



2022

Sustainable Development Report

Yibin Grace Co., Ltd.

Table of contents

About This Report	01
Speech by the Chairman	03
Key Performance in 2022	05

01

About Grace

1.Basic Information	09
2.Production Layout	11
3.Business Overview	13
4.Company Products	14

02

Sustainable Development

1.The concept of sustainable development	23
2.The sustainable development management framework	23
3.Identification of and communication with stakeholders	24
4.Analysis of substantive issues	25
5.Honors	26

03

Climate Change Response

1.Formulation of the “carbon peaking and carbon neutrality” strategy	31
2.Establishment of a carbon management system	32
3.Promotion of carbon emission reduction during the operation	33
4.Development of low-carbon products	39

04

Environmental Protection

1.Environmental management	47
2.Water resources management	51
3.Chemical management	53
4.Pollution prevention	55

05

Inclusive Growth

1.Rights and interests of labors	61
2.Public welfare	70
3.Harmonious community	70
4.Common prosperity	71

Index of Report Indicators	73
Reader Feedback	74

About This Report



Overview

The Sustainable Development Report 2022 of Yibin Grace Co., Ltd. is the second sustainable development report released by Yibin Grace Co., Ltd. (Hereinafter referred to as Grace), which sets out ideas, strategies and practices on sustainable development of Grace in 2022.

Grace attaches great importance to communication and exchanges with stakeholders and expects to facilitate all parties to better understand its strategies and actions on sustainable development by releasing this report, thereby enhancing cooperation and achieving win-win results.

It is planned that subsequent reports will be released annually.



Reporting Period

The reporting period of this report begins on January 1, 2022 and ends on December 31, 2022, and some contents may be traced back to previous years.



Reporting Scope and Boundary

This report contains information on Yibin Grace Co., Ltd., Yibin Grace Group Co., Ltd. and its relevant subsidiaries. Please refer to “About Grace” for details.



Basis for Preparing the Report

This report is prepared by referring to the China Sustainability Reporting - Guidelines for Apparel and Textile Enterprises (CSR-GATEs: 2008), core schemes set out in the Sustainability Reporting Standards by Global Reporting Initiative (GRI), Sustainable Development Goals (SDGs) defined by the UN, and the Guidelines on the Social Responsibility for Industries of China (2.0).



Data Source and Reliability Assurance

The data and information contained in this report are mainly from official documentation provided by Yibin Grace Co., Ltd., Yibin Grace Group Co., Ltd. and its relevant subsidiaries.



Information Access

This report is prepared by Grace in Chinese and you can get a free copy of this report through the following website.

Download Website: <https://www.cn-grace.com>.



Scan the QR code to get the report.

Speech by the Chairman



Deng Min

President of Yibin Grace Group Co., Ltd.

In 2021, we released the first sustainable development report of Grace, and now we are in 2022. This year, with the theme of sustainable development, we focused on the concept of “green, low-carbon, health and sustainability”, actively participated in a series of activities such as the “Climate Innovation Actions in Textile and Apparel Industry”, the assessment and selection of “Practitioners of Sustainable Fashion”, the release of “China Fiber Fashion Trend”, and the establishment of “Water-saving Benchmark Enterprise”, and continued to contribute to the efforts of Grace in actively coping with climate change, promoting sustainable fashion, and actively practicing social responsibility.

We have built a “three green manufacturing” model and integrated sustainable development into the planning blueprint.In the process of enterprise relocation and construction, we actively built a “three-green manufacturing” model integrating “green raw materials, green technology and green energy”, created a “five orientations” green economic system characterized by “green orientation, low-carbon orientation, energy-saving orientation, digital orientation and intelligent orientation”, innovated energy-saving and carbon-reducing working methods, implemented the concept of ecological sustainable development throughout the entire life circle of fiber manufacturing, and continuously promoted the upstream and downstream of the industry to work together for low-carbon transformation and green development of the entire industry chain.

We have focused on the goal of “carbon peaking and carbon neutrality development” and implanted the characteristics of low-carbon products into product genes. We took the initiative to join the “3060 Acceleration Plan”, completed the baseline measurement of carbon emissions of enterprises and the evaluation of carbon

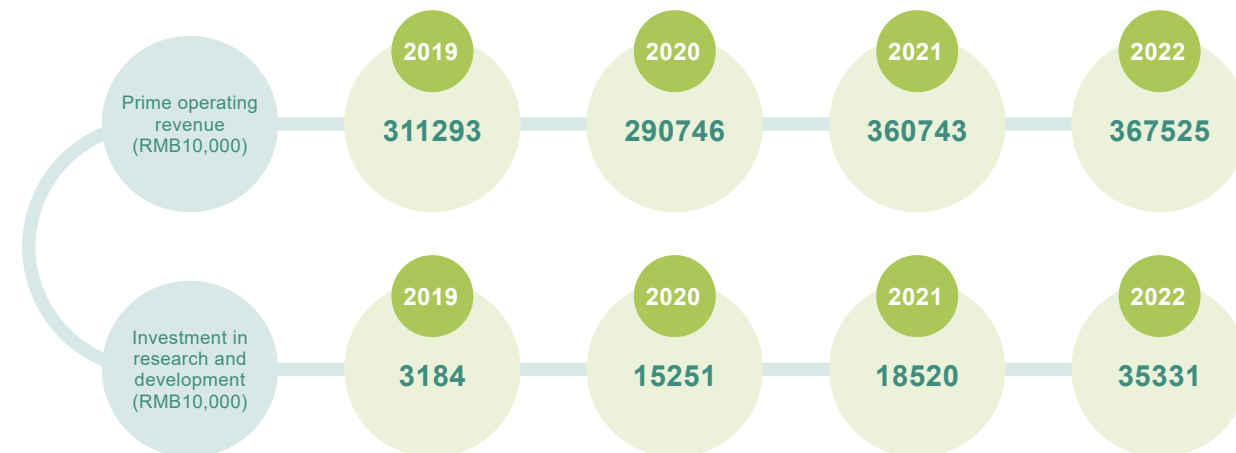
footprint based on the entire life cycle of products, and put forward the goal and path of carbon neutrality. The green certification has been implemented in the entire process of raw material acquisition, production process and market application. The technology of preparing fiber from bamboo pulp and recycled pulp has been developed, and patented brands such as “Gracell” and “Gracell Cotton” have been created, and the “Grace New Solution” for low-carbon development has been put forward to care for our blue planet and protect the beautiful home of mankind.

We have protected the welfare of employees, contributed to public welfare undertakings, and promoted social harmony through development. Through improving the salary and welfare, we helped the poor employees to create a “Happy Grace”; through the implementation of “Anti-pandemic Bubble” closed-loop management, we realized zero infection of employees during the pandemic, so as to guarantee a “healthy Grace”. We implemented voluntary service by cooperating with the communities, cared for students through fund donations and educational assistance, integrated into rural and urban regions to boost rural revitalization, built parks to beautify the living environment, and conveyed the enterprise culture of “beauty, charm, and happiness” with the public welfare force, so as to promote the same frequency resonance with social development.

The long endless journey will surely reach a bright end. Grace will adhere to “pragmatic creation” and “all-round innovation”, rely on “solid technology to realize steady development”, “green concept to help development”, and “transformation and upgrading to promote development”, explore the way of sustainable development, serve the strategic goal of “carbon peaking and carbon neutrality”, and be determined to create a better future with partners.

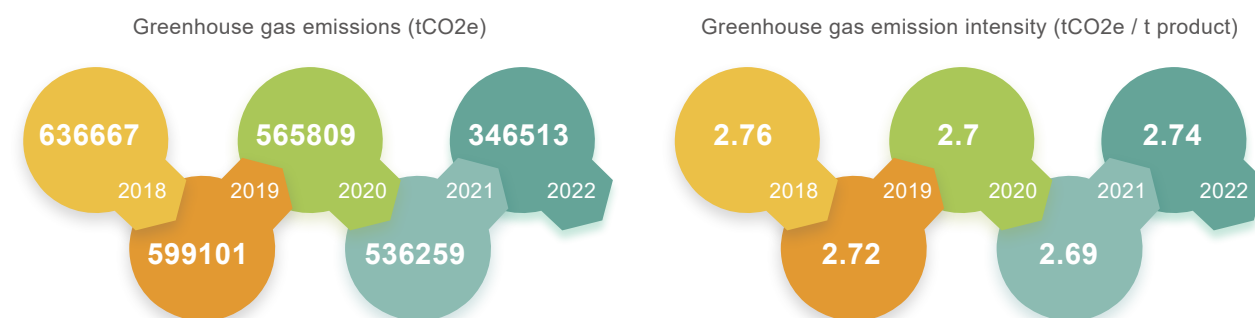
Key Performance in 2022

Economic Performance



Carbon peaking and carbon neutrality development

The condition of Greenhouse gas emissions

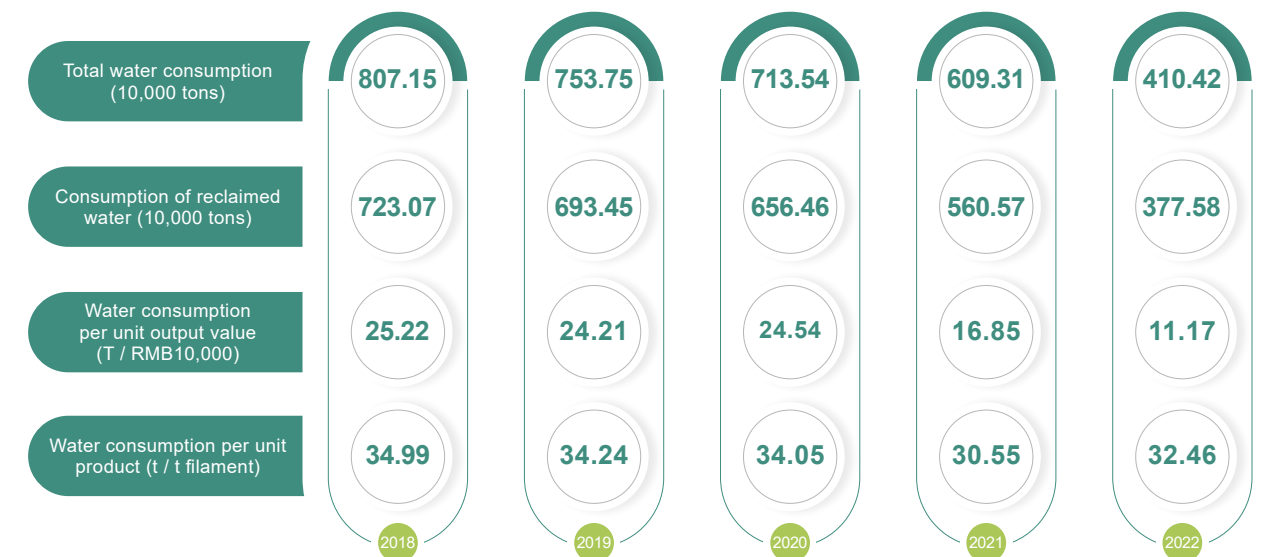


Energy consumption



Environmental protection

Water data usage



Solid waste management

	General solid waste (t)	Hazardous waste (t)	General solid waste (kg/t product)	Hazardous waste (kg/t product)
2019	1386	13.5	7.64	0.06
2020	1152	15.36	7.25	0.08
2021	807.15	19.98	5.78	0.1
2022	802	34.76	6.34	0.27

Note: The increase of hazardous waste is mainly activated carbon.

Rights and interests of employees

Headcount

1017	970	932	883
2019	2020	2021	2022

Labor contract signing rate

100%	100%	100%	100%
2019	2020	2021	2022

Employee insurance coverage

100%	100%	100%	100%
2019	2020	2021	2022

Social responsibility

Grace Youth Volunteer Service Team

It participated in **79** volunteer service activities, with **516** participants and an effective duration of more than **1,500** hours.

Consumption assistance

Through the mode of "purchasing instead of donating" to help farmers in income increase, we have purchased more than **15,000** Jin of various fruits from local farmers.

Industrial assistance

By investing in factories, **228** jobs were provided.

Educational assistance

We carried out activities to help the poor students. We have helped **7** primary school students, **3** middle school students, **2** secondary vocational school students, and **2** orphans.



01



About Grace

- 1. Basic Information
- 2. Production Layout
- 3. Business Overview
- 4. Company Products



Basic Information

Yibin Grace Co., Ltd., a subsidiary of Yibin Grace Group Co., Ltd., was established in 2000, located in Yanpingba Industrial Park, Nanguang Town, Xuzhou District, Yibin City, Sichuan Province. It is the only comprehensive growth enterprise in southwest China that mainly produces bio-based cellulose fibers (also known as regenerated cellulose fibers, viscose fibers, artificial cotton fibers, etc.) and composite pulp, with an annual output of 240,000 tons of viscose staple fibers.



Read more: Introduction of Yibin Grace Group Co., Ltd.

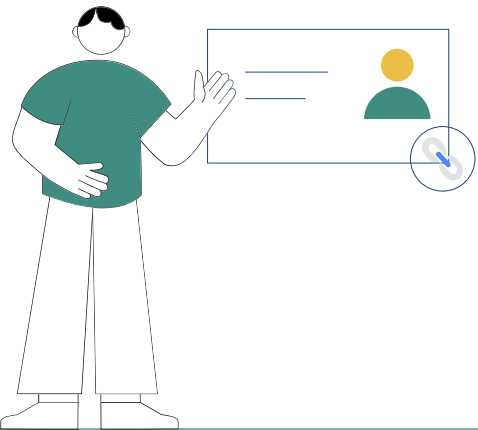
Yibin Grace Group Co., Ltd. is a large-scale comprehensive modern state-owned enterprise group with bio-based cellulose fibers and their new material industry as its core business. Based on the bio-based fiber industry, the Company has built a “One-base and binary” industrial cluster, with the “unitary” selective real estate 1+N system, and the “unitary” strong bio-based medical and health materials; the Company has built an industrial structure with “bio-based fibers”, “real estate”, “medical and health materials”, “supply chain trade”, and “liquor industry” as the main development direction, established a national-level post-doctoral research center and nationally-recognized enterprise technology center, and won national honors such as the “Second Prize of the State Science and Technology Advancement Award”, “China Patent Gold Award”, “National Innovative Enterprise”, “National International Workers’ Day Award”, and “National Textile Science and Technology Enterprise”. The Company now has more than 50 items of international leading technology, more than 100 items of domestic leading technology and more than 1,500 independent intellectual property rights. The number of patented technology accounts for 57% of the whole industry, and the patent implementation rate reaches over 80%.

As for the Grace bio-based cellulose fiber industry, the Company, playing the leading role as a leading enterprise in Yibin’s textile industry cluster with RMB100 billion, has cultivated a number of fiber products with independent intellectual property rights, such as Gracell and Gracell Cotton by relying on scientific research industry technology groups such as “one spindle with multiple filaments” independently researched and developed, and extended to the dietary fiber and xylooligosaccharide industries, forming circular economy demonstration enterprises represented by Sichuan Yahua Biological Co., Ltd. and Yibin Yatai Biotechnology Co., Ltd.

During the pandemic, Grace’s medical and health material industry turned the crisis into opportunities and entered into the field of medical and health materials. Relying on the fiber industry foundation, it connected the whole industrial chain, built a new marketing model of “industry+Internet”, formed nine terminal textile brands such as home textiles and bedding, clothing and health protection, and realized the popularity of “Made by Grace” textiles among ordinary people.

Grace supply chain industry firmly adheres to the road of sustainable development and has passed many international green certifications such as Canopy; it dared to break through trade barriers, and responded to the lawsuit of “countervailing” case about Indian viscose filament, which finally obtained a complete success; it has actively integrated into the “Belt and Road Initiative” and actively participated in the construction of the operation platform for the southbound international freight trains. The Company’s import and export trade has been in the forefront of the province for many years, and it has been rated as a “Leading Enterprise of Opening-up Development in Sichuan Province”.

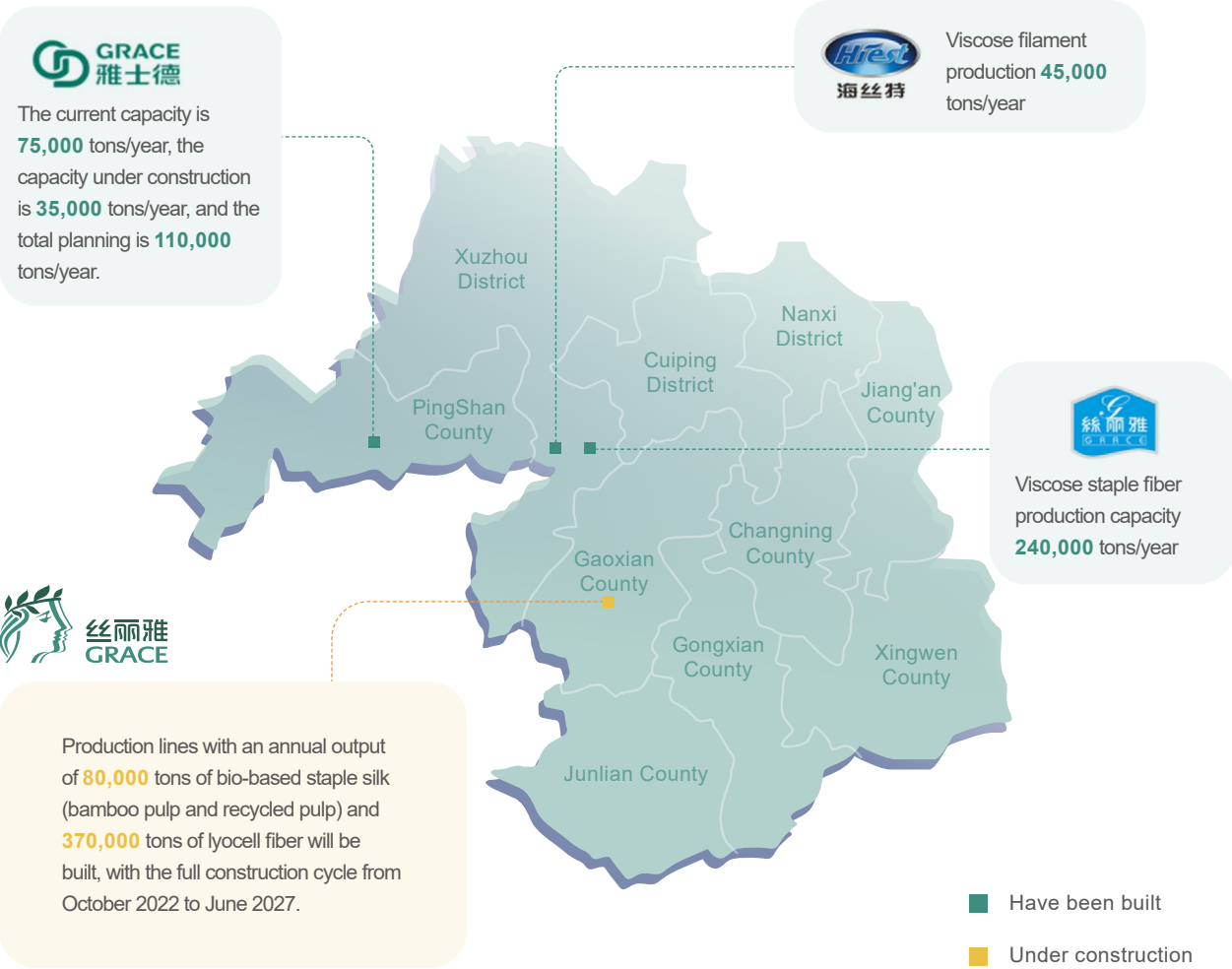
Next, Grace will continue to take the pace of high-quality development, vigorously implement the innovation-driven and industrial-development “two-wheel driving” strategy, and strive to achieve a total operating income of more than RMB50 billion during the “14th Five-Year Plan” period, enter into the “Double 500” goal of top 500 Chinese enterprises, and show the achievements of Grace in the new journey.



Production Layout

Grace enjoys a favorable geographical location as it is located at the intersection of the north-south trunk line and the east-west axis of the Yangtze River under the national transportation planning -“five vertical and seven horizontal main trunk lines”, linked to the junction of Sichuan-Yunnan-Guizhou Provinces and close to the golden waterway where the Panzhihua - Xichang - Liupanshui area connects the Yangtze River. For many years, benefiting from its favorable geographical location and abundant environmental resources, Grace has achieved rapid development, becoming an important contributor to the local economic and social development; through carrying out ecological civilization construction, it has become the protector, builder and beneficiary of ecological environment and biodiversity.

Currently, Yibin is facing an accelerated pace of urban development, accelerated adjustment of spatial patterns, and rising needs for ecological environmental protection. Being adjacent to the main line of the Yangtze River, Grace has a heavy responsibility to protect the ecological environment. Meanwhile, with the growing demand for viscose raw materials in the consumer market, existing capacity cannot meet the actual needs of the market. Against this backdrop, the Company, after comprehensively thinking about various factors including urban development, ecological protection and its own strategy, decided to relocate the Yanpingba factory and realize industrial upgrading and high-quality development through the improvement of technology, equipment and management, thereby promoting local economic development and ecological civilization construction.



Distribution of production bases as well as production capacity

Promoting transformation and upgrading and high-quality development by industrial relocation

Taking the opportunity of industrial relocation, Grace insists on the combination of eliminating backward production capacity and industrial transformation and upgrading, and develops towards a green, low-carbon, intelligent and safe direction.

Firstly, green upgrading. Through centralized energy heating, waste gas adsorption combustion, energy gradient utilization and other means, the cyclic gradient utilization of water resources is carried out, the green manufacturing level of fiber production process is comprehensively upgraded, and the comprehensive and efficient utilization of resources and energy is realized.

Secondly, low-carbon upgrading. The Company has focused on the implementation of combined heat and power generation projects, promoted the double reduction of total energy consumption and unit consumption, applied low-carbon bamboo pulp and recycled pulp raw materials, carried out close-range resource procurement, promoted green electricity transportation in the supply chain, and drove carbon reduction in the supply chain industry chain.

Thirdly, intelligent upgrading. The Company has built an integrated and intelligent management command center to collect real-time data, used digital, networked and intelligent technology, and applied production, consumption, management, safety and other information data to realize all-round monitoring and efficient management of production operation, raw material consumption, product inventory and sales, post-processing and other links.

Fourthly, safety upgrading. The Company has followed the concept of super-standard construction with strict design, scientific layout and safety management, realized full automatic control of the whole process and digital control over key processes, and ensured production safety and industrial safety with technical safety.

Promoting local economic development and ecological civilization construction through industrial relocation

Environmental Benefit: Industrial relocation will contribute environmental capacity to the development of the central urban area of Yibin City. The old factory area is expected to contribute 2,402 tons/year of environmental capacity to the improvement of air quality in the central city, demonstrating the priority transformation and upgrading of industrial ecology, high-quality development and green and low-carbon construction of the project.

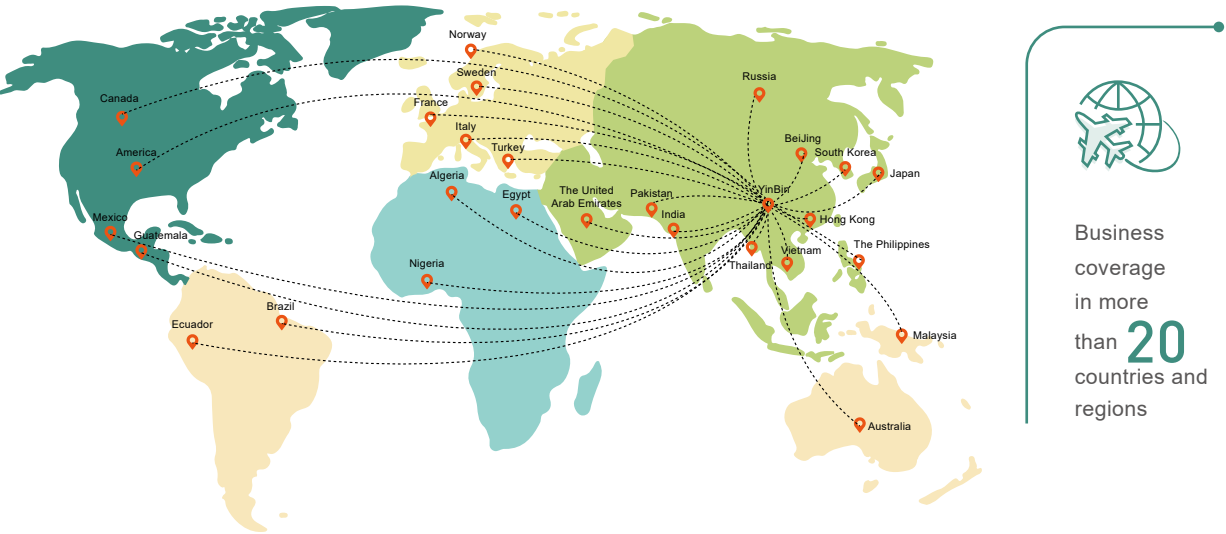
In the construction of the new area, the Company cooperates with the power company in combined heat and power generation, without a need to build new coal-fired boilers, so as to save project investment and land resources. The combined heat and power generation project is expected to save 240,000 tons of standard coal every year, and the thermal efficiency will be improved by nearly 20%. Accordingly, the annual carbon emission index will be optimized to release 700,000 tons, and the annual sulfur dioxide emission reduction will be 153.18 tons, compounds of nitrogen and oxygen (NOx) will be 875.5 tons, and dust will be 61.12 tons.

Economic Benefit: The green low-carbon high-end cellulose fiber new material project applies Grace's patented technology to build green low-carbon cellulose fiber high-end new material production lines and create a world-class green low-carbon cellulose fiber high-end new material industrial base enterprise. The total operating income will reach more than RMB50 billion and will be listed in the top 500 Chinese enterprises.

Social Benefit: After the completion of the project, it will not only promote employment, but also help improve local infrastructure construction. In the first phase of the project, the annual profit and tax will be RMB150 million and 500 jobs will be provided.

Business Overview

Grace is mainly engaged in the production and sales of viscose (filament and staple fiber), cellulose pulp and its ancillary products, as well as textiles. Its business is extended to more than 20 countries and regions such as Europe, America, South Korea, Japan, India, Pakistan and Vietnam, and its principal products earn good reputations both at home and abroad. In 2022, the Company's viscose staple fiber, viscose filament and embroidery thread accounted for 2%, 20% and 86% of the international market and 5.2%, 25% and 15% of the domestic market respectively. Grace has won the recognition and trust of customers and consumers at home and abroad with high-quality products.



Business Layout



Company Products

Main products

> Viscose filament yarn

Brand Name: Grace, Simice

Production capacity: The annual output of centrifugal spinning is 40,000 tons, and that of continuous spinning is 5,000 tons.



> Raffia

Brand Name: Grace

Production capacity: 333.3 ~4440dtex/1f flat high denier viscose filament with an annual output of 10,000 tons.



> Viscose embroidery thread

Brand Name: LIMICE

Production capacity: 18,000 tons per year



> Viscose staple fiber

Brand Name: Yacel and Gracell

Production capacity: 340,000 tons per year



> Spun rayon yarn

Brand Name: Yamice

Production capacity: Vortex spinning is 55,000 tons and Siro compact spinning is 10,000 tons.



> Regenerated cellulose filament

Brand Name: Circulose®

Production capacity: 10,000 tons per year

Source of recycled pulp: Waste textiles containing cotton before and after consumption.

Proportion of recycled components: 30%-100%



New product development

The Company attaches great importance to product R&D, especially differentiated fiber products. At present, the Company is vigorously promoting the development and application of temperature-regulating fiber, fine denier Gracell fiber, bamboo-based cellulose fiber and recycled cellulose staple fiber to meet the new market demands.

The new products to be launched by the Company

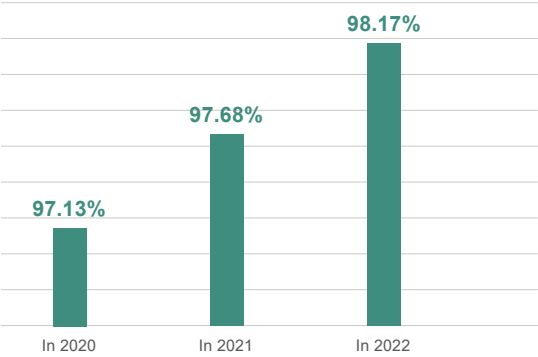
Product Name	Feature Introduction	Application Scenario
Temperature-regulating fiber	It gives full play to the temperature-regulating function of phase change heat-sensitive materials in fiber, and can be warm in winter and cool in summer in clothing.	It is used in clothing, bedding, home textiles and close-fitting clothes.
Fine denier Gracell fiber	It is a kind of fine denier and ultra-fine denier fiber between 0.9 and 1.2D, which is lighter, softer and more skin-friendly.	It provides raw materials for high-end yarns such as rotor spinning, vortex spinning and compact Siro spinning.
Bamboo-based cellulose fiber	It uses the antibacterial, hygroscopic and air permeable properties of bamboo-based fibers to make products superior to conventional fibers.	It provides raw materials for high-end yarns, which can be used for infant close-fitting clothes and medical and health products.
Recycled Gracell	It uses waste textiles as raw materials to make recycled Gracell products with lower carbon footprints.	It is widely used in clothing, bedding, home textiles and other high-end textile fields.

Product quality

The Company pays high attention to the requirements of the market for product quality, constantly improves the quality management regulations and processes, innovates management means and forms, realizes stable and continuous improvement of product quality, and wins customer recognition and good market feedback. In 2022, the Company passed the quality management system certification again, and carried out various quality management activities in the whole process according to the system requirements, including 456 labor competitions and 1305 post training, with 100% product qualification rate, 98% first-class product rate, increased first-class product rate by 0.49% year-on-year, and constantly improved customer satisfaction.



The first grade rate of company staple fiber



Quality management concept

Quality promotion with equipment

Based on the concept of “high-quality development and refined management”, the Company carries out work from the aspects of equipment structure upgrading, equipment quality influence elimination, and standardized management. It has upgraded and reformed equipment to improve the quality of viscose, upgraded and improved the recycling machine to increase the filtration capacity of alkali liquor by 50%, carried out standardized management of equipment to improve the uniformity of fiber forming, and improved the management of equipment information and visualization, so as to ensure the stable operation of equipment to provide basic conditions for improving product quality.

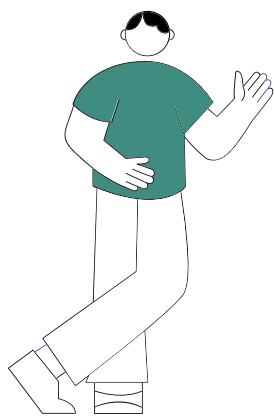
Quality promotion with technology

The Company adheres to the market demand orientation, improves the product quality through process optimization and improvement, and realizes that the fiber strength is increased by 10% and the elongation is increased by 4%. When the fiber is used in spinning, the yarn strength, yarn quality and yarn yield are obviously improved.


Quality promotion with management

The Company adheres to the problem-solving orientation to find, analyze, and solve problems, implements refined process standards, production management and operation process, improves process operation standards and process convergence standards, especially strengthens the process standards for middle and night shifts, enhances mutual supervision between upper and lower processes, constantly controls process quality, and achieves a stable improvement of product quality.

Quality management guideline



- New technology and new process to ensure uniformity and promote stability;
- Advanced and fine management to realize fine and excellent products.




01

Facing the severe market under the new situation, the Company has a new understanding of the market with new thinking and new ideas. All work starts with the market, ends with the market and serves the market.




02

With the principle of brave reform and corporate governance with intelligence, the Company establishes a new concept of “all for quality and quality for all” to ensure the uniformity and stability of product quality with

 new technology and new process.


03

The Company integrates advanced quality management methods, uses advanced quality management tools, implements refined quality management modes, and realizes high-quality products, so as to pursue excellence with continuous improvement.



04

The Company actively participates in market competition, wins the market with high-quality products, and pursues outstanding performance.



Quality management regulations and organizations

- Quality management supervision Committee



Organization chart of quality Control and Supervision Committee

- Quality management files

Quality management system manual	Relevant provisions on marking semi-finished products and finished products
Quality management system procedure document	Product varieties, brands, specifications, grade packaging labeling provisions
State of inspection and testing procedures	Relevant provisions on product packaging
inspection and testing procedures	Provisions on handling, storage, packing, protection and delivery
Inspection sample management regulations	Quality complaint handling method
Technology administrative provisions	Measures for the examination and approval of the disposal and use of unqualified raw materials
Regulations on the technology management of process inspection	Quarantine system for nonconforming products

Methods and modes of quality management

• PDCA process management method

The Company takes PDCA method to control each process, continuously reforms products, management system and management activities, and constantly improves the Company's quality management system and the quality management level.

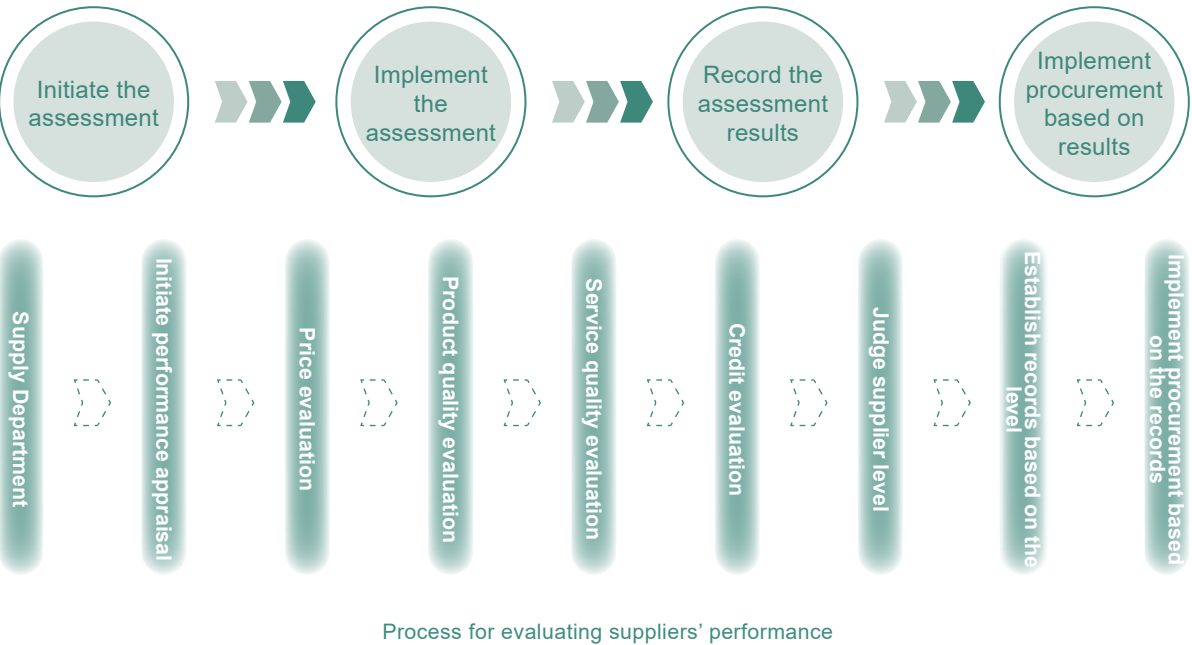
• Excellent performance management model

Since 2008, the Company has introduced the excellent performance management mode to carry out work in strict accordance with the PDCA process management method, GB/T19580 criteria for excellence performance evaluation and GB/Z19579 implementation guidelines of the criteria for excellence performance evaluation, standardize management activities, pursue excellent products, and continuously enhance the enterprise's ability to pursue excellence from seven aspects of leadership, strategy, customers and markets, resources, process management, measurement analysis and improvement, and operating results, so as to provide significant contribution to the suppliers, customers, employees, shareholders, and the entire society.

Quality improvement measures

Promotion of supply chain quality management

Strengthening supply chain quality management is an important measure to improve and guarantee product quality. The Company has formulated the Measures for Management of Appraisal of Supplier Performance and the Rating Standards and Incentive Measures for Supplier Performance Appraisal, and has established a dynamic adjustment mechanism to ensure that the procurement quality meets the Company's strategic needs by evaluating suppliers' performance, and comprehensively comparing the suppliers' integrity, service and quality system. During the reporting period, the supplier replacement rate is 2%.



Quality management improvement activities

The Company actively carries out post training, labor competition and other activities to enhance employees' quality awareness and job skills, improve grass-roots quality management capacity, and achieve continuous quality optimization and improvement.

“QC” activity

“QC” activity is a continuous comprehensive quality management activity by Grace. “QC” achievements not only create direct economic benefits for the Company, but also realize good social benefits.

In 2022, 53 “QC achievements” were formed, creating direct economic benefits of RMB16.2109 million; among them, 2 projects won the “Excellent QC Achievements in Sichuan Province” in the activities of the Excellent Quality Management Group in Sichuan Province in 2022; 8 projects won 2 first prizes and 6 second prizes in the evaluation of the 25th QC Activity Quality Management Group in Yibin. The Company was rated as the “Excellent Enterprise in Yibin Quality Management Group Activities”.



In 2022

the Company was rated as the “Excellent Enterprise in Yibin Quality Management Group Activities”.

In 2022

the Company's Research on Detection Methods of Polyethylene Glycol was awarded as the “Excellent QC Achievement in Sichuan Province”.



02



Sustainable Development

1. The concept of sustainable development
2. The sustainable development management framework
3. Identification of and communication with stakeholders
4. Analysis of substantive issues
5. Honors



The concept of sustainable development

Grace always adheres to the development concept of “green, low carbon, health and sustainability”, firmly grasps the two main tasks of “science and technology” and “green”, focuses on the upgrading of process, technology, equipment and management, builds a “three green manufacturing” model integrating “green raw materials”, “green technology” and ‘green energy’, and creates a green low-carbon recycling production system featuring the transformation and development of “five orientations”.

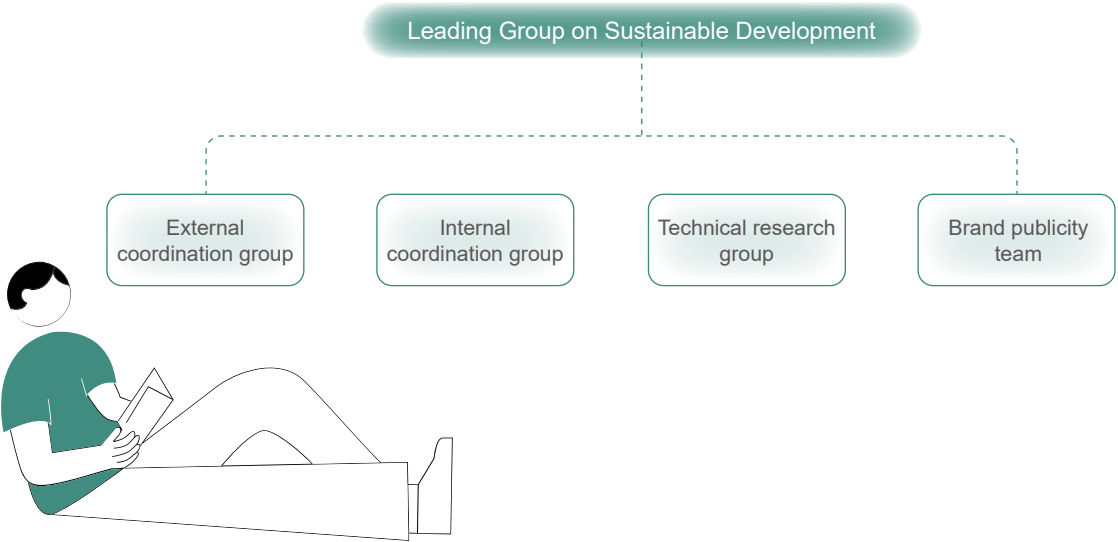
Read more:

Grace bio-based fiber “three greens” manufacturing industry model refers to green raw material (recycled pulp raw materials from waste textiles and bamboo pulp raw materials), green process (resource recycling process, green low-carbon process and closed-loop clean production process) and green energy (green hydropower).

The “five orientations” transformation of Grace bio-based fiber industry refers to “green orientation, low-carbon orientation, energy-saving orientation, digital orientation and intelligent orientation”, by which the upgrading and transformation of the enterprise production system are realized through the comprehensive upgrading of equipment, technology, process and management, and the construction of key projects for the transformation and upgrading of Lyocell fiber, modified bamboo pulp fiber and recycled pulp fiber.

The sustainable development management framework










During the reporting period, Yibin Grace Group Co., Ltd. established a leading group for sustainable development to comprehensively guide the Company's sustainable development management.



Identification of and communication with stakeholders

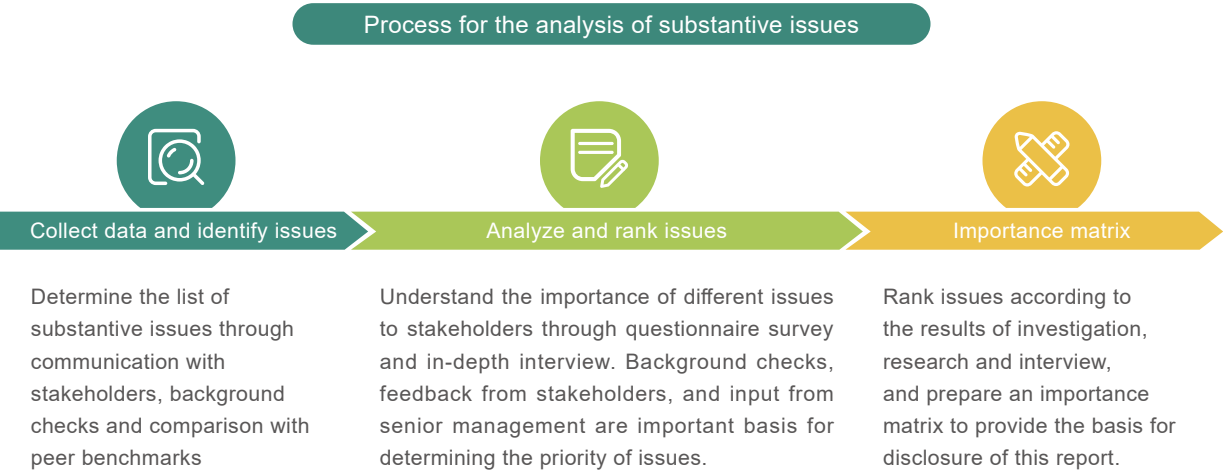
Grace actively communicates and interacts with stakeholders and listens to the opinions and suggestions of stakeholders to find solutions for sustainable development.

During the reporting period, the important stakeholders, their concerns and communication channels are shown in the following table.

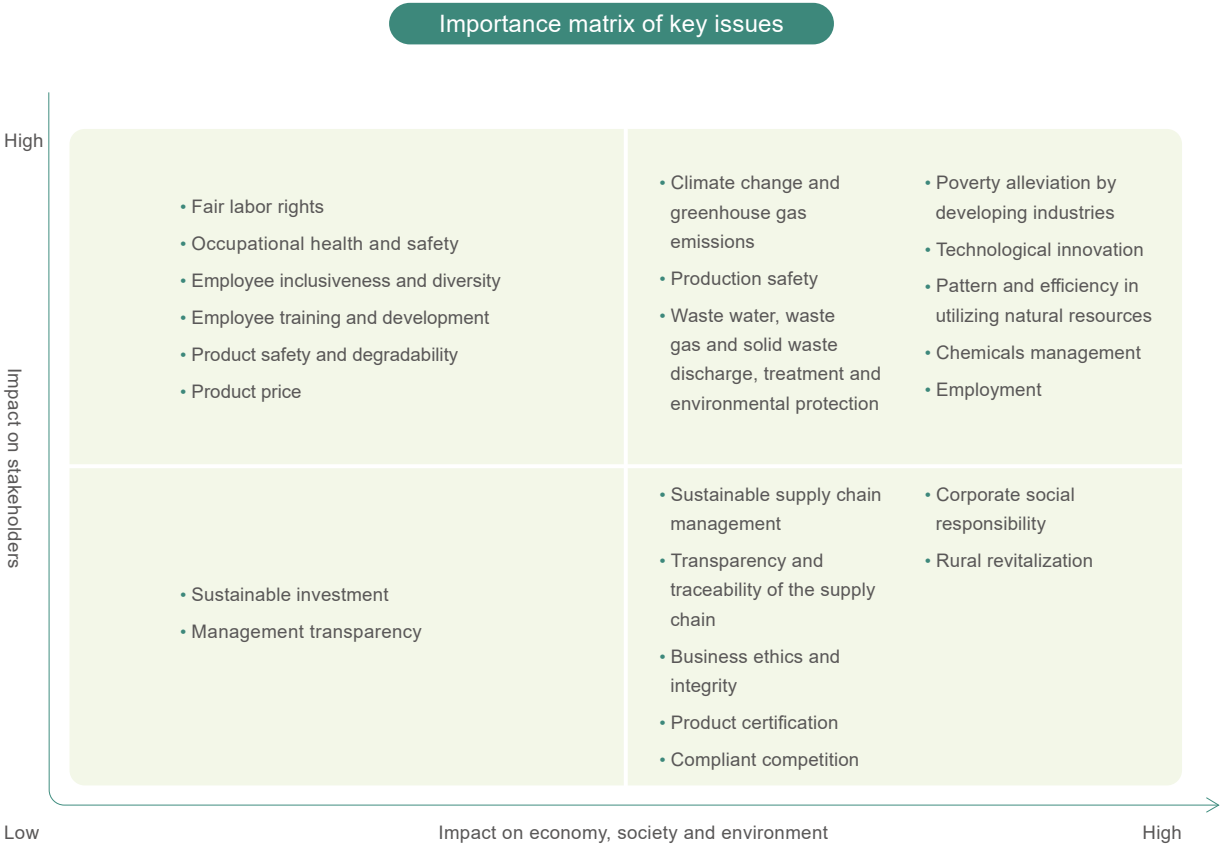
Stakeholders		Issues concerned by the stakeholders	Channels to communicate with the stakeholders
Main categories	Main representatives		
 Government organs	National ministries and commissions Local governments	<ul style="list-style-type: none">• Production safety• Waste water, waste gas and solid waste discharge, environmental protection and governance• Employment• Rural revitalization• Poverty alleviation• Product safety	<ul style="list-style-type: none">• Participate in local economic and social development• Supervise, examine and manage environment and safety• Disclose data on pollutant emission• Participate in formulation of industry standards
 Business operators and investors	Senior management of enterprises and associated companies Investors	<ul style="list-style-type: none">• Profitability• Labor protection• Public opinion environment• Circular economy• Development of innovative technology• Information disclosure• Sustainability	<ul style="list-style-type: none">• Working meetings• Company website• Journal of enterprises• Email, telephone, and other social media• Large forums
 Employee	Employee holding shares of Grace	<ul style="list-style-type: none">• Profitability• Promotion mechanism• Labor guarantee• Training mechanism• Information disclosure	<ul style="list-style-type: none">• Working meetings, trainings• Staff congress, team building activities• Company website, journal of enterprises• Email, phone, WeChat and other social media• Recruitment activities
 Suppliers	Pulp suppliers Chemical suppliers	<ul style="list-style-type: none">• Payment method• Delivery time• Compliance management• Supply of high-quality raw materials• Delivery time/source• Pricing mechanism• Source of raw materials• Innovation	<ul style="list-style-type: none">• Supplier evaluation• Chain of custody system for suppliers• Audit evaluation• Meetings, emails, phone calls• Product showcases• Industry seminars• Field visit
 Downstream customers	Yarn and fabric enterprises Clothing enterprises Enterprises in the non-woven fabric industry chain	<ul style="list-style-type: none">• Payment method• Delivery time• Chemical management• Transparent supply chain• Innovative services• Product quality and innovation• Product pricing mechanism• Business compliance• Green supply chain	<ul style="list-style-type: none">• Technical exchange• Joint research and development• Customer satisfaction investigation• Company website, journal of enterprises• Meetings, emails, phone calls, etc.• Product showcases• Industry seminars
 NGO (non-governmental organization) / trade associations	CV alliances Standardization organizations Third party organizations Industry associations	<ul style="list-style-type: none">• Climate Change• Energy management• Water resources management• Environmental management• Transparency and traceability of the supply chain• Biodegradable product• Application of innovative technology• Product innovation• Waste water, waste gas and solid waste discharge• Compliance promotion• Rural revitalization• Biodiversity protection	<ul style="list-style-type: none">• Industry survey and research report• Disclose data on pollutant discharge• Audit and evaluation of the chain of custody system• Industry survey and research report• Participate in formulation of industry standards• Product showcases and industry seminars• Meetings, emails, phone calls, etc.
 Colleges and universities/ research institutes		<ul style="list-style-type: none">• Technological innovation (raw materials, production process, circular economy, differentiated products)	<ul style="list-style-type: none">• Joint research and development mechanism• Strategic cooperation on talent cultivation• Academic and industry research reports
 Surrounding communities		<ul style="list-style-type: none">• Waste water and waste gas treatment• Corporate social responsibility	<ul style="list-style-type: none">• Community visit• Public open day activities• Complaint and feedback public mailbox• Community activities and daily communication
 Other stakeholders	Other regenerated cellulose fiber manufacturers	<ul style="list-style-type: none">• Compliant competition• Communication on environmental protection• Goal and path• Patent protection• Joint development	<ul style="list-style-type: none">• Technical exchange• Joint research and development• Product showcases and industry seminars• Industry survey and research report• Participate in formulation of industry standards

Analysis of substantive issues

During the reporting period, Grace established mechanisms for identifying and analyzing issues related to sustainable development, and strengthened the management of important issues to promote the Company's sustainable development.



The importance of substantive issues is comprehensively analyzed from two aspects: the degree of influence on the business development of Grace and the importance to stakeholders, and the importance evaluation matrix of key issues is obtained. This report will disclose key issues in detail with reference to the importance assessment matrix.



Honors

During the reporting period, the Company won the following honors.

Date	Granting institution	Name of honor or award
January 2023	China National Textile and Apparel Council	Water-saving benchmarking enterprise
		Advanced group of water-saving innovation
		Water-saving innovation group
December 2022	China National Textile and Apparel Council	Pioneer unit of climate innovation action in China textile and garment industry
November 2022	Sichuan Association for Quality	Sichuan Excellent Quality Management Group
September 2022	Yibin Quality Association	Excellent Enterprise of Yibin Quality Management Group Activities in 2021-2022
July 2022	Yibin Quality Association	The second prize of the 25th Yibin Quality Management Group Activities
April 2022	China Chemical Fibers Association	Intelligent Manufacturing Demonstration Unit in 2021
April 2022	CPC Sichuan Provincial Party Committee and Sichuan Provincial People's Government	Leading Opening-up Development Enterprise in Sichuan Province
April 2022	China Chemical Fibers Association	Advanced Standardization Unit in 2021



03

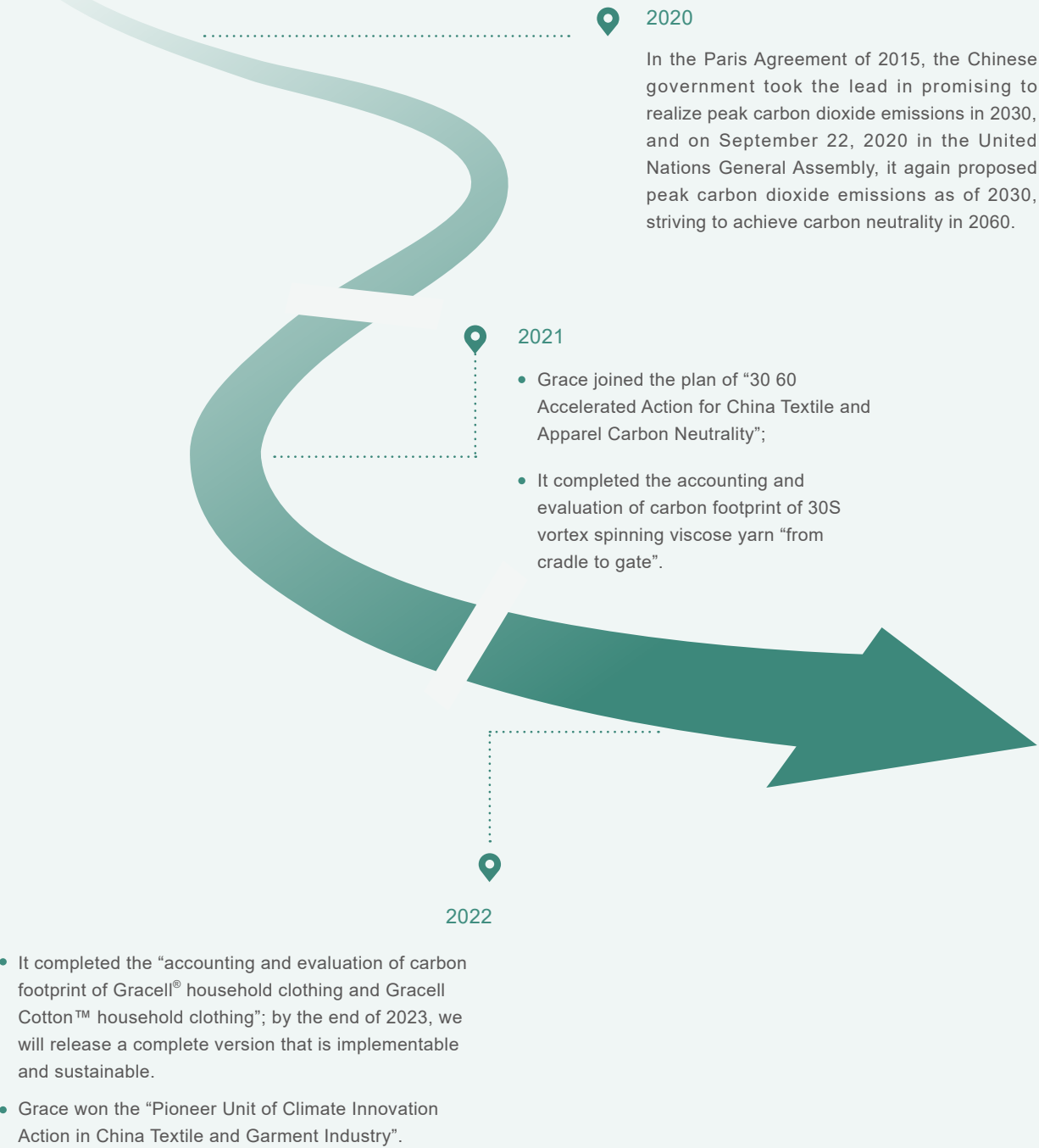
Climate Change Response

1. Formulation of the “carbon peaking and carbon neutrality” strategy
2. Establishment of a carbon management system
3. Promotion of carbon emission reduction during the operation
4. Development of low-carbon products



Grace always insists on the “green, low-carbon, healthy and sustainable” concept as the development goal, grasps the strategic opportunity of “carbon peaking and carbon neutrality” and promotes the high-quality development of the Company. At present, a variety of practical activities have been carried out in the development of green and low-carbon products, “carbon peaking and carbon neutrality” planning and action objectives, and the carbon management system.

History of important events



Read more: “30 60 Accelerated Action for China Textile and Apparel Carbon Neutrality”.



Climate change is a challenge faced by the whole world. Achieving peak carbon dioxide emissions and carbon neutrality has become a strategic choice for countries around the world to deal with climate change. As a major greenhouse gas emitter, China has also announced ambitious emission reduction targets including “striving to achieve peak carbon dioxide emissions by 2030 and carbon neutrality by 2060”, and is comprehensively and systematically promoting relevant work.

The textile industry is closely linked to people’s livelihood and has been highly concerned by all walks of life at home and abroad. As to climate change, the textile industry remains the focus of attention and is one of the first industries in the world to carry out climate action. As a great power in textile, Chinese textile industry undertakes its due responsibility and mission in dealing with climate change. In recent years, guided and driven by the Office for Social Responsibility of China National Textile and Apparel Council (the ad hoc agency of China National Textile and Apparel Council to promote the sustainable development of the industry), China’s textile industry has been at the forefront of China’s manufacturing industry in terms of dealing with climate change.

- In 2017, the Office for Social Responsibility of China National Textile and Apparel Council launched the “2020 Innovative Action for Carbon Emission Management”, and took the lead in raising the grand vision of realizing zero carbon emission in the industry by 2050.
- In 2018, China National Textile and Apparel Council, as one of the contracting parties, signed the UN Fashion Industry Charter for Climate Action, which defined the phased emission reduction target of the fashion industry, namely, to reduce carbon emissions by 30% in 2030 (relative to the emission benchmark in 2015).
- In 2019, after integrating the preliminary work, the Office for Social Responsibility of China National Textile and Apparel Council launched the “2030 Innovative Climate Actions of the Fashion Industry”, which is designed to gather all forces to jointly realize the emission reduction targets of the fashion industry and make contributions to global climate governance.

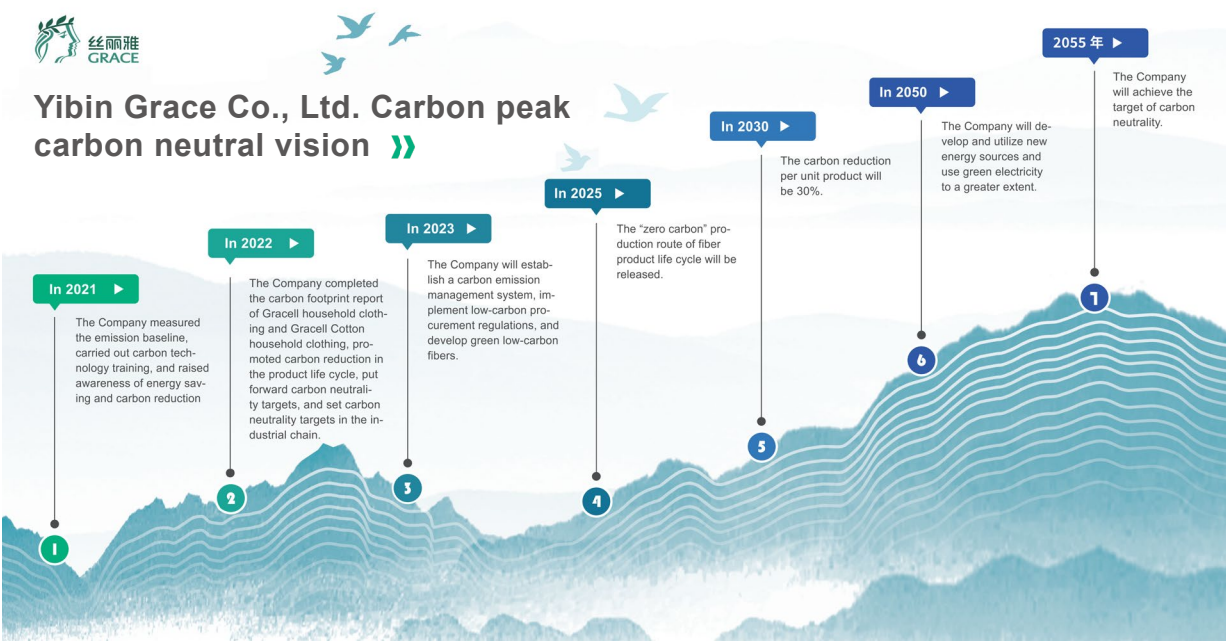
For the purposes of implementing the national strategy for achieving peak carbon dioxide emissions and carbon neutrality, carrying forward the “2030 Innovative Climate Action” and speeding up the green and low-carbon transformation of the industry, the Office for Social Responsibility of China National Textile and Apparel Council officially launched the “30-60 Innovative Climate Action and Carbon Neutrality Acceleration Initiative by Chinese Fashion Brands” (“30-60 Carbon Neutrality Acceleration Initiative” for short) on June 1, 2021. Guided by relevant departments and supported by technical institutions, the Office will select 30 key brand enterprises and 60 manufacturing enterprises to carry out innovative climate actions, and guide key industrial clusters to demonstrate best practices for carbon neutrality.



Formulation of the “carbon peaking and carbon neutrality” strategy

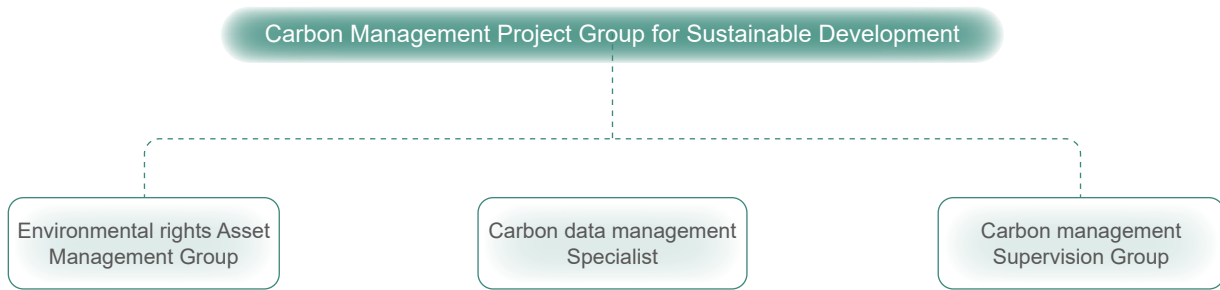
In order to implement the national “carbon peaking and carbon neutrality” strategy and fulfill the climate action commitment, the Company cooperates with professional institutions to carry out baseline research and set emission reduction targets and paths in combination with the Company’s development strategy.

The Company mainly reduces its carbon emissions through emission reduction management, emission reduction technology, and emission reduction transaction, and realizes low-carbon development and sustainable development.



Establishment of a carbon management system

Carbon management is an important measure to implement the Company’s “carbon peaking and carbon neutrality” strategy and improve its green and low-carbon development level. According to the requirements of the Company and the standards for the establishment of the carbon management system, a sustainable development carbon management project team will be established to accelerate the construction of comprehensive platforms including carbon emission, carbon trading, carbon assets and carbon verification.



Environmental equity asset management team: Its main responsibilities are carbon account management, green certificate I-rec, CCER, carbon asset management and carbon trading. Authority includes intra-group carbon trading and carbon quota, enterprise carbon sink storage and trading, and the construction of green and low-carbon supply chain.

Carbon emission data management specialists: They are responsible for the construction of the carbon emission management platform and energy management platform, including internal and external data collection, statistical analysis, query function, emission level evaluation and identification, prediction and early warning function and decision support. The preservation and management of original records of carbon data are carried out, and the carbon footprint reports are prepared as required.

Carbon management and supervision team: It supervises all departments of the Company to implement carbon emission reduction, establishes preferential policies for the green and low-carbon supply chain system, provides assistance to the green supply chain, encourages all departments to develop low-carbon technology and achieves low-carbon goals.

Read more:

Product carbon footprint is an effective tool for enterprises to implement carbon management and carbon emission reduction. The product carbon footprint can help the Company accurately identify the main emission sources, key emission areas or stages. In order to further reduce the carbon emissions of products, the Company organizes teams in charge of production sections to analyze the emission reduction space of the managed sections and the emission reduction measures that can be taken, and accordingly evaluate the emission reduction targets that can be achieved in each stage, and make plans. The effectiveness of emission reduction will be released in the 2023 Sustainable Development Report.

Promotion of carbon emission reduction during the operation

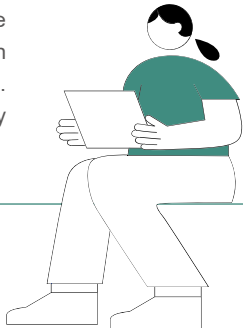
Grace always actively responds to the national call for “energy conservation, carbon reduction and green development”, which aims to reduce greenhouse gas emissions and continuously improve the green development level through disseminating concepts, optimizing energy structure, applying energy-saving technology and implementing environmental technology innovation.

The Company's greenhouse gas emissions all come from the net purchase of electricity and heat, without fossil fuel combustion emissions, industrial production process emissions and greenhouse gas recycling. During the reporting period, the Company's total greenhouse gas emissions were 346,500 tons of CO2 equivalent, down 35.38% compared with the previous year, and the greenhouse gas emissions per ton of products were 2.74 tons of CO2 equivalent, up 1.86% year-on-year. Different from the historical trend, during the reporting period, the Company's total greenhouse gas emissions dropped sharply, and the emission intensity turned from decline to increase. The reason was that the extreme high temperature weather in 2022 led to too large China's electricity load. In order to protect people's livelihood, measures such as limiting electricity and stopping production were adopted against industrial enterprises.



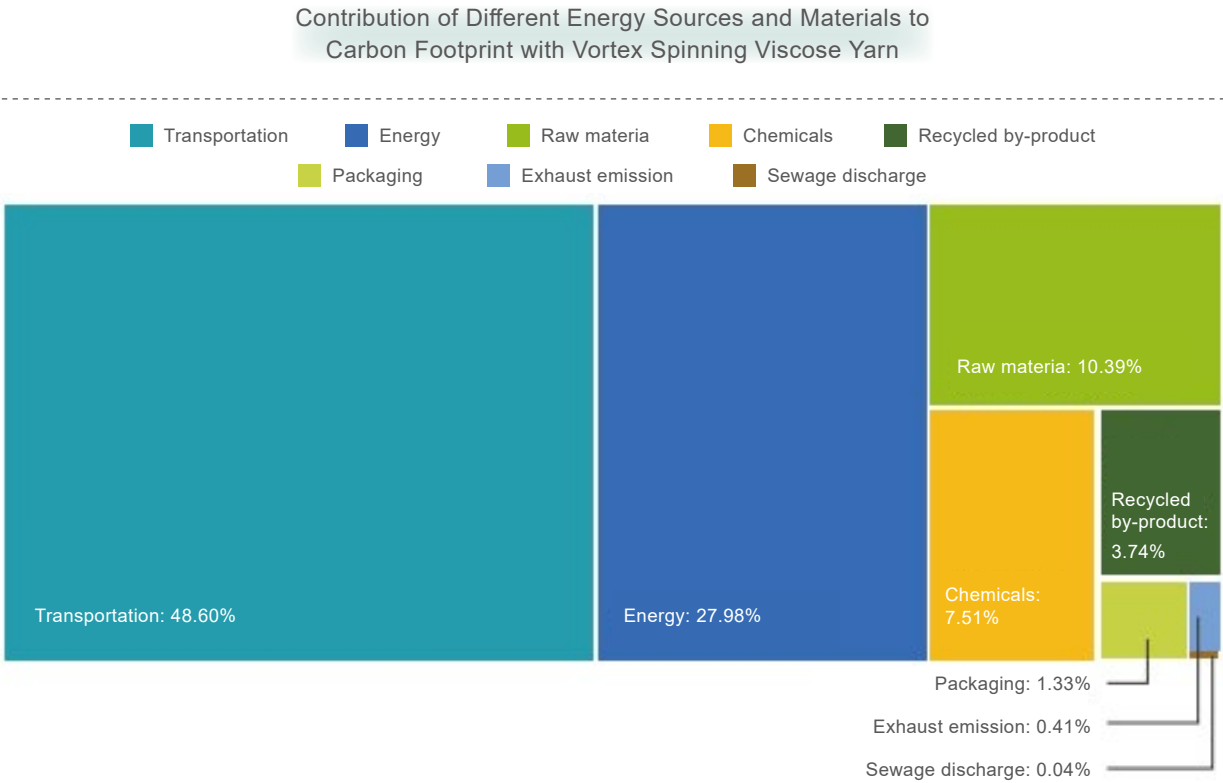
Read more:

In the summer of 2022, extremely high temperature weather occurred in many places in China, which led to the continuous increase of electricity load, causing local measures to limit electricity and protect people's livelihood. For example, Sichuan Province initiated three-level power supply protection and control measures, and successively formulated and implemented the Implementation Plan for Some High Energy-carrying Industries in Sichuan Province to Stop Production and Give Electricity to People's Livelihood in the Summer in 2022, and the Emergency Notice on Expanding the Implementation Scope of Giving Electricity for the People's Livelihood by Industrial Enterprises. According to this, the Company stopped production many times to give electricity to people's livelihood.



(1) Emission reduction with energy technology

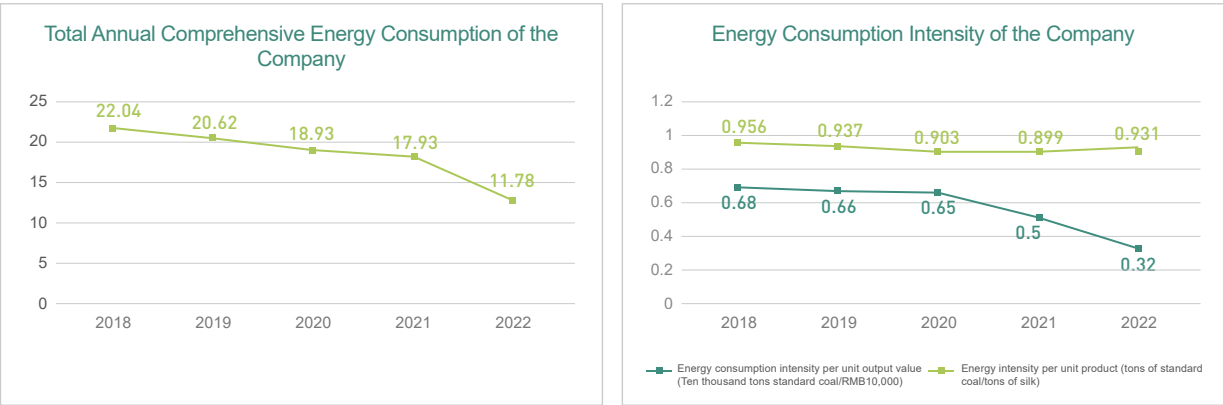
Energy is the main source of corporate carbon emissions. The carbon footprint report of vortex spinning viscose yarn shows that the carbon emission contribution caused by energy consumption is as high as 27.98%. In order to reduce energy emissions, the Company explores the “Grace Solution” which belongs to the green development of the enterprises and the industries in response to the global sustainable development initiative through further increasing clean energy consumption, adopting energy-saving equipment, conducting gradient utilization of energy efficiency, recovering and utilizing waste heat, implementing automation transformation to improve efficiency, and implementing combined heat and power generation to promote carbon reduction.



Source: Carbon footprint report of 30S vortex spinning viscose yarn



In order to cope with extreme weather, all parts of China started to use electricity in an orderly manner and required enterprises to give electricity to people's livelihood, resulting in a sharp drop in the Company's annual comprehensive consumption. In 2022, the Company's comprehensive energy consumption was 117,800 tons of standard coal, down 34.30% year-on-year. According to this, the energy consumption intensity per unit product of the Company has increased, with a year-on-year increase of 3.56%.



Data Comparison:(and EU-BAT)(20-30 GJ/MTF)

Read more:

High-quality heat sources are subject to gradient utilization to reduce carbon and increase efficiency. Taking the Australian unit (1000 m3/day, 90°C) driven by high-heat pre-cooling water in the second spinning as an example, the high-temperature heat source can be subject to gradient utilization to reduce steam consumption by about 20 tons/day, and at the same time, the cooled hot water can be reused for membrane filtration to prepare alkali liquor, which can reduce the consumption of desalted water by 1000 m3/day and reduce the refrigeration cost of frozen desalted water by about RMB2 million per year.

In order to reduce energy consumption such as steam, the Company has introduced air jet defoaming system to replace steam jet system, which can shorten the process flow, save 42,000 tons of steam per year, reduce power consumption by 2.85 million kwh/year, save production water consumption by 105,000 m3/year, and reduce the cost by about RMB5.63 million per year.

In addition, while promoting its own emission reduction and carbon reduction, the Company also actively promotes carbon reduction in the supply chain enterprises.



Case | Partner - Hmei Thread Co., Ltd.

In order to give full play to the advantages of centralized energy-saving and environmental protection of combined heat and power generation, promote the high efficiency of energy utilization and maximize benefits, Hmei Thread Co., Ltd. promotes the transformation of combined heat and power generation in local power plants, and further uses the waste heat resources of power plants to meet its own production and heating needs. This not only greatly reduces the investment cost of the Company's self-built steam plant and pipeline laying and the resulting environmental impact, but also brings good economic benefits and emission reduction benefits to the Company.



Case | Partner - Yibin Tianyuan Group Co., Ltd.

The reduction of carbon emissions from energy consumption during transportation is the key to developing low-carbon products. The carbon footprint report of vortex spinning viscose yarn shows that the energy consumption during the transportation contributed up to 48.6% to the carbon emissions of the products. According to this, Yibin Tianyuan Group Co., Ltd. successfully launched the “Electric Tianyuan” new energy heavy truck operation demonstration line in 2022, which greatly reduced the carbon emissions during transportation. At present, the demonstration line connects Jiang'an County and Sanjiang New Zone, with a one-way distance of about 60 kilometers. After replacing the fuel heavy trucks with new energy heavy trucks, the cost per trip and carbon emission can be reduced by 30% and 60% respectively.



Case | Partner - Leshan Fuhua Tongda Trade Co., Ltd.

In order to reduce the coal consumption of existing coal-fired boilers by using the surplus hydrogen exhausted from chlor-alkali device in Fuhua Area A, Leshan Fuhua Tongda Trade Co., Ltd. invested RMB8 million to build supporting facilities and equipment such as transportation pipelines, so as to realize that the annual coal consumption of three 280t/h coal-fired boilers in Fuhua Area B was reduced by about 2,600 tons, reducing air pollutant emissions and carbon emissions. After the completion of the project, the existing production scale of the enterprise will not be changed, and the total heating scale of the enterprise will remain unchanged.



(2) Emission reduction with production technology

Grace attaches great importance to the role of technological innovation in mitigating climate change. In recent years, the Company has increased input in technology-based environmental protection projects, vigorously promoted the innovative application of environmental protection technology, and improved its ability and level in waste gas control. Meanwhile, it has also formed a waste gas recycling industry, greatly reduced waste gas emission, substantially improved the total sulfur recovery rate, and achieved remarkable environmental, economic, and social benefits.



Case | Manufacturing technology of bamboo pulp fiber

In order to make full use of the advantages of local bamboo resources and promote the localization and green development of fiber raw materials, Grace in combination with related companies to overcome the manufacturing technology of bamboo pulp fiber and break through the whole production process. At present, the pilot plant of bamboo-based pulp regenerated cellulose fiber has been completed and put into operation by the end of 2022.

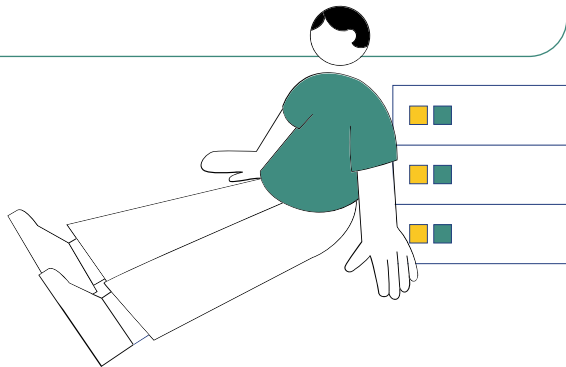
Compared with traditional regenerated cellulose fiber production, bamboo-based pulp regenerated cellulose fiber production technology has obvious advantages of green and low carbon. For example, the carbon emission of bamboo pulp fiber products produced with this technology is reduced by more than 30% compared with traditional wood pulp fiber; the use of pulp from local bamboo resources instead of imported pulp can not only reduce the transportation cost of raw materials and carbon emissions, but also drive the development of bamboo planting industry, realizing the synergistic interaction of the “first, second and third industries”. In addition, the acceleration of the local development of fiber raw materials is also an important guarantee for enterprises to achieve safe and sustainable development.

For example, the carbon emission of bamboo pulp fiber products produced by this technology is **30%** less than that of traditional wood pulp fiber



Read more:

By the end of 2022, the forestry land area of Yibin City was 553,000 hectares; the forest area is 622,000 hectares. In 2022, the comprehensive output value of forest and bamboo in Yibin City was RMB35.3 billion, up 14.62% year-on-year, ranking first in the province. Since 2019, the comprehensive output value of Yibin forestry and bamboo industry has ranked first in the province for four consecutive years. In addition, the International Bamboo Brand Expo was permanently located in Yibin, which provides a solid foundation for industrial development.



Case | Recycled pulp preparation cellulose filament technology

The recycled pulp preparation viscose technology has always been the key technology to realize the green and low-carbon cycling development in viscose fiber industry. In recent years, Grace continues to increase investment in technology R&D, and has jointly develop with Sweden’s Renewcell and Ekman to realize the scale production of regenerated cellulose fiber filaments with 100% Circulose® recycled pulp in 2022, and the product quality index has reached the level of superior product according to the national standard (GB/T 13758-2008), making it the first company in the industry to realize industrial scale production by using 100% recycled pulp to make cellulose fiber filaments. At present, the annual production capacity of this product is more than 10,000 tons, and there are 86 clothing brands and retailers in the world to purchase the demand.



The launching ceremony of Circulose® recycled pulp production line

The launch conference of regenerated cellulose fiber filament products





Development of low-carbon products

Facing the new challenges in the era of “carbon peaking and carbon neutrality”, Grace always adheres to the development goal of “green development, circular development and low-carbon development”, integrates the concept of green development into the whole product life cycle, innovates and develops green and low-carbon textile products, and creates the core competitiveness of products with more advantages and toughness. According to this, the Company has introduced a life cycle assessment tool - accounting and evaluation of product carbon footprint in product development, which supports the development of low-carbon products and promotes and improves the carbon management and emission reduction of enterprises.

During the reporting period, Grace completed “carbon footprint evaluation report of Gracell® household clothing and Gracell Cotton™ household clothing”, with practical actions to make clear to all sectors of society the ways and paths for Grace to participate in the green transformation and help achieve the goal of “carbon peaking and carbon neutrality”.

(1) Basic information of the product

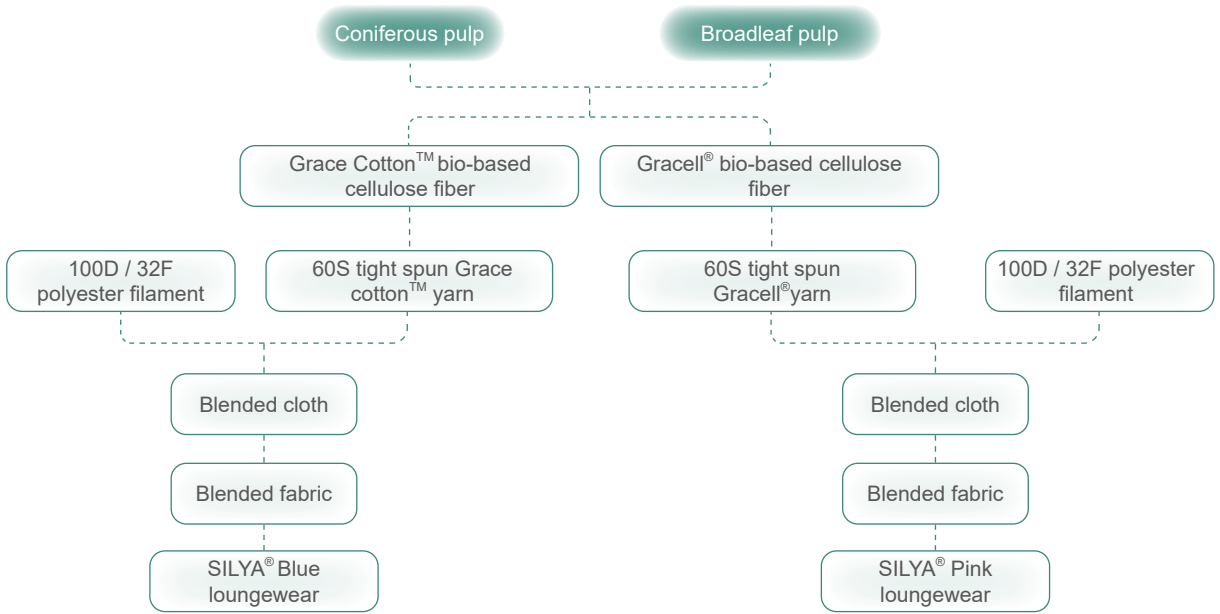
Evaluation Object	Household Clothing
Product Picture	<div></div>
Product Parameters	<div>SILYA® Blue Household Clothes' component: 61.5% Gracell Cotton™ bio-based cellulose fiber, 38.5% polyester filament</div> <div>SILYA® Pink Household Clothes' component: 61.5% Gracell® bio-based cellulose fiber, 38.5% polyester filament</div>

(2) Evaluation scope

The time frame for the assessment of the product life cycle is 2022, and the system boundary is from “Cradle -to-Gate”, including the following 6 stages:



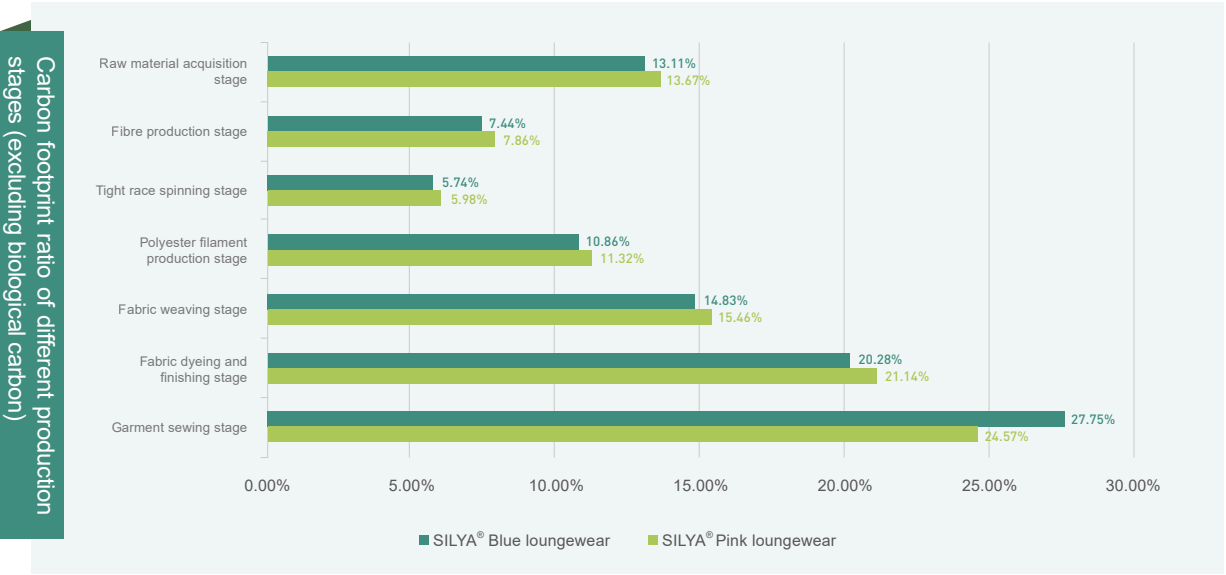
The stage products specifically included in the system boundary are as follows:



(3) Evaluation result

Carbon footprint performance	Global warming potential (excluding biochar) (GW)(Unit: kg CO2 eq./kg)
SILYA® Blue Household Clothes	13.59
SILYA® Pink Household Clothes	12.03

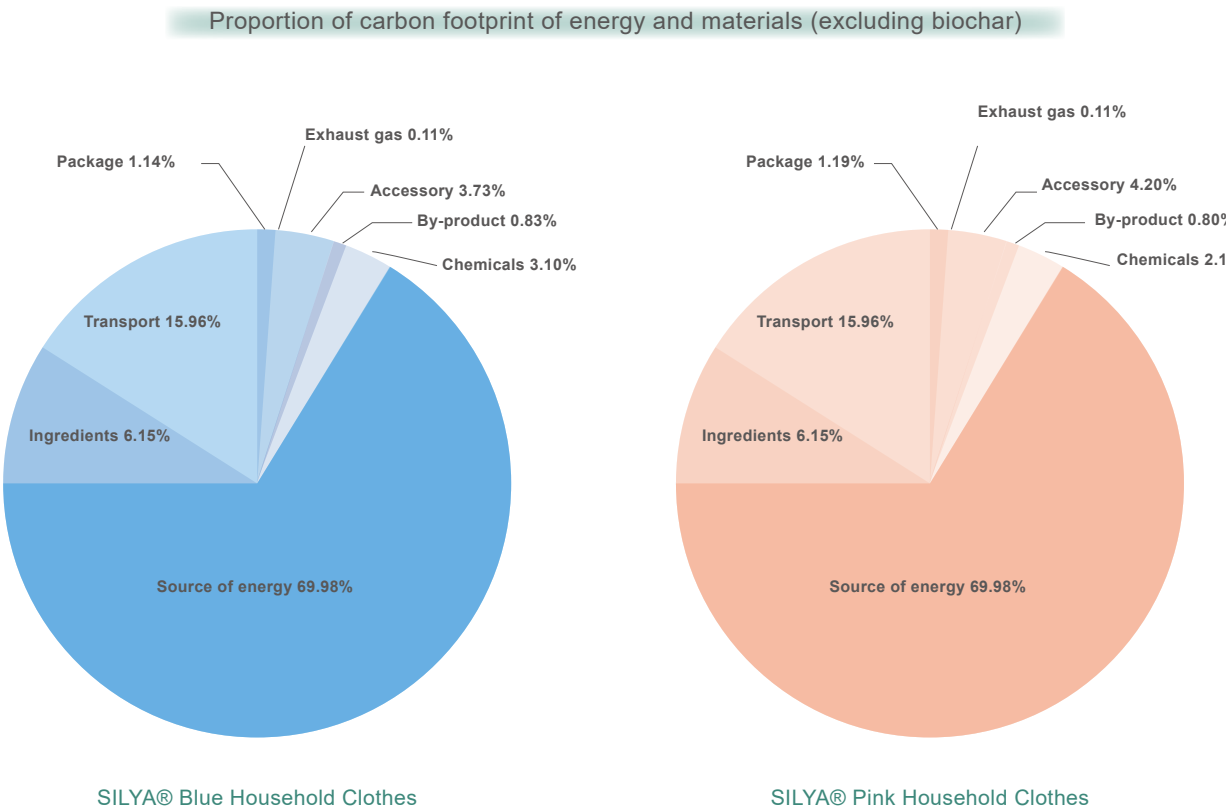
Proportion of carbon emissions in each production stage



Under the index of global warming potential (excluding biochar), the carbon footprint ratio of the two household clothes in different production stages is garment sewing stage > fabric dyeing and finishing stage > fabric weaving stage > raw material acquisition stage > polyester filament production stage > bio-based cellulose fiber production stage > compact Siro spinning stage.

The contribution of different energy sources and materials to the carbon footprint of products

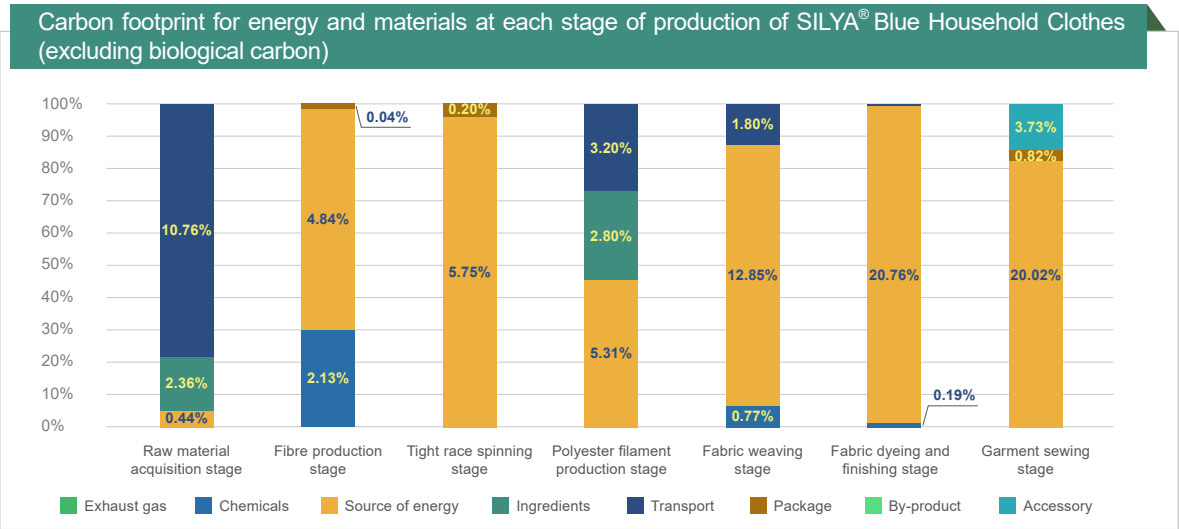
The proportion of energy and materials under the global warming potential (excluding biochar) index is analyzed.



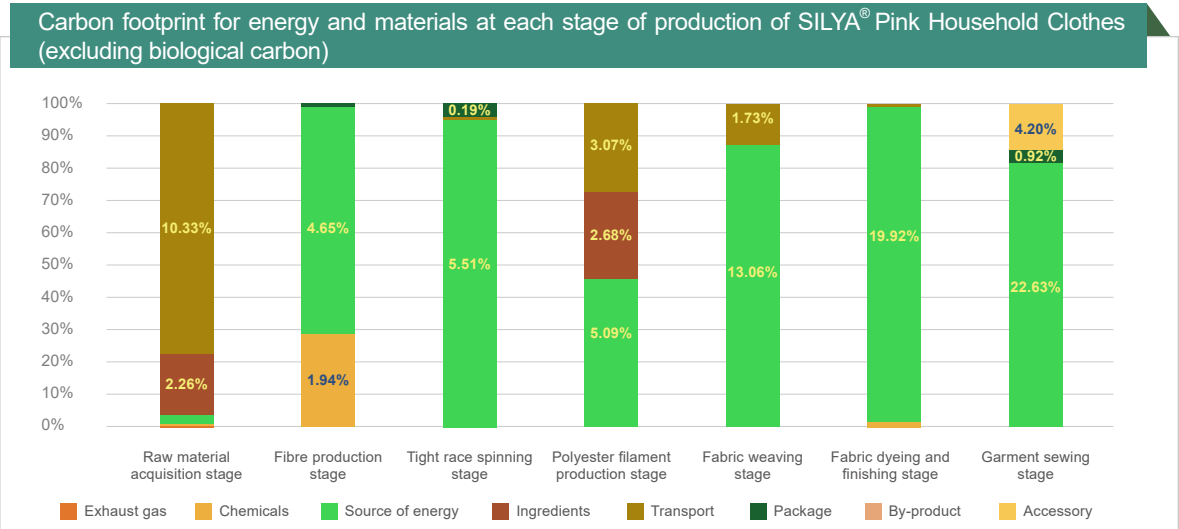
In terms of SILYA® Blue Household Clothes, under the index of global warming potential (excluding biochar), the energy accounted for the highest proportion, accounting for 69.98%, which mainly came from the steam use in the fabric dyeing and finishing stage, the electricity use in the garment sewing stage and the fabric weaving stage; the transportation took the second place, accounting for 15.96%, mainly from overseas transportation of wood pulp in the production stage of raw materials; the total proportion of materials was 13.12%, of which raw materials accounted for the highest proportion, accounting for 5.15%.

In terms of SILYA® Pink Household Clothes, under the index of global warming potential (excluding biochar), the energy accounted for the highest proportion, accounting for 71.27%, which mainly came from the electricity use in garment sewing stage, the steam use in the fabric dyeing and finishing stage, and the electricity use in fabric weaving stage; the transportation stage took the second place, accounting for 15.31%, mainly from overseas transportation of wood pulp in the production stage of raw materials; the total proportion of materials was 12.52%, of which raw materials accounted for the highest proportion, accounting for 4.94%. Because the weight of pink household clothes is lower than that of blue household clothes, and various materials and energy inputs are less, the overall carbon emission is lower than that of blue household clothes.

The proportion of energy and materials in each production stage under the global warming potential (excluding biochar) index is analyzed.



In terms of the different production stages of SILYA® Blue Household Clothes, the raw material acquisition stage accounted for the highest proportion, accounting for 10.76%, mainly from overseas transportation of wood pulp, and the raw materials took the second place, accounting for 2.36%; the highest proportion of other production stages was energy, mainly from the use of electricity, but the carbon footprint of steam in the dyeing and finishing stage accounted for the highest proportion, accounting for 16.55%. Chemicals accounted for the second highest proportion in the fiber production stage, and additives will be used in the production of viscose staple fiber at this stage; in the production stage of polyester filament, transportation (3.20%) and raw materials (2.80%) accounted for a relatively high proportion, and transportation mainly came from overseas transportation of raw materials; accessories accounted for a relatively high proportion in the garment sewing stage, accounting for 4.19%.



In terms of the different production stages of SILYA® Pink Household Clothes, in the raw material acquisition stage, transportation accounted for the highest proportion, accounting for 10.33%, mainly from overseas transportation of wood pulp, and the raw materials took the second place, accounting for 2.26%; the highest proportion of other production stages was energy, mainly from the use of electricity, but the carbon footprint of steam in the dyeing and finishing stage accounted for the highest proportion, accounting for 15.88%. Chemicals accounted for the second highest proportion in the fiber production stage and fabric dyeing and finishing stage; the second highest proportion of polyester filament production stage and fabric weaving stage was chemicals; the second highest proportion of accessories in the garment sewing stage was accessories, accounting for 4.2%.

On the whole, energy and transportation are the main contribution factors of household clothing. In the future, we can consider how to reduce the carbon footprint of products from the perspectives of electricity use in the sewing stage, steam use in the dyeing and finishing stage, and transportation distance and mode of raw material purchase.

Read more: China's textile and garment industry life cycle assessment working group

China's textile and garment industry life cycle assessment working group (CNTAC-LCA Working Group) was formally established at China Textile Conference in December 2020. CNTAC-LCA working group aims to give full play to the collaborative organization ability of industry organizations and guide the industry to carry out the life cycle assessment of textile products and the disclosure of product environmental information. By establishing a textile product life cycle assessment system and an environmental footprint database, it will speed up the establishment of an environmental information disclosure system for green products in the whole chain that can be traced from the terminal brand end to the raw material end, so as to enhance the ability of enterprises to cope with green trade barriers in the international market, support consumers' identification of green products, and guide green consumption.

CNTAC-LCA working group currently has 62 institutional members, including 51 enterprises and 11 academic and technical institutions and organizational alliances, covering the whole industrial chain of fiber materials, textile chemicals, spinning, weaving, printing and dyeing processing and clothing production, as well as brands and consumers.



04

Environmental Protection

- 1. Environmental management
- 2. Water resources management
- 3. Chemical management
- 4. Pollution prevention



Environmental management

Grace is an active practitioner in green development. It has formulated strategies and policies centered on environmental protection, combined targeted remediation with long-term management, and followed the principles of strict prevention at the source, strict management in the process and strict control at the end in accordance with requirements in the environmental management regulations, continuously improving the environmental management ability and clean production level, realizing the synergy between enterprise development and ecological protection, and driving the sustainable development of enterprises in upstream and downstream industries.

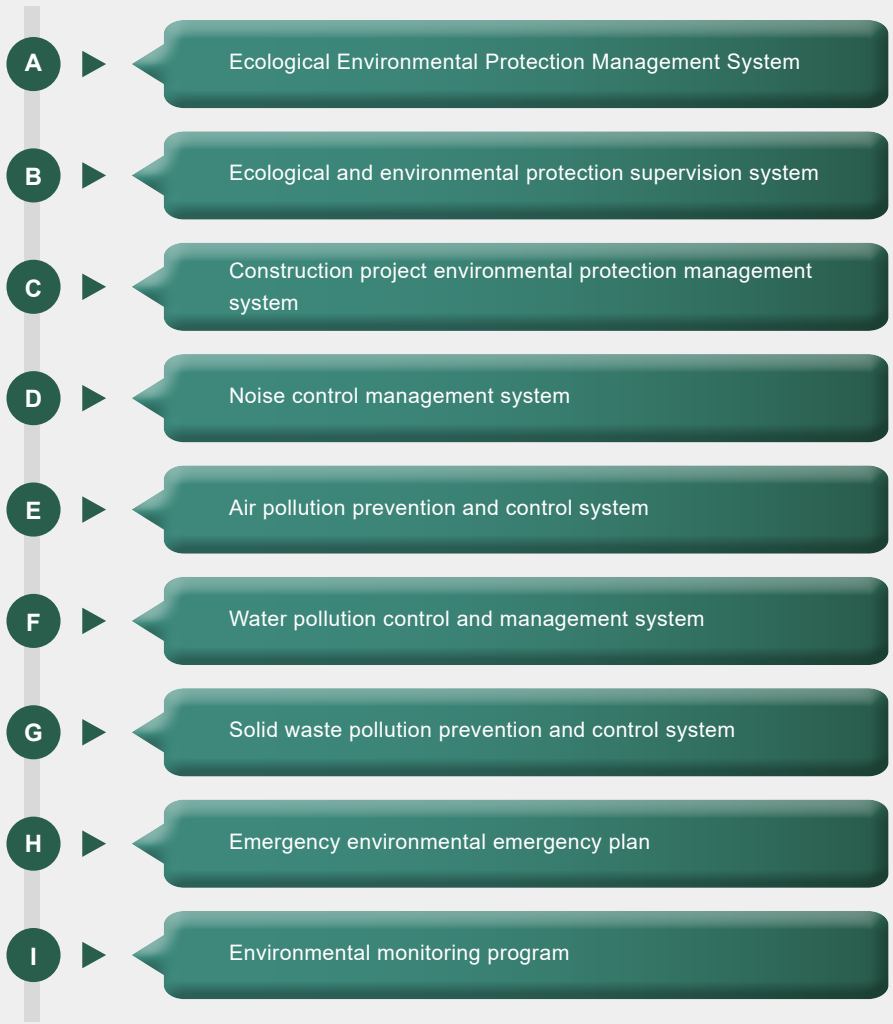
(1) Environmental management regulations

Grace pays attention to the construction of environmental management regulations, constantly revises and improves the environmental management and governance system, and forms the compilation of the Ecological Environmental Protection Management Regulation System of Yibin Grace Group Co.,Ltd. By strictly following the management regulations, it strengthens the implementation of responsibilities and prevents environmental protection risks.

Environmental protection management system of Yibin Grace Group Co.,Ltd.

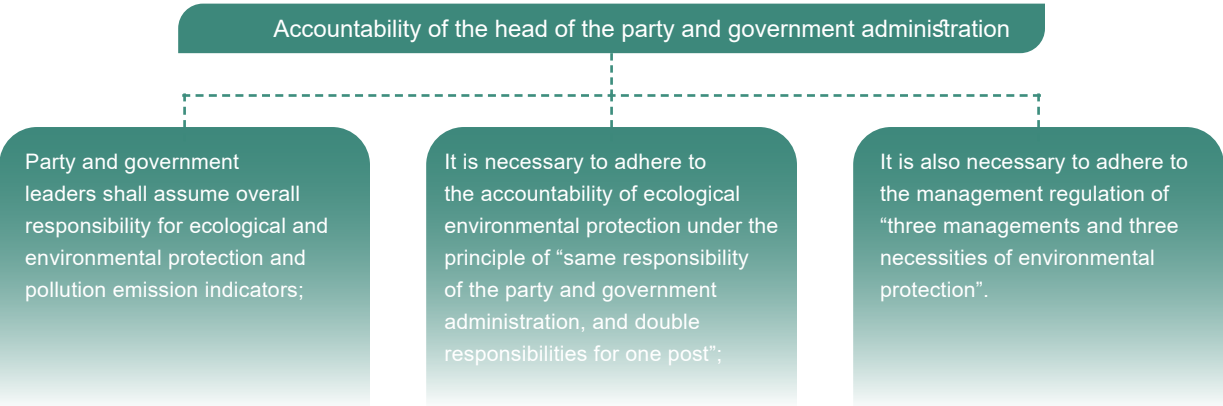


Ecological Environmental Protection Management System of Yibin Grace Group Co., Ltd.

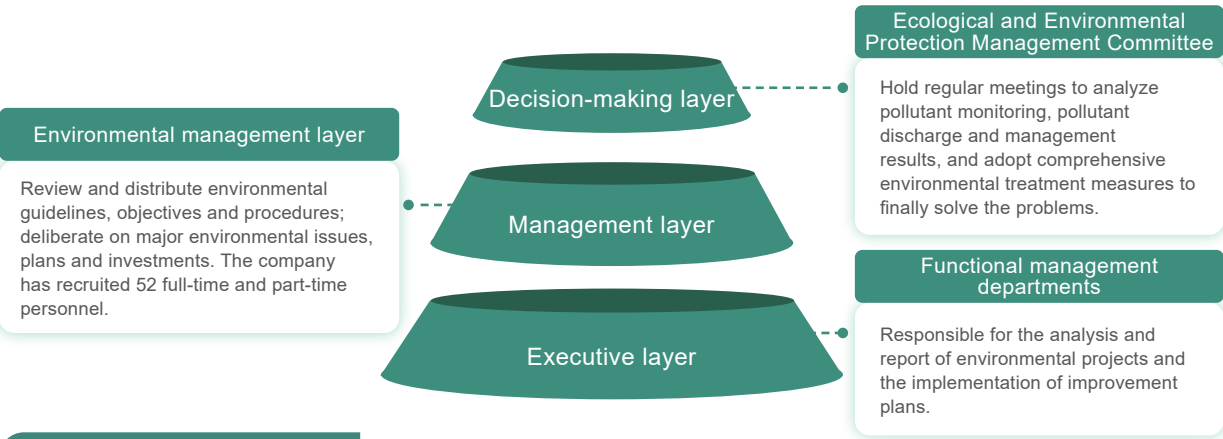


(2) Environmental management organizations

The Company has implemented the “accountability of the head of the party and government administration” for ecological environmental protection, set up an ecological environmental protection management committee, and strengthened the responsibility norms for ecological environmental protection of enterprises, so as to ensure that all environmental protection tasks can be implemented in place.



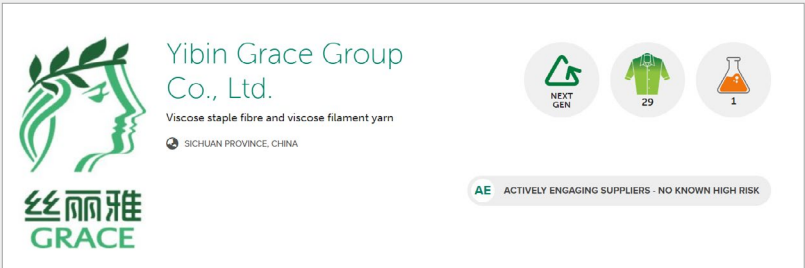
Organization chart for ecological environmental protection management



(3) Relevant certifications

During the reporting period, the Company has obtained or passed the following environmental-related certifications.

Certification of sustainable raw materials



Canopy Certification

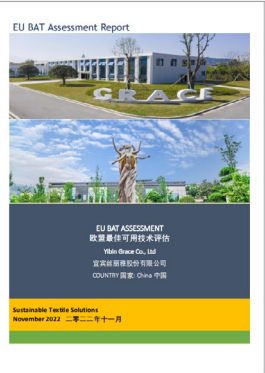


FSC Certification

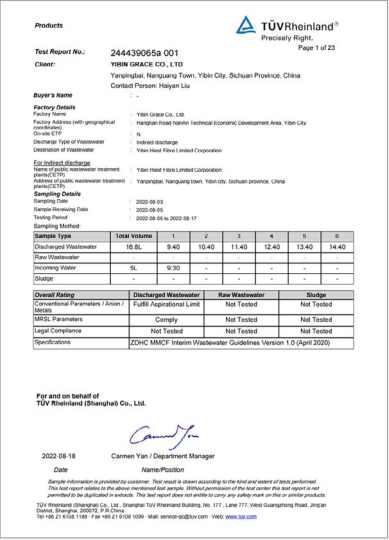
Low carbon closed-loop production certification



Environmental Management System Certification



EU BAT EU Best Available Technology Assessment



ZDHC Regenerated Cellulose Fiber Waste Water Guide Test



Higg FEM 3.0 Index Environmental Module System Certification



BSCI (Corporate Social Responsibility Certification) Class C Certification



STeP by OEKO-TEX® Certification

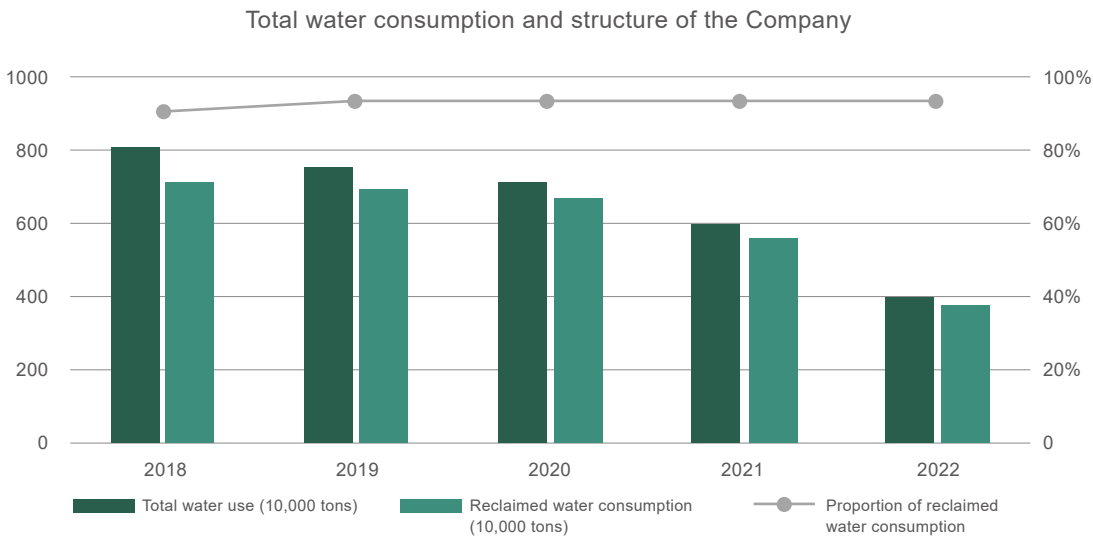


STANDARD 100 by OEKO-TEX®

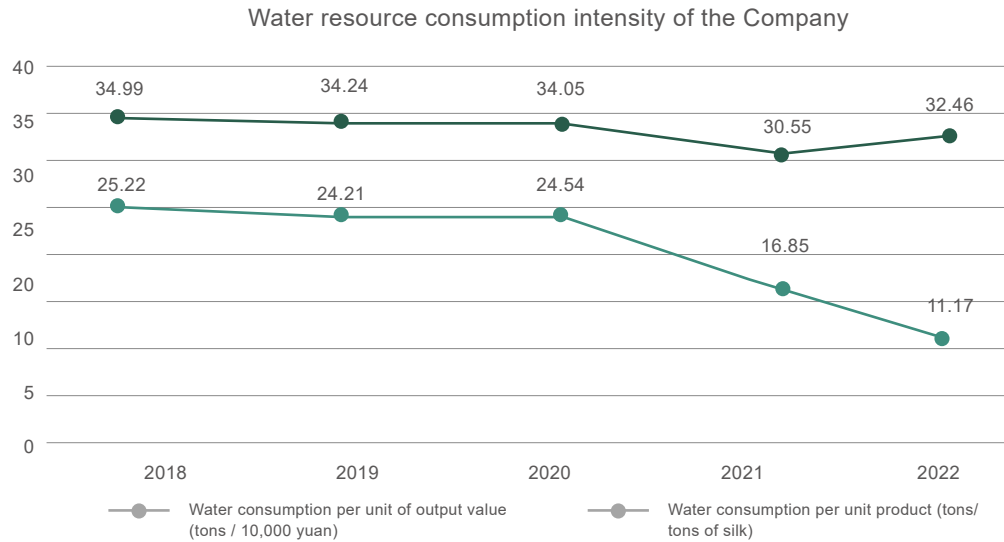
Water resources management

The change in the way of water use and the improvement of water efficiency are important channels to alleviate the contradiction between the supply and demand of water resources in China and ensure water safety, and they are also effective measures for enterprises to achieve transformation and upgrading and green and high-quality development. Grace always adheres to the concept of water use - “saving, high efficiency and recycling”, invests in advanced water-saving and reclaimed water reuse equipment, and applies advanced water-saving process and technology to continuously reduce water intake and improve water resource utilization with remarkable comprehensive benefits; it also actively carries out the green development labor competition with the theme of “science and technology leading green manufacturing”, regularly conducts water-saving inspections, and integrates water resources, so as to save water to the greatest extent.

During the reporting period, the total water intake and reclaimed water consumption of Grace were 4,104,200 tons and 3,775,800 tons respectively, which were significantly lower than those in previous years. In 2022, the Company's product output was 126,441 tons, down 36% year-on-year, which was roughly the same as the decrease of total water consumption.



During the reporting period, the Company's water resource consumption intensity data were as follows. Among them, the water consumption per unit product increased, mainly due to the influence of limited electricity, production stoppage, and blocked operation of water reuse facilities; but it was still better than EU-BAT specification (35-70 m3/ton of products).



Read more: Highlighted water-saving measures

In summer, metal tubes are used as heat exchangers to reduce the temperature of polluted gas by spraying chilled water. Compared with the traditional process, this method has the characteristics of the large heat exchange area and low consumption of chilled water. The cold consumption was reduced by 21.6 million kcal/day, and the direct economic benefit was RMB489,000 per year.

The carbon adsorption process uses “soft water+alkali separation” to prepare low-concentration alkali liquor to remove H2S, and innovates the use of membrane separation alkali to replace soft water. While saving alkali consumption, it can reduce the consumption of soft water by 100m3/d, with a direct economic benefit of RMB43,000 per /year.

During the reporting period, Grace participated in the “2022 National Textile Industry Green Development Labor Competition” and won the title of “Water-saving Benchmark Enterprise”; the first spinning manufacturing department of the Company won the title of “Advanced Water-saving Innovation Group”, and the second stock solution manufacturing department and acid station manufacturing department won the title of “Water-saving Innovation Group”; Tian Qibing, Assistant General Manager and Engineer of the Company, was awarded the title of “Advanced Individual of Water Saving and Efficiency Improvement”.

Read more: “2022 National Textile Industry Green Development Labor Competition”

Purpose and significance: To drive the development of green and low-carbon cycle in the textile industry, comprehensively the improve management level and water use efficiency, and promote the construction of the water-saving industrial system.

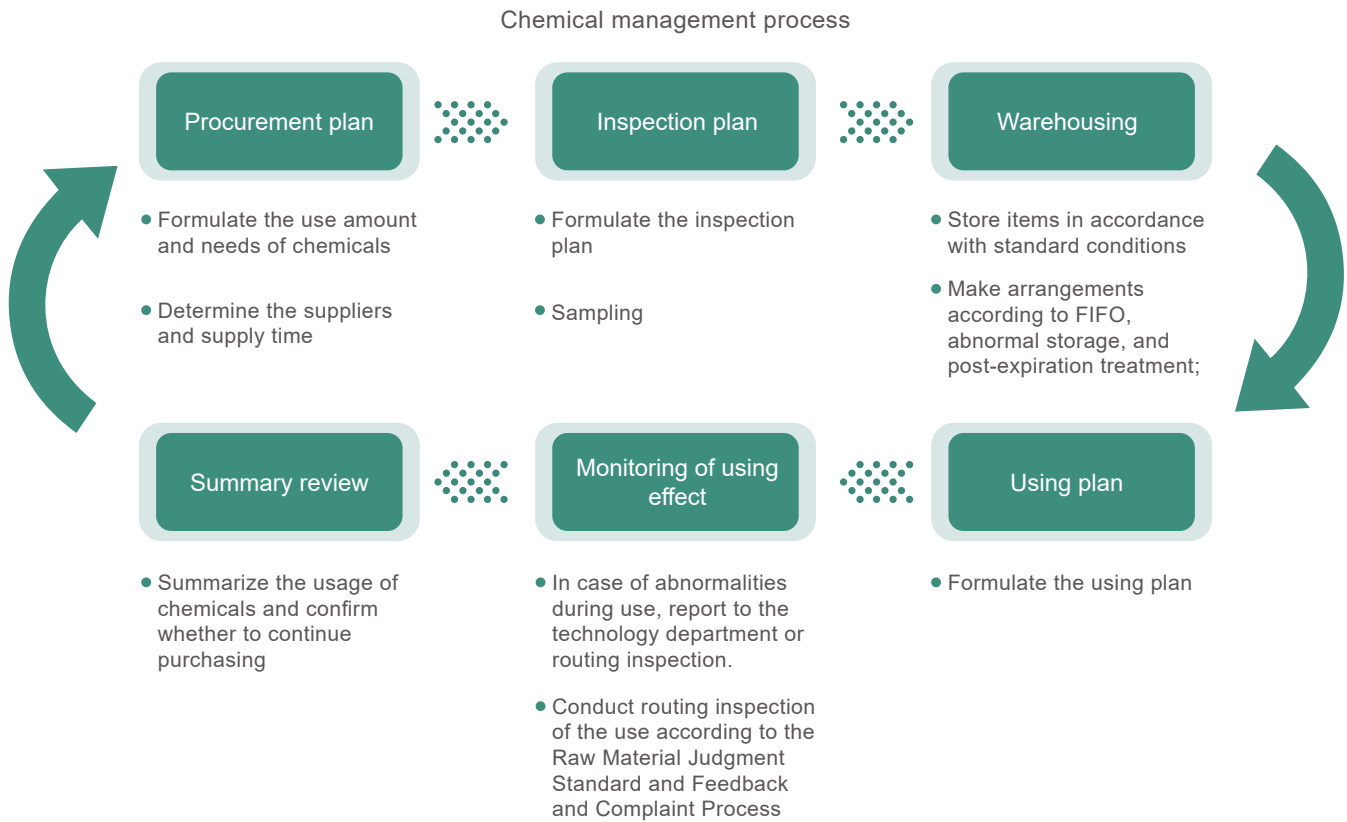
Hosted by: China National Textile And Apparel Council, and Trade Union of Financial and Commercial Workers, Light Industry and Textile Workers, Tobacco Industry Workers.

Competition results: 20 water-saving benchmark enterprises, 33 advanced water-saving innovation groups, 13 innovative water-saving groups, and 20 advanced individuals of water saving and efficiency improvement were selected nationwide.



Chemical management

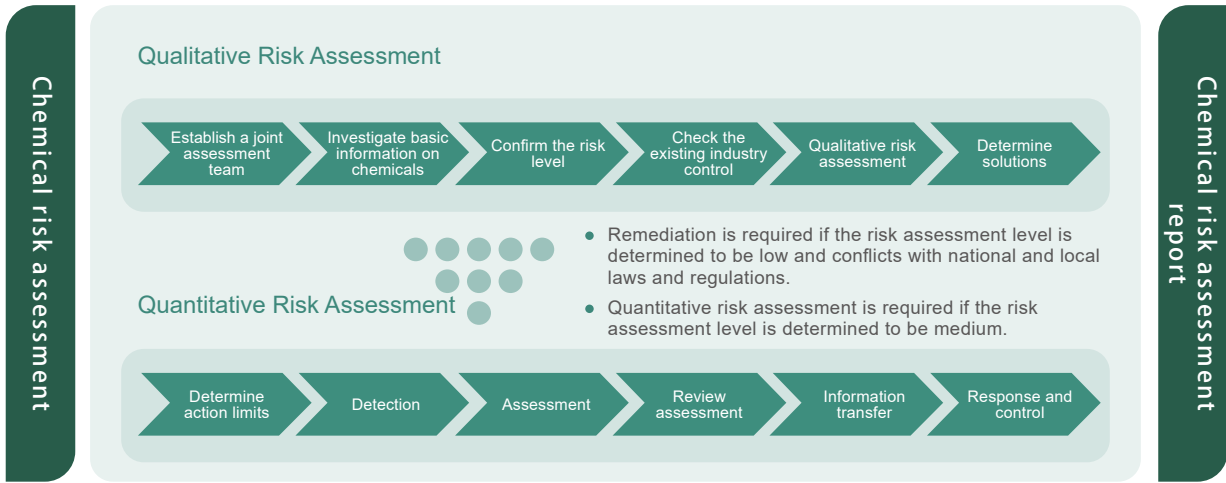
Under the strict implementation of the requirements of related laws and regulations such as the Work Safety Law of the People's Republic of China, the Regulations on the Safety Management of Hazardous Chemicals, and the General Norms for Safety Standardization of Hazardous Chemicals Enterprises, the Company, in combination with the actual situation, formulated the Safety Management Regulation on Hazardous Chemicals of Yibin Grace Co., Ltd., and carries out whole-process standardized management of identification, statistics, purchase, storage, custody, production, use, in & out warehousing, loading and unloading, and disposal of hazardous chemicals. At the same time, reduction targets are set for all kinds of hazardous chemicals every year, and continuous and effective chemical management plans ensure that strict safety standards can be met.



(2) Rules and regulations on the use and management of chemicals

- Measures for Chemical Use Management and Risk Response of Yibin Grace Co., Ltd.
- Chemical Risk Assessment Procedure of Yibin Grace Co., Ltd.
- Safety Management Regulation on Hazardous Chemicals of Yibin Grace Co., Ltd.

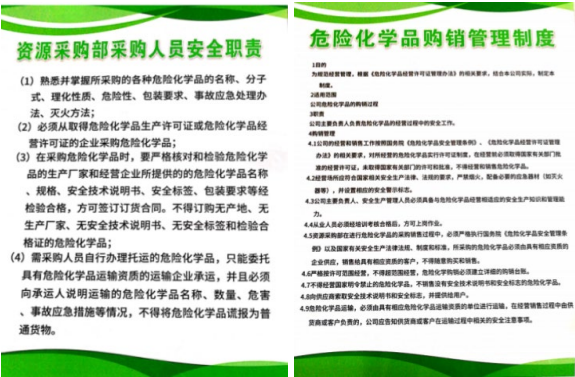
Chemical Risk Assessment and Risk Response Procedures



Reduction/replacement of the use of hazardous chemicals

During the reporting period, the Company strengthened the energy-saving transformation of acid bath (sulfuric acid) production process and invested in the construction of the "Sixteen-effect Acid Bath Process Energy-saving Transformation Project", which saved the steam consumption and reduced the consumption of sulfuric acid, and increased the comprehensive economic benefits by more than RMB20 million per year.

(1) Rules and regulations of chemical procurement management



- Management Regulation on Purchase and Sale of Hazardous Chemicals of Yibin Grace Co., Ltd.
- Safety Responsibilities of Purchasing Personnel in Resource Purchasing Department of Yibin Grace Co., Ltd.
- Chemical Management Process and Specification of Yibin Grace Co., Ltd.
- Management Regulation on Chemical Suppliers of Yibin Grace Co., Ltd.

Read more:

In 2021, the Company launched the chemical risk assessment according to the Chemical Risk Assessment Procedure of Yibin Grace Co., Ltd. and formulated the 2021 Risk Assessment Report of Yibin Grace Co., Ltd. 6 major risk factors were identified in the risk assessment process, and effective control and preventive measures had been taken in that period to realize that the Company had no safety accidents throughout the year.

According to the requirements of the Regulations on the Management of Hazardous Chemicals, if the production process has not changed and no new hazardous chemicals have been added in the production process, the assessment of the current situation of hazardous chemicals can be carried out in 2024.

Pollution prevention

Closely following the national strategic deployment of comprehensively strengthening ecological and environmental protection and resolutely fighting the battle against pollution, and strictly abiding by the relevant national regulations and requirements for the discharge of pollutants, the Company has taken multiple measures to deal with waste water, liquid and waste generated in the production process, reducing total pollutant discharges, improving the pollutant recycling capacity and level, and achieving remarkable comprehensive benefits.

(1) Waste water and waste liquid management

During producing cellulose fibers, a large number of pollutants such as waste alkali liquor, waste glue, acid bath water and plasticized water will be generated. To this end, the Company implements environmental objectives centering on strengthening source control, environmental monitoring and technical monitoring, carries out the pre-control of environmental pollution, pays close attention to sewage treatment, ensures up-to-standard discharge and prevents environmental risks. The main measures are as follows: the Company improves sewage treatment capacity and sewage recycling level by upgrading sewage facilities and biochemical treatment facilities, and optimizing treatment technology and technological innovation, and promotes source treatment and resource reuse to the maximum extent; by screening and domesticating special strains with high acid and salt tolerance, the existing sewage treatment process is optimized to improve the biochemical treatment capacity of waste water; through the innovation of advanced oxidation and negative pressure degassing filtration technology, the treated waste water can be efficiently recovered to the production system, improving the recycling rate of waste water.

In 2022, the Company carried out ZDHC MMCF waste water detection, and all indicators reached excellent levels. The specific results are as follows:

>>>> ZDHC MMCF Waste Water Test in 2022 - Yibin Grace Co., Ltd.

Parameters	Total chromium	Cadmium	Copper	Nickel	Chromium	Hydrocarbon	Sulfide	Mercury	Lead	Zinc	Carbon disulfide	(APEOs)Alkylphenol (APs) and alkylphenol polyoxyethylene acid (APEOs)
Unit	Mg/l	Mg/l	Mg/l	Mg/l	Mg/l	Mg/l	Mg/l	Mg/l	Mg/l	Mg/l	Mg/l	Mg/l
Result	A	A	A	A	A	A	A	A	A	A	A	Complay

A: Best level P: Good level
F: Basic level ND: Not measured



Read more:

1. Waste water treatment

In view of the difficult problems in wastewater treatment, the front-end treatment is implemented. The high concentration alkaline wastewater is collected, and after reacting with acidic water, the filter aid is added and filtered through the filter press, so that the COD of the discharged wastewater is within 2000mg/L and the SS is within 1000mg/L.

The newly-built sewage treatment plant adopted hierarchical treatment and automatic control, and the sewage treatment capacity was increased by 800 cubic meters per hour compared with the previous stage, and the waste water treatment capacity has been greatly improved.

1. Recycling of waste water

The Company conducts the gradient utilization of the condensed water of multi-effect heaters and acid bath heaters to realize water saving and emission reduction in the acid treatment plant.

The gradient reuse of condensate water from the acid treatment plant for the cutting water holding system can reduce the water consumption of fresh soft water by 840m3 per day with the economic benefits of more than RMB300,000 per year.

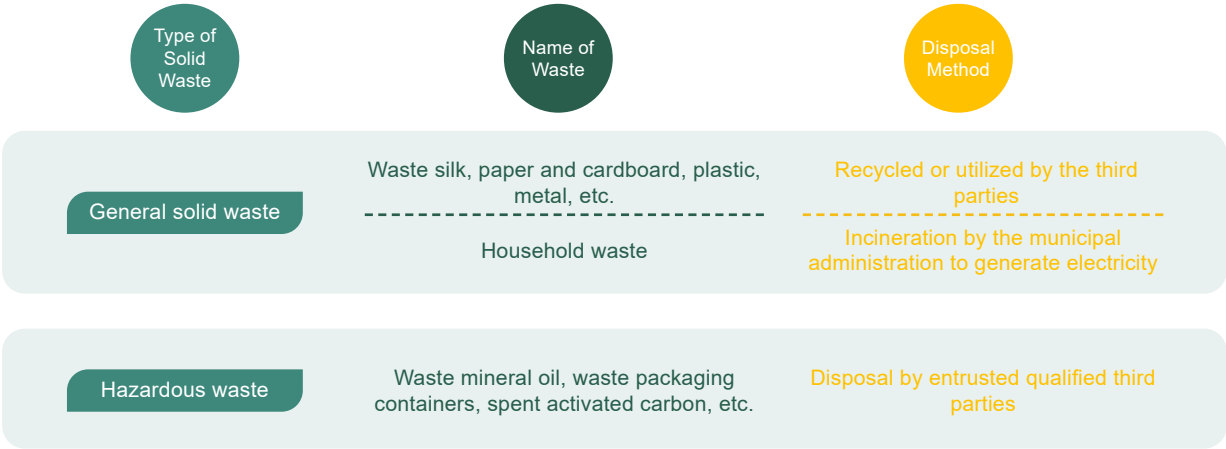
By using the condensed water from the acid treatment plant to conduct water replenishing for the scouring machine, the no more consumption of fresh water in the plasticizing tank can be increased, and the total amount of waste water discharged from the plant can be reduced, with an increased annual economic benefit of nearly RMB200,000.

(2) Waste management

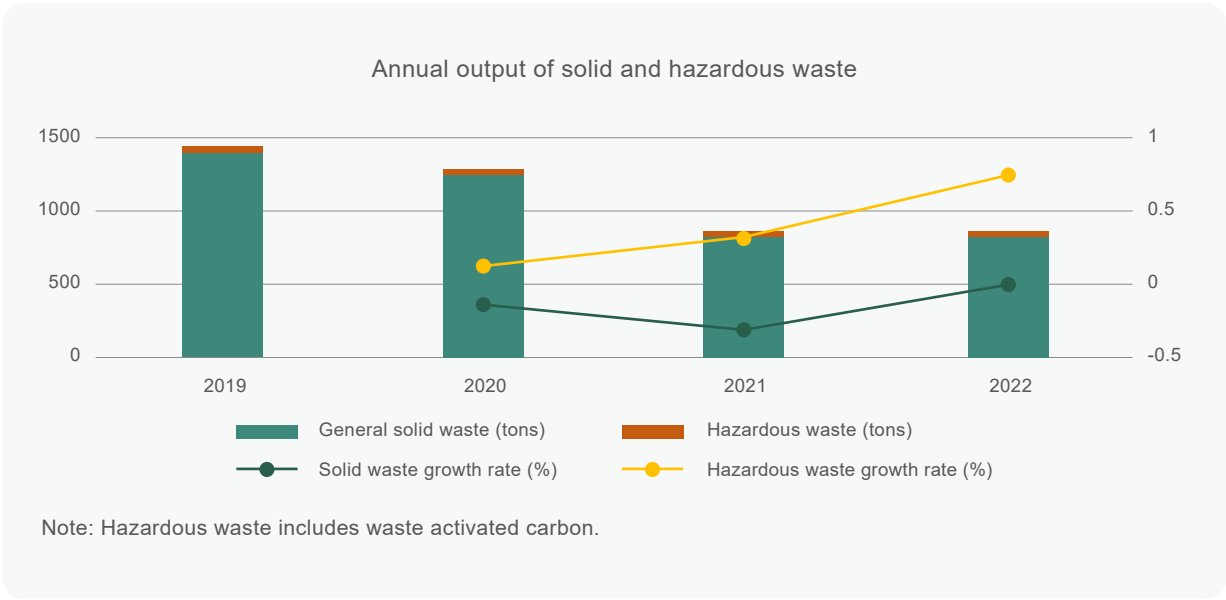
Solid wastes from fiber production mainly include general solid wastes and hazardous wastes. The former includes waste silk, paper and cardboard, plastic, metal and household waste, while the latter includes waste mineral oil and waste packaging containers. In strict accordance with the Law of the People's Republic of China on the Prevention and Control of Environment Pollution Caused by Solid Wastes and other relevant regulations, Grace strengthens the standardized management of solid waste and hazardous waste in combination with the actual situation to carry out reduction, recycling, and harmless disposal of solid waste, so as to reduce the risk of environmental pollution.

At present, Grace has established a perfect solid and hazardous waste management regulation, and prepared related documents such as the Hazardous Waste Management Regulation of Yibin Grace Co., Ltd. and the Operating Instructions for Solid Waste Management; it has also established storage warehouses for hazardous waste, implemented standardized management of hazardous waste, and entrusted qualified third parties for disposal according to relevant regulations. The Company will carry out regular verification of the main qualification and technical capacity of the entrusted parties and strictly implement the regulations related to hazardous waste transfer, so as to realize the traceability of hazardous waste.

>>>> Disposal Methods of Solid Waste (Graphic Illustration)



In 2022, due to the sharp decrease in product output, the general industrial solid waste generated by the Company also decreased significantly, but the decline was narrowed compared with the same period of last year, with a year-on-year decrease of 30.98%. In 2022, due to the pandemic, limited power supply, and other factors, the production of short fiber was unstable, and there were more times of shutdown and maintenance. Therefore, the waste mineral oil and waste oily rags produced by the Company increased greatly compared with the same period of last year, making the total amount of hazardous waste increase greatly compared with the same period of last year.



During the reporting period, the Company's solid waste output per unit product and hazardous waste output per unit product changed from decline to increase. Among them, the output of solid waste per unit product increased to 6.34kg/ton product, an increase of 8.93% year-on-year; the output of hazardous waste per unit product increased to 0.27kg/ton product, which is lower than the EU-BAT hazardous waste emission intensity standard (0.2-2.0kg/ton product).¹

¹Unit product's output of general solid waste = total output of harmless general waste/output of non-conversion viscose;Unit product's output of hazardous waste = total output of hazardous waste/output of non-conversion viscose.



(3) Waste gas management

Through increasing investment in waste gas treatment facilities, and reforming production equipment and auxiliary equipment, Grace has effectively controlled waste gas emission and greatly improved waste gas recycling. At the same time, Grace, in strict accordance with the deployment requirements of air pollution prevention and control, combined with the construction of sulfur recovery system, pays close attention to the construction of waste gas treatment capacity, reduces the emission of polluting gases, and continuously improves the production and living environment.



Case | Technical transformation project of carbon disulfide tail gas treatment and emission reduction

Through the application of new process and technology and the use of new equipment, the treatment efficiency of sulfur-containing waste gas can be stabilized above 80%, and the emission concentration of waste gas produced in the production process and unorganized emission can be reduced. After the project was put into operation, the environmental quality of the factory was fundamentally improved, the working environment of workers was optimized to the greatest extent, the surrounding ecological environment achieved remarkable results, and the air quality inside and outside the factory was significantly improved, laying a solid foundation for the Company's long-term sustainable development strategy.

05

Inclusive Growth

1. Rights and interests of labors
2. Public welfare
3. Harmonious community
4. Common prosperity



Rights and interests of labors

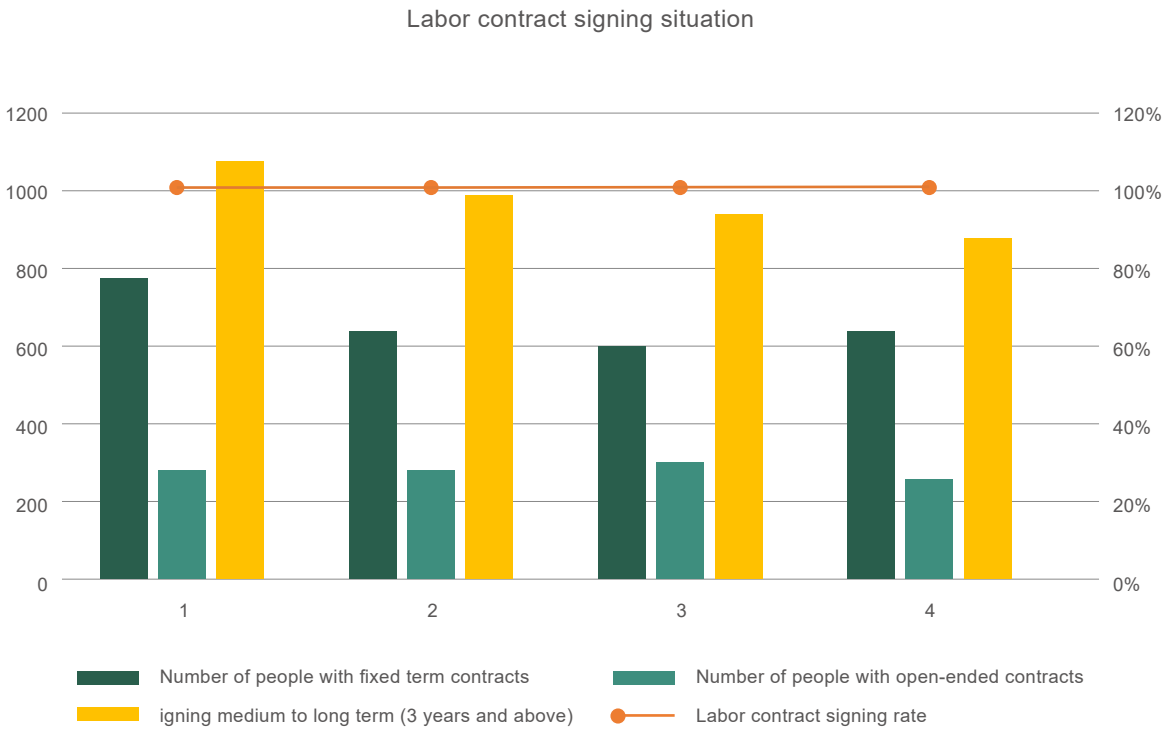
Grace implements the concept of respecting and protecting human rights throughout the whole process of the Company's human resources management, insists on protecting the legitimate rights and interests of employees, and provides employees with a broad development platform and opportunities, accompanies them to obtain growth sincerely, and jointly creates a brighter future with employees with comprehensive occupational health management, perfect training and development system, and care measures for employees.

During the reporting period, Grace passed the BSCI (Corporate Social Responsibility Certification) Class C certification at one time, becoming the first enterprise in the domestic regenerated cellulose staple fiber industry to pass the certification. The successful acquisition of BSCI is a high recognition and affirmation of Grace's work of safeguarding employees' rights and interests, which reflects the Company's harmonious employee relations and good social responsibility performance.

(1) Equal employment

Under the strict implementation of the requirements of laws such as the Labor Law of the People's Republic of China, the Labor Contract Law of the People's Republic of China, and the Law of the People's Republic of China on the Protection of Minors, the Company standardizes the management of employees' labor contracts, protects the legitimate rights and interests of employees, and ensure legal and compliant labor use in accordance with the Employee Handbook of Yibin Grace Co., Ltd. The Company has formulated the Code of Conduct for Social Responsibility to protect employees' right of free choice, resolutely resists the use of child labor and forced labor, and avoids any workplace discrimination based on race, religion, gender, age, marital status, disability or nationality.

During the reporting period, the total number of employees in the Company was 883, and the labor contract signing rate was 100%.



(2) Remuneration and welfare

The Company provides all employees with generous remuneration and welfare. The Company has formulated the Salary Payment Management Regulations and provides employees with "Five Insurances and One Fund" (including endowment insurance, employment injury insurance, medical insurance, maternity insurance, unemployment insurance and housing provident fund), and the social insurance coverage rate reaches 100%; it implements a series of vacation policies such as the national statutory vacation system and paid annual vacation; it also provides employees with high-quality benefits such as accommodation, transportation, family visitation, and physical examination. In addition, the Company also provides funds to organize employees to regularly carry out team building activities, selects and rewards outstanding employees every year, regularly offers care to employees in need, and carries out assistance activities for employees in need, etc.

The Company cares for every employee and it promotes the sense of identity and cohesion of employees based on the established warm, friendly, and positive working environment, so as to make the Company become a "warm home" for all employees. During the reporting period, Grace helped 495 person-times accurately and distributed a salvage fund of RMB785,900. Among them, 5 employees with major diseases were helped, and 6 children of employees with difficulties were helped to go to school, so that the employees could truly feel the care and warmth from the Company.

During the outbreak of the "9.3" novel corona-virus pandemic in Yibin in 2022, the Company provided more than 800 sets of bedding, such as quilts, mattresses and folding beds, and more than 20,000 daily necessities, such as socks, T-shirts and washcloths, which ensured the basic living needs of employees during the pandemic.

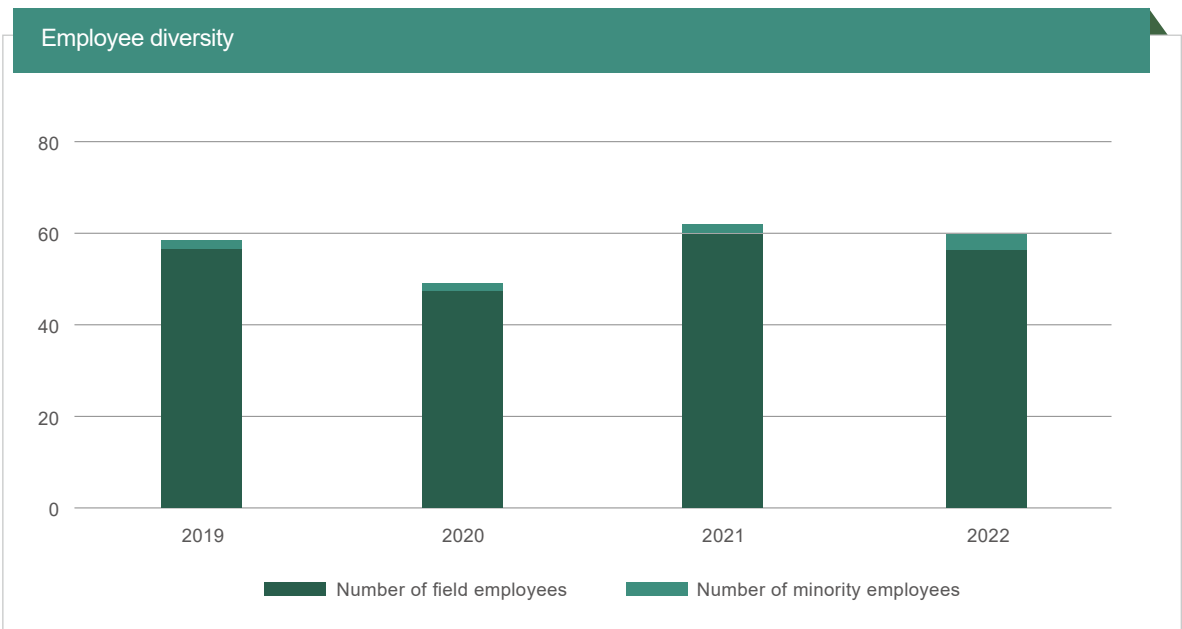
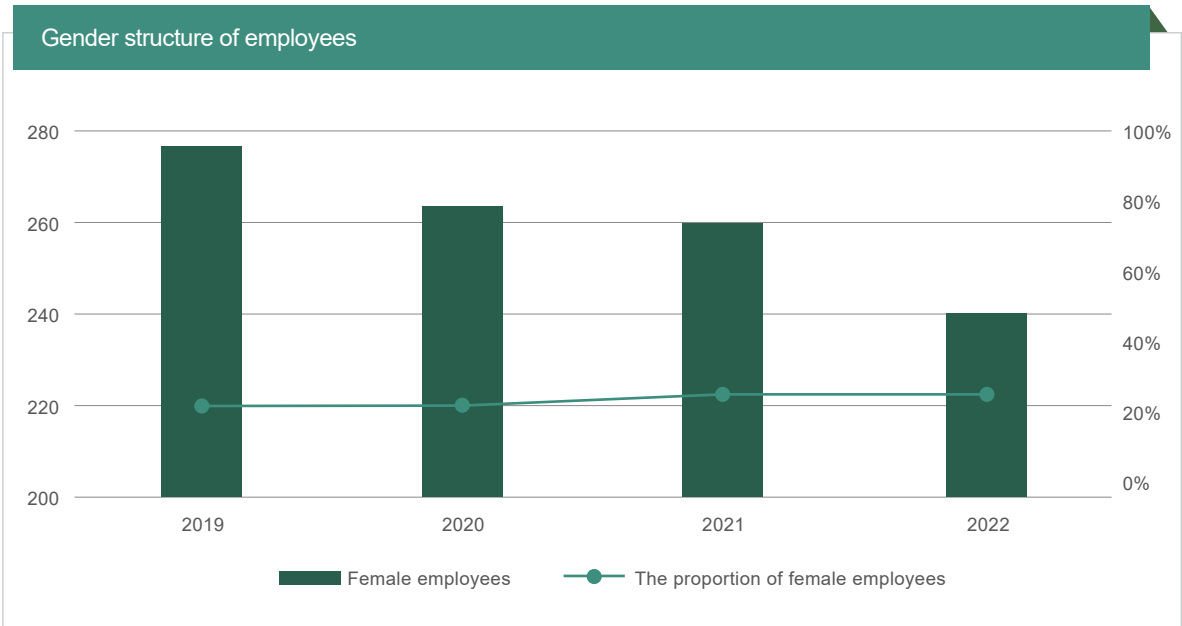


The Company has continuously increased its investment in recent years to create a better working and living environment for grass-roots employees by upgrading and renovating employee dormitories and upgrading living and sports facilities. In 2022, the Company invested about RMB500,000 in maintenance and renovation to repair and renovate the infrastructure of employee apartments to improve the living quality of employees, purchased household appliances such as washing machines, freezers, refrigerators and microwave ovens for employees to improve their quality of life, and carried out the summer "cool delivery" activities to distribute watermelons, cool drinks and heatstroke prevention and cooling drugs to the front-line employees of about 6,800 person-times. In addition, the Company invests millions of RMB every year to afforest the environment of industrial parks, and engages property companies to clean up the environmental sanitation on a regular basis, so as to create a clean and neat working environment for employees.



(3) Equal opportunities

The Company supports the diversity and equal opportunities of employees, opposes discrimination, provides equal employment opportunities for female employees and minority employees, and gives full play to employees' personality characteristics and self-worth. The Company actively protects the legitimate rights and interests of female employees, adheres to the principle of gender equality, ensures that the female employees can enjoy equal labor rights and social security rights with male employees, and strictly implements the regulations on the leave of pregnancy, childbirth, and lactation period for female employees, and the regular physical examination. The Company actively encourages female employees to participate in the democratic management of the Company, and realizes a proper number of female employees as the leading members. By the end of 2022, there were 239 female employees in the Company, accounting for 27.07% of the total, and the proportion of ethnic minority employees was 0.57%.



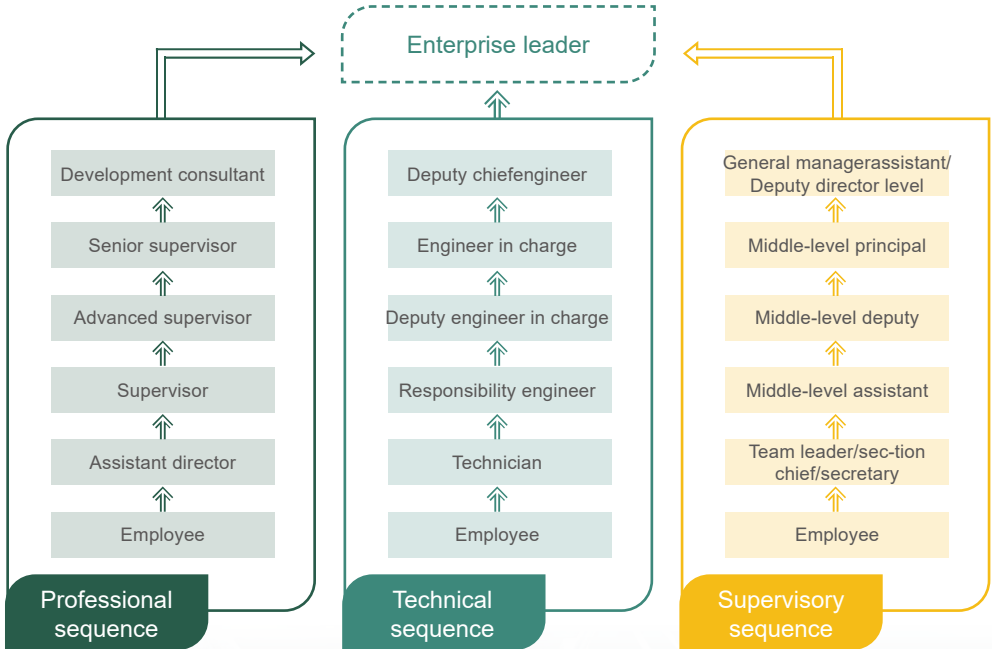
(4) Growth and development

The Company pays attention to the development and growth of employees, provides opportunities and space for their sustainable development, and is committed to realizing the joint growth and development of employees and the Company. Grace has formulated the program of the Employee Training and Development, which specifies the reasonable promotion channels and establishes a perfect training system to meet the joint development needs of employees and the Company.

● Career development

The Company has issued Opinions on Classified Management of Cadre Talent Team and Measures for Management of Professional and Technical Talents, and the employees are provided with multi-level career development channels. There are not only cadres responsible for management, but also professionals and technicians. The Company has established a multi-dimensional career development system for employees, encourages employees to carry out in-depth development in their professional fields, guides their career development, and unifies their self-growth with the Company's development goals, thus cultivating and creating a team with high-quality talents, and finally achieving a win-win vision of employees' career development and the Company's sustainable development.

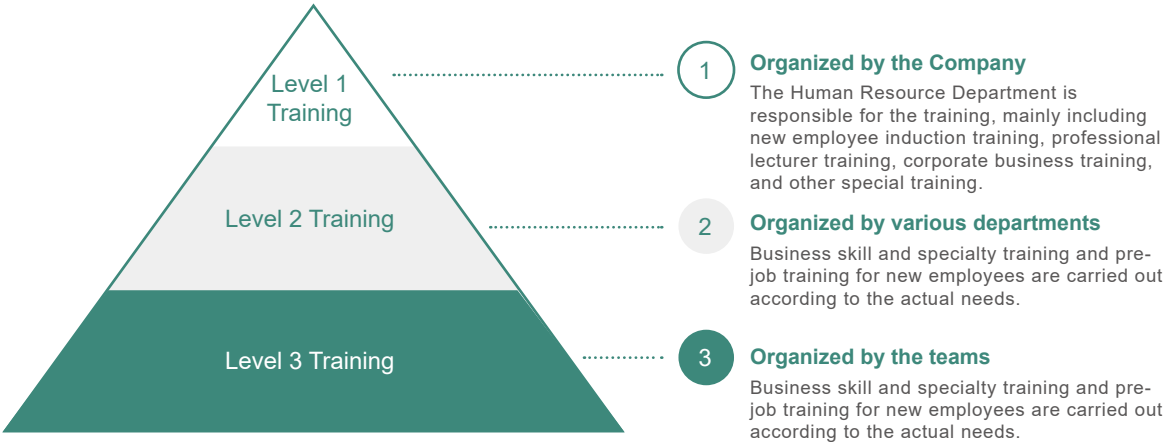
Career development path



• Ability improvement

The Company has fully implemented the concept of “compound talent management, specialized technical talents, and technicalization of staff”, established a three-level training system from the company level, department level to team level, and carried out normal training of talents. In 2022, 456 labor competitions were held and 1305 post trainings were conducted.

Training System of Yibin Grace Co., Ltd.



Training forms: Mainly including off-the-job training, on-the-job training and self-study.

Training types: Five types - internal courses and external courses of the Company, two-way communication, personal education and professional title training, and investigation trip.

Training scope: including grass-roots management personnel training, special operation post training, induction training for new employees, new apprenticeship post skill training, MBA training for middle-to-senior management, etc.

Training contents: including Corporate Culture, Professional Quality, Code of Conduct, Company Regulations, Confidentiality Education, Corporate Safety Knowledge and Occupational Health, Self-protection of Female Employees, Mental Health Maintenance, Excellent Employee Sharing, Team Management, Analysis of Labor Law Relationship, Standardized Management of GMO and 9S, etc.



Read more: New employee training

In November 2022, the “2022 Training Course for College Students” was organized, and more than 100 young college students participated. The week-long training was carried out in two batches in the form of “theoretical training+quality development”, with the training contents such as special lectures, field visits, group communication and team building, so as to help new college students quickly understand the Company, and at the same time, further condense their sense of cooperation, temper their excellent work style, improve their ability and quality, and enhance their skills as leaders.



Read more: “EP” Skill Competition

Since 2003, Grace “EP” (Engineer’s Pioneer) Skill Competition has been held for 19 sessions, from the initial 7 types of jobs to 85, which has cultivated a large number of skilled professionals for the Group and continuously consolidated the Company’s talent base for high-quality and sustainable development.

The 20th “EP” Skill Competition lasted for nine months. During the period, through five stages of training, strengthening, training, competition and skill appraisal, 10 issues of “EP” express were written; in the skill competition and appraisal stage, we organized 166 times of invigilations (in theory and practice), supervised 83 times of printing papers, re-checked 166 times of registered results, wrote 7 issues of “EP” battle reports, and publicized 7 issues of results. 83 projects in 32 branches have produced 5 gold technicians, 12 chief technicians, 96 “EP” technicians and 229 winners, providing strong talent and technical support for the Company to build Grace craftsmen.



(5) Health and safety

The Company insists on putting employees' life safety and occupational health in the first place, conscientiously implements the people-oriented concept of "safety first, people orientation", fully implements the "Healthy China 2030" Planning Outline, strictly abides by the laws and regulations such as the Work Safety Law of the People's Republic of China and the Law of the People's Republic of China on the Prevention and Control of Occupational Diseases, adheres to both occupational safety and occupational disease prevention, and promotes the integrated management of occupational health, physical health and mental health as a whole.

• Identification and control of hazardous risks of occupational diseases

The Company comprehensively identifies, prevents and controls hazardous risks of occupational diseases, takes the prevention and control of health risk factors as the starting point, systematically evaluates health risks, screens out key workplaces and key concerned personnel under control, and takes targeted prevention and control measures to comprehensively improve employees' health and safety quality.

The Company pays attention to the health and safety education and training of all employees, popularizes the knowledge of occupational disease prevention, labor protection, healthy lifestyle, disease prevention and mental health, improves the basic skills of first aid and self-help and emergency escape, establishes a solid awareness of self-safety and health prevention, and promotes employees to realize self-management of safety and health.

• Safeguard measures for occupational health and safety

The Company provides employees with workplaces, environment and conditions conforming to national occupational hygiene and health and safety production standards and requirements, and ensures an adequate supply of corresponding protective equipment and labor protection articles.



During the reporting period, the Company carried out safety and occupational health education training for more than 80 times with 100% qualified rate of safety education training for on-the-job employees, more than 160 times of emergency drills on production safety and chemical use safety, and more than 180 times of daily safety inspection, verified nearly 500 hidden dangers, and conducted 120 person-times of hazardous chemical management and operational evidence collection, with 100% on-duty licensed rate of safety production operators. There were no fatalities, occupational hazards, serious injuries and poisoning accidents in the Company throughout the year.

In addition, the Company entrusts a third-party qualification company to carry out comprehensive detection of occupational hazard factors according to the requirements of relevant national laws, regulations and standards, and takes reasonable measures to improve the abnormal detection.



Detection Results of Occupational Hazard Factors and Improvement Plan

Detection Item	Detection Qualification Rate	Improvement Measures and Plans
Noise	99%	Distribute anti-noise earplugs and supervise employees to wear them correctly.
Dust	100%	1. Increase air circulation facilities to ensure indoor air circulation, and increase air purification devices. 2. Use dust removal equipment for regular dust extraction to reduce dust concentration. 3. Distribute dust masks and supervise employees to wear them correctly.
Sodium hydroxide	100%	Distribute gas half masks and supervise employees to wear them correctly.
Sulphuric acid	100%	1. Increase air circulation facilities to ensure indoor air circulation, and increase air purification devices. 2. Distribute gas half masks and supervise employees to wear them correctly.
Hydrogen peroxide	100%	1. Increase air circulation facilities to ensure indoor air circulation, and increase air purification devices. 2. Adopt a closed transportation mode to reduce the risk of leakage. 3. Distribute gas half masks and supervise employees to wear them correctly.
Carbon disulfide	82%	1. Increase air circulation facilities to ensure indoor air circulation, and increase air purification devices. 2. Adopt a closed transportation mode to reduce the risk of leakage. 3. Distribute gas half masks or configure air respirators, and supervise employees to wear them correctly.
Hydrogen sulfide	100%	1. Increase air circulation facilities to ensure indoor air circulation, and increase air purification devices. 2. Adopt a closed transportation mode to reduce the risk of leakage. 3. Distribute gas half masks or configure air respirators, and supervise employees to wear them correctly.

(6) Democratic management

The Company follows the requirements of laws and regulations such as the Trade Union Law of the People's Republic of China, the Articles of Association of the Trade Union of China, the Provisions on the Election of Grass-roots Trade Union Organizations, the Provisions on Grass-roots Trade Union Member Congress, the Provisions on the Work of Enterprise Trade Unions, and the Provisions on the Democratic Management of Enterprises to establish trade union organizations, so as to protect and guarantee the vital interests of employees. The Company respects the autonomy of the trade union, cooperates with and strongly supports their work, gives full play to their role, and jointly builds a more harmonious labor-capital relationship. The Company has been awarded as the national and industrial “Enterprise with Harmonious Labor Relationship” many times. As of the end of 2022, the rate of the Company's employees joining the trade union reached 100%.



Case | “Smart Storm Rationalized Suggestion Activities”

Rationalized suggestion activities are an effective way for employees to participate in enterprise management and play the role of masters, and also an effective measure for the Company to enhance employees' cohesion and initiative. The Company actively carries out the disclosure activities of factory affairs, collects the rational opinions and suggestions of employees in time by establishing communication channels such as suggestion boxes, and promotes the economic benefits and enhances the development quality of the Company.

During the reporting period, the Company explored and innovated the original communication forms and channels, and mobilized all employees to make suggestions for the high-quality development of the Company.

In 2022, guided by the spirit of the 20th CPC National Congress, the 12th Provincial Congress of Party Representatives, and the 5th Plenary Session of the 6th Municipal Party Committee, the Company's trade union focused on the Company's “14th Five-Year Plan” and “Double Five Hundred” objectives and tasks. With the emphasis on scientific and technological innovation, management and operation improvement, production process optimization, energy saving and consumption reduction, cultural construction, and improvement of labor efficiency, it organized the first collection activity of Smart Storm rationalized suggestions with the theme of “Brainstorming and Strategy Provision for Development”. In order to further motivate employees to participate, the Company established an incentive mechanism, and set up awards such as wisdom “gold” ideas, wisdom “silver” ideas and wisdom “bronze” ideas, and commended and rewarded them.

After the activity, with the unprecedented enthusiasm and participation of employees, a total of 8981 rationalized suggestions were collected, far beyond the expectations. After review and appraisal, a total of 10 gold ideas, 20 silver ideas, 50 bronze ideas and 100 merit awards were selected. The commendation meeting was held in January 2023.



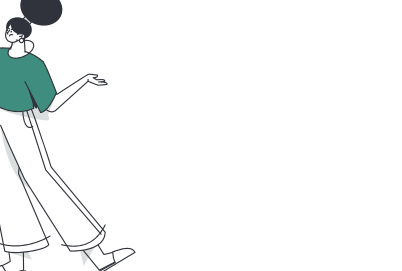
Public welfare

Since the “9.3” imported COVID-19 pandemic broke out in Yibin, with the support of the municipal party committee, the municipal government and relevant departments, Grace quickly launched the emergency mechanism, and on the basis of strictly implementing the pandemic prevention and control requirements and ensuring the health and living needs of employees, fully guaranteed the normal production and adequate supply of the pandemic prevention materials. During this period, Grace not only ensured the demands of local pandemic prevention materials such as Yibin and Chengdu, but also met the demands of production raw materials (melt-blown non-woven fabrics) for masks and protective clothing in Yunnan, Guizhou and Sichuan provinces and Chongqing, and made positive contributions to building a “red dam” for the pandemic prevention.



Harmonious community

In 2022, Grace Youth Volunteer Service Team participated in 79 volunteer service projects such as Community Services under Double Responsibilities and Double Guarantees (responsible for actions to be taken both in the enterprise and in communities around and guarantee of thorough publicity as well as collection of, feedback on problems and rectification accordingly under the long-term normal work mechanism for establishing national civilized cities) and “Cuiping Mountain Civilization Persuasion”, with 516 participants and an effective duration of more than 1,500 hours.



Common prosperity

The implementation of the rural revitalization strategy is an inevitable choice to achieve common prosperity and an important foundation for building a socialist modern country. On February 22, 2022, the Central Committee of the Communist Party and the State Council officially issued the Opinions on Effectively Completing the Key Work of Comprehensively Promoting Rural Revitalization in 2022, further making major deployments for rural revitalization. The promotion of rural revitalization in an all-round way is the common mission and responsibility of the governments, enterprises and social organizations, which requires joint force from the entire society. As an important social force, enterprises have the ability, obligation and responsibility to play a greater role in rural revitalization.

(1) Industrial assistance

In recent years, Grace insists on implementing the “industrial assistance” project, gives full play to the leading role of industrial development, and invests and builds factories in Leibo County which is a concentrated contiguous poverty-stricken area; by providing jobs to promote employment, the poverty-stricken people are driven to continue to increase their income, laying a solid foundation for Leibo rural revitalization. In 2022, there were 228 employees in the workshop, more than 85% of whom were women, including 18 couples and more than 60 employees from Yi ethnic group.

In order to continue to support the rural revitalization of Leibo County, lay a solid foundation for poverty alleviation and drive the development of the surrounding areas, the Company aims to promote rural revitalization through the “three-step” strategy.

The first step, Develop the role as the “leading bird” to cultivate industry leaders. That is to say, investing in establishing a company in 2020 can link and drive the development of surrounding ethnic minority areas, and form a development pattern of “cultivating a group of capable people, revitalizing some industries, prospering the economy, and making the people rich”.

The second step, Pay attention to “mentoring” to improve the ability of the surrounding people to live by skills. In 2022, the Company strengthened the training of new employees and adopted the mode of “corresponding assistance”, that is, the old employees taught the new employees to speed up the growth and meet the post requirements.

The third step, “Refined” assistance; the results of poverty alleviation have been continuously consolidated. In 2023, the Company will continue to consolidate the previous achievements, strive for the production of No.2 and No.3 workshops, expand production capacity, and recruit and absorb more people for employment from the surrounding areas and even the county.



(2) Talent assistance

The Company dispatched Peng Songwei, a poverty alleviation cadre, to serve the First Secretary and Captain of the Resident Team at Jianwu Village, Jiusi Town, Xingwen County. This comrade used to be the First Secretary of Shuangfeng Village, Gusong Town, Xingwen County where Grace once helped the village. The assessment results for six consecutive years were excellent and he had rich experience in rural work. During his tenure in Jianwu Village, Peng Songwei went deep into 183 poverty-stricken households and 6 monitoring households in 12 groups in the village, formulated corresponding assistance measures and methods according to the situation of each household, and passed the “review” of poverty alleviation results and the provincial third-party inspection work with the assistance of the two village committees. In 2021, the Party Committee of Jianwu Village was rated as “4A-level Excellent Village Grass-roots Party Unit” by the Organization Department of Yibin Municipal Committee, and successfully passed the acceptance of 5A-level.



Grace went to Jianwu Village, Jiusi Town, Xingwen County to carry out targeted assistance for rural revitalization.



Grace and Jianwu Village in Xingwen County held a symposium on rural revitalization.

(3) Consumption assistance

Since 2021, Grace Party Committee has organized grass-roots party branches, cadres and workers to purchase more than 15,000 Jin of various fruits such as Yinhong Plum, Crispy Persimmon and Kiwifruit in Jianwu Village at a slightly higher market price through “purchasing instead of donating”, and the fruits planted by farmers have been fully sold, effectively helping local farmers to increase their income steadily.

(4) Educational assistance

Grace actively takes education as the starting point to make every effort to help students. Through the First Secretary’s visit to monitoring households, poverty-stricken households and needy households, 7 primary school students, 3 middle school students, 2 secondary vocational school students and 2 orphans were identified to need assistance. Upon the approval of the Party Committee of the Group, each student will be given RMB300-500 cash assistance every month to encourage students to change their destiny with knowledge.



Index of Report Indicators

First-level Title	Second-level Title	China Sustainability Reporting Guidelines for Apparel and Textile Enterprises (CSR-GATEs)	Report Location
About this report	—	6.1.1 6.1.2 6.1.3 6.1.4 6.1.5 6.1.6 6.2.1 6.2.2 6.2.3 6.2.4 6.2.5 6.2.6 6.2.7 6.2.8	P1-P2
Speech by the chairman	—	2.1.3	P3-P4
About Grace	Basic information	1.1.1 1.1.2 1.1.4 1.1.8 1.2.1 2.1.1	P9-P10
	Production layout	4.3.24	P11-P12
	Business overview	1.1.3 1.1.6	P13
	Company products	4.1.1 4.1.4 4.1.6 4.1.7 4.1.8 4.1.9 4.1.10 4.1.11	P14-P20
Sustainable development	The concept of sustainable development	2.1.2	P23
	The sustainable development management framework	3.1.1 3.1.2 3.1.3	P23
	Identification of and communication with stakeholders	3.4.1 3.4.2 3.4.3 3.4.4 3.4.5	P24
	Analysis of substantive issues	3.4.6 3.4.7	P25
	Honors	1.1.9 4.3.31 4.4.20 4.5.10 4.5.11	P26
Addressing climate change	Formulation of the “carbon peaking and carbon neutrality” strategy	2.1.2 4.3.33	P31
	Establishment of a carbon management system	4.3.1	P32
	Promotion of carbon emission reduction during the operation	4.3.16 4.3.17 4.3.4 4.3.5 4.3.6 4.3.7 4.3.8 4.3.9 4.3.29	P33-P38
	Development of low-carbon products	4.3.17	P39-P44
Environmental protection	Environmental management	4.3.1 4.3.2 3.1.7	P47-P50
	Water resources management	4.3.3 4.3.10 4.3.11	P51-P52
	Chemical management	4.1.3 4.1.4 4.4.8 4.4.9	P53-P54
	Pollution prevention	4.3.11 4.3.12 4.3.13 4.3.14 4.3.15 4.3.18 4.3.19 4.3.20 4.3.22 4.3.28 4.3.29 4.3.30	P55-P58

Inclusive growth	Rights and interests of labors	4.2.1 4.2.2 4.2.3 4.2.4 4.2.5 4.2.6 4.2.7 4.2.10 4.2.12 4.2.15 4.2.18 4.2.20 4.2.23 4.2.24 4.2.25 4.2.26 4.2.27 4.2.29 4.2.30 4.2.31 4.2.32 4.2.33 4.2.34 4.2.35 4.2.36 4.2.37 4.2.38 4.2.39 4.2.40 4.2.41 4.2.42 4.2.43 4.2.44 5.3.1 5.3.2 5.3.3	P61-P69
	Public welfare	4.5.5 5.1.1 5.1.2 5.1.3	P70
	Harmonious community	4.5.2 4.5.9	P70
	Common prosperity	4.5.1 4.5.3 4.5.4 4.5.6	P71-P72

Reader Feedback

Distinguished readers:

Hello! Thank you for reading this report. In order to further improve the Company's sustainable development level and the quality of report preparation, if you have any comments and suggestions, please scan the QR code below and submit it to us online.





Yibin Grace Co., Ltd.

Address: Yanpingba Industrial Park, Nanguang Town,
Xuzhou District, Yibin, Sichuan Province

Postcode: 644002

Tel: 0831-2400222

Fax: 0831-2400100

Address: <https://www.cn-grace.com/index.aspx>



This report is made from environmentally
friendly recycled paper