

DOUBLESTAR

Qingdao Doublestar Co., Ltd.

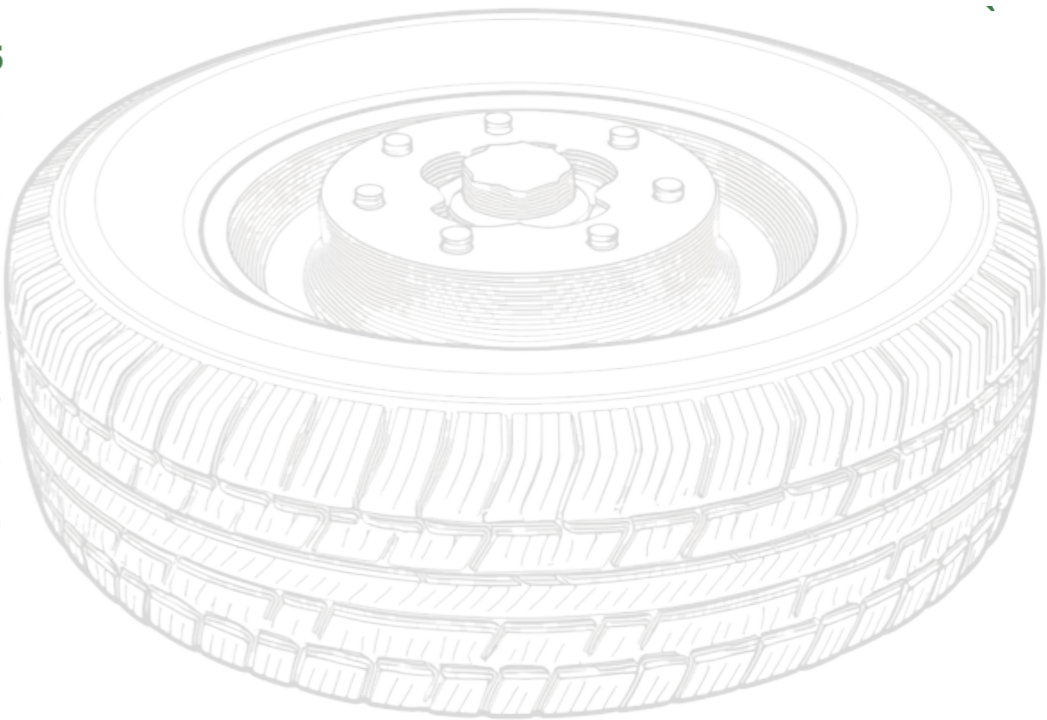


2024

Sustainability Report
(Environmental, Social and Governance Report)

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Reporting Introduction

This report is the second sustainability and ESG(Environmental, Social and Governance (ESG) report released by Qingdao Doublestar Co., Ltd. (hereinafter referred to as "Qingdao Doublestar", "the Company" or "we"), which aims to fully and transparently disclose to stakeholders the company's strategic layout, governance system, management model and identification, assessment and management of key issues in the field of sustainable development. This report systematically demonstrates how the company addresses ESG-related risks and opportunities. It elaborates on core initiatives, implementation progress, and actual results in the area of environmental, society and governance (ESG) to support the company's sustainable growth and meet the expectations of stakeholders.



Reporting Scope

This report mainly covers all business operations of Qingdao Doublestar Co., Ltd. and its controlled subsidiaries.

The time range is from January 1,2024 to December 31,2024. Unless otherwise specified, it is consistent with the financial report range of Qingdao Doublestar (000599.SZ). In order to enhance the comparability and forward-looking nature of this report, some contents will be traced back to previous years or have forward-looking descriptions. The previous report was released in March 2024.



Reporting Basis

This report complies with Chapter 7 "Other Significant Matters That Should Be Disclosed" of the "Shenzhen Stock Exchange Listing Rules" and is prepared in accordance with "Shenzhen Stock Exchange Listed Company Self-Discipline Guide No. 17 - Sustainable Development Report (Trial)" and "Shenzhen Stock Exchange Listed Company Self-Discipline Guide No.3 - Preparation of Sustainable Development Report".

We also refer to the GRI Sustainability Reporting Standards (GRI Standards) issued by the Global Sustainability Standards Board (GSSB), the International Financial Reporting Sustainability Disclosure Standard No.2 - Climate-related Requirements for Disclosure of Sustainability-related Financial Information (IFRS S2) issued by the International Financial Reporting Standards Foundation (IFRS Foundation), and the industry-based climate-related disclosure implementation guidelines - automotive parts industry standards, and the Chinese Academy of Social Sciences' "Guidelines for Sustainable Development Reporting for Chinese Enterprises (CASS-ESG 6.0)" and other standards and guidelines to assist in determining the content of the report, systematically integrate relevant key guidelines and standard requirements, respond to the expectations and demands of stakeholders, and highlight industry and company characteristics.



Data Description

The data and cases used in this report are all from the official records of the company's actual operations and have been reviewed and annotated by the board of directors.

All currencies and amounts involved in this report are measured in RMB.



Principles of Preparation

★ Importance

The company identifies important ESG issues through substantive issues related to operations that are of concern to stakeholders. This report takes into account the characteristics of the company's business and the industry it operates in, and combines the concerns of various stakeholders. The detailed analysis process and results can be found in the "Substantive Issues Management" section.

★ Balance

This report presents objective facts truthfully and discloses both positive and negative information of the company fairly. During the reporting period, the company did not have any negative situations that should have been disclosed but were not disclosed and caused significant impact.

★ Comparability

This report discloses the ESG quantitative performance indicators during the reporting period, and discloses the corresponding historical data, relevant standards, methods, assumptions and conversion factors as much as possible. This report maintains the same statistical and disclosure methods for the same indicator in different reporting periods; if there are changes in the statistical and disclosure methods, they will be fully explained in the notes to the report to facilitate analysis and evaluation by stakeholders.

★ Timeliness

This report is an annual report and will be published simultaneously with the company's 2024 annual report to provide timely information reference for stakeholders' decision-making.



Reporting Release

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★ Accuracy

This report is as accurate as possible. The Board of Directors guarantees the contents of the report and confirms that there are no false records, misleading statements or major omissions.

★ Clarity

This report is available in both Chinese and English versions and can be found on the company's website and the Shenzhen Stock Exchange website. If there is any ambiguity or conflict between the Chinese and English versions, the Chinese version shall prevail. This report includes tables, model diagrams, and professional terminology tables to assist in the explanation. To facilitate stakeholders to obtain relevant information more quickly, this report provides a directory and an index table of benchmarking of ESG-related standards.

★ Completeness

Unless otherwise specified, the scope of disclosure in this report is consistent with that of the Company's financial statements.

★ Verifiability

The cases and data in this report are all derived from the company's actual operation official records or financial reports, and can all be traced and verified.

Message from the Chairman

Chairman's Speech: Driving a Sustainable Future with Green Tires

Dear shareholders, partners, employees and friends from all walks of life:

2025 is a year in which global economic recovery and industrial transformation are intertwined, and it is also a key year for China's tire industry to move towards high-quality development. Faced with a complex and changing market environment, the urgent requirements of carbon neutrality goals, and the upgrading of consumer demand for green products, Qingdao Doublestar Co., Ltd. (hereinafter referred to as Qingdao Doublestar) has always taken "making every kilometer of driving safer and lower carbon" as its mission, integrating the ESG concept into the core of corporate strategy, seizing opportunities in challenges, and achieving breakthroughs in innovation.

The tire industry is undergoing a dual transformation: on the one hand, the global energy transition is accelerating the demand for new energy vehicle accessories, and lightweight and low rolling resistance tires have become the focus of technological competition; on the other hand, policies such as the EU's "carbon tariff" and the US "Inflation Reduction Act" have forced the entire industry chain to upgrade to green. We are well aware that tires, as the "contact point" between vehicles and roads, are not only related to traffic safety, but also bear the industry's responsibility to reduce carbon emissions and protect the ecological environment. Against this background, Qingdao Doublestar has driven the industry from "black pollution" to "green resources" through green manufacturing, circular economy and other multi-round drives, contributing Chinese solutions to the low-carbonization of global transportation.

Green smart manufacturing, laying a solid foundation for low carbon.

We reconstruct the production logic through "full life cycle management (FLM)" to achieve low carbon, circular and intelligent from source to terminal. Based on the deep integration design of information technology and automation technology, we have made long-term strategic planning for energy saving and consumption reduction strategies, and have broken down and implemented specific measures year by year based on this plan. By finely managing energy consumption, improving resource utilization efficiency, promoting the use of clean energy, and advocating the concept of green office, we continue to create a green and low-carbon operation mechanism and promote green development transformation.

We actively integrate new energy technologies, vigorously develop and utilize clean energy, introduce rooftop solar photovoltaic power generation systems for production and office use, increase the proportion of green energy, and accelerate the construction of a clean, low-carbon, safe and efficient energy structure system. At present, the Dongjiakou plant has achieved full coverage of photovoltaic power generation, and the photovoltaic power generation project at the Shiyan base and Cambodia base is also being promoted and implemented.

We utilize energy-saving equipment such as high-efficiency motors, frequency conversion technology, and waste heat recovery systems to reduce production energy consumption. We use intelligent energy management systems to monitor and optimize energy efficiency in real time. We build a water reuse system to treat production wastewater for cooling, cleaning, and other processes, significantly reducing energy consumption per unit product.

We collaborate with DoubleStar Ecostar Holdings Limited, focusing on the green ecological recycling of waste tires, expanding the industrial chain from the traditional R&D and manufacturing fields to the full life cycle management of recycling and re-cycling, and carefully cultivating the rubber tire circular economy industrial chain. Through pyrolysis technology, waste tires are completely transformed into high-value products, and the first domestic "tire-recycled rubber-new tire" full-chain recycling system has been built, truly realizing the "complete resource utilization" and "zero waste" of waste tires, and highlighting the "zero pollution, zero residue, zero emission, full utilization" concept in the waste tire processing process.

Innovation drives and leads the industry standards.

R&D innovation is the key for enterprises to maintain competitive advantages and achieve sustainable development. Qingdao Doublestar aims to meet user needs, integrate global technical resources, establish an innovative, open and interactive R&D platform, continuously increase product structure adjustment and R&D investment, and form a technical system covering the entire process of product R&D, manufacturing, and testing with the product strategy of "high-end + high added value + high differentiation". In 2024, we will continue to increase our R&D investment and deeply strengthen our R&D capabilities. Among them, the design, development and industrialization project of bio-based green low-carbon tires was selected as a national key research project in 2024, and the "Rare Earth Gold" low rolling resistance and high wear-resistant tire project won the "Second Prize of Science and Technology Award" in the rubber industry of Shandong Province. The "Safort" series of safety noise reduction tire projects won the second prize of the national Golden Bridge Award. In addition, Lunyun Design and Research Institute has also won the national "Top Ten Design Innovation Platform" and other honorary awards. The "MAXIMUM ALL SEASON" product and the "SAFORT EV" product successfully won the "iFDesignAward" design award, which fully demonstrated the company's product innovation and design capabilities. In 2024, Qingdao Doublestar added 83 authorized patents, 105 new patent applications and a total of 704 patents have been authorized. Participated in the formulation of 8 new standards, including 3 national standards and 5 group standards.

People-oriented, gathering development synergy.

We are committed to creating a vibrant and inclusive corporate culture, gathering talents from all over the world in various fields, forming a diverse and equal working atmosphere, respecting and giving full play to the characteristics of each employee, fully tapping their potential, and jointly promoting the development of the company. We have established a complete talent assessment mechanism to achieve all-round assessment and recognition of talents. According to different job levels, different job sequences and different employee needs, we have established three types of vertical training and development channels: management channel, professional channel and technician channel, and carried out "three-force training" of competence, improvement ability and innovation ability to ensure that each employee receives personalized training courses suitable for their own needs, helping employees realize their self-worth.

We practice the concept of "employees as family", pay attention to employee care, and cover all the families of employees in difficulties; we have established a "digital craftsman" training system, and the training cover all front-line employees. In addition, Qingdao Doublestar achieved zero major safety accidents throughout the year and was selected as the "Qingdao City Industrial and Trade Industry Safety Standardization Benchmark Enterprise".

Responsible supply chain, enabling ecological win-win.

We promote the coordinated development of upstream and downstream supply chains and achieve ecological win-win through systematic sustainable management mechanisms and green procurement practices. In terms of supplier management, we have built a full life cycle management system covering introduction, evaluation, and assessment. We give priority to partners with green production concepts and environmental certifications, ensure that all new suppliers pass the environmental protection test pass, and strengthen environmental compliance through tiered management of suppliers. At the same time, we regularly conduct green supply chain training, cover the concept of carbon neutrality and rely on monthly performance evaluation and rectification mechanisms to continuously optimize the supplier ecosystem.



Qingdao Doublestar Co., Ltd.
Chairman Chai Yongsan

In the field of green procurement, we are guided by the circular economy to reduce resource consumption and carbon emissions; through sharing pallets and "trading old for new" of waste tires, we build a closed-loop resource system to reduce the environmental impact of the entire life cycle. We strictly follow international standards, require suppliers to provide EU-approved environmental testing reports, and include the use of recyclable materials and energy efficiency improvements in the assessment to promote the green transformation of the supply chain.

Through responsible supply chain management, the company not only achieves collaborative growth with suppliers, but also empowers the sustainable development of the industrial chain with green practices, injecting long-term momentum into ecological win-win.

Standing at a new starting point, we will embark on a new journey into the future with the "three forces".

Green innovation. We have launched our first sustainable concept tire product, with sustainable materials accounting for more than 70% of the tire. In 2025, we will continue to develop tires made of sustainable materials and continue to increase the proportion of sustainable materials used in our products.

Green synergy. We will continue to deepen cooperation with leading automakers such as FAW, BAIC, and Sinotruk to jointly build a global zero-carbon supply chain alliance.

Green safety force. We will launch the "Safety Wheel Initiative", focusing on "rare earth gold" tires—a proprietary technology that enhances tire performance through the use of rare earth elements—striving to become the first brand of special tires; focusing on full explosion-proof & EV tires, striving to become the first brand of safe and energy-saving tires. Together with leading logistics and transportation partners, we will provide customized tire solutions for logistics fleets in remote areas, reduce operating costs, and protect the "last mile" of travel.

ESG is Qingdao Doublestar's commitment to keep pace with the times. We are well aware that only by integrating green genes into the corporate blood can we move forward steadily in the global industrial transformation. In the future, Qingdao Doublestar is willing to be the "green wheel", using tires as a link to connect China's smart manufacturing with the global sustainable travel vision, so that every step forward carries respect for the earth, and every mileage writes the future of the industry.

About Doublestar


Company Profile

——leader in intelligent manufacturing of China’s tire industry

As a state-owned listed company on the main board, Qingdao Doublestar takes party building as the guide and aims for high-quality development. It actively practices the "New Four Modernizations" strategy of Doublestar Group, which includes "ecologicalization," "high-tech," "localization," and "digitalization." It focuses on two main lines: business improvement and innovation breakthroughs. Through channel structure adjustment and product structure adjustment, it increases the sales proportion of high value-added products.

Since 2014, through smart transformation, DoubleStar has closed all old factories, eliminated all backward production capacity, built a full process "Industry 4.0" intelligent chemical plant and global R&D center in the global tire industry, and built an industrial Internet ecosystem of "R&D 4.0"+"Industry 4.0"+"Service 4.0". It has been awarded "Technological Innovation", "Quality Benchmark", "Intelligent Manufacturing", "Green Manufacturing", "Brand Cultivation", "Service Transformation" and other pilot demonstration enterprises by the Ministry of Industry and Information Technology. The DoubleStar Tire brand has won honors such as "Top 500 Asian Brands" for consecutive years.


DoubleStar has three major production bases in Qingdao,Shiyan and Cambodia, mainly producing passenger tires, truck tires, and giant mining tires. It has well-known tire brands such as NEWBUSTAR, DoubleSTAR, DONGFENG, CROSSLEDER, KUMKANG, KINBLI, Aosen, etc. Its "fully explosion-proof" safety tires, high-end new energy vehicle Ev tires, ultra wear-resistant tires, fire-resistant tires, and giant mining tires have core patented technologies. The goal of DoubleStar Passenger Tires is to create the first brand of safety tires, while the goal of Ka Ke Tires is to create the first brand of specialized tires and become a professional service provider for beautiful travel solutions.



Company Name:


青岛双星股份有限公司

Qingdao Doublestar Co.,Ltd.




Year of establishment:

1996




stock code:

000599.SZ (Main Board of the Shenzhen Stock Exchange)




Registered Address:

No. 666 Lianghe Road, Huangdao District, Qingdao




Business Network:

Covers more than 180 countries and regions, including Europe, America, Africa, Southeast Asia, and the Middle East.




Principal Products:

Full-steel radial tires, semi-steel radial tires, engineering tires, etc.



Operating Revenue:

4.336 billion yuan



Total Assets:

9.116 billion yuan

Doublestar tire "Industry 4.0" plant

Capacity Optimization and Global Strategic Layout

During the reporting period, Qingdao Doublestar, based on its strategic objectives and sustainable development plan, optimized and adjusted its domestic production capacity layout. In the third quarter of 2024, the company completed the public transfer of state-owned equity in Guangrao Jixing Tire Co., Ltd. (i.e., Dongying plant) through a public listing process.

In addition, the company actively responded to China's Belt and Road Initiative by expanding its market presence and making overseas investments. These efforts have promoted the development of China's tire industry in overseas markets. Qingdao Doublestar Tire Industry Co., Ltd., a controlled subsidiary of the company, jointly established a joint venture, Doublestar (Cambodia) Tire Co., Ltd., with UBE DEVELOPMENT Co., Ltd. in Cambodia. The factory and various supporting infrastructures have been completed and officially commenced production in September 2024. This initiative aims to create a new profit growth point for the company and rapidly enhance its profitability.

The company intends to issue shares and make cash payments to acquire assets, while also raising supporting funds. This transaction is designed to enable Qingdao Doublestar to indirectly hold 45% of the shares in Kumho Tire Co., Inc., thereby gaining control over Kumho Tire. Upon completion of this transaction, Kumho Tire will become a controlled subsidiary of the company. Both parties will achieve complementary strengths and realize synergies across various dimensions. The company will evolve into a specialized listed platform dedicated to tire research and development, production, and sales. This strategic move is expected to further enhance the company's overall business scale and market competitiveness, and elevate the competitive standing of Chinese tire enterprises in the global marketplace.

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Sustainable Development

Sustainable Development Concept

Qingdao Doublestar has always adhered to the core concept of "innovation-led, green development, and co-creating value", and is committed to becoming a world-leading tire company. Under the leadership of the Party, the company actively implements the country's "dual carbon" strategy and the principle that "Clear waters and lush mountains are invaluable assets". It integrates the concept of sustainability into daily operations and decision-making.



By building an industrial Internet ecosystem of "R&D 4.0 + Industry 4.0 + Service 4.0", we actively promote the innovation of green production and service models, optimize the industrial structure, improve energy efficiency, and promote an environmental friendly office culture. The company strives to create green management of the entire life cycle from tire R&D, production and manufacturing to the recycling of waste tires, focusing on technological innovation and launching high-performance, environmentally friendly tire products to meet market demand.



At the same time, Qingdao Doublestar attaches importance to the diversified development of employees, pursues win-win results for customers, common prosperity for the supply chain, and co-construction of communities, and strives to achieve a win-win situation between economic and social benefits, creating lasting prosperity for the enterprise and society.



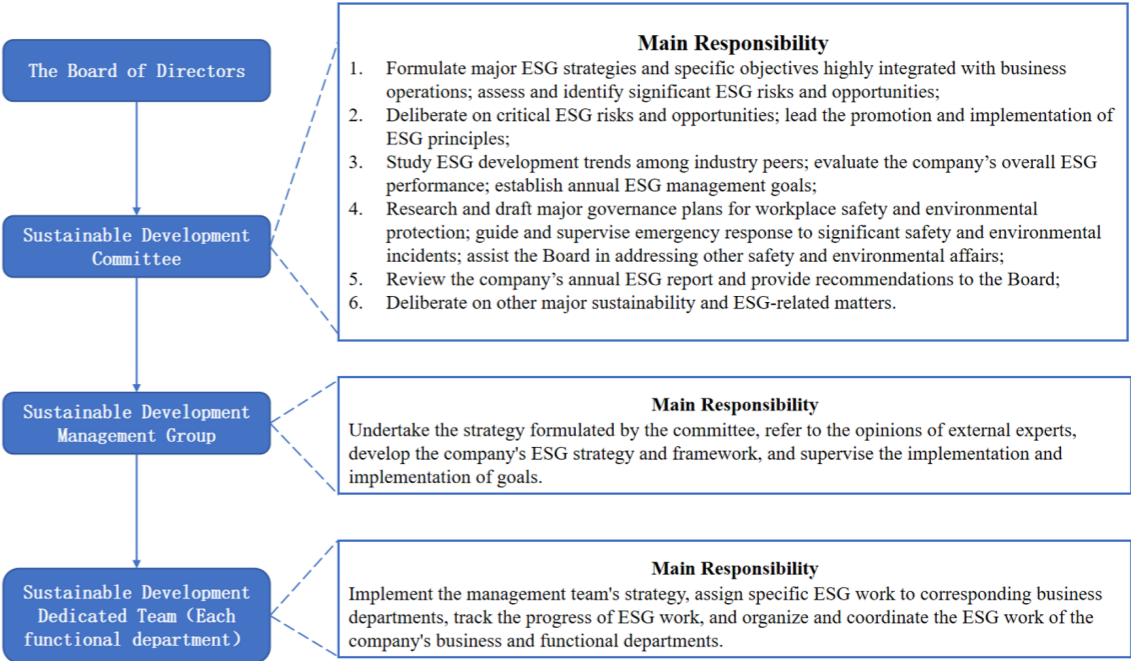
The company has established a sound governance framework, strategic objectives and risk management system, strengthened communication and cooperation with stakeholders, and minimized environmental impact and gave back to society while achieving economic benefits.



Sustainable Development Governance Framework


The board of directors has established a Sustainable Development Committee, which consists of no fewer than three directors. Members are nominated by the chairman, more than half of the independent directors, or one-third of all directors, and are elected by the board of directors. The Sustainable Development Committee has one director (convener) who is responsible for chairing the committee's work; the director is elected by the board of directors from among the committee members.

Under the leadership of the company's board of directors, the Sustainable Development Committee convenes meetings irregularly as needed to discuss the company's ESG strategic planning and the current status of ESG management implementation, with various functional departments participating and taking targeted measures. The company has established a special project team to undertake key carbon-neutral projects, and team members are entitled to project incentives based on the completion of the projects. In addition, all management positions in the company undertake safety target responsibilities, which are linked to the compensation of senior executive.



Relevant departments also consistently implement the ESG concept in daily production and service processes, adhering to principles such as energy saving, consumption reduction, and green innovation. They manage the entire product lifecycle, continuously improve production efficiency, and introduce innovative eco-friendly products. They enhance product quality and customer service, and when necessary, report progress and outcomes to management and the board through internal emails, systems, and meetings. The company summarizes the ESG implementation annually, compiles the "Annual Sustainable Development and Environmental, Social, and Governance (ESG) Report," and submits it to the board for final review.

Sustainable Development Strategy and Planning

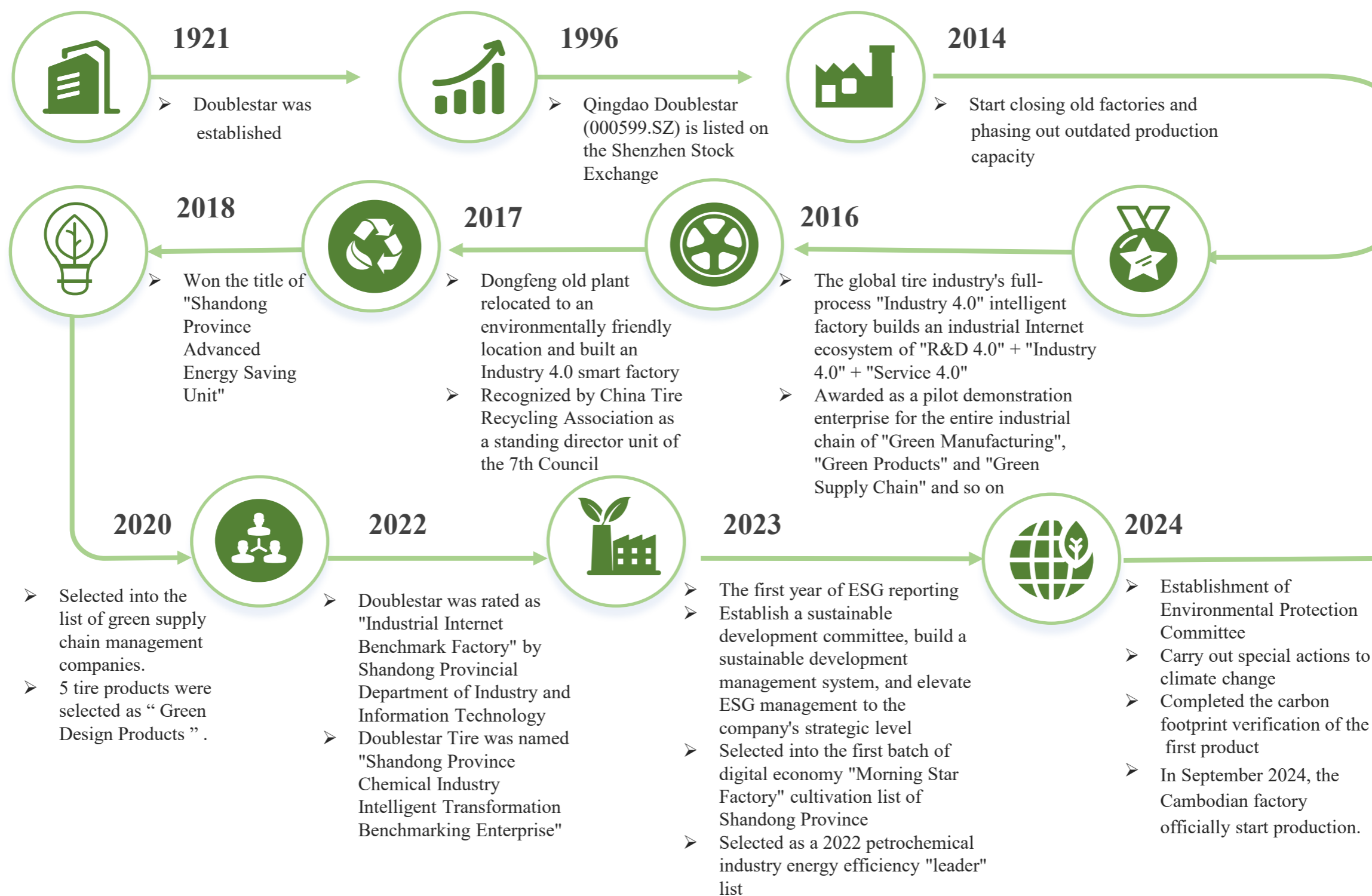
E	Sustainability Plan	Issues	Metrics	Target	Progress During The Reporting Period
<div>Environmental:</div> <div>To achieve the “Carbon Peaking, Carbon Neutrality”goals, Towards green, low-carbon and circular development</div> <div>  </div>	Promoting carbon reduction: Build and improve the carbon footprint management system and comprehensively evaluateAssess and manage carbon emissions during the product life cycle.	Responding to Climate Change	Carbon emission intensity	<ul style="list-style-type: none"> • Short term: By 2028, carbon emission intensity will be reduced by 5% compared to 2023. • Medium term: By 2035, carbon emissions intensity will be reduced by 10% compared to 2023, and achieve carbon peak in 2030. • Long term: By 2050, carbon emission intensity will be reduced by 50% compared with 2023, and we will gradually move towards the goal of carbon neutrality. 	<ul style="list-style-type: none"> √ Establish a climate change response and management team. √ Carry out special actions to respond to climate change. √ Conduct scenario analysis for the rubber industry under 7 different climates. √ Completed the carbon footprint verification of the first product, added basic research work.
	Optimize production process and upgrade equipment: Relying on energy monitoring and analysis system to achieve refinement energy management, optimization of production processes and technologies to efficiently utilize resources and reduce waste, develop and apply solar and other clean energy and energy storage projects.	Energy and Resource Management	Energy intensity	<ul style="list-style-type: none"> • Short term: By 2028, energy consumption intensity will be reduced by 5% compared with 2023 ; the proportion of electricity consumption from clean energy will reach 20%. • Medium term: By 2035, energy intensity will be reduced by 10% compared to 2023; the proportion of electricity from clean energy will reach 30%. • Long term: By 2050, energy consumption intensity will be reduced by 20% compared with 2023;the proportion of electricity consumption from clean energy will continue to increase. 	<ul style="list-style-type: none"> √ Dongjiakou base has achieved 100% rooftop photovoltaic coverage, and photovoltaic electricity accounts for 18.24%. In 2024, reactive power compensation devices are added. √ The photovoltaic power consumption of Shiyan Base accounts for 12.90%. The second phase of photovoltaic project is under planning. √ The Cambodia plant photovoltaic project is under implementation. √ Energy storage projects are being planned and implemented.
	Accelerate green technology and product R&D innovation: Optimize low rolling resistance, low noise, wear resistance and durabilityproduct performance, develop special tires for new energy vehicles, etc.Special tires for environmental protection accelerate the development of new sustainableDevelopment, storage and application of materials.	Cleantech opportunities	Percentage of sustainable materials	<ul style="list-style-type: none"> • Short term: By 2028, carbon emission intensity will be reduced by 4% compared to 2023. • Medium term: By 2035, carbon emissions intensity will be reduced by 8% compared to 2023, and achieve carbon peak in 2030. • Long term: By 2050, carbon emission intensity will be reduced by 10% compared with 2023, and we will gradually move towards the goal of carbon neutrality. 	<ul style="list-style-type: none"> √ Doublestar launched its first PCR (passenger car radial tire), TBR (Meridian Card Sustainable concept tire products (such as tires) use more than 70% sustainable materials. √ Launched the new energy upgraded iterative product EXTREME EV 97. √ Innovations have been made in tire design for new energy bus tires to improve safety. √ “Rare Earth Gold” the low rolling resistance and high wear-resistant tire won the second prize.
	Promoting circular economy practices: Strengthen tires life cycle management, waste tire storage, recycling and reuse mechanism to improve the recycling rate of waste tires.	Circular Economy	Percentage of sustainable materials sourced	<ul style="list-style-type: none"> • Short term: In 2028, purchases of pyrolysis carbon black and recycled rubber will account for 30%. • Mid-term: In 2035, purchases of pyrolysis carbon black and recycled rubber will account for 40%. • Long term: In 2050, purchases of pyrolysis carbon black and recycled rubber will account for 50%. 	<ul style="list-style-type: none"> √ In 2024, purchases of pyrolysis carbon black and recycled rubber accounted for 20%. √ In 2024, the company's waste tire recycling already saved 1.3477 million yuan. The recycling rate of waste tires in storage has reached 100%.
	Intelligent waste monitoring and compliance management: Implement waste classification, source reduction, recycling and process improvement, combined with intelligent monitoring system in real time.	Emissions and Waste Management	Wastewater and gas emissions	<ul style="list-style-type: none"> • Short term: Ensure all emissions meet national and local environmental standards; By 2028, the wastewater and waste gas emissions will be reduced to 5% decrease in 2023. • Mid-term : By 2035, wastewater and waste gas emissions will be reduced by 15% compared to 2023; • Long term: By 2050, establish zero-emission or low-carbon emission production lines and fully realize green production. 	<ul style="list-style-type: none"> √ Establish an Environmental Protection Working Committee. √ The company focused on optimizing and updating the "Regulations on the Management of Hazardous Waste Discharge " to make the relevant job responsibilities clearer.



S	Sustainability Plan	Issues	Metrics	Target	Progress During The Reporting Period
<p>Social:</p> <p>1. Become a more attractive talent Gravitational Enterprise</p> <p>2. Product first, innovation first Leading the industry with quality</p> <p>3. Build a responsible supply chain, Assume chain leader responsibility</p>	<p>Supply chain win-win:</p> <p>Continue to develop a global full-process digital procurement platform as the main supply chain Mobilize upstream and downstream collaboration to</p>	Supply Chain Management	Raw Material Suppliers, ISO 9001/ TS 16949	<ul style="list-style-type: none">• Short term: By 2028, energy consumption intensity will be reduced by 5% compared with 2023 ; the proportion of electricity consumption from clean energy will reach 20%.• Medium term: By 2035, energy intensity will be reduced by 10% compared to 2023; the proportion of electricity from clean energy will reach 30%.• Long term: By 2050, energy consumption intensity will be reduced by 12% compared with 2023;the proportion of electricity consumption from clean energy will continue to increase.	<ul style="list-style-type: none">• Suppliers of key raw materials (except rubber) The ISO 14001 certification pass rate is 98%. The annual assessment rate of the ISO 9001/ TS 16949 system for raw material suppliers is 100%.
	<p>People-oriented:</p> <p>By tapping employees' potential and strengthening personal skills training, timely update training system, improve employee efficiency, and provide industry-competitive salaries. Promote the all-round development of employees.</p>	Employee Care	Employee Physical Examination Coverage	<ul style="list-style-type: none">• Maintain 100% employee physical examination coverage.	<ul style="list-style-type: none">• Finish.
		Occupational Health and Safety	Average Employee Satisfaction	<ul style="list-style-type: none">• Short term, By 2030, increase the average employee satisfaction to above 97 points.• Medium to long term: gradually improve average employee satisfaction.	<ul style="list-style-type: none">• The average satisfaction rate has reached 95.79 points and continues to improve .
			Occupational Health Management	<ul style="list-style-type: none">• Short term: By 2030, 100% coverage of occupational health management system certification will be achieved in all bases.• Medium to long term: Maintain 100% coverage of the occupational health management system certification.	<ul style="list-style-type: none">• Dongjiakou and Shiyan plant have passed ISO 45001 Occupational Health and Safety Management System Certification, Cambodia Base Under construction.
	<p>Product and Service Liability:</p> <p>Continuously optimize the R&D system, improve customized R&D services, and integrate quality assurance fault and production system to provide</p>	Talent Cultivation and Development	Types and Duration of Employee Training	<ul style="list-style-type: none">• Short term: By 2030, the average training time per person will be increased to more than 70 hours.• Medium to long term: Increase the average training time per person to more than 100 hours.	<ul style="list-style-type: none">• Carry out employee training in corporate culture, environmental protection, occupational health, production safety , professional ability, etc.The average training time is 65.5 hours.
		Innovation and Intellectual Property Protection	R&D Investment Ratio	<ul style="list-style-type: none">• Maintain R&D investment at 4%.	<ul style="list-style-type: none">• During the reporting period, R&D investment accounted for 4.33%, target achieved.
		Customer Service and Rights	Customer Satisfaction	<ul style="list-style-type: none">• Short term: By 2030 , improve customer satisfaction to 99.5 points• Medium to long term: Maintain and gradually improve	<ul style="list-style-type: none">• Customer satisfaction has reached 98.9 points and is steadily improving.
		Product Quality Management	Quality Management System Certification	<ul style="list-style-type: none">• Short term: By 2030, all bases will have passed ISO 9001 :2015 quality management system and IATF 16949:2016 automotive industry quality management system certification.• Medium to long term: Regularly update and maintain ISO 9001:2015 quality management system and IATF 16949:2016 at all bases The automotive industry quality management system certification is 100% valid.	<ul style="list-style-type: none">• The company's Dongjiakou base and Cambodia tire factory have passed ISO 9001:2015 quality management system certification.• The factory in Shanghai and Shiyan base factory have passed IATF 16949:2016 automotive industry quality management system

G	Sustainability Plan	Issues	Metrics	Target	Progress During The Reporting Period
<p>Governance:</p> <p>Strengthening governance structure and improving profitability</p>	<p>Strengthening Corporate Governance and Operations:</p> <p>Build a governance system integrating rule of law, risk, compliance and internal control. Build a comprehensive risk management mechanism and establish overseas policy bills to deal with Group to provide all-round support for overseas business development.</p>	Corporate Governance	Number of major deficiencies in internal control	<ul style="list-style-type: none">• Conduct internal control self-evaluation on an annual basis to ensure that there are no major deficiencies in internal control.	<ul style="list-style-type: none">• An internal control effectiveness evaluation was conducted on thirteen major businesses and matters of operation and management.• No internal control major deficiencies.
	<p>Promoting the Company's Digital Management:</p> <p>Comprehensively build a digital management and control system, open up business system interfaces, and strengthen Data governance and reuse accelerate the enhancement of digital value.</p>	Digital Governance	Number of information security incident	<ul style="list-style-type: none">• The incidence rate of information security incidents is 0.	<ul style="list-style-type: none">• No information security incidents occurred during the reporting period, and the goal has been achieved.

Sustainable Development Chronicle



ALL STAR

Annual Honors Related to Sustainable Development

Number	Title or Award	Department
1	Shandong Province Digital Economy Industry Innovation Center	Shandong Provincial Department of Industry and Information Technology
2	2024 Shandong Province Enterprise Technology Innovation Project Plan (First Batch)	Shandong Provincial Department of Industry and Information Technology
3	2024 "Shandong Manufacturing • Qilu Boutique"	Shandong Provincial Department of Industry and Information Technology
4	Qingdao Social Responsibility Model Enterprise	Qingdao Enterprise Confederation, Qingdao Entrepreneurs Association, Qingdao Industrial Economy Federation
5	Truck Driver Recommended Charity Brand	Golden Summit Organizing Committee
6	Global Automotive Supply Chain Eco-Partner Award - ESG Eco-Partner Award	China Automotive News
7	2024 C-BPI the Top Brand in Chinese Domestic Automotive Tire Industry	Chnbrand
8	The Asia's 500 most influential brands	World Brand Lab



Qingdao Social Responsibility Model Enterprise Certificate



The Asia's 500 most influential bands



Truck Driver Recommended Public Welfare Brand



2024 C-BPI the Top Brand in Chinese Domestic Automotive Tire Industry

Materiality Assessment & Screening

The company follows the latest requirements of the Shenzhen Stock Exchange Guidelines, GRI, IFRS S2 automotive parts industry standards and CASS-ESG 6.0, and determines the substantive topics of the annual sustainable development report based on previous topic research and in combination with its own business characteristics and stakeholders' concerns.

(1)Screening of substantive issues:



Analyze the company’s business background, external environment (such as policies, industry trends) and affected stakeholders, and establish a list of issues.

(2)Materiality assessment and ranking:










By investigating the opinions of internal and external stakeholders, we identify potential important issues, consider their risks and opportunities and classify them, assess the importance of the issues and rank them. After assessing the impact, risks and opportunities of each issue, we integrate the impact and financial importance results. Finally, we screened out 11 highly important issues, 8 moderately important issues and 2 generally important issues, and ranked the material issues in terms of importance to the company's sustainable development and importance to stakeholders.

(3)Topic matrix and reporting scope:

Based on the order of importance, a substantive topic matrix is formed to reflect the importance of each topic to internal and external stakeholders. Based on the substantive topics, the Board of Directors and the Sustainable Development Committee have resolved to determine the key description scope of this report. This report elaborates on the above topics one by one, summarizes Qingdao Doublestar's relevant initiatives and achievements in 2024, and proposes business objectives and implementation measures.



Stakeholder Identification and Communication

Stakeholders	 Investor	 Staff	 Customer	 Supplier	 Cooperative partner	 Government and other regulatory agencies	 Public and community
Representatives of stakeholders	Shareholders and potential investors of the company	Union member representatives, employee representatives, and representatives of other workers serving the company	Domestic and foreign automobile manufacturers, automobile supporting service providers	Suppliers of core raw materials such as natural rubber, synthetic rubber, steel cord, and carbon black.	Industry associations, chambers of commerce, partner universities, and agents in the country/region where the operation is located	The country/local government where the operation is located, and the Shenzhen Stock Exchange	Non governmental organizations, charitable organizations, social organizations, mainstream media
Topics of concern	<ul style="list-style-type: none"> Corporate Governance Business Ethics Information Disclosure Innovation and Intellectual Property Protection 	<ul style="list-style-type: none"> Information Security Talent Development and Training Employee Care Diversity and Inclusion Occupational Health and Safety 	<ul style="list-style-type: none"> Product Quality Management Supply Chain Management Customer Service and Rights 	<ul style="list-style-type: none"> Innovation and Intellectual Property Protection Product Quality Management Supply Chain Management Information Security Occupational Health and Safety 	<ul style="list-style-type: none"> Innovation and Intellectual Property Protection Quality Management of Products 	<ul style="list-style-type: none"> Corporate Governance Business Ethics Information Security Information Disclosure Environmental Compliance Management Biodiversity Conservation 	<ul style="list-style-type: none"> Responding to Climate Change Environmental Compliance Management Energy and Resource Management Emissions and Waste Management Opportunities in Clean Technology Biodiversity Conservation Community Activities and Philanthropy
Communication methods and channels	<ul style="list-style-type: none"> Shareholders' Meeting Financial Reports and Announcements Investor Hotline Roadshows Earnings Presentations Online Group Reception Day for Investors 	<ul style="list-style-type: none"> Labor Union and Staff Representative Assembly Employee Activities Employee Training Employee Assessment and Promotion Internal Communication Platform Occupational Health Monitoring Safety Emergency Drills 	<ul style="list-style-type: none"> Customer Satisfaction Surveys Routine Customer Reviews, Visits, and Communication via Phone/Email 	<ul style="list-style-type: none"> Supplier Assessment and Evaluation Supplier Training Daily Feedback via Phone Communication 	<ul style="list-style-type: none"> Daily Exchanges and Visits Meetings and Activities of Standard Policy-Related Associations and Working Groups Strategic Cooperation Projects 	<ul style="list-style-type: none"> Government Meetings Institutional Inspections Information Disclosure Regular Reporting and Communication 	<ul style="list-style-type: none"> Public Welfare and Charity Activities Community Activity Support Energy Saving and Emission Reduction Projects Information Disclosure

Materiality Matrix



Importance	Material Issues	Issue Categories
High Importance	Product Quality Management	Social
	Innovation and Intellectual Property Protection	Social
	Responding to Climate Change	Environmental
	Corporate Governance	Governance
	Cleantech Opportunities	Environmental
	Occupational Health and Safety	Social
	Supply Chain Management	Social
	Talent Cultivation and Development	Social
	Emissions and Waste Management	Environmental
	Circular Economy	Environmental
	Energy and Resource Management	Environmental
	Customer Service and Rights	Social
Medium Importance	Environmental Compliance Management	Environmental
	Business Ethics	Governance
	National Strategic Response	Social
	Information Security	Governance
	Digital and Intelligent Governance	Governance
	Information Disclosure	Governance
	Employee Care	Social
Moderate Importance	Biodiversity Conservation	Environmental
	Community Activities and Public Welfare	Social



National Strategic Response

Party Leadership: Strengthening the “Roots” and Casting the “Soul”

Upholding the leadership of the Party and strengthening party building are the foundation and soul of state-owned enterprises. Qingdao Doublestar actively implements the major decisions and deployments of the Central Committee, the provincial and municipal Party committees, and the Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era. Guided by Party building, strengthens its sense of responsibility, and deeply integrates Party building into production and operations, thereby achieving high-quality development of the enterprise.



Pursuant to the provisions of the <Constitution of the Communist Party of China>, the company has established the <Committee of the Communist Party of Doublestar Co.Ltd.>, to undertake principal responsibility for Party building and to be in charge of the research, planning, deployment, promotion, and supervision of Party building work within the company. During the reporting period, the company has continuously conducted educational activities, holding over 90 sessions of specialized study classes and theoretical study group discussions of the Party committee, and organizing more than 410 theme party days, including party spirit education and viewing of red-themed educational films, thereby creating a positive learning environment. The company has strengthened the concept of “brand-led development” by establishing the “Doublestar Pioneer” Party building brand, and has created “N types of models,” “Star Organizations,” and “four types of pioneers,” “Star Party Members.” It has also established 73 Party member vanguard posts and Party member assault teams, fully leveraging the political core role of Party organizations and the exemplary role of Party members.

Cultivating and Practicing the Core Values of Socialism

The Party Committee of the company places high importance on cultivating and practicing the Core Values of Socialism. All Party branches and departments fully recognize the significance of cultivating and practicing these values. To thoroughly study and implement the spirit of the 20th National Congress of the Communist Party of China and to integrate the Core Values of Socialism into the work, life, and spiritual world of the broad masses of employees, the company has formulated the <Doublestar Tire Implementation Measures for Cultivating and Practicing the Core Socialist Values> as a guide. This is aimed at better fulfilling the important responsibilities of state-owned enterprises, providing spiritual motivation for the company's scientific development, and meeting the practical needs of building a high-quality workforce.

Qingdao Doublestar has established a leadership group for cultivating and practicing the Core Values of Socialism and has carried out a variety of activities related to the Core Values of Socialism, including themed essay contests, the establishment of publicity platforms, legal education and publicity, the promotion of advanced models, and the conduct of technological innovation and youth innovation and efficiency activities.



Thematic Meeting on Publicity and
Education of the Core Socialist Values



Public Opinion Propaganda of the
Core Socialist Values

“the Belt and Road Initiative”: Global Layout

The company actively responds to the national Belt and Road Initiative. During the reporting period, the overseas plant in Cambodia was successfully launched into production. This initiative has driven local economic development and enhanced friendly trade relations between China and Cambodia. It has effectively improved the company's integrated management capabilities in both raw material supply and product export markets. The company has reduced costs in raw materials and logistics, and can effectively mitigate the impact of anti-dumping and countervailing duties in international markets. This move further expands the company's market reach in Europe, America, and the ASEAN region, improves the operational performance of its overseas markets, and enhances its international competitiveness, thereby accelerating the globalization of Doublestar.



Inauguration Ceremony of Doublestar (Cambodia) Tire Co., Ltd.

Localization of Procurement

The Cambodian factory actively seeks cooperation with local suppliers, prioritizing the procurement of local raw materials. This strategy not only reduces transportation costs and carbon emissions but also supports local economic development. By localizing procurement, the factory ensures a timely supply of raw materials. Moreover, collaboration with local suppliers enhances the flexibility and responsiveness of the supply chain, thereby better meeting market demands.



Recruitment of Cambodian Personnel

Localization of Workforce

The establishment of the Cambodian factory has created nearly 1,000 job opportunities for the local community. The company actively promotes the localization of its workforce, which not only helps to reduce labor costs but also leverages the local human resource advantages. By recruiting and training local Cambodian employees, the factory can improve production efficiency and quality, while strengthening its connection and interaction with the local community. Localization of the workforce also enhances the cultural diversity and inclusiveness of the factory, creating a more harmonious working environment.



Governance Builds the Cornerstone Steady and Far-reaching

- **Corporate Governance**
- **Business Ethics**
- **Digital and Intelligent Governance**
- **Information Security**
- **Information Disclosure**

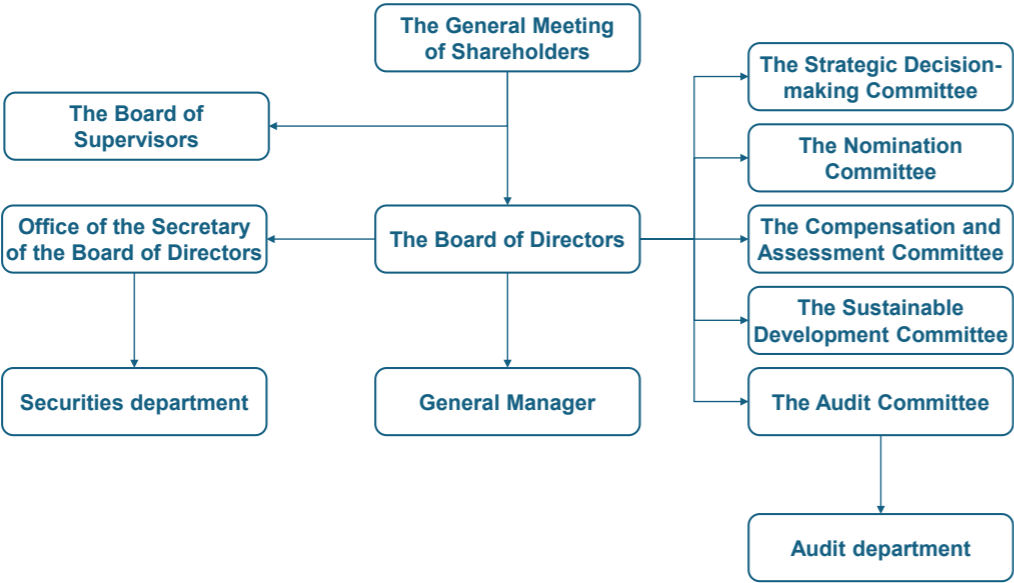


Corporate Governance

Governance Structure




In accordance with the relevant provisions of the <Company Law of the People's Republic of China>, the <Securities Law of the People's Republic of China>, the <Listing Rules of the Shenzhen Stock Exchange>, and other laws, regulations, and normative documents, as well as the <Company's Articles of Association>, Qingdao Doublestar has established a governance structure comprising the General Meeting of Shareholders, the Board of Directors, the Board of Supervisors, and the Management Layer. This structure ensures the standardized operation of the company and effectively protects the rights and interests of investors. By continuously improving and optimizing the company's corporate governance structure, the company promotes its sustainable and healthy development.

policy-making body	The General Meeting of Shareholders the supreme authority of the company, making decisions on important matters such as the company's business policies and investment plans in accordance with the law.
supervisory and inspection body	The Board of Supervisors responsible to the General Meeting of Shareholders, and independently exercises its supervisory and inspection powers. It supervises the legality and compliance of the company's financial affairs and the performance of duties by the company's directors, general manager, and other senior management personnel, safeguarding the legitimate rights and interests of the company and its shareholders.
Business management organization	The Board of Directors Accountability to the General Meeting of Shareholders. The Board of Directors has established the following committees: the Strategic Decision-making Committee, the Sustainable Development Committee, the Nomination Committee, the Compensation and Assessment Committee, and the Audit Committee. The company has clearly defined the specific and detailed responsibilities and rules of procedure for each committee, supervising the management of various company affairs and fully leveraging the important role of the committees in strategic decision-making and standardized operations, thereby driving the company's sustainable development.



Corporate Governance Structure Chart

The company has established relevant systems, including the <Articles of Association of Qingdao Doublestar Co., Ltd.>, the <Rules of Procedure for the General Meeting of Shareholders of Qingdao Doublestar Co., Ltd.>, and the <Rules of Procedure for the Board of Supervisors of Qingdao Doublestar Co., Ltd.>. During the reporting period, the company convened several sessions of the General Meeting of Shareholders, the Board of Directors, and the Board of Supervisors, with a 100% attendance rate of directors at the Board of Directors meetings.

 The General Meeting of Shareholders Number of Sessions Held: 3 Number of Topics Discussed: 50	 The Board of Supervisors Number of Sessions Held: 6 Number of Topics Discussed: 42	 The Board of Directors Number of Sessions Held: 8 Number of Topics Discussed: 55
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The Board of Directors

The Company gives due consideration to the industry experience, background and gender of the Board members in order to ensure the diversity of the Board and to provide different perspectives and values for the Company's strategic planning and assessment from a broader perspective. The Board of Directors of the Company consists of eight directors, with a chairman, and meets at least twice a year in accordance with the Articles of Association of Qingdao DoubleStar Co. When deciding on major matters of the Company, the Board of Directors will listen to the opinion of the Party Committee of the Company in advance.

Type	Name	Gender	Professional Experience	
			Industry experience	Financial experience
Chairman of the Board	Yongsen Chai	Male	√	
Director	Junhua Zhang	Female	√	√
Director	Ling Deng	Female	√	
Director	Hua Chen	Male		√
Director	Jingyu Wang	Male	√	√
Independent Director	Xijian Quan	Male		√
Independent Director	Kejian Gu	Male		√
Independent Director	Hong Wang	Female		√



3 independent directors
accounting for 37.5%



3 female directors
accounting for 37.5%



Investor Relations Management

Qingdao Doublestar actively maintains a positive relationship with its investors. To standardize investor relations management and protect the legitimate rights and interests of investors, especially those of the general public, the company has formulated the Investor Relations Management System in accordance with relevant laws, regulations, and normative documents, and in light of the company's actual situation. Through facilitating the exercise of shareholders' rights, information disclosure, interactive communication, and handling of complaints, the company strengthens communication with both existing and potential investors, enhances investors' understanding and recognition of the company, and thereby improves the corporate governance level and overall value of the listed company. These activities aim to respect, reward, and protect investors.

The Company actively carried out multi-category investor relations activities, such as performance briefing, roadshow activities and online reception. During the reporting period, the Company answered a total of 75 questions on the interactive platform, received more than 150 calls from investors, received 15 research visits from shareholders of listed companies and investment institutions, and participated in 6 investment activities organized by the regulatory authorities.

In the first quarter of 2024, the company officially disclosed its <2023 Sustainable Development and Environmental, Social, and Governance (ESG) Report> to the public, soliciting feedback from all investors. Based on the feedback received, the company continues to make improvements and gradually enhance its overall ESG management level.

Investor Relations Activities

Performance briefings

Roadshow events

Online reception

Performance briefings

Online reception

Internal Control Management

Qingdao Doublestar has strengthened the construction of its internal control system to standardize the company's operations and enhance its risk management capabilities. In accordance with the <Basic Norms for Internal Control of Enterprises> and the <Internal Control Guidelines for Listed Companies> issued by the Shenzhen Stock Exchange, the company has established a robust and efficient internal control mechanism. It has also formulated a series of regulatory management systems, including the <Internal Control System of Qingdao Doublestar Co., Ltd.>, the <Internal Control Evaluation System of Qingdao Doublestar Co., Ltd.>, and the <Internal Audit System of Qingdao Doublestar Co., Ltd.>. These systems are designed to better safeguard the company's assets, protect the legitimate rights and interests of investors, and ensure the ultimate realization of the company's strategic business objectives.

During the reporting period, the company conducted an evaluation of the effectiveness of internal control over thirteen major business operations and matters, including market competition and business management, fund safety management, human resource management, procurement and payment management, asset management, sales and collection management, inventory management, corporate governance and management, comprehensive budget management, contract management, safety and environmental protection management, investment management, and related-party transaction management. Based on the company's assessment of significant internal control deficiencies, as of the benchmark date for the internal control evaluation report, there were no significant internal control deficiencies identified.



Risk Management

Qingdao Doublestar fully recognizes the importance of a robust risk management system for the stable and sustainable operations of the company. It regularly identifies and analyzes internal and external risks associated with its business activities, investigates the causes, and prepares risk management reports. The company also formulates corresponding measures and disposal plans for risks and has launched a special improvement program for ESG risk management.

Climate Change Risk

A climate change response and control team has been established to conduct in-depth identification and analysis of different climate scenarios. The team has developed response measures and prepared documents such as the Emergency Response Plan for Staggered Production Due to Climate Risk, Climate Impact Production Strategy, and Contingency Plan for Sudden Climate Change to continuously improve the company's overall response to climate change.

Environmental Risk

An Environmental Protection Committee has been set up, which has formulated regulatory requirements such as the <Environmental Protection Committee's Environmental Protection Responsibility System>, <Environmental Protection Training System>, and <Environmental Protection Management System> to strengthen environmental protection management and prevent the occurrence of sudden environmental pollution incidents.

Risks Related to the Cambodian plant

The company has conducted comprehensive risk identification, assessment, and response analysis, identifying multiple types of risks, including political, economic, legal, operational, social, and environmental risks. Corresponding risk assessments and targeted response measures have been developed for each type of risk.

Information Security Risk

The <Internal Audit Management Procedure for Information Security> has been compiled to ensure the security and value of information assets while effectively managing potential risks and reducing the impact of information security risks on the company's operations. The company has also set information security performance management targets and clarified requirements for responding to information security risks.

Specialized Risk Management Enhancement Work



Compliance Management

The company has always adhered to compliance in its operations and continuously expanded the coverage of internal systems and external regulations. It has established 34 management systems, which have been publicized on the legal digital platform to strengthen the implementation of specific compliance obligations for different positions. Focusing on key business and management areas such as tax management, contract management, data compliance, overseas investment, labor employment, and environmental protection, the company has reviewed the relevant laws and regulations and established targeted compliance management mechanisms.



As a state-owned listed company, Qingdao Doublestar is oriented towards tax compliance and strictly adheres to national and local tax regulations. Through internal audits, compliance training, and periodic self-inspections, the company ensures the accuracy and timeliness of tax declarations.

In accordance with the tax system and requirements of its controlling shareholder, the company has compiled and improved the Tax Risk Inventory and has established a tax management position to handle various tax-related matters. Additionally, each business department of the company diligently fulfills its tax-related responsibilities, assisting the finance department in managing tax matters. This approach ensures the prevention and control of tax risks from the front end of business operations, gradually achieving the company's tax management objectives and comprehensively controlling tax risks throughout the business process.

There have been no instances where the company has been penalized or warned by regulatory authorities for violations of laws and regulations related to product quality, customer service, intellectual property protection, environmental protection, employee employment, and other aspects of its business operations.



The total amount of taxes paid by the company in 2024 was XXX yuan.

Business Ethics

Qingdao Doublestar has always advocated for the establishment of a business environment that is fair, just, transparent, objective, reasonable, and characterized by integrity and anti-corruption. The company strictly prohibits any behavior that violates business ethics and adheres to the principle of integrity as the foundation, promoting a culture of integrity. The company's business ethics management framework not only covers aspects of anti-corruption and anti-unfair competition but also includes codes of conduct or commitment requirements for suppliers, employees, Party members, and customers. It has received high recognition in fulfilling quality and social responsibilities.

Suppliers

The company has signed the <Integrity and Anti-Corruption Agreement> with all suppliers, achieving a coverage rate of 100%. The agreement explicitly prohibits any behavior that violates business ethics. The company also sends the Notice on <Integrity Cooperation for Suppliers to emphasize> this point. Penalties will be imposed for violations of the <Integrity and Anti-Corruption Agreement>.

Employees

Employees who are prone to violations of business ethics are required to sign the <Doublestar Integrity Commitment Letter> quarterly to restrain relevant behaviors and clarify the punishment mechanism. During the reporting period, the coverage rate of employees who received training on professional ethics and anti-corruption was 100%.

Party Members

The company has organized Party members to sign the <Doublestar Self-Discipline Commitment Letter>, with a signing rate of 100%.

Customers

The company actively promotes its business ethics policies to customers, encourages their participation in supervision, and sets up public reporting channels for customers to report any violations of business ethics by the company in a timely manner.

Integrity System Construction

The company continuously improves its anti-corruption and integrity-building efforts, focusing on enhancing the awareness of integrity and self-discipline among frontline employees and Party members. It effectively integrates the three aspects of "deterrence, prevention, and disinclination to corruption," adhering to a zero-tolerance policy towards corruption and establishing a comprehensive integrity system. As a state-owned enterprise, the company places great emphasis on building a culture of integrity, regularly conducting themed training sessions on integrity and anti-corruption for employees, strengthening Party spirit education, and enhancing moral cultivation to reinforce the ideological and institutional defenses against corruption.



Integrity Education Activities

The company conducted a comprehensive corruption risk assessment with a **100%** coverage rate of business processes, ensuring compliance and transparency in key business segments.

The coverage rate of conflict of interest declarations reached **100%**, ensuring that all relevant personnel strictly adhere to the principle of interest avoidance and maintain a fair and just business environment.

The proportion of senior management signing the <Integrity in Professional Conduct Commitment Letter> reached **100%**, further strengthening the responsibility for integrity.

Anti-Unfair Competition

Qingdao Doublestar respects the principles of market competition and supports a fair and free competitive market environment. The company strictly complies with relevant anti-monopoly and anti-unfair competition laws and regulations, such as the <Anti-Unfair Competition Law of the People's Republic of China> and the <Civil Code of the People's Republic of China>. It has established an honest and fair competition mechanism and conducts special investigations into any reported or discovered clues related to unfair competition to prevent its occurrence.



Reporting phone
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cn

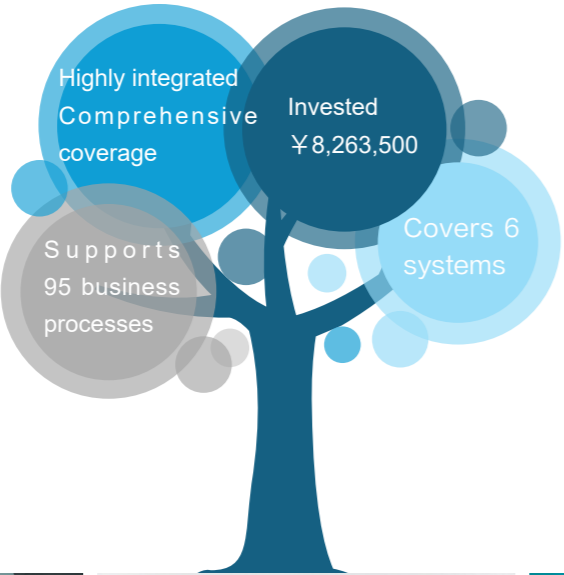


Reporting address
Discipline Inspection
Committee of Qingdao
DoubleStar Tire Industry
Co., Ltd (No. 66, Gangxing
Avenue, Dongjiakou
Economic Zone, Boli Town)



Digital and Intelligent Governance

Qingdao Doublestar integrates digital and intelligent technologies to enhance corporate governance efficiency and optimize resource allocation, thereby promoting the company's stable and sustainable development. The company's <Digital and Intelligent Quality Control throughout the Tire Manufacturing Process> project has been selected as a typical case of quality improvement in industry and information technology by the Ministry of Industry and Information Technology. This project represents a new model and business form of intelligent manufacturing and intelligent services based on the entire life cycle of tires. Through full-process digitalization, the project rapidly applies and develops data, accelerates product research and development, and innovation, and comprehensively improves quality management.



Production Informatization

- The Dongjiaokou Base has comprehensively reviewed the full-process informatization traceability of the production process. In response to the EU EUDR requirements for the traceability of raw materials, the corresponding MES system functions have been developed and optimized;
- The Hubei Shiyan plant, building on the management of finished product RFID chips, has added a barcode matching and binding function after molding. This ensures a one-to-one match between RFID chips and barcodes. The barcode system has been integrated with dealer systems such as JD.com and Tuhu, optimizing and enhancing the efficiency of information system integration between Doublestar and its dealers.



R&D Informatization

- The Central Research Institute has fully adopted PLM for product design. After PLM design and prototyping, testing notifications are sent to the Laboratory Information Management System (LIMS). The LIMS test result reports are automatically sent back to PLM, completing the online transformation of the R&D design system.



Manufacturing Informatization

- In response to the business needs for diversified production orders and flexible production, the company has conducted forward-looking research on Advanced Planning and Scheduling (APS) and has verified the Production Order Execution (POE) at the Shiyan Dongfeng plant. This has accumulated data experience in business management, information flow tracking, and overall architecture design for the rational aggregation and allocation of sales orders to the plant, and for tracking orders to the shift and machine level.

Information Security

Information Security and Privacy Protection

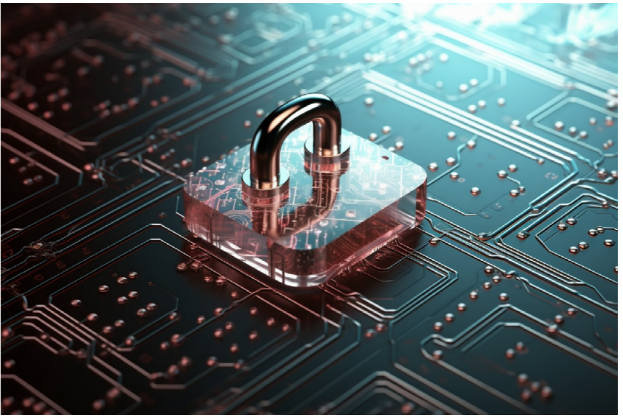
Qingdao Doublestar respects the privacy rights of all stakeholders and is committed to safeguarding their privacy and information security. In compliance with relevant laws and regulations, including the <Cybersecurity Law of the People's Republic of China>, the <Data Security Law of the People's Republic of China>, the <Personal Information Protection Law of the People's Republic of China>, the <Regulations on Information Security Level Protection Inspection Work (Trial) by Public Security Organs>, and the <Basic Requirements for Password Application in Information Systems>, the company has established the <Information Security Management System> and the <Doublestar Information Security> and <Personnel Confidentiality Management System>. Additionally, the company has compiled relevant procedural manuals, including the <Information Security Risk Management Procedure>, the <Information Security Incident Management Procedure>, and the <Information Asset Security Management Procedure>. A cross-domain data transmission security platform has been established to ensure the secure transfer of production data between different production bases and subsidiaries, thereby facilitating the implementation of the information security network.

For the newly established Cambodian plant and cross-border operations involving cross-border information transmission, Qingdao Doublestar has implemented several preventive measures. These include the installation of SSLVPN software for data encryption, strict control over the information system accounts of expatriate employees, and the deployment of specialized security software on terminal devices to ensure the integrity and confidentiality of data.

Dissemination and Training on Information Security

In 2024, the company conducted a total of 12 information security training sessions, averaging approximately 6 hours per person, covering all employees related to information security, achieving a coverage rate of 100%.

Furthermore, the company has established an emergency response mechanism for network and information security operations and has conducted three emergency drills for information security incidents. These drills included scenarios such as hacker attacks on servers, large-scale virus (including malware) attacks, and database system failures. The aim of these drills is to enhance the information security awareness and defense capabilities of all employees and to ensure the effective operation of the company's information security management system.



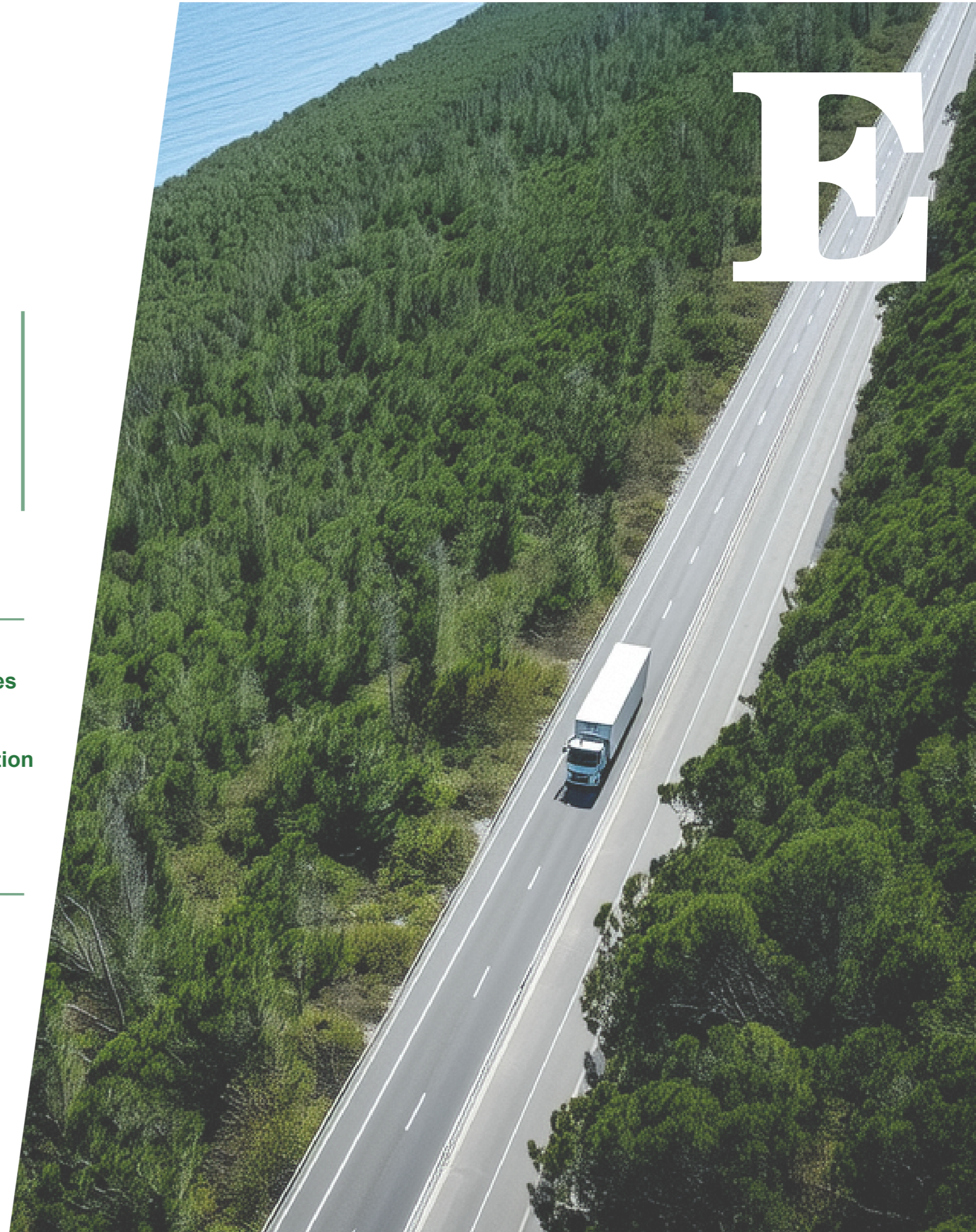
Information Disclosure

Qingdao Doublestar strictly complies with the relevant laws, regulations, and normative documents, including the <Listing Rules of the Shenzhen Stock Exchange>, the <Self-Regulatory Guidance No.1 for Listed Companies on the Main Board — Standardized Operations> and <the Self-Regulatory Guidance No.5 for Listed Companies — Management of Information Disclosure Affairs>, as well as the <Measures for the Administration of Information Disclosure by Listed Companies> and the provisions of the Company's Articles of Association. The company conscientiously fulfills its obligations for information disclosure, ensuring the authenticity and accuracy of the disclosed information.

The company proactively discloses information through multiple platforms and channels to ensure the wide dissemination and accessibility of the information, such as the company's official website, official public account, video account, and the Shenzhen Stock Exchange. The company not only focuses on the disclosure of financial data but also covers information on environmental, social, and corporate governance aspects that may have a material impact on investors and other stakeholders, ensuring that stakeholders can promptly understand the specific conditions of the enterprise.

Focus on Green Innovation to Address Climate Risks

- Responding to Climate Change
- Environmental Compliance Management
- Energy and Resource Management
- Emissions and Waste Management
- Cleantech Opportunities
- Circular Economy
- Biodiversity Conservation





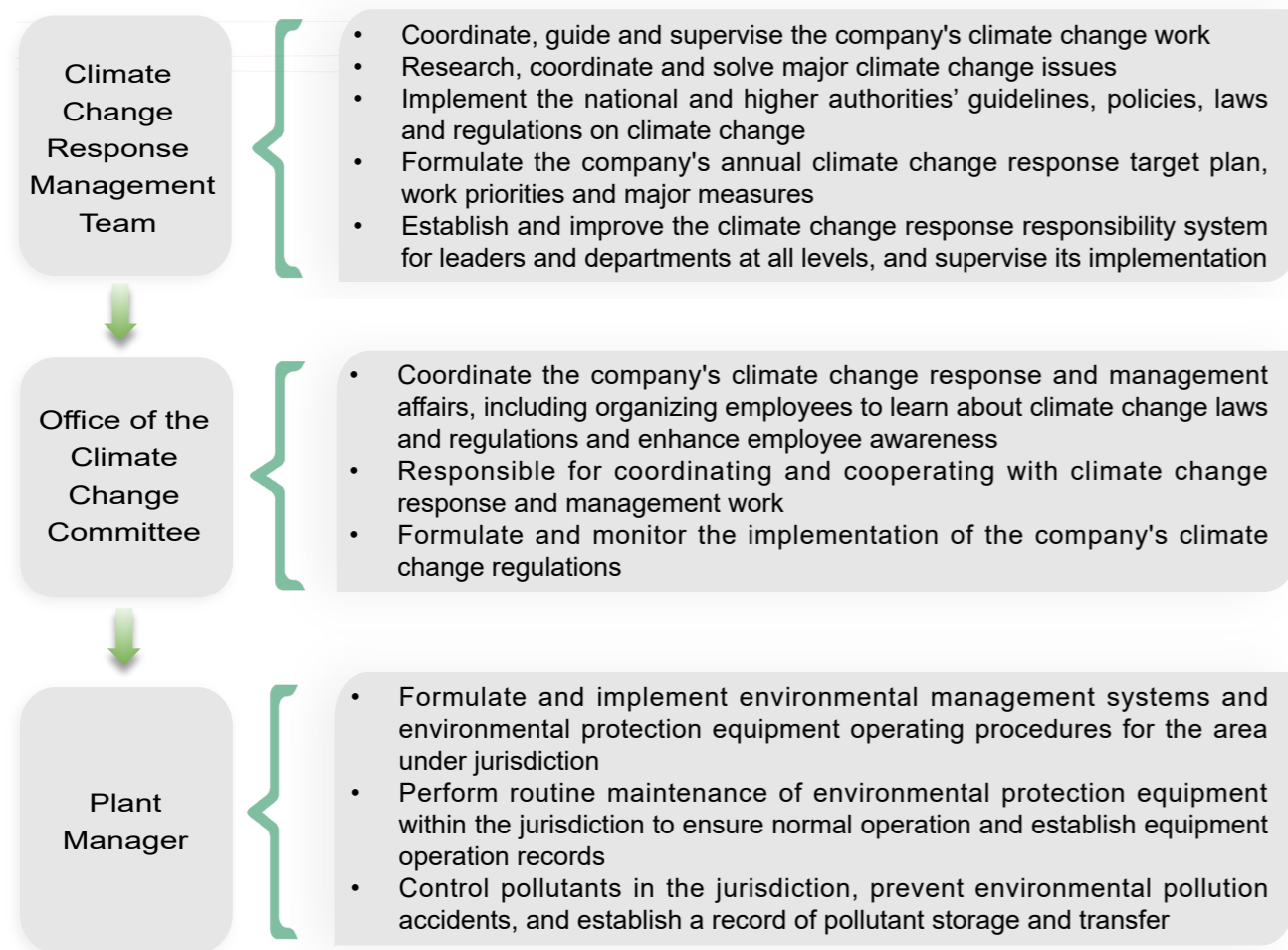
Responding to Climate Change

We systematically assess climate-related risks and opportunities in upstream and downstream operations and in our own operations, comprehensively benchmark against the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD), strictly adhere to the framework of International Financial Reporting Sustainability Disclosure Standard No. 2 - Climate-related Requirements for Sustainability-related Financial Disclosures (IFRS S2), and continuously strengthen and disclose the climate change governance system based on the four pillars of governance, strategy, risk management, indicators and targets, laying a solid foundation for the low-carbon transformation of the company itself and its value chain.

Governance



In 2024, Qingdao Doublestar established a new climate change response control team, with the head of the manufacturing headquarters as the chairman of the committee, and coordinated and guided the work related to climate change response



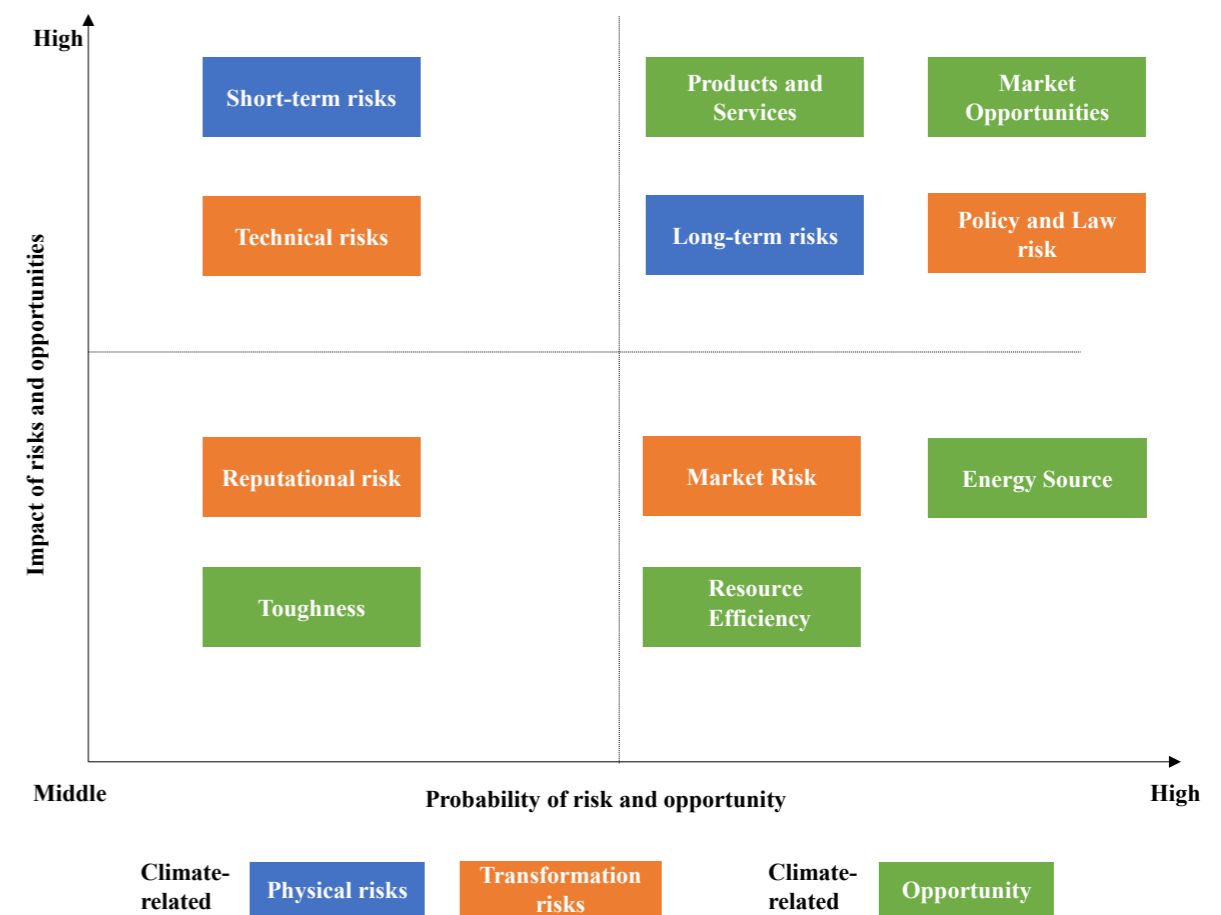
Climate Change Response Management Team

Strategy



During the reporting period, Qingdao Doublestar launched a special identification and response work for climate change risks. In combination with the characteristics of the industry in which the company is located, through scenario analysis, the potential impact of the rubber industry under normal climate scenarios, warming climate scenarios, extreme droughts, snowstorms, floods and other climate conditions was evaluated to identify the risks and opportunities related to climate change. At the same time, their extensive impact on supply chain efficiency, market demand and consumer behavior was explored, and the chain reaction that may be caused by changes in policies and regulations was considered. We have ranked these risks and opportunities according to their impact and likelihood, providing solid data support and decision-making basis for the rational allocation of resources and strategic planning.

Based on the comprehensive assessment results, Qingdao Doublestar further optimized its business operation model and investment decision-making process to effectively respond to the challenges brought by climate change and seize the opportunities it contains, ensuring that the company can develop more steadily and maintain efficient operation capabilities in the face of uncertain climate conditions in the future.



Climate Risk and Opportunity Identification Matrix



Qingdao Doublestar Climate-Related Risks and Opportunities

Risks Type		Risks Description	Potential Impact			Response Strategies
			Impact Time	Value Chain	Financial Impact	
Transformation risks	Policy and Legal Risks	Countries may set up carbon tariffs and promote clean energy trade. The EU has already formulated relevant laws and regulations such as carbon tariffs and product carbon footprint labels. The increase in compliance and competition costs has led to an increase in the price of carbon emission permits.	Short - medium term	Marketing and sales, overall operations	Operating costs	<ul style="list-style-type: none">• Pay close attention to changes in policies, regulations and international trade policies, and strengthen risk management and legal compliance.• Understand the policies and implementation of carbon tariffs in various countries, predict the trend of carbon tariffs in the future, and formulate reasonable export strategies.• Strengthen cooperation with the government, scientific research institutions and all sectors of society.• Strengthen the management of its own carbon footprint and reduce carbon emissions to reduce the cost of carbon tariffs.• Pay attention to the development trend of the clean energy market and international trade opportunities.
		As China's dual carbon goals are gradually implemented, carbon emission policies are becoming stricter, and there is a risk of being included in the list of companies subject to mandatory emission control.			Operating income	
		The gradual restriction on the sales of fossil fuel vehicles has led to a decline in the demand for tires of traditional vehicles, which in turn has led to a decline in the company's sales.				
	Technical Risks	<ul style="list-style-type: none">•Carbon and environmentally friendly technologies requires more R&D investment and faces stronger technological competition.•Maintaining a balance in product performance under the premise of continuously improving environmental protection requirements, high requirements are placed on technical improvements.•Temperature changes may directly affect product performance, and requirements for product quality and performance are increased.	Medium to long term	Product and service, R&D investment	Operating costs Operating income	<ul style="list-style-type: none">• Establish a technology risk monitoring mechanism to regularly evaluate and update the company's technology risks.• Increase R&D investment and strive to develop new sustainable materials and environmentally friendly processes.• Actively develop environmentally friendly products and improve the environmental performance of products.• Establish an industry-university-research cooperation mechanism to introduce advanced technology and talents.• Optimize production process flow to reduce production costs and energy consumption.• Strengthen employee training and awareness raising to enhance employees' attention to product performance and quality.
	Market Risks	Traditional fuel vehicle market is gradually shrinking due to environmental protection requirements and policy guidance, and the market demand for traditional fuel vehicle tires is declining.	Medium to long term	Product and service, Marketing and sales	Operating income	<ul style="list-style-type: none">• Strengthen market monitoring and early warning, establish a market risk assessment system, and timely adjust product portfolio and production plans to meet the real-time needs of the market.• Strengthen communication with stakeholders, pay attention to changes in consumer shopping habits, and clarify market demand.• Actively develop environmentally friendly products and improve the environmental performance of products.
	Reputational Risks	Customers and consumers are paying more attention to climate change. If companies fail to take positive action, their image and reputation may be damaged, and they may find it difficult to meet the expectations of stakeholders.	Medium to long term	Marketing and sales	Operating income Enterprise valuation Capital channels	<ul style="list-style-type: none">• Regularly publish corporate climate action, disclose corporate carbon emission data, emission reduction measures and results, etc.• Strengthen communication with the public, media and stakeholders, respond to concerns in a timely manner, and enhance corporate credibility.• Strengthen environmental management, improve resource utilization efficiency, and reduce pollution emissions.

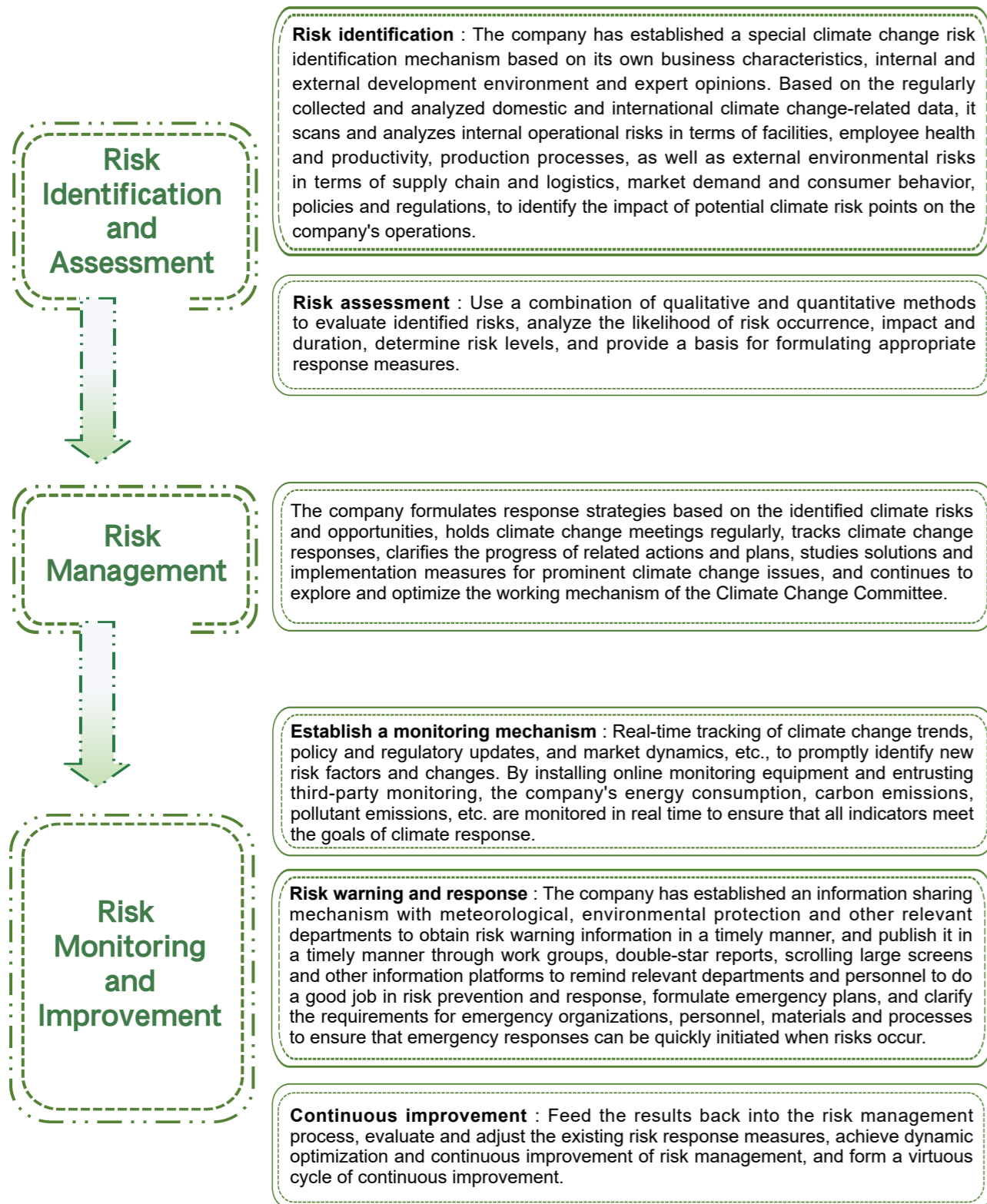


Qingdao Doublestar Climate-Related Risks and Opportunities						
Risk Type		Risk Description	Potential Impact			Countermeasures
			Impact Time Limit	Value Chain Links	Financial Impact	
Physical Risks	Short-term Risks	<ul style="list-style-type: none">Floods and rising sea levels: As climate change intensifies, sea levels may rise, causing flooding in factories or storage facilities, affecting the smoothness of the supply chain.Typhoons : Some production bases and logistics facilities are located in areas prone to typhoons or storms. Extreme weather may cause damage to infrastructure, interrupt production and supply chains, cause serious damage to company assets, threaten the safety of employee lives, and may even cause business interruptions, seriously affecting the company's operations.Extreme weather may affect the efficiency of domestic and foreign supply chains, which may lead to obstruction or delayed delivery of raw materials and increase the risk of order defaults.	Short Term	Supply Chain, Production Operations	Operating income ↓ Operating costs ↑ Fixed assets ↓	<ul style="list-style-type: none">Improve environmental adaptability: According to climate change trends and risk assessment results, optimize production layout and equipment configuration to improve the disaster resistance and environmental adaptability of the production process.Strengthen information sharing and early warning mechanism construction to improve the ability to respond to extreme weather events.Early warning information release: Establish an information sharing mechanism with meteorological, environmental protection and other relevant departments to obtain climate change early warning information in a timely manner, and release it in a timely manner through multiple information platforms to remind relevant departments and personnel to do a good job in risk prevention and response.Emergency plan formulation: Functional departments at all levels in each base formulate early warning response measures under different risk levels, formulate emergency plans for climate risks, clarify the requirements for emergency organization, personnel, materials and processes, and ensure that emergency response can be quickly initiated when risks occur.Emergency response and recovery: After the risk occurs, quickly organize emergency response work to ensure that losses are minimized; do a good job in production recovery after the risk is lifted, and restore normal production order as soon as possible.Diversified procurement: Expand the manufacturers in the warehouse, actively seek diversified raw material procurement channels, reduce dependence on a single source of supply, and improve the stability and reliability of raw material supply.Reserve management: The raw material storage department shall establish a raw material reserve system and reasonably determine the reserve scale and variety based on production demand and risk assessment results to ensure that normal production can be maintained when risks occur.
	Long-term Risks	<ul style="list-style-type: none">Climate change has led to a decline in natural rubber production, increasing the cost of natural rubber procurement and the risk of supply disruptions.The persistent high temperatures and water shortages caused by climate change may increase the risk of heat stroke for employees, affect factory production efficiency, and affect production and supply efficiency.Long-term temperature increases may affect the energy consumption and efficiency of the company's production process, especially the requirements for high-energy-consuming equipment and cooling systems.	Medium to long term	Supply Chain, Production Operations	Operating income ↓ Operating costs ↑ Fixed assets ↓	<ul style="list-style-type: none">Technological innovation: Research and develop rubber tree species that adapt to climate change and improve the resistance of rubber trees.Strengthen risk management and reduce the impact of market fluctuations on enterprises through financial instruments such as insurance and futures.Establish a diversified supply chain network to reduce dependence on a single production area.Strengthen employee training, health management, optimize the working environment, provide necessary protective equipment, improve work processes, promote green production technologies, and increase capital investment to comprehensively enhance employees' ability to adapt to climate change.Optimize energy management, upgrade efficient cooling systems, and enhance equipment' s ability to withstand high temperatures.

Qingdao Doublestar Climate-Related Risks and Opportunities						
Opportunities Type		Opportunities Description	Potential Impact			Countermeasures
			Impact Time Limit	Value Chain Links	Financial Impact	
Opportunity	Resource Efficiency	<ul style="list-style-type: none">Use renewable energy, save energy costs , develop a circular economy, improve resource and material utilization efficiency, reduce resource and material consumption, and thus reduce operating costs.	Short - medium term	R&D investment, Overall operations	Operating costs ↓	<ul style="list-style-type: none">Promote the construction of photovoltaic power generation and energy storage projects.Strengthen the improvement and innovation of production processes, adopt advanced energy-saving and emission-reduction technologies, reduce energy consumption and emissions in the production process, and improve resource utilization efficiency.Deepen the reuse of water resources and waste resources and the recycling of sustainable materials.Increase the research and development of renewable recycling technologies for tires and their raw materials.
	Energy Source	<ul style="list-style-type: none">Switching to lower-emission energy sources could potentially save you money on annual energy costs.	Short - medium term	Overall operation	Operating costs ↓	<ul style="list-style-type: none">Implement energy-saving and water-saving strategies and their supporting management measures.Actively explore new energy alternatives, pay attention to changes in the energy market, predict future energy price trends, and formulate reasonable energy procurement strategies.Strengthen the improvement and innovation of production processes, adopt advanced energy-saving and emission-reduction technologies, reduce energy consumption and emissions in the production process, and improve resource utilization efficiency.
	Products and Services	<ul style="list-style-type: none">Continuous innovation and development of new green, low-carbon and environmentally friendly products can not only significantly enhance the company's industry competitiveness, but also expand potential carbon reduction partners while reducing carbon emissions in its own industrial chain, and jointly build higher industry barriers.	Medium to long term	R&D Investment Marketing and sales	Operating income ↑	<ul style="list-style-type: none">In response to the changes in market demand caused by climate change, we will strengthen product research and development and innovation, launch tire products that adapt to different climate conditions, and meet market demand.Promote the research and development of green tire products and increase market share.
	Market	<ul style="list-style-type: none">Market demand for environmentally friendly and low-carbon products is increasing, the new energy vehicle market is gradually expanding, and the demand for new energy vehicle tires is increasing.	Long term	Marketing and sales	Operating costs ↓	<ul style="list-style-type: none">Flexibly adjust product structure and market layout according to domestic and international market demands and climate change trends to improve market competitiveness.
	Toughness	<ul style="list-style-type: none">Participate in renewable energy projects and adopt energy-saving measures to reduce production and operating costs.Develop diversified resource materials to reduce dependence on a single resource and reduce the risk of resource shortages.Develop new products and services to ensure resilience and increase revenue.	Long term	R&D investment, Marketing and sales	Operating income ↑ Cost of sales ↓	<ul style="list-style-type: none">Vigorously promote the construction of circular economy and improve resource utilization.Strengthen the planning of renewable energy projects and improve the utilization of renewable energy.Strengthen industry cooperation and actively promote sustainable material research.



Risk Management



Metrics and Targets

Based on a comprehensive assessment of climate-related risks v opportunities, Qingdao Doublestar has established a set of short-term, medium-term and long-term climate change response goals. The specific plans are as follows:

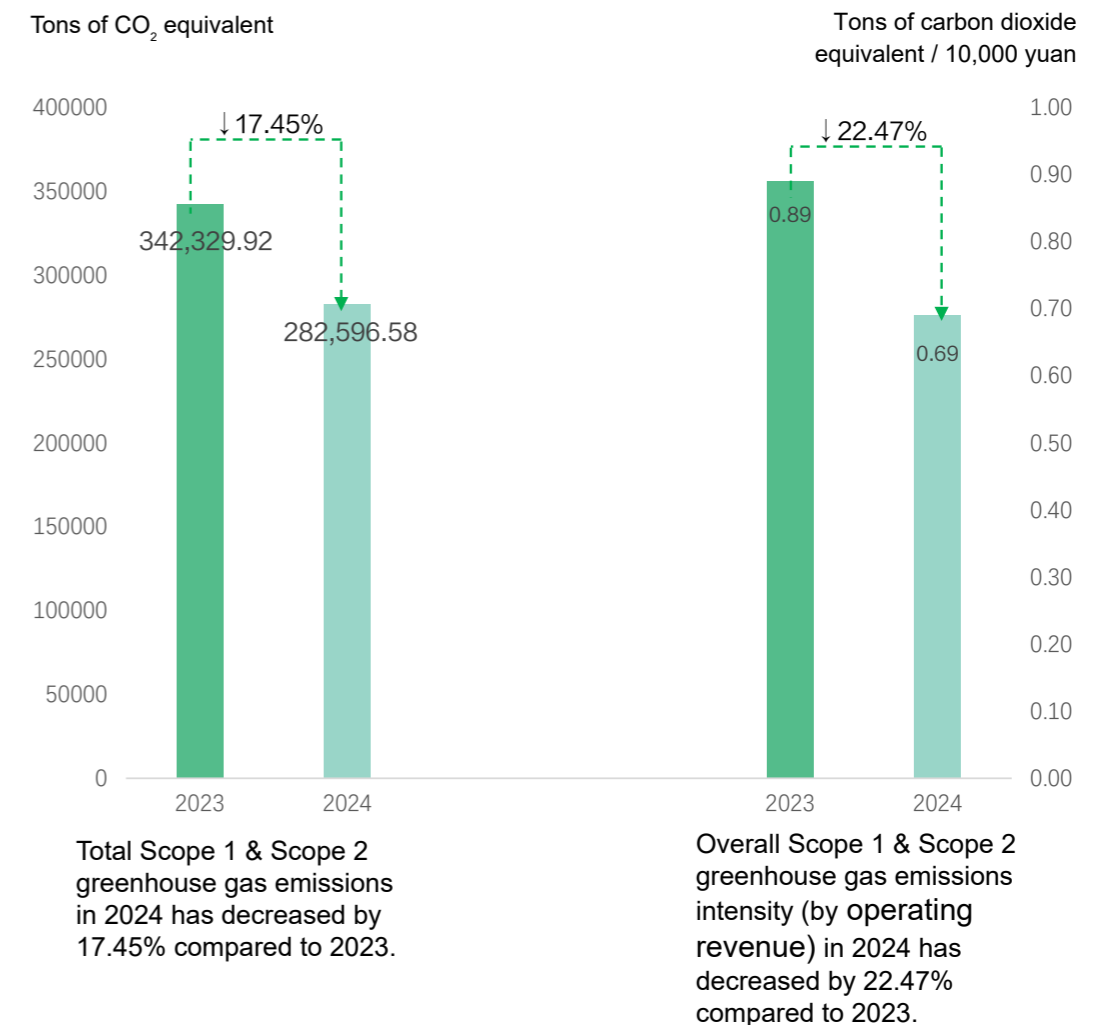
In the short term, by 2028, the carbon emission intensity will be reduced by 5% compared with 2023.

In the medium term, by 2035, the carbon emission intensity will be reduced by 10% compared with 2023.

In the long term, by 2050, the carbon emission intensity will be reduced by 50% compared with 2023, and gradually move towards the carbon neutrality goal, and strive to achieve carbon peak in 2030 and carbon a neutrality before 2050.

(For specific goals and indicators, please refer to: Chapter 4, Section 3 - Sustainable Development Strategy and Target Planning)

(1) Carbon Emissions





Qingdao Doublestar has strengthened its carbon emission management requirements. In 2023, the company established a dual-carbon leadership group led by the general manager to promote carbon management related work and regularly conduct greenhouse gas emission identification and data calculation.

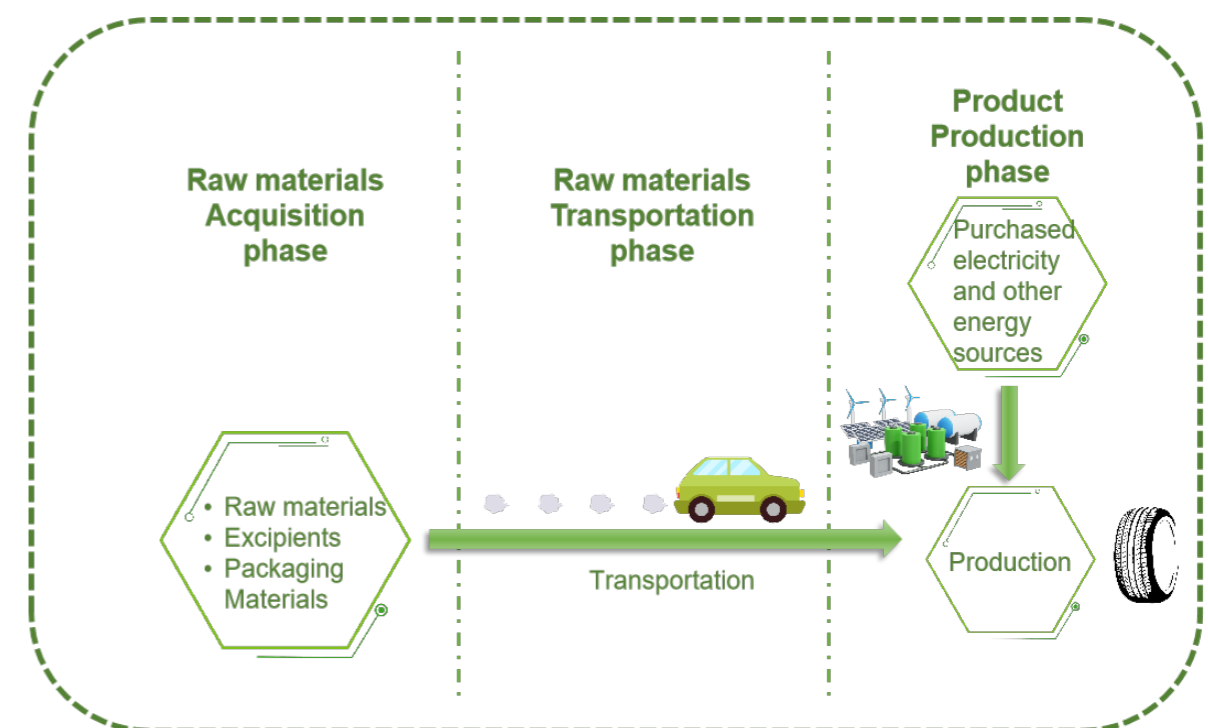
Each base actively promotes the update of relevant data every quarter, and strives to reduce emissions through the carbon emission management process. In 2024, the company commissioned a third-party agency to conduct a carbon audit. The results of the audit showed that the company's overall total greenhouse gas emissions and greenhouse gas emission intensity have decreased.

Plant	Carbon Emission Types	Unit	2024	2023	2022
Dongjiakou	Total Scope 1 GHG emissions	tCO ₂ eq	858.74	783.38	770.71
	Total Scope 2 GHG emissions	tCO ₂ eq	163,428.95	146,061.76	144,111.06
	Total Scope 1 & Scope 2 GHG emissions	tCO ₂ eq	164,287.69	146,845.14	144,881.77
	Carbon Intensity (Emissions per 10,000 yuan)	tCO ₂ eq/10,000 yuan	0.6	0.55	0.59
Shiyan	Total Scope 1 GHG emissions	tCO ₂ eq	457.84	407.51	251.04
	Total Scope 2 GHG emissions	tCO ₂ eq	91,220.11	95,904.47	80,052.83
	Total Scope 1 & Scope 2 GHG emissions	tCO ₂ eq	91,677.95	96,311.98	80,303.87
	Carbon Intensity (Emissions per 10,000 yuan)	tCO ₂ eq/10,000 yuan	0.75	0.82	1.04
Cambodia	Total Scope 1 GHG emissions	tCO ₂ eq	173.23	-	-
	Total Scope 2 GHG emissions	tCO ₂ eq	26,457.71	-	-
	Total Scope 1 & Scope 2 GHG emissions	tCO ₂ eq	26,630.94	-	-
	Carbon Intensity (Emissions per 10,000 yuan)	tCO ₂ eq/10,000 yuan	2.06	-	-
Total	Total Scope 1 GHG emissions	tCO ₂ eq	1,489.81	1,777.57	1,550.68
	Total Scope 2 GHG emissions	tCO ₂ eq	281,106.77	340,552.35	310,762.40
	Total Scope 1 & Scope 2 GHG emissions	tCO ₂ eq	282,596.58	342,329.92	312,313.08
	Carbon Intensity	tCO ₂ eq/10,000 yuan	0.69	0.89	0.97

(2) Product Carbon Footprint

In 2024, Qingdao Doublestar commissioned a third-party organization to successfully complete the carbon footprint assessment project for the semi-steel radial tire Arrizo series products in accordance with the following standards, and officially issued the corresponding report :

- PAS 2050:2011 <Specification for the Assessment of Greenhouse Gas Emissions from Goods and Services over their Life Cycle>
- ISO 14067:2018 <Requirements and guidelines for quantifying the carbon footprint of greenhouse gas products>
- GB/T 24067-2024 <Greenhouse Gases Requirements and Guidelines for Quantifying Product Carbon Footprint>
- GB/T 24040-2008 <Principles and framework for life cycle assessment of environmental management>
- GB/T 24044-2008 <Requirements and Guidelines for Environmental Management Life Cycle Assessment>
- T/SDXJ 001-2024 <Guidelines for Product Carbon Footprint Accounting and Reporting - Tires>



Product Carbon Footprint Rating System Boundaries



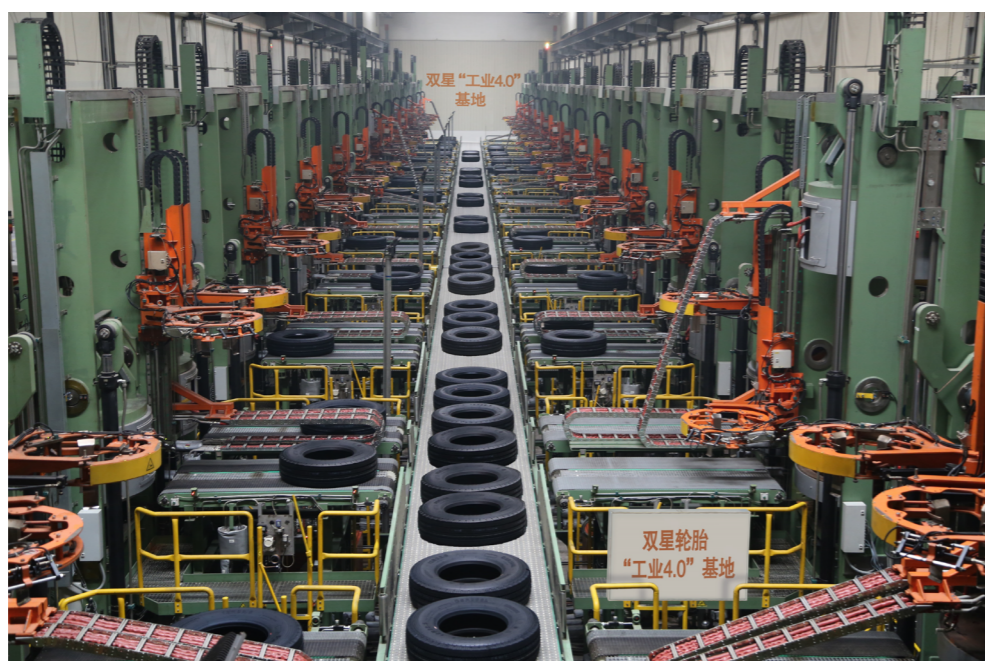
We calculated the carbon emissions per unit product from the "cradle to gate" stage, including the raw material acquisition stage, raw material transportation stage and production stage. These evaluation data and information will provide reliable carbon emission information for the company's product design, material procurement, production control, etc. Next, we will further analyze these data and information to promote green design, green procurement and supply chain management of products, and achieve product carbon reduction.

As the company's first product to achieve full life cycle carbon footprint investigation, this marks an important step in our product carbon footprint management. Based on this breakthrough, the company will continue to deepen this environmental protection initiative and gradually promote the carbon footprint accounting of more product lines.

At the same time, the company actively responded to the call of the China Rubber Industry Association, participated in the full-process carbon footprint accounting action for tire products, and worked with the industry to improve the tire industry accounting guidelines.

(3) Carbon Asset Management

In order to effectively reduce the cost of carbon emission reduction, control the risk of carbon trading compliance, Qingdao Doublestar realizes the appreciation of carbon asset value, actively respond to the country's call for energy conservation, emission reduction and green and low-carbon development, and comprehensively improve the company's environmental protection management level. the "Carbon Emission and Carbon Asset Management Regulations" have been formulated, and a carbon emission and carbon asset management leading group has been established to be responsible for building the company's carbon emission and carbon asset management system, promoting the company's energy conservation and carbon reduction and carbon asset optimization and upgrading, organizing the formulation and approval of the company's annual carbon emission management goals and carbon asset trading work plan, aiming to effectively control carbon emissions and optimize carbon asset management through standardized management methods, to ensure that the company actively fulfills its social responsibilities and promotes sustainable development while achieving economic benefits.



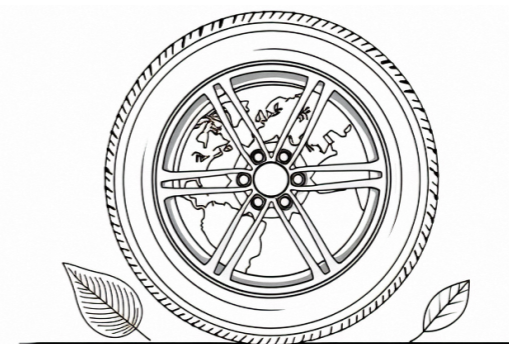
Environmental Compliance Management

Environmental Management Strategy

In the context of increasingly severe global climate change and environmental problems, Qingdao Doublestar deeply understands the importance of environmental management. In order to actively respond to environmental challenges and promote sustainable development, Qingdao Doublestar has formulated a comprehensive environmental management strategy and incorporated it into the company's long-term development plan. Qingdao Doublestar actively explores the green and low-carbon development path of the rubber tire industry, is committed to the green management of tire products, and accelerates the development of new quality productivity. To achieve this goal, we have determined the idea of "walking on two legs" early :

On the one hand, the company adopts advanced VPD digital twin design system and low rolling resistance tire technology, through the development of high-performance tires and disruptive innovative products, significantly reducing product carbon emissions, intelligent factories apply photovoltaic power generation and green energy-saving technologies on a large scale, improving production efficiency and reducing energy consumption;

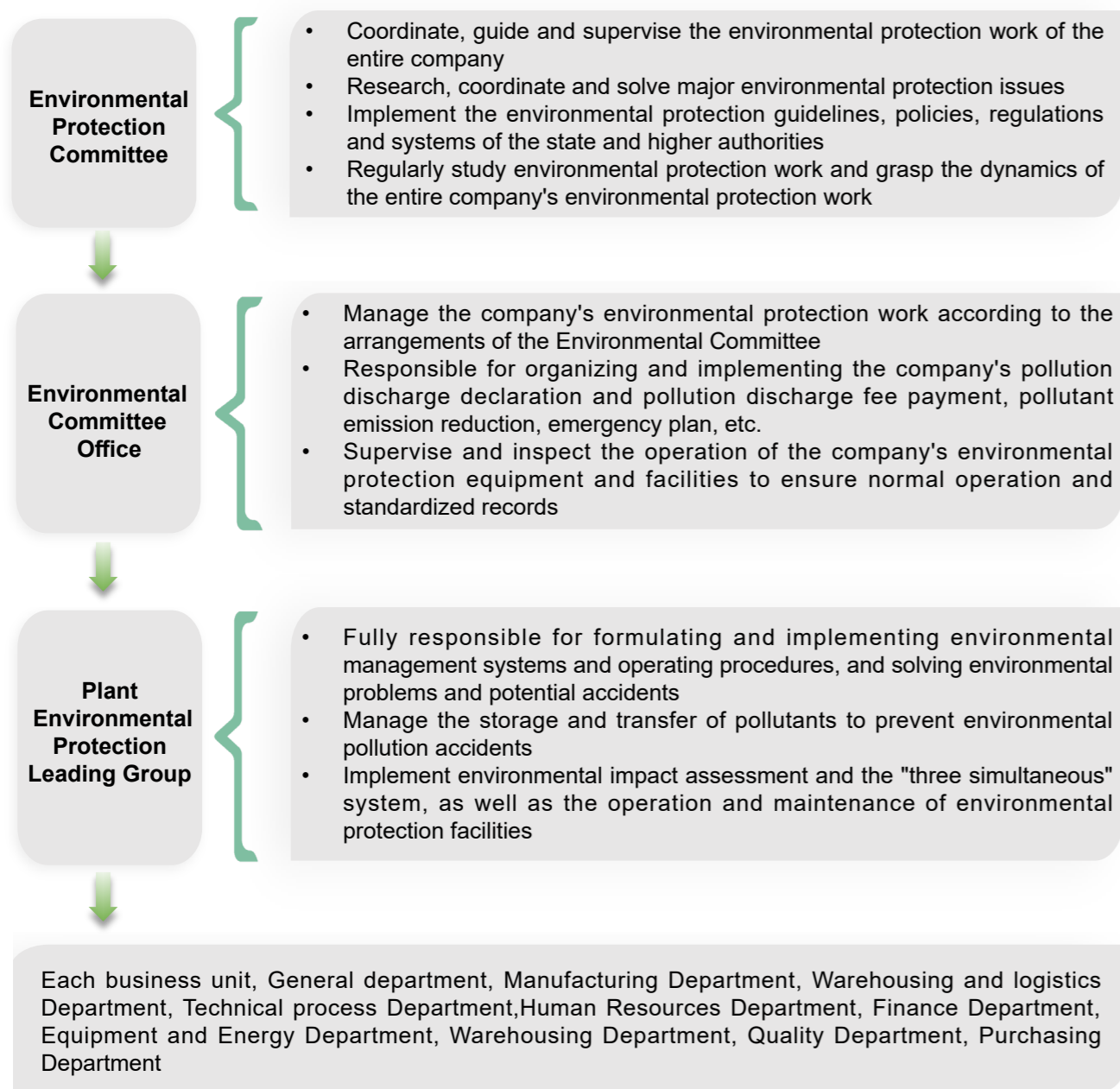
On the other hand, starting from the supply chain, we work closely with DoubleStar Ecostar Holdings Limited, to jointly create a circulareconomy industrial chain. Through these comprehensive measures, Qingdao Doublestar, which is making efforts in multiple areas, is steadily accelerating in the direction of green and low-carbon, promoting the green transformation and sustainable development of the tire industry.





Environmental Management System

Qingdao Doublestar takes "compliance with laws and regulations, pollution prevention, energy conservation and consumption reduction, and continuous improvement" as its environmental management policy. In accordance with the relevant requirements of ISO 14001 and combined with its own actual situation, it has compiled the "Qingdao Doublestar Environmental Protection Management System" and used it as a programmatic document to guide the construction and improvement of the company's environmental management system.



Environmental protection work organization structure

Establishment of the Environmental Protection Working Committee

In June 2024, the company established an environmental protection committee, with the general manager of the manufacturing department as the chairman of the committee and the heads of various departments as members. The Environmental Committee is responsible for reviewing and issuing the company's environmental protection policies and goals, supervising the implementation and improvement of environmental management policies, and making decisions on major environmental protection issues. The Environmental Committee has an Environmental Committee Office, which is specifically responsible for the daily management and coordination of the company's environmental protection work according to the arrangements of the Environmental Committee. The company fully implements the environmental protection responsibility system for personnel at all levels and positions, clarifies the environmental protection responsibilities of positions at all levels, ensures that environmental protection concepts are integrated into daily work, and forms a good atmosphere of full participation and joint promotion.

Green Factory and Exemplary Model of Green Manufacturing

Thanks to its outstanding environmental management performance, the company was successfully selected into the national green factory and green manufacturing list, becoming a model of green development in the industry.

Environmental Management System Certification

As of the end of the reporting period, except for the newly built Cambodia Plant, the rest of the company's production bases have completed ISO 14001 environmental management system certification. At the same time, during the construction of the Cambodia Plant, the company has always attached great importance to environmental protection. The base fully considered the relevant requirements of environmental impact assessment in the early planning stage, and has completed the environmental assessment certification in strict accordance with local laws and regulations in Cambodia. In order to ensure compliance with local environmental protection standards, the base has added advanced environmental management equipment to the production equipment and improved the level of hardware facilities. In addition, the base also works closely with the Cambodia Environmental Association to ensure that the environmental impact assessment report fully complies with local regulations and actively builds a complete environmental management system.

Environmental Investment

During the reporting period, the company invested a total of 11.6041 million RMB in environmental compliance publicity, environmental technology research and development, and the construction and operation of environmental protection facilities, and is committed to improving the company's environmental protection capabilities and promoting green manufacturing goals.



ISO14001



Environmental Impact and Risk Management

In order to ensure the effective operation of the environmental management system and timely discover and solve potential environmental safety management problems, the company has implemented multi-level and comprehensive monitoring and supervision measures. The company conducts 24-hour real-time monitoring and early warning of various types of emissions such as waste gas and wastewater to ensure that any abnormal situation can be discovered and handled in the first time. Calibrate the testing equipment every week to ensure the accuracy of the monitoring data; independently test all emission outlets and the environmental quality around the factory every quarter, and invite third-party professional organizations to conduct audits to ensure the fairness and reliability of the monitoring results. Through 24-hour real-time monitoring, regular calibration, independent testing and third-party audits, combined with advanced SCADA and MES systems, Qingdao Doublestar has achieved comprehensive monitoring and refined management of the environmental management system.

Environmental Emergency Management

Formulating Management Regulations

Qingdao Doublestar pays attention to the prevention and response of sudden environmental incidents, and is committed to improving the environmental emergency response capabilities of the entire company. In response to specific situations such as energy equipment, pollution and hazardous waste leakage incidents, the company has formulated the "Sudden Environmental Incident Emergency Plan Management System" and "Environmental Protection Emergency Materials Management System" to prevent environmental risks.

Optimizing Management Regulations

In 2024, the company focused on optimizing and updating the "Hazard Investigation and Management System", implemented the environmental protection hazard classification regulations and major hazard supervision and reporting system, and conducted key inspections on hazard dangers where sudden environmental emergency incidents may occur every month to eliminate hazard dangers.

Conducting Emergency Drills

Based on actual conditions and seasonal characteristics, the company conducted 9 emergency drills, including radiation and waste oil leakage, involving more than 865 people, to enhance employees' emergency response and risk avoidance capabilities for unexpected accidents, creating a safer and more stable environment for various production and operation tasks.

Environmental Awareness Enhancement and Internal and External Communication Management

Conducting Specialized Training

During the reporting period, the company conducted 11 special training sessions on waste laws and regulations, pollution discharge permit laws and regulations, environmental protection facilities laws and regulations, radiation safety knowledge, and basic environmental protection knowledge. More than 3,865 employees participated in the above training, and the employee environment-related training coverage rate reached 100%.

"Safety and Environmental Protection Month"

The company launched the "Safety and Environmental Protection Month" activity to enhance the safety emergency response and environmental protection and low-carbon awareness of all employees through in-depth safety production and environmental protection and low-carbon publicity and education and emergency drills.

Internally

Internally, the company has established a regular environmental management meeting mechanism to timely summarize and analyze environmental management data, discuss and solve existing problems. At the same time, through union feedback channels, special training and other means, the company conveys the latest environmental laws and policies to employees to enhance the environmental awareness of all employees.

Externally

Externally, the company maintains transparency in environmental protection, actively communicates with government departments, industry associations and the public, and responds to concerns from all parties in a timely manner. The company also publicly displays its efforts and achievements in environmental protection through regular annual reports, ESG reports, social media platforms, community charity activities, etc., accepts social supervision, and seeks opportunities for continuous improvement.

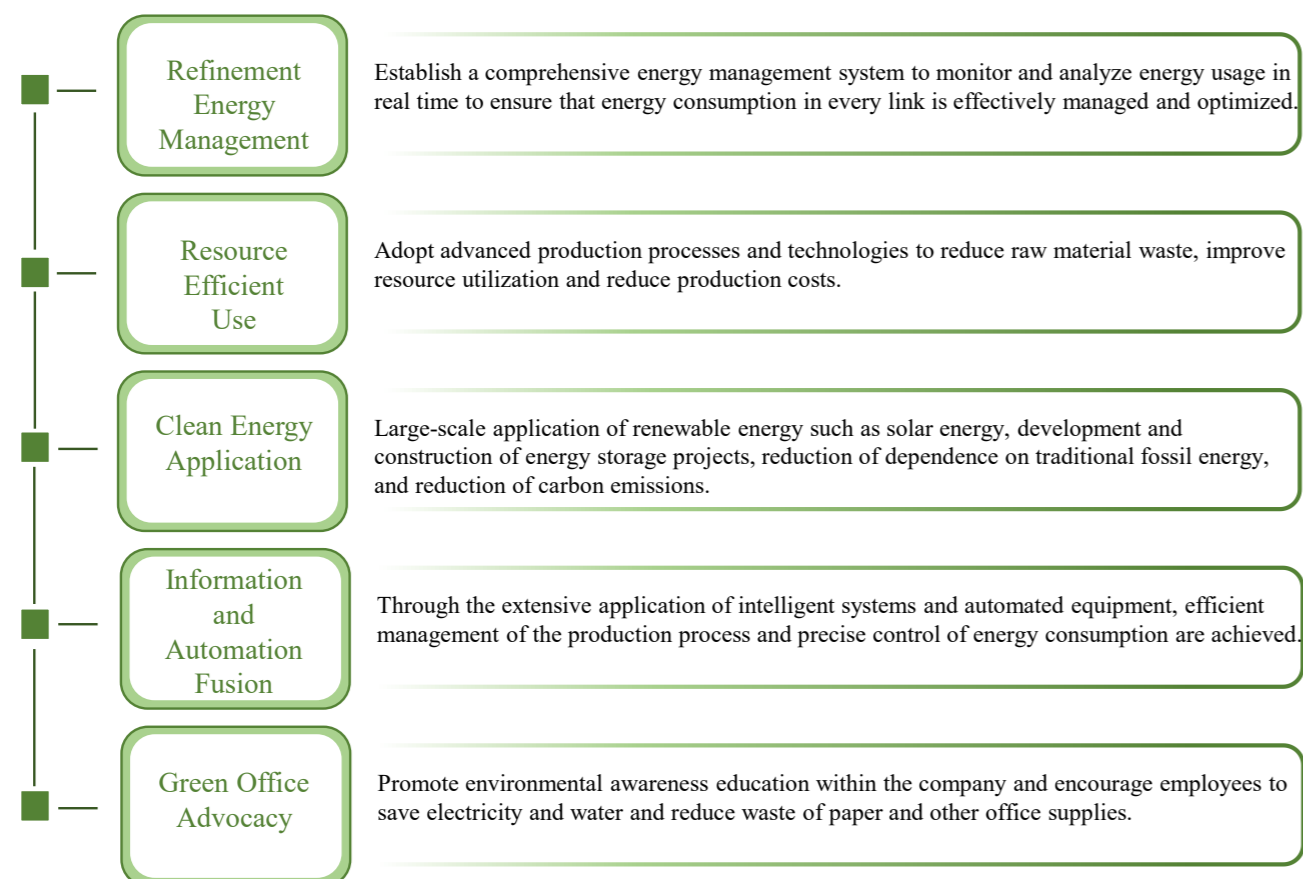


Energy and Resource Management

For manufacturing companies like Qingdao Doublestar, energy conservation and consumption reduction are key entry points of great importance, feasibility and practical value in sustainable development. Qingdao Doublestar is committed to improving the efficiency of energy and resource use and creating a low-carbon and low-consumption green operation mechanism.

The company has formulated an "Energy Management Manual" to clarify specific tasks such as energy management responsibilities, energy-saving plans and target management, energy consumption statistics management, and energy-saving technology progress management. It has also established an energy management functional department to link relevant performance indicators with the incentives of managers, thereby steadily promoting the company's energy management efficiency and ensuring the efficient implementation and steady progress of this work.

Based on the deep integration of information technology and automation technology, the company has made long-term strategic plans for energy conservation and consumption reduction strategies, and has broken down and implemented specific measures year by year based on this plan. By finely managing energy consumption, improving resource utilization efficiency, promoting the use of clean energy, and advocating green office concepts, we will continue to create a green and low-carbon operating mechanism, promote green development transformation, and contribute to the construction of a low-carbon society.



Energy and Resource Management Initiatives

Digitalization integrates refined management, and data insights drive energy saving and difference

The company's various production bases widely use SCADA (Supervisory Control and Data Acquisition) systems to record the use of water and electricity resources and various materials in real time, ensuring the comprehensiveness and accuracy of various resource consumption data. Subsequently, all collected data are uniformly imported into the MES (Manufacturing Execution System) for analysis and management, realizing online management of all equipment and meter information. It not only realizes real-time monitoring of resource use, but also uses data comparison and trend prediction to provide strong support for energy management and decision-making. The company sets short-term and long-term energy consumption reduction indicators and breaks down the goals into each production base. Each base cleans up energy data daily, evaluates and promotes key energy tasks weekly, analyzes deviations to optimize management, and continuously improves resource utilization efficiency through supervision, inspection and performance evaluation to ensure the achievement of energy-saving goals.

Green Packaging

Promoting Recyclable Packaging Materials

On the basis of ensuring the reliability of packaging in the product transportation and sales process, Qingdao Doublestar actively uses environmentally friendly packaging materials, designs more environmentally friendly packaging solutions, promotes the use of recyclable iron boxes, and adopts shared plastic pallets to reduce the impact of packaging on the environment and health.

In terms of green packaging, the company's synthetic rubber projects have 100% used recyclable iron boxes, and chemical additives, auxiliary materials, carbon black, and steel cord projects have fully adopted shared plastic pallets. On this basis, the company continues to expand the application scope of recycled pallets, planning to apply them to additives first, and then gradually promote them to natural rubber. In 2024, Qingdao Doublestar will purchase 500 shared pallets.

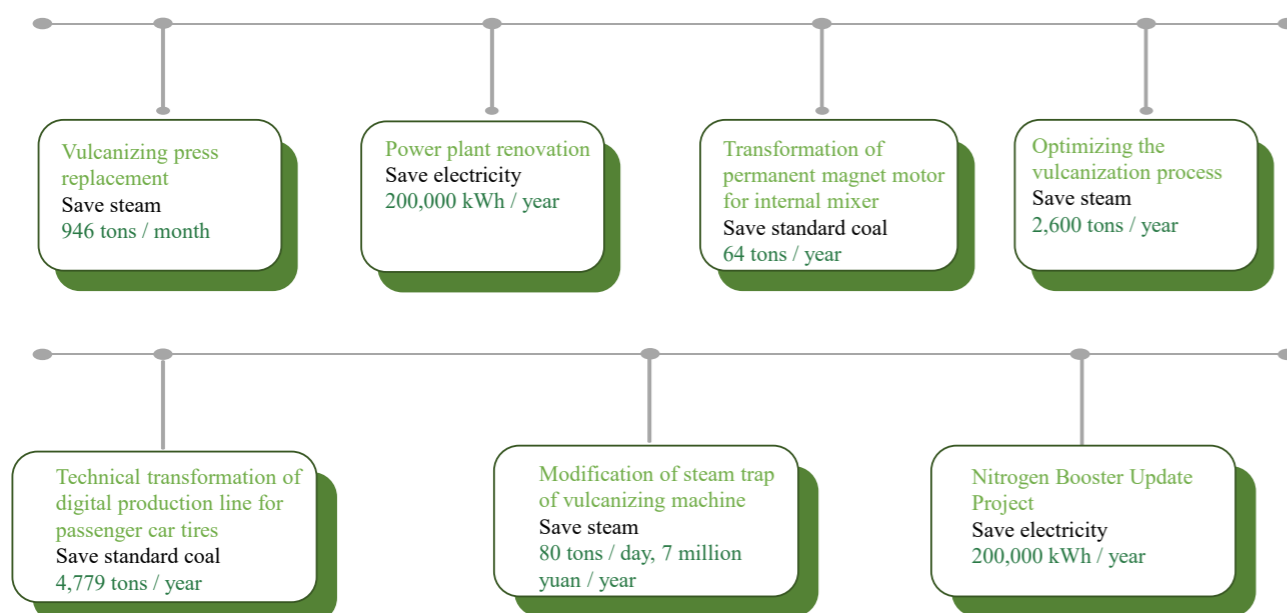
The Lightweighting and Reduction of Product Packaging

The company actively promotes the lightweighting and reduction of product packaging, proactively communicates with customers to promote bare tire shipments, reduces the proportion of packaging, and promotes the use of environmentally friendly materials for packaging for customers who require packaging.



Energy Saving Management

Qingdao Doublestar has taken a series of measures to save energy and reduce consumption in 2024, and has launched a total of 65 energy-saving projects, including 35 electricity-saving projects, 26 steam-saving projects, and 4 water-saving projects.



Energy-saving management projects and effects

Renewable Energy

In response to global climate change and the promotion of green development, Qingdao Doublestar actively embraces new energy technologies, vigorously develops and utilizes clean energy, introduces rooftop solar photovoltaic power generation systems for production and office use, increases the proportion of green energy, and accelerates the construction of a clean, low-carbon, safe and efficient energy structure system. Dongjiakou plant has achieved full coverage of photovoltaic power generation systems in its two major domestic production plant. At the same time, the photovoltaic power generation project of the Cambodian Plant has entered the planning and implementation stage, which will further expand the company's green energy applications in overseas markets and help achieve global sustainable development goals.

(1) Dongjiakou Plant

The Dongjiakou Plant has completed the third phase of the photovoltaic project, achieving full coverage of photovoltaic power generation. The total installed capacity has reached 25 megawatts, with an annual power generation of approximately 25 million kilowatt-hours. Photovoltaic electricity accounts for about 18%, equivalent to an annual reduction of 14,000 tons of carbon dioxide emissions.

In 2024, the photovoltaic project will add reactive power compensation devices. The reactive power compensation device can adjust reactive power on site and support remote control of grid dispatching to further optimize power efficiency. The photovoltaic phase II project will install two 1000 kvar SVG systems (static reactive power generators), and the photovoltaic phase I project will install two 600 kvar SVG systems (static reactive power generators), which will be connected to the AVC system (automatic voltage control) to protect the safety of grid equipment and power equipment. At present, the reactive power compensation device project is being orderly constructed and will be comprehensively debugged and operated through grid dispatching after the construction is completed.

The previously planned 5.88MW/11.868MWh energy storage project is in active communication with all parties and is progressing steadily as planned. The application of energy storage will be considered in the future in combination with the time period of the power grid and the photovoltaic situation. It is expected to significantly improve the company's energy management efficiency and green energy utilization rate.

(2) Shiyan Plant

The first phase of the Shiyan Plant photovoltaic project has been completed, with a total installed capacity of 9.6 MW and an annual power generation of approximately 4.6 million kWh (April 2024 to December 2024). Photovoltaic electricity accounts for 9.30%, equivalent to an annual reduction of 4,500 tons of carbon dioxide emissions.

As the company's clean energy strategy continues to advance, the second phase of the photovoltaic project at the Shiyan Plant is working in progress and is scheduled to be put into use in the second half of 2025, which will further expand the company's green energy production capacity.



Qingdao Doublestar Rooftop Photovoltaic Project

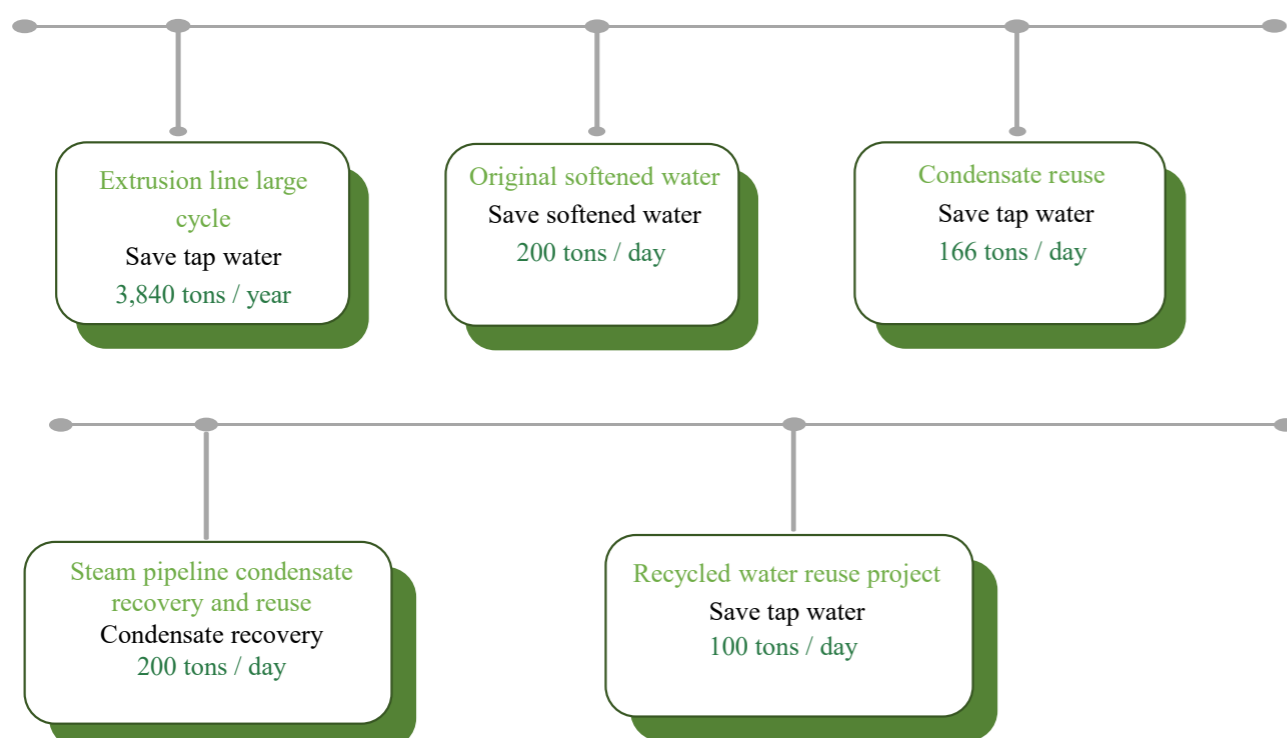


Water Resources Management

Qingdao Doublestar attaches great importance to the rational use of water resources and continuously strengthens scientific water management. During the reporting period, the total water consumption was 555,894.00 tons, and the water consumption intensity was 1.36 tons/10,000 yuan. The total recycle water consumption was 23,443,754.62 tons, and the total recycle water consumption intensity was 57.26 tons/10,000 yuan.

The company has fully implemented water-saving measures in production and operation, and is committed to improving the efficiency of water resource utilization. The main measures taken are as follows:

- Optimize production processes to reduce water use;
- Recycle the recycled water during the production process for reuse;
- Internal promotion, requiring employees to save water and turn off taps in time.



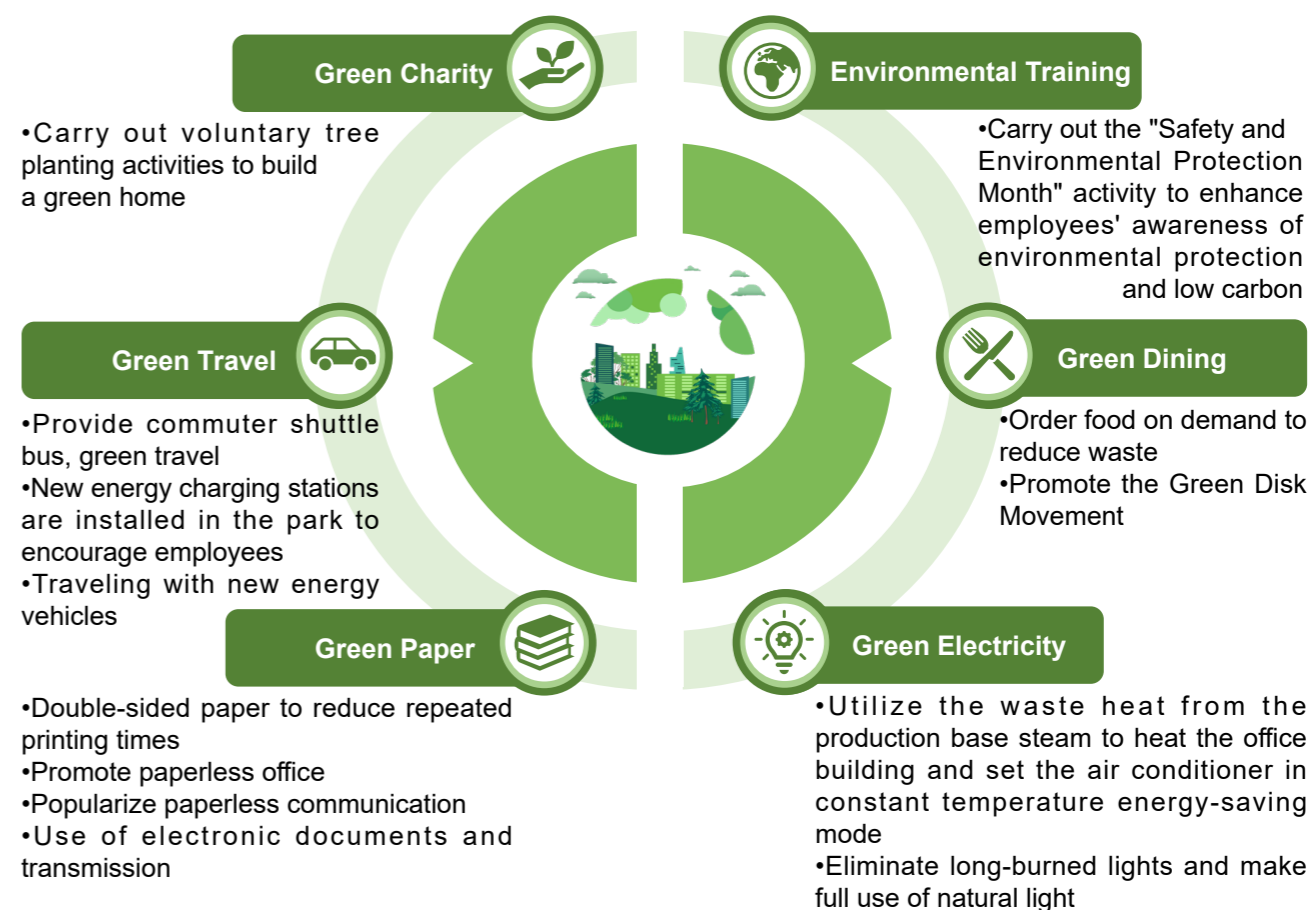
Water-saving projects and water-saving benefits

Green Office

Qingdao Doublestar pays attention to cultivating employees' sense of responsibility and environmental awareness, and is committed to making the practice of a green and low-carbon lifestyle a conscious and spontaneous action of everyone.

Starting from the details of employees' lives, Qingdao Doublestar carries out special initiatives such as green paper, green travel, green charity, green electricity, green dining, and environmental training.

It always advocates green office and low-carbon travel, supports energy conservation and carbon reduction with a green and low-carbon office model, and carries out the "Safety and Environmental Protection Month" activity, which is committed to reducing carbon emissions and resource waste, improving employees' environmental protection and low-carbon awareness, and creating a green and safe corporate culture.



Green Office Initiatives



Emissions and Waste Management



Mission and Governance Philosophy

Qingdao Doublestar regards protecting the ecological environment as its mission, adheres to the concept of scientific governance, actively promotes the treatment principles of waste "reduction, resource utilization, and harmlessness", carries out measures such as equipment introduction and process optimization, and reduces pollutant emissions in an all-round and multi-dimensional manner, reduces various types of pollutants and waste, achieves compliant and safe emissions, and strengthens comprehensive waste management and safe disposal of hazardous waste.



System Optimization and Categorized Management

The company regularly optimizes the system process, strictly follows the internal management methods, and guides the classification management of waste in a standardized and normalized manner. In 2024, the company focused on optimizing and updating the "Regulations on the Management of Hazardous Waste Discharges" to clarify the relevant responsibilities and requirements. At each production base, Qingdao Doublestar strictly implements waste classification and storage measures, distinguishes between general solid waste and hazardous waste, and entrusts a third-party organization with professional qualifications to be responsible for the safe disposal of hazardous waste, ensuring the compliance and environmental protection of waste management.



Compliance with Standards and Source Control

The company strictly abides by national and industry standards such as the "Rubber Products Industry Pollutant Emission Standards", "Hazardous Waste Storage Pollution Control Standards", "Industrial Enterprise Plant Boundary Environmental Noise Emission Standards" and relevant laws and regulations in the operating area to carry out environmental management work, from source control of waste to final treatment, implementing strict process monitoring, governance and disposal to improve the factory environment.



Environmental Monitoring and Third-party Testing

The company's "Environmental Protection Special Monitoring Plan" stipulates the requirements for regular self-monitoring of wastewater, waste gas, solid waste, noise and other wastes, and the inspection, maintenance and update of relevant environmental protection facilities to ensure the normal operation of equipment and prevent waste leakage. In addition, the company specially hired a third-party testing agency to conduct comprehensive monitoring of emission indicators such as waste gas, wastewater, waste and noise to ensure that the negative impact on the environment is continuously reduced during the production and operation process.

Examples

In 2024, Qingdao Doublestar carried out a waste gas treatment facility upgrade and renovation project:

A separate collection pipeline was made for the rubber cooling line of the rubber refining workshop 1, and two sets of waste gas treatment facilities with an air volume of 150,000 were added. The treatment process was "filtration spray + injection plasma + activated carbon adsorption box", which improved the smoke and dust inside the workshop and reduced unorganized emissions.

The second is to update the low-temperature plasma of some calendaring and vulcanization processes to injection plasma for deodorization equipment flue gas treatment. Compared with the original equipment, the exhaust gas does not directly contact the plasma generator, the operation is stable, the power is adjustable, the structure is compact and the space is small, the treatment efficiency is higher, and it is safer.



Exhaust

•Management system: <Environmental Protection Management System>, <Dust Removal and Odor Removal Daily Inspection Management System>

•Measures:

1. Develop operation control, safe operation plans and maintenance standards for deodorization equipment, and arrange dedicated personnel for maintenance.
2. Carry out supervision testing and online monitoring comparison on a quarterly basis to ensure that exhaust gas emissions meet emission standards.
3. Upgrade and transform equipment to reduce emissions of air pollutants.



Wastewater

•Management system: <Environmental Protection Management System>, <Rainwater and Sewage Pipeline Network Daily Inspection Management System>

•Measures:

1. Online monitoring
2. Classification treatment
2. Recycling and Utilization



Hazardous and solid Waste

•Management system: <Environmental Protection Management System>, <Hazardous Waste Safety Operation Procedures>, <Hazardous Waste Management Regulations>, <Environmental Safety Operation Procedures for the Classified Collection, Transportation, Storage, Transport and Disposal of Hazardous Wastes>, <Regulations on the Management of Hazardous Waste Discharge>, <Hazardous Waste Identification Marking System> and <Hazardous Waste Pollution Prevention and Control Responsibility System>

•Measures:

- Source reduction.
- Classified storage
- Process improvement
- Third-party recycling, processing and disposal
- Warehouse maintenance and renovation



Noise

•Management system: <Environmental Protection Management System>, <Environmental Noise Emission Standards for Industrial Enterprises>

•Measures:

1. Formulate noise control procedures, optimize process flow, reasonably arrange equipment operation time, and regularly maintain and service equipment to effectively reduce noise.
2. At the same time, noise levels are tested regularly to ensure that production activities always comply with laws and regulations.

Emission and waste classification management



Cleantech Opportunities

Qingdao Doublestar focuses on technological innovation and strives to achieve disruptive innovation of new products. By identifying industry development trends and opportunities under the green development environment, it seizes the market demand for green products and technologies and implements a full-link low-carbon strategy. The company actively implements the green concept into product innovation, raw material innovation and other links, strengthens formula development, sustainable material research and development, appearance and structural design, and launches high-end, differentiated, high value-added products. It is committed to the research and development and production of green, low-carbon, and environmentally friendly products with comprehensive excellent performance such as low rolling resistance and fuel saving, long-lasting wear resistance, and noise reduction, as well as products for the new energy vehicle industry. It not only reduces the environmental burden, but also wins market recognition and sets an example for the green development of enterprises.



Green Technologies and Products

In 2024, Qingdao Doublestar will continue to uphold the core concept of innovation-driven and green development, deeply analyze market demand and industry trends, gather top R&D teams, and explore innovative paths. We emphasize both green environmental protection and excellent performance, and plan strategic directions in a forward-looking manner.

In terms of new energy product iteration

the DLA115 series has been awarded the green product certification, demonstrating our comprehensive innovation in materials, processes and tire performance. From improving energy efficiency to enhancing wear resistance, to promoting environmental protection concepts and applying environmentally friendly materials, our various product series have embodied the unique green innovation charm, contributing to reducing carbon emissions and promoting sustainable development.

In the research and development of green technology and products

the company has established a finite element simulation department, formed technical service capabilities for tire material testing and characterization, static and dynamic mechanical performance prediction and analysis, and vehicle dynamics research, and equipped with special simulation and verification equipment for tire material preparation, testing, and finished tire performance testing, etc., and has the ability to independently carry out tire finite element modeling, performance simulation, and dynamic performance development, which is rare in the industry.

In the realm of core and critical technologies

The company conducts research on tire fuel economy simulation and test verification technology, and tackles key core technologies, such as research on fuel economy simulation and test verification technology for electric vehicle tires in low-temperature environments, and research on the impact of structural parameters on the performance of special tires for electric vehicles. The current simulation

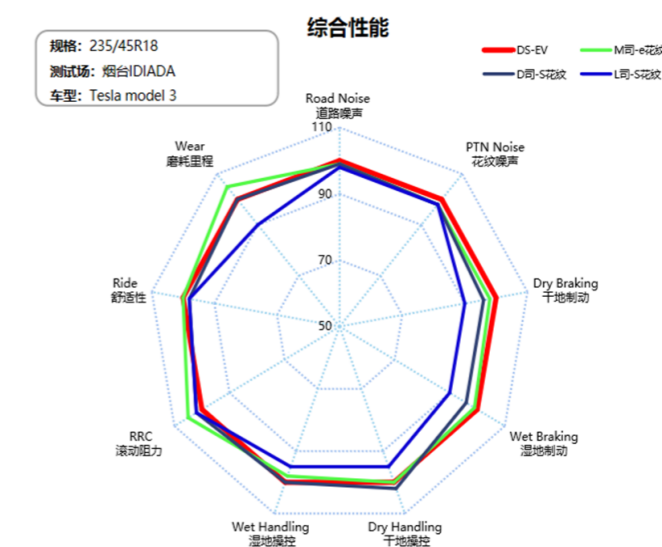
For existing small tire products, we have accelerated the upgrade of green performance in line with the national standard change requirements. It is expected that the rolling resistance of the entire product line will be improved by more than 10%, and the carbon dioxide emissions will be reduced by more than 3%. In the field of large tires, we have strengthened the research of core technologies through the application of new materials and cooperation with universities to cope with risks and strive to break through the "devil's triangle" problem in the tire industry. The goal is to achieve the "AAA" rating of tire products in the next five years according to the T/CRIA 11003-2016 standard and realize industrialization.

The company's main star green products

(1) EV new energy vehicle tires are upgraded and upgraded to improve safety and wear resistance

In 2024, the company launched the upgraded new energy product EXTREME EV97. Compared with the previous generation of products, this product has improved dry and wet braking safety, wear performance, noise and other performances. At the same time, it has achieved relevant certifications for the entire series of high-load tire products, leading the industry.

This product has achieved improvements in dry and wet braking safety, wear and other performances through the application of three major technologies: large rim protection design, high anti-slip performance upgrade, and high-load structure upgrade. When braking at a speed of 80km/h, the wet braking distance of EV97 is shortened by 1.44 meters compared with the previous generation, and the dry braking distance is shortened by 0.45 meters. The tire noise is reduced by 2.3dB, and the rolling resistance reaches EU label B level or above.



Comprehensive performance evaluation results



(2) DLA115 series products have been optimized and upgraded to pass the green product evaluation requirements

The DLA115 series products have been certified in accordance with GB/T 40718-2021 "Green Product Evaluation - Tires", with rolling resistance of 4.12, noise of 70.2, and wet grip of 1.19, all of which have passed the green product evaluation requirements. The rolling resistance is reduced by 32%, and the fuel consumption is reduced by 6.4%. While adjusting the structural optimization, the weight of the tire is reduced. The use of a new type of ultra-high-strength steel cord reduces the wear between monofilaments and improves the tire durability by 8%.

(3) EU AAA grade tire innovation, expanding the OE supporting market

With the rapid development of new energy vehicles and their structural differences from traditional fuel vehicles, new energy vehicle tires are very different from traditional tires, and higher performance requirements are put forward:

- ① Low rolling resistance and lightweight requirements;
- ② Ultra-quiet requirements;
- ③ High grip and high anti-slipability requirements.

Based on the needs of the above car manufacturers, we will simultaneously expand the EU AAA technology to the OE supporting market, and in 2024, we have completed the supporting supply of 5 new energy models of Chery and Geely.

(4) The performance of all-explosion-proof tires has been optimized and upgraded, making them green, environmentally friendly, wear-resistant and low-noise

In 2024, the performance of ordinary full-explosion-proof tires will be comprehensively improved. Through the upgrade of tread rubber, its rolling resistance performance has been improved by 10%, wear performance has been improved by 11%, and the wear resistance of the tip has been improved by 50% - 70%. At the same time, the new energy full-explosion-proof tires launched have performed well. Currently, 58 specifications have been launched on the market. Its performance characteristics perfectly match the many characteristics of new energy vehicles, such as heavy vehicles, high torque, fast acceleration, low noise, and no spare tires. When the vehicle speed is between 60 and 90 km/h, the noise inside the car can be reduced by 2 to 3 decibels compared to the original silent cotton tires, and at a speed of 60 km/h, the zero-pressure driving mileage can reach at least 30 km.

(5) Rare earth gold product materials and process innovation to jointly promote energy conservation and emission reduction

In 2024, Qingdao Doublestar focused on increasing the application research of new innovative materials for "rare earth gold" products, and specially selected a new type of highly wear-resistant and low-hysteresis carbon black with higher structure, which significantly improved the reinforcement performance of the product. It is worth mentioning that while ensuring that the rolling resistance of the product remains at the original level and does not increase, the wear performance of the product has been successfully improved by more than 10%, thereby helping the vehicle to achieve a higher mileage.

At the same time, through process optimization, the production efficiency has been greatly improved by 20%, effectively reducing the company's manufacturing costs, achieving good results in energy conservation and emission reduction, and helping the company achieve sustainable development in all aspects.

In 2024, the "rare earth gold" low rolling resistance and high wear-resistant tire won the second prize of the Shandong Rubber Association Science and Technology Award.



The second prize of Shandong Rubber Association Science and Technology Award



(6) The power-boosting wheel products have been innovated in many aspects, and their durability has been greatly improved

In non-highway fields such as mining and engineering, due to extreme terrain and bumpy roads, tires wear out faster, causing deformation and increasing the risk of tire blowout and loss of control. Qingdao Doublestar has launched the "black technology" of the tire industry - "power-enhancing wheels" to address this problem. "Power-enhancing wheels" subvert the design principles, materials, processes, equipment, sales and service models of the traditional "tire + rim". There is no need for inflation, rims, wheel removal, and no tire blowout. The life span can match the vehicle and can be up to 15 years. Not only does it use almost no rubber, it can also reduce carbon emissions, bringing epoch-making and subversive changes to the world's tire industry.

In 2024, the main R&D innovation of the power-boosting wheel will focus on three key aspects: product specification expansion, continuous optimization of tread pattern, and improvement of product durability. By adjusting the internal structure layout, improving the connection method of brake parts, and optimizing product materials, the indoor durability performance has achieved a significant leap, from the original 57 hours to 108 hours, a performance improvement of up to 89%.



Power Wheel

(7) New energy heavy-duty truck tires have improved grip and wear resistance, making them safe and reliable

With the popularization of new energy vehicles, the market demand for new energy tires has increased significantly. However, due to the large instantaneous torque when new energy vehicles start and accelerate, the tires slip and the average wear decreases by about 30-50%. In 2024, the company made innovations in tire design for new energy bus tires, using special materials such as new steel belt layers to enhance the tire's puncture resistance and load-bearing capacity by about 20%, and reduce crown deformation by 5%. At the same time, a special tread formula and pattern design are used to effectively improve the tire's grip and wear resistance.

(8) Special tires for the western region

In 2024, we will vigorously respond to national policies to promote the development of the western region. Infrastructure construction and industrial development will bring about rapid development of the automobile transportation industry. We will develop a special tire 12R22.5 in combination with the environment and road conditions in the southwest region. Through STOT profile design technology, the ultra-wide driving surface is combined with the saturation of the pattern and the comprehensive design of the rubber compound, so that the tire can maintain sufficient grip in complex road conditions and diverse weather conditions, ensuring safety performance and increasing its service life by more than 20%.

In the future, the company will continue to develop green technologies and products, enhance core technology research and risk response capabilities through the application of new materials and cooperation with universities, and ultimately achieve a certain breakthrough in the "devil's triangle" problem in the tire industry, so that tire products can reach the T/CRIA 11003-2016 "AAA" level of industrialization.

Sustainable Materials Innovation and Application

Qingdao Doublestar focuses on deepening innovation from the three dimensions of high performance, environmental protection and carbon reduction, integrating green and environmentally friendly sustainable materials into product design and manufacturing, and promoting technology exploration and reserves in all directions from basic theoretical research to formula innovation and development. Not only does it cover more types of tire products in breadth, and use bio-based materials and recycled materials to replace

- Accelerate the completion of basic research on bio-based synthetic rubber. A large amount of data analysis and testing has been carried out: the application and reserve of bio-based cis-1,1-butadiene rubber and bio-based solution-polymerized styrene-butadiene rubber, and the development of
- Continue to develop and reserve a variety of bio-based raw materials: including rice husk ash white carbon black, bio-based oil, bio-based oil carbon black, etc.
- Carry out various recycling of raw material reserves: including steel cord from recycled steel production, tire pyrolysis carbon black, etc.



At present, the company has successfully introduced and promoted the application and development of a series of environmentally friendly materials such as recycled rubber and pyrolysis carbon black. Among them, the design, development and industrialization project of bio-based green and low-carbon tires has been selected as a Industrial design key project research of the Ministry of Industry and Information Technology in 2024.

Examples

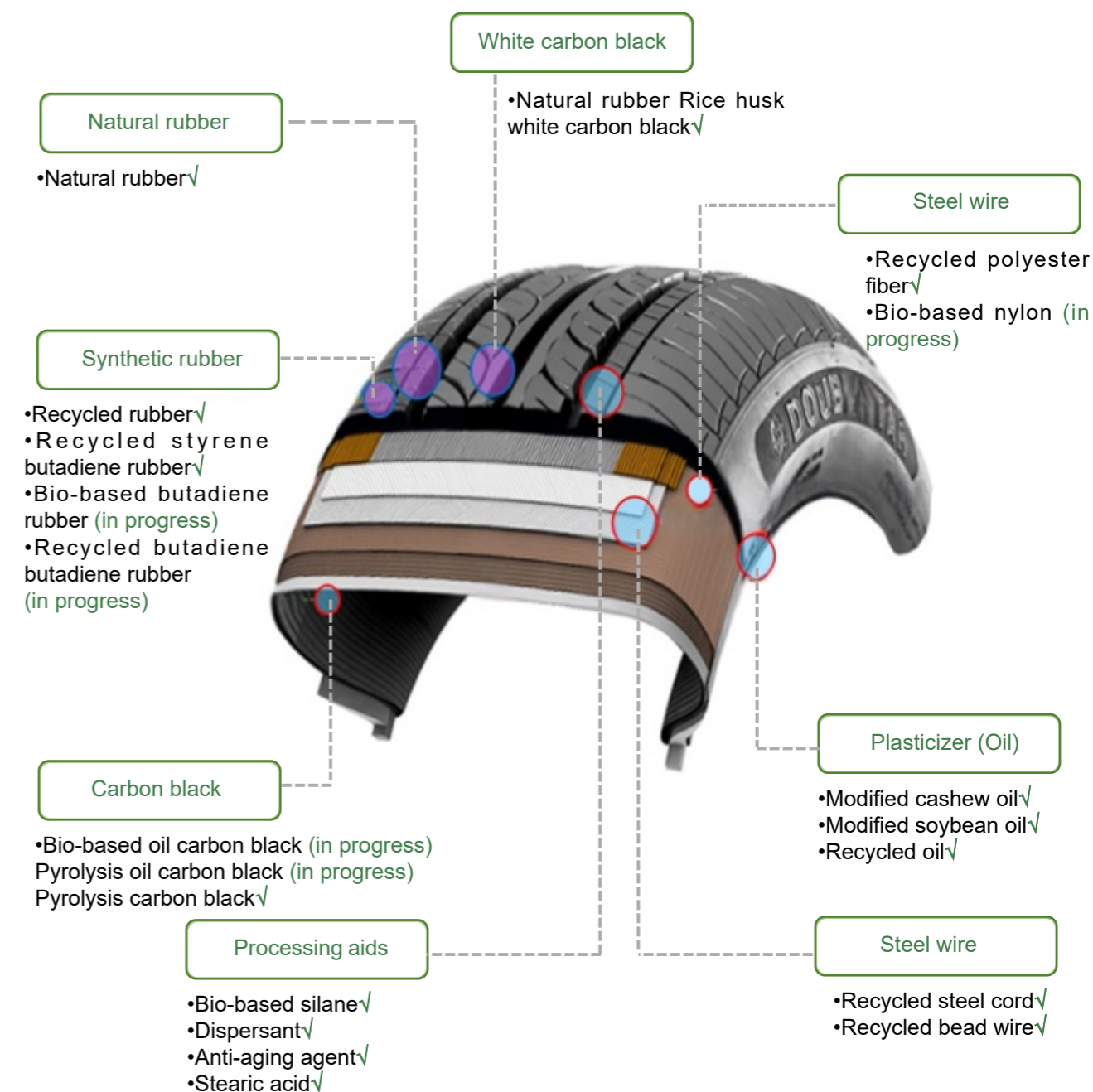
Qingdao Doublestar, together with China National Building Material Group and Qingdao University of Science and Technology, has conducted in-depth research and optimization on China National Building Material's mineral resources, aiming to develop innovative sustainable materials to efficiently replace traditional carbon black materials.

Qingdao Doublestar has established a strategic partnership with Black Cat Carbon Black to jointly develop carbon black using tire pyrolysis oil as raw material, and cooperated with Xingda to develop steel cord and bead wire using steel wire recycled from waste tires as raw materials.

These collaborations not only aim to maximize the transformation of resource value, but also highlight the core concept of green environmental protection. They strive to achieve both environmental friendliness and economic benefits while promoting industrial upgrading, and realize a new situation of mutual benefit and win-win for all parties.



The company has launched our first PCR (passenger car radial tire) and TBR (radial truck tire) sustainable concept tire products. This technology not only meets the basic performance of tire safety and reliability, but also makes the sustainable materials of tires account for more than 70%, exceeding the goal set at the beginning of the year. In 2025, the company will continue to research sustainable material tire technology, continuously increase the proportion of sustainable materials in products, and strive to develop tires with 80% sustainable materials.



Research on sustainable materials for various parts of tires

Circular Economy

Globally, the development of a circular economy and the coordinated advancement of economic growth and climate goals have become an irreversible trend.

European Union

Circular Economy Action Plan

It covers the entire life cycle of product design, production, consumption, recycling and disposal, and proposes specific goals and actions, such as improving the durability, repairability and recyclability of products. It aims to reduce resource consumption, improve resource utilization efficiency and reduce waste generation through a series of measures.

China

" 14th Five-Year Plan" Circular Economy Development Plan

This plan released by China's National Development and Reform Commission defines the key tasks for the development of the circular economy in the next five years, emphasizes the principles of "reduction, reuse and resource utilization", promotes the recycling of key areas such as plastics, electronic products, and automobiles, and encourages green design and clean production.

Shandong Province

" Shandong Province's Action Plan to Promote the Development of New Quality Productivity in the Tire Industry (2024-2027) "

It is required to implement green, low-carbon and circular development actions, accelerate the clean, circular and low-carbon transformation of the entire process of the industry, and continuously improve the overall energy efficiency level. Key enterprises should establish a domestic waste tire recycling network , accelerate the formation of a large-scale industry chain of refurbishing and remanufacturing of used tires, producing recycled rubber and vulcanized rubber powder from waste tires, and thermal cracking and recycling of waste tires.

Domestic and international circular economy policies

Faced with this consensus path, Qingdao Doublestar has responded positively and is vigorously implementing the product life cycle management strategy, aiming to run through every link in the entire life cycle of the product from research and development, raw material procurement, manufacturing, transportation, use to waste tire disposal, and comprehensively reduce the impact on the environment. The company is committed to reducing greenhouse gas emissions, saving resources, reducing waste, and minimizing the impact on the environment at all stages. At the same time, the company works closely with DoubleStar Ecostar Holdings Limited, to jointly layout the waste tire recycling industry. Through innovation and technological progress, it continuously optimizes the recycling and reuse processes, strives to create a complete circular economy industry chain, and set an example for the sustainable development of the industry.



Product Lifecycle Management

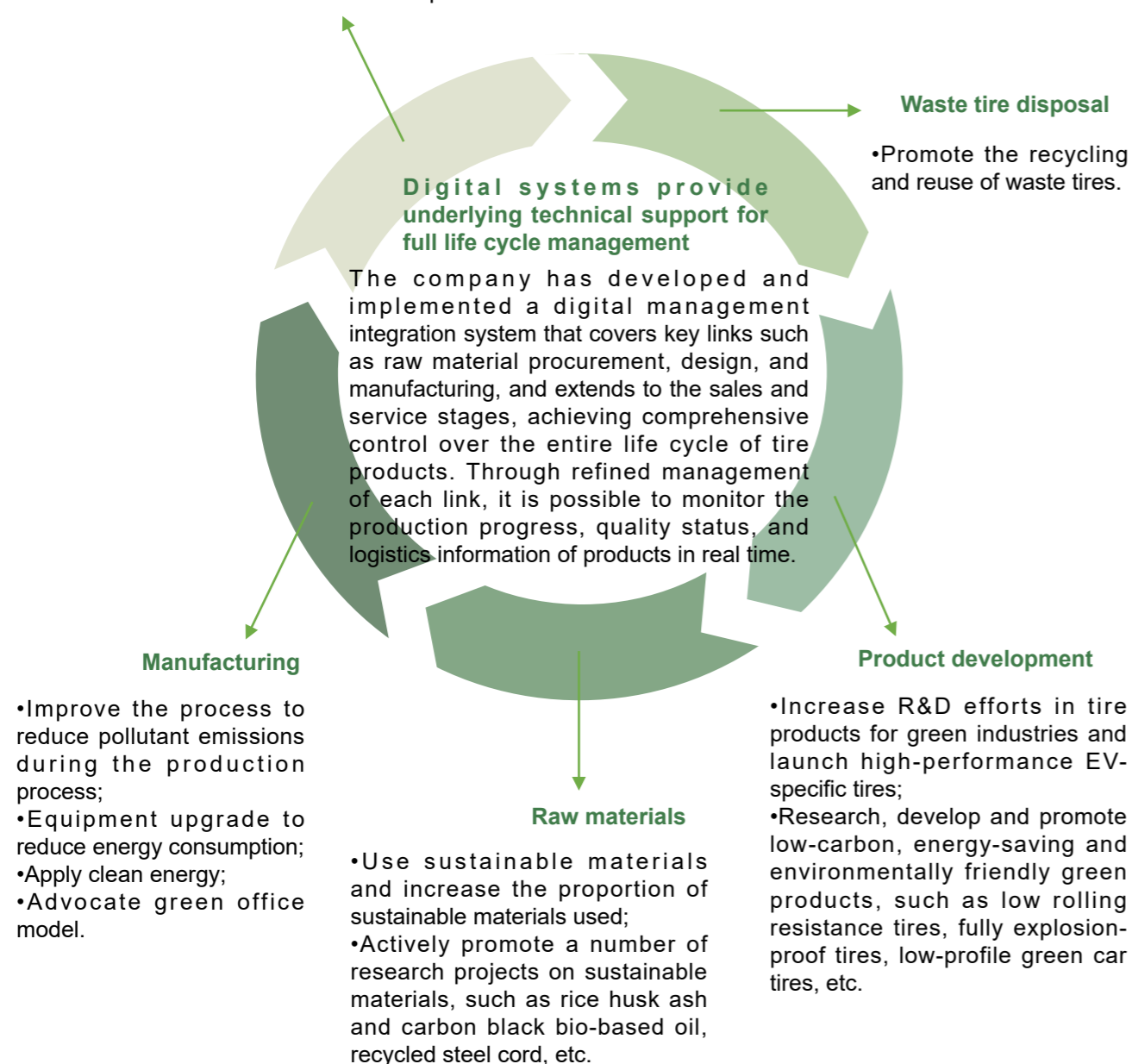
Qingdao Doublestar has formulated a full life cycle management strategy, which focuses on each department's independent reduction of environmental protection and efficient use of resources in their respective responsible links, and emphasizes the synergy between departments. The company has built a modular simulation design platform based on digital models and a product life cycle management (PLM) digital management integration system. Through the development of a digital management integration system, raw materials can be controlled from procurement, design, manufacturing, sales and other links, providing a solid foundation for the overall product life cycle management.

In the future, the company will strengthen collaboration among departments to ensure green management of the entire process from raw material procurement to product disposal.



Green packaging and transportation

- Promote lightweight and reduced packaging;
- Use reusable pallets;
- Adopt centralized delivery and truckload delivery strategies to encourage customers to place orders for truckloads;
- Advocate a green delivery model where multiple households in one place share a vehicle for delivery, or multiple households share a vehicle for delivery;
- Promote the use of clean transportation methods.



Qingdao Doublestar Tire's Product Life Cycle Management Initiative

Tire Recycling and Reuse

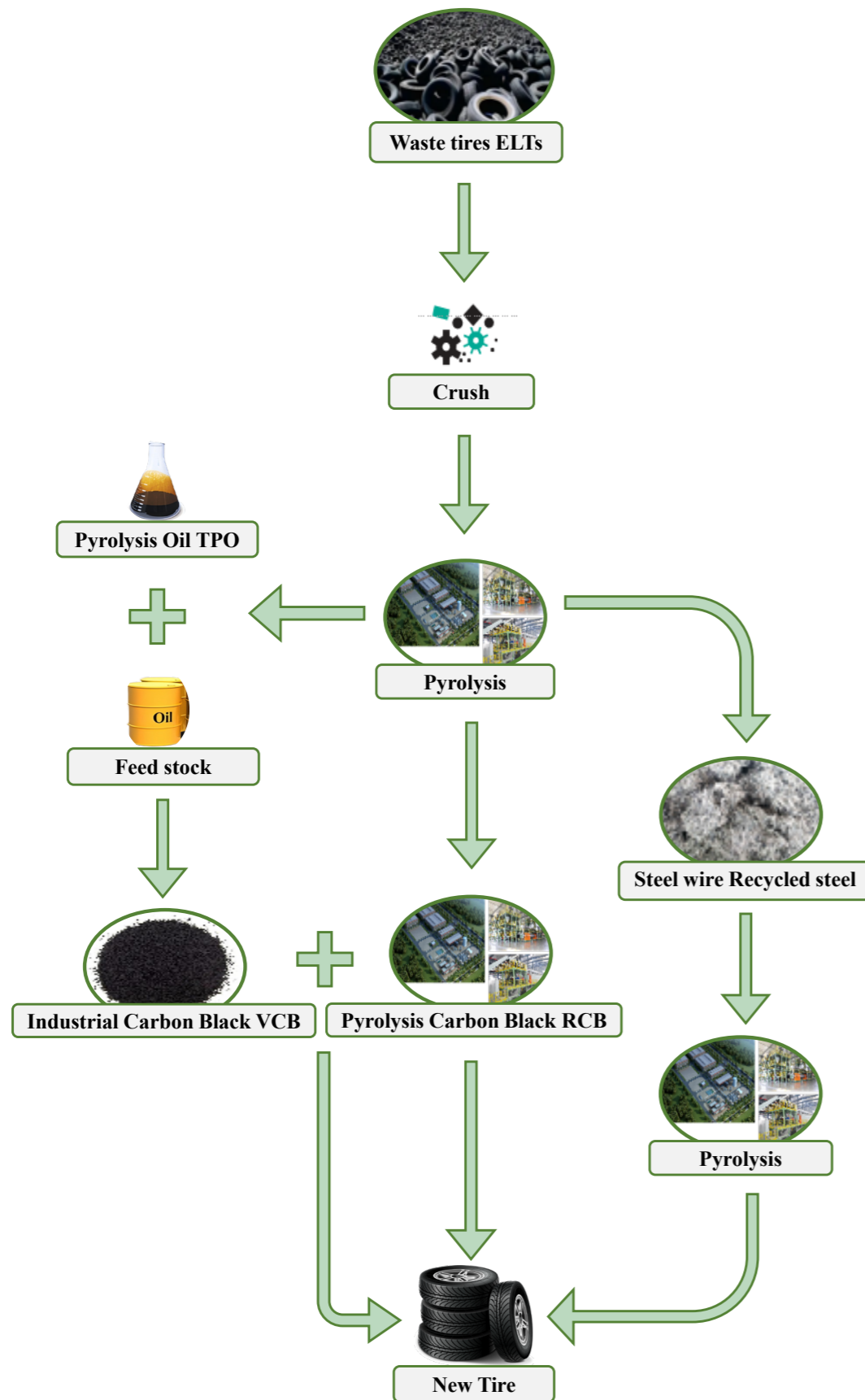
(1) Recycling of defective products

Qingdao Doublestar has always adhered to the strict quality concept of "defective products are waste products, and waste products must be chopped off", and is committed to minimizing the generation of defective and waste products and improving resource utilization efficiency through refined management and technological innovation. At the same time, by implementing a waste tire storage plan and an efficient recycling and reuse mechanism, it continuously optimizes the production process, improves resource utilization efficiency, reduces the demand for raw materials, reduces energy consumption and carbon emissions, significantly reduces resource waste in the production process, and achieves considerable cost savings.

(2) Recycling of waste tires

Qingdao Doublestar and DoubleStar Ecostar Holdings Limited work hand in hand to achieve high-value, environmental protection, minimized and intelligent environmental impact of products, achieve green ecological recycling, focus on the green ecological recycling of waste tires, expand the industrial chain from the traditional R&D and manufacturing field to the full life cycle management of recycling and recycling, and carefully cultivate the circular economy industrial chain of rubber tires.

Relying on pyrolysis technology, waste tires can be completely transformed into high-value products: about 40% into primary oil, 30% into environmental protection carbon black, 20% into steel wire, and about 10% of combustible gas, truly realizing the "complete recycling" and "zero waste" of waste tires. For every 10,000 tons of waste tires processed, 11,000 tons of carbon dioxide emissions can be reduced, highlighting the concept of "zero pollution, zero residue, zero emission, and full utilization" in the process of waste tire treatment.



Waste tire recycling process

Biodiversity Conservation

Qingdao Doublestar has always maintained a deep concern for the potential impact of its operations on biodiversity, and strictly abided by a series of relevant laws, regulations and policy guidelines, including the "Opinions on Further Strengthening Biodiversity Conservation" issued by the General Office of the State Council, the "Soil Pollution Prevention and Control Law of the People's Republic of China", and the "Groundwater Management Regulations".

During the reporting period, the company took the opportunity of the "Safety and Environmental Protection Month" event to actively organize education and training on biodiversity knowledge, participate in marine life protection activities, carry out Arbor Day theme activities and mobilize young volunteers to carry out tree planting and afforestation public welfare activities in the factory area, aiming to deepen employees' understanding and sense of responsibility for biodiversity protection.

In addition, the company conducts regular ecological monitoring: regularly monitors and evaluates the impact of pollution around the base on biodiversity to ensure that the impact of the base's production on the ecological environment is within a compliant and controllable range.

Examples

During the 2024 Arbor Day, the company organized young volunteers to carry out voluntary tree planting activities in the factory area. At the tree planting site, everyone had a clear division of labor and carried out activities such as tree planting, soiling, and watering. Through the implementation of voluntary tree planting activities, the cohesion of the team has been enhanced, and the ecological civilization awareness of "planting green, protecting green, and loving green" has been improved. The concept of ecological civilization and low-carbon life has been implemented with practical actions, and their own strength has been contributed to the construction of a green home.



Tree planting activities



\$

Social Responsibility & State-Owned Enterprise Commitment

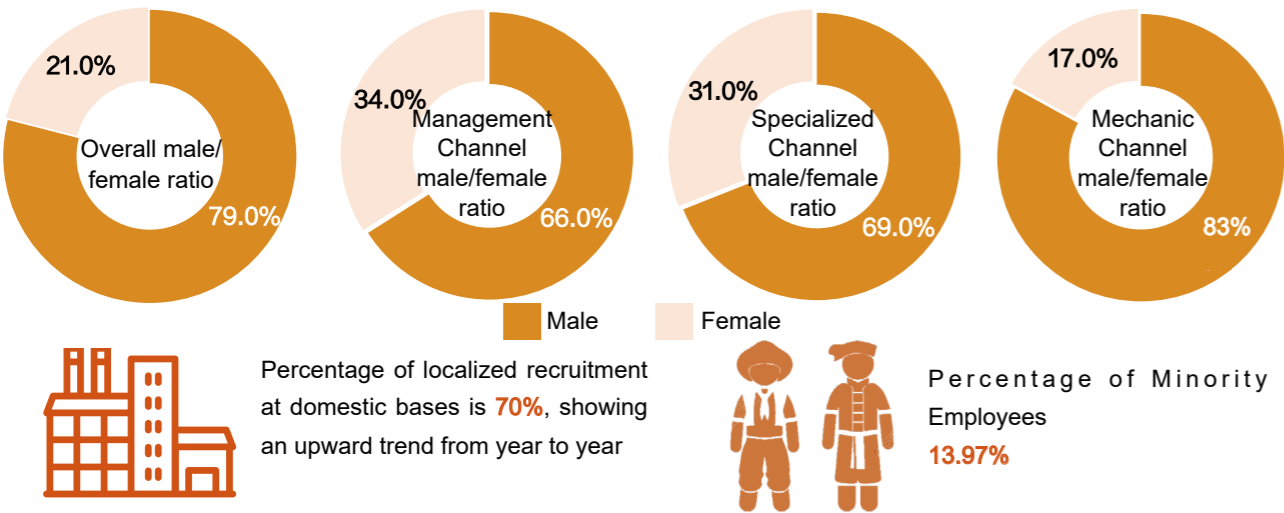
- Talent Cultivation and Development
- Employee Care
- Occupational Health and Safety
- Product Quality Management
- Innovation and Intellectual Property Protection
- Customer Service and Rights
- Supply Chain Management
- Community Activities and Public Welfare

Talent Cultivation and Development

Diversity and Inclusion

The company is committed to creating a dynamic and inclusive corporate culture, bringing together talents from all regions and fields around the world, forming a pluralistic and equal corporate culture, respecting and giving full play to the characteristics of each employee, fully exploiting their potential, and jointly promoting the development of the company. We oppose any form of discrimination and are committed to creating a fair and just working environment, eliminating the inclusion of non-work factors such as ethnicity, race, gender, religion, color and other factors in the recruitment process, so that all employees enjoy equal employment opportunities and career development paths.

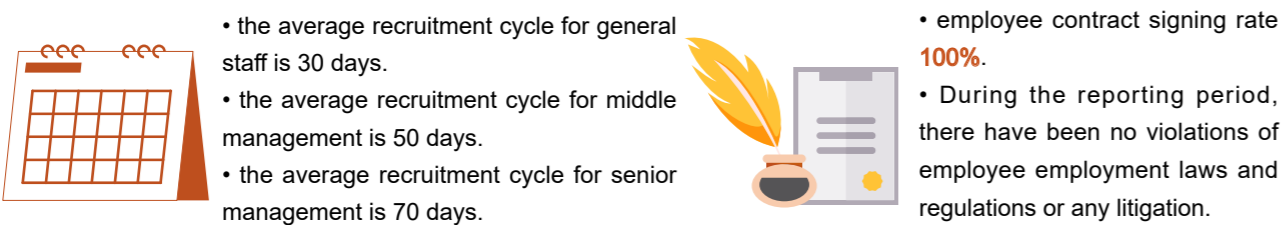
By the end of the reporting period, the Company had added **1,370** new employees, bringing the total number of employees to **5,161**.



Standardize Employment Relationships

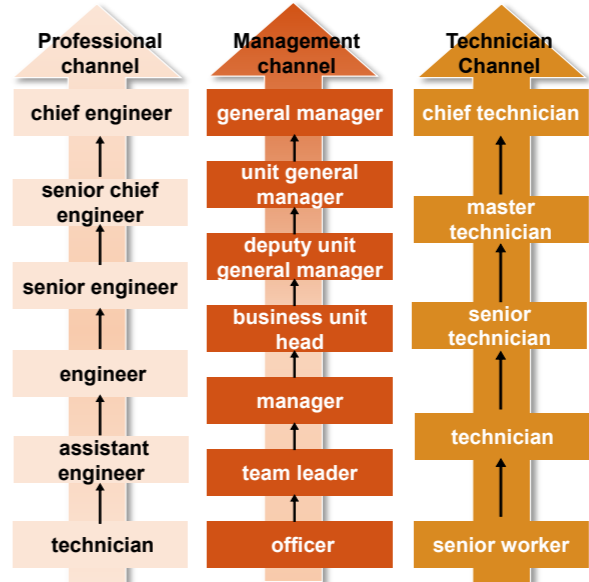
Qingdao DoubleStar strictly adheres to the "Labor Law of the People's Republic of China," the "Labor Contract Law of the People's Republic of China," and the "Labor Law of the Kingdom of Cambodia," as well as other relevant laws and regulations in the areas of operation. It follows the principles of fairness, justice, openness, and merit-based recruitment, utilizing the mature employment management systems of its controlling shareholder, DoubleStar Group, such as the "Group Social Mature Talent Recruitment and Employment Management Platform" and the "Employee Resignation Management Measures." These systems clarify mature recruitment processes and transparent job qualification requirements, actively promoting local employment rates and fulfilling the social responsibilities that a state-owned enterprise should bear.

The company's recruitment channels are uniformly planned and applied by the controlling shareholder, DoubleStar Group. The company has established a Labor Law Supervision Committee under the trade union, which is responsible for daily organization and promotion of labor laws and regulations, supervising the compliance of employers with labor laws and regulations, handling complaints and reports of violations of employees' legal rights, safeguarding the legal rights and interests of employees, building harmonious labor relations.



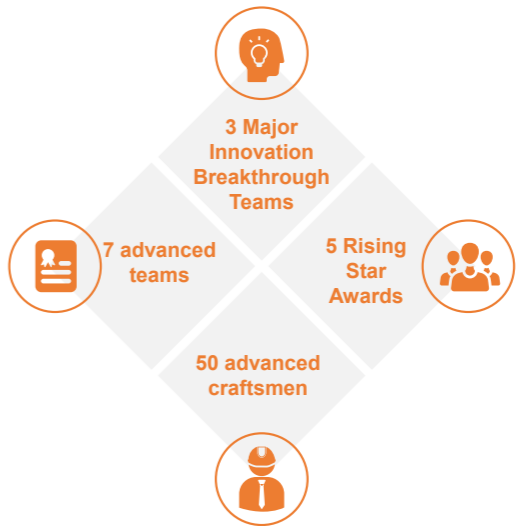
Assessment and Promotion of Talents

The company has established the "Young Talent Pipeline Development Plan" and the "Group Manager Selection and Appointment Platform," clarifying internal hiring processes and talent pipeline construction plans. These initiatives provide a broad stage for the development of young talents, cultivate and promote outstanding individuals, and implement a system of merit-based selection and elimination. Employee career development follows a principle of progression from lower to higher levels, with three career development paths set up for employees: management, professional, and technical, ensuring smooth channels for employee promotion.



All employees of the company undergo performance assessments each year, with a **100%** coverage rate in the year-end evaluations. Assessments are categorized into performance-related compensation, sales commission, piecework for workers, and non-piecework for workers, to evaluate employees in different positions. Additionally, all management personnel are subject to a 360-degree feedback assessment annually as a qualitative measure to quantify their work outcomes. The controlling shareholder, DoubleStar Group, leads the annual selection of honors such as significant innovation breakthrough teams, leading teams/individuals, advanced teams/individuals, and Rising Star awards.

In 2024, Qingdao DoubleStar selected multiple awards to recognize employees' special contributions in areas such as market, research and development, manufacturing, quality, and management.





Multi-Channel Development and Training

Qingdao DoubleStar firmly establishes the concept that talent is the "primary resource" and attaches great importance to talent development. It continuously improves employee training system, comprehensively establishes a learning organization, ensures that every employee has ample opportunities for training and advancement. Qingdao Doublestar adopts the training system of its controlling shareholder and has obtained the ISO 10015 Training System Certification.

The company's training efforts are centrally managed by the human resources platform, conducted through a combination of "Xingyun School" online learning platform and offline training. The content covers a wide range of areas and dimensions, such as corporate culture, environmental protection, occupational health, safety production, and professional skills, aiming to facilitate the rapid growth of highly skilled talents and comprehensively improve personnel quality.

The company has established a talent assessment mechanism to achieve a comprehensive evaluation and understanding of talents. Based on different job levels, different job series, and the needs of employees, it has established three vertical training and development channels: management, professional, and technical, and carries out "three forces training" in competency, improvement, and innovation capabilities. This ensures that every employee receives personalized training courses suitable for their needs, helping to realize their self-worth.

In addition, the company conducts environmental protection regulation training quarterly to popularize relevant regulations, ensure the company's compliance with environmental protection work, enhance the sense of responsibility and urgency of employees towards environmental protection, and improve environmental awareness. The company also periodically invites external experts to provide targeted training on sustainable development, covering various aspects such as climate change risk identification and response, key points of tire product carbon footprint accounting, and LCA (Life Cycle Assessment) evaluation, providing a solid foundation for the company's sustainable development.



In 2024, the total number of hours of training per employee of the company was 65.5 hours, of which the number of hours of training per management was 90.94 hours. The cost of the training investment was \$1.4 million, and a total of 9,373 training sessions were organized, with 100% coverage of employees receiving training.

Cambodian employee training

To assist local employees in Cambodia in better integrating into the company and quickly adapting to job responsibilities, the company actively carries out various training programs. In accordance with the relevant environmental protection regulations of Cambodia, an Environmental and Safety Department has been established, with designated personnel responsible for the management of wastewater, exhaust gases, hazardous solid waste, employee environmental protection knowledge training, and the dissemination of related environmental protection regulations and policies, ensuring the company's compliant operations.



Cambodian staff training

Employee Care Employee Support

Qingdao DoubleStar always adheres to the concept that "employees are family," aiming to create a warm working environment and foster a healthy and happy atmosphere. The company focuses on the well-being of its employees and extends its care to them. During the reporting period, the company invested a total of 418,200 yuan in employee care aspects such as marriage, children's education, marriage subsidies, and assistance for employees in difficulty. The amount is 40.67% higher than last year.

Assistance for Employees in Difficulty

During holidays, the company actively carries out visitation and consolation activities. The trade union leadership understands the actual difficulties of employees and provides financial assistance and supplies to those in need.

Women Employee Care Initiatives

The company has established a Women Workers' Committee, offering job adjustment services for pregnant and nursing female employees, and has set up a "Mother's Love Room" to provide a private, hygienic, and safe resting environment for female staff. The company also organizes health lectures and medical services to provide professional health care knowledge and services for female employees.

Supporting Facilities

The company provides a variety of supporting facilities for employees, such as a gym, recreational rooms, and a reading room, to enhance their happiness index.

Additional Vacation

The company offers various types of vacation to employees, such as paternity leave, parental leave, and carer's leave. For instance, male employees on duty are provided with 15 days of paternity leave, a total of 10 days of parental leave annually before the child reaches the age of 3, and a varying annual carer's leave ranging from 7 to 10 days.

Cultural and Sporting Activities

The company actively organizes a variety of cultural and sports activities to fully stimulate the employees' passion and vitality, effectively improving the physical fitness of all staff members.

Working Environment

The company places great emphasis on enhancing the working environment for its employees. It purchases and installs odor removal equipment, adds cooling and temperature reduction devices to meet the needs of workers in high-temperature processes, and provides electric footrests and other convenient transportation tools to increase work comfort.



Multi-Category Employee Communication Channels

Qingdao DoubleStar attaches great importance to the opinions and suggestions of every employee, in order to better protect the rights and interests of the majority of the company's employees, and to coordinate and solve in a timely manner the hot and difficult issues of concern to the majority of the employees, the company has set up a perfect feedback mechanism for employees, providing employees with a variety of ways to communicate their ideas and views, and organizing relevant personnel to verify and correct the feedback in a timely manner, and the results of the process to be publicly responded to. Through the diversified communication platform, it ensures that the opinions of the employees can be fully expressed and valued, and the effective expression of opinions and effective feedback can stimulate the employees' sense of participation and sense of belonging, and promote the continuous improvement and development of the company.



Compensation and Benefits Assurance

The company has established a multi-level compensation mechanism, including base salary, performance-based pay, and profit-sharing pay, to motivate employees to create and share value, and to fully mobilize their enthusiasm and initiative. In line with the DoubleStar "1+3" target management system (development goals, safety goals, operational goals, and control goals), the company aligns the personal interests of employees with its own growth, achieving a resonance between talent development and corporate progress. Additionally, based on annual operations and employee performance, the DoubleStar base makes salary adjustments for outstanding employees. Employees at all positions, in accordance with the company and department's strategic objectives, break down annual goals into monthly position targets and set corresponding assessment and incentive mechanisms. Salaries are then fulfilled based on the achievement of performance targets, closely linking employee compensation and incentives with the company's operations.



- The company strictly pays overtime pay to workers in accordance with national regulation.
- The company contributes to the five social insurances and one housing fund for employees as stipulated by law, with a compliance rate reaching 100%.
- The company follows established systems to issue allowances such as high-temperature subsidies, night shift subsidies, seniority allowances, and health care allowances to employees.

Employee Satisfaction

Every six months, Qingdao DoubleStar conducts employee satisfaction survey to collect employees' opinions and suggestions, so as to identify and solve the existing problems in time and further improve employees' satisfaction and loyalty. Employee satisfaction survey contains four modules, namely office environment, welfare and treatment, training and learning and comprehensive. The scope of the survey covers all departments of the company. 800 questionnaires were issued during the reporting period, all of which were collected on schedule, and the average satisfaction level of the employees was between basic satisfaction and satisfaction as a whole. Employee satisfaction survey reasonably classifies employees into management staff, frontline staff and auxiliary staff, etc. By analyzing the graded satisfaction of employees, we can more effectively locate and improve the related problems.



Department coverage **100%**
Effective recovery rate **100%**
The average employee satisfaction score is **95.79**, and overall employee satisfaction is high.

Occupational Health and Safety

Occupational Health Management



The company places great importance on the physical and mental health of all employees, and is committed to providing comprehensive pre-employment medical examinations, regular health checks, and in-service health checks. The coverage rate for annual in-service health checks and occupational disease examinations is 100%.

In order to protect the life safety and health of the employees, the company purchases accidental injury insurance for the employees, especially for the employees who travel frequently and have high risk of accidents, to

provide economic protection for the accidental injuries that may occur during the working period, which largely reduces the economic burden of the employees due to accidental injuries.

With the official commissioning of the Cambodian plant, the company not only pays social insurance for the expatriate cross-border employees at home according to the national requirements, but also buys overseas personal accident insurance for all cross-border employees, with a coverage rate of 100%; in addition to the local social insurance paid by the locally recruited Cambodian employees at the Cambodian plant, the company also buys personal accident insurance for Cambodian employees, with a coverage rate of 100%.

The company continuously organizes publicity and lectures for employees' physical and mental health. The Occupational Health Management Office sets up knowledge education on prevention and control of occupational disease hazards and emergency rescue measures for occupational disease hazards accidents in prominent positions in the production workshops, sets up warning signs in prominent positions, and conducts pre-service occupational health training and regular occupational health training during the period of employment, and urges employees to comply with occupational disease prevention and control laws and regulations and operating procedures.



Occupational Health and Safety Management System Certification for Shiyan Base and Dongjiakou Base



Safety Production Management

Qingdao DoubleStar implements the policy of "safety first, prevention oriented, and comprehensive management," strengthening the leadership and management of safety production to prevent production accidents to the greatest extent and ensure the safety of employees in the workplace. The company has established a safety production responsibility system of "layer-by-layer responsibility, everyone is responsible, and each person takes their own responsibility," achieving the layer-by-layer decomposition of safety objectives and the layer-by-layer guarantee of safety measures. It has been selected as a benchmark enterprise for safety production standardization in the industrial and trade industry by the Qingdao Emergency Management Bureau in 2024.

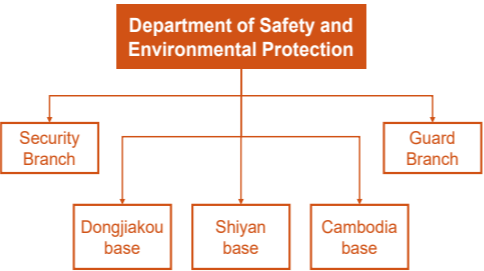
The labor union committee of Qingdao DoubleStar has a subcommittee for safety, which coordinates the regular conduct of the company's safety production work. The company has set up a Safety and Environmental Protection Department, which includes the Safety Office and the Security Office. The Safety Office is responsible for the internal and external control of safety, environmental protection, fire protection, and occupational health, while the Security Office is responsible for vehicle control, inspection and registration of various materials import and export, guidance and protection of visit activities, and emergency response to public security theft and other emergencies. The company's Safety and Environmental Protection Department is equipped with a total of 25 full-time safety management personnel and 6 registered safety engineers, all of whom have been certified by professional training and education. All three bases incorporate safety production factors into the performance appraisal indicators of safety production management personnel, which are closely linked to individual salaries.

Safety production construction

Qingdao DoubleStar has always prioritized safety production, implementing the concept that "people are the foremost, human life is of utmost importance, and life is more valuable than production." The company strictly enforces laws and regulations such as the "Safety Production Law of the People's Republic of China" and the "Enterprise Safety Production Standardization Specifications," comprehensively optimizing its safety production management system. The company has established a self-discipline mechanism, organized and benchmarked safety regulations, and formulated rules and regulations such as the "Safety Production Management System" and the "Special Operations Safety Management System." The company implements the main responsibility for safety production, incorporating safety production objectives into employee performance assessments and compensation structures.



"Industry 4.0" base



Security Management
Organizational Structure



"Industry 4.0" base

Base security inspection

Base safety inspections focus closely on key areas and important locations, concentrating on identifying and rectifying major accident hazards. The company has established guiding documents such as the "DoubleStar Group Major Hidden Danger Assessment List" and the "Special Operations Control Standards." The Safety Office of the Safety and Environmental Protection Department conducts special inspections on "occupational health, warning signs" in various company factories on a monthly basis. Based on the local unit's safety management system, incentives or penalties are applied according to regulations. Relevant issues will be announced, management and those in charge will follow up and rectify the problems. In 2024, a total of over 288 safety inspections were organized, with 4155 safety hazards identified throughout the year, achieving a closure rate of 100% for hazard rectification.

Emergency drill

The company continuously standardizes emergency management work to enhance its ability to respond to and prevent risks and accidents, maximizing the protection of the lives and health of employees and the public. In accordance with relevant laws and regulations such as the <Safety Production Law of the People's Republic of China> and the <Emergency Response Law of the People's Republic of China>, each base has formulated the <Production Safety Accident Emergency Plan Compilation>, with special emergency plans for accidents such as fires, equipment and facility accidents, and hazardous waste leaks.

In 2024, the plant organized 65 emergency drills, including electric shock accidents, waste oil leaks, radiation drills, and fire accidents, improving employees' response speed and handling ability for dangerous incidents.

Safety training

To enhance employees' awareness and proficiency in safety production, the company actively promotes the construction of safety production training. In 2024, DoubleStar's safety digitalization practices replaced traditional offline management with online "education and training" operations. On one hand, specialized training was conducted for key control groups, and on the other hand, comprehensive training was organized for all employees, covering the Safety Production Law, Fire Protection Law, occupational disease prevention, emergency response, operational procedures, etc.

The cumulative number of safety training sessions was 387, and the cumulative number of safety training sessions was 46,034, involving 100% coverage of the employees, helping them to effectively integrate the training content with their own work, and ensuring that the employees have a correct knowledge of the workshop's risk points, equipment operation, and how to recognize and warn of dangers.

Product Quality Management

Quality Management System

As an industry leader in the fields of rubber tires and intelligent manufacturing, Qingdao DoubleStar is always committed to continuously improving its quality management system to achieve high-quality development and enhance market competitiveness. At the same time, Qingdao DoubleStar always shoulders the responsibilities of a state-owned enterprise, striving to set industry benchmarks. With its comprehensive production quality standardization system, it has been awarded the national 5A "Good Practice Enterprise in Standardization" title. During the reporting period, the company was successfully selected for the 2024 Provincial Quality Benchmark Typical Experience List published by the Shandong Provincial Department of Industry and Information Technology with its case of "implementing full-process digital intelligent quality control of tires," becoming the only selected enterprise in the tire industry, highlighting the exemplary role of Qingdao DoubleStar in digital intelligent quality management.

To effectively implement the construction of the quality management system, Qingdao DoubleStar has formulated the <DoubleStar Quality Center Process System Manual> applicable to the company's actual situation in accordance with relevant laws, regulations, and industry standards. In addition, the company has achieved standardized intelligent online error prevention for equipment. By combining the TQM quality assurance system and the production quality standardization system, it has achieved real-time monitoring of product quality throughout the entire lifecycle, ensuring that the quality of finished products is always under 100% control. The quality assurance system consists of an EPS (Error Proof System) error prevention management system and an intelligent traceability system, which intelligently collects production data and automatically recognizes raw materials and semi-finished products through barcodes, achieving intelligent traceability of each tire from raw materials to finished products. The EPS management system has set up 47 error prevention items, covering 9 processes in the production flow, and has provided quality assurance from six major elements: people, machines, materials, methods, environment, and measurement. In addition, the company conducts monthly performance evaluations of supplier quality to ensure quality from the source.



Training on corporate
responsibility for work safety



Base firefighting training and firefighting
competitions

Product Quality Certification

The Dongjia Kou base and the Cambodian tire factory of Qingdao Doublestar have obtained the ISO 9001:2015 Quality Management System Certification. The Dongjia Kou factory and the Shiyan plant factory have also passed the IATF 16949:2016 Automotive Industry Quality Management System Certification, ensuring the compliance of Qingdao Doublestar's product quality.

The newly established Cambodian factory deeply implements the company's requirements, with the "two highs, one large, and one certainty" strategy at its core, to establish a full-process quality assurance system. It has formulated 20 quality management-related systems, with product quality benchmarked against international first-tier brands. By drawing on advanced operational experiences from Kumho and domestic 4.0 factories, the factory continuously identifies and closes gaps, promotes project implementation progress on a daily basis, and establishes a quality assurance system characterized by MES full-process online intelligent management to ensure product quality consistency. It has been benchmarked against leading enterprises and has now gained high recognition from customers.



Innovation and Intellectual Property Protection

R&D innovation is the key for enterprises to maintain competitive advantages and realize sustainable development. Qingdao DoubleStar aims to satisfy users' needs, integrates global technical resources, establishes an innovative, open and interactive R&D platform, continuously increases the adjustment of product structure and R&D investment, and forms a technical system covering the whole process of product R&D, manufacturing and testing with the product strategy of "high-end+high-value-added+highly-differentiated".

Intellectual Property Protection

Qingdao DoubleStar strictly abides by the Patent Law of the People's Republic of China, Trademark Law of the People's Republic of China and other laws and regulations, and formulates standardized management processes such as "Intellectual Property Management Process" and "Patent Application Control Process", and the legal department conducts legitimacy and compliance reviews of the business department's intellectual property operation needs. By continuously strengthening the company's intellectual property management and enhancing employees' awareness of intellectual property management and protection, the company ensures that it does not infringe upon others' intellectual property rights while protecting its own intellectual property rights.

A document encryption system is deployed at the R&D center, using professional encryption products from a state-owned enterprise to encrypt technical documents, construction plans, drawings, and other core data related to the R&D center. Encrypted documents can only be accessed on authorized machines within the company; unauthorized computers cannot open them, nor can external computers, and they cannot be brute-forced.

Various office software such as Office and CAD undergo process encryption, with all data generated by the encrypted applications carrying encryption protection identifiers. To decrypt documents, a company approval process must be followed for plaintext decryption before they can be authorized for use on external computers.

All ports of the encrypted terminal machines are systematically and physically isolated, with USB, CD-ROM, serial ports, and others all sealed to prevent data leakage.

Technological Innovation

To ensure the smooth conduct of research and development (R&D) activities, stimulate innovation, and enhance the efficiency and quality of R&D, the company's Central Research Institute has established several systems and regulations, including the <Intellectual Property Management Platform of the Central Research Institute>, the <Product Development and Change Management Procedure>, the <Value-Added Special Promotion and Incentive Mechanism for Doublestar Tire Industry (Doublestar Co., Ltd.)>, and the <New Product Development Management Regulations>. These measures are designed to ensure that the company's R&D activities comply with relevant academic ethical standards. During the reporting period, no instances of academic misconduct occurred.



The company's R&D staff totaled 771, account for 14.94%



R&D investment of 192 million yuan, the ratio of R&D investment to operating income was 4.43%



Introduced 3 new Ph.D.'s



11 internal expert/technical/professional training sessions, totaling 258 person-times
R&D reserve talent pool totaled 45 people, participated in 28 training sessions, accumulating more than 400 person-times



In 2024, the Large Tire Research Institute completed 194 product development tasks, including 116 new product development and 78 old product improvement. All product development tasks have been completed on schedule. Small Tire Research Institute mainly works on four aspects, such as product development, quality improvement, cost optimization and R&D system construction, and promotes the number of R&D projects 161; among them, the number of R&D projects related to new products is 101, the number of projects to improve product performance is 25, accounting for 15.5% of all R&D projects, and the number of R&D projects on the application of new materials is 13, accounting for 8% of all R&D projects.

Patent Authorizations:



704 patents authorized



83 newly added authorized patents



105 new patent application

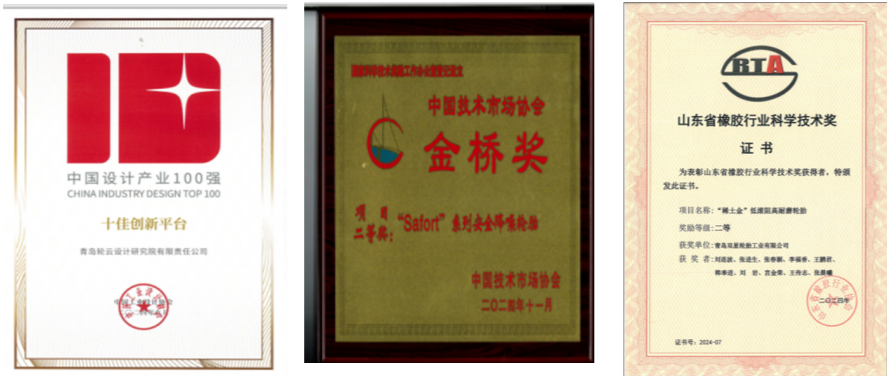
Standard-setting:

In 2024, Qingdao DoubleStar Central Research Institute participated in the formulation of 8 new standards, including 3 national standards and 5 group standards.

National standards	Industrial vehicle pneumatic tire specifications, sizes, pressures and loads	GB/T 2982-2024
	Tire Intelligent Manufacturing Data Dictionary	GB/T 45018-2024
	Determination of rubber solvent extracts	GB/T 3516-2024
Group standards	Green Tire Evaluation Specification	T/CRIA 11010-2024
	Product Carbon Footprint Accounting and Reporting Guide Tires	T/SDXJ 001—2024
	Automotive Tire Dynamic Impact Testing Impact Strip Method	T/CRIA 29011-2024
	Enterprise science and technology innovation achievements assessment norms	T/SECC 2024—0001
	Technical Requirements for Silent Foam for Tires	T/CRIA 29014-2024



2024 Award Winning Innovation and R&D Program Information			
#	Type	Project name	Achievements(Honored by the Central Research Institute: including the part declared by Wheeling Cloud and DoubleStar Tire Industry)
1	Platform construction	Top Ten Design and Innovation Platforms	Honors
2	project	National Priority Research of Year 2024	1 topic selected Title: Design, development and industrialization of bio-based green low-carbon tires Applicant: Qingdao Lunyun Design & Research Institute Co.
3	project	Golden Bridge Award	Second Prize in the Project Category Project Name: "Safort" Series Safety Noise Reduction Tires Applicant: Qingdao DoubleStar Tire Industry Co.
4	project	Shandong Rubber Industry Science and Technology Award	Second Prize Project Name: "Rare Earth Gold" Low Rolling Resistance and High Wear-resistant Tire Applicant: Qingdao DoubleStar Tire Industry Co.
5	Platform construction	Qingdao "One Enterprise One Technology" R&D Center 2024	Honored by "One Enterprise One Technology" R&D Center Declarant: Qingdao Lunyun Design & Research Institute Co.
6	Platform construction	Qingdao Technology Innovation Scenario Application Laboratory	Lab Name: Qingdao Tire Design and Simulation Scenario Application Laboratory Declared by: Qingdao Wheel Cloud Design Institute, Qingdao DoubleStar Tire Industry Co.



Innovation and R&D Program Award Certificates (Partial)

Key Technology Research and Development of Microcrystalline Graphite Application in Tires.:

Commissioned by China National Building Materials Investment Co., Ltd., Qingdao Lunyun Design Research Institute is leading a joint effort with Qingdao University of Science and Technology and Southern Graphite Research Institute to conduct key technology research and development on the application of microcrystalline graphite in tires. The collaboration aims to explore innovative applications in tire manufacturing, with the expectation that through the analysis of the physical and chemical properties of microcrystalline graphite, research on its impact on tire performance, and the development of specialized formulations, the industrial application of microcrystalline graphite in tires will be realized. This endeavor supports the high-value development and application of microcrystalline graphite products and promotes innovative development in the tire industry.



Development and Industrial Application of Wet Mixing Compound Masterbatch:

In 2024, our company collaborated with Yunnan Natural Rubber Industry Group Co., Ltd., Beijing University of Chemical Technology, and the China Natural Rubber Association on the project "Development and Industrial Application of Wet Mixing Compound Masterbatch." Additionally, in cooperation with Beijing University of Chemical Technology and the China Natural Rubber Association, we initiated the project "Research on the Application Technology of Domestic High-Performance Natural Rubber in Tires." We have completed the drafting of the project cooperation agreement. Through the implementation of these projects, we aim to rapidly integrate resources and strengths from all parties in the upstream and downstream of the tire industry, transforming scientific research achievements into new productive forces. This will enhance our company's technological standing in the industry, promote technological upgrades, and strengthen international competitiveness.

Customer Service and Rights

Qingdao DoubleStar has always been adhering to the concept of "Service Leadership, Quick Change to Win", and has established a service 4.0 system with "S2C" as the main symbol, which can truly realize "seamless online and offline connection" and "ubiquitous on and off the road". "everywhere on the road and off the road". Qingdao DoubleStar Service Center has always been committed to serving users with professional and sincere attitude, adhering to the market concept of "creating demand, leading the market and serving customers", establishing an intelligent service information system for effective control of the whole process of service, strengthening the interaction with the market demand, enhancing the service experience, meeting the personalized demand in an all-round way, improving the value-added ability of service, and enhancing the overall service quality. Qingdao DoubleStar has been recognized by Qingdao Consumer Rights Protection Committee as "Qingdao Consumer Education (Experience) Base" in the publicity activity of International Consumer Rights and Interests Day on March 15, 2023, and will apply for becoming a Consumer Rights Protection Service Station in 2024.



Qingdao DoubleStar has established a multi-channel domestic sales network, including traditional agents, distributors and e-commerce platforms, to realize large-scale sales, broaden the market scope, and ensure that customers can purchase Qingdao DoubleStar products conveniently. In the overseas market, we build marketing channels with a global vision and strategy, focusing on the "2080" strategy, focusing on the layout of 20 strategic "big customers" and 80 key markets, "one country, one partner, development of multi-brands The strategy of "2080" focuses on 20 strategic "big customers" and 80 key markets, "one country, one partner, multi-brand development", and strengthens the construction of overseas high-quality marketing network.

Customer After-sales Service

The company has developed different after-sales service models and policies according to the characteristics of different products in different markets. Quarterly customer satisfaction survey work is carried out to summarize service experience and continuously optimize product quality and service guarantee.

The company has set up a national 24-hour service hotline 400-017-666 to accurately match service demands and actively visit users, customers and suppliers. As long as the user dials the 24-hour service hotline, Qingdao Doublestar will arrive at the user's location at the first time to carry out technical services, and close the loop by biting the user's feedback problems in a limited time, realizing the goal that the user's problems will not be delayed, and the customer's problems will not stay overnight.

Customer satisfaction reached **98.94%**, improving year after year.

A total of **11,755 400** calls were received, with a **99.9%** call satisfaction closure rate.

A total of **4,266** problematic work orders were created, with a **99.1%** closure rate

Status of service facilities and equipment :

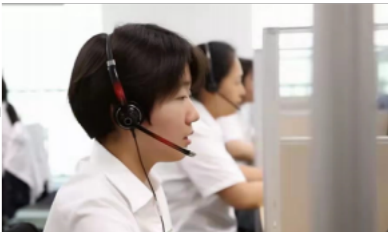
Intelligent Service Information System:
Utilizing technological advantages such as big data analysis and mobile apps.

Video authentication system:
Disrupting the after-sales model of the tire industry, we are the first in the industry to achieve face-to-face communication with users, solve problems in one step, and create the ultimate service experience for users.

Interactive services anytime&anywhere:
In the domestic tire industry, the first "0 delay rescue" service, innovative mobile e-commerce model selected core groups as the target users. The road to reach the country, the road everywhere; online and offline integration, creating a unique "service 4.0" ecosystem.

Product Claims

We have established different three-package processing procedures and claims systemsbased on varying market orientations, sales channels, and product types. Our warranty service has receivedhigh market recognition meeting the needs of different customer groups and product demands. The pre-claim systemis currently an exclusive claim system in the tire industry. The pre-claim system isavailable to all channels and customers, with a penetration rate of 100%.





Supply Chain Management

Supplier Sustainable Management Requirements

The company has established a comprehensive supplier introduction and evaluation process to form objective and effective supplier assessments and grading. This promotes fair and transparent competition among suppliers, guiding them to voluntarily improve themselves, fostering a virtuous cycle, and enabling suppliers to grow and develop in tandem with Qingdao DoubleStar.

During the reporting period, the management and assessment of green supply chain suppliers are as follows:

Green Supply Chain Supplier Management Assessment	Achievement in 2024
Pass rate of ISO14001 certificates for key raw material suppliers (except glue)	78.72%
Number of annual audits of suppliers in category A/B (except glue)	10
Coverage of assessment for introduction of new suppliers in the raw materials category	100%
Pass rate of new suppliers in the raw materials category in terms of environmental indicators	100%
A/B New Supplier Introduction Process Audit Coverage	100%
Annual assessment rate of ISO9001/TS16949 system for raw material suppliers	100%
Signing rate of framework contracts for new suppliers in the raw materials category	100%
Monthly performance evaluation coverage of vendors in the pool	100%
Monthly performance correction rate for suppliers in the pool	100%
Supplier coverage in communicating and promoting Twinstar's carbon-neutral philosophy	100%

Supplier Onboarding

Qingdao DoubleStar has established several supplier onboarding procedures, including the "Supplier Onboarding Process" and the "Supplier Audit Management Measures," to conduct qualification reviews for suppliers. In the supplier onboarding process, the company gives priority to suppliers with green production concepts and environmental certifications to ensure the environmental quality of raw materials. At the same time, considering supplier self-assessments, raw material testing, on-site supplier inspections and evaluations, and product service qualification reviews, the company examines suppliers from multiple dimensions such as business reputation, quality control mechanisms, equipment hardware, and the ability to handle quality exceptions.

Supplier Re-evaluation

Qingdao DoubleStar has formulated supplier evaluation systems such as the "Supplier Performance Assessment Management Standards" and the "Supplier Qualification and Production Part Approval Management Measures." The company conducts annual reviews of suppliers in its database based on supplier categorization. Starting from five dimensions—quality, cost, delivery and supply capability, technical capability, and service response speed (TQRDC)—the Research Institute, factory technical quality departments, bidding department, procurement office, and other relevant departments participate in scoring suppliers to promptly identify supplier risks.

Highlights of Supplier Management Requirements

- Monthly performance appraisal of suppliers, assessment indicators, specific indicators, including "product environmental testing indicators" and so on.
- No non-compliant suppliers by 2024
- When conducting supplier audits, ESG-related factors are added for consideration, such as the construction of environmental management systems, identification and management of environmental factors, and new green products.
- According to IATF 16949 and ISO9001 standards, the company has formulated the "Standard Audit Sheet", which puts forward the requirements for the operation of quality , safety, environmental protection and financial systems to suppliers.
- Require suppliers to obtain ISO9001 quality system certification as a minimum requirement

Green Procurement

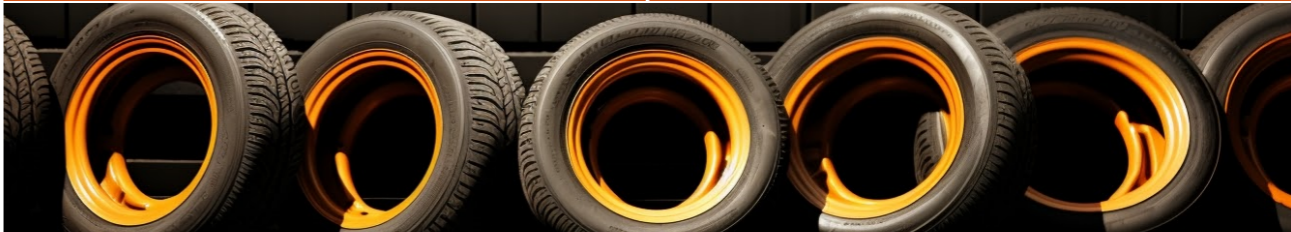
Qingdao DoubleStar regards green procurement as an essential part of the company's sustainable development strategy and has established a series of working procedures and related requirements for material procurement. The aim is to promote the green transformation of the supply chain and reduce the resource and environmental impact throughout the entire life cycle of products.

green supplier

When selecting suppliers, Qingdao DoubleStar gives priority to partners who have green production capabilities and environmental awareness. For new suppliers, the company conducts a comprehensive evaluation from the perspective of green procurement, including the environmental friendliness of their production processes, the green attributes of their products, and compliance with national environmental protection regulations. The company regularly conducts training to impart knowledge of green manufacturing and environmental management, helping suppliers to enhance their environmental awareness and capabilities. For existing cooperative suppliers, regular assessments are carried out, and suppliers with substandard product environmental protection testing indicators are subject to corresponding measures.

Green Procurement Practices

In terms of raw material procurement, the company reduces environmental impact by purchasing environmentally friendly raw materials such as pyrolysis carbon black and recycled rubber, and reduces resource waste in the production process by procuring shared pallets. Additionally, the company actively practices circular economy initiatives, recycling used tires to form a "retire and recycle" cycle, further reducing environmental pollution.



Community Activities and Public Welfare

Community Co-Construction

Qingdao DoubleStar strengthens its sense of responsibility, actively undertakes the social and public welfare responsibilities of a state-owned enterprise, promotes the traditional virtue of "supporting each other in times of difficulty," and proactively fulfills its corporate social responsibilities. In response to the call from organizations such as the Qingdao Civil Affairs Office, the company has carried out a series of community service activities, including respecting the elderly, assisting the disabled, and helping the poor, to promote the sustainable development of the community.



Community service activities

Public Welfare

DoubleStar will continue to actively organize and carry out all kinds of community welfare activities, and actively fulfill their social responsibility and commitment to pass on the positive energy of the community, highlighting the good spirit and image.

Voluntary Blood Donation

The company organized a voluntary blood donation activity titled "Donating Blood Freely, Extending Love." The event received an enthusiastic response from a large number of employees, with a total of 71 people successfully donating 27,200 milliliters of blood. This demonstrated the virtue of DoubleStar's employees in the new era, who are brave in taking on social responsibilities and passionately committed to their original mission. Over the past decade, the cumulative amount of blood donated has exceeded 320,000 milliliters. The company has been honored multiple times by the New District Red Cross as an advanced collective in caring for life and an outstanding group member, and has consecutively won the title of "Qingdao Outstanding Contribution to Voluntary Blood Donation" and other honorary titles. Next, DoubleStar Tires will continue to actively organize various public welfare activities, fulfill social responsibilities, convey positive energy to society, and demonstrate a good spirit and image.



Blood Donation Volunteer Program

Big hands pulling small hands, caring for minors

Taking the occasion of June 1st International Children's Day, with the theme "Big Hands Holding Little Hands, Caring for Minors,"adhering to the Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era and focusing on vulnerable minors such as orphans and children with disabilities, new era civilization practice volunteer activities were carried out. A large number of volunteers went to the Children's Rehabilitation Training Center in the West Coast New Area to conduct the "Caring for the Future, Warmth on June 1st" new era civilization practice volunteer activities, celebrating the "June 1st" International Children's Day together with children with autism and children with disabilities. During the event, volunteers played rehabilitation training games with children with developmental disabilities, drew with them, actively communicated, and sent them milk, mixed congee, and other comfort items, delivering love and warmth to the children with developmental challenges.



New Era Civilization Practice Volunteer Activities

Learning from Lei Feng Volunteer Service Activity

With the theme "Tire Confidant, Safe Travel," young volunteers conducted a Learn from Lei Feng volunteer service activity around the Dongjiakou Economic Zone Management Committee in the Qingdao West Coast New Area. The focus was on popularizing knowledge about spring tire maintenance, civilized driving, and civilized travel to local residents and car owners. This aimed to enhance the awareness of green, low-carbon, civilized, safe, and environmentally friendly practices among car owners and residents, promoting the construction of urban spiritual civilization.



Volunteer Service Activities



Appendix I.
Performance Data

Corporate Governance and Economic Performance

Economic Performance		
Indicator	Unit	2024
Operation revenue	RMB 100 million	44.35
Total assets	RMB 100 million	91.16
Total number of employees	/	5,161

Governance Structure				
Indicator	Unit	2024	2023	2022
Number of board members	/	8	9	9
Number of independent directors on the board of directors	/	3	3	3
Number of female board members	/	3	2	3
Number of board meetings	/	8	8	5
Attendance rate of directors at the board of directors	%	100%	100%	100%
Number of decisions passed at board meetings	/	55	31	17
Number of committees under the board of directors	/	5	5	4

Business Ethics				
Indicator	Unit	2024	2023	2022
Proportion of leaders who signed the "Integrity Commitment"	%	100%	100%	100%
Proportion of suppliers who have signed the Integrity Agreement	%	100%	100%	100%
Coverage rate of employees receiving professional ethics and anti-corruption training	%	100%	100%	100%
Number of cases in which Doublestar was identified as a party to antitrust litigation	/	0	0	0

Environmental

Indicator	Unit	2024	2023	2022
Responding to Climate Change				
Number of greenhouse gas verifications	Times	1	0	0
Total greenhouse gas emissions	tCO ₂ eq	282,596.58	342,329.92	312,313.08
——Scope 1 greenhouse gas emissions (CO ₂ , direct emissions)	tCO ₂ eq	1,489.81	1,777.57	1,550.68
——Scope 2 greenhouse gas emissions (CO ₂ , indirect emissions)	tCO ₂ eq	281,106.77	340,552.35	310,762.40
Greenhouse gas emissions intensity - by operating revenue	tCO ₂ eq/10,000 yuan	0.59	0.74	0.80

Indicator	Unit	2024	2023	2022
Energy and Resource Consumption				
Energy				
Total energy consumption - total non-renewable energy consumption	Tons of standard coal	489.88	647.19	612.19
——Non-renewable energy consumption - gasoline	Ton (t)	146.91	155.92	161.83
	Tons of standard coal	216.16	229.42	238.12
——Non-renewable energy consumption - diesel	Ton (t)	331.83	429.91	354.46
	Tons of standard coal	483.51	626.42	516.48
——Non-renewable energy consumption - natural gas	Ton (t)	2.12	2.46	2.26
	Tons of standard coal	25.44	29.58	24.82
——Non-renewable energy consumption - coal	Ton (t)	0.00	0.00	0.00
	Tons of standard coal	0.00	0.00	0.00
——Non-renewable energy consumption - fuel oil	Ton (t)	0.00	0.00	0.00
	Tons of standard coal	0.00	0.00	0.00



Indicator	Unit	2024	2023	2022
Energy and Resource Consumption				
Energy				
Total energy consumption - renewable energy consumption	Tons of standard coal	3,640.79	3,150.80	1,734.77
Renewable energy consumption - photovoltaic	Kilowatt-hour (kWh)	29,624,029.30	25,637,140.00	14,115,328.00
	Tons of standard coal	3,640.79	3,150.80	1,734.77
——Photovoltaic power generation	Kilowatt-hour (kW h)	29,644,329.30	25,000,000.00	25,000,000.00
——Proportion of photovoltaic electricity consumption	%	3.58%	3.69%	2.24%
Renewable energy consumption - waste heat and waste pressure	Kilowatt-hour (kWh)	0.00	0.00	0.00
	Tons of standard coal	0.00	0.00	0.00
Energy storage installed capacity	Kilowatt-hour (kWh)	9.60	0	0
Total external energy purchases	Tons of standard coal	71,526.43	81,552.68	75,226.32
——External energy consumption-purchased electricity (electricity consumption)	Kilowatt-hour (kWh)	202,125,369.69	247,880,335.16	233,806,874.30
	Tons of standard coal	24,841.21	30,464.49	28,734.86
——External energy consumption-purchased steam	Ton(t)	487,295.48	533,724.98	485,591.51
	Tons of standard coal	46,859.31	51,324.06	46,695.45
Proportion of renewable energy use	%	3.58%	3.69%	2.24%
Total electricity consumption intensity - by operating income	kWh/10,000 yuan	466.31	532.45	597.91
Energy Consumption Intensity - By Revenue	Ton of standard coal/10,000 yuan	0.16	0.18	0.20

Indicator	Unit	2024	2023	2022
Energy and Resource Consumption				
Water Resources				
Total water consumption	Ton (t)	555,894.00	716,891.00	502,684.00
——Industrial water consumption	Ton (t)	547,613.00	669,953.00	467,488.00
——Domestic water consumption	Ton (t)	8,281.00	46,938.00	35,196.00
——Water consumption of water plants (municipal water supply)	Ton (t)	630,452.00	401,847.00	317,307.00
——The total amount of water used for recycled water	Ton (t)	23,443,754.62	23,348,276.25	24,228,354.38
Water intake (tap water and industrial water)	Ton (t)	630,452.00	372,255.00	295,313.00
Total water intensity - by operating income	Tons/10,000 yuan	1.28	1.54	1.29
Total water use intensity - by operating income	Tons/10,000 yuan	54.09	50.15	61.96
Total water saving	Ton (t)	46,000.00	47,168.20	46,000.00
Water saving amount	10,000 Yuan	248,400.00	248,400.68	248,400.00
- Amount of water reused and recycled	Ton (t)	46,000.00	46,000.00	46,000.00
Resources and Materials				
Total material consumption	Ton (t)	251,949.25	299,876.40	250,370.45
Consumption of toxic and hazardous materials	Ton (t)	187.68	175.40	145.63
Material consumption intensity - by operating income	Tons (t)/10,000 yuan	0.58	0.64	0.64
Total packaging material usage	Ton (t)	3.00	106.00	122.00
Total packaging material consumption intensity - by operating income	Tons/million yuan	0.00001	0.00023	0.00031
——Use of recyclable packaging	Ton (t)	2.00	-	-
Total office paper consumption	ton	3.00	-	-
Total office paper consumption intensity - by operating income	Tons/million yuan	0.00001	-	-



Indicator	Unit	2024	2023	2022
Waste and Pollutant Management				
Exhaust Emissions				
Total exhaust gas emissions (volume)	Ton (t)	10,647,223,117.20	15,676,512,122.00	16,211,668,942.00
Waste gas emission intensity (volume) - by operating income	Tons/10,000 yuan	24,563.46	33,673.10	41,457.85
Particle emissions	Ton (t)	10.67	32.72	33.04
VOCs volatile organic compound emissions	Ton (t)	43.09	101.16	91.07
PM emission intensity - by operating income	Tons/10,000 yuan	0.000025	0.000083	0.000085
VOCs Volatile Organic Compounds Emission Intensity - By Operating Income	Tons/10,000 yuan	0.000099	0.000019	0.000017
Nitrogen oxide emissions (NOx)	Ton (t)	-	-	-
Nitrogen oxide (NOx) emission intensity - by operating revenue	Tons/10,000 yuan	-	-	-
Sulfur oxide emissions (SOx)	Ton (t)	-	-	-
Sulfur oxide (SOx) emission intensity - by operating revenue	Tons/10,000 yuan	-	-	-
Wastewater Discharge				
Total wastewater discharge	Ton (t)	271,196.00	240,636.00	210,931.00
Wastewater Discharge Intensity - By Operating Revenue	Tons/10,000 yuan	0.63	0.52	0.54
Total amount of solid waste generated	Ton (t)	7,972 . 05	7,826.99	11,303.38
——Solid waste generation - general waste	Ton (t)	7,171.91	7,237.82	10,671.83
——Solid waste generation - hazardous/hazardous waste	Ton (t)	800.14	589.17	631.55
——General waste emission intensity - by operating income	Tons/10,000 yuan	0.02	0.02	0.03
——Hazardous waste emission intensity - by operating income	Tons/10,000 yuan	0.0018	0.0013	0.0016
Solid Waste				
Solid waste recycling rate	%	1.00	1.00	1.00

Indicator	Unit	2024	2023	2022
Dongjiakou Plant				
Exhaust Emission Concentration				
Particle emission concentration	mg/m³	4.88	2.60	1.40
VOCs volatile organic compound emission concentration	mg/m³	5.10	6.77	3.53
Non-methane total hydrocarbon concentration	mg/m³	5.10	6.77	3.53
Wastewater Discharge Concentration				
Wastewater discharge concentration-COD chemical oxygen content	mg/L	44.80	33.20	13.00
Wastewater discharge concentration - ammonia nitrogen	mg/L	0.09	0.40	0.65
Wastewater discharge concentration - total nitrogen ((measured as N)	mg/L	11.30	7.76	19.20
Wastewater discharge concentration - total phosphorus ((measured as P)	mg/L	0.83	0.88	0.93
Wastewater discharge concentration-Suspended substance (SS)	mg/L	25.00	18.00	13.00
Wastewater Discharge Concentration-Petroleum	mg/L	0.08	0.08	0.07
Five day biochemical oxygen demand (BOD5) emission concentration	mg/L	9.10	9.30	3.80
Wastewater pollutant discharge concentration-wastewater PH value	(Numerical range)	7.2	7.9	7.9
Shiyan Plant				
Exhaust Emission Concentration				
Particle emission concentration	mg/m³	1.25	5.48	6.21
VOCs volatile organic compound emission concentration	mg/m³	4.69	5.20	4.86
Non-methane total hydrocarbon concentration	mg/m³	4.69	5.20	4.86
Wastewater discharge concentration				
Wastewater discharge concentration-COD chemical oxygen content	mg/L	18.88	55.25	144.00
Wastewater discharge concentration - ammonia nitrogen	mg/L	2.67	2.41	28.30
Wastewater discharge concentration - total nitrogen (measured as N)	mg/L	10.50	19.58	38.70
Wastewater discharge concentration - total phosphorus (measured as N)	mg/L	0.31	0.10	0.11
Wastewater discharge concentration-Suspended substance (SS)	mg/L	14.63	34.00	47.00
Wastewater Discharge Concentration-Petroleum	mg/L	0.74	0.29	0.17
Five day biochemical oxygen demand (BOD5) emission concentration	mg/L	7.21	18.50	45.20
Wastewater pollutant discharge concentration-wastewater PH value	(Numerical range)	7.4-8.4	7.1-8.1	7.3-7.6



Social

Indicator	Unit	2024	2023	2022
Environmental Compliance Management				
Environmental Protection Investment				
Total amount of investment in environmental protection	10,000 Yuan	1,160.41	667.16	1,941.90
The proportion of total environmental protection investment to operating income	%	0.27%	0.14%	0.50%
Environmental Training and Drills				
Number of environmental protection training sessions	/	11	10	10
Environmental protection training person-times	/	3,865	4,423	4,615
Environmental protection training duration per capita	Hours/person	2.50	2.50	2.50
Coverage rate of employee environment-related training	%	100%	100%	100%
Number of environment-related emergency drills	/	9	19	21
Number of participants in environment-related emergency drills	/	865	662	906
Environmental Certification				
Proportion of base environmental management system certification	%	100%	100%	100%
Proportion of base energy management system certification	%	100%	100%	100%
Percentage of workplaces that have conducted environmental risk assessments	%	100%	100%	100%
Total number of green factories	/	2	2	2
Number of national green factories	/	2	2	2
Green Supply Chain Management				
Number of new suppliers screened using environmental criteria	/	12	0	0

Labor				
Indicator	Unit	2024	2023	2022
Number of employees	/	5,161	4,274	4,197
Number of employees under 30 years old	/	1,335	704	576
Number of employees aged 30-50	/	3,024	2,859	2,961
Number of employees aged 50 and above	/	802	711	660
Number of people with doctoral degree	/	7	5	3
Number of people with master's degree	/	110	93	123
Number of people with bachelor's degree	/	872	838	733
Number of people with college degree	/	2,155	458	480
Other academic qualifications	/	2,017	2,880	2,858
Percentage of male employees	%	79%	79%	77%
Percentage of female employees	%	21%	21%	23%
New employees	/	1,370	694	811
Local employment rate	%	70%	64.6%	63.23%
Labor contract signing rate	%	100%	100%	100%
Number of child laborers	/	0	0	0
Social insurance coverage	%	100%	100%	100%
Employee physical examination coverage	%	100%	100%	100%
Coverage rate of employee occupational disease examination	%	100%	100%	100%



Training				
Indicator	Unit	2024	2023	2022
Average total training time per employee	Hour	65.5	50.3	23
Percentage of employees receiving business ethics training	%	100%	100%	100%
Coverage rate of employees receiving vocational and skills training	%	100%	100%	100%
Coverage rate of employees receiving anti-discrimination and anti-human rights violations training	%	100%	100%	100%
Coverage rate of employees receiving environment-related training	%	100%	100%	100%
Coverage rate of employees receiving compliance training	%	100%	100%	100%
Coverage rate of employees receiving safety production related training	%	100%	100%	100%

Safety Production				
Indicator	Unit	2024	2023	2022
Safety production investment	10,000 Yuan	687.17	734.5	941.7
Total number of safety trainings	/	46,034	49,296	46,513
Cumulative number of safety trainings	/	387	485	54
Coverage rate of safety training received by employees	%	100%	100%	100%
Number of factory safety inspections	/	288	204	157
Total number of safety hazards found	/	4,155	10,193	9,838
Total rectification closed-loop rate of safety hazards	%	100%	99.9%	100.0%
Total number of emergency drills	/	65	61	63

Suppliers				
Indicator	Unit	2024	2023	2022
Number of suppliers	/	206	207	189
Number of key raw material suppliers	/	94	84	76
Evaluation coverage of new suppliers introduced into the warehouse	%	100%	100%	100%
Comprehensive supplier assessment coverage	%	100%	100%	100%
Local procurement rate	%	94.20%	94.20%	93.65%
Percentage of new suppliers screened using environmental rating dimensions	%	100%	100%	100%
Percentage of key raw material suppliers that have obtained ISO14001 environmental certification	/	74	54	48

R&D and Innovation				
Indicator	Unit	2024	2023	2022
Number of patents	/	704	636	556
Number of new patents	/	83	80	172
Number of participants in the formulation of standard catalogues	/	64	52	30

Product Quality Assurance				
Indicator	Unit	2024	2023	2022
Number of IATF16949:2016 certified factories	/	2	3	3
Number of ISO9001:2015 certified factories	/	2	2	2
Number of recalls due to product quality	/	0	0	0
Customer coverage rate of participating in customer satisfaction survey	%	100%	100%	100%
The percentage of very satisfied and satisfied customers in the customer satisfaction survey results	%	98.9%	98.8%	98.7%





Appendix II.

GRI Content Index

GRI Content Index		
GRI Standard	Disclosure Issues	Location
General Standards		
GRI 1: Foundation 2021		
GRI 2: General Disclosures 2021		
Organizations and their reporting practices		
2-1	Organizational details	About Doublestar
2-2	Entities included in the organization's sustainability reporting	About this Report
2-3	Reporting period, frequency and contact point	About this Report
Activities and Workers		
2-6	Activities, value chain and other business relationships	Supply Chain Management
2-7	Employees	Talent Cultivation and Development
Governance		
2-9	Governance structure and composition	Corporate Governance
2-10	Nomination and selection of the highest governance body	Corporate Governance
2-11	Chair of the highest governance body	Corporate Governance
2-12	Role of the highest governance body in overseeing the management of impacts	Corporate Governance
2-13	Delegation of responsibility for managing impacts	Corporate Governance
2-14	Role of the highest governance body in sustainability reporting	Sustainable Development Governance Framework
2-15	Conflicts of interest	Business Ethics
2-16	Communication of critical concerns	Corporate Governance
2-17	Collective knowledge of the highest governance body	Sustainable Development Governance Framework
2-19	Process to determine remuneration	Talent Cultivation and Development
2-20	Conflicts of interest	Talent Cultivation and Development
Strategy, policy and practice		
2-22	Statement on sustainable development strategy	Sustainable Development Concept
2-23	Policy commitments	Party Building Leading
2-24	Embedding policy commitments	Sustainable Development Governance Framework
2-26	Mechanisms for seeking advice and raising concerns	Stakeholder Identification and Communication
2-27	Compliance with laws and regulations	Corporate Governance
2-28	Membership associations	Sustainable Development Governance Framework

GRI Content Index		
GRI Standard	Disclosure Issues	Location
Stakeholder Engagement		
2-29	Approach to stakeholder engagement	Stakeholder Identification and Communication
2-30	Collective bargaining agreements	Stakeholder Identification and Communication
GRI 3: Material Topics 2021		
3-1	Process to determine material topics	Materiality Assessment & Screening
3-2	List of material topics	Materiality Matrix
3-3	Management of material topics	Materiality Assessment & Screening
GRI 201: Economic Performance 2016		
201-1	Direct economic value generated and distributed	About Doublestar
201-2	Financial implications and other risks and opportunities due to climate change	Responding to Climate Change
GRI 202: Market Presence 2016		
202-1	Ratios of standard entry level wage by gender compared to local minimum wage	Employee Care
GRI 203: Indirect Economic Impacts 2016		
203-2	Significant indirect economic impacts	National Strategic Response
GRI 205: Anti-corruption 2016		
205-1	Operations assessed for risks related to corruption	Business Ethics
205-2	Communication and training about anti-corruption policies and procedures	Business Ethics
205-3	Confirmed incidents of corruption and actions taken	Business Ethics
GRI 206: Anti-competitive Behavior 2016		
206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	Business Ethics
GRI 207: Tax 2019		
207-1	Approach to tax	Corporate Governance
207-2	Tax governance, control, and risk management	Corporate Governance
207-3	Stakeholder engagement and management of concerns related to tax	Corporate Governance
GRI 301: Materials 2016		
301-1	Materials used by weight or volume	Energy and Resource Management
301-2	Recycled input materials used	Circular Economy
301-3	Reclaimed products and their packaging materials	Energy and Resource Management
GRI 302: Energy 2016		
302-1	Energy consumption within the organization	Energy and Resource Management
302-2	Energy consumption outside of the organization	Energy and Resource Management
302-3	Energy intensity	Energy and Resource Management
302-4	Reduction of energy consumption	Energy and Resource Management
302-5	Reductions in energy requirements of products and services	Energy and Resource Management



GRI Content Index		
GRI Standard	Disclosure Issues	Location
GRI 303: Water and Effluents 2018		
303-2	Management of water discharge-related impacts	Emissions and Waste management
303-3	Water withdrawal	Energy and Resource Management
303-4	Water discharge	Emissions and Waste management
303-5	Water consumption	Energy and Resource Management
GRI 304: Biodiversity 2016		
304-2	Significant impacts of activities, products and services on biodiversity	Biodiversity Conservation
GRI 305: Emissions 2016		
305-1	Direct (Scope 1) GHG emissions	Responding to Climate Change
305-2	Energy indirect (Scope 2) GHG emissions	Responding to Climate Change
305-4	Other indirect (Scope 3) GHG emissions	Responding to Climate Change
GRI 306: Waste 2020		
306-1	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	Emissions and Waste Management
306-2	Waste generation and significant waste-related impacts	Emissions and Waste Management
306-3	Management of significant waste-related impacts	Emissions and Waste Management
306-4	Waste generated	Emissions and Waste Management
306-5	Waste diverted from disposal	Emissions and Waste Management
GRI 308: Supplier Environmental Assessment 2016		
308-1	New suppliers that were screened using environmental criteria	Supply Chain Management
308-2	Negative environmental impacts in the supply chain and actions taken	Supply Chain Management
GRI 401: Employment 2016		
401-1	New employee hires and employee turnover	Talent Cultivation and Development
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	Employee Care
401-3	Parental leave	Employee Care

GRI Content Index		
GRI Standard	Disclosure Issues	Location
GRI 403: Occupational Health and Safety 2018		
403-1	Occupational health and safety management system	Occupational Health and Safety
403-2	Hazard identification, risk assessment, and incident investigation	Occupational Health and Safety
403-3	Occupational health services	Occupational Health and Safety
403-4	Worker participation, consultation, and communication on occupational health and safety	Occupational Health and Safety
403-5	Worker training on occupational health and safety	Occupational Health and Safety
403-6	Promotion of worker health	Occupational Health and Safety
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Occupational Health and Safety
403-8	Workers covered by an occupational health and safety management system	Occupational Health and Safety
403-9	Work-related injuries	Occupational Health and Safety
403-10	Work-related ill health	Occupational Health and Safety
GR1 404: Training and Education 2016		
404-1	Average hours of training per year per employee	Talent Cultivation and Development
404-2	Programs for upgrading employee skills and transition assistance programs	Talent Cultivation and Development
404-3	Percentage of employees receiving regular performance and career development reviews	Talent Cultivation and Development
GR1 405: Diversity and Equal Opportunity 2016		
405-1	Diversity of governance bodies and employees	Talent Cultivation and Development
GR1 406: Non-discrimination 2016		
406-1	Incidents of discrimination and corrective actions taken	Talent Cultivation and Development
GR1 413: Local Communities 2016		
413-1	Operations with local community engagement, impact assessments, and development programs	Community Activities and Public Welfare
413-2	Operations with significant actual and potential negative impacts on local communities	Community Activities and Public Welfare
GRI 414: Supplier Social Assessment 2016		
414-1	New suppliers that were screened using social criteria	Supply Chain Management
414-2	Negative social impacts in the supply chain and actions taken	Supply Chain Management
GRI 418: Customer Privacy 2016		
418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	Information Security



Appendix III.
Shenzhen Stock Exchange Index

Shenzhen Stock Exchange Guidelines Content Index		
NO.	Disclosure Issues	Corresponding Chapter
Environmental		
1	Responding to Climate Change	Responding to Climate Change
2	Pollutant Emissions	Emissions and Waste Management
3	Waste Disposal	Emissions and Waste Management
4	Ecosystem and Biodiversity Conservation	Biodiversity Conservation
5	Environmental Compliance Management	Environmental Compliance Management
6	Energy Utilization	Energy and Resource Management
7	Water Resource Utilization	Energy and Resource Management
8	Circular Economy	Circular Economy
Social		
9	Social Contribution	National Strategic Response Community Activities and Public Welfare
10	Innovation Driven	Innovation and Intellectual Property Protection
11	Science and Technology Ethics	Not Applicable
12	Supply Chain Security	Supply Chain Management
13	Treat small and medium-sized enterprises equally	Not Applicable
14	Product and Service Safety and Quality	Product Quality Management
15	Data security and Customer Privacy Protection	Information Security
16	Staff	Employee Care Diversity and Inclusion Occupational Health and Safety
Sustainable development related governance		
17	Due Diligence	Not Applicable
18	Stakeholder Communication	Stakeholder Identification and Communication
19	Anti-commercial Bribery and Anti-corruption	Business Ethics
20	Anti-unfair Competition	Business Ethics

Appendix IV.
Standards Glossary Index

Abbreviations	Interpretation
A	
APS	Advanced Planning and Scheduling
AVC	Automatic Voltage Control
C	
CAD	Computer Aided Design
CASS-ESG 6.0	China Corporate Sustainability Reporting Guidelines (CASS-ESG 6.0)
COD	Chemical Oxygen Demand
E	
EPS	Error Proof System
EUDR	EU Deforestation-free Regulation, EU Zero Deforestation Regulation
G	
GB/T 24040-2008	Principles and Framework for Life Cycle Assessment of Environmental Management
GB/T 24044-2008	Requirements and Guidelines for Environmental Management Life Cycle Assessment
GB/T 24067-2024	Requirements and Guidelines for Quantifying Carbon Footprint of Greenhouse Gas Products
GB/T 40718-2021	Green Product Evaluation - Tires
GRI	Global Reporting Initiative
GRI Standards	GRI Sustainability Reporting Standards
GSSB	Global Sustainability Standards Board
I	
IATF16949:2016	Automotive Industry Quality Management System Certification
IFRS Foundation	IFRS Foundation
IFRS S2	IFRS 2: Climate-related Disclosures
ISO 9001	Quality Management System Certification
ISO 10015	Training system certification
ISO 14001	Environmental Management System Certification
ISO 14067:2018	Requirements and Guidelines for Quantifying Carbon Footprint of Greenhouse Gas Products
ISO 45001	Occupational Health and Safety Management System Certification
L	
LCA	Life Cycle Assessment
LIMS	Laboratory Information Management System
M	
MES	Manufacturing Execution System



Appendix V.
Full and Short Names of Companies

Abbreviations	Interpretation
N	
NOX	Nitrogen oxides
O	
ODS	Ozone Depleting Substances
P	
PAS 2050:2011	"Greenhouse gas emissions assessment standards for goods and services during their life cycle"
PCR	Passenger Car Radial Tire, Passenger Car Radial Tire
PLM	Product Lifecycle Management
R	
RFID	Radio Frequency Identification
S	
SCADA	Supervisory Control and Data Acquisition, data acquisition and monitoring control system
SOX	Sulfur oxides
SS	Suspended Substance
SSLVPN	Virtual Private Network (VPN) software based on the Secure Sockets Layer (SSL) protocol
STOT	Shape and Topology Optimization Technique, Shape and Topology Optimization Technique
SVG	Static Var Generator, static var generator
T	
TBR	Truck and Bus Radial Tire, Radial Truck Tire
TCFD	Task Force on Climate-related Financial Disclosures
T/CRIA 11003-2016	China Rubber Industry Association Tire Grading Standard
TQM	Total Quality Management, Quality Assurance System
TQ	Technology, Quality, Response, Delivery, Cost, Technical capabilities, quality, service response speed, delivery supply capabilities, cost
T/SDXJ 001-2024	Product Carbon Footprint Accounting and Reporting Guidelines Tires
V	
VOCS	Volatile Organic Compounds
VPD	Virtual Product Development, Digital Twin Design System

Abbreviation	Full Name
Qingdao Doublestar	Qingdao Doublestar Co., Ltd.
Doublestar Group	Doublestar Group Co., Ltd.
Dongjiakou Plant	Qingdao Doublestar Tire Industry Co., Ltd.
Shiyan Plant	Doublestar Dongfeng Tire Co., Ltd.
Cambodia Plant	Doublestar (Cambodia) Tire Co., Ltd.
Dongying Base	Guangrao Jixing Tire Co., Ltd.
Kumho, Kumho Tire, Kumho Corporation	Kumho Tire Co., Ltd.



Appendix VI.

Report Feedback

Thank you very much for taking the time out of your busy schedule to read this report. In order to further enhance the level of sustainable development work and the quality of report preparation at Qingdao DoubleStar, we kindly ask for your assistance in completing the feedback and sending it to us via the following methods:

- Mailbox:gqb@doublestar.com.cn
- Address:No. 666 Lianghe Road, Huangdao District, Qingdao City
- Telephone:0532-67710729

- *Which category of stakeholder do you belong to?
- ☐ Employee ☐ Customer ☐ Government ☐ General Public
- ☐ Regulatory Agency ☐ Shareholder and Investor ☐ Community Resident
- ☐ ESG Professional ☐ Peer Company ☐ Supplier and Partner
- ☐ Non-Governmental Organization (NGO) ☐ Other (please specify)

*Your feedback:

1.Your overall evaluation of the report is:

- ☐ Excellent ☐ Good ☐ Average ☐ Poor

2.Please evaluate the response and disclosure of stakeholders' concerns in this report:

- ☐ Excellent ☐ Good ☐ Average ☐ Poor

3.Please evaluate the clarity, accuracy, and completeness of the information, indicators, and data disclosed in this report:

- Definition:

☐ Excellent ☐ Good ☐ Average ☐ Poor
- Accuracy:

☐ Excellent ☐ Good ☐ Average ☐ Poor
- Integrity:

☐ Excellent ☐ Good ☐ Average ☐ Poor

4. Your evaluation of the responsibilities fulfilled by Qingdao DoubleStar as disclosed in this report is:

- Environmental responsibility:

☐ Excellent ☐ Good ☐ Average ☐ Poor
- Social responsibility:

☐ Excellent ☐ Good ☐ Average ☐ Poor
- Governance responsibility:

☐ Excellent ☐ Good ☐ Average ☐ Poor

5.Do you think the content arrangement and layout design of this report are reader-friendly:

- ☐ Yes ☐ No

6.Have you been able to obtain the information you wanted from this report:

- ☐ Yes ☐ No

We welcome your comments and suggestions on Qingdao DoubleStar's sustainable development efforts, as well as the information you hope to obtain from the report.

Please feel free to share your thoughts here:

Thank you for your enthusiastic participation!



Qingdao Doublestar Co.,Ltd.