RCP4.5 / RCP6.0 / RCP 8.5 情境下短期風險值

### Physical risk adaptation plan for Giant's own assets:

Short-term (1-3 years)	Medium-term (4-10 years)	Long-term (10 years)
<p>Rolling review: Conduct annual disaster risk assessments on Giant's own assets to achieve the risk management objectives.</p> <p>Contingency plan: Establish emergency response procedures, including plans for evacuation and material salvage, to protect employee safety and property.</p>	<p>Risk warning system: Establish a risk warning system for timely notification of risks and corresponding countermeasures during periods of high rainfall frequency.</p> <p>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.</p> <p>Water resistance enhancement of buildings: Improve the water resistance of building structure to minimize flood damage.</p>	<p>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.</p> <p>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.</p>

### 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	Normal cooperation	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24
● Low Risk	Normal cooperation	4	5	5	5	5	3	3	5	5	4	5	5	5	5	4	2
● Medium Risk	Normal cooperation and closely monitor trends of potential disasters	1	0	0	1	0	2	2	1	0	1	0	0	0	0	1	3
● High Risk	Depending on the industry nature, the contracts shall contain hazard risk-related terms and compensation clauses. Long-term collaboration is prohibited.	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 between 4 and 5 and 0 and 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 between 3 and 5 and 0 and 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 between 4 and 5 and 0 and 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 between 2 and 5 and 0 and 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's Own Assets

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



Mudslide Risk Distribution of Giant's Own Assets

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



Landslide Risk Distribution of Giant's Own Assets

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



Overall Risk Distribution of Giant's Own Assets

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

RCP 4.5



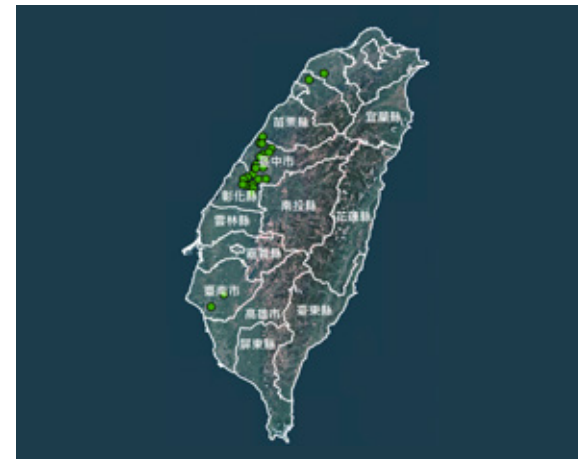
Flood Risk Distribution of Giant's Own Assets

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



Mudslide Risk Distribution of Giant's Own Assets

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



Landslide Risk Distribution of Giant's Own Assets

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



Overall Risk Distribution of Giant's Own Assets

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

RCP6.0



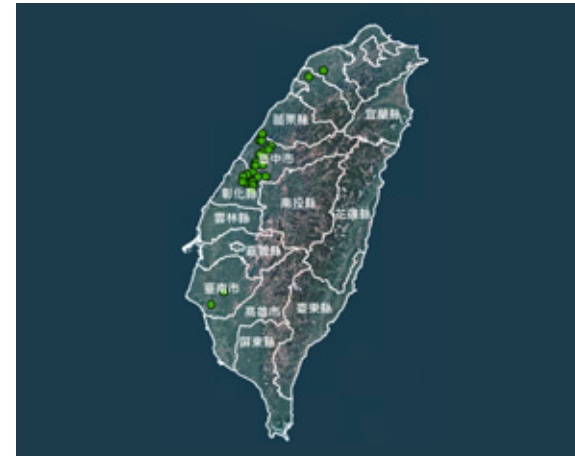
Flood Risk Distribution of Giant's Own Assets

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



Mudslide Risk Distribution of Giant's Own Assets

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



Landslide Risk Distribution of Giant's Own Assets

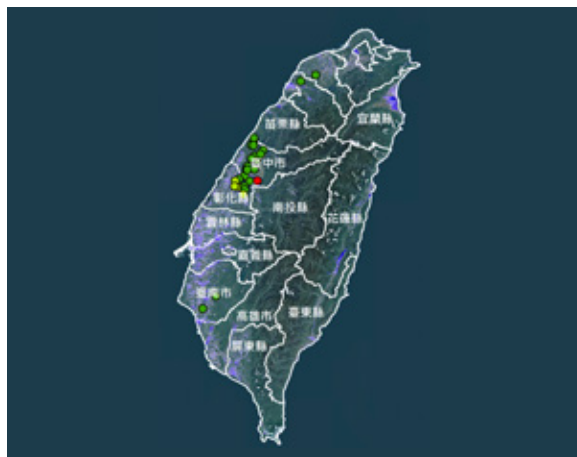
- No Risk (0)
- Low Risk (0-1)
- Medium Risk (1-2)
- High Risk (2-3)



Overall Risk Distribution of Giant's Own Assets

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

RCP8.5



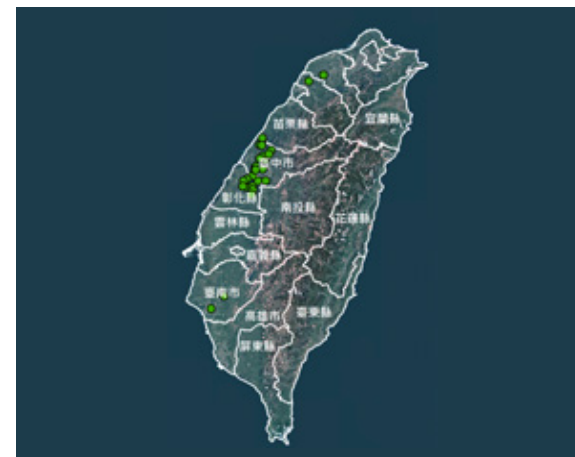
Flood Risk Distribution of Giant's Own Assets

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



Mudslide Risk Distribution of Giant's Own Assets

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



Landslide Risk Distribution of Giant's Own Assets

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



Overall Risk Distribution of Giant's Own Assets

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



### Physical risk adaptation plan for Giant suppliers:

Short-term (1-3 years)	Medium-term (4-10 years)	Long-term (10 years)
<ul style="list-style-type: none"> <li>Rolling review: Conduct annual disaster risk assessments on Giant suppliers to achieve the risk management objectives.</li> <li>Contingency plan: Establish emergency response procedures, including plans for evacuation and material salvage, to protect employee safety and property.</li> </ul>	<ul style="list-style-type: none"> <li>Risk warning system: Establish a risk warning system for timely notification of risks and corresponding countermeasures when risks occur.</li> <li>Assessment on building structure: 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.</li> <li>Preparation of supplies: Enhance preparation of supplies to ensure the basic needs of employees are met during extreme weather events.</li> </ul>	<ul style="list-style-type: none"> <li>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.</li> </ul>

### Transition risk scenario analysis - data analysis based on operating sites in Taiwan

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 - data analysis based on operating sites in Taiwan

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

## Parameters for scenario simulation

## Factors and assumptions of transition scenario analysis

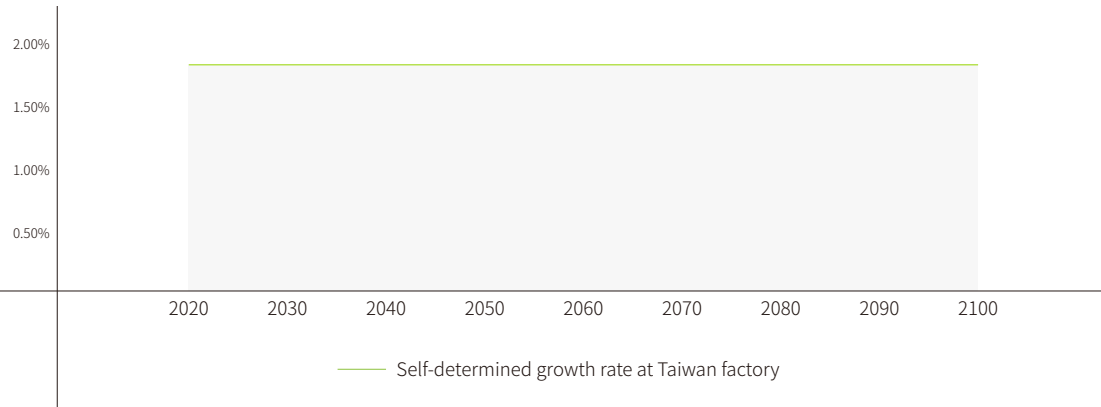
	Risk	Description	Cost Type	
Regulatory	<b>Carbon tax</b>	<p>Tax is levied based on a company's units of carbon emissions under different scenarios. Carbon tax has a high level of uncertainty due to significant differences between tax systems. This assessment focuses on carbon tax under three scenarios:</p> <ul style="list-style-type: none"> <li>Government's net zero pathway: Carbon tax of NT\$300/tCO<sub>2</sub>e (approximately US\$10/tCO<sub>2</sub>e)</li> <li>SSP1-1.9 and SBT-NZ: Carbon price of SSP1-1.9 (about US\$650/tCO<sub>2</sub>e by 2050)</li> </ul>	<p>USD/tCO<sub>2</sub>e</p> <p>SSP1-1.9 World</p>	Operating costs
	<b>Cap-and-trade and carbon fine</b>	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 regulations of not exceeding NT\$1,500/tCO <sub>2</sub> e).		Operating costs
Technology	<b>Installation costs of renewable energy</b>	The costs to install renewable power systems by the Group, which are 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	
	<b>Operating costs of renewable energy</b>	The operating cost of renewable energy is available in the Renewable Energy Statistics 2022 by the IRENA.	Operating costs	
	<b>Purchase cost of renewable energy</b>	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	
	<b>Cost of purchasing from Taiwan Power Company</b>	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	
	<b>Cost of carbon removal</b>	<p>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/tCO<sub>2</sub>e. The assumptions for three different scenarios are as follows:</p> <ul style="list-style-type: none"> <li>Immature technology: US\$340/tCO<sub>2</sub>e</li> <li>Average price: US\$235/tCO<sub>2</sub>e</li> <li>Mature technology: US\$130/tCO<sub>2</sub>e</li> </ul>	-	
Market	<b>Risk of decreasing market share of low carbon products</b>	Not considered	Expected revenue	

**Emission estimates of baseline scenario**

A. Giant Group’s parameters for emission estimates of baseline scenario

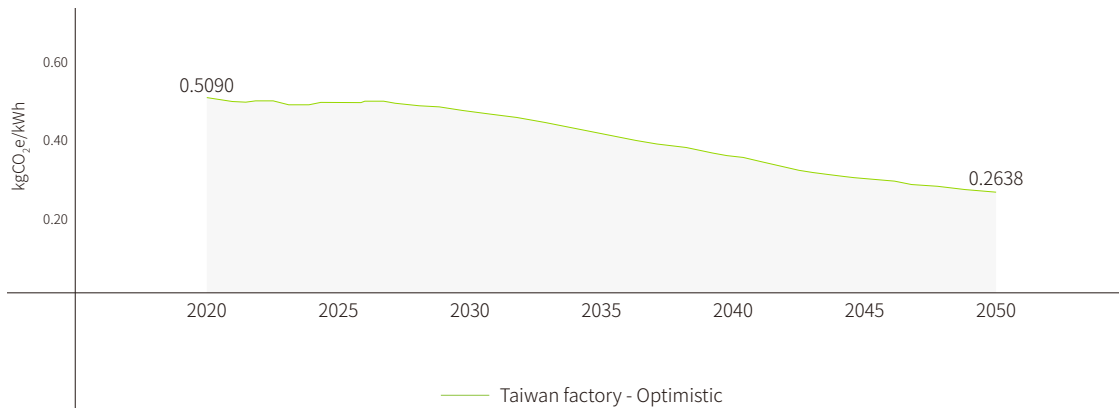
- The assessment baseline is set at a total of 34,016.37 tCO<sub>2</sub>e for Scope 1 and Scope 2 emissions from operating sites in Taiwan in 2021.
- Scope 1 emission growth rate: Estimated with a growth rate of -0.36%.
- Electricity consumption growth rate: The growth rate is estimated based on a linear 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.)

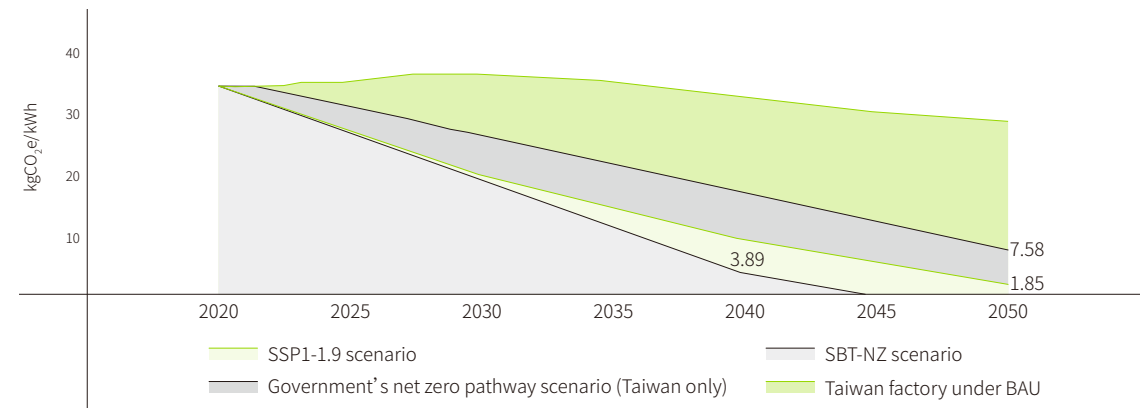
**Electricity Coefficient Simulation (without considering the government’s net zero policy)**



B. Giant Group’s results for emission estimates of baseline 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<sub>2</sub>e in 2050.

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

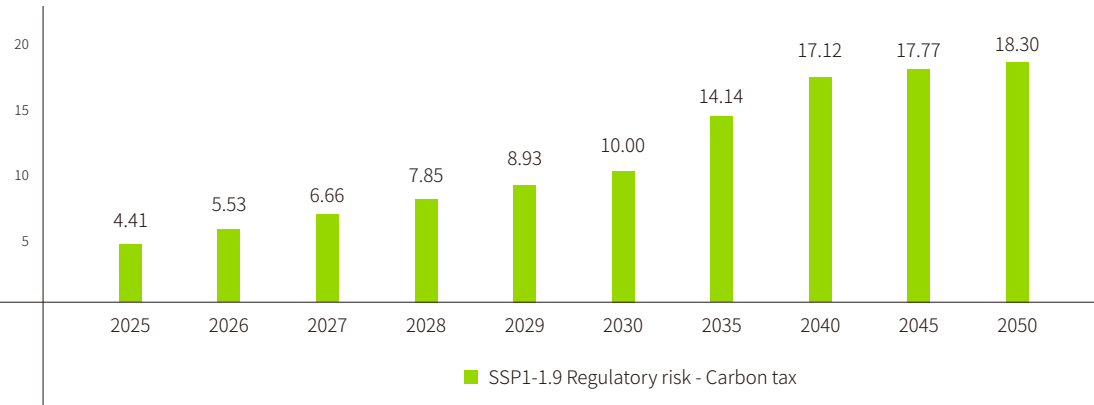


- Financial impact on Giant Group with existing strategy (BAU, excluding RE100 strategy)

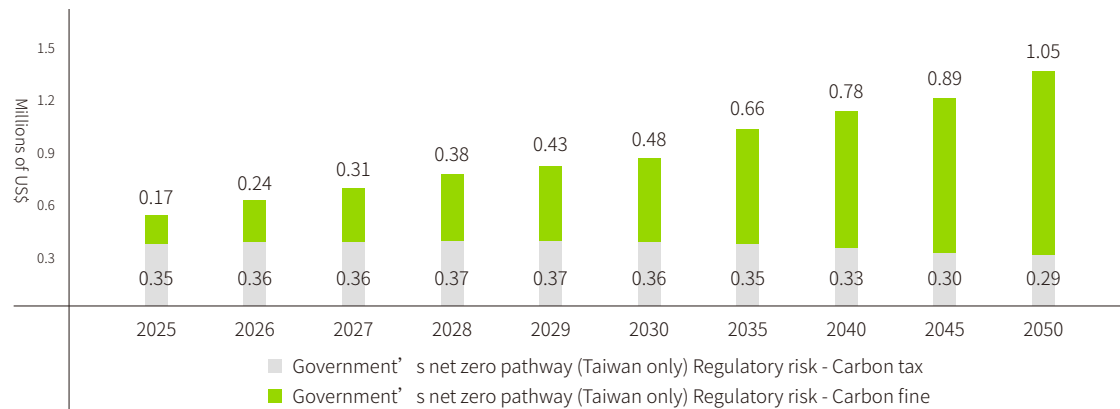
The assessments of financial impacts on Giant Group under BAU with future emission estimates under different external transition scenarios are as follows: Under the scenario of the government’s net zero pathway, carbon tax will gradually decrease around 2050 due to diminishing carbon emissions. However, 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\$1.34 million. As for the SSP1-1.9 path, please refer to the graph below.

- Under the SSP1-1.9 path

**Risk Analysis of BAU\_SSP1-1.9 Scenario**



**Risk Analysis of BAU\_ Government’s Net Zero Pathway (excluding market risk)**



**Financial Impact on Giant Group under Two External Scenarios with BAU**

1. Cost of capacity obligation

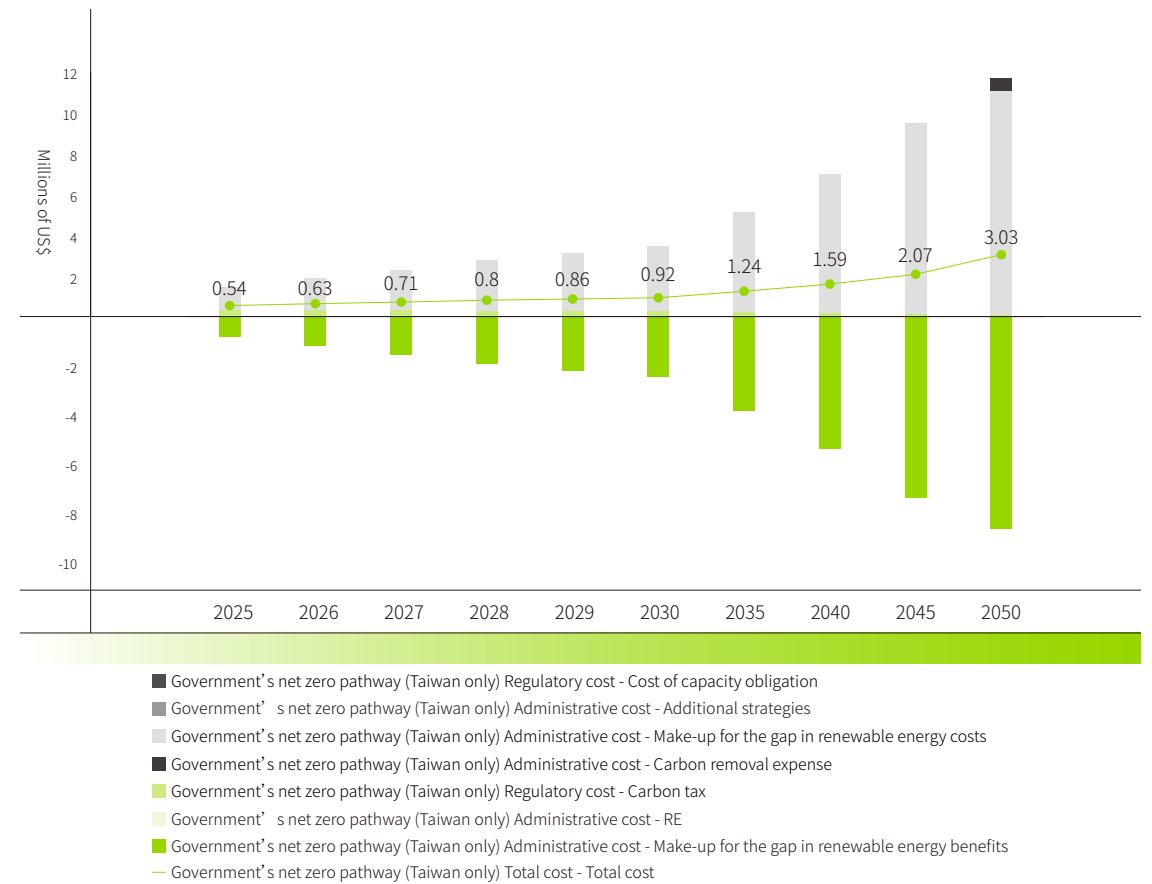
With a contracted capacity below the 5,000kW threshold, Giant Group does not have to perform the calculation.

2. Management cost analysis for achieving the climate change transition scenarios

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

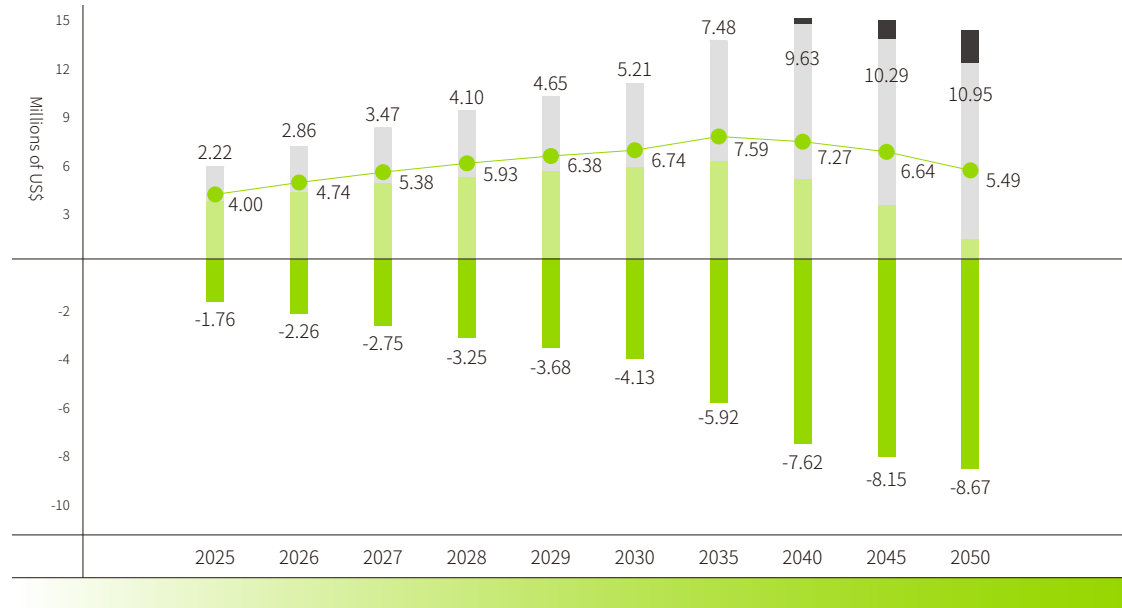
In order to satisfy the carbon emission allowances under the government’s net zero target, Giant Group has to purchase renewable energy and adopt carbon removal measures to avoid all carbon fines in 2025. In other words, to be mandatorily required to achieve the transition scenario target, our renewable 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. Besides, 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.

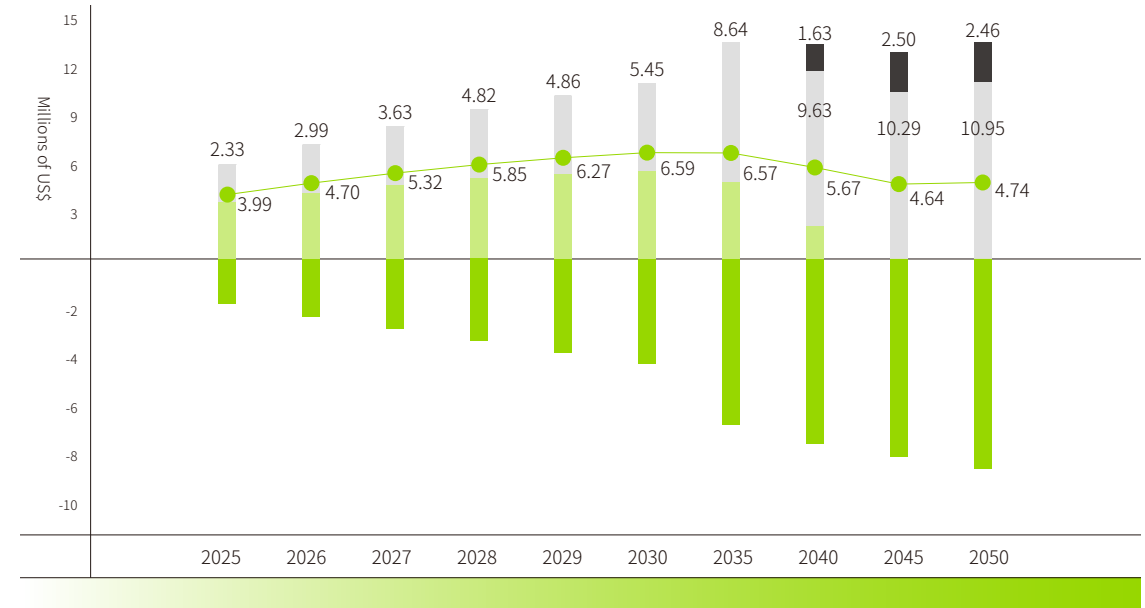
Management Cost Analysis for Achieving SSP1-1.9



- SSP1-1.9 Regulatory cost - Cost of capacity obligation
- SSP1-1.9 Administrative cost - Additional strategies
- SSP1-1.9 Administrative cost - Make-up for the gap in renewable energy costs
- SSP1-1.9 Administrative cost - Carbon removal expense
- SSP1-1.9 Regulatory cost - Carbon tax
- SSP1-1.9 Administrative cost - RE
- SSP1-1.9 Administrative cost - Make-up for the gap in renewable energy benefits
- SSP1-1.9 Total cost - Total cost

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, and only additional purchase costs of renewable energy and carbon removal remain around 2045. The total cost is US\$4.74 million.

Management Cost Analysis for Achieving SBT-NZ

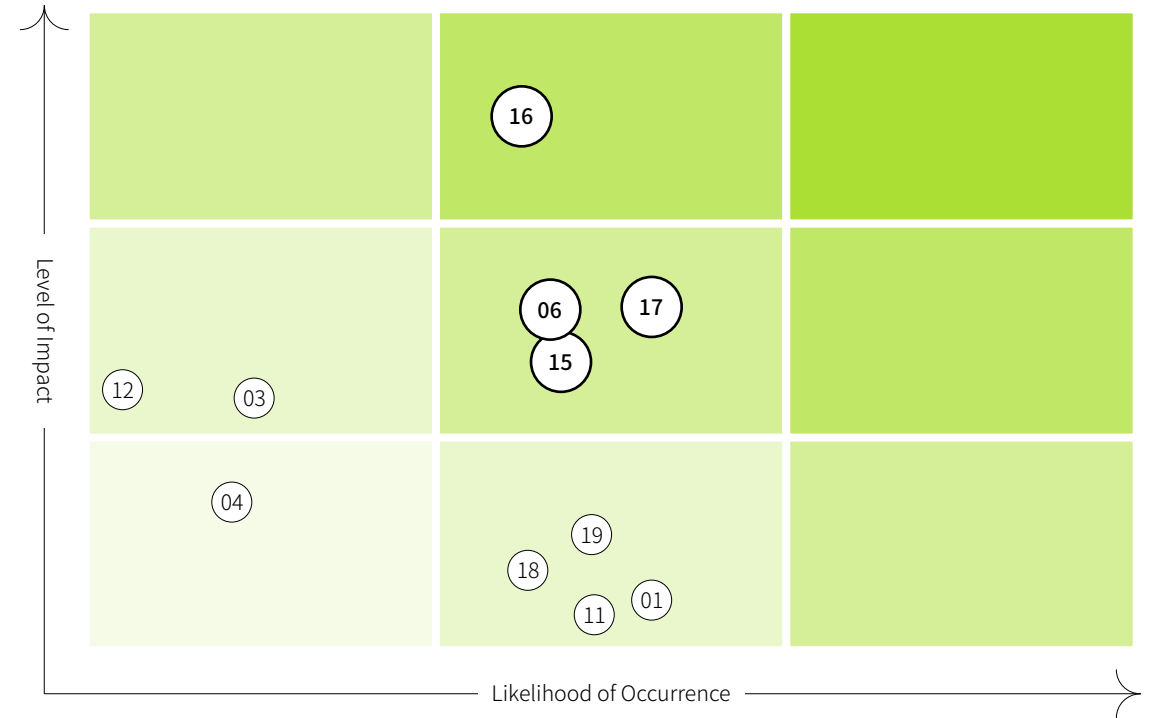
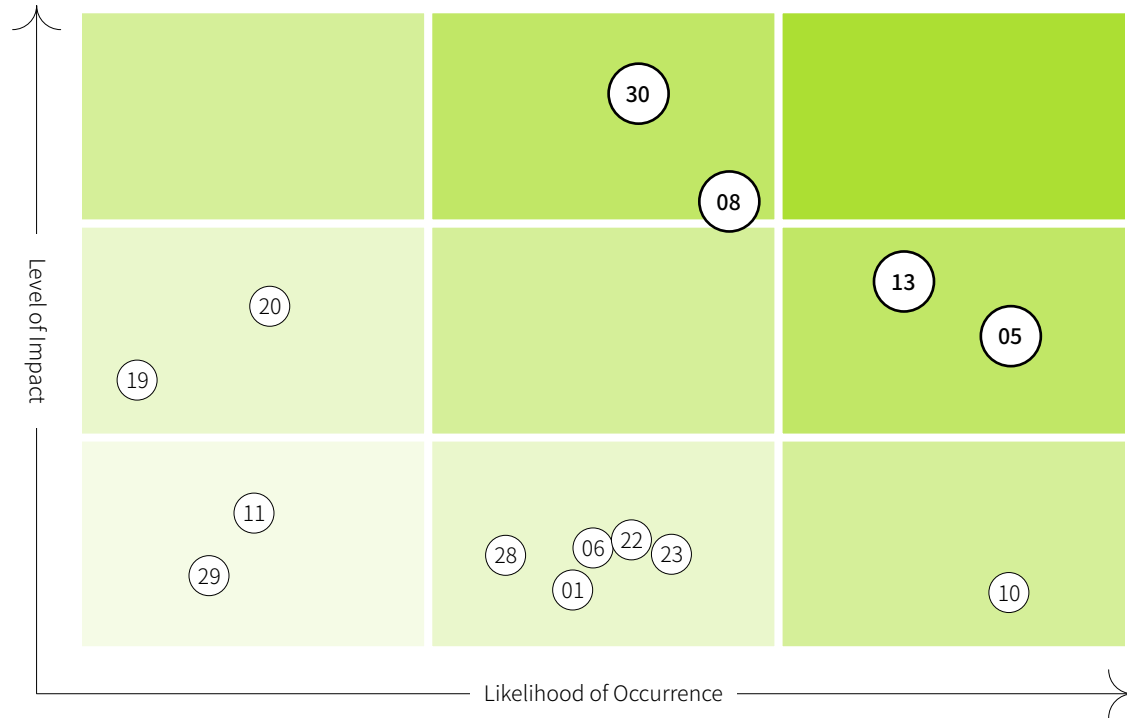


- SBT-NZ Regulatory cost - Cost of capacity obligation
- SBT-NZ Administrative cost - Additional strategies
- SBT-NZ Administrative cost - Make-up for the gap in renewable energy costs
- SBT-NZ Administrative cost - Carbon removal expense
- SBT-NZ Regulatory cost - Carbon tax
- SBT-NZ Administrative cost - RE
- SBT-NZ Administrative cost - Make-up for the gap in renewable energy benefits
- SBT-NZ Total cost - Total cost

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 to avoid 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	Management Practices	
Risks	Product efficiency regulations and standards	Within Giant Downstream customers	Short-term	Increasing R&D costs to meet new product quality requirements	In addition to complying with regulations, Giant Group is dedicated to improving the average energy efficiency of e-bikes every year. We are committed to enhancing the performance of batteries and motors and increasing the capacity of batteries and the torque of motors under the same weight, thereby improving the overall efficiency for cyclists and reducing the burden of riding. Many countries around the world have enacted electric vehicle laws to regulate the use of e-bikes, with the most important aspect being the speed limits of e-bike. The regulations cover definitions of e-bikes, speed limits, road rights, electromagnetic constraints, weight restrictions, and age requirements. EU member states have jointly agreed on broader legislations to ensure e-bikes are used properly and safely. Giant Group's products comply with the e-bike safety standards of various countries worldwide, meeting different regulatory standards in markets across the globe. Adhering to safety regulations increases costs.
	Cap-and-trade	Upstream suppliers Within Giant	Medium-term	Higher operating costs due to downtime loss from power rationing in countries where factories are located or additional emissions trading costs	We proactively discuss carbon rights of bicycles or the developments of zero-carbon certifications for transport with relevant agencies 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	<ul style="list-style-type: none"> <li>· Include carbon emission reduction in performance assessment under objective management with monthly reviews.</li> <li>· Lead the industry in energy conservation and emission reduction, and advocate the use of carbon tax for promoting carbon reduction technology or management.</li> </ul>
	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	<ul style="list-style-type: none"> <li>· Promote inclusive cycling, e.g., the sales weighting of Liv, the industry's one and only cycling brand tailored for women.</li> <li>· 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 of commuting.</li> <li>· 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.</li> <li>· We actively discuss the developments of bicycle carbon rights or zero-carbon transport certifications with relevant agencies, providing greater incentives for cycling.</li> </ul>
	Diversity in operation	Within Giant	Medium-term	Capture more innovative circular economy business models to boost revenues	<ul style="list-style-type: none"> <li>· Rediscover revenue growth engines from a circular economy perspective.</li> <li>· Besides bicycle and e-bikes, the Company generates diversified revenue through certified used bicycle trading, YouBike, and Giant Adventure Co., Ltd.</li> <li>· In addition to physical products, we also generate revenue from repair work and travel insurance, adding to the diversity of our revenue.</li> </ul>
	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	<p>We are committed to industry-leading low-carbon materials and processes, and work together to create low-carbon competitiveness in the supply chain:</p> <ul style="list-style-type: none"> <li>· 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.</li> <li>· 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 adopt energy-efficient facilities to achieve optimal production efficiency.</li> <li>· 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.</li> <li>· Expand the used bicycle market and YouBike operations globally.</li> </ul>

### 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. We have set 2021 as the base year for GHG and planned to formulate emission reduction schemes based on the internationally accepted SBTi. 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%

Metric	2023		
	Target	Performance	Status
GHG reduction (%)	3%	Operating sites in Taiwan + China - Absolute intensity reduction 22.48%	Achieved - Please refer to GHG section for details
Percentage of green power to total electricity (%)	5%	11.7%	Achieved - Please refer to Energy consumption and conservation for details
Percentage of green power at our China factories (%)	16%	15.32%	Achievement rate of 96% - Please refer to Energy consumption and conservation for details
Key suppliers with ISO14064 certifications (%)	35%	80%	Achieved - Please refer to 4.2.2 Bicycling Alliance for Sustainability (BAS) for details
Carbon reduction rate of BAS key suppliers (%)	3%	5%	Achieved - Please refer to 4.2.2 Bicycling Alliance for Sustainability (BAS) for details
Enhancement on average energy efficiency of e-bikes (%)	80%	Unachieved	Unachieved - Please refer to 5.1 Product Sustainability Strategy for details
Increases in number of public bicycle rentals/mileage (cumulative)	700 million	Achieved, 750 million	Achieved - Please refer to 5.1.1.1 YouBike public bicycle sharing service for details
Percentage of participants of climate education (%)	70%	Redefine the metric (Note)	Please refer to 6.3.2 Climate Philanthropy -Sustainable 22 for details

Note: Redefine the number of attendance and participation rate to quantify climate education more effectively.



#### 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 power systems since 2021. The facilities were installed in three more factories in 2023, generating 18,584,039 kWh of electricity from a total of seven factories during the year. Green power accounts for 11.7% of the Group's total electricity consumption, representing an increase of 60% from the previous year.

Energy		Unit	2020	2021	2022	2023
Electricity	In-house renewable generated	kWh	10,583,293	11,765,060	12,939,622	18,176,491
		MJ	38,099,855	42,354,217	46,582,639	65,435,367
	Renewable purchased	kWh	-	-	-	2,057,129 (Note 4)
		MJ	-	-	-	7,405,665
	Non-renewable purchased	kWh	146,632,857	171,825,194	163,390,285 (Note 2)	137,315,975
		MJ	527,878,287	618,570,697	588,205,025 (Note 2)	494,337,511
Steam	MT	43,985	51,074	51,242	38,088	
	MJ	14,690,990	17,058,716	17,114,828	12,721,392	
Natural gas	M <sup>3</sup>	22,882,126	26,256,688	24,402,156	21,437,631	
	MJ	860,367,943	987,251,480	917,521,066	806,054,918	
Petrol	L	99,028	135,901	106,649	219,242	
	MJ	3,228,309	4,430,367	3,476,755	7,147,301	
Diesel fuel	L	374,150	543,280	488,566	1,651,855	
	MJ	13,132,673	19,069,143	17,148,664	57,980,099	
LPG	Kg	19,140	22,540	18,280	6,346	
	MJ	480,797	566,205	459,194	159,412	
Production (bicycle)	Set	4,901,000	6,061,000	5,843,000	4,198,000	
Total renewable energy consumption	MJ	38,099,855	42,354,217	46,582,639	65,435,367	
Energy intensity (renewable)	MJ/set	7.77 (Note 2)	6.99 (Note 2)	7.97 (Note 2)	15.59	
Total non-renewable energy consumption	MJ	1,419,778,998	1,646,946,607	1,544,285,560	1,378,400,633	
Energy intensity (non-renewable)	MJ/set	289.69 (Note 2)	271.73 (Note 2)	264.24 (Note 2)	328.35 (Note 3)	

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 M<sup>3</sup> = 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

Note 2:

Data from previous years were reviewed for errors and updated.

Note 3:

Due to lower production in 2023 compared to previous years, the energy intensity increased. (Production reached new heights between 2020 and 2022.)

Note 4:

In 2023, the Rinan Factory of Giant Group acquired registered and certified T-RECs, which allowed the Factory to declare the offset of carbon dioxide emissions from its conventional electricity consumption of 2,057,129.14 kWh in 2023. Following principles outlined in the GHG Protocol Scope 2 Guidance, the information was disclosed in Carbon Disclosure Project (CDP), stating its use for Scope 2 (market-based emissions reduction.)



Registered and certified T-RECs acquired by Rinan Factory in 2023 were presented in the table below. They were used by the Factory to declare the offset of carbon dioxide emissions from its conventional electricity consumption of 2,057,129 kWh in 2023. Following principles outlined in the GHG Protocol Scope 2 Guidance, the information was disclosed in CDP, stating its use for Scope 2 (market-based emissions reduction).

Certificate No.	Power Generation Site	Period	Power Type	Amount Generated (REC)
22SP0062-B023000001~963	Rinan Factory - East & central warehouses	2022.12.31~2023.11.28	Solar	963
23SP0051-B023000001~383	Installation of solar power systems for 524.8kWp at GTM parking shed	2023.06.05~2023.11.28	Solar	383
23SP0054-B023000001~326	Rinan Factory - South warehouse	2023.06.05~2023.11.28	Solar	326
23SP0148-B023000001~29	Rinan Factory - YS	2023.09.14~2023.11.30	Solar	29
23SP0160-B023000001~98	Rinan Factory - Molding Zone B	2023.09.14~2023.11.28	Solar	98

Since 2021, the Group has followed the GHG emission requirements at the organization level (ISO14064-1:2018) and the GHG Protocol to establish a comprehensive GHG inventory list for our global manufacturing bases. At present, the GHG inventory results of six of our operating sites in Taiwan, i.e., the Rinan Factory of the Giant Manufacturing Co., Ltd., Giant Group Headquarters, Youth Logistics Center, AIPS Technology Co., Ltd., YouBike Co., Ltd. and Giant Taiwan Sales Company; together with five operating sites in China, i.e., Giant (China) Co., Ltd., Giant (Kunshan) Co., Ltd., Giant (Tianjin) Co., Ltd., Giant Electric Vehicle (Kunshan) Co., Ltd. and Giant (Chengdu) Co., Ltd., have been verified by a third party.

In 2023, the total GHG emissions (Scope 1 and 2) of Giant Group (all operating sites in Taiwan and China) were approximately 86,967.49 metric tons CO<sub>2</sub>e with the primary sources being electricity and fuels for the Company's operation, which accounted for more than 98% of the Company's total emissions. In addition to our operations in Taiwan and China, GHG inventory was conducted for sales companies in six countries in 2023: Japan, South Korea, Mexico, Canada, Australia, and the United States (Please refer to the emission list in the Appendix for details.)

Scope 1 and 2 Emissions (metric tons CO <sub>2</sub> e)		2021	2022	2023
Scope 1	Stationary combustion	27,839.58	25,800.17	21,232.78
	Mobile combustion	3,266.32	3,538.97	4,016.72
	Fugitive emission	4,345.36	2,787.21	2,271.14
	Process emissions		0.032	
Subtotal		35,451.26	32,126.38	27,520.64
Scope 2	Location-based	76,737.57	75,073.25	59,446.85
	Market-based	76,737.57	75,073.25	59,446.85
Scope 1+2 Total	Location-based	112,188.83	107,199.63	86,967.49
	Market-based	112,188.83	107,199.63	86,967.49
Emissions intensity (metric tons CO <sub>2</sub> e /set)	Location-based	18.51	18.34	20.72

Note 1: The third-party GHG verification was conducted pursuant to ISO14064-1:2018. The inventory boundary included:

Operating sites in Taiwan: Giant Group Global Headquarter, Giant Manufacturing Co., Ltd., AIPS Technology Co., Ltd., YouBike Co., Ltd., Giant Taiwan Sales Company and Youth Logistics Center

Operating sites in China: Giant (China) Co., Ltd., Giant (Kunshan) Co., Ltd., Giant (Tianjin) Co., Ltd., Giant Electric Vehicle (Kunshan) Co., Ltd. and Giant (Chengdu) Co., Ltd.

Note 2: The boundary of GHG inventory data in this table is Giant Group's operating sites in Taiwan and China. Emissions of sales companies can be found in the Appendix.

With 2021 as the base year, Giant Group has set the short-term target of a 3% reduction in Scope 1 and 2 emissions by 2023. In 2023, our operating sites in Taiwan achieved an absolute reduction of 21.72% on Scope 1 and Scope 2 emissions, while the operating sites in China delivered a 22.81% absolute reduction. The overall absolute reduction of Scope 1 and Scope 2 emissions by operating sites in Taiwan and China was 22.48%, demonstrating significant energy-saving and carbon-reduction effectiveness.

#### Operating sites in Taiwan

Scope 1+2 emissions (metric tons CO <sub>2</sub> e)	2021	2022	2023
Scope 1 emissions (metric tons CO <sub>2</sub> e)	11,590.83	11,549.62	9,747.09
Scope 2 emissions (metric tons CO <sub>2</sub> e)	22,425.55	23,152.80	16,880.11
Scope 1+2 emissions (metric tons CO <sub>2</sub> e)	34,016.38	34,702.42	26,627.20

#### Operating sites in China

Scope 1+2 emissions (metric tons CO <sub>2</sub> e)	2021	2022	2023
Scope 1 emissions (metric tons CO <sub>2</sub> e)	23,860.43	20,576.76	17,773.55
Scope 2 emissions (metric tons CO <sub>2</sub> e)	54,312.02	51,920.45	42,566.74
Scope 1+2 emissions (metric tons CO <sub>2</sub> e)	78,172.45	72,497.21	60,340.29

#### Operating sites in Taiwan + China

Seven categories of Scope 1 emissions:

Category of GHG Emissions (metric tons CO <sub>2</sub> e)	2021	2022	2023
CO <sub>2</sub>	28,218.01	26,960.89	25,168.19
CH <sub>4</sub>	6,016.29	4,327.99	1,692.75
N <sub>2</sub> O	225.22	212.62	79.01
NF <sub>3</sub>	0	0	0
HFC	991.74	624.88	580.71
PFC	0	0	0
SF <sub>6</sub>	0	0	0
Total	35,451.26	32,126.38	27,520.64

Note: The boundary of GHG inventory data in this table is Giant Group's operating sites in Taiwan and China.

#### Giant Group has set the short-term target of a 3% reduction for the bicycle industry in Scope 1 and 2 emissions by 2023

The absolute reduction emission for Scope 1 and Scope 2 in Taiwan sites are reached	Reduction 21.57%
The absolute reduction emission for Scope 1 and Scope 2 in China sites are reached	Reduction 22.81%
The absolute reduction emission for Scope 1 and Scope 2 in Taiwan and China sites are reached	Reduction 22.48%

## Column Story

Scope 3 Emissions (metric tons CO <sub>2</sub> e)			Year		
ISO14064-1 Classification	GHG Protocol Classification	Item	2021	2022	2023
Category 3	Category 4	Upstream transportation and distribution	2,032.40	7,005.07	1,330.75
	Category 6	Business travel	70.71	45.45	182.62
	Category 7	Employee commuting	1,698.96	637.20	1,343.46
	Category 9	Downstream transportation and distribution	3,217.01	5,747.18	3,383.80
Category 4	Category 1	Purchases of raw materials and consumables	2,357,669.73	941,288.35	551,643.75
	Category 2	Capital goods	9,033.62	20,271.50	13,096.71
	Category 3	Fuel- and energy-related activities	12,709.95	10,684.08	10,449.36
	Category 5	Waste from operations	6,374.76	5,822.30	2,000.42
	Category 8	Upstream leased assets	0	0	21.10
Category 5	Category 10	Processing of sold products	4,687.86	4,513.18	1,578.89
	Category 11	Use of sold products	55,075.71	80,131.64	53,654.51
	Category 12	End-of-life treatment of sold products	1,146.89	585.35	935.86
	Category 13	Downstream leased assets	968.51	0	0
	Category 14	Franchises and authorized dealers	1,475.86	1,823.10	2,794.63
	Category 15	Investments	52.64	63.53	68.97
Subtotal of Scope 3 Emissions (in metric tons CO <sub>2</sub> e)			2,456,214.61	1,078,617.93	642,484.83

Note: The boundary of GHG inventory data in this table is Giant Group's operating sites in Taiwan and China.

## Energy-saving and carbon-reduction highlights of a single factory: Rinan Factory

In 2023, our Rinan Factory in Dajia, Taiwan introduced four solar power systems and solar panels, and applied for T-RECs. With these certificates, the cumulative renewable energy output of 2,057,129.14kWh in 2023 could be used to offset the carbon dioxide emissions. As a result, the Scope 1 and 2 emissions of the Rinan Factory had a significant decrease of 30% compared to the base year while its carbon intensity dropped from 32.18 tCO<sub>2</sub>e/million dollars of revenue in 2021 to 25.14 tCO<sub>2</sub>e/million dollars of revenue in 2023, representing a remarkable decrease of 22%.



Rinan Factory in Dajia	2021	2022	2023
Scope 1+2 GHG emissions (tCO <sub>2</sub> e)	28,620.53	28,586.3	20,027.75
Carbon intensity (tCO <sub>2</sub> e/US\$ million dollars of revenue)	32.18	26.47	25.14

## Emission reduction from the base year 2021 to the present (%)

Scope 1+2 GHG emissions (tCO <sub>2</sub> e)	-30%
Carbon intensity (tCO <sub>2</sub> e/US\$ million dollars of revenue)	-22%



The operation of Giant Group spans across three continents: North America, Asia and Australia. In 2023, Giant expanded its GHG inventory to include sales companies in six countries: Japan, South Korea, the United States, Mexico, Canada and Australia. For the first year, we carried out voluntary inventory on Scope 2 GHG emissions of these sales companies to understand their status of GHG emissions. Please refer to the Appendix for details. In order to mitigate the impact of energy consumption on global warming, Giant Group has developed GHG reduction schemes focusing on decreasing the use of electricity, natural gas, and steam. These initiatives aim to progressively reduce GHG emissions year by year. Our GHG emissions reduction plan include energy-saving measures such as process optimization, equipment replacement/technological improvements/upgrades, behavioral management, energy transition, lighting management and other means to achieve our emission reduction targets. Energy-saving measures adopted in 2023 were as follows:

Type of Energy	Type of Reduction Measures	2023 Energy Consumption Units	2023 Energy Savings (GJ)
Electricity	Process optimization, equipment replacement/technological improvements/upgrades, behavioral management, energy transition, lighting management	8,391,216.07 kWh	30,208.38
Natural gas	Process optimization, equipment replacement/technological improvements/upgrades	700,416.53 M <sup>3</sup>	26,335.66
Steam	Equipment replacement/technological improvements/upgrades, energy transition, behavioral management	90,999.00 metric ton	30,393.67
Total heat value of energy savings			86,937.71

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 M<sup>3</sup> = 37.6 MJ



#### 2023 type of reduction measure and amount of emission reduction:

Type of Reduction Measure	Main Projects	2023 Emission Reduction (metric tons CO <sub>2</sub> e)
Process optimization	<ul style="list-style-type: none"> <li>· RTOs for exhaust air treatment to save compressed air</li> <li>· Forced air supply and blowing to improve indoor circulation</li> <li>· Pneumatic press enhancement to save energy</li> <li>· Laser welding for chain stay parts</li> <li>· Upgrade of the mouth and top cap of billet furnaces</li> <li>· Improvement on the heating method for punching</li> <li>· Optimization of water pump control for central air conditioning to save energy</li> </ul>	706.14
Equipment replacement/technological improvements/upgrades	<ul style="list-style-type: none"> <li>· Heat recovery from air compressors</li> <li>· Interlock control on air-pressure equipment</li> <li>· Power-saving of hydraulic servo motor</li> <li>· Permanent magnet inverter air compressor with high efficiency</li> <li>· Energy efficiency improvement of blower with inverter</li> <li>· Installation of check valve on coated air duct</li> <li>· RTO for exhaust air treatment with inverter</li> <li>· Replacement of milling and punching equipment with laser cutters</li> <li>· Energy-saving of press machine for precise logo engraving</li> <li>· Natural gas-saving of coating ovens</li> <li>· Replacement of air suspension blower in blowers</li> <li>· Modification of servo for annular processing line</li> <li>· Adoption of T4 air-cooled chillers</li> <li>· Replacement of motor for polishing</li> <li>· Installation of energy-saving dissolved air flotation (DAF) for sewage treatment station</li> </ul>	1,430.89
Lighting management	<ul style="list-style-type: none"> <li>· Change of utility street lights to solar street lights</li> <li>· Energy efficiency improvement of factory lighting</li> <li>· Installation of light sensors in office pantries and freight elevators</li> </ul>	83.27
Energy transition	<ul style="list-style-type: none"> <li>· Introduction of solar power systems</li> </ul>	2,499.33
Behavioral management	Promoting the Sustainable 22 initiatives within the Group; and to expand and sustain the sustainability spirit within the organization. Please refer to "Sustainable 22" in Chapter 6 for details.	119.73
Total		4,839.36

#### 4.1.1.4 Raw materials management

Giant Group endeavors to reduce environmental burden in terms of sourcing raw materials and improving material efficiency. With the objective of managing significant impacts, statistics of key raw materials and packaging materials for bicycle manufacturing are summarized below:

Type of Raw Materials (metric tons)	2020	2021	2022	2023
Aluminum products	103,792.78	117,831.63	98,829.33	86,763.16
Recycled aluminum products	30,422.26	39,155.98	34,951.19	33,079.03
Percentage of recycled aluminum used (%)	22.67%	24.94%	26.13%	27.60%
Paper	227,527.19	153,297.99	269,593.26	154,615.24
Recycled paper	735,428.91	581,188.71	1,048,021.79	623,951.24
Percentage of recycled paper used (%)	76.37%	79.16%	79.54%	80.14%
Iron products	1,264.89	1,778.93	1,549.72	1,309.54
Steel	1,457.19	4,842.31	7,913.22	4,215.86
Carbon fiber	259.98	356.64	378.24	346.44
Rubber	8,222.69	9,447.27	8,972.78	5,911.00
Total	1,108,375.95	907,899.46	1,470,209.52	910,192.07

Type of Raw Materials (metric tons)	2020	2021	2022	2023
Percentage of recycled aluminum used (%)	22.67%	24.94%	26.13%	27.60%
Percentage of recycled paper used (%)	76.37%	79.16%	79.54%	80.14%

#### 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 2023, the total water withdrawal of Giant Group (excluding sales offices outside of Taiwan and China) was approximately 2,048.76 megaliters, and the total water discharge was around 1,481.60 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. In 2023, Giant Group produced 4,198 thousand bicycles, and the average water withdrawal per bicycle was 0.49 metric tons. 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 quality inspection on effluent discharged, our Taiwan factory delivers results that are above the standard of the industrial zone<sup>(Note)</sup>. 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.



In 2023, the Giant Group utilized the internationally recognized Aqueduct Water Risk Atlas developed by the World Resources Institute (WRI) to identify the water risk indicators of regions surrounding our largest production facilities in Taichung, Taiwan; and Kunshan at Jiangsu, China. The results were presented as follows:

Water Risk Indicator	Risk Level	
	Taichung, Taiwan	Kunshan, China
Physical Risks Quantity (Water stress, water depletion, interannual variability, seasonal variability, groundwater table decline, riverine flood risk, coastal flood risk, drought risk)	With risk (Medium Risk) (2-3)	Extremely high (4-5)
Physical Risks Quality (Untreated connected wastewater, coastal eutrophication potential)	With risk (Medium Risk) (2-3)	With risk (Medium Risk) (2-3)
Regulatory and Reputational Risk (Unimproved/no drinking water, unimproved/no sanitation, Peak RepRisk Country ESG Risk Index)	No or very low risk (0-1)	With risk (Medium Risk) (2-3)
Overall Risk	With risk (Medium Risk) (2-3)	High risk (3-4)

#### WRF risk level description

1. No or very low risk (0-1)
2. Limited risk (Low risk) (1-2)
3. With risk (Medium Risk) (2-3)
4. High risk (3-4)
5. Extremely high risk (4-5)

#### Overall Water Risk

Low (0-1)	Low - Medium (1-2)	Medium-high (2-3)	High (3-4)	Extremely high (4-5)
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■ No data

#### Water resources risk assessment form

Risk Category	Evaluation Factor	Possible Risks/Opportunities	Approach
Policies and Regulations	Regulatory standards	(1) Regulatory standards of wastewater discharge in terms of quality/quantity (2) Water consumption fees, pollution discharge fees, or environmental taxes (3) Increasing percentages of effluents recycled and reused (4) Restrictions on water discharge permits or issuance of water rights	(1) Enhance water treatment efficiency and, if necessary, set up units with advanced treatment technology to improve water quality treatment capabilities and reduce pollutant emissions (2) Actively evaluate the process for achieving the water treatment and recycling targets and enhance water resource utilization efficiency
Technology	Self-imposed requirements	(1) Water treatment technology (2) Advancement in wastewater treatment technology	Continuously collect and evaluate water treatment technology solutions and their applicability
Goodwill	Declaration of major events	Fines	Strengthen routine self-monitoring practices
Immediate losses	Frequency of climate changes Recovery from financial losses	(1) Extreme weather events: Increasing severity of drought, snowstorm, and flood would lead to damage or shutdowns of factories (2) Disruption in raw material supply	(1) Establish an emergency notification mechanism, including abnormal response mechanisms for climate risks (2) Incorporate climate risks into the selection of new factory locations (3) Enhance water treatment efficiency through assessment and design considerations
Long-term risks	Aqueduct Water Risk Atlas	(1) Risks of flood and drought could potentially damage the factory premises and pose risks to employee safety (2) Risks of water resource scarcity and poor water quality	Continuously monitor international water resource risks and regional early warning information for the reference of business decision-makers

Water Volume (megaliters)	2020	2021	2022	2023
Tap water	886.18	861.51	838.47	632.00
Surface water	419.52	688.92	1,241.58	770.23
Groundwater	761.45	817.16	764.94	646.53
Total water withdrawal	2,067.15	2,367.59	2,844.99	2,048.76
Water discharge (megaliters)	1,009.51	1,390.69	1,906.98	1,481.60
Water consumption (megaliters)	1,057.64	976.90	938.01	567.16
Water recycled (megaliters)	359.36	458.23	460.33	350.20

## 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 2023, the amount of hazardous waste incinerated has dropped significantly 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)		2020	2021	2022	2023
General Waste	Recycled	7,611.65	9,412.47	13,646.22	12,490.24
	Landfill	190.82	404.43	295.87	127.38
	Incineration (with energy recovery)	188.59	211.75	289.21	188.35
	Incineration (without energy recovery)	3,287.19	3,600.33	3,480.52	2,411.26
	Total weight of general waste (including landfill and ones without energy recovery) (a+b+c+d)	11,278.25	13,628.97	17,711.83	15,217.23
	Total weight of general waste (excluding landfill and ones without energy recovery) (a+c)	7,800.24	9,624.22	13,935.43	12,678.59
	Percentage of general waste recycled (a/e)	67.49%	69.06%	77.05%	82.08%
Hazardous Waste	Landfill	778.20	825.28	505.16	323.43
	Incineration (without energy recovery)	3,436.53	4,840.70	698.12	266.92
	Recycled	574.62	500.16	6,345.72	4,521.20
	Total weight of hazardous waste (g+h+i)	4,789.35	6,166.15	7,549.00	5,111.55
	Percentage of hazardous waste recycled (i/j)	12.00%	8.11%	84.06%	88.45%
Total (General + Hazardous)	Total waste generated (including landfill and ones without energy recovery) (e+j)	16,067.60	19,795.12	25,260.83	20,328.78
	Excluding landfill and ones without energy recovery (f)	7,800.24	9,624.22	13,935.43	12,678.59

## 4.1.4 Pollutants

Compared to other transportation sectors, the bicycle manufacturing industry has a relatively lower air pollution emissions level. Nevertheless, Giant Group remains committed to fulfilling our responsibilities and actively adopting measures to mitigate the environmental impact. In addition to monitoring pollutant emissions for regulatory compliance, we begin to address the environmental impacts throughout the supply chains. By collaborating with suppliers, we strive to steer the industry towards a more sustainable direction.

Types of Volatile Organic Gases (metric tons)	2020	2021	2022	2023
SOx	3.17	2.13	1.69	0.36
NOx	29.54	13.32	19.93	14.92
VOCs	108.94	109.88	76.45	64.58
Xylene	25.91	26.09	18.01	15.03

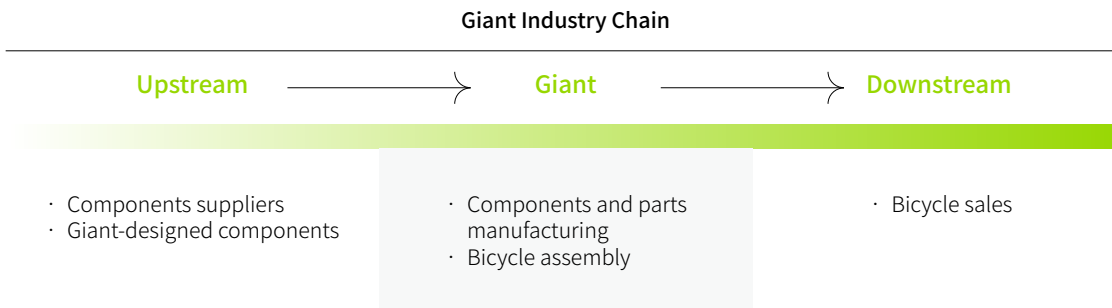


## 4.2 Responsible Procurement

### 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.



#### 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 2023, Giant transacts with a total of 556 suppliers worldwide.

Suppliers of Giant Group worldwide	<b>556 Suppliers</b>
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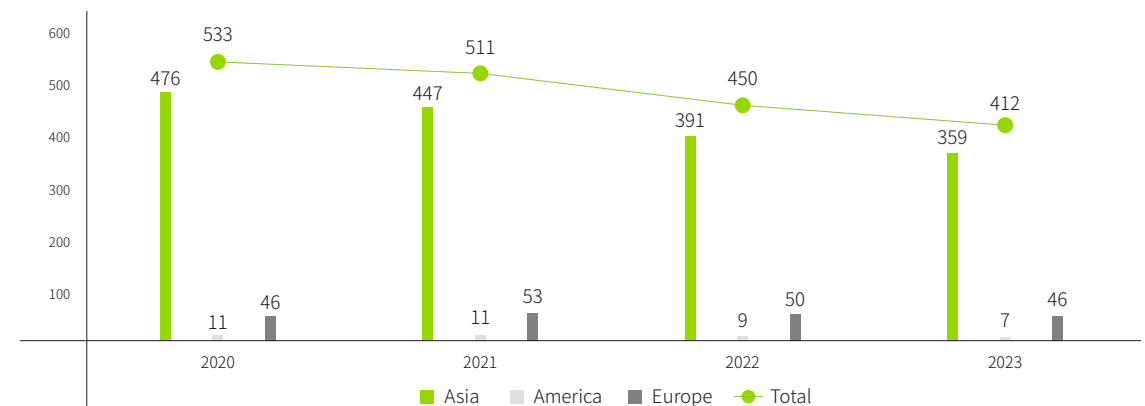
#### Supplier distribution and categories

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 purchase amounts, we define first-tier suppliers as ones not engaging in one-off transactions and having an annual transaction amount exceeding NT\$500,000. There were 412 first-tier suppliers in 2023. We then identify key suppliers<sup>(Note)</sup> from the first-tier suppliers by the percentages of purchase amounts. There were 99 first-tier key suppliers in 2023.

Note: (1) Suppliers we conduct business directly with, (2) not engaging in one-off transactions, (3) with an annual transaction amount exceeding NT\$500,000, and (4) contributing to the top 90% of our purchase amount.

Overview of First-tier Supplier				
Number of suppliers	2020	2021	2022	2023
Asia	476	447	391	359
America	11	11	9	7
Europe	46	53	50	46
Total	533	511	450	412

Notes: First-tier suppliers must meet the criteria of (1) direct transactions, (2) not one-off transactions, and (3) with an annual transaction amount exceeding NT\$500,000.



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

Type of Purchase		2020	2021	2022	2023
Derailleur System	Number of first-tier suppliers	7	6	6	6
	Number of first-tier key suppliers	3	4	4	3
	Percentage of first-tier key suppliers in terms of number (%)	0.5%	0.7%	0.9%	0.7%
	Percentage of first-tier key suppliers in terms of purchase amount (%)	28.3%	29.9%	25.5%	25.8%
Frame System	Number of first-tier suppliers	38	35	30	31
	Number of first-tier key suppliers	24	18	20	19
	Percentage of first-tier key suppliers in terms of number (%)	4.5%	3.5%	4.4%	4.6%
	Percentage of first-tier key suppliers in terms of purchase amount (%)	11.3%	10.6%	10.7%	10.7%
Suspension System	Number of first-tier suppliers	9	9	9	8
	Number of first-tier key suppliers	5	5	5	5
	Percentage of first-tier key suppliers in terms of number (%)	0.9%	1%	1.1%	1.2%
	Percentage of first-tier key suppliers in terms of purchase amount (%)	5.4%	6%	5.9%	6.0%
Wheel System	Number of first-tier suppliers	36	35	35	33
	Number of first-tier key suppliers	12	13	12	12
	Percentage of first-tier key suppliers in terms of number (%)	2.2%	2.5%	2.7%	2.9%
	Percentage of first-tier key suppliers in terms of purchase amount (%)	6.4%	6.3%	7.2%	7.5%
Steering System	Number of first-tier suppliers	26	25	25	23
	Number of first-tier key suppliers	8	8	9	9
	Percentage of first-tier key suppliers in terms of number (%)	1.5%	1.6%	2%	2.2%
	Percentage of first-tier key suppliers in terms of purchase amount (%)	4.6%	4.4%	4.6%	5.0%
Transmission System	Number of first-tier suppliers	18	20	18	18
	Number of first-tier key suppliers	6	6	7	6
	Percentage of first-tier key suppliers in terms of number (%)	1.1%	1.2%	1.6%	1.5%
	Percentage of first-tier key suppliers in terms of purchase amount (%)	2.4%	2.5%	3%	3.7%

Type of Purchase		2020	2021	2022	2023
Physical Prompting System	Number of first-tier suppliers	12	10	9	8
	Number of first-tier key suppliers	6	5	5	5
	Percentage of first-tier key suppliers in terms of number (%)	1.1%	1%	1.1%	1.2%
	Percentage of first-tier key suppliers in terms of purchase amount (%)	2.8%	2.5%	2.7%	3.3%
Brakes System	Number of first-tier suppliers	12	13	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%	0.5%
	Percentage of first-tier key suppliers in terms of purchase amount (%)	2.5%	2.8%	3%	3.2%
Electronic Control System	Number of first-tier suppliers	55	55	52	51
	Number of first-tier key suppliers	9	11	13	8
	Percentage of first-tier key suppliers in terms of number (%)	1.7%	2.2%	2.9%	1.9%
	Percentage of first-tier key suppliers in terms of purchase amount (%)	19.2%	19.7	22.6%	17.6%
Others	Number of first-tier suppliers	320	303	252	221
	Number of first-tier key suppliers	34	22	18	30
	Percentage of first-tier key suppliers in terms of number (%)	6.4%	4.3%	4%	7.3%
	Percentage of first-tier key suppliers in terms of purchase amount (%)	7.2%	5.5%	4.8%	7.3%
Total	Number of first-tier suppliers	533	511	449	412
	Number of first-tier key suppliers	109	94	95	99
	Percentage of first-tier key suppliers in terms of number (%)	20.5%	18.4%	21.1%	24%
	Percentage of first-tier key suppliers in terms of purchase amount (%)	90.1%	90%	90%	90%

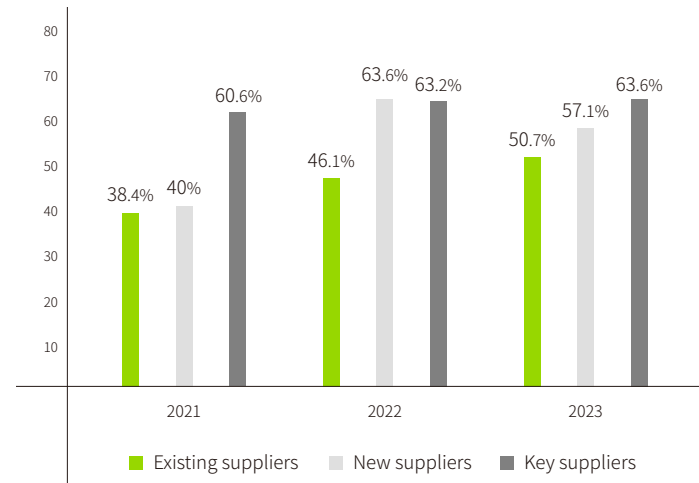
### 4.2.1.3 Sustainable supply chain management

#### Supplier CSR Code of Conduct

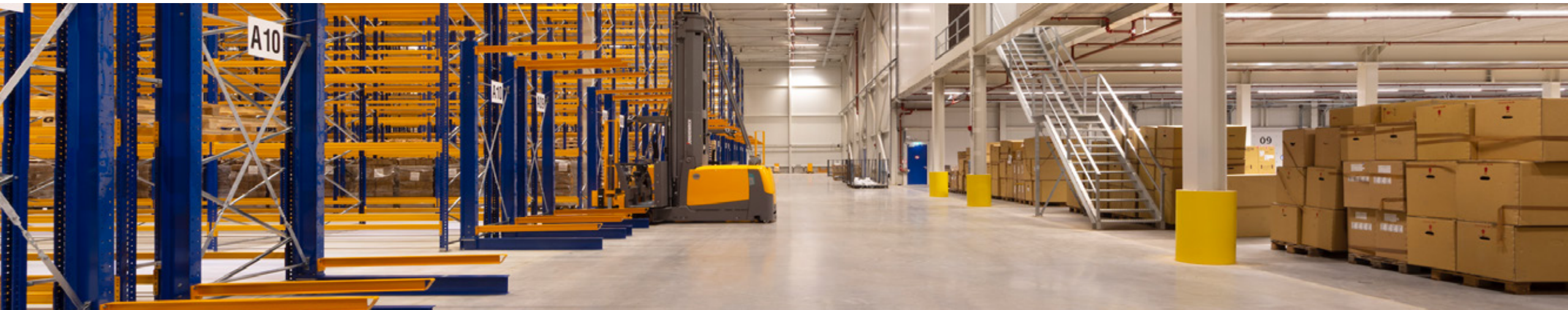
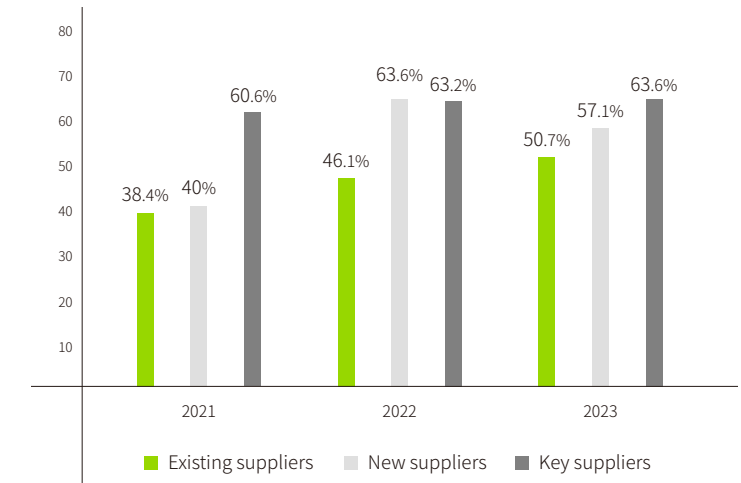
The Group is well aware that our pursuit of sustainable growth shall take into account social and environmental influence and impact. Therefore, we formulate the Supplier CSR Code of Conduct as the basic principles for suppliers. Compliance with the labor laws and avoidance of environmental hazards are 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 Purchase Agreements		2021	2022	2023
Existing suppliers	Number of suppliers signing the agreements	196	207	209
	Percentage of suppliers signing the agreements (%)	38.4%	46.1%	50.7%
	Training coverage rate (%)	38.4%	46.1%	50.7%
New suppliers	Number of suppliers signing the agreements	4	7	4
	Percentage of suppliers signing the agreements (%)	40%	63.6%	57.1%
	Training coverage rate (%)	40%	63.6%	57.1%
Key suppliers	Number of suppliers signing the agreements	57	60	63
	Percentage of suppliers signing the agreements (%)	60.6%	63.2%	63.6%
	Training coverage rate (%)	60.6%	63.2%	63.6%

Percentage of suppliers signing the agreements (%)



Training coverage rate (%)



**Supplier Code of Conduct and Supplier Commitment Letter**

In 2023, Giant Group formulated the Supplier Code of Conduct along with a Supplier Commitment Letter, adopting the highest standards in aspects of laws, ethics, environment and quality. We expect all suppliers to adopt the same standards in order to achieve mutual benefits and fulfill corporate social responsibility. The Supplier Code of Conduct and Supplier Commitment Letter were distributed to 223 suppliers in Taiwan, and 162 suppliers had signed and returned the documents, resulting in a 73% response rate.

**Highlights of Supplier Code of Conduct and Commitment Letter**

A. Labor	B. Health and Safety	C. Environment	D. Ethics and Others
<ul style="list-style-type: none"> <li><input type="checkbox"/> 1. Freedom of employment</li> <li><input type="checkbox"/> 2. Young workers</li> <li><input type="checkbox"/> 3. Working hours</li> <li><input type="checkbox"/> 4. Wages and benefits</li> <li><input type="checkbox"/> 5. Humane treatment</li> <li><input type="checkbox"/> 6. Anti-discrimination/anti-harassment</li> <li><input type="checkbox"/> 7. Freedom of association</li> <li><input type="checkbox"/> 8. Suppliers warrant that all products, components or raw materials supplied, transferred or delivered to GTM are not manufactured using forced labor, child labor, or any other means that violate human rights</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> 1. Occupational safety</li> <li><input type="checkbox"/> 2. Emergency response</li> <li><input type="checkbox"/> 3. Occupational injuries and occupational disease</li> <li><input type="checkbox"/> 4. Occupational health</li> <li><input type="checkbox"/> 5. Manual and physical labor</li> <li><input type="checkbox"/> 6. Machine protection</li> <li><input type="checkbox"/> 7. Public health and accommodation</li> <li><input type="checkbox"/> 8. Health and safety communication</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> 1. Environmental permits and reports</li> <li><input type="checkbox"/> 2. Pollution prevention and resource conservation</li> <li><input type="checkbox"/> 3. Hazardous substances</li> <li><input type="checkbox"/> 4. Solid waste</li> <li><input type="checkbox"/> 5. Waste gas emissions</li> <li><input type="checkbox"/> 6. Material restrictions</li> <li><input type="checkbox"/> 7. Water resource management</li> <li><input type="checkbox"/> 8. Energy consumption and GHG emissions</li> <li><input type="checkbox"/> 9. Suppliers shall fulfill their responsibilities as global citizens and participate in green procurement</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> 1. Business integrity</li> <li><input type="checkbox"/> 2. No improper gains</li> <li><input type="checkbox"/> 3. Disclosure of information</li> <li><input type="checkbox"/> 4. Intellectual property rights</li> <li><input type="checkbox"/> 5. Suppliers shall not engage in any illegal, improper, anti-competitive or unfair business practices</li> <li><input type="checkbox"/> 6. Protection of identity and prevention of retaliation</li> <li><input type="checkbox"/> 7. Suppliers shall keep track of updates to applicable export control regulations to ensure compliance</li> <li><input type="checkbox"/> 8. Privacy</li> </ul>

The Group has established supplier evaluation procedures, and new suppliers are assessed accordingly. The evaluation covers seven major aspects: “owner’s ideas and philosophy” (30%), “quality and delivery” (20%), “cost and price” (20%), “company size and talents” (10%), “development potential” (10%), “key technologies” (5%), and “brand and added value” (5%). To qualify, suppliers must score 80 points or above, whereas scores below 69 are considered disqualified and would be rejected. Past performance of suppliers also serves as a reference in supplier selection. For qualified suppliers, we regularly monitor and assess their quality and delivery performance. For those who do not meet the standards, we provide guidance and continue to track improvements.

**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
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### Enhance supplier sustainability

In 2023, we chose our carbon-fiber models, the TCR ADPRO 0D DI series, for carbon footprint calculation and invited supply chain partners to participate in the carbon inventory. Carbon fiber bikes are Giant Group's flagship road bike products. They are different to aluminum alloy bikes in terms of raw materials. We continuously enhance 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 Suppliers	Description	Corresponding Sustainable Supply Chain Management Policy/Strategy	Qualitative Benefit	Quantitative Benefit
Involvement in carbon footprint inventory of TCR ADPRO 0D DI series	Select five key raw material suppliers that have carbon hotspots. Inventory the carbon emissions of components from suppliers for the series 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 specific for carbon fiber bicycles and establish database

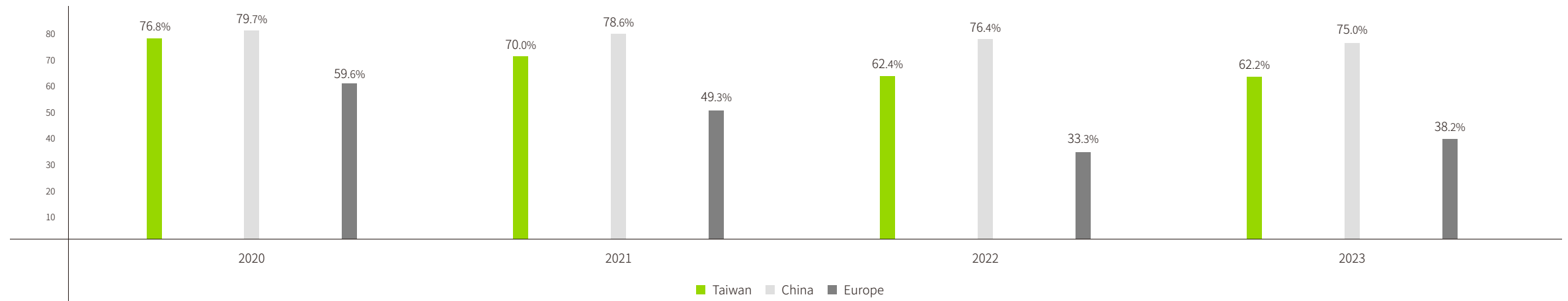
Note: The external verification of product carbon footprint is scheduled for the second half of 2024.

#### 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	2020	2021	2022	2023
Taiwan	Local purchases (%)	76.8%	70.0%	62.4%	62.2%
China	Local purchases (%)	79.7%	78.6%	76.4%	75.0%
Europe	Local purchases (%)	59.6%	49.3%	33.3%	38.2%

Note: Local purchases in Europe decreased significantly compared to the previous three years as components for e-bikes were mostly purchased from Asia.



## 4.2.2 Bicycling Alliance for Sustainability (BAS)

### 4.2.2.1 BAS overview



In June 2022, Giant Group and key leaders in the cycling industry jointly proposed ESG initiatives and established the Bicycling Alliance for Sustainability (BAS), an exclusive platform for the industry chain. To implement the BAS carbon reduction initiatives and enhance the effectiveness of BAS operations, the Industrial Development Bureau of the Ministry of Economic Affairs has commissioned the Cycling & Health Tech Industry R&D Center to support BAS in accelerating the progress of achieving its carbon reduction target. A special post-pandemic budget has been provided for upgrades and transition, and there are plans to engage corporate and expert consultants for diagnosis, guidance, subsidies, and personnel training concerning “smart” and “low-carbon” initiatives. Additionally, the 1+N approach is promoted, where larger companies within the supply chain would assist smaller companies with carbon reduction, aiming to enhance competitiveness and secure a critical position in the international supply chain.

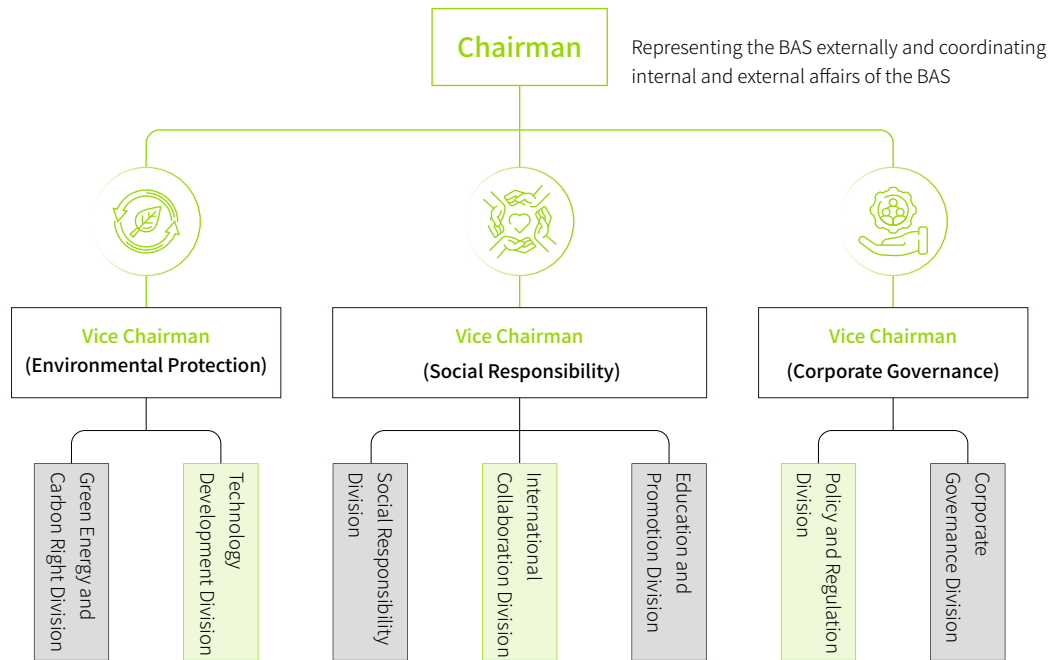
The BAS collects policies and laws, provides professional counseling courses, initiates technical discussions on industry sustainability, promotes carbon rights and carbon neutral solutions for bicycles, establishes corporate governance mechanisms, and organizes visits to leading companies as well as 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. The BAS inaugural meeting was officially held on December 22, 2022, starting with 66 key players in the cycling industry chain committing to fulfill the six BAS responsibilities, which cover the three major aspects of ESG:

<b>Environmental</b>	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 at least 3%, with the reduction target of 25% or 40 kilograms per bicycle by 2030.
<b>Social</b>	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.
<b>Governance</b>	Disclose ESG information on the English official websites of BAS member companies, presenting open, transparent, and stable sustainable developments.
	Annual supply chain engagement, where members request ESG initiatives from upstream companies.



#### 4.2.2.2 Governance organization

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.



- 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 sustainability-related knowledge; 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

#### 4.2.2.3 Projects of BAS in 2023

By the end of December 2023, there were more than 75 members, with 100% completion rate of GHG inventory education and training. More than 80% of the members had completed and on going ISO14064-1 organization-level GHG inventory, and about half of the members had completed carbon footprint inventory of products. We have progressed significantly ahead of schedule compared to our two-year targets.

Project	Description
Cumulative number of bicycle companies in BAS	75 industry suppliers have joined the BAS, along with 8 sponsor members, including internationally renowned brands, media, and non-profit organizations, to jointly drive the developments of ESG initiatives.
Education and training: ESG aspects, net zero-related courses	ESG education and training for BAS members: 90 hours Advanced leadership courses (6 hours): Opportunities driven by global sustainability issues, Pathway for transitioning to net-zero carbon emissions in the bicycle industry Executive management courses (48 hours): Concept of sustainable development in the cycling industry, Pathway for transitioning to net-zero carbon emissions in the bicycle industry, ISO14064-1 GHG inventory, ISO14067 Carbon footprint of products, ISO50001 Energy management systems, Green energy carbon rights and carbon neutrality
Special topic lectures	One session per month
Benchmark learning	12 monthly member meetings on sharing best practices and benchmarking, with instant feedback based on personal experience.
Carbon inventory calculation and subsidies for carbon reduction projects	84% of BAS members have either completed or are currently conducting GHG inventory. Members can propose subsidy schemes in accordance with relevant regulations.
Fulfillment of social responsibility	Two riverside clean-ups were arranged where BAS members cleaned areas around the cycling paths, i.e., Fazi River clean-up, to fulfill their social responsibilities.
Achievement presentation and international promotion	At the Taipei Cycle on March 23, 2023, BAS participated in the "Sustainable Supply Chain Forum," where representatives from member countries of the World Bicycle Industry Association (WBIA) and domestic industry leaders gathered at the Nangang Exhibition Center, sharing insights into the implementation and application of sustainable supply chains and ESG practices. During the Eurobike in Frankfurt, Germany between June 21 and 25, 2023, BAS members unveiled carbon reduction initiatives and concrete actions of cycling industry in Taiwan to global media. At the same time, BAS represented Taiwan in the "Future Mobility Forum," the leadership forum summit at the exhibition, exchanging ideas with global leaders in the bicycle industry. Despite challenges such as declining sales and high inventory levels worldwide, industry partners remained positive towards low-carbon transition. The promotion of a net-zero carbon emission model by BAS members was educational to and well-received by European partners, successfully creating the global image of Taiwan's bicycle industry excelling in energy conservation and carbon reduction.

Press releases: <https://www.ctee.com.tw/news/20231216700564-431401>

[http://www.wheelgiant.com.tw/bsnews\\_d.asp?id=2246](http://www.wheelgiant.com.tw/bsnews_d.asp?id=2246)

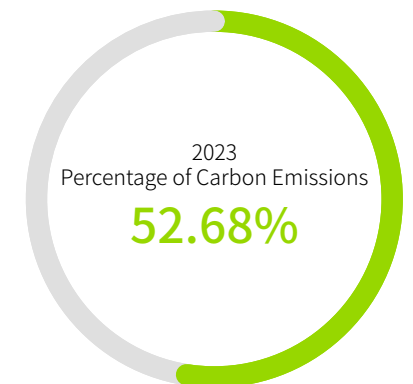
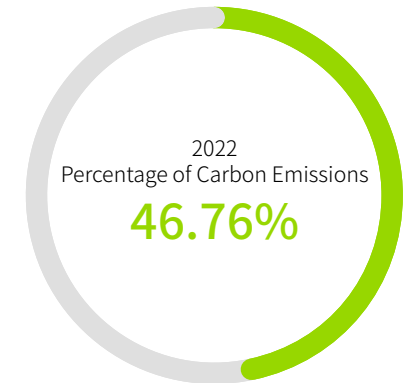
Press releases of the Ministry of Economic Affairs: [https://www.moea.gov.tw/Mns/populace/news/News.aspx?kind=1&menu\\_id=40&news\\_id=110608](https://www.moea.gov.tw/Mns/populace/news/News.aspx?kind=1&menu_id=40&news_id=110608)

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. In 2023, the EU's CBAM was launched on a trial basis. Sectors regulated for carbon emissions in the first phase included iron and steel and its midstream and downstream products (such as screws, bolts, etc.), cement, electricity, hydrogen, fertilizers, and aluminum. These industries were required to start reporting the carbon emissions of their products to EU importers. The Global Legal Affairs Center and Integrated Procurement Center of Giant Group took inventory of parts affected by CBAM regulations and provided feedback to as well as communicated with supply chain partners. About 10 companies in the supply chain were affected by the EU carbon border tax, and six of them, who were all BAS members, could satisfy the CBAM requirements.

In 2023, our supply chain ESG sustainability initiatives encouraged suppliers to conduct GHG inventory at the organization level, thereby understanding their carbon inventory status and obtaining carbon data of the supply chain. They could then provide carbon footprint of products within the industry chain or meet the CBAM requirements. These actions also drove the supply chain to set carbon reduction targets.

- Giant Group promotes energy saving and carbon reduction within the supply chain, encouraging partners to take carbon inventory of emissions from the purchased goods and services category of GHG Scope 3 which affect the emission reduction actions of the supply chain. The results of supply chain carbon inventory of operating sites in Taiwan in 2023 were as follows:

Category	Supplier Carbon Inventory			
	2022		2023	
	Number of Suppliers	Percentage of Carbon Emissions (Note 2)	Number of Suppliers	Percentage of Carbon Emissions (Note 2)
Frame System	8	9.58%	9	11.23%
Derailleur System	4	10.11%	4	11.22%
Steering System	6	6.64%	8	8.02%
Electronic Control System	5	5.27%	5	6.42%
Transmission System	3	2.50%	3	3.02%
Wheel System	10	1.80%	12	2.23%
Suspension System	2	1.53%	2	1.92%
Physical Prompting System	2	1.34%	3	1.64%
Brakes System	2	0.31%	3	0.43%
Others	15	7.65%	15	6.55%
Total	57	46.76%	64	52.68%



Note 1: The 2023 carbon reduction target of BAS key suppliers was 3%, and the actual reduction was 5%. Data were based on the 2023 BAS Performance Report of the BAS ESG Initiative Forum.

Note 2: Percentages of carbon emissions were calculated using the emissions from the purchased goods and services category of 99,831 tCO<sub>2</sub>e in the 2023 carbon inventory.



# Transforming for Circularity

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## 5.1 Product Sustainability Strategy

“Cycling for a Better Future” is Giant Group’s sustainability vision. We aim to work with industry partners 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. We have set the target of 100% circular products by 2030, pledge to disclose product carbon footprint information, adopt the 3R (Reduce/Recycle/Reuse) practices and non-toxic eco-friendly materials, and ban the use of plastic packaging materials. At the same time, we promote a circular economy model supported by strategies including provision of low-carbon services; promotion of green production as well as circular supply and regeneration of resources and materials; enhancement of resource efficiency; extension of product lifespan; and expansion of cycling and product service model, thereby shaping an innovative blueprint for the sustainable development of our products.

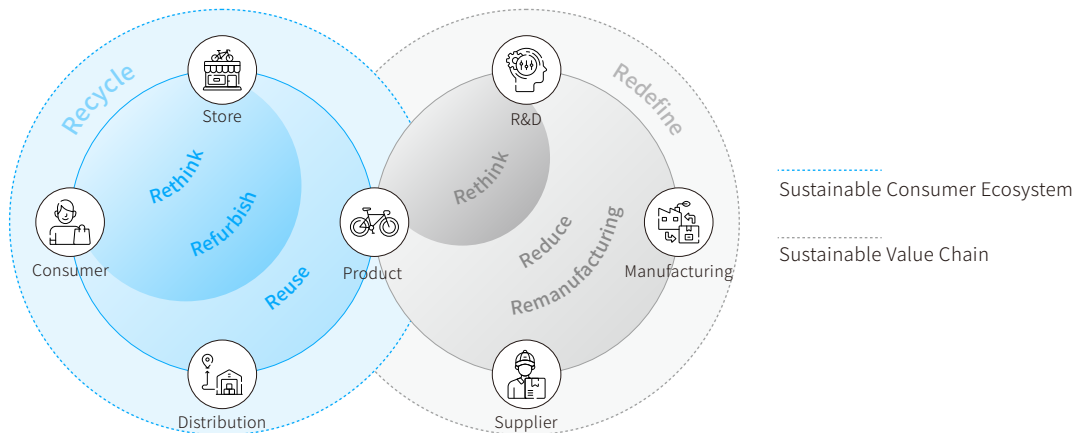
Strategy	Key Performance Indicator (KPI)	2023 Target	2023 Performance	Achievement Status	2025 Target	2030 Target
Circular Supply and Regeneration	Percentage of recycled carbon fiber (%) (with new carbon fiber of 200t/year as the basis)	3% (Link rocker arm)	2.5%	Failed. Please refer to “5.2.1 Recycled Materials” for details.	5% (Other components)	10% (Frame)
	Recycling rate of carbon fiber scraps (%) (with carbon fiber scrap of 20t/year as the basis)	30% (6t)	0%	Failed. Please refer to “5.2.1 Recycled Materials” for details.	50% (10t)	100% (20t)
	Percentage of recycled aluminum alloy (extrusion) (%)	30%	0%	Failed. We completed the functional verification of all recycled aluminum in 2023 and scheduled to commence product application in May 2024. Please refer to “5.2.1 Recycled Materials” for details.	75%	100%
	Percentage of recyclable materials in OBC saddles (%)	90%	90%	Achieved. Please refer to “Recyclable materials for OBC saddles” section for details.	100%	100%
	Percentage of recycled materials in OBC saddles (%)	10%	0%	Failed. We planned to introduce 17 items in 2024. Please refer to “Recycled Materials” section for details.	20% (GRS certified)	50% (C2C certified)
Resource Efficiency	Use of water-based coating + powder coating (%)	59%	49%	Failed. Powder coating was developed in 2023 and expected to be widely applied in 2024. Please refer to “Green Transition of Process” section for details.	62%	88%
	Ban on plastic packaging materials (%)	85%	86%	Achieved. Please refer to “Sustainable Packaging Design” section for details.	96%	100%
	Reduced coating layers and baking	(EB) 5-Coat-6-Bake (Single color) 7-Coat-8-Bake (Two-tone)	100%	Achieved. Please refer to “Green Transition of Process” section for details.	(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%	41%	Achieved. Please refer to “Green Transition of Process” section for details.	50%	100%
	Commercialization of uncoated carbon fiber process technology	Rim	Verification completed	Achieved. Verification completed in 2023, with plans to be applied to new products in 2024.	Other components	Frame
Extend Product Life Cycle	Reuse of service battery (pcs)	1,000	0	Failed. Please refer to the “Battery circularity and services for e-bikes” section for details.	5,000	10,000
Product Service Model	Improvement of service and repair revenue (%)	0.9%	1.21%	Achieved. Please refer to “Extend Product Lifespan” and “Expansion of Riding Services” sections for details.	15%	26%

Note: OBC: Own Brand Component; EB: E-Bike

### 5.1.1 Circular Economy Model

Giant Group’s circular economy model is an innovative blueprint shaping our path towards sustainable development. The transformation encompasses manufacturing and sales, creating an infinite circular approach to maximize resource efficiency.

In the bicycle industry, Giant Group is renowned for having the most comprehensive value chain. Our businesses not only cover the sales end with the provision of products and services to end consumers, but also include the production value chain of product R&D and manufacturing. Therefore, in our circular economy model, we reference the “Circularity Approach” formulated by the United Nations and extend the characteristics of Giant Group’s complete value chain. We use products to connect two core systems in order to achieve circulation and regeneration, and establish an infinite circular sustainable path to reduce resource waste in the future.



Sales End (B2C)	Manufacturing End (B2B)
<p>“From product delivery, sales to usage, we assist consumers with extending the product lifespan, make efforts to recycle discarded items at each stage, preserve product value, and minimize waste. We aim to create a “Sustainable Consumer Ecosystem” for consumers.</p> <ul style="list-style-type: none"> <li>· Reuse: Extend the lifespan of items.</li> <li>· Repair: Fix damaged parts or defects.</li> <li>· Refurbish: Renovate to enhance or restore its function.</li> <li>· Recycle: Process discarded items to be reused in the production of new products.</li> </ul>	<p>From R&amp;D to manufacturing, we strive for resource reuse from the user’s perspective, injecting new life into materials and adjusting production processes to realize a “Low-carbon Sustainable Value Chain.”</p> <ul style="list-style-type: none"> <li>· Redefine: Redefine product manufacturing process with a carbon reduction mindset.</li> <li>· Rethink: Design sustainable solutions based on user scenarios.</li> <li>· Reduce: Adjust manufacturing processes to achieve process carbon reduction.</li> <li>· Remanufacturing: Repair during the industrial manufacturing process for it to take on a new look.</li> </ul>

### 5.1.2 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	<ul style="list-style-type: none"> <li>· Product carbon footprint analysis</li> <li>· Establish a carbon emission coefficient database</li> </ul>	✓	✓	✓	✓	✓
Hazardous substance management	<ul style="list-style-type: none"> <li>· Monitor regulatory trends</li> <li>· Establish management process</li> </ul>	✓	✓			
Recycled materials	<ul style="list-style-type: none"> <li>· Develop recycle and reuse technology</li> </ul>	✓				
Green transition of process	<ul style="list-style-type: none"> <li>· Optimize process for energy conservation and emission reduction</li> </ul>		✓			
Sustainable packaging design	<ul style="list-style-type: none"> <li>· Simplify design and be plastic free</li> </ul>			✓		
Product energy efficiency	<ul style="list-style-type: none"> <li>· Improve the efficiency of battery and motor</li> </ul>				✓	
Extend product lifespan	<ul style="list-style-type: none"> <li>· Certify used bicycles for sale</li> </ul>				✓	
Battery recycling service	<ul style="list-style-type: none"> <li>· Local services and recycling systems</li> </ul>					✓
Sharing economy model	<ul style="list-style-type: none"> <li>· YouBike public bicycle-sharing service</li> </ul>				✓	
Expansion of riding services	<ul style="list-style-type: none"> <li>· Giant Adventure</li> </ul>				✓	

### 5.1.3 Life cycle assessment (LCA)

Life cycle assessment (LCA) is a systematic analysis on the environmental impacts of various stages within the product life cycle, i.e., from materials acquisition, manufacturing, transportation and distribution, to use and disposal. In order to mitigate such impact, Giant Group establishes an assessment method for product carbon footprint pursuant to ISO14067, ISO14040 and ISO14044, systematically conducting carbon footprint analyses on each product model by phases to build a carbon emission coefficient database for the cycling industry. The carbon hotspots of the bicycle life cycle primarily concentrate on raw material acquisition and manufacturing, including frame materials, tires (including new tires and replacements during the use stage), and electricity consumed during manufacturing. Giant Group adopts more environmentally friendly materials through innovative technology R&D and selection of raw materials. During the manufacturing phase, we employ various energy-saving and carbon reduction technologies to lower carbon emissions, thereby establishing a low-carbon, sustainable bicycle manufacturing process. Starting with material design and process technology, we team up with supply chain partners to achieve low-carbon transition, and work towards the vision of circular sustainability.

#### Types of products with LCA

● : Assessment completed and verified by a third party; ▲ : Assessment completed; ○ : Under planning

	Model	Representation	Assessment Period	Product Carbon Footprint	Product Environmental Footprint <sup>(Note 2)</sup>
3.92% Products with LCA <sup>(Note 1)</sup>	ATX 7 Mountain Bike	Aluminum alloy frame	2020	●	○
	Stance 29 1 Mountain Bike	Aluminum alloy frame	2021	●	○
	TCR Road Bike	Aluminum alloy frame	2022	●	○
	TCR ADPRO 0D Road Bike	Carbon fiber frame	2023	▲	○
	Fathom E+2 E-Bike	Aluminum alloy E-Bike	2023	○	○

Note 1: Product coverage is calculated using sales volume in 2023. The coverage of product assessed for carbon footprint: 3.92%.

Note 2: The environmental footprint examines the impacts of products from 18 environmental aspects, including global warming, stratospheric ozone depletion, ionizing radiation, ozone formation, human health, fine particulate matter formation, ozone formation, terrestrial ecosystem, terrestrial acidification, freshwater eutrophication, marine eutrophication, terrestrial ecotoxicity, freshwater ecotoxicity, marine ecotoxicity, human carcinogenic toxicity, human non-carcinogenic toxicity, land use, water consumption, mineral resource scarcity, and fossil resource scarcity.

#### Product carbon footprint hotspots and improvement plans

Emission Hotspot	Carbon Fiber Frame	Aluminum Alloy Frame	Tire	Electricity Consumption
Reduction and action plans	Carbon fiber recycling technology (Details in “Multi-stage recycling of carbon fiber”)	Feasibility assessment of recycled aluminum materials (Details in “Application of recycled aluminum alloy”)	Development of recycled tire technology (Details in “Circular carbon technology for tires”)	Reduction of coating layer and baking in coating design Details in “Cut down coating layers and materials to reduce process time”)

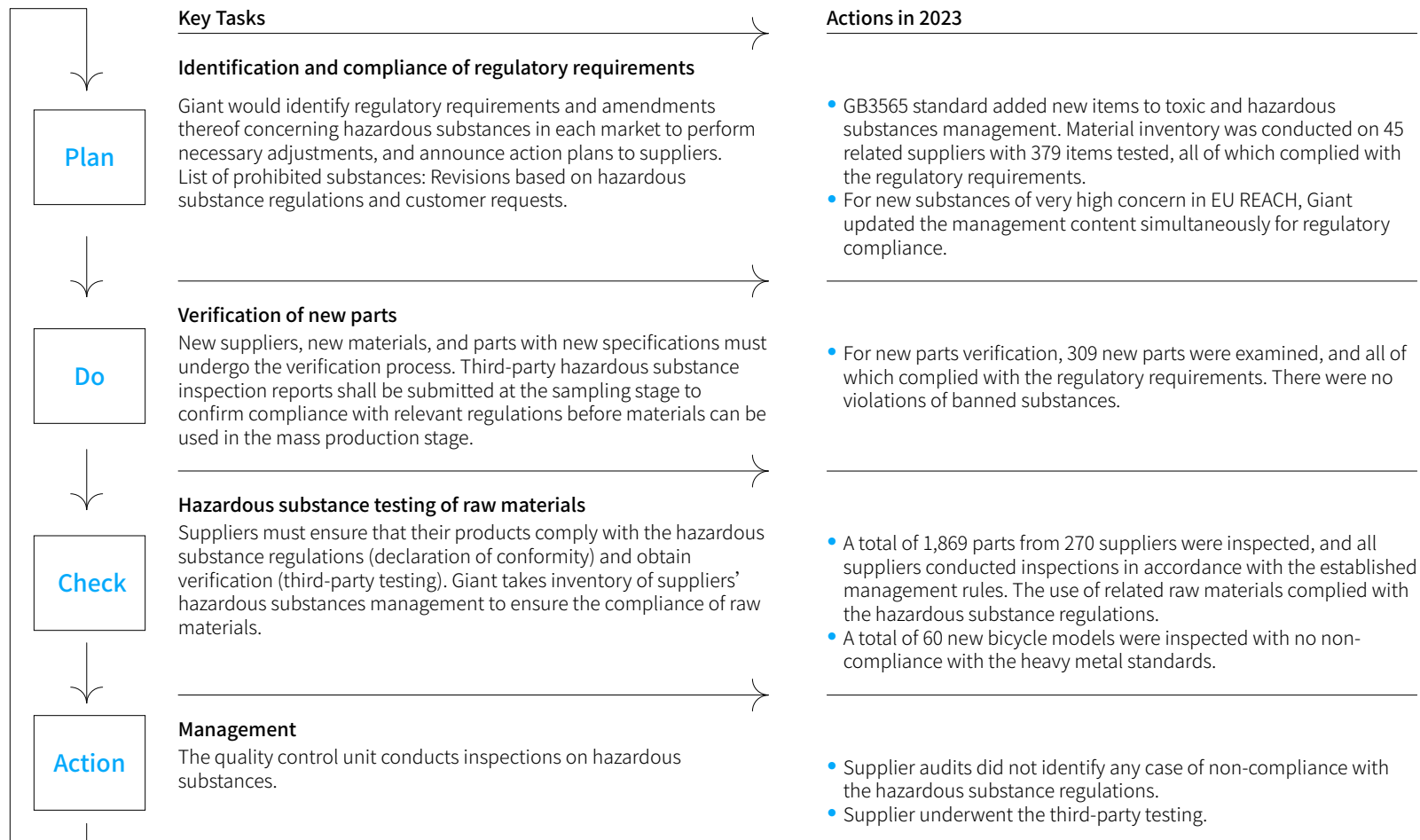


## 5.1.4 Hazardous Substance Management

### Giant Group’s continuous improvement model for hazardous substances

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, i.e., “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 operations and systems; and monitors the timely resolution of major quality issues.

Between R&D reviews and 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. We also conduct regular inventory and management of related product safety and hazardous substances regulations around the world.



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	<b>100%</b>
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Regulation or Directive	Giant Product
REACH	<b>100% compliance</b>
RoHS	<b>100% compliance</b>
CPSIA	<b>100% compliance for products to the U.S.</b>
EN71-3 of EU	<b>100% compliance for kid’ s bicycles to Europe</b>
ASTM F963 of the U.S.	<b>100% compliance for kid’ s bicycles to the U.S.</b>
GB 3565	<b>100% compliance for products to China</b>

## 5.2 Circular Supply and Regeneration

### 5.2.1 Recycled Materials

Product Category	Recycling Program	Application of Recycled Materials	Environmental Benefits	Expected Percentage of Products with Recycled Materials by Category
Tire	17 OBC tire items are scheduled to adopt the application in 2024. 11 tire items sourced directly from suppliers have already been switched to such application.	Ocean plastic nylon	Estimated reduction of 150~176g CO <sub>2</sub> e per tire.	Tires scheduled for such applications accounted for 91% of the total OBC tires sales in 2023.
Saddle	Based on the applied materials, 17 OBC saddle items are scheduled to adopt the application in 2024.	Recycled iron (rail) Recycled PP (shell) Recycled carbon fiber (shell) Recycled fiberglass (shell)	Estimated reduction of 29.7~414g CO <sub>2</sub> e per sheet.	Saddles scheduled for such applications accounted for 98% of the total OBC saddles sales in 2023.
Aluminum alloy frame	Two models are scheduled to adopt 100% recycled aluminum alloy for frames in 2024, with plans to expand the application to all aluminum alloy components of bicycles.	100% recycled aluminum alloy	The entire frame is made of 100% recycled aluminum alloy, and waste materials from the manufacturing process can be reused. Estimated reduction of 22,610~24,316g CO <sub>2</sub> e per frame.	Models scheduled for such applications accounted for 46% of the bicycle series sales in 2023.

Note: OBC stands for Own Brand Component

#### 5.2.1.1 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 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.

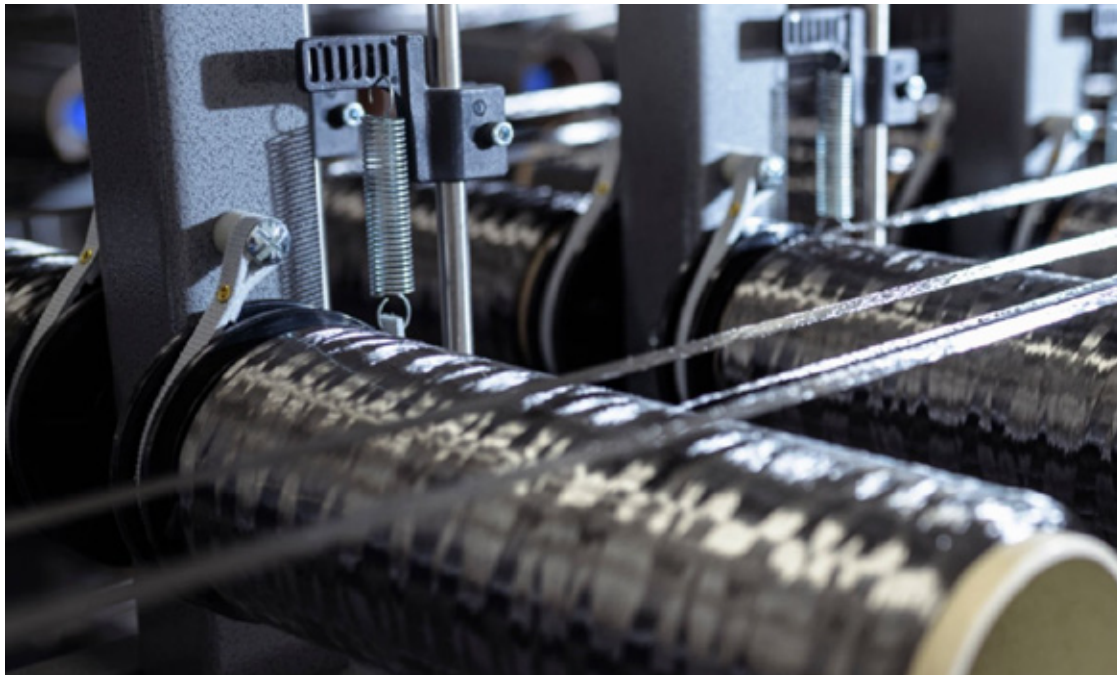
After confirming the technological maturity of recycled tires with tire suppliers, Giant Group adopted recycled tires for commercial applications where appropriate based on their performance. In 2023, Giant Group tested nylon yarns recovered from discarded fishing nets of the marine fishery industry, and applied it to tire cord fabrics, replacing petrochemical materials which have high carbon emissions. We then carried out performance testing and carbon emission calculation for high-performance tires. The verification results indicated that in addition to the benefit of carbon reduction, the replacement maintained the tire performance which is emphasized for high-end tires. Carbon reduction is expected to be 7-9% carbon dioxide equivalent per tire. We look forward to the widespread adoption by both OBC tires and tires directly sourced from suppliers in the future, and through the extensive use of Giant Group's various bicycle models across the globe, we anticipate a significant reduction in overall carbon emissions.

Development of recycled tire technology: In 2023, Giant collaborated with tire suppliers to actively engage in the application of ocean plastic yarns for tire cord fabrics. We have successfully adopted the recycled material in 11 tire items, achieving a carbon reduction of 1.92 metric tons CO<sub>2</sub>e in 2023. We will continue to expand the testing and application, with plans to adopt the application in 17 tire items for an average reduction of approximately 150g CO<sub>2</sub>e per tire.

### 5.2.1.2 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. The production of high-end carbon fiber bicycles utilizes high-grade, high-strength continuous carbon fiber prepreg, which results in significant carbon emissions. Maximum carbon reduction benefits and environmental friendliness can only be achieved through products which can withstand multiple recycling cycles while preserving the high-strength properties as much as possible. Starting from 2023, we have taken 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.

In 2023, apart from recycling discarded frames, we also actively explored the possibilities of diversifying the use of waste carbon fiber residues from the aviation industry, which have lower carbon emissions, in various gears and components. At present, other than the existing application in rocker arms, the use of recycled carbon fiber materials in carbon fiber saddles, power pedals, front-end components, kids bikes, eyewear, etc., have mostly met the relevant functional thresholds and entered the planning and design stage of commercialization. In 2024, we will take one step further and challenge the new composite forming technology of recycled carbon fiber with greater strength, and apply the recycled carbon fiber to structural components such as front forks and handlebars.



### 5.2.1.3 Recyclable materials for 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, foam, shell and rails, evaluating the adoption of appropriate recycled materials in actual products. In 2022, Giant Group confirmed through researches that key materials of the four major components in a saddle can be recycled to minimize environmental pollution.

In 2023, Giant Group continued to assess the impact of using recycled materials in OBC saddles in terms of saddle performance, and studied the optimal design for incorporating recycled materials in products. At the current stage of development, recycled material solutions for both rails and shell have been verified and passed performance and safety standards. They are expected to be gradually introduced to commercial applications next year. Depending on the specific performance requirements of saddles, a significant amount of recycled materials will be utilized in OBC saddles; and we plan to recycle OBC products in the future.

Parts	Recyclability of Current Materials	Percentage of Recycled Material Used / Verification Results
Shell	Nylon: Recyclable PP: 100% recyclable	<ul style="list-style-type: none"> <li>Application of recycled materials account for 20-30%</li> <li>Verified by ISO standards and the performance remains uncompromised.</li> </ul>
Rail	Metal rail: 100% recyclable	<ul style="list-style-type: none"> <li>Application of recycled materials account for 35%</li> <li>Verified by ISO standards and the performance remains uncompromised.</li> </ul>

#### 5.2.1.4. Application of recycled aluminum alloy

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



Model Year	Model Series	Full Model Name	Color	Carton Label Color Description
MY24	Flourish	Flourish 0 Disc	Color A	Silver Pine
MY24	Flourish	Flourish 1	Color A	Charcoal Plum
MY24	Flourish	Flourish 2	Color A	Ocean Storm
MY24	Flourish	Flourish 24	Color A	Daybreak
MY24	Flourish	Flourish 24	Color B	Muscat Blanc
MY24	Flourish	Flourish 3	Color A	Pulp Gray
MY24	Flourish	Flourish 3 Disc	Color A	White
MY24	Flourish	Flourish 3 Disc	Color B	Muscat Blanc
MY24	Flourish	Flourish FS	Color A	Estoril Blue
MY24	Flourish	Flourish FS	Color B	Red Enamel
MY24	Flourish	Flourish FS Disc	Color A	Red Enamel
MY24	Flourish	Flourish FS Disc	Color B	Early Espresso
MY24	Glory Advanced	Glory Advanced	Color A	Shoreline
MY24	Glory Advanced	Glory Advanced-FF	Color A	Legends Edition

In addition to utilizing recycled aluminum for frame plates, Giant actively engages in closed-loop recycling by reusing aluminum waste generated during production to produce 100% recycled aluminum alloy frame sets. Such frames have passed various performance verifications and will be officially launched in May 2024. It is expected that each frame will contribute to a reduction of 22,610 to 24,316g CO<sub>2</sub>e. Moving forward, there are plans to expand the use of recycled aluminum, incorporating it into various components such as wheel rims and front forks. Additionally, there are development plans underway for the verification and development of recycled materials in aluminum rims and hubs.



## 5.3 Resource Efficiency

### 5.3.1 Green Transition of Process

#### 5.3.1.1 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 carbon emission reduction. In 2023 (MY24 models), we eliminated the primer and bicycles took on the high-quality appearance with naked carbon fiber, bringing the proportion of models with less than four layers of coating to 85% with an average coating of only 4.02 layers; and we set the target of 100% by 2026. The elimination is expected to lower VOCs emissions and energy consumption during process.



Average coating layers over the years

Model Year	MY19	MY20	MY21	MY22	MY23	MY24
Coating (layer)	4.58	4.45	4.34	4.19	4.17	4.02

#### 5.3.1.2 Development and application of water-based and powder-based environmental paints

Considering the fact that volatile organic compounds (VOCs) in traditional solvent-based paints are hazardous to human health as well as flammable and explosive, Giant Group has started to adopt eco-friendly coating materials and processes since 2015. Initially, we developed eco-friendly paints for clearcoat and CED with mass production began 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 had all adopted water-based paints, and more than 360,000 bicycles used water-based paints in 2022. With a reduction of approximately 30 g of VOCs per bicycle using the water-based paint, we reduced VOCs emissions by 10,800 kg in 2022. We have gradually introduced powder coatings, which have an even lower environmental impact, and initially apply them to CED, kid's bicycles and commuter bicycles. In 2023, Giant Group completed the development of powder coatings and all affiliated factories began to engage in powder development. The existing powder-coating production lines have already produced 150,000 bicycles with further expansions underway, expecting to hit the market in 2024. Through powder coating development, we can eliminate two spraying and two baking processes compared to our original procedures, effectively reducing carbon and VOC emissions.

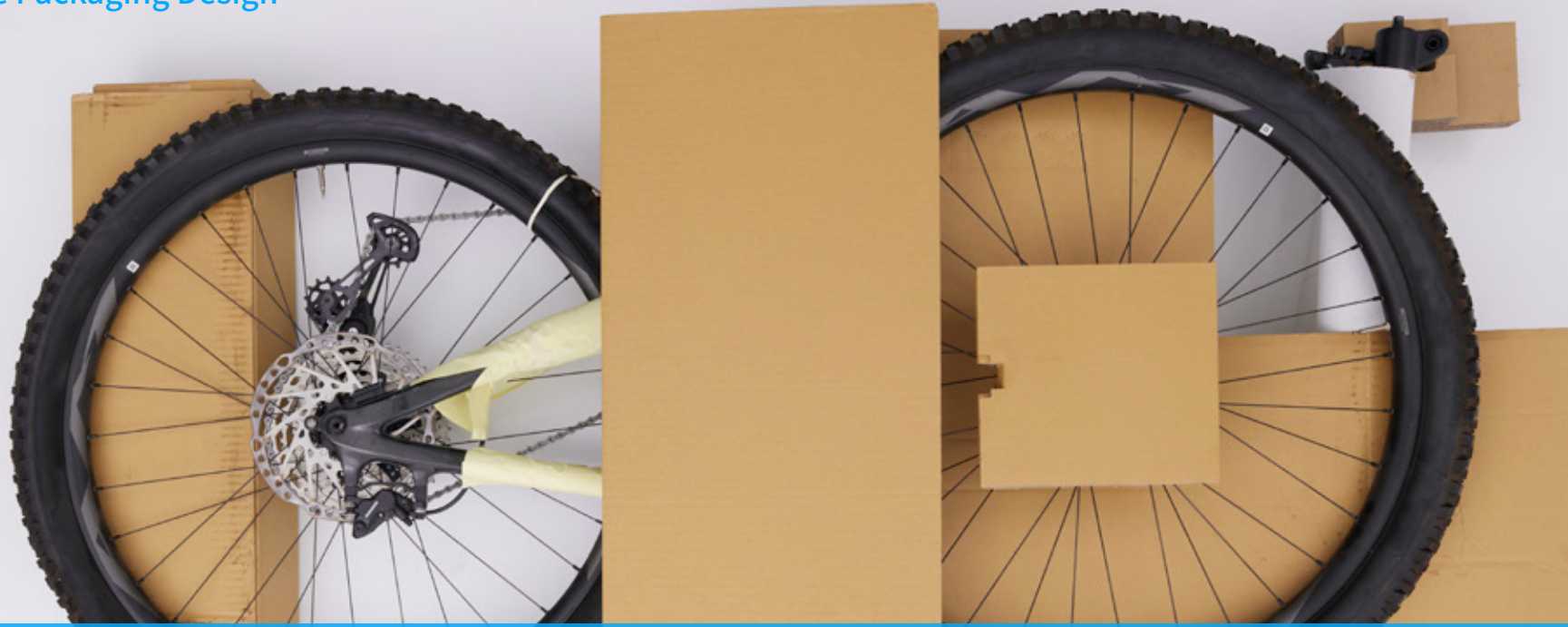
Water-based coating	Powder coating
It is a resource-saving coating as it uses pure water as thinner. Its VOCs emission is 1% of that from water-soluble coatings and 0.1% from solvent-based coatings.	With high coverage rate, we can reduce the coating layers, thus lowering energy consumption. It does not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

#### 5.3.1.3 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. In 2023, Giant Group achieved 41% of the target in terms of replacing solvents with UV curing in decal production. We have been progressively assisting our suppliers in adopting the UV curing technology for decals.

## 5.3.2 Sustainable Packaging Design



### 5.3.2.1 Ban on plastic packaging materials

Giant Group is a bicycle manufacturer with both private brands and OEM businesses. Our goal is to cease using plastic packaging materials in all of our factories. Without limiting to certain customer types, we select bicycle models with relatively significant production volumes as well as number of auxiliary packaging materials as targets for improvement, aiming for “total plastic-free” packaging. Starting with the target models, improvements will be made and then horizontally expanded to other models. In 2023, we achieved an overall result of 87%.

Percentage of packaging designs achieving plastic-free

**87%**

Note: Method for calculating the target:

1. Target selection principles for auxiliary packaging materials: (1) No restrictions on customer type; (2) Relatively high production volume (representative); and (3) Relatively high number of auxiliary packaging materials.
2. Percentage of plastic-free auxiliary packaging materials for bicycles = Number of plastic-free auxiliary packaging materials (a)/ Number of auxiliary packaging materials for bicycles (a+b)  
Packaging materials are divided into: a. Plastic-free packaging materials, and b. Packaging materials containing plastic.  
Number of auxiliary packaging materials: Use part numbers to calculate the number of auxiliary package materials.
3. The target where auxiliary packaging materials are concerned is to achieve “total plastic-free.” Customer-designated products are excluded.

Product Model	2023 Target: 85%	2023 Performance: 87%
GTM_TRANCE E+	89%	93%
GCK_MY23 TCR	80%	86%
GCM_MARLIN	81%	81%
GEV_Talon E+	93%	91%
GCT_2023 XTC 800 Classi	80%	79%
GEM_OB e-bike	96%	96%
GHM_TALON and TEMPT	85%	82%

### 5.3.2.2 AIPS packaging reform

In 2023, we implemented the packaging reduction design for Formelife products. In terms of process efficiency, the design added paper folding and pleating to the process; however, we could thoroughly examine the product quality at this stage, and eliminate plastic waste and time associated with the traditional packaging materials. In addition to simple packaging, we also strive to incorporate design features into packaging materials so that they can serve different purposes, e.g., as tool pads for maintenance purposes, thereby improving their effectiveness.

### 5.3.2.3 Product packaging reduction reform

The Global GEAR Business Department develops a wide range of products including various personal and bicycle gears, such as wheelsets, inner and outer tires, helmets, cargo racks, bicycle lights, bicycle tools, saddles, pedals, and cycling apparels. Products are packaged differently based on brand, type, or display method, using hanging boxes, blister cards, plastic protective cases, and hardcover boxes.

Since mid-2021, efforts have been made to use recycled paper packaging and vegetable-based ink printing while minimizing the use of plastics as part of our packaging planning. This included to avoid single-use plastics whenever possible or to substitute them with other materials upon evaluating the requirements. There are two types of packaging transition: proactive and reactive. Reactive transition involves designing reduction schemes after receiving notification from suppliers about the impending stock depletion. Proactive transition, however, involves arranging product groups by sales amounts in a descending order for evaluation and planning, followed by batch execution according to the devised schemes. Below are examples of packaging for saddles, handlebars, and disc brakes:

The packaging for saddles uses cardboard cutouts to secure the saddle, replacing the existing plastic fixtures. This change reduces plastics by 5 g per product. The same practice is adopted for handlebar packaging and reduces the amount of plastic used per product by 55 g. In the case of disc brake packaging, paper envelopes are used instead of plastic blister, resulting in a reduction of 7 g of plastic per product.

For future packaging planning, we will continuously adjust our packaging solutions to reduce unnecessary use of paper while maintaining good usability and display experience. In the short term, we aim to minimize non-recyclable plastics by substituting them with alternative materials whenever possible. In the long run, our goal is to replace recyclable plastic packaging as well, achieving the packaging objective of “reduce + plastic-free.”



## 5.3.3 Product Energy Efficiency

### 5.3.3.1 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 enhance the overall efficiency for cyclists and reduce the burden of riding. In 2023, we focused on clearing the inventories of mid-range bicycles with ongoing studies on improving the average energy efficiency of e-bike.



## 5.4 Extend Product Life Cycle

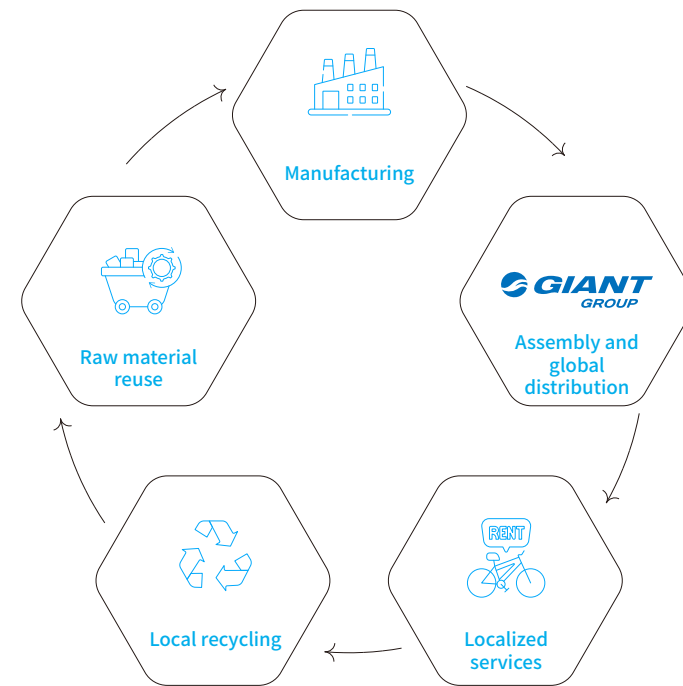
### 5.4.1 Battery Recycling Service

#### 5.4.1.1 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.

In 2023, the service battery reuse project could not be executed due to immature battery testing technology and procedures, which were the prerequisites for battery reuse. As of now, we continue to refine various battery testing items, procedures, and tools. We plan to commence battery recycling and gradually advance to battery reuse from the second quarter of 2024.

Value chain cycle of Giant battery:



<b>Manufacturing</b>	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.
<b>Assembly and global distribution</b>	We simplify production and transportation process and reduce carbon emissions through consolidated shipments.
<b>Localized services</b>	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 shorten its life span. 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.
<b>Local recycling</b>	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.
<b>Raw material reuse</b>	Waste treatment plants would break down waste batteries into raw materials, which would then enter the next value chain cycle.

## 5.4.2 Extend Product Lifespan

### 5.4.2.1 Certify used bicycles to expand service scope

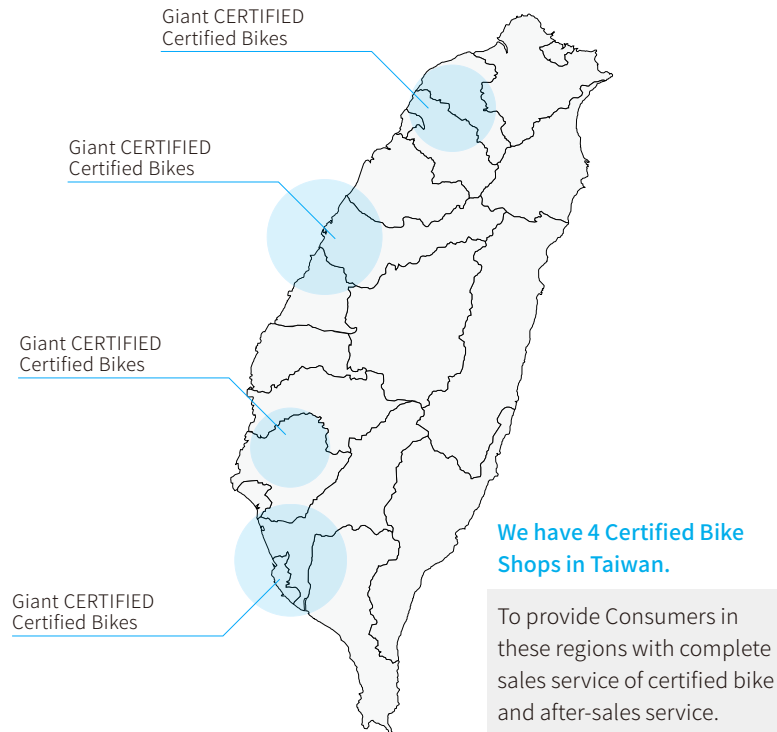
In order to achieve circular economy, Giant Group employs trade-in arrangements to enhance consumer repurchase rate and brand loyalty while increasing in-store service revenue. As a brand and manufacturer, we take the initiative to engage in bicycle recycling, dismantling, refurbishment, and remanufacturing to ensure product functionality and safety while actively extending the product life cycles. Giant is currently the first brand in the industry to introduce certified pre-owned bicycles and has been offering pre-owned bicycle trading services in Taiwan for 13 years. Giant own stores in Taiwan provides pre-owned bicycle trading services by adopting the model of collecting used bicycles for sales in the stores. Our 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 planned to launch the business model of recycling used bicycles in Japan in 2024.

#### Recycling of pre-owned bicycle (Revenue of pre-owned bicycle in Taiwan in 2023)

Economic benefits of product recycling programs

**NT\$11 million**

Distribution of Certified Bike Shop



Annual sales and purchase volumes of certified pre-owned bicycles in Taiwan over the past ten years

Certified Bicycles	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Sales volume	489	1,008	1,248	1,357	1,425	1,503	1,280	1,313	1,242	1,124	1,071	1,133	1,286
Purchase volume	662	1,103	1,341	1,379	1,752	1,287	1,121	1,333	1,180	1,002	1,078	1,161	1,243
Sales amount	\$3,909,700	\$9,584,700	\$11,015,000	\$12,247,400	\$12,878,300	\$11,209,400	\$10,554,700	\$11,057,900	\$11,897,300	\$11,551,200	\$9,324,400	\$9,273,300	\$11,084,000

## 5.5 Product as a Service

### 5.5.1 Sharing Economy

#### 5.1.1.1 YouBike public bicycle sharing service

Giant Group promotes renting instead of outright purchasing, and adopts the concept of product as a service. We initiated the pilot program with 500 public bicycles and 11 stations at Xinyi District on March 11, 2009 and gradually combined the service with the MRT network, using bicycles as the tool bridging communities and MRT stations. YouBike has been established to integrate public transportation platforms, reduce the use of private transport, mitigate the environmental impact of traffic, and increase the use of public transport. It also strives to become a subset of the public transportation system, providing convenient rental modes and comfortable rides along with quality services. YouBike is now available in 11 counties and cities with more than 90,000 bicycles at 7,000 stations for an average of more than 400,000 rides per day. The total number of rides has exceeded 750 million so far.

In 2023, YouBike expanded its service scope to include Tainan and Pingtung, and accelerated the expansion of station numbers and bicycle deployed nationwide. The substantial increase significantly improved the convenience of riding and the public's willingness to ride. The number of rides per year reached 130 million, a surge of 30% compared to 2022. In line with the Group's sustainability philosophy, continuous efforts will be made to enhance public awareness, encourage more people to use the YouBike service, and promote broader participation in net-zero, carbon-reducing green lifestyles.

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



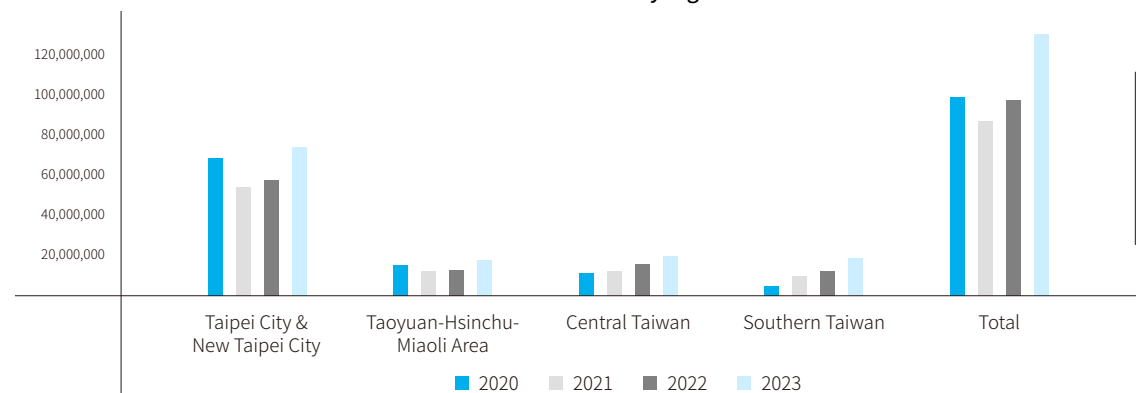
Reduction of carbon dioxide equivalent emissions through the YouBike public bicycle sharing service in 2023

**25,578 metric tons CO<sub>2</sub>e**

Method of calculation:

1. The reduction of carbon dioxide equivalent emissions from a single YouBike ride was approximately 0.196 kg CO<sub>2</sub>e. Carbon reduction = Carbon emissions from fuel-powered cars for the same distance - Carbon emissions from public transportation. (The method of calculation is based on the "Greenhouse Gas Inventory Management System of Electronic Ticketing" adopted by EasyCard Corporation to calculate the carbon footprint of different transportation modes, and has passed the BSI audit.)
2. Reduction of carbon dioxide equivalent emissions per YouBike rides (0.196 kg CO<sub>2</sub>e) x Number of rentals in 2023 (130,500,000 rides) = 25,578 metric tons CO<sub>2</sub>e

Annual YouBike rides by region



Total number of rides in 2023: 130 million rides  
 Cumulative number of total rides in 2023: 750 million rides  
 New service locations in 2023: Tainan and Pingtung  
 Number of rides by region in 2023: Taipei City & New Taipei City 74.5 million rides / Taoyuan-Hsinchu-Miaoli Area 17.5 million rides / Central Taiwan 19.5 million rides / Southern Taiwan 18.9 million rides

## 5.5.2 Expansion of Riding Services

### 5.5.2.1 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. In 2023, 4,678 people took on the round the island trip and 5,234 people signed up for other cycling tours arranged by Giant Adventure, saving approximately 665 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 2023

**665 ton CO<sub>2</sub>e**

Method of calculation:

1. Carbon Emissions = Distance traveled x Emission coefficient of transport mode. Distance traveled - The distance for one lap around Taiwan is estimated to be 900 km while other cycling tours are around 300 km. In 2023, 4,678 people took on the round the island trip and 5,234 people signed up for other cycling tours. Therefore, the total distance travelled is estimated to be 5,780,400 km.
2. Transport assumption: Zero emission from cycling tours and assuming these tours were originally planned to be completed by cars.
3. The carbon emission coefficient of domestic private car (gasoline) is 0.115 kg CO<sub>2</sub>e/pkm.
4. Reduction of carbon dioxide equivalent emissions for tours with bicycles instead of cars = 5,780,400 x 0.115= 664.746 metric tons CO<sub>2</sub>e



# Mobilizing for DEI

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## 6.1 Diverse and Open Workplace

### 6.1.1 Workforce Overview

#### 6.1.1.1 Workforce structure

##### Employee composition

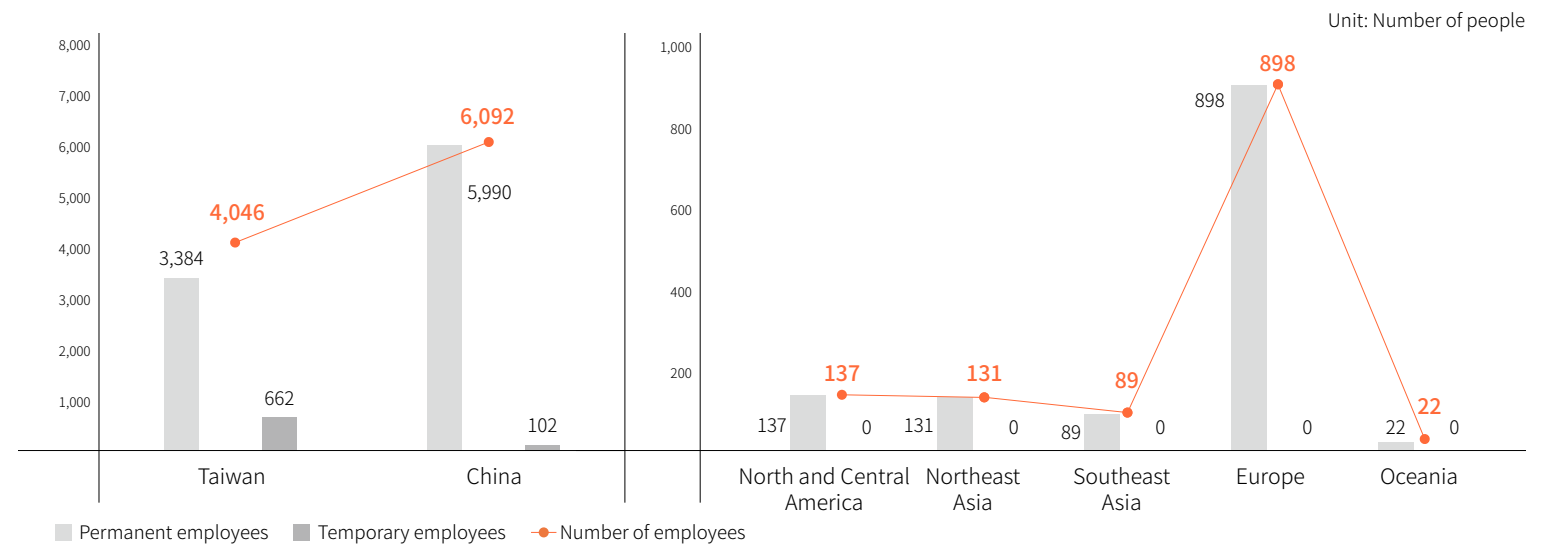
Giant Group's global management insight is a crucial pillar to its success. Such insight is built on the strategy of local talent recruitment and inclusion of different markets. The Group's vision of "making cycling accessible to people all over the world" not only brings all employees together towards a common goal, but also serves as the guiding principle of our actions. Employees are seen as Giant family members not based on their nationalities, but the joint pursuit of corporate mission. Innovative mindset and positive thinking as well as integrity and down-to-earth character are valued above all, and they can be seen in every corner of the organization.

For international operations, we grant full authority to each segment on resource utilization based on local conditions, and drive continuous improvement through the feedback and learning model to accumulate brand value and maintain a competitive edge. As of the end of 2023, Giant Group had a total of 11,415 employees worldwide and the major operations are mostly located in Taiwan and China, where we have 10,138 employees, including both permanent and fixed-term contract employees and 743 non-employees, such as dispatched employees from staffing agencies, contractors, suppliers, and other on-site personnel. The majority of our employees is in the range of 30-50 years old, which accounts for over 70%. In line with our technology-oriented production model, half of our employees have high school and college degrees.

In Taiwan, the percentage of senior executives recruited locally is 100%, while it is 50% for our operations in China. These figures indicate the Group's belief in local management and signify its determination to respect and employ local talents. The strategy allows Giant Group to better integrate into the local market, better meet the needs of local customers, and better adapt to the local culture and environment.

Total number of employees worldwide and employment type

Item \ Region	Taiwan	China	North and Central America	Northeast Asia	Southeast Asia	Europe	Oceania	Total
Number of employees	4,046	6,092	137	131	89	898	22	11,415
Permanent employees	3,384	5,990	137	131	89	898	22	10,651
Temporary employees	662	102	0	0	0	0	0	764



Note:

\* Temporary employees: Employees with fixed-term contracts.

\* Source:

Taiwan: Giant Group Global Headquarter, Giant Manufacturing Co., Ltd., AIPS Technology Co., Ltd., YouBike Co., Ltd., and Giant Taiwan Sales Company.

China: Giant (China) Co., Ltd., Giant (Kunshan) Co., Ltd., Giant Electric Vehicle (Kunshan) Co., Ltd., Giant (Tianjin) Co., Ltd. And D. Mag (Kunshan) New Material Technology Co., LTD.

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

Southeast Asia: Giant Vietnam Manufacturing Co., Ltd.

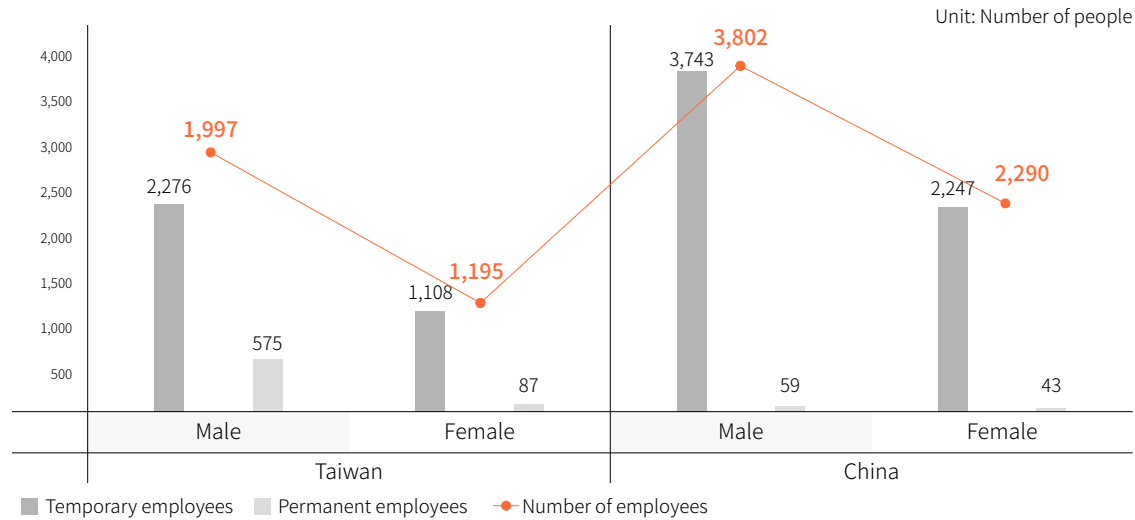
Northeast Asia: Giant (Japan) Co., Ltd. and Giant Korea Co., Ltd.

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

Oceania: Giant Bicycle Co., Pty Ltd.

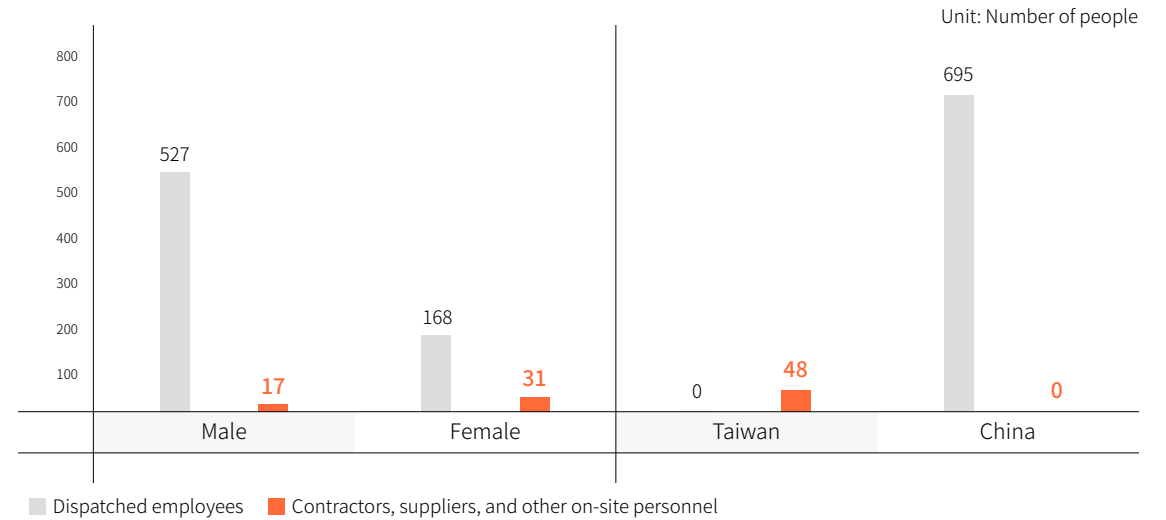
Total number of employees and employment type at major operations (Taiwan and China)

Region	Taiwan		China		Total
	Male	Female	Male	Female	
Number of employees	2,851	1,195	3,802	2,290	10,138
Permanent employees	2,276	1,108	3,743	2,247	9,374
Temporary employees	575	87	59	43	764



Total number of non-employees and employment type at major operations (Taiwan and China)

Item	Gender		Region		Total
	Male	Female	Taiwan	China	
Dispatched employees	527	168	0	695	695
Contractors, suppliers, and other on-site personnel	17	31	48	0	48



Note:

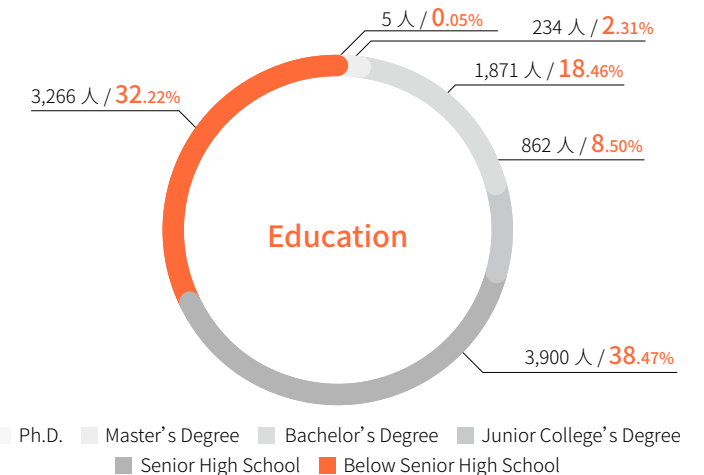
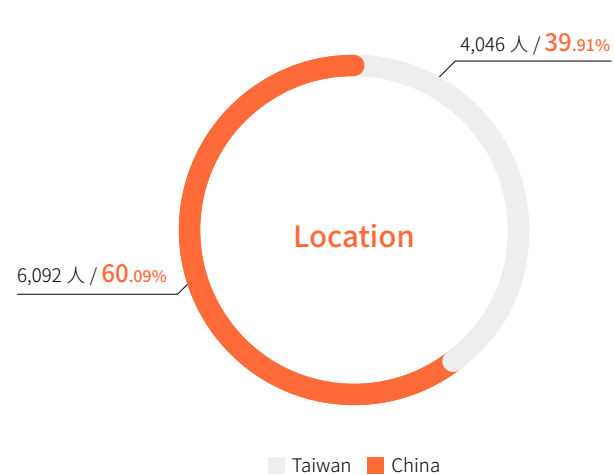
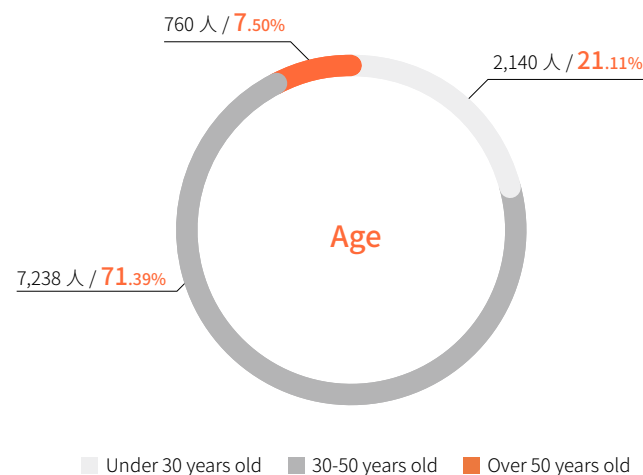
\* Dispatched employees from staffing agencies:  
Our factories in China, including GCK, GEV, GCT and DM, need a small number of dispatched employees to meet labor demand. These employees would assume positions not related to product quality.

\* Contractors, suppliers, and other on-site personnel:  
INC: 9 cleaners, 2 receptionists, 2 cooks, 4 security guards; GTM: 8 cleaners, 10 cooks, 5 security guards, 6 waste treatment personnel; AIPS: 1 cleaner, 1 security guard.



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	1,466	22.04%	674	19.34%	2,140	21.11%
	30-50 years old	4,592	69.02%	2,646	75.93%	7,238	71.39%
	Over 50 years old	595	8.94%	165	4.73%	760	7.50%
Location	Taiwan	2,850	70.44%	1,196	29.56%	4,046	39.91%
	China	3,803	62.43%	2,289	37.57%	6,092	60.09%
Education	Ph.D.	5	100.00%	0	0.00%	5	0.05%
	Master's Degree	167	71.37%	67	28.63%	234	2.31%
	Bachelor's Degree	1,226	65.53%	645	34.47%	1,871	18.46%
	Junior College's Degree	560	64.97%	302	35.03%	862	8.50%
	Senior High School	2,746	70.41%	1,154	29.59%	3,900	38.47%
	Below Senior High School	1,949	59.68%	1,317	40.32%	3,266	32.22%



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	2020	2021	2022	2023
Taiwan	100%	100%	100%	100%
China	33%	50%	50%	50%

Note:

\* Method of calculation: Number of senior executives recruited locally / Total number of senior executives at major operations (%)

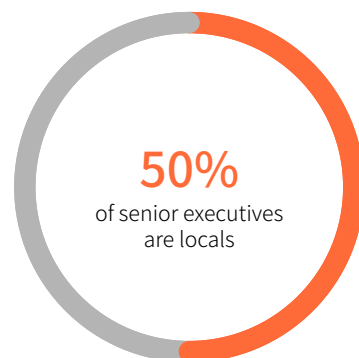
\* Senior executives: Taiwan: Chief functional officers and Presidents; China: Presidents

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  
**50%** of senior executives are locals



### Employee diversity

We have built a diverse and inclusive work environment that respects the uniqueness of each employee, regardless of gender, race, nationality or identity. In Taiwan, the overall percentages of female employees and female in management are 34.38% and 25.63%, respectively. Percentage of female employees in STEM is 31.75%. Also, our employees come from different countries with different cultures. Through interactions with mutual respect, we work together to create the most inclusive workplace for employees to unleash their full potential.

In promoting minority diversity, we actively employ disabled people and indigenous people in Taiwan, as well as more than 30 local ethnic minorities at our China factories, including Yi, Lisu, Bai, Hui and Man. We continually strive to create an inclusive and harmonious work environment to ensure that every employee can adapt and realize their potential.

In Taiwan	
the overall percentages of female employees	<b>34.38%</b>
female in management	<b>25.63%</b>

### Female employees and female in management at major operations (Taiwan and China)

	Number of Employees	Percentage
Total number of employees	10,138	
Percentage of female employees	3,485	34.38%
Percentage of female in management	164	25.63%
Percentage of female in entry-level management	107	27.58%
Percentage of female in mid-level management	43	23.63%
Percentage of female in top-level management	22	28.21%
Percentage of female in management at revenue related departments	59	38%
Percentage of female employees in STEM (Science, Technology, Engineering, Mathematics) related positions	428	31.75%

Note:

\* Revenue related departments: Sales, Production, Supply and Marketing, and GTS; STEM related departments: Technology, R&D, Quality Assurance and Finance

\* 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	2020				2021			
	Management		Employee		Management		Employee	
	Number of Management	Percentage	Number of Employee	Percentage	Number of Management	Percentage	Number of Employee	Percentage
Chinese	447	71.86%	5,997	58.73%	428	66.98%	5,966	58.64%
Taiwanese	171	27.49%	3,585	35.11%	206	32.24%	3,589	35.28%
Vietnamese	0	0.00%	588	5.76%	0	0.00%	505	4.96%
Thai	0	0.00%	40	0.39%	0	0.00%	113	1.11%
Indonesian	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Filipinos	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Malaysian	2	0.32%	0	0.00%	2	0.31%	0	0.00%
Hungarian	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Indian	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Turkish	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Myanmar	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Canadian	1	0.16%	1	0.01%	2	0.31%	0	0.00%

Nationality	2022				2023			
	Management		Employee		Management		Employee	
	Number of Management	Percentage	Number of Employee	Percentage	Number of Management	Percentage	Number of Employee	Percentage
Chinese	419	63.40%	6,241	63.50%	420	65.32%	5,697	60.00%
Taiwanese	231	35.90%	2,287	29.90%	219	34.06%	3,282	34.57%
Vietnamese	0	0.00%	349	3.50%	0	0.00%	252	2.65%
Thai	0	0.00%	303	3.10%	0	0.00%	243	2.56%
Indonesian	0	0.00%	0	0.00%	0	0.00%	11	0.12%
Filipinos	0	0.00%	0	0.00%	0	0.00%	5	0.05%
Malaysian	2	0.30%	0	0.00%	2	0.31%	1	0.01%
Hungarian	0	0.00%	0	0.00%	0	0.00%	1	0.01%
Indian	0	0.00%	0	0.00%	0	0.00%	1	0.01%
Turkish	0	0.00%	0	0.00%	0	0.00%	1	0.01%
Myanmar	0	0.00%	0	0.00%	0	0.00%	1	0.01%
Canadian	2	0.30%	0	0.00%	1	0.16%	0	0.00%

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)

	2020		2021		2022		2023	
	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	58	0.5%	62	0.5%	55	0.56%	46	0.45%
Indigenous people	18	0.2%	18	0.2%	18	0.18%	29	0.29%
Ethnic minorities	109	1.0%	175	1.6%	185	1.88%	176	1.74%

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

## Percentage of disabled employees at Taiwan factory

	2020				2021				2022				2023			
	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	43	58	0	134.88%	44	62	0	140.91%	45	55	0	122%	40	45	0	112.5%

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 2020	Headcount in 2021	Headcount in 2022	Headcount in 2023
Yi	35	60	48	49
Lisu	9	17	21	22
Bai	2	7	17	16
Hui	13	20	16	14
Man	8	6	9	11
Miao	12	16	10	10
Others (28 ethnic minorities)	39	64	64	54
Total	118	190	185	176



### 6.1.1.2 Talent recruitment

#### Diverse recruitment channels

Establishing diverse recruitment channels is an important strategy to enhance corporate image and attractiveness. We actively utilize a variety of channels to recruit talents, including but not limited to 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 more accurately identify suitable talents while enhancing our corporate image and attractiveness in the eyes of job seekers, thereby attracting more talented people to join our team and injecting new vitality and energy for corporate development.

#### Recruitment channels at major operations (Taiwan and China)

Recruitment Channel	Practice
Employment agencies	Employment agencies provide candidates according to 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	We post recruitment information on FB for interested parties to submit their resumes.
Collaboration with schools (trainee-students)	Industry-academia collaboration and internship programs with schools
Headhunters	We send out job vacancies and requirements for headhunters to recommend suitable candidates for interviews.
Re-employment	We send out re-employment letters to former employees who resigned for reasons other than unsatisfactory performance

#### Recruitment expense at major operations (Taiwan and China)

Recruitment Expense	2020	2021	2022	2023
Total recruitment expense (NT\$)	3,083,012	5,118,872	2,090,893	4,166,233
Total number of recruits (persons)	4,867	4,328	4,145	2,865
Recruitment cost per hire (NT\$)	633	1,183	504	1,454

Note:

\* Recruitment expense includes agency and advertising fees.

\* Method of calculation: Recruitment cost per hire = Total recruitment expense / Total number of recruits

\* Reason for a higher recruitment cost in 2023: Compared to 2022, our factories in China recruited 500 direct personnel in 2023 in response to domestic demand in China, and the rising employment agency fee for the director personnel was the main reason for the increase in recruitment cost.



## New recruits at major operations (Taiwan and China)

		2020	2021	2022	2023				
<b>Total number of new recruits</b>		4,867	4,328	4,487	2,828				
<b>Total number of employees</b>		9,326	9,347	9,836	10,138				
<b>Percentage of new recruits % (New recruits / Total number of employees)</b>		52.19%	46.30%	45.62%	27.90%				
		Number of Employees	Percentage (%)	Number of Employees	Percentage (%)	Number of Employees	Percentage (%)	Number of Employees	Percentage (%)
<b>Gender</b>	Male	3,237	66.51%	2,834	65.43%	2,668	59.46%	1,869	66.09%
	Female	1,630	33.49%	1,494	34.52%	1,819	40.54%	959	33.91%
<b>Age</b>	Under 30 years old	2,389	49.09%	17,64	40.76%	1,986	44.26%	1,046	36.99%
	30-50 years old	2,439	50.11%	2,515	58.11%	2,465	54.94%	1,741	61.56%
	Over 50 years old	39	0.80%	49	1.13%	36	0.80%	41	1.45%
<b>Location</b>	Taiwan	1,012	20.79%	1,050	24.26%	1,146	25.5%	422	14.92%
	China	3,855	79.21%	3,278	75.74%	3,341	74.5%	2,406	85.08%
<b>Management Position</b>	Entry-level management	8	0.16%	9	0.21%	5	0.22%	13	0.46%
	Mid-level management	3	0.06%	9	0.21%	10	0.11%	3	0.11%
	Top-level management	6	0.12%	5	0.12%	9	0.20%	0	0.00%
	Not in management position	4,850	99.65%	4,305	99.47%	4,463	99.47%	2,812	99.43%

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 allowing 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.

Category	2020		2021		2022		2023		
	Number of Employees	Percentage	Number of Employees	Percentage	Number of Employees	Percentage	Number of Employees	Percentage	
Total internal replacement	450	35%	376	23%	274	59%	295	51.3%	
Gender	Male	316	70%	279	74%	142	51.8%	160	54.2%
	Female	134	30%	97	26%	132	48.2%	135	45.8%
Age	Under 30 years old	97	22%	87	23%	63	23.0%	86	29.2%
	30-50 years old	334	74%	275	74%	200	73.0%	201	68.1%
	Over 50 years old	19	4%	14	4%	11	4.0%	8	2.7%
Management	Entry-level management	144	32%	48	13%	43	9.2%	77	71.3%
	Mid-level management	44	10%	17	5%	10	2.1%	26	24.1%
	Top-level management	14	3%	8	2%	12	2.6%	5	4.6%

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 saw severe labor shortage and thriving social and economic environment as well as businesses. The surging replacement demand (a larger denominator) led to a decreasing internal replacement rate in 2021

## 6.1.2 Talent Development and Retention

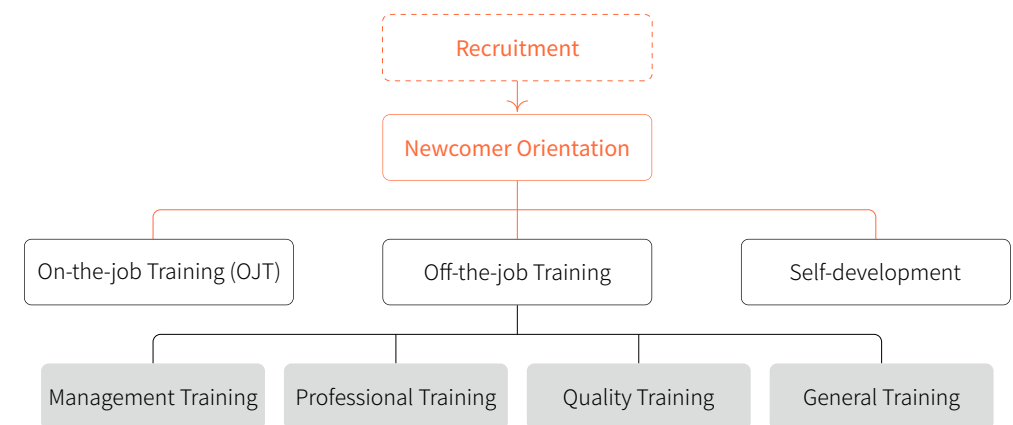
### 6.1.2.1 Build an environment for cultivation and development

#### Training and development system

Giant Group adheres to the principles of creating well-rounded talents and putting knowledge into practice in drawing up the three training and development strategies: to develop and train employees' competence in line with the directions of corporate growth and strategy, to facilitate the cultivation of key talents to meet the Group's future needs, and to strive to build and provide an environment for employee growth. To ensure the training programs align with actual needs, an annual survey on training demand is conducted in the fourth quarter every year, and an annual training and development plan for off-the-job training needs is formulated based on the findings. Once the plan is discussed and approved by senior management, 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 stimulate creativity that dares to think outside of the box. "Raise The Bar" - 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. 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 Type	Purpose and Details of Training
<b>Newcomer Orientation</b>	<p>Purpose: To give new recruits a basic understanding of the Company and help them to quickly adapt to daily operation.</p> <p>Details:</p> <ol style="list-style-type: none"> <li>(1) Domestic orientation: The human resources unit shall brief new recruits 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.</li> <li>(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.</li> <li>(3) Orientation program covers business overview, corporate culture and values, personnel rules and regulations, occupational safety, quality awareness, product overview and other related courses.</li> </ol>
<b>On-the-Job Training</b>	<p>Purpose: To emphasize the practices of learning by doing, passing down experience and sharing.</p> <p>Details:</p> <ol style="list-style-type: none"> <li>(1) Business meetings: To learn work-related knowledge and information from business consensus meetings.</li> <li>(2) Job coaching: Supervisors or senior operators give guidance during daily work or project improvement.</li> <li>(3) Job rotation: To cultivate internal talents through horizontal job rotation.</li> <li>(4) Job coaching is arranged by unit supervisors.</li> <li>(5) Unit supervisors arrange on-the-job training for job rotation.</li> </ol>
<b>Self-development</b>	<p>Purpose: To encourage employees to take the initiative to learn for personal growth.</p> <p>Details:</p> <ol style="list-style-type: none"> <li>(1) Book study: Month allowance for reference book purchases in accordance with the “Employee Welfare Rules.”</li> <li>(2) School education: Subsidies for foreign language tutoring, on-the-job training and study leaves for continuing education in accordance with the “Employee Continuing Education Policy.”</li> <li>(3) Learning eNewsletter</li> <li>(4) Sharing activities: Sharing of learning experience among employees to expand the effect of self-learning.</li> </ol>
<b>Off-the-job Training</b>	<p>Purpose: Group together employees with similar training requirements to temporarily leave their posts for off-the-job training.</p> <p>Details:</p> <ol style="list-style-type: none"> <li>(1) External training: Employees may be subsidized by the Company to attend courses organized by external training organizations according to their own job requirements.</li> <li>(2) Internal training: Training organized by the Company. Currently, our internal training units include the Giant Academy, TDC and various departments.</li> </ol>

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
	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
On-the-job Training	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
<b>2021 Global Value Up Project</b>	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-III Behavior effectiveness. They mapped out five projects for execution, including: <ul style="list-style-type: none"> <li>· GF value up project</li> <li>· Global orientation platform</li> <li>· Global GRA Program</li> <li>· Build up regional business management model</li> <li>· Online training for direct labor</li> </ul>
<b>2021 Giant Talk</b>	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-II 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: <ul style="list-style-type: none"> <li>· Understand market trends of the industry</li> <li>· How to develop team leadership</li> <li>· Enhance R&amp;D competence</li> <li>· Self-awareness for career development</li> </ul>
<b>2021 Cross-industry seminar -</b> 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 seminar aimed at diffusing the concept of service-oriented organization. The effectiveness was not analyzed in depth.
<b>2022 Cross-industry seminar -</b> 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	<ul style="list-style-type: none"> <li>· Understand the global ESG game rules</li> <li>· Cycling of bicycle products</li> <li>· Corporate cycling examples and carbon reduction practices</li> </ul>	A total of 116 supervisors and employees attended the seminar. We collaborated with Miniwiz through ESG-based experience sharing and projects, including: green building development and exchanges on carbon emission calculation
<b>2022 Excellent Customer Experience Management -</b> Moving Forward with Consumers	Brand management and consumer experiential marketing	Open seminar to all employees	<ul style="list-style-type: none"> <li>· Case study on brand management</li> <li>· Understanding of brand management strategies and techniques</li> </ul>	A total of 110 domestic and overseas supervisors and employees attended the seminar.

Program	Content	Trainee	Operational Benefits	Learning Effectiveness by the Four Levels of Kirkpatrick Model
<b>2023 Bullpen Program</b>	<ul style="list-style-type: none"> <li>Identify individual behavioral styles and traits</li> <li>Cross-learning through team-based interactive activities</li> </ul>	Global headquarters; reporting of high potential talents	Enhance self-awareness and consciously strengthen leadership capabilities	<p>A total of 70 domestic and overseas supervisors and employees took part in the program and achieved Level-III Behavior effectiveness.</p> <ul style="list-style-type: none"> <li>Two self-awareness workshops were held to identify individual behavioral styles and traits.</li> <li>The team coaching session had a total of 216 participants, where energy was channeled through interactive activities to enhance cross-learning and self-reflection among supervisors.</li> <li>Participants shared the most significant learnings and changes in leadership management behaviors for individuals through presentations.</li> </ul>
<b>Management Consensus</b>	Explanation and promotion of functional strategies	Entry-level management of the Greater China region	Focus on setting up tasks under functional strategies and reach consensus	A total of 4 management consensus sessions were held in 2023, chaired by the Chairperson, CEO, QA supervisor and audit supervisor, and open to entry-level management in the Greater China region. There were 751 participants during the year.
<b>Coffee Meeting</b>	Management insights and experience sharing	Global headquarters; senior executives and employees with proposals	Exchange of business philosophies and experiences to promote mutual prosperity	The Chairperson and CEO initiated the exchanges of management insights and experience sharing in the meeting to influence senior executives.

#### Training effectiveness evaluation method

Level	Evaluation Item	Tools	Timing of Evaluation
L-I	Reaction	<ol style="list-style-type: none"> <li>Internal training: Post evaluation form, course records/on-site observation records, attendance statistics</li> <li>External training: External education and training review sheet</li> </ol>	During and after the course
L-II	Learning	<ul style="list-style-type: none"> <li>Examinations/competency tests</li> <li>Insight sharing/assignment presentation</li> <li>Practical exercises/field operations</li> </ul>	Before, during and after the course
L-III	Behavior	<ul style="list-style-type: none"> <li>Effectiveness evaluation form after the course</li> <li>Action checklist</li> <li>Action plan</li> </ul>	3 to 6 months after the course
L-IV	Result	<ul style="list-style-type: none"> <li>Project implementation results</li> <li>Supervisor interviews and feedback</li> </ul>	Approximately 1 to 3 years after the course



In 2023, we shifted training from offline to online at major operations in the post-pandemic era, as well as transformed, consolidated and reorganized the orientation programs of our China operations, where courses were significantly condensed by 80%. Except for the increase in new recruits at factories for domestic demand, the number of other new recruits reduced by nearly 1,500 people, resulting in an overall decrease of 1,000 recruits. In addition, robust domestic sales in China led to a sharp decrease in internal training across all units; therefore, the overall training hours plummeted. However, in terms of training expenses, total costs exceeded NT\$10 million in both 2022 and 2023 as we launched the Group's leadership program for high-level talents. Chief functional officers and potential talents of each function were given coaching leadership training, with an emphasis on professional, people and pioneering leadership. There was also a significant increase in female trainings.

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

Item	2020	2021	2022	2023		
				Percentage of Total Hours	Average Hours	
Training hours	Total training hours	874,619	664,902	912,081	93,119	
	Average training hours	94	71	93	9.2	
Gender	Male	68.48%	68.59%	67.91%	64.05%	9
	Female	31.52%	31.41%	32.09%	35.95%	9.6
Age	Under 30 years old	33.48%	26.38%	20.97%	19.03%	8.3
	30-50 years old	65.17%	72.41%	71.15%	72.96%	9.4
	Over 50 years old	1.36%	1.21%	7.88%	8.01%	9.9
Type of training	Type of training - management	0.98%	7.49%	1.04%	9.30%	11.5
	Type of training - professional	79.67%	75.64%	23.55%	43.93%	3.5
	Type of training - general	19.35%	16.87%	75.41%	46.77%	3.7

Note:

\* Method of calculation: Average training hours = (Total training hours / Total number of employees in Taiwan & China)

\* Management courses: Management leadership and pursuit of excellence in performance; Professional courses: Foreign language proficiency and personal skills; General courses: Orientation and seminars on a better life.

\* The sharp decrease in the total and average training hours in 2023 was mainly due to the shift from offline to online training in the post-pandemic era and the consolidation and reorganization of courses.

#### Training costs at major operations (Taiwan and China)

Item	2020	2021	2022	2023	
					Training costs
	Average training costs (Total costs / Total number of employees in Taiwan & China)	415	948	1,135	1,250
Gender	Male - total training costs	2,821,286	6,150,747	9,373,473	9,026,472
	Female - total training costs	1,052,790	2,709,909	1,788,701	3,635,357
Age	Under 30 years old - total training costs	920,086	1,854,460	1,215,775	1,394,099
	30-50 years old - total training costs	2,711,467	6,727,870	6,922,773	7,735,768
	Over 50 years old - total training costs	242,523	278,325	3,023,626	3,539,011
Type of training	Type of training - management - total training costs	945,071	4,358,857	6,888,259	8,020,681
	Type of training - professional - total training costs	2,741,878	3,887,430	2,491,973	3,172,875
	Type of training - general (external training / orientation) - total training costs	187,127	614,369	1,781,942	1,475,322

Note:

\* Training costs: Tuition + Lecturers' fee + Professional service fee + Miscellaneous administrative fees

\* Management courses: Management leadership and pursuit of excellence in performance; Professional courses: Foreign language proficiency and personal skills; General courses: Orientation and seminars on a better life.

## Human capital ROI

Unit: In thousands of NT\$

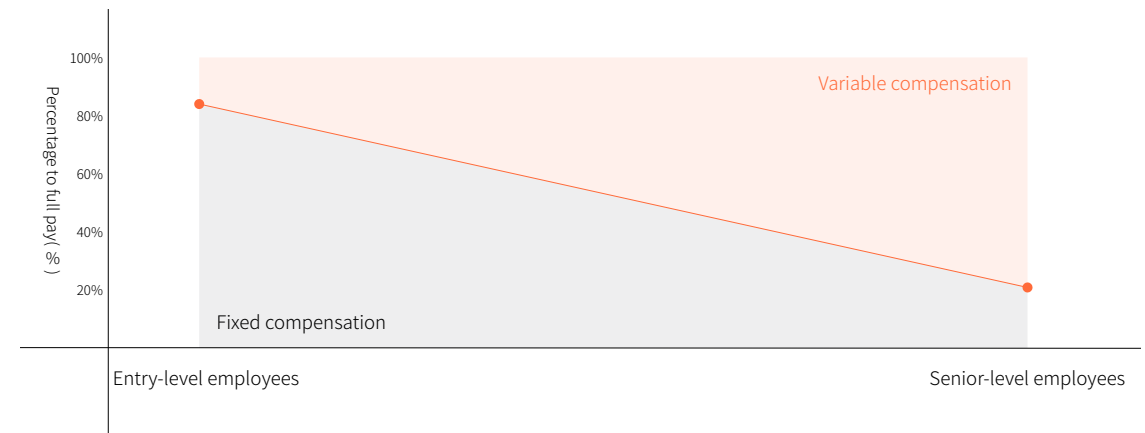
	2020	2021	2022	2023
Total revenue (a)	70,010,849	81,839,870	92,043,675	76,953,546
Total operating costs and expenses (b)	63,152,576	73,130,583	84,129,236	72,244,226
Total employees-related expenses (salaries + benefits) (c)	9,311,947	11,777,734	12,735,502	11,006,604
ROI (a - (b-c)) / c	1.74	1.74	1.62	1.43

Note: Source: Giant Group

## 6.1.2.2 Competitive compensation

Our 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 to ensure our compensation packages remain competitive in attracting and retaining talents.

The highest ratio of our indirect labor pay to the local minimum wage at our major operations is 2 times (1 to 1.45 times in Taiwan depending on the functions; 1.66 time in Tianjin, China; and 2 times in Kunshan, 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.



\* Major operations: Giant Manufacturing Co., Giant (Kunshan) Co., Ltd., Ltd., Giant (China) Co., Ltd., Giant Electric Vehicle (Kunshan) Co., Ltd. and Giant (Tianjin) Co., Ltd.

\* 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	2022 (a)	2023 (b)	Percentage of Changes Compared to 2022 (b-a)/b
Number of employees	328	305	324	317	-2.21%
Average compensation (NT\$)	758,548	846,847	847,392	823,805	-2.86%
Median compensation (NT\$)	650,000	758,548	744,900	746,200	0.17%

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 at the Giant Group Headquarters includes 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 at the Giant Group Headquarters includes 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

Welfare policy is an important goal of Giant Group's ongoing efforts. By establishing such a policy, not only can we attract excellent talents, but also initiate a positive cycle to retain talents and thereby enhancing our overall competitiveness. At the same time, the policy helps to reduce employees' work stress, making it easier for them to achieve work-life balance and improve work efficiency and productivity. In recent years, the widespread promotion of green cycling culture has further enhanced employee well-being and corporate sustainable development. Promoting this culture helps to reduce traffic congestion and environmental pollution, as well as encourages employees to choose a healthy lifestyle, which in turn enhances their health and well-being, and contributes to the Company's sustainable growth.

<b>1. Flexible work hours</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>
<b>2. Employee relations</b>	<ul style="list-style-type: none"> <li>Family Day events are organized every year to promote family harmony and relationships.</li> <li>A broad variety of domestic and overseas trips are arranged to improve employee interactions and as a form of stress relief.</li> <li>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.</li> <li>Bicycle-related activities are organized and employees are encouraged to experience our products and the joy of cycling.</li> <li>Others: Club activities, year-end parties, etc.</li> </ul>
<b>3. Employee welfare</b>	<ul style="list-style-type: none"> <li>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.</li> <li>Special discounts at contracted shops.</li> </ul>
<b>4. Day-to-day care</b>	<ul style="list-style-type: none"> <li>Health is vital to everyone, which is why the Company promotes health awareness, organizes health checkups regularly and subsidizes advanced health checkups.</li> <li>The Company provides and assists with group insurance to safeguard employees' personal safety.</li> <li>Corporate cafeteria provides a variety of nutrition-balanced meals.</li> <li>Shuttle bus service is available for the convenience of employees living nearby.</li> <li>Counseling sessions are provided regularly. Employees can make online reservations and relieve emotional stresses through counseling.</li> </ul>
<b>5. Retirement system</b>	<ul style="list-style-type: none"> <li>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 retirement policy established in accordance with the Labor Standards Act, where monthly contributions are made to the pension account 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: <ul style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>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.</li> </ul> </li> </ul>

<b>6. Honorary retirement benefits</b>	<ul style="list-style-type: none"> <li>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 between 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.</li> </ul>
<b>7. Green cycling</b>	<ul style="list-style-type: none"> <li>Employee discounts on Giant products and subsidies for cycling tours.</li> <li>Bicycle parking and showers are available in the offices.</li> <li>Cycling events or daily rides to accumulate mileage rewards.</li> <li>Free visits to the Cycling Culture Museum with employee badges.</li> </ul>

#### 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:

	2020	2021	2022	2023
Percentage	7.2%	7.2%	7.1%	7.0%
Salaries and benefit expenses (NT\$)	455,893,309	558,392,774	538,258,062	322,534,167

Note: Source: Giant Group

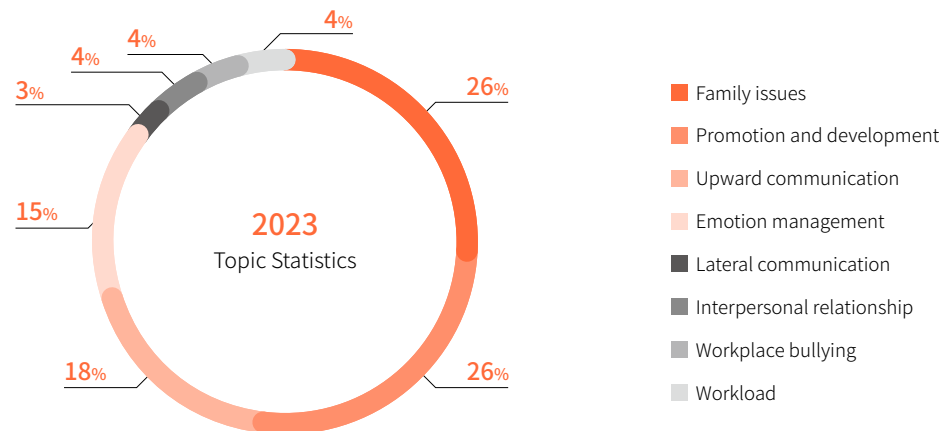
### LOHAS at workplace

- Collaboration between Giant Group and Bydo Life Design on health consultation at workplace

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 develops services that can be effectively applied to individual career planning and mental health counseling, assisting business leaders in creating positive organizations.

Employees can seek workplace health counseling services when they are confronted with either life or workplace adaptability issues. With professional knowledge, counselors can help employees to explore their own emotions and thoughts, assisting them to make changes and decisions to meet their own needs. Employees shall look for help from counselors when faced with difficult psychological or emotional problems in life or workplace. By doing so, we are showing our willingness to face and tackle the problems head-on. 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 can register online for a video consultation. Exchanges during the sessions are kept strictly confidential. The Company will only be informed of the topic categories, such as family issues, promotion and development, and upward communication. This arrangement allows employees to seek professional help and advice with their privacy protected, which enables them to discuss relevant issues more freely.



Note: As a reference for the well-being of employees within the organization to continuously improve relevant management system.

- “Blind massage service by the Taiwan Foundation for the Blind” - safeguard health for happy life

Starting from October 2022, our Group Headquarters has worked with the Taiwan Foundation for the Blind to provide massage services at the Headquarters. We have arranged for two visually impaired masseurs to offer on-site services every Friday, giving employees a more convenient massage experience. By the end of 2023, 755 employees had enjoyed this service, which was well received with a utilization rate of 98%. This initiative not only meets our employees’ needs for massage service, but also demonstrates our care and support for the visually-impaired community.



### Unpaid parental leave

Giant Group empathizes with employees' needs and gives thorough consideration to the unpaid parental leave policy for comprehensive protection of employee family rights. The Company not only respects each employee's family situation, but also understands the importance of parental care. Therefore, we are committed to providing ample support and flexible arrangements to ensure our employees can achieve a balance between their careers and families. The female return to work and retention rates of 100% demonstrate our commitment to female employees. The Company considers unpaid parental leave an integral part of employee rights, therefore, we provide not only necessary leave and benefits but also, more importantly, understanding and support. We firmly believe that a warm, caring work environment is the key to achieving work-family balance for every employee.

Item	2023		
	Female	Male	Total
Number of employees eligible for unpaid parental leave for the year			
Number of employees eligible for unpaid parental leave in 2023	46	71	117
Actual number of employees applied for unpaid parental leave for the year			
Actual number of employees applied for unpaid parental leave in 2023	22	19	41
Number of employees expected to return from parental leave for the year (A)			
Number of employees expected to return from parental leave in 2023 (A)	8	14	22
Actual number of employees returned from parental leave for the year (B)			
Actual number of employees returned from parental leave in 2023 (B)	8	9	17
Actual number of employees returned from parental leave last year (C)			
Actual number of employees returned from parental leave in 2022 (C)	10	8	18
Number of employees returned from parental leave and stayed for one year (D)			
Actual number of employees returned from parental leave in 2022 and stayed for one year (D)	10	4	14
Return to work rate % (B/A)	100%	64%	77%
Retention rate % (D/C)	100%	50%	78%

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 their 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.
4. This table presents statistics of our Taiwan operations.

### 6.1.2.4 Employee engagement

#### Employee commitment survey

In 2021, Giant Group's global employee commitment survey was conducted by the HR unit of the Headquarters through online anonymous questionnaires, 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 had 11 items above the benchmark and 9 items below the benchmark. The survey revealed that our relative strengths lay in purpose, manager, and prospect; and our relative opportunities were communication, collaboration, and hiring. Also, we would improve and positively reinforce 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 to be useful and shall be conducted internally at a higher frequency.

4 regions

Survey area:  
Taiwan, China, Europe and the U.S.

12 survey aspects

Work-Life Balance, Manager, Corporate Culture, Purpose, Collaboration, Communication, Job Roles, Hiring, Customer Focus, Prospect, Leadership, and Values

#### 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.

### Turnover analysis

In 2023, Giant Group had an overall turnover rate of 22.68%, 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 true causes of voluntary termination with feedback given to relevant departments, seeking improvement measures. Based on the statistics, one of the reasons for leaving the Company was retirement, where employees had 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	2020		2021		2022		2023	
		Number of Employees	Percentage	Number of Employees	Percentage	Number of Employees	Percentage	Number of Employees	Percentage
Total termination		2,552	19%	2,576	19%	2,379	17.50%	2,974	22.68%
Voluntary termination		2,541	18.98%	2,575	19.23%	2,362	17.38%	2,874	21.92%
Involuntary termination		11	0.08%	1	0.01%	17	0.13%	100	0.76%
Gender	Male	1,748	68.50%	1,703	66.11%	1,536	64.56%	1,891	63.58%
	Female	804	31.50%	873	33.89%	843	35.44%	1,083	36.42%
Age	Under 30 years old	1,031	53.49%	1,006	53.49%	880	53.49%	972	53.49%
	30-50 years old	1,462	43.55%	1,504	43.55%	1,421	43.55%	1,826	43.55%
	Over 50 years old	59	2.96%	66	2.96%	77	2.96%	176	2.96%
Location	Taiwan	647	25%	609	24%	638	26.82%	774	26.03%
	China	1,905	75%	1,967	76%	1,741	73.18%	2,200	73.97%
Management	Entry-level management	6	0.24%	15	0.58%	15	0.63%	24	0.81%
	Mid-level management	13	0.51%	12	0.47%	8	0.34%	7	0.24%
	Top-level management	13	0.51%	7	0.27%	3	0.13%	17	0.57%
	Non-managerial employees	2,520	98.75%	2,542	98.68%	2,353	98.91%	2,926	98.39%

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.

\* The number of turnovers excludes employees who are employed for less than three months.

**Performance evaluation management**

Through periodic evaluation and talent inventory, outstanding talents would be given the opportunities to be trained and placed in important positions with greater responsibilities and more room for development. A group-wide performance evaluation is conducted in the fourth quarter every year. Except for employees in the probation period, who are subject to probation standards, all regular employees who have been employed for more than six months during the year are required to take part in the annual performance evaluation (vitality evaluation). The evaluation details can be adjusted by SUB to align with the local management systems. Global Headquarters' evaluation framework and details are set out below:

Positive performance evaluation 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.

Commitments to participate in ESG activities and annual reviews were added to the 2023 vitality assessment, calling on employees to actively engage and jointly promote corporate social responsibility. Through active participation in ESG initiatives, we can be more effective in fulfilling our corporate social responsibilities and making positive contributions to building a more sustainable future.

**The performance evaluation process includes:**

<p><b>1. Employee self-commitments</b></p> <p>Employees initiate performance interviews and management with an organizational commitment to continuous growth and engagement.</p> <p>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.</p>	<p><b>2. Future improvements</b></p> <p>Reach a consensus on areas of self-improvements as well as improvement plans, improvement targets, and resources required through discussions, and assist employees with adjusting areas requiring improvement.</p>
<p><b>3. Guidance, instructions and corrections to encourage self-learning and development</b></p> <p>In the process of improvement or talent development, supervisors shall provide guidance, instructions, corrections, and other management behaviors to inspire self-motivation in employees, thereby building a learning organization.</p> <p>For employees scored B- (improvement required) in the evaluation, unit supervisors shall propose a 3-month counseling program. Retraining would be given to address failings in order to improve competence and performance for follow-up evaluations.</p> <p>If the employees still fail to fulfill job requirements after counseling, job duties may be adjusted through coordination. Where a termination of employment is necessary, procedures shall be carried out pursuant to local laws and regulations.</p>	<p><b>4. Behaviors and results</b></p> <p>After going through the aforementioned management stages, work performance is reviewed again at the time agreed or through regular performance evaluation to achieve a positive cycle.</p>



## Performance evaluation model

Employee Evaluation Method	Object	Description
Multidimensional performance appraisal (e.g., 270-degree feedback)	Giant Group Headquarters	<p>The 270-degree performance appraisal of Giant Group is applicable to employees in the Global Headquarters. Besides feedback from direct supervisors, it also includes:</p> <ol style="list-style-type: none"> <li>1. Co-Assessment People who have worked with the employee recently were invited to co-assess the employee. These associates would provide specific examples and feedback on tasks they performed together as one part of the multidimensional assessment.</li> <li>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). These persons can provide feedback on the collaboration and effectiveness thereof based on actual experience as a part of the multidimensional assessment.</li> <li>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! These persons can provide feedback on the collaboration and effectiveness thereof based on actual experience as a part of the multidimensional assessment.</li> </ol>
Annual vitality evaluation	Each business unit can formulate their own evaluation rules with reference to the Group's standards. Regular employees ranked as assistant vice president or below are subject to the evaluation.	<ol style="list-style-type: none"> <li>1. Set annual evaluation scores: After a review between supervisors and their subordinates on the overall evaluation results for the year, evaluation scores would be determined for all employees within the department.</li> <li>2. For subordinates with poor results and in need of improvements, unit supervisors shall propose a 3-month counseling program and associated evaluation forms. Retraining would be given to address failings in order to improve competence and performance for follow-up evaluations. If the employees still fail to fulfill job requirements after counseling, job duties may be adjusted through coordination. Where a termination of employment is necessary, procedures shall be carried out pursuant to local laws and regulations.</li> </ol>

## 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, stating that we respect and support 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, and strive 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 employee rights and interests. 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 employee 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-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 appropriate units based on case details.

### Supplier human rights due diligence (HRDD)

In line with the plan drawn up in 2022, units including the Legal Affairs, Audit, Human Resources, and Integrated Procurement establish short to medium-term first-tier supplier HRDD process with the management objective of enhancing human rights management capabilities and creating industry competitiveness/brand sustainability with supply chain partners. In order to enhance industry competitiveness and sustainable development with suppliers, Giant Group had the aforementioned units initiated 2023 supplier HRDD, which included:

- Formulation of a supplier sustainability questionnaire:  
With reference to international human rights standards, major national laws and regulations, and industry practices, we map out aspects for a sustainability survey as well as key risk assessment benchmarks to identify supplier risks.
- Supplier risk investigation:  
The Group's suppliers are required to conduct self-assessments of sustainability practices using the aforementioned tools. This enables suppliers to identify risks across various aspects during the investigation process and adjust their own risk controls, thereby establishing genuine benchmarks for supplier sustainability practices and management.
- Continuous promotion of supplier sustainability management:  
Based on feedback from suppliers, we summarize risks of each supplier as benchmarks for future improvements. We continuously promote the tracking, assessment, and communication of supplier risk impacts to enhance industry sustainability, create a safe working environment, and fulfill our corporate social responsibilities.

### Courses of human rights and prevention of human rights violation at workplace

In 2023, Giant Group organized courses of human rights and prevention of human rights violation at workplace in Taiwan, focusing on the concepts of "Seeing the Differences + Communication and Dialogue + Equal Respect." The online courses conveyed the importance of gender respect to supervisors and employees, with the objectives of building a gender-friendly workplace, establishing the right concepts, and mastering appropriate methods of response. The courses fortified our commitment to human rights and gender equality, and more importantly, brought employees to learn about respecting others as well as enhancing their understanding of a diverse work environment.



### Non-discrimination and harassment

- Reporting and investigation procedures
  1. All employees are responsible for ensuring a work environment free of 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.
  2. 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.
- Education, training and promotion
  1. Regulatory education and training are provided regularly to all employees. They are also a part of the orientation program for new recruits.
  2. 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 is posted clearly at workplace. Relevant complaints are handled by the HR unit to ensure that all employees can enjoy a fair and safe working environment.

#### Case statistics - Taiwan

Year	2019	2020	2021	2022	2023
Number of discrimination cases	0	1	0	1	3
Number of cases filed/solved*	0	0	0	0	0
Number of sexual harassment cases	0	0	0	0	0
Number of cases filed/solved*	0	0	0	0	0

\* Upon investigation, the complainant decided against filing the case.

### Protection of freedom to participate in trade unions

Giant Group highly respects employees' freedom of assembly and association, and their participation in labor unions. In Taiwan, employees can join the internal 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 where all employees are union members. Although we have unions in our Taiwan and China factories, the Company has not entered into any collective bargaining agreements between 2019 and 2023 as the unions have yet to raise relevant requests. The labor union and management convene quarterly meetings to address mutual concerns, ensuring the relevance of topics and harmony between both parties. Consequently, the demand for collective bargaining agreements has never been raised.

Year	2020	2021	2022	2023
Percentage of employees being Union members	88%	89%	90%	86%

### 6.1.3.2 Open communication channels between management and employees

The Company values labor-management harmony and actively fosters good labor relations to safeguard the rights and welfare of employees. We hold regular labor-management meetings and establish an open communication channel for immediate response and handling of employees' concerns and opinions. At the same time, we formulate policies that give full consideration to the rights and interests of our employees to ensure that they are adequately protected. In order to create diversity at workplace, we encourage employees to strike a balance between life and health, and proactively build a sound relationship of mutual trust between management and employees. Even in the face of major operational changes, we would give notice in advance to personnel involved in accordance with the laws and regulations of the jurisdiction where we operate. There were no labor disputes between 2020 and 2023. We will continue to treat labor relations with openness, transparency and respect, and strive to create a harmonious and stable working environment where each employee can unleash his or her potential and achieve the common goals of individuals and the Company.

#### Communication channels

At least four labor-management meetings are held in our Taiwan factory every year, attended by representatives from both labor and management. There are seven management representatives, and fourteen labor representatives. The latter, plus one alternate representative, are elected by employees to voice their opinions.

Item	Description	Number of Meetings in 2023	Frequency
Labor-management meeting	<ol style="list-style-type: none"> <li>1. Explanation of the overall operational performance, which may prompt corresponding personnel policies to be reiterated and communicated, such as adjustments to work hours, annual maintenance, attendance measures, etc.</li> <li>2. Employee proposals such as adjustments to work hours, insurance, welfare initiatives, etc.</li> </ol>	6	Organized upon request. At least four meetings every year.



## 6.1.4 Building a Safe Workplace

### 6.1.4.1 Occupational safety and health management system

#### Occupational Safety and Health Committee

We understand that employees are our most valuable assets, therefore, we are committed to creating a safe and healthy work environment with zero occupational accidents. To achieve this goal, we strictly regulate safety and health management, prevent occupational injuries, protect company property, and ensure the safety and health of employees. To effectively manage environmental safety and health (ESH) work, we have established an Occupational Safety and Health (OSH) Committee, with the President of each factory serving as the chairman and professional personnel assigned responsibility for ESH management. The Committee supervises, inspects, and implements improvement measures in accordance with laws and regulations, and coordinates relevant departments to comply with laws, standards, and norms. To ensure the rights and interests of workers are fully protected, we have established labor unions in our Taiwan and China factories pursuant to law. The union appoints labor representatives to participate in the OSH Committee for the workers' voices to be fully considered and involved in the safety and health decision-making process. The Committee also formulates OSH 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.



#### Giant Group ESH management policy:

<b>Health and safety</b>	Set safety as our priority, carry out civilized production, eliminate occupational diseases and ensure employee health and safety.
<b>Prevention-oriented</b>	Create a comprehensive production safety accountability system, strengthen employee safety training management and implement a safety hazard prevention system.
<b>Risk control</b>	Promote environmental protection and hazard identification; assess relevant risks and opportunities; implement risk control measures for safety and health, air pollution, water pollution and waste; and enhance ESH management performance.
<b>Contractor management</b>	Urge contractors and visitors to become our partners in safety and health management to achieve the goal of zero accidents.
<b>Environmental protection</b>	Maintain the ecological balance, minimize environmental impacts and prevent major and catastrophic pollution incidents.
<b>Waste reduction and energy conservation</b>	Continuously reduce energy consumption, water usage and other resource consumption to minimize environmental pollution.
<b>Regulatory compliance</b>	Comply with national and local laws, regulations and other relevant provisions related to environmental, safety and occupational health.
<b>Continuous development</b>	Regularly evaluate the effectiveness of OSH, environmental protection and energy management systems with ongoing review and improvement.

OSH Committee

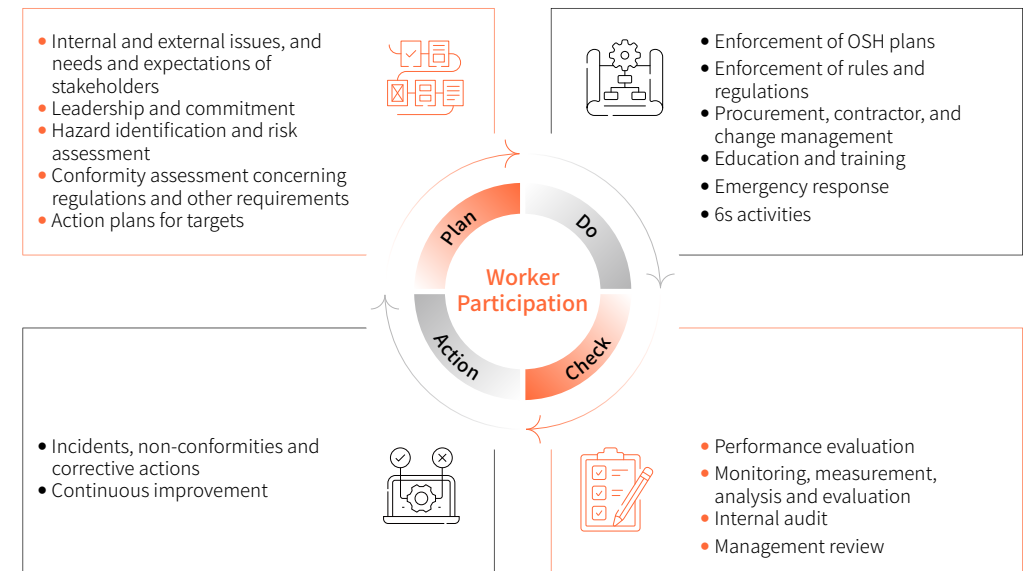
Taiwan factory	Tianjin factory	Kunshan factory	China factory	Electric Vehicle (Kunshan) factory
<ul style="list-style-type: none"> <li>Members: President / Union representative / Department heads / ESH personnel</li> <li>Number of members: Of the 20 Committee members, there are 7 union representatives (35%)</li> <li>Meeting frequency: Quarterly</li> </ul>	<ul style="list-style-type: none"> <li>Members: President / Administration Department / ESH Council / Department heads</li> <li>Number of members: Of the 16 Committee members, there is 1 union representative (6%)</li> <li>Meeting frequency: Weekly</li> </ul>	<ul style="list-style-type: none"> <li>Members: President / Department heads / ESH personnel</li> <li>Number of members: Of the 11 Committee members, there are 2 union representatives (18%)</li> <li>Meeting frequency: Weekly /Monthly</li> </ul>	<ul style="list-style-type: none"> <li>Members: President / Safety Director / ESH Section / Department heads</li> <li>Number of members: Of the 18 Committee members, there are 2 union representatives (13%)</li> <li>Meeting frequency: Monthly</li> </ul>	<ul style="list-style-type: none"> <li>Members: President / Safety Director / ESH Council / Section officers of each department / Labor representative</li> <li>Number of members: Of the 17 Committee members, there is 1 union representative (6%)</li> <li>Meeting frequency: Monthly</li> </ul>

OSH management system and operation

Since March 2021, our Taiwan factory has obtained TOSHMS:2007 (OHSAS 18001:2007) Occupational Safety and Health Management Systems certification, and adopted the Plan-Do-Check-Act (PDCA) management process for continuous improvement. In March 2020, we passed the certification and completely switched to the ISO45001:2018 (CNS 45001:2018) certification system.

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 Level 2 review in November 2023. China and Electric Vehicle (Kunshan) factories passed Level 3 review of the “Work Safety Standardization” in April 2020, while the management system of Tianjin factory 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 the local governments in accordance with local laws and regulations for risk control and management. The OSH management systems of our Taiwan and China factories cover all employees. At present, Taiwan, Kunshan and China factories have obtained ISO45001 Management System certifications, while Electric Vehicle (Kunshan) and Tianjin have scheduled to submit the applications in 2024, i.e., 60% of our factories have obtained the certifications. Each factory has its own OSH Committee to promote occupational health management tasks. Factories with ISO45001 certifications have established an internal OSH audit team, which has passed ISO45001 professional training and obtained certifications. Internal auditors are responsible for the formulation and promotion of annual OSH audit plans within the factory; rectification, tracking and verification of audit issues in various departments; and continuous improvement of the OSH system.

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. We value this auditing process and regard it as a crucial step in ensuring the Company's operations. Through audits, we are able to comprehensively assess the effectiveness of our OSH management system, identify and address potential issues, thereby improving the safety and health of our workplaces.

#### 2023 internal audits findings and improvement measures

Opertation	Number of Deficiencies	Deficiencies	Improvement Measures
Taiwan Factory	5	5.3 Roles, responsibility, and authority of the organization 6.1.2 Hazard identification and evaluation of risks and opportunities 7.3 Awareness 8.1 Operational planning and control 8.2 Emergency preparedness and response	<ul style="list-style-type: none"> <li>Issue an incident report for OSH corrections and preventive measures, and track the improvement progress</li> <li>Promote employee education and training</li> </ul>
China Factories (Excluding GEV)	7	8.2 Emergency preparedness and response (1 incident) 5.4 Consultation and participation of workers (1 incident) 8.1 Operational planning and control (5 incidents)	<ul style="list-style-type: none"> <li>Promote employee education and training, and increase worker participation through meetings</li> <li>Implement P-D-C-A cycle for improvements</li> <li>Carry out factory-wide improvement measures, and expand the scope to cover other deficiencies</li> </ul>

Completion rate of occupational safety and health proposals for Taiwan and China factories in 2023

100%

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 risk mitigation opportunities. Giant Group has created a channel 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 would be handed in to the Improvement and Standardization Committee simultaneously for review. 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 the plan progress would be monitored for management purpose. Our Taiwan and China factories have achieved 100% completion rate on proposals and actively implement the 6S mechanism, stressing the importance of occupational safety proposals and continuous improvement. All of these actions clearly demonstrate our emphasis on workplace safety and commitment to continuous improvement.

#### TOSHMS improvement plans - GTM

	2020	2021	2022	2023
Number of management plans	13	7	4	3
Number of management plans completed	12	6	4	3
Completion rate of management plans	92%*	85.7%*	100%	100%

Reasons for failing to achieve 100% completion rate in the past:

Note 1: In 2020, the plan of improving the unpleasant odors of equipment during testing was canceled after we opted for alternative equipment.

Note 2: In 2021, the auto-molding plan was decided against after further studies.

#### Regulatory compliance improvement (occupational health) - China factories

	2023
Number of management plans	24
Number of management plans completed	24
Completion rate of management plans	100%

#### 6S improvement cases

	Taiwan and China Factories			
	2020	2021	2022	2023
5S	635	754	630	774
Safety self-inspection and self-audit	498	442	697	641
6S	1,133	1,196	1,131	1,415

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

Note 2: GCT 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: Reasons for the increased 6S improvement cases in 2023: Increased incentives prompted employee participation.

### 6.1.4.3 OSH training

We constantly work on enhancing employees' occupational safety awareness. To this end, we have developed a comprehensive OSH education and training program following standard protocols. This program not only caters for new employees but also provides specialized educational content for existing employees to meet the needs of different groups and to comply with relevant regulations. Through these training programs, our goal is to raise every employee's awareness of occupational safety, ensure that they strictly adhere to relevant regulations, and build a safe working environment together.

#### Employee occupational safety training program

China Factories	New Recruits	Before joining the production line, employees shall pass three levels of training: factory level (video + materials + exam), department level (materials + exam), and workshop level (practical training + materials + exam). Training materials for new recruits cover topics of safety, fire, occupational hazards, etc. Only when they score 80 points or above in the exams can they be allowed to operate independently on their jobs. Employees failing to be qualified shall be retrained or transferred for re-education.
	Existing Employees	Occupational health education and training program is mapped out every year to provide occupational health training for all factory personnel. Every employee is required to participate in the training and test the effectiveness of their education and training through exams.
Taiwan Factory	New Recruits	ESH education and training commence when new recruits come on board. General training and exams would be given by occupational safety personnel while equipment operation is instructed by unit supervisor or designated personnel with oral exams and on-site observation to verify the effectiveness. Direct personnel are scheduled for education and training and competency assessment once their job scope is confirmed. They can only be allowed to work on the production line once they have obtained the qualification certifications.
	Existing Employees	ESH develops education and training programs every year, which include the monthly STOP 6 promotion (safety & health) and random questioning to enhance the safety awareness of all employees. Employees with certification requirements mandated by regulations would undergo regular training courses to maintain the validity of their certificates. For critical manufacturing processes, employees must be assessed by key personnel before they are allowed to work on the production line.

Statistics on the number of trainees and hours of education and training

Location	Quantitative Statistics								
	2020		2021		2022		2023		
	Total Number of Trainees	Total Number of Hours	Total Number of Trainees	Total Number of Hours	Total Number of Trainees	Total Number of Hours	Total Number of Trainees	Total Number of Hours	
Taiwan factory	12,200	6,697	10,820	6,111	33,421	12,953	30,366	10,424	
China Factories	Tianjin	190	380	298	596	1,002	711	3,416	10,922
	Kunshan	2,032	5,102	2,110	6,828	2,196	6,970	1,512	6,048
	China	207	3,794	319	6,190	89	1,284	2,350	4,750
	Electric Vehicle	772	11,813	1,146	21,354	883	15,483	778	5,068

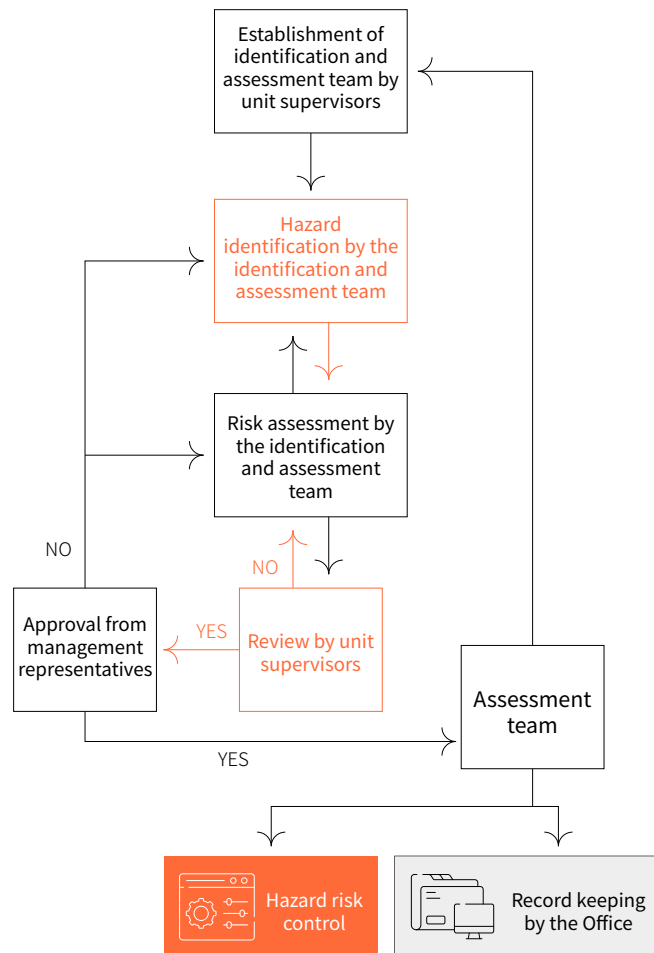


## 6.1.5 Occupational Safety Risk Management

### 6.1.5.1 Risk assessment and hazard identification

In Taiwan Factory, we carry out hazard identification and risk assessment, and formulate internal management rules and standards pursuant to ISO45001 OHS management system and government regulations. Unit supervisors would 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, safety risk classification and control, investigation and management of potential dangers, and internal rules concerning safety risk assessment and control.

#### Hazard identification and risk assessment process



#### Occupational hazard risk classification management

To secure the professional competency of risk assessment and identification personnel, we collaborate with professional agencies to carry out risk identification training annually. Taiwan Factory has implemented TOSHMS for more than a decade, using it for hazard identification with impact levels ranging from Level 5 (extremely high) to Level 1 (low). We also carry out continuous improvement on operational risk. In 2023, there was no risk identified as Level 4 and above while there were two risks below Level 3 with improvement opportunities. As for our China factories, the severity of hazards and the riskiness of operating conditions are evaluated based on risk identification by specialized personnel, thereby identifying different risk levels, i.e., significant, high, moderate, and low risks. Next, we adopt five approaches: engineering technology, safety management, education and training, personal protection, and emergency measures for hierarchy of controls, continuously improving and enhancing intrinsic safety to eliminate all sources of hazards in the workplace. The 2023 assessment results of our China factories revealed no significant risk, 116 major risks, 1,477 general risks, and 393 low risks. Emergency and management measures are formulated for each risk.

Number of Improvement Cases from 2023 TOSHMS Hazard Identification - Taiwan Factory

Impact Level	Quantity	Risk Issues
5 Extremely High Risk	0	None
4 High Risk	0	None
3 Moderate to High Risk	2	1. Solvents splashed into the eyes during paint spraying, causing hazards including eye redness, swelling, impaired vision, etc. 2. Hazards such as dizziness or poisoning from inhaling evaporated solvents for a prolonged period of time.
2 Moderate Risk	0	None
1 Low Risk	0	None

2023 Risk Assessment Results - China Factories

China Factories	Significant Risks	High Risk	Moderate Risks	Low Risk
GCM	0	39	104	175
GCK	0	27	185	165
GEV	0	13	1,069	33
GCT	0	37	119	20
Total	0	116	1,477	393

### Hazardous chemicals management and operating environment monitoring

We manage hazardous chemicals with extreme caution, ensuring compliance with safety standards and regulations to protect the safety of our employees and the reputation of the Company. We establish rigorous monitoring and management standards, provide training and education, and ensure that employees are equipped with the necessary skills to handle potential hazards. Additionally, we maintain stringent environmental monitoring and regularly test various parameters to ensure compliance with relevant laws and regulations, thereby maintaining a safe and healthy work environment and safeguarding the health and safety of our employees.

#### Management Policy

##### Taiwan factories

1. Area control within the solvent warehouse, including the appointment of dedicated personnel, explosion-proof surveillance systems, ventilation and exhaust systems, static grounding systems, spill containment trays, and the installation of flammable gas detectors (calibrated annually);
2. Chemical-related contingency drills;
3. Preparation of an inventory list for chemicals, regular review of Safety Data Sheet (SDS) and on-site placement of SDS;
4. Protective gear for operators;
5. Preparation of first-aid/medical supplies;
6. Semi-annual operating environment monitoring to ensure a safe working environment;
7. Adoption of new chemical management mechanisms.

##### China factories

1. Dedicated chemical and hazardous waste warehouses;
2. Certified operators, management by designated personnel and dual authorization with two locks;
3. Installation of video surveillance (explosion-proof) and access control systems on the premises;
4. Organization of drills for chemical spills, fires, and other emergencies;
5. Purchases of chemicals by warehouse personnel with approvals from relevant departments pursuant to factory standards, and the posting of Material Safety Data Sheets (MSDS) where the chemicals are to be used. Wearing of appropriate personal protective equipment provided in compliance with the laws to commence work. Relevant facilities within the warehouse must be explosion-proof and equipped with spill containment trays. Appropriate emergency supplies shall be provided at the entrance and regularly checked to ensure they are within their validity periods. Our China factories have commissioned qualified maintenance companies to inspect facilities within the chemical warehouse at least once a year to ensure that they stay in good condition, and to make necessary improvements in a timely manner. Operating environment monitoring: Qualified maintenance companies are commissioned once a year to conduct tests on hazardous factors (e.g., noise, dust, arc light, etc.) within the factory.

### 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. GTM 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 Workplace Accidents. Occupational injuries at GTM in 2023 can be categorized into 10 types, with cut, slash, or scrape, as well as fall and rolling being the majority. There was no false alarm in 2023, and corrections and improvement measures 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

Step 2

Step 3

Step 4

Step 5

Transport injured employees to hospital for immediate medical attention

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

Establish a task force for rescue and handling of the situation

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

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

Accident classification assessment:

Class A: dispatch of fire trucks and significant injuries (casualties); Class B: personal incident and incidents with certain severity; Class C: false alarm and incidents with no severity

### 6.1.5.3 Emergency response

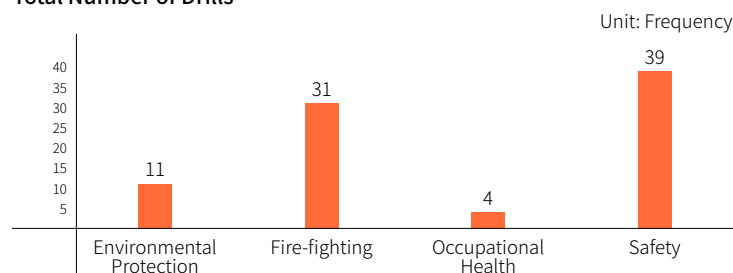
Every year, we develop and fully implement emergency drill plans in strict compliance with regulations and standards. These drills are designed to ensure that we can respond effectively to all kinds of emergencies, safeguard our employees and the Company, and secure the stable operation of production and business activities.

#### Statistics on the number of people and hours of emergency drills in 2023

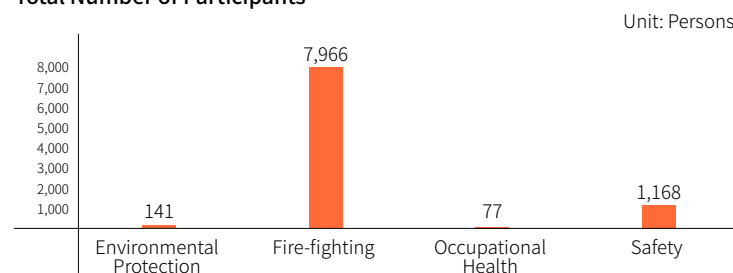
SBU/Item	Environmental Protection			Fire-fighting			Occupational Health			Safety		
	Total Number of Drills	Total Number of Participants	Total Hours	Total Number of Drills	Total Number of Participants	Total Hours	Total Number of Drills	Total Number of Participants	Total Hours	Total Number of Drills	Total Number of Participants	Total Hours
Total	11	141	101	31	7,966	7,952	4	77	109	39	1,168	1,479

Note 1: Including Taiwan and China factories

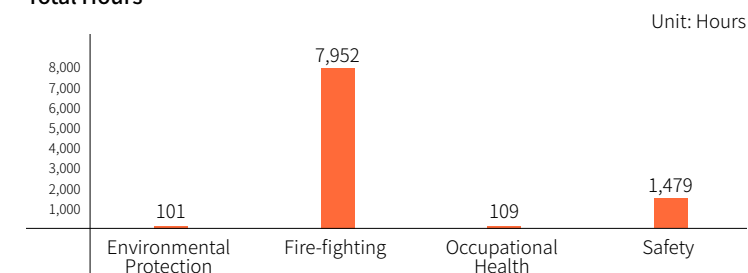
#### Total Number of Drills



#### Total Number of Participants



#### Total Hours



### 6.1.5.4 Safety and health management performance

#### Number of false alarms and occupational injuries

In 2023, there were no false alarms at Taiwan factories while there were seven similar incidents at our China factories. The said incidents had all been investigated and corrected accordingly. In 2023, there were 18 and 34 occupational injuries at Taiwan factories and China factories, respectively. They were mostly cut, slash, and scrape; mechanical injuries; and crushed or rolled up accidents. These statistics highlighted the importance of continued OSH commitment, as well as efforts towards ongoing improvement. Through safety training, stricter monitoring measures, and upgraded safety facilities, Giant can better protect the safety and health of our employees, and continually strive to reduce the incidence of workplace injuries, thereby fostering a safer and healthier work environment.

#### Improvement measures for 2023 false alarms

Factory	Type of Incident	Cause of Incident	Improvement Measures
China Factories	1 trip incident due to cables	Tripped over by the cables of handheld barcode scanner and resulted in fainting.	Cables shall not be left on the ground. They shall be coiled up.
	3 fire alarm incidents	1. Hairdryer in the rest room caught fire 2. The capacitor cabinet emitted smoke due to aging circuit breaker and poor heat dissipation of the capacitor cabinet 3. The deep fryer emitted smoke due to high temperature, aging electronic component, and improper switch settings	1. Remove the hairdryer and plan to replace the fans with air-conditioning systems 2. Replace the spring-type circuit breaker with one featuring a trip-free mechanism, change the connection wires, and replace the heat dissipation mesh as well as clean it regularly 3. Replace electronic components, and install independent switch for equipment
	1 incident of scratch	Unsafe behaviors of employees	Organize personnel education and improve the mistake-proofing mechanism of equipment
	1 incident of fall within the factory	Employees tripping over protruding screws at the edge of the wall	Organize factory-wide education, and inspect and remove screws on the floor
	1 incident of crushed injury	Arm crushed by a molding machine	Organize factory-wide education and change to two-handed operation

Note: False alarms excluded traffic accidents during commuting.

## Number of false alarms

Year	Taiwan Factory	China Factories			
		China	Electric Vehicle (Kunshan)	Tianjin	Kunshan
2020	1	1	2	3	2
2021	0	1	1	6	3
2022	4	1	0	1	3
2023	0	2	2	0	3

## Number of occupational injuries

Year	Taiwan Factory	China Factories			
		China	Electric Vehicle (Kunshan)	Tianjin	Kunshan
2020	11	18	5	5	10
2021	10	13	5	9	15
2022	18	17	8	3	6
2023	18	13	5	3	13

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

## Improvement measures for 2023 occupational injuries

Factory	Type of Injury	Cause of Incident	Improvement Measures	
Taiwan Factory	3 incidents of cut or slash	Improper operation /Equipment malfunction	<ol style="list-style-type: none"> <li>1. Improve the mistake-proofing mechanism of equipment</li> <li>2. Employee education and training</li> <li>3. Correction of operating standards</li> <li>4. Work area layout planning</li> </ol>	
	3 incidents of fall and rolling	Failure to pay attention to surroundings		
	2 incidents of pinched or rolled up	Unsafe behaviors of employees		
	2 incidents of bumping	Improper operation		
	2 incidents of tripping	Failure to pay attention to surroundings		
	1 incident of thermal burns	Failure to pay attention to surroundings		
	1 incident of collision	Improper operation		
	1 incident of falling object	Improper operation		
	1 incident of improper action	Unsafe behaviors of employees		
	2 incidents of crushed injury	Unsafe behaviors of employees/Equipment malfunction		
China Factories	1 incident of pinched or rolled up	Traffic accidents were all no-fault traffic accidents. The struck by object incident was caused by the unsafe state of object. The crush by heavy objects was due to unsafe behaviors of employee. Equipment false alarm was due to aging components and unreasonable causes. Other accidents were also caused by unsafe behaviors of employees	Organize employee education, improve the intrinsic safety of equipment, enhance employee safety awareness training, improve the fundamentals of equipment, and carry out self-inspection and self-audit for improvement	
	1 incident of struck by object			
	4 traffic accidents			
	2 incidents of equipment false alarm			
	2 incidents of thermal burns and crushed by heavy objects			
	3 other accidents			
	Electric Vehicle (Kunshan)	3 incidents of pinched	Unsafe behaviors of employees	<ol style="list-style-type: none"> <li>1. Organize factory-wide education and establish standard norms</li> <li>2. Improve the fundamentals of equipment, and carry out self-inspection and self-audit for improvement</li> </ol>
		1 off-site traffic accident	Unsafe behaviors of employees	
		1 incident of fall	Unsafe behaviors of employees	
	Tianjin	3 mechanical injuries	Non-compliance	Follow the operation standards
	Kunshan	4 incidents of pinched or rolled up	Unsafe behaviors of employees, non-compliance, lack of safety awareness	Improve the mistake-proofing mechanism of equipment, organize employee education and training, and improve the intrinsic safety of equipment
		1 incident of tripping		
		5 off-site traffic accidents		
1 incident of struck by object				
	2 incidents of equipment collision			

### Statistics on occupational accidents

Occupational accident statistics of Giant Group employees in 2023 are presented below. Numbers are based on data reported by each factory to the government. We have conducted rigorous analysis and tracking on occupational injuries occurred and taken follow-up measures pursuant to government regulations and our handling procedures. To this end, we have adopted corresponding preventive and improvement measures to reduce the risk of employee injuries. In addition, there was one occupational incident each at \*GTM and GCT with a fine exceeding NT\$100,000. Both factories have undergone equipment improvement. We will continue to strive for improvement in our occupational safety management.

\*Note 1: In July 2023, during the pre-treatment process of acid mist collection and treatment facilities at GCT, the pH meter reading in the neutralization tower and the actual measurement both failed to meet the standard. Thus, the Tianjin Ecology and Environment Bureau imposed a fine of RMB 30,000. Improvement measures: Employees shall follow the standard operations and be reviewed by supervisors. An automatic alarm device is installed on the facilities (sending alarms when the pH values failed to meet the standards). Employees shall check regularly using pH test strips to detect abnormalities in advance. Subsequent evaluations have led to the adoption of an automatic dosing system.

\*Note 2: When adjusting air ducts during the cutting operation, an employee at GTM had his right wrist pinched by the equipment. Upon investigations conducted by the government agencies, a fine of NT\$100,000 was imposed. Improvement measures: Safety switches are installed to the maintenance doors of the cutting machine. Similar facilities are inspected and improved accordingly.

### Occupational injury statistics between 2020 and 2023

Item	Factory	Taiwan Factory				China Factories															
						Tianjin				Kunshan				China				Electric Vehicle (Kunshan)			
Year		2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023
Total hours worked		5,507,328	5,142,112	5,327,040	4,767,096	1,375,289	1,705,618	1,952,695	3,172,321	6,053,367	6,739,693	6,095,567	6,625,051	2,281,343	2,626,058	5,346,078	3,413,547	2,298,793	2,678,099	2,891,189	1,868,844
Number of fatal occupational injuries (persons)		0	0	0	0	0	0	0	0	0	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	0	0	0	0	0	0	0	0	0
Number of serious occupational injuries (persons)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Severity rate of occupational injuries		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of recordable occupational injuries (persons)		11	10	18	15	0	0	3	3	11	16	6	8	20	13	17	11	7	6	9	7
Recordable disabling injury frequency rate (FR)		2.00	1.94	3.38	3.15	0	-	1.54	10.27	1.82	2.37	0.98	1.36	65.87	29.26	3.18	39.94	3.05	2.24	4.50	4
Number of working days lost (days)		98	132	107	274	0	-	26	39	224	714	162	187	292	185	305	45	98	171	61	39
Disabling injury severity rate (SR)		17.79	25.67	20.29	57.48	0	-	145.95	193.34	37.00	105.98	26.58	28.23	1,092.69	499.78	57.05	164.93	42.36	63.66	20.93	18
Frequency-severity indicator (FSI)		0.19	0.22	0.26	0.43	0	-	0.13	0.12	0.26	0.50	0.16	0.21	6.56	3.17	0.43	0.154	0.36	0.38	0.26	0.22

Note 1: - indicates data loss due to equipment upgrade.

Note 2: 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 3: 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 4: Number of working days lost (days): Number of persons × Number of working days

Note 5: Total hours worked: 8 hours × Number of persons × Number of working days

Note 6: Fatality rate of occupational injuries: Number of recordable occupational injuries (including the number of fatality) / Total hours worked × 1,000,000

Note 7: Severity rate of occupational injuries: Number of serious occupational injuries (excluding the number of fatality) / Total hours worked × 1,000,000

Note 8: Recordable disabling injury frequency rate (FR) = Number of disabling injury / Total hours worked × 1,000,000

Note 9: Disabling injury severity rate (SR) = Number of working days lost / Total hours worked × 1,000,000

Note 10: Frequency-severity indicator (FSI) =

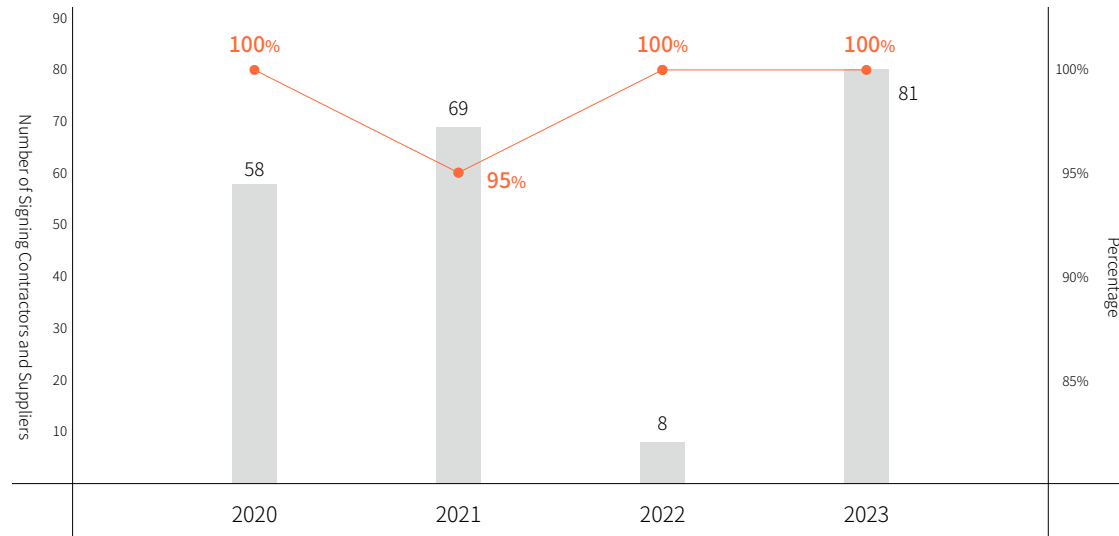
### 6.1.5.6 Contractor occupational safety management

#### Management policy

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 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 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 2023, a total of 111 seeded personnel of contractors at Taiwan Factory underwent contractor safety and health education and training. Suppliers are informed of relevant hazards and asked to sign the hazard notification at the guardhouse prior to entering our premises. Our occupational safety personnel enforce compliance with factory rules and audit factory access and the work of suppliers and contractors. In 2023, we identified five cases of non-compliance through the audits, with damage to parking shelters being the major items. Suppliers were immediately notified of the violations and improvements were made.

#### Number of contractors and suppliers signing the safety and health management rules - Taiwan Factory

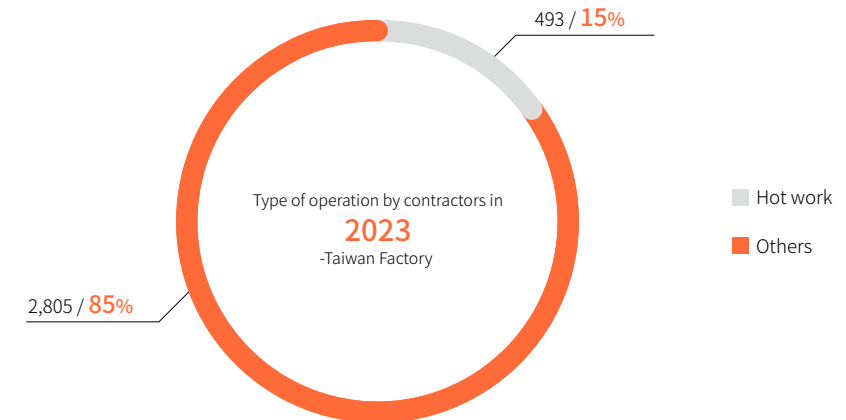
Year	Number of Signing Contractors and Suppliers	Percentage
2020	58	100%
2021	69	95%
2022	8	100%
2023	81	100%



In order to carry out safety management measures in high-risk areas where our contractors operate, such as the coating zones, we hold a preliminary meeting for hot work where we confirm the procedures and necessity of hot work, and assess and discuss related protective measures to ensure the work is conducted under safe conditions, thereby minimizing potential hazards and risks.

#### Type of operation by contractors in 2023 - Taiwan Factory

Type of Operation	Number of Operation	Percentage
Hot work	493	15%
Others	2,805	85%



### Contractor management and assistance programs in 2023

We require and assist our on-site contractors (e.g., security guards, cleaners, waste vendors, shops, catering staffs, etc.) to strictly adhere to 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, increasing convenience and willingness to participate in health checkups.

Location	Number of Personnel	Security Guards	Cleaners	Waste Vendors	Shops	Catering Staffs
Taiwan Factory		6	8	5	0	13
China Factories	Tianjin	5	0	2	18	18
	Kunshan	17	6	3	31	31
	China	7	4	2	24	24
	Electric Vehicle (Kunshan)	4	6	0	24	24

Note 1: China and Electric Vehicle (Kunshan) 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 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 Taiwan Factory can have health checkups with our employees on-site, thereby avoiding the risks of outbound transportation and increasing convenience and willingness to participate.



### Contractor education and training

To raise contractors' awareness of work safety, we hold regular contractor safety and health education and training sessions every year. Through these sessions, contractors are able to understand the safety requirements and communicate them accurately to their employees. Such training ensures that contractors and their employees possess adequate safety awareness, enabling them to comprehend and adhere to relevant safety regulations and procedures. When each worker has a clear understanding and sense of responsibility for construction safety, the overall safety level of the construction site would be enhanced, laying a solid foundation for the success of the project and the well-being of the workers.

### Contractor education and training in 2023

Location	Trainees	Direction and Purpose
Taiwan factory	Contractor's seeded personnel, in-charge persons and internal and external supervisors	Contractor education and training: (1) Hazard notification - Taiwan factory provides safety and health education and training to contractors entering the factory. The target audience comprises contractors' seeded personnel, who then disseminate the training to their colleagues, ensuring operational safety and 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.
China Factories		(2) Work safety agreement - clarify the responsibilities of parties involved (3) Internal rules on operation management - clarify operational process and safety requirements

Training Effectiveness in 2023			
Taiwan	Kunshan	China	Electric Vehicle (Kunshan)
83 contractors attended with 111 participants	44 contractors attended with 70 participants	42 contractors attended with 69 participants	14 contractors attended with 26 participants

Note 1: Current practice at Tianjin factory: Safety training is provided to individual contractor entering the factory when he/she signs the work safety agreement. Tianjin factory plans to hold safety education and training sessions for all contractors in 2024.



## 6.1.6 Employee Health Management

### 6.1.6.1 Occupational health services

We are deeply aware of the crucial role employee health plays in corporate development. Therefore, we are committed not only to providing a safe working environment but also taking a series of measures to promote the health and well-being of our employees. We offer a comprehensive health program that includes regular health checkups, special health checkups, health education and health management services to ensure that our employees are in good physical condition. We also care about the mental health of our employees. We provide psychological counseling and support services to help them cope with the stresses of work and life. We believe that only when employees are physically and mentally healthy can they fully unleash their potential and make greater contributions to the Company's development. Thus, we will continue to focus on and invest in employee health management to create a healthy, happy and energetic working environment for our employees.

### Health checkups

#### General Health Checkups

Item	Factory	2020	2021	2022	2023	
Health checkups for new recruits	Taiwan	Number of eligible employees	193	245	359	46
		Number of employees examined	193	245	359	46
		Participation rate	100%	100%	100%	100%
Health checkups for employees	Taiwan	Number of eligible employees	2,437			2,588
		Number of employees examined	2,437			2,588
		Participation rate	100%			100%
	Kunshan	Number of eligible employees		331	129	49
		Number of employees examined		331	129	49
		Participation rate		100%	100%	100%
Health checkups for management	Kunshan	Number of eligible employees	10	10	9	9
		Number of employees examined	10	10	9	9
		Participation rate	100%	100%	100%	100%

Note 1: General health checkups are conducted once every three years at GTM.

Note 2: Special health checkups had not been conducted at GCT prior to 2019 (inclusive).

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

#### Management policy

Employee health care and health promotion	Occupational injury and disease prevention	Employee physical and mental health protection	Infectious diseases prevention	Employee health quality enhancement
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#### Special Health Checkups

Factory	2020	2021	2022	2023	
Taiwan	Number of eligible employees	940	908	1,038	934
	Number of employees examined	940	908	1,038	934
	Participation rate	100%	100%	100%	100%
Tianjin	Number of eligible employees	711	678	855	843
	Number of employees examined	711	678	855	843
	Participation rate	100%	100%	100%	100%
Kunshan	Number of eligible employees	537	559	651	671
	Number of employees examined	537	559	651	671
	Participation rate	100%	100%	100%	100%
China	Number of eligible employees	912	811	966	534
	Number of employees examined	912	811	966	534
	Participation rate	100%	100%	100%	100%
Electric Vehicle (Kunshan)	Number of eligible employees	339	345	421	205
	Number of employees examined	339	345	421	205
	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 GTM, health management is divided into four levels and implemented in accordance with regulatory guidelines.

### Classification management for special health checkups in 2023 - Taiwan factory

Hazard Category	Health Management							
	Level 1		Level 2		Level 3		Level 4	
	Persons	%	Persons	%	Persons	%	Persons	%
Noise	368	45.2%	339	41.7%	0	0%	107	13.1%
Dusts	390	83.5%	77	16.5%	0	0%	0	0%
n-Hexane	17	100%	0	0%	0	0%	0	0%
Manganese and its compounds	99	96.1%	4	3.9%	0	0%	0	0%
Ionizing radiation	4	80%	1	20%	0	0%	0	0%

### Improvement Schemes

Health guidance - For employees classified as 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.

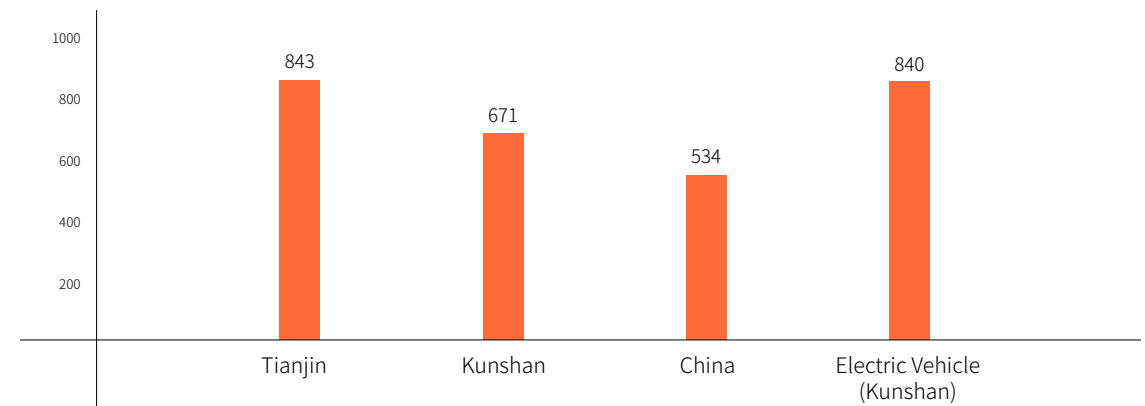
#### Note 1:

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 physicians 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 physicians 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 physicians 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 physicians upon comprehensive reviews.

Hazard types of 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 2023, a total of 2,888 employees were subject to the health management system.

### Classification management for special health checkups in 2023 - China factories

Location	Factory	Persons
China Factories	Tianjin	843
	Kunshan	671
	China	534
	Electric Vehicle (Kunshan)	840
Total		2,888



### Prevention of occupational diseases

At Taiwan factory, we have established four major programs for labor health protection pursuant to laws and regulations, namely the “high risk of illness induced by excessive workload”, “prevention of ergonomic hazards”, “maternal health protection at workplace” and “prevention of rights violation at work.” These programs involve regular tracking and monitoring of employees at risk, targeting the prevention of cardiovascular disease due to long working hours, musculoskeletal disorders, and workplace violence, as well as the maternal and child protection. To address risks associated with different job characteristics, especially abnormal workloads resulting from shifts, night shifts, and prolonged working hours, Taiwan factory adopts an assessment model to evaluate high-risk employees on items including the risk of cerebrovascular and cardiovascular diseases and musculoskeletal disorders for a period of ten years. In 2023, neither Taiwan factory nor our China factories reported any cases of occupational diseases, indicating the effectiveness of these health programs. These efforts help to safeguard the health and safety of employees and positively contribute to creating a better work environment.

#### Four major labor health protection programs - Taiwan factory

Item	Actions	Follow-up Items/People			
		2020	2021	2022	2023
<b>High risk of illness induced by excessive workload</b>	Workload assessments of “overworking assessment and preventive counseling” were carried out for employees with more immediate risks, such as at a risk level > 20% based on the Framingham Risk Score or with 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	17 people	12 people	5 people	21 people
<b>Prevention of ergonomic hazards</b>	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	1 person	1 person	97 people
<b>Maternal health protection at workplace</b>	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	19 people	20 people	16 people	23 people
<b>Prevention of rights violation at work</b>	The Company conducts hazard identification and risk assessment for rights violation 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 violation 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 GTM's contracted hospital. Their occupational physicians provide regular on-site health services every month, with service hours posted on the bulletin board for employees in need of a consultation to come in freely. In addition, we arrange regular thematic health guidance and assessments, with several employees participating each time, to further enhance their health awareness and management capabilities. These measures aim to provide employees with comprehensive health services, ensuring they can stay on top in both work and life.

Taiwan Factory					
Programs	Description	Year/Effectiveness			
		2020	2021	2022	2023
On-site occupational physicians	General health education and counseling, health promotion, individual health consultation for abnormal cases, follow-up management, tracking of blood pressure and glucose	614 participants	443 participants	396 participants	441 participants
Injury and disease management	Monitoring of occupational disaster cases	6 participants	7 participants	2 participants	3 participants
Ergonomic hazards prevention program	Investigation of musculoskeletal pain and monitoring of abnormal cases	Monitoring: 31 participants	Monitoring: 4 participants	Monitoring: 25 participants	Monitoring: 12 participants
Prevention of illness induced by excessive workload	Risk assessment and monitoring of high-risk cases	Monitoring: 15 participants	Monitoring: 50 participants	Monitoring: 44 participants	Monitoring: 52 participants
Health protection program for female employees	Employee during pregnancy and within one year after childbirth: Hazard assessments at the workplace, health consultation, and health risk assessment and health education by occupational physicians	Health interview: 77 participants	Health interview: 48 participants	Health interview: 50 participants	Health interview: 50 participants
Health seminar	Seminars on AED and health-related topics	0	0	0	0

Note 1: The decrease in the number of participants for on-site occupational physicians in 2021 was due to the change of physicians, who stressed the importance of employees' overall well-being rather than a single health condition, and allowed a longer consultation time per person; thus, the total number of participants had decreased.

China Factories					
Factory	Programs	2020	2021	2022	2023
Kunshan	On-site health services	40	30	0	3
	First aid training	45	51	16	54
China	Health seminar	25	26	10	24
Electric Vehicle (Kunshan)	Occupational health training	725	762	870	580
	First aid training	N/A	N/A	10	9

Note 1: These programs have yet to be implemented at GCT






## 6.2 Diverse Environments

### 6.2.1 Diverse Sponsorship of the Cycling Teams

As a leader in the cycling industry, we shoulder the responsibility and opportunity to shape the future. Our vision is to build a society that promotes gender equality and culture inclusiveness, and provides equal sporting opportunities. Our sponsorships for individuals and teams under the brands of Giant, Liv, and CADEX have actively demonstrated this vision. We not only support multi-ethnic cycling team, men's and women's teams, and triathletes, but also sponsor and nurture various forms of cycling events. Through these sponsorships, we are committed to building a diverse and inclusive cycling community. The emergence of women's teams inspires more women to participate in cycling sports, highlighting the importance of gender equality in the field of sports. The existence of diverse ethnic teams showcases cultural diversity and rich exchanges, and promotes inclusion among different communities. Ironman triathlon teams demonstrate the courage and perseverance of extreme challenges, encouraging individuals to push beyond their limits. We believe that through these sponsorships and support, we not only promote the development of cycling sports but also make substantial contributions to creating a more equal and diverse society. This is not only our vision but also our commitment. We look forward to collaborating with these teams to create a more inclusive and equitable future together.

#### Team sponsorship by our brands

Brand	Sponsorship Type	Teams/Athlete
	Multi-ethnic cycling team	1 team
	Men's Teams/Athletes	8 teams
	Women's Teams/Athletes	6 teams
	Ironman Triathlon	10 triathletes
	Rider training program	2 projects

#### 1. Multi-Ethnic Cycling Team

Cycling Team	Introduction
THE BLACK FOXES	THE BLACK FOXES is an international collective comprised of cycling enthusiasts who are passionate about outdoor activities and committed to welcoming people from diverse backgrounds into outdoor spaces. This is a mission we can all support. Together with its partners, THE BLACK FOXES takes necessary steps to establish a cycling industry where a diverse multicultural leadership reflects the world we live in and provides opportunities to connect and experience the joy of cycling.

#### 2. Men's Teams/Athletes

Cycling Team	Introduction
Team Jayco-AlUla	The Jayco-AlUla team boasts several top riders, including Simon Yates, who has won the Vuelta a España and stood on the podium at the Giro d' Italia; Michael Matthews, a former winner of the sprinter's green jersey at the Tour de France; and Dylan Groenewegen, a superb sprinter with 58 career victories. Team members also include Lawson Craddock and Matteo Sobrero, the U.S. and Italian time trial national champions. With a combination of sprinters, climbers, time trialists, and general classification contenders, the team is poised to reach new heights with its most complete lineup.
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 (GFORT). This year the team has 10 riders competing in a variety of races, including downhill, enduro, XC, gravel and E-MTB.
Gravel	Giant's Gravel Team is comprised of a group of riders from various sporting backgrounds who have collectively answered the call of gravel - the new trend in the cycling world. They are a team of enthusiasts for vast spaces, magnificent routes, and the camaraderie of sports, which often entails not only facing challenges of the track and environment but also surpassing competitors. All of them train and compete on Giant's Revolt series gravel bicycles.
Ambassador Community	From the roads to the trails and across the globe, our ambassador team is dedicated to community and connection. 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 inspire us to ride.

## Column Story

## Cycling Team

## Introduction

## FREERIDE

From the steep cliffs of the Utah desert to urban street contests around the world, Freeriders travel the globe in search of the best trails and competition venues to showcase their skills.

## Giant Columbus Cycling Team

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 a very well-known origin of cycling sport in northern Taiwan. Based in the Tianmu area, it operates out of the Gaochang Bicycle Shop and stands as the only club team dedicated to this competitive sport on a shop basis. Having more than 80 registered members with 50 plus active members, the Columbus Cycling Club regularly organizes group rides with over 30 participants each week.

## Action Cycling Team

Action Cycling Team (or the Chien-Ching Cycling Team in Chinese) was established in 2010. With elites from the Taichung Cycling Team at the core, the Team aims to cultivate more top-level professional cyclists in Taiwan. The team coach Jui-Te Hsu stated that the Chinese character “Chien” in the team’s name symbolizes continuous progress to align with international standards one day and have the proficiency to compete with athletes from Asia and even around the world by elevating Taiwan’s cycling talent pool and competitiveness. The word “Ching” is to remind cyclists to double their efforts and perseverance, pushing forward relentlessly towards international standards, and striving for championship titles in all competitions.

## Sheng-Shan Chiang

Sheng-Shan Chiang, aka “Dan”, is a three-time downhill gold medalist at the Asian Championships. With more than 20 years of riding, it can be said that he grew up accompanied by “mountain biking”. As a rider, Dan has dabbled in various MTB events, and focused on EWS events in recent years. At the same time, he has been nurturing Taiwan’s potential young MTB riders as a coach, hoping to take these young riders to the world stage together.

## Awards in 2023

- Team Jayco-AlUla won 17 bike races
  - Giant Factory Off-Road Team rider Carter Woods won the U23 men’s XC race at Round 7 of the UCI Mountain Bike World Cup
  - Cole Paton scored a top-five finish at the Leadville and now 3rd overall in Life Time Series!
  - XC and gravel racer Cole Paton scored a top-five finish at the Leadville 100 mountain bike race, moving up to third place overall in the Life Time Grand Prix series
  - Cole Paton won the USA Cycling MTB Marathon National Championship in Auburn, Alabama
  - GRAVEL members Brendan Johnston and Cole Paton won Life Time GP finale, and stood on the series podium
  - Ting-Wei Li of Giant’s Columbus Cycling Team was champion yet again in the 96 Cycling Race WuLing
- Having just won the championship at 2023 The Road to Taiwan KOM - Summer on June 26, “Xindian Ultraman” Ting-Wei Li immediately joined the 96 Cycling Race WuLing on July 1 and claimed victory with 2 hours, 30 minutes, and 43.01 seconds, which is his best performance ever in WuLing races.

## TOM DUMOULIN is officially the Giant brand ambassador:

Giant announced a new partnership with former Giro d’Italia winner and time trial world champion [Tom Dumoulin](#). Now retired from professional racing, the 32-year-old Dutchman will serve as a global ambassador for Giant, sharing his passion for cycling and inspiring more people to ride. “I have a really special relationship with Giant,” Dumoulin said. “During the best years of my career, Giant supported the teams I was riding on. My best results were always on Giant bikes, so it goes without saying that I’m thrilled to now be an ambassador for the brand.”

As a global ambassador for Giant, Dumoulin will attend events with Giant and participate in various cycling disciplines including road, gravel and mountain bike. He’s also working as a television analyst for NOS, the Dutch public broadcasting network, and is involved with a new bike park near his home in Maastricht, Netherlands. The Tom Dumoulin Bike Park features a 3.2km road course along with mountain bike trails and a BMX track. It’s designed to help aspiring riders and racers train and gain experience in a safe environment.



## Women's Teams/Athletes

Cycling Team	Introduction
Liv ALUla Jayco	Liv will continue to be the technical partner of the Liv ALUla Jayco women's team in 2024. Female cyclists of Liv ALUla Jayco will compete in top road races, including the UCI Women's World Tour.
Liv RACING	Liv Factory Racing is a UCI World Cup cross-country (XCO, XCC) mountain bicycle team.
Liv Racing Collective	The Liv Racing Collective competes across multiple disciplines around the world. The women of the Liv Racing Collective ride Liv bikes to compete at national, continental and international road, triathlon, gravel, cyclocross and mountain bike races.
Liv Ladies AllRide	Ladies AllRide is a movement dedicated to fostering the community of female mountain bike lovers across the globe. Professional mountain biker and skills instructor Lindsey Richter travels the world, helping women to face their fears, believe in themselves and excel on the mountain bike. Together with her business partner Meredith Brandt (Grit Clinics, LLC), they run a series of inspirational mountain bike skills camps for women: Liv Ladies AllRide. Led by the best coaches in the business, these events bring women together in a welcoming environment to enrich their lives on and off the bicycles.
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.
Ya-Yu Tsai	Currently holding a remarkable nine consecutive wins in Taiwan's National Mountain Biking Championship, Ya-yu has delivered outstanding performances in various domestic and international races over the years. Similar to being confronted with challenges in life, she tackles head-on the obstacles on off-road trails, finding solutions most fitting for herself. This is also one of the reasons she loves cycling. Ya-yu will continue to stay the course in the future and embrace more challenges together with Liv.

Note: Liv Racing is comprised of three distinct professional teams (Liv Factory Racing, Liv Racing Collective, and Liv ALUla Jayco) represented by women competing across various cycling disciplines in top-level races around the globe. We are committed to creating more opportunities and greater equality for women in professional cycling. We are also proud to be the one and only partner of the Enduro World Series (EWS) with an all-female team, registered at USA Cycling (USAC) and Union Cycliste Internationale (UCI).

## Awards in 2023:

- Alex Manly won stage two and took the lead at Tour Down Under!
- Team Jayco ALUla athlete Alex Manly won the second stage of Santos Tour Down Under on the local roads in Adelaide. The win put Manly in the lead of general classification by a thin margin with just one stage left in the race.
- Allysa Seely ranked third at World Triathlon Para Series Yokohama!
- Liv Racing Collective athlete Allysa Seely took home bronze at the World Triathlon Para Series in Yokohama, Japan, despite a collision during the cycling segment.
- Ronja Blöchlinger won U23 XCC in Lenzerheide!
- Liv Factory Racing athlete Ronja Blöchlinger took the victory at the U23 XCC in Lenzerheide with an impressive finish and retained her overall position and leader's jersey.
- Ronja Blöchlinger podiumed again at the XC World Cup in Lenzerheide!
- Liv Factory Racing athlete Ronja Blöchlinger earned her second podium finish at the XC World Cup, Lenzerheide in the U23 XCO.
- Linda Indergand won Swiss Bike Cup Gstaad and overall title!
- Liv Factory Racing athlete Linda Indergand secured a double triumph at the Swiss Bike Cup in Gstaad, Switzerland, with a win in the last race of the series and took the overall title.
- Ronja Blöchlinger podiumed twice at Snowshoe and took the overall leads!
- Ronja Blöchlinger won the U23 XCC and battled it out for an impressive second-place finish in the U23 XCO at Snowshoe, USA, taking the lead in both overall standings.
- Ronja Blöchlinger made history at Mont-Sainte-Anne!
- Liv Factory Racing athlete Ronja Blöchlinger secured a double victory at Mont-Sainte-Anne and won the overall in both the XCC and XCO.
- Radka Kahlefeldt on the podium at Ironman Cairns!
- Liv Racing Collective athlete Radka Kahlefeldt finished second at Ironman Asia Pacific Championships, delivering her personal best!
- With her first ride on EnviLiv in the new season, Ke-Xin Tseng won the gold medal in her first race at the 96 Cycling Race
- Switching to Liv's brand-new aero road bike EnviLiv for the new season, the Liv-sponsored cyclist Ke-Xin Tseng immediately won the first victory in the 96 Cycling Race on the 19th.
- At 2023 The Road to Taiwan KOM - Spring, Yen-Yi Ho won the men's championship while Ke-Xin Tseng secured the women's championship.

## Column Story

### Liv was once again a premier sponsor of the second Tour de France Femmes avec Zwift!

As a major partner of the Tour de France Femmes avec Zwift and sponsor of the white jersey for the best young rider, we are looking forward to encouraging more female riders to participate in higher-level competitions and step onto bigger stages!

Liv founder Bonnie Tu said, “Continuing our sponsorship of the Tour de France Femmes avec Zwift aligns perfectly with our commitment to helping advance women’s participation in cycling, and we look forward to signing on as a long-term partner. The success of the inaugural event has made us extremely proud because Liv has always aimed for female riders to understand and become aware that we have the potential to achieve our dreams and also the opportunity to participate in higher-level competitions.”



### 4. Triathlon

Giant Group extensively sponsors triathletes of different distances, including the Olympic distance of 51.5 kilometers, the Ironman 70.3 from 2020 (IRONMAN world champion Gustav Iden), and the Ironman 70.3 from 2021 (IRONMAN world champion and Tokyo Olympic gold medalist Kristian Blummenfelt), as well as many world-class triathletes with CADEX components. Additionally, we actively support athletes in other categories, including off-road triathletes and triathletes with disabilities. At the same time, through our premium component brand CADEX, we sponsor cyclists of other cycling brands.

Sponsored Athletes	Awards in 2023
Gustav Iden	· Blummenfelt won the Professional Triathletes Organization (PTO) Asian Open, finished second in the European Open and secured the third place in the US Open.
Kristian Blummenfelt	· Kristian Blummenfelt and Emma Pallant-Browne turned in impressive podium performances.
Emma Pallant Browne	· Lisa Tertsch finished fourth at the World Triathlon Championships in Pontevedra, Spain in 2023.
Lisa Tertsch	· Allysa Seely won bronze at the Para Triathlon World Championships, Spain.
Allysa Seely	· Radka Kahlefeldt finished second at Ironman Cairns.
Radka Kahlefeldt	· Yu Hsiao set new record in the 226km men’s category and won the championship with a time of 8 hours, 32 minutes and 08 seconds.
Yu Hsiao	· Rudy von Berg won IRONMAN Florida, smashing the previous course record held by the former world champion Gustav Iden.
Rudy von Berg	· Beth Potter secured her first-ever WTCS victory and won the WTCS finals. Having won three out of five events, she became the world champion in the 51.5-kilometer triathlon.
Beth Potter	
Tyler Mislawchuk	



## 5. Diversity in riding

Sponsored Programs	Description
Giant Grassroot Program	<p>Giant Group has launched the “Giant Grassroot Program”, sending young athletes selected from all over the world to Team Finisher training camp in Spain every year. In 2023, eight athletes from seven countries including Taiwan were sent to the two-week phase one training program. Based on their performance, two to four riders would be selected by the coaching team to participate in the phase two training in September. Finally, one rider would be chosen to stay with the team and take part in Finisher’s races for a full season in the following year. The program aims to provide opportunities for riders to progress to the world’s second-tier team Kern Pharma, or even to the world’s first-tier team Jayco-ALUla, after one or two years of training. Additionally, we schedule to launch the Liv Grassroots Program for young female riders in 2024.</p> <p>Resources available: Nutrition courses (including nutrition supplementation concepts before, during and after races), body fat testing, blood lactate testing (to check lactate accumulation concentration) to assess physical performance, maximal oxygen uptake testing, lactate tolerance, tests related to body health, sweat testing to determine fluid and electrolyte loss during rides, and calculation of hourly fluid replacement needs are arranged. These measures aim to help potential athletes understand their physical condition.</p>
Sprockids	<p>Giant USA sponsors Sprockids, which has 15 locations across the United States for school children ages between 5 and 18. The goal is to teach children that cycling is not only a recreational activity, but also a great way to develop skills, values and life strategies that can help achieve a balanced and healthy life.</p>

## Column Story

Giant Group firmly believes that creating social responsibility and a sustainable future is our mission. Since 2022, we have sponsored the Migration Gravel Race located in Maasai Mara, Kenya with participation from our local dealers. This exciting event is organized by the Amani Team with the aim of nurturing cycling talents in Africa. We not only support the race, but also sponsor the Amani House, providing accommodation for cyclists from East Africa and overseas. Additionally, we sponsor the Pump Track, providing athletes with a training environment. Understanding the significance of cycling for children, we sponsored bicycles worth US\$25,000 in 2023, and distributed them through the Amani Team to children, igniting new hopes and opportunities for them. We are committed to supporting outstanding cyclists worldwide, promoting inclusive communities, and making positive contributions to change.



## 6.3 Diverse Initiatives

### 6.3.1 Blueprint for Welfare Strategy

Theme	Vision	Focus	Target and Partner	Social Impact	2023 Main Activity: Benefit/Output/Result
Climate philanthropy	We advocate for climate related welfare programs that educate people about climate change.	Environmental action and education	<ul style="list-style-type: none"> <li>Colleagues</li> <li>Cyclists</li> <li>The government and non-profit organizations</li> <li>Communities</li> </ul>	<ul style="list-style-type: none"> <li>Environmental conservation</li> <li>Ecological diversity</li> <li>Energy saving and carbon reduction</li> </ul>	(1) Plant nursery cultivation: Taiwan Reforestation Association and GEM (tree planting activities) (2) Clean-ups along the Chushui Coast at Yuanli in Miaoli County, Fazi River, Songbo Fishing Port, and Xishi Shore (3) Sustainable environment and climate forums  Number of events: 6 Cumulative attendance of each event: 600+ visitors Donation of goods: Gloves and burlap bags are rented instead of purchased.
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	<ul style="list-style-type: none"> <li>Cyclists</li> </ul>	<ul style="list-style-type: none"> <li>Increase the visibility of female athletes</li> <li>Promote self-realization of women</li> </ul>	(1) Cycling races for all ages (2) Women & children cycling at Ecuador and Kenya African (3) Cycling safety promotion and education (4) Bicycle culture exhibition and summer camp promotion (5) Donations of bicycles and related peripherals
Promote cycling	Giant Group brings young people to enjoy the fun of cycling through community involvement, and develops activities for all ages to pursue their passions and initiate the cycling trend.	Promotion of cycling activities 1. Rides 2. Bicycle education - Safety education - Culture education	<ul style="list-style-type: none"> <li>Children</li> <li>Teenagers</li> <li>The public</li> <li>Students</li> </ul>	<ul style="list-style-type: none"> <li>Promote healthy living</li> <li>Promote cycling culture</li> <li>Enhance safety education and awareness</li> <li>Nurture talents</li> </ul>	Number of events in 2023: More than 28 sessions (project-based instead of individual sessions) Cumulative attendance of each event: 15,000+ visitors Donation of goods: Bicycles, safety helmets, related peripherals, YouBike souvenirs, and others.
Social welfare	To contribute to the society for support received, Giant actively engages in various charitable activities to assist disadvantaged groups, as well as cultivates talents for a positive social impact.	1. Help the disadvantaged groups 2. Industrial talent cultivation: Industry-academia collaboration	<ul style="list-style-type: none"> <li>Disadvantaged groups</li> <li>Student</li> </ul>	<ul style="list-style-type: none"> <li>Help the disadvantaged groups</li> <li>Provide employment opportunities</li> <li>Enhance workplace competence</li> </ul>	<ul style="list-style-type: none"> <li>Positive social impact: Support underprivileged groups, orphanages, and rural schoolchildren; reduce risks of disadvantaged families; and organize donations.                Number of events in 2023: 14 times with goods or cash donations</li> <li>Talent cultivation                Industry-academia collaboration, education cooperation, internship opportunities, and vocational training campus programs: Internship applications from Dajia Industrial Senior High School, National Taiwan University of Science and Technology, National Cheng Kung University, National Changhua University of Education                Number of projects in 2023: 8 projects with 6 internships (YouBike) and more than 100 beneficiaries</li> </ul>

## 6.3.2 Climate Philanthropy

### 2023 Beach clean-ups for climate philanthropy

Cleaning over a hundred kilograms of [marine debris during the beach clean-ups along the Chushui Coast at Yuanli in Miaoli County](#). AIPS and the Yuanli Coast Protection Association teamed up for the beach clean-up at Chushui Coast, with nearly 100 colleagues taking actions to participate in environmental protection. Working together, they successfully cleared up to 780 kilograms of marine debris from the Chushui Coast area. Following the event, participants became more proactive in using eco-friendly utensils and bags in their daily lives, and reduced the use of disposable chopsticks by approximately 1,100 pairs per month. Participants shared their thoughts on the experience. They felt that riverside cleaning went beyond the stereotype of trash picking and tidying up the environment, and hoped to expand the duration and scope of future activities to ensure more coastal litter could be removed. They have all pledged their support for the next event, continuing to contribute to environmental protection.



### Taiwan factory “Riverside Clean-up: River Protection X Sustainable Generation” Fazi River clean-up

Taiwan factory and Yuanli Coast Protection Association jointly organized the [2023 Chill Live Beach Clean-up Go event](#). This year, the event attracted over 400 volunteers with some brought their families to participate. The coastline was littered with styrofoam, discarded fishing nets, and various bottles and cans. Volunteers donned gloves, grabbed tools such as shovels and garbage bags, and started from the Songbo Fishing Port up north along the coastline. After more than 4 hours of cleaning, they collected a total of 466 kilograms of trash and 163 kilograms of recyclables. The event originated from our previous employee road running event, which involved running from our factory to the Songbo Fishing Port. Witnessing the increasing amount of trash along the route, they decided to organize a beach clean-up, hoping to contribute to marine environment preservation.

### Giant Group Tree Planting Program: [Cultivating a greener future](#)

Since 2022, Giant Group has collaborated with Taichung City Government and the Taiwan [Reforestation Association](#) to plant fire-resistant trees in order to reduce the occurrence of wildfires on the slopes of Dadu Mountain in Taichung. This initiative aims to restore the forest ecosystem and thereby enhancing the quality of life. The plant cultivation event held by the Taiwan Reforestation Association is not merely about tree planting but also symbolizes an important step of Giant Group towards ecological sustainability and community well-being. We were honored to have Ms. Bonnie Tu, the Chairperson of Giant Group, took part in the activity. We also encourage every employee to take small actions and start making changes for the planet through internal mobilization. Enthusiastic volunteers from Giant Group worked as a team to cultivate “Chinese banyan”, a native tree of Dadu Mountain, and plated 2,655 pots in a short span of three hours.



## Sustainable 22

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 2022 by launching the Sustainable 22 initiatives within the Group. In 2023, we formally established the “Giant Group Sustainability Seeded Team” in order to expand and uphold the sustainability spirit within the organization. The Team aims to unite the creativity and strength of employees in creating a more profound sustainability impact. We hold Sustainable 22 sharing meetings with our subsidiaries around the world, and share ESG experiences of our employees twice a year.

Simplify	Educate	Localize
Carbon reduction initiatives must be simple to implement, as employees are less likely to resist and more willing to comply. Understanding “human nature” is the key.	Employees need to be educated, and communications shall include: Why? What? And How? Education takes time to produce results.	Each country or city has its own regulations or customs, and sales companies and manufacturing factories may have different cultures. Aligning with local practices would facilitate communication.

The themes of sharing meetings are energy saving, circulation and low carbon commuting.

Theme	Low-level Investment	Moderate-level Investment	High-level Investment
Energy Saving	<ul style="list-style-type: none"> <li>Turn off water/electricity</li> <li>Encourage the use of stairs</li> <li>Use of water-saving/energy-saving devices</li> <li>Air conditioning/heater temperature control</li> <li>Purchase of green power: (Available: UK sales company has chosen Greenpoint as the source of electricity)</li> </ul>	<ul style="list-style-type: none"> <li>Replace bulbs with LED lights</li> <li>Install sensors on lights/water faucets</li> <li>Replace old appliances</li> <li>Air conditioning control unit</li> <li>Regular equipment maintenance</li> </ul>	<ul style="list-style-type: none"> <li>Install solar energy (Available: Giant factories)</li> <li>Adopt energy management systems (Available: Giant factories, Taiwan sites)</li> <li>Renovate offices with effective temperature control/lighting management (Available: in Netherlands factory)</li> </ul>
Practice	Reduce	Reuse	Recycle
Circulation	Stop using disposable tableware <ul style="list-style-type: none"> <li>Stop providing bottled water</li> <li>Reduce food waste</li> <li>Use electronic files or cloud files to minimize printing.</li> <li>Use hand dryers</li> <li>Use Forest Stewardship Council (FSC) business cards (implemented in Japan sales company) or e-business cards (implemented in Giant Headquarter)</li> </ul>	Reuse printing papers, envelopes and cardboard boxes <ul style="list-style-type: none"> <li>Share tools or office supplies</li> <li>Purchase refurbished furniture</li> <li>Employee second-hand fair (implemented in Giant Headquarter and Hungary factory)</li> <li>Provide mugs and water bottles for new recruits (orientation gift pack) (implemented in Giant France sales company)</li> </ul>	Garbage sorting <ul style="list-style-type: none"> <li>Metal/battery recycling (implemented in Australia sales companies)</li> <li>Use of wooden display in the showroom (implemented in Germany sales company)</li> </ul>
Promote	Encourage Cycling	Encourage Low Carbon Commuting	Future Direction
Low Carbon Commuting	Provide parking space <ul style="list-style-type: none"> <li>Bicycle/gear rental program</li> <li>Provide incentives/insurance</li> <li>Bike purchase subsidy</li> <li>Organize employee rides</li> <li>Install sensors on employees' bicycles to record cycling to work (implemented in in Netherlands factory)</li> </ul>	Provision of shuttle services <ul style="list-style-type: none"> <li>Encourage car-pool commuting</li> <li>Work from home 2~3 days per week (implemented in Germany and UK sales companies)</li> <li>Phase out fuel cars (implemented in Polska and UK sales companies)</li> <li>No parking space for automobiles (implemented in Japan sales company)</li> <li>Install charging piles (implemented in France and UK sales companies)</li> </ul>	Increase the functions of Ride Life app, allowing employees to record cycling distance and redeem prizes <ul style="list-style-type: none"> <li>BMWC Day promotion (cycling, bus ride or MRT, walking and carpooling)</li> <li>Encourage the use of low-carbon transportation for business trips</li> </ul>

Building on our Sustainable 22 initiative, we are delighted to share the results of our efforts to reduce waste and conserve valuable resources. At Giant Group, we recognize the serious threat that food waste and excessive consumption of water pose on the environment and climate. To address the issue of food waste, we initiated a “Eat Up” program. Starting with office employees, they can pack and bring home leftover food from lunch at cafeteria on weekdays to share with their families. By reducing kitchen waste, we minimize the generation of harmful greenhouse gases such as methane, thus helping to mitigate climate change.

At our manufacturing factories worldwide, 1,639 employees participated in the program in 2023. To reduce food waste, we improved cafeteria menus and offered incentives. Thanks to the enthusiastic participation of our employees, the monthly rice consumption per person decreased by 13.6%, and the average kitchen waste per person was down by 34%.

In terms of water conservation, we have retrofitted faucets with shower-type fixtures, saving 450 metric tons of water annually. In addition, we have adjusted the flush volume of toilets from 5 liters to 3 liters, saving an additional 607.5 metric tons of water annually.

By reducing food waste and conserving water resources, we can all create a more sustainable future for the next generation.

In terms of supporting sustainable development, reducing carbon emissions is our top priority. We actively explore various improvement options, including reducing paper usage and waste disposal.

In 2023, our global team implemented various effective measures. In the office, we promoted duplex printing, reduced paper size (from A4 to A5), used electronic communication, and set limits on paper usage for each department. These efforts significantly reduced paper consumption from 1,564 packs in 2022 to 717 packs in 2023, surpassing the original 2023 reduction target of 934 packs.

As for our factories worldwide, we replaced paper-based inspections with QR code scans, including the first checklists, material requisition forms, and equipment maintenance cards. This change resulted in a reduction of 182,200 sheets of A4 paper in 2023, equivalent to a carbon emission reduction of 1,411 kilograms.

In addition, we have begun implementing waste sorting, resource recycling, and use of communal trash bins instead of individual trash cans at our subsidiaries worldwide. These changes allowed us to achieve an average waste reduction of 44.62% per bicycle produced.

By implementing carbon reduction initiatives in our daily operations, we not only bring positive changes to Giant Group but also have a significant impact on the planet. We are proud to inspire others to join us in creating a more sustainable future together.

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.

Spread across six countries

Countries	Quantity
Cameroon	10
Ecuador	60
Guatemala	110
Kenya	150
Madagascar	60
Tanzania	110



### 6.3.3 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.

**"Liv is an example. It's not an exception."** Bonnie Tu, the chairperson of Giant Group, encourages more industry partners to join hands and develop the blue ocean of women's cycling.

In her speech at the 2023 Bicycle Leadership Conference (BLC) in the United States, Bonnie Tu introduced her role in founding Liv, a women's bicycle brand, and designing bicycle apparel specifically for women. With Liv celebrating its 15th anniversary, Bonnie Tu continues to tirelessly advocate for female cycling. Through her influence, she hopes to seriously address the needs of and provide suitable equipment to female cyclists worldwide. She also encourages more industry partners to collaborate in reaching out for the blue ocean of women's 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 around 1,400 members in 2023, up 45% year-over-year from 740 members in 2022, 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 encourage women to grasp every opportunity.

### 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. In 2023, LivDay continued with the theme of “A Great Weekend Ride! Let's Party!” from the previous year and organized three LivDay riding events scheduled for May and September 2023, and January 2024. To encourage more women to experience outdoor riding, our events focused on four key elements: Challenge, Safety, Atmosphere, and Camaraderie. We aimed to create an environment where participants can Ride, Play, Photograph and Eat. We invited all friends to join us, move forward together, challenge ourselves, and enjoy the joy of riding!

### 2023 Liv LAVA Queen Duathlon in Taipei

In order to promote women's cycling, 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. The first “[Liv LAVA Queen Duathlon in Taipei](#)” was held in 2023, 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.



## 6.3.4 Promote Cycling

We will continue to enhance the accessibility and safety of cycling. We are committed to promoting cycling culture through community events, advocacy programs, and educational workshops. We firmly believe that these efforts will inspire more people to take an interest in cycling, making it a popular sport and mode of transportation. We are actively promoting cycling not only in Taiwan but also in other regions. We provide comprehensive cycling education, including safety and cultural awareness, to establish a safe, healthy, and sustainable cycling community and industry.

### 6.3.4.1 Cycling activities

We promote the adoption of cycling not only in various regions but also as part of people's daily lives. Through cycling events, we encourage participation in a wide range of unrestricted activities, thereby enriching people's lives. The use of bicycles not only brings more equitable transportation options to cities but also reduces disparities between urban areas. This makes it easier for residents to go to work, school, and other social activities, thereby improving their quality of life and social engagement. Through cycling, we have made progress in urban transportation and also encouraged people to be more active and involved in city life.



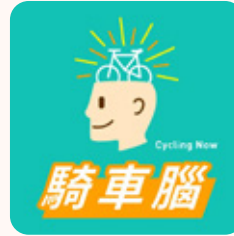
#### Cycling promotions around the world in 2023

Region	Theme	Participant	Links and Events
Taiwan	Promotion of YouBike	General Public	Promoted riding during the Dajia Mazu Pilgrimage Organized YouBike rides on June 3, the World Bicycle Day
China	Bicycle for Kids	Children and Teenagers	Through teaching activities, we assisted children aged 3 to 12 in learning how to ride safely and experiencing the fun of cycling.
China	Coming-of-age ceremony	Teenagers	At Southeast University in Nanjing and Duke Kunshan University, we organized cycling activities for teenagers aged 16 to 18 as part of their coming-of-age ceremony. The purpose was to encourage them to challenge themselves, complete the rite of passage, foster a team spirit, and guide them towards embracing a green lifestyle.
Simba for Kids at Kenya	Riding in Africa	Children	<a href="#">Simba for Kids</a> , the after-school center near the AMANI House, taught children how to ride bicycles with sponsored bicycles.
Joy Riders at Kenya	Riding in Africa	Children	Children near the Kibera slum spontaneously joined the bicycle training club after school. With <a href="#">bicycles sponsored by Giant</a> , they were given the opportunity to develop an interest in cycling, which could potentially change their lives.
Ecuador, South America	Teach women and children to ride	Women and children	Liv brand ambassadors in Ecuador were involved in <a href="#">charity work</a> , assisting in teaching children from single-parent and divorced families how to ride bicycles.

## Column Story

### Column Story: Cycling Now!

Since June 2022, the podcast “Cycling Now!” has been releasing monthly episodes covering various aspects of cycling, including history, race introductions, bike selection for beginner, safety tips, and more. This program allows audience to gain relevant knowledge through listening. Whether you are a seasoned cyclist or a beginner, we welcome you all to join us in discussing “cycling”! We share various cycling tips, stories, and in-depth observations. Pedal along, feel the breeze, and let’s ride out your story together!



### 2023 monthly topics of Bicycle Elementary School

2023	Monthly Topics
January	Ten Lessons for Beginners: Making Friends While Cycling - Where to Meet Cycling Enthusiasts?
February	Ten Lessons for Beginners: Group Cycling Etiquette - Once Learned, I Can Cycling around the Island~
March	Ten Lessons for Beginners: The Art of Riding with a Cycling Partner - How to Advance from Amateur to Pro
April	Ten Lessons for Beginners: How to Enjoy a Ride
May	The Art of Refueling: When to Drink Water and When to Eat While Cycling?
June	Games On~ What Are the Cycling Races?
July	The Art of Time Management: For moms - How to Juggle Parenting and Cycling
August	The Art of Choice: Your Bike Saddle Isn't for Sitting
September	Share the Beauty of Cycling with Your Kids
October	Exploring the World on Bikes: The Africa You've Never Known
November	The Cool Behind-the-Scenes Crew at Cycling Races
December	Clipless shoe: Are They for Style or Comfort?

### Column Story: Giant Traffic Day at GHM

The annual “[Giant Traffic Day](#)” organized by Giant Group Hungary Manufacturing has been a success since its inception last year, and Giant Group is thrilled to announce that it will become a recurring event, aiming at engaging local students and educating them about traffic safety while highlighting the joy of cycling.

This year’s event was attended by over 150 students and more than 50 individuals, creating a vibrant and energetic atmosphere. To expand the reach of Giant Traffic Day and cater to a wider age group, we collaborated with the Researchers’ Night. This allowed students to have fun while acquiring essential cycling and traffic skills in an easy way.

To make the day even more enjoyable, we organized cooking and cookie baking contests, as well as various sports activities such as table tennis, teqball, soccer, and, of course, more cycling activities.

We look forward to continuing to ignite children’s passion for cycling through this traditional event. It also provides us with a great opportunity to attract more attention and involve more children. Through traffic safety education and cycling experiences, we hope to create a safer and more sustainable environment for the next generation.



### 6.3.4.2 Bicycle education

Education promotion is mainly carried out by the Cycling Life-Style Foundation, Cycling Culture Museum and YouBike. The promotion provides comprehensive courses, including bicycle safety and bicycle culture education, to help students understand riding safety and bicycle culture. Bicycle safety education emphasizes the enhancement of students' safety awareness and skills in order to reduce the risk of traffic accidents. At the same time, we encourage students to learn during cycling, developing problem-solving abilities, confidence, and decision-making skills. With this philosophy, we are committed to creating a safe, healthy, and growth-oriented bicycle culture.

Bicycle culture education is also an essential component of our bicycle education promotion. By delving into the diverse forms and cultural backgrounds of bicycles, students are guided to understand the evolution of bicycles in different eras and regions, as well as their significance in society and culture. We encourage students to participate in diverse riding experiences to deepen their understanding and love for cycling activities. At the same time, we emphasize the values of bicycle culture, including environmental protection, health, socialization, and sustainability, and encourage students to build a more diverse and active cycling community through sharing riding experiences and exchanging cultural perspectives.

Through educational programs like this, we aim to establish a more inclusive and vibrant cycling community, providing students with a safe, enjoyable, and growth-oriented riding environment.



#### [Cycling Life-Style Foundation](#)

##### Vision of the Foundation

To promote Taiwan as a Cycling Paradise entails advocating for a new cycling culture, urging the government to create safe and bike-friendly riding environments, and encouraging people to embrace the quality and healthy leisure lifestyle that cycling offers, thereby abandoning personal transportation in favor of bicycles for commuting and realizing the vision of a Cycling Paradise.

- Highlights of the Foundation's activities
- Spread the joy of cycling
- Drive the popularization of cycling
- Encourage round-the-island cycling and promote related certificates
- Promote "bicycle safety" education, starting with children
- Assist the public sector in creating a more bicycle-friendly riding environment
- Use riversides bicycle rentals to promote a healthy leisure life



#### [Cycling Culture Museum](#)

The Cycling Culture Museum is the first museum to explore the world of bicycles through interactive technology and the aesthetics of workmanship. The museum houses a collection of antique bicycles and presents various facets and cultural developments of bicycles through installation art, movies and a wide range of immersive devices. It leads visitors to new perspectives and unlimited imagination of the world of bicycles through hands-on experiences.

- Fall in love with cycling. Start here!

The Cycling Culture Museum is a cultural venue constructed by Giant Group. The museum contains a variety of exhibitions include history, science, road and mountain biking, city environment, and more, as well as VR experience and cycling-themed theater. It is a new landmark for cultural exchange.

- Cycling Paradise - Taiwan

Through genuine experiences, we inspire people to fall in love with cycling, hoping that Taiwan would become the ultimate cycling destination in the world, where people think of Taiwan when they think of cycling.





## 2023 bicycle education programs

Organizer	Theme	Participant	Description
YouBike	Bicycle safety promotion, on-site services	Students, general public	<p>Promotion of cycling safety by YouBike at 38 schools with 280 sessions, conveying the concept of safe cycling to school children and citizens (Taiwan: schools of all levels in Taichung City, Tainan City, Chiayi City, Kaohsiung and Pingtung.)</p> <p>The course includes:</p> <ol style="list-style-type: none"> <li>(1) Introduction of bicycle types (including electric-assisted bicycles and e-bikes)</li> <li>(2) Components of a bicycle</li> <li>(3) Pre-ride safety checks and adjustments</li> <li>(4) Tips for cycling</li> <li>(5) Common mistakes in cycling</li> <li>(6) Guidelines for using a YouBike</li> <li>(7) Cycling etiquette for urban and riverside rides</li> </ol>
Cycling Life-Style Foundation	Cycling safety education	Student	We visited 50 schools to convey the concept of correct and safe cycling to students of junior high schools, elementary schools and senior high schools in Taipei City and New Taipei City.
Cycling Culture Museum	Cycling culture education	Students, general public	<ul style="list-style-type: none"> <li>· In 2023, the Cycling Culture Museum supported domestic cultural development with               <ol style="list-style-type: none"> <li>(1) Spending on operations: NT\$29.75 million</li> <li>(2) Number of visitors: 18,790 people</li> <li>(3) Volunteer team: 45 people</li> </ol> </li> <li>· Cycling Culture Museum - Permanent exhibition hall visits</li> <li>· Cycling Culture Museum - Operated by the volunteer team</li> <li>· Summer Camp for Little Promoters of Bicycle</li> <li>· National Science and Technology Council (NSTC) - KISS SCIENCE “From manufacturing to museums - Decoding bicycles”</li> <li>· Taichung Municipal Dongshan Senior High School - “Green Energy, Comfort, Dual-Wheel Dance” talent summer camp</li> <li>· Tanzi Branch of Taichung Public Library - “Making Cycling a Daily Routine: This Is What Cycling Is Like” seminar</li> <li>· 100th Anniversary Celebration of National Library of Public Information - Bicycle Theme Exhibition</li> <li>· Won the award of “Taichung Original Design” organized by the Cultural Affairs Bureau of Taichung City Government and participated in the “2023 Creative Expo Taiwan”</li> <li>· Collaboration with school and educational institutions - bicycle culture promotion and industry introduction courses</li> <li>· AUO Museum of Sidadun Kiln: “Let’ s Go! Little Cultural Iron Man” joint event</li> <li>· Tanzi Branch of Taichung Public Library - “Making Cycling a Daily Routine: This Is What Cycling Is Like” seminar               <ul style="list-style-type: none"> <li>- National Changhua University of Education: High-quality talent development program for enterprises</li> <li>- Taichung Municipal Dongshan Senior High School: “Green Energy, Comfort, Dual-Wheel Dance” talent summer camp</li> <li>- Department of Business Administration of National Taiwan University: Summer camp</li> </ul> </li> </ul>

### 6.3.5 Social Welfare

Giant Group has been established for more than 50 years. We have been very fortunate to succeed in marketing the “Giant” brand all over the world and develop into the world’s leading bicycle brand in terms of revenue. During our course of development, Giant Group has been continuously thinking about ways to utilize corporate resources to engage in meaningful and valuable social welfare activities in order to fulfill our social responsibility. Besides promoting cycling, cycling education and bicycles, 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.

Giant Group not only focuses on developing the bicycle industry but also actively participates in supporting disadvantaged communities through social welfare activities. We recognize that bicycles serve as an important means of transportation and lifestyle for certain disadvantaged groups. Therefore, we provide bicycles, related accessories, and cycling skills training to help these groups better integrate into the society, improve their quality of life, and enhance their autonomy. Through these efforts, we aim to bring about real changes and assistance to these groups, while promoting social inclusion and tolerance at the same time, thus realizing the ideals of social welfare.

#### Social welfare activities in 2023

##### Talent development

Talent Development Activity	Theme	Participant	Links and Events
Industry-academia collaboration with universities and colleges in Taiwan	Youth training, industry-academia collaboration	Industry-academia collaboration with National Taiwan University of Science and Technology (NTUST), National Cheng Kung University (NCKU), and Dajia Industrial Senior High School	<ul style="list-style-type: none"> <li>· Cultivated AI visual talents through NTUST’s Professional Master’s Program</li> <li>· Cultivated mechanical and electrical engineering talents through NCKU’s Professional Master’s Program as a win-win solution to schools and the industry</li> <li>· Fostered on-site technical talents for the bicycle industry</li> </ul>
Cycling Culture Museum	Bicycle culture and industry knowledge	Taichung-Changhua-Nantou Regional Branch, Ministry of Labor - Campus Career Programs	In order to help students of junior/senior high schools and vocational senior high schools gain early insights into the industry trends and workplace dynamics, the Taichung-Changhua-Nantou Regional Branch, Ministry of Labor invited the Cycling Culture Museum to take part in the “Industry Experiences for Successful Employment: Campus Career Program.” Students from the Taichung-Changhua-Nantou regions were arranged to visit the permanent exhibitions of the Cycling Culture Museum as well as took courses on the introductions of works at the cycling industry, Giant Group and the Cycling Culture Museum.
Cycling Culture Museum	Bicycle culture and industry knowledge	National Changhua University of Education x 104 Job Bank - Top Talents Cultivation Program for Enterprises	National Changhua University of Education collaborated with 104 Job Bank to organize the “Top Talents Cultivation Program for Enterprises” with Chia-Hao Wang, the Director of Cycling Culture Museum, being the lecturer. The courses focused on bicycle science, production processes, as well as industry and Group introductions, and targeted students from the College of Science and Engineering, aiming to promote knowledge related to the bicycle industry. The courses concluded with end-of-term presentations on topics chosen by students concerning the future of bicycles, followed by comments from the lecturer.

##### Caring for the disadvantaged

Social Welfare Activities	Participant	Links and Events
Ride Like King	Disadvantaged groups	<ul style="list-style-type: none"> <li>· For every 500 kilometers cycled, a Buffalo bicycle was donated to the World Bicycle Relief.</li> <li>· Collaborated with our partner World Bicycle Relief and donated Buffalo bicycles to communities and people in need.</li> <li>· Donated 500 Buffalo bicycles</li> </ul>
Kunshan Charity Association built a charity community on Wujiang Road	Disadvantaged groups	<ul style="list-style-type: none"> <li>· GEV participated in the building of a charity community</li> <li>· 20 e-bikes</li> </ul>
Second-hand bicycles donation	Disadvantaged groups	<ul style="list-style-type: none"> <li>· Donated second-hand bicycles to underprivileged groups, orphanages and rural schoolchildren</li> <li>· 150 second-hand bicycles</li> </ul>
Gear donation	Teenage groups	<ul style="list-style-type: none"> <li>· GBD donated personal gears including helmets, jerseys, and pants to schools with cycling clubs to sponsor equipment for teenagers.</li> <li>· 190 helmets, 548 pairs of jersey and pants, 361 pairs of socks and 50 pairs of gloves.</li> </ul>



# About this Report

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## About this Report

This is Giant Group's 2nd non-financial report, issued in electronic form in both English and Chinese with the purpose of conveying more accurate and specific information to stakeholders who are concerned about the sustainable development of the Group. We would like to thank all stakeholders for your interest in and support of the Group. The contents of this report refer to guidelines from the Global Reporting Initiative (GRI), the Task Force on Climate-related Financial Disclosure Recommendations (TCFD recommendations) and the Sustainability Accounting Standards Board (SASB). We detail the Group's sustainability strategy, with performance, practices and management approaches in environmental, social and governance (ESG) as well as human rights dimensions disclosed in separate chapters. Through this Report, we aim to engage in constructive communications with stakeholders and jointly build a vision and blueprint for a sustainable society.

### Reporting Period

This report disclosed data and performance for the period from January 1, 2023 to December 31, 2023, the same as the annual financial report. Reports are issued on a yearly basis.

### Reporting Boundary

This report covers the Giant Group, with a focus on our major operating sites 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 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 confirm 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 prepares 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](mailto: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

Boundary Issues	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	◐	◐	-	-	◐	-	◐	-	◐	◐	◐	◐	-	-	-



## Management Approach

### Giant Group's Management Approach to Material Issues

Financial Performance	
<b>Commitment</b>	<ul style="list-style-type: none"> <li>In order to maintain the stability and growth of financial performance, we enhance our competitiveness through diversification, product/service innovation and R&amp;D, and ESG development to achieve sustainable operation</li> </ul>
<b>Long-term goals</b>	<ul style="list-style-type: none"> <li>2030 goal: Maintain stable long-term growth in revenue and profitability</li> </ul>
<b>Achievements in 2023</b>	<ul style="list-style-type: none"> <li>Consolidated revenue amounted to NT\$76.95 billion in 2023, down 16.4% compared to 2022, but up 9.8% compared to the pre-pandemic level in 2020. Gross margin stayed relatively flat at 22.06%.</li> <li>The annual sales growth of our operations in China exceeded 60%. Liv, the brand targeting the female market, contributed to 9% of the Group's overall sales growth in 2023. CADEX, the high-end bicycle component brand, enjoyed a significant growth of 10-digit revenue.</li> </ul>
<b>In-charge department</b>	<ul style="list-style-type: none"> <li>Global Finance Center</li> </ul>
<b>Management metrics</b>	<ul style="list-style-type: none"> <li>Prepare annual budgets and set financial KPIs for each SBU</li> <li>Review operating results and progress against annual budget of each SBU in the monthly business performance meeting</li> <li>SBU's achievement of financial KPIs as one of the criteria for performance appraisal</li> </ul>
<b>Positive and negative impacts</b>	<ul style="list-style-type: none"> <li>Positive: Product or technology R&amp;D and innovation facilitate the development and application of industry technology</li> <li>Positive: Paying taxes help to support infrastructure and social welfare</li> <li>Positive: Business integrity improves net income and profits of investors</li> </ul>

Risk Management	
<b>Commitment</b>	<ul style="list-style-type: none"> <li>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</li> </ul>
<b>Long-term goals</b>	<ul style="list-style-type: none"> <li>2030 goal: Integrate the Group's risk control structure</li> <li>2030 goal: Refine the implementation of operational impact analysis and risk assessment</li> </ul>
<b>Achievements in 2023</b>	<ul style="list-style-type: none"> <li>The Group's risk management policy was established in the Board meeting in March.</li> <li>Inventory management was reported to the Board and the Audit Committee in March, May, August and November.</li> <li>The Group's risk management was reported in the Board meeting in December.</li> <li>The Internal Audit Office performed regular and random audits of the internal control system with audit results reported by the Chief Audit Officer to the Board and the Audit Committee in March, May, August, November and December to assist the management and the Board with ensuring operational efficiency, financial reporting accuracy, and legal compliance, as well as promoting the sound operation of the Company.</li> </ul>
<b>In-charge department</b>	<ul style="list-style-type: none"> <li>Strategy Planning Office</li> </ul>
<b>Management metrics</b>	<ul style="list-style-type: none"> <li>Regular weekly/monthly meetings</li> </ul>
<b>Positive and negative impacts</b>	<ul style="list-style-type: none"> <li>Positive: Business integrity improves net income and profits of investors</li> <li>Negative: Misuse of data and invasion of privacy</li> <li>Negative: The Company's operational activities affect climate change and extreme weather</li> <li>Negative: Resource consumption leads to pollution emissions which affect human health, species or ecosystems</li> <li>Negative: Human rights impact from violation of labor conditions</li> <li>Negative: Occupational injuries result in permanent physical and mental impairment</li> </ul>

### Customer Relationship Management

<b>Commitment</b>	<ul style="list-style-type: none"> <li>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</li> </ul>
<b>Long-term goals</b>	<ul style="list-style-type: none"> <li>2030 goal: Closure rate of customer complaints within 7 days</li> <li>2030 goal: Continuously implement measures to protect customers' personal information</li> </ul>
<b>Achievements in 2023</b>	<ul style="list-style-type: none"> <li>The in-charge unit followed the standard procedure to provide an initial response to consumers within 24 hours of receiving a complaint and reached a consensus on how to handle the case.</li> <li>Measures implemented to prevent a recurrence of customer complaints:</li> <li>Internalize customer complaint cases for case studies in training and share them in the complaint system.</li> <li>Direction of internal process improvement based on cases.</li> <li>No customer privacy violations.</li> </ul>
<b>In-charge department</b>	<ul style="list-style-type: none"> <li>Customer Service and Technical Support Group / Business Division / Global ASQA</li> </ul>
<b>Management metrics</b>	<ul style="list-style-type: none"> <li>Customer satisfaction survey</li> <li>Customer complaint investigation form</li> </ul>
<b>Positive and negative impacts</b>	<ul style="list-style-type: none"> <li>Positive: Product or technology R&amp;D and innovation facilitate the development and application of industry technology</li> <li>Negative: Misuse of data and invasion of privacy</li> <li>Negative: Resource consumption leads to pollution emissions which affect human health, species or ecosystems</li> </ul>

### Innovative Products and Services

<b>Commitment</b>	<ul style="list-style-type: none"> <li>Through cooperation with external experts and internal innovations, we continue to cultivate our R&amp;D momentum and strengthen R&amp;D investment to promote the development of new products, technologies and services, and lead the industry in cross-innovation</li> </ul>
<b>Long-term goals</b>	<ul style="list-style-type: none"> <li>2030 goal: Disclose carbon footprint data (model/frame/coating/OBC) when designing new products</li> <li>2030 goal: Expand the operation and increase the rides of public bicycles</li> </ul>
<b>Achievements in 2023</b>	<ul style="list-style-type: none"> <li>In 2023, we completed the carbon footprint calculation and self-declaration of TCR ADPR 0D DI at GTM while the carbon footprint inventory of e-bikes was carried out at GEV. These data would be the basis for the development of carbon footprint calculation models for new products in the future.</li> <li>By the end of 2023, YouBike has more than 90,000 bicycles at 7,000 stations for an average of more than 400,000 rides per day. In 2023, the total number of rides was 130 million, with a cumulative total number of 750 million rides, surging 30% compared to 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.</li> <li>Reduced plastic in product packaging and developed various sustainable materials.</li> </ul>
<b>In-charge department</b>	<ul style="list-style-type: none"> <li>Global R&amp;D and Design Center / YouBike</li> </ul>
<b>Management metrics</b>	<ul style="list-style-type: none"> <li>ISO14067 calculation and self-declaration of data and product carbon footprint verification plans</li> <li>Number of YouBike rentals</li> <li>Continuous tracking and correction through monthly ESG PDCA meetings at Headquarters</li> </ul>
<b>Positive and negative impacts</b>	<ul style="list-style-type: none"> <li>Positive: Product or technology R&amp;D and innovation facilitate the development and application of industry technology</li> <li>Positive: Continuous value creation for upstream or the industry</li> <li>Positive: Product or service contributes to environmental benefits (energy saving/carbon reduction/water saving/ pollution reduction/recyclability)</li> <li>Negative: Misuse of data and invasion of privacy</li> <li>Negative: The Company's operational activities affect climate change and extreme weather</li> <li>Negative: Resource consumption leads to pollution emissions which affect human health, species or ecosystems</li> </ul>

### Brand Management

<b>Commitment</b>	<ul style="list-style-type: none"> <li>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</li> </ul>
<b>Long-term goals</b>	<ul style="list-style-type: none"> <li>2030 goal:</li> <li>Continuously provide innovative and diverse bicycle products for different consumer segments to maintain our leading position in the industry</li> <li>Actively promote the new cycling culture movement, provide diversified bicycle services, and work together with the public to create a sustainable future</li> <li>Stay in the top 10 of "Best Taiwan Global Brands" with continuous growth in brand value</li> </ul>
<b>Achievements in 2023</b>	<ul style="list-style-type: none"> <li>Ranked in the top 10 of "Best Taiwan Global Brands" for 15 consecutive years.</li> <li>Ranked No. 6 in 2023 Best Taiwan Global Brands with a record-breaking brand value of US\$790 million, and the highest brand value in Taiwan's health and sports industry.</li> <li>Giant Group ranked 21st in the Corporate Knights' Global 100 in January 2024.</li> </ul>
<b>In-charge department</b>	<ul style="list-style-type: none"> <li>Global Branding and Marketing Center</li> </ul>
<b>Management metrics</b>	<ul style="list-style-type: none"> <li>Review and adjust marketing program priorities every year</li> <li>Improve the exposure and precision of disclosures from the Group and product marketing communications</li> <li>Enhance the planning and execution of key projects based on internal and external feedback</li> </ul>
<b>Positive and negative impacts</b>	<ul style="list-style-type: none"> <li>Positive: Continuous value creation for upstream or the industry</li> <li>Positive: Business integrity improves net income and profits of investors</li> <li>Positive: Invest resources to improve the environment or quality of life for the community or disadvantaged groups</li> </ul>

### Sustainable Supply Chain

<b>Commitment</b>	<ul style="list-style-type: none"> <li>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</li> </ul>
<b>Long-term goals</b>	<ul style="list-style-type: none"> <li>2030 goal: All key suppliers with ISO14064 certifications</li> <li>2030 goal: All key suppliers join the BAS</li> <li>2030 goal: 25% carbon reduction by key suppliers of the BAS</li> <li>2030 goal: Local suppliers exceeding 90%</li> <li>2030 goal: 90% of first-tier suppliers complete the ESG/human rights risk assessment</li> <li>2030 goal: 85% of first-tier suppliers complete the ESG/human rights risk audit</li> </ul>
<b>Achievements in 2023</b>	<ul style="list-style-type: none"> <li>All key suppliers signed the Code of Conduct.</li> <li>A total of 75 suppliers of the cycling industry joined the BAS, along with 8 sponsor members, including internationally renowned brands, media and non-profit organizations, to jointly drive the developments of ESG initiatives.</li> <li>12 monthly member meetings on sharing best practices and benchmarking, with instant feedback based on personal experience.</li> <li>The Supplier Code of Conduct and Supplier Commitment Letter were distributed to 223 suppliers in Taiwan, and 162 suppliers had signed and returned the documents, resulting in a 73% response rate.</li> </ul>
<b>In-charge department</b>	<ul style="list-style-type: none"> <li>Global Manufacturing Center - Integrated Procurement</li> </ul>
<b>Management metrics</b>	<ul style="list-style-type: none"> <li>Supplier data management, including contracts, audit results, ISO verification reports, etc.</li> <li>BAS member information</li> <li>Continuous tracking and correction through monthly ESG PDCA meetings at Headquarters</li> </ul>
<b>Positive and negative impacts</b>	<ul style="list-style-type: none"> <li>Positive: Product or technology R&amp;D and innovation facilitate the development and application of industry technology</li> <li>Positive: Continuous value creation for upstream or the industry</li> <li>Positive: Reduce the use of non-renewable resources, preserve resources, and restore important habitats</li> <li>Positive: Product or service contributes to environmental benefits (energy saving/carbon reduction/water saving/ pollution reduction/recyclability)</li> <li>Negative: The Company's operational activities affect climate change and extreme weather</li> <li>Negative: Human rights impact from violation of labor conditions</li> </ul>

### Regulatory Compliance

<b>Commitment</b>	<ul style="list-style-type: none"> <li>Comply with laws and regulations of various countries externally and implement management rules and the code of conduct internally to minimize operational risks</li> </ul>
<b>Long-term goals</b>	<ul style="list-style-type: none"> <li>2030 goal: Continue to implement regulatory compliance and enhance employees' regulatory awareness</li> </ul>
<b>Achievements in 2023</b>	<ul style="list-style-type: none"> <li>Organized regulatory compliance courses on competition laws periodically in 2023.</li> <li>There were no violations of the competition law between 2019 and 2023.</li> <li>Obtained TIPS Level A certification in 2023 - Level A in promoting the use of intellectual property to generate operational benefits</li> </ul>
<b>In-charge department</b>	<ul style="list-style-type: none"> <li>Global Legal Affairs Center</li> </ul>
<b>Management metrics</b>	<ul style="list-style-type: none"> <li>Promotion at weekly/monthly meetings</li> <li>Education and training records</li> <li>Announcement and implementation of relevant systems</li> </ul>
<b>Positive and negative impacts</b>	<ul style="list-style-type: none"> <li>Positive: Paying taxes help to support infrastructure and social welfare</li> <li>Negative: The Company's operational activities affect climate change and extreme weather</li> </ul>

### Climate Strategy

<b>Commitment</b>	<ul style="list-style-type: none"> <li>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</li> </ul>
<b>Long-term goals</b>	<ul style="list-style-type: none"> <li>2030 goal: 25% reduction of GHG</li> </ul>
<b>Achievements in 2023</b>	<ul style="list-style-type: none"> <li>Achieved an absolute reduction in GHG Scope 1 + Scope 2 of 21% at operating sites in Taiwan.</li> <li>Taiwan Renewable Energy Certifications (T-RECs).</li> <li>Solar green power accounted for 11.7% of the Group's total electricity consumption.</li> </ul>
<b>In-charge department</b>	<ul style="list-style-type: none"> <li>Strategy Planning Office</li> </ul>
<b>Management metrics</b>	<ul style="list-style-type: none"> <li>ISO14064 GHG emission verification</li> <li>Continuous tracking and correction through monthly ESG PDCA meetings at Headquarters</li> </ul>
<b>Positive and negative impacts</b>	<ul style="list-style-type: none"> <li>Positive: Reduce the use of non-renewable resources, preserve resources, and restore important habitats</li> <li>Positive: Product or service contributes to environmental benefits (energy saving/carbon reduction/water saving/ pollution reduction/recyclability)</li> <li>Negative: The Company's operational activities affect climate change and extreme weather</li> <li>Negative: Resource consumption leads to pollution emissions which affect human health, species or ecosystems</li> </ul>

## Green Products

<b>Commitment</b>	<ul style="list-style-type: none"> <li>Develop energy-saving and recyclable products from design, enhance the environmental friendliness of products or services, and implement hazardous substances management</li> </ul>
<b>Long-term goals</b>	<ul style="list-style-type: none"> <li>2030 goal: Reduce coating layers and baking of products</li> <li>2030 goal: 100% recyclable materials in OBC saddles</li> <li>2030 goal: 50% recycled materials in OBC saddles</li> <li>2030 goal: 88% water-based coating</li> <li>2030 goal: Replace all solvent-based decals with UV resin decals</li> <li>2030 goal: 10,000 (pcs) reused service batteries</li> <li>2030 goal: Continuous improvement on the average energy efficiency of e-bikes</li> </ul>
<b>Achievements in 2023</b>	<ul style="list-style-type: none"> <li>Achievement rate of 87% for banning the use of plastic packaging materials.</li> <li>Achieved the replacement of solvent-based decals with UV resin decals.</li> <li>Completed the commercialization of uncoated carbon fiber process technology.</li> <li>Completed the carbon footprint calculation and self-declaration of TCR products.</li> </ul>
<b>In-charge department</b>	<ul style="list-style-type: none"> <li>Global R&amp;D and Design Center / HPB Business Division</li> </ul>
<b>Management metrics</b>	<ul style="list-style-type: none"> <li>ISO14067 Product carbon footprint</li> <li>Continuous tracking and correction through monthly ESG PDCA meetings at Headquarters</li> <li>New products meet standards and goals, and are launched on time</li> </ul>
<b>Positive and negative impacts</b>	<ul style="list-style-type: none"> <li>Positive: Product or technology R&amp;D and innovation facilitate the development and application of industry technology</li> <li>Positive: Reduce the use of non-renewable resources, preserve resources, and restore important habitats</li> <li>Positive: Product or service contributes to environmental benefits (energy saving/carbon reduction/water saving/ pollution reduction/recyclability)</li> <li>Negative: The Company's operational activities affect climate change and extreme weather</li> <li>Negative: Resource consumption leads to pollution emissions which affect human health, species or ecosystems</li> </ul>

## Diversity and Inclusion

<b>Commitment</b>	<ul style="list-style-type: none"> <li>Respect the uniqueness of each employee and uphold the values of diversity, inclusiveness and equality to create an equal and inclusive workplace</li> </ul>
<b>Long-term goals</b>	<ul style="list-style-type: none"> <li>2030 goal: Build a diverse and inclusive work culture with agile and efficient organizational operation</li> </ul>
<b>Achievements in 2023</b>	<ul style="list-style-type: none"> <li>In 2023, courses of human rights and prevention of human rights violation at workplace were arranged with a focus on the concepts of "Seeing the Differences + Communication and Dialogue + Equal Respect". The online courses conveyed the importance of gender respect to supervisors and employees of our Taiwan operations, aiming to build the right concept of a gender-friendly workplace and master appropriate methods of response.</li> <li>The percentage of female employees in STEM related positions was 31.75%.</li> <li>The percentage of disabled employees at our Taiwan operations reached 115% in 2023.</li> </ul>
<b>In-charge department</b>	<ul style="list-style-type: none"> <li>Global HR Center</li> </ul>
<b>Management metrics</b>	<ul style="list-style-type: none"> <li>Employee commitment survey</li> </ul>
<b>Positive and negative impacts</b>	<ul style="list-style-type: none"> <li>Positive: Invest resources to improve the environment or quality of life for the community or disadvantaged groups</li> <li>Negative: Human rights impact from violation of labor conditions</li> <li>Negative: Occupational injuries result in permanent physical and mental impairment</li> </ul>

### Occupational Safety and Health

<b>Commitment</b>	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
<b>Long-term goals</b>	2030 goal: Frequency-severity indicator (FSI) down by more than 30% compared to the average in 2021/2022 in all factories
<b>Achievements in 2023</b>	All TOSHMS improvement plans between 2019 and 2023 were effectively implemented, achieving a 100% improvement rate. SCADA was linked to the ESH monitoring data to trigger mistake-proof safety alerts. There were no false alarm incidents (with injury) at GTM in 2023. The percentage of contractors and suppliers signing the safety and health management rules was 100% in 2023.
<b>In-charge department</b>	Global Manufacturing Center / Manufacturing factories
<b>Management metrics</b>	Continuous tracking and correction through monthly ESG PDCA meetings at Headquarters Monthly review of FSI EHS monthly meeting - project progress review
<b>Positive and negative impacts</b>	Negative: Human rights impact from violation of labor conditions Negative: Occupational injuries result in permanent physical and mental impairment

### Talent Development

<b>Commitment</b>	Assist employees in career planning and continuous education, and strengthen employees' personal skills to build up the Group's talent pool
<b>Long-term goals</b>	2030 goal: Build organizational competitiveness to swiftly respond to market changes
<b>Achievements in 2023</b>	The training expenses exceeded NT\$12 million in 2023. We strengthened the leadership competencies of the organization's core talents and promoted cross-functional knowledge sharing in 2023. About 70 high potential talents took part in the Bullpen Program in 2023 and achieved Level-III Behavior effectiveness.
<b>In-charge department</b>	Global HR Center
<b>Management metrics</b>	Employee commitment survey
<b>Positive and negative impacts</b>	Negative: Human rights impact from violation of labor conditions Negative: Occupational injuries result in permanent physical and mental impairment

### Talent Attraction and Retention

<b>Commitment</b>	Maintain stable industry-academia collaboration, and continue to cultivate industry talents; provide a safe and friendly work environment for employees and strengthen employee commitment
<b>Long-term goals</b>	2030 goal: Increase employee commitment and the retention rate of key personnel
<b>Achievements in 2023</b>	Free-talks were organized for employees with 2 to 3 years of service. There were no labor disputes between 2020 and 2023. In 2023, the return to work and retention rates of Giant Group's female employees were 100%.
<b>In-charge department</b>	Global HR Center
<b>Management metrics</b>	3% increase in global employment commitment rate (comparing to the previous year) 3% increase in retention rate (comparing to the previous year)
<b>Positive and negative impacts</b>	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

In 2023, we expanded GHG inventory to include our sales companies in six countries: Japan, South Korea, the United States, Mexico, Canada and Australia, for Scope 2 GHG emission. The operation of Giant Group spans across three continents: North America, Asia and Australia. The inventory gave us an understanding on the status of GHG emissions from these sales companies. 2023 was the first year we carried out self-inventory for these sales companies and the results had not been verified.

2023 Scope 1 and 2 Emissions (metric tons CO <sub>2</sub> e) of Sales Companies in Six Countries		Japan	Korea	the United States	Mexico	Canada	Australia
Scope 1	Stationary combustion						
	Mobile combustion	15.48					36.61
	Process emissions						
	Fugitive emission						
Subtotal							
Scope 2	Location-based	142.55	11.24	1,073.3	3.04	7.41	30.28
	Market-based						
Total	Location-based	158.03	11.24	1,073.3	3.04	7.41	66.89
	Market-based						

Note 1: The inventory boundary for data in this table is Giant Group's sales companies in six countries. Data have yet to be verified externally.

Note 2: Giant Group's sales companies are coded as follows: GJ for Japan; GKR for South Korea; GU for the U.S., GMX for Mexico, GV for Canada, and GA for Australia.

Note 3: The electricity emission coefficient of sales companies comes from International Energy Agency (IEA) - Emission factor 2022 with electricity only for countries up to 2020.

## Global Reporting Initiatives (GRI) Index

Statement of use: The report is prepared in accordance with the GRI Standards for the period from January 1, 2023 to December 31, 2023.

GRI 1 used: GRI 1: Foundation 2021

General Disclosures				
GRI Standard	Disclosure Title	Corresponding Chapter	Page	Omitted / Note
GRI 2: General Disclosures 2021	2-1 Organizational details	1.1 Company Profile	08	
	2-2 Entities included in the organization's sustainability reporting	1.2 Global Network	09	
	2-3 Reporting period, frequency and contact point	Appendix: About this Report	153	
	2-4 Restatements of information	No restatements of information	-	
	2-5 External assurance	Appendix - External Independent Assurance Statement	176	
	2-6 Activities, value chain and other business relationships	1.2 Global Network	09	
	2-7 Employees	6.1.1 Workforce Overview	08	
	2-8 Workers who are not employees	6.1.1 Workforce Overview	08	
	2-9 Governance structure and composition	3.1.1 Corporate Governance	25	
	2-10 Nomination and selection of the highest governance body	3.1.1 Corporate Governance	25	
	2-11 Chair of the highest governance body	3.1.1 Corporate Governance	25	
	2-12 Role of the highest governance body in overseeing the management of impacts	2.1 Sustainability Governance Organization	12	
	2-13 Delegation of responsibility for managing impacts	2.1 Sustainability Governance Organization	12	
	2-14 Role of the highest governance body in sustainability reporting	Appendix: About this Report	153	
	2-15 Conflicts of interest	3.1.1 Corporate Governance	25	

## General Disclosures

GRI Standard	Disclosure Title	Corresponding Chapter	Page	Omitted / Note
GRI 2: General Disclosures 2021	2-16 Communication of critical concerns	3.1.1 Corporate Governance	25	The Company has established the "Procedures for Handling Internal Material Information." For the nature and total number of material events in 2023, please refer to the material information announced by the Company at the Market Observation Post System (MOPS).
	2-17 Collective knowledge of the highest governance body	3.1.1 Corporate Governance	25	
	2-18 Evaluation of the performance of the highest governance body	3.1.1 Corporate Governance	25	
	2-19 Remuneration policies	3.1.1 Corporate Governance	25	
	2-20 Process to determine remuneration	3.1.1 Corporate Governance	25	
	2-21 Annual total compensation ratio	3.1.1 Corporate Governance	25	
	2-22 Statement on sustainable development strategy	Preface - Message from the Chairperson Message from the CEO	02	
	2-23 Policy commitments	3.1.3 Business Ethics and Integrity 6.1.3 Human Rights and Employee Communication	31 117	We have completed our human rights policy and initiated the 2023 supplier human rights due diligence (HRDD): 1. Formulation of a supplier sustainability questionnaire; 2. Supplier risk investigation; and 3. Continuous promotion of supplier sustainability management.
	2-24 Embedding policy commitments	3.1.3 Business Ethics and Integrity 6.1.3 Human Rights and Employee Communication	31 117	
	2-25 Processes to remediate negative impacts	6.1.3 Human Rights and Employee Communication	31	
	2-26 Mechanisms for seeking advice and raising concerns	3.1.3 Business Ethics and Integrity 6.1.3 Human Rights and Employee Communication	31 117	
	2-27 Compliance with laws and regulations	3.1.3 Business Ethics and Integrity	31	
	2-28 Membership associations	3.3.1 Participation in Industry Associations and Policy Implications	37	
	2-29 Approach to stakeholder engagement	2.4 Stakeholder Communication	22	
	2-30 Collective bargaining agreements	6.1.3 Human Rights and Employee Communication	117	

GRI Standard	Disclosure Title	Corresponding Chapter	Page	Omitted / Note
GRI 3: Material Topics 2021	3-1 Process to determine material topics	2.3 Materiality Analysis	15	
	3-2 List of material topics	2.3 Materiality Analysis	15	
	3-3 Management of material topics	Appendix: About this Report -Management Approach	156	

### Material Topics

GRI Standard	Disclosure Title	Corresponding Chapter	Page	Omitted / Note
<b>Financial Performance</b>				
GRI 3: Material Topics 2021	3-3 Management of material topics	Appendix: About this Report -Management Approach	156	
GRI 201: Economic Performance 2016	201-1 Direct economic value generated and distributed	3.1.2 Operating Performance	29	
	201-4 Financial assistance received from government	3.1.2 Operating Performance	29	
<b>Risk Management</b>				
GRI 3: Material Topics 2021	3-3 Management of material topics	Appendix: About this Report -Management Approach	156	
GRI General Disclosures		3.2.1 Risk Management	32	
<b>Customer Relationship Management</b>				
GRI 3: Material Topics 2021	3-3 Management of material topics	Appendix: About this Report -Management Approach	156	
<b>Innovative Products and Services</b>				
GRI 3: Material Topics 2021	3-3 Management of material topics	Appendix: About this Report -Management Approach	156	
<b>Brand Management</b>				
GRI 3: Material Topics 2021	3-3 Management of material topics	Appendix: About this Report -Management Approach	156	
<b>Sustainable Supply Chain</b>				
GRI 3: Material Topics 2021	3-3 Management of material topics	Appendix: About this Report -Management Approach	156	
GRI 308: Supplier Environmental Assessment 2016	308-1 New suppliers that were screened using environmental criteria	4.2.1 Supply Chain Management	74	
	308-2 Negative environmental impacts in the supply chain and actions taken	4.2.1 Supply Chain Management	74	

## Material Topics

GRI Standard	Disclosure Title	Corresponding Chapter	Page	Omitted / Note
<b>Supplier Social Assessment</b>				
GRI 3: Material Topics 2021	3-3 Management of material topics	Appendix: About this Report -Management Approach	156	
GRI 414: Supplier Social Assessment 2016	414-1 New suppliers that were screened using social criteria	4.2.1 Supply Chain Management	74	
	414-2 Negative social impacts in the supply chain and actions taken	4.2.1 Supply Chain Management	74	
<b>Regulatory Compliance</b>				
GRI 3: Material Topics 2021	3-3 Management of material topics	Appendix: About this Report -Management Approach	156	
GRI General Disclosures		3.1.3 Business Ethics and Integrity	31	
<b>Climate Strategy</b>				
GRI 3: Material Topics 2021	3-3 Management of material topics	Appendix: About this Report -Management Approach	156	
GRI 201: Economic Performance 2016	201-2 Financial implications and other risks and opportunities due to climate change	4.1.1 Climate and Energy	51	
GRI 302: Energy 2016	302-1 Energy consumption within the organization	4.1.1 Climate and Energy	51	4.1.1.3 Energy consumption and conservation
	302-2 Energy consumption outside of the organization	—		Planning for future implementation
	302-3 Energy intensity	4.1.1 Climate and Energy	51	4.1.1.3 Energy consumption and conservation
	302-4 Reduction of energy consumption	4.1.1 Climate and Energy	51	4.1.1.3 Energy consumption and conservation
	302-5 Reductions in energy requirements of products and services	5.3.3 Product Energy Efficiency	93	
GRI 305: Emissions 2016	305-1 Direct (Scope 1) GHG emissions	4.1.1 Climate and Energy	51	4.1.1.3 Energy consumption and conservation
	305-2 Energy indirect (Scope 2) GHG emissions	4.1.1 Climate and Energy	51	4.1.1.3 Energy consumption and conservation
	305-3 Other indirect (Scope 3) GHG emissions	4.1.1 Climate and Energy	51	4.1.1.3 Energy consumption and conservation
	305-4 GHG emissions intensity	4.1.1 Climate and Energy	51	4.1.1.3 Energy consumption and conservation
	305-5 Reduction of GHG emissions	4.1.1 Climate and Energy	51	4.1.1.3 Energy consumption and conservation
	305-6 Emissions of ozone-depleting substances (ODS)	N/A		
	305-7 Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	4.1.3 Wastes	73	4.1.4 Pollutants

## Material Topics

GRI Standard	Disclosure Title	Corresponding Chapter	Page	Omitted / Note
<b>Green Products</b>				
GRI 3: Material Topics 2021	3-3 Management of material topics	Appendix: About this Report -Management Approach	156	
<b>Diversity and Inclusion</b>				
GRI 3: Material Topics 2021	3-3 Management of material topics	Appendix: About this Report -Management Approach	156	
GRI 202: Market Presence 2016	202-2 Proportion of senior management hired from the local community	6.1.1 Workforce Overview	98	
GRI 405: Diversity and Equal Opportunity 2016	405-1 Diversity of governance bodies and employees	6.1.1 Workforce Overview	98	
<b>Occupational Safety and Health</b>				
GRI 3: Material Topics 2021	3-3 Management of material topics	Appendix: About this Report -Management Approach	156	
GRI 403: Occupational Health and Safety 2018	403-1 Occupational health and safety management system	6.1.4 Building a Safe Workplace	120	
	403-2 Hazard identification, risk assessment, and incident investigation	6.1.5 Occupational Safety Risk Management	125	
	403-3 Occupational health services	6.1.6 Employee Health Management	132	
	403-4 Worker participation, consultation, and communication on occupational health and safety	6.1.4 Building a Safe Workplace	120	
	403-5 Worker training on occupational health and safety	6.1.4 Building a Safe Workplace	120	
	403-6 Promotion of worker health	6.1.6 Employee Health Management	132	
	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	6.1.5 Occupational Safety Risk Management	124	
	403-8 Workers covered by an occupational health and safety management system	6.1.4 Building a Safe Workplace	120	
	403-9 Work-related injuries	6.1.5 Occupational Safety Risk Management	124	
	403-10 Work-related ill health	6.1.5 Occupational Safety Risk Management	124	
<b>Talent Development</b>				
GRI 404: Training and Education 2016	404-1 Average hours of training per year per employee	6.1.2 Talent Development and Retention	106	
	404-2 Programs for upgrading employee skills and transition assistance programs	6.1.2 Talent Development and Retention	106	
	404-3 Percentage of employees receiving regular performance and career development reviews	6.1.2 Talent Development and Retention	106	

## Material Topics

GRI Standard	Disclosure Title	Corresponding Chapter	Page	Omitted / Note
<b>Talent Attraction and Retention</b>				
GRI 202: Market Presence 2016	202-1 Ratios of standard entry level wage by gender compared to local minimum wage	6.1.1 Workforce Overview	98	
GRI 401: Employment 2016	401-1 New employee hires and employee turnover	6.1.1 Workforce Overview	98	
		6.1.2 Talent Development and Retention	106	
	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	106	
		401-3 Parental leave	6.1.2 Talent Development and Retention	106

GRI Standard	Disclosure Title	Corresponding Chapter	Page	Omitted / Note
<b>GRI 200: Economic Series</b>				
GRI 201: Economic Performance 2016	201-3 Defined benefit plan obligations and other retirement plans	6.1.2 Talent Development and Retention	106	
GRI 203: Indirect Economic Impacts 2016	203-1 Infrastructure investments and services supported	6.3.1 Diverse Sponsorship of the Cycling Teams 6.4.2 Climate Philanthropy 6.4.3 Female Riders 6.4.4 Promote Cycling 6.4.5 Social Welfare	141	
		203-2 Significant indirect economic impacts	N/A	
GRI 204 Procurement Practices 2016	204-1 Proportion of spending on local suppliers	4.2.1 Supply Chain Management	74	
GRI 205: Anti-corruption 2016	205-1 Operations assessed for risks related to corruption	3.1.3 Business Ethics and Integrity	31	
	205-2 Communication and training about anti-corruption policies and procedures	3.1.3 Business Ethics and Integrity	31	
	205-3 Confirmed incidents of corruption and actions taken	3.1.3 Business Ethics and Integrity	31	
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	31	

GRI Standard	Disclosure Title	Corresponding Chapter	Page	Omitted / Note
GRI 207: Tax 2019	207-1 Approach to tax	3.1.2 Operating Performance	29	
	207-2 Tax governance, control, and risk management	3.1.2 Operating Performance	29	
	207-3 Stakeholder engagement and management of concerns related to tax	3.1.2 Operating Performance	29	
	207-4 Country-by-country reporting	3.1.2 Operating Performance	29	
<b>GRI 300: Environmental Series</b>				
GRI 301: Materials 2016	301-1 Materials used by weight or volume	4.1.1 Climate and Energy	51	4.1.1.4 Raw materials management
	301-2 Recycled input materials used	4.1.1 Climate and Energy	51	4.1.1.4 Raw materials management
	301-3 Reclaimed products and their packaging materials	4.1.1 Climate and Energy	51	4.1.1.4 Raw materials management
GRI 303: Water and Effluents 2018	303-1 Interactions with water as a shared resource	4.1.2 Water Management	71	
	303-2 Management of water discharge-related impacts	4.1.2 Water Management	71	
	303-3 Water withdrawal	4.1.2 Water Management	71	
	303-4 Water discharge	4.1.2 Water Management	71	
	303-5 Water consumption	4.1.2 Water Management	71	
GRI 306: Waste 2020	306-1 Waste generation and significant waste-related impacts	4.1.3 Wastes	73	
	306-2 Management of significant waste-related impacts	4.1.3 Wastes	73	
	306-3 Waste generated	4.1.3 Wastes	73	
	306-4 Waste diverted from disposal	4.1.3 Wastes	73	
	306-5 Waste directed to disposal	4.1.3 Wastes	73	
<b>GRI 400: Social Series</b>				
GRI 402 Labor/Management Relations 2016	402-1 Minimum notice periods regarding operational changes	6.1.3 Human Rights and Employee Communication	117	
GRI 405: Diversity and Equal Opportunity 2016	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	117	No related incidents

GRI Standard	Disclosure Title	Corresponding Chapter	Page	Omitted / Note
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	136	
	413-2 Operations with significant actual and potential negative impacts on local communities	6.4.3 Female Riders 6.4.4 Promote Cycling 6.4.5 Social Welfare	141	
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	48	
	416-2 Incidents of non-compliance concerning the health and safety impacts of products and services	3.4.3 Advanced Technology	48	
GRI 417: Marketing and Labeling 2016	417-1 Requirements for product and service information and labeling	3.3.2 Customer Relationship Management	39	
	417-2 Incidents of non-compliance concerning product and service information and labeling	3.3.2 Customer Relationship Management 5.1.4 Hazardous Substance Management	39 86	
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	36	

## 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	52
	Management's role in assessing and managing climate-related issues	4.1.1.2	52
Strategy	Climate-related risks and opportunities the Company has identified over the short, medium, and long term	4.1.1.2	52
	Impact of climate-related issues on the Company's businesses, strategy, and financial planning	4.1.1.2	52
	Scenario analysis (including a 2°C or worse scenario)	4.1.1.2	52
Risk Management	Processes for identifying and assessing climate-related risks	4.1.1.2	52
	Process for managing climate-related risks	4.1.1.2	52
	Describe how the above processes for identifying and managing risks are integrated into the Company's overall risk management system	4.1.1.2	52
Metrics and Targets	Evaluate whether the metrics are in line with the Company's strategy and risk management	4.1.1.2	52
	Disclose Scope 1, Scope 2, and if appropriate, Scope 3 GHG emissions, and the related risks	4.1.1.2	52
	Management objectives and related performance	4.1.1.2	52

## Sustainability Accounting Standards Board (SASB) Index

Topic/Code	Category	Metric	Note	Corresponding Chapter
<b>Chemical &amp; Safety Hazards of Products</b>				
CG-TS-250a.1	Quantity	(1) Number of units to be recalled (2) Total units recalled	There were no product recalls in 2023	3.3.2 Customer Relationship Management
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	The Group's products did not violate any product and services health and safety regulations nor voluntary codes in 2023.	3.3.2 Customer Relationship Management
CG-TS-250a.4	-	Description on the processes of assessing/managing risk/hazards associated with chemicals in products	Adopted PDCA for management and all products complied with the hazardous substance regulations in the sales regions.	5.1.4 Hazardous Substance Management
<b>Labor Conditions in the Supply Chain</b>				
CG-TS-430a.1	Quantity	Number of facilities audited to a social responsibility code of conduct	BAS was established in 2022, and the environmental audits had been completed for part of the supply chain. Please refer to 4.2.2. Bicycling Alliance for Sustainability (BAS) for details. In the future, we plan to promote audits on social responsibility code of conduct throughout the supply chain.	
CG-TS-430a.2	Percentage	Direct suppliers' social responsibility audit non-conformance rate and associated corrective action rate for (1) priority non-conformances and (2) other non-conformances		
<b>Activity Metric</b>				
CG-TS-000.A	Quantity	Annual production	Production of 4,198 thousand units in 2023. Please refer to 3.1.2 Operating Performance for details.	3.1.2 Operating Performance
CG-TS-000.B	Quantity and percentage	(1) Number of manufacturing facilities (including outsourced manufacturing facilities) (2) Percentage of outsourced facilities (%)	Please refer to 3.3.2 Customer Relationship Management for details on the quantity and percentage of bicycle factories (both in-house and outsourced factories).	3.3.2 Customer Relationship Management

## European Sustainability Reporting Standards (ESRS) Disclosures

This table lists material issues of Giant Group and the corresponding GRI Index and ESRS voluntary disclosure requirements.

Aspect	Material Issues	GRI Index	ESRS	Disclosure Requirements	Progress	Corresponding Chapter			
Financial Performance	Economic Performance (201-1, 201-4)		ESRS 2	SBM-1 Strategy, business model and value chain	In progress	4.2.1 Supply Chain Management			
				SBM-3 Material impacts, risks and opportunities and their interaction with strategy and business model(s)	In progress	3.2.1 Risk Management			
			E1	E1.SBM-3 Disclosure requirements related to ESRS 2 SBM-3 - Material impacts, risks and opportunities and their interaction with strategy and business model(s)	Progressing well	4.1.1 Climate and Energy			
				E1-3 Actions and resources in relation to climate change policies	In progress	4.1.1 Climate and Energy			
				E1-6 Gross Scopes 1, 2, 3 and total GHG emissions	Progressing well	4.1.1 Climate and Energy			
				E1-9 Potential financial effects from material physical and transition risks and potential climate-related opportunities	In progress	4.1.1 Climate and Energy			
			S1	S1-10 Adequate wages	Progressing well	6.1.2 Talent Development and Retention			
			Economic	Risk Management	GRI General Disclosures 2-12 Role of the highest governance body in overseeing the management of impacts 2-13 Delegation of responsibility for managing impacts	ESRS 2	GOV-1 The role of the administrative, management and supervisory bodies	Progressing well	3.1.1 Corporate Governance
							GOV-2 Information provided to and sustainability matters addressed by the undertaking's administrative, management and supervisory bodies	Progressing well	3.2.1 Risk Management
							SBM-2 Interests and views of stakeholders	Progressing well	2.4 Stakeholder Communication
S1	S1-2 Processes for engaging with own workers and workers' representatives about impacts	Internal work initiated				6.1.3 Human Rights and Employee Communication			
S2	S2-2 Processes for engaging with value chain workers about impacts	Internal work initiated				6.1.3 Human Rights and Employee Communication 6.1.5 Occupational Safety Risk Management			
S3	S3-2 Processes for engaging with affected communities about impacts	Internal work initiated				—			
S4	S4-2 Processes for engaging with consumers and end-users about impacts	Internal work initiated				6.1.3 Human Rights and Employee Communication 3.3.2 Customer Relationship Management			
G1	GOV-1 The role of the administrative, management and supervisory bodies	Progressing well				3.1.1 Corporate Governance			
G1	G1-3 Prevention and detection of corruption or bribery	Progressing well				3.1.3 Business Ethics and Integrity			

Aspect	Material Issues	GRI Index	ESRS	Disclosure Requirements	Progress	Corresponding Chapter
Economic	Sustainable Supply Chain	GRI 308: Supplier Environmental Assessment GRI 414: Supplier Social Assessment	ESRS 2	SBM-3 Material impacts, risks and opportunities and their interaction with strategy and business model(s)	In progress	3.2.1 Risk Management
			G1	G1-2 Management of relationships with suppliers	Progressing well	4.2.1 Supply Chain Management
	Regulatory Compliance	GRI General Disclosures 2-27 Compliance with laws and regulations	ESRS 2	SBM-3 Material impacts, risks and opportunities and their interaction with strategy and business model(s)	In progress	3.2.1 Risk Management
			E2	E2-4 Pollution of air, water and soil	In progress	4.1.2 Water Management
			S1	S1-17 Incidents, complaints and severe human rights impacts	Internal work initiated	6.1.3 Human Rights and Employee Communication
			G1	G1-4 Confirmed incidents of corruption or bribery	Progressing well	3.1.3 Business Ethics and Integrity
	Environmental	Climate Strategy	GRI 201-2 Economic Performance GRI 302: Energy GRI 305: Emissions	E1	E1-3 Actions and resources in relation to climate change policies	In progress
E1-4 Targets related to climate change mitigation and adaptation					In progress	4.1.1 Climate and Energy
E1-5 Energy consumption and mix					In progress	4.1.1 Climate and Energy
E1-6 Gross Scopes 1, 2, 3 and Total GHG emissions					Progressing well	4.1.1 Climate and Energy
E1-7 GHG removals and GHG mitigation projects financed through carbon credits					Under planning	—
E2-4 Pollution of air, water and soil					In progress	4.1.2 Water Management
Social	Diversity and Inclusion	GRI 202-2 Market Presence GRI 405: Diversity and Equal Opportunity	ESRS 2	GOV-1 The role of the administrative, management and supervisory bodies	Progressing well	3.1.1 Corporate Governance
			S1	S1-6 Characteristics of the undertaking's employees	Progressing well	6.1.1 Workforce Overview
				S1-9 Diversity metrics	Progressing well	
				S1-12 Persons with disabilities	Progressing well	
				S1-16 Compensation metrics (pay gap and total compensation)	Internal work initiated	6.1.2 Talent Development and Retention

Aspect	Material Issues	GRI Index	ESRS	Disclosure Requirements	Progress	Corresponding Chapter
Social	Occupational Safety and Health	GRI 403: Occupational Health and Safety	S1	S1-1 Policies related to own workforce	Internal work initiated	6.1.3 Human Rights and Employee Communication
				S1-3 Processes to remediate negative impacts and channels for own workers to raise concerns	Internal work initiated	6.1.3 Human Rights and Employee Communication
				S1-4 Taking action on material impacts on own workforce, and approaches to mitigating material risks and pursuing material opportunities related to own workforce, and effectiveness of those actions	Internal work initiated	6.1.3 Human Rights and Employee Communication
				S1-14 Health and safety metrics	Progressing well	6.1.5 Occupational Safety Risk Management
	Talent Development	GRI 404: Training and Education	S1	S2-4 Taking action on material impacts on value chain workers, and approaches to mitigating material risks and pursuing material opportunities related to value chain workers, and effectiveness of those actions	Internal work initiated	6.1.3 Human Rights and Employee Communication
				S1-1 Policies related to own workforce	Internal work initiated	6.1.3 Human Rights and Employee Communication
	Talent Attraction and Retention	GRI 401: Employment GRI 202-1 Market Presence	S1	S1-13 Training and skills development metrics	Progressing well	6.1.2 Talent Development and Retention
				S1-6 Characteristics of the undertaking's employees	Progressing well	6.1.1 Workforce Overview
				S1-11 Social protection	Progressing well	Provision of relevant protection in accordance with government regulations
			S1-15 Work-life balance metrics	Under planning	—	

# External Independent Assurance Statement

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## Independent Assurance Statement

**GIANT MANUFACTURING CO., LTD.'S 2023 SUSTAINABILITY REPORT**

AFNOR GROUP was established in 1926. We are the National Standardization Body of France, a permanent council member in ISO and one of the leading certification bodies in the world. This verification work was carried out by AFNOR ASIA LTD., a subsidiary of AFNOR GROUP. All the members of the verification team have professional backgrounds and have accepted AA1000 AS, AFAQ 26000, ISO 9001, ISO 14001, ISO 14064, ISO 45001, ISO 50001, and other sustainability-related international standard trainings. All assigned verifiers have been approved as the lead auditors or verifiers. AFNOR GROUP hereby provides a summary of GIANT MANUFACTURING CO., LTD.'s Sustainability Report of 2023 (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 Group") are independent entities. AFNOR ASIA LTD., was commissioned by Giant Group to conduct the assessment and assure the Sustainability Report of 2023 was in accordance with AA1000 Assurance Standard (v3) and the Global Reporting Initiative Sustainability Reporting Standards (GRI Standards).

**SCOPE**

GIANT MANUFACTURING CO., LTD. is responsible for reporting fairly on the economic, environmental and social aspects of operating activities and performance of Taiwan and overseas operating sites in sustainability reports in accordance with the declared sustainability reporting standards.

AFNOR ASIA LTD. is responsible for:

- Evaluating the accordance of the Report with the Type 1 of AA1000 Assurance Standard (v3) based on the AA1000 Accountability Principles (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.
- In accordance with the GRI Standards, we verified the statement options and material topics disclosed in the report compiled by Giant Group.

**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 :

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- AA1000 Accountability Principles (2018)
- GRI Standards
- Task Force on Climate-related Financial Disclosures
- Sustainability Accounting Standards Board Standards

**METHODOLOGY**

- The inclusivity, materiality, responsiveness, and impact in the Report were assessed according to the principles of management process against AA1000 Assurance Standard (v3).
- 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.
- The mechanism of communication and response to the interest of stakeholders was verified through discussion and interview with the management team, however, the assessment team did not make any direct contact with external stakeholders.
- The qualitative and quantitative information produced, collected, and disclosed by the Report was reviewed through a validated sampling plan.
- The documents, materials and information related to the report were examined and reviewed by interviewing the responsible persons of each group of Giant Group.
- Interviews with members of the organization related to sustainable development management and report writing, including representatives of all levels and departments.
- All documents, data and information related to the preparation of this report were checked by the verification team through interviews with relevant personnel.
- Check the sufficiency and completeness of supporting materials and evidence for the content of the report.

**CONCLUSION**

◆ **AA1000 Accountability Principles**

**Inclusivity**

Giant Group has identified stakeholders, maintained communication channels for stakeholders to participate in various major topics, and understood important information of concern to stakeholders. In the future, the stakeholder discussion mechanism will be continuously strengthened to receive feedback from all parties for its sustainable development.

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**Materiality**

Giant Group has established an effective process to identify issues of material importance to stakeholders and operational performance, and reflects the organization's priorities for dealing with major issues through reports. In the future, the organization will develop a sustainable assessment and decision-making mechanism for materiality issues and integrate it into organizational operations.

**Responsiveness**

Giant Group has developed and implemented a stakeholder response mechanism through communication channels, clearly announcing various policies, norms and codes, etc., and being able to respond promptly to issues of concern to stakeholders. In the future, the organization will continue to engagement with stakeholders to develop management policies and performance goals that meet the needs of stakeholders and itself.

**Impact**

Giant Group has adopted the monitoring and measurement of risks and opportunities for the impact of its operations on the overall environment, identified various risks and opportunities to formulate action plans, and responsibly demonstrated its management, communication and improvement of its sustainable performance. In the future, the organization will continue to provide resources to support the identification, measurement, assessment and management of impacts.

◆ **Global Reporting Initiative Sustainability Reporting Standards**

Based on the results of the review, we confirmed that the general disclosure and specific disclosure content of the report and the necessary management policy disclosure of major topics have complied with the requirements of GRI Standards. In the future, the organization will continue to comply with the requirements of reporting standards, compile major theme management content and relevant operational performance of each base, and provide sufficient sustainable development reporting content.

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

Based on the results of the review, Giant Group has disclosed the impact of climate change on the company's operations, as well as measures to deal with risks and opportunities. In the future, the organization can strengthen the setting of different climate scenarios and develop the resilience of operating strategies to continuously evaluate the financial performance impact of measures corresponding to the risks and opportunities of the scenarios.

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◆ **Sustainability Accounting Standards Board Standards**

Based on the results of the review, Giant Group has made disclosures with reference to the sustainable accounting indicators and activity indicators of the SASB standards. Future reports will continue to be collected and reported in accordance with disclosure standards and integrated into the organization's information collection, monitoring and analysis processes.

**ASSURANCE OPINION**

AFNOR GROUP has developed a complete sustainability reporting assurance standard based on the verification guidelines of the AA1000 Assurance Standard (v3) and the GRI Standards. Based on the sufficient evidence provided by Giant Group and the facts seen during on-site verification, we adhere to the principle of fairness and issue a statement on the global sustainability reporting standards followed by the organization.

In our opinion, the information and data presented in the Report by Giant Group provides a fair and balanced representation. We believe the focuses on economic, social, and environmental matters in Giant Group in 2023 are well represented.

**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  
May.22.2024

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