

2023

Qingdao Doublestar Co., Ltd.

Sustainability Report

(Environmental, Social and
Governance Report)





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Reporting Introduction

This report is the first Sustainability and ESG (Environmental, Social and Governance) report published by Qingdao Doublestar Co., Ltd. (hereinafter referred to as "Doublestar", "the company" or "we") since its establishment in 1921. It aims to meet the expectations of relevant stakeholders and to transparently communicate our performance, management ethos, initiatives, and achievements in environmental, social, and governance aspects in 2023. There are no false records or misleading statements in this report.

Reporting Scope

All business operations of Doublestar Co., Ltd. and its subsidiaries have been included, consisting with our Consolidated Financial Statements 2023. And this report covers our activities undertaken from January 1, 2023 to December 31, 2023. In order to enhance the comparability and forward-looking nature of this report, some content will be traced back to previous years or have forward-looking descriptions.

Reporting Basis

The report is prepared in accordance with Chapter 7 "Other significant matters that should be disclosed" of the Shenzhen Stock Exchange Stock Listing Rules, and also refers to the Global Reporting Initiative Standards (GRI Standards), as well as in reflection of issues concerned by Sustainable Development Goals (SDGs), and abides by the Guidelines on Corporate Social Responsibility Reporting for Chinese Enterprises (CASS-ESG5.0) issued by China Academy of Social Sciences. For climate-related disclosure, we adopted the disclosure recommendations developed by the TCFD (Task Force on Climate-Related Financial Disclosure).

Reporting Assurance

This report has been reviewed by The Board of Directors has been reviewed and does not contain any false records or misleading statements.

Reporting Data Source

The information, data, and examples presented in this report are sourced from Doublestar's official documents, statistical and financial reports, and publicly available documents. Additionally, it includes ESG practice information compiled and summarized by various functional departments within our company.

Reporting Release

This report is available in Chinese and English versions and can be viewed on the website of the Shenzhen Stock Exchange. If there is any ambiguity or conflict between the Chinese and English versions, the Chinese report shall prevail.



Chairman's Message

2023 is the opening year for the comprehensive implementation of the resolutions from the 20th National Congress of the Communist Party of China. We are wholeheartedly embodying the Party's spirit. Guided by party development and oriented towards strategic transformation, Doublestar is diligently applying the nation's new developmental ideologies. Actively aligning with the national's "Carbon peaking and Carbon neutrality" strategy and firmly practicing the Doublestar Group's "New Four Modernizations" strategy of ecological modernization, high-tech, localization, and digital intelligence, we are committed to transforming Doublestar into a globally leading enterprise renowned for its digital intelligence, high technology and sustainable development.

Doublestar (000599), the sole state-owned enterprise listed on the main board in Shandong Province's tire sector, initiated a novel phase of 'second entrepreneurship and the creation of a globally renowned tire brand' on January 16, 2014. Through a strategic smart transformation, it shut down all outdated factories, phased out all obsolete capacities, and established the world's first fully integrated 'Industry 4.0' smart factory in the tire industry. This led to the formation of an 'R&D 4.0' + 'Industry 4.0' + 'Service 4.0' industrial Internet ecosystem, making it the only entity in recent years to be recognized by the Ministry of Industry and Information Technology with accolades in 'Brand Cultivation', 'Technological Innovation', 'Quality Benchmarking', 'Intelligent Manufacturing', and 'Service Transformation'. Doublestar has positioned itself as the frontrunner in China's intelligent tire manufacturing, with its brand leading the Chinese tire category in the 'Top 500 Asian Brands' for consecutive years. On January 16th, 2020, Doublestar embarked on a new journey of 'third entrepreneurship phase, to become a world-class enterprise'.

In alignment with our sustainable development strategy, we have inaugurated a Sustainable Development Committee, establishing a comprehensive management system that encompasses the Sustainable Development Committee, Sustainable Development Management Group, and a specialized Sustainable Development Team. This elevates ESG management to a pivotal role within our corporate strategy. By setting sustainable development objectives and strategies, we aim to create an entire industry chain for green and low-carbon products, thus propelling our company towards sustainable growth.

As a socially responsible corporation, we deeply comprehend the immediacy of global environmental challenges. We fully embrace the philosophy that "Lucid waters and lush mountains are invaluable assets." always integrating social responsibility with high-quality corporate advancement. Our approach spans from tire R&D and manufacturing to service and recycling of old tires, rigorously aligning with ESG benchmarks to forge an all-encompassing industry chain and life-cycle management for sustainable development. By pioneering an "R&D 4.0 + Industry 4.0 + Service 4.0" industrial network ecosystem, alongside initiatives like the "Tire Network," retreading, and green recycling, we've positioned ourselves among the first in the global tire sector to adopt comprehensive life-cycle green management. Notably, at the "ESG Excellent Practice Cases" national conference co-hosted by the China Enterprise Reform and Development Research Association and CCTV in October 2023, Doublestar was distinguished as the sole tire industry representative.

We have firmly grasped the market demand for eco-friendly products and technology, implementing an industry-wide green and low-carbon strategy with notable success. Our company utilizes platforms such as the Green Tire New Materials Engineering Research Center and the National Industrial Design Center for R&D in green products. We persistently roll out premium products such as AAA-rated tires according to EU Tire Labeling regulations, 'Rare earth gold' tires, 'Run-flat safety' tires, and EV tires, each is high-end, highly differentiated and high value-added. Additionally, we prioritize 'Safety, Energy conservation, and Environmental protection' in our technical pursuits, developing innovative tread designs, formulas for ultra-low rolling resistance, eco-friendly materials, and simulation-optimized structures, while also emphasizing ultra-quiet and highly durable technologies. This dedication to ecological design is steadily reinforcing our industry-leading position.



Qingdao Doublestar Co.,Ltd.
Chairman, Yongsen Chai

We place a high priority on the digitalization of our operations and the protection of intellectual property. Through the establishment of network and information security protocols, the development of a cross-domain data transmission security platform, and regular emergency drills for information security incidents, we have achieved the Data Management Capability Maturity (DCMM) Level 3 Certificate in 2023, marking us as leaders in the tire industry. Our "Intellectual Property Management Process" and "Patent Application Control Process" aim to mitigate the risks of intellectual property infringement. Our effective management and conversion of intellectual property rights earned us the title of National Intellectual Property Demonstration Enterprise in 2023, distinguishing us as the sole recipient in our industry.

We are actively embracing the "Belt and Road" initiative, accelerating our international expansion with a strong commitment to localization. By focusing on crafting a global brand and customizing products and services to fulfill the unique demands of overseas clients, we've set the groundwork for a significant strategic shift. In 2023, we constructed our first foreign plant in Cambodia, aiming at navigating international trade challenges, penetrating the highly regulated yet lucrative markets of Europe and America, and establishing a new cornerstone for profit expansion.

We proactively fulfill the social and charitable responsibilities expected of state-owned enterprises. We embody the traditional virtue of mutual assistance during hardships, actively engaging in philanthropic efforts through various charitable events. Our commitment extends to local educational support, providing scholarships and fostering talent development. Collaboratively, we enhance community sustainability through partnership and volunteer initiatives. Moreover, we champion the values of exemplary work, labor, and craftsmanship, cultivating a culture of excellence and innovation. Our "talent-enhancing" strategy aims to develop skilled professionals, thereby elevating our collective expertise and enhancing employee well-being and belonging.

Looking forward to 2024, Doublestar will steadfastly continue under the guidance of party-building principles and the "New Four Modernizations" strategy, focusing on high-quality growth, operational enhancements, and pioneering innovations. We will maintain our commitment, advance with openness and continuous innovation, all aimed at forging a better future and co-writing a new chapter together.



About Doublestar

1

Overview of Doublestar

Qingdao Doublestar Co., Ltd. is a holding subsidiary of Doublestar Group, founded in 1921 and listed on the main board of the Shenzhen Stock Exchange(000599.SZ) on April 30th, in 1996. As a state-owned main board listed company, Doublestar focuses on the excellent development of the tire industry and the production of passenger tires, truck and bus tires, and giant mining tires, etc.

Doublestar is committed to becoming an industry leader and actively exploring an ecosystem that integrates " Service 4.0 + R&D 4.0 + Industry 4.0 ". We focus on scientific and technological innovation, overcome the industry's core technical issues, achieve disruptive innovation in new products, meet long-term needs with differentiated products, and become the world's leading tire company. With Smart Manufacturing as the main symbol, we improve product quality and production efficiency, and have synergized the development of production, marketing and R&D cycles as well, creating the first large-scale tire customization order model to meet the personalized needs of customers in the tire industry.

While achieving high-quality development, we integrate sustainable development into our business strategy through promoting the co-construction of surrounding ecology, devoting to green manufacturing, and taking social responsibilities to achieve the development both in financial and social perspective. We are devoted to building a company that has long-term trust from customers, shareholders, employees, society and other stakeholders.



2

Overall Strategy

With the belief in "First, Open and Innovative" , Doublestar builds high-quality development capabilities for the tire industry through channel segmentation, product differentiation, localization strategy implementation, and disruptive innovation to provide high-quality tire products and services for customers.



Plant Expansion

Doublestar currently has three domestic production plants in Dongjiakou, Dongying and Shiyao, with a total production capacity of 21.50 million tires. In addition, in 2023, we started to invest and construct our first overseas production plant, the Cambodian plant, with annual production capacity expected to reach 8.50 million high-performance radial tires. This strategic move is of great significance for Doublestar to expand overseas markets, reduce costs, cope with trade challenges, enhance brand image and promote local economic development.

Marketing Strategy

Doublestar continues to expand new domestic and foreign marketing networks. In the domestic market, we firmly implements the marketing strategy of sinking replacement market channels, accelerating the flattening of traditional tire sales channels, establishing direct-to-customer sales channel, and expanding the share of replacement market. At the same time, in the strategic layout of supporting market, we focus on high-end tire, matching and strengthen strategic cooperation with mainstream car manufacturers.

Oversea Expansion

With a global vision and strategy, we have built a marketing network in overseas markets, focusing on the "2080" strategy, the development of 20 strategic "key account" and 80 key markets with sales concept of "one country, one partner, multiple brands" strategies, to strengthen the construction of high-quality overseas marketing. Currently, Qingdao Double Star's products are distributed across more than 180 countries and regions globally and have secured the AEO (Authorized Economic Operator) certification from customs authorities. Recognized as a high-level certified enterprise, we benefit from streamlined customs procedures worldwide, significantly facilitating our efforts to expand into overseas markets. Doublestar has covered more than 180 countries and regions around the world. In 2024, we would further expand to high-end markets such as Europe and the United States and optimize the global marketing network to improve financial performance and the capability of risk management.



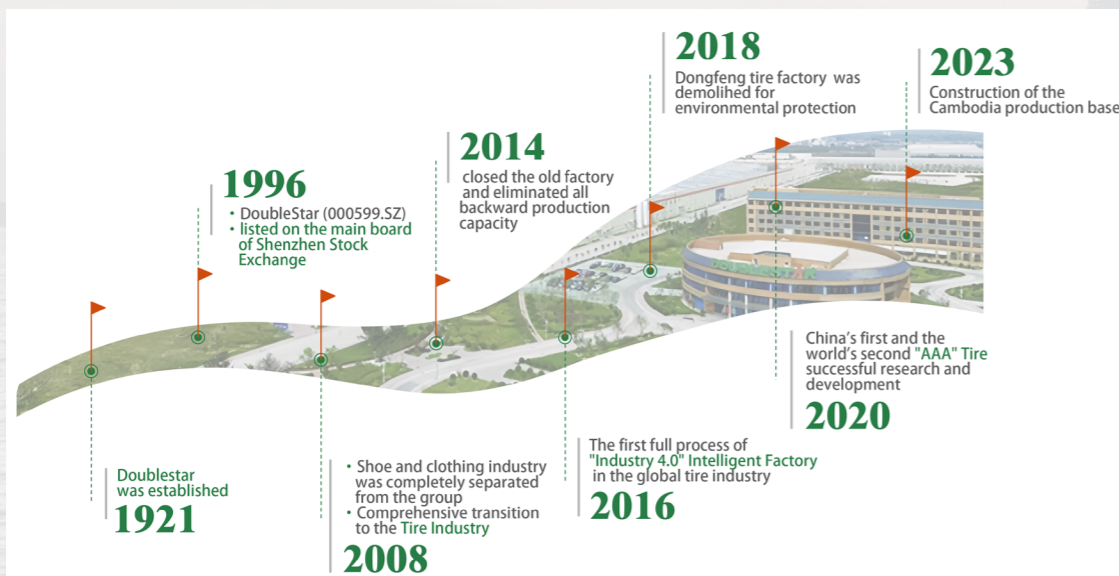
Product system: Well-known Brands



Doublestar has always focused on meeting the diverse needs in different scenarios. Our product system covers truck and bus tire products (TBR) and passenger car tire products (PCR). We focus on the technological innovation and quality improvement of tire products, that tire performance indicators such as tire wear resistance, wet skid resistance, low rolling resistance, silent performance, load-carrying capacity, grip and handling performance, etc. have improved significantly these years, and products for multiple specific scenarios has been launched as well. Specialty tire products include long-haul and medium-haul rare earth gold tires, short-haul and medium-haul 100-ton 100-kilometer tires, low-profile metric tires, mining explosion-proof tires, light truck tires with high load capacity, engineering tires, run-flat safety tires, new energy vehicles' special tires and other core products to meet the needs of customers who have strict requirements on tire performance. We will continue to optimize product design, material selection and manufacturing processes to provide customers with more intelligent, efficient and reliable tire products, helping customers achieve greater success in various fields.



Company History



Doublestar was restructured in 2008 to focus on the tire industry. Since 2014, it has embarked on a new journey of secondary entrepreneurship to make it a world famous brand with a series of initiatives such as eco-friendly relocation to accelerate the conversion from old to new driving forces and became the first one to found all process operation "Industry 4.0" smart factory for truck, bus and car tires in global tire industry. In 2023, we invested in the construction of a production plant in Cambodia to accelerate the improvement of our economic benefits while expanding into high-profit markets with high tariff barriers.



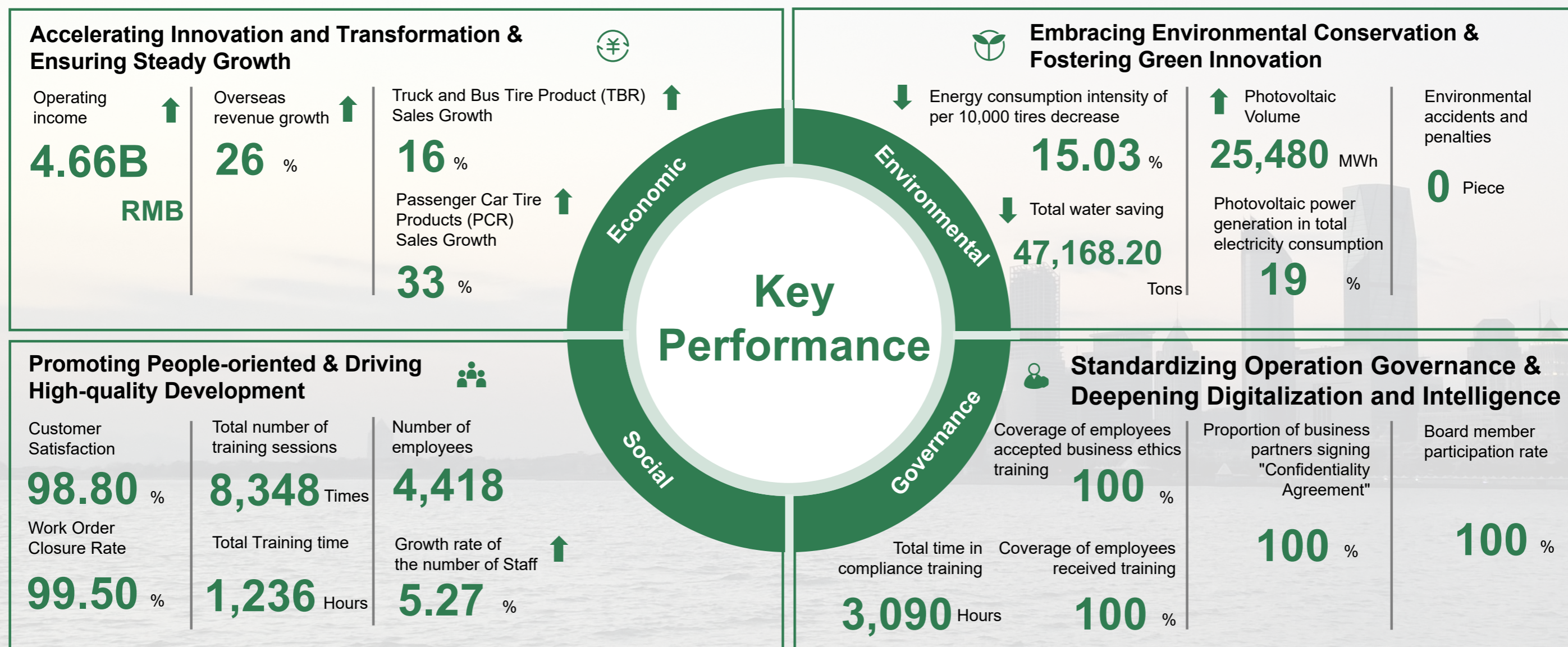
Main Honors and Awards

Doublestar is playing the role of practitioner of the tire industry in Doublestar Group. The group has been awarded "Best Brand Building", "Best Technological Innovation", "Best Quality Benchmark", "Best Smart Manufacturing", "Best Green Manufacturing", "Best Green Products", "Best Green Supply Chain", "Best Service Transformation", and "Best Pilot Demonstration Enterprise with Whole Industry Chain" and hailed as "the leader of Smart Manufacturing of tires in China". In 2023, it was awarded "China Brand Annual Award NO.1 Tire Brand" by the World Brand Laboratory, "Top 10 Influential Tire Brands in China", "500 Most Valuable Brands in China", and listed in the "Top 500 Asian Brands", ranking first in the Chinese tire industry. In October of the same year, with the outstanding performance in ESG governance, ESG value creation and ESG ecosystem construction, especially the case From "Smart Manufacturing" to "Green Manufacturing": Doublestar Group Creates Green Management of the Tire Life Cycle being selected as the best practice of the year by the China Enterprise Reform and Development Society and the Central Enterprise ESG Alliance, the group became the only tire company on the list.

Granting Department	Project Name
National Industry and Information Technolog Sector	National green supply chain management enterprise
	Green Manufacturing, Green Factory of 2022
	Industrial Internet trials and demonstrations of 2022
	Trials and Demonstrations of classified and hierarchical management of network security in Internet industrial enterprises
	Typical cases of industrial and information quality improvements of 2023
National Ministry of Commerce	The first batch of national supply chain innovation and application demonstration enterprises
State Intellectual Property Office	National Intellectual Property Demonstration Enterprise of 2023
Chnbrand	Ranked first in C-BPI Chinese domestic tire industry brand power of 2023
Shandong Provincial Industry and Information Technology Department	Shandong Province intelligent transformation of chemical industry model enterprise
	Listed in Shandong Province "Two Integration Management System Implementation Demonstration Enterprises"
	Listed in The Seventh Batch of Shandong Province Manufacturing Individual Champion Identification
Shandong Provincial Development and Reform Commission	Listed in "ChenXing Factory" cultivation list
	Pilot enterprise of "Construction of Green, Low-carbon and High-quality Development District"
China Petroleum and Chemical Industry Federation	All steel and semi-steel radial tires in the petroleum and chemical industry 2022 annual energy efficiency "leader" model enterprises
Qingdao Municipal Science and Technology Bureau	High-tech enterprise
Qingdao Municipal Development and Reform Commission	Listed in Qingdao first batch of "Low-carbon Demonstration Enterprises" fosterage
	Qingdao Green Manufacturing Demonstration of 2023
Qingdao Municipal Science and Technology Bureau	Qingdao Green Design Products of 2023
	"All-steel load-carrying radial mine internal and external tires" were selected into the Qingdao Innovative Product Recommendation Catalog (the first batch of 2023)



Key Performance





Approach to Sustainability

Our Philosophy

Sustainable high-quality development is our core business development philosophy. We proactively apply the concepts of green and innovative development to the entire industry chain, reducing dependence on natural resources, and is committed to providing customers with high-performance tire products through continuous investment in research and development and focusing on green management throughout the product life cycle. We regard social responsibility as the core of corporate sustainable development, and actively participate in community construction, care for employee well-being, and promote skills training and career development as our unremitting goals. In terms of economic development, we advocate for a stable and robust business model. We believe that under the guidance of sustainable development principles, Doublestar will continue to forge a better future, achieving a "win-win" for both economic and social benefits, and bringing sustainable prosperity to both enterprise and society.



Strategies & Planning

With the overall objective of achieving green management throughout the whole life cycle of tires, Doublestar has set up sustainable development goals and plans from the perspectives of environmental, social, and governance, and mapped them against the United Nations Sustainable Development Goals (UN SDGs) to establish our ESG strategic framework.



➤ Achieve dual carbon goals and move towards green, low-carbon and circular development

Sustainable Development Plan	Practice as of 2023
<p>Promote carbon reduction:</p> <p>Establish a complete carbon footprint management and control system, conduct carbon emission assessment and management on product life cycles, and optimize and upgrade life cycle assessments.</p> <ul style="list-style-type: none"> Short-term goal: reduce carbon emissions by more than 5% in the next 3-5 years on the current basis Mid-term goal: achieve carbon peak in 2030 and reduce carbon emissions by more than 30% based on 2022 Long-term goal: achieve carbon neutrality and become the first company in the global tire industry to implement full life cycle green management 	<ul style="list-style-type: none"> A carbon management committee has been established to formulate and supervise the implementation of the carbon management plan. Carbon footprint data collection of products has been carried out
<p>Optimize production processes and equipment upgrades:</p> <ul style="list-style-type: none"> Reduce carbon emissions, improve raw material utilization, and achieve a reduction of standard coal consumption per ton of glue by more than 5% compared with 2022 in 2025 	<ul style="list-style-type: none"> Carry out energy conservation and consumption reduction work through optimization of manufacturing processes, upgrading of energy-saving technology, and transformation of energy-saving equipment. Formulate an "Energy Efficiency Leadership" plan, conduct evaluation and promotion of key tasks of energy conservation and consumption reduction, and analyze significant differences. Promote green office and enhance awareness of energy conservation and consumption reduction
<p>Accelerate green technology and product R&D innovation:</p> <ul style="list-style-type: none"> Optimize and improve product performance with the goal of developing new products such as low rolling resistance tires and tires for new energy vehicles. Continue to strengthen sustainable product research and development innovation, collaborate with the raw material supply chain, and accelerate the development, preliminary storage and application of new sustainable materials Strive to achieve more than 60% of sustainable materials in PCR and TBR products by the end of 2024 	<ul style="list-style-type: none"> Design products based on the technical requirements of "safety, energy saving and environmental protection", master green technologies such as ultra-low rolling resistance formula design, environmentally friendly materials, ultra-quiet and ultra-wear-resistant technology, and form new energy vehicle tires, "rare earth gold" tires, "Fully explosion-proof safety tires, booster wheels and other green star products. A modular simulation design platform based on digital models and a product lifecycle management (PLM) digital management integrated system have been built. Carry out industry-university-research cooperation projects with a number of companies and universities to conduct breakthrough research on sustainable materials, tire performance, etc. Sustainable materials research and application projects have been carried out: 7 bio-based materials including rice husk gray silica, bio-based oil, bio-based resin, bio-based carbon black, bio-based dispersant, recycled steel wire, renewable polyester and recycled steel wire. Characteristic analysis and application testing of three major categories of recycled materials, including cord, nylon, and cracked carbon black, have been carried out to achieve green tire products with a sustainable material ratio of 41% for truck and bus tire products (TBR) and 34% for passenger car tire products (PCR). design and development Sustainable formula development and application projects have been carried out: promoting the application of natural rubber to replace synthetic rubber and rice husk gray and white carbon black to replace carbon black in the formulas of various tire components.
<p>Clean energy development and utilization:</p> <ul style="list-style-type: none"> Cover the company's available space with photovoltaic equipment to achieve 100% renewable energy coverage and reduce reliance on traditional energy 	<ul style="list-style-type: none"> The Dongjiakou plant has achieved 100% roof coverage with photovoltaics. Dongjiakou plant has planned to build an energy storage project. Shiyan plant photovoltaic grid-connected power generation in March 2024.
<p>Promote circular economy practices:</p> <ul style="list-style-type: none"> Optimize the production process, improve the recycling and reuse rate of waste tires, and reduce resource waste 	<ul style="list-style-type: none"> Work closely with the green ecological recycling industry of the controlling shareholder Doublestar Group to carry out the recycling of waste tires and the application of cracked carbon black





Society

- Become a more talent-attractive enterprise
- Product first, leading the industry with innovation and quality
- Build a responsible supply chain and assume the responsibility of the chain owner

Sustainable Development Plan	Practice as of 2023
<p>People oriented:</p> <ul style="list-style-type: none"> Aiming to tap the potential of employees, strengthen their personal skills and update the training system in a timely manner Improve employee efficiency and provide more competitive wages in the industry <p>Product and service responsibilities:</p> <ul style="list-style-type: none"> Continue product development based on existing R&D goals and R&D systems to improve customized R&D services Improve the further integration of quality assurance system and production system to improve quality management level Develop the application breadth of video authentication, provide customers with better after-sales services, and provide the tire industry with more advanced R&D technology and better service templates 	<ul style="list-style-type: none"> Establish a diversified and multi-channel employee feedback mechanism Establish a transparent and open career development system and set up a smooth promotion mechanism Establish a training system, formulate a 2024 training plan, and gradually open special training projects Create a R&D 4.0 system with digital and analog simulation platforms as the main symbols, and create the first large-scale customization ordering model in the tire industry Introducing advanced equipment to achieve standardization of production quality and intelligent error-proofing, greatly improving product production efficiency and qualification rate Combining online video online services with traditional passenger tire dealer models and new retail models to make tire problem identification more efficient
<p>Supply chain win-win:</p> <ul style="list-style-type: none"> Continue to develop a procurement platform to connect all materials and equipment involved in the rubber industry, and build the industry's first global full-process digital procurement system As the owner of the supply chain, we promote sustainable collaboration between upstream and downstream to achieve the green development of the tire industry chain and rubber industry chain. 	<ul style="list-style-type: none"> Multi-party data integration and system function optimization have been achieved, including more than 10,000 rubber industry suppliers. Issue sustainable development initiatives and raise expectations for suppliers in environmental protection, social responsibility, diversity and inclusion, innovation and technology, etc. Through the formulation of the "2024 Supplier Environmental Management System Development Plan", the remaining key raw material suppliers are required to complete ISO14001 certification by the end of 2024.
<p>Social feedback:</p> <ul style="list-style-type: none"> Continue to carry out public welfare activities and become a warm-hearted performer of social responsibilities 	<ul style="list-style-type: none"> Carry out rural revitalization activities Carry out public welfare activities such as tree planting, respecting the elderly and caring for the elderly, voluntary blood donation, love donations and other public welfare activities



Governance

- Strengthen governance structure and improve profitability

Sustainable Development Plan	Practice as of 2023
<p>Strengthen corporate governance and operations:</p> <ul style="list-style-type: none"> Build a four-in-one governance system of rule of law, risk, compliance, and content, build multi-dimensional risk management and control, and fully cover all business and functional processes Establishing an overseas policy bill and response team to protect overseas business development 	<ul style="list-style-type: none"> Clarify business compliance responsibilities, optimize and upgrade existing controls, and establish an overseas compliance system in advance for the establishment of Cambodian factories.
<p>Promote the company's digital and intelligent management:</p> <ul style="list-style-type: none"> Comprehensively build a digital management and control system, open up business system interfaces, and provide digital support for smooth business operations Strengthen data governance standards, accelerate data re-application and development, and achieve digital value-added 	<ul style="list-style-type: none"> Achieve 90% horizontal integration of data between businesses, comprehensively improve the digital system integrating production, marketing and research, and significantly improve R&D and production efficiency Deepen the granular analysis of the collected data, and promote data application analysis through flexible combination





Sustainability Governance

We have newly established a top-down sustainability development management structure led by the Sustainability Development Committee at the management level, with Sustainability Management Group and Sustainability Specialized Group as the implementation level. Also, to further strengthen the effectiveness of sustainability management work, we have established a dynamic and effective governance mechanism, promoting our sustainable management and leading to a great sustainability practice through identification of key issues and formulation of sustainable development goals.

ESG Management Structure

Responsibilities





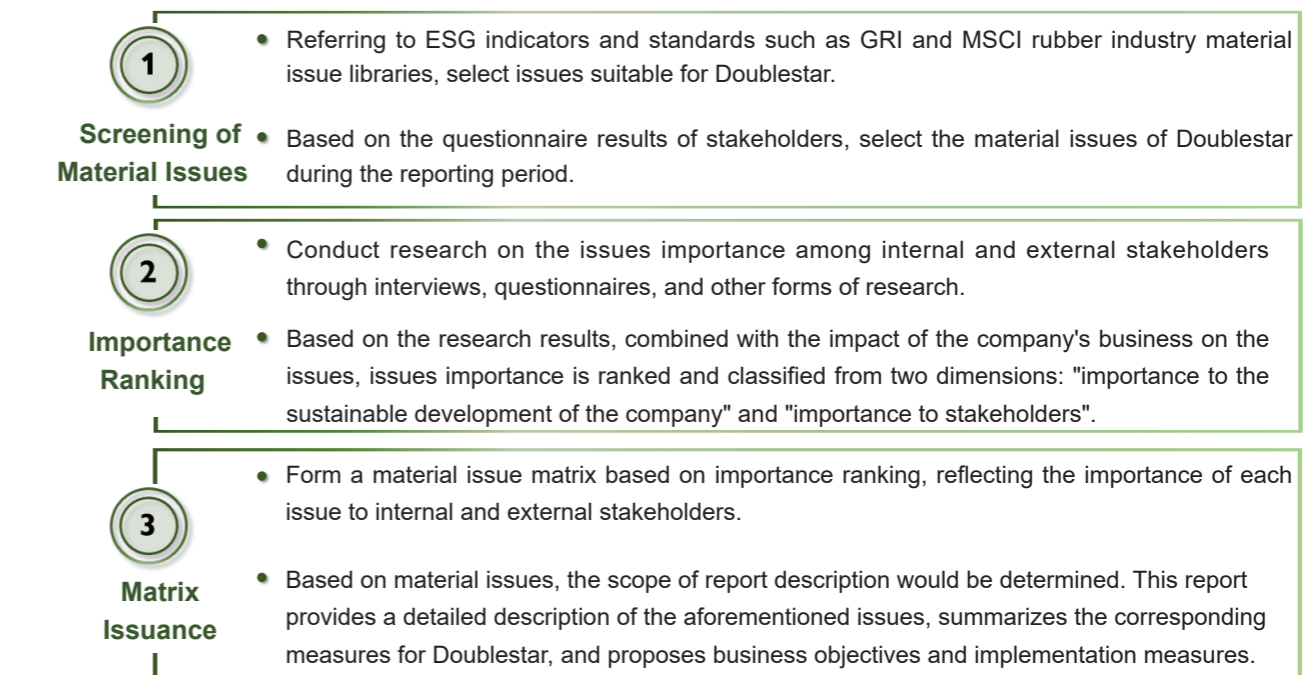
Stakeholder Engagement

Doublestar continues to communicate with stakeholders, including government and industry institutions, shareholders and investors, customers, cooperative partners, employees, suppliers, communities and the Public, to understand their expectations and respond promptly to ESG issues they are concerned with. The company pays high attention to the impact of external environment and market changes, closely monitors social media reports, and ensures timely understanding of the expectations of stakeholders. In addition, Doublestar collects opinions from stakeholders through several channels such as meetings, interviews, internal discussions, surveys, and feedback plans, based on which the ESG Committee identifies and evaluates the most important ESG issues related to the company's development.

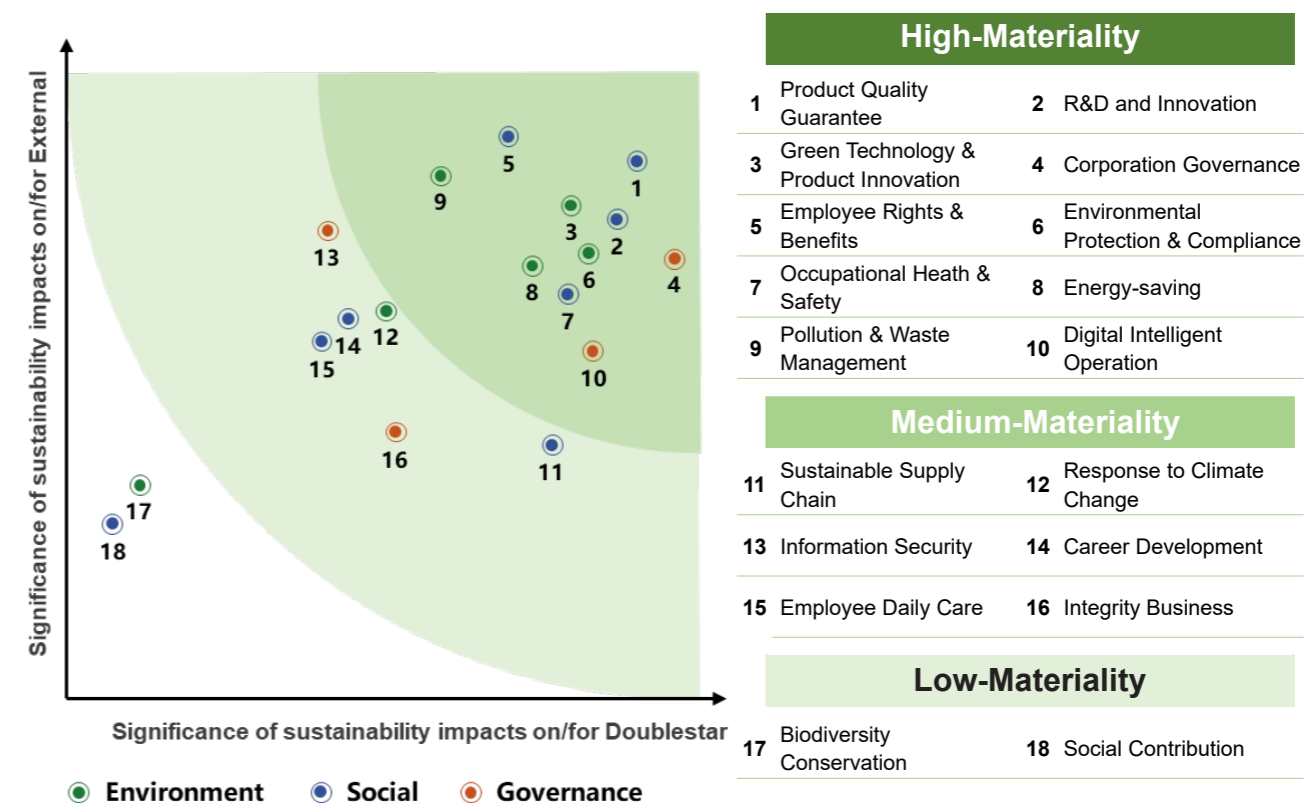
Stakeholders	Expectations & Propositions	Communication Channels	Responding & Performance
Government and industry organizations	<ul style="list-style-type: none"> Compliance with laws and regulations, industry standards Sustainable development strategy Timely tax payment duty Employment promotion Environmental protection 	<ul style="list-style-type: none"> Access to government official website policy and official document Disclosure of annual report and announcement Explanatory meetings and seminars on regulations of with regulatory authorities External inspections on safety, environment, employment, tax, etc. 	<ul style="list-style-type: none"> Safety and environmental compliance Legal taxation Information disclosure standardization Social performance contribution
Shareholders and investors	<ul style="list-style-type: none"> Corporation governance enhancing competitive advantage Stable operation and sustainable profitability Prevention and control of business risks Information Transparency 	<ul style="list-style-type: none"> High-level management meetings Performance conference Presentation of regular management results and related measures 	<ul style="list-style-type: none"> Optimize governance system and improve corporation governance Strengthen risk control and risk prevention system Sustain profit recovery Standardize information disclosure
Customers	<ul style="list-style-type: none"> Protecting customers' rights and interests Quality service Satisfying customized needs 	<ul style="list-style-type: none"> Customer satisfaction survey interviews Regular customer communication activities After-sales service and complaint process 	<ul style="list-style-type: none"> Product quality assurance High-frequency business liaison and inspection visits High quality after-sales service
Cooperative partner	<ul style="list-style-type: none"> Win-Win Co-operation, Long-Term Co-operation Individualized product requirements Product quality and safety 	<ul style="list-style-type: none"> High frequency exchange visits Strategic co-operation projects Information disclosure 	<ul style="list-style-type: none"> Strict fulfilment of contracts and agreements Product development and innovation Product quality guarantee
Employees	<ul style="list-style-type: none"> Employee rights and benefits Local employment Salary guarantee Training and growth opportunities Occupational health and safety 	<ul style="list-style-type: none"> Feedback from Labour Union and Discipline Inspection Committee Employee feedback Employee satisfaction survey 	<ul style="list-style-type: none"> Diversified employee communication channels Compensation and welfare Induction training and special training Training and logistic support for safe production
Suppliers	<ul style="list-style-type: none"> Transparent, fair and impartial supplier selection Integrity of business environment Sustainable supply chain 	<ul style="list-style-type: none"> Supplier management and supplier evaluation Supplier seminars Email reply 	<ul style="list-style-type: none"> Public bidding Procurement integrity and compliance Training of supplier sustainability awareness
Community and the Public	<ul style="list-style-type: none"> Practicing public welfare and charity Local economic development promotion Environmental impacts of production and business 	<ul style="list-style-type: none"> Social media Community benefit activities 	<ul style="list-style-type: none"> Regular volunteer activities Community co-development Participation and counterpart communities donation Local environmental input

Materiality Assessment & Screening

Regarding the material issues during the reporting period, Doublestar refers to standards such as GRI, SDG, and China Corporate Social Responsibility Reporting Guidelines (CASS-ESG 5.0), combined with concerns raised by various stakeholders and the significant impact of company's main business on the environment, society, and governance, to screen the material issues and disclosing scope in the 2023 Sustainable Development Report.



Materiality Matrix





National Policy Response

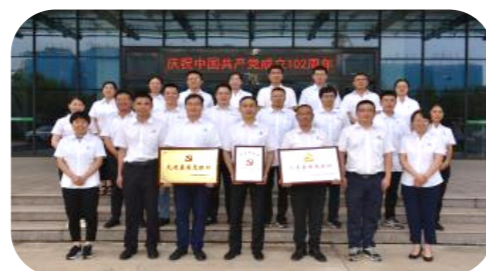
Party Leading: Take Practical Actions, Promote Development

Doublestar has been practicing President Xi's socialism thought in this new era by strengthening theoretical learning, benchmark leading and constructing the integrity party culture. The company adheres to the leadership of party, grasps the main responsibility and business, and constantly promotes the innovation and theoretical achievements of the party to guide the operation and development. In 2023, we implemented the "First Issue" regulation of the party committee, strengthened the theoretical central group study, carried out regular party cultural and integrity governance education, and adhered to the "Four Winds".

In 2023, a total of 12 thematic education and learning discussions and 4 warning case studies were organized, with 100% coverage of party members participating, enhancing the political standing and stimulating their cohesion.



To celebrate the 102nd anniversary of CCP foundation, we held the "Two Excellencies and One Priority" commendation, that a number of employees were awarded the titles of "Outstanding Communist Party Member", "Advanced Party Organization" and "Outstanding Party Worker".



We effectively strengthen the sense of business and operations, focusing on the outstanding problems and weaknesses of industrial grass-roots party building. We selected projects for party inspection, that a total of 12 key issues have been identified, focusing on the shortcomings in the fields such as daily operation, integrity supervision and discipline, with specific personnels responsible for rectifying.

Highlight

Doublestar actively participated in the "Party Building Knowledge Contest" held by Qingdao Dongjiakou Economic Zone, strengthening the Party leadership, and guiding the party members to set up their ideals and beliefs, building up a good atmosphere of "Promoting Learning by Competition, Promoting Knowledge by Learning, and Promoting Behavior by Knowing".



Under the strong Party leading, we are equipped with stronger organizational, cohesive and executive forces, which provide supports for ESG management and a solid guarantee for the sustainable development of Doublestar.

Through the in-depth implementation of ESG management, we aim to focus more on environmental friendliness, social justice and efficient governance. The comprehensive ESG management concept would help establish a healthier and more sustainable business model and realize the organic unity of economic benefits and social responsibilities.

"Belt and Road" Initiative

Doublestar actively responds to the "One Belt, One Road" initiative, accelerates the pace of "going out", focuses on the implementation of the "localisation" strategy, building a global brand, and tailoring products and services to meet overseas customers's needs.



The company has established its first overseas plant in Cambodia, a key point of cooperation between China and ASEAN.



This strategic initiative will not only bring new economic benefits to us, but also promote the co-operative relationship between China and ASEAN, promoting the implementation of the "Belt and Road" initiative. We radiate the Southeast Asian market, and provide strong support for the expansion of high-tariff, high-yield market such as Europe and US as well, effectively reducing trade barriers and expanding channels to open the market.

Also, we are able to achieve a significant reduction in costs in many aspects such as raw materials, manpower, logistics, etc., thus controlling costs and improving product scale efficiency and manufacturing level. Doublestar's investment in Cambodia promotes friendly trade relations between China and Cambodia, boosts Cambodia's industrial and economic development, and creates local jobs.

An orange ABB industrial robot arm is shown in a factory setting, positioned on a green base. The robot is holding a large, dark, cylindrical object, likely a tire, which is illuminated with a blue light. The background features a green metal structure with yellow railings and a white wall with a sign.

Governance Standardization Digital-Intelligent Operation

Doublestar recognizes that standardized operations and governance are important cornerstones for corporation sustainable development. We emphasize a compliant and legal operation approach to improve transparency and provide operational predictability for investors and stakeholders.

双星轮胎
“工业4.0”基地



Governance Improvement

Standardized operation is an important cornerstone of corporation sustainable development. We establish a sound governance structure and strengthen internal controls, aiming at enhancing risk-resistant capability, reducing operational risks and ensuring the reliable and stable operation.

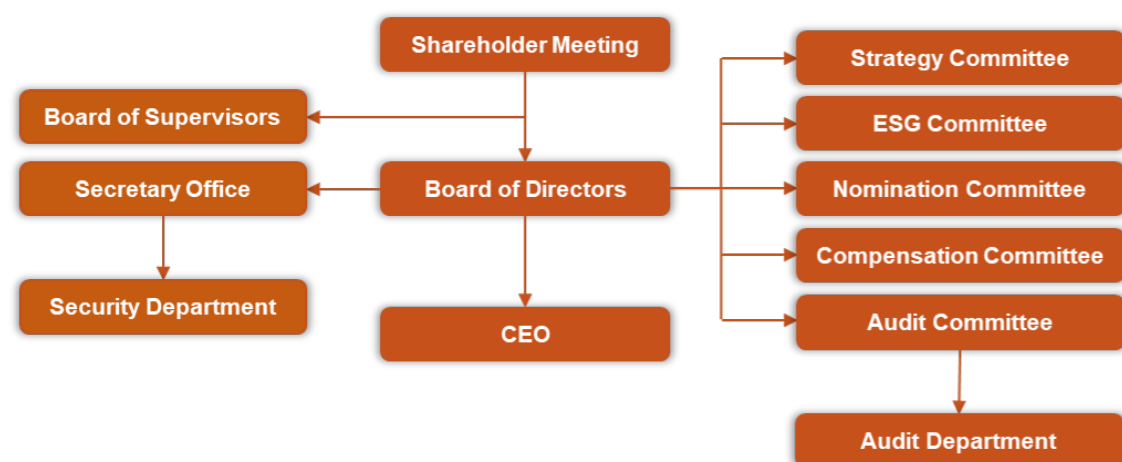
Governance Structure

According to <Company Law of the People's Republic of China>, <Securities Law of the People's Republic of China>, <Listing Rules of Shenzhen Stock Exchange> and other relevant laws and regulations, Doublestar has established a highly synergistic corporate governance system with effective and mutual balances, and has sustained to improve corporation internal governance structure and optimize the internal control environment.

The Company has established an organizational framework primarily composed of shareholders, Board of Directors, Supervisory Board, and Senior Management, and has formulated the Articles of Association, Rules of Procedure of Shareholder Meeting, Board of Directors, Board of Supervisors as well as the regulatory requirements in compliance with the requirements of regulatory documents on the listed companies' governance. The Company held several meetings of shareholders, meeting of BOD and meeting of BOC during the reporting period in accordance with the Articles of Association and Rules of Procedure.

Meeting	Held times	# of Topics Communicated
Meeting of Shareholders	3	13
Meeting of BOD	8	31
Meeting of BOC	7	17

Board of Directors, as the business executive body of shareholders, is responsible for the direction and management of Doublestar's business activities. Board of Directors is comprised of Strategy Committee, ESG Committee, Nomination Committee, Compensation Committee and Audit Committee. The Company specifies the detailed duties and proceedings of each committee, supervises the management of all affairs, gives full play to the important role of the committees in strategic decision-making and standardized operation, and promotes the sustainable development.

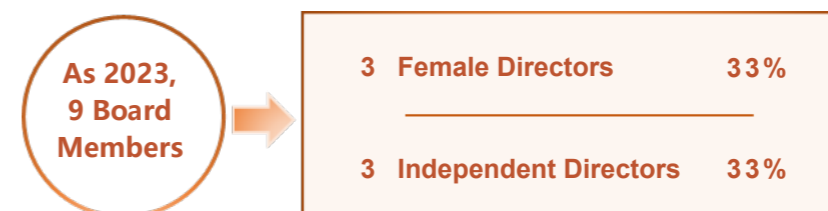


Doublestar Governance Structure

Introduction of Committees

- Strategic Committee**
 Responsible for conducting research and making recommendations on the long-term development strategic planning, major investment decisions and other major matters influencing the company's development.
- ESG Committee**
 Responsible for formulating major ESG strategies and specific objectives that are highly integrated with business operations; assessing and identifying important ESG risks and opportunities, and publicizing ESG concepts; formulating governance plans for the company's safe production and environmental protection; guiding and supervising emergency response to safety and environmental accidents, and assisting the BOD in dealing with other EHS issues; reviewing the annual ESG report.
- Nomination Committee**
 Responsible for formulating criteria and procedures for the selection of directors and senior management personnels; selecting and reviewing candidates and their qualifications.
- Compensation Committee**
 Responsible for formulating assessment criteria for directors and senior management and conducting the assessment; formulating and reviewing the remuneration policies and programmes for directors and senior management.
- Audit Committee**
 Responsible for reviewing company financial information; disclosing, supervising and evaluating the internal and external audit work and internal control.

Doublestar continuously optimizes and improves the corporate governance structure, strengthens the balances within the BOD, improves decision-making efficiency and reduces decision-making risks. During the reporting period, we successfully completed the tenth session of the Board of Directors and Board of Supervisory. The company has given due consideration to factors such as the industry experience, background and gender of the Board members in order to ensure the diversity of the Board and the provision of different perspectives and values for strategic planning and assessment from a broader perspective. Current BOD and BOC members possess expertise in a wide range of fields, including economics, mechatronics, finance, electrical machinery and electrical appliances, and possess a wealth of industry experience as well.





Investor Relations Management

Doublestar actively maintains a good relationship with investors. To regulate the management of investor relations, we have formulated the <Regulation of Investor Relations Management>, specifying detailed regulations on the responsibilities of investor relations management. As the core team of investor relationship, the Secretary Office of the BOD is responsible for daily communication and relationship maintenance. We publish corporate news on social media platforms to ensure information transparency and enhance investors' understanding and recognition of business dynamics and strategic planning.

Meanwhile, the Company strictly follows CSRC's <Supervisory Guidelines for Listed Companies No. 3 - Cash Dividends for Listed Companies> and the <Articles of Association> and other relevant documents, effectively guaranteeing the rights and interests of the majority of shareholders, especially small and medium-sized investors, and ensuring the healthy and sustainable development of the company.



During the reporting period:

Consideration and adoption of topics 31

Preparation and disclosure of periodic reports 4

Externally issuance of temporary announcement 51

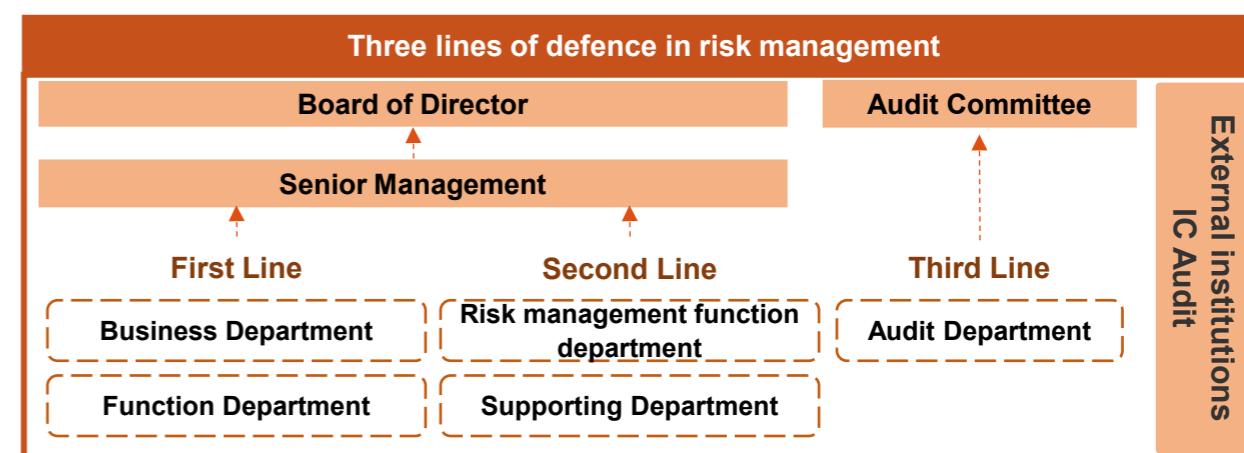
Information Disclosure

Doublestar is strictly in accordance with the requirements of the <Articles of Association>, <Rules for Listing of Stocks on Shenzhen Stock Exchange>, <Shenzhen Stock Exchange's Self-Regulatory Guidelines for Listed Companies No.1 - Standardized Operation of Listed Companies>, <Shenzhen Stock Exchange's Self-Regulatory Guidelines for Listed Companies No.5 - Management of Disclosure Matters>, and relevant laws and regulations of the CSRC and Shenzhen Stock Exchange, and has conscientiously fulfilled the obligation of information disclosure to ensure that the disclosure of information is truthful and accurate.

We proactively disclose information that may have a material impact on investors and relevant stakeholders on platforms, such as our official website, public website, video website and Shenzhen Stock Exchange, to ensure that stakeholders are kept abreast of the operating and financial conditions of the enterprise.

Comprehensive Risk Management

Doublestar is fully aware of the importance of a sound risk management system to the sustainable operation of the company. We have constructed a comprehensive system, regularly identified and analyzed the causes of internal and external risks, formed a risk management report, and formulated countermeasures and disposal plans for risks.



- ➔ Daily sort out the internal and external causes of corporation risks, diagnose and identify business risks
- ➔ Organize the drafting of the risk management system construction program and the regulation of compliance management
- ➔ Examine the work of the first and second line of defence to ensure that risk management is in line with the expectations
- ➔ Build a risk management system and implement risk prevention measures
- ➔ Oversight of the risk management system implementation and review of compliance fulfilment
- ➔ To ensure the objectivity and independence, the third line of defense has no direct control responsibility

Internal Control Management

We have strengthened the construction of internal control system to effectively reduce and prevent business risks and enhance the risk management.

In accordance with the <Basic Standard for Enterprise Internal Control> and its supporting guidelines, we soundly and effectively implement the internal control, formulate the <Internal Control of Major Economic Operations>, <Sub-Financial Management System> and other internal control management regulations, providing safeguards for the company's high-quality development, and we would continue to improve the level of standardized management.

Evaluation of Business Processes	Significant audit deficiencies identified
13	0

Compliance Management

We adhere to compliance management and continue to broaden the coverage boundaries of internal systems and external regulations. For key business areas such as contract management, data compliance, overseas investment, labor and employment, and environmental protection, we have established a compliance system and publicized the relevant management processes and systems on our legal digital platform to strengthen the implementation of specific compliance obligations for different positions. In 2023, we conducted dozens of compliance training sessions, through which we enabled our employees to master the compliance requirements of their respective functional areas, be capable to fulfil their compliance obligations, and consciously comply with the compliance requirements.

	3,090 hours Total training hours in 2023
	100 % Employee training coverage in 2023



Compliance in Cambodia Plant

The Cambodian plant has completed the collection and collation of local laws and regulations related to labor, cross-border data transmission, safe production, goods import and export and corporation operations, and plans to complete the construction of business process management applicable to the Cambodian plant in 2024. We will continue to improve our overseas compliance supervision to achieve timely detection, prevention and control of potential compliance risks and weaknesses in Cambodia.

Integrity Construction

The company continues to improve the integrity and anti-corruption construction, focusing on the integrity and self-discipline awareness cultivation of front-end business personnels and party members. We make sure that officials do not dare to be, are not able to be, and do not want to be corrupt. As a state-owned enterprise, we attach great importance to the construction of a clean culture, and regularly carry out training on the cleanliness, self-discipline and anti-corruption to our employees, strengthen party education and moral cultivation, and build up a strong ideological and institutional defense line of cleanliness and self-discipline.

Vendor Integrity promotion by sending the <Supplier Integrity Co-operation Notification>, supplier coverage rate

100%

Front-end business personnels and all departmental management sign the <Doublestar Integrity Commitment> each quarter, signing coverage rate

100%

The company organized the party members to sign the "Double Star Self-discipline Commitment", the party members signing rate

100%

Anonymous Reporting

We encourage employees to report corruption anonymously, effectively extending the monitoring scope to junior employees, daily collect management problems, risks and weaknesses in the party daily integrity work, and further improve the supervision network of party integrity construction. The Discipline Inspection Committee is responsible for supervising the behavior of employees and management personnels at all levels, and has set up a reporting platform for employees, upholding the prevention discipline of "early detection, early prevention, early containment and early resolution".

The committee hears from employees, suppliers or customers who reports the violation of the laws, regulations and policies of the State. **During the reporting period, we conducted daily corruption risk assessments of all business processes and provided compliance advice on potential corruption.**

Integrity Business

Doublestar eliminates any violations of business ethics, adheres to the integrity business, and is highly recognized for fulfilling its product quality, safe production as well as its social responsibilities. The project of "Casting Honest Brands and Striving for First-class Enterprises" has been selected as a case study for the "National Honest Business Promotion Month" in 2023, which is the only enterprise winning this award in the tyre industry. We will continue to promote integrity in technological innovation, quality improvement, service guarantee and other aspects, and take the lead in integrity management.

Antitrust and Anticompetitive

Doublestar respects the principle of market competition and supports and maintains a fair and free market competition environment. We strictly abide by <the Anti-Unfair Competition Law>, <the Civil Code> of the People's Republic of China, and other relevant laws, regulations and international standards on anti-monopoly and anti-unfair competition. We also have set up a mechanism of honest and fair competition, and carried out specific investigations on the clues of unfair competition discovered and reported to avoid the occurrence of unfair competition.

During the reporting period, we have not been involved in any litigation cases concerning anti-competitive behavior, anti-trust and anti-monopoly violation.

Reporting Mechanism

Doublestar encourages stakeholders to speak out against any violation of ethical business management principles. We have set up an open and transparent reporting channel to ensure the convenience of stakeholders' complaints and the timely response to their claims. At the same time, we maintain strict confidentiality of reporting information and safeguard the information security and protect the rights and interests of whistleblowers. We would timely conduct the investigation and take strict actions in accordance with the law, if there are any disciplinary violations and illegal behavior.

Whistleblowers can report to Doublestar (headquarters) through the following ways by name or anonymously:



Reporting Phone Number
0532-55527790



Reporting Email Address
jiwei-It@doublestar.com.cn

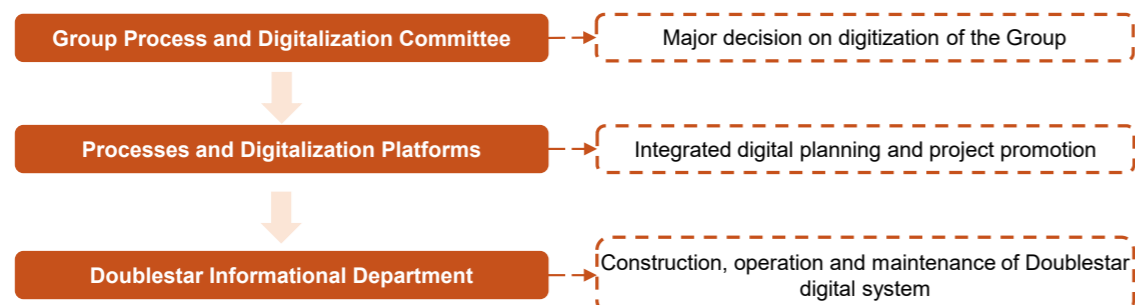


Reporting Address
Discipline Inspection Committee of Qingdao Doublestar (No. 66, Gangxing Avenue, Dongjiakou Economic Zone, Boli Town)



Operational Digitization

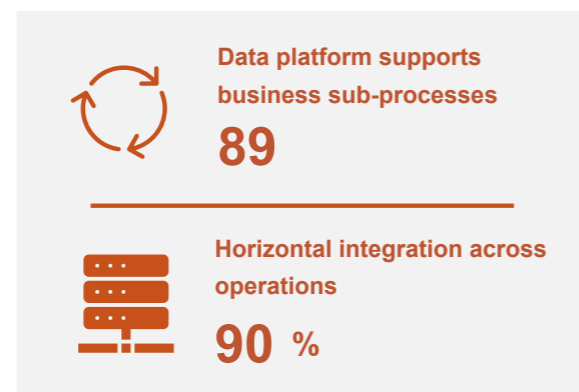
Under the overall planning of the digital construction, operation and maintenance of its controlling shareholders, Doublestar Group's operational system, the company has set up the Digital Informatization Department to co-ordinate the construction and maintenance of the digital system, obtaining the certification of ISO27001 Information Security Management System.



Doublestar Digital Construction and Management Structure

Informatization Construction

We deeply understand the criticality and importance of digital transformation, and have always regarded intelligent manufacturing and process informatization as an important part of our corporate development strategy. We have continued to promote the informatization construction, focusing on the continuous optimization of operation processes, promoting the informatization processes with the goal of integrating logistics, capital flow and information flow. Doublestar data platform has achieved a high degree of integration of the core operational system, covering all business areas from upstream suppliers to downstream customers, from R&D cycle, procurement to production, sales and even after-sales cycles.



In 2023, the "Tyre Whole-Process Digital Intelligent Quality Control" project was selected as a typical case of quality improvement in industrial and information technology by MIIT, representing a new mode of intelligent manufacturing and intelligent service for the whole life cycle of tyres. The project accelerates product R&D and innovation through the whole-process digitization, rapid data collection and application, and comprehensive improvement of quality management.



"Six Intelligent" Realizing Whole-process Intelligent Production

Intelligent Customisation

The company's intelligent system collaboratively pull production, using the order system to synchronize the orders placed by the e-commerce platform to ERP and MES system, and through the scheduling function of MES system to generate the production plan of the intelligent factory to achieve customized production.

Intelligent Rating

Based on tyre performance test data, user evaluation, mileage data, safety performance and other information, we use artificial AI technology for tyre products rating, to be more effective in identifying the performance and characteristics of a variety of tyre products, and more accurately manufacturing tyre products in demand.

Intelligent Scheduling

The finished product manufacturing plan will be sent to the factory automatically, and the plan will be arranged to each semi-finished products process through MES system according to the split BOM level by level.

Intelligent Detection

Data is captured in real time during the production process and analyzed to anticipate quality issues in advance.



Intelligent Warehousing

The company has upgraded its warehouse with IoT intelligence to form a set of credible warehouse management system, using digital labels, LIDAR, 3D modelling and other technologies to achieve real-time visibility of the warehouse and inventory traceability.

Intelligent Logistics

The key production processes in Dongjiakou "Industry 4.0" smart factory are all equipped with intelligent equipment, including 11 types and nearly 300 robots, which undertake most of the material transport and inspection tasks, of which 80% the intelligent equipment are independently developed and manufactured by ourselves, greatly improving the efficiency and accuracy of material conveyance and substantially reducing the labor intensity.



Fetal embryo detection robot



Intelligent Truss Robot



Intelligent Conveyor



Intelligent tyre unloading and weighing robot



Tire Networking "Intelligence Cloud" Platform Facilitating Production, Marketing and Research Itegration

Doublestar has created a smarter, more convenient and personalized tyre service system with an innovative business model by building a new sales model of tyre network. Based on 5G tech, the "Intelligence Cloud" platform of tyre networking integrates technologies such as IoT, AI, cloud computing and big data with further innovation. The platform realizes real-time monitoring of tyre temperature and pressure, driving conditions, tyre wear and other kinds of data through chip embedding. Online and intelligent cycle management of tyre data is realized as well.



In 2023, more than 200,000 wheel positions of operational data were accessed to the system database every month. We have transitioned from simple demand satisfaction to demand creation, creating an innovative marketing model.

Tyre networking "Intelligence Cloud" empowering R&D and production: Through the tyre networking "Intelligence Cloud" data of the whole life cycle of tyres, we analyze and format the demand portrait of tyre use, and various industries and various forms of tyre demands and tyre performance data, providing a large number of data support for product R&D, facilitating R&D team to upgrade the products more suitable for the specific scenarios. We are currently matching and customizing products with appropriate performance specifications for customers based on actual car models, road conditions and other information, to better adapt to a variety of complex road conditions.

- ✓ Extend tyre life by 10%
- ✓ Reduce the cost of tyre use by 20%
- ✓ Reduce fuel consumption by 3%

Through the new sales model of Tyre Networking and the "Intelligence Cloud" platform, Doublestar realizes the integration of production, marketing and research, provides customized product services, reduces cost and fuel consumption, prolongs tyre life, and helps R&D team to upgrade the products and realize more personalized tyre services. The tyre networking project was selected as the "2020-2021 Internet of Things key technology and platform innovation, integrated innovation and integration application project", which is the only project awarded in the tyre industry.



Information Security

Guarantee of Information Security

Doublestar respects the privacy rights and interests of all stakeholders and is committed to safeguarding their privacy and information security. We follow the <Network Security Law>, <Data Security Law>, <Personal Information Protection Law> of the People's Republic of China and relevant laws and regulations of the countries where it operates, and has formulated the <Doublestar Information Security and Personnel Confidentiality Management Standards>. We constructed a secure platform for cross-domain data transmission, to ensure the secure data transmission between different production plants and promote the information security network.

We also took a variety of measures, such as encryption technology, security access control, firewalls, antivirus software, Internet behavior management, domain control management, etc., to establish a proactive defense system for the security control of key files, and networks. For the collected data, we updated the data security level according to the business characteristics and took measures such as desensitization and encrypted storage, use of secure communication protocols such as HTTPS for data transmission, and signing data transmission agreement compliant with legal and industry standards to ensure the legality and security of the data.

12 Information Security Training	100 % Staff Training Coverage	1236 hours Total duration of training
3 Emergency Response Exercise for Information Security Incidents <ul style="list-style-type: none"> Hacker attack server Large-scale virus attacks Database system failure 		Offshore data protection For cross-border information transmission, we installed SSLVPN software to encrypt data, implemented strict control over information system accounts of expatriate staffs, deployed specialized security software on terminal equipment to ensure the integrity and confidentiality of data.

Customer Privacy Protection

Doublestar signs confidentiality agreement with business partners with **100% signing rate**, to ensure that customer information is properly protected.

During the reporting period, Doublestar did not have any cases of disputes caused by the disclosure of customer information.

Intellectual Property Protection

Doublestar Central Research Institute attaches great importance to information security and confidentiality to establish strict intranet security management. We formulated the <Intellectual Property Management Standard> and <Patent Application Control Standard>, and clarified the responsibilities of personnels at every levels, and ensured that all core technologies can only be used and accessed within the scope of authorization to safeguard the security and confidentiality of technologies and prevented the risk of intellectual property infringement.

By virtue of the strong management and high transformation of intellectual property rights, we lead the innovation and development of tyre industry, and were awarded the <2023 National Intellectual Property Demonstration Enterprise>. We are the only enterprise in the industry awarded.

The compliance rate and control rate of Doublestar intellectual property both reach 100%.



Embracing Environmental Conservation & Fostering Green Innovation

In recent years, climate change, ecosystem degradation, resource depletion and environmental pollution have become increasingly prevalent. The global ecological environment is confronting significant challenges, and humanity stands at the crossroads of sustainable development. As a socially responsible enterprise, we are deeply aware of the urgency of today's environmental issues, actively integrate environmental protection concepts into every aspect of corporate development, and take practical and effective actions to enhance the environmental awareness of all employees. Our commitment lies in mitigating the adverse impact of our corporate operations on the environment, thus realizing high-quality and sustainable development for our enterprise.



Environmental Protection and Compliance

Environmental Protection Strategy

Doublestar adheres to the guidance of Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, deeply implements the concept of "Lucid waters and lush mountains are invaluable assets". In accordance with the management policy of "compliance with laws and regulations, pollution prevention, energy saving and consumption reduction, and continuous improvement", we conscientiously implement environmental protection and safety laws and regulations, integrate social responsibility with high-quality corporate development, and are committed to the green management of tire products.

In terms of green product design, production process optimization, environmental protection equipment upgrades, resource conservation and utilization, and safe waste disposal, Doublestar is committed to green manufacturing and green product research and development throughout the entire life cycle of tire products, transitioning from "Smart Manufacturing" to "green Smart Manufacturing."

In 2024, Doublestar will carry out key environmental protection work around the control of harmful substances in products, the application of sustainable materials, the use of natural rubber, the improvement of tire rolling resistance and wear resistance, and energy conservation and consumption reduction in the production and manufacturing process.



Doublestar Environmental Protection Strategy

Environmental Protection System Guarantee



Dongjiakou Plant Environmental Management Certification ISO14001: 2015 Certification

Shiyan Plant Environmental Management Certification ISO14001: 2015 Certification

Doublestar has formulated documents such as the "Environmental Protection Management System" to establish a localized management system for each production Plant. Guided by the major environmental management strategies and goals set forth by Doublestar's Sustainable Development Committee, each individual responsible for the environment has signed the "2023 Environmental Protection and Safety Goals Responsibility Letter", thereby layer by layer, consolidating responsibilities across environmental management working groups at each Plant.

Through twice environmentally friendly relocation, we increased investment in environmental protection, built a green factory, and successfully created a "Green tire intelligent production demonstration Plant", becoming the first one to found all process operation "Industry 4.0" smart factory in global tire industry. In addition, Doublestar has also obtained ISO14001 environmental management system certification.

Environmental Emergency Response

Doublestar has developed comprehensive emergency plans, encompassing protocols for energy equipment, pollution, and hazardous waste leakage. These plans are designed to mitigate production interruption losses resulting from energy disruptions and critical equipment failures, while also minimizing the environmental impact of pollutants and other toxic substances. At the same time, through the preparation of systems such as the "Risk Assessment Report for Environmental Emergencies" and the "Emergency Plan for Environmental Emergencies" and other systems, the potential risks are identified and evaluated, and a monitoring and early warning mechanism is established to manage emergency events in a hierarchical and classified manner. We conduct at least one comprehensive emergency plan drill and two disposal plan drills every year. After the emergency incident, relevant departments shall conduct investigations and assessments, clarify responsibilities, summarize response experience, revise plans, and deal with the aftermath, including monitoring and assessing the long-term impact on the surrounding environment.

A total of 10 environmental protection training sessions
Over 4,423 participants



In 2023, Doublestar organized a total of 10 environmental protection training sessions, with over 4,423 participants, achieving a training assessment pass rate exceeding 99%. Our plants regularly engage in exchanging and learning experiences in environmental management, sharing best practices to effectively disseminate, learn, and apply excellent cases throughout the organization.

Energy Saving, Consumption Reduction and Efficiency Improvement

During the "14th Five-Year Plan" period, China's emphasis on green development has intensified. With the implementation of the "Carbon peaking and Carbon neutrality" strategy, the tire industry has pivoted towards high-end and environmentally sustainable practices. Doublestar has responded proactively to this trend, adhering to an energy management policy characterized by compliance with laws and regulations, the promotion of circular economy principles, commitment to low-carbon environmental standards, and the establishment of a green enterprise ethos. Our focus remains on green, energy-efficient, and eco-friendly production and manufacturing. Through initiatives targeting energy-saving transformations, innovative green processes, and the adoption of clean energy technologies, we have achieved significant milestones in our journey towards sustainable production practices.



Energy Saving

In response to the risks and challenges faced by the tire industry, such as fluctuations in raw material prices, high energy costs, and dependence on energy, Doublestar has placed a strong emphasis on energy conservation. We have developed an "Energy Management Manual" and established a dedicated energy management department responsible for formulating energy-saving measures, implementing monitoring and correction mechanisms, and conducting training and advocacy activities to establish and continuously improve the energy management system.

- We have established an energy management platform and devised detailed energy-saving measures, which are implemented across various units and key energy-consuming processes. Each Plant conducts regular audits of energy data, evaluates and promotes key energy tasks on a weekly basis, and analyzes discrepancies to achieve energy-saving objectives.
- Through energy-saving measures such as equipment upgrades and process optimizations, Doublestar has achieved significant improvements in energy efficiency. In 2023, the energy consumption per 10,000 tires was reduced by 14.23% compared to 2022.
- In 2024, we will prioritize energy-saving and optimization efforts in rubber refining and vulcanization processes, aiming to enhance production efficiency. We are committed to achieving our goal of reducing rubber consumption by over 5% in 2025, compared with 2022.

Production Energy Consumption			
Project	Unit	2023	2022
Total Energy Consumption	tons of standard coal	85,350.67	80,080.28
Energy Intensity	tons of standard coal/10,000 tires	53.10	62.48

The energy consumption per 10,000 tires was reduced by

15.03%

Major energy-saving projects

7. Nitrogen vulcanization process design

Energy saving benefit (tons of standard coal / year): **5,192.00**

It can shorten the vulcanization cycle by 5%-20% , improve the utilization rate of the vulcanizer, reduce heat exchange losses, and save 50% of energy consumption .

6. Waste heat recovery system

Energy saving benefit (tons of standard coal / year): **1442.00**

The heat energy such as spent steam and condensate water is fully recovered and used for workshop heating in winter and lithium bromide absorption refrigerator to produce chilled water in summer. The excess condensate is returned to the pump room condensate water recovery station for recovery and cooling, and then used for circulating cooling water. of additional water. It has been calculated that the system can recover 10% of the heat consumed , equivalent to more than 10 kilograms of steam per tire, and can save 15,000 tons of refrigeration and heating steam every year.

5. Open mill motor modification project

Energy saving benefit (tons of standard coal / year): **460.00**

The rubber-refining unit's final refining production line has carried out a special project to upgrade the open mill from three to two, optimize and adjust the open-refining process, and save 500,000 yuan in electricity costs per month .

1. Technical transformation of engineering vehicle tires

Energy saving benefit (tons of standard coal / year): **2,563.00**

Renovate and upgrade the production line, update equipment, and upgrade the digital control system: eliminate equipment with backward digitalization in the original production line, and purchase equipment such as application machines, cutting machines, lining pre-composite machines, and intelligent forming machines.

2. Technical transformation of passenger car tires

Energy saving benefit (tons of standard coal / year): **1,263.00**

Renovate and upgrade the production line, update equipment, and upgrade the digital control system: eliminate equipment with backward digitalization in the original production line, purchase new high-efficiency dual-mold vulcanizing machines and other machines, and upgrade intelligent molding machines .

3. One-machine four-mold vulcanizing machine project

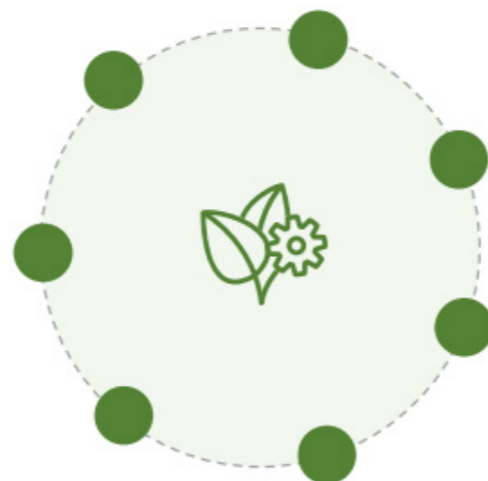
Energy saving benefit (tons of standard coal / year): **1,178.80**

the design, development and trial production of a digital four-mold vulcanizing machine + electric heating mold, the vulcanizing efficiency of the four-mold vulcanizing machine + pure electric mold is increased by 110% and the energy consumption is reduced by 20% .

4. Steamer vulcanizing machine renovation project

Energy saving benefit (tons of standard coal / year): **823.00**

The energy consumption of steamer vulcanizers is about 15% higher than that of hot plate vulcanizers. The 10 power water steamer vulcanizers in the TBR3.0 vulcanization workshop were replaced with hot plate vulcanizers, and the corresponding thermal pipelines and power systems were modified.





Clean Energy Application

Photovoltaic power generation is an important strategic emerging industry in China. Vigorously promoting the application of photovoltaic power generation holds great strategic significance in optimizing the energy structure, ensuring energy security, improving the ecological environment, and transforming the urban and rural energy consumption patterns.

In response to these policies, Doublestar has progressively expanded the scale of photovoltaic projects at the Dongjiakou Plant, resulting in a year-on-year increase in power generation. Currently, the plant's rooftop space is fully covered with photovoltaic panels.



Dongjiakou plant's photovoltaic facilities

- By the end of the reporting period, following the completion of the third phase at Dongjiakou Plant photovoltaic output had reached 25,480MWh, increasing the share of power supply from 8% to 19%.
- The photovoltaic project at the Shiyen Plant is scheduled to operate in March 2024, with an expected electricity generation of 6,887 MWh.

Dongjiakou Plant		Shiyen Plant	
25,480	19%	2024.03	6,887
Photovoltaic volume (MW-h)	Photovoltaic power generation in total electricity consumption (%)	Estimated Time of Operation	Expected Electricity Generation (MW-h)

Energy Storage Project Planning:

To further enhance the flexibility, reliability and sustainability of the energy system, Dongjiakou Plant plans to build an energy storage power station, with a storage scale of 5.88MW/11.868MWh. The project adopts three 3.44 MWh energy storage container systems and six 258KWh standard energy storage cabinet systems. The implementation of this project will help reduce basic electricity fees, save on transformer capacity expansion costs, and lay the foundation for green electricity trading and electricity spot market trading.

Storage Allocation	Project Implementation	
5.88MW/11.868MWh	Three	Six
	3.44 MWh	258KWh
	Energy storage container systems	Standard energy storage cabinet systems

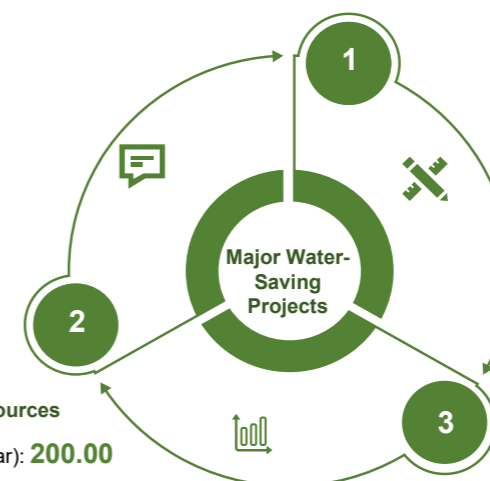
Save & Recycle Water

Water plays an indispensable role in tire production, serving in refrigeration, processing, cleaning, lubrication, and steam production processes. Doublestar recognizes the critical importance of water resources in production and allocates special funds annually for water-saving project, equipment upgrades and maintenance, water resource recycling, process optimization, and installation of water-saving sanitary appliances. By monitoring and analyzing water resource management practices, we successfully promoted water conservation efforts, leading to significant reductions in both production and domestic water consumption.

Improvement of large circulation of extrusion line and recycling of pure water

Water saving benefit (tons / year): **3,840.00**

The double compound cooling method is transformed into large circulation + small circulation. A filtering device is installed in the pump room. The water from the return water tank of each machine is pumped to the filtering device in the pump room for filtration, and then pumped to each machine through the pure water tank for secondary use.



Reuse and recycle water resources

Water saving benefit (tons / year): **200.00**

Replenish softened water by collecting sulfide condensate .

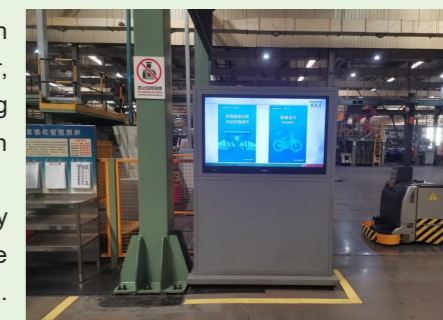
Reuse and recycle water resources

Water saving benefit (tons / year): **100.00**

Vacuum cooling water is recycled, collected in water tanks, cooled through cooling towers, and replenished with circulating water for public works .

Green Office Operation

- Doublestar has formulated a green office management system, actively advocating all employees to practice the concept of "Green office, energy conservation and environmental protection". We are committed to fostering a conducive atmosphere for "jointly building, operating, and fostering a green and low-carbon office lifestyle."
- At the individual level, we advocate environmental protection practices such as using electronic documents instead of paper, double-sided printing, turning off lights when not in use, conserving water, adopting green commuting and participating in CD (Carbon Disclosure) initiatives.
- At the collective level, we create a green office environment by utilizing steam waste heat from production facilities to heat office buildings and implementing energy-saving modes for air conditioning. We call on all employees to actively participate in energy conservation and environmentally friendly practices in their office life.





Pollution and Waste Management

In the tire manufacturing process, pollutants and waste such as rubber particles, chemical residues, and noise are generated. The annual global production of waste tires has a long-term adverse impact on the environment. Actively addressing these issues not only mitigates the risk of environmental pollution but also serves as a crucial measure in establishing a positive corporate image and promoting the values of environmental protection and sustainable development. We has undertaken initiatives such as green process enhancements, environmental equipment upgrades, and waste recycling, along with implementing stringent management of pollution and waste. Additionally, an environmental monitoring network has been introduced to conduct real-time monitoring of relevant pollution and waste indicators, supplemented by quarterly professional technical testing, ensuring 100% compliance with environmental protection standards throughout the production process.

Waste Gas Treatment

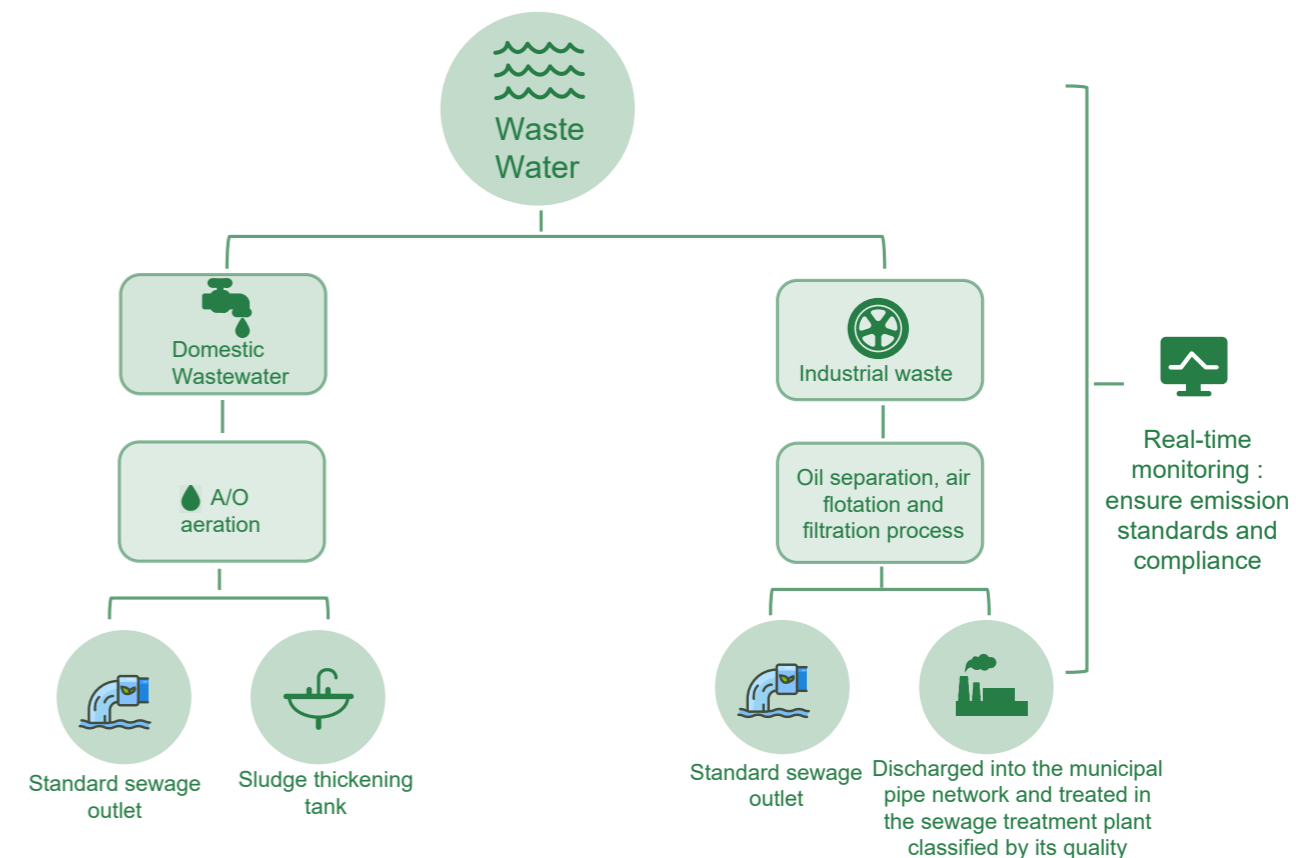
Doublestar takes the following measures to ensure that the exhaust emissions meet the standards:

Equipping with an online monitoring system for air emissions	Plant process improvement	Case
Equipping with an online monitoring system for air emissions, allowing real-time monitoring of emission levels and setting up alert mechanisms to ensure effective treatment of emissions while meeting relevant standards.	Improving green processes and upgrading advanced environmental protection equipment such as plasma dust collectors and other depolluting devices to reduce the emission of pollutants in the production process.	The effectiveness of odor removal in rubber refining and sulfide dust removal has been enhanced by installing odor removal devices or chemical purification equipment adjacent to the vulcanization machines. This ensures that emissions generated during the vulcanization process are controlled and treated effectively. As a result, VOCs emissions reduce by 15.18 tons/day and particulate matter emissions reduces by 2.86 tons/day.

Exhaust Emissions Treatment						
Plant	Emission Factor	Unit	Executive Standard	Emission Concentration (mean)		Reaching Standard
				2023	2022	
				Dongjiakou	Particulate matter (PM)	
Total non-methane hydrocarbons	mg/m ³	10	2.89		3.53	Yes
Shiyan	Particulate matter (PM)	mg/m ³	10	5.48	6.21	Yes
	Total non-methane hydrocarbons	mg/m ³	10	5.20	4.86	Yes
Dongying	Particulate matter (PM)	mg/m ³	10	3.90	4.50	Yes
	Total non-methane hydrocarbons	mg/m ³	10	2.01	2.02	Yes

Wastewater Treatment

- Doublestar ensures that wastewater discharge meets national and local standards through the classification and treatment mechanism and the whole process detection mechanism. We actively promote the recycling of waste water, reduces the dependence on natural water sources, and improves the efficiency of water resources utilization.
- In 2023, We did not incur any significant incidents involving penalties from relevant authorities due to violations of wastewater discharge limits.



Wastewater Treatment						
Plant	Emission Factor	Unit	Executive Standard	Emission Concentration (mean)		Reaching Standard
				2023	2022	
				Dongjiakou	Ammonia nitrogen (NH3-N)	
Suspended substance (SS)	mg/L	150	13.00		13.00	Yes
Chemical oxygen demand (COD)	mg/L	300	20.00		13.00	Yes
Shiyan	Ammonia nitrogen (NH3-N)	mg/L	30	2.41	28.30	Yes
	Suspended substance (SS)	mg/L	150	34.00	47.00	Yes
	Chemical oxygen demand (COD)	mg/L	300	55.25	144.00	Yes
Dongying	Ammonia nitrogen (NH3-N)	mg/L	30	3.73	3.05	Yes
	Suspended substance (SS)	mg/L	300	45.60	39.80	Yes



Solid and Hazardous Waste Management

Doublestar works closely with its controlling shareholder, Doublestar Group, and is committed to solving the problem of the continuous growth of the number of used and waste tires every year. In 2022, the number of waste tires in China reached 350 million, weighing about 12.28 million tons, with a serious impact on the environment. Through cooperation, we use green cracking and carbon black recycling technology, establish a waste tire recycling system and channels to promote circular economy and improve the recycling and reuse rate of waste tires. At the same time, we have also taken the following measures in both solid waste and hazardous waste:

Major waste management measures

We have formulated standards and procedures such as *Waste Control Procedures, Hazardous Waste Management Regulations* and other Regulations to classify and standardize the treatment and disposal of hazardous waste.

We have also established an emergency plan for hazardous waste, filed it on interconnected supervision platform of supervision platforms, and timely communicate with stakeholders.

On the basis of legal disposal and recycling, we maximize resource reuse and minimize environmental impact through the following solid and hazardous waste recycling and reuse projects:



- Recycling of hazardous waste hydraulic oil and rotor sealing oil: the recycling amount reached 325.39 tons during 2023.
- Reusable fabric pads can completely replace plastic pads: During 2023, we saved 232,121 kilograms of plastic pads, totaling 5,100 rolls, resulting in savings of approximately 1.83 million yuan.
- Using waste oil drums to replace waste ton drums to handle waste oil: Using waste oil drums as disposal containers saves about 23,000 yuan/year on hazardous waste disposal costs.



Noise Control

Doublestar has followed the Environmental Noise Emission Standards for Industrial Enterprises and formulated noise control procedures to ensure that the noise is within the acceptable range. We implement noise source control, and reduce the impact of noise on the surrounding environment by improving the process, controlling the operation time of equipment and keeping regular maintenance. We monitor the noise level regularly to ensure that the production activities meet the regulatory requirements. At the same time, we equip our employees with earplugs, earmuffs and other protective equipment to reduce the exposure time in a noisy environment.



Responding to Climate Change

Climate Strategy and Actions

Against the backdrop of increasingly severe global climate change, China attaches great importance to addressing climate change. Guided by the goals of "Carbon peaking and Carbon neutrality" Doublestar actively promotes the transformation of enterprises towards intensification, greening, and low-carbonization. We have established a climate risk management system in accordance with the Task Force on Climate-related Financial Disclosures (TCFD) framework and the Climate Change Law of the People's Republic of China. It has set up a climate change response and control team to study strategies for achieving carbon neutrality and to explore the impact of the EU carbon border tax policy, thereby promoting the development of green environmental products and services, enhancing competitiveness, and facilitating sustainable development.

Doublestar's Climate-Related Risks

Categories	Risk Description	Responses & Measures
Transition Risks		
Policy and Legal Risks	<ul style="list-style-type: none"> The European Union has enacted relevant laws and regulations such as carbon tariffs and product carbon footprint labels, and companies' compliance and competition costs have increased. As "Carbon peaking and Carbon neutrality" strategy is gradually implemented and carbon emission policies become stricter, the company may face the risk of being included in the list of companies with mandatory emission control. The gradual restriction of sales of fossil fuel vehicles has led to a decline in demand for tires for traditional vehicles, which in turn has led to a decline in the company's sales. 	<ul style="list-style-type: none"> Establish a greenhouse gas emission reduction plan and increase investment in the research and development of energy-saving and emission-reduction technology and the upgrading of energy-saving and emission-reduction equipment. Pay close attention to policy and market dynamics, conduct policy research and training, and maintain close contact with stakeholders. Produce and sell green products, focusing on the research, development and sales of new energy vehicle tires.
Technology Risks	<ul style="list-style-type: none"> Under the premise of continuously improving environmental protection requirements, we maintain the balance of product performance and put forward high requirements for technological improvement. Climate change may directly affect product performance and increase product quality and performance requirements. 	<ul style="list-style-type: none"> Continuous technological innovation and R&D investment, committed to developing new sustainable materials and environmentally friendly processes. Before new materials or processes are put into production, conduct comprehensive product testing and verification to ensure the stability and reliability of new technologies. Strengthen employee training and awareness raising, and increase employees' emphasis on product performance and quality. Establish a continuous monitoring and improvement mechanism to track and evaluate the environmental performance and quality of products.
Market Risks	<ul style="list-style-type: none"> Market demand for environmentally friendly and low-carbon products increases Market demand for new energy vehicle tires increases 	<ul style="list-style-type: none"> Increase the research and development of environmentally friendly and low-carbon products, and increase the recruitment of relevant R&D personnel and expert reserves. Expand the sales layout of new energy vehicle tires and strengthen the market promotion of environmentally friendly products and new energy vehicle tires. Cooperate with the supply chain to strengthen low-carbon and environmentally friendly management of the supply chain. Strengthen communication with stakeholders and clarify market needs.
Reputation Risks	<ul style="list-style-type: none"> Stakeholders' requirements for climate risk disclosure affect the company's investment and financing costs, order requirements, etc. The market has increased demands on companies to proactively manage climate change, affecting the company's order demand. 	<ul style="list-style-type: none"> Increase climate change management training and strengthen the publicity and popularization of climate change awareness. Establish a digital climate management system to monitor and provide feedback on climate change management results. Improve the climate change management system and strengthen management.
Physical Risks		
Acute Physical Risk	<ul style="list-style-type: none"> Increasing extreme weather events may damage factory operating facilities, cause asset losses, hinder or interrupt production and supply operations, and may even affect employee safety. Extreme weather may affect the efficiency of domestic and foreign supply chains, which may lead to disruptions in the supply of raw materials or delayed delivery, increasing the risk of order defaults. 	<ul style="list-style-type: none"> Prepare and regularly revise and improve emergency plans. Regularly test the emergency response system, factory operation system, etc. to ensure that the system can operate normally. Prepare a list of emergency supplies for flood prevention and typhoon prevention, and prepare emergency supplies such as generators and first-aid supplies.
Chronic Physical Risk	<ul style="list-style-type: none"> Climate change has led to a decline in natural rubber production, increasing the procurement costs of natural rubber and the risk of supply disruptions. Sustained high temperatures and water shortages caused by climate change may increase the risk of heat stroke among employees, affect factory production efficiency, and affect production and supply efficiency. 	<ul style="list-style-type: none"> Manage the natural rubber supply chain and participate in natural rubber sustainability efforts. Formulate a high temperature emergency plan, equip with heatstroke prevention equipment, and strengthen employee awareness training on heatstroke prevention.



Doublestar's Climate-Related Opportunities

Categories	Opportunity description	Responses & Measures
Resource Efficiency	<ul style="list-style-type: none"> Develop a circular economy, improve the efficiency of resource and material use, reduce the consumption of resources and materials, and thereby reduce operating costs. 	<ul style="list-style-type: none"> Actively implement relevant strategies and management measures for energy and water conservation. Strengthen recycling measures such as water recycling, waste reuse, and sustainable material recycling. Increase research and investment in the renewable recycling of tires and raw materials.
Energy Source	<ul style="list-style-type: none"> Use renewable energy to save energy costs 	<ul style="list-style-type: none"> The construction of photovoltaic power generation projects and energy storage projects will further research and deploy low-emission and low-cost renewable energy.
Products & Services	<ul style="list-style-type: none"> Increased demand for products such as tires with lower carbon footprints, new energy vehicle tires, etc. boosts revenue Customers prefer tire products that are wear-resistant and have low rolling resistance that can help improve fuel efficiency. The vigorous development of such products will help sales growth. 	<ul style="list-style-type: none"> Increase the reserve of scientific research personnel and increase the research and development of new energy vehicle tires. Further increase the research and development and promotion of low rolling resistance products to improve product performance and market share
Markets	<ul style="list-style-type: none"> The "Electric Vehicle Tires" taxonomy is classified as a green economic activity, expanding the entry of capital through the expansion of green investment products based on the taxonomy. 	<ul style="list-style-type: none"> Reduce the cost of capital by expanding access to capital
Resilience	<ul style="list-style-type: none"> Participate in renewable energy projects and use energy-saving measures to reduce production and operating costs. Develop diversification of resources and materials, reduce dependence on a single resource, and reduce the risk of resource shortages Develop new products and services to ensure resilience and increase revenue 	<ul style="list-style-type: none"> Make good plans for renewable energy projects and make good use of renewable energy. Pay attention to the development of circular economy and improve resource utilization. Actively promote research on sustainable materials and look for diverse and alternative sustainable materials. Increase the development of tire leasing business and expand the tire leasing business market.

Climate Strategy and Actions

Doublestar has actively embraced the national "Carbon Peaking and Carbon Neutrality" strategy and has established clear emission reduction targets. We aim to reduce carbon emissions by over 5% within 3-5 years and to achieve a reduction of over 30% by 2035. Our commitment extends to reaching a carbon peak by 2030, attaining carbon neutrality by 2050, and becoming the pioneering enterprise in the global tire industry to implement green management throughout the entire life cycle.

To achieve these goals, we have established a carbon peaking and carbon neutrality leading group, led by the general manager, entrusted with spearheading efforts to reduce carbon emissions. This group oversees carbon inventory, verification, product carbon footprint management, and coordinates other relevant initiatives. Additionally, we regularly conduct greenhouse gas emission identification and data measurement to track our progress.

Furthermore, we aim to complete the carbon footprint assessment of a specific product by 2024 and enact strategies to reduce carbon emissions based on the findings. Over the next five years, we will develop a carbon footprint control system to manage all products, thereby strengthening our capacity to efficiently manage and minimize carbon emissions.

Carbon Emission				
Plant	Categories	Unit	2023	2022
Dongjiakou	Scope1	ktco2eq	783.38	770.71
	Scope2	ktco2eq	146,061.76	144,111.06
	Carbon Intensity (Emissions per 10,000 tires)	ktco2eq/10,000 tires	272.90	321.98
Shiyan	Scope1	ktco2eq	407.51	251.04
	Scope2	ktco2eq	95,904.47	80,053.83
	Carbon Intensity (Emissions per 10,000 tires)	ktco2eq/10,000 tires	206.50	276.98

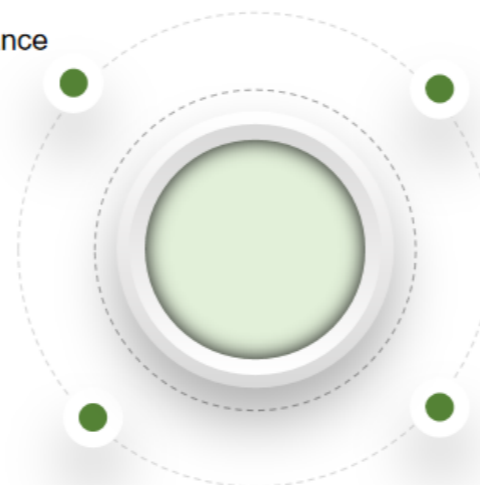


Green Innovation

Doublestar has seized the market demand for green products and green technologies, implementing a full-chain low-carbon strategy, yielding significant results.

Multi-platform R&D

- Green Tire New Material Performance Engineering Research Center
- National Industrial Design Center



Prioritizes Technical Requirements

- Safety
- Energy saving
- Environmental protection

Launch Product

- High-end
- Differentiated
- High-value-added

16 of which have been selected for the National "Green Design Product" list.

Technology Development

- Pattern design
- Ultra-low rolling resistance formulation
- Environmentally friendly materials
- Simulation-optimized contour structures
- Ultra-quiet
- Highly durable technologies



We have developed the following star green products:

Run-flat safety tires

The "run-flat safety" tire developed by Doublestar introduces a new design concept for run-flat tires. It employs "Safort" magic support technology combined with unique AFB (Air Flow Breaking) pattern silent technology and specialized formulas, making it safer than standard tires and more comfortable and fuel-efficient than typical run-flat tires. This tire not only meets users' needs for run-flat functionality but is also suitable for vehicles equipped with standard run-flat tires as well as those without original run-flat tires, offering significant market value.

This product distinguishes itself from ordinary tires by enabling driving with zero tire pressure; **it can travel for 30 kilometers at a speed of 60 km/h even with no tire pressure**, providing some anti-rollover capability. Moreover, compared to standard run-flat tires, it boasts substantial benefits in terms of quietness, comfort, and environmental friendliness.

In the context of vehicles lacking spare tires, car owners traditionally must depend on 4S(Sales, Service, Spare Parts, and Surveys) shops for emergency assistance. However, with Doublestar's "run-flat safety" tires, even if a tire deflates, the vehicle can still safely reach the nearest 4S shop or tire repair station, offering increased safety and convenience for the driver.



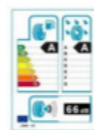
Run-flat safety tires

EU AAA-grade tires

Doublestar adopts the industry-leading intelligent product development process to optimize the design from all aspects of pattern, outline, structure, formula, etc., and uses simulation technology to conduct performance simulation predictions. The developed DX01 product has obtained **the AAA rating, the highest standard on EU tire labels**. Currently, only a select few top-tier international companies have products that meet this standard in the global market.



Doublestar, DX01 European label grade



EV tires

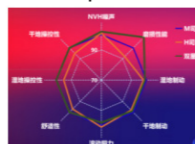
Doublestar introduces the EXTREME EV95, the pioneering tire designed exclusively for new energy vehicles. This product is tailored to fulfill the unique demands of new energy vehicles, encompassing grip, noise reduction, energy efficiency, durability, and environmental sustainability. Compared to conventional tires, the EXTREME EV95 demonstrates remarkable performance enhancements: it reduces braking distance **by over 8%**, lowers cavity noise levels **by 10.8dB** at peak and **4dB** effectively at 100km/h, diminishes rolling resistance **by 57%**, extends battery life **by 15%**, and reduces tire wear particle emissions **by 20%**.



Doublestar EV95



European label grade



European label grade performance test report

Low-profile single-groove eco-friendly car tires & Uni-directional low-energy green tires

With Industry 4.0's smart production lines and advancements in sustainable material production and performance testing, Doublestar has undertaken systematic and thorough research into the development technology of low-profile single-groove eco-friendly car tires and uni-directional low-energy green tires. This effort has led to **significant enhancements in vehicle fuel efficiency and energy efficiency**, addressing the growing market demand for single-oriented low-energy consumption green tires. Consequently, it bridges the gap for domestic tire companies, enabling them to get rid of technical barriers.

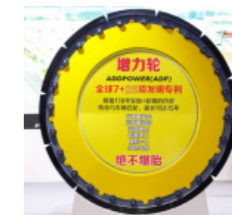


Low flat metric tire Low roll resistance tire DSR308

"Traction Booster Wheel"

In the challenging environments of mining and engineering, where terrain can be extremely rough and roads uneven, tires face accelerated wear, leading to increased deformation and a higher risk of blowouts and loss of control. To counter these issues, Doublestar has introduced an innovative solution in the tire industry: the "Traction Booster Wheel" In May 2023, this groundbreaking product, which revolutionized the traditional concept of the "tire + rim" that has been unchanged for 178 years, immediately captured significant attention from both the industry and the market upon its debut.

The "Traction Booster Wheel" **challenges conventional design principles, materials, processes, equipment, and sales and service models of the "tire+rim."** It eliminates the need for inflation, rims, wheel removal, and is completely puncture-proof. Its lifespan is equivalent to that of the vehicle, lasting up to 15 years. Most importantly, it uses minimal rubber, significantly reduces carbon emissions, and represents an epoch-making, disruptive innovation in the global tire industry.



Traction Booster Wheel

Rare earth gold tires

To satisfy the truck and bus market's demand for high mileage and low fuel consumption tire products, Doublestar collaborated with technical experts from Europe, the United States, and South Korea to develop a novel "rare earth gold" rubber composite material. By employing comprehensive zero-degree winding technology and a distinctive tread pattern, we cater to domestic market requirements and craft internationally leading "rare earth gold" tires.

This product has five major functions: **ultra-safe, ultra-fuel-efficient, ultra-wear-resistant, ultra-low heat generation, and high mileage**. Specifically, it reduces rolling resistance to between **4.5 and 3.8**, and its full life cycle can reach up to **1 million kilometers**, thereby lowering operational costs for vehicle owners and supporting the "Carbon Peaking and Carbon Neutrality" strategy. Analysis shows that if a large trailer equipped with "rare earth gold" tires, featuring a **rolling resistance of 4.5**, travels 1 million kilometers, **it can save 63,000 liters of fuel and reduce carbon emissions by 168 tons**.

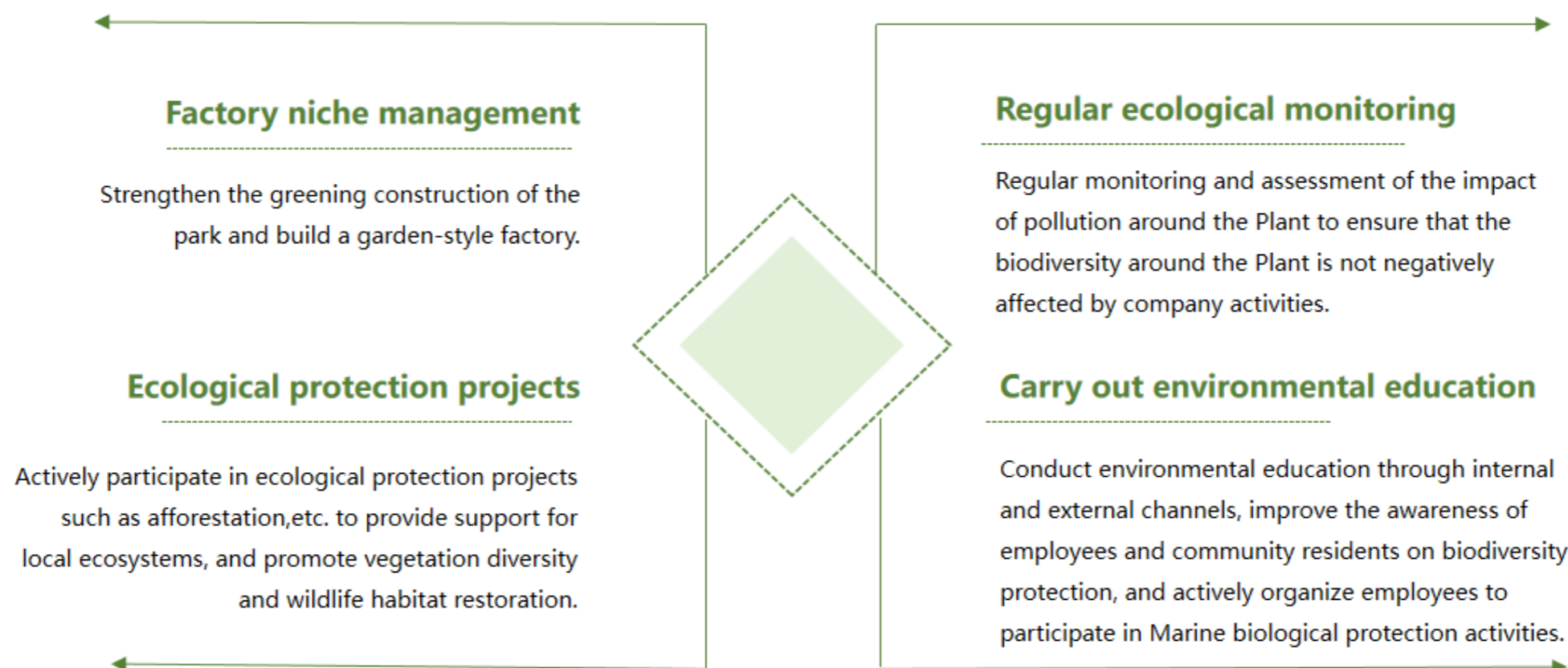


KLA95 KRS66



Biodiversity

Doublestar is committed to protecting and promoting biodiversity prosperity, in the following ways:



People-oriented Promotion High-quality Development

High-quality innovation has become the main engine to promote the development of Doublestar. It not only provides sustained impetus for business growth, but is an important support for constructing harmonious human relations. We understand that cultivating and introducing high-quality talents is the key to innovation. Hence, we commits to staff training and development. Through continuous innovation, Doublestar provides a more environmentally friendly, more efficient products and services, fulfilling its corporate social responsibility and promotes the harmonious social development. Meanwhile, we focus on enhancing employees happiness and creating more development opportunities, making an outstanding contribution to building a harmonious and prosperous future.





Our People

Employee Rights and Benefits

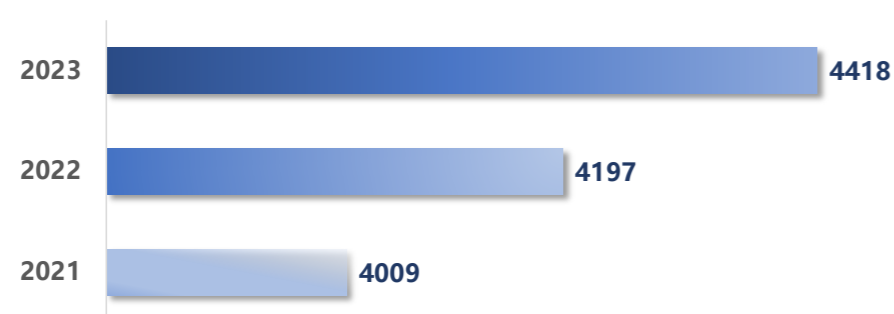
Doublestar is committed to providing its employees with a diverse and inclusive working environment, an adequate feedback mechanism, a perfect development path, a high degree of respect and protection for employees' rights and interests, and a continuous enhancement of employee's sense of well-being and belonging.

Equality and diversity in employment

In order to create a dynamic and inclusive corporate culture, we gather talents from all over the world in various fields, forming a diversified and equal culture. We respect and give full play to each employee's characteristics, fully exploiting personal potential, jointly promoting the development of the company. We oppose any form of discrimination and are committed to creating a fair and just working environment where all employees could enjoy equal promotion opportunities and career development paths regardless of gender, age, race, religious beliefs or physical conditions.

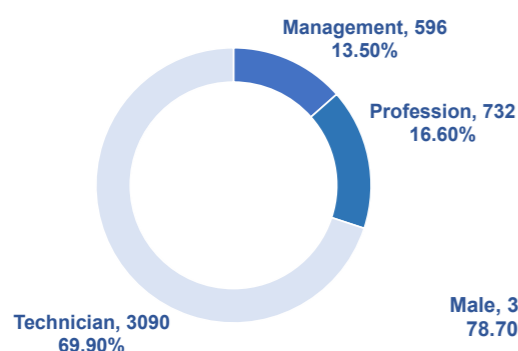
At the end of the reporting period, the total number of employees reached 4,418.

Total Number of Employee

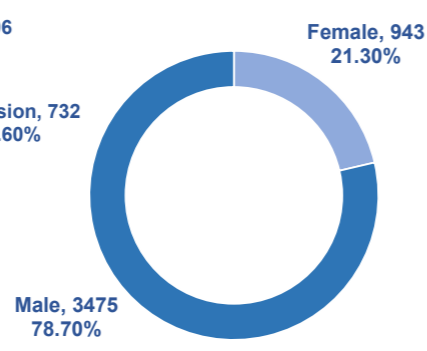


The proportion of female employees in 2023 reaches 21.30%, with the proportion of women in the management pipeline reaching 31%, achieving a significant proportional increase.

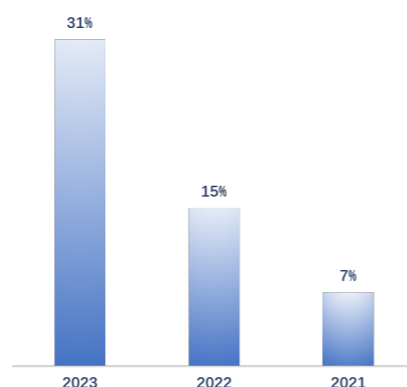
Channel Structure



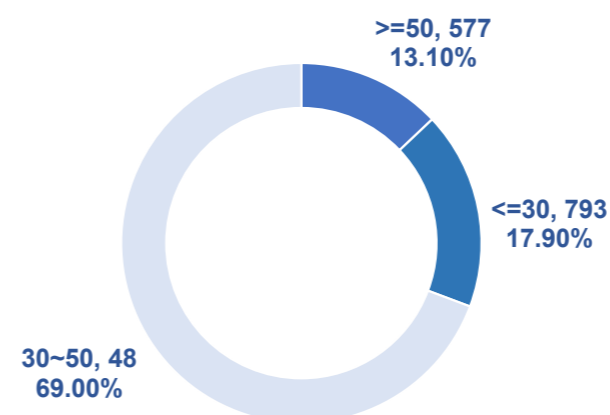
Employee Gender Structure



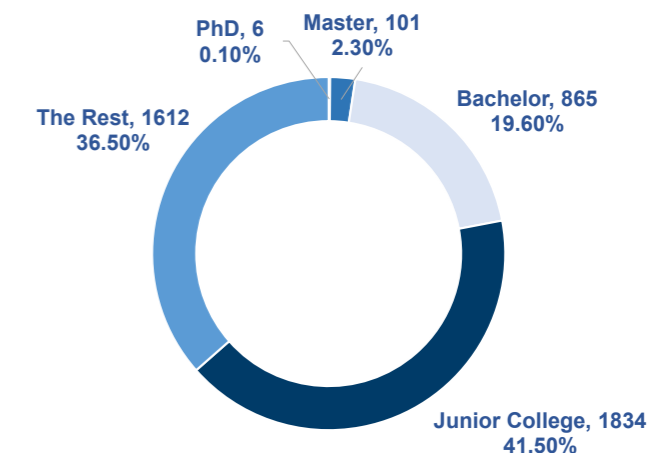
Women in Management Pipeline (%)



Employee Aging Structure



Employee Education Structure



Currently, the percentage of localized hiring in the domestic plant is 64.60%, while the percentage of foreign employees is 1%. With the Cambodian plant construction in progress, the percentage of expatriates is expected to rise significantly by 2024, that the employee localization rate of the Cambodian plant is expected to be 100%.



Regulating the employment relationship

As a state-owned enterprise with sense of social responsibility, Doublestar strictly abides by the <Labor Law>, <Labor Contract Law>, <Regulations on the Implementation of the Labor Contract Law> of the People's Republic of China and other relevant laws and regulations, and has formulated a recruitment process and employment regulations based on the principle of legal employment. Doublestar follows the mature talent recruitment system <Group Social Mature Talent Recruitment and Employment Management Platform> of its controlling shareholder, standardizes the recruitment process, clarifies the qualification requirements of employees, and promotes the local employment rate in accordance with the principle of "openness, fairness and impartiality".



Set up Labor Law Supervision Committee

The Labor Law Supervision Committee has been set up under the union, responsible for the daily dissemination of organizational labor laws and regulations, the supervision of employers' compliance with labor laws and regulations, and the handling of complaints and reports of violations of the legitimate rights and interests of employees. We safeguard the legitimate rights and interests of employees, and build the harmonious labor relations.



Employment compliance

The Company is committed to protecting the legitimate rights and interests of its employees by eliminating violations of labor laws and regulations. There were no violations of the Labor Contract Law of the People's Republic of China in 2023.



Contracts Signing Regulation

The company has established a good employer brand image and attaches great importance to the harmonious development of employment and labor relations. Doublestar follows the principle of equality, voluntariness and consensus on employees labor contracts, carries out the obligations of fulfilling and terminating labor contracts in accordance with the procedures stipulated by national laws and regulations, and clearly stipulates the rights and obligations of both employees and Doublestar. By continuously improving the contract management system, **we achieve the 100% contract compliance rate.**



Disabilities Recruitment

We have strictly fulfilled the responsibilities of employing the disabilities, and have recruited a total of 73 persons with disabilities, representing 1.65% of the total.



Elimination of child labor

The company abides by the <Law on the Protection of Minors>, <Regulations on the Prohibition of Child Labor> of the People's Republic of China, etc., and resolutely resists the employment of child labor and protects the rights and interests of minors. We have strengthened the employee identity information verification and online management, and established a personnel-related file management platform, with HR responsible for collecting and organizing personnel files, as well as ensuring the authenticity and accuracy of employee information. We firmly resist the employment of child labor, making positive contributions to the creation of a fair, just and harmonious society.



Anti-discrimination and anti-harassment

The Company prevents and reduces the risk of sexual harassment in the workplace through educating and training, law disseminating, and building the awareness of zero tolerance of sexual harassment.

Employee Daily Care

Doublestar always implements the concept of "employees are relatives", constructs a warm working environment for employees, creates a healthy and happy working atmosphere, and sends warmth from the perspective of employees personal interests. During the reporting period, the company invested a total of RMB 297 thousand in employee care, such as employee marriage, children's education, marriage subsidy, and assistance for workers in difficulty.

Employee Care

Support for Employees in difficulty

In 2023, the company carried out visits and condolences during festivals, and the labor union listened carefully to the practical difficulties and needs of employees, and distributed nearly RMB 75 thousand of warmth aid and materials to the workers in difficulty, solving employees' most urgent and most concerned problems.

Care for Female

The labor union committee has set up a female workers committee to safeguard the specific rights and interests of female workers. We transfer those front-line female workers in pregnancy, breastfeeding period to the more appropriate position. We have already built five love-mother huts as well, providing private, hygienic, safe environment for more than a hundred female workers. In addition, we carried out maternal and child health care VIP medical services and staff care health lectures for hundreds of female employees, passing professional health care knowledge to them.



Love-mother hut



Women's Health Seminar

Scholarship Distribution

We attach importance to children education, and have already distributed scholarships to employee's children passing the college entrance examination for seven consecutive years. In Dongjiakou plant, as a example, we held a "special scholarship distribution ceremony for the children of employees passing the college entrance examination" for 45 children.



Provision of Additional Holiday

We provide paternity leave, parental leave, nursing care leave, etc. For example, the company provides 15 days of paternity leave for male employees, 10 days of parental leave per year in aggregate before the child reaches the age of 3, and nursing care leave ranging from 7-10 days per year in aggregate.

Improvement of the working environment

We place great emphasis on enhancing the working environment for our employees and continuously strive to improve their comfort. This includes procuring and installing odor elimination equipment, incorporating cooling systems during summer time to cater to workers in high-temperature processes, as well as equipping the workshop with convenient transportation tools such as electric pedals.



Organize various cultural and sports activities

We actively carry out colorful cultural and sports activities to fully stimulate the employees' passion and vitality, effectively improving staff physical quality.

We vigorously carry forward Chinese traditional culture, and create a cheerful holiday atmosphere. We carried out the Dragon Boat Festival theme activities of making rice dumplings to inherit festive customs; we celebrated the International Women's Day, commending the well-capable first-line female workers and first-line female auxiliaries, and carrying out various fun activities to enhance team cohesion.



We constantly construct staff culture and organize sports activities, such as equipping additional badminton rackets, basketball rackets and other fitness equipment in the plants. Also, we held basketball and badminton games and many other competitive competitions to enrich employees' business and cultural life.



Diversified Employee Communication Channels

Doublestar attaches importance to opinions and suggestions of every employee, constantly strengthening the protection of employees' rights and interests, coordinating and solving employees' concerns in a timely manner. We have established multi feedback mechanism for employees, providing employees with a variety of ways to convey their ideas and views, and organized relevant personnels to provide feedbacks. The results would be publicly responded to the employees.

We have set up rationalization suggestion boxes in each plant workshop, so that employees can submit their opinions at any time, and the trade union regularly collects employees' problems and gives feedback to all employees. In 2023, employees totally put forward dozens of opinions, and the union organized relevant personnels to verify and correct the feedback in time, and responded in a public manner.

Employees can directly call the team leader phone number and workshop phone number to communicate directly with the manager in charge, and convey their needs more effectively. Also, employees can make suggestions by calling the Discipline Inspection Committee to report or reflect the injustice and non-compliance.



The plant would carry out staff reception day activities 2 times per month, that leaders would regularly communicate with staff, timely and effectively understanding staff demands.



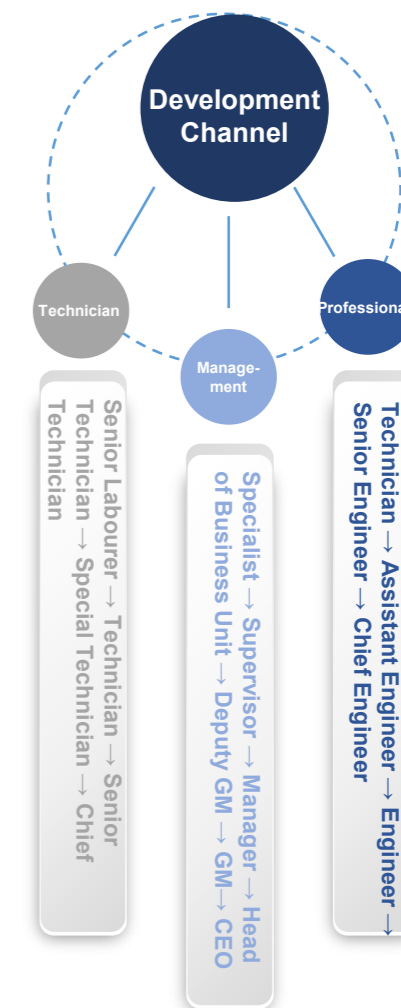
In 2023, the Company carried out 7 staff congresses with a total of 134 participants, giving full play to the role of staff representatives in democratic management and supervision, and safeguarding the legitimate rights and interests of employees.

Career Development

Doublestar has established a comprehensive career development system, aiming to provide employees with an orderly and sustainable career development path. Through a fair and transparent assessment mechanism and clear promotion channels, we provide employees with a broad career upward space. We provide professional competence training and leadership development programs, thereby achieving an overall improvement in personnel quality and enabling young people to grow up quickly.

Talent assessment and promotion

The company has formulated the <Echelon Construction Program for Young Talents> and the <Group Manager Selection and Appointment Platform>, and clarified the internal appointment process and the echelon construction program, providing a broad development stage for young talents, and cultivating the outstanding personnels. The career development of employees follows the principle of promotion from low to high, step by step, and three career development channels have been set up for employees, i.e., management, professional, and technician channels, to ensure the smooth promotion for employees.



Performance Assessment

The assessment of employees is divided into payroll category, sales commission category, workers piecework category, and workers non-piecework category. All management staffs would be assessed by 360-degree feedback, as the soft indicator to evaluate and quantify their work results. If employees have objections to the results, we set a multi-channel feedback mechanism. Employees can appeal to HR or Discipline Inspection Committee, and HR will verify with feedback to be made in a timely manner.

100% Coverage of employees participating in performance evaluation at the end of each year

The controlling shareholder, Doublestar Group, leads in selecting major innovative breakthrough teams, leading teams/individuals, advanced teams/individuals, Rising Star Award and other honors and awards every year. Doublestar Group would allocate the award quota to the company.

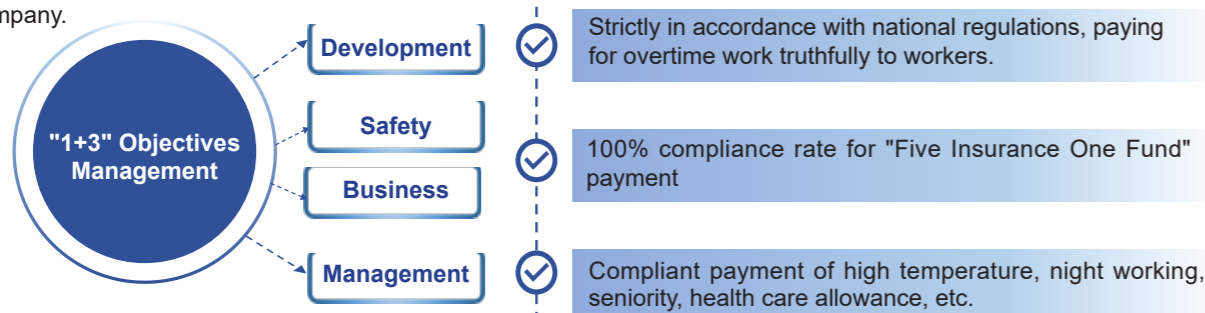
In 2023, We recognized the special contributions made by employees from the perspectives of marketing, R&D, manufacturing, quality and management:

5 Leadership Teams and Major Innovation Breakthrough Teams, 50 Advanced worker, 5 Rising Star, 9 Advanced team



Compensation and Benefits

The company has established a multi-level compensation mechanism, including basic, performance and sharing compensation to motivate employees, and to fully mobilize employees' enthusiasm and initiative. According to "1+3" objective management system, the company and employees' personal interests can be promoted simultaneously, so as to achieve the same goal between talents growth and corporation development. In addition, based on the annual business and personal performance, plants will adjust the salary of employees with excellent performance. According to the strategic objectives of the company and the department, the annual objectives will be decomposed into monthly one, and set up corresponding assessment and incentive mechanism, and distribute salary according to the achievement of performance objectives, so as to realize the close correlation between the salary and incentives of employees and the company.



Multi-Channel Development and Training

Doublestar attaches great importance to improving staff training system and establishing a comprehensive learning organization, to ensure that every employee could receive adequate training and promotion opportunities. The training system follows that of Doublestar Group and has been certified by ISO10015 training system.

We carry out a variety of training programs for different levels and channels, with the dual combination of the "Star Learning" online platform and offline training. We also establish individual digital workbooks for employees to help them achieve self-worth.



Curriculum Development

We continue to improve the curriculum development, and HR is responsible for coordinating all training work, aiming to help high-skilled personnels to grow rapidly and comprehensively. Through the establishment of a talent assessment mechanism, we have achieved an all-round assessment and recognition of talents, so as to carry out the "Three Forces Training" of competence, enhancement and innovation perspectives based on career development channels and job responsibilities. Each employee is guaranteed to receive personalized training courses.

Three Forces Training

- Innovation
- Enhancement
- Competence

Career Development

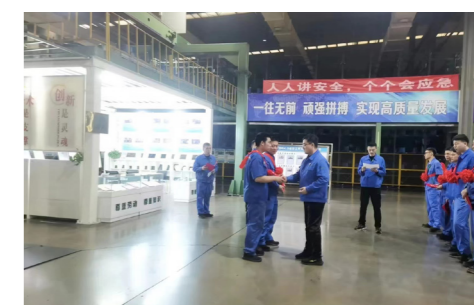
- Management
- Profession
- Technician

Vertical training pathways:

Management	Profession	Technician
<p>Provide leadership training to all grassroots, middle and senior managers as well as the reserve talent echelon.</p> <p>Improve management ability and decision-making ability from the perspective of overall quality and professional ability, strengthening the efficiency of the team work in this digital era.</p>	<p>Consolidate menu and database, covering multiple business areas, and designed multi courses. Launch the "Star Worker" talent development program, combining internal lecturers coach, external expert train, and outbound visits and exchanges, and set up program content around enterprise management, personal ability, professional skills, and external advanced enterprise relations aspects.</p>	<p>Through "Star Cloud" courses and offline training in safety, environment, technology, equipment, etc. to improve employees' technique, and ensure the effectiveness of training through online testing and evaluation. In 2023, we constructed company's technician team with more than 400 offline courses provided to technician channel and vocational skills assessment for highly skilled personnels in 14 job category.</p>

New Employee Training

In order to ensure the integration of new employees as soon as possible, and to let young employees grow up quickly, we builds a training management platform for new workers and new mature talents, and opens the "Star Youth" training program to enhance the professional ability and comprehensive quality level of young talents. New employee training includes induction training and workshop training, allowing new employees to reach a quick understanding of Doublestar culture, workshop safety and professional knowledge respectively.



Manufacturing skills test

Lecturer Platform Construction

Doublestar cultivates excellent lecturers, establishes professional instructor team, summarizes and refines internal training courses, and absorbs and transforms external educational resources. Through the creation of the "Star Instructor" and "Star Lecturer" platform, we can efficiently transfer and transmit former experience and enhance the competitiveness of human capital. We have set up multi-channel application channels and multi-dimensional evaluation, and awarded incentive bonuses to "Star Instructors" and "Star Lecturers", aiming to incentive them to instruct employees practical operation, and workshop experience. Also, instructors independently have developed courses based on their personal experience and insights to enrich the training resource pool.

By the end of reporting period

31 Lecturers Cultivated

32 Training programmes covering multiple areas



High-quality Innovation and Development

Comprehensive Quality Management

Doublestar strictly abides by the <Law of the People's Republic of China on Product Quality>, <Tire Industry Policy>, <Tire Retreading Industry Entry Conditions> and other laws and industrial regulations, and internally compiled the <Doublestar Quality Centre Procedure> to clearly define the quality standards of product production and to implement the quality management of the products.

Doublestar has been awarded the title of national "4A Standardized Good Behavior Enterprise" for the significant production quality standardization system, representing Doublestar's production standardization management and daily operation and supervision of technical and manufacturing standards.



Quality Standardization System

By combining TQM quality assurance system and production quality standardization system, we realize the real-time quality monitoring of tyres whole life cycle, ensuring the quality of finished products, and keep all product quality activities under 100% control. The quality assurance system consists of EPS (Error Proof System) error prevention management system and intelligent traceability system. Through the intelligent collection of production data from each process and the automatic identification of raw materials and semi-finished products, we achieve the intelligent traceability of each tyre from raw materials to finished products.

EPS Error Prevention System covers:

Set **47** Error-preventing projects
Cover **9** Process in the whole Production Process

Product quality certification

Each plant guarantees product quality compliance in accordance with the ISO9001:2015 quality management system certification and the IATF16949:2016 quality management system certification for the automotive industry, as well as customer-specific requirements.



100%

IATF16949:2016 authenticated

67%

ISO9001:2015 authenticated

Product Recall

Doublestar strictly abides by the <Law of the People's Republic of China on the Protection of Consumers' Rights and Interests>, <Law of the People's Republic of China on Product Quality> and other national standards and laws and regulations on automotive tyres, and has formulated the <Administrative Provisions on Double Star Product Recall>, regulating the tyre recall standards, the recall process, and the subsequent handling of the recalled products.

There were no recalls during the reporting period.

"5M1E" Standardise Production Quality and Online Error-proofing

Machine

We ensure that every tyre meets the uniform standards by realizing the digital intelligent production control of the whole process. Production data is automatically collected and uploaded to the MES system. If exception of production data occurs for three consecutive tyres, the production equipment automatically alarms and stops, effectively preventing the unqualified materials from flowing into the next process and therefore, the batch quality problems. The introduction of intelligent manufacturing standardization has led to a significant improvement in the tyre quality that the pass rate reach over 98%.



Germany HF tandem refiner



Passenger moulding module

Man

Each plant regularly carries out all-range, all-process quality inspection training activities, and organizes production process competitions for each production process. In 2023, the Standardization Management Office led the standardization publicity for personnels of each unit, and strengthened various standardization training activities. A total of 15 standardization trainings and 7 external trainings were organized, with more than 2,300 personnels involved.

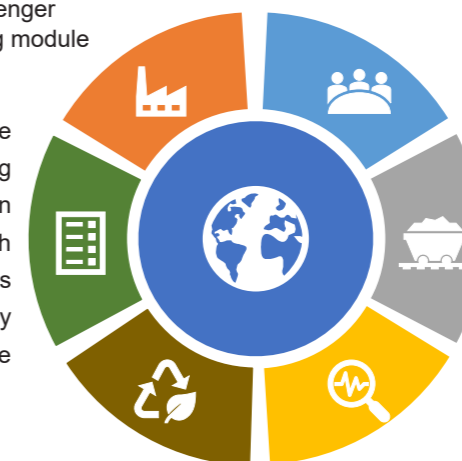


Material

Doublestar strictly screens the qualification of suppliers and guarantees the quality and reliability of raw materials from the source. In the production process, automatic identification of feeding accuracy, automatic weighing and transport of feeding materials, and automatic opening of feeding ports has been achieved through barcode scanning. Feeding is not allowed if the raw materials not matching with the BOM, which effectively eliminates the risk of using the wrong rubber materials, overdue materials, or incorrect weight of materials.

Method

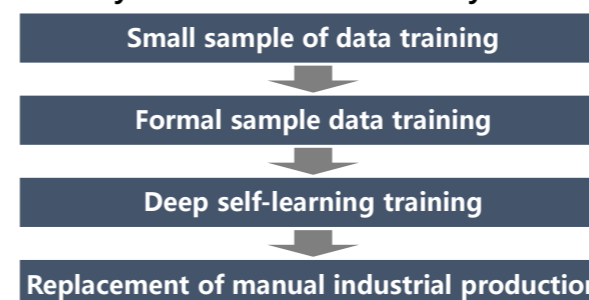
From the perspective of early-stage product realization and manufacturing guarantee, the manufacturing division revised 103 guidelines in 2023, of which 41 were newly formulated. Plant workers strictly follow the guidelines for daily operation, achieving the comprehensive monitoring and continuous optimization.



Measurement

The X-ray automatic identification and grading system are introduced in the plant to build AI identification model and identify the tyres defects independently. Through the intelligent inspection, the base effectively avoids the large-scale defect leakage, reduces the instability of manual inspection, and improves the qualified rate by 20%.

X-ray Automatic Identification System



Environment

Each plant formulates the <6S Management System>, divides the responsibility of working environment area according to the use of actual working area, specifies the personnels in charge respectively to guarantee the safety and tidiness of the operation site. The standardization management office leads the supervision and inspection of the standards implementation, and organized 3 specific inspections and 18 standardization inspections in 2023, with a cumulative total of 137 problems identified and a 100% rectification rate of those findings.





Customer Service Guarantee

To protect customers' rights and interests, we have set up service centres to provide customers with recognized after-sale service, and developed different after-sales service models and policies according to the characteristics of different products in different markets. We constantly summarise service experience and continue to optimize product quality and service guarantee. Customer satisfaction has risen year after year, reaching 98.8% in 2023.



After-sales Services

The 400 number is our most important customer communication channel. We inform every customer of our phone number 4000176666, to ensure that every customer can contact Doublestar customer service at any time.

- 7 × 24 Online** Ensure that any customer needs are met at all times
- Order Tracking** Committed to tracking the whole process of work order from order establishment, problem resolution, order closure, to the customer return visit.
- Rapid Response** Abide by the service concept "User problems never delayed, customer problems never left overnight", response speed is required to answer within 0.5 hours and solve problems within 24 hours.
- Multi-department Support** Technical support department, service support department and other back-office support departments as supporting departments, collaborate to ensure the continuous operation.

During the reporting period:

10,034 Phone Call	173 Work Orders
99.50% Work Order Closure Rate	98.80% Customer Satisfaction

Among which, we received phone complaints:

8 Phone Complaints	100% Complaints closed-loop resolution rate
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In addition, we would integrate online video services with new marketing channels, simultaneously develop video customer system and strengthen information technology customer service management, so that the technical team can identify the specific problems through video online with more efficient problem identification.



"Half-hour Delivery" in Qingdao

Under the strategy of sales channel sinking and supply chain extension, we realise the digital construction of warehouse building and financial distribution system in Qingdao, so that the tyres can be directly distributed and transported from factories to chain shops, so as to realise the most optimal inventory, lowest cost and most optimal speed.

11 Region Involved	102 Offline Shop	0.5 hour Vendor responsiveness
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Product Claim

Doublestar has formulated "Sanbao" handling process and Pre-claims are used to settle claims for customer problems, claims system according to the different market-oriented, based on a pre-claim fee determined on the basis of sales channels and product types. Our warranty service different channels. The pre-claim system is available to all is highly recognized in the market and meets the needs of customers, with a penetration rate of 100%. different customer groups for different products.

Product Development and Innovation

Doublestar aims to satisfy users' needs, integrates global technical resources, establishes an innovative, open and interactive R&D platform, continuously adjusts product structure and increases R&D investment, in-depth strengthening R&D capabilities. We form a technical system covering the whole process of product R&D, manufacturing and testing with the product strategy of "High-end, High-value-added, High-differentiated".

204.24 M RMB
2023 R&D Investment

R&D System

Doublestar is committed to improving and building an efficient R&D system to achieve scientific and technological innovation and self-breakthrough by continuously investing in scientific research, attracting scientific talents, and improving the R&D management system.

R&D talents attraction

We have built a technology-led R&D system and R&D capability. As of the end of 2023, the Tyre Research Institute is composed of 115 R&D talents, including 38 masters and PhDs, and 5 external experts, in addition to hundreds of other R&D related personnels.

To continuously increase the introduction and training of scientific research talents, we has established talent platforms such as "Offshore Innovation and Entrepreneurship Workstation for Overseas Talents", and "Postdoctoral Researcher Innovation and Practice Base" in Qingdao. In order to achieve the construction of the new "Smart Tyre" channel, we employ talents based on their academic backgrounds to play to their individual strengths, providing supports for the improvement of product R&D, and to carry out specific R&D in a variety of aspects, such as pattern design and development, characteristic simulation, structural design, formula design, product testing, etc..



Digital Simulation Design Platform

The R&D 4.0 system takes the digital module simulation design platform as its main symbol, and is equipped with a global innovation and technology R&D center, the most advanced and complete high-performance laboratory in the tyre industry, equipped with more than 200 testing equipment of international advanced level, significantly improving R&D efficiency.

By intergrating tyre simulation and analysis module with R&D design process, the laboratory can efficiently simulate the real use scenarios of different customers, improve the feedback speed of tyre performance indexes to R&D after the parameters changing, facilitating to provide customers with more personalized and applicable products.



Meanwhile, through the establishment of a comprehensive evaluation system for products performance, 12 performance indicators can be predicted in the process of new product development and simulation design such as comfort, durability, and handling performance. Also, the performance of specified working conditions can be quickly optimized as well.



R&D projects at the end of the reporting period:

345 PCR and TBR R&D projects	198 2023 New Product R&D Projects
122 Product Performance Enhancement Project	26 New material applications R&D Projects

Sustainable Materials R&D

Doublestar explores the use of sustainable materials for product design and manufacturing. From basic research to formulation development, the company continues to explore and reserve a full range of technologies, and has already applied and promoted the use of environmentally friendly materials such as recycled rubber and cracked acetylene black. We have carried out several research projects on sustainable materials. The PCR Tire Research Institute gradually strengthens the research and application of increasing the proportion of natural rubber, recycling and reusing steel wire, rice husk ash white carbon black, renewable oils replaced for traditional oils, renewable polyester, and other 20 types of processing aids.

Sustainable Materials Application Objectives

The TBR Research Institute carries out research on sustainable materials based on the existing formula, and expands the proportion of renewable and recyclable materials such as natural rubber and cracked acetylene black year by year. At present, the proportion of sustainable rubber materials has reached more than 60%, and the proportion of sustainable materials in the whole tyre has reached more than 40%, with physical and vulcanization characteristics meeting product performance requirements. Also, the TBR Research Institute is developing the research and application of sustainable materials in tyres, striving to increase the proportion of sustainable materials in the whole tyre to more than 60% by the end of 2024.

Patents Applied and Standard Set

Patent Licensing By the end of 2023, we have validly authorized 636 patents, of which the number of invention patents is 65. 80 patents were newly licensed in 2023.	Softwares Application In 2023, we newly applied 2 software, including transient relaxation characteristic modelling and analysis software for tyre models and tyre laboratory data centre system.	Standard Set By the end of 2023, we have participated in the formulation of 94 standard catalogues, with 29 new in 2023.
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Industry-academia-research Cooperation Project

Doublestar is currently carrying out a number of joint research projects with a number of universities and research institutes, such as Jilin University, Beijing University of Chemical Technology, Shandong University, etc., mainly focusing on the research and application of different skeleton materials and raw materials in tyre formulations, and the application of different equipment to tyre production.

Doublestar and Dynamics Co-Innovation Alliance created TDA Doublestar Laboratory, strengthening the experimental testing and basic research capabilities, and also provides high-quality data resource sharing services and academic technical support for the member units to support the healthy development of China's automotive, aircraft, and tyre industries in a sustainable, efficient, and professional manner.



We carry out projects with a number of downstream automotive manufacturers, led by Chery and Geely, focusing on tyre performance, impact of acetylene black on new energy tyres, and the impact of production equipment on tyre performance.





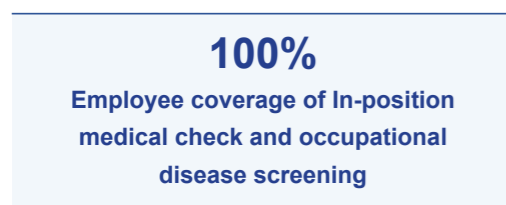
Occupational Health and Safety

The company adheres to the people-oriented principle, protects employees' health and safe production, provides regular health check for employees, controls and eliminates hazardous factors in the workshop, and creates a safe and reliable working environment for employees. According to the relevant provisions of the <Law of the People's Republic of China on Prevention and Control of Occupational Diseases> and the <Provisions on Supervision and Management of Occupational Health in Workplaces>, Doublestar plants have formulated the <Compendium of Occupational Health Regulations>, so as to effectively safeguard the occupational health and safety of workers.

Occupational Health Management

Health Protection

We attach importance to the physical and mental health of all workers, and is committed to providing employees with a comprehensive pre-employment physical examination, regular health checks and in-position physical examination.



In order to ensure the employee health, Doublestar purchases occupational accidental injury insurance, providing financial guarantee for accidental injuries, largely reducing the financial burden of employees due to accidental injuries. For the landing in Cambodia, Doublestar expects to purchase group claims insurance for expatriate cross-border employees starting from 2024.



Occupational Health Promotion and Education

The company continuously organizes publicity and lectures for employees' physical and mental health. The Occupational Health Management Office sets up signs on prevention of occupational disease hazards and emergency rescue measures for occupational disease hazards in prominent positions in the workshops, 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, regulations and operating procedures.

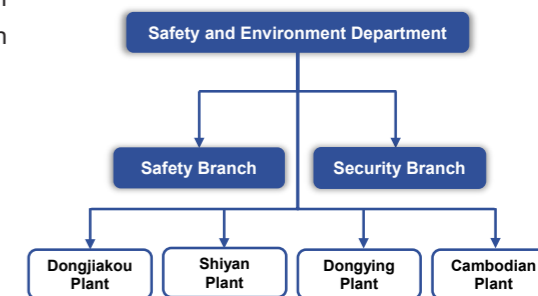
The company invited psychologists to carry out "Overcoming Burnout, Restarting Vitality" mental health lectures, to help them enhance the ability to manage emotions.



Productive safety management

Doublestar implements the policy of "Safety First, Prevention First", strengthens the leadership and management of safe production, prevents accidents to the maximum extent possible, and guarantees the safety of employees in the workshop. We have set up a production safety responsibility system with the concept of "Every level responsible, everyone accountable, and every personnel fulfilling own duties", realizing the decomposition of safety objectives and the guarantee of safety measures at all levels.

Doublestar Group sets up a production safety committee, Doublestar safety and environment department, and Safety Supervision Committee to co-ordinate the routine management of safe production normalization.



- Safety Branch**
Responsible for internal and external control of safety, environmental protection, fire prevention and occupational health.
- Security Branch**
Responsible for vehicle control, materials inbound and outbound, guidance visit activities, security theft and other emergencies disposal.

Investment in production safety

A total of approximately RMB 5,755k was invested in safety management at the three plants in 2023, of which approximately RMB 1,610k was invested in safety equipment and RMB 280k was invested in the maintenance and repair of fire safety equipment.



Management System Certification

The Dongjiakou and Shiyao plant have passed ISO 45001 OHSMS certification, while the Dongying and Cambodia plants are actively involved in the construction of ISO45001.



Safety Experience Centre

In 2023, the Dongjiakou base established a safety experience centre, with a "scenario + situation" educational approach, through the simulation of accidents, to strengthen employees' understanding of the importance of safe production.

Safety-linked Remuneration

The performance evaluation of heads of Safety and Environment Departments of the three plants includes indicators of safe production in their appraisal indexes, such as losses from fire accidents, work-related injuries greater than Grade 7 recordable accidents, unqualified items of safety rectification, etc., closely linked to individual remuneration.



Building the safety production culture

Doublestar strictly implements the <Law of the People's Republic of China on Work Safety>, <Norms for Enterprise Work Safety Standardization> and other laws and regulations, and comprehensively optimizes the safe production management system. We have established a self-restraint mechanism, sorted out and benchmarked safety systems and regulations, and formulated regulations such as <Production Safety Management Regulation> and <Safety Management System for Special Operations>. The company specifies the responsibility for safe production and routine supervision and inspection. In addition, we incorporate safe production objectives into employee performance appraisal and salary structure to raise the emphasis.



Plant Safety Inspection

Doublestar has always put production safety in the first place, focusing on key areas and important issues, concentrating on the investigation and rectification of major accidents and hidden dangers, and comprehensively improving the ability to manage production safety, as well as formulating the guiding documents <List of Determination of Major Hidden Dangers of Safety in Doublestar> and <Standards for the Control and Management of Special Operations>.

Cumulatively, over 200 safety inspections were organized in 2023:



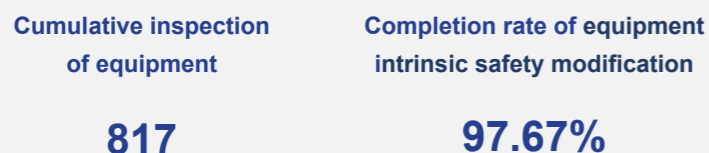
Innovating to add controlled indicators

In 2023, the plant innovatively added new indicators: the number of people and elements under control, sorted out all kinds of safety elements in each plant area, and combined with the key areas to divide the safety responsibilities, so as to ensure that the responsibility for each safety element is assigned to the specific personnels and the control is in place.



Intrinsic safety modification of equipment

The Safety and Environment Department takes the lead in combining the equipment departments, technical quality and workshops to evaluate the acceptance of the equipment safety innovation and transformation.



Digitalisation of Safe Production

In 2023, the plant focused on safety informational enhancement, and carried out the practice of safety digital construction. At present, the safety digital inspection platform mainly includes three functional modules, namely, safety inspection, safety hazards inspection and special operation online approval, greatly improving the efficiency of special inspection. Taking the digitisation of Dongjiakou plant fire inspection as an example, the completion rate of inspection by frontline staff of the fire prevention element has increased from 94.3% at the initial trial operation stage to 98.5% by the end of 2023. All managers completed the inspections on a monthly basis.

Emergency drill

We continuously standardize our emergency management work, improve our ability to respond to and prevent risks and accidents, and protect the lives, health and safety of employees to the maximum extent possible. In accordance with <Law of the People's Republic of China on Work Safety> and <Law of the People's Republic of China on Response to Emergencies> and relevant laws and regulations, each base has formulated a <Compendium of Emergency Preparedness Plans for Production Safety Accidents>, and has formulated special emergency preparedness plans for accidents such as fires, hazardous wastes leakage.

During the reporting period, the plant organized drills in various areas, including electrocution accidents, waste oil leaks, radiation drills and fire accidents:



Emergency Flood Drill



Emergency environmental Drill



Safety training

In order to enhance the awareness and level of production safety of employees, the company actively promotes the construction of training for employees' production safety. In 2023, Doublestar safety digital construction practice has replaced the traditional offline management method with the online operation of "education and training". On the one hand, specific training is provided to key control groups, and on the other hand, all-round training is organized for all employees, mainly including courses on Work Safety Law, Fire Safety Law, Occupational Disease Prevention, Emergency Disposal, and Operational Procedures.

Since its official launch in August 2023, the online safety training programs have helped employees effectively integrate the training content with their own work, ensuring that they have a correct understanding of the workshop's risks, equipment operation, and how to identify and warn of dangers.





◎ We train employees in operating safety procedures, attached with corresponding supporting exams.

485 Cumulative trainings	49,296 Cumulative number of persons trained
80,86 hours Total duration of safety training	100% Coverage of employees receiving safety training

Organisation of safety training accountability



Firefighting training and competitions



Safety Production Month

The plant organized and carried out the third "Dongfa Cup" Safety and Emergency Knowledge Contest and "Ankang Cup" Safety and Production Knowledge Contest during the "National Safety Production Month", through which we specified the responsibility of safe production, promoted the safety guarantee, and created the safe atmosphere of "everyone knows safety, everyone deal with emergencies".



"Dongfa Cup" Safety and Emergency Knowledge Contest



"Ankang Cup" Safety and Production Knowledge Contest

Sustainable Supply Chain

Doublestar adheres to the strategy of "Transparent Procurement", signs long-term contracts with industry-leading suppliers, integrates the concept of sustainable development into the requirements of supplier management, to build a stable and reliable supply chain, and endeavors to set a global industry model.

Supplier evaluation and selection

In order to form an objective and effective supplier evaluation and grading, and to promote the transparent competition among suppliers, Doublestar has established a comprehensive supplier introduction and evaluation process, which guides suppliers to improve themselves automatically and spontaneously, promoting the virtuous circle of suppliers, so that suppliers and Doublestar grow and develop simultaneously.



Supplier Introduction

Doublestar has formulated a number of supplier introduction processes, such as <Supplier Introduction Process> and <Supplier Audit Operation Management Measures>, to audit the qualifications of suppliers. In the supplier introduction process, we give priority to suppliers with green production concept and environmental protection certification to ensure the environmental quality of raw materials. Also, combined with suppliers' self-assessment, raw material testing, suppliers' on-site inspection and evaluation, product and service qualification audit, etc., we examine suppliers' business reputation, quality control mechanism, equipment, quality abnormality handling ability and other dimensions.

Supplier Reassessment

Doublestar has formulated the Supplier Performance Assessment Management Standards and Supplier Qualification and Production Parts Approval Management Measures as well as other supplier assessment system. We conduct annual audits of suppliers in the pool based on supplier classification, and scores suppliers in five dimensions, i.e. quality, cost, delivery and supply capability, technical capability, and responsiveness (TQRDC), in order to identify supplier risks in a timely manner.

Environmental testing indicators

Evaluate suppliers' "product environmental" monthly, with a focus on confirming the compliance with requirements for polycyclic aromatic hydrocarbons, heavy metals, and high-risk substances of concern, etc. There was no suppliers failing to meet these standards in 2023.

Recyclable materials

We propose indicators for suppliers in terms of recyclable material use, energy efficiency, carbon emissions, and occupational health and safety, and make requests for improvement.

Quality System Certification

We require our suppliers to be certified to ISO9001 as a minimum.

Onsite standard audits

Based on IATF16949 and ISO9001 standards, we formulate the "Standard Audit Form" to put forward our requirements of quality, safety, environmental protection and finance to the suppliers.

Environmental Compliance

Prior to material approval, suppliers are required to have an environmental protection test report issued by an EU-recognized third-party testing organizations in compliance with latest EU environmental protection regulations, and to certify that they have authenticated the quality system certification.



Procurement Strategy Optimization

Empowering upstream and downstream synergistic development as a "chain master"

Doublestar Group has been awarded as "Chain master of High-end Chemical Industry". As the most important industry under the Group, we empower other enterprises in the supply chain with our own high-tech and digital development, provide advanced solutions for upstream and downstream development and technological innovation, and promote the rapid development of chain economy. We promote continuous improvement of suppliers through contractual constraints and incentives with them. We maintain positive interaction with our suppliers and diagnose their systems through network communication and onsite interview visits.

Environmental Compliance

We have formulated a green procurement policy, specifying the environmental requirements and standards for procured products and encouraging the green products procurement. Also, we set up a traceability system to ensure the transparency of product sources and quality.

"Cambodia Rubber Source Traceability" Project: In response to the national "dual-carbon" request and to improve product quality, Cambodia plant has started to work on traceability from the rubber source to accurately track carbon emissions in the production process. By tracking both the source of raw materials and production process, we could better control and manage carbon emissions and reduce operating costs, while using traceability to optimize raw material purchasing and inventory management, reduce resource wastage and improve utilization efficiency.

Localised Multi-Sourcing

We give priority to using local suppliers to plants to reduce transport costs and carbon emissions, and shorten delivery times. Meanwhile, we appropriately introduce multiple suppliers to reduce our dependence on a single supplier and increase the flexibility and selectivity of procurement to resist quality risk, transportation risk and international trade risk.

Digital Procurement

We have continued to promote the construction of the AliCloud Procurement and Marketing SAAS digital platform system in 2023, achieving multi-party data integration and system function optimization, thereby making procurement services more efficient and convenient. At present, the SAAS platform has basically covered all suppliers required for the Company's business.

10,935 Suppliers involved
66% Procurement Efficiency Improved

Green Packaging

Green packaging is an important part of Doublestar's active practice of green management concepts, and we demonstrate our commitment to environmental sustainability through the following measures.

Synthetic Rubber

Greening of synthetic rubber packaging has been achieved with the use of 100% recyclable steel boxes. This initiative not only helps to recycle resources, but also sets a good example of environmentally friendly packaging.

Chemical auxiliaries, excipients, carbon black, steel cord

Shared plastic pallets from Worldly Le Orange and Lettuce Shipping Union have been fully adopted to replace traditional packaging with recyclable and recyclable materials, committed to reducing the consumption of natural resources and contributing to the green management of the whole industrial chain. In 2023, the company has purchased 91,842 shared pallets.

Green Logistics

Doublestar actively promotes intelligent logistics, using the IoT, big data and other technical manners to achieve the visualization and intelligence of the logistics process, improve logistics efficiency and reduce energy consumption.

Clean Transport

All transportation vehicles are required to meet national emission standards, with more than 90% of vehicles meeting China V and above standards. This requirement aims to reduce environmental pollution during transportation and improve overall transport efficiency.

Shipping Strategy

We adopted the strategy of centralized shipment and full truckload shipment. Customers are encouraged to place full truckload orders in order to reduce LTL orders, thus optimizing the vehicles utilization. This strategy reduces both fragmented shipments in the logistics chain and waste of energy, in line with our core concept of green logistics.

Shipping Advocacy

We have actively promoted combined shipment for delivery in one place and carpooling for small orders. This initiative has effectively reduced the frequency of shipments, maximized transport efficiency and further promoted green transport.

Synergistic Development of Green Supply Chain

We have formulated the "Green Supply Chain Promotion Management Program", taking the assessment results of suppliers as an important basis for management decisions and promoting the continuous improvement of green supply chain management.



Training of employees in green supply chain management

Continuously improve employees' environmental awareness and skills to ensure the effective implementation of green supply chain management.

Enhanced guidance on vendor training

- Help suppliers understand the significance and requirements of green supply chain management and promoting their participation in green supply chain management
- Issue Supplier Sustainability Initiative to all suppliers in 2023, requiring suppliers to make commitments to safety and production responsibility, environmental protection compliance, and business integrity

Conducting awareness-raising activities on green supply chain management

Raise awareness and concern of employees and society about green supply chain management through internal and external publicity.



In 2023, we signed the <Safety Responsibility Commitment> and <Environmental Protection Commitment> with our suppliers, which set targets for our suppliers in resource conservation, environmental friendliness and social responsibility. The signing rate reached 83.89%.



For now, approximately 64% of the raw material suppliers in the pool have been certified to the ISO14001 environmental management system, and we are requesting the remaining key raw material suppliers to complete the ISO14001 certification by the end of 2024.



Social Contribution

Doublestar actively undertakes its social responsibility of state-owned enterprises and public welfare responsibility, promoting the traditional virtue of "one party in need of help from all sides". We have carried out a series of charitable donations and public welfare activities, caring for the disadvantaged groups of the society and actively engaging in public welfare and charitable undertakings. We support local education, donate money to schools, help cultivate talents, and promote sustainable development of the community through community services.



Rural Revitalization

To achieve the resource sharing, advantages complementing, efficiency synergizing, and to continuously promote the normative and long-term effect of civilization practice voluntary service activities, in 2023 Doublestar co-constructed with the New Era Civilization Practice Institute of Po Li Town and carried out diverse civilization practice activities.

In order to deeply implement the unified deployment of Qingdao on poverty alleviation and East-West poverty alleviation collaboration, Doublestar followed the pace of controlling shareholder to help Rizhuang Town, Laixi City, with a total donation of RMB 131,700 during the reporting period.



In 2023, we organized volunteers to carry out civilized city co-creation and co-construction activities, cleaning and sweeping the environmental hygiene of the community of Muguan Island, and distributing promotional leaflets on protecting the environment to the community residents.



During the Double Ninth Festival, our volunteers organized the "Our Festival - Double Ninth Festival" volunteer service activity, visiting Xichenjia Village, Dacun Town, West Coast New District and carrying out the volunteer service activity of caring for the elderly living alone, and sent care and warmth to them by visiting them, chatting with them and sending them condolence goods.

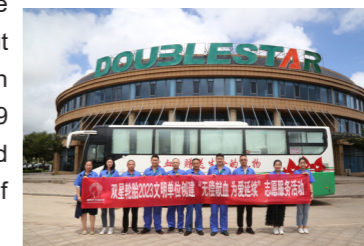
Social Welfare

We have established a regular volunteer service system, and set up the DoubleStar "Star Youth" volunteer team, mobilized the majority of employees to actively register on Qingdao Volunteer Network, with a total of 1,797 employees registered as volunteers. The volunteer team regularly organizes and carries out kinds of voluntary activities, demonstrating the social responsibility and commitment of state-owned enterprises.



Blood Donation

We actively responded to the initiative of "Donate Blood, Share Life", and organized staff to carry out the volunteer service activity of "Blood Donation for Love" at the Dongjiakou Base. A total of 79 employees successfully participated in the blood donation, with a total blood donation quantity of 31,000 ml.

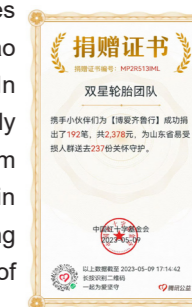


Doublestar has been carrying out blood donation activities for 10 consecutive years, and has been awarded the title of Qingdao Outstanding Contribution Collective for Blood Donation and Advanced Collective for Caring for Life for several times.



Employee Donation

We organized the "One Day Donation Charity" activity, which mobilized 1,186 employees to participate in the donation activity, and all the money raised was handed over to Qingdao Charity Federation, used for carrying out relief work for the needy groups in Qingdao. In addition, as a group member of Qingdao West Coast New District Red Cross, we actively set up the Double Star team, and advocated that the majority of employees extend a warm hand and participate in the activities positively, with a total of 195 people participating in the crowd funding. We were awarded the title of Excellent Organising Unit of Crowdfunding Activity "5-8 Humanitarian Public Welfare Day" in 2023, demonstrating the responsibility of the state-owned enterprise.



Children Care

The plant carried out the "Going Faraway" public welfare project, organized teachers and students of the sixth primary school in Naixiang County, Nanyang City, Henan Province to visit Dongjiakou base, to have a close observation of the whole process of tyre intelligent manufacturing process in the Intelligent Manufacturing Industry 4.0 Industrial Plant. In addition, on the June 1 Children's Day, we visited the West Coast New District Poli Primary School and employee families with the theme of "Caring for the Future", and sent school supplies and DoubleStar's warmth and care to those school-age children.





Appendix I. Performance Data

Indicator	Unit	2023	2022
Energy Use			
Total energy consumption	Tons of standard coal	85,350.67	77,573.28
Total non renewable energy consumption	Tons of standard coal	647.19	612.19
Renewable energy consumption	Tons of standard coal	3,150.80	1,734.77
Total amount of external energy purchased	Tons of standard coal	81,552.68	75,226.32
Total Energy consumption intensity	Tons of standard coal/10,000 tires	53.10	62.49
Photovoltaic power generation	MWh	25,480	25,000
Total water consumption	Ton	716,891	502,684
Environmental Protection			
Environmental protection education and training			
No. of environmental protection education and training	Times	10	10
Environmental protection training attendance	/	4,423	4,615
Environmental emergency management			
No. of environment related emergency drills	Times	19	21
No. of participants in environmentally related emergency drills	/	662	906
Carbon Emission			
Dongjiakou Plant			
Scope1	ktco2eq	783.38	770.71
Scope2	ktco2eq	146,061.76	144,111.06
Total Carbon Emissions (Scope1+Scope2)	ktco2eq	146,845.14	144,881.77
Carbon Intensity (Emissions per 10,000 tires)	ktco2eq/10,000 tires	272.90	321.98
Shiyan Plant			
Scope1	ktco2eq	407.51	251.04
Scope2	ktco2eq	95,904.47	80,053.83
Total Carbon Emissions (Scope1+Scope2)	ktco2eq	96024.565	80304.87
Carbon Intensity (Emissions per 10,000 tires)	ktco2eq/10,000 tires	206.50	276.98

Indicator	Unit	2023	2022
Pollution & Waste Management			
Dongjiakou Plant			
Exhaust Emissions			
Particulate matter (PM) emission concentration	mg/m ³	4.00	1.40
Total non-methane hydrocarbons emission concentration	mg/m ³	2.89	3.53
Wastewater Disposal			
Chemical oxygen demand (COD) emission concentration	mg/L	20.00	13.00
Ammonia nitrogen (NH3-N) emission concentration	mg/L	0.60	0.65
Total nitrogen (measured as N) emission concentration	mg/L	7.76	19.20
Total phosphorus (measured as P) emission concentration	mg/L	0.88	0.93
Suspended substance (SS) emission concentration	mg/L	13.00	13.00
Petroleum emission concentration	mg/L	0.06	0.07
Five day biochemical oxygen demand (BOD5) emission concentration	mg/L	3.40	3.80
Solid & Hazardous Waste Management			
Total solid waste generation	Ton	3,442.26	3,240.01
Total amount of general waste generated	Ton	2,974.82	2,712.83
Total amount of hazardous waste generated	Ton	467.44	527.18
Shiyan Plant			
Exhaust Emissions			
Particulate matter (PM) emission concentration	mg/m ³	5.48	6.21
Total non-methane hydrocarbons emission concentration	mg/m ³	5.20	4.86
Wastewater Disposal			
Chemical oxygen demand (COD) emission concentration	mg/L	55.25	144
Ammonia nitrogen (NH3-N) emission concentration	mg/L	2.41	28.30
Total nitrogen (measured as N) emission concentration	mg/L	19.58	38.7
Total phosphorus (measured as P) emission concentration	mg/L	0.10	0.11
Suspended substance (SS) emission concentration	mg/L	34.00	47.00
Petroleum emission concentration	mg/L	0.29	0.17
Five day biochemical oxygen demand (BOD5) emission concentration	mg/L	18.50	45.20



Indicator	Unit	2023	2022
Shiyan Plant			
Solid & Hazardous Waste Management			
Total solid waste generation	Ton	3,460.97	7,097.31
Total amount of general waste generated	Ton	3,381.00	7,050.00
Total amount of hazardous waste generated	Ton	79.97	47.31
Dongying Plant			
Exhaust Emissions			
Particulate matter (PM) emission concentration	mg/m ³	3.90	4.50
Total non-methane hydrocarbons emission concentration	mg/m ³	2.01	2.02
Waste Water Disposal			
Chemical oxygen demand (COD) emission concentration	mg/L	45.60	39.80
Ammonia nitrogen (NH ₃ -N) emission concentration	mg/L	3.73	3.05
Solid & Hazardous Waste Management			
Total solid waste generation	Ton	923.76	966.06
Total amount of general waste generated	Ton	882.00	909.00
Total amount of hazardous waste generated	Ton	41.76	57.06

Social

Indicator	Unit	2023	2022
Human Resource			
No. of employees	/	4,418	4,197
Employee Aging Structure			
<=30	/	793	576
30~50	/	3,048	2,961
>=50	/	577	660
Employee Education Structure			
PhD	/	6	3
Master	/	101	123
Bachelor	/	865	733
Junior College	/	1,834	480
The Rest	/	1,612	2,858
Employee Gender Structure			
Male	%	79%	77%
Female	%	21%	23%
No. of employees newly hired	/	825	811
Local employment rate	%	64.60%	63.23%

Indicator	Unit	2023	2022
Human Resource			
Contract signature rate	%	100%	100%
No. of child hired	/	0	0
Coverage rate of "Five Insurance One Fund"	%	100%	100%
Employee coverage rate of health check	%	100%	100%
Employee coverage rate of occupational disease screening	%	100%	100%
Training and Development			
Employee coverage rate for receiving ethics training	%	100%	100%
Employee coverage rate for receiving anti-discrimination and anti-harassment training	%	100%	100%
Employee coverage rate for receiving environment related training	%	100%	100%
Employee coverage rate for receiving compliance training	%	100%	100%
Employee coverage rate for receiving safe production training	%	100%	100%
Safe Production			
Investment in safe production	Thousand Yuan	576	941.70
Cumulative Person for safety training	/	49,296	46,513
Cumulative number of safety training	Times	485	54
Employee coverage of safety training	%	100%	100%
Number of plant safety inspections	Times	204	157
No. of potential safety hazards identified	/	10,193	9,838
Closed loop rate of safety hazards rectification	%	99.9%	100.0%
No. of emergency drills	/	61	63
Overview of Suppliers			
No. of key raw material suppliers	/	84	76
Coverage of inbound assessment for new vendor introductions	%	100%	100%
Comprehensive vendor assessment coverage	%	100%	100%
Localised procurement rate	%	94.20%	93.65%
Percentage of new suppliers environmentally evaluated	%	100%	100%
No. of key raw material suppliers with ISO14001 environmental certification	/	54	48



Indicator	Unit	2023	2022
R&D and Innovation			
No. of patents	/	636	556
No. of new patents	/	80	172
No. of new software applications	/	2	0
No. of new standards set	/	29	7
Product Quality Guarantee			
No. of plants authenticated by IATF16949:2016	/	3	3
No. of plants authenticated by ISO9001:2015	/	2	2
Number of recalls due to product quality	/	0	0
Customer coverage of satisfaction surveys participation	%	100%	100%
Satisfaction % in customer satisfaction survey	%	98.80%	98.70%

Appendix II.

GRI Content Index

GRI Content Index		
GRI STANDARD	DISCLOSURE	LOCATION
Common Standards		
GRI 1: Foundation 2021		
GRI 2: General Disclosures 2021		
Organization and its reporting		
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	About Doublestar
2-7	Employees	Our People
Governance		
2-9	Governance structure and composition	Governance Improvement
2-10	Nomination and selection of the highest governance body	Governance Improvement
2-11	Chair of the highest governance body	Governance Improvement
2-12	Role of the highest governance body in overseeing the management of impacts	Sustainability governance
2-14	Role of the highest governance body in sustainability reporting	Sustainability governance
2-16	Communication of critical concerns	Stakeholder Engagement
2-18	Evaluation of the performance of the highest governance body	Governance Improvement
2-19	Remuneration policies	Our People
2-20	Process to determine remuneration	Our People
Strategy, Policy and Practices		
2-22	Statement on sustainable development strategy	Our Philosophy
2-23	Policy commitments	Approach to Sustainability
2-24	Embedding policy commitments	Approach to Sustainability
2-26	Mechanisms for seeking advice and raising concerns	Stakeholder Engagement
2-27	Compliance with laws and regulations	Governance Improvement

Governance

Indicator	Unit	2023	2022
Governance Structure			
No. of the Board of Directors members	/	9	9
No. of independent members	/	3	3
No. of female members	/	3	3
No. of Board meetings held	Times	8	5
Board Director Attendance	%	100%	100%
No. of decisions adopted at board meetings	/	31	17
No. of committees under the BOD	/	5	4
Business Morality			
Percentage of leadership signing the <Integrity Commitment>	%	100%	100%
Percentage of suppliers signing the <Integrity Commitment>	%	100%	100%
Employee coverage rate for receiving ethics and anti-corruption training	%	100%	100%
No. of cases identified as the party to anti-trust litigation	/	0	0

**GRI Content Index (Continued)**

GRI Content Index		
GRI STANDARD	DISCLOSURE	LOCATION
Stakeholder Engagement		
2-29	Approach to stakeholder engagement	Stakeholder Engagement
2-30	Collective bargaining agreements	Stakeholder Engagement
GRI 3: Material Topics		
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		
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 203: Indirect Economic Impacts		
203-2	Significant indirect economic impacts	About Doublestar
GRI 205: Anti-corruption		
205-1	Operations assessed for risks related to corruption	Governance Improvement
205-2	Communication and training about anti-corruption policies and procedures	Governance Improvement
205-3	Confirmed incidents of corruption and actions taken	Governance Improvement
GRI 206: Anti-competitive Behavior		
206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	Governance Improvement
GRI 207: Tax		
207-2	Tax governance, control and risk management	Governance Improvement
207-3	Stakeholder engagement and management of concerns related to tax	Stakeholder Engagement
GRI 301: Materials		
301-1	Materials used by weight or volume	Sustainable Supply Chain
301-2	Recycled input materials used	Sustainable Supply Chain
301-3	Reclaimed products and their packaging materials	Sustainable Supply Chain

GRI Content Index		
GRI STANDARD	DISCLOSURE	LOCATION
GRI 302: Energy		
302-1	Energy consumption within the organization	Energy Saving
302-2	Energy consumption outside of the organization	Energy Saving
302-3	Energy intensity	Energy Saving
302-4	Reduction of energy consumption	Energy Saving
302-5	Reductions in energy requirements of products and services	Energy Saving
GRI 303: Water and Effluents		
303-2	Management of water discharge-related impacts	Pollution and waste management
303-3	Water withdrawal	Energy Saving
303-4	Water discharge	Pollution and waste management
303-5	Water consumption	Energy Saving
GRI 304: Biodiversity		
304-2	Significant impacts of activities, products and services on biodiversity	Biodiversity
GRI 305: Emissions		
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	GHG emissions intensity	Responding to Climate change
GRI 306: Waste		
306-1	Waste generation and significant waste-related impacts	Pollution and Waste Management
306-2	Management of significant waste-related impacts	Pollution and Waste Management
306-3	Waste generated	Pollution and Waste Management
306-5	Waste directed to disposal	Pollution and Waste Management
GRI 308: Supplier Environmental Assessment		
308-1	New suppliers screened using environmental assessment dimensions	Build a Sustainable Supply Chain
308-2	Negative environmental impacts of supply chains and actions taken	Build a Sustainable Supply Chain

**GRI Content Index (Continued)**

GRI Content Index		
GRI STANDARD	DISCLOSURE	LOCATION
GRI 401: Employment		
401-1	New employee hires and employee turnover	Our People
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	Our People
401-3	Parental leave	Our People
GRI 403: Occupational Health and Safety		
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
GRI 404: Training and Education		
404-1	Average hours of training per year per employee	Our People
404-2	Programs for upgrading employee skills and transition assistance programs	Our People
404-3	Percentage of employees receiving regular performance and career development reviews	Our People
GRI 405: Diversity and Equal Opportunity		
405-1	Diversity of governance bodies and employees	Our People
GRI 406: Non-discrimination		
406-1	Incidents of discrimination and corrective actions taken	Our People
GRI 414: Supplier Social Assessment		
414-1	New suppliers that were screened using social criteria	Sustainable Supply Chain
414-2	Negative social impacts in the supply chain and actions taken	Sustainable Supply Chain
GRI 417: Marketing and Labeling		
417-1	Requirements for product and service information and labeling	High-quality Innovative Development
GRI 418: Customer Privacy		
418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	Information Security

**Appendix III.
Report Feedback**

Dear readers:

Thanks for taking the time to review this report. To further enhance the sustainable development efforts and report preparation quality of Doublestar, we kindly request your feedback. Please provide us with your insights and suggestions through the following methods:

Email: gqb@doublestar.com.cn

Tel: 0532-67710729

Fax: 0532-67710729

Address: No. 666, Lianghe Road, Huangdao District, Qingdao City

*What type of stakeholder do you belong to?

Employees Customers Government Public Regulatory Agencies Shareholders and investors Community Residents ESG Participants Similar Enterprises Suppliers and Partners Public Welfare Organizations Others

*Your feedback:

1. Your overall evaluation of this report is:

Very good Good Average Poor

2. What is your evaluation of Doublestar's environmental responsibilities disclosed in this report:

Very good Good Average Poor

3. What is your evaluation of the social responsibilities of Doublestar disclosed in this report:

Very good Good Average Poor

4. What is your evaluation of the governance responsibilities of Doublestar disclosed in this report:

Very good Good Average Poor

5. Do you think the content arrangement and layout design of this report are easy to read:

Yes No

6. Did you get the information you wanted to know in this report:

Yes No

7. What other information do you think you need to know that is not reflected in this report?

8. What other information would you like to know through Doublestar's sustainability report?

9. If you have any opinions and suggestions on the sustainable development of Doublestar, please submit them here:

DOUBLESTAR

Qingdao Doublestar Co., Ltd.