

# **CONTENTS**

About This Report	5
Speech by the Senior Executive	6
Key Performance in 2021	8

About Grace 10		
	1. Company Profile	11
(-h)	2. Business Introduction	14
	3. Stakeholders and Issues Analysis	19
	4. Certification and Honors	21
Climate Change 22		
	1. Addressing climate change	23
$\langle \dots \rangle$	2. Energy conservation, consumption	29
	reduction and emission reduction	
Environmental Protection 34		
$\wedge$	1. Environmental management	35
	2. Water resources management	38
$\mathbf{V}$	3. Pollution prevention	40
	/ Chemicals management	//3

4. Chemicals management



1. Protection of employee rights	47
and interests	
2. Growth and development	49
3. Health and safety	52
4. Employee care	54

1. Public welfare	57
2. Harmonious community	59
3. Common moderate prosperity	60

# About This Report

#### 1.0verview

The Sustainability Report 2021 of Yibin Grace Co., Ltd. is the first version sustainability 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 2021.

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.

### 2.Reporting Period

The reporting period of this report begins on January 1, 2021 and ends on December 31, 2021, and some contents may be traced back to previous years.

## 3. 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.

## 4.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 latest version of Sustainability Reporting Standards by Global Reporting Initiative (GRI), Sustainable Development Goals (SDGs) defined by the UN, and Guidelines on the Social Responsibility for Industries of China (2.0).

## 5.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.

### 6.Report verification

At the request of Yibin Grace Co., Ltd. the Office for the Social Responsibility of CNTAC has verified the report in accordance with the verification principles(Part III) of China Sustainability Reporting Verification Rules and Instructions(CSR-VRAI), and that the preparation and quality of the report met requirements.

## 7.Information Access

This report is prepared by Grace in English and you can get a free copy of this report through the following website. https://www.cn-Grace.com

# Speech by the Senior Executive

This is an era in which mankind pursues green and advocates nature, making sustainable development a new call of our times. Being in this great era, we are allowed to depict a beautiful picture of sustainable development and let the world give ear to the voice of the textile industry for green with the care and support from industry associations and colleagues from all walks of life.



In 2021, the starting year of the "14th Five-Year Plan", we actively embraced the new development paradigm in which domestic and foreign markets boost each other, and combined sustainable development with opening up and innovation, industrial distribution, transformation and upgrading, and deepening reform, achieving favorable performance and progress in environment, social responsibility and corporate governance. Grace has been successively granted honorary titles including "Top Ten Textile Technology Achievements of China", "Innovative and Exemplary Technology-based Enterprises in the Textile Industry",

"Model Enterprise Upholding Green Development in the '13th Five-Year Plan' Period", and "2021 Regenerated Cellulose Fiber - 'High-quality Supplier' in the Cotton Textile Industry Chain"

#### We uphold the circular economic development approach and formulate our strategies for sustainable development.

We have constructed perfect innovation system and circular economy system from multiple dimensions including scale production, whole process quality control, differentiated customization, product-wide certification and supply chain combination, and integrated climate and ecosystem protection into the whole fiber production process; we have made great efforts to explore inclusive sustainable development system from partnership cooperation, built a coordinated and win-win industrial layout through close cooperation of the whole industrial chain, laying a solid foundation for us to realize our development blueprint.

#### We energetically answer the call of the industry and actively carry out sustainable development practices.

We have fully implemented the roadmap of the Collaboration for Sustainable Development of Viscose (CV), launched the "peak carbon dioxide emissions and carbon neutrality" program. joined the "30 · 60" acceleration program, confirmed the medium and long-term development goals, and responded to the ZDHC MMCF Wastewater Guidelines. Besides, we have passed the HIGG FEM 3.0 INDEX environmental module system certification, launched environment-friendly products including Gracell fiber, dope dyed fiber, Yasi, recycled fiber, and spared no efforts to constantly learn, participate in and create green and sustainable development.

#### We carry forward all-round ecological environmental protection and foster innovative, circular and inclusive developmen

We have worked together with leading retailers to actively develop and promote environment-friendly products and widely publicize environmental protection concept. We have fully examined our management and operation, energy conservation and emission reduction, technological innovation and brand construction, strengthened our core competitiveness and made continuous contributions to social progress.

#### le effectively assume our social responsibility and organically unify our development goals with social development goals.

Internally, we have taken measures to protect the basic rights and interests of employees and improve their salary and welfare: carried out abundant and various cultural activities for employees and laid emphasis on the construction of corporate culture; drew up talent training plan to improve the comprehensive competence of employees; created various platforms to encourage employees to create values. Externally, we have donated funds to schools, conducted paired assistance, took effective measures including connecting industries and building schoolhouse to carry forward rural revitalization, and have won the honorary title of "Advanced Collective for Poverty Alleviation in Sichuan Province" ; provided supportive services to communities 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) consolidated the achievements in building civilized cities; produced masks, protective suits, disinfectant wipes and other protective articles to build a health "protective wall" against the pandemic; put forth effort to construct urban parks, created a new living mode and spread our core humanistic concept of "beauty, charm and happiness" .

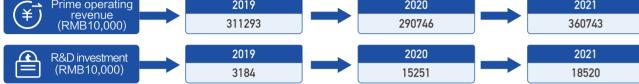
Looking ahead, against the backdrop of "Peak Carbon Dioxide Emissions", "Carbon Neutrality" and "14th Five-Year Plan" proposed by the country, Grace, as a global professional supplier of regenerated cellulose fiber, will take green, circular and sustainable development as its mission, constantly strive to alleviate the impact of its business activities on resources and environment, and strive to be a pioneer in the sustainable development of the industry; work together with upstream and downstream partners to create a sustainable omnichannel supply chain and strive to be a leader in sustainable development.

Now that we have set our goals, we will march forward regardless of hardship. On a new journey in the new era, let's move step by step towards the vision of the textile industry for 2035 and ioin hands for a better future!

----President of Yibin Grace Group Co., Ltd. Deng Min







□ Actions for Peak Carbon Dioxide Emissions and Carbon Neutrality

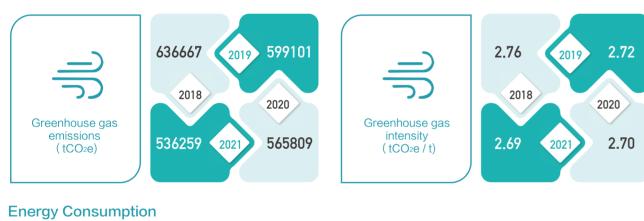
We have joined the "Climate Stewardship 30 · 60 Net Zero Accelerating Plan" and taken innovative climate actions.

# **Greenhouse Gas Emission**

YIBIN GRACE CO., LTD.

SUSTAINABILITY REPORT 2021

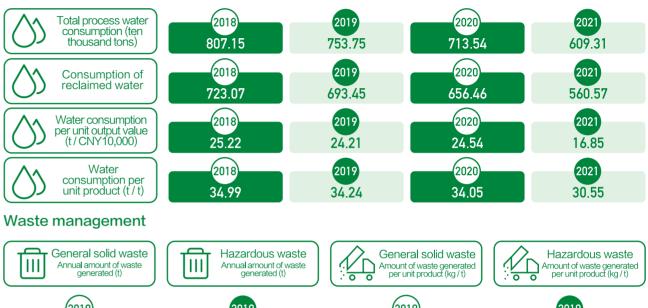
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# **Ξ**、Environmental Protection

Use of water resources





# 四、Rights and Interests of Employees



leakage accident, and no mass poisoning accident.

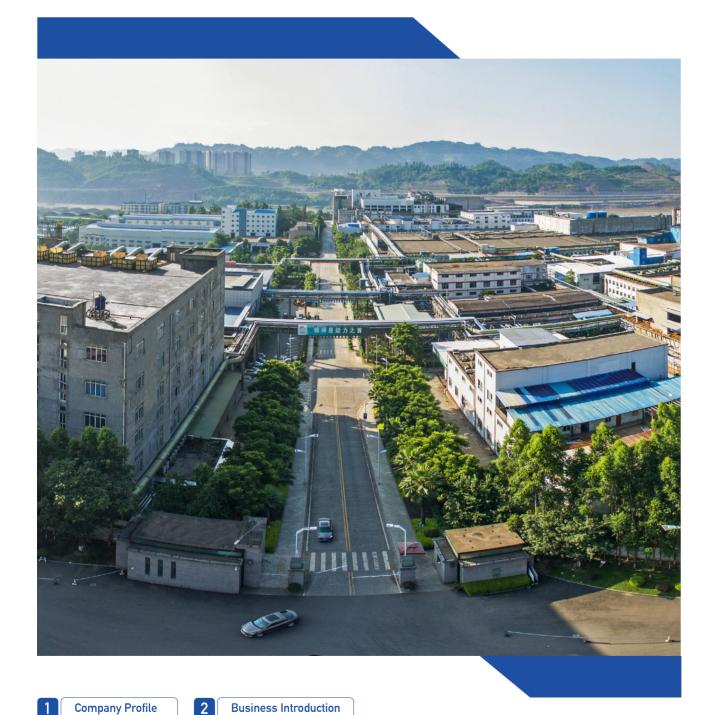
# 五、Social Responsibility



3

Stakeholders and Issues Analysis





**Certification and Honors** 

**/**1

1 Company Profile



Yibin Grace Co., Ltd.

Established in 2000 and located in Yanpingba Industrial Park, Nanguang Town, Xuzhou District, Yibin City, Sichuan Province, Yibin Grace Co., Ltd. is the only comprehensive growth orientated enterprise that is mainly engaged in producing viscose and compound pulp in Southwest China. The Company now has the capacity of producing 240,000 tons of viscose staple fiber per year. Besides, the Company is also the only enterprise in China that owns proprietary intellectual property rights over composite viscose, and is one of the first batch of top 500 enterprises in China.



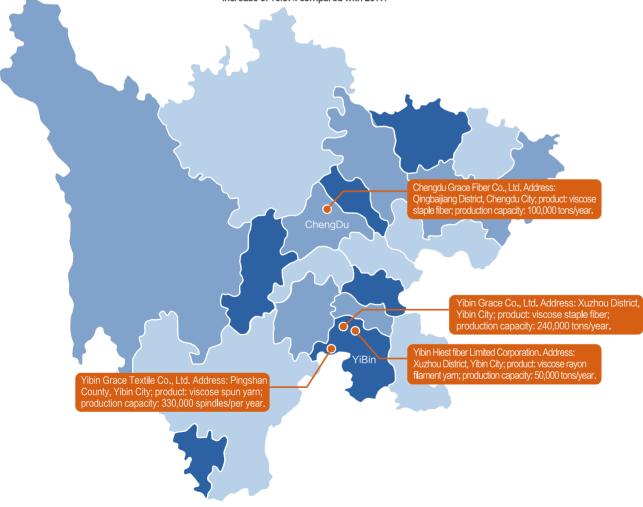


#### (2)Management lavout

Grace enjoys a favorable geographical location as it is located at the intersection of the northsouth 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. Benefiting from favorable geographical location and abundant environmental resources, Grace has achieved rapid development, becoming an important contributor to the local economic and social development. By carrying out ecological civilization construction, it has become the protector, builder and beneficiary of ecological environment and biodiversity.

Currently, Yibin is facing accelerated pace of urban development, accelerated adjustment of spatial pattern, and rising needs for ecological environmental protection. Being adjacent to the main line of the Yangtze River, Grace has 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. Once the relocation is completed, 680,000 tons of regenerated cellulose fiber industry (including 200,000 tons of bamboo fiber) will be formed in Yibin.

The Company has basically got rid of the impact of COVID-19 and achieved positive growth during the reporting period. In 2021, the Company's prime operating revenue reached CNY3.607 billion, an increase of 15.89% compared with 2019.



Distribution of production bases as well as production capacity

# § Promoting upgrading and high-guality development through industrial relocation

Taking industrial relocation as an opportunity, Grace has shut down outdated production facilities and upgraded technology, equipment and management simultaneously, realizing the green, low-carbon, intelligent and safe development of the industry.



After the relocation, industry-leading MK waste gas intercooling technology clusters, recycling system governance technology will be adopted in the new factory, the airtightness of the spinning machine will be comprehensively upgraded, and the waste gas recovery rate will reach more than 98%.

Secondly, upgrading low-carbon development. Energy-efficient production equipment will be adopted to reduce energy consumption. The average annual water consumption is expected to be reduced by 2.03 million tons compared with the current one, with a saving rate of 7.6%, and the steam is expected to be reduced by 324,000 tons compared with the current one, with a saving rate of 10.4%. The emission of carbon-based compounds will be reduced to promote carbon emission reduction.

Automation technologies will be fully applied in production to precisely control process, improve product guality, reduce labor intensity and improve production efficiency. Advanced technologies such as industrial Internet of things and industrial big data will be adopted to realize the interconnection of traditional ERP and build a modern information management system.

Design will be strictly supervised, scientific layout will be implemented, security management will be carried out, DCS full-automatic control will be put into practice, and concepts concerning technical security will be strictly defined to realize the safe and stable operation of the industry.

# § Promoting local economic development and ecological civilization construction through industrial relocation

Industrial relocation will contribute environmental capacity to the development of central urban area of Yibin City. It is expected that industrial relocation will reduce 2,402 tons of hazardous air pollutants per year for the improvement of air quality in the central urban area, including 594 tons of nitrogen oxides, 82 tons of flue gas and dust, 1,186 tons of sulfur dioxide and 540 tons of VOC.

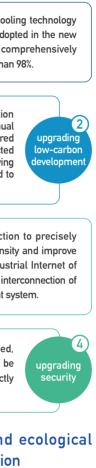
nvironmental benefit

1

After the industrial relocation, the Company will work together with electric power companies to realize combined heat and power generation without the need to build new coal-fired boilers, thus saving RMB660 million of investment and 500 mu of land. It is expected that 240,000 tons of standard coal will be saved every year, 700,000 tons of carbon emission will be reduced per year, 58.78 tons of SO<sub>2</sub> emission, 188.2 tons of NOx emission and 9.62 tons of dust emission will be reduced per year.

After the industrial relocation, the production value of the new production base is expected to reach RMB20 billion and 8,000 posts will be provided. This will effectively driving the development of local economy.

13



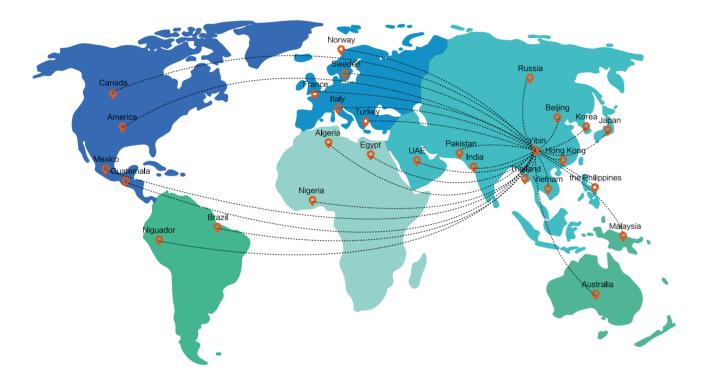
Economi benefit

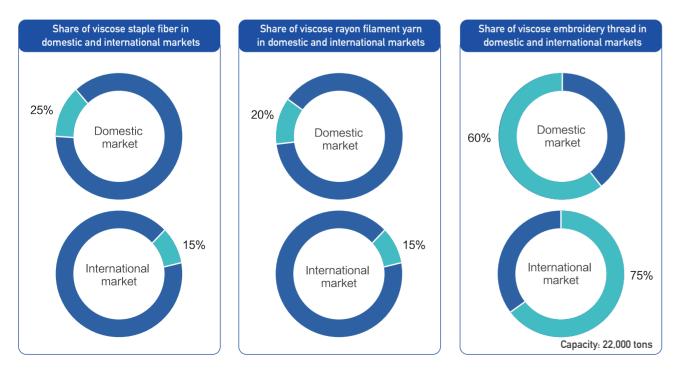


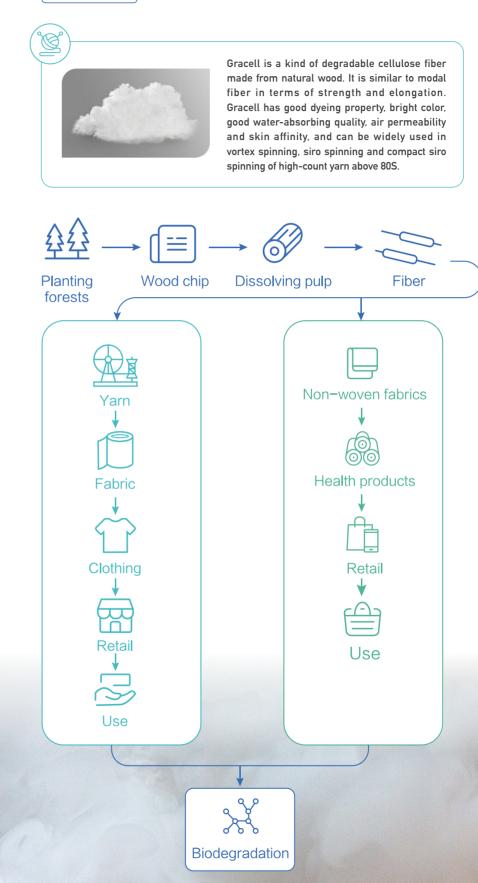
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# 2 Business Introduction

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 account for more than 15% of the overseas market and more than 25% of the domestic market. Grace has won the recognition and trust of customers and consumers at home and abroad with high-quality products.







(1)Main products

YIBIN GRACE CO., LTD. SUSTAINABILITY REPORT 2021



### (2)Product quality assurance

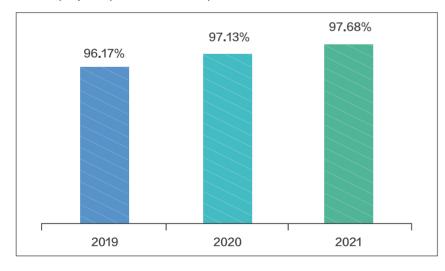
The Company has established a guality concept featuring "improving guality with equipment, technology and management", established a perfect quality management system and management organization, and comprehensively implemented the PDCA method and excellent performance management mode to effectively ensure product quality. Meanwhile, the Company has actively carried out post training and labor competition (TQM, TPM) to improve employees' quality awareness and job skills as well as quality management ability of lowlevel managers, so as to continuously optimize and improve product quality.



Organization of Quality Management Supervision

During the reporting period: the Company held 801 labor competitions and 1,355 on-the-job training; product gualification ratio reaches 100%, with the percent of pass of first-class products reaching 97% and that of superior products reaching 98%, increased by 0.99% and 0.1% respectively year-onyear; product guality has reached the best level in history, customer satisfaction has been greatly improved, and market complaints have been greatly reduced. The Company faces no punishment for violation of product safety or consumer protection regulations, no returns and consumer complaints due to issues related to product safety, and no product recall.

#### The company's staple fiber first-class product rate



As to the development of new products, Grace takes customers as the center, creates the best guality with the best employees, and innovates and applies targeted measures to optimize product process and improve product quality, leading to increasing recognition of product quality by customers.

## "TQM" activity

The Company has carried out regular "TQM" activities and "TPM" competitions<sup>1</sup> to strengthen the guality management awareness of all employees and improve the management ability of low-level managers, and lay the foundation for the steady improvement of product guality. Meanwhile, it adopted various scientific means<sup>2</sup> to improve management efficiency, create an intelligent equipment management system with Grace's characteristics, and promote the high-guality development of the Company.



"QC" activity

"QC" activity is a total quality management activity continuously performed by Grace. While creating direct economic benefits for the Company, achievements made in "QC" also bring good guality, safety, environmental, brand and social benefits.

Over the years, the Company has created batch after batch of excellent "QC achievements", which has brought remarkable economic benefits. In 2021, the Company has created 10 excellent "QC achievements", bringing a direct economic benefit of RMB693,800. The QC team has made lots of technical improvement and innovations, which not only improve the Company's independent innovation ability and core competitiveness, but also bring the Company's quality management to a new level.



<sup>1.</sup> Total Quality Management (TQM for short) is a management philosophy driven by customer needs and expectations. It is a management method centered on quality and based on involvement of all employee. It is designed to obtain long-term customer satisfaction and provide interests for organization members and the society. 2. Total Productive Maintenance (TPM for short) is an equipment maintenance and repair management system aiming at improving the overall equipment efficiency, taking the preventive maintenance of the whole system as the process and the involvement of all personnel as the basis. Scientific means adopted by the Company mainly include: Improving green-oriented. information-oriented and high-end-oriented. "Three Foundations". "Four Ones" activity. "Ten Standards" and "Four Assessment" : promote TPM; refine the assessment contents and strengthen the exemplary work; carry forward informatization management and promote informatization, digitization and intelligence of the Company: continuously improve equipment efficiency: innovate equipment system, etc.

YIBIN GRACE CO., LTD. SUSTAINABILITY REPORT 2021



In 2021, the company was rated as "Excellent Enterprise in Yibin Quality Management Group Activities"

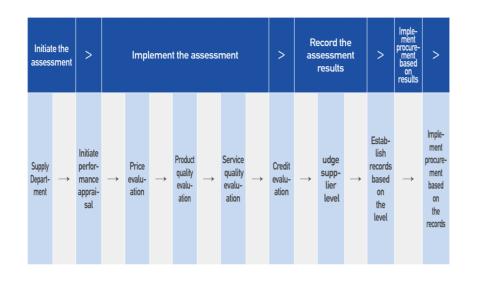




In 2021, the topic of "Research on New Methods of Oil Agent Detection" won the "Second Prize of the 24th Quality Management Group Activity Achievements of Yibin City



In addition, the Company has taken important measures such as strengthening supplier management to improve and ensure product guality. The Company has formulated the Measures for Management of Appraisal of Supplier Performance and Standards for Assessing and Rating Performance of Suppliers and Measures for Reward and Punishment, and has established a dynamic adjustment mechanism to ensure that the procurement quality meets the Company's strategic needs by evaluating suppliers' performance, comprehensively comparing the suppliers' integrity, service and quality system. During the reporting period, the supplier replacement rate is 8%.



During the reporting period, the supplier adjusted the replacement rate to 8%



#### 3 Stakeholders and Issues Analysis

#### (1)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. In 2021, Grace actively interacted with internal and external stakeholders, listened to their opinions, and adopted the relevant standards and guidelines recommended by them, promoting the sustainable development of society, environment and economy. In order to better interact with stakeholders, Grace decided to release a sustainable development report every year from 2021 to facilitate stakeholders to better understand the sustainable development situation of Grace and help Grace make more effective management decisions.

The categories of important stakeholders of the Company, issues concerned by the stakeholders and channels to communicate with the stakeholders are shown in the table below.

Stak	Stakeholders Issues concerned by the		Channels
Main categories	Representatives	stakeholders	th
Government organs	National ministries and commissions Local governments	Preservation and appreciation of state-owned assets Production safety Poverly alleviation Waste water, waste gas and solid waste discharge, environmental protection and governance Employment Product safety	Participate Supervi em Disclose Participat
Business operators and investors	Senior management of enterprises and associated companies Investors	Profitability Information disclosure Labor protection Public opinion environment Circular economy Sustainability Development of innovative technology	Jo Err
Employee	Remuneration Work environment Promotion mechanism Labor guarantee Training mechanism	Work Staff congr Company w Email, phone Re	
Suppliers	Pulp suppliers Chemical suppliers	Payment method Pricing mechanism Delivery time Source of raw materials Compliance management Innovation Supply of high-quality raw materials Delivery time/source	S Chain of c Meetir F
Downstream customers	Payment method Product pricing mechanism. Delivery time Business compliance Chemicals management Green supply chain Transparent supply chain Innovative services Product quality and innovation	T Joint re Custome Company w Meeting F	
NGO (non-govern- mental organization) & associations	CV Slandardization organizations Third party organizations Industry associations	Climate Change Biodiversity protection 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 Production safety	ndustry : Disclose Audit and evo Industry : Participal Product shor Meeting
Colleges and universities/research institutes		Technological innovation (raw materials, production process, circular economy, differentiated products)	Joint researc Strategic co Academic a
Surrounding communities		Wastewater and waste gas treatment Corporate social responsibility	Pub Complaint Comm
Other stakeholders	Other regenerated cellulose fiber manufacturers	Compliant competition Communication on environmental protection Goal and path Joint development Patent protection	T Joint re Product sho Industry s Participate in

19

#### to communicate with e stakeholders

e in local economic and social development ise, examine and manage wironment and safety e data on pollutant emission ate in formulation of industry standards

Working meetings Large forums Company website Journal of enterprises Email, phone and other . social media

rking meetings, trainings igress, team building activities website, journal of enterprises ne, WeChat and other social media Recruitment activities

Supplier evaluation custody system for suppliers Audit evaluation Field visit tings, emails, phone calls Product showcases Industry seminars

Technical exchange research and developmen ner satisfaction investigation website, journal of enterprise ngs, emails, phone calls, etc. Product showcases Industry seminars

y survey and research report e data on pollutant discharge valuation of the chain of custody system

y survey and research report ate in formulation of industry standards owcases and industry seminars

gs, emails, phone calls, etc.

ch and development mechanisr cooperation on talent cultivation c and industry research reports

Community visit ublic open day activities nt and feedback public mailbox munity activities and daily communication

Technical exchange research and development showcases and industry seminars survey and research repo ion of indu



## (2)Analysis of substantive issues

During the reporting period, Grace improved the mechanisms for the identification, analysis and ranking of issues related to sustainable development, and strengthened the management of important issues to promote the sustainable development of the Company.

#### Process for the analysis of substantive issues:

Collect data and identify issues	Analyze and rank issues	Importance matrix
Determine the list of substantive issues through communica- tion with stakeholders, background checks and comparison with peer benchmarks	Understand the importance of different issues to stakeholders through questionnaire survey and in–depth interview. Background checks, feedback from stakeholders, and input from senior manage– ment are important basis for determining the priority of issues.	Rank issues accord- ing to the results of investigation, research and interview, and prepare an importance matrix to provide the basis for disclosure of this report.

The key issues importance evaluation matrix is obtained by comprehensively analyzing the importance of substantive issues from the impact of such issues on Grace's development and the importance of such issues to stakeholders. This report will disclose key issues in detail with reference to the importance assessment matrix.

#### Key issues importance matrix



#### Impact on economy, society and environment High

#### **Certification and Honors** 4

Date	Granting institution
March 2021	China Chemical Fibers Association
November 2021	China National Textile and Apparel Council
June 2020	China Chemical Fibers Association
November 2020	China National Textile and Apparel Council
March 2019	China Chemical Fibers Association
May 2019	TESTEX
July 2019	Zhonggui (Beijing) Certification Co., Ltd.
September 2019	Collaboration for Sustainable Development of Viscose
December 2019	Collaboration for Sustainable Development of Viscose
March 2018	China Chemical Fibers Association
October 2018	Ministry of Industry and Information Technology
March 2017	People's Government of Sichuan Province
April 2017	People's Government of Sichuan Province
May 2017	People's Government of Sichuan Province
July 2017	China National Textile and Apparel Council
December 2017	Ministry of Industry and Information Technology



21

# Name of honor or award

Model Enterprise in Green Development in the Chemical Fiber Industry during the 13th Five-Year Plan Period

Excellent Patent Award

Bronze Key Award for Green Contribution

Outstanding Award for Scientific and Technological Achievements

Excellent Enterprise in Green Manufacturing in the Chemical Fiber Industry

STeP by OEKO-TEX<sup>®</sup>Certification

Intellectual Property Management System Certification

Enterprise Reaching the Standard of the Roadmap of the Collaboration

Garden Factory

Golden Key Award for Green Contribution

**Green Manufacturing Integration Project** 

Sichuan famous-brand product

the third prize of scientific and technological progress

Third Prize of Sichuan Patent Award

Excellent Enterprise in Mass Quality Management Group Work

Conform to the Standards of Viscose Industry

# Н. **Climate Change**



Addressing Climate Change

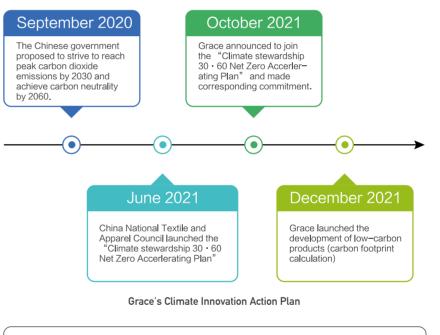
Energy Conservation, Consumption Reduction and Emission Reduction

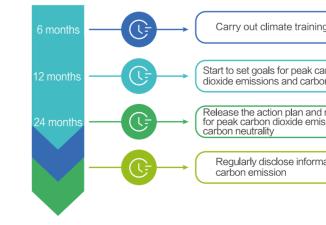
#### Addressing Climate Change 1

#### (1)Actions for peak carbon dioxide emissions and carbon neutrality

Against the backdrop of the goal for achieving peak carbon dioxide emissions and carbon neutrality, Grace will coordinate its transformation and upgrading and carbon emission reduction process, structural optimization and carbon emission control, actively carry out research on peak carbon dioxide emissions and carbon neutrality, set carbon emission reduction targets on this basis, promote low-carbon energy, green materials, cleaner production and low-carbon products, contributing to addressing global climate change.

As a leading MMCF manufacturer in the industry, Grace always upholds the development concept of "green, low-carbon and environmentally friendly", which is not only a requirement for resonating with the global sustainable development concept, but also an important path to realize the transformation and upgrading. In October 2021, Grace announced to join the "Climate stewardship 30 · 60 Net Zero Accerlerating Plan" and made corresponding commitment. For this purpose, Grace will improve its climate governance mechanism, strengthen the control over greenhouse gas emissions, actively analyze its carbon emission status, set carbon reduction goals and paths, and promote green, low-carbon transformation and sustainable development.







g camp
arbon on neutrality
road map ssions and
ation on

### "Climate Stewardship 30 · 60 Net Zero Accerlerating Plan"

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, 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 Climate Stewardship 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 "Climate Stewardship 30 · 60 Net Zero Accerlerating Plan" ("30 · 60 Net Zero Acceleration Plan" 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.

#### **Opportunities and Challenges**

The implementation of the "carbon peak" and "carbon neutral" strategies is also a transformation opportunity to company .The Company will actively respond to potential risks including carbon trade barriers. Meanwhile, it will seize opportunities to vigorously develop green and lowcarbon technologies and develop green and low-carbon products, so as to create value for customers and create a better life for consumers.

## (2)Product carbon footprint

key brand

enterprises

manufacturing

companies

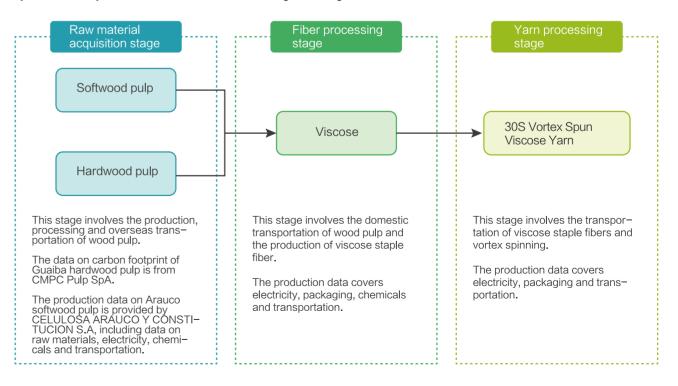
In order to fulfill the commitment of climate innovation action, the company has cooperated with supply chain enterprises to jointly explore low-carbon product development. During the reporting period, the company developed a low-carbon yarn product, 30S Vortex Spun Viscose Yarn, with a carbon footprint value of 7.87kgC02 eq./kg. At the same time, the company through the analysis of product carbon footprint, determine the key links of product carbon emissions, and then take measures to optimize the product process and technology.

(1) Basic information of products



#### (2) Evaluation scope

The time frame concerning the assessment of product life cycle is 2021, and the system boundary is "Cradle -to-Gate". The following three stages are covered:





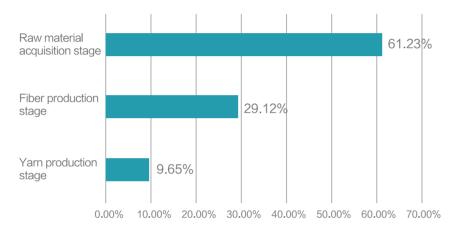


#### ③ Evaluation results (multiple graphs)

Analysis of carbon footprint of each production stage and each production process

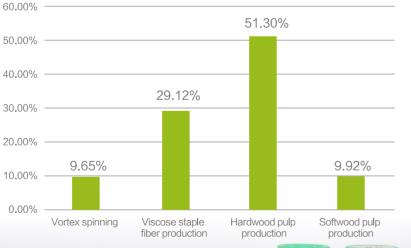
Under the global warming potential (excl. biogenic carbon) index, the proportion of carbon footprint in different production stages is as follows: raw material acquisition stage > fiber production stage > yarn production stage

# Proportion of carbon footprint in different production stages (excl. biogenic carbon)



Under the global warming potential (excl. biogenic carbon) index, the proportion of carbon footprint of different production processes is as follows: hardwood pulp production > viscose staple fiber production > softwood pulp production > vortex spinning

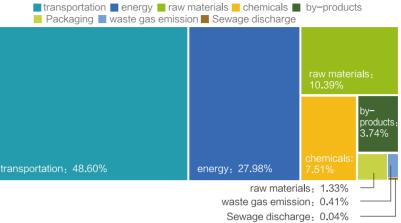
## Proportion of carbon footprint in different production processes (excl. biogenic carbon)





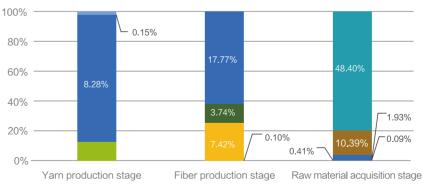
#### Analysis of the contribution of resources including energy and materials to the carbon footprint of products:

## Proportion of carbon footprint of energy and materials (excl. biogenic carbon)



Under the global warming potential (excl. biogenic carbon) index, the carbon footprint of transportation accounts for the highest (48.60%), which mainly comes from the overseas transportation of wood pulp in the raw material acquisition stage (the coefficient of "bulk cargo ship and ocean transportation" is guoted in the calculation). Transportation will be the focus of emission reduction in the future, which can be considered from the dimensions of procurement distance and transportation mode, or of directly obtaining the transportation energy consumption to optimize the coefficient; the carbon footprint of energy takes the second place (27.98%), of which steam accounts for the highest (14.14%), mainly from the use of low-pressure steam in the fiber production stage; the carbon footprint of materials accounts for 22.97%, of which raw materials account for the highest (10.39%).

Analysis of the proportion of carbon footprint of energy and materials in each production stage under the global warming potential (excl. biogenic carbon) index.



# Proportion of carbon footprint of energy and materials in each production stage (excl. biogenic carbon)

transportation energy raw materials chemicals by-products Packaging waste gas emission Sewage discharge

Under global warming potential (excl. biogenic carbon) index, in the raw material acquisition stage, the carbon footprint of transportation accounts for the highest (48.40%), mainly from the overseas transportation of wood pulp, followed by raw materials, accounting for 10.39%; in the fiber production stage, the carbon footprint of energy accounts for the highest (17.77%), mainly from the use of steam and electricity; in the yarn production stage, the carbon footprint of energy accounts for the highest (8.28%), mainly from the use of electricity, of which 8.13% comes from thermal power generation.



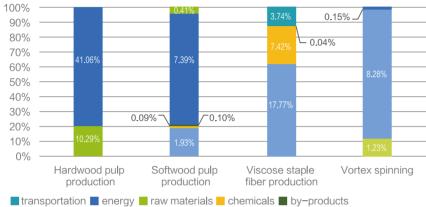


YIBIN GRACE CO., LTD. SUSTAINABILITY REPORT 2021

> Analysis of the contribution of energy and materials consumption to the carbon footprint of products in different production stages

> Analysis of the proportion of carbon footprint of energy and materials in each production stage under the global warming potential (excl. biogenic carbon) index.

Proportion of carbon footprint of energy and materials of each production process (excl. biogenic carbon)



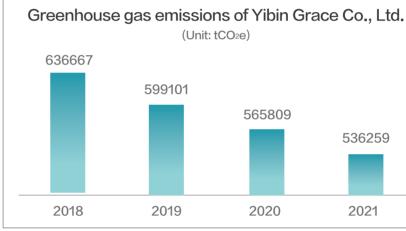
Packaging waste gas emission Sewage discharge

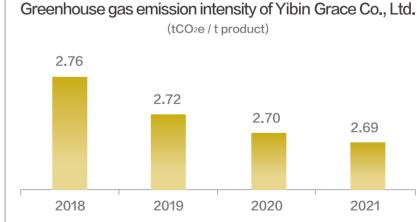
Under global warming potential (excl. biogenic carbon) index, in the hardwood pulp production process, the carbon footprint of transportation accounts for the highest (41.06%), mainly from the overseas transportation of wood pulp, followed by raw materials, accounting for 10.29%; in the softwood pulp production process, the carbon footprint of transportation accounts for the highest (7.39%), mainly from the overseas transportation of wood pulp; in the viscose staple fiber production process, the carbon footprint of energy accounts for the highest (17.77%); in the vortex spinning process, the carbon footprint of energy accounts for the highest (8.28%), mainly from the use of electricity.

#### 2 Energy Conservation, Consumption Reduction and Emission Reduction

Grace actively answered the national call for "energy conservation, carbon reduction and green development" . It has reduced greenhouse gas emissions and continuously improved the level of cleaner production through disseminating concept, optimizing energy structure, applying energy-saving technology and environmental protection technology.

During the reporting period, the Company's total greenhouse gas emissions were 536,259 tons of carbon dioxide equivalent, down 5.22% from the previous year; all greenhouse gas emissions are from the net purchase of electricity and heat, namely, no emissions generated from the combustion of fossil fuel, industrial production process and recycling of greenhouse gas. The Company's greenhouse gas emissions per ton of products were 2.69 tons of carbon dioxide equivalent, down 0.37% year on year.







2021

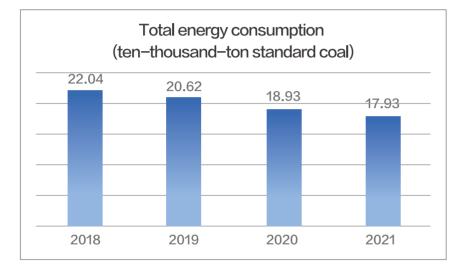


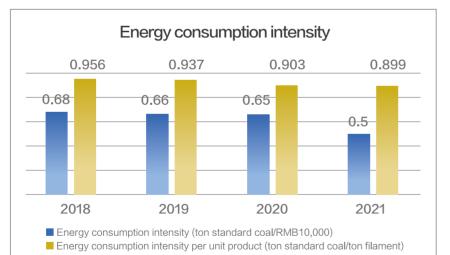




#### (1)Energy conservation and emission reduction

Grace's energy consumption mainly comes from the production process, and the main energy consumed is electricity and heat. In recent years, the Company has vigorously rolled out electricity saving and steam saving projects, realizing the continuous decline in total energy consumption and energy consumption intensity. The Company's energy consumption in 2021 decreased by 5.28% compared with that in 2020 and 18.65% compared with that in 2018; energy consumption per RMB10,000 output value and energy consumption per unit product decreased to 0.5 tons of standard coal and 0.899 tons of standard coal respectively. Meanwhile, the Company's total renewable energy utilized is about 13,000 tons of standard coal.





### (2)Emission reduction technology

Technology is the core of climate governance, and is the core driving force and guarantee for the green and sustainable development of enterprises. The Company attaches great importance to technological innovation, especially environmental protection technological innovation. 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 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 and economic benefits.

Technology-based environmental protection projects rolled out the Company during the reporting period are shown below.

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# Case 1: Yasi project

Investing RMB24.25 million in 2018, Grace jointly developed a new solvent spinning technology - dissolving cellulose by alkali/urea solution at low temperature with the Chinese Academy of Sciences, Wuhan University and Sichuan University. This technology completely eradicates the use of carbon disulfide solvent and can eliminate the emission of carbon disulfide, completely solving the problems in controlling VOCs. Compared with technologies applied in Tencel or Lyocell, this technology can yield lower price of rubber raw materials, less pollution, easy recycling and low safety risk, the products with good natural degradability and no CS<sub>2</sub> precipitation, are more friendly to the environment, and the related finished products are healthier and safer. At present, the pilot-scale production line has been completed, and the whole set of processes and key equipment are all independently developed. In the future, the Company will replace the traditional viscose staple fiber production technology with this technology, continuously reduce the impact of production and products on the environment, and will also explore new application fields, such as producing sulfide free cellophane products for the food packaging industry.

## Case 2: Adsorbing CS<sub>2</sub> with activated carbon for recycling in the viscose production line

The Company adopted the domestic advanced and mature "H<sub>2</sub>S removal and adsorption of CS<sub>2</sub> on activated carbon" technology in 2019 to recycle H<sub>2</sub>S and CS<sub>2</sub> emitted in the production of viscose, that is, the hydrogen sulfide is firstly removed by the reaction between sodium hydroxide and hydrogen sulfide in the waste gas, and then the carbon disulfide in the waste gas is adsorbed and desorbed by activated carbon to be recovered in liquid form, and the recovered carbon disulfide is recycled. The project can recycle 18,000 tons of carbon disulfide and create economic benefits of CNY10 million per year.



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# 3 Emission Reduction Management

Grace has established a "Leading Group for Preventing and Controlling Air Pollution" to lead and manage the prevention and control of air pollution. Group Chairman acts as the leader of the leading group, and members are made up of main leaders of the Company. Meanwhile, Grace formulated the Plan of Grace for the Prevention and Control of Air Pollution as required by the municipal party committee and municipal government, and supervised the implementation of the plan, yielding good results.

Grace has strictly followed the deployment in the plan and taken serious measures to implement key tasks in the plan, improving its waste gas treatment capacity, reducing the emission of polluting gases, and continuously improving the production and living environment. Through measures including increasing the investment in waste gas treatment facilities and upgrading production and auxiliary equipment, the emission of waste gas has been effectively controlled, the emission of waste gas has met the standard limits, the recycling of waste gas has been greatly promoted, and the air quality of production areas and parks has been greatly improved.



# Ш. **Environmental Protection**



#### **Environmental Management** 1

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, 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 system, 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. During the reporting period, the Company passed ISO environmental management system certification, HIGG-FEM-3.0 tripartite on-site verification, and STeP by OEKO-TEX® factory system certification, implemented ZDHC MMCF Wastewater Guidelines , and continuously improved its environmental performance; it receives no complaints on environmental protection and faces no penalties on environmental protection throughout the year. The Company won the honorary title of "Model Enterprise in Green Development in China's Chemical Fiber Industry during the 13th Five-Year Plan Period".



35

source-saving and environ-ment-friendly enterprise



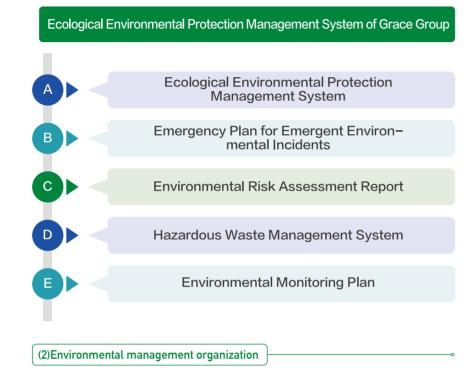


Organization

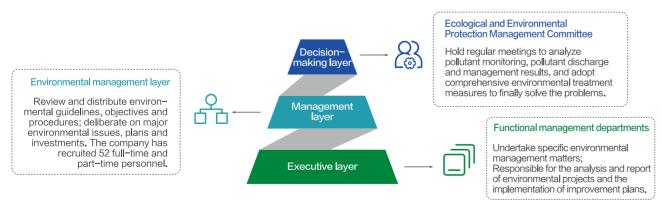
Party and government leaders assume overall responsibility



Grace lays emphasis on the construction of environmental management system. It has formulated the Ecological Environmental Protection Management System of Grace Group after revising and completing the original environmental management system. The Company strictly implemented the management system, strengthened the fulfillment of responsibilities and prevented environmental protection risks.



The Company implemented the "Leaders assuming overall responsibility" proposed by Grace Group for ecological and environmental protection, and established an Ecological and Environmental Protection Management Committee to manage the ecological and environmental protection responsibilities of managers at all levels to ensure that all environmental protection tasks are implemented in detail.



Organization chart for ecological environmental protection management

#### (3)Certification / assessment related to environmental management system

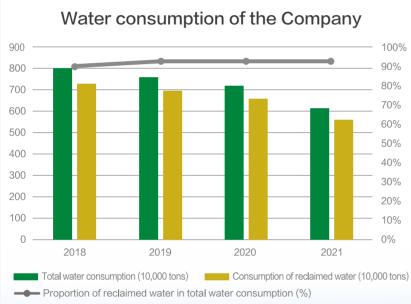
Certifications obtained by the Company during the reporting period are as follows.

Certifications obtained and tests passed	Certification explanation	Scope obtained
FSC certification	FSC is the certification of global forest timber, and it is a tool to promote sustainable management of forests and achieve ecological, social and economic goals by using the market mechanism. FSC forest certification includes Forest Management (FM) Certification and Chain of Custody (COC) Certification. At present, the Company is involved in the certification of global COC Certification.	Yibin Grace Group Co., Ltd., Yibin Grace Co Ltd., Yibin Hiest Fiber Co., Ltd., Yibin Grace Textile Trading Co., Ltd., Yibin Grace Textile Co., Ltd., Yibin Grace Imp. & Exp. Co., Ltd., and Grace (Hong Kong) International Tradin Limited.
Canopy certification	Canopy is a public welfare organization for environmental protection initiated by environmentalists around the world, and its headquarters is in Vancouver, Canada. Its main purpose is to help build a sustainable supply chain, foster innovative solutions to environmental challenges, protect the world's forests, species and climate, and promote the sustainable development of global ecology through cooperation with business leaders, scientists and decision makers.	Yibin Grace Group Co., Ltd., Yibin Grace Co Ltd., Yibin Hiest Fiber Co., Ltd., Chengdu Grace Fiber Co., Ltd.
STeP by OEKO-TEX® certification	STeP by OEKO-TEX <sup>®</sup> is an independent certification system for sustainable production enterprises, representing sustainable textile and leather production. Through modular form and dynamic certification system, the sustainable production conditions of enterprises are comprehensively subject to analysis and evaluation, aiming at realizing an environmentally-friendly production process, ensuring a healthy and safe working environment, and protecting the social rights and interests of workers.	Yibin Grace Co., Ltd.
HIGG FEM 3.0 factory environment module certification	HIGG FEM 3.0 is developed by Sustainable Apparel Coalition (SAC) to measure the environmental management of seven environmental categories, including environmental management system, energy use and greenhouse gas emission, water use, wastewater and exhaust gas emission, waste management, and chemical use and management.	Yibin Grace Co., Ltd.
IS014001:2015 environment system certification	ISO 14001, a certification code of the environmental management system, is the standard of the environmental management system formulated by the International Organization for Standardization. It is formulated in response to major environmental problems such as the increasingly serious global environmental pollution and ecological damages, ozone layer destruction, global warming, and the disappearance of biodiversity which threaten the future survival and development of mankind, aiming to conform to the development of international environmental protection, and meet the needs of international economic and trade development.	Yibin Grace Group Co., Ltd., Yibin Grace Co Ltd., Yibin Hiest Fiber Co., Ltd.
ZDHC manmade cellulosic fibers wastewater guide test	The Zero Discharge of Hazardous Chemicals (ZDHC) Alliance was established in 2011 to promote zero emissions of hazardous chemicals in the textile, leather and footwear industries. ZDHC MMCF Temporary Wastewater Guide was issued in 2020, which defines the standard practices of wastewater test requirements and the expectations of manmade cellulosic fibers (MMCF) manufacturers.	Yibin Grace Co., Ltd.
Permit for safe use of hazardous chemicals	Chemical enterprises that use hazardous chemicals in production and use them in prescribed quantities (excluding hazardous chemical manufacturers) shall obtain the permit for safe use of hazardous chemicals. The chemical fiber manufacturing industry is included in the Catalog of Industries Applicable to the Permit for Safe Use of Hazardous Chemicals.	Yibin Grace Co., Ltd.
STANDARD 100 by OEKO-TEX <sup>®</sup>	STANDARD 100 by OEKO-TEX <sup>®</sup> certification is an ecologically- friendly textile certification, and TESTEX Swiss Textile Testing Center is an independent and neutral organization, which mainly tests the content of harmful chemicals and metal substances in textiles.	Yibin Grace Co., Ltd. (nominal application, including viscose filament yarn and embroidery thread produced by Yibin Hiest, and viscose staple fiber and Gracell products produced by Yibin Grace).

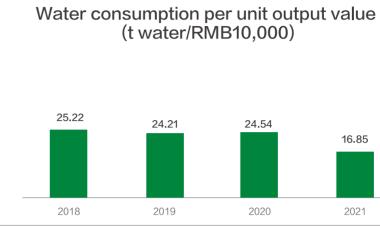
# 2 Water Resources Management

Water is one of an important resource for the production and processing of cellulose fibers. Advocating saving and efficiently using water and improving water management capacity is not only an effective way for the Company to realize green operation and production, but also an important measure to improve the comprehensive benefits of the Company. We upholds saving water, efficiently using water and cycling use of water, and takes measures such as investing in water-saving and reclaimed water reuse equipment and applying water-saving technology to reduce the water used in the process of production and operation, yielding comprehensive benefits. The Company has won the honorary title of "Water-saving Enterprise in Sichuan Province"

During the reporting period, all water used by the Company is surface water. The data on total water consumption and reclaimed water consumption are as follows.



The data on water resource consumption intensity and water consumption per unit product of the Company during the reporting period are as follows. Among them, the water consumption per unit product outperformed EU-BAT standard (35-70 m<sup>3</sup> / t product).











# 3 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. In 2018, the Company won the honor of "National Green Manufacturing Integration Project" from the Ministry of Industry and Information Technology.

(1)Wastewater 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 produced. The main pollutants contained in the wastewater and waste liquid discharged by the Company include chemical oxygen demand, ammonia nitrogen (NH<sub>3</sub>-N), total nitrogen (N), total phosphorus (P), suspended solids, five-day biochemical oxygen demand, sulfide, total zinc, etc. 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 implementation of reclaimed water reuse, the daily reuse of 4200m3/d, sewage treatment system water intake significantly lower than the same period last year.

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The front-end high-temperature and high-salt wastewater is centrally collected and pre-treated, of which the medium and high-concentration wastewater treatment system treats 300m<sup>3</sup>/d, and the enriched wastewater treatment system treats 7500m<sup>3</sup>/d, which effectively reduces the COD concentration and total salt concentration of the biochemical system inlet water, and ensures the stable compliance of biochemical effluent COD.

The wastewater discharge of the Company during the reporting period met the requirements specified in the ZDHC MMCF Wastewater Guideline. The specific results are as follows:<sup>3</sup>

	ZDHC MMCF Wastewater Test in 2021 - Yibin Grace Co., Ltd.											
Parame- ters	Total chromium	Cadmium	Copper	Nickel	Chromium VI	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	Α	А	А	А	А	А	Р	Α	Α	Α	А	ND

A: Aspiration level; P: Progressive level; F: Foundational level; ND: Not detected

In addition, the company has taken measures such as upgrading sewage facilities and biochemical treatment facilities, optimizing treatment technology and making technological innovation to improve its sewage treatment capacity and sewage recycling level, so as to promote source treatment and resource recycling to the largest extent; it optimized existing sewage treatment process by screening and domesticating special strains resistant to high acid and high salt environment and Improve the biochemical treatment capacity of wastewater; it can efficiently recycle the treated wastewater to the production system by innovating the advanced oxidation and negative pressure degassing filtration technology, improving the wastewater recycling rate.

#### Case 1: Recycling of viscose staple fiber waste liquid

The Company has invested a total of RMB66.36 million to build a viscose staple fiber waste liquid recycling system back in 2017. The project applies disc filter, dilution increasing system and pretreatment system, and can realize zero discharge of waste rubber; it uses anti-pollution nanofiltration membrane, which can improve the filtration capacity and operation efficiency, and greatly improve the waste liquid recovery rate. The project can reduce waste viscose water discharges by 770,000 tons per year, waste alkaline water discharges by 280,000 tons, and total waste water discharges by 1.05 million tons, and yield a comprehensive economic benefit of RMB28.01 million.

#### Case 2: Efficient governance of viscose waste and resource recycling and reusing

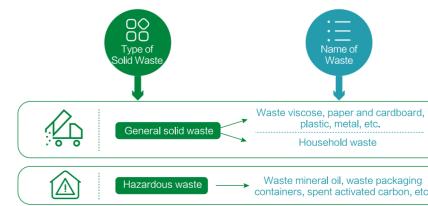
For the problem of the governance, recycling, and reusing of waste liquid in the viscose production process, the Company has invested a total of RMB108.1035 million in 2018 to produce sulfuric acid and sodium hydroxide by bipolar membrane electrodialysis devices, with the reusing rate of sodium sulfate waste liquid reaching over 95%. The project was completed and put into operation in 2019, with an annual reduction of 35,310 tons of waste acid bath, treatment of 99,139 tons of sodium sulfate, a reduction of 134,449 tons of waste acid bath emissions, and an annual comprehensive economic benefit of RMB24.96 million.

#### (2)Waste management

The Company's solid waste mainly includes general solid waste and hazardous waste. 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, the Company 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, the Company 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**



41



of er and cardboard, tal, etc. waste Waste waste waste waste packaging ivated carbon, etc.

During the reporting period, the general solid waste generated by the Company was 1,152 tons, a decrease of 16.88% compared with that of 2020 and a decrease of 2.91 percentage points compared with that of the same period of the previous year. The Company will further study feasible measures to further reduce the output of hazardous waste.





During the reporting period, the data of the Company's general solid and hazardous waste emissions is as follows. Among them, the emission intensity of hazardous waste is greater than the emission intensity standard of EU-BAT hazardous waste (0.2-2.0 kg/ton product).<sup>4</sup>



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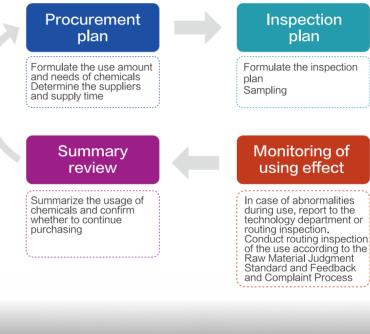
Case: Industrialization project of comprehensive utilization of alkali liquor containing hemicellulose

In order to reduce waste discharge in the production process and tap the value of waste resources, the company developed the independent patent of "a process technology for the preparation of feed grade xylo-oligosaccharide by squeezing lye combined membrane concentration" as early as 2014, and used the extracted hemicellulose to produce xylo-oligosaccharide products and reduce pollutants and waste discharge from the source. In order to further improve the utilization level of waste resources and reduce emissions, the company invested another 150 million yuan in 2017 to construct the project of "Industrialization of comprehensive utilization of hemicellulose-containing alkali solution". The project adopts combined membrane purification technology, solid acid catalytic hydrolysis technology, waste water waste alkali recycling circular economy technology, the hemicellulose immersion waste in the production process of viscose fiber is recycled, and the crystalline xylose is produced as the raw material for food grade xylose, which realizes the transformation of hemicellulose waste lye into treasure in the production process of viscose fiber and enhances the value of waste lye. The project was completed and put into production in 2018, creating economic benefits of 190 million yuan per year, while solving the problem of environmental protection treatment of hemicellulose immersion, and the ecological and environmental protection benefits are remarkable.

4. Unit 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

#### **Chemicals Management** 4

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 carry out wholeprocess 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 harmful chemicals every year, and continuous and effective chemical management plans ensure that they meet the safety standards in a strict manner. Within the reporting period, no safety incidents of hazardous chemicals in the Company.





YIBIN GRACE CO., LTD. SUSTAINABILITY REPORT 2021

43

# Warehousing

Store items in accordance with standard conditions Make arrangements according to FIFO. abnormal storage, and post-expiration treatment

# Using plan

Formulate the using plan

#### (1)Chemical procurement management



Management Regulation on Purchase and Sale of Hazardous Chemicals of Yibin Grace Co., Ltd.

Management Regulation on Chemical Suppliers of Yibin Grace Co., Ltd. Safety Responsibilities of Purchasing Personnel in Resource Purchasing Department of Yibin Grace Co., Ltd.

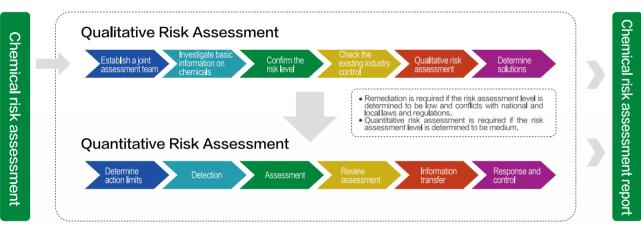
(2)Chemical use management



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

Within the reporting period, 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. In the process, the Company identified six major risk factors, and all of them have been subject to effective control and preventive measures; no safety accidents occur throughout the year in the Company after it takes effective control and preventive measures against all risks.

# Chemical Risk Assessment and Risk Response







# IV. **Rights and Interests of Employees**



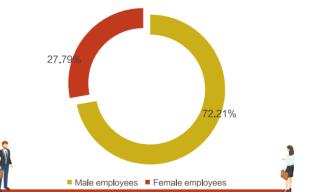
Yibin Grace Co., Ltd. implements the concept of respecting and prorights throughout the whole process of the Company's hum management, insists on protecting the legitimate rights and interests and provides employees with a broad development platform and accompanies them to obtain growth sincerely, and jointly creates a with employees with comprehensive occupational health manage training and development system, and care measures for employees.

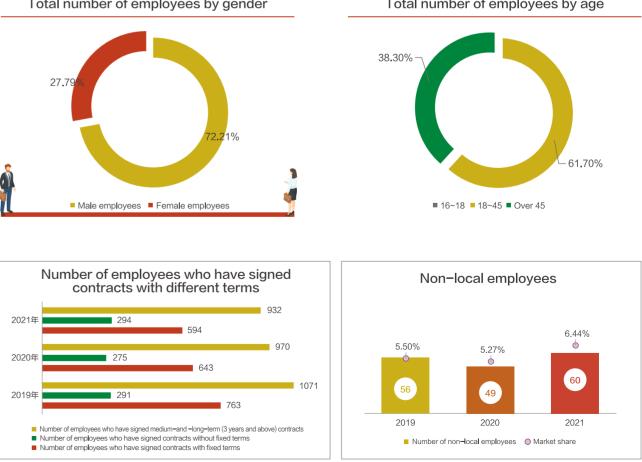
#### Protection of Employee Rights and Interests 1

The Company follows the eight core principles related to basic human rights of the International Labor Organization (ILO) and the relevant requirements of the United Nations Universal Declaration of Human Rights and other conventions, so as to provide employees with an equal and harmonious working environment. 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 Juvenile Employee Protection Law, 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 of the company is 932, the details are as follows:

Total number of employees by gender





tecting human
an resources
of employees,
opportunities,
brighter future
ement, perfect

# Total number of employees by age

#### (1)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.

#### (2) Diversity and equal opportunity

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. As of the end of 2021, the Company had 932 employees, among which 27.79% were female employees and 0.54% were minority employees.

#### (3)Communication and participation

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 2021. the rate of the Company's employees joining the trade union reached 100%.

Rational 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 enthusiasm. 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. A total of 1,108 rational suggestions were received in 2021



## 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.

#### Training System of Yibin Grace Co.,Ltd.



The Company sees it as its responsibility to provide employees with opportunities and space for their sustainable development and establishes a three-level training system from the company level, the department level to the team level to realize multi-level employee training. A total training cost of RMB730 thousand was invested from 2019 to 2021, with 136 training sessions and 4,570 person-times.

### 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.

## Professional Quality. Code of Conduct, Company Regulations, Confidentiality Education, Corporate Safety Knowledge and Occupational Health, Selfprotection of Female Employees, Mental Health Maintenance. Excellent Employee Sharing, Team Management, Analysis of Labor Law Relationship, Standardized Management of GMO and 9S, etc.





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responsible for the training, mainly including responsible for the training, mainly including new employee induction training, professiona lecturer training, corporate business training, and other special training.

Business skill and specialty training and pre-job training for new employees are carried out according to the actual needs.

Including Corporate Culture,

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# - 🛱 "QC" training activities

The Company continues to promote the "QC" training activities, and has organized 100 person-times to participate in the group standard publicizing and implementation network training class of the Team Construction Principle of Quality Assurance of the national textile industry in 2021 according to the Quality Management Team Activity Guidelines (T/CAQ10201-2020); it also organized 40 person-times to participate in practical backbone training of Yibin Quality Management Team Activity, organized internal auditors to participate in assessor training, and organize four high-quality development training activities for grass-roots managers, with about 180 person-times as participants, to continuously improve the ability and level of quality management activities.



### Case: "EP" skill competition for cultivating "Grace Craftsman"

TH

Nineteen Grace "EP" (Engineer's Pioneer, refers to a technician pioneer) Skill Competitions have been held since 2003, from the initial 7 types of work to 85. The activity has trained a large number of skilled professionals for the group and laid a solid talent foundation for the Company's high-quality development.

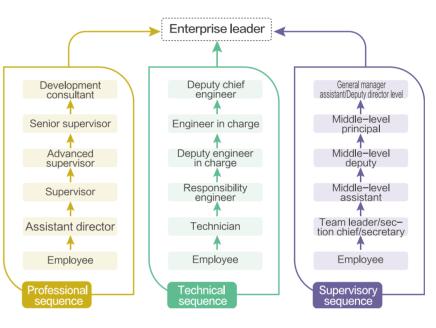
[☆]

The 19th "EP" Skill Competition lasted for nine months. There are five stages in the competition including training, enhancement, practical operation, competition, and skill identification, and there are a total of more than ten items in six branches. In the competition, there are 2 golden technicians, 1 chief technician, 20 "EP" technicians, and 58 winners. Among them, there are 11 types of work, 5 technicians, and 16 winners in Affiliated Factory 1; there are 11 types of work, 1 golden technician, 5 technicians, and 22 winners in Affiliated Factory 2; there is 1 golden technician, 1 chief technician, 10 technicians, and 20 winners in the Equipment Maintenance Department.

#### (2)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 Plan Table**



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# Health and Safety

The Company insists on putting employees' life safety and occupational health in the first place, earnestly implements the Healthy China 2030 Blueprint, strictly abides by 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, insists on both occupational safety and occupational disease prevention and control, and promotes the integrated management of occupational health, physical health and mental health.

#### (1)Identification and prevention 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 much attention to health education and training for all employees and popularizes knowledge of occupational disease prevention and treatment, labor protection, healthy lifestyle, disease prevention, mental health, first aid and self-rescue, etc., so as to promote self-health management of employees.





#### (2)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. At the same time, the Company improves related regulations and laws, operating procedures, and emergency plans such as the Safety Production Responsibility Regulation, the Safety Production Management Regulation, the Safety Production Operating Procedures, the Occupational Hygiene and Health Management, the Double Prevention Mechanism of Hierarchical Risk Control and Hidden Danger Investigation and Governance, the Safety Production List System and the Comprehensive Emergency Plan for Safety Production in accordance with the requirements of provisions such as the Safety and Occupational Health Management System formulated by the group company. On this basis, the Company specifies the effective measures to deal with safety production and occupational disease protection, such as hanging safety warning and occupational health warning signs, regularly carrying out knowledge and awareness training and education on occupational health, production safety and emergency rescue, and organizing safety and occupational health skill training and emergency drills to improve employees' self-protection awareness and ability. The Company also provides annual free occupational health examination for all employees, and the employees who may have occupational disease hazards will be provided with free targeted special health examination for occupational disease prevention.

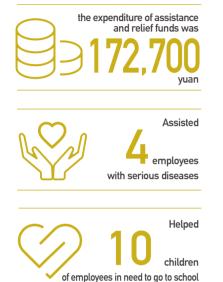
Within the reporting period, the Company strengthened the fine and standardized management of safety production, paid attention to the physical and mental health of employees, and prevented safety production accidents and occupational disease hazards. There were no fatalities, occupational hazard accidents, serious injury accidents, and mass poisoning accidents and incidents throughout the year.





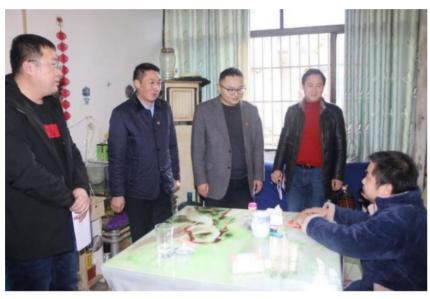
# 4 Employee Care





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. Grace focuses on employees' expectations and demands, practically solves the key, difficult, and hot issues that employees are concerned about, helps employees in need sincerely, cares for retired employees, and constantly enhances employees' sense of acquisition, happiness and security.

Within the reporting period, the group company provided accurate assistance to 261 person-times with relief funds of RMB172.7 thousand. Among them, there were four employees with serious diseases who obtained relief and ten children of employees in need were helped to receive education in schools.



The leaders of the Company visited and helped employees in need.

The Company advocates "happy work and healthy life" and regularly organizes cultural and sports activities to promote employees' physical and mental health. Within the reporting period, the Company organized the "Mass Happy Sports 2021 Basketball and Badminton Championships" and more than 200 players from 19 representative teams and 4 friendly units participated in the competition; it also organized 2 representative teams to attend "Villages & Communities" basketball match in Yibin City. and organized to "Villages & Communities" 3rd eight-a-side football match for middle-aged and elderly people in Xuzhou District, Yibin City.



Basketball game

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 2021, the Company continued to add the cost of repair and renovation of about RMB700 thousand to repair and renovate the infrastructure of employee apartments (including the self-built public rental housing community- Grace Locke) for the improvement of their living quality: it purchased home appliances such as washing machines, freezers, refrigerators and microwave ovens for employees to improve their life quality: it also launched the "Coolness Delivery" activity in summer to distribute watermelons, cool drinks and heatstroke prevention and cooling drugs to the front-line employees, with a total of about 3,500 person-times. In addition, the Company invests millions every year to afforest the environment of industrial parks, and engages property companies to clean up the environmental sanitation in a normal way, so as to create a clean and neat working environment for employees.









# V. Social Responsibility





Harmonious Community

Common Moderate Prosperity

The Company has been rooted in the community where it is located all the time. It takes the concept of "Co-integration, Co-construction, sharing and Co-governance" to focus on the practice of localized social responsibility, and contribute to targeted poverty alleviation, rural revitalization, and public welfare establishments while paying much attention to environment protection, employment creation, and development of the local economy. It makes great efforts to make a positive contribution to the harmonious development of the local economy, environment, and society. The Company is rewarded as the "Sichuan Advanced Group for Poverty Alleviation" and realizes the inclusive growth and sustainable development in implementing social responsibility.

# 1 Public Welfare

The Company is earnest about public welfare undertakings to realize common prosperity with the region. Since the Top Ten Projects for "Happy Yibin" was put forward, the Company has actively responded to the government's call, used its own advantages to help the community, and gave back to the society, so as to make a contribution to the solutions to livelihood problems closely related to the lives of ordinary people with practical actions, and constantly improve people's sense of acquisition, happiness and satisfaction.

## Top Ten Projects for "Happy Yibin"

On the occasion of the "14th Five-Year Plan" and the full start of a new journey of socialist modernization, Yibin City launched the Top Ten Projects for "Happy Yibin" in March 2021 in order to better conform to the people's expectations for a better life and speed up the construction of livable places for high-quality living, including two major sections of "Urban Function Improvement" and "Weak Link Remediation in Counties and Villages", with 1,164 projects and a total investment of RMB21,556 million. All projects and plans will be completed within 2022. The establishment of the Top Ten Projects for "Happy Yibin" aims to effectively solve the livelihood issues closely related to people's lives, such as transportation, environment, culture, education, medical treatment, enhance the core competitiveness of the city, and realize the sharing of the development results among the masses.

## (1)Education support

The Company strongly supports the development of local education through the measures of funding, aid construction and assistance, so as to effectively promote the humanistic care of "Happy Yibin" and urban basic education. In 2021, the Company funded 10 students for their education in the autumn beginning of school, a total of more than 40 students in need in poverty-stricken areas, and more than RMB150 thousand of subsidies. It also assisted the construction of Ma'anshi Kindergarten in Sanjiang New District with a total investment of nearly RMB32 million. It donated more than 3,000 books to schools such as Gaoxian County Shuoxun Primary School and Liduan Town Central Primary School.



In 2021, the Company invested RMB32 million in the construction of Ma'anshi Kindergarten



The love donation activity of "Books for Future and Warmth Everywhere"



#### (2)Anti-pandemic support

At the beginning of the COVID-19 pandemic, the Company turned the crisis into opportunities to promote transformation. It relied on the advantages of the industrial chain and built a medical and health materials industry. It took only 22 days to build a standard medical and health factory covering an area of 3,000 square meters, which had the capacity of producing 1.5 million masks per day, 1,500 tons of melt-blow non-woven fabrics per year, 10,000 tons of spun-bonded non-woven fabrics, and 10,000 tons of composite non-woven fabrics per year. It made a strong contribution to the victory of the anti-pandemic campaign in Sichuan and laid a solid foundation for the Company' s development.

Under the normalization of the pandemic prevention and control, the Company insists on the role of a good logistics soldier. In 2021, the Company provided anti-pandemic materials worth RMB800 thousand to pandemic areas, which includes 1 million masks, 200 thousand compressed towels, 50,000 packets of disinfectant wet tissues, 20,000 disposable bath towels, 2,000 packets of disposable wet toilet paper, 6,000 packets of disposable face towels, and 15,000 packets of disposable wet tissues, etc. Grace Company was awarded the honorary title of the "Advanced Group Against COVID-19 Pandemic" by Sichuan Pharmaceutical Industry Association.





## 2 Harmonious Community

The Company fully cooperates with Yibin's task of creating the national civilized city, has established a youth volunteer service team, conducts the knowledge contests and offline publicity related to creating the national civilized city for Yibin City, and completes the "School Community" guidance and services for the task in the communities 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), so as to contribute to the successful creation of the "National Civilized City" in Yibin City. Up to now, more than 600 volunteer service activities, such as "Community Services under Double Responsibilities and Double Guarantees" and "Civilization Persuasion in Cuiping Mountain", have been carried out with service time exceeding 26,000 hours.

The Company carried out the in-depth "Double Responsibilities and Double Guarantees" community assistance activities to distribute goods and warm care to the lonely elderly and families in need in the community: it established neighborhood interaction organizations such as Grace Public Welfare Society and Longcheng Neighborhood Club, and carried out special festival activities and zero-distance services such as Charity Walk, Parent-child Tea Club, and Spring Festival Couplets into Community, so as to promote the harmonious development of the community.





# 3 Common Moderate Prosperity

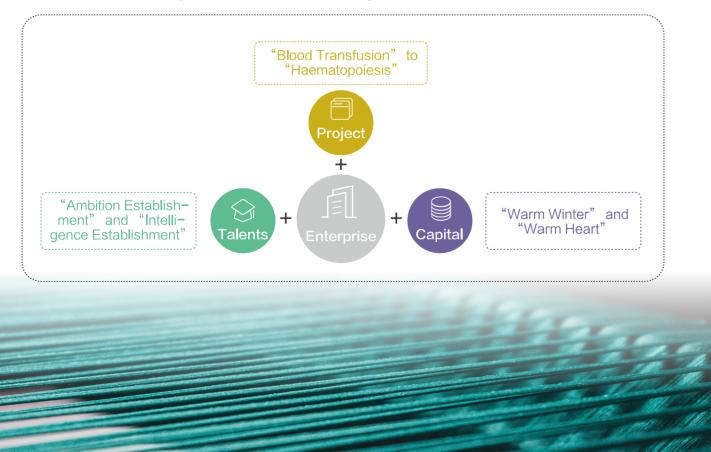
In recent years, Grace has always taken poverty alleviation and rural revitalization as the primary task of the Company's development, implemented the work arrangements and deployments of the provincial party committee and the municipal party committee on targeted poverty alleviation and rural revitalization, and exerted its own industrial advantages to actively explore effective assistance modes and mechanisms and realize the win-win situation of enterprise development and rural prosperity. Up to now, the Company has assisted four corresponding villages to overcome poverty, involving 211 low income families with a total of 811 people.

In the process of targeted poverty alleviation campaign, the Company dispatched three cadres to assist four villages, Shuangfeng Village in Xingwen County, Yibin, Nianmi Village at Shulou Town in Yibin, and Gaoshan Village and Eri Village in Ganzi Tibetan Autonomous Prefecture. It donated more than RMB3 million of industrial development funds and purchase amount in place of donation, actively connected and actively coordinated targeted donations of more than RMB3 million, and introduced poverty alleviation funds of more than RMB7 million.

The Company has carried out eight industrial projects in combination with its own industrial advantages: investing nearly RMB3 billion in Pingshan to build Grace Textile' s highend spinning and spunlace non-woven fabric projects, assisting to introduce more than 30 downstream enterprises, and investing over RMB15 billion to contributing to Yibin's construction of textile industry cluster worth RMB100 billion; it implemented the requirements of assisting the regions where the ethnic group of Yi live, and built an embroidery thread project in Leibo County with an output value of RMB200 million.

In 2021, the Company continued to make efforts to promote the effective connection between poverty alleviation and rural revitalization, and selected cadres as a new round of First Secretaries in the designated villages receiving assistance; the purchase amount in place of donation was RMB170 thousand to help the villagers increase their income; it also contributed to the development of "Red Culture Tourism Economy" at Jianwu Village in Xingwen County, and the village was named as "Demonstrative Village for the First Batch of Municipal Rural Culture Revitalization in Yibin"

# Corporate "1+3" Poverty Alleviation Mode



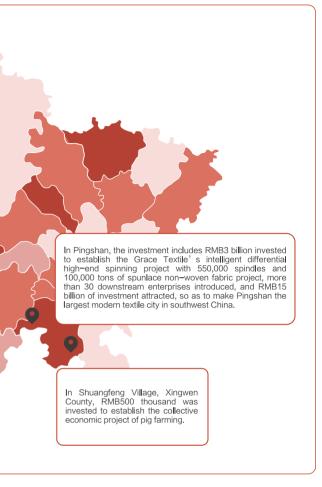


The company's poverty alleviation footprint

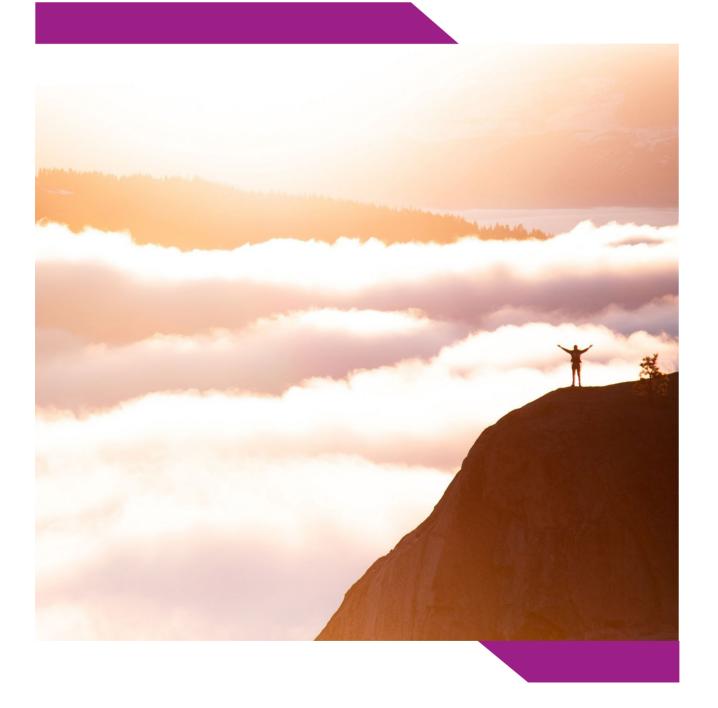
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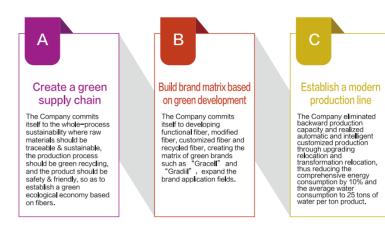




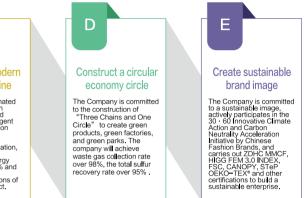
# VI. Future Expectations



Right thinking leads to the right path so as to go further. Based on the cellulose fiber industry, Grace is in the historical journey of becoming a "world-class biomaterial industry group", and it carries out innovations and explorations, works hard to constantly improve the green and sustainable development ability, and fulfill the Company's green declaration with outstanding results!







64

# **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 6.1.1 6.2.1 6.2.3 6.2.4 6.2.5 6.2.6 6.2.7 6.2.8	P5
Speech by the Senior Executive	_	2.1.3	P6~P7
About Grace	Company introduction	1.1.1 1.1.2 1.1.4 1.1.8 1.2.1 1.2.3 2.1.1 4.3.24	P11~P13
	Business Introduction	1.1.3 1.1.6 4.1.1 4.1.4 4.1.6 4.1.7 4.1.8 4.1.9 4.1.10 4.1.11 4.4.2 4.4.7	P14~P18
	Analysis of stakeholders and issues	3.4.1 3.4.2 3.4.3 3.4.4 3.4.5 3.4.6 3.4.7	P19~P20
	Certification and Honors	1.1.9 4.3.31 4.4.20	P21
Climate Change	Addressing climate change	1.2.10 4.1.2 4.3.16 4.3.17 4.3.33 5.2.1 5.2.2 5.2.3	P23~P28
	Energy Conservation, Consumption Reduction and Emission Reduction	1.2.9 4.3.4 4.3.5 4.3.6 4.3.7 4.3.8 4.3.9 4.3.29	P29~P32
Environmental Protection	Environmental management	4.3.1 4.3.2	P35~P37
	Water resources management	4.3.3 4.3.10 4.3.11	P38~P39
	Pollution prevention	4.3.12 4.3.13 4.3.14 4.3.15 4.3.11 4.3.18 4.3.19 4.3.20 4.3.28	P40~P42
	Chemicals management	4.1.3 4.1.4 4.4.8 4.4.9	P43~P44
Rights and Interests of Employees	Protection of employee rights and interests	4.2.1 4.2.2 4.2.3 4.2.4 4.2.5 4.2.6   4.2.7 4.2.8 4.2.10 4.2.12 4.2.15   4.2.17 4.2.18 4.2.23 4.2.24 4.2.25   4.2.26 4.2.27 4.2.29 4.2.30 4.2.32   4.2.33 4.2.34 4.2.43	P47~P48
	Growth and development	4.2.35	P49~P51
	Health and safety	4.2.37 4.2.40 4.2.41 4.2.42 4.2.44	P52~P53
	Employee care	4.2.36	P54~P55
Social Responsibility	Public welfare	2.1.2 4.5.1 4.5.2 4.5.3 4.5.4 4.5.5 4.5.6 4.5.8 4.5.10 4.5.11 5.1.1 5.1.2 5.1.3	P57~P58
	Harmonious community	4.5.9	P59
	Common moderate prosperity	4.5.3 4.5.4 4.5.11	P60~P61
Future expectations			P63

# **Reader Feedback**

# Distinguished readers:

Hello! Thank you for reading this report. In order to continuously improve the report preparation, we especially hope to receive your opinions and suggestions. Please assist us to complete the related questions in the feedback form and choose the following ways to send it back to us:

Mailing address: Yanpingba Industrial Park, Nanguang Town, Xuzhou District, Yibin, Sichuan Province (644002)

# Your Information

Name	Contact Number Fax				
Work Unit					
Job Title	E-mail				
Options	Very Good	Good	Ordinary	Bad	Very Ba
1. This report comprehensively and accurately reflects the signifi- cant influence of Grace on economy, society and environment.					
2. The report's response and disclosure of concerns of stake- holders.					
3. The clarity, correctness, and completeness of the information, indicators and data disclosed in this report.					
<ol><li>Readability of this report, i.e. the logical main line, content design, language and layout design of the report.</li></ol>					
1.What do you think is the most satisfying aspect of t	his report?				
2.What other information do you think that you need	to know is n	ot reflecte	ed in this re	port?	
3.What are your suggestions for us to prepare the progre	ess report on	the sustai	nable develo	pment in	the future

Very Good	Good	Ordinary	Bad	Very Bad



# Yibin Grace Co., Ltd.

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