

Abbreviation of the Company: Kingfa Sci.&Tech.

Stock Code: 600143

2024

Environmental, Social and Governance Report





Description of the Report Preparation	01
o Stakeholders	03
bout the Company	05
Our Sustainability Management	13
Topic: Digital Intelligence Empowerment Accelerating the Development of New	25

Annex	
GRI Index	12
Benchmark Index to the Guidelines of the Stock Exchange	13
ist of Key Performance Indicators	13
Main Participatory Domestic Associations and Organizations	13
Overview of Certificates	14
Reader's Feedback	14

Environmental Responsibilities

Climate Change Tackling	35
Environmental Compliance Management	44
Pollutant Discharge and Waste Treatment	49
Energy Usage	53
Usage of Water Resources	56
Circular Economy	61
Chemical Safety	65
Management of Raw and Packaging Materials	68

Social

Responsibilities

Innovation-drive and Intellectual Property	71
Safety and Quality of Products and Services	s 80
Supply Chain Security	84
Support for Industry Development	89
Equality, Inclusion and Diversity	93
Talent Attraction and Retention	95
Employee Training and Development	101
Occupational Health and Safety	105
Rural Revitalization and Social Contributions	111
Data Security and Customer Privacy Protection	112

Responsibility for Governance

Operation by the Board of Directors, the Board of Supervisors and the General Meetings of Shareholders	117
Transparent Disclosure	121
Risk Management	123
Business Ethics	124

Kingfa Sci. & Tech. Co., Ltd. | Environmental, Social Responsibilities | Environmental Responsibilities | Environmental Responsibilities | Social Responsibilities | Responsibilities | Ann

Description of the Report Preparation

This is the third environmental, social and governance (ESG) report issued by Kingfa Sci. & Tech. Co., Ltd. (hereinafter referred to as "the Company", "we" or "us"), intended to integrate the concept of sustainable development into corporate governance, and comprehensively present our ESG practice and related performance to our stakeholders.



Time Frame of the Report

This Report covers the period from January 1, 2024 to December 31, 2024, punished on an annual basis. To increase the comparability and integrity of this Report, some content may be appropriately extended to previous and subsequent years.



Coverage of the Report

This Report, which focuses on the Company, covers all branches and subsidiaries of the Company (collectively referred to as "the Group" together with the Company). The key environmental performance indicators are mainly specific to the Company, its branches and subsidiaries in China. The key social performance indicators are mainly about the Company, all its branches and subsidiaries at home and abroad.



Notes on Data of the Report

All data and cases cited herein derive from the official documents and statistical reports of the Company and its affiliates. Unless otherwise specified, all amounts hereunder shall be denominated in RMB.



Reference Standards

This Report was prepared with reference to Guidelines No. 14 of Shanghai Stock Exchange for Self-Regulation of Listed Companies - Sustainability Report (Trial) and GRI Standards. Besides, it was written in combination with the Guidelines for Self-regulation of Listed Companies on Shanghai Stock Exchange No.4 - Sustainability Development Report, 2030 United Nations Sustainable Development Goals (SDGs), A Practical Guide to Sustainability Reporting of Listed Companies issued by China Association for Public Companies, other standards and guidelines.



Access to This Report

This Report may be accessed and downloaded in the official website of the Company (https://www.kingfa.com.cn/) and the website of Shanghai Stock Exchange (http://www.sse.com.cn/). This Report is provided for the readers in Chinese, English and Japanese. In case of any discrepancies among the three versions or conflicts resulting from languages, the Chinese version shall prevail.



Terms

Unless the context otherwise requires, the following words shall have the following meanings in this Report:

Company Law	means	Company Law of the People's Republic of China
CSRC	means	China Securities Regulatory Commission
Articles of Association	means	Articles of Association of Kingfa Sci. & Tech. Co., Ltd.
The Company/we	means	Kingfa Sci. & Tech. Co., Ltd.
Shanghai Kingfa	means	Shanghai Kingfa Sci.& Tech.Dvpt. Co., Ltd.
Jiangsu Kingfa	means	Jiangsu Kingfa Sci.&Tech. Advanced Materials Co., Ltd.
Tianjin Kingfa	means	Tianjin Kingfa Advanced Materials Co., Ltd.
Guangdong Kingfa	means	Guangdong Kingfa Sci.& Tech. Co., Ltd.
Wuhan Kingfa	means	Wuhan Kingfa Sci.& Tech. Co., Ltd.
Chengdu Kingfa	means	Chengdu Kingfa Sci.& Tech. Advanced Materials Co., Ltd.
Kingfa (USA)	means	KINGFA SCIENCE & TECHNOLOGY (USA), INC.
Kingfa (Europe)	means	KINGFA SCI.&TECH. (EUROPE) GMBH.
Kingfa (Malaysia)	means	KINGFA SCI&TECH (MALAYSIA) SDN. BHD.
Kingfa (India)	means	KINGFA SCIENCE & TECHNOLOGY (INDIA) LIMITED
Kingfa (Vietnam)	means	KINGFA SCIENCE & TECHNOLOGY (VIETNAM) CO., LTD.
Kingfa Biomaterials	means	
Zhuhai Vanteque Specialty Engineering Plastics	means	Zhuhai Vanteque Specialty Engineering Plastics Co., Ltd.
Kingfa Carbon Fiber/Carbon Fiber Company	means	Guangzhou Kingfa Carbon Fiber Materials Development Co., Ltd.
Ningbo Kingfa	means	Ningbo Kingfa Advanced Materials Co., Ltd.
Liaoning Kingfa	means	Liaoning Kingfa Sci.& Tech. Co., Ltd.
National Industrial Innovation Center	means	National Industrial Innovation Center of Advanced Polymer Materials
Qingyuan Meijin	means	Qingyuan Meijin Advanced Material Sci.and Tech. Co., Ltd.
Kingfa Environmental	means	Kingfa Environmental Sci.&Tech. Co., Ltd.
Kingfa (Spain)	means	KINGFA ENVIRONMENTAL SCI.&TECH. SPAIN, S.L.
Liaoning Kingfa Biomaterials	means	Liaoning Kingfa Biomaterials Co., Ltd.
Jiangsu Kingfa Recycling	means	Jiangsu Kingfa Recycling Co., Ltd.
Guangdong Kingfa Composites	means	Guangdong Kingfa Composites Co., Ltd.
PP	means	Polypropylene
HDPE	means	High-density polyethylene
PC	means	Polycarbonate
ABS	means	Acrylonitrile butadiene styrene
PLA	means	Polylactic acid
LCP	means	Liquid crystal polymer
PA	means	Polyamide
MBS	means	Methyl methacrylate-butadiene-styrene
PPA	means	Polyphthalamide (high temperature nylon)
PEEK	means	Polyetheretherketone
PCR	means	Post consumer recycled
COC	means	Copolymers of cycloolefin
PBS	means	Polybutylene succinate
PPE	means	Polypheylene ether
PFAS	means	Per- and polyfluoroalkyl substances
VR/AR	means	Virtual reality/augmented reality
RMB	means	Chinese Yuan
Reporting period	means	2024

For and on behalf of the Company, I would like to extend the sincerest greetings to all of you in this new year. In 2024, global climate change and sustainable development will still be grave issues. As a worldwide leader in the field of new chemical materials, the Company will actively respond to challenges and continuously promote the industry's transformation to green, low-carbon, and circular economy.

In 2024, the Company will continue to deepen its strategic layout in recycled plastics, bio-based materials, green petrochemicals, and other fields. We will focus on the applications of new chemical materials, especially modified plastics, special engineering plastics, and composites in new energies, new infrastructure, 5G communications, artificial intelligence, and VR/AR. We will make technological innovations, optimize production capacity structure, accelerate R&D of new products, and provide cost-effective material solutions to satisfy diversified customer needs. Through in-depth cooperation with global leading customers, we will achieve more breakthroughs in mass production of lightweight materials, biodegradable plastics, and other fields to consolidate our market competitiveness.

Green Transformation and Promotion of a Low-carbon Future

The Company continuously deploys its business in the upper, middle and lower reaches of the industry chain, for which we have set an objective of achieving "one million tonnes in three fields". By 2030, the Company will produce 1 million tonnes of green plastics, recycle 1 million tonnes of waste plastics, and manufacture 1 million tonnes of recycled plastics. In 2024, the Company produced 274,100 tonnes of green plastics, recycled 268,500 tonnes of waste plastics, and manufactured 348,100 tonnes of recycled plastics. Through this series of measures, we will achieve pollution and carbon reduction in the upper, middle and lower reaches of the industry chain, and make contributions to the global green and low-carbon circular economy.

Global Expansion and Joint Value Creation

To Stakeholders

In terms of globalization arrangement, the Company will continue to speed up its overseas expansion, and achieve the operating revenue of RMB 8.792 billion abroad in 2024. The construction of Kingfa (Vietnam) as a new factory will further deepen our cooperation with our major overseas customers and strike a balance between localization and internationalization of our supply chain. Active overseas expansion has not only enhanced our global competitiveness but also created more local employment opportunities. We have employed 581 foreign employees and promoted the sustainable development of the regional economy.

In business operation, we always regard product quality as the lifeline of an enterprise. Through strict quality control system, we ensure provision of high-quality, reliable products for our customers. Besides, we continuously improve our customer service capabilities, quickly respond to customer needs, and provide the customers with all-round technical support and solutions, with our customer satisfaction up to 91.30%.

Talent management has always been an area that has been arousing our great concern, as we have deeply realized that employees are the most valuable assets of an enterprise. Therefore, we are committed to providing our employees with a favorable work environment and career development opportunities. We help our employees grow through a sound training system and promotion mechanism. Besides, we pay attention to the health and safety of our employees and strive to create a harmonious and safe office environment. In addition, we actively participate in public welfare activities in support of education, environmental protection, community development, and other fields, in an attempt to give back to the society.

Optimization of Management and Practising of the ESG Concept

We have realized a systematic adjustment of our corporate governance structure by transforming our team of founders into a team of professional managers. Besides, we continuously strengthen our internal ESG training, especially professional publicity and implementation among our senior executives, to ensure that the ESG concept is deeply rooted in their hearts and lay a solid foundation for our long-term development. In addition, we continuously optimize our digital factory, having achieved fruitful results in increasing our production efficiency and management capabilities through intelligent means. The efforts and achievements in intelligent manufacturing, transformation, and upgrading in the field of plastics have been fully recognized by the outside. For example, Shanghai Kingfa was titled a "Service-oriented Manufacturing Demonstration Enterprise" by the Ministry of Industry and Information Technology, and with the project named "Integrated Complete Set of Technologies for Upgrading and Recycling of Waste Plastics and Their Industrialized Applications", the Company won the "First Prize of Guangdong Provincial Science and Technology Award". This is not only helpful for us to maintain our leading position in the path to green transition, but also ensures our more efficient and transparent operation.

In the context of global climate change, the Company will continue to be driven by innovation and unswervingly take the path to sustainable development, with green as the background color. We believe that only by closely integrating our growth with social progress and environmental protection can we truly achieve long-term development.

Finally, I would like to express gratitude to all shareholders, partners, employees, and friends from all walks of life for their trust and support for us. We will continue to work hard, live up to your expectations, and strive for a green, low-carbon and sustainable future!

O Chairman of the Company O Chief Sustainability Officer

PF和冷 戴耀珊

About the Company

Company Overview

Founded in 1993 and headquartered in Guangzhou Science City, Kingfa Sci. & Tech. Co., Ltd. ("the Company, "we" or "us") "is a new material enterprise focusing on the R&D, production, sales, and services of new high-performance materials, and providing brand-new material solutions for creating safer, more comfortable, and more convenient life. After more than 30 years of development, the Company has set up more than 60 subsidiaries worldwide, R&D and production bases in South Asia, North America, Europe, and other regions. In 2004, the Company (Stock Code: 600143) was listed on the Main Board of Shanghai Stock Exchange.

Principal Business and Important Products

As one of the companies with the most complete product categories in the global new chemical material industry, the Company is also the world's largest manufacturer of modified plastics with the most complete range of products. Our products are mainly based on independent innovations and development, including nine major categories, namely modified plastics, environment-friendly high-performance recycled plastics, fully biodegradable plastics, special engineering plastics, carbon fiber and composite materials, light hydrocarbon and hydrogen energies, polypropylene resin, and healthcare polymers, These products are widely used in many industries such as automobiles, household appliances, electronics, electrical engineering, communication electronics, new infrastructure new energies, modern agriculture, modern logistics, rail transit, aerospace, high-end equipment, and healthcare. We have established long-term strategic partnerships with many well-known enterprises at home and abroad. With excellent product performance and environmental friendliness, our products are exported to more than 130 countries and regions worldwide. We provide quality services for more than 1,000 well-known enterprises.

Upstream



Sectors of green petrochemicals and new materials

- Guarantee supply chain security
- Enhance the competitiveness of midstream business

Green petrochemicals

Ningbo Kingfa: PP industry chain

Liaoning Kingfa: ABS industry chain

New materials

Synthesis capabilities of special engineering plastics, fully biodegradable materials and bio-based materials

Midstream



Sectors of modified plastics and new materials

- Provide overall material solutions
- Covering automobiles and household appliances. Several fields such as electronics, new energies and consumer electronics

Modified plastics

General and engineering plastics solutions

All-round green comprehensive solutions for recycled plastics

New materials

Solutions to special engineering plastics, fully biodegradable plastics and bio-based materials

Downstream



Sectors of new materials and healthcare

 Leverage the advantages of polymer technologies to extend downstream applications

New materials

Carbon fiber reinforced plastics

Healthcare

Super soft nitrile gloves, high-grade chemical protection gloves, protective masks and protective clothing, etc.

Diagram of Relationships between the Company's Four Major Sectors and Main Products





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Corporate Culture



Grow together with partners, share achievements, provide high-quality new materials for the society, and create a wonderful life.



Become the world's best new material enterprise highly respected within the industry.



Be value creator-oriented.



Be people-oriented, achieve high-quality development, and perform compliance management.

Development Strategy

In line with China's "Belt and Road" initiative and dual circulation in domestic and overseas markets, the Company adheres to the strategic thinking of" strengthening the middle, consolidating both ends, being innovation-oriented, and achieving leap-forward development", and strives to build a world-class R&D, marketing, manufacturing, and information platform to become a worldwide leader in new materials, providing support for national strategic materials.

Business development strategy

Focus of high-quality sustainable development

Core objectives of business development

Strengthening the middle

Expand and strengthen the polymer business; continuously expand its breadth and depth, and enhance its competitiveness.

Consolidating both ends

Give full play to the pillar role of the polymer business and anti-risk capability; guide the benign development in upstream and downstream business sectors, and facilitate collaboration in the whole industry chain.

Being innovation driven

Guide collaboration in new technologies, upselling and outward operation.

Leapfrog development

With the focus on the ambitious goal of achieving an output of RMB 100 billion, facilitate sustainable and high-quality development in four major business sectors, namely modified plastics, new materials, green petrochemicals, and healthcare.

Strategic development policy

Development History

1993

The Company was established.

1997

Guangzhou Tianhe Gaotang Production Base was established.

2003

The Postdoctoral Research Workstation was built.

2001

Shanghai Kingfa was established.

2004

The Company was listed on the Main Board of Shanghai Stock Exchange.

Mianyang Changxin New Material Development Co., Ltd. was established.

The Academician Workstation was established.

2008

Mianyang Dongfang Special Engineering Plastic Co., Ltd. was acquired.

2009

Zhuhai Wango Chemical Co., Ltd. was established.

Tianjin Kingfa Advanced Materials Co., Ltd. was established.

2010

Jiangsu Kingfa Sci.&Tech. Advanced Materials Co., Ltd. was established.

The Company's sales exceeded RMB 10 billion.

2013

Kingfa (India) was acquired.

Guangdong Kingfa Sci. & Tech. Co., Ltd. was established.

2015

Kingfa Sci. & Tech. (USA), Inc. was established.

Chengdu Kingfa Sci. & Tech. Advanced Materials Co., Ltd. was established.

KINGFA SCI. & TECH. (MALAYSIA) SDN BHD was established.

2019

Ningbo Haiyue New Material Co., Ltd. was acquired and renamed "Ningbo Kingfa New Material Co., Ltd.".

2020

Hainan Kingfa Sci & Tech Co., Ltd. was established.

In 2020, Kingfa Medical was established.

2021

Liaoning Bora New Materials Co., Ltd. was acquired.

Zhuhai Wango Chemical Co., Ltd. was renamed "Zhuhai Kingfa Biomaterial Co., Ltd."

2022

Liaoning Bora New Materials Co., Ltd. was renamed "Liaoning Kingfa Sci. & Tech. Co., Ltd."

KINGFA SCIENCE AND TECHNOLO-GY (JAPAN) CORPORATION LIMITED was formally established.

2023

Kingfa Science & Technology (Vietnam) Co., Ltd. was established.

2024

The Company's Board of Directors was re-elected. The chairman and management were elected.

2014

Wuhan Kingfa Sci. & Tech. Co., Ltd. was established.

Kingfa Global Innovation Training Development Center was established.

Important Honors











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Our Sustainability Management

Consistently adhering to the core values of being "value creator-oriented", the Company is committed to empowering a better life and natural ecology with high-quality products and services, and insists on creating sustainable value responsibly. The Company attaches great importance to ESG issues, incorporates ESG governance into strategic decision-making, and ensures the coordinated promotion of ESG goals and business growth by establishing a full-process management system covering strategic planning, execution monitoring, and performance appraisal.

ESG Management System

The Company has built an ESG architecture suitable for its own business attributes and management model, created an ESG architecture at four levels (i.e. the Board of Directors, Strategy and Sustainability Committee, ESG working group, and ESG-related functional departments), and appointed special ESG functional personnel to manage its ESG matters. In the ESG architecture, the division of labor, rights, and responsibilities are clear at all levels. The internal ESG work is managed top-down, to better integrate the ESG concept into the Company's strategic planning, and promote the Company's high-quality development.



Board of Directors

As the top team responsible for ESG work, assume full responsibilities for the Company's ESG strategies, management, and external disclosure.

Strategy and Sustainability Committee

Incorporate ESG work into strategic planning; study the Company's medium and long-term development strategic plans and make suggestions; carry out research on the Company's sustainable development, ESG, and other related matters; and make relevant suggestions and decisions.

ESG working group

It is composed of the Company's senior executives, heads and executives of ESG-related functional departments.

Handling daily affairs on the ESG, the ESG working group supervises and manages the ESG-related work of key functional departments, implements ESG strategies and specific measures, and reports to the Strategy and Sustainability Committee on a regular basis.

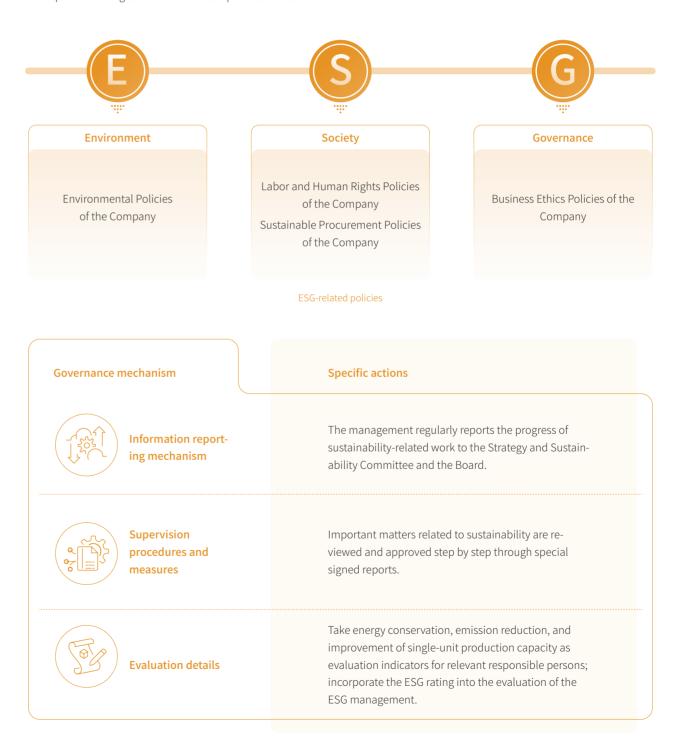
ESG-related functional departments

Include all functional departments and subsidiaries related to important ESG issues of the Company.

During the daily operation, actively perform specific ESG-related work within the scope of responsibilities, and promote the achievement of various key ESG performance indicators and goals under the guidance of the ESG working group.

SG Architecture

In order to implement the sustainability concept, the Company has formulated a set of comprehensive internal policies on the ESG work and disclosed some key policies on its official website to guide the management of ESG-related matters. The ESG body is responsible for monitoring the Company's compliance with the policies and procedures described below, and updating the policies to respond to changes in the ESG-related policies and standards.



ESG mechanism

Communications with the stakeholde

Extensive listening to the stakeholders' opinions is one of the important guarantees for the sustainable and healthy development of the Company. The Company actively listens to the stakeholders' suggestions and expectations on the Company's sustainable. development, and ensures effective communications with the key stakeholders through various communication channels.



Government and regulatory authorities



Shareholders and investors



Customers



Employees



Suppliers and partners



Communities and industries

Green products and designs

Climate Change Tackling

Biodiversity and ecological



Media

Responses to national strategies Compliance operation

Risk management

Business ethics

Stable return on investment

Transparent information disclosure

Compliance operation

Risk management Intellectual property protection

Scientific and technological innovation

Product quality and safety Customer services

Responsible business and marketing

Scientific and technological innovation Privacy protection

Environment and carbon management

Talent attraction and retention

Protection of employees' rights and interests

Employee development and training

Occupational health and safety

Sustainable supply chain Supplier empowerment

Transparent procurement development

protection Facilitation of the industry

Public welfare donations

Information disclosure and dissemination

Responsible business and marketing

Government surveys Compliance inspections

Regular meetings and exchanges

Participation in government cooperation, exchanges and seminars Regular and temporary announcements

Operation by the Board of Directors, the Board of Supervisors and the General Meetings of Shareholders

> Performance briefing Investor hotline Company research

Customer exchange and cooperation

Customer satisfaction surveys

Technical seminars

Customer audit

Daily communication with customers Confidentiality of customer information

Employee training

Working meetings

Employee symposiums and democratic communications

Employee engagement investigation

Employee activities

Supplier management and

audit

Supplier training and empow erment

Supplier communications

Supplier conferences

Environmental protection activi-

Industry conferences and exhibitions

Industry-academia collaboration

Public welfare and volunteer activities

Regular and temporary infor-

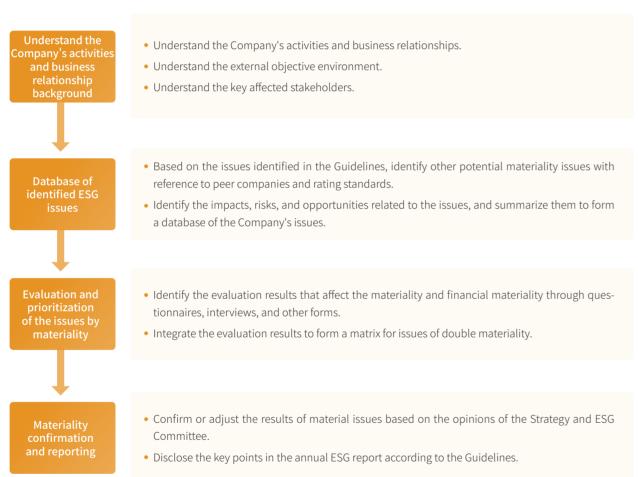
mation disclosure Communications and interviews

Official accounts platform

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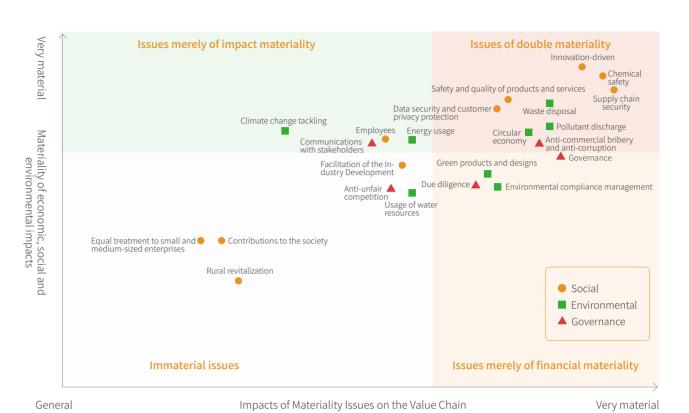
Analysis of Material Topics on ESG

Materiality issues are the focuses of the Company's sustainability management, identification and evaluation of ESG risks. To fully understand the key concerns of the stakeholders and better integrate the demands and expectations of the stakeholders into its own sustainability management practices, the Company identifies and analyzes the materiality issues, identifies the database of ESG issues based on the in-depth analysis of the Company's activities and business relationship background, extensively solicits opinions from various stakeholders through questionnaire surveys, and ranks the issues by materiality. In the evaluation, the Company prioritizes risks that might seriously affect its business, damage its reputation or arouse the greatest concern among the stakeholders. Such prioritization enables the Company to efficiently allocate resources and formulate mitigation strategies for the most significant risks to better manage ESG-related matters.



Materiality Analysis Procedure

During the reporting period, the Company extensively solicited opinions from the stakeholders through questionnaire surveys and comprehensively created a matrix for the current year's issues from the perspective of "financial materiality" and "impact materiality", identifying a total of 9 issues of double materiality, 4 issues of financial materiality only, and 4 issues of impact materiality only.



Impacts of Materiality Issues on the Value Chain

Issue type	Materiality issue	Supply chain	Production/ operation	Customers	Employees	Society
	Innovation-driven	✓	✓	✓	✓	✓
	Chemical safety	~	~		✓	~
Society	Supply chain security	✓	~	✓		
	Safety and quality of products and services	~	✓	✓		
	Data security and customer privacy protection	✓	~	✓	✓	
	Waste disposal		~			~
Environment	Pollutant discharge		~			✓
	Circular economy	~	~	✓	✓	~
Governance	Anti-commercial bribery and anti-corruption	~	~	✓	✓	~
	Green products and designs	✓	~	✓		~
Environment	Environmental compliance management		✓		✓	
C = 1/2 m = m = 2	Governance		✓			
Governance	Due diligence	~	✓	✓	✓	✓
Society	Employees				✓	
Environment	Energy usage		✓		✓	~
Environment	Climate Change Tackling		~	✓		✓
Governance	Communications with stake- holders	~	~	~	✓	~

Note: "✓" means the links of this value chain are impacted.

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Annex

Response to ESG Goals

In 2024, the Company joined the United Nations Global Compact (UNGC) and actively implemented the ten principles of the UNGC based on United Nations conventions, including human rights, labor standards, environment, and anti-corruption, to facilitate the achievement of the SDGs.

UN Sustainable Develop- ment Goals (SDGs)	Our goals	Our actions	Progress towards 2024 goals
3 GOOD HEALTH AND WELL-BRING	Customer health and safety: • From 2022 to 2030, we will continuously optimize the safety performance of our products, to receive no health or safety complaints from the customers.	The Company adopts advanced production technologies and a strict quality control system to ensure that all links of products from the procurement of raw materials to the delivery of finished products conform to safety standards. We select environmentally friendly and non-toxic raw materials to produce plastic products, reduce the use of harmful substances, and protect customer health.	Achieved
- ₩•	 Occupational health and safety: From 2022 to 2030, we will ensure annual zero work-related deaths and a coverage rate of 100% in the physical examination. From 2022 to 2030, we will ensure that the annual health and safety risk assessment covers 100% sites. 	The Company constantly improves its health and safety management system, betters its health and safety management, regularly organizes occupational health inspections and safety risk assessment, promptly detects and addresses occupational disease risks, and carries out health promotion activities.	Achieved
	Collective contracts: • From 2022 to 2030, we will ensure that the annual coverage rate of the collective contract is up to 100%.	The Company respects the employees' freedom of association and collective bargaining rights. We actively establish communication and cooperation mechanisms with our trade union, encourage and support our trade union to negotiate on an equal footing with the Company on matters such as working conditions, remuneration, benefits, working hours, rest, and vacation on behalf of the employees, and seek mutually acceptable solutions.	Achieved
8 DECENT WORK AND ECONOMIC GROWTH	Career: • Compared with 2022, the average skills training time per employee will increase by 2 hours by 2030.	The Company encourages and supports all employees to participate in training activities. Regardless of their positions, they have the opportunity to receive training and achieve career development. Besides, the employees are regularly organized to participate in external training activities such as industry conferences, seminars, and professional training organizations to broaden their learning channels.	Achieved
111	Coverage of social insurance: • From 2022 to 2030, we will ensure that the annual coverage of social insurance is 100% among the employees.	The Company provides comprehensive social insurance and housing provident fund for the employees, to firmly guarantee the health and future of the employees and their families.	Achieved
	Employee satisfaction: • Achieve employee satisfaction among more than 98% of the employees in 2030.	The Company conducts an employee satisfaction survey at least once a year, and extensively collects the employees' opinions and suggestions on the working conditions, remuneration, benefits, career development, etc. through questionnaires and symposiums.	In steady prog- ress
10 REDUCED INEQUALITIES	Anti-discrimination and anti-harassment: • From 2022 to 2030, ensure that no discrimination or harassment occurs every year, and the coverage rate of discrimination and harassment training reaches 100%.	The Company is always fair, impartial and transparent in all aspects of recruitment, promotion, salary, training, and career development. We continuously carry out publicity and education activities to prevent and stop harassment.	Achieved
	 Energy consumption: Compared with 2022, the comprehensive energy consumption per unit of output will be reduced by 25% by 2030. 	The Company regularly conducts energy efficiency evaluation, increases single-machine capacity by energy-saving renovation with advanced production technologies and processes, includes energy conservation objectives in related personnel's KPI and reduces its energy consumption.	In steady prog- ress
12 RESPONSIBLE CONSUMPTION AND PRODUCTION	Air pollution: • By 2030, the emissions of air pollutants (VOCs, PM, SO2, NOx) per unit of output in the production process will be reduced by more than 30% compared with 2022.	In the early stage of production equipment and process design, the Company gives priority to low-pollution production equipment and raw materials to reduce the generation of pollutants. In new projects, priority is given to the use of high-efficiency pollution control processes, and the pollutant control facilities of existing projects gradually undergo iterative upgrading to improve pollution control efficiency and reduce total pollutant emissions. Strengthen the operation and management of pollution control facilities to ensure efficient and stable operation, and emission up to standards.	Achieved
	Wastes: • Establish a complete waste classification and recycling system. The recycling rate of industrial waste will increase by 60% by 2030 compared with 2022.	The Company is committed to converting the wastes into resources and improving the resource utilization of the wastes through recycling and reuse.	In steady prog- ress

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Annex

UN Sustainable Develop- ment Goals (SDGs)	Our goals	Our actions	Progress towards 2024 goals
13 CLIMATE ACTION	 Greenhouse gas: Compared with 2022, the greenhouse gas emissions per unit of products will be reduced by at least 30% on a year-on-year basis. Compared with 2022, achieve a 30% reduction in carbon emissions per unit related to procurement activities by 2030. 	The Company identifies, inspects, and monitors greenhouse gas emissions during its operations, establishes a management and control system and continuously optimizes it. We gradually expand the scope of application of green energies, build green parks and factories, procure the interested parties to practice green and low-carbon production, living and office methods, establish a green procurement mechanism and a carbon emission management system in the supply chain, and promote the realization of net-zero emission goals in the supply chain.	In steady progress
	Anti-corruption and anti-bribery: • From 2022 to 2030, we will ensure that no corruption occurs every year.	The Company resolutely opposes any forms of corruption and bribery, encourages the employees to actively participate in the anti-corruption and anti-bribery work, establishes an internal whistleblowing mechanism, and provides necessary protection and support for whistleblowers.	Achieved
DEADE HISTID	 Business ethics training: From 2022 to 2030, we will achieve full coverage of business ethics training (on corruption and information security) among all our employees, to ensure that our annual training coverage will be up to 100%. By 2030, the average business ethics training hours per employee will increase by 2 compared with 2022. 	The Company continuously strengthens its business ethics education and training for the employees, to improve their understanding of business ethics and enhance their self-discipline skills.	Achieved
16 PEACE, JUSTIC AND STRONG INSTITUTIONS	Anti-fraud: • From 2022 to 2030, the Company will ensure no fraud, strengthen internal control, increase the employees' awareness of integrity and risks, and reduce fraud risks.	The Company will establish a sound internal control system, strengthen integrity education for the employees, enhance all the employees' vigilance and ability to identify frauds, and ensure that all business activities will be based on the cornerstones of truthfulness, accuracy, and compliance.	Achieved
	Evaluation of business ethics risks: • From 2022 to 2030, ensure that the business ethics risks are evaluated and internally audited at least once a year to comprehensive assess the risks that the Company might face in business ethics, and put forward corresponding improvement measures and suggestions.	The Company conducts a comprehensive examination regarding the business ethics at least once a year. The Audit Department evaluates and controls the business ethics risks. It is responsible for identifying risks of different departments and positions.	Achieved
	 Conflicts of interest: From 2022 to 2030, ensure that all employees can timely and accurately disclose their external relationships or activities that have potential conflicts of interest with the Company's business, with a disclosure rate of 100%. 	The Company enhances its employees' awareness of and alertness to the conflicts of interest through training and education, and ensures that the employees can consciously abide by the Company's policies on the conflicts of interest.	Achieved
	 Sustainable procurement training: From 2022 to 2030, ensure that the annual sustainable procurement training coverage of purchasing specialists reaches 100%. 	The Company regularly organizes internal training to communicate sustainable procurement requirements to procurement engineers to ensure effective implementation of policies.	Achieved
17 PARTNERSHIPS FOR THE GOALS	 Supplier management: From 2022 to 2030, ensure that the suppliers comply with labor laws and regulations, and annually, 100% suppliers are qualified in protecting the rights and interests of laborers. From 2022 to 2030, the Company ensures that 100% of key raw materials will be from the suppliers with environmental management system certification (ISO 14001). From 2022 to 2030, ensure that the supplier code of conduct will be 100% signed every year. Compared with 2022, the on-site audit coverage of core suppliers will increase to 90% by 2030. 	The Company has issued the Sustainable Procurement Policies to regulate the procurement standards and requirements for environmental protection, laborers' human rights, business ethics, etc., which shall be implemented by the Purchasing Department and supervised by the executive deputy general manager of the General Manager's Office. When selecting the suppliers, the Company regards compliance with labor laws and regulations, and protection of labor rights and interests as important access conditions, includes labor rights protection clauses in the agreements, and actively procures the suppliers to pass the system certifications related to environmental and labor rights.	In steady progress
	 Information security: From 2022 to 2030, we will ensure that no major information security incident will occur every year, guarantee the security of our business data and customer information, and prevent information leakage and abuse.¹ 	The Company regulates and manages the collection, storage and use of personal data, prohibits the employees from disclosing customer information and other personal data to unauthorized third parties, conducts regular information security risk assessment, discovers and repairs security vulnerabilities in time, drafts emergency plans for information security incidents, responds to and handles information security incidents in a timely manner.	Achieved

 $^{^1}$ A major information security incident was an information security incident that caused a loss of more than RMB 100,000

Kingfa Sci. & Tech. Co., Ltd. | Environmental, Social and Governance (ESG) Report 2024 Responsibility for Governance Introduction Environmental Responsibilities Social Responsibilities Annex

Sustainability Honors and Recognition









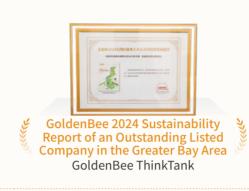
























Kingfa Sci. & Tech. Co., Ltd. | Environmental, Social and Governance (ESG) Report 2024 | Introduction | Environmental Responsibilities | Social Responsibilities | Responsibilities | Responsibilities | And Control of Cont

Topic

Digital Intelligence Empowerment Accelerating the Development of New Quality Productive Forces

Based on the concept of "empowering high-quality sustainable development through digital transformation", the Company transforms its development mode and optimizes its business composition through digital intelligence, continuously refreshes its growth momentum, deepens the collaboration among different business sectors, and accelerates the development of the new quality productive forces.

During the reporting period

the Company invested RMB

680 million in building information-based and digital factories

Compared with traditional factories, the efficiency per capita has increased by

50%

4 digital workshops

nops

nducts

and the defect rate of products has been reduced by

40%

and

1 unmanned warehouse have been completed and put into use

Our factory in Shanghai was evaluated as a

"service-oriented manufacturing" demonstration enterprise by the Ministry of Industry and Information Technology

Informatization Improvement

The Company's informatization aims to build a full range of operations management platforms with the focus on ERP, CRM, SRM, PPM, OA etc. by building a unified business support platform, and unify the core business processes and accounting standards of the branches and subsidiaries, thus promoting efficient internal supply chain collaboration, and realizing a global collaborative work system that integrates production, supply, and marketing.

Lateral collaboration with the supply chain system

Efficient collaboration with upstream and downstream customers and suppliers

○ Visual and controllable operation management systen

Complete and integrated linkage of logistics, capital flow, human resource flow, and information flow

Vertical integration into the enterprise management and control system

Business processes, accounting standards, and assessment system standards for achieving company coordination

Quick response and efficient decision-making system

Coordination of research, production, supply, and marketing costs

nformatization nlan

Informatization results

- Platform selection and implementation preparation were completed

 The coverage of third-party malls for procurement
 and the categories of materials on shelves were con
- Zhuhai Base and Kingfa (Europe) launched the integrated production, supply, marketing and financial projects to refine the granularity of management.
- The IT infrastructure construction of Kingfa (Vietnam) and Liaoning Kingfa Biomaterials was completed, realizing interconnection with the Group.
- Preparations are being made for launching the human resource informatization upgrade project, to get ready for the comprehensive improvement of organizational control capabilities, employer attractiveness, and human service capabilities.
- Our five major bases in China have launched the electronic accounting file system online for operation, realizing online filing of all attachments and one-stop inquiry, and reducing our internal control risks.

- The coverage of third-party malls for procurement and the categories of materials on shelves were continuously expanded, which further improved the procurement efficiency and transparent procurement.
- Through digital transformation of R&D, ideological unification and approval of the planning report were completed, thus laying a solid foundation for the introduction of digital technologies to comprehensively improve R&D efficiency and product competitiveness.
- In the field of data application, a series of kanban on group revenue, PP price, procurement analysis and inventory analysis have been added to help the senior executives understand business information in real time and speed up team response.

Human Resource Informatization Upgrade Project



In the second half of 2024, the Company launched a human resource informatization upgrade project, with a view to improving the organizational control capabilities, employer attractiveness, human service capabilities, and technical support capabilities. Complete reorganization has made the organizational architecture more flexible, positions more standard, preparation control more precise; optimized the employee employment and classification, facilitated panoramic management of the employees' electronic files, and increased "electronic signing" efficiency; standardized salary accounts, achieved unified hierarchical control and budget control over labor costs; made services available to all employees and application scenarios more diversified, which greatly improved the employees' self-service experience, let them feel the Company's cultural care and made the services more expedient.



ive Core Tasks

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Promotion of the Electronic Accounting File System

The electronic accounting file project was quickly promoted on a large-scale basis after its pilot promotion in South China in early 2024, realizing the construction of a lifecycle system from collection and sorting to archiving of 13 types of documents in the five major production bases of modified plastics. Through end-to-end process reconstruction, 100% electronic archiving of documents in seven core business chains, including procure-to-pay and sell-to-collect, was realized, and the relationships between business documents and attachments were established to realize information linkage. The synchronous embedding of intelligent approval control nodes promoted an increase in the efficiency of expense reimbursement by more than 38.9%, and annually cut the costs of paper consumables by RMB 336 thousand on average.



Malls from Modification to Group-wide

According to its strategic orientation for development, the Company promoted the transformation and upgrade of the purchasing malls from the sector of modified products to the whole group. The project focused on the upgrade of group control and ecological empowerment of the platform. In this project, the mall platforms, non-raw material procurement organization model and business control plan were horizontally promoted to the four major business sectors. The category strategy was vertically and synchronously expanded. A general standard product database was created for new modified materials, and a cross-sector collaborative procurement mechanism was constructed. The "management" was promoted by "use". The use of non-raw material malls as carriers promoted the in-depth alignment of petrochemical and new materials with the Group's management system. 5 categories of modified materials, 15 categories of petrochemical and new materials, and 2 categories of medical materials were launched in the online malls. A Group-level procurement data asset pool was built, providing full business perspective and dynamic analysis support for strategic procurement decisions.

Digital Transformation

Anchoring the intelligent manufacturing strategy under the national "14th Five-Year Plan", the Company set 2023 as the first year of its digital transformation, established its digital transformation strategies and goals, planned the digital transformation path, and adopted a two-step method at the physical manufacturing side. Firstly, Digitalization 3.0 was designed and implemented for the incremental domestic and foreign new factories, and large-scale technological transformation projects. Secondly, the existing domestic bases were transformed and upgraded, with their Automation 2.0 upgraded to Digitalization 3.0.

During the reporting period, the Company implemented the demonstration project of a lean digital factory in the modification sector, for the purpose of realizing synchronous and coordinated development of key elements such as men, machines, and materials through the in-depth implementation and active exploration of the project, accumulating experience, verifying the effectiveness, promoting the digital transformation model, gradually expanding this successful model to different production bases and factories, and completely increasing the production and operation efficiency. We plan to realize Digitalization 3.0 for our factories of modified products by 2030 to 2035, to lay a solid foundation for intelligence. The complete upgrade of intelligent manufacturing was accelerated.







Goals of the lean digital factories of modified products

Unified form

In combination with the complete SAP Industry 4.0, a unified form is created for the Company's digital factories to achieve information system consistency, unified management and operation, and collaborative production processes.

Production operations

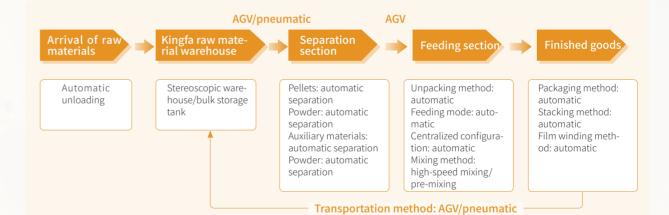
Establish a multi-level planning collaboration and formula control system from ERP to MES/electronic process tables to highly integrate production resources in the entire factory, and achieve efficient resource collaboration, real-time accurate data, and effective control over formula confidentiality.

Workshop management

Standardize and visualize the production processes; facilitate reliable and efficient anomaly handling; and increase the overall production efficiency, for the purpose of efficient on-site collaboration, reliable quality traceability, automatic color match recommendations, and strict margin control.

Equipment interconnection

Through equipment interconnection, parameter monitoring and formula distribution are carried out to improve the quality predictability and stability, and realize information perception, data predictability, and quality consistency.



Feature: modular design according to product requirements

Target: applicable to 90% of the Group's product categories









New flexible material mixing solution: fully automatic offline batching system + AGV + fully automatic unpacking device + robot

Construction Status of Lean Digital Factories in the Modification Sec

During the reporting period, the Company continuously developed and introduced intelligent manufacturing equipment such as intelligent stereoscopic warehouse system, automatic unpacking and feeding system, automatic detection system for raw materials and finished products, automatic packaging system, automatic transfer system and automatic spline injection molding system, in order to make factories highly automated and unmanned, improve the intelligence of manufacturing processes, and achieve remarkable results in improving production efficiency and management ability as follows:

Adopt the intelligent stereoscopic warehouse management system and MES to realize unmanned outbound and inbound delivery management in the whole process of material production from demand to automatic delivery by AGV.



Realize multi-directional monitoring of production data, visual refined margin control, and the average margin per order can be reduced by 50%.



Increase production efficiency, single-unit production capacity of the workshop by 20%, and annual output per capita by 50%. Reduce the power consumption per unit of exteriors by 3 kWh/t.



Realize the standardization and visualization of the production process. Quality inspection can be traced with one click, process inspection personnel can be reduced by 50%, and the entire quality process can be fully traceable.



Develop a complete range of production business procedures, standardize the operation of each node, and reduce the employees' misoperation rate by 80%.



Collect product-related data in the entire manufacturing process; provide data support and direction for lean improvement, scale expansion, and long-term decision-making of enterprises, as well as basic data for companies to establish industry standards.

Inspection Automation for Improving Inspection Efficiency and Quality

The Company has introduced a variety of automation equipment to different links of the production process, which significantly improves test efficiency and quality control capabilities, reduces labor costs, and realizes automation and intelligence of production tests.

Automatic heterochromatic point detection equipment for raw materials

The detection rate is high, and the detection efficiency increases by 50%, which can meet the detection needs for 1 million tonnes of materials and annually reduce the employment of 1.5 labor workers.



The self-developed particle density tester does not Automatic par- require sample preparation, characterized by low ticle density cost, small sample size for tests, low energy contesting equip- sumption, easy operation, and increased detection efficiency by 50%. It has been promoted by the Company.



They are used for online automatic sampling and Online autotesting, covering heterochromatic points, density, matic detection fluidity, and color differences. The monitoring fre**equipment** quency increases by 97% and the detection cycle is shortened by 80%.



terface of ondetection

Monitoring in- The detection data can be monitored online by SPC in real time. The anomaly data can be alarmed instantly and automatically pushed so that the sta**equipment** bility of the product processes is guaranteed.



Automatic injection molding equipment The whole process of machine washing, mold change, injection molding, water shearing and packaging is automatically integrated, controlled, and traceable.



Automatic particle color difference tester

12 samples are loaded at one time, and the equipment repeats the tests as set, automatically homogenizes and realizes unattended testing.



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Improved Automation of High-temperature Nylon Equipment for Reducing Operational Safety Risks



From April to October 2024, in order to further improve the intrinsic safety of production equipment and deepen the Company's digital transformation concept, Zhuhai Vanteque Specialty Engineering Plastics invested more than RMB 4 million in carrying out an automation improvement project for high-temperature nylon equipment. Zhuhai Vanteque Specialty Engineering Plastics built a special project team to complete the automation improvement research, scheme design, installation, debugging, and commissioning of high-temperature nylon equipment, reducing the frequency of production operations from about 147 times/batch to 4 times/batch. This automation improvement project effectively reduced the safety risks caused by high-frequency operations and reduced the risk of personnel's on-site exposure.



Additional Control Valves of the Project



Digital Transformation Training for Enhancing Project Management Capabilities

To accelerate the digital transformation of R&D, the Company vigorously promotes the deep integration of the Group's informatization work with its business and organizational changes, achieves efficient collaboration and linkage with the help of project operations, and continuously refines the programs titled Project Management and Informatization Methodology. In these programs, teaching and training activities are carried out for many business segments of the Group, with a total of 9 training sessions, covering 400 trainees from the Jincai Program, backbones of the Technical Center, backbones of the HR Department, and other groups, laying a solid foundation for the cultivation of talents for the Group's informatization. In April 2024, the Company held a training session focusing on project management, with a total of 90 online and offline participants. As a key link for accelerating the digital transformation of R&D, project management is of great significance for improving team efficiency and innovation capabilities. This training program covered the core pain points of project management, practical skills, and applications in digital transformation. It supported the professional growth of the employees through the lecturers' lectures, trainees' questions, group discussions, result presentations, interactive PK, and other links, to jointly promote the Company's innovation and development on the road of digital transformation.



Digital Project Management Transformation Training

Environmental Responsibilities

As the world's leading enterprise of new chemical materials, the Company has always regarded environmental protection as the cornerstone of its survival and development, leading the industry forward with "green, low-carbon, and sustainable" development concept. Through continuous technological innovation and industrial upgrading, we are committed to minimizing the impacts on the environment and protecting the blue planet while ensuring product quality and performance in combination with scientific resource management and recycling.

Highlighted results



Invested more than RMB

100 million in environmental protection

recycled

268,500 t waste plastics

and produced

348,100 t recycled plastics

The power of

23.79 million kWh was generated by PV

274,100t green plastics

The total greenhouse emissions of

million tonnes of carbon dioxide

13.9763

1 + Scope 2) declined by

domestic production bases (Scope 1 + Scope 2 + Scope 3) were up to

The water of

126,708 m³ was recycled/re-utilized The waste recycling and utilization rate was up to

42%

in 2022

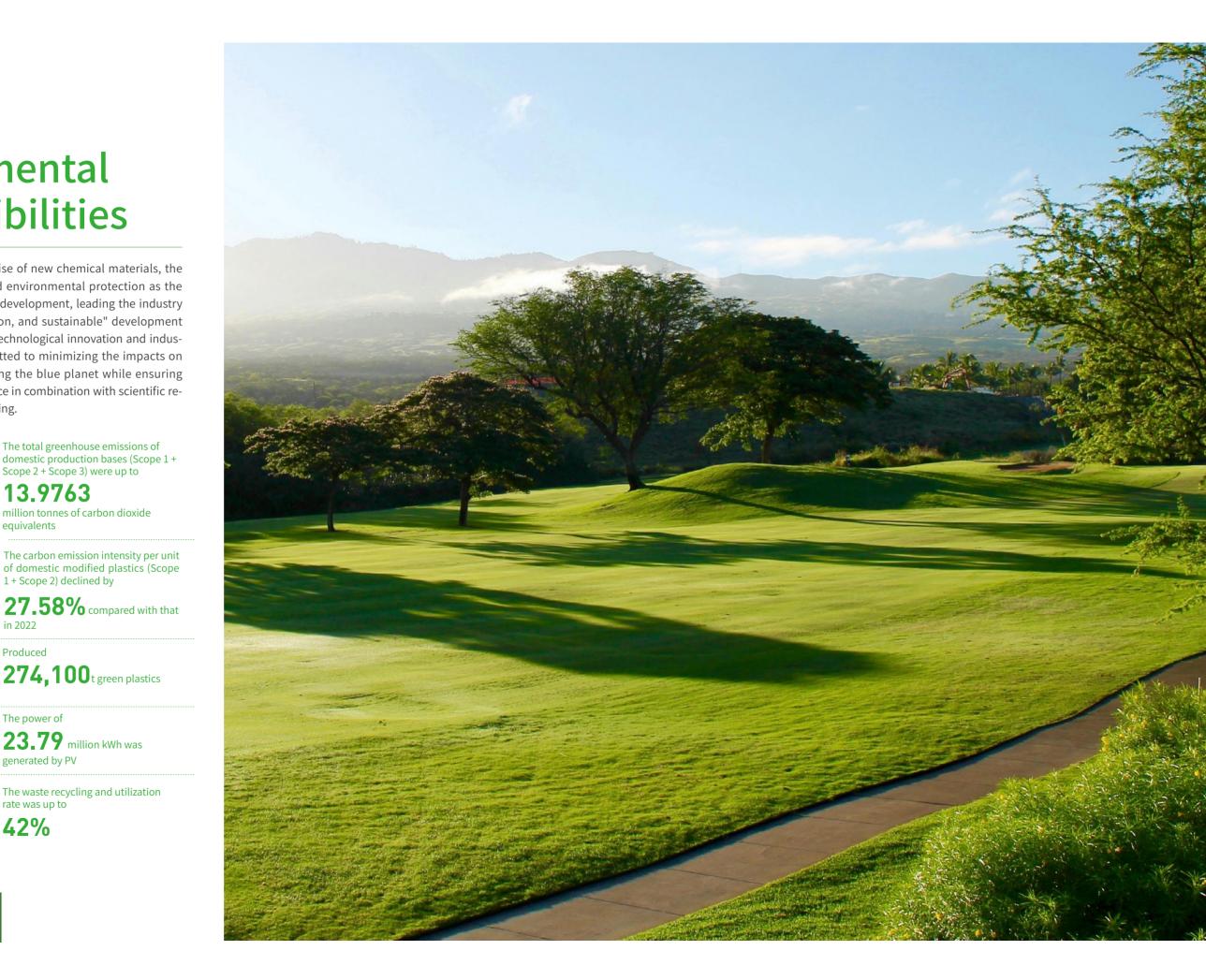
Produced

SDGs benchmarking









Kingfa Sci. & Tech. Co., Ltd. | Environmental, Social and Governance (ESG) Report 2024 | Introduction | Environmental Responsibilities | Social Responsibilities | Social Responsibilities | Annex

Climate Change Tackling

In response to the national goal of "2030 Carbon Peaking and 2060 Carbon Neutrality", the Company officially launched the "green, low-carbon, and circular" actions in 2021. The Company is committed to developing more environmentally friendly and energy-saving production processes and technologies, continuously reducing carbon emissions, improving energy utilization efficiency, promoting clean energies, optimizing energy structure, and increasing the green level of products, in order to achieve the goal of carbon neutrality and contribute to the global response to climate change.

Governance

The Company actively establishes a climate change management system, joins hands with the stakeholders to establish a "carbon" management system, verifies corporate carbon footprints according to relevant standards, continuously reduces emissions, and regularly discloses the progress of carbon neutrality. In the Environmental Management Policies, the Company specifies that the Strategy and Sustainability Committee of the Board of Directors is a department that reviews the greenhouse gas governance to coordinate and manage the Company's "carbon peaking and carbon neutrality" work. The General Manager's Office, offices, branches, and subsidiaries perform their respective duties to ensure the effective implementation of relevant practices and objectives.

Strategies

The Company has established a dual-carbon strategy with Kingfa characteristics, planned to reduce plastic pollution caused by its business operations while reducing carbon emissions, and helped the industry chain reduce its overall emissions by 2060. For this purpose, we have drafted a detailed dual-carbon action plan and low-carbon product strategy, and accelerated our R&D of more low-carbon and environment-friendly products.

Identify, inspect, monitor, and manage emissions; establish a control system and continuously optimize it; and gradually expand the application scope of green energies. Select key products and check the carbon footprint of products according to relevant standards; continuously improve and refine emission reduction work; and regularly make them public. Create a full value chain to provide low-carbon solutions, accelerate the overall emission reduction of the industry, and cooperate with the entire industry chain to verify the carbon footprint of the product lifecycle and continuously reduce emissions.

Action Strategies of the Company for "Carbon Peaking and Carbon Neutrality"

Build green parks and green factories; promote relevant parties to practice green production, living and office methods.

Construct a green plastic recycling system; promote and continuously improve it. Establish a green procurement mechanism and a carbon emission management system for the supply chain to promote the realization of the emission targets of the supply chain. Construct R&D, design, production, supply, and service systems for green low-carbon reproduction, continuously improve efficiency, and achieve the carbon emission reduction target per unit product.

Data on carbon emissions

- Accuracy, authority, and recognition of carbon emission data based on life cycle assessment (LCA)
- Provisioning of data on carbon emissions for the whole series of plans
- Carbon emission data computing system with the capability for constant improvement

Low-carbon material solutions

- Bio-based solutions: bio-resins or bio-based flame retardants, bio-based additives
- Factory certification
- Third-party authoritative material certification
- Environmental substance certification and declaration of conformity for the whole batch

Quality control

- Complete production strengths and process control of the factory
- Quality stability of PCRs, GRS certification, TC certification, etc.
- A complete range of control procedures and systems for production capacity and process stability
- Properties and quality stability of finished products; strict control monitoring system

Future planning

- Gain insight into the future low-carbon development trend and make advance arrangements for material solutions, certification requirements, etc.
- Cooperate with the customers for joint development, and truly help the customers achieve the goal of carbon reduction

Low-carbon Product Strategies

Impact, Risk and Opportunity Management

Based on the in-depth analysis of operating activities and business relationship backgrounds, the Company proactively identifies and manages possible impacts, risks and opportunities arising from the climate change. In the future, the Company plans to further carry out more in-depth identification of climate impacts, risks and opportunities to adapt to the potential impacts caused by the climate change, and formulate corresponding countermeasures for different types of potential risks, in an attempt to achieve comprehensive identification, scientific assessment, effective prevention and orderly control to ensure its sustainable operations.

Potential Impacts of Climate Change on the Company

Regulatory and policy pressure

The fulfillment of global carbon neutrality goals is accelerated. The policies such as carbon tariffs and carbon allowances are tightened. The enterprises are facing stricter carbon emission constraints and increasing compliance costs.

Market demand transformation

Customer demand for low-carbon products has surged, and the competitiveness of traditional high-carbon products has declined. As a result, the enterprises have no choice but to upgrade their technologies and adjust their product mix.

Fluctuations in operating costs

Extreme weather events (e.g., flooding and high temperature) might cause damage to production facilities and supply chain disruptions, and increase operation and maintenance costs.

Correlation with brand reputation

The public pays more attention to corporate climate actions. Environmental performance directly affects brand image and capital market evaluation.

Kingfa Sci. & Tech. Co., Ltd. | Environmental, Social and Governance (ESG) Report 2024 | Environmental, Social Responsibilities | Social Responsibilities | Responsibilities | Responsibilities | Social Responsibilities | Responsibilities | Social Responsibilities | Responsibiliti

Identification and Management of Climate Change Risks

Risk type	Description	Response measure
Transition risk	Policy risks: rising carbon prices, industry access restrictions.	Establish a carbon management system; accelerate the R&D of low-carbon technologies and deploy zero-carbon processes in advance.
Transition risk	Technical risks: The iteration of clean technologies has lagged behind.	Establish special R&D programs, and develop low-carbon materials (e.g. bio-based materials and recycled plastics) in place of existing materials.
Physical risk	Acute risks: The impacts of extreme weather such as typhoon and rainstorm on factory production and logistics.	Improve the disaster warning system, optimize the layout of production and supply chain, and improve emergency management.
Thysicatrisk	Chronic risks: Long-term rising temperature leads to the escalation of energy costs.	Promote the application of renewable energies (e.g. photovoltaic and hydrogen energies) to improve energy efficiency.
Market risk	Shift in customer demand: The green procurement preference in downstream industries has increased.	Launch internationally certified carbon-related products; provide the customers with low-carbon technical solutions.

Explosive growth in the demand for low-carbon materials (including degradable plastics and lightweight composites). Circular economy Commercialization potential of resource recycling technologies. Carbon asset value development Revenue opportunities brought by the expansion of the carbon trading market. Collaborative carbon reduction in the industrial chain Become a key enabler in the low-carbon transformation of the supply chain.

Identification and Management of Opportunities from the Climate Change

Indicators and Targets



Strategic "Carbon" Target of the Company

According to the greenhouse gas emission verification results of an independent third-party organization, our 2024 greenhouse gas inventory included 17 sites in the headquarters and the sectors of modified plastics, green petrochemicals, new materials, and healthcare in China. During the reporting period, the total greenhouse gas emissions of each site (Scope 1 + Scope 2 + Scope 3) were up to 13,976,319.80 tonnes of CO_2 equivalents. The carbon emission intensity per unit of modified plastics (Scope 1 + Scope 2) was 0.1338 tonnes of CO_2 equivalents, with a decrease of 27.58% compared with 2022.

Index	Unit	2024
Scope 1 greenhouse gas emissions	Tonnes of carbon dioxide equivalent	794,353.21
Scope 2 greenhouse gas emissions	Tonnes of carbon dioxide equivalent	2,083,880.23
Scope 3 greenhouse gas emissions	Tonnes of carbon dioxide equivalent	11,098,086.37
Total greenhouse gas emissions	Tonnes of carbon dioxide equivalent	13,976,319.80

Notes: (1) Scope 1: Direct greenhouse gas emissions, including consumption of fixed equipment necessary for production, fuel consumption of means of transport, production processes of raw and auxiliary materials, refrigeration equipment, dissipation of the factories' septic tanks, and other activities within the business scope.

(2) Scope 2: Indirect greenhouse gas emissions from incoming energies, specifically electricity and steam provided outside the organizational boundaries.

(3) Scope 3: Other indirect greenhouse gas emissions, specifically including Type 1 purchased goods and services, Type 3 fuel and energy related activities (parts not included in Scope 1 and Scope 2), Type 4 upstream transportation and distribution, Type 5 wastes generated in operations, Type 6 business travel, and Type 7 employee commuting.

(4) The total number of statistical sites for the carbon emission intensity per unit of modified plastics was the same as that in 2023 and 2022. In the actual layout, the two sites were merged, and one site was added due to business adjustments, including 11 sites of the headquarters and modified plastics (including recycled plastics). The emission data has been verified by independent third-party agencies.

Participation in the Work Meeting for Drafting the National Standard Titled Calculation of Carbon Emissions from Physical Recycling of Recycled Plastics



In February 2024, the Company and the National Industrial Innovation Center jointly undertook the team building for drafting the national standard titled Calculation of Carbon Emissions from Physical Recycling of Recycled Plastics and the first work meeting for standard revision. As a core promoter, the Company relied on its technological accumulation and industrial synergy advantages in the field of recycled plastics to work with participating experts to transform enterprise-level carbon management experience into national standards. This not only provided a unified, scientific and feasible carbon accounting system for the industry, but also procured the entire plastics industry chain to achieve the carbon peak and neutrality goals as soon as possible.



Joint Photo of the Work Meeting for Drafting the National Standard

Kingfa Sci. & Tech. Co., Ltd. | Environmental, Social and Governance (ESG) Report 2024 | Environmental, Social and Governance (ESG) Report 2024 | Annex



Carbon Footprint Verification of Kingfa Carbon Fiber Thermoplastic Honeycomb Panels

Compared with metal materials, thermoplastic composite materials showed the advantages of low-carbon processing. During the reporting period, the carbon fiber company performed a product carbon footprint calculation of thermoplastic composites. With the lifecycle "from cradle to gate", the verification covered prepreg extruded unidirectional tapes, composite pressing, raw material transportation, raw material input, energy input, waste discharge, and other links. The carbon footprint from each process of the thermoplastic honeycomb panels was analyzed.

Prepreg extr	uded unidirectional tap	oes	1.02
Compo	site pressed laminate		0.81
Extrude	d PP honeycomb core		1.21
Composite pressed	d PP honeycomb sandw	ich panel	2.18

Carbon Footprint Calculation Result

3.75

71.92

Clean Technology Opportunity

In the context of the new era led by the "carbon peaking and carbon neutrality" objectives, clean and low-carbon technologies and materials have become important driving forces for promoting the green transformation of the economy and society. The Company has elevated the R&D of clean technologies and green and low-carbon product manufacturing to a strategic level as important pillars for achieving sustainable development. Through continuous innovations, the Company is committed to providing the downstream customers with green, environmentally friendly, low-carbon, and efficient high-performance material solutions, empowering the green upgrading of the industrial chain, actively fulfilling environmental responsibilities while creating economic value, and contributing to the goal of carbon neutrality.

Product application scenarios	Production lines/products	Key cases
		100% Recycled HDPE Bottles: Wholly recycled high-density polyethylene (HDPE) bottles are used in the packaging of daily chemical products. Compared with the use of brand-new materials, this recycling approach reduces carbon emissions by 60%.
	Decycled	Recycled polypropylene from disposable fast food boxes: Used in fields with high environmental requirements such as toys, food, and cosmetics, they have passed the challenging tests of the US FDA and obtained the no objec-
All aspects of life and	Recycled materials	tion letter of food contact recycled PP (C-G grade).
production		Recycled materials: Processed and recycled from waste washing machines, air conditioners, refrigerators, and other household appliances, as well as products with low black speck content, low VOCs, desirable processing performance, and stable performance, they can be used in household appliances, furnishings, automobiles, and other fields to provide the customers with low-carbon solutions.
New energy vehicles	Steel plastic composite boards	Compared with the steel bottom guard plates, they are featured by high strength, impact resistance, scratch resistance, and low permeation, which greatly improve the protection capability and useful life of the bottom guard plates.

Product application scenarios	Production lines/products	Key cases
New energy vehicles	Sealed covers	With advantages such as desirable mechanical properties, low water absorption, flame-retardant property, air-tightness, high molding efficiency, insulation, withstand voltage, environment-friendliness, and recyclability, they may be molded into specific shapes.
	Honeycomb panels	Being light, moisture-proof, mold-proof, and highly rigid with mild odor and low VOCs, the honeycomb panels are moldable, and preferred alternatives to paper honeycomb panels.
Photovoltaic	Organic boards	Thermoplastic composite laminates: Which are light, recyclable, and flexible with high strength and low thermal conductivity, lay a foundation for lightweight applications in the photovoltaic industry.
	Honeycomb panels	Sandwich boards: Show advantages such as lightweight, high rigidity, high impact resistance, resistance to high-temperature compression, corrosion resistance and recyclability.
	Product lines of PPE	Polyphenylene ether (PPE) materials: With high-temperature resistance, desirable dimensional stability, and excellent low-temperature toughness, they are mainly used in photovoltaic connectors and junction boxes. With the shipment of more than 2,500t in 2024, the products can be applied in related components with a power of more than 50GW (50t PPE is sufficient for producing 1GW power generation modules (power: 650W), and help the customers reduce their carbon dioxide emissions by more than 79 million tonnes over a year.
	Product lines of PC	PC: With excellent characteristics such as attractive appearance, high heat resistance, sound toughness, high weather resistance, and halogen-free environmental protection, it is mainly used in photovoltaic inverters and energy storage battery casings. With the shipment of more than 100t in 2024, they can be applied in related components with a power of more than 2GW (50t PC is sufficient for producing 1GW power generation modules (power: 650W), and help the customers annually reduce their carbon dioxide emissions by more than 3.16 million tonnes over a year.
Energy storage	Product lines of styrene	Flame-retardant ABS: With advantages such as excellent low-temperature resistance, strong corrosion resistance, long-term weather resistance, excellent welding performance, and electrical breakdown resistance, they are used in lead-carbon energy storage battery casings.
New Energy	Propene and high purity hydrogen	Blue hydrogen: It has attracted much attention for its advantages of reducing greenhouse gas emissions and improving environmental balance. Ningbo Kingfa has realized integrated and stable production capacity of propylene and high-purity hydrogen through propane dehydrogenation equipment, provided reliable hydrogen sources for end customers, and promoted the wide application of blue hydrogen in different fields. In 2024, Ningbo Kingfa produced 14,063t hydrogen-rich gases and purified 1,799t high-purity hydrogen.

During the reporting period, the Company continuously strengthened the R&D of green technologies in different sectors. Relying on the respective advantages and development characteristics of these sectors, we identified and seized the opportunities in clean technologies, adopted advanced production technologies and processes, constantly increased and scientifically deployed funds, resourced and manpower investments, promoted the combination of the green technologies with products, used them in mass production, increased the proportion of operating revenues related to the clean technologies, and empowered the green and low-carbon transformation of the society.

Kingfa Sci. & Tech. Co., Ltd. Environmental, Social and Governance (ESG) Report 2024 Introduction **Environmental Responsibilities** Social Responsibilities Responsibility for Governance Annex

R&D Outcomes in the Clean Technologies of Different Sectors

Modified plastics



The Company focuses on replacing steel with plastics, develops high-performance, environmentally friendly lightweight products, and promotes the low-carbon transformation of the automobile industry.

Develop materials with long takt time, shorten their production cycle, improve the processing efficiency of parts, reduce the energy consumption per unit of products for the downstream customers, and further expand the fields of application for the products.

Use green environmentally friendly spray-free materials and antibacterial materials with longer service life.

Replace steel with plastics: Use plastic materials in place of traditional metal materials, which are used for designing all-plastic tailgates, inner tailgate panels, seat brackets, etc. of automobiles, and greatly reduce the carbon emissions in the production process, procuring the automobile industry to be lightweight and environmentally friendly.

New material segment



Special engineering plastics

The Company has obtained the ISCC PIUS. The critical input raw materials include Diamine (Diaminodecane), Polyamide (PA), Glass (Glass Fiber), etc., where:

- O In connector applications, using Vicnyl ® PA10T biobased materials in place of non-bio-based materials such as PA66/6T can reduce carbon dioxide emissions by 800t over a year.
- O In low-voltage electrical applications, Vicnyl ® PA10T bio-based materials are used in place of irradiated crosslinked PA66, which helps the customers save irradiation cross-linking processes and reduce the production cycle by 10%. They can help the customers reduce their carbon emissions by 2,400t per year.
- O Vicnyl® PA10T bio-based materials are used to replace solids with plastics. Since they demonstrate the highest RTI (155 ° C) among high-temperature resistant polyamides and desirable recyclability, they can annually reduce carbon emissions by 800t on the premise of ensuring long-term use by the customers over a year.
- o In the application of electronic components, the foreign high-temperature resistant polyamide was successfully upgraded to Vicnyl® PA10T bio-based high-temperature resistant polyamide. Besides, the wall thickness was reduced from 1.0 mm to 0.5 mm, achieving an overall 60% reduction in carbon emissions by 600t over a year.
- In the application of key components of robots and robot dogs, the ultra-high temperature-resistant and wear-resistant PPA and PEEK developed by Zhuhai Vanteque Specialty Engineering Plastics have solved the problems on long-term usability of key components of key robots and robot dogs, and have been widely used in the industry.

Biobased degradable plastics

The Company actively implements the ESG concept, promotes innovations in the bio-based materials, reduces the carbon emissions from the source, facilitates the green transformation and upgrading of the petrochemical and material industries, and reconstructs a sustainable industrial system. Through the biological fermentation process of bio-based succinic acid, the Company realizes the efficient utilization of biomass raw materials, which can reduce the dependence on fossil resources and provide low-carbon solutions for the downstream customers.

Carbon fiber materials

The Company is committed to promoting the low-carbon transformation and sustainable development of the industrial chain through material innovation and systematic solutions. We integrate our internal and external resources based on the customer requirements. We have constructed a full lifecycle management system that covers product R&D, application evaluation, carbon footprint measurement, and emission reduction path planning to help customers coordinate their environmental and economic benefits.

- O Green travel solution: In response to the core requirements for automobile lightweight and battery safety, we have innovatively developed a series of products such as steel-plastic composite bottom guards and continuous fiber reinforced thermoplastic flame-retardant composite box covers. This solution reduces the weight by 30% compared with traditional metal parts, and significantly improves the energy efficiency. The supporting carbon emission accounting model can accurately quantify the carbon reduction benefits throughout the product lifecycle and promote the low-carbon transformation of the new energy automobile industry.
- O Innovative applications of low-altitude economy: Focus on breakthroughs in aircraft lightweight technologies, and develop key components such as high-strength blades, arms, and fuselages. Through structural optimization, the weight of the entire UAV is reduced by 25%-40%, and the endurance mileage is increased by over 30%. The carbon footprint of the whole product lifecycle is reduced by 42% compared with the aluminum alloy solution, promoting the transformation of low-altitude economy to a resource-saving development model.
- O Clean energy layout: Lightweight photovoltaic backsheet innovatively developed with recyclable thermoplastic composites are used. The products are 50% lighter than traditional backsheets, providing breakthrough support for the integrated application of flexible components and BIPVs. Extending the service life of modules by 15% through material innovations is expected to approximately reduce carbon emissions by 120t per lifecycle of the MW photovoltaic system.
- Cold chain logistics circulation system: Cold chain lining boards continuously maintain their leading position in the industry. Through structural innovations, the weight of transportation cartons has been reduced by 35%, and the overall supporting solution developed has reduced the energy consumption of cold chain logistics by 18%. Through 100% recyclable design and low VOCs process of the products, a closed-loop system from production to recycling is constructed, thus reducing the VOCs emissions by more than 200 t per year, and forming a low-carbon transportation system solution.

Healthcare



In the field of healthcare, the Company has developed the green technologies and products with its own characteristics from material R&D to product development, including degradable melt-blown materials, degradable gloves, and degradable masks.

Degradable melt-blown materials: Based on the advantages of the Company's full-range biodegradable materials (e.g. PLA, PBS and PBAT), completely biodegradable mask melt-blown nonwoven fabrics, disposable swimming pool filter elements, washing machine wastewater filter bags and air filter elements were successfully developed in 2024 through nonwoven technologies.

Degradable gloves: Based on the previous R&D, the compositions of biodegradable additives have been adjusted and optimized. The introduction of new degradation additives into the products can effectively increase the degradation percentage and degradation rate of gloves without affecting the protection ratings of the products against the chemicals and drugs.

Degradable masks: PLA is used as the main material. The mask body, filter element, ear strap, nose bridge and other components that can be simultaneously degraded are prepared through different processing methods such as melt-blowing, spinning, and injection molding to form the final degradable mask. Compared with ordinary masks, the carbon emissions of biodegradable masks can be reduced by more than 50%.

Kingfa Sci. & Tech. Co., Ltd. | Environmental, Social and Governance (ESG) Report 2024 | Introduction | Environmental Responsibilities | Social Responsibilities | Responsibilities | Ann

Deploying Bio-based Industries and Exploring Low-carbon Products

The Company builds an integrated industry chain around bio-based materials, which covers the entire process of bio-based cell factory development, monomer preparation, resin synthesis, and modification application, accelerating the green upgrading of traditional petrochemicals. As a core production base, Liaoning Kingfa Biomaterials has realized the large-scale production and export of bio-based organic acids, and completed the construction of a bio-based 1,4-butane-diol production line. The bio-based succinic acid is produced by the Company with a bio-fermentation process, to replace petroleum-based resources with renewable raw materials. It shows the advantages of lower carbon footprint and bio-based carbon content of 100%. It has been certified by the United States Department of Agriculture (USDA) and DIN-Ge-prueft. The Company plans to cooperate with professional institutions to promote product carbon footprint accounting and provide low-carbon solutions for the industry.





Liaoning Kingfa Biomaterials Formally Put into Production

Bio-based Succinic Acid



Environmental Compliance Management

The Company has deeply realized the importance of the environmental compliance management for the sustainable development of enterprises. We have formulated the Environmental Policies of the Company as a programmatic document for the Group's environmental management. Each production base/branch/subsidiary combines local environmental regulations and production practices to construct a differentiated environmental management system to ensure that the Company's decisions and actions are steadily implemented on the correct path to sustainable development.

Governance and Strategies

The Company actively responds to the environmental policies and ensures its compliance through the closed-loop management of "monthly tracking - annual review - real-time optimization". We monthly publicize and implement the newly promulgated and implemented policies on a group basis, regularly conduct a comprehensive review of applicable environmental policies at least once a year, promptly rectify and optimize them, continuously and steadily practice environmental management in accordance with the latest environmental laws and regulations, its own development and objectives. Ensure timely adjustment and update of the environmental policies.

To strengthen the organization and management of the environmental protection work to ensure accurate implementation of such work, the Company has created an environmental management network with the general manager of the Group as the top decision-maker and leader, the heads of all centers and the general managers of subsidiaries being responsible step by step, and set up environmental management departments in all its production bases to ensure effective implementation of environmental management work at all places of business. In addition, to comprehensively consolidate its environmental management responsibilities, the Company has established a System of Responsibility for Environmental Protection to clarify all its employees' responsibilities for environmental protection and ensure that responsibilities are assigned to all employees through an accountability mechanism. The Company and 16 of its subsidiaries have passed ISO 14001 Environmental Management System Certification.



- The general manager of the Company is responsible for reviewing and approving the Company's environmental policies, objectives, and plans.
- Supervise the operational effectiveness of the environmental management system to ensure that the Company's environmental protection strategies are consistent with its overall strategies.
- Comprehensively implement the environmental policies, ensure the input of resources, and promote the continuous improvement of the environmental management system.



- The office safety and environment module is responsible for the specific formulation, interpretation, and revision of the environmental policies to ensure that the policies are scientific, appropriate, and operable.
- Organize internal environmental protection training to increase the employees' environmental awareness and publicize the Company's environmental protection concept and achievements.
- Supervise and inspect the environmental protection work of all bases/business departments and subsidiaries to ensure that all environmental protection measures are effectively implemented.



- Strictly implement the Company's environmental policies to ensure that the production and operation activities of the bases meet environmental protection requirements.
- Formulate and implement energy conservation and emission reduction measures to reduce energy consumption and carbon emissions, and increase resource utilization efficiency.
- Promptly communicate the Company's environmental policies to all employees of the subsidiaries to
 ensure the effective implementation of the policies in the subsidiaries.
- Formulate specific environmental protection management systems and measures according to the actual situations of the subsidiaries, to ensure the realization of environmental protection goals.



- Pay attention to energy conservation and emission reduction in daily work to reduce unnecessary energy consumption and waste.
- Actively put forward suggestions for improvement of the Company's environmental protection and make contributions to the Company's environmental protection work.

Environmental Management Architecture

Kingfa Sci. & Tech. Co., Ltd. | Environmental, Social and Governance (ESG) Report 2024 | Environmental Responsibilities | Social Responsibilities |



Indicators and Targets

Environmental compliance targets	Fulfillment of targets
0 environmental or social responsibility incident	Achieved
No wastes emitted beyond standards	Achieved
100% compliance of construction projects in three environmental simultaneities	Achieved

During the reporting period

The Company invested

RMB 107.658 million

in environmental protection

Without experiencing general or more serious environmental emergencies

The Company's environmental hazard rectification rate was

100%

The Company did not receive administrative penalties from any government agency of environmental protection

and the implementation rate of the environmental monitoring plan was

100%



Risk Management

The Company always maintains high vigilance against the occurrence of environmental pollution incidents. Therefore, we have formulated the Environmental Risk Investigation and Hazard Governance System and the Environmental Monitoring Management System, established an environmental risk investigation mechanism in line with the production types of all production bases, comprehensively identified the risks that are likely to cause environmental protection incidents, particularly supervised the points that are likely to cause environmental protection incidents and accidents according to the identification results, regularly checked and inspected the operation of environmental protection equipment, environmental protection management system, management, records, and hazards.

- Joint investigation and inspection
- Investigation on holidays
- Seasonal inspection and inspection
- Professional investigation and inspection

- Handover check
- Peer inspection
- Self-inspection
- Daily investigation and inspection

Forms for investigating environmental risks



In June 2024, the Company's Qingyuan Base carried out a special major environmental protection inspection and a comprehensive inspection of pollutant treatment equipment in all workshops and sewage stations of the factory area.



A comprehensive environmental protection inspection was conducted in Liaoning Kingfa in June 2024, to comprehensively investigate the pollutant treatment equipment in all workshops and sewage stations of the factory area.

In the face of environmental emergencies, the Company and its subsidiaries set up an emergency rescue headquarters for the environmental emergencies led by its general manager, prepared and filed an Emergency Plan for Environmental Emergencies, issued an Investigation Report on Environmental Emergency Resources and a Risk Assessment Report on Environmental Emergencies, continuously strengthened its emergency management of environmental emergencies, and strived to eliminate or minimize the environmental impacts when environmental emergencies occurred. To this end, the Company regularly organized its employees to receive emergency training and drills to ensure that they could respond to the environmental emergencies properly, timely, and efficiently.



In June 2024, the Company made an on-site emergency response to a significant leakage of propylene in the polypropylene unit I, simulating an unexpected large-area leakage on the first flange of the polypropylene feeding pipeline, and improving the relevant personnel's capabilities of making emergency responses to the environmental incidents.

Construction of Green Factories

The Company, its branches and subsidiaries have actively carried out the construction of green factories, and created a "green factory" management model. From six modules, namely infrastructure, management system, energy and resource inputs, products, environmental emissions, and environmental performance, they have promoted green manufacturing, and sought solutions with both environmental and production benefits. As of the end of the reporting period, the Company has passed the national green factory certification. Ningbo Kingfa, Wuhan Kingfa, Kingfa Biomaterials, and Tianjin Kingfa have all been included in the list of national green factories.

The Company attaches great importance to the protection of the surroundings around its places of business. The project selection, factory site selection, and construction of all its production projects are subjected to the impact assessment system for construction projects and the three-simultaneous system for pollution control in accordance with the Regulations on the Administration of Environmental Protection in Construction Projects. These projects satisfy the national and local ecological protection requirements, avoid ecological protection areas, and never cross the red line of ecological protection and the bottom line of environmental quality.

Environmental Protection Promotion and Green Office

The Company has formulated the Environmental Protection Publicity, Education and Training System. We regularly carry out environmental protection education and training, actively organize and perform various environmental protection learning activities, and practice the national environmental protection guidelines and policies, with a view to increasing the employees' environmental awareness, improving the technical qualifications for environmental protection and preventing environmental accidents. Besides, the Company has formulated the Management Regulations for Management of Energy Consumption in Offices and Living, advocating actions such as electricity and water conservation in the daily work, implementing green office initiatives, and encouraging its employees to participate in environmental protection.

Post water-saving and energy-saving signs to create a good atmosphere for energy conservation and consumption reduction.

Use energy-efficient computers, printers, and other equipment to strengthen the maintenance and management of lighting and air-conditioning systems.

When the air conditioners are in use, set temperature zoning and remind door closing. Discontinue their operations during rest.

Develop an online approval system and an online procurement platform for office supplies to encourage paperless office and avoid unnecessary paper waste.



Green Office Initiatives

Promptly adjust when to turn on and off the street lights and lighting devices according to seasonal changes.

The elevators are put under group control and linked. Properly set when to start and shut down the elevators based on the flow of people, to reduce unnecessary load-free operations of the elevators.

Strictly follow the regulations on garbage classification and disposal. Classify and mark garbage bins.

Distribution of Knowledge Manuals on Preventing Solid Waste Pollution fo **Improving Solid Waste Management**

To help the employees understand the harm of solid wastes to the environment and health, and foster correct ideas about the environmental protection, in June 2024, the Company organized distribution of the "Knowledge Manual on Preventing and Controlling Solid Waste Pollution" for publicity and training. From the perspective of front-line employees in the workshop production, the manual concisely explains the harm of solid wastes to the human body and environment during the production in the form of pictures and texts, as well as how to correctly classify and collect the solid wastes. The manual was issued by the Environmental Management Department to ensure that environmental protection knowledge was announced in place, and that our employees' knowledge and capabilities of environmental protection management were effectively improved.



Knowledge Manual for Employee Learning

Implemented Environmental Management Requirements and Carried out **Environmental Protection Training**

In June 2024, the Company organized a knowledge training lecture on the environmental protection for middle-level and above leaders with the theme of "Compliance Management of Solid Wastes" at Liaoning Base. The lecture mainly explained the eight red lines, typical cases and related law enforcement matters on the solid waste law, definition and classification of hazardous wastes, compliance management of hazardous wastes, and solid waste management. In combination with the warning and educational films, as well as typical law enforcement cases released by Liaoning Provincial Department of Ecology and Environmental Protection, the keys for localized supervision were analyzed in depth, and the upgrading of environmental compliance from passive response to active governance was promoted.

Introduction



Training Site

Environmental Protection Knowledge Competition on "Green Factory Area, Environmental Protection First

In October 2024, to increase the employees' environmental awareness and promote the concept of green, low-carbon office and production, the Company organized a special environmental protection award-winning knowledge competition at Qingyuan Base with the theme of "Green Factory, Environmental Protection First", and provided a question base for acquiring knowledge about environmental protection. The employees who gave excellent answers were given cash rewards to encourage them to acquire knowledge related to the environmental protection independently.



Environmental Knowledge Contest Questionnaire



Poster of "Ecological Environment Day"

Kingfa Sci. & Tech. Co., Ltd. | Environmental, Social and Governance (ESG) Report 2024

Pollutant Discharge and Waste Treatment

The Company has formulated the Operation Management System for Pollution Prevention and Control Facilities, Responsibility System for Environmental Pollution Prevention and Control, and Management Procedure for Environmental Safety Monitoring. We constantly improve our management mechanism for monitoring and regular inspection of the pollutants and waste discharge, and regularly entrust third-party organizations to inspect pollutant treatment facilities and discharge conditions to ensure that the discharge and disposal of various pollutants and wastes strictly comply with the local discharge standards without affecting the local ecological environment.

In addition, the Company is committed to minimized, harmless, and resource-oriented management of pollutants and wastes. We actively carry out three-waste improvement projects in our major production bases and subsidiaries to explore and tap the potential of waste recycling and comprehensive utilization.

Waste gas treatment

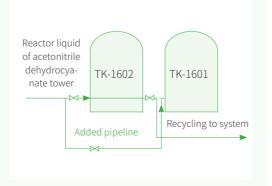
The Company strictly abides by relevant laws, regulations, and local standards on exhaust gas emissions. Following the principle of "recycling the wastes as far as possible and collecting them by quality", we are committed to adopting the most advanced pollution control technologies, scientifically designing exhaust gas collection systems, optimizing production equipment and processes, ensuring efficient and stable operation of air pollutant treatment facilities and reducing unorganized emissions of pollutants.

The Company's exhaust emission-related performance during the reporting period is shown in the following table:

Index	Unit	Data in 2024
Wastewater discharge intensity	m ³	22,865,427,592
Recovery rate of waste gases	%	32
Particulate matter (PM)	Tonne	91.96
Non-methane hydrocarbon	Tonne	163.54
Nitrogen oxides	Tonne	80.72
Sulfur oxide	Tonne	41.24
VOCs emissions	Tonne	548.94

Optimizing the Outbound Pumping Process of the Reactor Liquid in the Hydrocyanic Acid Removal Tower of the Acetonitrile Unit to Reduce Waste Gas Emissions

In 2024, to solve the problem that the waste liquid generated during the production of the acetonitrile unit could not be effectively utilized, Liaoning Kingfa implemented measures for optimizing the waste gas process. During the production of the acetonitrile unit, the Company optimized the outbound delivery process for effective recovery of the waste liquid. After the technical transformation of the projects, the wastewater incineration amount was reduced by 19,910t in 2024, saving the fuel gas by 3,117,706.9 standard cubic meters. While cutting the costs, the technical transformation effectively reduced the exhaust gas emissions, providing strong support for the Company's environmental protection and economic benefits.



Project Reconstruction Procedure

RCO Technology Application Project of Guangdong Kingfa Composites

To satisfy the environment-friendly emission requirements and effectively reduce the VOCs emissions, Guangdong Kingfa Composites combined cyclone hybrid spray tower + filtration + honeycomb activated carbon adsorption concentration + RCO". Through a comprehensive waste gas collection system, the waste gas generated at each location is concentrated, preliminarily purified by cyclone hybrid spray tower, filtered for impurity removal, and subjected to honeycomb activated carbon adsorption and concentration to further reduce the pollutant content. Finally, after deep treatment by RCO, it is discharged at an altitude of 21m, effectively reducing the waste gas emission concentration from 18 mg/m³ to 8.6 mg/m³, effectively mitigating the environmental pollution of organic waste gas, ensuring that the Company's production conforms to the environmental protection standards, and taking a solid step in the green development process of the carbon fiber industry.



RCO Equipment

Waste Disposal

For the solid wastes, the Company strictly abides by waste-related laws, regulations, and disposal standards to ensure that all wastes are treated harmlessly to avoid harm to the environment and human health. The Company reduces the amount of wastes generated by optimizing production processes and improving resource utilization efficiency. We actively explore how to utilize the wastes as resources, recycle plastic wastes as recycled plastic raw materials, reduce the production demand for new plastics, and develop cooperation with professional waste recycling and treatment organizations to jointly promote the utilization of wastes as resources. As of 2024, the Company had established a complete waste classification and recycling system, and the waste recycling rate was up to 42%.

The Company's waste emission during the reporting period is shown in the following table:

Index	Unit	Data in 2024
Total waste disposal	Tonne	21,109.84
Disposal of hazardous wastes	Tonne	10,934.45
Disposal of non-hazardous wastes	Tonne	9,506.58
Disposal of high-level wastes	Tonne	0
Waste recycling rate	%	42
Total amount of wastes recycled/ reused	Tonne	8,916.94

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Non-hazardous wastes

The Company's non-hazardous wastes mainly include general industrial solid and domestic wastes. Among them, the domestic wastes are collected, disposed of and handed over to a municipal sanitation department for disposal. For general industrial solid wastes, the Company and its subsidiaries have prepared policy documents such as Solid Waste Management Regulations, General Solid Waste Management System and Solid Waste Packaging Specifications to standardize the management of industrial solid wastes which are not hazardous. The Company scientifically and efficiently recycles the non-hazardous wastes with value for recycling. For those that really cannot be internally recycled, the Company strictly screens and entrusts a third-party professional organization with corresponding qualifications for safe and standardized disposal. During the disposal, some general industrial solid wastes are appropriately delivered to thermal power stations, and advanced energy conversion technologies are used for power generation, realizing the transformation from wastes to energies.



• Identify and judge that industrial solid wastes are not included in the National Catalogue of Hazardous Wastes or other standards for identifying hazardous wastes, and are not hazardous.



- After their generation, the general industrial solid wastes shall be collected by categories, handed over to relevant departments for unified warehousing and storage. Graphic environmental protection signs shall be set up.
- The storage places shall be equipped with the facilities or measures for protection against rain, leakage, scattering and loss. The hazardous and domestic wastes are prohibited from delivery into the these storage locations.



- Harmless disposal measures are required for the disposal of general industrial solid
- The generation and storage conditions must be strictly recorded, regularly reported and entered into the system.
- Relevant units and third party disposal organizations must be qualified, and draft emergency plans for environmental incidents.

Disposal Procedures for General Industrial Solid Wastes

Hazardous Wastes

The Company has prepared the Hazardous Waste Management System to standardize the classification, collection, storage, transfer, and production of the hazardous wastes included in the National Catalogue of Hazardous Wastes. For the hazardous wastes generated during the production, the Company strictly obeys the regulations and entrusts external third-party organizations with professional qualifications for properly disposing of the wastes. The steam generated after incineration of some hazardous wastes is recycled by a third party for secondary value conversion of resources.

Identification and judgment

Identify the hazardous

wastes based on the

corresponding identifica-

tion standards, including

the National Catalogue

Technical Specifications

Hazardous Wastes, and

Identification Standards

for Hazardous Wastes. De-

termine their types and

manage them by type.

of Hazardous Wastes,

for Identification of



Collection and storage



Transfer and transportation



- When collecting the hazardous wastes, necessary collection tools, packaging and temporary storage facilities shall be equipped. The collection sites shall be close to the operation areas and shall not affect or hinder the safe passage.
- In the process of hazardous waste collection, storage, and management, appropriate labor protection articles, occupational hazard notification card machines, other signs, and protective equipment shall be equipped.
- Centralized storage facilities or places for hazardous wastes shall be equipped with safety facilities or equipment according to the types and hazard characteristics of the hazardous wastes stored.
- The storage plans and facilities shall be safe, reasonable, and feasible.

- When transferred internally, the hazardous wastes shall be packaged in good containers or packages to prevent leakage and pollution.
- Declarations should be made on the environmental supervision platform and hazardous waste labels shall be printed in accordance with the regulations.
- Examine hazardous waste disposal units to ensure that they are qualified.

Promoting Hazardous Waste Minimization and Performing Comprehensive Management



• In 2024, Liaoning Kingfa comprehensively managed hazardous waste minimization, optimized, and improved the Company's hazardous waste disposal in three dimensions, namely source reduction, process control and end-of-pipe treatment, and achieved desirable results.

Source reduction

- Change the waste discharge index of the process card of the upstream production equipment, explore the control scope more suitable for production, strengthen management, and reduce the generation of source pollutants and discharge to the downstream.
- "Turn wastes into treasure", for example, the self-built equipment in the condensation unit of ABS production equipment recovers more than 60% of particulate matter in the condensation wastewater, realizes resource utilization, and reduces the generation of downstream hazardous wastes.

Process screening

- Perform classification and screening. Strictly plan the classified management of solid wastes, train and assess all production equipment and units, and prevent mixed storage and discharge of solid wastes.
- The resource-oriented recycling follows the principle below: Reduce sources before resource-oriented utilization, and ultimately perform harmless disposal. Give priority to recycling valuable solid wastes, including recycling waste timber, preparing waste acid and alkali solution for wastewater treatment, and recycling raw and auxiliary materials.
- Abandon backward technologies and consider green emission reduction and resource utilization in new projects.
 For example, the dry catalytic oxidation adsorption process is used to replace the traditional activated carbon adsorption process for the absorption of exhaust gases containing VOCs in a hazardous wastes warehouse to improve the efficiency and reduce the generation of hazardous wastes. A reduction and treatment project is also initiated for sludge and scum, to modify the dehydration procedures and reduce the water content from 85% to 30%. The project is expected to be put into use in the second half of 2025.

End-of-pipe treatment

• In early 2024, a large-scale survey and screening was performed for the hazardous waste terminal treatment teams, which were selected from various aspects to ensure that the transfer and disposal of the hazardous wastes were legal and compliant.

Measures for Reducing Hazardous Wastes

Replacement of Old Machines for Improving the Transformation Results of Slud Treatment Technologies



In November 2024, to satisfy the sludge treatment needs after the output increased that year and the 6,000-tonne polyaromatic ether sulfone workshop was put into operation, and the inherent defects of the original plate and frame filter presses, Zhuhai Vanteque Specialty Engineering Plastics carried out technical transformation of the special plastics sewage stations. The original two 25m³ small plate and frame filters were removed. A 100m³ plate and frame filter press equipped with a sludge unloading bucket was added. Supporting sludge pumps, sludge pipelines, valves, etc. were installed. The technological transformation cannot only satisfy the sludge treatment needs after the output increase in the next three years the 6,000t polyaromatic ether sulfone workshop is put into operation, but also increases the treatment efficiency of the sludge filter presses, reduces the labor intensity, and effectively settles the enterprises' difficulties in waste disposal.



New Plate and Frame Filter Press

Hazardous Waste Disposal Procedure



Committed to the continuous optimization of energy consumption, the Company increases its energy utilization efficiency and reduces the total energy consumption with advanced energy-saving technologies and equipment. We have prepared more than ten institutional documents such as the Energy Management Manual, set clear energy consumption reduction targets, evaluated and adjusted them year by year to continuously improve the energy management system.

The Company's energy-related performance during the reporting period is shown in the following table:

Index	Unit	Data in 2024
Direct energy consumption	Tonne of standard coal	334,812.3
Natural gas	m³	134,482,393
Diesel	Tonne	300.06
Coal water slurry	Tonne	275,920.61
Indirect energy consumption	Tonne of standard coal	616,907
Purchased electricity	'0000 kWh	287,800
Medium-pressure steam	Tonne	1,987,963.87
Low-pressure steam	Tonne	380,380.31
PV power generation (self generation for self use)	'0000 kWh	2,379
Total energy consumption (in- cluding PV power generation)	Tonnes of standard coal	951,719.2

Energy-saving Technological Transformation Practice

Having established a complete energy efficiency evaluation mechanism, the Company regularly carries out professional in-depth assessment work. Through comprehensive monitoring and analysis of the energy use process, we accurately identify what need to be optimized and adopt pertinent improvement measures to ensure the continuous improvement of energy efficiency, realize efficient energy utilization and maximize the value of resources.

During the reporting period, the Company's subsidiaries and production bases actively carried out energy-saving technological transformation practices and achieved a series of favorable results.

Improvement of the single-unit production capacity of two-stage machines: By optimizing the screw combination of the main machine and adjusting the screw size of the sub-machine, the single-unit production capacity was approximately increased by 2,000 t/unit/year, and the power consumption per unit of output was nearly reduced by 30 kWh/t.

Improvement of the HDPE twin-screw process: Two tensile screws were used in place of shear blocks, which reduced the shear strength, improved the plasticization capacity, and reduced the power consumption per unit of output by 11.6%.

Kingfa nvironmental **Process improvement for the drying system:** On the premise of ensuring that the product smell was acceptable, the drying and heating time was shortened. The cooling time was prolonged, and the power consumption was reduced. The energy consumption was approximately cut by 10%.

Research and use of meshless filter: The machine was transformed into a dual-filter production mode of continuous filter + melt pump. The power consumption per unit of output was reduced by 13% (with an average decrease of 40 kWh/t), and the production capacity was higher.

Transformation of the air compressor system: The fixed-frequency air compressor was replaced with a permanent magnet variable frequency air compressor, and the electrical conversion ratio declined. It saved electricity of 376,500 kWh and electricity bills of RMB 199,500.

Kingfa Biomaterials **Energy-saving motor transformation:** Use a 200kW permanent magnet energy-saving 6-level motor to replace a 250kW 4-level ordinary motor, reducing electric energy consumption per unit by 45%.

Energy substitution: Steam energy was used to replace electric energy, and energy consumption costs were reduced by 15% per unit.

Optimization of the distillation unit: Using the coupling process and advanced trap, the steam energy consumption per unit was reduced by 18%.

Improvement of the heating method: Electromagnetic heating replaced resistance heating, and electrical energy consumption per unit was reduced by 12%.

Sto ca en Liaoning

Comprehensive production improvement and energy-saving transformation: A number of measures such as debottlenecking and exhaust gas deethanization were implemented. The whole plant's commodity quantity was increased, and the natural gas consumption was decreased. Previous steam purchase was changed into sales, and the comprehensive energy consumption per unit throughout the year was 323.6 kg oil equivalent/tonne, with a year-on-year decrease of 28.2%.

Steam optimization of the whole field: After the debottlenecking of the integrated acrylonitrile unit, the production capacity and the amount of by-product steam increased. The combination with a number of technical transformations ensured the continuous return of steam. In 2024, the purchased steam decreased by 340 thousand tonnes, and the return steam increased by 110 thousand tonnes, saving about RMB 104 million in purchases and about RMB 18 million in sales.

Improvement of boiler water quality: Optimized the boiler water treatment chemicals, refined the control over water quality indicators and increased the resource utilization efficiency. The volume of sewage discharge from the whole factory's steam drums was approximately 7t/h, and the consumption of desalinated water declined by 7t/h. The steam output dropped by 7t/h, and the steam output increased by 3t/h. The costs were approximately cut by RMB 5 million.

Optimization of the heating and tracing system: Increase monitoring of return water in the main water units, optimize hydraulic balance, and reduce water supply temperature. The consumption of low-pressure steam for heat tracing decreased by 5.5 t/hour on a year-on-year basis. The heating period was calculated as 153 days, saving about RMB 3.03 million.

Ningbo Kingfa

Kingfa

Energy-saving transformation of air compressors: The low-pressure drop check valve was alternatively used for the regenerative air compressor of the propane dehydrogenation unit. Calculated based on 8,000 hours per year, the electricity consumption could be cut by about 880,000 kW/year, equivalent to about 260 tonnes of standard coal/year.

Heat exchanger replacement: Both the separation tower condenser of the propane dehydrogenation unit and the product gas No. 1 chiller were high-efficiency energy-saving heat exchangers, which could approximately save the standard coal by 9,907 tonnes in total.

Guangdong Kingfa Composites Replacement of the low-power heating rod: The theoretical power was reduced by 18 kW/unit, and the temperature was kept stable within \pm 10 °C .

Addition of heat insulation cotton to the extruder: The average temperature was lowered by about $18\,^{\circ}\text{C}$, which reduced heat loss and energy consumption.

Energy Conservation Measures for Different Sectors (Partial)

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Clean Energy Utilization

The Company adheres to the concept of green development, continuously optimizes the energy structure, actively explores and vigorously applies clean energies such as solar energy and wind energy, promotes its substitution of traditional fossil energy, constantly increases the proportion of clean energy to total energy consumption, and gradually constructs a green, low-carbon, sustainable energy system.

As of the end of the reporting period

Our rooftop photovoltaic installed capacity reached

24,300 kw

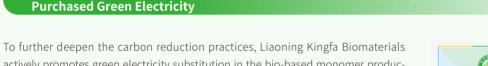
and the capacity under construction was

38,400 kW

In 2024, photovoltaic power generation was up to

23.79 million kWh

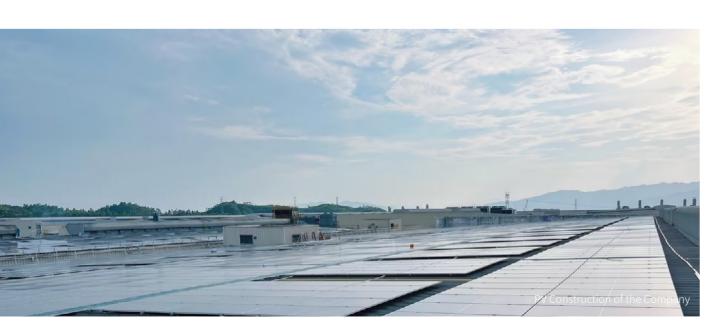
In Response to the Call for Green Development, Liaoning Kingfa Biomaterials Purchased Green Electricity



actively promotes green electricity substitution in the bio-based monomer production. In 2024, the proportion of green electricity used in Liaoning Production Bases reached 60%, and the cumulative purchase of green electricity throughout the year exceeded 8.49 million kWh. With the release of production capacity, it is expected that the monthly consumption of green electricity would increase to 3 million kWh after full production (33 million kWh per year). Through the large-scale application of renewable energies, production carbon emissions were significantly reduced, and contributions were made to achieving the goal of carbon neutrality.



Green Electricity Certificate Transaction Voucher



Usage of Water Resources

The Company strictly abides by the national Water Pollution Prevention and Control Law, Water Resources Management Regulations, other laws and regulations. While guaranteeing the ecological safety of water sources in compliance with the regulations, it achieves intensive and efficient utilization of the water resources, continuously fulfilling its corporate responsibility for green production and sustainable development.

Governance

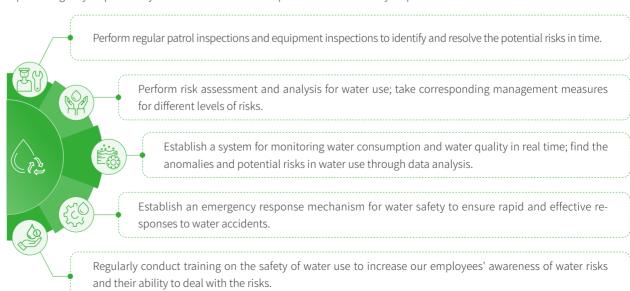
The Company's water resources management exhibits a three-level collaborative governance structure, with the general manager as the main person in charge, who is responsible for coordinating overall strategies, determining water resources management objectives and supervising the implementation of the policies. The Strategy and Sustainable Development Committee, at the supervisory level, focuses on target decomposition and process control, reviews management plans, promotes cross-departmental collaboration and optimization, and drives innovation and development of water resources management. The executive level relies on the process equipment department, branch factory directors, and full-time factory engineers to draft and implement water resources management plans, perform technological transformation for the water conservation, organize daily data monitoring and equipment maintenance, and embed water-saving measures into the entire production process through refined operations, forming a closed-loop management system from the strategic planning to the on-site operation, and from the target formulation to the data traceability.

Strategies

Committed to the efficient utilization and protection of water resources, the Company increases the reuse rate of water resources by utilizing water conservation technologies, optimizing production processes, and building sewage treatment and reclaimed water recycling facilities. Besides, we optimize our water circulation system, install water conservation devices, and employ advanced wastewater treatment technologies to ensure the maximization of the water resources. The Company strictly abides by the management and control quality requirements for water use, water reuse and sewage discharge, etc. We reasonably regulate our use of the water resources in daily operations, set annual water resources management goals and indicators based on our previous year's water resource consumption, our operation and development strategies, and draft pertinent water conservation proposals for the factories in different places of business.

Risk Management

The Company has built a proactive prevention and control model for "data-driven warning - hierarchical hazard management - rapid emergency response - dynamic enhancement of capabilities" to effectively respond to water resource risks.



Conservation of Water Resources

The Company continuously improves its water resource management system, draws up elaborate water resource utilization plans, clarifies water consumption indicators and targets of all departments, promotes the use of water conservation equipment, and reduces the water consumption. In addition, we have established an incentive mechanism for water conservation to encourage all employees to participate in water conservation activities and enhance the employees' awareness and skills of water conservation.

The Company's data on its utilization of water resources during the reporting period is shown in the following table:

Index	Unit	Data in 2024
Total water consumption	Tonne	14,947,896.89
Total water consumption intensity	t/RMB'0000	2.55
Purchased municipal water	Tonne	12,561,236.89
Desalted water	Tonne	2,333,191
Groundwater	Tonne	53,469
Recycled/reused water volume	m ³	126,708

Carried out Water Conservation Renovation in Workshops to Promote the Recycling of Process Water

In 2024, Kingfa Medical transformed its water conservation process in the A611 workshop and established a layered reuse system based on the water characteristics of the production line: By introducing the water overflown from the upper tank to replenish the middle process section and the water discharged from the middle layer into the bottom cleaning process, and accurately calibrating the water use standards for all cleaning units and recycling the water discharged from the processes, a water conservation mode of "gradient use - closedloop cycle" was created. After the transformation, the average daily displacement of the workshop dropped from 2,560m³ in the second quarter to 1,900m³ in the fourth quarter (with a decrease of 25.7%), and the annual single-line water consumption of products dropped by 7.5% on a year-on-year, thus realizing the collaborative optimization of process water efficiency and resource recycling.



Reclaimed Water Diversion and Use Points



Ningbo Kingfa was recognized as a provincial water-saving enterprise

Used MVR Evaporators and Recycled Steam Condensate

Liaoning Kingfa Biomaterials used the mechanical vapor recompression (MVR) technology for production. The secondary steam generated by evaporation was pressurized and heated through a compressor before circulation as a heat source for efficient reuse of heat energy, thus reducing the energy consumption by 50%-70% compared with the traditional evaporation process. Under the current production load, the amount of condensate from evaporation was 1,100m³ per day. All the condensate was reused in the fermentation and purification processes. It is estimated that the daily recovery capacity of the device would reach 2,750m³ after full production (annually saved 907,500t), and technological innovation drove production water conservation and efficiency improvement.



MVR Evaporator

Wastewater Treatment

Nowadays, when environmental protection is receiving increasing attention, the Company regards wastewater treatment as a key link in the green development. The Company's wastewater pollutants mainly include suspended solids, ammonia nitrogen, total nitrogen, total phosphorus, etc. Through a series of effective treatment measures, while ensuring that wastewater pollutants are discharged up to standard, we have explored how to use wastewater as resources and minimize wastewater, where desirable outcomes have been achieved.

The Company's performance related to the wastewater discharge during the reporting period is shown in the following table:

Index	Unit	Data in 2024
Total wastewater discharge	Tonne	4,760,944.73
Where: Total volume of industrial wastewater	Tonne	4,282,130.43
Where: Total volume of domestic wastewater	Tonne	478,814.3
Recovery rate of wastewater	%	16.42
Chemical oxygen demand (COD)	Tonne	379.97
Five-day BOD (BOD₅)	Tonne	41.95
Suspended matter	Tonne	31.45
Ammonia nitrogen	Tonne	31.95
Total phosphorus	Tonne	3.88

Kingfa Medical Sewage System Renovation Project

To strengthen its sewage treatment capability, since 2023, Kingfa Medical has carried out the upgrading and renovation of Sewage Treatment System 151, with a view to increasing the physical, chemical and biochemical treatment efficiency and reducing the total volume of pollutants discharged. After a series of modifications, the system was completed and put into regular operation in April 2024. Before the transformation, Treatment System 151 could achieve deep denitrification to meet the emission standards only with the support of System 155. Now it can independently meet the standards. Among them, the daily removal of total nitrogen - the main pollutant in sewage, increased significantly from 130kg to 275kg, laying a solid foundation for the Company's subsequent sewage treatment after the expansion of production capacity.

Renovation Measures

For the physical and chemical treatment system of the original System 151, the air flotation process was changed into inclined tube sedimentation to improve the physical and chemical mud removal effectiveness.

The original physicochemical flocculation adjustment system was changed from manual to automatic to improve the system's stability.

The anoxic tank was upgraded and transformed. The aeration system was changed from tubular type to disc type to improve the biochemical denitrification capacity.

Contact Oxidation Tank 1 was changed into an anoxic aeration tank to increase the denitrification capacity of the system.

For Contact Oxidation Tank 2, the aeration system was changed from tubular type to disc type to improve the biochemical denitrification capacity.

An ab aeration pipeline was added to the microbial culture tank to increase biological activity and sludge concentration.



Ningbo Kingfa Reclaimed Water Reuse System

In January 2024, Ningbo Kingfa constructed a new 200m³/h reclaimed water reuse system, which used high-density + ultrafiltration + reverse osmosis process for treating and recovering industrial wastewater for reuse as makeup water in the circulating and cooling water systems. The recovery rate of the ultrafiltration system within the system reached 92% or above. The recovery rate of water from reverse osmosis was at least 60%, and the average desalination rate exceeded 98.6%. During the reporting period, the wastewater discharge was reduced by 338,000 tonnes in total, and wastewater treatment costs were cut by RMB 1.75 million.



Ningbo Kingfa Reclaimed Water Reuse System

Capacity Expansion and Technical Transformation of the Wastewater treatment System by Zhuhai Vanteque Specialty Engineering Plastics

After the 6,000-tonne polyaromatic ether sulfone workshop of Zhuhai Vantegue Specialty Engineering Plastics was put into operation, the wastewater volume daily increased by 300-500m³, and the original sewage treatment system could not treat the wastewater from the whole factory's production. For this purpose, the Company carried out a series of technological wastewater transformations, including five new measures, namely adding accident tank, polyaromatic ether sulfone transfer tank, polyaromatic ether sulfone pretreatment equipment (air flotation tank), nylon incoming water pretreatment sedimentation tank, and technically transformed mixed monitoring tank, to improve the wastewater treatment capacity and ensure wastewater discharge in compliance with the regulations.



Nylon Incoming Water Pretreatment Sedimentation Tank

High-COD Wastewater Recycling Project of Liaoning Kingfa Biomaterials

Liaoning Kingfa Biomaterials actively explored how to recycle high-COD wastewater. High-COD wastewater came from the concentrated residues after filtration of fermentation broth, which was rich in organic matters such as bacteria and protein. The content of COD was as high as 150,000-200,000 mg/L. Liaoning Kingfa Biomaterials used high-COD wastewater for producing the biogas through anaerobic fermentation, and the biogas was burned by a biogas boiler to produce steam, which was reused in the production steam system. It was estimated that after the device was operated at full capacity, the annual steam output was up to 16,500t. This innovative measure not only successfully realized the utilization of the wastes as resources and cut production costs, but also alleviated the potential harm of high-concentration sewage discharge to the environment, built a green bridge between enterprise production and ecological protection, and provided a valuable reference example for the sustainable development of the

Circular Economy

The Company is committed to constructing a resource recycling system throughout the product lifecycle and continuously improving the resource utilization efficiency. Internally, we have actively established a resource recycling mechanism within the scope of production to reuse wastewater, waste gases, wastes, and leftover materials as resources. Externally relying on technological innovations in recycling the waste plastics, we will promote the high-quality development of the circular economy and provide strong support for the green transformation of the industrial chain.

Objectives of circular economy

By 2030, the Company will

produce 1 million tonnes of green plastics

recycle 1 million tonnes of waste plastics

manufacture 1 million tonnes of recycled plasti

Progress of the objectives

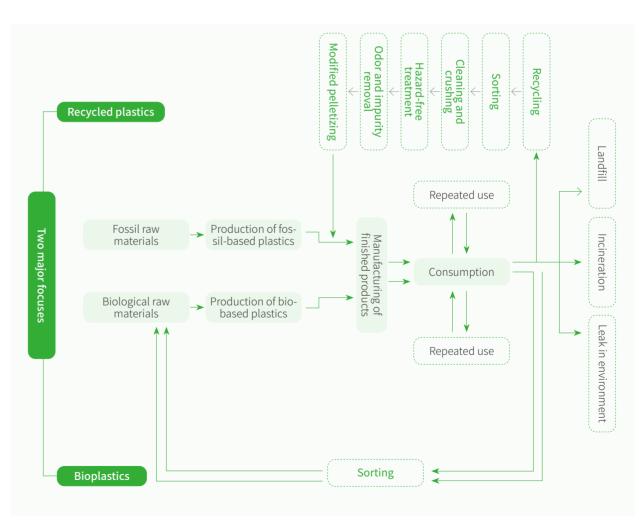
In 2024, the Company
produced 274,100 tonnes of green plastics
recycled 268,500 tonnes of waste plastics
manufactured 348,100 tonnes of recycled plastics

Note: Green plastics is a collective term for fully biodegradable plastics and bio-based materials.

External Circular Cooperation

The Company has put forward an integrated and comprehensive solution for "making the best use of plastics". Through an effective recycling mechanism, we increase the recycling rate of plastic products produced, reduce resource waste, promote the recycling of plastic products, transform them into new plastic products or other valuable resources, supply environmentally friendly high-quality recycled plastics for packaging, automobiles, IT electronics, electrical appliances, furnishing, electrical appliances, electric tools, construction, energies, express delivery and other industries, and accelerate the green and low-carbon recycling transformation of the whole plastic industry chain. Since 2004, the Company has been engaged in the recycling and high-quality utilization of waste plastics, and gradually constructed a circular, complete and closed technical recycling system for the whole process of the carbon emission reduction system that covers intelligent identification, automatic sorting, green cleaning, product lifecycle classification, cascade recycling, and high-quality utilization of the waste plastics.

The Company domestically built two production bases of recycled plastics, including Qingyuan Base and Pizhou Base, which are situated in South and North China respectively. We have built factories with a total area of 0.3 million square meters, 6 production workshops of high-performance recycled modified plastics, more than 60 highly standard production lines, and 6 production workshops for pretreatment of waste plastics, with a high-quality treatment capacity of 150 thousand tonnes of various waste plastics and an annual production capacity of more than 500,000 tonnes of recycled plastics. The Company has created a refined recycling system, developed more than 500 suppliers of high-quality recycled plastics, built more than 60 resource recycling outlets, and constructed a multi-scenario and multi-channel plastic waste recycling network for industries, agriculture, life, oceans, and other scenarios.



 $The Company's \ Circular \ Economy \ Solution \ for \ Plastics - an \ Integrated \ Comprehensive \ Solution \ for \ "Making \ the \ Best \ Use \ of \ Plastics"$

Visualization of High-quality Utilization of Recycled Materials

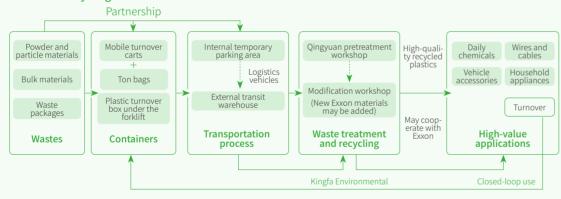
The Company innovatively developed a technology for visualizing the high-quality utilization of recycled materials, thus breaking through the bottlenecks in recycling light-colored plastics caused by low-temperature resistance and uneven particle size of organic spotted materials. This technology introduced inorganic/bio-based spots, accurately controlling heterochromatic spots and fiber defects, and achieving a carbon emission reduction efficiency of 21.6%. Besides, this technology separates spots through physical filtration during recycling, and produces relatively pure PCR. Being in line with the 3R principle of circular economy, it is conducive to creating a virtuous circle of economic benefits, promotes the development of the plastic recycling industry, and reduces resource consumption. Remarkable results have been achieved in reducing the carbon emissions.



Assisting the Partners in Building "Zero Waste Factories"

Relying on a professional and complete waste plastic full-chain recycling and processing system, Kingfa Environmental provided a petrochemical company with a closed-loop solution covering waste sorting, transfer, and recycling. The warehouse pretreatment system realized efficient sorting, crushing, cleaning, modification and high-quality processing of the waste plastics, forming recycled particles and environmentally friendly materials suitable for daily chemicals, cables, household appliances, automobiles, and other fields. This solution deeply integrated the customers' new material resources, jointly developed comprehensive application scenarios of PCR/ PIR, simultaneously provided carbon emission accounting and zero waste factory construction support, and promoted the increase in the resource utilization rate of production wastes and the coordinated development of the low-carbon industrial chain.

Full-chain Recycling Solution





Construction of a Waste Plastic Recycling Plant in Kingfa (Spain)

Kingfa Environmental built a waste plastic recycling factory in Spain to implement a localized model of the circular economy. The project utilized integrated sorting, cleaning and high-quality recycling technologies to convert the waste plastics into high value-added environmentally friendly materials and re-inject them into the local production and living chain. The early annual production capacity of the factory was up to 10,000 tonnes (which could be as high as 30,000 tonnes upon complete construction of the plant). In reliance upon the R&D capabilities of European local waste plastic recycling qualifications and technology centers, the high-performance recycled plastics produced by the Company demonstrated leading advantages in efficiency, quality and supply cycle, achieving localized supply in Europe, facilitating the achievement of the EU's carbon neutrality goal, and promoting the Company's international development process.



During its active response to the call for the development of circular economy and vigorous promotion of sustainable development, the Company does not only actively strengthen external cooperation, deeply participate in the field of waste plastic recycling, and join hands with all partners to construct a waste plastic recycling system, which effectively promotes the vigorous development of the circular economy, but also makes continuous efforts in the internal production process. By adopting advanced technologies and processes, we realize the efficient reuse of wastewater, waste gas, waste and leftover materials as resources, and convert various materials that might have caused environmental burden into resources that may be re-put into production or have other value, thus maximizing the utilization of resources and effectively reducing the negative impacts of the production on the en-



PIR Recovery Plan for Promoting Recycling Scrapped Automotive Lamps

The Company carried out in-depth cooperation with leading automotive lamp companies within the industry, and successfully constructed a closed-loop recycling system of "scrapped automotive lamps - dismantling and crushing - Kingfa modification - automotive lamp manufacturers - PIR (post-industrial recycled)" to realize recycling in the factory. This system reapplied the recycled materials in manufacturing automotive lamps through efficient dismantling and modification technologies. Its PIR solution not only fully met the performance test requirements for automotive lamp parts, but also contributed to a significant reduction in carbon emissions in the production process by about 33%. The results set a benchmark for the circular economy model of the auto parts industry.



R&D of PLA Online Recycling Technology for Promoting Recycling of the **Nonconforming Products**

In 2024, Kingfa Biomaterials innovatively developed PLA online recycling technology to effectively recycle and reuse the nonconforming PLA resin products produced in the production process, reducing the accumulation of PLA wastes from the sources. This not only alleviated the environmental pressure caused by waste treatment, but also simultaneously reduced the raw material consumption and manufacturing costs, achieving both economic and environmental benefits.



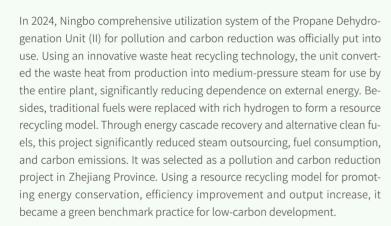
Recycling of Leftover Materials and Bags

Kingfa Biomaterials carried out recycling actions for raw and auxiliary material packaging bags, materials falling off machines, and crushed materials. Through the recycling process and reuse mechanism, the cumulative recycling quantity reached 752 tonnes in 2024, greatly reducing Kingfa Biomaterials' demand for new raw materials, and saving RMB 6.7 million in raw material procurement costs. While cutting the production costs, it also reduced the potential pollution of the wastes to the environment.

Comprehensive Utilization Project of Tail Gas from Deethanizer of the PDH Uni

In 2024, Liaoning Kingfa invested RMB 1.48 million in solving the long-term problem that the tail gas from the deethanizer of the PDH unit could not be recovered, relied on torch incineration treatment, and caused energy waste. Through technical transformation, the tail gas of the deethanizer could be led out and transported to the wastewater and exhaust gas incinerators of the acrylonitrile unit as fuel gas. After the transformation, the project provided 12,500 tonnes of fuel gas in total for acrylonitrile production, achieving resource recycling while reducing carbon emissions, effectively decreasing energy waste and environmental pollution, and facilitating the enterprises' green and low-carbon transformation.

Comprehensive Utilization System of the Propane Dehydrogenation Unit (II) **Pollution and Carbon Reduction**





Propane Dehydrogenation Unit (II)

Chemical Safety

Kingfa Technology strictly abides by the national laws and regulations on the safety management of hazardous chemicals, including the Regulation on the Safety Management of Hazardous Chemicals, in an attempt to reduce the risks of chemical accidents and prevent accidents of hazardous chemicals.

Strategies

The Company has formulated the Safety Management System for Hazardous Chemicals, Management Procedure for Hazardous Chemicals, Chemical Emergency Preparedness and Response Plan, other rules and regulations to ensure the safety management of hazardous chemicals in the whole lifecycle of procurement, storage, use, and disposal. It regularly conducts safety assessment, safety training, and education on the hazardous chemicals, as well as emergency drills on hazardous chemicals incidents. In addition, the Company actively promotes the intrinsic safety management of the hazardous chemicals, encourages the R&D and application of green environmentally friendly chemicals, and reduces the possible impacts on the environment during production and use from the sources.

Transportation



- The Company requires the suppliers of hazardous chemicals to entrust the carriers qualified for road transport of dangerous goods to carry the hazardous chemicals. We strictly control and inspect the incoming vehicles transporting hazardous chemicals, requiring the vehicles and transport personnel to take fire and explosion prevention measures when entering areas where flammable and explosive hazardous chemicals are stored and used. The vehicles and personnel shall also be equipped with sufficient and effective emergency treatment equipment and facilities, as well as personal protection equipment.
- When handling the hazardous chemicals within the Company, each department shall formulate safe operating procedures for handling hazardous chemicals based on the characteristics of the hazardous chemicals, educate and supervise employees to handle the hazardous chemicals in a standardized manner.

Storage

- For the storage of hazardous chemicals, the Company strictly implements relevant regulations and standards such as the General Rules for the Hazardous Chemicals Warehouse Storage, and all hazardous chemicals are stored in approved hazardous chemical warehouses that conform to national standards. The hazardous chemicals are partitioned, classified and stored in different warehouses by their characteristics.
- The hazardous chemicals warehouses shall be managed by personnel with corresponding professional knowledge and safety skills, equipped with reliable personal protective equipment.
- Corresponding safety facilities and equipment are set up in the warehouses according to the types and characteristics of the hazardous chemicals to ensure the safe storage of the hazardous chemicals at all times.

Emergency response



• We have drafted the Emergency Plan for Production Safety Incidents, a reasonable, complete and effective emergency response plan for hazardous chemicals, and organized no less than one practical drill every year in accordance with the national requirements.

Procurement



• The Company strictly controls the safety of the hazardous chemicals from the source, purchases hazardous chemicals from qualified suppliers, and requires the suppliers to provide corresponding material safety data sheets. For the purchased hypertoxic, precursor, and explosive hazardous precursor chemicals, we take the initiative to report to the public security organs in accordance with regulations, and perform due diligence.



Use

- The Company has established a strict management system for the use of the hazardous chemicals. Our relevant procurement, storage management, safety management, use and operation personnel have undergone relevant training and obtained qualification certificates in accordance with national requirements. We have maintained a complete ledger for the receipt and use of the hazardous chemicals, and regular inventories are made.
- The Company is equipped with personal protective equipment up to national standards, strictly requires the employees to wear corresponding personal protective equipment when operating the hazardous chemicals, and regularly conducts safety inspections, practical training, and emergency drills.

Waste disposal



• We have formulated the Management Procedures for Four Types of Wastes in accordance with relevant national and local laws, and industry standards. The hazardous chemical wastes and other wastes produced in the production process are collected, classified, and temporarily stored according to company-level national waste management documents and standards, handed over to qualified third parties for transfer and disposal. The Company performs whole-process risk identification and closedloop risk management for the compliant disposal of wastes, in order to make industrial solid wastes traceable and searchable, and ensure the compliant disposal of waste hazardous chemical residues.

Chemical Safety Management

Kingfa Sci. & Tech. Co., Ltd. Environmental, Social and Governance (ESG) Report 2024 Introduction **Environmental Responsibilities** Social Responsibilities Responsibility for Governance Annex

Risk Management







Comprehensive data collection

Statistically analyze the stock, types, and storage locations of various hazardous chemicals. Create a database for the hazardous chemicals.

Risk identification

Regularly organize personnel to conduct special inspections on hazardous chemicals warehouses and laboratories. Track and implement the rectification. In combination with the environment and operating procedures, the potential risk factors of all positions in an area are identified. Qualitative and quantitative methods are used for evaluation.

Chemical Safety Evaluation

and analysis

Review of safety facilities and management measures

Check the equipment of safety facilities in places where the hazardous chemicals are stored and used; regularly inspect the operation of the facilities, and check the implementation of the safety management system, including personnel training, compliance with the operating procedures, emergency plans, and drills.



Xylene is a hazardous chemical with a "Class A" fire hazard. For this reason, Zhuhai Vanteque Specialty Engineering Plastics completely cancelled the use and storage of xylene in the polyarylether resin process in May 2024 to eliminate the employees' health risks and hidden dangers of fire explosion. This action simultaneously reduced the storage scale of the hazardous chemicals in the enterprises, reduced the costs of environmental governance and

safety protection, and optimized both production activities and environmental risks by reducing the emissions of



xylene volatile organic compounds (VOCs).

Emergency Material Reserves for Hazard-

67



Warning Signs of the Hazardous Wastes



Firefighting System of the Hazardous

Management of Raw and Packaging Materials

The Company deeply understands the importance of raw and packaging material management for practicing green development, regards efficient resource utilization and waste reduction as its core management goals, establishes strict raw material screening standards, gives priority to environmentally friendly, renewable materials, and optimizes production processes to reduce resource consumption. Besides, the Company actively promotes the lightweight design and recycling of packaging materials, establishes an internal recycling mechanism, and significantly reduces waste generation. The systematic internal management measures continuously improve the resource utilization efficiency, reduce environmental footprints with practical actions, and provide strong support for the realization of sustainable development goals.

Raw Material Management

The Company is committed to improving the performance and quality of environmentally friendly raw materials, giving priority to green raw materials, and establishing strict procurement standards to ensure that the negative impacts on the environment are mitigated while meeting the functional requirements for products.

Prioritize green raw materials

low-toxicity and low-emission raw materials and reduce dependence on traditional petroleum-based plastics.

Establish procurement standards

Prioritize renewable, degradable, Establish stringent procurement standards for envi- Actively promote upstream and downronmentally friendly raw materials, give priority to stream enterprises of the supply chain mental protection certification and conformed to materials, jointly build a green supply international environmental protection standards, chain, and improve the environmental and ensure that the sources of raw materials are le-protection of the whole industry. gal and environmentally friendly.

raw material suppliers who have passed environ- to use environmentally friendly raw

Empowering upstream and

Management Measures of the Company for Raw Materials

As of the end of the reporting period

The Company had 231 pieces of products that had passed sustainability-related certifications

accounting for

1.88% of all products

Up to 100%

raw materials produced by the Company are traceable

Packaging Material Management

In terms of packaging material management, the Company reduces resource consumption and wastes by optimizing packaging material design, reducing unnecessary packaging layers and material use, and implementing recycling measures. Committed to constructing a scientific and efficient management system for saving packaging materials, the Company formulated the Bag Management Standards. By implementing strict systems for procurement, storage, use and recycling of the packaging materials, it reduces the wastes from the sources and increases resource utilization efficiency while ensuring the timely supply of the packaging materials.

Reducing Disposable Consumption and Promoting Recycling of the Packaging Materia

In 2024, Liaoning Kingfa organized a project for reducing the packaging costs to decrease and recycle the slip sheets consumed during warehousing and delivery. By replacing the existing 0.8 mm (disposable) slip sheets with 1.5 mm slip sheets (which may be reused more than 6 times), the project significantly reduced the consumption of slip sheets and the use of disposable slip sheets while generating economic benefits. As of the end of the reporting period, the project approximately created benefits of RMB 1,483,400, and reduced the use of approximately 155,700 disposable slip sheets.



Recycling of Slip Sheets

Social Responsibilities

While pursuing its own high-quality development, the Company bravely shoulders its social responsibilities and actively gives back to the society. We focus on innovation-driven and intellectual property strategies, strengthen the technological innovation and industrial chain advantages, assure the product safety and quality, and optimize the supply chain efficiency. We actively assume our social responsibilities, promote our talent development, participate in the social welfare and rural revitalization, protect the data security, and support the sustainable development of the industry and society.

Highlighted results

Invested RMB

2.49 billion in R&D

3 Patent Excellence Awards

The score obtained in the employee engagement was

82.47%

and the total employee training hours were as long as

583,501.8 hours

The incidence rate of occupational diseases was

0%

• heavy work-related injuries occurred

SDGs benchmarking



























Kingfa Sci. & Tech. Co., Ltd. | Environmental, Responsibilities | Social Responsibilities | Social Responsibilities | Social Responsibilities | Responsibilities | Social Resp

Innovation-drive and Intellectual Property

As the world's largest producer and consumer of new chemical materials, China is facing strategic opportunities for optimizing the industrial structure and making continuous breakthroughs in high-end new materials in the new material industry. The rapid development of strategic emerging industries such as new energy, new infrastructure, 5G communications, artificial intelligence, and VR/AR has brought new opportunities for the Company's continuous high-quality development. During the reporting period, the Company effectively responded to the complex internal and external environment, strengthened the technological innovation around the new quality productive forces, enhanced the advantages of the integrated industrial chain, and relied on the world's leading application innovation capabilities to provide global customers with more competitive and overall new material solutions.



Resource Input and Innovation Capacity Building

The Company has continuously developed the world's leading technology R&D platform, created a R&D system known as "13551", led innovation, achieved leapfrog development, improved its independent R&D capabilities, developed clean renewable new products to lead the industry's technological upgrading, in an attempt to become a global leading enterprise of new chemical materials, achieve high-quality development, and make technological innovations to serve the country through industry.



"13551" - an R&D System

71

R&D objectives

Technology leadership

Under the background of national strategic emerging industry support, construct "13551" as a R&D system based on global collaboration. Take the R&D of modified plastics as a breakthrough, strive to improve technological innovation capabilities, make high-quality, green and intelligent technological innovations in all links, actively carry out technological upgrading, increase resource utilization efficiency, and enhance the Company's overall competitiveness.

Leapfrog developmen

Develop across fields, industries and regions. Organize the construction of a national industrial innovation center, strengthen industry - education - research cooperation technology innovation alliance, integrate the existing innovation platform resources, and build a combined innovation fleet with the business model that increases customer value as the traction, with the construction of the R&D platform of Academia Sinica as the center, 3 international R&D centers, 5 domestic sub-technology centers and 5 new chemical material incubation bases as the pivots, and with world-class innovative talents and teams as bases, guaranteed by a systematic, professional and efficient global collaborative work system, to lead the common development of the industry.







novation Platform

Innovation management mechanism

Sustained high-growth R&D investment

The Company has formulated the Management Measures for Scientific Research Work, where clear indicators have been put forward for the investment of scientific research funds and the growth rate of scientific research investment, to promote its sustained and highgrowth R&D investments.

The Company has standardized the process management of technological projects. Guided by the market demand and for the major purpose of "making breakthroughs in key industries", assure project quality, and build an inter-departmental collaborative product development team with the participation of product development, marketing, finance, pilot test, production personnel and other members, in order to ensure the rapid response to market demand and the effective transformation of achievements, and promote the orderly development of scientific research projects.

nism for market-ori ented technological

Scientific and effective talent Implement a talent training plan for "external introduction and internal training", and vigorously perform innovative leading talent projects; make use of talent policies such as Guangdong Provincial Leading Innovation Team Plan to attract and introduce the talents. Internally, we create career promotion channels, enhance the R&D capabilities of the technical team, and cultivate international competitive technical talents through training programs such as "Genesis Plan", "Overseas Creation Plan" and "Creation Plan". For innovative projects, incentives are offered according to project value and individual contributions.

The Company's values are promoted through publications such as "Kingfa Science & Technology News". A corporate innovation culture of "encouraging innovations and tolerating failures" and a comprehensive innovation atmosphere of "innovation everywhere and innovation in everything" have been created.

culture cultiva-

During the reporting period

the Company had a total of

foreign academician

experts with special al lowance from the State Council

197 professional technical personnel above the deputy senior level.



Key Technological Breakthroughs and Achievement **Transformation**

Upholding "making independent innovations, taking the lead in technologies, and creating excellent products", the Company has been accumulating technologies and studying products. Progressively, we have built a R&D platform driven by technology, industry and product research. We have made constant efforts in four major sectors, namely modified plastics, new materi

Science and Technology Honors

Introduction

Second Prize of National Scientific and Technological Advancement Award

Key Technologies for the Preparation of Degradable Copolyesters Based on Precise Regulation of Soft and Hard Segments of Molecular Chains and Their Application in Agricultural Films (the Company and Kingfa Biomaterials)

China Patent Excellence Award



PBAT resin composition (Zhuhai Wango, the Company, Tianjin Kingfa)

First Prize of Guangdong Provincial Science and Technology Award



Integrated Complete technologies for Upgrading and Recycling Waste Plastics and Their Industrial Applications

Second Prize of the Science and Technology Progress Award of the Light **Industry Council**

Vehicles (Shanghai Kingfa)



China Patent Excellence Award



Matte PE material, manufacturing method for same, and applications thereof (the Company)

China Patent Excellence Award



Thermoplastic resin composition (Shanghai Kingfa, the Company)

First Prize of the Science and Technology Progress Award of the Light Industry Council

Key Technologies and Industrialization of Halogen-free Flame Retardant Polymers in the New Energy Field

Second Prize of the Science and Technology Progress Award of China Petroleum and **Chemical Industry Federation**

Key Technologies for Preparing High-performance Polyolefin Composites for New Energy Battery Packs (Shanghai Kingfa)

Diancheren 2024 Smart Electric Vehicle "Technology Innovation Award"



Ablation-Resistant Injection Molding Material for Power Battery Packs

Kingfa Sci. & Tech. Co., Ltd. Environmental, Social and Governance (ESG) Report 2024 Introduction Environmental Responsibilities **Social Responsibilities** Responsibility for Governance

Key technological R&D projects during the reporting period:

Business sectors

Innovation achievements

- Independently developed PFAS Free, 5VA highly heat-resistant PPE, which further improved the flame retardance of the material apart from being PFAS Free as required by the customer.
- The self-developed flame-retardant enhanced PC products contributed to the long-term performance stability of outdoor security products and broke up the monopoly of foreign manufacturers in the security industry.



- **Modified plastics**
- Independently developed bio-based PA5T, LCP and other special modified engineering materials resistant to higher temperature during use, which met the industry's requirements for high current, voltage and temperature rise. The materials are widely used in connectors, photovoltaics, lithium batteries, and power tools.
- Independently developed rapid prototyping reinforced PBT, which realized a significant decline in the molding cycle, greatly improved the competitiveness of materials, and achieved successful application in the automotive connector industry.
- The self-developed chemically recyclable PBT, transparent MBS and bio-based PA helped the customers reduce the carbon emissions of products.
- Independently developed high-strength PA6, and realized the application of plastics instead of steel in automotive structural parts through hybrid structure design.



Environment-friendly high-performance recycled plastics

Green

petrification

- Through the self-developed core technologies such as intelligent fine sorting, efficient cleaning, and low-carbon recycling, an integrated overall industrialization solution was developed for the waste plastics. Related projects won the First Prize of Guangdong Provincial Science and Technology Progress Award.
- Independently developed products such as high-rigidity, high-toughness, heat-resistant, electroplated, weather-resistant and chemical-resistant ABS, breaking through the performance bottleneck of traditional ABS and gaining market recognition.
- Independently developed special high-performance modified materials for the toy industry, which met the stringent requirements of the toy industry for safety, durability and environment-friendliness, and provided core material solutions for upgrading toy performance.
- Independently developed materials with high flow, high rigidity and high impact properties; successfully overcame technical difficulties on material odor control and spray painting that had long plagued the industry; greatly improved material properties and application performance; overturned the dominant position of foreign companies in the field of these materials.
- Independently developed special modified polymer composites for the wire drawing industry, shortened the product molding cycle and provided key technical support for the process upgrading of the wire drawing industry.
- Continuous progress was made in the independently developed cyclic olefin copolymer (COC), its key monomer norbornene (NB) and key production technologies, sold and recognized by the customers.

Business sectors

Innovation achievements

- Breakthrough progress was made in the project of "High-yield Succinic Acid Strain with Independent Intellectual Property". The conversion rate, potency, and other indicators reached an advanced level on a worldwide basis. The Company's independently developed high-performance strains flexibly produced important chemical raw materials and products such as lactic acid and succinic acid, forming a "carbon cycle" of raw materials → finished products → complete biodegradation, which contributed to the development of China's circular economy and green GDP growth, carbon peaking and carbon neutrality work.
- For the self-developed halogen-free flame retardant, the opportunity of green chemical upgrading was seized to overcome core technologies such as high heat resistance, precipitation resistance, and long-term compatibility. Developed an environmentally friendly formula system and achieved industrial mass production. Promoted large-scale application in the global market, and the technical indicators were internationally leading.
- The Company's project on "Key Technologies for Preparing Degradable Copolyesters and Agricultural Film Applications Based on Precise Control of Soft and Hard Segments of Molecular Chains" won the Second Prize of 2023 National Science and Technology Progress Award. As a leading and responsible unit, the Company undertook the National Major Science and Technology Project. Based on the major needs for the national "carbon peak and carbon neutrality" strategy, we promoted the development in biomanufacturing and the new quality productive forces, and sped up China's overtake in the new track of bio-based degradable polyesters. The Company undertook the sub-project of the National Key R&D Plan, achieving breakthrough progress, focusing on global environmental pollution problems (white pollution), giving full play to the advantages of application development and industrial manufacturing platforms, and supporting commercial promotion of biodegradable plastics in the packaging industry.
- By creatively designing the molecular structure of resin, modified PBAT useful for high-speed film blowing was developed. The film blowing speed was increased by 40%, and the blown film processing costs were cut significantly. The gaps between biodegradable packaging materials and traditional packaging materials were further narrowed in terms of their processability. The special materials for biodegradable films were further upgraded. The Company adapted to the need that high-end flexible packages should be environment-friendly, made breakthroughs in the blown film-grade bio-based high toughness, high transparency and high gloss technologies, and realized small-scale application of high-end flexible packages, reaching the world's leading
- Independently developed special materials for fully biodegradable straws based on the rapid crystallization and modification process, which solved the problem of low production efficiency caused by low thermal deformation temperature and slow crystallization of traditional degradable plastic straws. The straws were highly heat-resistant with their rapid crystallization, and the product innovations were widely recognized by downstream companies. The Company made phased breakthroughs in high-speed 3D printing applications. Domestically, the product quality was first-class, and the product performance met various standards, recognized by core customers.
- Independently developed bio-based PBT, bio-based PBST, and fully bio-based PBXY for degradable film bags, achieving a high compatibility between the bio-based and degradable, satisfying the multi-faceted diversified market needs, leading the development orientation of the industry, and consolidating the Company's leading position in the industry.



• Made breakthroughs in multiple key industrialization technologies of polyarylethersulfone. The industrialization unit with a capacity of 6,000 t/year was successfully put into operation and achieved full production capacity. The polymerization efficiency, energy consumption and quality were significantly improved.



Business sectors

Innovation achievements

- Independently developed a new generation of cold and thermal shock-resistant halogen-free flame-retardant semi-aromatic polyamides, which demonstrated excellent electrical safety at high-temperature and high resistance under harsh environment. The materials have been widely used in key areas such as high-voltage copper bars for new energy vehicles and ultra-high speed fans for servers, providing leading material solutions for high-reliability application scenarios.
- Independently developed ablation-resistant halogen-free flame-retardant semi-aromatic polyamides, which maintained structural integrity and excellent electrical insulation after high-temperature burning and improved the safety and reliability of the 800V high-voltage architectures of new energy vehicles. New industry standards were established for protecting safety of the high-voltage system of electric vehicles.
- Independently developed several types of LCPs with electrical performance control, ultra-high flow, low warpage, and high damping and shock absorption. The LCPs are widely used in key components such as high-speed connectors, CPU sockets, and high-speed cooling fans to promote high-speed and stable operations of AI servers and big data centers.
- The independently developed anti-cracking LCPs have been widely used in the structural parts for packaging new energy batteries to improve the packaging efficiency and safety of new energy batteries.
- Independently developed the second-generation polymerization technology for extrusion-grade LCP resin. The resin produced was used in high-strength LCP fibers in large quantities, which greatly improved the fiber strength and stability.



Special Engineering

Plastics

Carbon fiber and composites

• A self-developed gradient energy-absorbing, high-impact steel-plastic composite board improved the application capabilities of thermoplastic composites in the field of new energy vehicles.



polymers

- The self-developed nitrocellulose microporous membranes for in vitro diagnostics have been put into pilot-scale production, successfully breaking through the technical barriers and bottlenecks in this field, laying a solid foundation for large-scale mass production and market application, and accelerating import substitution.
- The self-developed super-soft nitrile gloves and high-grade chemical-resistant gloves have successfully been put into use in high-end fields, including dentistry, foods, and chemicals, highly recognized by customers for their excellent product performance and
- The self-developed multi-grade and multi-functional air filters have achieved mass production and sales, empowering the development of the industry and being well received by customers.

Material R&D for UAVs Facilitated the Development of Low-Altitude Economy

Nowadays, when the low-altitude economy is booming, the Company focuses on making R&D breakthroughs in the field of unmanned aerial vehicles, develops customized material solutions according to the differentiated needs for consumer-grade unmanned aerial vehicles and industry-grade products, provide strong support for the development of the low-altitude economy, and help the industry of the unmanned aerial vehicles reach new heights.



Consumer-grade UAVs

Made of carbon fiber reinforced thermoplastic materials, they are used in the injection-molded body, arms, shock-absorbing plates, platforms, blade clips, and other components to satisfy the performance requirements.

Use continuous carbon fiber composites to make blades, arms, etc. to improve product quality and performance.



Obtained a No Objection Letter from the FDA and Set a Benchmark for Recyclin **Technologies**

In the face of high-standard supervision over the food-grade recycled materials in Europe and the United States, the Company obtained a no objection letter (NOL) from the US FDA (Food and Drug Administration) in September 2024, becoming Asia's first Company that passed this certification. In this letter, a reply and a confirmation were made that the Company's recycled HDPE recycling process could produce food contact grade HDPE (covering all scenarios such as high-temperature sterilization and refrigeration), marking that the Company's recycling technologies had been recognized by international authorities. The Company not only broke through the barriers of the high-end food packaging market in the United States, but also realized 100% conversion of post-consumption waste plastics into foodgrade materials, setting a technical benchmark for the Asian recycled plastics industry and accelerating the upgrading of the global industrial chain to a highly safe high-value recycling model.



78

The Breakthrough in the Supercritical Electrostatic Injection Technology Rea Independent and Controllable Production

Kingfa Medical independently initiated an innovative R&D project of the "Complete Production Line Based on the Supercritical Electrostatic Jetting Principles and Technologies" to develop high-strength functional supercritical electrostatic jetting nonwovens for medical protection and packaging products. Kingfa Medical deeply explored the formation mechanism and regulation mechanism for supercritical electrostatic jet nonwoven micro-nano structures, clarified the structure-activity relationships among the functionality, processes and raw material structures, and realized independent, controllable production of high-strength functional nonwoven materials and their preparation technologies.

During the reporting period, Kingfa Medical made remarkable progress in this project. It not only completed the systematic optimization of dissolution, blown spinning, screen laying, hot rolling and other processes, but also successfully developed the pilot production line preparation process and smoothly completed customer samples for the medical packages. As of the end of the reporting period, the overall pilot plan and main equipment had been developed, and the pilot production line had been installed. It is expected that the system debugging and process package will be output in 2025 to achieve continuous and stable production of the pilot production line. The successful implementation of this project not only demonstrates Kingfa Medical's independent innovation capabilities in the field of supercritical electrostatic jet nonwovens, but also lays a solid foundation for China's technological breakthroughs and industrial upgrading in this field.

Kingfa Sci. & Tech. Co., Ltd. | Environmental, Responsibilities | Social Responsibilities | Social Responsibilities | Social Responsibilities | Responsibilities | Annex

■ Intellectual Property Protection

The Company has formulated management systems for intellectual property protection, including the Intellectual Property Management Manual and the Procedural Documents for Intellectual Property, and established corporate standards such as the Intellectual Property Management Regulations. A clear intellectual property management system has been established, defining the responsibilities of the management representatives, competent intellectual property and other relevant authorities, and standardizing the management of intellectual property declaration, ownership, use and infringement. The intellectual property management system is annually audited. The Company has been certified by the intellectual property management system and won the honor as a National Advantageous Intellectual Property Enterprise.

Intellectual property management



A technical committee composed of product line managers, R&D engineers, and patent engineers was set up. Various intellectual property platforms such as the "National Technical Committee for Standardization of Plastic Products/Sub-technical Committee for Modified Plastics" and "Guangdong Advanced Manufacturing Standardization Pilot Unit" have been established to promote the Company's transformation from product leadership to patent and standard leadership.

During the reporting period

Number of valid patents owned

2,977

Number of copyrights owned

18

Number of trademarks owned

281

Annual number of new invention patent applications

558

Annual number of new copyrights

1

Annual number of new trademarks

27

Number of new invention patents authorized in the year

409





During the reporting period, the Company won

3 China Patent Excellence Awards.



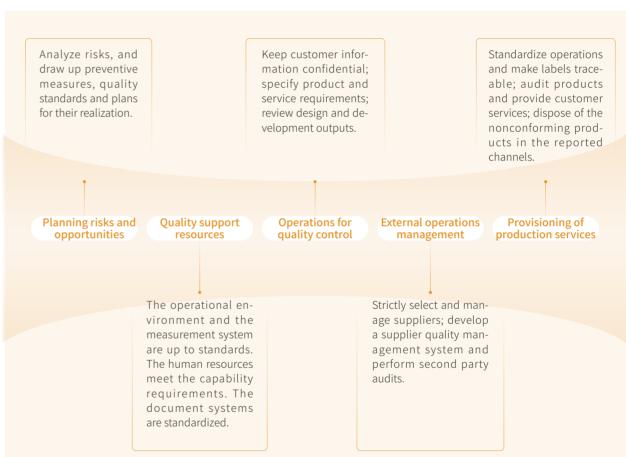
The Company and its subsidiaries conducted intellectual property and patent protection training respectively

Safety and Quality of Products and Services

We adhere to the quality concept of "maintaining survival based on standards, becoming powerful in reliance upon quality, and taking the customers first". We have established a standardized and lean product, safety and quality system, provided our customers with all-round, full-cycle service support, and ensured that all products demonstrate excellent "Kingfa quality".

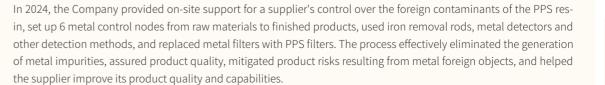
Product Safety and Quality

The Company has established a product quality management system covering the Quality Manual and Incoming Material Inspection Process to strictly control the quality of the whole product process to ensure stable and safe quality. During the reporting period, the Company and all its subsidiaries passed the quality-related system certification.



Quality control procedure

Support for a Supplier's Control over Metal Contaminants



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Product Recall

The Company prevents and averts recall risks ahead of risk analysis. We standardize the after-sales product disposal process, specify the recall process and the responsible department in the Quality Control Specifications for Product Shipment, and incorporate on-site product return and recall data into our performance indicators related to customer satisfaction to truly protect the rights and interests of the customers. Since its establishment, the Company has not experienced any recall.







Product Recall Procedures

Management of Hazardous Substances

The Company always protects product safety, strictly controls the use of hazardous substances in products, and formulates the Technical Standards for the Control of Hazardous Substances to clarify the prohibited substances in the raw materials to ensure product compliance and minimize the adverse impacts on the environment. During the reporting period, the Company and its three subsidiaries obtained the QC 08000 Hazardous Substance Process Management System Certification.

The Company continuously updated the regulated list of hazardous substances and drafted reduction and control plans, which should be strictly implemented by the Company and its suppliers. When reviewing the new and qualified suppliers, the Company will check the prohibited substances separately. If the suppliers fail to meet the standards, the Company will require the suppliers to complete the rectification and re-audit them within one month. If the suppliers still fail the re-audit, no new suppliers will be introduced, and the qualified suppliers will be directly eliminated.

Control over the Company's new hazardous substances during the reporting period

Control level	List of substances	Control method
Level I	Isopropylphenyl phosphate, medium-chain Chlorinated paraffin, polybrominated biphenyls, poly brominated diphenyl ethers, polychlorinated biphenyl, dicumyl peroxide, 2-(2-hydroxy-5-tert-octylphenyl) benzotriazole (UV - 329), 2, 4, 6-tri-tert-butylphenol (2, 4, 6 - TTBP), and diphenyl (2, 4, 6-trimethylbenzoyl) phosphine oxide	Ban their use in the products immediately, and intentional addition is prohibited for any items. The content of all product compositions must meet the control requirements or special customer requirements, except those that comply with the exemption items and can be exempted.
Level II	PFAS, 6-[(C10-C13)-alkyl-(branched, unsaturated)-2, 5-dioxopyrrolidin-1-yl] hexanoic acid, triphenyl phosphorothionate, octamethyltrisiloxane, perfluamine, reaction mass of triphenylthiophosphate and tertiary butylated phenyl derivatives, tris (4-nonylphenyl, branched) phosphite	Prohibit their use after the specified date. To use them in the manufacturing process, the suppliers shall consider and draft a mitigation and gradual replacement plan.
Level III	Triphenyl phosphate, resorcin, perfluorobutanesulfonic acid (PFBS) and its salt, decamethylcyclopentasiloxane (D5), dodecamethylpentasiloxane (D6), octamethylcyclotetrasiloxane (D4)	The suppliers need to pay attention to their use. Currently, the period of use is not specified, and these materials will be automatically converted into Class II controlled substances with the introduction of new regulations.

Cultivation of Quality Awareness

The Company actively carries out the quality-related training, builds a quality talent echelon, and has the quality awareness deeply rooted into the hearts of all employees. During the reporting period, the Company continuously improved the training of quality management-related talents to meet the Company's needs for high-quality development and global quality talents:



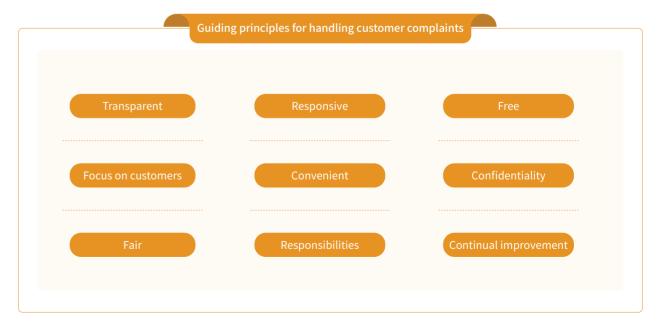
- Trained 12 talents for each echelon, including department heads and supervisors. All supervisors undertook job rotations till it was conducive to their business improvement or personal growth.
- Added 3 key quality account managers, to enhance the extension to Japan and Vietnam.
- Appointed 2 R&D quality managers, to discuss the reliability of formula design, quality management of sample delivery, trial production assurance, formula change evaluation, etc.
- Appointed 5 engineers and foremen to change the foreman model that focused on the execution into an engineer empowerment model to build specialized inspection platform.



- The senior management assisted in continuously promoting the training of new employees.
- The LSSGB program was started for systematic training about the Six Sigma awareness and method.
- Performed the Golden Shield Plan Phase II.

Customer services

The Company has formulated customer service systems such as Customer Complaint Management Regulations to provide the customers with prompt services before, during and after sales, quickly standardize the process for handling customer complaints, respond to customer demands in a timely manner, and improve customer satisfaction with its products and services.



Kingfa Sci. & Tech. Co., Ltd. Environmental, Social and Governance (ESG) Report 2024

Introduction

Emergent



Make an emergency response within 8 hours, and provide the investigation results within 2 business days. In case of any anomaly, contact the superior or the complainant in time to give an explanation.

Urgent

an explanation.



Make an emergency response within 12 hours, and provide the investigation results within 2 business days. In case of any

General



Handle the complaint normally, and offer an initial reply or suggestions within 1 business day. Make the final suggestions on how to handle the complaint within 3 business days. If the customer puts forward special requirements for time, reply within the time limit specified by the customer. In case of an abnormality in the handling process, report to the complainant as soon as possible.

anomaly, contact the superior or

the complainant in time to give



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Promotion of key customer service model

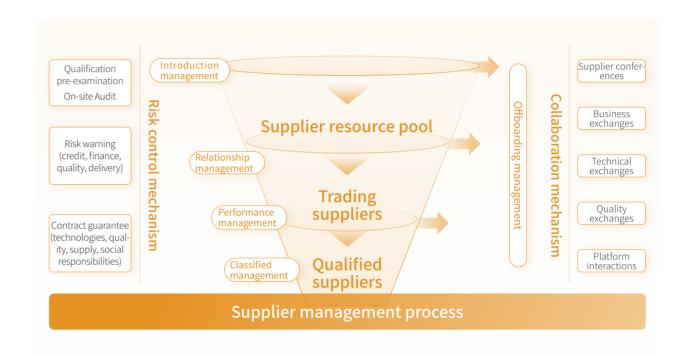




Change in the Customer Service Model

Supply Chain Security

The Company has constructed and continuously improved the supplier lifecycle management system, built an SRM platform, and realized targeted transparent supply chain management based on the differentiated needs of all the Company's business segments and product categories. We have leveraged our own advantages to continuously empower our suppliers' performance in the quality system, ESG, and other aspects to build a sustainable supply chain.





Kingfa Sci. & Tech. Co., Ltd. Environmental, Social and Governance (ESG) Report 2024 Introduction Environmental Responsibilities **Social Responsibilities** Responsibility for Governance



During the reporting period, the Company revised the Evaluation and Application Procedures for Supplier Classification Management. In combination with the principles for evaluating the importance of material categories and supplier dependency, we classified the suppliers of various materials, and carried out differentiated management for four types of suppliers, namely strategic suppliers, key collaborative suppliers, collaborative suppliers, and general suppliers.



Formulate supplier introduction rules to standardize the selection and management process for the new suppliers. Establish differentiated supplier introduction standards based on the needs for category management, to strictly control supply risks, evaluate upstream supply capabilities, and accommodate the needs for resource reserve and optimization.

The Purchasing Department conducts pre-qualification review for all potential suppliers. The raw material suppliers shall at least pass ISO 9001 certification, and attention is paid to the suppliers certified by ISO 14001, ISO 45001 and other relevant systems. Conduct on-site audits when necessary. Comprehensively evaluate the suppliers' operation status, production capacity and management, to improve their overall qualification.



Formulate the Supplier Audit Management Regulations and conduct routine audits for key suppliers according to the audit plan. Evaluate whether the suppliers' management systems remain effective and are continuously improved. Audit problematic suppliers to evaluate the effectiveness of the suppliers' problem improvements, in order to eliminate the suppliers with supply risks in a timely manner.



Formulate the Supplier Performance Management Regulations and continuously pay attention to the suppliers' performance in delivery, quality and services, Output the overall performance results of the raw material suppliers on a quarterly basis and put them into practice. Provide the suppliers with corresponding incentives, rewards and punishments for the suppliers with different performance levels (A-D). Improve the efficiency of the supply chain, and realize the differentiated demonstration of supplier value.



Closely track the political, military, economic, climatic and other trends in different regions of the world. Identify the risk factors and draw up risk plans in advance. Adjust procurement and inventory strategies in a timely manner, including increasing raw material reserves, locking raw material orders in advance, and making early preparations for raw material substitution. Eliminate potential adverse effects of risks. Establish an early warning mechanism for high-risk raw materials, and keep informative about the supply chain by continuously tracking the production status of upstream suppliers and signing four major agreements with the suppliers, including supply agreements, quality assurance agreements, environmental protection agreements, and technical agreements.



85

Supplier conferences, technical exchanges, daily business exchanges, quality exchanges, platform interactions, etc.

Supplier Management System

Continuous improvement of the supply chain digitalization system

In 2024, the Company continuously improved the SRM system portal, launched a non-raw material e-commerce platform, and increased procurement efficiency. The Company published the management requirements such as the Supplier Management Manual and the Notice of Honest Cooperation on the portal to guide the suppliers to learn and implement relevant requirements. Through the SRM system, the Company continuously strengthened its communications with its suppliers, standardized its cooperation, and increased the efficiency and transparency of the supply chain management.



Management optimization for the suppliers of recycled materials



Annex

In 2024, the Company optimized its management system for the suppliers of the recycled materials, improved the full lifecycle management, and clarified the exit mechanism. We built a fixed audit team for on-site audit, clarified the qualification level of all suppliers of the recycled materials, initiated rectification for 42 underperforming suppliers, and gradually started to eliminate the suppliers with poor on-site management. This improved the purchase management and supplier performance, ensured the stability of the supply chain, and promoted sustainable development.

Sustainable Procurement

Strengthen communication and col-

laboration on the annual supplier con-

ference, special capacity training and

supply chain support plan. Our SRM

systematically carries out training on

the sustainability concept, including

CSR management, EHS, diversified

construction and requirements, waste

management, sustainable water man-

agement, and other topics.

The Company works closely with the suppliers to jointly remain committed sustainable development goals and create sustainable value. During the reporting period, the Company issued the Sustainable Procurement Policy. In terms of environmental protection, we prioritized environmentally friendly suppliers, focused on the environmental protection of raw materials and equipment, and clarified waste management requirements. Regarding the labor workers' human rights, priority was given to the suppliers who had passed relevant certification. Human rights were prohibited from infringement to protect the employees' rights and interests. In terms of business ethics, we advocated that both parties should maintain integrity, conclude fair transactions and respect mutual intellectual property.

The Company constantly promotes the continuous improvement of the ESG management in the supply chain through the closedloop management of "training - evaluation - improvement":

Normalized training Systematic assessment

> Systematically perform sustainability risk assessment and

Establish a hierarchical management system based on supplier ESG portraits, draft targeted improvement plans and incorporate them into the supplier performance appraisal.

Targeted improvements

audit environmental and social responsibilities.

Dimensions for Auditing the Suppliers' Environmental and Social Responsibilities

- Child labor and minor Working hours and salaries Management of toxic, flammable
- Anti-discrimination
- Morality and integrity

Intellectual property

- Lodging sanitation
- Forced labor
- Information security
- Freedom of association Free choice of employment

and explosive products

- Energy conservation and emission reduction
- Management of occupational diseases
- Safety
- Environmental management
- Resource utilization



2024 Supplier Conference on "Deepening Cooperation, Optimizing the Platform and Promoting Global Development", Conveying the Sustainability Concept

During the reporting period

the Company conducted

ESG training sessions for the suppliers

covering

of the suppliers, and there were no suppliers with actual or potential significant negative environmental or social impacts.

Contractor Management

The Company has established a contractor safety management mechanism that focuses on "who is in charge and who is responsible". We ensure that the safety risks of contractors' operations are controllable by controlling the whole process of "review - notification - supervision - accountability".

Examination

Examine the contractors' safety qualifications, particularly evaluating their legality, adaptability, reliability, technical and safety guarantee capabilities. The examination results are reported to the Office of the Work Safety Leading Group for archiving.

Accountability

Identify responsibilities of and punish the contractors who violate safety regulations and cause accidents according to the Company's accident investigation procedures.

Notification

Clarify the safety responsibility boundaries through the Contractor's Internal Operating Safety Instructions and the Contractor's Safety, Environmental Protection and Occupational Health Management Agreement.

Supervision

All personnel of the contractor shall undergo safety education and training before their entry. The Company dispatches safety management personnel to supervise the daily on-site safety inspections.

Indicators and Targets

Sustainable procurement objectives	Progress of the objectives
Compared with 2022, achieve a 30% reduction in carbon emissions related to procurement activities by 2030.	In 2024, the Company's carbon emissions related to procurement activities were reduced by 5%.
From 2022 to 2030, ensure that the coverage of the annual sustainable procurement training of purchasing specialists reaches 100%.	In 2024, the coverage of sustainable procurement training by the purchasing specialists was up to 100%.
From 2022 to 2030, ensure that the suppliers comply with labor laws and regulations, and annually, 100% suppliers are qualified in protecting the rights and interests of laborers.	In 2024, 100% of the raw material suppliers were qualified in protecting the laborers' rights and interests.
From 2022 to 2030, the Company ensures that 100% of key raw materials will be from the suppliers with environmental management system certification (ISO 14001).	In 2024, 72% of the Company's stable suppliers of brand new raw materials were certified by ISO 14001.
From 2022 to 2030, ensure that the supplier code of conduct will be 100% signed every year.	In 2024, the SRM portal was built. The supplier code of conduct was published and announced in the SRM portal. At present, all our suppliers have SRM system accounts, and they need to log in to the system for daily purchase quotation, information receipt and interaction.
Compared with 2022, the on-site audit coverage of core suppliers will increase to 90% by 2030.	In 2024, the on-site audit coverage of the Company's core suppliers was 80%.



Support for Industry Development

As a leading enterprise within the industry, the Company always firmly believes in the positive value of cooperation and sharing for sustainable development of itself, the industry, and the society during innovations. To facilitate the industry win-win, we cooperate with our domestic and overseas associates, upstream and downstream enterprises to exchange and learn about new opportunities and achievements in the development of the industry. We actively undertake the responsibilities of industry associations, promote the formulation of industry standards, carry out in-depth exchanges and scientific research project cooperation with universities, and guide the future development trend of the industry with technological innovations.

Joint industry advancement

To promote joint construction and win-win in the industry, we actively participate in exchanges, exhibitions and other activities related to materials and sustainable development, and realize the coordinated development, mutual benefit and win-win of the industry through intuitive and high-quality exchanges.

Industry events

In October 2024, the Company participated in the VDA Round Table.



Shanghai Kingfa won APTIV Outstanding Contribution Award.



The Chairman led a team to participate in the technology exhibition at the head office of Toyota in Japan.



Kingfa (USA) participated one of the world's most influential SPE Automotive Innovation Awards Program, and entered the Finalist round of the transparent bumper innovation program.



Awards



The Company won Dongfeng Nissan's "Best Partner Award of the Supply Chain of the Year".

Kingfa Biomaterials won the "Emerging Star Award" at the Innovative 3D Strategic Supplier Conference.

The Company was evaluated by L'Oréal as "Strategic Packaging Partner".

Participated in the 3rd International Green Zero Carbon Festival and 2024 ES Leaders Summit to Promote the Green Transformation of the Plastics Industry





Delivered a keynote speech

Representatives of the Company's ESG Working Group Actively Participated in th Global Sustainability Forum and Exchange

The Company was invited by Guangzhou Representative Office of Macao Trade and Investment Promotion Institute to participate in the opening ceremony of the "2024 Macao International Environmental Cooperation Forum and Exhibition". Representatives of the Company's ESG working group and participants from different industries shared and discussed environmental concerns such as ESG and sustainability. By participating in this event, we strengthened the expansion of exchanges and cooperation among Guangdong, Hong Kong, Macao and the world in government, industry, academia, research and application, and jointly promoted the diversification of circular economy and green sustainable development.



Participated in the forum and exchange

Attended the SPE TPO Global Automotive Conference to Share Experience in t Field of Lightweight Automobiles

In October 2024, the Company participated in the world's leading engineering polyolefin forum - SPE TPO Global Automotive Conference, focusing on the application of polyolefins in the fields of automobiles and ground mobility. Our industry manager released a thematic report on the "the application of high-performance transparent polyolefin materials in luminous automotive bumpers", showcasing the Company's innovative achievements in the R&D of lightweight materials, and contributing to the application of polyolefins in the field of automobiles.



Participated in the SPE TPO Global Automotive Conference

Deep Industry Engagement

Since its establishment, the Company has actively participated in establishing industry standards for polymers, modified plastics, recycled plastics, bio-based materials, etc., and discussed with associations. Taking the national deployment for the long-term development of strategic emerging industries as our own mission, we actively participated in and undertook the national key program to contribute to industry development and industrial upgrading.



In September 2024, Liaoning Kingfa, as a member of the National Acrylonitrile Industry Association, attended the annual meeting to exchange and discuss the industry production issues.



In October 2024, the Company held "Project of Guangzhou - a Capital of International Academic Conferences - Key Technology Innovation Salon of New Composite Materials for Batteries" to discuss cutting-edge technologies.

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The Company played important roles in several technology standardization committees, including National Technical Standardization Committee on Plastics, ISO/TC61/SC9/WG27 and ISO/TC330. As of the end of the reporting period, the Company took the lead in and participated in the drafting and publication of 12 international standards, and presided over/participated in the formulation and revision of more than 200 national, industry, local and group standards.

Standard Number	Standard	Standard status
ISO 15373:2024	Plastics - Polymer dispersions - Determination of free formaldehyde	Released
GB/T 44535-2024	Plastics - Determination of linear dimensions of test specimens	Released
GB/T 44303-2024	Plastics - Quantitative evaluation of scratch damage and scratch visibility	Released
GB/T 44559.1-2024	Plastics - Determination of puncture impact behaviour of rigid plastics - Part 1: Non-in- strumented impact testing	Released
GB/T 33596	Electrical installations in ships - Insulating and sheathing materials for shipboard and offshore units, power, control, instrumentation and telecommunication cables	Solicitation of comments
ISO 15373:2024	Plastics - Polymer dispersions - Determination of free formaldehyde	Released
GB/T 1632.1-2024	Plastics - Determination of the viscosity of polymers in dilute solution using capillary viscometers - Part 1:General principles	Released
GB/T 2035-2024	Plastics - Vocabulary	Released
GB/T 5169.12-2024	Fire hazard testing for electric and electronic products - Part 12: Glowing/hot-wire based test methods - Glow-wire flammability index (GWFI) test method for materials	Released
GB/T 5169.13-2024	Fire hazard testing for electric and electronic products - Part 13:Glowing/hot-wire based test methods - Glowing-wire ignition temperature (GWIT) test method for materials	Released
GB/T 5169.23-2024	Fire hazard testing for electric and electronic products - Part 23:Test flames - 500W vertical flame test method for tubular polymeric materials	Released
GB/Z 5169.48-2024	Fire hazard testing for electric and electronic products - Part 48: Glowing/hot-wire based test methods - Hot wire coil test method - Apparatus, verification, test method and guidance	Released
GB/T 29284-2024	Polylactic acid	Released
GB/T 40006.11-2024	Plastics - Recycled plastics - Part 11: Polyvinyl chloride (PVC) materials	Released
GB/T 44443-2024	Green product assessment - Computers	Released
GB/T 44447-2024	Green product assessment - Printers and multifunction devices	Released
GB/T 45090-2024	Plastics - Labelling and marking of recycled plastics	Released
GB/T 1632.1-2024	Plastics - Determination of the viscosity of polymers in dilute solution using capillary viscometers - Part 1:General principles	Released

Diversified Cooperation

Guided by the needs for industrial development, the Company actively establishes strategic cooperation with enterprises and institutions of higher learning to promote deep integration of industry, academia, and research.

Joint laboratory for joining forces to promote material innovations

In 2024, the Company established a joint laboratory with 7 leading companies of automobile, home appliances, electronics, electrical, new energy and other industries, developing joint development projects based on industry development trends, including intelligent driving, lightweight, replacement steel with plastics, and electrical performance tests, which effectively promoted material innovation and R&D.





Cooperation on the Joint Laboratory



Expanding the Business Layout and Practicing Green Development

In 2024, the Company leveraged its upstream resource advantages and downstream processing expertise to expand its business areas, accelerated the construction of a plastic recycling industry ecosystem, and strengthened full-chain synergy capabilities through strategic cooperation.



the Company entered into a contract with a representative industry of the renewable resources industry to cooperate on the laboratory construction, material production and sales, and utilization of household appliance dismantling materials to achieve resource sharing and complementary advantages.

the Company joined hands with China Renewable Resources Group, explored the establishment of a joint venture based on the green concept, jointly set up a sorting center, and built a "unified purchase and marketing" cooperation model.



Kingfa Sci. & Tech. Co., Ltd. Environmental, Social and Governance (ESG) Report 2024 Introduction Environmental Responsibilities **Social Responsibilities** Responsibility for Governance Annex



Multiple institutions of higher learning cooperated to cultivate talents and

In 2024, the Company continuously promoted industry-academia-research cooperation, facilitated deep integration of industry and education, cultivated and reserved professional talents for enterprises, drove scientific research innovation, accelerated the transformation of results, and supported the sustainable development of the industry.



Shanghai Kingfa carried out industry-academia-research cooperation with several institutions of higher learning: It negotiated with Fudan University to jointly build a "Road to a Strong Country" ideological and political course teaching practice base, exchanged views on industry-academia-research cooperation and joint laboratory construction, and reached intentions to deepen cooperation. It negotiated about joint doctoral training with Donghua University and carried out technical exchanges on non-woven products. It discussed with the University of Shanghai for Science and Technology on the cultivation of innovative engineering talents, carried out technical exchanges with Zhejiang University, and built an off-campus practice base with Shanghai University.



Kingfa Carbon Fiber joined hands with nine organizations, including Sichuan University, to participate in the joint declaration of the national key R&D program.



Wuhan Kingfa successively cooperated with Jianghan University to develop key technologies for high-performance protective safety polymers for new energy batteries, studied the technology for preparing high-performance polyolefin composites for new energy battery packs with South-Central Minzu University, and cooperated with Hubei University and Wuhan University of Technology to build an internship base.



Ningbo Kingfa was approved to establish a national postdoctoral research workstation.



Kingfa Biomaterials and South China University of Technology jointly built Guangdong Provincial Postdoctoral Innovation Practice Base.

Equality, Inclusion and Diversity

We uphold being people-oriented, fair, open, and impartial, giving priority to morality and attaching equal importance to capabilities and good virtues. We are committed to creating a diverse, equal and inclusive work environment to promote innovation, enhance teamwork, and ensure that all members give full play to their potential.

During the reporting period, the Company continuously improved the management systems related to recruitment, personnel and labor management, revised and newly compiled 10 management systems including the Recruitment Management Regulations, Personnel Management Regulations and Internal Recommendation Management Regulations, and promulgated the Labor and Human Rights Policies to clarify its specific action guidelines and objectives in all aspects of employee rights and human rights protection, and ensure the smooth achievement of the objectives.

The Company strictly complies with the Universal Declaration of Human Rights, ILO Core Conventions, Social Accountability (SA 8000), other local laws and regulations, international labor conventions and initiatives. We carry out a number of actions to ensure equality, tolerance and diversity in the employee management.

ight against discrimination and harassment

- We have formulated the Anti-Discrimination and Anti-Harassment Management Regulations, following the principles of fairness, justice, and transparency in all aspects to ensure equal employment opportunities.
- We have been carrying out publicity and education activities to prevent and stop harassment, posting the rules and regulations in conspicuous places such as bulletin boards.
- The employees can file complaints through suggestion boxes, dedicated mailboxes, etc. When discovering discrimination and harassment, we will collect evidences, and build a team for investigation. After confirmation, punish the relevant personnel, appease the victims, arrange paid sick leave, and work normally after recovery.

minor workers

- Having formulated the Management Regulations for Child Labor and Minor Workers, we don't accept suppliers or partners which employ child labor or minor workers.
- We implement stringent age verification procedures for recruitment, require the provision of identity documents, question about educational backgrounds and age in interviews, and perform background checks if necessary.
- Once it is found that child labor is recruited by mistake, the children will not be dismissed immediately. Instead, we will take remedial actions, report to a labor bureau, and arrange medical examination. Provide treatment for the child labor with illness. After soliciting opinions, the Company shall bear the expenses, require the guardian to sign for acknowledging them, provide financial assistance, and keep records.

Forced labor

- · Having formulated the Management Regulations on the Prohibition of Forced Labor, we prohibit coercive or deceptive means, and protect the employees' rights to rest, vacation and termination of labor relationships during the term of the contract. The Company does not restrict these rights in violation
- · Promote the protection of human rights and anti-forced labor concepts to the suppliers, contractors and other partners.
- The new employee orientation training notices may be given through the suggestion box, email, reporting hotline, and OA system.
- Once forced labor is discovered, the HR Department will communicate with the trade union in time for appeasement and remedy

- Having formulated the Regulations on Labor Protection and Management of Female Employees, we have created a diverse, inclusive culture, attached importance to the rights and interests of female employees, and emphasized equality between men and women and equal pay for equal work.
- We gradually improve our sanitary conditions, regularly organize professional organizations to assist with health care, set up relevant facilities in collective dormitories, and regularly organize physical and gynecological examinations.
- We buy the maternity insurance for our female employees according to regulations; reimburse their security and living expenses during their pregnancy; offer them insurance benefits during their childbirth (abortion); provide them with breastfeeding leave and living expenses after maternity leave, build a committee for safeguarding the female employees' rights and interests.

Equality, Inclusion and Diversity

During the reporting period

the Company had a total of

13.083 employees

The labor contracts were concluded with all employees

All employees returned to work after their parental leave

disabled employees were cumulatively recruited

retired soldiers were cumulatively employed

Women accounted for

management

of the Company's middle of the senior management



Kingfa Sci. & Tech. Co., Ltd. | Environmental, Social and Governance (ESG) Report 2024 | Environmental Responsibilities | Social Responsibilities |

Talent Attraction and Retention

The Company is committed to safeguarding the legitimate rights and interests of the employees, building a diverse and inclusive corporate atmosphere, and effectively implementing various welfare and care measures to increase all employees' sense of happiness and belonging, and ensure that the employees may feel warmth and respect in the Company.

As of the end of the reporting period

a total of

675 people participated in the evaluation of professional and technical qualifications

197 were evaluated as senior engineers (experts), all of whom enjoyed housing benefits

Among them,

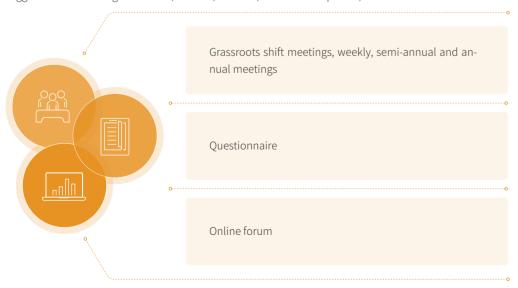
261 professional engineers were rated as intermediate engineers



The Company was awarded the title of "2024 Best Employer" by Intern Monk.

Democratic Communication

The Company has established a systematic communication management system, and created a multi-dimensional communication channel for "daily communication - appeal management - democratic participation" around the concept of "following procedures, respecting hierarchy and facilitating sincere interactions". The Company has built an employee appeal management platform and constructed a rapid response mechanism to ensure that employees' reasonable suggestions are processed in time, and the employee participation and satisfaction were effectively improved. Through institutionalized platforms such as trade union members' and workers' congresses, the Collective Contract has been concluded with employee representatives, which has improved the democratic management mechanism and effectively guaranteed the employees' rights to know, participate, express, and supervise. We conduct employee satisfaction surveys at least once a year to extensively collect the employees' opinions and suggestions on working conditions, salaries, benefits, career development, etc.





oiverse communication channe

During the reporting period

the Company conducted an employee engagement survey, and collected a total of

5,493 valid questionnaires

covering multiple business sectors and employee categories, with an engagement of

82.47%

and an increase of

5.4% compared with last year

The Trade Union and Employee Congresses Was Held, and the Democrati Communication Jointly Promoted Enterprise Development

In December 2024, the Company held the third member representative conference of the eighth Trade Union and the second Employee Congress of the eighth Trade Union. Our leaders and more than 120 member (employee) representatives gathered together. All employee representatives voted with a show of hands and unanimously approved the "Kingfa Technology Collective Wage Contract" to fully exercise their rights and protect their own interests. Meanwhile, the representatives actively participated in discussions, provided suggestions for the Company's development, and fully communicated in the Trade Union's general elections, work reports and other aspects. This meeting built a bridge of communication between the Company and the employees' democratic communications, enhanced the employees' sense of belonging and responsibility, and enhanced the Company's cohesion.



Collective Contract Review

Remuneration and Performance

Adhering to the philosophy of being "value creator-oriented", the Company has established a comprehensive remuneration and performance management system, adopted a salary structure that combined basic salary with floating salary, and made regular adjustments based on market level and employee performance to ensure the internal fairness and external competitiveness of the remuneration system. In terms of performance management, we implement the "cake theory" and the job target responsibility system, decomposed our strategic objectives for different positions step by step, and guided the employees to focus on value creation through scientific assessment and incentive mechanism, in order to promote the efficient achievement of organizational objectives.

During the reporting period, the Company continuously improved the management system related to the performance remuneration, revised the Performance Management Regulations, Management Regulations on Performance Appraisal of Senior Management and Internal Operations and other systems, and established a performance management cycle system. If an employee raises any objections to the performance appraisal results, the employee shall communicate with the performance appraisal superior first, and no agreement can be reached, an appeal may be made the HR Department. After receiving the appeal, the relevant departments will conduct investigation and evidence collection. If the appeal succeeds, the performance responsibility of the superior will be traced and assessed to ensure the fairness of the performance appraisal, the rights and interests of the employees.

Performance plan

As the starting point of the cycle, the appraiser and the appraisee need to fully communicate and reach an agreement on the goals of a certain cycle in the future. The goals of employees at different levels are presented in different forms. They shall be consistent with the overall goals of the Company and dynamically adjusted with them. The goal setting shall comply with the SMART principle. After determination, the immediate supervisor will guide the employees to draft a work plan and break down the goals into specific tasks.

Performance interview

Performance interviews are divided into performance planning interviews, performance counseling interviews and performance appraisal summary interviews. The performance planning interviews guide the employee behaviors. The performance counseling interviews are conducted regularly according to work nodes or progress to improve the subordinates' enthusiasm. The performance appraisal summary interviews are conducted during the appraisal cycle or after the completion of the work for comprehensive review and evaluation, laying a foundation for the next period of performance management.



Performance appraisal and feedback

The superiors shall use scientific methods to evaluate the subordinates' work against goals and standards, and set the appraisal methods by positions and levels. The Company's senior management is assessed according to the target responsibility certificate. For the non-frontline employees engaged in the internal operation, monthly summary and scoring, quarterly + annual assessments are performed. For the frontline employees, the assessment plans shall be drafted by positions, and the performance evaluation rules are explained under special circumstances.

Application of performance results

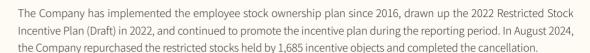
The assessment results are linked to employees' performance bonuses, salary adjustments, position adjustments, training, development, benefits etc. For the employees who fail to meet the annual performance standards, the performance improvement plan shall be initiated, and those who fail to meet the standards after the improvement period expires will be transferred or dismissed.

Performance communication and counseling

The superiors help the subordinates achieve their performance goals through daily counseling and mid-term review. The daily counseling is carried out for the problems in any form during the implementation of performance plan. The mid-term review is to formally review, diagnose and counsel the subordinates at a specific time. The superiors shall record important performance facts.

Equity Incentive Plan

Introduction

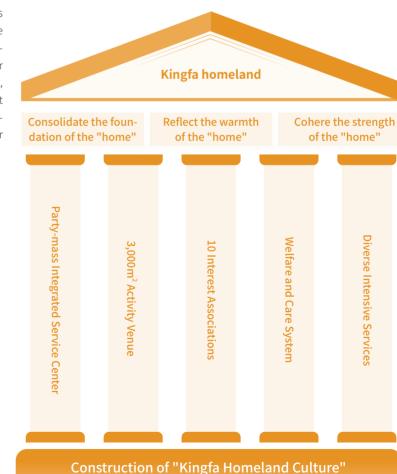


In November 2024, we reviewed and approved the Proposal on the Implementation of Equity Incentives for Wholly-owned Subsidiaries and the Company's Waiver of Preemptive Subscription Rights and Related Transactions made by Zhuhai Vanteque Specialty Engineering Plastics. Zhuhai Vanteque Specialty Engineering Plastics granted equity incentives to the Group's core employees through capital increase and share expansion, which involved the Company's senior management, key technologies collaborating with the business of Zhuhai Vanteque Specialty Engineering Plastics, marketing personnel, core managerial personnel of Zhuhai Vanteque Specialty Engineering Plastics, and core marketing personnel. 5 limited partnerships were established as the employee shareholding platforms.

The establishment and implementation of the personalized incentive mechanism and a series of supporting measures have attracted numerous outstanding talents, stimulated their passion and aspiration for the Company's development, and injected everlasting vitality into the Company's development.

Employee Welfare

Being always professional and meticulous in the construction of an employee welfare system, we are committed to providing allround and multi-level welfare guarantee for our employees. During the reporting period, the Company revised the Welfare Management Regulations, Employee Retirement Management Regulations, and other systems to further improve the employee welfare management.









Five social insurances and one housing fund

The Company buys the "endowment insurance, medical insurance, maternity insurance, unemployment insurance, work-related injury insurance and housing provident fund" for all employees.

Supporting living and recreation facilities

The Company provides the employees with canteen dining services and multi-room dormitories as benefits, equipped with comprehensive land-based facilities and diversified cultural and entertainment venues.

The Company has set up an infirmary to provide basic health diagnosis, treatment and psychological consultation services for the employees, and annually arranges free physical examinations for the employees.

Employee Welfare

and Care System

Support for difficulties

We attach great importance to the lives and families of our employees in need. We have set up a special fund to support the employees in need, and apply for support fund for our employees who can hardly obtain loans or suffer from critical diseases or whose families face difficulties in applying for loans.

Holiday benefits

The Company provides birthday gifts for the employees, annually sends consolation money or condolences for the Spring Festival, Mid-Autumn Festival and anniversary celebrations, and organizes abundant recreational activities during holidays.



The Company provides the employees with various benefits and subsidies, including annual and quarterly benefits, traffic subsidies and seniority subsidies.

The Company provides the employees with paid training, learning and improvement subsidies.

Holiday care

The Company implements a five-day working week, and the employees are entitled to maternity leave, marriage leave, funeral leave, annual leave and other holidays according to law.

Family care

The Company encourages the employees to bring their children and other immediate family members to live with them, provides services for the custody, schooling, pickup and dropoff, introduces kindergartens and sets up free school bus lines.

Rights and interests of the female employees

Paying attention to the female employees' rights and interests, the Company has formulated the Regulations on Labor Protection and Management of Female Employees. We have set up nursery rooms and green channels for the pregnant women to dine, and implemented other measures to care for the female employees.

Convenient transportation

The Company provides the employees with free shopping buses, shuttle buses for commuting, and welfare vehicles.

The Company provides overseas subsidies, overseas foreign language subsidies, family visit holidays, overseas insurances and other benefits for the overseas employees.

During the reporting period

the Company cumulatively issued benefits of RMB

85.4925 million





During the reporting period, the Company built new gyms, swimming pools and golf rooms for the employees to do sports.

Employee activities

The Company has long been committed to optimizing the employees' spiritual and cultural life. Upholding popular, small-scale and routine activities, we make innovations of our recreational and sports activities in form and substance according to local conditions. During the reporting period, we organized more than 228 activities to enrich our employees' amateur life, increase our employees' enthusiasm for work, and cohere the team spirit.

March 8 Festival Activities for Supporting the Female Employees' Growth and Development



In March 2024, the Company organized a range of "March 8 Women's Day" activities, which reflected the Company's care for the female employees and helped the female employees achieve continuous growth and shine in their life and work.

- We carried out the sharing of National Clothing Culture and Social Tasting to help the female employees enrich their cultural knowledge and improve their self-cultivation.
- We performed the training program named Parent-child Emotional and Psychological Nourishment to help the employees handle parent-child relationships and improve themselves.
- · We organized our female employees and their family members to watch the movie known as YOLO together to draw on "her strengths".



Thematic activity for the Women's Day

The 31st Anniversary Hiking Event, Cohering the Blonde Spirit

In December 2024, in order to celebrate the 31st anniversary of its establishment, the Company carried out a hiking event, where four routes with a distance of 5km, 10km, 20km, and 31km were set up, representing different challenges and difficulties, especially symbolizing the Company's major time nodes. A total of more than 200 employees completed this hiking, which fully demonstrated the spirit of the Company's employees who were full of vitality, perseverance, unity and cohesion, and further gathered the Company's strength.





Kingfa Sci. & Tech. Co., Ltd. Environmental, Social and Governance (ESG) Report 2024 Introduction Environmental Responsibilities **Social Responsibilities** Responsibility for Governance Annex

Employee Training and Development

The Company has continuously optimized its talent development system, created a multi-dimensional career development channel for the employees, built a competency model for the talents, established a systematic training management system, improved the construction of teacher pool and curriculum development, constantly enriched internal training resources, effectively improved the employees' professional and job competencies, and provided solid talent support for the Company's development.

■ Employees' Career Development

The Company has established a fair, transparent internal promotion mechanism, clarified the development path, promotion standards and ability requirements of the channels, provided the employees with clear career development directions and expectations, and encouraged the employees to obtain promotion opportunities through hard work and outstanding performance, in order to achieve personal career growth.

Around the "1438" strategic goal for 2030 and based on the needs of the business units, the Company has integrated the talent strategies from the perspective of marketing, technologies, domestic and overseas operations. We have set the employee development vision of "attracting global outstanding talents, activating individuals, improving organizational capabilities, becoming a world-renowned employer brand, and guaranteeing our realization of the "1438" strategic goal by providing a high-quality talent supply chain". The Company is committed to fulfilling the core tasks for increasing its talent adequacy ratio, organizational efficiency and organizational fit, to guarantee the talents' career development.

Level of talent competency	Personal empowerment	Internal empowerment	Worldwide development
Core competencies	Continuous innovations; loyalty to the organization	 Collaboration and cooperation; effi- cient operations 	Customers first; striving spirit
Top leadership	Customers' foremost striving spirit	Inspire othersShape organizational capabilitiesLead transformation	Strategic thinkingResolute decision-making
Middle leadership	Strive for excellence	 Empower the teams Manage target plans Drive execution	Strategic integrationOperational awareness
Bottom leadership	Intrinsic motivationResilient growthEQ	Team managementProblem analysis and solving	Professional influence

Talent Competency Model

Adhering to the employment principle of "attaching equal importance to integrity and talent and employing one's talent to the fullest extent", the Company has constructed a "management + professional" dual-channel promotion system and job rotation mechanism to create a multi-dimensional career growth path for the employees. Based on the quality model and job qualification requirements, we have established differentiated and reasonable career promotion standards to drive talents and corporate strategies for symbiosis and joint growth.

During the reporting period

the Company annually provided the employees with millions for the employees to improve their academic education and financial subsidies for further study in the institutions of higher learning, to encourage the employees to constantly improve their professional knowledge.

Organization of Employee Training

Regarding talent training as an important part of its sustainability strategy, the Company created a stepwise training structure through the "TOP Plan - Eagle Series - Creation Series - Sword Series - Shield Series", covering core areas such as leadership development, technological tackling, and market development. We implemented the "Young Eagle Plan", "Integration Series" special training for the new generation and foreign employees respectively to strengthen the global adaptability of the talent pool. During the reporting period, the Company optimized seven training systems, focusing on improving the compliance management systems such as the Management Regulations for Labor Ethics Training, formulated employee training and assessment indicators, and realized the dual-track linkage between the training evaluation and the performance appraisal. It not only protected the employee rights and interests in development, but also formed a talent supply chain at the strategic level, supported cultural integration and production technology needs in overseas operations, and provided long-term development momentum for business development.

As of the end of the reporting period

the Company created

compiled learning maps for

1.180 courses

During the reporting period

a total of

13 . 083 employees were trained by the Company

583,501.8 hours

and the employees' total training hours were Each employee received training of

The Company has built "Kingfa e-Enterprise Learning" platform. Through the organic collaboration of the digital learning ecosystem and a series of projects such as "TOP/Eagle/Creation", we have created a sustainability cultivation system covering the entire employee lifecycle, empowering the symbiosis and joint growth of the talent value and organizational strategy.



Kingfa e-Enterprise Learning

Introduction

The Company has established an internal lecturer training system to effectively accumulate and inherit organizational wisdom through systematic learning and a certification mechanism for lenient entry and strict exit. As of the end of the reporting period, 148 employees of the Company passed the junior instructor certification and 49 employees passed the intermediate instructor certification, providing endogenous motivation for the construction of a sustainability talent system.

Employee Training

Reserved middle management training program for enhancing leadership

In 2024, the Company launched a one-year reserved middle management training program. In December, trainees from all over the country participated in the final training. A professor of Shanghai Jiao Tong University shared the course titled Operations Management to help students achieve efficient operations under a changing business environment. The next day, the students participated in the knowledge and skills assessment. All of them passed the written examinations, and 19 students achieved excellent results. At the end of the training camp, international business etiquette courses were opened to pave the way for the Company's global development. This training camp effectively improved the trainees' knowledge and abilities and reserved outstanding middle-level talents for the Company.



Seminar "Combined Training and Combat: Case Study on Operations Management of Kingfa (Europe)"

Overseas "Integration Series"

To deepen the implementation of the globalization strategy, the Company launched the "Integration Series" cross-cultural empowerment project, initiated the overseas training camps for operation backbones and marketing elites respectively, opened core courses such as Kingfa Globalization Strategy and Overseas Business Layout and Cross-cultural Collaboration Mechanism around three dimensions, namely strategic synergy, cultural integration, and management efficiency improvement, and organized field studies and corporate culture competitions in the manufacturing bases to strengthen overseas teams' deep recognition of corporate vision and strategies. The training covered the foreign employees from 10 countries, improved cross-cultural communication skills, localized management awareness, and provided governance efficiency support for building a multicultural inclusive sustainable talent supply chain.



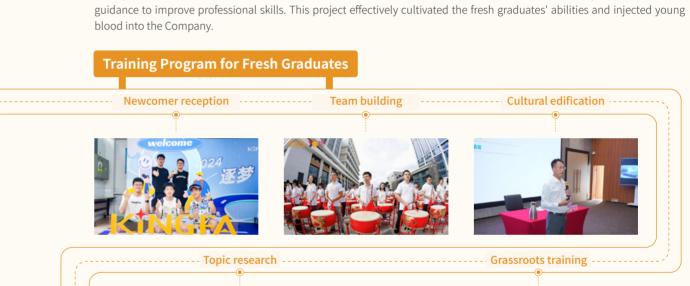
Overseas Employee Training for Improving Marketing Elite Cultures and Business Capabilities in 10 Countries in April 2024



Foreign Operation Employees' Visit to Qingyuan Factory for Study in November 2024

Fresh graduate training program for supporting the newcomers' growth

In 2024, the Company performed a half-year training program for the fresh graduates to facilitate the newcomers' rapid integration and growth. At the beginning of the project, the newcomers were received by the Company to let fresh graduates feel warmth. Subsequently, team building was carried out to hone their will and enhance their teamwork skills. The cultural edification session was arranged to help them understand the Company's values and culture. During the grassroots training, the fresh graduates went deep into the front line to accumulate practical experience. The project research procured the fresh graduates to use what they had learned to analyze and solve problems. In the post-based teaching, the tutors offered









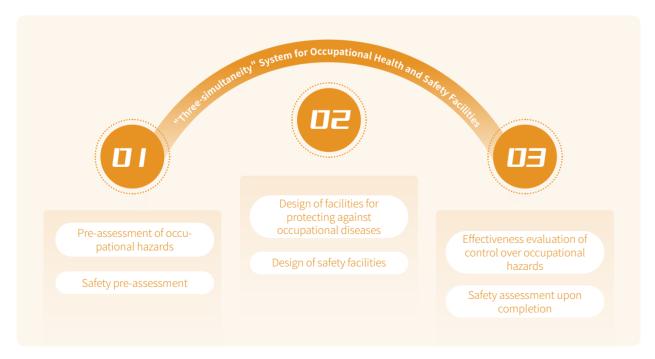
Occupational Health and Safety

Our occupational health and safety work has always been carried out based on the management concept that "safety is essential for survival", and the work principle that "production and life safety is the top priority". We pay attention to the management policy of "always placing an emphasis on prevention, paying attention to employee health, ensuring personal safety, preventing and controlling environmental pollution, and remaining committed to sustainable development". To comply with the national laws and regulations, which is reckoned as a basic requirement, for the purpose of "zero accidents", and in reliance on the Group's management system standards, the Company has continuously improved the system construction, strengthened the process control, performed the main responsibilities, carried out regular assessment, effectively improved the occupational health and safety, and ensured the orderly development of production and operation activities through the risk control mechanism, safety evaluation system, Group supervision, assessment, etc., as well as the safety evaluation index system. During the reporting period, the Company and its 14 subsidiaries or production bases passed the ISO 45001 Occupational Health and Safety Management System Certification.

Governance and Strategies

The overall occupational health and safety work of the Company is controlled by the Group, led by the Work Safety Committee of the Group in a coordinated manner. The work safety committees of the subsidiaries perform territorial management in accordance with the national laws and regulations, technical safety standards and our management system standards. We have established a safety management network at four levels, namely "Group-subsidiary-department-team". Improve the safety literacy and skills of all employees by improving the safety management system, sharing work safety experience, promoting intrinsic safety improvement, strengthening emergency response capacity building, and practicing safety management culture.

The Company strictly implements the principle of "three managements and three musts" (business/industry/production and operations management, with safety management required), the responsibility system for identifying "whoever in charge is responsible", and performance linkage appraisal. The Safety Committee of the Group has formulated the annual Letter of Responsibility for Work Safety, set up a quantifiable safety responsibility assessment system (including result and process indicators), and performed safety responsibilities step by step through the closed-loop mechanism of "target decomposition - process supervision - result application" towards the general managers, department heads and grassroots teams of all subsidiaries. Directly link the assessment results to the year-end performance and the annual merit-based evaluation, in order to realize the coverage of all employees' responsibilities.



Indicators and Targets

Health and safety objectives	Progress of the objectives
From 2022 to 2030, ensure annual "0" work-related death and the cover age rate of 100% in the physical examination.	- Achieved
From 2022 to 2030, ensure that the annual health and safety risk assess ment covers 100% sites.	- Achieved

The Company's health and safety data during the reporting period is shown in the following table:

	Unit	2024
Occupational health and safety investments	RMB 10,000	526.18
Work safety investments	RMB 10,000	7,650.92
Number of major work safety incidents	/	0
Number of general work safety accidents		0
Incidence of occupational diseases	%	0
Serious work-related injuries	Persons	0
Work safety inspections	Times	881
Rectification rate of hidden safety hazards	%	93.2
Safety Production Training	Times	1,320
Person-times of work safety training	Person-times	37,823
Work safety drills	Times	276
Employee coverage of safety drills	%	99



Introduction

Annex

Occupational Health Protection

The Company complies with the Law of the People's Republic of China on the Prevention and Control of Occupational Diseases, other relevant laws and regulations. We prepare and strictly implement occupational health protection system documents, including the Regulations on the Management of Occupational Health, Safety and Environmental Protection to protect our employees' safety and health in the production process, and effectively prevent them from suffering occupational diseases.

When entering into the labor contracts with the employees in positions exposed to occupational hazards, the Company truthfully informs the employees of the hazards they might be exposed during work, and their consequences, measures for protecting against the occupational diseases and benefits. The employees are informed ahead of the job risks, and clearly specify that no concealment or fraud is allowed. For the on-the-job employees, the Company selects an occupational health examination institution after comprehensive consideration of its qualification, medical standards, experience in occupational health examination, facilities, internal and external environment, price and traffic accessibility. We organize physical examinations according to our production characteristics and the occupational hazards existing in the positions of employees in with reference to the national occupational health monitoring standards. Besides, we continuously observe and manage our employees' physical examination results.

Pre-job On-the-job > Post-employment >

Arrange occupational health examinations for the employees who are about to go on duty (including those subject job transfer) with respect to the potential hazards they might be exposed in their posts according to the post characteristics.

Annually arrange occupational health examinations for the employees according to national regulations on a regular basis.

Arrange health examinations In case of any emergency for the employees before they that endangers the employare transferred away from or ees' health, immediately orget away from the operations ganize health examinations exposed to occupational haz- for the employees working ards, or in front of their posts, in the same workplace, anin order to confirm their alyze the cause of the accihealth status when they are dent, draw up solutions and suspended from exposure to a solidification plan, and rethe occupational hazards.

inforce occupational health and safety management.

The Company pays attention to the employees' occupational health and safety, carries out pre-job and on-the-job occupational health training for them, popularizes knowledge about occupational health, and urges the employees to abide by laws, regulations, rules, national occupational health standards and operating procedures for prevention and control of occupational diseases. For the employees in positions exposed to serious occupational hazards, special occupational health training will be carried out, and the employees will be allowed to perform operations in their posts only after they have passed the training. The Company has posted occupational hazard notification cards and bulletin boards in all workplaces to inform the employees of occupational hazards in the workplaces, preventive and control actions and systems. Each base, branch and subsidiary regularly monitor the occupational hazards in the workplaces, and announce the test results to the employees. The Company provides sufficient and conforming personal protective equipment for all employees exposed to the occupational hazards.

Set up an occupational health management organization with occupational health management personnel to be responsible for the prevention and control of occupational diseases.

Establish and improve the systems for monitoring and evaluating occupational hazards in the

Draw up plans for prevention and control of occupational diseases and implementation plans.

Draft and improve the emergency rescue plans for occupational hazards and accidents.

Formulate and improve occupational health management systems and operating rules.

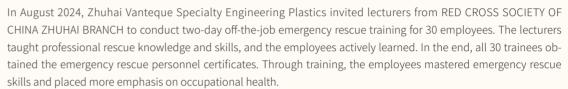
Provide the employees exposed to occupational hazards with personal protective equipment up to the national standards.

Create and improve files on occupational health and laborers' health monitoring.

Set up corresponding warning signs and occupational health bulletin boards in THE workplaces that produce or have occupational disease hazards.

The Company regulates the management of infectious diseases, publicizes the basic knowledge about the infectious diseases, increases the employees' awareness of self-health care and disease prevention, prevents, controls and eliminates the occurrence and prevalence of the infectious diseases in the Company, and protects the employees' health. When suspicious symptoms of the infectious diseases or related patients are found, the Company will take necessary protective measures, immediately isolate and send them to hospitals for diagnosis and treatment, discover and manage the sources of infection in time, cut off the channels of transmission, and avoid cross-infection. The Company performs chemical disinfection, and prepares standardized operation tables for common disinfection of daily necessities to guide the actual disinfection work and reduce the spread of infectious viruses.

training for the first aid personnel







Free Clinic and Health Lecture for Supporting the "Hundred-Thou-



Mental Health Training for the Employees

Protection of Work Safety

During the reporting period

a total of

276 safety emergency drills were organized by the Company according to its annual plan

including

189

on-site emergency plan drills

66

special emergency plan drills

and

21

comprehensive emergency plan drills for work safety accidents



In terms of work safety, we have always adhered to the concept that "safety is essential for survival" and the policy of "safety first, prevention foremost, full participation, and comprehensive governance" to ensure the employees' personal safety. We ensure the smooth progress of production and business activities by improving our system construction, strengthening our process management, performing our main responsibilities, and conducting regular assessments.

During the reporting period, the Company improved the Safety Inspection, Hidden Danger Investigation and Governance System, classified hidden dangers into hidden dangers of general and major accidents by their hazards and rectification difficulty, and completed the closed-loop rectification assessment in time.

Safety Inspection and Hidden Hazard Investigation Methods

Daily investigation

Investigation

before key

periods and

holidays

Comprehensive investigation

Investigation of

accident types

Professional investigation

Seasonal investigation

Investigation before production and work resumption Diagnostic investigation by an external expert

To strengthen the Company's emergency response capability and speed, the Company has formulated emergency response procedures such as the Management Procedures for Risks, Opportunities and Emergency Preparedness and Response Plans to ensure that various emergency plans can be implemented in time and effectively in case of emergencies, minimize casualties and property losses, and ensure the safety of the employees' lives.

<u>O</u>4

Fire emergency Drills for Strengthening Safety Guarantees

In November 2024, our petrochemical segment teamed up with the Management Committee of Liaobin Economic Development Zone, the Fire Rescue Brigade and multiple professional fire brigades to carry out an emergency response drill for the Acetone Storage Tank Leakage and Fire Accident, mobilizing 18 fire trucks, and 80 commanders and fighters to participate. The drill focused on five professional units such as communication command, fire extinguishing, cooling, and airlift jet. A number of practical programs were performed on UAV and robot detection, foam fire extinguishing tactics, chemical decontamination, and emergency avoidance. This drill tested the park's ability to make collaborative responses to sudden hazardous chemical accidents, improved the government-enterprise linkage efficiency and emergency response, and achieved good results.



Drilling Site

Safety Training and Drills

The Company implements full coverage of safety education, requires the employees to study conscientiously and strictly abide by various rules and regulations, and enhances their awareness of safety work, without violating labor disciplines, operating in violation of regulations, or giving commands in violation of regulations, in order to avoid accidents to the greatest extent. The new employees must pass the orientation training and assessment on safety, and the incumbent employees must receive safety re-education every year. The management supervisors, professional and technical engineers shall receive safety training before their promotion, and may be promoted or appointed only after passing the assessment.

During the reporting period

the average time for online safety training for employees was up to

110 hours per capita

Content of safety training

Previous accident cases of the Company and those related to the appointment for this post; procedures and requirements for handling the emergencies

Work safety laws and regulations, as well as relevant standards applicable to the Company

The evaluation is performed after the training, and a closed-book examination is arranged. The exam paper consists of choice questions and short answer questions or case analysis. The minimum passing score is 80



Safety procedures and requirements of the Company, including work safety prohibitions

Discuss the hazards existing in the areas of new posts where appointment remains to be performed or that the personnel to be appointed for these posts will be exposed, and some major controls

Safety knowledge competition for enhancing safety awareness



In December 2024, Zhuhai Vanteque Specialty Engineering Plastics organized 14 participatory teams represented by departments to carry out the first 100-day safety and accident-free knowledge competition. The Company created a specialized examination questions database with more than 8 categories and 500 questions, which covered knowledge about multiple fields, including safety and environmental protection. The employees actively participated in answering questions. This competition effectively popularized safety knowledge, increased the employees' safety awareness, promoted the construction of corporate safety and environmental protection culture, and helped improve the overall safety management.



Safety Knowledge Contest

Kingfa Sci. & Tech. Co., Ltd. | Environmental, Social and Governance (ESG) Report 2024 | Introduction | Environmental Responsibilities | Social Responsibilities | Re

Rural Revitalization and Social Contributions

The Company actively performs its corporate social responsibilities, responds to the national rural revitalization strategy, and remains committed to promoting social equity and common prosperity. Through charitable donations and project assistance, we continuously increase our investments in the rural revitalization to facilitate the economic development, and improve people's livelihood and ecological construction in poverty-stricken areas. In the future, we will continue to implement our national rural revitalization strategy, further increase our investments in the field of rural revitalization, explore diversified innovative models such as industrial assistance, ecological protection, and cultural revitalization, facilitate rural economic development, ecological protection, and social progress, and make contributions to the goal of common prosperity.

During the reporting period

the Company's social welfare donations (including rural revitalization donations) totaled

RMB **2.383** million

Consolidating the achievements in poverty alleviation and laying a solid foundation for development

- Assisted with the infrastructure construction: Donated RMB 50,000 to the solar street lamp construction project in Huanggang Village, Shigu Town, Gaozhou City, to improve local infrastructure and the villagers' living standards.
- Promoted common prosperity: Donated RMB 250, 000 to support the Beilun District "Common Prosperity, Happy Home" charity fund, supported the development of charity in Beilun District, and promoted the realization of the goal of common prosperity.

Revitalizing rural economy and building a beautiful homeland together

- Lvmei Qingyuan Project: Donated RMB2, 000 through Guangyi Joint Fundraising Platform to support the regional ecological and environmental construction in Qingyuan, and facilitate the green development of rural areas.
- Community Charity Fund support: Donated RMB 5,000 to support Wuhan Liaojiabao Community Charity Fund to promote the harmonious development of the rural society.
- Ecological protection of the Yangtze River: Donated RMB 50,000 to support Hubei Yangtze River Ecological Protection Foundation, promote ecological environment protection in Yangtze River Basin, and assist with rural ecological revitalization.



Data Security and Customer Privacy Protection

The Company deeply realizes the importance of information assets, adopts a series of strict comprehensive measures to ensure data integrity and confidentiality, and creates an information security defense line, in order to create a safe and reliable digital environment for the customers and fully protect customer privacy.

Data Security Protection

The Company systematically improves the information security management system. During the reporting period, we revised the Information Application Management Regulations and added the Requirements for Supply Chain Information Security Management to ensure the security of information systems and data.

During the reporting period

the Company conducted

62 information security audits

and the information security risks identified in the security audit were

00% rectified

Data security protection measures

Risk assessment

Risk assessment and reclassification of data are carried out annually to ensure the pertinence and effectiveness of data protection measures.

Vulnerability scanning and fixing Quarterly arrange information security engineers for vulnerability scanning, penetration test and weak password inspection on the intranet. Output scanning results and rectification requirements. Follow up on and review the reinforcement measures. Finally, summarize all inspections, reinforcements, and tracking. Prepare a summary report and announce the completion of the work internally. During the reporting period, the Company discovered 611 system vulnerabilities and completed all repairs.

Access permission settings Construct an access control and privileged account management system. The information security engineers conduct behavioral audit on the account permissions of product managers, administrators and external consultants. During the reporting period, the security access control over the subsidiaries' new servers only allowed the access through a bastion host.

Software and equipment

During the reporting period, we completed performed special security protection for 10 domestic bases, added 6 firewalls, 2 network access systems, 2 network threat detection systems, and 3 online behavior management systems. The anti-virus software of the terminal computer fully covered those that met the installation conditions.

Document encryption

Encrypt data for storage and transmission to ensure the data confidentiality and integrity. Any decryption requirements must be submitted through the internal OA system, and the decryption operation can only be performed with approval.

Data backup

Perform regular backup and recovery tests on important data to ensure data reliability and availability.

Equipment network access specifications

We have formulated the Equipment Network Access Management Specifications to specify the procedures for application, approval, use and change of equipment network access, require office computers to be installed according to standards, and private computers to follow specific rules for network access, and punish violations.

Reward and punishment mechanism According to the Information Security Management Regulations, employees or departments making valuable suggestions, implementing improvement measures or performing well in handling incidents in information security work are rewarded, and information security violations are punished.

To improve our ability to make emergency responses to information security incidents, strengthen the information security guarantee work, and form a scientific, effective and responsive emergency work mechanism, we have drafted the Emergency Plan on Information Security according to the Management Measures for Internet Information Services, Management Measures for Computer Virus Prevention and Control, other relevant laws and regulations, set up an information security emergency organization, standardized emergency response procedures, ensured the physical security, operation security and data security of important company information systems, and minimized the harm of information security emergencies.

Information security emergency organization

Emergency organization

Personnel composition

Emergency leading group of the Company

Level 1 incidents: CEO, CIO, general managers of bases

Level 2 incidents: head of the Information Department, heads of departments related to application systems

Level 3 incidents: head of the Information Department, heads of departments related to application systems

Emergency response team Level 1 incidents: head of the Information Center, supervisors, relevant module team leaders, director of the Confidentiality Office, confidentiality commissioner

Level 2 and 3 incidents: related supervisors of the Information Center, related module team leaders

External liaison officers

Supervisors of the Information Center, security team leader

The Company has formulated the Management Measures for Information Security Training, to conduct annual information security awareness training for new employees and the employees in key positions such as finance, procurement, sales, and IT to increase their awareness of the Company's information security strategies, evaluate the training effectiveness and adjust the training plan and content. The Company also requires the suppliers to conduct information security awareness training for all employees at least once a year to ensure that they understand the Company's information security policies and regulations.

During the reporting period

the Company organized

training sessions related to information security

and achieved

and

full coverage of key personnel



Among them, a total of

information security training sessions were organized for branches and subsidiaries

information security training session for middle and senior management cadres above the ministerial level

orientation training sessions on information security for the new employees

information security training session for overseas employees

information security training sessions for key personnel





Introduction





for Key Groups

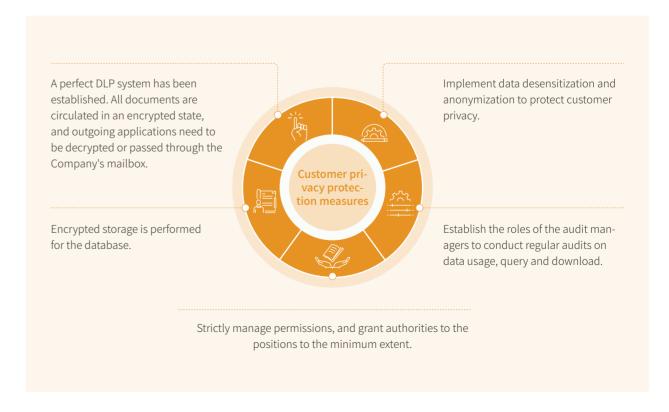


Confidentiality of Material Information

The Company has formulated the Confidentiality Management Regulations, which stipulate that internal confidentiality-related employees and external personnel shall enter into confidentiality agreements to ensure that sensitive information is not disclosed and the information security of the Company is guaranteed. In addition, the Company has also formulated and strictly implemented the Management Specifications for Major Meetings and the Management Specifications for Meeting Safety to ensure smooth progress of important meetings, confidentiality and security of meeting information.

Customer Privacy Protection

The Company complies with the relevant laws and regulations on privacy protection, regulates and manages the collection, storage and use of personal data, and ensures the data security and legality of data. In addition, we require our employees not to disclose customer information or other personal data to unauthorized third parties, in order to ensure the confidentiality of customer information and other personal data. During the reporting period, there was no customer privacy leakage incident. During the reporting period, no customer privacy was disclosed in the Company.



Responsibility for Governance

Committed to building an efficient governance structure for the shareholders' meeting, the Board of Directors and the Board of Supervisors, the Company ensures the transparency and compliance of corporate governance through a range of measures. The Company has optimized the information disclosure process and strengthened risk management to improve governance efficiency and effectiveness. In addition, the Company firmly adheres to business ethics, upholds the principle of integrity management, and jointly creates an equal competitive environment with its stakeholders.

Highlighted results

Convened

4 general meetings of shareholders

11 meetings of the Board of Directors

and

7 meetings of the Board of Supervisors

The information disclosure work was evaluated as Class

A

Completed a new-round management re-election

SDGs benchmarking





Kingfa Sci. & Tech. Co., Ltd. | Environmental, Social and Governance (ESG) Report 2024

Operation by the Board of Directors, the Board of Supervisors and the General Meetings of Shareholders

The Company has established a sound system for the operations of the three boards, and continuously regulates the operation and decision-making of the general shareholders' meetings, the Board of Directors, and the Board of Supervisors, so as to ensure efficient cooperation, checks and balances among the authorities, decision-making and supervisory bodies. In order to protect the legitimate rights and interests of the shareholders and creditors and standardize its organization and operation, in 2024, the Company revised the Rules of Procedure for the General Meeting of Shareholders, Rules of Procedure for the Board of Directors, Remuneration Management System for Directors, Supervisors and Senior Managers, Articles of Association and other governance documents, and disclosed them on the website of Shanghai Stock Exchange (www.sse.com.cn) and its own official website.



Board of Directors of the Company

■ General Meeting of Shareholders

In accordance with the Company Law, the Rules of Procedure for the Meeting of General Shareholders of the Company, and the Articles of Association, the shareholders' meeting of the Company shall perform the procedures for convening/holding the meetings and voting according to law. As the highest authority of the Company, the general meeting of shareholders is mainly responsible for decision-making over major issues of the Company, supervising corporate governance, safeguarding the right of all shareholders to attend the meeting, providing sufficient consultation channels for the shareholders, and ensuring the open, fair and just voting.

Board of Directors

Our Board of Director strictly performs the duties for lawfully deciding on our major business decisions and investment plans of the Company and formulating our basic management systems in accordance with the Company Law, the Rules of Procedures for the Board of Directors of the Company and the Articles of Association. The Board of Directors has set up four special committees to provide professional advice and support for its scientific decision-making.

Board of Supervisors

Our Board of Supervisors lawfully performs its supervisory duties in strict compliance with the Company Law, the Rules of Procedure for the Board of Supervisors of the Company and the Articles of Association. As a body that supervises the corporate governance, the Board of Supervisors carries out supervision by convening regular meetings, and reviewing reports and onsite inspections. It performs its duties for supervising and inspecting the performance of duties by our directors and senior management, as well as our financial affairs, in order to effectively safeguard our and our shareholders' legitimate rights and interests.

During the reporting period

the Company held at which a total of meetings of shareholders were considered 11 Board of Directors meetings at which a total of 50 motions were considered and **7** Board of Supervisors meetings at considered

■ Independence and Diversity of the Board of Director

The Company attaches great importance to the independence of the Board of Directors. We have formulated and regularly revised the Independent Director Work System. The Company attaches great importance to the plurality of independent directors in the Board of Directors and its special subordinate committees, and ensures independent operations of the special committees, so as to strengthen the fairness of the Board of Directors' decision-making and protect the legitimate rights and interests of the shareholders.

While emphasizing the independence of the Board of Directors, the Company also attaches great importance to the diversity of the Board of Directors. Sex, age, professional background and other dimensions have been considered in nominating directors for the Nomination Committee. The Company believes that directors with diverse backgrounds may help the Board of Directors better supervise its management and operations, evaluate the risks and opportunities of its business model from different perspectives, and promote its formation of an equal, inclusive and open culture.

Diverse Backgrounds of the Members of the Board of Directors

Name	Age	Gender	Current position	Incumbency of the committees	Major
Chen Pingxu	42	Male	Chairman	Strategy and Sustain- ability Committee	•
Yuan Chang chang	41	Male	Director, Vice Chairman, Executive Deputy Gen- eral Manager	Nominating Committee	•
Wu Di	40	Male	Director, Gen- eral Manager	Remuneration and Appraisal Committee, Strategy and Sustain- ability Committee	•
Ning Hongtao	51	Male	Director		
Chen Niande	40	Male	Director and Deputy Gen- eral Manager		•
Li Peng	43	Male	Director and Deputy Gen- eral Manager		•
Li Hua xiang	43	Male	Director		^
Yang Xiong	58	Male	Independent director	Audit Committee	•
Meng Yue zhong	61	Male	Independent director	Nomination Commit- tee, Remuneration and Appraisal Committee, Strategy and Sustain- ability Committee	•
Zeng Xing rong	62	Male	Independent director	Remuneration and Appraisal Committee, Strategy and Sustain- ability Committee, Audit Committee	•
Zhang Jicheng	48	Male	Independent director	Nomination Committee, Audit Committee, Strat- egy and Sustainability Committee	*

During the reporting period the Board of Directors consist 11 members 4 of whom were independ All members of the Audit Committee were independ Either the Audit Committee the Nomination Committee or the Remuneration and Appraisal Committee had 3 of whom were independent Polymers

Governance Optimization

The Company completed the new-round management re-election in May 2024, turning the founding team to a team of professional managers, making the members of the Board of Directors younger, systematically adjusting the corporate governance structure and further optimizing the decision-making mechanism and management efficiency.

Management specialization

The Company turned its founding team into a team of professional managers and made the members of the Board of Directors younger. We introduced new professional knowledge and market experience, thus improving the efficiency and quality of decision-making.

Innovation and change promotion

The vounger Board of Directors was more willing to accept new technologies and ideas, which promoted the continuous innovation of our products and services.

Optimized corporate culture

The new directors made our culture more open and inclusive, stimulating the employee motivation and creativity.

Enhanced market competitiveness

The new members of the Board of Directors introduced innovative business models and market strategies so that the Company became more advantageous in the market competitions.

Improved brand image

The optimization of corporate governance structure and the management specialization attracted more value investors and partners, and improved our brand image.

Enhanced risk management capacity

The team of professional managers was more capable of risk identification and management, which helped the Company maintain its stability in market fluctuations.

Higher shareholder value

Positive Impacts of the New Management on the Company

With the optimization of corporate governance structure and performance improvement, the shareholder value increased, while the shareholder satisfaction and loyalty were improved.

Conflicts of Interest

The Company will always uphold the principles of fairness and transparency, avoiding any behaviors that might lead to conflicts of interest. Ensure that all employees and partners can identify and report the conflicts of interest in business activities by establishing a sound conflict of interest management system. In addition, the Company enhances its employees' awareness of and alertness to the conflicts of interest through training and education, and ensures that the employees can consciously abide by the Company's policies on the conflicts of interest.

We strictly abide by the relevant laws and regulations of related party transactions in the place of listing, and prohibit our directors, supervisors, and other senior managers from harming our and our shareholders' interests through related party transactions. The interested directors need to voluntarily declare and abstain from voting. In addition, the Company strengthens the supervision and review of related party transactions, requires the independent directors to perform their duties, and supervises the potential major conflicts of interest among the controlling shareholders, actual controllers, directors, and senior managers of its subsidiaries, in order to urge the Board of Directors to make decisions in line with the overall interests of the Company and protect the legitimate rights and interests of minority shareholders. For details of the Company's related party transactions during the reporting period, see Section 10 - Financial Report "Related Parties and Related Party Transactions" in the Annual Report 2024.

Remuneration and Equity Policies

The Company adopts a salary structure of " annual base salary, annual performance pay, and long-term incentives". We have established a benefit and risk-sharing mechanism for our shareholders, management and business backbones. Besides, we implement an equity incentive plan for all employees, to encourage our managerial personnel, technical, business and operation backbones who satisfy the incentive conditions.

Restrictions on shareholder transactions

If the directors, supervisors, senior managers, and shareholders holding more than 5% of the shares sell the Company's stocks or other equity securities within 6 months after their purchase, or purchase them within 6 months after selling, the proceeds therefrom will be owned by the Company.

Exceptions

Except for the circumstance that a securities company holds more than 5% of the shares due to the purchase of the remaining shares after the package sale, and other circumstances stipulated by the China Securities Regulatory Commission.

Execution by the Board of Directors

The Board of Directors shall implement the above provisions. Otherwise, the shareholders have the right to request the Board of Directors to implement the provisions within 30 days.

Shareholders' right to file lawsuits

If the Board of Directors fails to execute within 30 days, the shareholders have the right to directly file a lawsuit with the people's court in their own name for the benefit of the Company.

Directors' responsibilities

The responsible directors shall be jointly and severally liable according to law.







Policies for the Company's Directors, **Supervisors** and Officers

Equity







Transparent Disclosure

The Company strictly obeys the Measures for the Administration of Information Disclosure by Listed Companies, ensures the transparency of information disclosure and protects the rights and interests of its investors and stakeholders by formulating the Information Disclosure Management System and the Investor Relations Management System. The Company objectively and completely displays its performance in ESG and builds a good image around the information demand related to the investors' decisions and by fully considering the correlations between the present and past information.



Information disclosure

A transparent and standard information disclosure mechanism is essential for the Company's smooth communications with its investors, regulators and other stakeholders. The Company truly, accurately, completely, timely and fairly discloses the matters related to its operation and governance through regular and interim announcements, strictly performs its information disclosure obligation as a listed company, and protects the legitimate rights and interests of its investors and stakeholders.

The Company designates the media announced by China Securities Regulatory Commission and the website of Shanghai Stock Exchange that meet the conditions for information disclosure in the securities market as the media for publishing its announcements and other information that need to be disclosed. In addition, a special investor relations column has been set up at our website to update important announcements in real time, to ensure that our investors and stakeholders can have easy access to our key information accurately through authoritative and official channels.

During the reporting period



the Company disclosed

regular announcements



88 interim announcements



Shanghai Stock Exchange's evaluation result of the Company's information disclosure work in 2023-2024 was rated



Investor communications

The Company annually organizes publicity activities for the Investor Protection Day on May 15. The investors are organized to visit and communicate with the Company from time to time. Meanwhile, the Company provides the investors with diversified communication methods, so the investors can keep informative about the Company's latest information through communication channels such as strategy meetings with securities firms, corporate performance briefings, investor surveys, hotline, email, E-Interactive, and investor relations portal of the official website. The relevant persons in charge of the Company promptly sort out and respond to the investors' questions, actively communicate with the investors, and effectively improve the relationship between the Company and its investors.

During the reporting period



the Company participated in









and carried out

11 investor research and exchange activities

Inviting the Investors to Conduct On-site Research to Boost the Investor Confidence



In 2024, the Company organized investor communication event, and invited Wanlian Securities, China Merchants Securities, Huaan Securities, other institutions, and individual investors to conduct on-site research, thus further strengthening its communications with the investors, increasing its transparency and improving its governance. The activities included presentations by the Company's management, factory tours, and visits to the R&D Center, enabling the investors to understand the Company's operations and strategic planning more comprehensively. During the event, the management actively responded to the investors' concerns and enhanced their confidence in the Company. After the event, the Company collected related feedback and provided reference support for the Company's future investor relations management. By continuously deepening its communications with investors, the Company continuously improved its governance mechanism and laid a solid foundation for its healthy development.



Investor Survey

Kingfa Sci. & Tech. Co., Ltd. Environmental, Social and Governance (ESG) Report 2024 Introduction Environmental Responsibilities Social Responsibilities **Responsibility for Governance**

Risk Management

To increase its efficiency of corporate governance and risk management, and promote its long-term development and value creation, the Company has built an Audit Committee under the Board of Directors to coordinate its compliance management work and supervise the efficient operation of its compliance management system. In addition, the Company has also issued a number of policies, including the Internal Audit System and Corporate Risk Control and Early Warning Plan, to strengthen its internal control and risk management, and ensure its stable operation and sustainable growth.

First line of defense

All departments of the Company are responsible for compliance management of this system, and lead such management.

Second line of defense

Determine that the Legal Affairs Department is a general compliance management department, which shall organize, coordinate and supervise the compliance management, to provide compliance support for the departments responsible for compliance management.

Third line of defense

The Audit Department shall audit and evaluate the compliance of operations management and the effectiveness of compliance management.

Internal Control and Management System of the Company

Rectification of risk issues

The Company adheres to the risk management philosophy of "prevention first, supported by control". We emphasize reducing the possibility of risks through preventive actions, and mitigating the impacts of risks through control measures.

In 2024, the Company sorted out the process for rectifying risk issues, informatized the process, improved the rectification efficiency, and realized real-time monitoring of risk rectification. The risk rectification is a systematic and multi-step process involving multiple roles, including the persons following up on the rectification, heads of the responsible departments, persons responsible for rectification, administrator of the risk database, and audit manager. The process starts from the entry of risk data, ranging from preliminary review, feedback, review and approval of rectification measures, update of risk database, feedback, review and review of rectification situation, and reexamination to the confirmation of rectification completion and final filing. This process ensures the standardization, transparency and effectiveness of our risk management, timely implementation of rectification measures and effective risk control through the layer-by-layer review and feedback mechanism.

During the reporting period

the Company produced a total of

32 summary reports on risk identification

In 2024, a total of

237 problems in the Group's risk database were rectified

By promoting the rectification of the medium and high risk problems, the Company avoided economic losses totaling

RMB 22.4 million

identifying a total of

medium and high risk items and included them in the Group's risk database

with a rectification completion rate of

78%

and added/revised a total of

Tax Management

The Company abides by the local tax laws and regulations of its places of business all over the world, and fulfills its tax declaration and information disclosure obligations according to law. We pay all taxes on time, empowering social value creation with tax contributions. The management strictly implements the reporting mechanism of the Board of Directors in major business decisions, cooperates with internal professional teams to conduct tax compliance reviews, and introduces third-party organizations for evaluation when necessary, in order to ensure that tax risks are controllable throughout the decision-making chain.

The tax team is actively responsible for managing and supervising the direct and indirect tax changes of all entities, assessing the potential impacts of new tax legislation and policies on the Company, continuously optimizing tax management measures, improving compliance with tax policies, reducing tax risks, and improving the tax management information system to enhance the informatization of tax management.

During the reporting period

Annex

the Company paid taxes of

RMR 1-078 hillion

Business Ethics

Adhering to the highest standards of business ethics, the Company always regards integrity management, information disclosure, elimination of illegitimate interests, prevention of conflicts of interest, anti-money laundering, anti-fraud, and customer privacy protection as its core principles. In all its business activities, the Company, its employees and partners are committed to creating a sunny, transparent, standardized and orderly corporate ecosystem.

Taking a "zero tolerance" attitude towards any violations of business ethics, we resolutely oppose any form of bribery, corruption, extortion, and other violations of business ethics. For relevant misconducts verified, the Company will immediately terminate cooperation with relevant personnel, and take legal measures when necessary for ensuring the Company's ethical and legal rigor.

Anti-corruption

The Company has always strictly abided by the relevant laws and regulations on anti-corruption and anti-bribery, and formulated a series of internal systems and norms, including the Regulations on Acceptance of Gifts for Business, Code of Conduct for Employees, Business Ethics Policies, and Management Regulations for Protection against Commercial Bribery, to comprehensively standardize and control the employees' business practices. In addition, the Company has signed the Integrity Commitment Letter with all suppliers it has transacted with to ensure that its partners follow the principle of integrity management. It is expressly stipulated in the Management Regulations for Protection against Commercial Bribery that the Company shall establish and improve its integrity management system that covers all customers, suppliers, service providers, and contractors who have business dealings with the Company. Adhering to the management policy for "bribery prohibition and fair trade", we resolutely reject commercial bribery, bribe, and any form of improper business practices. We are committed to creating a clean, honest, transparent and fair business environment.

Internal

Integrity

Management

Mechanism

Audit Department

- · Assess and control our integrity risks; identify integrity risks of different departments and positions.
- Perform regular integrity inspection for each department, report the integrity problems to the general manager if any, and formulate control measures.
- Organize on-the-job integrity training for all departments and employees to increase their awareness of integrity.

All departments of the Company

- Assist the Audit Department in conducting regular self-examination on their integrity problems, report any problems found to the Audit Department and the general manager in time, and formulate corrective and preventive actions.
- Particularly organize follow-up on their positions with integrity risks, and formulate corresponding management measures.

The Company deeply advances its Party integrity and clean governance, and promotes the integrity culture. We have formulated the Regulations on Integrity Management to integrate integrity education into the corporate culture, overall publicity and education work. The Company has established a compliance and business ethics training system that covers all employees. We strengthen incorruptible employment and risk control education for key positions. Our marketing and financial personnel are required to receive training related to the anti-corruption, anti-bribery and anti-money laundering. We regularly organize the employees of the Securities Department to learn the new regulations of the CSRC.

In addition, the Company actively conducts compliance training for each place of business, which covers local laws and regulations, its compliance code of conduct, ethics, etc. By carrying out positive and negative education for typical Party members, we have increased these members' awareness of integrity and self-discipline, and drawn up an annual Party building work plan for corruption prevention.

During the reporting period



the Company conducted

anti-corruption training



sessions with a total duration of

28 hours



and a total of

Anti-corruption Education and Training for Creating a Clean and Honest Atmosph

From August to October 2024, the Company organized a total of 259 employees in the key positions of the Marketing Center, Purchasing Department, Finance Department, Audit Department, Technical Center, and other departments to visit Guangdong Integrity Education Base for study, and conducted anti-corruption education and training through on-site visits, in order to increase the employees' awareness of laws, disciplines, and professional ethics, mitigate its operational risks, create a clean and upright corporate atmosphere, and promote its sustainable and healthy development.



Purchasing Department's Anti-corruption Education and Training



Leaders' and Cadres' Visit to the Self-cultivation Hall

In September 2024, to further increase the awareness of integrity and self-discipline among the leaders and cadres in key departments, the Company organized key Party members and leaders of key regulatory departments to go to Qingyuan Prison, visit the anti-corruption warning education base and prison command center. They intuitively understood the prisoners' life, study, and re-education, and were enlightened. This study and education helped the leaders and cadres deeply understand the serious consequences of duty crimes, keep in mind the red lines of discipline, strengthen self-discipline, and play vanguard and exemplary roles.

This activity touched my soul directly, made me confident to create a "sunshine procurement" ecosystem, and strengthened my determination to stay away from corruption, and maintain integrity.



A leader of the Purchasing Department

I will resolutely fulfill my duties, give priority to the interests of the organization, and be honest and self-disciplined.



A leader of the Finance Department

Anti-money laundering

The Company undertakes to fully abide by national anti-money laundering laws and regulations, and resolutely opposes any form of money laundering activities. We deeply realize the great harm of money laundering to financial market stability, social public safety and our reputation, taking effective measures to prevent and curb money laundering.

Anti-monopoly

The Company has formulated the Management Regulations on Anti-monopoly and Anti-unfair Competitions, to ensure that its operations comply with national anti-monopoly and anti-unfair competition laws and regulations, maintain a fair orderly market environment, and protect the legitimate rights and interests of itself and the stakeholders.



Monitoring monopoly agreements

Establish a regular review mechanism to screen agreements and exchanges with competitors, suppliers, distributors, etc., and prevent monopolistic behaviors involving sensitive areas such as price, output, market division, and technology sharing.



Preventing abuse of market dominance

Evaluate the Company's market position through market surveys, draw up a self-examination plan, follow the principle of cost plus and dynamic balance between market supply and demand to price products, and avoid acts like price discrimination.



Managing the operators' centralized declarations

Track M&A, equity acquisitions, and other projects that might lead to concentration of the operators, predict whether they meet the declaration standards, and initiate the declaration process.

Detailed Anti-monopoly Rules

Preventing misleading consumer behaviors

Formulate norms on brand use, conduct infringement search, and prevent counterfeiting and misleading consumers.

> Detailed Anti-unfair Competition Rules

Prohibiting commercial bribery

The employees in key business positions sign a letter of commitment on integrity and self-discipline, receive training on anti-commercial bribery, and establish a registration and confiscation system for gifts.

Controlling false propaganda

Promotional materials shall be reviewed by the Legal Affairs Department to ensure their authenticity and accuracy. Establish a quick response mechanism for customer feedback.

Protecting trade secrets

Clarify the scope of trade secrets, implement hierarchical and classified management, ensure information security, and perform strict resignation and handover procedures.

Whistleblowing Mechanism

The Company has established a comprehensive whistleblowing system, to encourage all stakeholders to provide feedback, complaints and suggestions on corruption, money laundering, fraud, conflict of interest, unfair competition, and other violations through the hotline and e-mail and whistleblowing channels. We promise to seriously process all reported information, and protect the rights and privacy of the whis-

Whistleblowing channel: Tel: +86(020)-66818888 Email: ir@kingfa.com

Reward and Punishment Measures of Business Ethics



Employees violating rules

Forfeit all bribery proceeds, and perform relevant education and administrative sanctions dependent upon seriousness of the case; transfer them to judicial organs for investigation of their criminal responsibilities if the circumstances are rather serious.



Suppliers and service providers violating rules

Notify and supervise our departments corresponding to the related units and send a written warning letter. If the circumstances are serious, the suppliers and service providers will be resolutely disqualified. If their acts constitute a crime of commercial bribery (bribery), they will be transferred to the judicial organs for investigation of their criminal responsibilities.



Truthful whistleblowing

Encourage the parties and insiders to whistleblow. We will reward the whistleblowers whose reports are true as demonstrated after investigation, and maintain their confidentiality.

Protecting the rights and interests of whistleblowers

The Company takes measures to protect the rights and privacy of the whistleblowers and ensure that the whistleblowers will not be subject to any form of retaliation.

Anonymous whistleblowing

The Company respects privacy and makes anonymous whistleblowing optional to encourage people to provide information without concerns.

Maintaining safety and privacy

The Company resolutely protects the safety and privacy of the whistleblowers and ensures the confidentiality of information during the whistleblowing.



Fast response

Once complaints or suggestions are received, the Company will promptly initiate investigation and handling procedures.

Investigation and handling

Including recording and classifying complaints, assigning them to relevant departments for handling, conducting necessary investigations, and taking appropriate actions.



Kingfa Sci. & Tech. Co., Ltd. | Environmental, Social and Governance (ESG) Report 2024 | Introduction | Environmental Responsibilities | Social Responsibilities | Re

GRI Index

Instructions

The information cited in this GRI Content Index is reported by the Company with reference to the GRI Standards from January 1, 2024 to December 31, 2024.

GRI 1 used

GRI 1: Foundation 2021

2-1 Organizational details 2-2 Entities included in the organization's sustainability reporting 2-3 Reporting period, frequency and contact point 2-4 Restatements of information 2-6 Activities, value chain and other business relationships 2-7 Employees 2-9 Governance structure and composition 2-9 Governance structure and composition 2-10 Nomination and selection of the highest governance body CRI 2: General Disclosures 2021 2-11 Chair of the highest governance body Description of the Report Preparation Disclosure Preparation Disclosure Preparat	
ability reporting 2-3 Reporting period, frequency and contact point 2-4 Restatements of information List of Key Performance Indicators 2-6 Activities, value chain and other business relationships 2-7 Employees Equality, Inclusion and Diversity Operation by the Board of Directors the Board of Supervisors and the General Meetings of Shareholders GRI 2: General Disclosures 2021	
2-4 Restatements of information 2-6 Activities, value chain and other business relationships 2-7 Employees 2-9 Governance structure and composition 2-9 Governance structure and composition 2-10 Nomination and selection of the highest governance body CRI 2: General Disclosures 2021 2-11 Chair of the highest governance body List of Key Performance Indicators About the Company About the Company Coperation by the Board of Directors the Board of Supervisors and the General Meetings of Shareholders Operation by the Board of Directors the Board of Supervisors and the General Meetings of Shareholders	on
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Disclosures 2021 2-11 Chair of the highest governance body Operation by the Board of Directors the Board of Supervisors and the Ge	
eral Meetings of Shareholders	
Our sustainability management; Op 2-12 Role of the highest governance body in over- seeing the management of impacts Board of Supervisors and the gener meetings of shareholders	е
Our sustainability management; Op 2-13 Delegation of responsibility for managing eration by the Board of Directors, th impacts Board of Supervisors and the gener meetings of shareholders	е
Our sustainability management; Op 2-14 Role of the highest governance body in sus- tainability reporting Board of Supervisors and the gener meetings of shareholders	е
Operation by the Board of Directors 2-15 Conflict of interest the Board of Supervisors and the General Meetings of Shareholders	

GRI Standards	Disclosed item	Sections of the Report
	2-16 Communication of critical concerns	Our Sustainability Management
	2-17 Collective knowledge of the highest gover- nance body	Operation by the Board of Directors, the Board of Supervisors and the Gen- eral Meetings of Shareholders
	2-19 Remuneration policies	Operation by the Board of Directors, the Board of Supervisors and the gen- eral meetings of shareholders; Talent attraction and retention
	2-20 Process to determine remuneration	Talent Attraction and Retention
	2-22 Statement on sustainable development strategies	To Stakeholders
GRI 2: General	2-23 Policy commitments	Our Sustainability Management
Disclosures 2021	2-23 Integration policy commitments	Our Sustainability Management
	2-25 Procedures for remedying negative impacts	Safety and Quality of Products and Services
	2-26 Mechanisms for seeking advice and raising concerns	Talent Attraction and Retention
	2-27 Compliance with laws and regulations	Operation by the Board of Directors, the Board of Supervisors and the Gen- eral Meetings of Shareholders
	2-28 Membership associations	Main Participatory Domestic Associations and Organizations
	2-29 Approach to stakeholder engagement	Our Sustainability Management
	2-30 Collective bargaining agreements	Talent Attraction and Retention
	3-1 Process to determine material topics	Our Sustainability Management
GRI 3: Material Topics 2021	3-2 List of material topics	Our Sustainability Management
	3-3 Management of material topics	Our Sustainability Management
	201-2 Financial implications and other risks and opportunities due to climate change	Climate Change Tackling
GRI 201: Econom- ic Performance 2016	201-3 Defined benefit plan obligations and other retirement plans	Talent Attraction and Retention
	201-4 Financial subsidies granted by the gov- ernment	Refer to the annual report

Annex

Kingfa Sci. & Tech. Co., Ltd. | Environmental, Social and Governance (ESG) Report 2024 | Introduction | Environmental Responsibilities | Social Responsibilities | Re

GRI Standards	Disclosed item	Sections of the Report
GRI 203: Indirect economic impacts 2016	203-1 Infrastructure investments and services supported	Rural Revitalization and Social Contributions
	205-1 Operations assessed for risks related to corruption	Business Ethics
GRI 205: Anti-cor- ruption 2016	205-2 Communication and training about anti-corruption policies and procedures	Business Ethics
	205-3 Confirmed incidents of corruption and actions taken	Business Ethics
GRI 206: An- ti-competitive Behavior 2016	206-1 Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	No Related Lawsuit in the Company
	207-1 Approach to tax	Risk Management
GRI 207: Tax 2019	207-2 Tax governance, control, and risk management	Risk Management
	207-3 Stakeholder engagement and management of concerns related to tax	Risk Management
GRI 301: Materials	301-2 Recycled input materials used	Management of Raw and Packaging Materials
2016	301-3 Recycled products and their packaging materials	Circular Economy; Management of Raw and Packaging Materials
	302-1 Energy consumption within the organization	Energy Usage
GRI 302: Energy	302-3 Energy intensity	List of Key Performance Indicators
2016	302-4 Reduction of energy consumption	Energy Usage
	302-5 Reduction of energy demand for products and services	Energy Usage
	303-1 Interactions with water as a shared resource	Usage of Water Resources
	303-2 Management of water discharge-related impacts	Usage of Water Resources
GRI 303: Water and Effluents 2018	303-3 Water withdrawal	Usage of Water Resources
	303-4 Water discharge	Usage of Water Resources
	303-5 Water consumption	Usage of Water Resources

GRI Standards	Disclosed item	Sections of the Report
GRI 304: Biodiversity 2016	304-1 Operational sites owned, leased, managed in or near protected areas and areas of high biodiversity val- ue outside protected areas	Environmental Compliance Management
	305-1 Direct (Scope 1) GHG emissions	Climate Change Tackling
	305-2 Energy indirect (Scope 2) GHG emissions	Climate Change Tackling
GRI 305: Emissions	305-3 Other indirect (Scope 3) GHG emissions	Climate Change Tackling
2016	305-4 GHG emissions intensity	Climate Change Tackling
	305-5 Reduction of GHG emissions	Climate Change Tackling
	305-7 Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	List of Key Performance Indicators
	306-1 Waste generation and significant impacts related to waste	Pollutant Discharge and Waste Treatment
GRI 306: Effluents	306-2 Management of significant waste-related impacts	Pollutant Discharge and Waste Treatment
and Waste 2020	306-3 Waste generated	Pollutant Discharge and Waste Treatment
	306-4 Waste diverted from disposal	Pollutant Discharge and Waste Treatment
GRI 308: Supplier en-	308-1 New suppliers that were screened using environ- mental criteria	List of Key Performance Indicators
vironmental assess- ment 2016	308-2 Negative environmental impacts in the supply chain and actions taken	Supply Chain Security
	401-1 New employee hires and employee turnover	List of Key Performance Indicators
GRI 401: Employ- ment 2016	401-2 Benefits provided to full-time employees (excluding temporary or part-time employees)	Talent Attraction and Retention
	401-3 Parental leave	Equality, Inclusion and Diversity
	403-1 Occupational health and safety management system	Occupational Health and Safety; Overview of Certificates
GRI 403: Occupational Health and Safety 2018	403-2 Hazard identification, risk assessment, and incident investigation	Occupational Health and Safety
	403-3 Occupational health services	Occupational Health and Safety

Kingfa Sci. & Tech. Co., Ltd. | Environmental, Social and Governance (ESG) Report 2024 | Environmental Responsibilities | Social Responsibilities | Responsibilities



Benchmark Index to the Guidelines of the Stock Exchange

Topics disclosed	Sections of the Report
Climate change tackling	Climate Change Tackling
Pollutant discharge	Pollutant Discharge and Waste Treatment; Usage of Water Resources
Waste disposal	Pollutant Discharge and Waste Treatment
Ecosystem and biodiversity protection	Environmental Compliance Management
Environmental compliance management	Environmental Compliance Management
Energy usage	Energy Usage
Usage of water resources	Usage of Water Resources
Circular economy	Circular Economy
Rural revitalization	Rural Revitalization and Social Contributions
Contributions to the society	Rural Revitalization and Social Contributions
Innovation-driven	Innovation-drive and Intellectual Property
Ethics of science and technology	Not involved. The Company's core business does not involve scientific research, technology development and other activities in sensitive fields such life sciences and artificial intelligence ethics.
Supply chain security	Supply Chain Security
Equal treatment to small and medium-sized enterprises	Not involved. The Company treats small and medium-sized enterprises equaly, and there is no overdue payment to small or medium-sized enterprises.
Safety and quality of products and services	Safety and Quality of Products and Services
Data security and customer privacy protection	Data Security and Customer Privacy Protection
Employees	Equality, Inclusion and Diversity; Talent Attraction and Retention; Employee Training and Development; Occupational Health and Safety
Due diligence	Risk Management
Communications with stakeholders	Our Sustainability Management
Anti-commercial bribery and anti-corruption	Business Ethics
Anti-unfair competition	Business Ethics

Kingfa Sci. & Tech. Co., Ltd. | Environmental, Social and Governance (ESG) Report 2024 | Environmental Responsibilities | Social Responsibilities | Responsibilities

List of Key Performance Indicators

Index		Unit	2021	2022	2023	2024
Environ- mental Protection Input	Total investment in environmental protection	RMB 10,000	5,510.87	5,640.23	6,689.70	10,765.80
	Direct energy consumption	Tonnes of stan- dard coal	331,099.35	222,972.54	618,559.85	334,812.3
	Natural Gas³	Standard cubic meters	45,420,273.21	17,958,913	122,408,572	134,482,393
	Diesel	Tonne	393	268	284	300.06
	Coal water slurry	Tonne	432,334	314,168	424,676	275,920.61
	Indirect energy consumption	Tonnes of stan- dard coal	373,742.97	315,849.68	590,678.64	616,907
Energy Consump- tion	Purchased elec- tricity ³	'0000 kWh	77,610	73,306	199,721	287,800
	Medium-pressure steam	Tonne	2,257,989.16	1,641,952.22	2,787,760.571	1,987,963.87
	Low-pressure steam	Tonne	250,039.67	427,803.00	325,068.7263	380,380.31
	PV power generation (self generation for self use ¹	'0000 kWh	/	1,137	1,334	2,379
	Total energy consumption ²	Tonnes of stan- dard coal	704,842.25	540,220.24	1,210,877.98	951,719.2
	Intensity of energy consumption	Tonne standard coal/RMB '0000 operating revenue	/	/	0.24	0.16
	Purchased munici pal water	Tonne	5,359,027	3,870,989	10,627,435	12,561,236.89
Con- sumption	Desalted water	Tonne	0	0	2,452,794	2,333,191
of water resources	Groundwater	Tonne	0	0	2,356	53,469
	Recycled/reused water volume	Tonne	/	/	/	126,708

Index		Unit	2021	2022	2023	2024
	Wastewater dis- charge intensity ³	m³	15,167,781,315	12,115,581,982	21,795,515,009	22,865,427,592
Emissions of gaseous pollutants	Recovery rate of waste gases	%	8.03	10.52	26.26	32
	Particles	Tonne	32.234336	193.155492	753.820625	91.96
	Non-methane hydrocarbon	Tonne	310.468	257.075	127.673	163.54
	Nitrogen oxides	Tonne	124.825745	216.483935	106.111583	80.72
	Sulfur oxide	Tonne	33.9	50.833	53.434989	41.24
	VOCs emissions	Tonne	309.76	721.23	1,446.83	548.94
	Total amount of wastewater discharge ³	Tonne	528,164.0	1,463,014.4	5,434,078.1	4,760,944.73
	Recovery rate of wastewater	%	11.54	4.05	8.54	16.42
	Chemical oxygen demand (COD)	Tonne	29.662	82.933	238.711	379.97
of water pollutants	Five-day bod (BOD5)	Tonne	11.036	14.795	45.819	41.95
	Suspended matter	Tonne	12.202	13.322	34.577	31.45
	Ammonia nitrogen	Tonne	0.522	2.043	6.055	31.95
	Total phosphorus	Tonne	0.185	0.584	1.822	3.88
	Total waste disposal	Tonne	13,691.3	20,803.53	20,873.35	21,109.84
Wasta	Total amount of wastes recycled/ reused	Tonne	/	/	/	8,916.94
Waste emis-	Recovery rate of wastes	%	22.97	25.68	33.89	42
	Disposal of haz- ardous wastes	Tonne	2,026.2	3,360.6	8,848.17	10,934.45
	Disposal of high-level wastes	Tonne	0	0	0	0

Kingfa Sci. & Tech. Co., Ltd. | Environmental, Social and Governance (ESG) Report 2024 | Introduction | Environmental Responsibilities | Social Responsibilities | Re

In	Index		2021	2022	2023	2024
Cus-	Customer satisfaction	%	/	/	92.40	91.30
tomer services	Customer complaint handling rate	%	100	100	100	100
	Total number of suppliers	/	3,226	6,699	8,307	9,780
	Suppliers of Mainland China	/	3,102	6,430	8,009	9,103
	HK, Macao, Taiwan and foreign suppliers	/	164	269	298	677
	Percentage of Suppli- er Code of Conduct signed	%	100	100	100	100
Sustain- able supply chain ⁵	Percentage of suppliers with clauses that include environmental and labor requirements*	%	100	100	100	100
	Total number of new suppliers ⁶	/	490	3,433	1,608	1,473
	Percentage of new suppliers that were screened using environmental criteria*	%	100	100	100	100
	Percentage of new suppliers that were screened using social criteria	%	100	100	100	100
	Percentage of our purchasing specialists passing sustainable procurement training	%	0	100	100	100
	Male	Persons	6,689	8,221	8,541	10,447
Em- ployee	Female	Persons	1,847	2,129	2,088	2,636
compo- sition	51 years old and above	Persons	564	756	892	1,050
	41~50	Persons	1,819	2,055	2,124	2,620

Index		Unit	2021	2022	2023	2024
	31~40	Persons	3,565	4,036	4,034	4,965
	30 and below	Persons	2,588	3,503	3,579	4,448
	Employees working in Mainland China	Persons	8,166	9,973	10,217	12,273
Em- ployee	Employees working in other countries and regions	Persons	370	377	412	810
compo- sition	PhD	Persons	106	124	168	212
	Master	Persons	707	895	1,136	1,364
	Bachelor	Persons	1,483	2,536	2,849	3,249
	Below bachelor's de- gree	Persons	6,240	6,795	6,476	8,258
Em- ploy-	Total rate of new employees	%	21	18	23	25
ment	Total turnover rate	%	18	14	19	24
	Total number of trained employees	Persons	7,413	8,685	10,658	13,083
	Classification by gender: trained male employees	Persons	6,013	6,987	8,565	10,458
_	Classification by gender: trained female employees	Persons	1,400	1,698	2,093	2,625
Em- ployee	Total training hours of employees	h	206,304	257,858	440,232	583,501.8
training	Average training hours per employee	h	28	30	41	44.6
	Classification by gen- der: total training hours of male employees	h	166,079	211,776	340,459	390,486.1
	Classification by gen- der: total training hours of female employees	h	40,225	46,082	99,774	130,097.6
Social welfare	Amount of investment in social public welfare	RMB 10,000	1,486	1,167	635	238.30

Annex

Notes: In 2021, the Company deployed photovoltaic modules, by which power was generated for self-use, but the PV power generation was not systematically analyzed.

The PV power generation was included in the total energy consumption.

From August 2022, Liaoning Kingfa started trial production and pollutant discharge, so material changes occurred to propane consumption, purchased electricity, emission, and other indicators.

The waste emissions excluded waste empty barrels and paint barrels produced by Kingfa Medical, as well as the wastes that the weight is hard to measure.

The number of suppliers, which is indicated in the SRM system launched online, excludes the number of the suppliers in the systems not launched, and overseas bases.

The indicator marked * only indicates the percentage of suppliers of raw materials made in China.

Kingfa Sci. & Tech. Co., Ltd. | Environmental, Social and Governance (ESG) Report 2024 | Introduction | Environmental Responsibilities | Social Responsibilities | Re

Main Participatory Domestic Associations and Organizations

Unit	Associations/organizations	Position Held
	China National Light Industry Council	Vice chairman unit
	China Plastic Processing Industry Association	Vice chairman unit
	Plastic Carbon Neutrality Working Group of the National Technical Standardization Committee on Plastics	Director and mem- ber unit
	Technical Subcommittee on Modified Plastics of the National Technical Standardization Committee on Plastics	Director and mem- ber unit
	China Synthetic Resin Association	Standing council member unit
	ABS Branch of China Synthetic Resin Association	Member unit
	China Association of Automobile Manufacturers	Vice chairman unit
The Company	China Household Electrical Appliances Association	Member unit
The Company	China Packaging Federation	Vice president unit
	Society of Competitive Intelligence of China	Ordinary member unit
	China Electronics Standardization Institute (National Technical Standardization Committee on National All-or-nothing Relays)	Director and mem- ber unit
	Working Group on Standards for Pollution Prevention and Control of Electrical and Electronic Products, Ministry of Industry and Information Technology	Member unit with full authorities
	China Association for Public Companies	Council member
	ICT Industry High Quality and Green Development Alliance	Standing council member unit
	China Industrial Association of Power Sources	Member
	Diancheren	Council member

Unit	Associations/organizations	Position Held
	Panjin Petroleum and Chemical Industry Association	Executive vice pres- ident-level execu- tive director unit
Liaoning Kingfa	National Acrylonitrile Production Technology Association Group	Member unit
	Panjin Precursor Chemicals Industry Self-discipline Association	Member unit
	Ningbo New Material Industry Association	Vice chairman
	Ningbo Petroleum and Chemical Industry Association	Vice president
Ningbo Kingfa	Ningbo Beicang District Enterprise Federation (Entrepreneur Association)	Executive chair- man
	Ningbo Plastics Industry Association	Vice president
	Latex Products of Rubber and Rubber Products	Director and mem- ber unit
	Guangdong Medical Devices Management Academy	Supervisory unit
	China Nonwovens & Industrial Textiles Association	Member unit
Guangdong Kingfa	China Association for Medical Devices Industry	Member unit
	Qingyuan Pharmaceutical Society	Vice chairman unit
	Guangdong Association for Medical Devices Industry	Standing council member unit
	Guangdong Food & Drug Technology Association for Evaluation & Certification	Council member
	Professional Committee on Recycling of Plastics, China Plastic Processing Industry Association	Director unit
Kingfa Environ-	Recycled PCR Self-discipline Organization	Initiator
mental	Sustainability Working Group on Food Contact Materials	Initiator
	Green Recycle Plastic Supply Chain Group (GRPG)	Member unit



Kingfa Sci. & Tech. Co., Ltd. | Environmental, Social and Governance (ESG) Report 2024 | Environmental Responsibilities | Social Responsibilities | Responsibilities

Overview of Certificates

System c	ertification	The Compa- ny	Shang- hai Kingfa	Jiangsu Kingfa	Wuhan Kingfa	Tianjin Kingfa	Cheng- du Kingfa	Kingfa Envi- ron- mental	Jiangsu Kingfa Recy- cling	Qin- gyuan Meijin	Zhuhai Vanteque Specialty Engineer- ing Plastics	Bioma- terials
	ISO 9001	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓
	IATF 16949	√	√	√	√	✓	✓				√	
	GMP											
	ISO 13485											
Quality	QSR 820											
	MDSAP											
	MDR											
	5GONOGO									✓		
Environment	ISO 14001	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓
Occupational health and safety	ISO 45001	√	✓	✓	✓	✓	✓	✓	✓		✓	✓
Hazardous sub- stances	QC080000	√					√				✓	
Laboratory	ISO/IEC 17025	✓	✓									
	ISCC PLUS							✓				
Sustainability	OK RECYCLED							✓	√			
	GRS		✓	✓				✓	✓			
Social responsibility	CSR(SA80000/RBA/ SMETA/IWAY)	✓	✓					✓		✓		
Measurement	ISO 10012	✓										
Intellectual property	GB/T 29490	✓		✓	√							
Brand certifica- tion	GB/T 27925	✓										
Energy	ISO 50001								✓	✓		
	AEO	√				✓						
	BRC (packaging materials)							√				
	ISO 28000 (Supply Chain Security)									✓		
Other	GSP (Quality Management System for Medical Device Operation)											
	GB/T23001 Integra- tion of informatiza- tion and industrial- ization managemen systems	t				√						

System	certification	Guang- dong Kingfa Com- posites	Guang- dong Kingfa	Ningbo Kingfa	Lia- oning Kingfa	Kingfa (USA)	Kingfa (Eu- rope)	Chakan Factory of Kingfa (India)	Pondi Factory of Kingfa (India)	Manesar Factory of Kingfa (India)	(Viet-	Num- ber of certified compa- nies	
	ISO 9001	√	√	√	√		√	√	√	√	√	19	21
	IATF 16949	√				√	√	√	√	√		13	16
	GMP		✓									1	2
	ISO 13485		✓					√				2	3
Quality	QSR 820		✓									1	2
	MDSAP		√									1	2
	MDR		✓									1	1
	5GONOGO						√	✓				3	4
Environ- ment	ISO 14001	✓	✓	✓	√		✓	√	✓			17	21
Occupa- tional health and safety	ISO 45001		✓	✓	√			✓	√			15	21
Hazardous substances	QC080000											3	21
Laboratory	ISO/IEC 17025					✓		✓				4	21
	ISCC PLUS											1	2
Sustain- ability	OK RECYCLED											2	2
	GRS							√				5	7
Social re- sponsibility	CSR(SA80000/RBA/ SMETA/IWAY)		✓				√					6	21
Measure- ment	ISO 10012											1	21
Intellectual property	GB/T 29490											3	15
Brand certi- fication	GB/T 27925											1	15
Energy	ISO 50001											2	21
	AEO		✓	✓								4	15
	BRC (packaging materials)		✓									2	4
	ISO 28000 (Supply Chain Security)						√	✓				3	21
Other	GSP (Quality Man- agement System for Medical Device Operation)		√									1	2
	GB/T23001 Integra- tion of informatiza- tion and industrial- ization management systems											1	15

Annex

Kingfa Sci. & Tech. Co., Ltd. | Environmental, Social and Governance (ESG) Report 2024 | Introduction | Environmental Responsibilities | Social Resp

pility for Governance Annex

Reader's Feedback

Dear Reader,

Thank you for reading the "2024 Environmental, Social and Corporate Governance (ESG) Report of the Company". To provide you and other stakeholders with more professional and valuable corporate ESG information, please answer our related questions in this feedback form to help us further improve our future ESG work.

Choice Questions (please tick the appropriate box)

1. For the Company, v	vhat's your identity?			
☐ Employee	☐ Customer	☐ Supplier	☐ Regulatory Authority	☐ Media
☐ Others (please indi	cate)			
2. What is your overal	l evaluation of this Repor	+2		
-	•			
☐ Very good	☐ Relatively good	☐ Medium	☐ Relatively poor	☐ Very poor
3. What do you think	of the outline of this Repo	ort?		
☐ Very reasonable	☐ Relatively reas	onable \square	Medium ☐ Relatively poor	☐ Very poor
4. What do you think	of the layout design and	oresentation form of	f this Report?	
☐ Very good	☐ Relatively good	☐ Medium	□ Relatively poor	☐ Very poor
□ very good	☐ Relatively good	□ Mediuiii	□ Relatively pool	□ very poor
5. What do you think	of the Company's overall	performance in the	environmental issues?	
☐ Very good	☐ Relatively good	☐ Medium	☐ Relatively poor	☐ Very poor
6. What do you think	of the Company's overall	performance in the	social issues?	
☐ Very good	☐ Relatively good	☐ Medium		☐ Very poor
, 0	, ,		, ,	7.
7. What do you think	of the Company's overall	performance in the	governance issues?	
☐ Very good	☐ Relatively good	☐ Medium	☐ Relatively poor	☐ Very poor
Open-ended Question	on:			
What opinions and su	iggestions do you have re	egarding the Compa	ny's ESG work?	

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