



2022 ENVIRONMENTAL, SOCIAL & GOVERNANCE REPORT

SHAPING A SUSTAINABLE FUTURE WITH PLASTIC

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About This Report

This report is the first environmental, social and governance (ESG) report launched by Kingfa Sci. & Tech. Co, Ltd. ("Kingfa", "the Company" or "we") with the aim of integrating sustainability into our corporate governance and providing our stakeholders with comprehensive information on our ESG practices and related performance.

Reporting Scope

This report covers the period from January 1, 2022 to December 31, 2022 (the " Reporting Period "), with an annual release cycle. In order to enhance the comparability and completeness of the report, some contents may be extended from the previous and future years.

Reporting Organization Boundary

This report is based on Kingfa Sci. & Tech. Co, Ltd. and covers its subsidiaries (together with its subsidiaries, the "Group"). The environmental key performance indicators (KPIs) mainly cover the Company and its subsidiaries in China, and the social KPIs mainly cover the Company and all its subsidiaries in China and overseas.

Data Description

The data and cases cited in this report are derived from official documents and statistical reports of the Company and its subsidiaries. Unless otherwise stated, the amounts shown in this report are in RMB.

Reporting Principles

- GRI Sustainability Reporting Standards (GRI Standards), the Global Sustainability Standards Board (GSSB)
- Sustainable Accounting Standards Board Index (SASB Index)
- The Sustainable Development Goals (SDGs), the United Nations (UN)
- Corporate ESG Report Preparation Guide (CASS-ESG 5.0), the Chinese Academy of Social Sciences (CASS)

Disclosure Method

This report is available in our official website (<https://www.kingfa.com.cn/>) and the Shanghai stock exchange website (<http://www.sse.com.cn/>) in electronic form. Both Chinese and English versions of this report are available for readers' reference.

For any ambiguity or discrepancy due to language reasons, the Chinese version shall prevail.

Terms

In this report, unless stated otherwise, the following words have the following meanings.


Company Law	refers to	Company Law of the People's Republic of China
Articles of Association	refers to	Articles of Association of Kingfa Technology Co., Ltd. (Revised in 2022)
The Company, Kingfa Technology, Kingfa	refers to	Kingfa Sci. & Tech. Co, Ltd.
Shanghai Kingfa	refers to	Shanghai Kingfa Sci. & Tech. Co., Ltd.
Tianjin Kingfa	refers to	Tianjin Kingfa Advanced Materials Co., Ltd.
Guangdong Kingfa	refers to	Guangdong Kingfa Sci. & Tech. Co., Ltd.
Wuhan Kingfa	refers to	Wuhan Kingfa Sci. & Tech. Co., Ltd.
Chengdu Kingfa	refers to	Chengdu Kingfa Sci. & Tech. Advanced Materials Co., Ltd.
Zhuhai Kingfa	refers to	Zhuhai Kingfa Biodegradable Materials Co., Ltd.
Kingfa Carbon Fiber	refers to	Guangzhou Kingfa Caron Fiber Materials Dvpt. Co., Ltd.
Ningbo Kingfa	refers to	Ningbo Kingfa Advanced Materials Co., Ltd.
PP	refers to	Polypropylene
PE	refers to	Polyethylene
ABS	refers to	Acrylonitrile-butadiene-styrene copolymer
PBAT	refers to	Poly (butyleneadipate-co-terephthalate)
PBS	refers to	Poly (butylene succinate)
PLA	refers to	Polylactic acid
PA	refers to	Polyamide
PA10T	refers to	Polyamide10T
Reporting Period	refers to	January 1, 2022 to December 31, 2022

Message from the Chairman



On the path to becoming an outstanding company that develops advance materials, Kingfa has undergone 30 years of challenges. The years have strengthened us with a solid foundation and commitment to provide advance material products of superior quality as well better lives for all. Green recovery is gradually becoming a global consensus. Facing global challenges such as climate change, pollution, and economic inequality, we now more than ever believe in the importance of sustainable development and continuously explore the value it can provide for us. On this publishing of our first ESG report, on behalf of Kingfa, I would like to express my sincere gratitude to all colleagues who have shown their concern and support for us. I cordially invite you to explore our performance in sustainable development through this report and engage in a collective discussion on Kingfa's path of sustainability.

Kingfa always focuses on creating value through our dedication to provide products and services of superior quality, creating a sustainable environment and better lives for all. We remain steadfast in our responsibility to create sustainable value, closely monitor key issues related to the environment, society and corporate governance, and evaluate our sustainable development within the ESG framework. This gives us direction in fostering a responsible corporate culture.


Chairman of Kingfa

Leading technological innovation to drive high-quality development in the industry. Research and innovation (“R&D”)are Kingfa's core competitiveness. We establish the "13551" R&D system and an RDS (research, development, service) organizational structure, gradually forming an R&D platform driven by technology, industry and product research. While constantly optimizing our customer service system, we adhere to responsible marketing and strengthen our management of quality control. In this way, we provide clients with high-quality products and high-standard services. To promote the optimization and upgrading of the entire industry chain, we fully leverage our role as a leading enterprise to shape a sustainable value chain. We establish platforms for industry cooperation and create new cooperation methods between industry, research and academia.

Undertaking circular and low-carbon development for a greener and cleaner planet.Kingfa adheres to green manufacturing to provide green products for production and consumption for all. At the production and operational level, we continuously increase our investment in renewable energy and clean production. We have also completed the annual assessment and verification on greenhouse gas (“GHG”) emissions in Category 1, Category 2 and Category 3 for 10 legal entities, encompassing the headquarter, modified plastic sector, recycled plastic sector and medical and healthcare sector within mainland China , establishing a baseline for our carbon neutrality goals. We have proposed “Make the Best Use of Plastic,” a comprehensive solution to a circular economy for plastic. The solution focuses on environmentally-friendly high-performance recycled plastics and fully biodegradable plastics. It aims to address the issue of white pollution and provide innovative business models to support the low-carbon transformation of the chemical industry.

Strengthening the foundation for sustainable development based on excellent governance. In 2022, Kingfa continuously improved its corporate

governance, strictly adhering to business ethics and conducting operations in compliance with regulations. We ceaselessly strengthened our risk management capabilities and established a risk management center. The comprehensive risk prevention mechanism we have established covers the entire process of risk management from beginning to end. At the same time, to effectively further the progress on our ESG initiatives, Kingfa has initiated the establishment of an ESG governance framework. We are improving the division of responsibilities and integrating ESG principles more effectively into our strategic planning to drive the company's high-quality development.

Adhering to the people-oriented principle for a value sharing system.We value the personal rights and development of our employees. By continuously improving our chemical safety management system, we aim to create a healthy and safe working environment. We also foster an inclusive and diverse corporate culture where everyone feels equal and valued. Additionally, we provide our employees with competitive compensation and benefits and offer ample opportunities for career development. As a responsible corporation, we see adding value to society as the foundation of our business success. We actively participate in philanthropic activities for education, poverty alleviation, assistance to people with disabilities, and disaster relief efforts. Since our establishment in 1993, Kingfa has cumulatively donated RMB 150 million for the betterment of society.

Moving forward, Kingfa will leverage its ESG strategy as a driving force for its sustainable development. We will explore new sources of growth and seize opportunities presented by the emerging generation. A journey of a thousand miles begins with a single step, and so does the journey to sustainable development. Kingfa will persistently move forward together with all stakeholders to create a sustainable future for all.

Kingfa at a Glance

Kingfa Sci. & Tech. Co., Ltd. was established in 1993, headquartered in Guangzhou, China. We focus on the research, development, production, sales, and services of high-performance advanced materials and chemicals. We are committed to providing innovative solutions to create a safer, more comfortable and convenient life for everyone. After 30 years of continuous development, Kingfa has experienced substantial growth. Currently, we own 56 subsidiaries and operate research and production bases in regions such as South Asia, North America, and Europe. In 2004, we were listed on the main board of the Shanghai Stock Exchange with the stock code 600143.

As a global leader in the chemical advanced materials sector, we are committed to addressing the increasingly urgent environmental challenges that humanity is facing. We strive to promote the continuous improvement of the environment and achieve sustainable development. Kingfa focuses on the independent innovation and development of our products. Our products cover eight major categories of proprietary intellectual property: modified plastics, environmentally-friendly high-performance recycled plastic, fully biodegradable plastics, special engineering plastics, carbon fiber and composite materials, light hydrocarbons and hydrogen energy, styrene resins, and medical and healthcare polymer materials. With their excellent environmental friendliness and outstanding performance, our materials are exported to over 130 countries and regions worldwide. We proudly serve over 1,000 renowned global enterprises.

Key Achievement of 2022

Kingfa's ranking in the
China's Fortune 500:

311th

Corporate Culture



Vision

Becoming highly respected as the world's premier company for advanced materials



Mission

Growing together with our partners, sharing achievements, and providing high-quality advanced material products for society to create a better life



Core Principle

Creating value



Market Philosophy

Creating demands, leading the market, and serving clients



Employee Values

Loyalty, responsibility, diligence, innovation



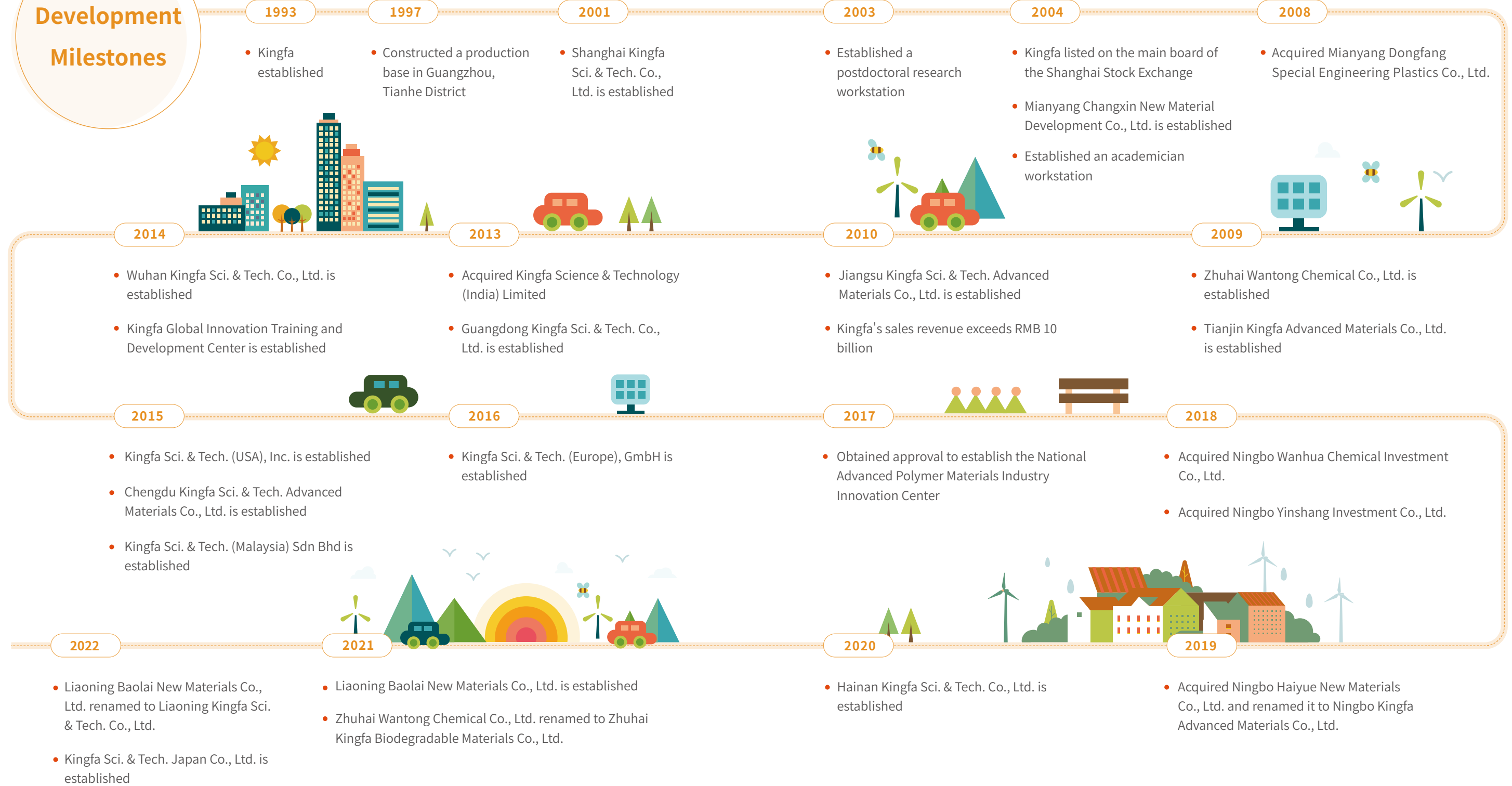
R&D Philosophy

Independent innovation, technological leadership, excellent products

Kingfa's Headquarters in Guangzhou



Development Milestones



Core Business

The Global Supplier with the Most Complete Range of Polymer Materials

Sales volume and/or sales of Kingfa's eight product lines in 2022

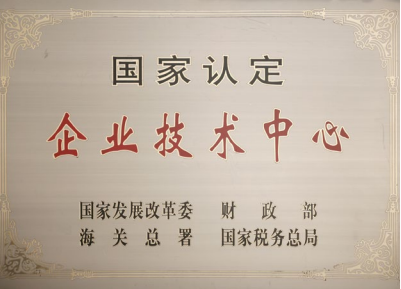
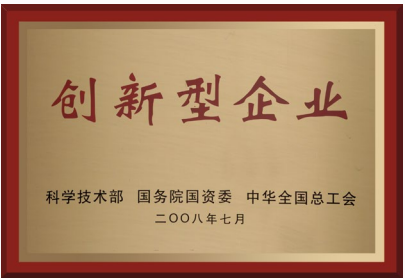
Modified Plastic Sector		Advanced Materials Sector			Green Petrochemicals Sector		Medical and Healthcare Sector
Modified Plastics	Environmentally-friendly High-Performance Recycled Plastics	Fully Biodegradable Plastics	Special Engineering Plastics	Carbon Fiber and Composite Materials	Light Hydrocarbons and Hydrogen Energy	Styrene Resins	Medical and Healthcare Polymer Materials
1,573,200 tons	189,000 tons	98,500 tons	17,800 tons	RMB 158,000,000	459,200 tons	95,600 tons	RMB 1,495,000,000

Global Footprint

local production, tailor-made services, nationwide coverage, global reach



Awards and Honors



Participating in Domestic Associations and Organizations

Association or Unit	Role
China National Light Industry Council	Vice President
China Plastic Processing Industry Association	Vice Executive Member
China Synthetic Resin Association	Executive Member
China Synthetic Resin Distribution and Marketing Association, ABS Resin Chapter	Member
China Association of Automobile Manufacturers	Vice Director
China Household Electrical Appliances Association	Member
China Packaging Federation	Vice President
Competitive Intelligence Chapter of the Institute of Scientific and Technical Information of China	General Institutional Member
Green Recycling Plastic Supply Chain Joint Working Group (GRPG)	Member
Working Group on Standards for Pollution Control of Electrical and Electronic Products, Ministry of Industry and Information Technology	Full Member
Green Recycled Plastic Supply Chain Joint Working Group	Member
Guangdong Materials Research Society	Vice Director
Guangdong Circular Economy and Resource Comprehensive Utilization Association	Vice President
Guangdong Light Industry Association	Director
Guangdong Mechanical Engineering Society	Standing Executive Member
Guangdong Plastics Industry Association	President

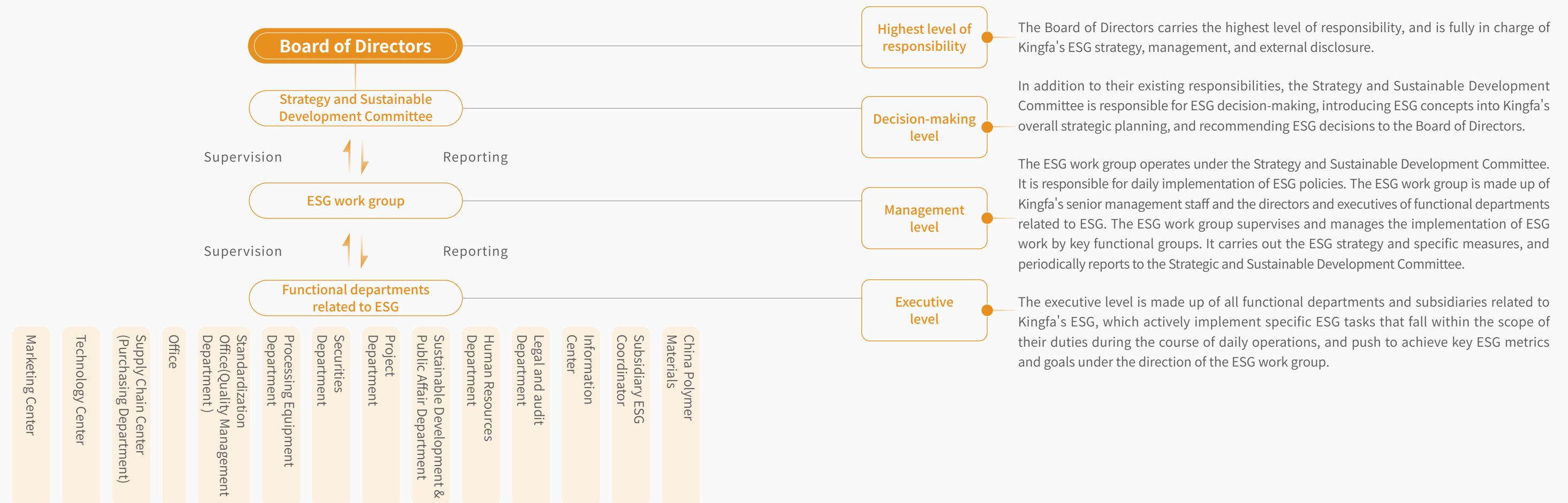
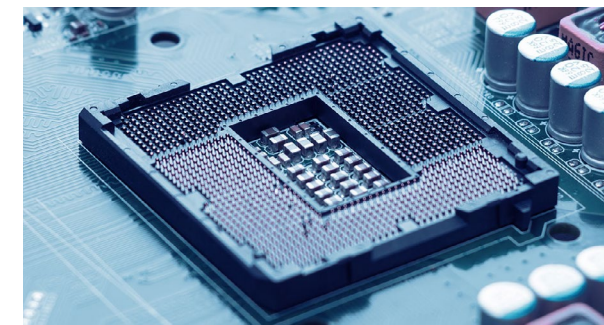
Association or Unit	Role
Guangdong Patent Information Association	Member
Guangdong Institute of Scientific and Technological Information	Director
Guangdong Quality Association	Director
Guangzhou Advanced Materials Industry Development Promotion Association	President
Guangzhou Association of Science and Technology Innovation	Vice President
Guangzhou Enterprise Federation	Vice President
Guangzhou Chemical Industry Association	Director
Guangzhou Certification and Inspection Association	Member
Guangzhou Chemistry and chemical Association	Vice Executive Member
Guangzhou Integration Between Industry and Education Association	Vice President
Guangzhou Industrial Design Association	Vice President
Guangzhou Development Zone Intellectual Property Association	Vice President
Guangzhou Development Zone Chemical Industry Association	President
Carbon Neutrality Working Group of the National Standardization Technical Committee on Plastic	Director
Sub-committee on Modified Plastic of the National Standardization Technical Committee on Plastic	Director
China Association for Public Companies	Director
Guangdong Listed Companies Association	Member

Our ESG Approach

We believe the key to creating long-term value lies in the sustainable development of our company. Kingfa focuses on the effectiveness and integrity of our ESG system. Based on our own inherent ESG principles and global strategy, we have established a top-down ESG governance framework and continuously strengthen communication on ESG issues with stakeholders. Through analyzing material ESG issues, we align our actions with the United Nations Sustainable Development Goals (SDGs) to identify key directions for our ESG development. In this way, we continuously improve our ESG initiatives and enhance our ESG performance.




ESG Governance Framework

To effectively carry out ESG work, Kingfa has established a clear and hierarchical four-level ESG governance framework based on its existing corporate governance structure and strategic development needs. This framework ensures clear roles and responsibilities and facilitates the implementation of top-down ESG management work. Each level has clear and coordinated responsibilities that together enhance Kingfa's performance in sustainable development to create value for the economy, environment, and society.



Stakeholder Communication

Kingfa understands that our sustainable development relies on the support of all stakeholders. We highly value communication with stakeholders and actively engage in dialogue with them. Through diverse communication channels, we aim to gain a deep understanding of stakeholders' expectations and demands. Feedback from stakeholders is essential for us. We incorporate their concerns and suggestions regarding ESG issues into our decision-making process. This, in turn, is reflected in our sustainable actions.

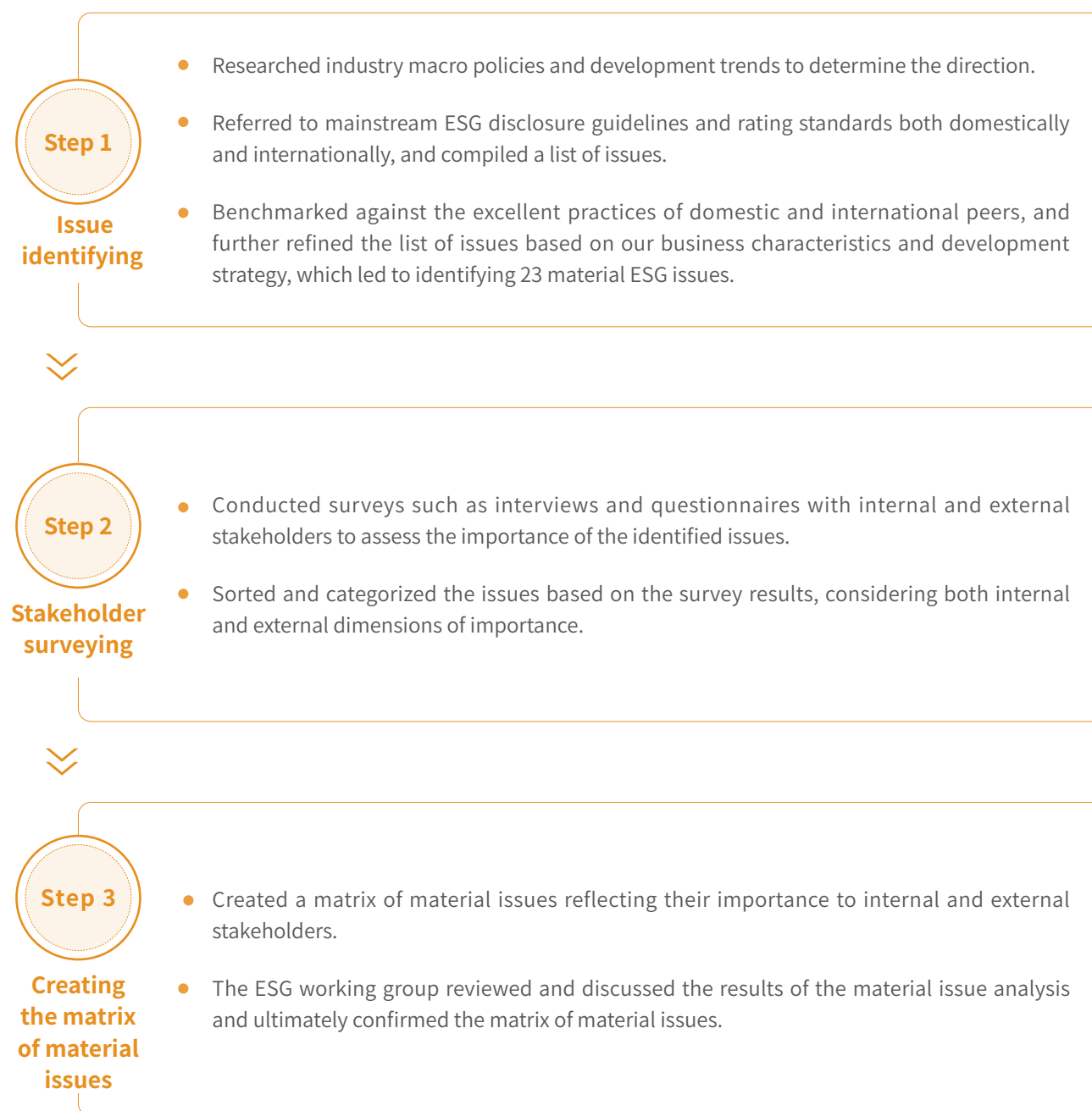
Stakeholder	Concerns and Expectations	Communication Channel
 Government and regulatory institutions	<ul style="list-style-type: none"> • Responding to national development strategies • Compliance operations • Risk management • Transparent information disclosure • Promoting industrial development 	<ul style="list-style-type: none"> • Participating in government cooperation projects, exchanges, and seminars • Actively cooperating with regulatory authorities • Daily work reporting
 Shareholder/Investor	<ul style="list-style-type: none"> • Corporate governance • Compliance operations • Risk management • Stable investment returns • Transparent information disclosure 	<ul style="list-style-type: none"> • Information disclosure • Shareholder meetings • Performance briefing • Communication through phone and email
 Client	<ul style="list-style-type: none"> • Product quality and safety • Technology R&D and innovation • Information security and privacy protection • Business ethics 	<ul style="list-style-type: none"> • Product demand research • Customer satisfaction surveys • Complaint handling mechanism

Stakeholder	Concerns and Expectations	Communication Channel
 Employees	<ul style="list-style-type: none"> • Ensuring the basic rights of employees • Well-established career development system • Good welfare benefits • Healthy and safe work environment 	<ul style="list-style-type: none"> • Regular work meetings • Suggestion boxes • Email and enterprise WeChat communication • Employee engagement surveys • Labor union
 Supplier	<ul style="list-style-type: none"> • Fair procurement • Supplier support and empowerment • Building a sustainable supply chain 	<ul style="list-style-type: none"> • Supplier conference • Regular communication with a dedicated contact
 Community and non-governmental organizations	<ul style="list-style-type: none"> • Charitable donations • Driving regional economic development and promoting employment • Environmental protection 	<ul style="list-style-type: none"> • Public welfare activities • Promotion on social media platforms
 The Media	<ul style="list-style-type: none"> • Information disclosure and dissemination 	<ul style="list-style-type: none"> • Communication with spokesperson

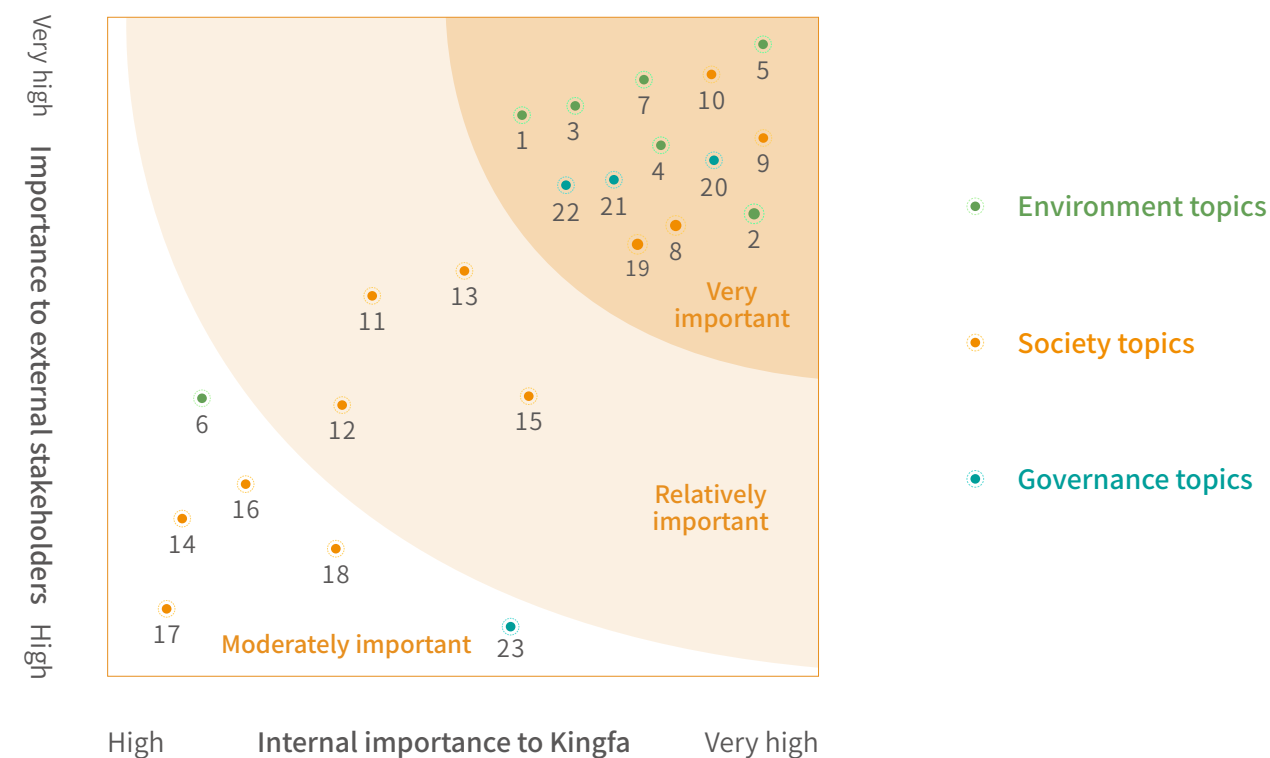
Materiality Assessment

Based on our sustainable development strategy and considering the concerns and expectations of both internal and external stakeholders, Kingfa identified 23 material ESG issues. This identification process involved referencing domestic and international standards, macro policies, industry development trends, and other factors.

Our workflow for identifying and analyzing material issues was as follows:



The matrix of material issues provides an important reference for us to progressively carry out various ESG initiatives.



E Environment

- | | | | |
|-------------------------|---|--------------------|--------------------|
| 1 Climate change action | 2 Energy management | 3 Water management | 4 Waste management |
| 5 Circular economy | 6 Biodiversity & environmental protection | 7 Green products | |

S Society

- | | | |
|------------------------------------|---|-------------------------------------|
| 8 Product quality and safety | 9 Technological innovation | 10 Chemical safety |
| 11 Responsible supply chain | 12 Responsible business & marketing | 13 Employment & employee rights |
| 14 Employee development & training | 15 Occupational health & safety | 16 Equality, inclusivity, diversity |
| 17 Societal development & charity | 18 Contribution to industry development | 19 Data security |

G Governance

- | | | | |
|--------------------------|--------------------|--------------------|---------------------------|
| 20 Compliance operations | 21 Risk management | 22 Business ethics | 23 Transparent disclosure |
|--------------------------|--------------------|--------------------|---------------------------|

Contributing to the UN SDGs

The United Nations 2030 Agenda for Sustainable Development outlines 17 SDGs that provide a roadmap for promoting human well-being and sustainable development. These goals also serve as a strategic framework for businesses to explore sustainable practices. In 2022, we assessed Kingfa's response and contributions to the SDGs from three dimensions: the planet, plastics, and people. In the future, we will further integrate the SDGs into our sustainable development practices and aim to help achieve global sustainable development goals through concrete actions.



Overview of ESG Highlights in 2022

Environmental

Inventory and verification of GHG for Category 1, Category 2, and Category 3

(applied standard: ISO 14064 - 1:2008): **401,844.28** tons of carbon dioxide equivalent (tCO₂e)

Sales of environmentally-friendly high-performance recycled plastics: **189,000** tons

National green factories: **4** in total

Total annual investment in environmental protection: RMB **56,402,300**

Energy savings in the modified plastic sector: **1,197.77** tons of standard coal

Roof photovoltaic power generation: **11.37** million kilowatt-hours

Social

The first Chinese company in the plastic industry joined the **New Plastics Economy Global Commitment** initiative

R&D investment in the past three years: RMB **4,347,878,400**

Cumulative patent applications: **5,401**

Patents granted in 2022: **514**

Investment in safe production: RMB **78,279,200**

Employee social insurance coverage rate: **100%**

Cumulative donations to society since establishment: over RMB **150** million

Governance and Economy

An **ESG function** added to the strategic committee, with the establishment of an **ESG working group**

Completion rate of internal audit rectification: **91%**

Revenue in 2022: RMB **40,412** million

Net profit attributable to shareholders of the listed company in 2022: RMB **1,992** million

Features: Make the Best Use of Plastic for a Greener Future

As a leading company in the advanced materials industry, Kingfa always aspires to create a better world and is committed to achieving the perfect balance between the planet, plastics, and people. Only by continuously researching and developing high-performance plastic products can we contribute to a convenient and better life for humanity. By fully embracing low-carbon and environmentally-friendly business models for both the production and disposal of plastics, we can ensure our planet remains green and full of vitality.

We have closely linked sustainable development with business growth and are working together to build a green, low-carbon, and circular advanced materials business system. We are focusing on two emerging areas, namely recycled plastics and bioplastics. We have proposed a comprehensive solution to a circular economy for plastic called “Make the Best Use of Plastic,” which promotes the green and low-carbon transformation of the chemical industry and leads the way in reducing plastic wastes in society.

Contributing to the UN SDGs



Key Achievements of 2022

Inventory and verification of GHG for Category 1, Category 2, and Category 3 (applied standard: ISO 14064 - 1:2008):

401,844.28 tons of carbon dioxide equivalent (tCO₂e)

Waste plastic recycled: approximately **200,000** tons

Sales of environmentally-friendly high-performance recycled plastics: **189,000** tons

Production of bio-based special engineering plastics : approximately **9,100** tons

Moving towards Carbon Neutrality

The Global Risks Report 2023, released by the World Economic Forum, identifies climate change as the most serious long-term risk globally. In recent years, climate change has intensified, leading to more frequent extreme weather events , which seriously threaten the sustainable development of human beings and the inherent balance of the planet's ecosystem. Actively coping with climate change and pursuing a path of green, low-carbon development has become an urgent and common issue for all mankind.

Low-Carbon Journey

As a responsible advanced materials company, Kingfa has always adhered to the concept of sustainability and actively promotes green and low-carbon production. We are committed to researching and developing products that are environmentally-friendly.

Kingfa's Low-Carbon Journey



Carbon Neutrality Goals

Since the national dual goals of peaking carbon dioxide before 2030 and achieving carbon neutrality before 2060 of China was proposed in 2020, the growth of low-carbon economy is turning into a new path of high-quality development in China. In response to the above goals, on October 16, 2021, Kingfa announced its carbon strategy and goals at the China High-level Carbon Forum for The Plastic Value Chain, as the first Chinese company in the plastic industry to launch its carbon goals to the public.



Plastic Industry Carbon Peak Forum, China

Kingfa's Carbon Goals, Version 1.0 (updated and upgraded every two years)

- Reducing greenhouse gas (GHG) emissions per product unit by 30% before 2030 compared to 2022
- In 2030, producing 1 million tons of green plastics (including fully biodegradable plastics and bio-based materials), recycling 1 million tons of plastic wastes, and producing 1 million tons of environmentally-friendly high-performance recycled plastics
- Achieving corporate carbon neutrality before 2060

Note: The goals will be dynamically updated every two years based on our decarbonization progress.

According to the verification of the independent third-party agency TÜV Rheinland, Kingfa's GHG inventory covers a total of ten legal entities in the modified plastic, recycled plastic and medical and healthcare sectors along its headquarter in China. During the Reporting Period in Year of 2022, the total GHG emissions amounted to 401,844.28 tCO₂e. Direct greenhouse gas emissions (Category 1¹) amounted to 37,085.07 tCO₂e, accounting for 9.2% of the total emissions, while indirect greenhouse gas emissions amounted to 364,759.21 tCO₂e, accounting for 90.8% of the total emissions. Among the indirect emissions, Category 2² accounted for 82.3%, and Category 3³ accounted for 8.5%.

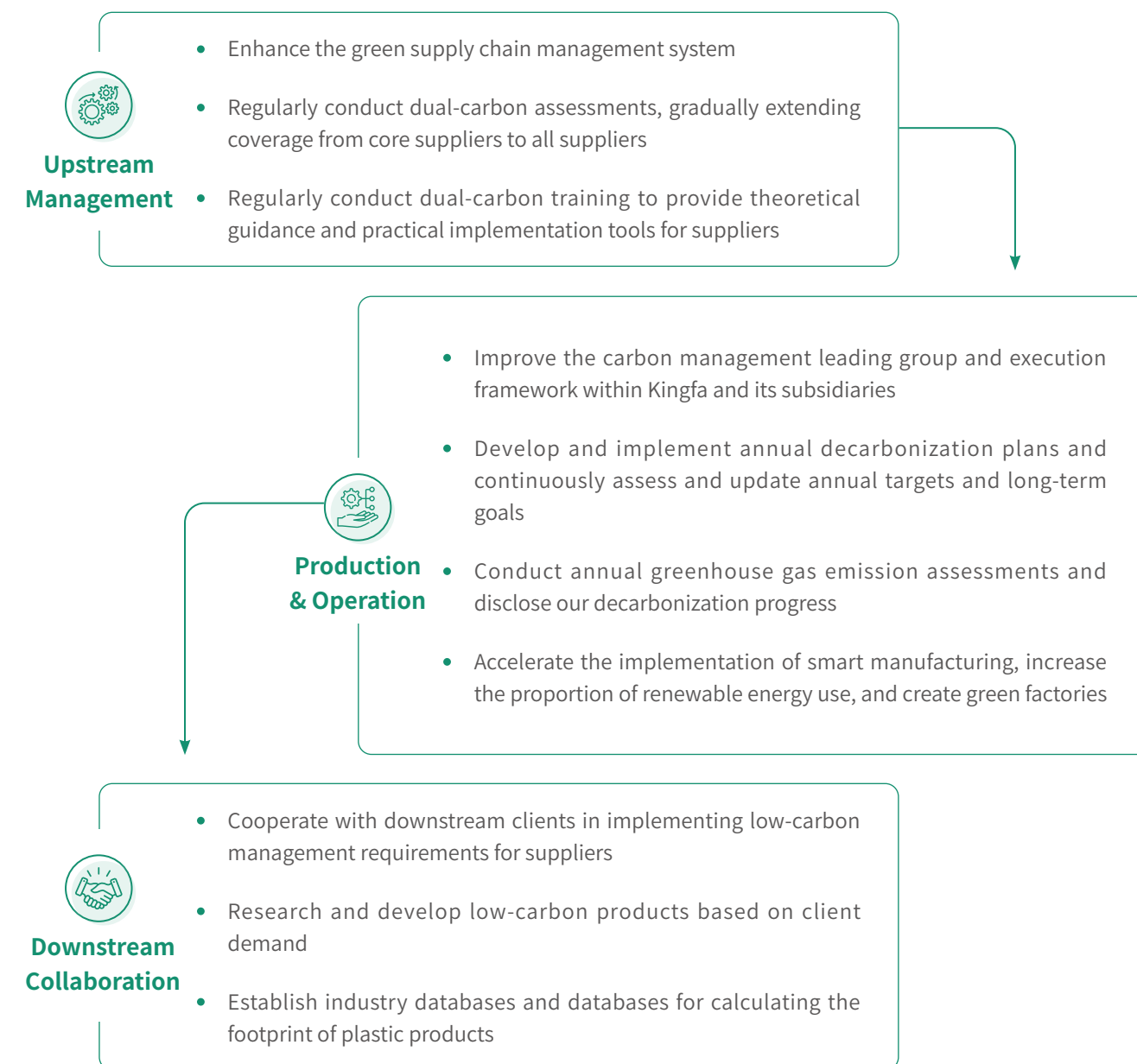
Category 1: Direct greenhouse gas emissions, including fuel combustion of fixed equipment required for production, fuel combustion of transport vehicles, raw and auxiliary materials manufacturing process, refrigeration equipment and plant septic tank escape and other activities within the scope of business.

Category 2: Indirect GHG emissions from input energy, including electricity and steam provided outside the boundaries of the organization.

Category 3: Indirect greenhouse gas emissions from transportation, including upstream and downstream cargo transportation, employee commuting, business travel, customer transportation, etc.

Carbon Neutrality Actions

To achieve the above goals, Kingfa has initiated green, low-carbon and circular transition actions and formulated practical strategic action plans for each goal. We will collaborate with upstream and downstream companies across the entire plastics industry chain to take collective action:

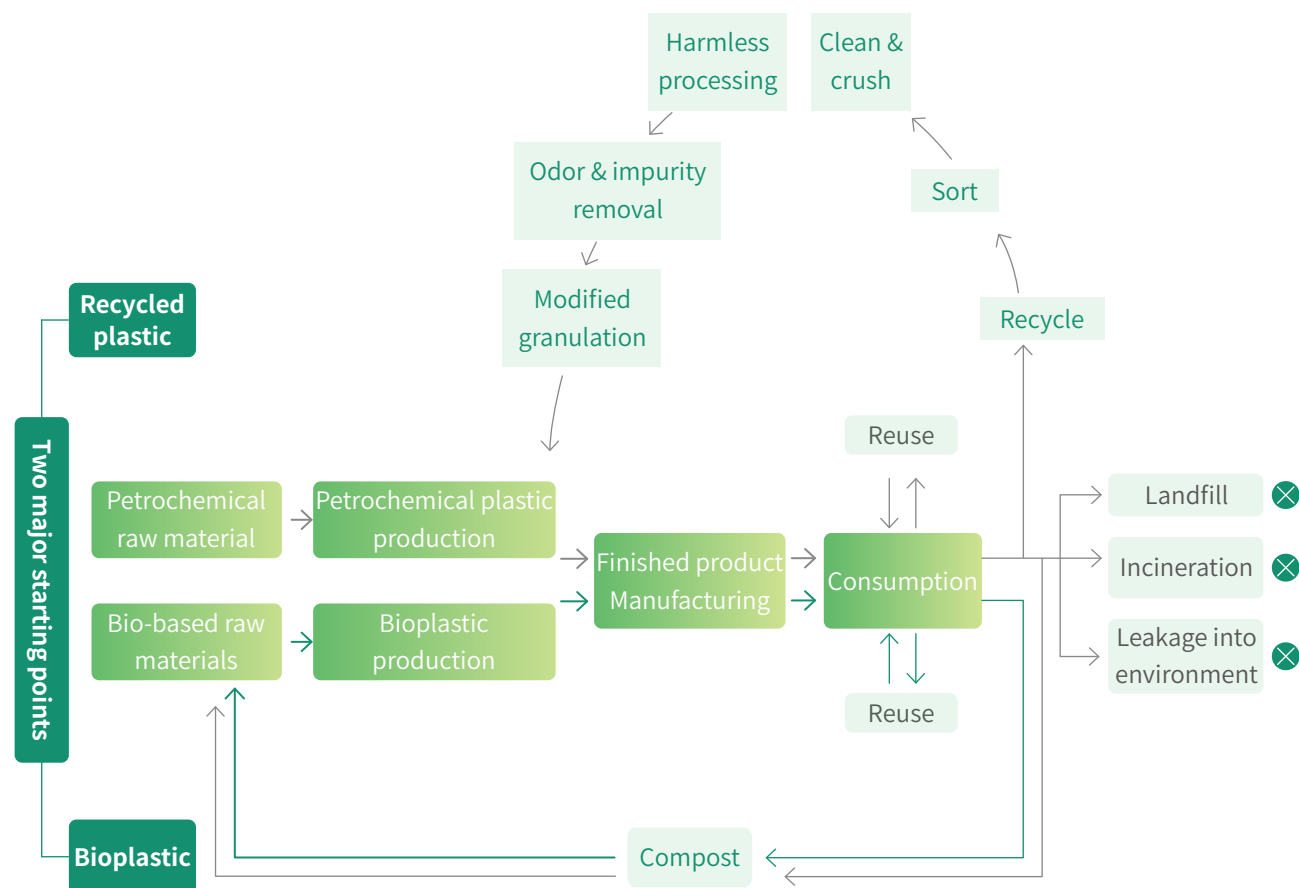


A Circular Economy for Plastic

Plastic, as an important and basic material with light weight, low price and strong plasticity, has been widely used in many aspects of the economy and society. While bringing many conveniences to people's daily life, it also brings huge environmental challenges. To date, cumulative global plastic waste has exceeded 7 billion tons, with only around 9% of plastic waste being recycled. Countless tons of plastic waste are either incinerated, landfilled, or disposed through other inappropriate methods. In an effort to help solve plastic pollution, Kingfa has proposed the circular economy plan "Maximizing the Use of Plastics." The plan focuses on key stages throughout the entire lifecycle of plastic, with a particular emphasis on recycled plastic and bioplastics. Through these two approaches, Kingfa aims to provide innovative ideas and solutions for global plastic reduction.

Make the Best Use of Plastic

– Kingfa’s Solution to A Circular Economy for Plastic



Turning Wastes into Resources

We firmly believe that plastic waste is a valuable resource placed in the wrong location. Kingfa began laying the groundwork in the field of environmentally-friendly high-performance recycled plastics in 2004. We established a sustainable development technology research institute and increased our research efforts for general technologies of environmentally-friendly high-performance recycled plastics. In 2013, we established the Sustainable Products Department, which later developed into a subsidiary called Kingfa Environmental Protection in 2021. This subsidiary specializes in the research, production, and sales of environmentally-friendly high-performance recycled plastics.

Kingfa tackles various aspects such as recycling, pre-processing, refined regeneration, and high-quality use to systematically address the challenges the recycled plastics industry faces in terms of technology, equipment, and environment. We provide theoretical and technical support for the efficient use of waste plastic resources.

Recycling

- Kingfa has established a comprehensive plastic waste recycling system that covers the industrial, agricultural, household, and maritime sectors, among others.
- We have developed over 500 high-quality suppliers specifically targeting different segments of recycling channels. With over 60 resource recycling centers, we are continuously enhancing our front-end recycling capabilities.
- We collaborate with large-scale dismantling plants and recycling facilities in China, enabling the direct processing of waste materials in their premises. This partnership significantly shortens the recycling chain and reduces overall recycling costs.

Pre-Processing

- Kingfa owns two major pre-processing bases in Pizhou and Qingyuan. In 2022, our capacity for the high-quality treatment of waste plastics reached 130,000 tons.
- We continuously improve our R&D for core technologies and equipment, making significant progress in areas such as intelligent identification, automatic sorting, and chemical impurity removal. These advancements improve recycling efficiency and reduce resource waste.
- Kingfa has developed customized pre-processing equipment and production lines tailored to different categories of waste plastics and developed environmentally-friendly cleaning agents and solvents for specific types of pollutants. We continuously optimize high-efficiency cleaning techniques and secondary pollutant control technologies to minimize process pollution.

Refined Regeneration

- By changing the combination of screws in the extruder and employing melt filtration, we enhance the appearance of recycled plastic pellets.
- Combining negative pressure, water injection, steam blowing, and infrared heating, we effectively reduce the odor of recycled plastics.

High-quality Utilization

- We analyze the physical, visual, structural, and aging properties of recycled plastics as well as their impurities. Based on the defects found in waste materials, we modify our processes to improve their performance. Through researching formulations, antioxidants, and impurity influences, along with extrusion blending processes, we enhance the mechanical and aging properties of recycled plastics. This allows us to produce high-quality modified plastics that can fully or partially substitute for advanced materials.

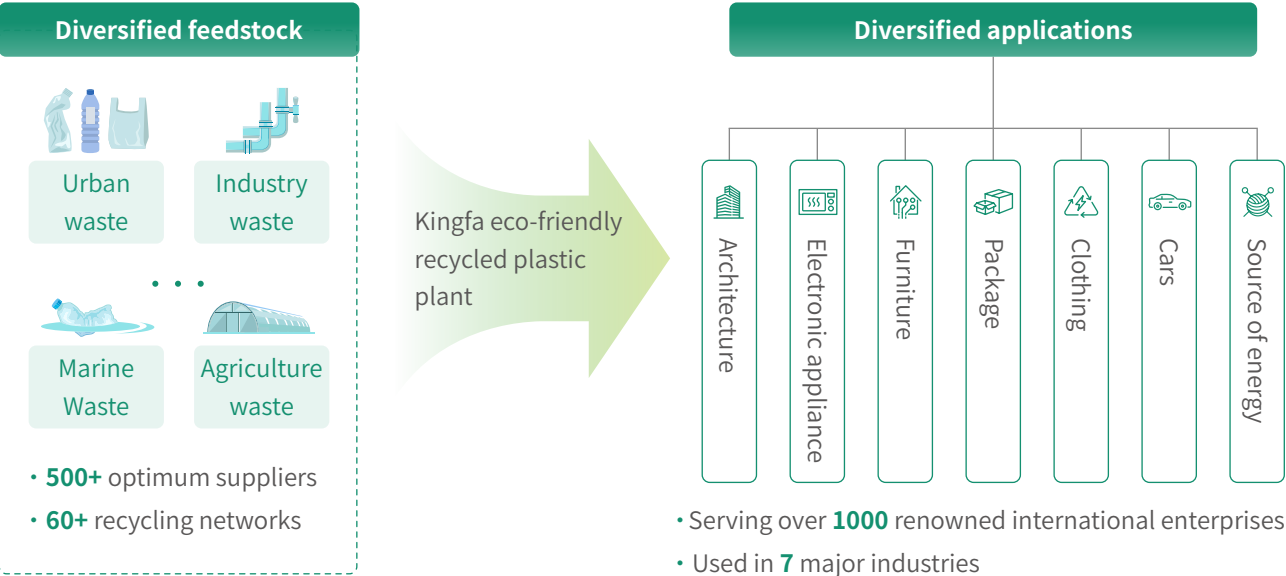
Kingfa has obtained several certifications in the field of recycled plastics. These include the world's first TÜV Rheinland Ocean-Bound Plastic (OBP) Recycled Content Validation certificate, UL 2809 certification, and the Global Recycled Standard (GRS) certification. These certifications validate our commitment to using recycled plastics and adhering to global standards in sustainable recycling practices. As of December 31, 2022, Kingfa had obtained 72 OBP Recycled Content Validation certificates, 104 certificates for recycled plastic content after consumption, and 9 certificates for chemical recycled plastic content. Kingfa has provided products and services to over 1,000 internationally renowned companies in more than 130 countries and regions worldwide. Our environmentally-friendly high-performance recycled



Kingfa's OBP Recycled Content Validation Certificate Awarding Ceremony

plastic products have been widely applied in industries such as packaging, automotive, household appliances, IT electronics, and energy.

Kingfa's Environmentally-Friendly High-Performance Recycled Plastics – Upstream Feedstock and Downstream Application Scenarios



Kingfa innovates environmentally-friendly high-performance plastic recycling technology, which not only helps address white pollution but also significantly reduces energy consumption and GHG emissions in contrast to virgin materials. From 2004 to 2022, Kingfa has cumulatively provided over 1.7 million tons of environmentally-friendly high-performance recycled plastics to the global market. This contribution has played a significant role in mitigating climate change, protecting the environment, and preserving biodiversity.

Coal Use Reduction 2.38 million tons	CO ₂ Emission Reduction 2.16 million tons	Electricity Reduction 7,900 million kilowatt-hours
Petroleum Use Reduction 8,740,000 tons		Water Use Reduction 113,340,000 tons

Case Study on Product Carbon Footprint Reduction via Kingfa's Environmentally-Friendly High-Performance Recycled Plastics

Object of study	Unit	Reduction in Carbon Footprint (Relative to Virgin HDPE Material) %	Software	Database
Virgin HDPE modified plastic	1 ton of modified plastic pellets	≥ 65	eFootprint	CLCD-China-ECER 0.8, Ecoinvent 3.5, GGCdatabase 1.1

Information source: The case of the Carbon footprint calculation project for the whole life cycle of polymer products of China National Polymer Materials Industry Innovation Center Co., Ltd. - detergent bottles in the daily chemical industry as an example.

Innovative Alternatives

In addition to our continuous efforts in the field of recycled plastics, we are actively exploring the use of bioplastics as alternatives to traditional single-use plastic products and as a complement to recycled plastics. Kingfa's research and industrialization of fully biodegradable plastics began in 2004. After nearly 20 years of exploration, we have developed into a leading global enterprise as well as the only Asian enterprise that has fully mastered the core technologies of polymerization, modification, and end-use applications of fully biodegradable plastics. Currently, we have an annual production capacity of 180,000 tons of PBAT and PBS resin and 30,000 tons of PLA.

“ What are Bioplastics?

Bioplastics are plastics that are produced using non-food-based biomaterials as raw materials. They are also bio-based plastics that can completely degrade into harmless substances within a short period of time under natural or composting conditions, thereby replenishing the ecosystem. Fully biodegradable plastics are currently regarded globally as a powerful tool for addressing plastic pollution, particularly in tackling the pollution caused by disposable plastic waste such as straws, food containers, and packaging bags.

”

Kingfa's ECOPOND® fully biodegradable plastics can be completely decomposed by microorganisms and enzymes into water, carbon dioxide, and organic matter within a few weeks under industrial composting conditions. No toxic or harmful residues remain after decomposition.

ECOPOND® products comply with numerous internationally recognized biodegradation standards



TÜV Austria OK compost - INDUSTRIAL



TÜV Austria OK compost - HOME



European standard EN 13432
Australian standard AS 4736



Germany's TÜV Rheinland DIN
CERTCO - DIN Industrial



North American
BPI standard

Kingfa has developed products for various applications, including film blowing, extrusion, injection molding, and film casting. These products encompass PBAT, PBS, PLA resins, and related modified materials. Among them, we have launched PBS resins that meet food contact requirements, thereby promoting the transformation of materials for products such as straws. We have become a global leader in terms of the most extensive product lines of bioplastics. Our products are widely used in applications such as disposable packaging, food utensils, agricultural mulch films, and 3D-printed consumables. The quality of Kingfa's fully biodegradable plastics has reached internationally advanced levels. We have been granted 44 domestic invention patents and 20 utility model patents, as well as 147 foreign invention patents and 12 utility model patents. Our PCT international patents cover Europe, the United States, Japan, South Korea, and Australia.

Kingfa's fully biodegradable materials



High-Temperature Nylon Derived from Castor Oil

Starting in 2006, Kingfa began R&D on high-temperature resistant polyamide (high-temperature nylon) materials. After years of technological breakthroughs, we successfully overcame issues related to formulation, processes, and equipment. As a result, we developed a bio-based PA10T with unique performance advantages and established a large-scale industrial production facility with an annual capacity of tens of thousands of tons. Compared to foreign high-temperature resistant polyamides, PA10T has the advantage of using decanediamine derived from castor oil as its raw material. This helps reduce petroleum consumption and makes PA10T an environmentally-friendly and low-carbon material. PA10T demonstrates superior overall performance and has been widely applied in various fields such as LEDs, electronics, automotive, renewable energy, telecommunications, household appliances, and rail transportation. Currently,



Castor oil

Kingfa is the only company in China that can mass produce PA10T, and in 2022, our product sales accounted for 90.8% of the market share in China's bio-based high-temperature nylon market.

Value Chain Collaboration

Achieving dual-carbon goals and building a circular economy for plastics is a systemic project that requires collaboration from all of society, rather than being achievable by individual companies alone. In 2022, Kingfa joined the New Plastics Economy Global Commitment initiated by the United Nations Environment Program and the Ellen MacArthur Foundation. We are the first Chinese company in the plastic industry to join the initiative. Kingfa will work together with industry partners to promote the development of a circular economy for plastics, accelerate the low-carbon transformation of the economy and society, and jointly safeguard our green planet.

Leading Standardization

The standardized operation and healthy development of the industry rely on the guidance of high-quality standards. Since its establishment, Kingfa has actively participated in the formulation of national, industry, and association standards in the fields of polymer materials, modified plastics, recycled plastics, bio-based materials, and more. We have been involved in formulating over 130 standards, contributing to the healthy development of the plastics industry.

As a core member of the National Technical Committee on Plastics of Standardization Administration of China (TC15) and the Secretariat of the Sub-Technical Committee on Modified Plastics (TC15/SC10), Kingfa has taken the lead in formulating national standards for recycled plastics. This includes GB/T 40006.1-2021 - Part 1: General Principles and GB/T 40006.8-2021 - Part 8: Polyamide (PA). These standards define the scope and performance criteria of recycled plastics from a material perspective.

Moreover, to promote the use of high-quality recycled plastics in downstream applications, Kingfa has taken the lead in collaborating with leading enterprises from various industries to develop specific standards for recycled plastics in their industries. For example, in collaboration with Lenovo, Kingfa has co-initiated the development of the association standard "Guidelines for the Evaluation of Recycled Plastics in Electrical and Electronic Products". Additionally, in collaboration with China Automotive Data Co., Ltd., Kingfa has co-initiated the development of a series of standards on "Specifications for the Use of Recycled Plastics in Automotive Applications". These standards are expected to be officially published in 2023-2024.

To facilitate the industry's measurement of the contribution of the plastic circular economy to carbon emission reduction, we have collaborated with the China National Resources Recycling Association to develop a calculation methodology. Under the guidance of the National Development and Reform Commission, we have formulated and released the first domestic standard for calculating the carbon emissions of recycled plastics, titled "Recycled Plastics - Calculation of Carbon Emission from Physical Recovery". This standard was officially implemented on December 28, 2022, complementing existing standards.

Setting a Green Benchmark in the Packaging Industry

While plastic packaging makes our lives more convenient, it also increases plastic pollution. Increasing the use of post-consumer recycled (PCR) plastic has become the primary measure for major brands worldwide to address the issue of plastic packaging pollution. Kingfa employs internationally leading plastic recycling technology to safely recycle and process waste packaging, providing environmentally-friendly high-performance recycled materials to packaging factories for the production of new packaging. These materials then circulate back to consumers through the market, enabling a closed-loop model for plastic packaging.



Event for the Establishment of the Sustainable Plastic Packaging Joint Innovation Center

As a strategic partner in Unilever's sustainable development strategy, Kingfa has developed an environmentally-friendly high-performance recycled plastic HDPE (High-Density Polyethylene) for it. Our process for recycling HDPE is simple, and yields products with low odor and minimal black spots while maintaining comparable physical properties to products made with virgin materials.

In 2021, Kingfa's project of "Green Circularity and High-Quality Use of Disposable Takeout Food Containers" was selected as a demonstration project by Meituan Green Tech, an environmental technology innovation fund initiated by Meituan, a leading food delivery platform in China. The project focuses on the recycling and use of discarded plastic food containers and aims to integrate and optimize the entire industry chain. It has become the first demonstration line in China with the capacity to recycle and regenerate plastic food containers by the tens of thousands of tons.

In 2022, Kingfa, together with the Guangzhou Customs Technology Center, Jinan University, and Southern Packaging Co., Ltd., established the Sustainable Plastic Packaging Joint Innovation Center. The center aims to unite the industry, academia, and research forces to "promote sustainable innovation and development in the plastic packaging industry." It is dedicated to researching and industrializing innovative technologies for sustainable plastic packaging, promoting industry standardization, addressing technological bottlenecks in the industry, and jointly creating a new era of sustainable development in the plastic packaging industry.

Empowering the Automotive Industry for a Low-Carbon Future

In the face of the growing global trend towards green, low-carbon, and circular development in the automotive industry, the use of recycled plastics has become an increasingly popular choice among major car manufacturers worldwide.



Forum of Application Technology of Recycled Plastic Used in Vehicles for Dual Carbon Goals

Kingfa has successfully mastered key technologies to produce plastics with low VOC (volatile organic compounds), low odor, excellent appearance, and aging resistance, which makes them ideal for replacing steel. Our typical recycled materials for automotive use have been recognized by numerous global automotive OEMs and are widely used for manufacturing key automotive components. In this way, we are leading the trend of low-carbon and circular materials in the automotive industry.

On June 10, 2022, Kingfa, in collaboration with the China Automotive Data Co., Ltd. Under the China Automotive Technology and Research Center (CATARC), successfully held the Forum of Application Technology of Recycled Plastic Used in Vehicles for Dual Carbon Goals. This forum marked the beginning of a new chapter in collaboration between upstream and downstream sectors of the automotive industry in the field of recycled materials.

Creating Diversified Applications in the IT and Electronics Industry

The 14th Five-Year Plan for the Development of A Circular Economy has clearly outlined key actions such as the recycling and use of waste electrical and electronic products and the recycling of used batteries. The IT and electronics industry is on the verge of transition towards sustainability.

Kingfa and Lenovo have joined hands to expand the plastic circular economy into the production of electronic consumer goods. We are collaborating to research and develop environmentally-friendly advanced materials, thereby introducing recycled plastics into the production lines of high-end manufacturing industries. As early as 2007, Kingfa PCR materials were already used in Lenovo's relevant electronic products. Subsequently, through technological innovation, we continuously developed PCR materials with high incorporation ratios, applying them to a wider range of products. In the future, Kingfa will continue to collaborate with Lenovo to enter the field of marine plastic waste collection and recycling. Following the principles of ecological design and full product lifecycle assessment, we will jointly develop new products that meet carbon neutrality standards. We aim to lead the application of solutions for plastic recycling and reuse in the global electronics industry.

Accelerating the High-Quality Development of the Home Appliances and Household Industry

The Implementation Plan of the Extended Producer Responsibility Scheme of China specifies that by 2025, the proportion of recycled materials used in key products should reach 20%, and the average standardized recycling and utilization rate of waste products should reach 50%. The trend towards environmentally-friendly and lightweight household appliances continues to drive the research and application of recycled materials.

The environmentally-friendly high-performance recycled materials developed by Kingfa have been widely applied by domestic and international household appliance brands in products such as televisions, refrigerators, air conditioners, humidifiers, lamps, hair dryers, and more. As the strategic partner on sustainability for the world-leading household products brand owner, Kingfa has constructed the Meijin Factory, a factory that is tailor-made to this client for recycled materials. This factory supports this brandowner's commitment to using renewable or recyclable materials in all its products by 2030.



01

Leading Innovation, Creating a Global Brand

With a mission to achieve a gross output of RMB 100 billion, Kingfa always takes innovation as the core driving force for its business. We vigorously develop new products, enhance product competitiveness, solidify product quality, and improve customer management in order to become a global leader in the chemical and advanced materials industry.

Key Achievements of 2022

R&D investment in the past three years:

RMB **4,347,878,400**

Cumulative patent applications: **5,401**

Patents granted in 2022: **514**

Contributing to the UN SDGs



Independent R&D and Inclusive Innovation

The vision of becoming widely respected as the world's premier advanced materials company motivates every member of Kingfa to passionately lead the high-quality development of the advanced materials industry through innovation-driven approaches. Kingfa actively seizes the opportunities brought by technological revolution and industrial transformation. Through innovative and independent R&D, we have tackled many challenges related to materials in the emerging industry, driving the industry toward sustainability and technological advancement.

R&D Capability

Kingfa conducts R&D by focusing on independent innovation, technological leadership, and excellent products. We rely on four national-level technological R&D platforms, including the National Enterprise Technology Center, National Engineering Laboratory, National Key Laboratory, and National Industrial Innovation Center, as well as 22 provincial-level R&D centers. We continue to accumulate technical expertise and conduct product research in the fields of modified plastics, environmentally-friendly high-performance recycled plastics, fully biodegradable plastics, special engineering plastics, carbon fiber and composite materials, light hydrocarbons and hydrogen energy, styrene resins, and medical and healthcare polymer materials. In addition, Kingfa sees the trend of low-carbon transformation in the chemical industry. We have proactively positioned ourselves by incorporating the development of clean and low-carbon technologies into our core R&D strategy.



Modified Plastic Sector

Materials research for smart home appliances, new energy vehicles, photovoltaic (PV), energy storage, etc.



Advanced Materials Sector

Focusing on high-efficiency and low-carbon industries, expand the types of bio-based and biodegradable materials



Green Petrochemicals Sector

Focusing on high-efficiency light hydrocarbon materials, explore low-carbon and low-cost segmentation

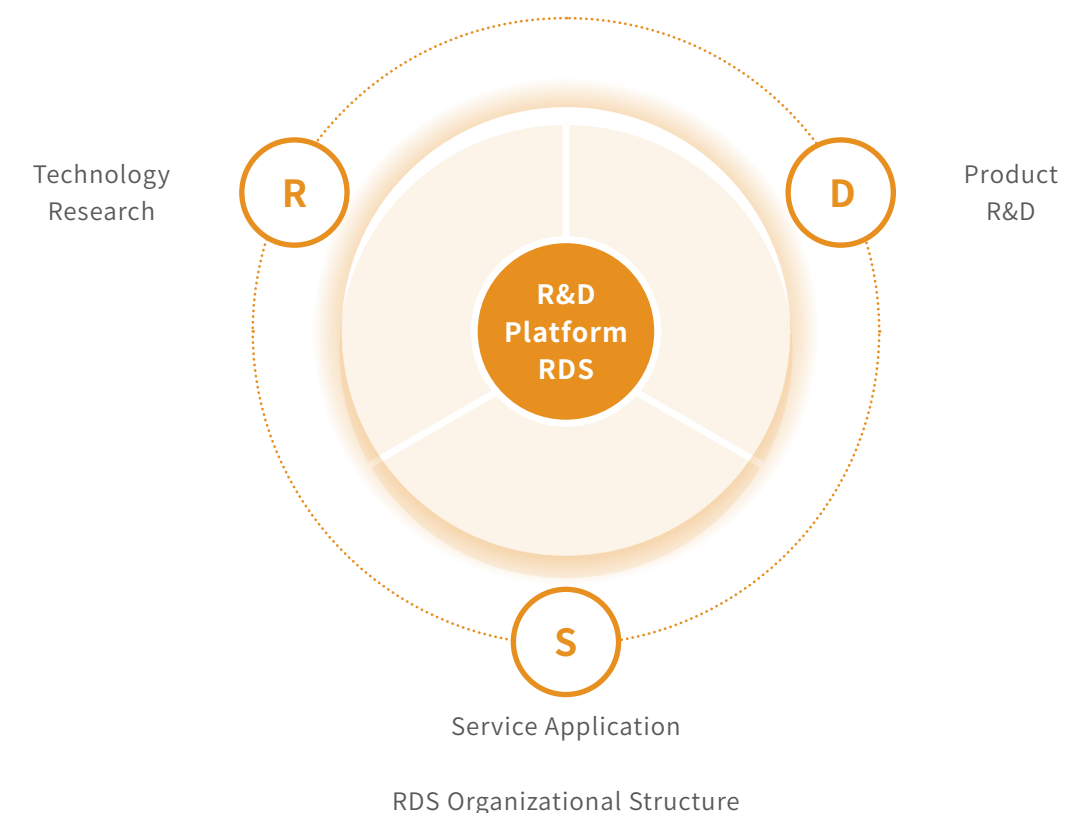
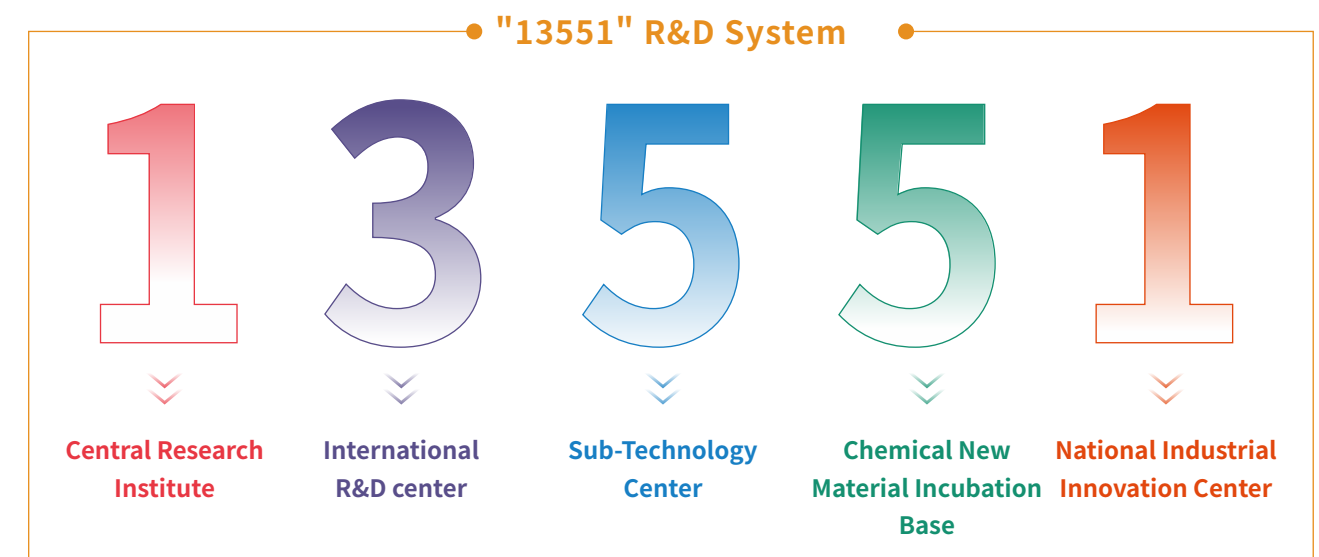


Medical and Healthcare Sector

Focusing on the development and production of medical and healthcare protection products, products covering professional medical, industrial, civil life three major fields

R&D Platform

Kingfa has established a focused "13551" R&D system and built an RDS (research, development and service) organizational structure, gradually forming an R&D platform driven by technology, industry, and product research. To address common technical challenges across different modules, Kingfa has established a technology research institute. With projects being the main focus, the institute systematically addresses common key technical issues across various products, aiming to enhance research efficiency.



Kingfa National Certified R&D Institutions

R&D Institution	Certification Time	Certification Authority
National Advanced Polymer Materials Industry Innovation Center	2016	National Development and Reform Commission
National Key Laboratory for Efficient Development and High Utilization of Waste Plastics Resources	2015	Ministry of Science and Technology
National Engineering Laboratory for Plastic Modification and Processing	2008	National Development and Reform Commission
CNAS Accredited Laboratory	2006	China National Accreditation Service for Conformity Assessment (CNAS)
National Enterprise Technology Center	2004	National Development and Reform Commission
Postdoctoral Research Workstation	2003	National Postdoctoral Management Committee

R&D Capacity

To strengthen our industry research capabilities, we have established an industry research department. With a focus on common key technologies in the industry, we closely follow industry developments and cutting-edge technological applications to provide industry customers with professional and comprehensive solutions. In addition, we have established a product R&D department which operates based on product categories and material applications. We conduct customized product R&D to provide our customers with competitive products based on their requirements. By the end of 2022, Kingfa had assembled a talented team consisting of 1 foreign academician, 5 experts who receive special government allowances from the State Council, 15 leading academicians, 157 senior experts from overseas, 138 senior and associate engineers, and more than one hundred doctors.

Key Achievements of 2022

Employees in our R&D team: 1,183

Including employees with Ph.D. degree: 105

And employees with master's degree: 302

Collaborative Innovation

We have built an innovative ecosystem of collaboration by cooperating with prestigious universities and research institutions such as Zhejiang University, Sichuan University, and the Institute of Chemistry under Chinese Academy of Sciences to carry out national key R&D programs, contributing to the development and innovation of the industry.

Recent Collaborations in Research and Innovation
(Selected National Key R&D Programs)

Year	Project Name	Collaborating Unita	Focus
2019	Technology and Demonstration of Green Circularity and High-Quality Utilization of Waste Mixed Plastic Packaging Based on a Structure-Function Relationship	South China University of Technology, Fujian Normal University, Sichuan University	Solid Waste Resource Utilization
2019	Research on Quality Systems of Generic Technologies for High-Quality Circulation of Waste Plastics from Daily Sources	National Institute of Metrology of China	Generic Technology Research and Application for National Quality Infrastructure of China
2019	Intelligent Decision-Making and Control Technology for Polymer Product Mixed Manufacturing Production Lines	South China University of Technology, Huazhong University of Science and Technology	Collaborative Manufacturing and Intelligent Factory via Networks
2021	Demonstration and Application of Cycloolefin Copolymer Materials and Their Key Monomer Norbornylene for Pharmaceutical Packaging	Zhejiang University	Advanced Functional and Intelligent Materials
2021	Demonstration and Application of Ultra-High Melt Flow Polypropylene (PP) Resins for Medical Protective Use	Sichuan University	Advanced Functional and Intelligent Materials
2022	Technology and Engineering Demonstration of Recycled Film Stretching Reconstructed Packaging Materials	South China University of Technology	Key Technologies and Equipment for a Circular Economy
2022	Technology and Engineering Demonstration of Non-Sorting Regenerated Geomembranes from Waste Food Packaging Films	Huazhong University of Science and Technology	Key Technologies and Equipment for a Circular Economy

R&D Accomplishments

Kingfa adopts an aggressive R&D strategy, always guided by market demand. We focus on breakthroughs in generic key technologies based on industry needs and applications. Since its establishment, we have achieved fruitful results in technological innovation through our leading R&D capabilities, earning wide recognition and praise from the market and users.

Key Achievements of 2022

Cumulative patent applications: 5,401

design patents: 34

Including invention patents: 3,951

and PCT patents: 459

utility model patents: 688

Awards Received in Recent Years (Partial List)

Year	Award	Project Name	Awarding Organization	Award ecipient
2021	China Patent Excellence Award	Biodegradable Polyester Composite	China National Intellectual Property Administration	Kingfa, Zhuhai Kingfa
	Second Prize for Scientific and Technological Progress	R&D and Application of High-performance Polyolefin Materials for Emergency Epidemic Prevention	China National Light Industry Council	Kingfa
	Silver Award of Guangdong Patent Award	Biodegradable Polyester Composite	Guangdong Administration for Market Regulation	Kingfa, Zhuhai Kingfa
2022	First Prize for Scientific and Technological Progress	Research and Industrial Application of Intelligent Plastic Manufacturing Technology	China National Light Industry Council	Kingfa

Striving for Excellence, Quality and Branding

Kingfa highly values product quality and actively responds to the national strategy of high-quality development. We consistently prioritize customer satisfaction and strive to become a globally respected leader in the advanced materials industry. Our philosophy regarding quality revolves around establishing ourselves through standards, gaining strength from quality, and prioritizing customers. We implement standardized PDCA (plan, do, check and act) closed-loop management, constantly pursuing excellence, continuous improvement, and the spirit of craftsmanship. Our commitment is to provide high-quality advanced material solutions to society and fulfill people's aspirations for a better life.

Since our establishment, Kingfa has relied on technological innovation, setting standards, and winning through excellent service. We continuously optimize our brand management system, actively expand our global presence, and establish the concept of "Kingfa Quality" to earn the trust of customers and gain market recognition.

Quality Control

We actively implement an excellent performance model and a quality strategy based on achieving high quality in five areas, which are customers, products, supply chain, operations, and employees. This has formed into a model with Kingfa's characteristics of value creation and flexible quality management. By prioritizing safety, upholding integrity, strengthening management, and striving for excellence, we achieve our high-quality development.

We focus on building the foundation of quality capabilities and actively promote standardization in the company. This has resulted in the effective integration of various management systems based on our standards system, including quality, environment, occupational health and safety, hazardous substances, energy, laboratories, metrology, social responsibility, intellectual property, and confidentiality. Our integrated system is known as KMS (Kingfa management system), which embodies our standardization management. Technical standards, with product standards at the forefront, serve as the core, while basic standards serve as a platform. The organically complete system includes processes (management standards) as the links, roles (work standards) as the nodes, and quality (technical standards) as the criteria.

We strictly control product quality and have established a comprehensive quality management organizational structure. We continuously improve internal regulations and have developed internal systems and standards for quality management, such as our **Quality Manual**, **Incoming Inspection Process**, **Product Process Quality Control Management Specifications**, **Finished Product Sampling and Testing Management Regulations**, and **Product Delivery Quality Control Specifications**. These internal systems and standards ensure quality management and supervision throughout the entire product process, enabling us to provide customers with high-quality products in compliance with quality standard. To strengthen employee quality management behavior, we have developed the **Quality Incentive Management Standards** and **Quality Improvement Fund Management Regulations**. These initiatives aim to enhance employees' awareness of quality management by providing incentives and rewards. By implementing these measures, we ensure that quality management is integrated into every aspect of our work.

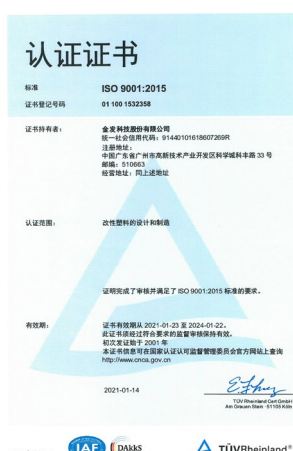
Our quality management system extends across our entire business, ensuring the quality of the products and services we provide. Kingfa's quality management system has the certifications of ISO 9001:2015, IATF 16949, and GB/T 19002. Our analysis and testing center has also received the Laboratory Accreditation Certificate from the China National Accreditation Service for Conformity Assessment (CNAS). Kingfa has been widely recognized both within and beyond the industry for its excellent quality management work. We have received numerous awards, including the Chinese AAA Quality Integrity Enterprise, National Advanced Enterprise in Implementing Excellent Performance, as well as quality awards from the provincial government of Guangdong, from the governor of Jiangsu, and from the mayors of Guangzhou and Suzhou.



China National Accreditation Service
for Conformity Assessment (CNAS)



Measurement Management System
Certification (AAA) Certificate



ISO 9001:2015
Certificate



IATF 16949:
2016 Certificate

Key Achievements of 2022

Product qualification rate: **99.41%**

Complaint resolution rate: **98.4%**

Product Recalls

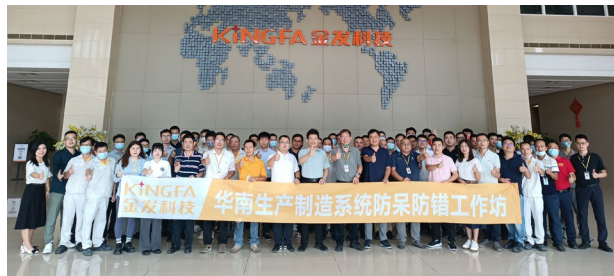
Our **Product Delivery Quality Control Specifications** clearly defines the process and responsible departments for product recalls, standardizing the management of recalling defective products and safeguarding customers' rights to the best quality. Since our establishment, we have not experienced any product recalls.



Product recall process

Quality Culture

As a global leading chemical and advanced materials company, we always prioritize a quality culture and continuously promote the quality awareness of our employees. Through internal, external, and specialized training, we continuously strengthen the foundation of quality management and firmly establish the awareness of placing employee quality as a top priority. In 2022, we conducted a variety of training courses, including internal auditor training, Six Sigma Green Belt training, training on quality tools, and mistake-proofing workshops.



2022 workshop on mistake proofing for production and manufacturing systems



2022 Six Sigma Green Belt training

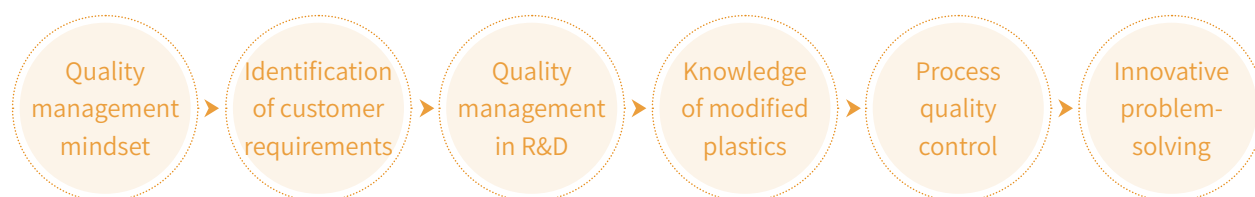
Key Achievements of 2022

Quality training conducted: **61** sessions, Employees involved: over **10,000** person-time



Golden Shield Program Training Project

In order to promote the development of core quality talent and enhance the organizational capability in quality management at Kingfa, we have launched the Golden Shield Program. The aim of this program is to enhance the professional capabilities of core personnel in quality management. By mastering and applying advanced quality management and improvement tools, we seek to explore innovative methods to enhance our capabilities of quality management and improve the stability of product quality for key customers. The first phase of the Golden Shield Program was officially launched in 2022, with the participation of 54 engineers. As part of the program, core personnel in quality management positions in the modified materials related departments underwent professional training, including coursework, practice exercises, and practical implementation, and produced comprehensive upgrade schemes upon the completion of classes, so as to assist Kingfa in forming a unified development path of product quality work in a systematic way.



Training framework for the first phase of the Golden Shield Program

Leading the Market and Serving Customers

Kingfa is committed to providing customers with high-quality products and services, and has developed a business model centered around our core competitiveness of providing customers with comprehensive material solutions. Through our global collaborative marketing network, we continuously optimize our customer service system to address customer needs and ensure customer satisfaction with high standards of quality service and responsible marketing content.

Marketing Network

Building a global collaborative marketing network centered around customer needs, Kingfa has developed an integrated customer service system that encompasses regions, customers, and industries



Region



Establishing a global collaborative service network in China, India, the United States, Europe, and Malaysia

Responding to customer needs quickly



Client



Establishing key account managers

Implementing meticulous management, conducting in-depth research on customer demands, and providing comprehensive solutions



Industry



Establishing industry managers

Researching industry trends and requirements through collaboration between the Marketing Industry Manager and technical industry experts, providing comprehensive solutions for the industry



Around our integrated customer service system, we have planned and established a global marketing network that spans vertically, horizontally, and across multiple intersections.



The vertical axis refers to the strategic development of the industry

It involves studying changes in demand of customer product applications within the industry. Through proactive engagement and collaboration with customers, we aim to provide new products and materials that meet future needs. We offer customized industry-wide solutions for advanced materials, enabling our customers to achieve a cost-effective balance and quickly gain market share during the early stages of new product launches. By catering to both customer and industry needs, we facilitate seamless connections with the end-users of enterprise customers.



The horizontal axis represents our regional business expansion strategy

Through this approach, we directly engage with upstream plastic product manufacturers, who are our B-end customers, at the regional operational level. We provide them with relevant products of modified plastics and polymer materials that are urgently needed for their production and delivery requirements. The service radius of our regional business marketing network is set to 300 kilometers or less, ensuring fast and efficient order fulfillment. With the marketing concept of considering orders as commands and contracts as paramount, we maintain strong customer loyalty.



The multiple intersections refer to high-value major customers

Through vertical and horizontal business operations, we identify high-value major customers that span across industries and regions. We select core marketing members to allocate a service team for fast delivery. Based on the production processes and specific characteristics of our major customers, we tailor high-quality products and establish large-scale customized delivery models. This allows us to provide personalized services that cater to the specific needs and requirements of each customer.

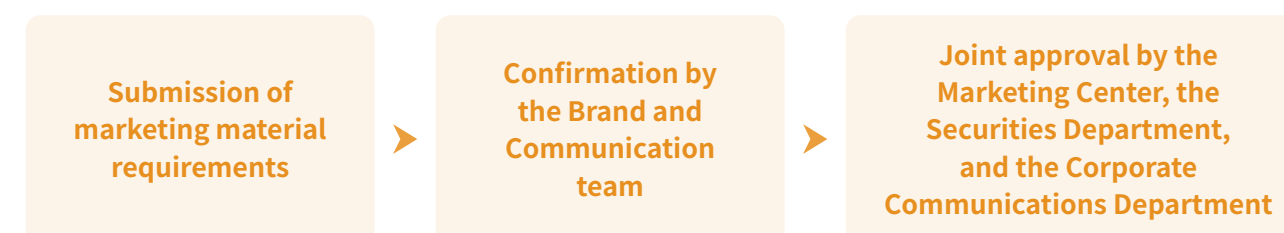
Customer Satisfaction

We are committed to providing our customers with services of the highest quality. We continuously optimize our communication channels to efficiently address customer inquiries and meet their needs. We strive to enhance service quality and improve customer satisfaction. We have developed a series of management measures, such as the **Customer Complaint Management Guidelines** and the **After-Sales Service Policies** to standardize the handling of customer complaints and the process of after-sales service. These measures enable us to promptly and comprehensively understand customer demands and feedback.

Every year, we conduct online satisfaction surveys with our key customers. The surveys cover various aspects, including satisfaction with the technical specifications of products, product quality stability, color stability, appearance and packaging, cost-effectiveness of products, timeliness of after-sales service, timely delivery, product development cooperation, and service attitude.

Responsible Marketing

We pay attention to the current and future changes in customer demands, and have developed a distinctive marketing model at Kingfa that revolves around the comprehensive understanding of customer needs. We strictly adhere to the requirements of relevant laws and regulations, such as the Advertising Law of the People's Republic of China, and closely monitor information disclosure in our promotional and marketing materials across various channels. All marketing and promotional materials must be approved jointly by the Marketing Center, Securities Department, and the Corporate Communications Department before they can be officially released to the public. In addition, we have established management requirements for product labeling and implemented strict labeling processes to regulate the use of product labels. As of the end of the Reporting Period, Kingfa has not received any litigation or regulatory penalties related to product labeling.



Review process of marketing materials

We continuously optimize the work standards of our marketing team. We have conducted various marketing training programs such as the Swordsmith Program, Sharpening Phase IV, Overseas Sharpening Phase I, and Campaign Leader Program for different types of marketing personnel. These training courses have effectively enhanced the service awareness and professional skills of our marketing personnel.



Swordsmith Program

Started in August 2020, targeting marketing newcomers with 1-3 years of experience



Sharpening Phase IV

Started on June 27, 2022, targeting marketing professionals with 4-8 years of experience



Overseas Sharpening Phase I

Started on October 22, 2022, focusing on the development of overseas business talents



Campaign Leader Program

Started in October 2022, aimed at cultivating campaign leaders for global marketing coordination, specifically targeting key marketing account managers

02

Safety Coming First as the Solid Foundation for Development

Kingfa always prioritizes safety and proactively integrates safety principles into all aspects of production and management. We firmly adhere to safety in our development, continuously improve our safety management system, and enhance our safety management capabilities. We prioritize and regulate employee safety behavior, with a focus on protecting their occupational health and enhancing their safety awareness. We strive to create a safe and healthy work environment, promoting the well-being of all our employees.

Key Achievements of 2022

Investment in safe production: RMB **78,279,200**



Contributing to the UN SDGs



Chemical Safety at the Forefront

Kingfa implements full lifecycle management for product safety. We strictly regulate the use and management of chemicals, conducting comprehensive identification and assessment of all chemical substances used. We have established measures to ensure that our products do not have any adverse impact on human health or the environment during their use. We assign specific responsibilities and establish clear procedures and operational standards to ensure that personnel use special equipment as required.

Chemical Safety Management

We strictly comply with laws and regulations such as the [Regulations on the Safety Management of Hazardous Chemicals](#). We have established the Hazardous Chemical Control Procedures which provides clear instructions and requirements for the procurement, storage, use, and disposal of hazardous chemicals. We follow the classification and labeling of commonly used hazardous chemicals according to the standard GB 13690-2009 Classification and Labeling of Hazardous Chemicals, as well as the List of Hazardous Chemicals. We identify, classify, and label hazardous chemicals in strict accordance with these regulations, and we keep records of all major hazard sources associated with hazardous chemicals. In addition, we conduct regular evaluations of chemical safety and have developed detailed contingency plans for the on-site handling of chemical spills and accidents. These measures are implemented to minimize the potential hazards and risks associated with such incidents.

In the procurement process, we purchase highly toxic chemicals, drug precursors, and explosive-prone hazardous chemicals from qualified suppliers. We require these suppliers to provide the corresponding safety technical specifications, and we also report these purchases to the public security authorities through online channels for record-keeping purposes.

Hazardous chemicals must be stored in specialized warehouses that have been approved by relevant government departments. The hazardous chemical warehouses are managed by professionals with technical expertise and equipped with reliable personal protective equipment.

Hazardous chemicals should be obtained by personnel designated by the relevant department and who have undergone training and assessment. Once obtained, the hazardous chemicals should be kept under the custody of a dedicated individual within the department. Personal protective equipment (PPE) should be worn when handling hazardous chemicals, and the acquisition and use of PPE should strictly adhere to the specified requirements.

In the waste disposal phase, chemical hazardous waste or other waste generated during the production process should be treated in accordance with standards such as [Management Procedures on Pollution from Exhaust Gas, Wastewater, Waste and Noise](#), and collected, categorized, and temporarily stored according to national regulations and our waste management procedures. Qualified third-party providers should be contracted for the transfer and disposal of waste. We conduct full-process risk identification and closed-loop risk management for the compliant disposal of waste.

Compliance Management for Special Equipment

We have established clear safety usage specifications for production equipment, requiring departments that operate equipment and relevant technical personnel to develop safety procedures based on process requirements. Employees must undergo training before they are allowed to operate equipment. For some special equipment, operators must obtain a nationally recognized certificate. We also keep comprehensive management records to ensure a high level of compliance in matching special equipment with specialized operations.

Hazard Investigation and Emergency Drills

Safety Inspection

- Establishment of the Three-Tier Safety Inspection System for the company, departments (workshops), and teams
- Conducting inspections daily, weekly, monthly, as well as special and irregular inspections

Emergency Management

- Each subsidiary formulates and implements emergency response procedures and contingency plans for safety incidents; these documents are updated every three years and are filed with the relevant government authorities
- Each subsidiary conducts regular emergency drills

Hazard Management

- Safety hazards should be reported in the Safety Production Management Information System and submitted for handling by relevant departments
- Response to safety hazards, including corrective measures, responsible parties, and completion time, should be provided within two working days, and immediate action should be taken to rectify the issues
- The safety production leadership team conducts regular reviews of the rectification progress



Key Achievements of 2022

Safety hazards rectified: over **300**

On-time completion rate for rectification processes: **100%**



Zhuhai Wantong

In June 2022, conducted a comprehensive emergency drill to simulate cylinder leakage

Zhuhai Kingfa

Conducted a specialized emergency drills for chemical leakage incidents, steam leakage incidents, confined space operation accidents, comprehensive emergency drills for hazardous material incidents, and specialized emergency drills for special equipment accidents

Ningbo Kingfa

Conducted a comprehensive emergency drill for ammonia leakage in the tank area

Developed an Emergency Response Facilities Inventory Form that includes firefighting emergency equipment such as air respirators, fire blankets, fire axes, and others equipment

Liaoning Kingfa

Developed emergency response plans and conducted corresponding drills for incidents involving major hazards and on-site risks associated with hazardous chemicals such as hydrogen cyanide and acrylonitrile, and additionally conducted an emergency response drill for butadiene sphere tank leakage and personnel poisoning drill



Partial list of emergency drill activities conducted by chemical subsidiaries



Fire Safety Month activities in 2022: emphasizing fire safety for high-quality development

Safety Management and Responsibility Allocation

Kingfa strictly adheres to relevant national laws and regulations, with safety always as the main priority to achieve safe production and protect our employees. With "0 accident" as the highest goal and the management system of Kingfa as the management standard, we have established a perfect safety production management system through the combination of target and process management, and passed ISO 45001: Occupational health and safety management system certification. We have established a comprehensive safety production management system and obtained ISO 45001 certification for occupational health and safety management. We have identified and formulated a series of internal regulatory requirements, such as [the Procedure for Identification, Assessment, and Control of Environmental, Occupational Health, and Safety Factors](#), the [Regulations on Occupational Health, Safety, and Environmental Protection Management](#), and the [Regulations on Special Equipment and Special Operations Personnel Management](#). These documents are formulated in accordance with national regulations, industry standards, and local policies. We also implement standards for safety production and management, and have obtained certifications such as the second-level safety production standardization certification. To fulfill the responsibilities mandated by the Safety Production Law, we proactively carry out inherent safety work to enhance the safety competency of all employees. We promote a proactive safety culture to ensure the smooth progress of production and business activities.

Safety Management Framework

We have established a streamlined and efficient safety management framework, which includes the formation of a Safety Production Leadership Group. The group is led by the General Manager and consists of department heads from relevant production departments. This framework ensures a clear chain of command and accountability, with responsibilities and duties delegated at each level of the organization. We have established a mechanism for conducting regular meetings on safety production management. The Safety Production Leadership Group holds working meetings to periodically review and summarize safety management efforts. During these meetings, the group discusses and addresses safety issues that arise in the course of production and operations, ensuring timely improvement and response. Under the centralized management model of safety production at Kingfa, each subsidiary company establishes a local Safety Production Leadership Group to promote the implementation of group decision-making guidelines and management requirements, as well as undertake safety production management. Each site establishes a three-tier streamlined safety network that spans from the company to departments and teams to ensure effective communication and coordination of safety-related matters.

Key Achievements of 2022

Special safety production inspections: **13**

Hazard source inspections: **9**

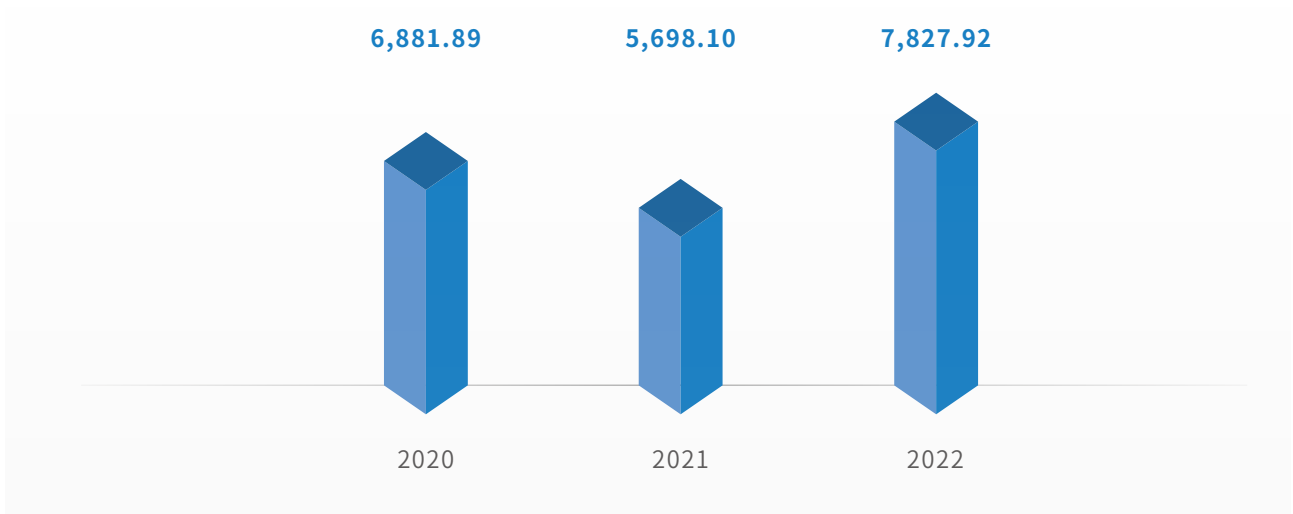
Special emergency drills: **3**

Safety meetings at the group level: **5**



To strengthen the implementation of safety responsibilities and risk management, Kingfa has established a Risk Control Center. The center developed and strictly adheres to the occupational health, safety, and environmental (HSE) performance evaluation system and conducts regular internal audits of safety risks. It also organizes safety production work exchanges among various sites to enhance communication and collaboration. To identify risks in various stages of production and operation and prevent accidents and safety issues, we extend the internal audit work of the environmental and safety management system to all production sites and departments. This promotes risk resolution and improvement efforts at each production site. By implementing standardized assessment criteria and audit requirements, Kingfa and our subsidiaries effectively manage risks, leading to an overall improvement in the level of safety management across the group. In addition, we provide safety training for outsourced construction crews and conduct visitor safety training for all incoming personnel.

Safety Production Expenses (In ten thousand)



Safety Training

To promote a culture of proactive safety, Kingfa has established a comprehensive safety management training system, from ideology to implementation. Safety training is an essential component of safety production management and serves as a significant indicator for safety assessments. Every year, we develop a safety work plan and implement a safety training program that requires the participation of all employees. In addition, we enhance employees' safety awareness and foster a proactive safety culture through various activities such as online and offline knowledge competitions and skill-based contests. These initiatives create a dynamic safety environment for employees and strengthen their safety consciousness.

Practical safety training and emergency drills are mandatory courses for our production employees. Based on risk identification and assessment, we have developed emergency response plans for accidents and unforeseen events. Every year, we conduct training and drills on fire safety, occupational health, and emergency response to hazardous chemical incidents. This ongoing training helps to cultivate and strengthen our employees' emergency response capabilities.

	2020	2021	2022
Safety training coverage (the number of participant)	5,277	6,408	7,857
Safety training (hours)	118	152	181
Average training duration (hours/person)	3	4.5	5



Fire monitoring training



Fire emergency drills

Safety Education					
Three levels of safety education for new employees	Safety education for job transfers and resumption of work	Specialized safety training	Safety training for specialized operations	Supplementary safety education	Safety training prior to promotion

Safeguarding Occupational Health

We strictly comply with relevant laws and regulations such as the Occupational Disease Prevention and Control Law of the People's Republic of China and have established regulations and procedures, such as the [Regulations on Occupational Health, Safety, and Environmental Protection Management](#), the [Program for Identification, Evaluation, and Control of Environmental Occupational Health and Safety Factors](#), and the [Regulations on Labor Protection for Female Workers](#). These documents are designed to regulate employee behavior, strengthen supervision and inspection, and effectively ensure the occupational health and safety of our employees.

When signing employment contracts with employees in positions involving exposure to occupational hazards, we provide truthful information about potential occupational hazards and their consequences, as well as occupational disease prevention measures. This information is clearly stated in the employment contracts. We have developed an annual occupational health examination plan in accordance with GBZ 188-2014 Technical Specification for Occupational Health Surveillance. We select provincial hospitals qualified for occupational health examinations to provide employees with regular medical check-ups. These examinations aim to detect and prevent the occurrence of occupational diseases, as well as strengthen the management of employees' occupational health. We require each subsidiary to provide free personal protective equipment that complies with national standards to employees working in positions with occupational hazards. We also provide training and supervision to ensure that employees wear the equipment correctly. In workplaces and job positions with occupational disease hazards, as well as in areas with equipment or for materials packaging and storage, we ensure the placement of warning signs and occupational health bulletin boards in prominent locations to draw employees' attention. For personnel engaged in toxic and hazardous operations, we require them to undergo occupational health examinations before starting their work, during their work period, and upon leaving their work. In the event of an emergency situation in the workplace, immediate emergency health examinations are conducted. For employees exposed to occupational risks, relevant measures are taken in accordance with requirements, and regular follow-up examinations are conducted. Since our establishment, Kingfa has maintained a record of zero confirmed occupational diseases.

In addition, we continuously upgrade production processes and manufacturing equipment to provide a more ergonomic work environment for employees. We have developed and implemented various systems such as automated raw material measurement, automated packaging production lines, automated stacking systems, vacuum feeding systems, and automated blending systems. We also promote engineering improvement projects such as granulation of raw materials, noise reduction in equipment, and negative pressure in workshops to enhance the working environment for our employees and reduce their workload.

Key Achievements of 2022

Severe injury rate per million working hours: **0.28**



Occupational Health and Safety Testing

Every year, we hire qualified third-party organizations to conduct regular testing on premises that may affect environmental occupational health and safety. The testing includes assessing physical and chemical hazards such as noise, high temperature, dust, toxic substances, and others.



Identification of Environmental Occupational Hazards and Risk Assessment

In accordance with the operational guidance requirements, we organize departments annually to conduct identification and risk assessment of occupational health and safety hazards in the production environment. A comprehensive assessment of environmental occupational health and safety hazards is conducted at least once a year.



03

Protecting the Environment for a Greener Future Together

We believe green mountains and clear waters are as valuable as mountains of gold and rivers of silver. We are committed to pursuing a path of green development and minimizing the environmental impact of our operations on the planet. We are guided by a comprehensive low-carbon transformation, strengthening environmental compliance management, actively promoting diversified new energy ecosystems, deepening efforts in energy conservation and emission reduction, advocating environmentally-friendly production and office practices, and fostering the construction of an ecological civilization.

Key Achievements of 2022

National green factories: **4** in total

Total annual investment in environmental protection: RMB **56,402,300**

Energy savings in the modified plastic sector: **1,197.77** tons of standard coal

Roof photovoltaic power generation: **11.37** million kilowatt-hours



Contributing to the UN SDGs



Setting Clear Goals and Improving Management

A sound environmental management system is the foundation for ecological protection. To ensure the achievement of environmental objectives and the implementation of various systems, we continuously improve our environmental management system. We uphold environmental compliance, enhance awareness of environmental risk prevention, and effectively enhance our environmental management capabilities.

Improving Environmental Management

Kingfa strictly adheres to laws and regulations such as the Environmental Protection Law of the People's Republic of China and the Regulations on Environmental Protection Management of Construction Projects, continuously improving our environmental management system. By the end of the Reporting Period, Kingfa and our subsidiaries, including Tianjin Kingfa, Chengdu Kingfa, and Guangdong Kingfa have obtained ISO 14001:2015 certification for environmental management systems.

We have established an environmental accountability system with the General Manager as the highest decision-maker, ensuring the cascading implementation of environmental responsibilities and the prevention and reduction of unforeseen environmental incidents. We included indicators such as administrative penalties related to environmental issues, the number of environmental monitoring failures, and other relevant metrics for each department in our performance assessment. We have established a system of rewards and penalties to effectively safeguard our level of environmental management. At the same time, we require all subsidiaries to document the process and outcomes of their environmental management efforts and create environmental protection archives for future reference.

Kingfa has established and improved the construction of environmental protection compliance management system, and strictly implemented the "three simultaneous" system for environmental protection of construction projects to achieve simultaneous design, construction and operation of environmental protection supporting equipment and the main project.. During the process of project design, application, environmental assessment, acceptance, and obtaining discharge permits, we exercise strict control and ensure timely completion of environmental impact assessments and the preparation of public archives for construction projects.

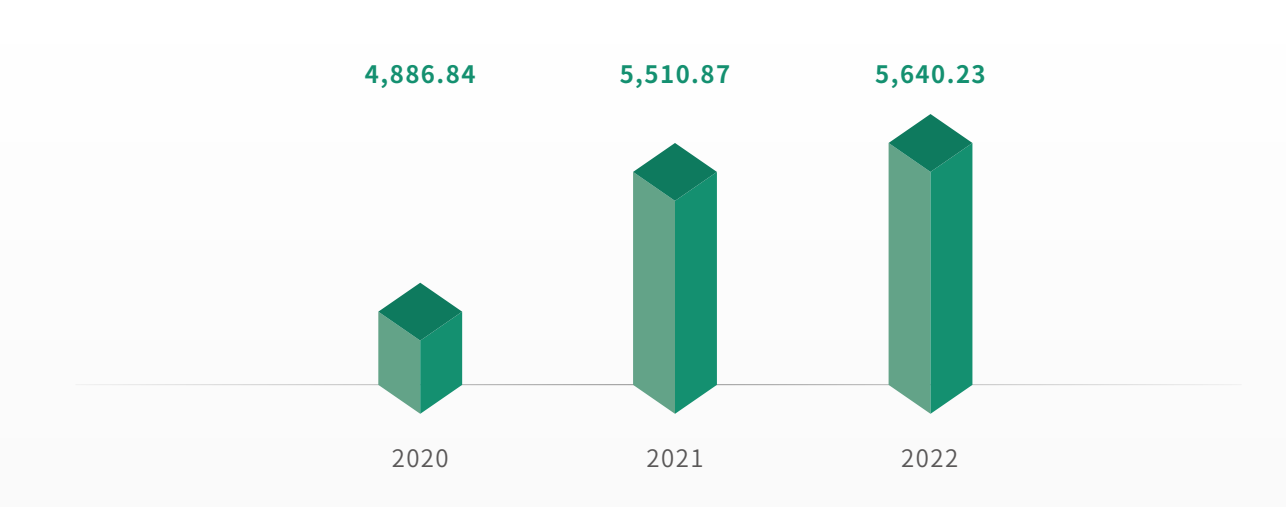
According to our [Energy Target and Management Program Procedures](#), we establish energy goals and indicators and decompose them to each department. We also develop detailed energy management implementation plans for each objective and indicator to continuously improve our energy efficiency. Additionally, we establish measurable and specific emission reduction and water conservation targets to coordinate and promote the achievement of our overall environmental goals across the entire company.

Kingfa's Environmental Goals

Energy	Emission Reduction	Waste Reduction	Water Conservation
By 2023, achieve energy savings of approximately 2,000 tons of standard coal in the modified plastic sector	Over the next 3-5 years, annually reduce VOCs emissions by 1,000 tons	By 2023, save 10 tons of packaging waste	By 2023, conserve 168,320 tons of water

We attach great importance to ecological and environmental protection, continuously increasing environmental investment. In 2022, the investment in environmental protection amounted to RMB 56,402,300, representing a year-on-year growth of 2.35%.

Environmental Investment (In ten thousand)



Environmental Risk Prevention and Control

Kingfa incorporates environmental risk prevention and control into regular enterprise management, continuously enhances the level of environmental risk prevention, and strengthens proactive measures. We have established an emergency response mechanism for unexpected environmental incidents and have developed guiding documents such as the [Emergency Response Plan for Environmental Incidents](#) and the [Environmental Emergency Resource Investigation Report](#). We also establish an emergency response team responsible for handling unexpected incidents and environmental demands. They ensure that our factories can quickly, accurately, and efficiently carry out emergency response measures to control, mitigate, or eliminate personnel casualties and property losses caused by unexpected environmental incidents.

Additionally, we conduct environmental risk assessments based on HJ 941-2018 Risk Grading Method for Unexpected Environmental Incidents in Enterprises. Taking into account our specific circumstances, we prepared the **Risk Assessment Report for Unexpected Environmental Incidents**. It allows us to identify and evaluate potential environmental risks and develop appropriate strategies and measures to mitigate those risks. We systematically analyze and identify environmental risk sources, assess our existing prevention and control capabilities, and propose practical and feasible work plans and measures to reduce environmental risks. This approach allows us to proactively address and mitigate potential environmental risks with effective management and control.

Clean Production and Low-Carbon Manufacturing

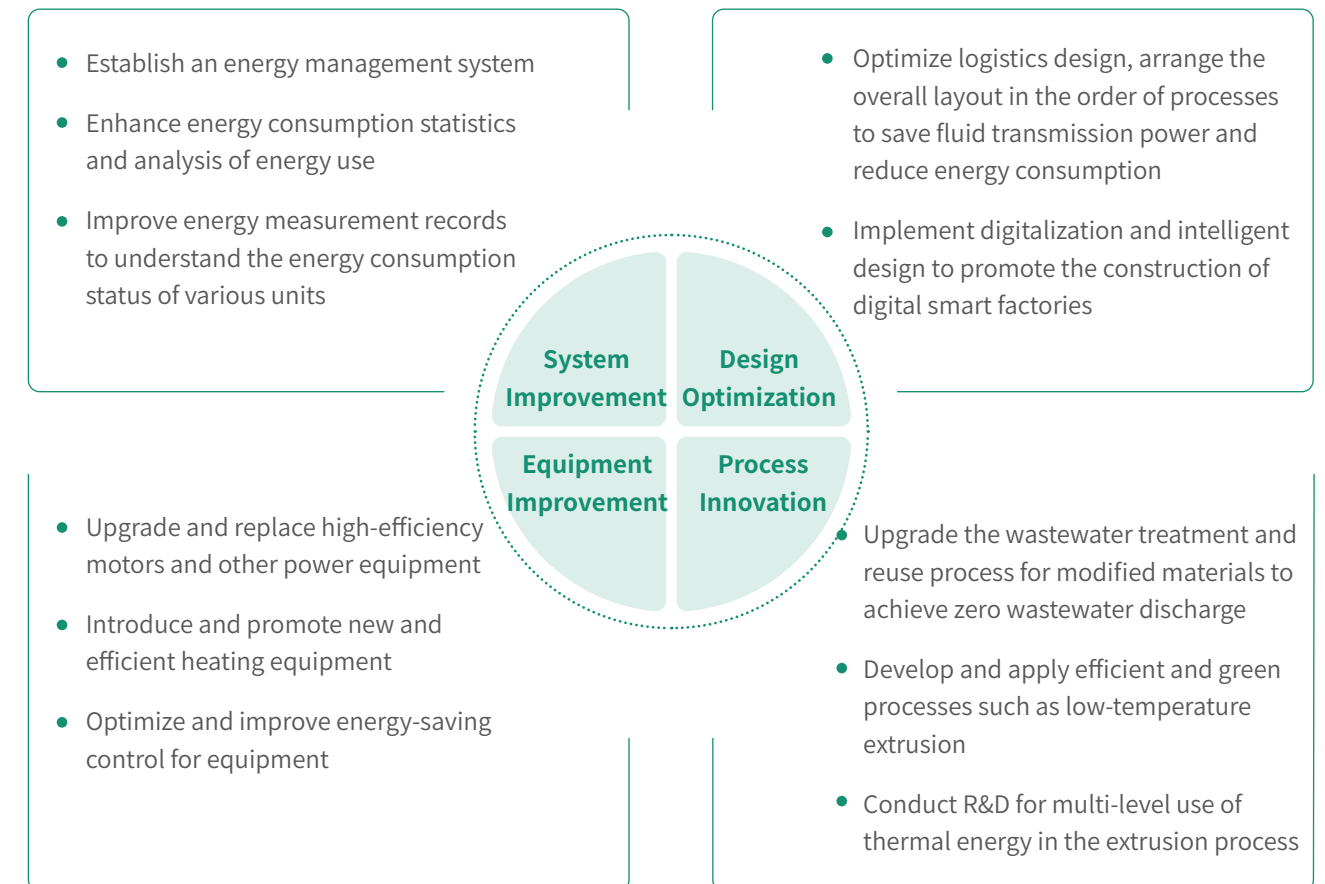
Kingfa attaches great importance to the negative impact of its operations on the environment and practices clean production to improve resource efficiency and reduce emissions. In addition, we closely follow the national development strategy and actively engage in constructing green factories to establish an efficient, clean, low-carbon, and circular green manufacturing system.

We have collaborated with multiple universities and enterprises, and realize the application of whole-process node intelligent linkage technology, whole-process intelligent detection technology, and whole-element integrated Internet of Things technology in the production process of plastic manufacturing industry. We have established the Intelligent Plastic Manufacturing Platform and actively introduce green production technologies and processes. We have also innovated and developed intelligent integrated applications, promoting the exploration of new applications for green technologies and low-carbon production in the plastics industry.

Resources Management

The main energy sources we use in the production process include water, electricity, natural gas, steam, coal-water slurry, and diesel. We have developed more than ten system documents, including the **Energy Management Manual**, **Energy Management Operation and Control Procedures**, and **Energy Management Training** to ensure our energy management system operates efficiently and to improve the energy efficiency of production and operations.

Kingfa has adopted a series of effective resource management measures to improve energy efficiency.



In 2022, Kingfa achieved a reduction in energy consumption of 5.79 kilowatt-hours per ton of product in the modified plastic sector compared to the previous year, resulting in actual energy savings of 1,197.77 tons of standard coal.



Roof Photovoltaic Project

In response to the national call for the development of clean energy, we actively promote the construction of photovoltaic power projects at our production bases to inject clean kinetic energy into the company's green and low-carbon development. As of the end of the Reporting Period, the cumulative installed capacity of rooftop photovoltaic systems at Kingfa reached 13.15 megawatts, with an additional capacity of 23.16 megawatts under construction. In 2022, the electricity generated from photovoltaic sources reached 11.37 million kilowatt-hours. In the future, we will further promote photovoltaic construction projects by expanding or establishing rooftop photovoltaic systems in production bases such as those in Guangzhou or Shanghai. This will increase the proportion of renewable energy in our power generation and continuously optimize our energy consumption structure.

Key Performance Indicators for Resource Utilization

Resource	Unit	2020	2021	2022
Total energy consumption ¹	Tons of standard coal	799,225.73	704,842.32	538,822.23
Direct energy ²	Tons of standard coal	332,988.08	331,099.35	222,972.54
Diesel	Tons	347.40	392.55	267.91
Natural gas ³	Cubic meters	3,031,030.99	45,420,273.21	17,958,912.60
Coal-water slurry	Tons	512,680.14	432,334.24	314,168.09
Indirect energy ⁴	Tons of standard coal	466,237.64	373,742.97	315,849.69
Purchased electricity	10,000 kilowatt-hours	82,756.57	77,610.47	73,305.54
Purchased steam ⁵	Tons	3,346,163.16	2,508,028.83	2,069,755.22
Energy consumption density	Tons of standard coal per RMB million of revenue	22.80	17.53	13.33
Direct energy	Tons of standard coal per RMB million of revenue	9.50	8.24	5.52
Indirect energy	Tons of standard coal per RMB million of revenue	13.30	9.30	7.82
Total water consumption	Tons	5,614,303.19	5,359,027.47	3,870,988.98
Water consumption density	Tons per RMB million of revenue	160.13	133.31	95.79

1.In 2021, the suspension of isooctane production at Ningbo Kingfa led to a reduction in the group's total energy consumption compared to 2020. In 2022, natural gas consumption in the medical and healthcare sector decreased compared to 2021. Additionally, the suspension of isooctane production at Ningbo Kingfa led to a decrease in the group's energy consumption in 2022 compared to 2021.

2.Direct energy mainly originates from the diesel, natural gas, and coal-water slurry consumed by Kingfa and our subsidiaries in China. The data is calculated based on GB/T 2589-2020 General Rules for Comprehensively Calculating Energy Consumption and GB/T 50441-2016 Energy Consumption Calculation Standards for Petrochemical Design, with energy units converted into tons of standard coal.

3.The increase in natural gas consumption in the group in 2021 is mainly due to the production of gloves in the medical and healthcare sector. In 2022, due to the decrease in production capacity in the medical and healthcare sector, natural gas consumption decreased compared to 2021.

4.Indirect energy primarily comes from the purchased electricity, medium-pressure steam, and low-pressure steam consumed by Kingfa and its subsidiaries in China. The data is calculated based on GB/T 2589-2020 General Rules for Comprehensively Calculating Energy Consumption and GB/T 50441-2016 Energy Consumption Calculation Standards for Petrochemical Design, with energy units converted into tons of standard coal.

5.The purchased steam consumed by Kingfa includes medium-pressure steam and low-pressure steam. In 2022, we consumed 1,641,952.22 tons of medium-pressure steam and 427,803.00 tons of low-pressure steam.

Pollutants Discharge Management

In response to pollutant emissions during the production process, Kingfa strictly adheres to relevant national standards such as the Comprehensive Emission Standards for Air Pollutants, the Emission Standards for Odor Pollutants, and the Standards for the Unorganized Emissions of Volatile Organic Compounds. We have established stringent policies to regulate waste disposal, such as the **Management Procedures on Pollution from Exhaust Gas, Wastewater, Waste and Noise** and the **Waste Management Procedures**. We promote wastewater reuse projects and embrace the concept of zero direct discharge to protect the environment.

We have established regular inspection mechanisms for exhaust gas, wastewater, noise, and other pollutants, arranged online monitoring and early warning facilities for organic exhaust gas and wastewater one after another. We also entrust third parties to inspect our pollution control facilities and their compliance of emissions, and strictly fulfill our environmental protection responsibilities to ensure compliance with emission standards.

Exhaust Gas Management

- In order to maximize the separate collection of all exhaust gases, we designed an exhaust gas collection system to transform unorganized emissions into organized emissions that can be controlled
- New projects adopt fully enclosed negative pressure discharge measures, with a VOCs collection efficiency of 95%
- To improve organic exhaust gas, the three-chamber RTO combustion process helps us achieve a treatment efficiency of 80-90% during end-of-pipe treatment and significantly reduces exhaust gas emissions

Wastewater Management

- Rain and sewage are separated within the plant. Treated wastewater from the modified plastic sector is reused for workshop floor cleaning, toilet flushing, greening, road sprinkling and other uses, and accounts for 80% of the total water used
- Regular sewage is treated through a three-stage septic tank and then discharged into the municipal sewage pipe network after meeting standards

Waste Management

- General industrial waste is internally recycled and sold to external recycling units or entrusted to general industrial waste treatment facilities for recycling and disposal
- Hazardous waste is entrusted to qualified organizations for recycling and disposal
- In the petrochemical division, waste generation is reduced through sludge drying processes

Noise Management

- Low-noise equipment is prioritized during equipment upgrade
- Every year, accredited environmental monitoring agencies are commissioned to conduct noise measurement and issue boundary noise monitoring reports and workplace noise monitoring reports

Kingfa's disposal methods for exhaust gas, wastewater, waste, and noise



Waste disposal and transportation



Special Measures for Dust Control

Industrial dust is a significant source of air pollution. By improving processes to reduce dust generation and increase dust collection efficiency, we control, reduce and eliminate related hazards.

Substituting powdered materials with pellets

- Adding pellets to raw materials can reduce dust dispersion, improve cleanliness during the production process, thereby ensuring the health and safety of workers
- Directly mixing some colorant powders into raw materials without diffusion can easily create color streaks, but using pellets can reduce such occurrences

Applying automatic micro-ingredient weighing technology

- The automatic weighing and batching control system for micro-ingredients enables the automatic control and management of weighing and batching for materials. This ensures consistent accuracy in micro-ingredient batching
- By improving production efficiency, the system minimizes open material handling, thereby reducing dust emissions and the need for dust collection and treatment, as well as labor costs



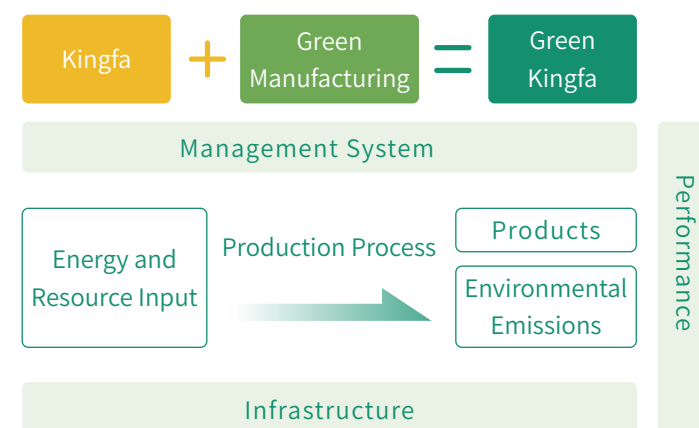
Key Performance Indicators for Waste Management

Waste Emission	Unit	2020	2021	2022
Total hazardous waste ¹	Tons	1,343.81	2,026.20	3360.60
Hazardous waste emission intensity	Tons per RMB million of revenue	0.04	0.05	0.08
Total non-hazardous waste	Tons	6,087.59	11,665.10	17,442.93
General industrial waste ^{1,2}	Tons	2,369.21	3,397.41	9,587.94
Domestic waste ³	Tons	1,876.20	6,022.53	5,450.10
Kitchen waste	Tons	407.50	616.00	670.60
Other waste ^{1,4}	Tons	1434.68	1629.16	1734.29
Non-hazardous waste emission intensity	Tons per RMB million of revenue	0.17	0.29	0.43

1. In 2021, due to the construction of production projects in Kingfa's medical and healthcare sector and Liaoning Kingfa's green petrochemicals sector, there was a significant increase in hazardous waste, general industrial waste, and other waste (mainly packaging materials) compared to 2020.
2. In 2022, there was a significant increase in general industrial waste compared to 2021 due to the interim delivery of construction projects in Liaoning Kingfa's green petrochemicals base, as well as the generation of water treatment sludge in the Guangdong Kingfa nitrile glove production site.
3. In 2021, due to the construction of production projects in Kingfa's medical and healthcare sector and Liaoning Kingfa's green petrochemicals sector, there was a significant increase in municipal waste compared to 2020, as there were more construction workers on-site. The production projects in the medical and healthcare sector were mostly completed by early 2022, and the production projects in Liaoning Kingfa's green petrochemicals sector were substantially delivered by 2022, resulting in a decrease in municipal waste emissions in 2022 compared to 2021.
4. The "other waste" category mainly consists of waste generated from packaging materials.

Green Factories

Kingfa actively carries out the construction of green factories by considering six main aspects: infrastructure, management system, energy and resource input, products, environmental emissions, and environmental performance. Kingfa has become the first company in the industry to receive the national-level honor of "Green Factory Demonstration Site" from the Ministry of Industry and Information Technology. Wuhan Kingfa and Tianjin Kingfa have also subsequently obtained the same title. As of December 31, 2022, Kingfa owns a total of four national-level green factories.

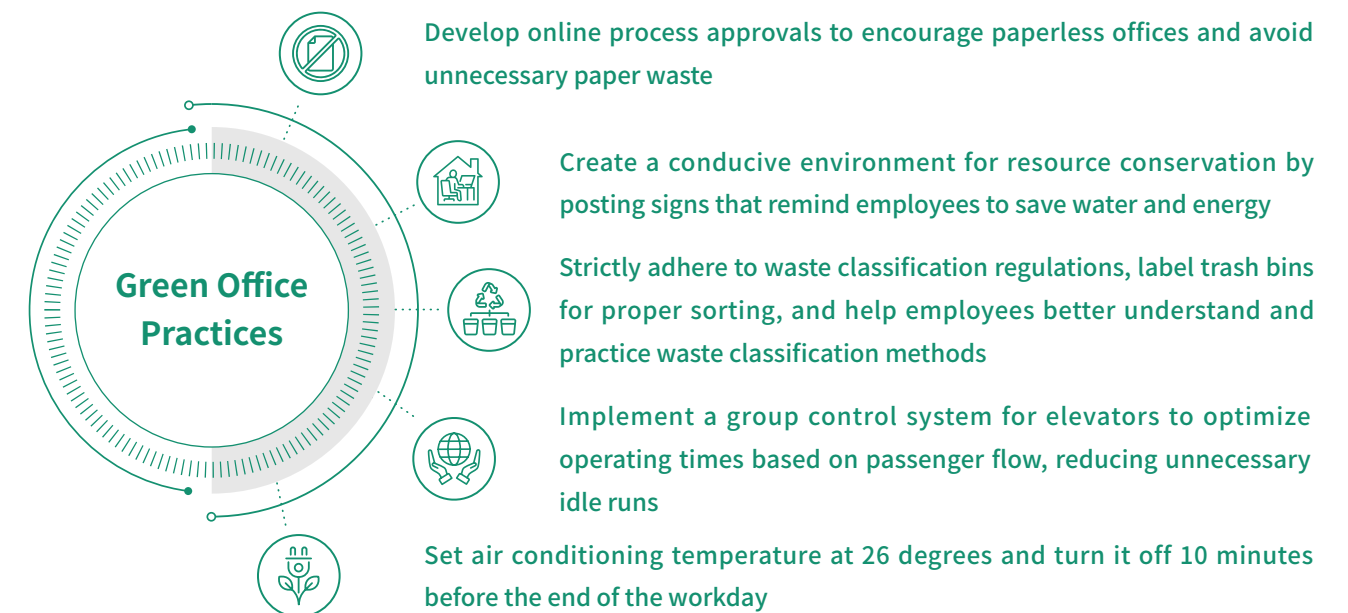


Kingfa's model for green factories

Low-Carbon Offices and Green Lifestyle

Kingfa continuously enhances its awareness of resource conservation and takes on the social responsibility to save energy, protect the environment, and implement green low-carbon practices. We encourage employees to save energy in their daily lives and office activities, creating a simple, moderate, civilized, and healthy environmental atmosphere. We strive to constantly improve employees' awareness and abilities in energy conservation, carbon reduction, and ecological protection, aiming to achieve harmonious and sustainable development among people, resources, and the environment.

We advocate for a work culture that promotes resource conservation and environmental friendliness. We actively encourage green office practices to raise awareness among every employee about the importance of resource conservation and their active participation in energy-saving efforts.



Kingfa's green office initiatives

In addition, Kingfa is committed to enhancing environmental awareness and education, raising employees' awareness of energy saving and converting it into low-carbon actions. We conduct regular environmental training and encourage employees to participate in online training sessions.



Environmental occupational health management training

04

People-Oriented for Better Lives

Adhering to the principle of "people-oriented", Kingfa values the equal rights and benefits of every employee. We strive to create a diverse and inclusive corporate culture and empower the growth of employees in all aspects. At the same time, we insist on "social interests as the basis of enterprise development", actively participate in various public welfare activities and contribute to the construction of a better society.

Key Achievements of 2022

Total number of employees:

10,353

Cumulative number of employees with disabilities:

156

Cumulative investment in the Fund for People

with Disabilities: RMB **38,050,000**

Employee social insurance coverage rate:

100%

Cumulative employment of veterans:

186

Maternity leave employee return rate:

100%

Cumulative investment in vocational training in the

past 3 years: approximately RMB **45,000,000**

Investment in poverty alleviation and rural

revitalization: RMB **5,700,000**

Contributing to the UN SDGs



Caring for Employees with Equality and Inclusivity

An equal, respectful, inclusive, and diverse corporate culture is the source of our vitality. Kingfa safeguards the rights and interests of employees, fosters a diverse and inclusive corporate atmosphere, implements comprehensive welfare care, and continuously enhances the happiness and sense of belonging of each employee.

Equal Rights and Benefits

Kingfa strictly adheres to international labor standards and Chinese labor laws and regulations, including the Labor Law of the People's Republic of China and the Labor Contract Law of the People's Republic of China. We have formulated internal management regulations such as the **Recruitment Management Regulations**, the **Management Regulations on Child Labor and Juvenile Workers**, the **Management Regulations on the Prohibition of Forced Labor**, and the **Management Regulations on Anti-Discrimination and Anti-Harassment** to effectively safeguard the rights and interests of our employees.

During the recruitment process, we uphold the principles of fairness and voluntary participation, ensuring that no coercive or deceptive means are used to attract applicants. We strictly prohibit the employment of prison labor, contract labor, bonded labor, slave labor, child labor, and similar forms of exploitative labor. Furthermore, we do not engage with any suppliers or subcontractors who employ child labor or practice forced labor. We strictly comply with laws and regulations when signing labor contracts with employees and clearly define the rights and obligations of both the labor and management parties. Under no circumstances do we allow managers to violate the basic human rights and dignity of employees, and we strictly prohibit any form of threats, humiliation, or exploitative behavior. We treat all employees equally in all aspects of recruitment, probation, promotion, and end of employment, regardless of their race, nationality, gender, religion, sexual orientation, age, or physical conditions. We strongly oppose any form of discrimination and strive to provide a fair and inclusive work environment and equal opportunities for career development and advancement for all employees. We also emphasize gender equality and equal pay for equal work, and have formulated the **Management Regulations on Labor Protection for Female Employees** to effectively protect the rights and interests of female employees from infringement.

To promptly address cases of discrimination and harassment, we provide internal channels for employees to file complaints. Employees can submit their complaints through suggestion boxes, internal email, our OA system, or directly contact the relevant responsible person to report such cases to the company. The company management will assign dedicated personnel to thoroughly investigate the complaint and provide a response to person who filed the complaint within 15 days. Upon verification, appropriate actions will be taken against the reported individual, ranging from education for minor offenses to legal prosecution for serious offenses.

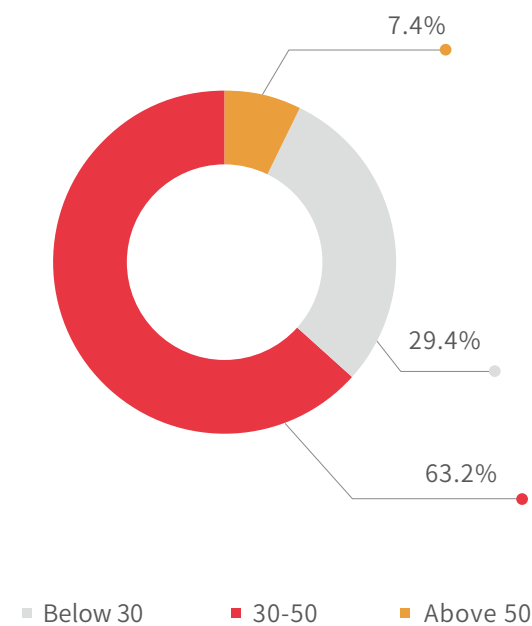
Diversity and Inclusivity

Kingfa establishes and maintains a culture of diversity and inclusion, recruits talents through diverse channels and builds a diverse workforce. We attach importance to employee communication and listen to their feedback to enhance employee engagement, thereby strengthening team cohesion.

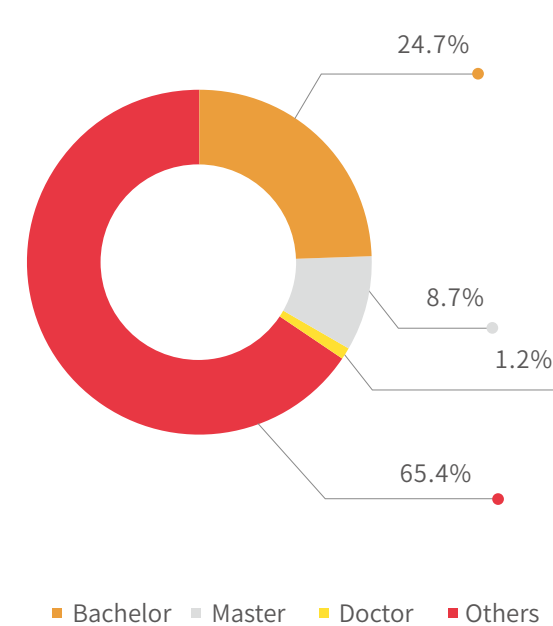
Diversified Recruitment

As a global company, Kingfa actively recruits talent through various channels. In addition to annual campus recruitment activities, Kingfa also collaborates with more than 10 third-party recruitment agencies to attract diverse talent from around the world. The diverse perspectives and approaches of employees contribute to the team's ability to think in different ways, thereby enabling us to provide customers with a wider range of high-quality products and services. As of the end of the reporting period, Kingfa has a total of 10,353 employees, including 324 overseas employees, accounting for 3.15% of the total workforce. Additionally, Kingfa has cumulatively employed 156 employees with disabilities and 186 veterans.

Employees categorized by age



Employees categorized by education



Employee Communication

Effective communication is a key element in maintaining a positive team dynamic and ensuring teams function efficiently. We uphold the communication concept of "following the process, respecting superiors, respecting subordinates, and being sincere and proactive" and have established diverse and transparent communication and feedback channels to promptly understand and respond to the thoughts and demands of our employees. This approach aims to fully engage employees in company operations, decision-making, and cultural development.

To provide opportunities for face-to-face communication and exchange between employees and the management, we regularly organize grassroots meetings and weekly meetings, as well as semi-annual and annual conferences.

These platforms facilitate internal communication among employees and enable open dialogue between employees and management. Every year, we conduct employee engagement surveys in the form of questionnaires to understand the views and suggestions of employees regarding work experience, cultural atmosphere, company vision, long-term development, and other aspects. As of the end of the Reporting Period, we have received thousands of rationalized suggestions from employees, which can effectively help the company in identifying issues, empowering management, and optimizing overall corporate performance.

Key Performance Indicators for Employee Hiring in 2022

KPI	2020	2021	2022
Total employee hire rate	33%	21%	18%
Total employee turnover rate	23%	18%	14%
Employee hire rate (non-frontline)	10%	15%	13%
Employee hire rate (frontline)	23%	6%	5%
Employee turnover rate (non-frontline)	4%	7%	5%
Employee turnover rate (frontline)	19%	11%	9%

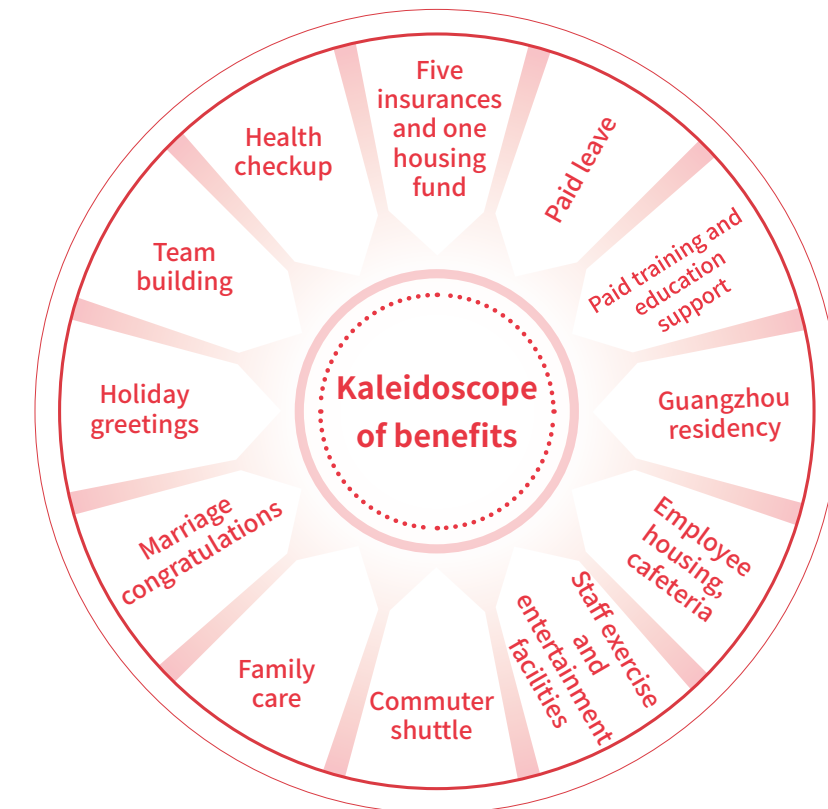
Employee Welfare and Care Package

A truly vibrant company always has a culture of care. We always prioritize the needs of our employees and continuously improve and upgrade various welfare benefits to provide them with multidimensional care and support. We strive to create a warm and welcoming environment, and bring "home-like" warmth to employees.

Employee Welfare

We provide employees with various types of benefits, including insurance, paid leave, condolence payments, subsidies, and supporting infrastructure. Starting from the needs and expectations of employees, we aim to provide more personalized and caring services. We ensure that employees are entitled to their legal rights to annual leave, sick leave, maternity leave, nursing leave, marriage leave, bereavement leave, parental leave, and other types of leaves. We also provide various benefits and allowances such as annual and quarterly welfare benefits, transportation subsidies, and seniority allowances to our employees. We provide comprehensive and well-equipped

facilities to our employees, actively creating a positive work environment that feels like home. In addition to a staff canteen that provides three meals a day, we have established the Kingfa Residence, which offers various types of dormitories for our employees. Employees also have the convenience of commuting to the workplace through our shuttle bus service. By providing kindergartens, free school buses, and education subsidies, we help employees address practical challenges in childcare, children transportation to school, female employees returning to work after childbirth, and in other aspects. In addition, we have set up a medical room to provide employees with basic health diagnosis and counseling services for their mental well-being.



A kaleidoscope of welfare for Kingfa employees

Caring for Employees

To increase the happiness index of all employees and build a family culture at the workplace, Kingfa has launched several programs to engage with employees, including sending holiday greetings, granting tiny wishes, providing beverages to cool off in the summer, and hosting New Year's dinners. Kingfa has established a financial relief program for assisting employees who are going through difficult times, ensuring that their basic needs are met. We have also set up a quick dining lane for pregnant women at our cafeteria and nursery spaces to provide pregnant women and new mothers with a comfortable working environment.

Kingfa cares about the mental and cultural health of our employees, so we have upgraded over 3,000 square meters of employee activity space, constructing badminton, tennis, and basketball courts, dance rooms, and gyms. We have invested in setting up 10 clubs which organize a variety of literary and sports competitions and entertainment activities, offering staff a wide range of options for leisure activity. We care about our women employees, and carry out a series of thematic events on International Women's Day, such as training on topics impacting women, and voting for "March 8th Red Banner Pacesetters". We pay attention to the mental and physical health of women employees, and affirm the important contributions that women employees have made to our company's development.



New Year's Campus Visit



Mid-Autumn Dinner



"The Age of Dreams and Prosperity" Art and Cultural Event



"March 8th Red Banner Pacesetter" Activity Awards Ceremony

For three consecutive years from 2020-2022, Kingfa was named a "Guangzhou Enterprise with an AA Rating for Harmonious Labor Relations" by five departments including Guangzhou Municipal Human Resources and Social Security Bureau; in 2022, Kingfa received the "Best Employer in Guangzhou" from an acclaimed job search platform.



Guangzhou Enterprise with an AA Rating for Harmonious Labor Relations



2022 Best Employer in Guangzhou

Empowering Talents, Sharing Value

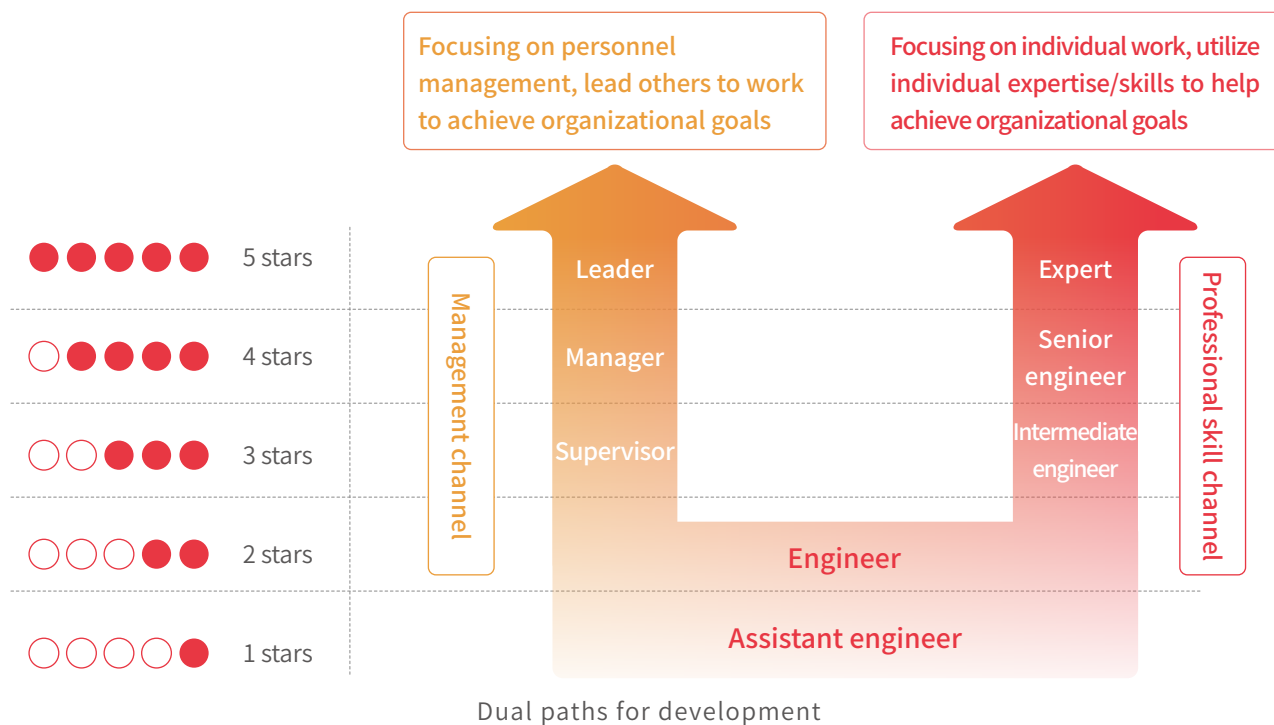
Talent is the fountainhead of continuous development and the most precious resource of a company. Pursuing a mission of "Shared struggle, shared growth, shared prosperity", Kingfa unceasingly innovates and improves the talent development system to provide employees with a vast platform for professional development. The company has created a "Cake Theory" incentive system of value sharing, which combines company development with employees' personal interests, and achieves a resonance between company development and the growth of talent.

Career Development

Kingfa adopts an employment concept in which "employees have both ability and integrity, people let their talent shine, and talent is put to good use". We care deeply about the professional development of employees, and offer them a broader space for career advancement by providing dual-path development as well as opportunities for job rotation.

Dual Tracks for Career Development

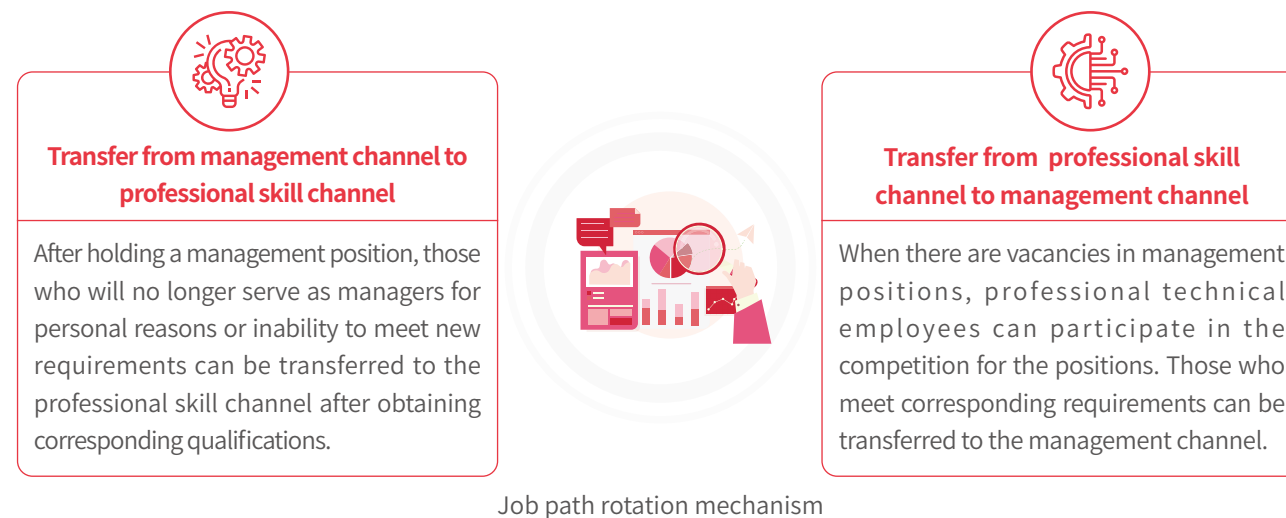
The company has established dual development tracks for management and professional skills. The professional path involves marketing, skills, operational abilities, and other professional categories. Employees can choose a career development path according to their own specialties and aspirations.



Based on competency models and qualification systems, the company has created job promotion standards which are differentiated, reasonable, and effective. Employees at the corresponding ranks along the two paths receive identical benefits. Whether they hold management positions or professional and technical positions, employees who have the ability can be promoted continuously in their own development paths and receive salary compensation that matches their strength.

Rotation Mechanism

Kingfa's job rotation mechanism offers employees more options for professional development. Employees can change positions on the Professional Path and Management Path according to their individual professional plans and needs. The job rotation system encourages employees to tap into their personal potential, develop in well-rounded ways, and become multi-talented individuals with diverse skill sets.

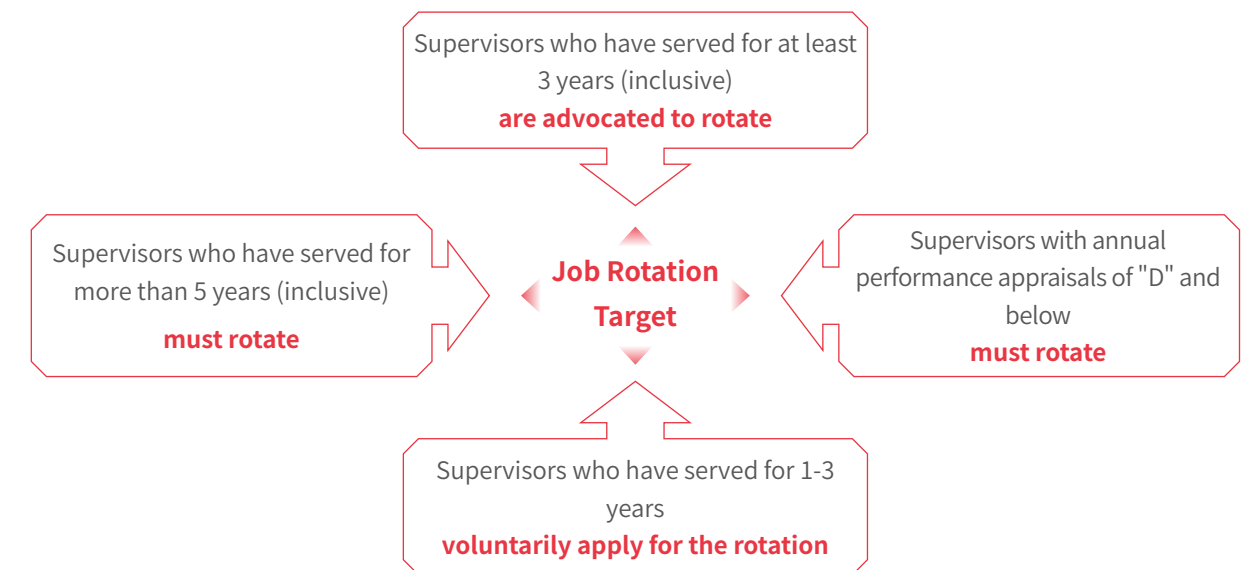


Job path rotation mechanism



Cadre Rotation System

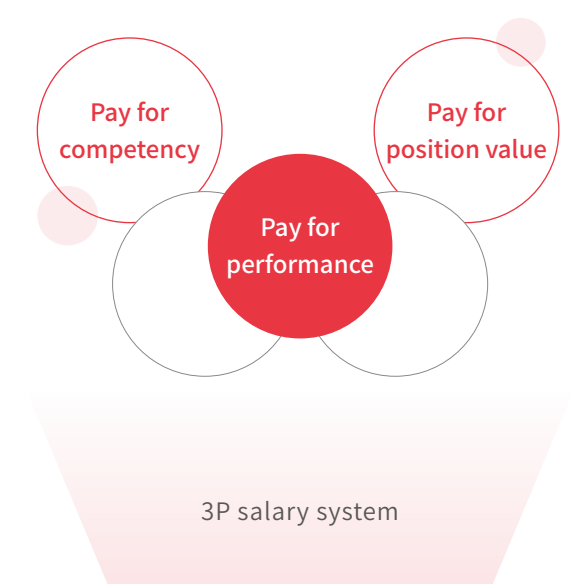
To invigorate cadres and strengthen the internal flow of talent within the company, Kingfa has established a "Cadre rotation system" and offers opportunities to temporarily serve in higher positions to supervisors who show potential.



Salary and Incentives

Kingfa's salary structure combines a basic salary with a fluctuating wage, offering employees a salary and incentive system which is internally fair and externally competitive. To attract and retain exceptional talent, and to invigorate teams, Kingfa continuously works on salary reform, strengthens the assessment and incentive role of fluctuating wages, amply affirms employee value, and brings positivity to employees at work.

We have established a differentiated compensation schemes for employees in different positions and ranks, improving the target responsibility incentive assessment system for marketing and technical personnel, fixed annual salary for internal operations personnel, and piece work wages of front line operating personnel, creating a complete 3P salary system. In addition, we continue to push for internal assessment and incentive policies which relate to sustainable development, such as sharing the benefits generated by cost reduction and efficiency projects with project employees.





Goal-Based Responsibility System

Kingfa has established a highly effective talent incentive mechanism, and continues to innovate and improve incentive methods. In 2018, Kingfa launched the job target responsibility system, which gradually delegates company's target to various key positions, steering employees towards the company's main goals through incentivization to achieve the most outstanding results. The job target responsibility system effectively recognizes and affirms the value of each position and employee, motivating them to generate benefits for the company while acquiring their own individual value.

In 2022, the job target responsibility system assessment covered more than 1,000 employees, including those in core management, business personnel, technical personnel, internal operations department heads, and core positions at branch companies. Targets were achieved at a rate of 46%. This system reinvigorates employees and inspires positivity, helping the company to achieve extraordinary results.



Stock Incentive Plan

To inspire enthusiasm, initiative, and creativity among senior management and core talent, and improve the company's operational management, Kingfa established its employee stock plan in 2016. During the Reporting Period, the company formulated the "2022 Limited Stock Incentive Plan (Draft)", designating 1,350 employees to participate in the 2022 annual stock incentive plan - 14% of the total number of employees. This stock incentive plan improves Kingfa's wage assessment system while achieving shared value by combining the interests of shareholders, the company, and incentive recipients.



Employee Development

Kingfa's emphasis on employee development is the reason that our company has seen continuous improvement, and the key to our future success. We empower staff through a series of employee training programs, our E-learning platform, and on-the-job opportunities for formal education.

Key Achievements of 2022

Proportion of employees received training: **100%**



Key Achievements of 2022

Average training hours for employees: **56** hours

Amount invested in vocational training in 2022: RMB **11,000,000**

Proportion of employees received periodic performance assessment and professional development evaluations: over **90%**

Internal Training

In 2014, Kingfa founded the Kingfa Global Innovation Training and Development Center, and established a training system that corresponds with the company's dual paths for career development. On the basis of conventional training, the center emphasizes 5 management training plans and 3 professional training programs which form a strategic employee echelon training system that continuously outputs talent. To help improve employee development, Kingfa has created a "Job Learning Map" based on the qualifications needed for different jobs. The map provides learning planning solutions by showing the important knowledge and skills needed for each position, clarifying learning tasks, formulating learning strategies, and indicating learning paths to assist employees in filling in gaps in their knowledge, and honing their professional abilities.

Kingfa has taken initiative to train 5 State Council Special Allowance Experts and 2 academic reserve candidates, fostering exceptional talent on behalf of both the company and society. Many new arrivals also benefit from the company's multi-level talent training system, and gradually grow into the backbone of the company's development.



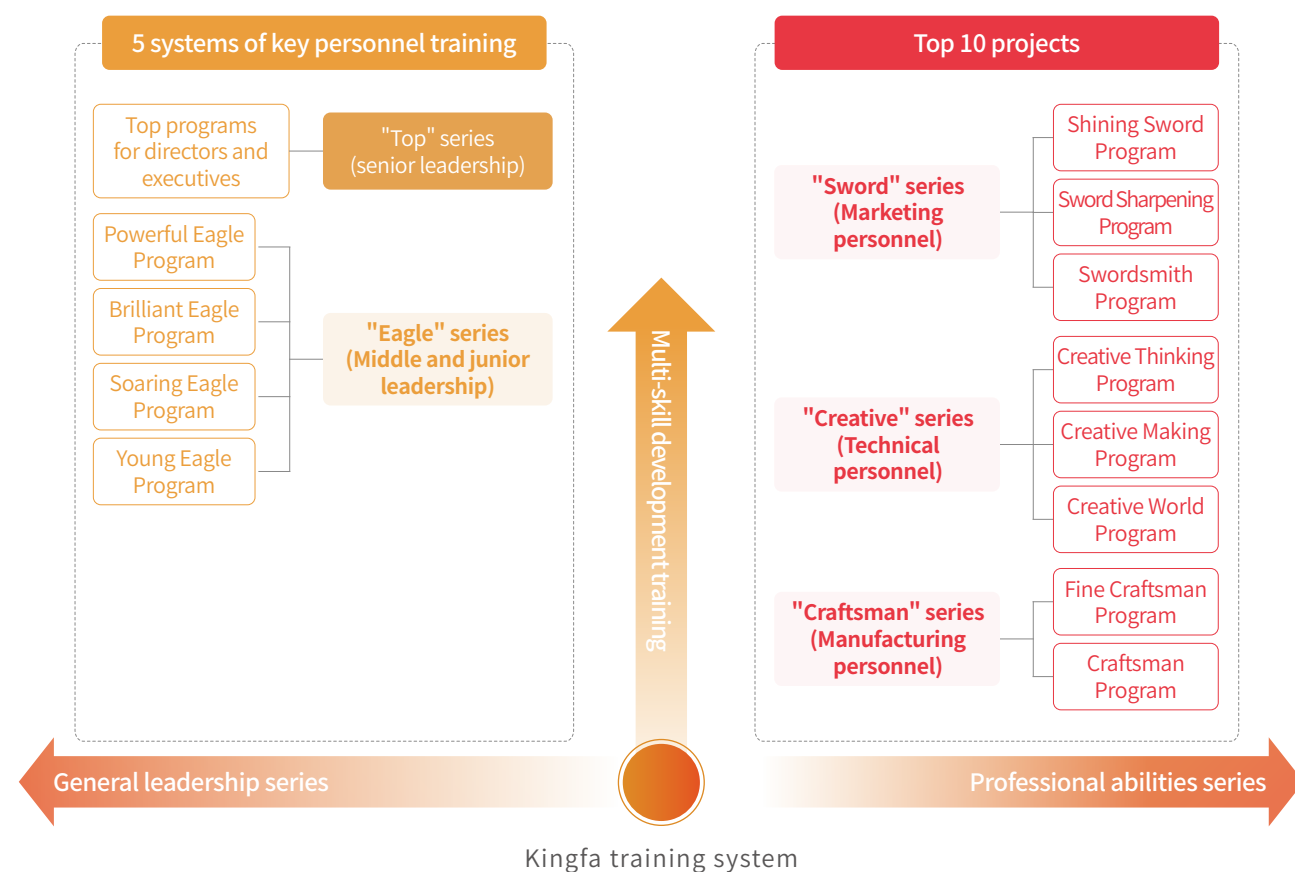
Swordsmith Program



TOP Program



Powerful Eagle Program



External Training

High quality external training can help employees to quickly understand cutting-edge theories and methods in the industry. Kingfa invites external experts from a variety of fields to provide employees with training on a diverse range of topics, such as industry development trend analysis, new industry regulations, industry knowledge, and technological sharing. We also provide 30,000 to RMB 2 million of scholarships for academic education (MBA/MPA/EMBA) to managerial and senior staff who have worked with us for a certain number of years.



External Training for Quality Department Staff

In 2022, Kingfa invited external experts to provide our Quality Department staff with training on a broad range of subjects, including ISO Management Systems, and Tech Popularization of the Auditing Process in the German Automotive Industry, ensuring that employees in the Quality Department could quickly grasp new industry regulations and guarantee product quality.



Management System Training Site



Total Quality Management Practical Application

Taking Responsibility and Giving Back to Society

As a responsible corporation, Kingfa follows a public welfare philosophy of "harnessing the potential of manufacturers, shaping industry trends, and implementing industry improvements". Kingfa regards societal benefit as the basis for company growth, shoulders the duty of giving back to the country through industry development, and courageously takes on our responsibility to society. We are actively involved in charitable programs, including scholarship funds, poverty and disability relief, rural revitalization, and disaster relief. The "Kingfa Volunteers", a company team with over 60 members, provides volunteer services through a "voluntary + job rotation" operating model.



Donations to Build Hope Primary School in Jinxin, Hunan



RMB 30,000,000 in Donations to Build National Hope School in Yangchun City



RMB 2,000,000 in Donations for Poverty Relief Fund to Support Shuimei Village Service Improvement Project



May 12 Donations to Charities & Foundations



Examples of Charity Awards Earned



Campus Donations

Kingfa collaborates with several institutes of higher learning, such as South China University of Technology, Beijing Institute of Technology, and Beijing University of Chemical Technology, to provide students with financial support for professional study and extracurricular activities. We have established the "Kingfa Scholarship" for higher education, which encourages students to learn and explore within their professional fields. We also support campus activities and programs which offer opportunities for exciting extracurricular activities, such as the "Beijing University of Chemical Technology Cultural Festival" and "Zhejiang University Exceptional Engineer Leadership Training". As of the end of the Reporting Period, Kingfa has donated a total of RMB 6.4 million in scholarship funds.



"Kingfa Scholarship" Award Ceremony

Rural Revitalization

With the posture of an industry leader, Kingfa actively supports poverty alleviation and rural revitalization. Our company centers on a rural revitalization strategy, helping the governments of Guangdong Province and Guangzhou City in joint efforts to assist in poverty alleviation and wealth building in certain impoverished areas and villages. Over the past five years, programs for new rural construction, poverty relief workshop construction, and village collective industry development have been launched in more than ten villages, and over RMB 50 million in donations have been provided, benefiting over 200,000 impoverished persons in Guangdong Province.



Poverty relief - Batang County

In 2017, Kingfa donated RMB 300,000 to the Finance Bureau of Batang County, Sichuan Province. The funds were allocated to help in the construction of a primary school and provide books to more children, creating opportunities for students to learn more and broaden their horizons. In the years that followed, Kingfa has continued to provide financial assistance to Batang County, helping to create programs that alleviate poverty and build wealth. In 2020, Batang County removed the "poverty hat" and embarked on a new stage of development. To steer Batang County to continue down the path of positive development following poverty alleviation, Kingfa made further donations of RMB 300,000 for local industry development in 2021 and 2022, respectively.

Environmental Public Welfare

To raise environmental protection awareness among consumers, since 2021, Kingfa has joined hands with Unilever and other renowned enterprises and charitable organizations to engage in environmental protection in Qinghai Province, through a program called "Protect Sanjiangyuan, and create a cleaner tomorrow". Held at Sanjiangyuan, this plastic cleanup is a practical action to care for the environment around the headwaters of three of China's major rivers, and to contribute to the cleanliness of those rivers. Following the cleanup, the plastic collected in Sanjiangyuan is shipped across vast distances back to Kingfa, where it is transformed through pre-processing and high quality reclamation, providing both environmental and economic benefit.



"Protect Sanjiangyuan, and create a cleaner tomorrow" Environmental Protection Campaign

05

Forging Partnerships to Facilitate Industry Flourishing

Kingfa works with our partners to create value, and is devoted to building the industry community. We deepen sustainable management in the supply chain to respond to greater complexity in the market environment and a variety of challenges. In addition, we remain committed to the development of both the enterprise and the industry, integrating the industry's upstream and downstream resources. We build a collaborative industry platform, and implement an industry-university-research approach to innovation, to promote optimization and improvement throughout the entire industry chain.

Key Achievements of 2022

Proportion of suppliers verification on site (modified plastic sector): **21%**

Proportion of strategic suppliers (modified plastic sector): **8%**

Number of current standards participated formulating: over **160**

Number of supplier representatives who attended the Supplier Conference: **973**

Number of suppliers with transaction records in 2022: **3,311**

Investment in scholarships for higher education: RMB **1,170,000**



Contributing to the UN SDGs



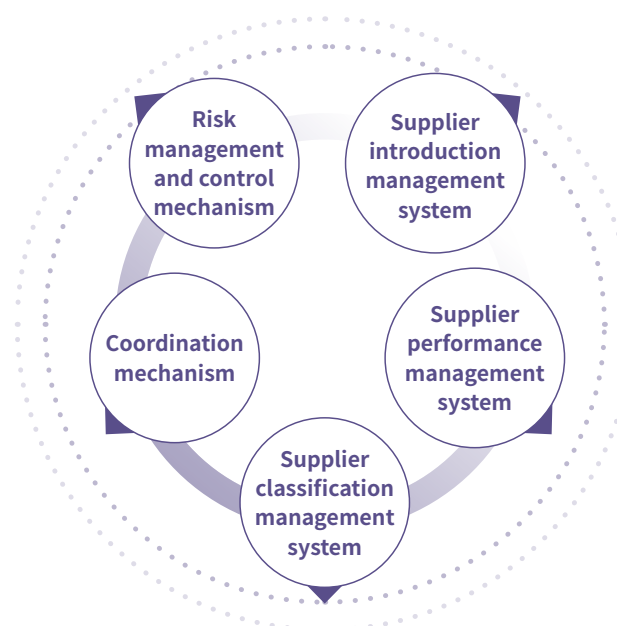
Collaboration for Common Benefits, Safety and Efficiency

To continually optimize and improve supplier management, Kingfa has established a robust system for management of suppliers throughout their life cycle. We closely monitor the creation of quality and non-quality systems by suppliers, mobilize our resources to empower suppliers, improve the efficiency and flexibility of the supply chain, and ensure that enterprise operations remain smooth. In 2022, Kingfa was included on a list of "National Exemplary Enterprises in Supply Chain Innovation and Application" jointly selected and evaluated by 8 departments, including the Ministry of Commerce of China.

Through our "One platform, three systems" management model, Kingfa achieves the dynamic management of supplier introduction, operations, and output processes. We establish different supplier introduction regulations and daily management methods based on the requirements of different categories, which are supplemented by a withdrawal mechanism that achieves survival of the fittest in supply resources. This ensures that business management is visible and transparent.

Resource reserves , review + on-site audit of introductory stage; daily risk warnings (credit risks, financial risks, quality risks and delivery risks), agreement guarantee (technology, quality, environment, social responsibility, integrity, commerce, supply, etc.)

Supplier conferences, technology exchange, daily business communication (combining annual planning to formulate monthly plan), quality communication, platform interaction



Establish differentiated supplier introduction standards based on categorized management to conduct initial screening of suppliers and meet the needs of resource reserves and optimization

Establish differentiated performance rules and performance application scenarios according to the management needs of different sectors, to achieve differentiated display of supplier value

Combine supplier performance and category management strategy to formulate supplier category rules and differentiated management measures for strategic suppliers, bottleneck suppliers, collaborative suppliers, and general suppliers, enabling precise distribution and effective integration of resources

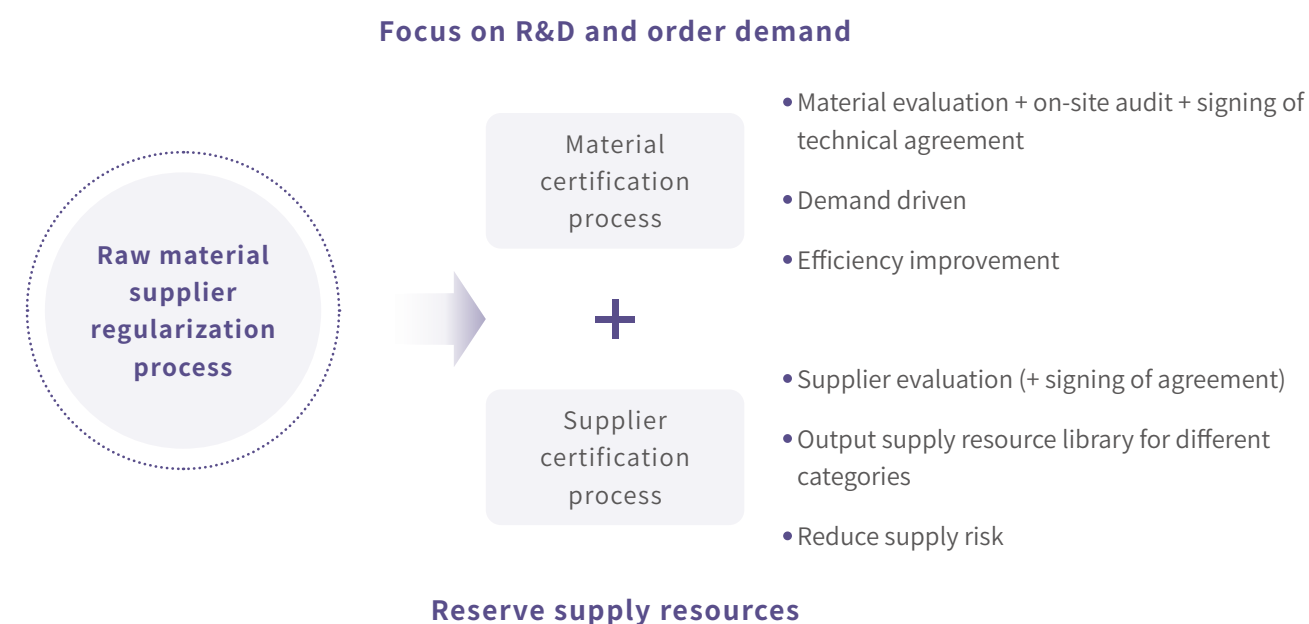
Supplier management platform

Sustainable Purchasing

Based on relevant national regulations and the principles of sustainable procurement, Kingfa has formulated rules such as **Regulations for the Management of Supplier Introduction and Auditing** and **Management Regulations for Supplier Overall Performance**, which clarify the responsibilities and requirements of departments that conduct supplier introduction, auditing, and daily management tasks. This creates a supplier management system that ensures information transparency and adopts standardized processes.

Supplier Introduction

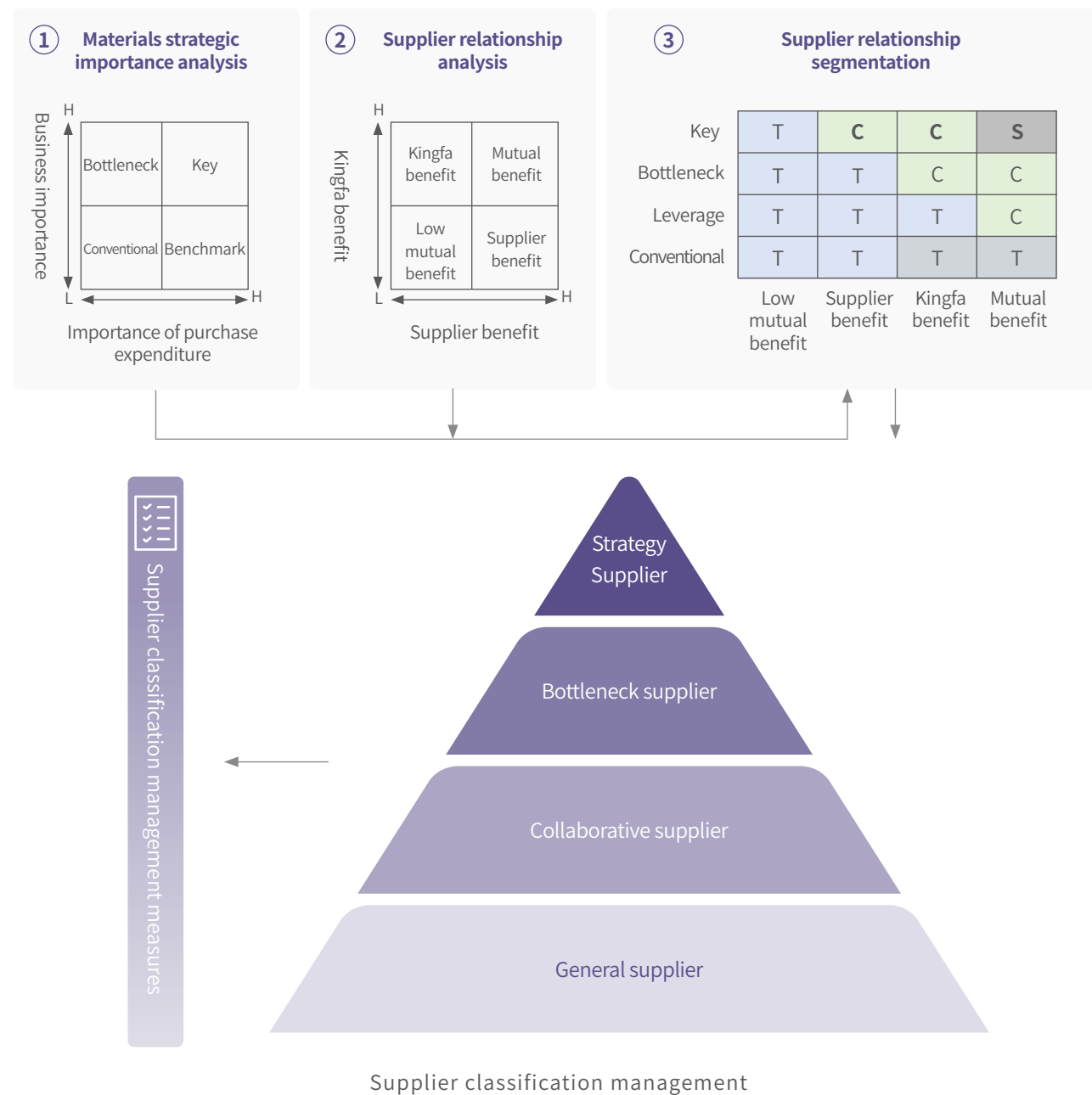
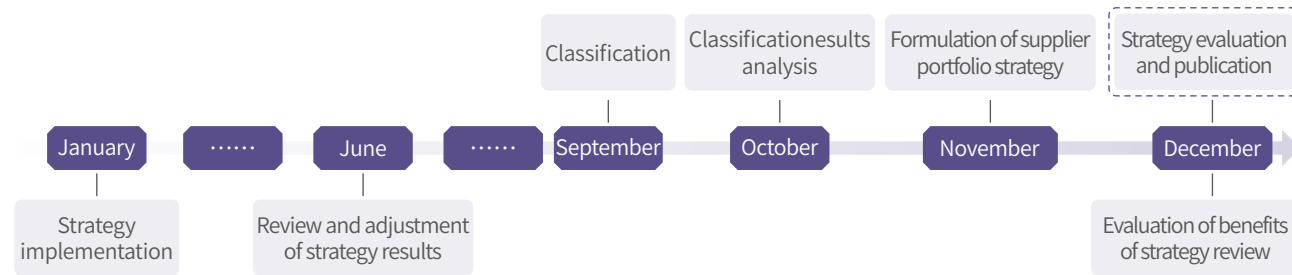
Kingfa adopts an open door policy towards supplier introduction. Any supplier that meets the operating requirements may register. After passing the auditing process, they become reserve suppliers. This lays a solid foundation for the management of resource supply reserves for major sectors. To ensure the sustainable development of the modified plastic business, modified raw material suppliers must pass rigorous quality and non-quality system auditing before being added to the list of approved suppliers.



Supplier Classification Management

In 2022, we conducted classification management on 456 modified material suppliers, enacting different kinds of supplier management measures and establishing targeted daily communication plans with strategic and bottleneck suppliers. We also integrated the goals of standard suppliers to promote the continual optimization of supplier resources.

Strategy formulation

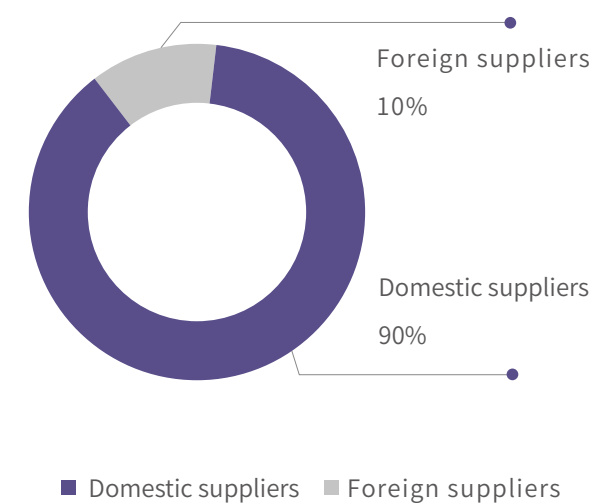


Annual Auditing Results of Modified Plastic Sector Suppliers over the Past 3 Years

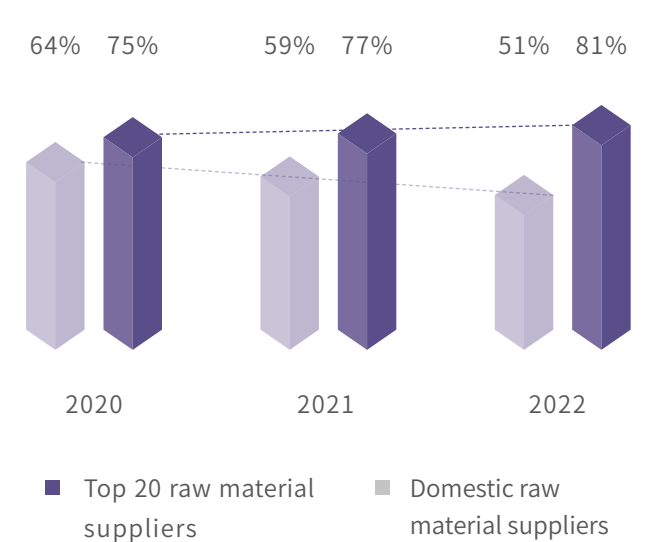
Supplier audits	Unit	2020	2021	2022
Suppliers which did not fully pass annual audits	Num	114	129	149
Suppliers which reformed areas of non-conformance	Num	72	112	98
Reform rate	%	63	87	66
Suppliers which were paused/terminated due to non-conformance	Num	2	0	7
Potential suppliers rejected due to non-conformance	Num	30	20	31

Kingfa worked with a total of 6,136 suppliers as of the end of the Reporting Period, of which domestic suppliers accounted for 90%. Over the past 3 years, we have gradually increased the volume of raw materials procured from domestic suppliers, continuing to localize raw materials and reduce procurement costs. In addition, year upon year we have continued to lower the percentage of raw materials purchased from our top 20 raw material suppliers, effectively distributing the supply risk and ensuring the quality of goods and materials.

Modified Plastic sector suppliers according to region



Procurement from raw material suppliers as a percentage of total raw material procurement



Enabling Suppliers

Kingfa strives to help suppliers improve their abilities and develop in a coordinated way. We maintain close communication and relationships with our partners by holding supplier conferences and offering supplier training, working hard to create mutual benefit.

Kingfa hosts an annual supply conference, the agenda of which includes an economic forum, procurement special topic reports, technology and quality special reports, and an awards ceremony and banquet. In November 2022, we convened an online supplier conference based on the theme of "Mutual benefit, safety, and efficiency". Representatives from 973 suppliers around the globe attended the event, joining the effort to create sustainable development.



Kingfa 2022 Annual Supplier Conference

To meet the needs of technological innovation, we have strengthened our multi-dimensional collaboration with suppliers, implementing multiple dimensions of total technological innovation.



China Jushi and Kingfa Technological Collaboration Partnership

In June 2016, China Jushi and Kingfa formed a technological collaboration partnership which aims to encourage high-tech talent, and develop cutting-edge products within the industry. Our tech innovation strategy continuously accumulates breakthroughs in international technology, allowing both parties to ascend to the peak of the new materials industry, and become mainstay suppliers within the global new materials sector.



2021 Jushi Foundation Awards Ceremony



Kingfa and Clariant Chemicals Globalization Strategy Collaboration



Kingfa and Clariant Chemicals Strategic Partnership Agreement Signing Ceremony

Since the beginning, Kingfa and Clariant Chemicals have maintained a close commercial partnership and engaged in technological exchange, establishing cutting-edge product testing mechanisms for the additives industry which are honest and trustworthy. Over the past two years, we have further expanded in-depth collaboration in the catalyst sector. Both parties have signed an agreement to establish a global strategic partnership, deepening business collaboration in the catalyst business for the modified plastic and green petrochemicals sectors, creating mutual benefit on a global scale.



Technological Exchange between Kingfa and ExxonMobil

Through a united lab platform, Kingfa and ExxonMobil leverage our advantages in fundamental research and application evaluation. Each year, we host a large technological exchange conference where brainstorming and creativity collide. The focus is on the development of future technologies, sharing developmental trends in the new material's market, and ranking the importance of innovation requirements to create a detailed development plan for review and implementation.



Kingfa and ExxonMobil Technological Exchange

To ensure that procurement requirements for quality, cost, and delivery schedule are met, we continue to promote programs to improve the capabilities of suppliers, and actively provide suppliers with assistance. For example, we offer suppliers quality improvement training. If suppliers encounter bottlenecks related to the introduction of new raw materials or daily management, Kingfa stations on-site professionals at supplier factories to conduct training in essential operations and quality management - achieving lasting results by "teaching our partners to fish".



Kingfa Helps a Supplier Continuously Improve Product Quality

A new materials technology company that supplies Kingfa with functional masterbatch materials was struggling with numerous quality issues due to factory relocation and the turnover of management personnel. When the supplier was unable to properly rectify the situation on their own, Kingfa responded rapidly by visiting their company and providing feedback on areas that needed improvement. Within 3 months, the supplier improved product quality. The assistance was effective.

From 2021 to 2022

A materials technology company faced major quality issues with masterbatch supply, and cut prices by over RMB 70,000.

In August 2022

Kingfa visited the company and provided two weeks of quality management assistance, imparting quality awareness. In August and September, there was a noticeable drop in problems related to product coloring.

In September and October of 2022

Kingfa investigated the company's upstream manufacturer and trained the company to use colorimeters during masterbatch production, effectively controlling product quality.

In November and December of 2022

The company had rectified masterbatch appearance issues, and supply quality was stabilized.



Teaching Quantitative Methods to Inspect Color Differences



In addition, we also strive to improve environmental protection awareness among suppliers. In July 2022, Kingfa hired lecturers from third party organizations to provide regulatory environmental and material training. Over 90 suppliers participated in the training, and a test was administered after the training to assess training results.

Stable Supply Chain

To improve supply chain stability, Kingfa utilizes the full potential of system management and strategy optimization to ensure that our supply chain remains stable and secure. We establish an in-depth global collaborative supply system with "intercommunication of information, resource sharing, stable supply, and rapid response", mitigating the risk of rising supply costs and reduced production capacity.

Supplier evaluation

- We control the risks of suppliers from the introduction stage by strictly evaluating upstream supply capabilities, bringing in suppliers that offer better supply guarantees
- Suppliers undergo annual routine audits. Suppliers who are evaluated as having a supply risk are immediately replaced with new suppliers to minimize supply risks

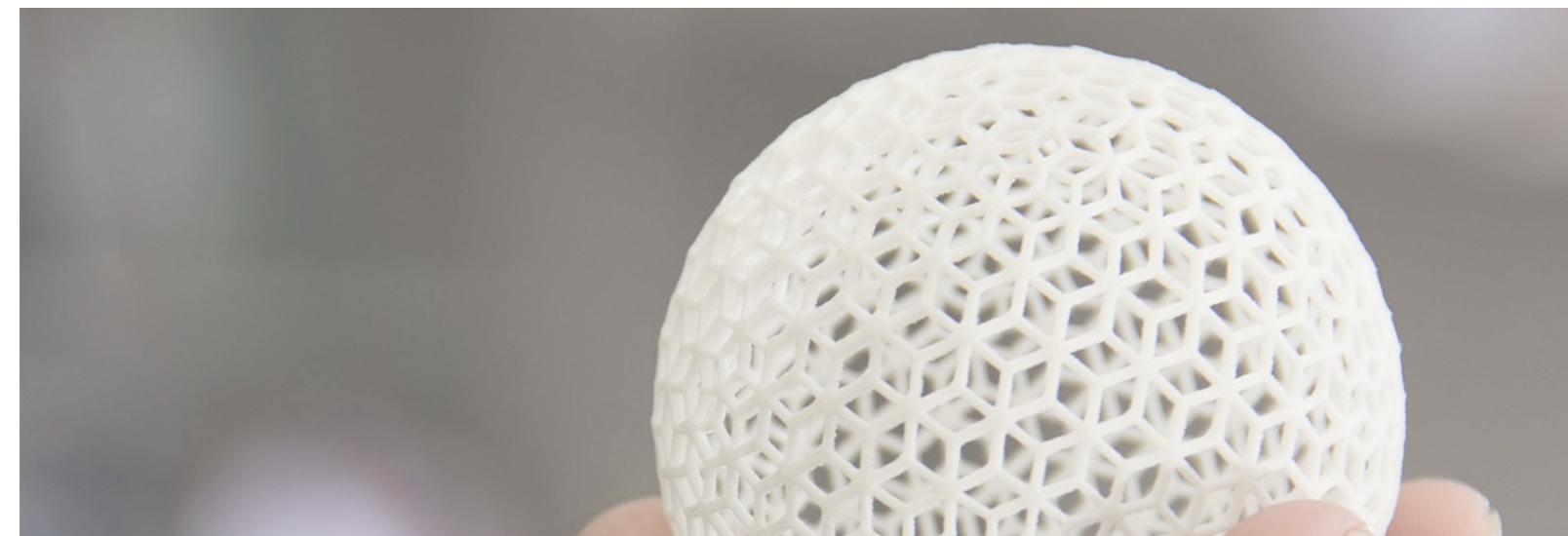
Establishing warning mechanisms

- Establishing a warning mechanism for high risk materials
- Kingfa establishes in-depth supply chain control by continuously tracking the parking, production scheduling, and manufacturing circumstances of over 100 upstream polyolefin producers.

Risk factor recognition

- We closely follow global political, military, economic, and climate developments around the world to identify risk factors and create risk contingency plans, and rapidly adjust procurement and inventory strategies, taking measures such as increasing raw material reserves, locking raw material supply orders, and preparing for raw material replacement

Kingfa's measures to ensure supply chain stability



Industry Collaboration for Growth Together

Innovation, partnership, and sharing in the development environment help nourish Kingfa's sustainable development. To provide mutual benefit to our industry partners, we have established an industry exchange platform, strengthening strategic partnerships with stakeholders such as upstream and downstream enterprises, and research institutes to create a more sustainable supply chain in the chemical industry.

Facilitating Industry Advancement

To promote collective industry building, we fully utilize Kingfa's brand influence and leadership, participating in the formulation of over 160 international, national, industry, local, and group standards. In addition, we actively attend industry conferences in the household appliances, electronics, and IoT industries to achieve collective development and mutual benefit. Through technological exchanges with globally renowned companies like Shneider Electric, Kingfa has established smooth communication channels with international customers, creating opportunities for our company's globalized operations and the export of domestic products, and enriching global technological resources.

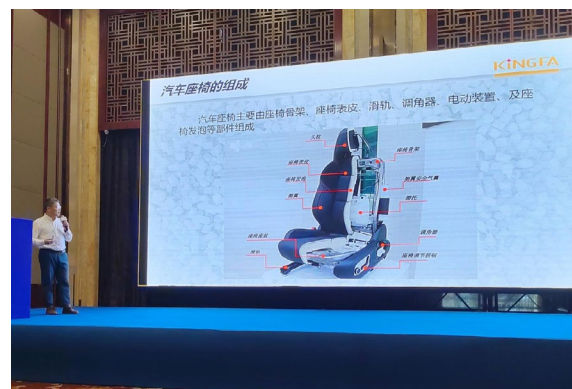


In October 2022, Kingfa Conducted Connector Materials Technology Exchange in Germany with Clients



Kingfa Attends the ATC Automotive Interior Design Tech Week - Automotive Smart Cockpit and Seat Tech Forum

In September 2022, Kingfa joined the ATC Automotive Interior Design Tech Week - Automotive Smart Cockpit and Seat Tech Forum, discussing new automotive seat technologies with major original equipment manufacturers (OEM) and automotive seat companies. During this session, we released the keynote speech "Kingfa automotive seat system materials total solution", and participated in the elite closed-door summit round table discussion on smart interior decoration, giving customers the opportunity to learn more about Kingfa's technological abilities in terms of automotive seating.



Automotive Smart Cockpit and Seat Technology Forum

Strengthening Strategic Partnerships

Kingfa leverages our enterprise advantages to actively engage in education, fostering partnerships with learning institutions and deepening strategic partnerships in the upstream and downstream industry chain. The collective strength enables us to overcome challenges in applying industrial technology, ultimately benefiting society.

Fostering Industry Talent

Kingfa is guided by the needs of industry development. Our objective is to provide impetus for higher quality employment. To achieve this, we actively promote in-depth collaboration among the industry, universities, and research institutions, assemble exceptional technological resources, and accelerate the industrialization of the results of scientific research. In June 2022, Kingfa's joint program with Guangdong Electronic - Commerce Technician College, the "Guangzhou advanced materials industry employment training infrastructure program" was approved. Its purpose was to promote collaboration between the enterprise and university throughout the entire process, build a community for school and enterprise development, and train "new craftsmen" who are accustomed to the new technologies, formats, and career development requirements of the polymer materials industry, effectively achieving "talent for enterprises, skills for students, and development for universities".

We established scholarships for majors in materials science, chemistry, and polymers at the South China University of Technology, Beijing Institute of Technology, and Sun Yat-sen University. At Kingfa, we launched an internship base and organized exchange tours with universities, fostering high-quality talent and driving high-quality development in the industry. In 2022, Kingfa offered a total of RMB 1.17 million in scholarships.



Kingfa & South China University of Technology Golden Eagle Internship Program

Kingfa launched an internship program in collaboration with South China University of Technology, arranging for polymer materials major undergraduates to engage in 4-week practical internships at Kingfa. Interns get hands-on experience in the Product Research and Development Center, Procurement Department, and other departments. In addition, department teachers offer one-on-one instruction, equipping students with a solid foundation that will benefit their future careers.



Kingfa & South China University of Technology Golden Eagle Internship Program (2nd term)

Coordinated Upstream and Downstream Development

Through our powerful influence and extensive reach, Kingfa drives the cooperative development of technological innovation and industrial collaboration throughout the industry chain. We also engage in the design, manufacture, and implementation of green products to build more resilient industry and supply chains.



Kingfa Carbon Fiber and BYD Jointly Declared the Program of "High Integration Lightweight Driving Battery Protective Plate Key Technology Development and Applications"

During one year of partnership, Kingfa Carbon Fiber and FinDreams Battery completed materials testing, program design and development, and advanced molding process development for the driving battery protective plates used in new energy electric vehicles produced by BYD. The product was successfully mass produced and helped BYD in the global launch of its first CTB Seal model vehicle in March 2022, creating the industry-leading vehicle with the highest under-vehicle safety rating in the industry. In 2022, this program won the "Gold Award in Forward Thinking" at the 7th Lingxuan China Automotive Awards.



7th Lingxuan China Automotive Awards
"Gold Award in Forward Thinking", 2022



"Brand Transformation, and the Amazing Benefits of Kingfa" - Dongfeng Nissan's Brands Nissan and Venucia Began a Strategic Partnership with Kingfa

On May 15, 2021, to mark the beginning of a strategic partnership with Kingfa, Dongfeng Nissan's subsidiaries Nissan and Venucia held a ceremony under the theme of "Brand transformation, and the amazing benefits of Kingfa" at Kingfa's Qingyuan base. In recent years, we have continually improved bilateral collaboration mechanisms, expanded our partnership, improved the QCDDS service system, promoted the use of green recycled materials, and optimized lightweight and low carbon designs. We provide Dongfeng Nissan with cost-effective customized material solutions, and have achieved mutual benefit by supplementing each other's strengths, sharing resources, emphasizing practical results, and developing in unison.



Kingfa Was Named "Exceptional Supplier of the Year" by Dongfeng Nissan for Two Consecutive Years

Kingfa continuously provides Dongfeng Nissan with high quality products and services, earning a full QCDDS material product score throughout the year. We also actively and rapidly respond to Dongfeng Nissan's needs, helping the partner ensure raw material supply. In addition, Kingfa has perfected our material certification planning, promoting monthly technical meetings and holding "Brand transformation" marketing events, taking cooperation to a new level for both parties. Because of Kingfa's outstanding performance as a strategic partner, Dongfeng Nissan named us the "Exceptional Supplier of the Year" for two consecutive years in 2021 and 2022.



Kingfa was Named "Exceptional Supplier of the Year 2022"
by Dongfeng Nissan



In addition, we began a partnership with third-party inspection, testing and certification organizations to focus on the mass utilization of renewable energy and cleaner, low-carbon conventional energy. Kingfa actively works towards the global development strategy of energy conservation, green development and renewable energy research, helping the global energy transition.



Kingfa and DEKRA Partnership

Kingfa and DEKRA have begun a partnership in photovoltaic materials, greatly shortening the time spent on transporting samples and waiting for test results. This increases product certification rates and improves product competitiveness in the market. In 2019, our Analysis and Testing Center received DEKRA's Witnessed Lab Qualification for raw materials used in solar energy products. In 2021, two photovoltaic materials produced by Kingfa passed DEKRA's certification, providing powerful support for the fiercely competitive international market.



In 2019, Kingfa's Analysis and Testing Center Received DEKRA's
Witnessed Lab Qualification for Raw Materials Used in Solar
Energy Products

06

Building Sustainable Growth through Ethical Operations

Kingfa operates with honesty and complies with regulations. We strictly follow the code of business ethics, and actively create a system of enterprise operation which abides by legal regulations and the ethical standards of business. We are committed to implementing the company's mission of "providing society with the best products and most satisfying services" through compliant and efficient management.

Key Achievements of 2022

Whistleblowing of internal/external stakeholders:

0 times

Completion rate of internal audit rectification:

91%



Contributing to the UN SDGs

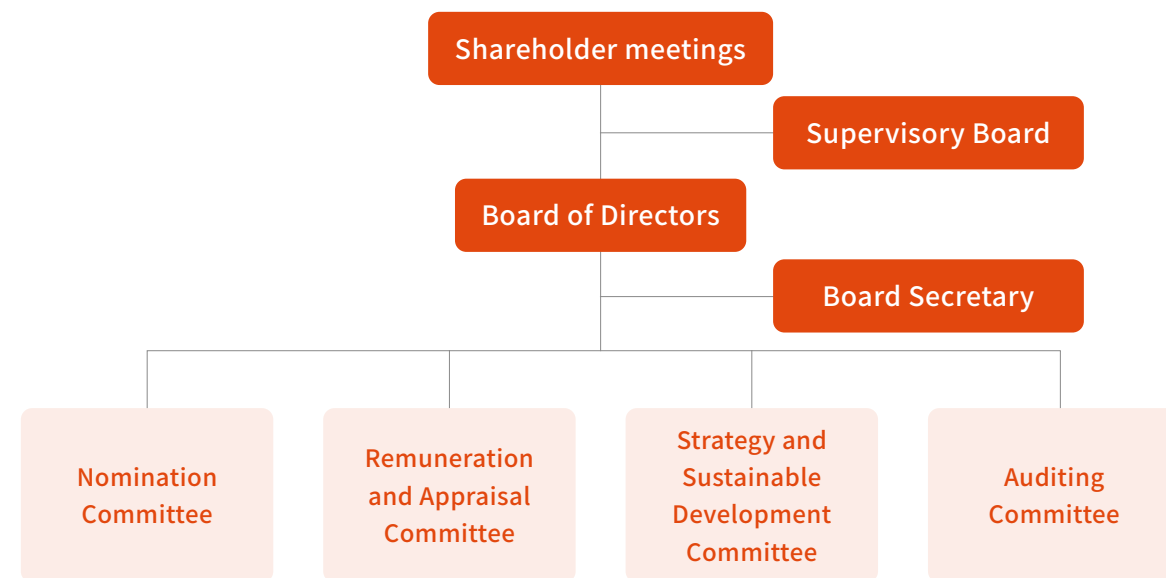


Driving Excellence through Standardized Operations

Exceptional enterprise management is a strong guarantee for Kingfa's sustainable development. Kingfa engages in high-efficiency operations that strictly comply with laws, regulations and other normative documents, including the Company law, Code of Corporate Governance for Listed Companies, and Rules Governing the Listing of Stocks on the Shanghai Stock Exchange, building and continually improving the company's internal management system and enterprise management level.

"Triple Meeting" Operations

Kingfa has established a sound triple-meeting operating mechanism which continuously improves the policy authorization system that includes meetings of the shareholders, Board of Directors, and Supervisory Board. This achieves high-efficiency collaboration and reciprocal checks and balances between the mechanisms of power, policy, and supervision. To protect the legal interests of shareholders and creditors, and standardize the company organization and operations, Kingfa periodically updates and improves governance documents such as the Articles of Association, Administrative Measures for Changes in Shareholdings of Directors, Supervisors and Senior Management, Internal Reporting Policies for Critical Information, and Administrative Measures for Information Disclosure, which are available on the company's official website.



Triple-meeting operating mechanism

Shareholder Meetings

The Kingfa's shareholder meetings are convened strictly in accordance with the requirements outlined in the Company law, Rules of Procedure for Shareholder Meetings of Kingfa Sci. & Tech. Co., Ltd. and Articles of Association. We conduct appropriate procedures for convening and voting, ensuring the presence of all shareholders at meetings and enabling them to fully exercise their rights to inquire, and vote on decisions. In 2022, 5 shareholder meetings were convened, and a total of 15 motions were deliberated.

Board of Directors

Kingfa strictly follows the processes outlined in the Company law and Articles of Association to elect directors, and acts in accordance with relevant legal and regulatory requirements. The Kingfa's Board of Directors operates four sub-committees, namely the Nomination Committee, Remuneration and Appraisal Committee, Strategy and Sustainable Development Committee and the Auditing Committee, providing the Board of Directors with expert opinions and support to assist in decision making. In 2022, the Board of Directors convened 7 meetings, and a total of 35 motions were deliberated.

Supervisory Board

The Kingfa's Supervisory Board strictly carries out the duties outlined in the Rules of Procedure for the Supervisory Board, periodically convening Supervisory Board meetings and engaging in the supervision and inspection of duty performance by directors and senior managers, as well as company finances, helping to protect the interests of the company and its shareholders. In 2022, the Supervisory Board convened 7 meetings, and a total of 23 motions were deliberated.

Independence and Diversification of Board of Directors

Kingfa attaches importance to the independence at the Board of Directors level, and has formulated and periodically updated the Independent Director Operation System. In 2022, the Board of Directors consisted of 11 members, 4 of whom were independent directors. Independent directors make up the majority of members and act as conveners in the Auditing Committee, Nomination Committee, and Remuneration and Appraisal Committee. We are committed to further increasing the proportion of independent directors and strengthening the internal restraints and supervision on the director and management level.

While strengthening the independence of the Board of Directors, Kingfa also attaches importance to ensuring the diversity of board members. We firmly believe that having directors from a variety of backgrounds is crucial for effective supervision of company management and operations. Such diversity allows for assessing risks and opportunities associated with the company business models from multiple perspectives, and fostering a fair, inclusive, and open company culture. As part of the director nomination procedure, the Nomination of Committee ensures that directors are selected from a diverse set of backgrounds by taking multiple factors into consideration, including but not limited to specialty, age, and gender.

The Diverse Backgrounds of Board of Directors Members

Name	Gender	Age	Role	Economics	Finance	Polymer materials	Law
Yuan Zhimin	Male	61	Chairman of the Board			Y	
Li Nanjing	Male	60	Director, General Manager	Y		Y	
Xiong Haitao	Female	58	Director	Y			
Li Jianjun	Male	59	Director			Y	
Ning Hongtao	Male	49	Director	Y			
Wu Di	Male	38	Director, Vice General Manager			Y	
Chen Pingxu	Male	40	Director, Vice General Manager			Y	
Yang Xiong	Male	56	Independent Director		Y		
Xiao Shengfang	Male	53	Independent Director				Y
Zhu Qianyu	Female	47	Independent Director	Y			
Meng Yuezhong	Male	59	Independent Director			Y	

Identifying and Controlling Risks

Kingfa has established a risk control center and formulated the Group Risk Management and Warning Plan, which identifies and confirms risks from the external environment, company level and business level. We have also created a group risk library and risk warning mechanism, clarifying closed-loop risk operations and risk prevention processes.

Risk Identification and Management

Kingfa actively engages in risk identification and management by recognizing, analyzing, and evaluating risks at our headquarters, subsidiaries and branches. We use tools such as the risk database to record, report, and manage medium and high level risks. In 2022, Kingfa identified a total of 164 risks related to finance, law, contracts, the market, and operations. While identifying risks, we utilize the risk database as a management tool to bring risks under control, effectively guarding against and dismantling the impacts of major risks on healthy company development.



Risk Warning System

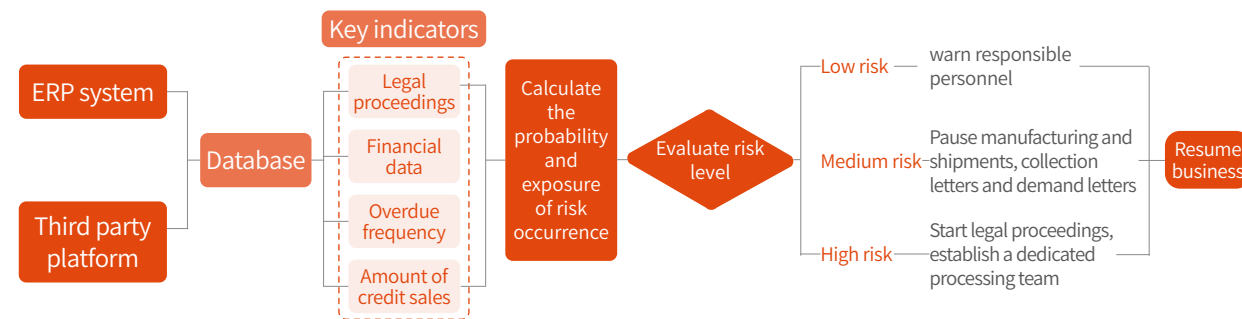
In addition to strengthening risk management, Kingfa adopts measures that focus on technological advancements. To avoid risks, the company has expanded the scope of our risk investigation and built up a dynamic cycle warning system. Based on the uniqueness and pervasiveness of risks that have been identified, we investigate and review similar risks that may affect other departments, identifying risks that trigger the risk warning conditions and requesting the responsible parties rectify those risks in a timely manner.



Dynamic Cycle Warning System Assists in Credit Control

Continuous risk identification and warning serve as a useful credit control tool for Kingfa. Take credit management for example. Having identified risks for certain business departments, we improved the risk parameters configuration of the existing risk warning system, which lowered the occurrence of overdue receivables by 9 percentage points, increasing the turnover rate by 0.9 times, and improving loan quality.

Building and continuously improving Kingfa's customer information database is key to responding to overdue receivables warning system. We established an internal interface to retrieve data of transactions and payment collection from the ERP system, and built an external interface for third-party platforms to improve information about customer business, legal disputes, and the status of operations. Based on these two interfaces, we drew a regional risk map using customer key indicators, forming a picture of customer credit, evaluating their risk level, and taking appropriate measures to mitigate risks.



Compliant Operations, Transparent Disclosure

Kingfa firmly maintains the bottom line of compliant operations by strengthening auditing supervision functions, abiding by business ethics, and continuously improving the information disclosure system. These measures help us to enhance operational compliance.

Compliance and Business Ethics

Kingfa has always committed to compliant operations. We firmly follow ethical standards, continue to broaden the scope of our compliance system and business ethics, conduct internal and external audits and employee compliance awareness training. In addition, we resolutely oppose all forms of corruption and bribery to protect the rights and interests of the company and our stakeholders.

To ensure the healthy development of our company's operating activities, and guarantee that there are no infringements on the legal rights and interests of any shareholders, Kingfa has formulated the Internal Audit Policies in accordance with laws and regulations such as the Audit law of the People's Republic of China and National Audit Office Regulations on Internal Audit, which also takes into account the company's realities.

We periodically review and evaluate our company's operating and business activities to discover problems as quickly as possible and fill in gaps in management. Each year, Kingfa's audit team creates an annual audit plan based on our company's internal control needs and audit priorities. It then conducts audit projects to assess the effectiveness of internal operational management and evaluate operational risks. As of the Reporting Period, Kingfa has completed multiple internal and external audits, and rectified 102 items – a rectification rate of 91%.

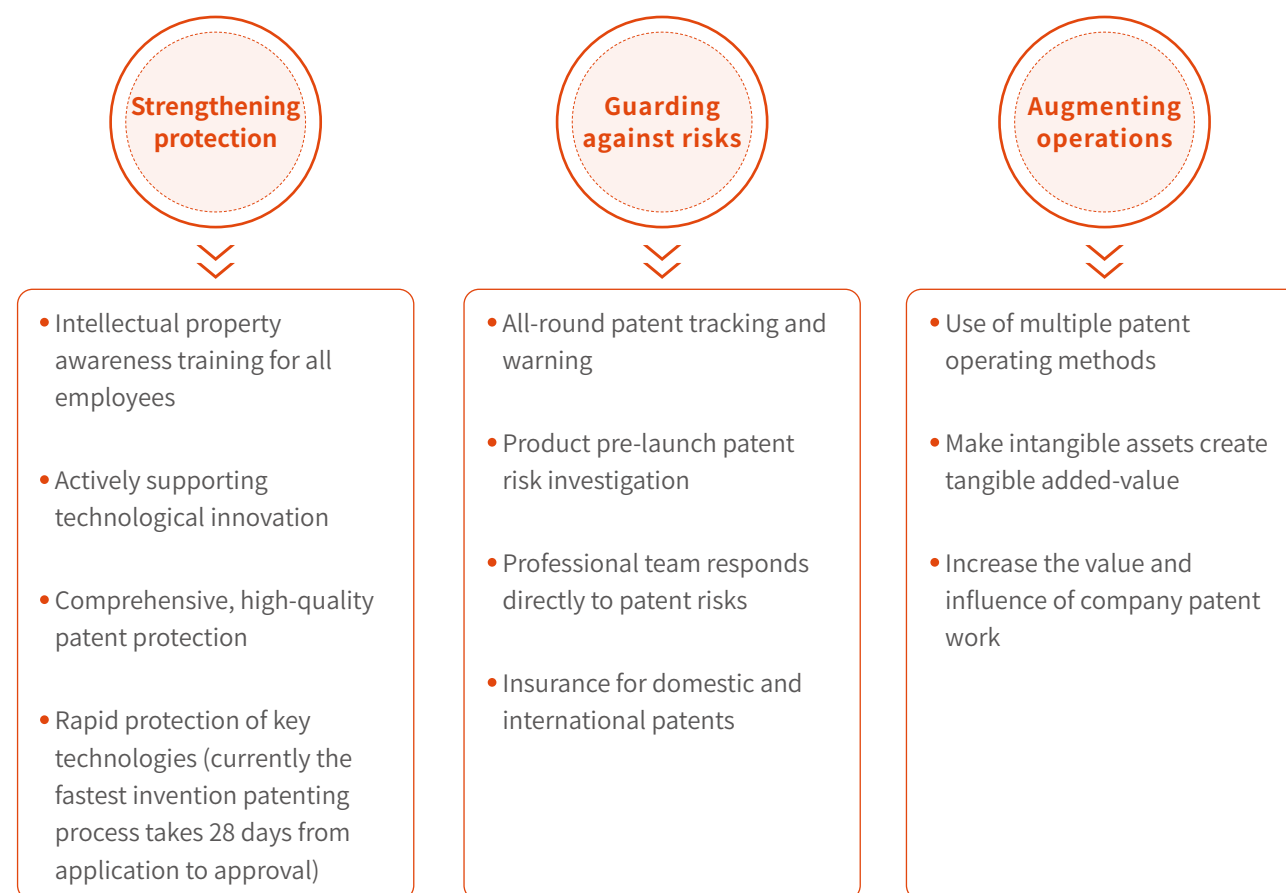
Kingfa advocates for a business philosophy which upholds honesty and trustworthiness and aims to build an incorruptible and transparent business community. To this end, Kingfa has formulated the **Administrative Measures on the Receipt of Gifts in Business**, which clarifies the duties and responsibilities of the company and employees in terms of compliance and guarding against bribery and corruption. Kingfa continually improves internal whistleblowing mechanism and whistleblower protection mechanism. We have set up an email address for receiving reports from employees 24 hours a day. We also strictly protect the privacy of whistleblowers to prevent any retaliation on them.

Kingfa has established a compliance and business ethics training system that covers all employees. Marketing and financial affairs staff are required to receive training on the prevention of corruption, bribery, and money laundering. We also periodically provide Securities Department staff with training on new regulations of the China Securities Regulatory Commission. Kingfa actively holds on-site compliance training at each operations office, the content of which covers topics such as local legal regulations, the company's compliance standards, code of ethics, and more.

To ensure that the corporate compliance management system abides by high standards, high requirements, and remains up-to-date, Kingfa has introduced the Compliance Management System Requirements and Usage Guidelines (GB/T35770-2022) as the standard for corporate compliance management. This will effectively reduce the risk of overlapping corporate responsibilities, inefficient management, and disorganization, and further contribute to resource support, the deployment of managers, continual company improvement, informatization, the creation of a culture of compliance, and the establishing of compliance reporting mechanisms.

Protecting Intellectual Property Rights (IPR)

Kingfa steadfastly follows the path of sustainability driven by innovation. We attach great importance to IP right protection, following laws and regulations such as the Patent law of the People's Republic of China, and have established an intellectual property office. Kingfa is committed to protecting achievements in technological innovation, guarding against patent risks, and strengthening patent operations.



Kingfa IP right protection measures

Kingfa also operates research and development bases in overseas areas, so we care about safeguarding our IP rights overseas. As a key contact unit of the National Overseas Intellectual Property Dispute Response and Guidance Center, Kingfa actively engages in communication and exchanges with overseas professional organizations to acquire the most up-to-date information about laws and regulations pertaining to international intellectual property. We are doing our utmost to protect the company's IP rights overseas.



Kingfa and European Patent Office Conduct Exchanges

Kingfa was the first chemical enterprise in Asia to communicate with the European Patent Office (EPO). On June 25, 2021, Kingfa and the EPO convened their first video conference focusing on patent work communication, during which the keynote speech "Essential points of chemical patent applications in Europe" was given. Both parties engaged in in-depth discussions on the verification of experiment data, patent application standards, and other topics.



Patent Work Communication between Kingfa and the EPO



Information Security

In the information age of today, events like information leaks and network attacks are regular occurrences. Kingfa attaches great importance to information and data security. In 2018, we founded a professional information security team and established 3 phased objectives to improve the company's information security: "visible", "controllable", and "trustworthy". In 2020, Kingfa achieved its "visible" objective, possessing improved risk discovery and monitoring capabilities. In 2021, we established multiple defense systems that can effectively control risks, achieving the objective of "controllability". As of the end of 2022, Kingfa possesses the ability to conduct our own security operations, and has essentially achieved the objective of "trustworthiness".

In accordance with Cybersecurity law, Information System Multi-Level Protection Scheme (the 'MLPS') and other laws and regulations, Kingfa focuses on the three-level requirements of MLPS 2.0, and has conducted security development, evaluation, and rectification of core business systems such as ERP, SRM and OA. An improved management system centered on information production, dissemination, storage, use, and destruction effectively ensures the secrecy, completeness, and accessibility of information assets, offering strong protection of the privacy and data security of Kingfa and all the stakeholders.



In 2021, the Government of Shanghai's Huangpu District Organized a Cyber-attack Defense Event Involving 40 Large Enterprises; Kingfa Ranked 2nd in Terms of Performance

Division of Employee Authority	Secure Software Guarantee	Life Cycle Management
Adopting the principle of "minimizing authority", Kingfa assigns employees varying levels of internet access authority and authority control	Security software is installed on the server, network, user terminal, and access method layers	Information security testing and maintenance is conducted throughout the lifecycle of a program, covering design, launch, operation and maintenance, and removal

Kingfa information security management measures

The improved information security awareness among employees plays an integral role in perfecting an enterprise's information security system. Each month, we disseminate information security knowledge to employees via our internal company WeChat account, and irregularly offer warnings about critical information security matters impacting the industry. In addition, Kingfa requires all employees to receive basic information security training and holds specialized training on other topics as needed to increase employee awareness of data security and privacy protection.



Information Security Training

Key Achievements of 2022

Information security training sessions: **20**

Number of attendances of information security training: **8,900**

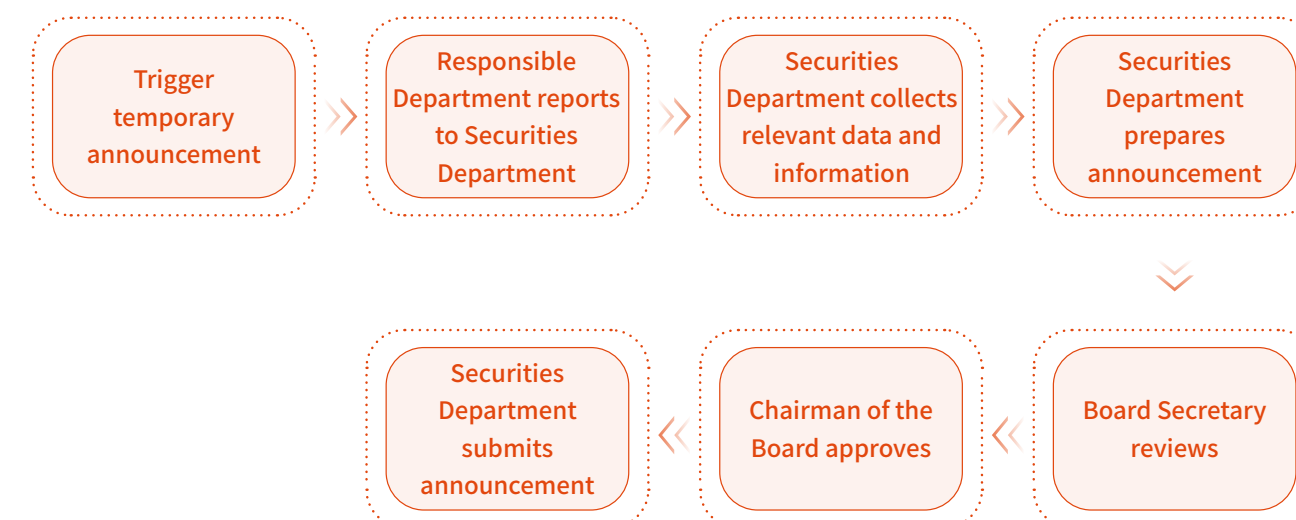
Cumulative hours of information security training: **11,000**

Transparency

Standardized and transparent information disclosure is an effective channel of communication between Kingfa and investors, regulatory departments, and other stakeholders. Kingfa strictly adheres to the Administrative Measures for the Information Disclosure of Listed Companies, and has formulated the Information Disclosure Management Policies to disclose information related to company operations and governance in a way that is truthful, accurate, complete, timely, and fair. We rigorously carry out the information disclosure duties of a listed company, and actively protect the legal rights and interests of our investors and other stakeholders.

As sustainable development has become a common goal pursued by the whole world, Kingfa continues to improve our ESG information disclosure work, sharing information about our sustainable development implementation and achievements through a diverse range of channels, including our official website, WeChat public account, and collaborations with external media. We actively respond to the interests and expectations of Kingfa stakeholders.

Kingfa has designated the China Securities Regulatory Commission as the announcer of media which meets the conditions of securities market information, and the Shanghai Stock Exchange website as the publisher of company announcements and other information which requires disclosure. The company discloses information on the designated disclosure media prior to any such disclosure on other public media, and press releases or press conferences will not take the place of company announcements. The following figure shows Kingfa's information disclosure process:



Appendix 1: GRI Standards Index

Content		GRI Standards
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Leading Innovation, Creating a Global Brand	Independent R&D and Inclusive Innovation	2-28
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	Empowering Talents, Sharing Value	2-19、404-1、404-2、404-3
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	Compliant Operations, Transparent Disclosure	205-2、205-3

Appendix 2: Provincial R&D Centers

Hubei Enterprise Technology Center	Guangdong Kingfa Engineering Technology Center
Hubei Engineering Technology Research Center	Zhuhai Kingfa Provincial Key Laboratory
Sichuan Provincial Enterprise Technology Center	Zhuhai Kingfa Engineering Center
Tianjin City Enterprise Technology Center	Kingfa Technology Engineering Center
Tianjin City Enterprise Key Laboratory	Kingfa Technology Provincial Key Laboratory
Tianjin City Engineering Research Center	Kingfa Technology New Research and Development Institution
Jiangsu Enterprise Scholar Workstation	National Advanced Materials Guangdong Engineering and Technology Research Center
Jiangsu Enterprise Technology Research Center	Shanghai Engineering Plastic Functionality Engineering Technology Research Center
Jiangsu Enterprise Technology Center	Shanghai Enterprise Post-doctorate Scientific Research Workstation
Jiangsu Graduate Student Workstation	Shanghai Academic Expert Workstation
Guangdong Composite Materials Engineering Center	
Guangdong Kingfa Engineering Laboratory	

Feedback

Dear readers:

Hello!

Thank you for taking the time to read the "Kingfa 2022 ESG Report". For the purposes of communication and to improve Kingfa's sustainable development management and implementation, we humbly ask you to complete the following feedback questionnaire regarding this report.

1. What is your overall rating of Kingfa's ESG report?

☐ Very good ☐ Good ☐ Ok ☐ Poor
2. How would you rate the truthfulness, accuracy, and effectiveness of the information and data revealed in this report?

☐ Very good ☐ Good ☐ Ok ☐ Poor
3. How well does this report reflect Kingfa's influence on the environment, society, and governance?

☐ Very good ☐ Good ☐ Ok ☐ Poor
4. How would you rate communication with Kingfa stakeholders?

☐ Very good ☐ Good ☐ Ok ☐ Poor
5. Are the writing, content layout, and page format design of the report easy to understand?

☐ Yes ☐ No
6. Do you have any comments or suggestions about Kingfa's ESG Report?

Please contact us through one of the following methods:

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Thank you again for your time!