

2023-2024

Social Responsibility Report

of China's Textile and Apparel Industry





The year 2023 marked the beginning of the full implementation of the guiding principles of the 20th CPC National Congress on all fronts and witnessed China's economic recovery following a smooth transition in our three-year COVID-19 response efforts. From a global perspective, against the backdrop of a turbulent international environment and accelerating global changes unseen in a century, the global supply chain pattern has undergone profound adjustments and the division of labor in the textile industry has continuously deepened. Seeing domestically, the grand blueprint laid out by the 20th CPC National Congress is gradually unfolding. China is pressing ahead with energy and enterprise to advance the great rejuvenation of the Chinese nation on all fronts through a Chinese path to modernization. The Action Plan for Building a Modern Textile Industry System (2022–2035) is driving high-quality development to become a consensus and conscious action of the textile and apparel industry.

Looking back to the past year, the textile and apparel industry, as a vital industry for people's livelihood and a crucial manufacturing sector, has systematically advanced the building of a modern textile industry system featuring high-tech, fashionable and green development. The comprehensive strength, quality, and efficiency of the industry have been significantly enhanced, and its integrity, security, and progressiveness have been continuously improved. Textile technology innovation has entered a stage where "running after, keeping pace, and taking the lead" coexist, achieving breakthroughs in high-end transitions. The deep integration of digital technology and advanced manufacturing has led to significant achievements in intelligent upgrades. A green, low-carbon industrial system covering the full life cycle is being established, opening a new chapter in green transformation. The vitality of market entities has been effectively stimulated, and intensive development has reached new heights. Chinese design, Chinese brands, and Chinese platforms have rapidly emerged, injecting new vitality into the fashion industry.

This report, the 19th consecutive CSR report of the industry issued by China National Textile and Apparel Council (CNTAC), was presided over by CNTAC, prepared by the Office for Social Responsibility of CNTAC, and supported by the leaders and member units of CNTAC. In addition, many domestic and foreign stakeholders of CNTAC also offered valuable revision opinions during its preparation.

Participating stakeholders (In no particular order)

China Cotton Textile Association

China Wool Textile Association

China Silk Association

China Dyeing and Printing Association

China National Garment Association

China Nonwovens & Industrial Textiles Association

China Fashion Association

China Textile Enterprise Association

Chinese Association For Textile Enterprises Culture Construction

China Textile Information Center

Industry Cluster Working Committee of CNTAC

Industrial Park Work Office of CNTAC



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Part I Development of China's Textile and Apparel Industry and Its Impact on CSR Construction

Part I

Development of China's Textile and Apparel Industry and Its Impact on CSR Construction

1.1 Development Overview of the Industry in 2023

1.1.1 Support the stable development of China's economy

In 2023, Chinese enterprises in the textile industry faced increased stress in production and operation due to a complicated external environment. However, as domestic demands have played a greater role in driving growth, the industry's production-sales coordination and economic cycle continued to improve. This led to a gradual enhancement in business expectations and confidence, with the industry's composite prosperity index remaining within the expansion zone throughout the year. Based on the research data of the CNTAC, the composite prosperity index of the textile industry in 2023 was 55.6%, 57%, 55.9%, and 57.2% for each quarter, reflecting an upswing to relatively high levels compared to recent years.



Prosperity index of China's textile industry¹

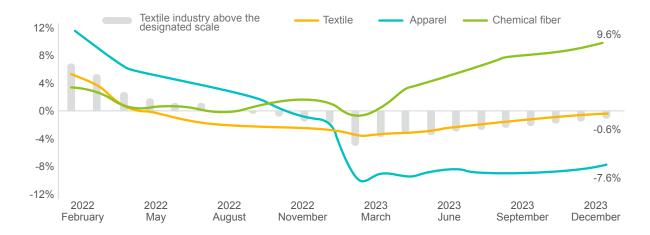
¹ Source: Industrial Economy Research Institute of CNTAC. A prosperity index of China's textile industry higher than 50 indicates a good condition of the industrial business; a higher index shows a more prosperous business.

In 2023, textile enterprises above the designated scale decreased their industrial added value by 1.2% on a year-on-year basis, an improvement of 0.7 percentage points compared to 2022.

Cumulative quarterly growth on a year-on-year basis of key economic operation indicators of textile industry in 2023²

Key indicators	Q1	Q1 and Q2	Q1, Q2 and Q3	The whole year
Industrial added value (of enterprises above the designated scale)	-3.7	-3.0	-2.2	-1.2
Operating revenue (of enterprises above the designated scale)	-7.3	-5.1	-3.3	-0.8
Total profit (of enterprises above the designated scale)	-32.4	-21.3	-8.8	7.2

The industrial added value of sub-industries such as chemical fiber, cotton textile, wool textile, and filament achieved a year-on-year positive growth. Specifically, the growth rate of the chemical fiber industry, which re-entered positive territory in the first quarter, accelerated throughout the year with a 9.6% year-on-year increase, an 8.5 percentage points rise compared to 2022. Conversely, sub-industries like apparel textiles, home textiles, and industrial textiles at the end-use stage of the industrial chain maintained negative growth in industrial added value.



Year-on-year growth of the industrial added value of textile industry above the designated scale and major sub-industries in 2023³

² Source: National Bureau of Statistics and China Customs.

³ Source: National Bureau of Statistics.

Most major product categories experienced a synchronized rebound in their output growth in 2023. Among them, the output of chemical fiber reached 71.27 million tons, up 10.3% on a year-on-year basis, with a growth rate increase of 10.5 percentage points compared to 2022. The output of yarn and cloth was 22.342 million tons and 29.49 billion meters respectively, down 2.2% and 4.8% on a yearon-year basis, but the decline was 3.2 percentage points and 2.1 percentage points less than that in 2022, respectively. Enterprises above the designated scale achieved 1.3% year-on-year growth in the output of dyeing cloth, an 8.8-percentage-point increase in growth rate compared to 2022. In contrast, the output of nonwoven and apparel saw a year-on-year decrease of 3.6% and 8.7%, with growth rates slowing by 4.2 percentage points and 5.3 percentage points compared to 2022.

Output growth of major product categories of textile enterprises above the designated scale in 20234

Name of product	Year-on-year growth in 2023 (%)	Comparing with 2022 (percentage points)
Yarn	-2.2	3.2
Cloth	-4.8	2.1
Dyeing cloth	1.3	8.8
Nonwoven	3.6	4.2
Apparel	8.7	5.3
Chemical fiber	10.3	10.5

The profitability of textile enterprises improved steadily. In 2023, the operating revenue of 38,000 textile enterprises above the designated scale decreased by 0.8% on a year-on-year basis, with the decline narrowing by 0.1 percentage points compared to 2022. Total profits saw a 7.2% year-onyear increase, a dramatic 32-percentage-point rise compared to 2022, resuming positive growth for the year. The operating margin recovered to 3.8%, the highest level of the year, up 0.3 percentage points from 2022. The performance of most links in the industrial chain showed notable improvement compared to 2022, with sectors such as chemical fiber, wool textile, silk, filament, and dyeing achieving positive growth in operating revenue on a year-on-year basis. Additionally, total profits of industries such as chemical fiber, silk, cotton textile, wool textile, linen textile, and textile machinery rose more than 10% compared to the previous year.

⁴ Source: National Bureau of Statistics

However, the operational quality of textile enterprises slipped. In 2023, the turnover of finished products for textile enterprises above the designated scale was 11.1 times/year and the total assets turnover was 1 time/year, with year-on-year slowdowns of 5.8% and 3.6%, respectively. The financial costs, management costs and marketing costs accounted for 6.6%, remaining unchanged from the previous year. The asset-liability ratio increased by 1 percentage point to 58.6% compared to 2022.

Main operational quality indicators of the textile industry and major sub-industries in 2023⁵

	Operat	ing margin	Turno finished p		Total assets	turnover
Industry	2023 (%)	Year-on- year change (percentage points)	2023 (Time/year)	YoY (%)	2023 (Time/year)	YoY (%)
Textile industry	3.8	0.3	11.1	-5.8	1.0	-3.6
Textile	3.7	0.3	10.1	-8.2	1.0	-4.5
Chemical fiber	2.5	0.7	14.3	-4.1	0.9	0.4
Apparel	5.1	0.1	10.7	-3.6	1.1	-5.0

The domestic market maintained recovery momentum. According to the National Bureau of Statistics, Chinese people spent an average amount of 1,479 yuan on apparel in 2023, with an increase of 8.4% compared with the same period last year, demonstrating a rise of 12.2 percentage points. The retail sales of apparel, shoes, hats, knitwear and textiles of distributors above the designated scale amounted to 1.4 trillion yuan, a 12.9% increase from the previous year, with the growth rate rebounding sharply by 19.4 percentage points compared to 2022. The overall retail scale surpassed the pre-pandemic level. Online retail sales saw a strong recovery in 2023, as evidenced by the online retail sales growth of clothing products by 10.8% over the previous year, a significant increase of 7.3 percentage points in growth rate from 2022.

Chinese fashion trends and outdoor sports have become highly popular areas in Chinese textile and apparel consumption. Relevant data indicates that the Chinese fashion trend industry has seen an annual growth rate exceeding 230% in recent years. In 2023, orders from female consumers for clothing that integrates traditional Chinese elements with contemporary styles surged by 195% compared to the previous year, with orders for mamiangun (literally "horse-faced skirt") and hanfu increasing 8.4 times and 3.4 times, respectively. The market size for sports footwear and apparel in China reached 492.6 billion yuan in 2023, a 12% increase from 2022.

⁵ Source: National Bureau of Statistics

Amidst increasing operational pressures, investment confidence among textile enterprises in 2023 remained relatively low. However, as the pace of high-end, intelligent and green transformation and upgrading is accelerating, efforts have been made to optimize and adjust the regional layout in an orderly manner, with the decline in industry investment gradually narrowing. According to the National Bureau of Statistics, the completion rate of investment in fixed assets of China's textile industry, apparel industry, and chemical fiber industry (exclusive of farmers) decreased by 0.4%, 2.2%, and 9.8% on a year-on-year basis, respectively. Though the growth rate dropped compared to 2022, the decline narrowed by 10.6 percentage points, 3.5 percentage points, and 1.8 percentage points compared to the lowest growth rate in 2023, respectively. Additionally, a survey conducted by the CNTAC on key enterprises shows that the highest proportion of new fixed asset investment projects was allocated to technological transformation and upgrading, with this figure exceeding 40% in four quarters of 2023. The proportion of investment in new production capacity and supporting facilities for production and living remained relatively stable and close, approximately 20% each.

1.1.2 Optimize the overseas market structure

Due to factors such as shrinking overseas demand and rising trade environment risks, the export scale of China's textile industry in 2023 was reduced compared to 2022. According to China Customs, the total export volume of China's textile and apparel industry in 2023 reached 310.46 billion US dollars, exceeding 300 billion US dollars for the fourth year in a row. This figure represented an 8.9% decrease compared to 2022, with the growth rate falling by 11.4 percentage points.

In terms of the structure of export products, the export volume of China's textiles in 2023 was 143.15 billion US dollars, a year-on-year decline of 8.7%. Among them, the export volume of textile yarns, fabrics, and finished products decreased by 8.9%, 8.6%, and 8.8%, respectively. The export volume of apparel was 167.31 billion US dollars, falling 9.1% from a year ago. Products such as chemical fiber yarns, chemical fiber fabrics, special yarns, and carpets showed a trend of increased volume with decreased prices.

In terms of the structure of export markets, in 2023, China's exports of textiles and apparel to the US, the EU, Japan, and ASEAN amounted to 51.67 billion, 40.04 billion, 18.37 billion, and 52.14 billion US dollars, respectively, experiencing year-on-year downturns of 11.7%, 18.2%, 14.2%, and 10.4%. Chinese export enterprises have achieved positive results in exploring diversified markets, with exports to some emerging markets remaining resilient. In 2023, the export volume of textiles and apparel to Africa, Russia, and Turkey was 24.51 billion, 7.55 billion, and 2.43 billion US dollars, respectively, a year-on-year increase of 0.9%, 12.1%, and 2.9%.

China's export of textiles and apparel to major countries and regions in 2023⁶

Countries and regions	Export value (Unit: 100 million US dollars)	YoY (%)	Proportion of export value (%)
Global	3104.6	-8.9	100.0
US	516.7	-11.7	16.6
EU	400.4	-18.2	12.9
Japan	183.7	-14.2	5.9
ASEAN	521.4	-10.4	16.8
Markets along the Belt and Road	1234.6	-5.3	39.8

1.2 Major Trends of China's Textile and Apparel Industry in 2023 and Their Impact on CSR

As a vital industry for people's livelihood and a crucial manufacturing sector, the textile industry has been dedicated to integrating into the Chinese modernization drive. It has systematically advanced the building of a modern textile industry system featuring high-tech, fashionable and green development, and has endeavored to empower its comprehensive strength, quality, and efficiency with new quality productive forces to consistently improve its integrity, security, and progressiveness.

With innovation playing the leading role, new quality productive forces mean advanced productivity that is freed from traditional economic growth mode and productivity development paths, features high-tech, high efficiency and high quality, and comes in line with the new development philosophy. New quality productive forces are driven by revolutionary technological breakthroughs, innovative allocation of production factors, and deep industrial transformation and upgrading. New quality productive forces regard the improvement of workers, means of labor, subjects of labor and their optimal combinations as the basic connotation, with a substantial increase in total factor productivity as the core hallmark. Marked by innovation, and with high quality as the key, new quality productive forces are advanced productivity in essence.

——Xi Jinping, General Secretary of the CPC Central Committee, President of the People's Republic of China (PRC), and Chairman of the PRC Central Military Commission

⁶ Source: China Customs

In the term "new quality productive forces", "new" primarily lies in driving industrial innovation through technological innovation, and "quality" is key to achieving new development "effects" through new industrial "quality". Industrial upgrading and innovation in business types are not only crucial scenarios to drive new quality productive forces but also vital points to realize systemic leaps in productivity. Following the right approach to promoting new industrialization on the new journey of the new era and considering industry characteristics, development realities, and future trends, new quality productive forces in the textile industry will serve as a synergistic system consisting of technological, green, and cultural productivity.

—Sun Ruizhe, President of CNTAC

On November 28, 2023, the Ministry of Industry and Information Technology, the National Development and Reform Commission, the Ministry of Commerce, and the State Administration for Market Regulation jointly issued the Implementation *Plan for Quality Improvement and Upgrading of Textile Industry (2023–2025)* (hereinafter referred to as the Implementation Plan). The Implementation Plan outlines the overall approach and goals for the quality improvement and upgrading of the textile industry. It proposes seven key tasks focusing on innovation-driven development, product upgrades, intelligent transformation, green and low-carbon practices, brand cultivation, supply optimization, and open cooperation around the development goals. To ensure the smooth implementation of these goals and tasks, five supporting measures have been put forward.



Guided by Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era and thoroughly implementing the guiding principles of the 20th CPC National Congress, the Plan aims to fully and faithfully apply the new development philosophy on all fronts, give priority to high-quality development, organically combine expanding market demand with deepening supply-side structural reforms, advance the initiative of increasing variety, improving quality, and creating brands, expand the development space for the industry, and drive the quality improvement and upgrading of the textile industry.

By 2025, substantial progress will be made in building a modern textile industry system. The R&D investment intensity of textile enterprises above the designated scale will reach 1.3%, and 70% of these enterprises will basically develop digital and networked capabilities. Energy and water consumption per unit of industrial added value will be further reduced, the intensity of major pollutant emissions will continue to decrease, and the quality and scale of recycled textile materials will steadily improve. Additionally, 20 world-renowned corporate brands and regional brands will be established.





Cultivate high-end textile manufacturing to expand the development space for the industry

Vigorously develop intelligent manufacturing to improve industry quality and efficiency

Promote green, circular and low-carbon practices to achieve sustainable development

Deeply implement the initiative of increasing variety, improving quality, and

Improve the resilience of the supply chain to unleash the potential of market demand

Optimize the regional layout of the industry to



In August 2023, the CNTAC released the Action Plan for Building a Modern Textile Industry System (2022–2035) (hereinafter referred to as the Action Plan). The Action Plan clearly states that the textile industry should become a major driver of global textile technology, an important leader in global fashion, and a strong propeller of sustainable development. The Action Plan consists of nine chapters, with an overall framework of "one plan and seven actions". It systematically discusses how to promote the high-quality development of the textile industry and accelerate the construction of a modern textile industry system, provides effective paths, and draws a strategic blueprint for the high-quality development of the textile industry in the context of Chinese modernization.

"Seven Actions" proposed in the Action Plan for Building a Modern Textile Industry System (2022–2035)

Action	Specific content
Promote textile technology innovation to drive industry progress	Achieving greater self-reliance and strength in science and technology is the only way to promote high-quality development in the industry. Efforts should be intensified in the research and development of cutting-edge materials, high-end equipment, advanced processes, and intelligent manufacturing to promote basic, key, integrated, and applied innovations. We should adhere to market-oriented and demand-driven approaches, accelerate the transformation and application of innovative achievements, open up further to the outside world, and strengthen international cooperation in science and technology.
Highlight culture-based textile fashion upgrading	Bolstering confidence in and raising awareness of our own culture and developing a modern Chinese civilization are inevitable requirements for advancing the Chinese path to modernization. We should grasp the prominent continuity, innovation, unity, inclusiveness and peaceful nature of the Chinese civilization, and deeply explore the fusion points of traditional and modern cultures with textile fashion to drive the transformation of cultural values. Efforts should also be made to foster masters, major brands, and events to enhance design skills, brand value, and fashion ecosystem.
Practice textile green manufacturing and fulfilling social responsibilities	Accelerating the transition to green and low-carbon development is the key to building a modern economic system and an inevitable choice for building a beautiful China. Scientific and pragmatic actions should be taken to address global climate change. It is necessary to accelerate the construction of a low-carbon and green circular system that spans the full industrial chain, including green materials, green technologies, green products, green manufacturing, and green consumption. Enterprises should be encouraged to fulfill their social responsibilities and build a sustainable future.

Action	Specific content
Establish coordinated and linked textile regional integration development	Developing a regional economic layout and a territorial space system that complement each other's strengths and promote high-quality development is a strategic deployment made at the 20 th CPC National Congress. We should actively align with national strategies for regional development and form a pattern of cross-regional linkage and coordinated development in the textile industry. By leveraging different resource advantages of the eastern, central, and western regions, efforts should be made to strengthen the integration and circulation of elements such as capital, knowledge, technology, management, and data, thereby improving overall quality and efficiency.
Promote international supply chain upgrading of dual circulation	Integrating development and security in the dual circulation of domestic and international markets is an integral part of building a modern industrial system. Efforts should be made to stabilize the advantages in industrial scale and system and to consolidate the manufacturing foundation of the industry. By deepening open-up and cooperation, we should attract global high-quality industrial resources with China's large domestic demand market and the advantages of the textile industry system. It is crucial to deeply engage in the global productivity layout to ensure the security and stability of the supply chain in the global textile and apparel industry.
Promote the deep integration of digital economy and textile industry	Developing a digital economy is a strategic choice for grasping the new opportunities in the new round of revolution in science and technology and industrial transformation. It is imperative to promote the integration and application of key digital economy technologies such as artificial intelligence (AI), industrial Internet, big data, and industrial robots in the textile industry, thereby enhancing the basic digital and intelligent capabilities of the industry. Efforts should be made to facilitate the development of new models and new business types driven by digital transformation.
Support the construction of textile human resources for modern development	Talent is the most valuable resource and the fundamental and strategic support for accelerating the construction of a modern industrial system. It is important to understand, adapt to, and lead the new normal of China's population development, and build a high-level talent cultivation system. Efforts should be made to strengthen the integrated development of technology, education, and talent, thereby shaping a modern human resource system with good quality, appropriate quantity, optimized structure, and reasonable distribution.

1.2.1 Innovation-driven high-tech industry

The Central Economic Work Conference in 2023 stressed the importance to promote industrial innovation with sci-tech innovation. As pointed out by the Action Plan for Building a Modern Textile Industry System (2022–2035), the action to promote the deep integration of digital economy and textile industry has become one of the seven key actions. Textile technology innovation has entered a stage where "running after, keeping pace, and taking the lead" coexist.

In 2023, 402 textile enterprises were dubbed "little giants" among specialized and sophisticated enterprises that produce new and unique products as well as individual champion enterprises.

China Textile Innovation Conference. On December 19, 2023, the 2023 China Textile Innovation Conference was held in Wuhan, Hubei Province. With the theme "Insight into New Pattern, Reconstruction of New Growth", the conference included the strategic cooperation signing ceremony of the Fabrics China Technology Innovation Alliance, the granting ceremony of the CNTAC Product Development Base Construction Task, and the award ceremony of the 2023 CNTAC Product Development Contribution Award. A total of 66 enterprises, including Huafu Fashion Co., Ltd., were honored with the 2023 CNTAC Product Development Contribution Award. Additionally, three units — Guangzhou International Textile City, Hubei Huafang Supply Chain Co., Ltd., and Zhejiang China Light & Textile Industrial City Group Co., Ltd. — were awarded the 2023 CNTAC Product Development Promotion Award.



2023 China Textile Innovation Conference

Platform	Value	Progress
Fabrics China Technology Innovation Alliance	It is an industrial platform for collaborative innovation jointly established by outstanding enterprises from upstream and downstream of the industrial chain, which has become a pioneer in the development and promotion of new materials, new technologies, and new products in the industry.	Transfar Zhilian Co., Ltd., Jilin Chemical Fiber Group Co., Ltd., Nanjing Bioserica Era Antibacterial Materials Technology Co., Ltd., and Shanghai Haikai Biomaterials Co., Ltd. have officially reached strategic cooperation with the China Textile Information Center.
CNTAC Product Development Base	It is a carrier for the collaborative innovation mechanism of product development in the textile industry, composed of leading enterprises with excellent innovation capabilities and willingness for collaborative development from various niches of the industrial chain.	Ten enterprises — Dali (China) Co., Ltd., Nanjing Bioserica Era Antibacterial Materials Technology Co., Ltd., Nantong Dongyi High-tech Fiber Technology Co., Ltd., SIXN Textile (Suzhou) Co., Ltd., Suzhou Romrol Fashion Group Co., Ltd., Suzhou Xingfengqiang Textile Technology Co., Ltd., Wujiang Jiali Advanced Fiber Co., Ltd., Wujiang TTK Textile & Finishing Co., Ltd., Yibin Grace Group Co., Ltd., and Zhejiang Rongda Fashion Technology Co., Ltd. — have joined the CNTAC Product Development Base Construction Task.



Support technological innovation of enterprises and accelerate the transformation and upgrading of the silk industry

On November 12, 2023, entrusted by the National Cocoon and Silk Coordination Office of the Ministry of Commerce, the China Silk Association organized the National High-Quality Development Promotion Conference of the Cocoon and Silk Industry in Shengzhou City, Zhejiang Province. Themed "Share BRI Opportunities for High-Quality Industry Development", the conference held the launch ceremony for major scientific and technological projects in the cocoon and silk industry. Relevant departments in Zhejiang, Jiangsu, Guangxi, and Sichuan signed memorandums of cooperation with enterprises to implement a number of major scientific and technological projects. These projects will focus on key technologies and equipment development for intelligent silk reeling production, key digital dyeing technologies for silk fabrics, factory-based silkworm rearing techniques using artificial diet for all instars, and research on automated silkworm rearing equipment. The aim is to support enterprises in technological innovation, improve production efficiency, and accelerate the transformation and upgrading of the silk industry. Over 240 people, including heads of relevant departments from 17 provinces (districts and cities), industry experts, scholars, and business representatives, attended the conference.



National High-Quality Development Promotion Conference of the Cocoon and Silk Industry



Advance the accreditation of technology R&D centers in a systematic way

To assist and guide enterprises in improving their R&D center systems and enhancing their R&D capabilities, the China Wool Textile Association (CWTA) has been conducting the China Wool Textile Industry Technology R&D Center Accreditation Program since 2020. It regularly issues notifications to the industry to solicit applications for R&D center accreditation, reviews the format of qualifications and materials of declared enterprises, organizes evaluations by industry senior experts, and follows a strict review process. Comprehensive assessments cover the building of R&D systems, R&D strategies and directions, implementation and operation, technologies and products, and industrial chain cooperation. By the end of 2023, a total of 10 wool textile enterprises had obtained the qualification of China Wool Textile Industry Technology R&D Center.



Accreditation of China Wool Textile Industry Technology R&D Centers



Foster new driving forces for industry development through school-enterprise cooperation

Shuyang National Economic and Technological Development Zone in Jiangsu Province established the Wuhan Textile University & Shuyang Industrial Technology Research Institute to foster new driving forces for the high-quality development of textile enterprises in the park. The institute focuses on technological R&D innovation and the transformation (transfer) of achievements in areas such as new textile materials, green textile manufacturing, advanced textile products, and intelligent textile manufacturing and equipment. By the end of 2023, the institute had signed seven industry-university-research cooperation agreements with a total value of 3.35 million yuan. It assisted enterprises in solving technical problems, overcoming key technologies, and developing eight new products and technologies. The institute also helped enterprises apply for 61 patents, including four invention patents, two design patents, five software copyrights, and 50 utility model patents. Five of these patents received notices of authorization, and 56 received notices of acceptance.

The institute plans to further improve its work mechanisms by establishing a technology transfer center, a school-enterprise joint research center, and a public service platform for small and medium-sized enterprises (SOEs). It will collect technical problems to assist enterprises in solving them and overcoming key industry technologies. Relying on a professional intellectual property service team, the institute will promote the implementation of intellectual property strategies in enterprises to meet their demands for patent technology. It will also organize technology forums, scientific achievement release conferences, expert visits to enterprises, and enterprise visits to universities to build bridges for demand-supply matching.

Selection of Science and Technology Awards. Among the CNTAC Science and Technology Awards, a total of 67 projects were selected for the Technical Invention Award and the Scientific and Technological Progress Award, and four individuals for the Special Contribution Award — Sangma Scholars. Six projects were selected for the Technical Invention Award, including three first prizes, and 61 projects were selected for the Scientific and Technological Progress Award, including 14 first prizes and 47 second prizes. The Special Contribution Award — Sangma Scholars was granted to Professor Jiang Gaoming of Jiangnan University, Professor-level Senior Engineer Liu Xueqiang of the Military Supply Engineering Technology Research Institute of the Academy of Military Science, Professor Wang Hua of Wuhan Textile University, and Professor-level Senior Engineer Zhang Guoqing of Yuyue Home Textile Co., Ltd. Of the total projects submitted, 43.2% were led by young scientists under the age of 40. The award-winning projects primarily focused on high-end, intelligent, and green development, with many achieving breakthroughs in key technologies through the cooperation between industry, academia, research, and application. Projects led by enterprises accounted for 46.3% of the total. The 17 first-prize-winning projects in 2023 generated direct sales revenues of 24 billion yuan and added profits of 2.77 billion yuan over the past three years.

Deep integration of digital technology and advanced manufacturing. By the end of 2023, the proportion of textile enterprises fully digitalized in key business processes such as R&D, design, production, manufacturing, and operation management reached 57.9%, higher than the national manufacturing average of 56.5%. This represented an increase of 2.9 percentage points compared to the same period in 2022, surpassing the national average growth rate of manufacturing. By the end of 2023, the digitization rate of production equipment and the networking rate of digital equipment in the textile industry reached 57.1% and 50.3%, respectively, exceeding the national manufacturing averages of 54.3% and 48.0%, up by 3.5% compared to those in 2021.

The rapid development of new models and new business types, such as network collaborative manufacturing, mass customization, and flexible manufacturing featuring "small order and quick response". On November 12, 2023, the Ministry of Industry and Information Technology announced the 2023 5G Factory Directory, with 16 projects from the textile and apparel sector being selected. According to the 5G Fully Connected Factory Construction Guide released in 2022, the Ministry of Industry and Information Technology emphasized the needs of the textile industry to improve product quality, enhance the digital level, promote the green transformation of the industry, and quickly adapt to personalized consumption trends. This involves the widespread application of typical scenarios such as production unit simulation, equipment collaborative operation, flexible manufacturing, process compliance verification, production process traceability, and enterprise collaboration and cooperation.

2023 5G Factory Directory (textile and apparel sector)

Industry (Major category of national economy)	Project name	Enterprise	Location
	Jixiang Sanbao High-Tech Textile 5G Intelligent Factory	Jixiang Sanbao High-Tech Textile Co., Ltd. and China Telecom Corporation Limited Jieshou Branch	Fuyang City, Anhui Province
	Kaibang Polyamide Technology 5G+ Industrial Internet Intelligent Factory	Fujian Kaibang Polyamide Technology Co., Ltd. and China United Network Communications Limited Fujian Branch	Fuzhou City, Fujian Province
	Xintai (Shishi) Technology Co., Ltd. 5G Intelligent Factory	Xintai (Shishi) Technology Co., Ltd. and China Mobile Communications Group Co., Ltd.	Quanzhou City, Fujian Province
	5G Intelligent Textile Factory	Hubei Deyongsheng Textile Co., Ltd. and China Mobile Communications Group Co., Ltd.	Jingzhou City, Hubei Province
Textile	Ganghong Fiber 5G Factory	Jiangsu Ganghong Fiber Co., Ltd. and China Telecom Corporation Limited Suzhou Branch	Suzhou City, Jiangsu Province
industry	Suzhou 5G Factory	Jiangsu New Horizon Advanced Functional Fiber Innovation Center Co. Ltd. and China Mobile Communications Group Jiangsu Co., Ltd. Wujiang Branch	Suzhou City, Jiangsu Province
	Chenyi 5G+ High-Grade Fashion Factory	Jiangsu Chenyi Intelligent Technology Co., Ltd. and China Telecom Corporation Limited Siyang Branch	Suqian City, Jiangsu Province
	FMS 5G Factory	Jiangsu FMS Environmental & Energy Saving New Materials Co., Ltd. and China Mobile Communications Group Jiangsu Co., Ltd. Yancheng Branch	Yancheng City, Jiangsu Province
	Jiangxi Mingheng Textile 5G Factory	Jiangxi Mingheng Textile Group Co., Ltd. and China United Network Communications Limited Fuzhou Branch	Fuzhou City, Jiangxi Province
	Huarui (China) Sewing Thread 5G Factory	Huarui (China) Sewing Thread Co., Ltd. and China United Network Communications Limited Jiujiang Branch	Jiujiang City, Jiangxi Province

Industry (Major category of national economy)	Project name	Enterprise	Location
	Textile and Apparel Digital and Intelligent Management Cloud 5G Factory	Anhui Xinbo Huayang Garment Co., Ltd. and China United Network Communications Group Co., Ltd.	Bozhou City, Anhui Province
	Brand Clothing Flexible Manufacturing 5G Factory	Jiangsu Bosideng Technology Co., Ltd. and Jiangsu Mobile Information System Integration Co., Ltd.	Suzhou City, Jiangsu Province
Textile, apparel and	Yumeiren 5G+ Intelligent Knitting Factory	Jiangsu Yumeiren Textile Co., Ltd. and China Telecom Corporation Limited Jiangsu Branch	Suqian City, Jiangsu Province
accessory industry	Heilan 5G Factory	Heilan Group Co., Ltd. and China Mobile Communications Group Co., Ltd.	Wuxi City, Jiangsu Province
-	HOdo Men's Wear 5G Factory	Wuxi HOdo Men's Wear Co., Ltd. and China United Network Communications Limited Jiangsu Branch	Wuxi City, Jiangsu Province
	Hongmeijia Clothing 5G Intelligent Factory	Guang'an Hongmeijia Clothing Co., Ltd. and China Mobile Communications Group Sichuan Co., Ltd. Guang'an Branch	Guang'an City, Sichuan Province

Case

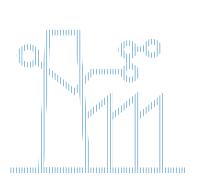
Digital transformation of industrial chains fosters driving forces for development

The Yudu textile and apparel industry is one of the 12 key industrial chains of Jiangxi Province's "1269" Action Plan for the modernization of key industrial chains in manufacturing. It is also one of the seven key industrial chains of Ganzhou's "7510" Action Plan. Currently, Yudu boasts over 3,000 textile and apparel enterprises, of which 130 are above the designated scale, 63 have implemented intelligent transformations, 21 have been recognized as provincial-level specialized and sophisticated enterprises that produce new and unique products, two as provincial-level intelligent manufacturing benchmark enterprises, and two as provincial-level 5G application pilot demonstration enterprises. By vigorously promoting the digital economy as the primary development project, Yudu has been committed to driving the industry's digital transformation and stepping up efforts to extend, supplement, and reinforce industrial chains.

Digital transformation helps enterprises reduce costs and increase efficiency. Enterprises are encouraged to install sensors, barcode scanners, and display screens to address issues of equipment and materials in sensing, communication, and display. Through the integration of the Manufacturing Execution System (MES) and Enterprise Resource Planning (ERP), data connectivity across production, procurement, and sales can be achieved.

The application of digital scenarios intelligently creates new business types. Aiming to build a digital flexible supply chain base, Yudu actively fosters new business types such as flexible production, personalized customization, network collaborative manufacturing, and service-oriented manufacturing. The "central factory + satellite factories" industrial Internet model has been developed, where the central factory handles order receiving, remote quality control, and delivery management, and 30 satellite factories in villages and towns manage single-process production. This effort enables collaborative production and digital management.

The Yudu Industrial Park has been recognized as an advanced industrial park for digital transformation. Guided by intelligent manufacturing, it has gradually formed an integrated industrial chain system encompassing all processes from body measurement, design, processing, testing, warehousing, logistics, to customer service.











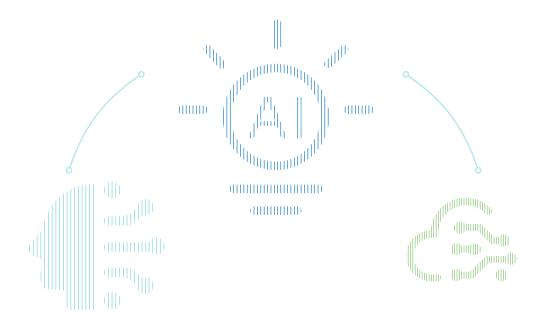
Case

Digital brain reshapes traditional industries

Currently, the textile and apparel industry is transitioning from mass production to a "small order and quick response" model. During this process, digitalization becomes one of the driving forces for the upgrading and development of the entire industrial chain.

Guangzhou Zhijing Information Technology Co., Ltd. strives to integrate textile and apparel processes through digital technology. In terms of product quality, by integrating visual AI big models, edge computing, cloud computing, and other technologies, as well as intelligent inspection instead of manual inspection, once quality problems are detected, it can accurately determine the type of problem. According to the severity of the situation, call a blocker or mechanic or even stop the machine from stopping the loss. By simply inputting keywords, the digital and intelligent Fashion3D system can automatically complete the design, pattern-making, and photography processes, reducing labor costs and time investment. Customers can select virtual garments online for rapid production, which addresses inventory challenges.

Guangzhou Lingying Technology Co., Ltd. transforms and upgrades industrial models through innovative technology and provides high-value dressing solutions for men of different sizes in various regions globally with "AI + big data cloud computing". The company has developed five systems, including a custom shirt pattern automatic generation system and a factory management platform system. The company has also imported advanced equipment such as automatic cutting machines from overseas, which are seamlessly integrated with the company's IT systems and continually upgraded in practical applications. By connecting users directly with factories, the company adopts a "selling first, production later" approach according to customer demands, thereby achieving a Customer-to-Manufactory (C2M) model to reduce costs in the distribution sector.



1.2.2 Culture-based fashion industry

The fashion industry is all about practical manufacturing, innovative technology, and cultural beauty. As a unique aspect of new quality productive forces in the textile industry, cultural productive forces are a vital source of aesthetic, emotional, and brand value. Based on the global fashion industry, the Chinese textile and apparel industry promotes confidence in design, brand, and culture, and integrates innovation along the textile and apparel industrial chain to continuously explore fine traditional Chinese culture and skills, enhance new productive forces in design, and foster a diverse fashion ecosystem. On the grand journey of building a modern textile industry system, it will consistently lead industrial structure upgrading and contribute to building a powerful fashion nation.

China's textile and apparel industry accelerates its pace to build international brands. In 2023, six textile-related companies made it to the Fortune Global 500 list, and four textile companies were included in the World Brand Lab's "World's 500 Most Influential Brands". According to a survey by the Ministry of Industry and Information Technology on the "Top 100 Key Textile and Apparel Brands", 32.6% of the 46 consumer brands have opened offline stores in foreign markets, and 21.7% are expanding internationally through cross-border e-commerce.

Define industry fashion. On May 29, 2023, the People's Government of Shengze Town, Wujiang District, Suzhou City, in collaboration with the China Fashion Association (CFA) and the China Textile Planning Institute of Construction (CTPIC), released the 2023 China Fashion Index (Industry) Report. This report puts forward a "4821" fashion index evaluation system, providing new definitions for fashion and fashionability. The index weights were determined by experts' assignment and the Analytic Hierarchy Process (AHP), and the evaluation method was formed using the scaling method and numerical normalization. Approximately 9,300 pieces of data were collected and processed through five collection methods.

- Fashion spearheads contemporary trends, inherits outstanding culture, expresses advanced technology, and is a distillation of a better life.
- Fashionability is the sum of the contemporary trends, outstanding culture, and advanced technology conveyed by fashion products.



Release of the 2023 China Fashion Index (Industry) Report

On December 9, 2023, the China Commercial Circulation Association of Textile and Apparel (CATA) awarded the title of "China Textile Fashion Center" to Guangzhou International Textile City, marking the official establishment of China's first textile fashion center in Haizhu District, Guangzhou.



China's first textile fashion center settles in Haizhu District, Guangzhou



Case

Cultural confidence aids brand value expansion

The creative transformation and innovative development of fine traditional Chinese culture are becoming important sources of fashion innovation. The market size of new Chinese-style clothing reached 1 billion yuan in 2023, with the gross merchandise value (GMV) growth rate of related products exceeding 100% over the past three years. The uniform design for the 19th Asian Games Hangzhou achieved breakthroughs within constraints by integrating Chinese traditional culture and art. It embodies Chinese traditional design concepts and craftsmanship philosophies and represents our cultural inheritance and confidence. Cathaya, together with Kongyue Culture and the Palace Museum Creative Cultural Products launched the Xiangyunsha (gambiered Guangdong gauze) garment and created a high-end silk brand "Jinxiu Suigong". According to the 2023 Young Consumer Insights Survey into Guochao Brand, as many as 78.5% of consumers prefer domestic brands.

Bosideng has been making efforts to position Chinese original design on the international scene, with its products being sold in over 400 multi-brand stores across eight European countries. Following "Nü Shu", the HUI brand released the "Riflessi d'Oriente" (Mu Lan Ci in Chinese) series at Milan Fashion Week.

Chinese brands at the international fashion weeks spring/summer 2024⁷

Event name	Event date	Number of Chinese brands
New York Fashion Week Spring/ Summer 2024	September 8-13	6 Chinese/Chinese diaspora designer brands
London Fashion Week Spring/ Summer 2024	September 15-19	21 Chinese/Chinese diaspora designer brands
Milan Fashion Week Spring/ Summer 2024	September 19-25	2 designer brands
Paris Fashion Week Spring/	September 25-October 3	8 women's wear brands
Summer 2024	June 20-25	5 men's wear brands

⁷ Source: Brand Office of CNTAC.



Case

"Weaving of Shengze" boosts matrix development

As an industrial hub with tens of thousands of fabric production and trading enterprises, and a famous textile town boasting over 100 billion industries, markets, and enterprises, Shengze launched the Shengze Fashion Week in 2020, ushering in an era of coordinated development of the fabric industry and original design. In 2023, the regional brand "Weaving of Shengze" was fully launched, calling upon hundreds of local textile and apparel brands to fully leverage their resource endowments and collectively achieve matrix development.

In March and September 2023, several leading Shengze brands and outstanding designers appeared at the China International Fashion Week. Leading local brands such as Huajia Group, Tianyuan Textile, Hengxin Weaving, Tianwei Textile, and Omniapiega presented multiple fashion trend release shows, showcasing the charm of Shengze brands in various fields like silk home textiles, nylon fashion, and affordable luxury women's wear. Five designers from Shengze were named among the Top 10 Chinese Fashion Designers of the year. In September 2023, Shengze sponsored the closing ceremony of the China International Fashion Week Spring/Summer 2024, marking a dynamic exploration of new sources of industrial value by the China International Fashion Week, a pivotal platform for showcasing China's fashion trends and original designs for the past 26 years, in collaboration with China's premier textile production cluster.

On May 29, 2023, the 2023 Shengze Fashion Week grandly opened. Themed "Silk Orient, Fashion Shengze", the four-day event incorporated fashion elements of "origin, originality, green, and technology". It gathered industrial resources and innovative fashion factors, aiming to drive Shengze from a weaving base to an innovation-driven technological industry, a green industry of responsible development, and a culture-based fashion highland. CFA brought together three Golden Top Award winners and six Top 10 Designers to collaborate with local premium fabric companies. They presented 18 brand shows with product characteristics as the core and design creativity as the orientation. This endeavor is aimed at promoting cooperation between the upstream and downstream sectors of the textile and apparel supply chain and exploring new paths for brand development through spatial restructuring, resource reorganization, and quality remolding.

Inheritance and development of textile intangible cultural heritage. On December 22, 2023, the 7th China Textile Intangible Cultural Heritage Conference was held in Beijing. The conference, themed "High-quality Development of Textile Intangible Cultural Heritage in the Process of China's Modernization", aimed to accelerate the construction of a modern textile industry system, link textile intangible cultural heritage project resources, fully utilize the advantages of industry platforms, promote industry development through culture, build up the momentum through shows, boost sales through exhibitions, and integrate across sectors. It sought to explore innovative models for the inheritance and development of textile intangible cultural heritage in the context of Chinese modernization with a new perspective. The 2022/2023 China Textile Intangible Cultural Heritage Development Report was released at the conference.



The 7th China Textile Intangible Cultural Heritage Conference



Innovation in intangible cultural heritage increases revenue of Wabrocade weaving

In 2021, the Wa brocade weaving skill from Ximeng Wa Autonomous County, Pu'er City, Yunnan Province, was included in the fifth representative list of state-level intangible cultural heritage items. In recent years, the county has continuously increased policy support for Wa brocade weaving. By the end of 2023, it had trained 50 intangible cultural heritage inheritors of the Wa brocade weaving skill and established a number of training bases, intangible cultural heritage workshops, and emerging cultural enterprises. It had also trained 3,000 people to become proficient in brocade weaving, producing over 20,000 handmade Wa brocade products annually, with an average income increase of over 8,600 yuan per person. Through "intangible cultural heritage + products" and "intangible cultural heritage + cultural tourism" modes, the county received over 750,000 tourists from 2022 to the end of 2023, boosting the sales of products like Wa brocade. Wa brocade weaving has achieved creative transformation and innovative development in the process of protection and inheritance and has been continuously providing momentum for rural revitalization.

In November 2023, the Ministry of Industry and Information Technology announced the list of the sixth batch of national industrial design centers, including textile-related enterprises such as Hi-Tech Heavy Industry, Shandong Rifa, Jihua 3515, Xtep, Anta, Eve, Jixiang Sanbao High-Tech, Fujian Huafeng New Materials, and Weihai Guangwei Composites.

Protect intellectual property rights and stimulate innovative impetus. The China Fashion IP Protection Center (CFIPPC) was jointly established by the China Trademark Association (CTA) and CFA in Beijing in 2019. CFIPPC aims to gather forces from all walks of life around the world, with a focus on sensitive issues of intellectual property in the fashion industry, vigorously promote the process of intellectual property protection in China's fashion sector through the promulgation of feasible protection measures and implementation plans, and maintain the order of global fashion intellectual property together with international peers.

Fashion IP Protection Platform (Protection Platform) The Fashion IP Protection Platform was co-created by CFA and Beijing Version of the Whole Family Technology Development Co., Ltd. The platform provides fashion and related creative enterprises and original designers with comprehensive copyright services, including copyright pre-registration, registration, certification, monitoring, judicial evidence collection, and legal protection. By the end of 2023, it had over 2,000 registered users.

China Fashion IP Conference The China Fashion IP Conference is an international conference with a focus on the intellectual property protection in the fashion industry, co-hosted by CTA and CFA, which is held annually. The conference aims to advocate and promote the concept of intellectual property protection in the fashion industry and raise awareness of respect and protection of intellectual achievements across the industry. Each year, an annual report on intellectual property protection in the fashion industry will be released at the conference. The association will organize experts and scholars to collect, survey and analyze data on the development status of local industrial clusters and enterprise composition, compare them with foreign fashion industries, analyze differences through data on patents, trademarks, copyrights, and intellectual property litigation case associated with the samples, and provide relevant recommendations.

Comprehensive coverage of core projects of CFA The Protection Platform provides intellectual property protection solutions for original works in various design competitions, fashion weeks, and college student fashion weeks organized by the CFA. Additionally, the CFIPPC conducted a series of IP-related activities for colleges and universities in 2023, including online and offline professional lectures on fashion intellectual property protection. This aims to strengthen intellectual property exchanges and popularization in colleges and universities and facilitate the fashion design students and faculty to comprehensively build a proper fashion intellectual property protection system.

IP Protection
Assistance
Project for
Young
Designers

The IP Protection Assistance Project for Young Designers is a special assistance project initiated by CTA and CFA and organized by CFIPPC. The project aims to protect young designers' intellectual property rights, maintain the original driving force of fashion creativity, support and cultivate excellent design talent, and enhance the awareness and level of intellectual property protection in the fashion industry.



Deeply implement outstanding invention patent recommendation work

To encourage the integration of intellectual property value realization with industrial innovation and development, and strengthen the creation, protection, application, and rights protection of intellectual property, CWTA launched the "Outstanding Invention Patent Recommendation in Chinese Wool Textile Industry" work in 2021. By the end of 2023, a total of 66 invention patents had been collected from enterprises, and 16 patents were selected as outstanding patents after expert review. Innovation in intellectual property protection not only brings economic benefits to enterprises but also helps reduce financing costs, motivates enterprises to invest in research and development, and forms a virtuous cycle of supporting benefits with innovation.

1.2.3 Responsibility-oriented green industry

As a global leader in the textile and apparel industry and a major consumer, China's textile and apparel sector bears a great mission. It has become an inevitable demand of the textile and apparel industry to advocate for green supply chain collaboration, provide credible, reliable, and comparable environmental performance data, and develop scientifically suitable methods and tools to support green products and end-user green consumption. CNTAC has always been committed to advancing the industry's green and low-carbon development.

At the end of 2023, eight Chinese authorities, including the Ministry of Industry and Information Technology and the National Development and Reform Commission, jointly issued the *Guideline on Accelerating the Transformation and Upgrading of Traditional Manufacturing Industries*. The guideline calls for actively promoting the resource recycling production model, vigorously developing ... the comprehensive utilization industry for waste textiles, and advancing the high-value recycling of renewable resources. This serves as a guide for the green and low-carbon development of the textile and apparel industry.

Green manufacturing leads the trend. In December 2023, the Ministry of Industry and Information Technology announced the 2023 Green Manufacturing List. Among the 1,488 listed green factories, 48 are textile enterprises.

Green innovation is moving forward orderly. Efforts have been accelerated to develop the full-process green manufacturing technology and recycling systems, with key performance indicators (KPIs) such as comprehensive energy consumption per 10,000 yuan of output value, water withdrawal per 10,000 yuan of output value, wastewater discharge volume, and main pollutant discharge volume continuing to decline. In 2023, the production of recycled chemical fibers exceeded 5 million tons. A green and low-carbon industrial system covering the entire life cycle is being established.

In October 2023, the Ministry of Industry and Information Technology and the Ministry of Water Resources jointly released the *Catalog of Industrial Water-Saving Processes, Technologies and Equipment Encouraged at the National Level (2023)* for public comment. A total of 171 technologies are included in the list, of which 13 are from the textile printing and dyeing industry.



Guangxi Yulin (Fumian) Energy-Saving and Environmental Protection Eco-Industrial Park

The textile and apparel industry is one of the leading industries in the Guangxi Yulin (Fumian) Energy-Saving and Environmental Protection Eco-Industrial Park. In 2023, the park achieved production of 300 million pairs of washed jeans, a dyeing capacity of 300,000 tons, and 800 million meters of sized yarn. The Fumian District Park Administrative Committee has taken the lead in constructing centralized pollution control facilities such as wastewater treatment plants in the eco-industrial park and promoted the settlement of 24 local washing enterprises in the park. The production wastewater from enterprises in the park was centrally treated by a third party to reach the Class A discharge standard for domestic sewage. The daily wastewater treatment capacity reached 200,000 tons, effectively addressing the environmental issues of jeanswear washing.

The park further established an IoT intelligent management platform to enhance the efficiency of tracking "runoff, leaks, drips, and spills" and the ability to deal with environmental emergencies. With technical support from China Unicom Yulin Branch, an intelligent water condition monitoring IoT solution was designed for effective management and control of the rainwater pipe network in the park, which was promoted to enterprises settled in the park. By the end of 2023, 66 enterprises in the park had signed contracts for installing online monitoring equipment at rainwater discharge outlets, with the installation at all 107 monitoring points completed.









Sichuan Santai Industrial Park supports green development through technological innovation

Adhering to the principles of quality first and efficiency priority, Sichuan Santai Industrial Park has been pursuing intensive development, deploying innovation chains around the industrial chain, and encouraging enterprises to carry out technological innovation, technological transformation, and capacity expansion and speed up the upgrading of process level and product level. The park has supported leading enterprises like Ganlion and Erke to invest 100 million yuan and collaborated with research institutes such as Xi'an Polytechnic University and Sichuan Textile Science Research Institute to jointly build enterprise technology centers, engineering technology research centers, and other research platforms. These collaborations focus on breakthroughs in product innovation, significantly enhancing the technical content, quality efficiency, and environmental benefits of products. The textile and apparel industry in the park boasts one China well-known trademark, two famous trademarks of Sichuan Province, three provincial-level technology centers, and one engineering technology center.

In January 2023, Sichuan Santai Industrial Park was recognized as a green park by the Sichuan Provincial Economic and Information Department. In the same year, the textile and apparel industry cluster in Santai County, Mianyang City, Sichuan Province, was identified as a special cluster for SMEs in Sichuan Province.



Case

Green cooperation for a sustainable future — build a sustainable supply chain

In September 2023, the first International Textile and Apparel Sustainable Supply Chain Conference was successfully held in Weihai. The conference consisted of a plenary session and parallel sessions centered on the theme "Carbon Reduction, Green Growth, Sustainable Future". Several ceremonies were held at the conference, including the signing of the strategic cooperation memorandum between CNTAC and the Weihai Municipal People's Government, the signing of the framework cooperation agreement for the Wendeng Home Textile Industry Project, the collective signing of the Rushan Textile Dyeing and Finishing Industrial Park Project, the unveiling of the Textile and Apparel Sustainable Supply Chain Weihai Service Station, and the commendation of "Sustainable Innovation Units" in the top ten categories of textile innovation products.







Part II CSR Construction of China's Textile and Apparel Industry in 2023

Part II CSR Construction of China's Textile and **Apparel Industry in 2023**

2.1 Responsibility for People

2.1.1 Empower modern industrial workers to make development achievements benefit to all

CNTAC has been dedicated to fostering harmonious labor relations in the industry. By sticking to the problem-solving approach, CNTAC has been striving to address the difficulties in recruiting and employing workers and broaden pathways for securing livelihoods, resolving employment issues, and promoting development. CNTAC has intensified efforts to improve workers' capabilities and has continuously conducted initiatives to enhance workers' professional technical skills, resulting in optimized quality and structure of the industrial workforce. Additionally, CNTAC has devoted greater effort to the industry's social responsibility work and kept pushing forward the development and improvement of social responsibility management systems and tools to ensure the protection of workers' legitimate rights and interests.

Since 2009, CNTAC has organized eight nationwide campaigns to foster national textile enterprises with harmonious labor relations, recognizing 301 enterprises as National Textile Enterprises with Harmonious Labor Relations in total. In 2023, CNTAC named 41 units, including Beijing Fangsheng Fashion Co., Ltd., as National Textile Enterprises with Harmonious Labor Relations and designated three parks — Qiuxian County Economic Development Zone in Hebei, Guanyun Economic Development Zone in Jiangsu, and Yancheng Textile Dyeing and Finishing Industrial Park — as National Textile Industrial Parks with Harmonious Labor Relations. As a result, standard, orderly, just, reasonable, harmonious, and steady labor relations featuring mutual benefit and win-win results are rapidly taking shape in the textile industry.

CNTAC has established a long-term cooperation mechanism with the Chinese Financial, Commercial, Light Industry, Textile and Tobacco Workers' Union, striving to enhance the protection of workers' rights and interests in China's textile and apparel industry and contributing to the construction of the industrial workforce in the new era. On April 2, 2024, the two sides held the 21st joint meeting, where the cooperation theme of "excellent competition, exemplary cases, and strong skills" was emphasized, aiming to promote high-quality development in the textile industry and achieve high-level co-building and sharing of development achievements:



Strengthen collaboration for efficient industrial research, and address the pain points, difficulties, and bottlenecks in the reform of the textile workforce through investigations and research in practice and at the primary level with normalized collaboration mechanisms.



Start with the most needy workers, address the most prominent problems, and focus on the most immediate interests to solve workers' difficulties and troubles and alleviate trend issues and emerging issues.



Proactively expand the scope and depth of cooperation, think ahead about key changes in labor relations and the workforce in the industry, and advance on the whole.



Carry out collaboration and innovation in areas such as employee ideological guidance, skill enhancement, rights and interests protection, and corporate social responsibility.



Innovate cooperation carriers and working modes to jointly promote the protection of employees' rights and interests and the construction of corporate culture, set industry examples in fulfilling social responsibility, and broadly promote social responsibility publicity and education and enterprise support services.



Case

The Labor Competition for Digital Transformation was launched

Since March 2023, CNTAC and the Chinese Financial, Commercial, Light Industry, Textile and Tobacco Workers' Union have jointly organized the 2023 National Textile Labor Competition for Digital Transformation. The competition focuses on the practices of digital transformation and development, R&D and applications of key technologies, and digital public services. Following the labor competition for green development, this project was also included in the database of national leading labor and skills competition projects in the 14th Five-Year Plan period of the All-China Federation of Trade Unions (ACFTU). The competition has highlighted seven advanced industrial clusters, three advanced industrial parks, 20 advanced enterprises, 17 advanced groups, and 20 advanced individuals in the digital transformation of the textile industry.



Award ceremony of the 2023 National Textile Labor Competition for Digital Transformation





Case

Industrial park development boosts employment

Adhering to the principle of giving priority to employment, Xinjiang Aksu Textile Industry City (Development Zone) has witnessed a steady improvement in job quality. By enhancing coordination among counties, cities, schools, and enterprises, it has ensured enterprises' employment through multiple online and offline channels. The Industry City organized over 30 "Spring Breeze Action" and school job fairs in 2023, serving 168 key enterprises and creating over 6,000 jobs. The labor service working mechanism and assessment methods have been continuously optimized, with an annual employment stability rate at above 90%.

Yudu County Industrial Park in Jiangxi Province has accelerated the implementation of supporting infrastructure. A newly built middle school has been put into use, effectively solving the schooling difficulty for employees' children. Additional bus routes and optimized stop settings have eased employees' commuting difficulties. Talent apartments are under construction and supporting facilities like hotels and supermarkets are being expedited. Meanwhile, steady progress has also been made in enterprise recruitment services. The park has organized professional schools to actively engage in school-enterprise cooperation, conducted targeted recruitment, and offered a series of textile and apparel courses to provide more talent and industrial workers for the garment industry. Regular dual selection fairs for graduates have been held with the support of vocational secondary schools and the Employment Bureau of Yudu County, continuing to supply the enterprises with over 300 industry professionals.

2.1.2 Establish family-friendly factories to strike a balance between employees' work and life

The textile industry is a traditional pillar, a vital livelihood industry, and a sector with international comparative advantages in China. Currently, there are over 30,000 textile enterprises above the designated scale in China with more than 20 million employees, of which over 65% are women. Like other manufacturing industries, the textile industry faces the "people paradox" with declining talent attractiveness and widespread shortages of workers and technicians among enterprises.

In 2019, CNTAC launched the Family-Friendly Factories (FFF) initiative in the textile and apparel industry. The FFF initiative urges textile and apparel companies, brands, and stakeholders to collaborate, establish a system for building family-friendly factories, and jointly promote the highquality and sustainable development of the industry. In 2022, CNTAC initiated a pilot project of "Building 'Family-Friendly Factories' in Textile and Apparel Industry". This project aims to create a more inclusive working environment, enhance cohesion, fulfillment, and happiness among employees in the textile industry, and elevate the industry's competitiveness, which is of great significance to the sustainable

development of the industry. Brands such as H&M, Puma, Aimer, Lindex, Anta, and Adidas, along with their supplier factories, have participated in this project.

During the pilot phase, the Office for Social Responsibility of CNTAC, supported by partners including the United Nations International Children's Emergency Fund (UNICEF) and the All-China Federation of Trade Unions (ACFTU), surveyed the implementation of family-friendly policies in the industry. The survey spanned nine provinces, involving 34 enterprises and over 900 employees. The findings culminated in the Implementation Guide for Family-Friendly Factories. Through training and onsite guidance, the pilot enterprises were assisted in developing or improving their family-friendly management mechanisms, thereby enhancing their sustainability.



2.1.3 Build exchange and learning platforms to implement human rights due diligence in the industry

In 2023, CNTAC, in collaboration with the Institution for Human Rights at China University of Political Science and Law and the Center for the Study of Human Rights at Nankai University, hosted forums on business and human rights successively. These forums engaged industry enterprises to exchange views on and discuss theoretical and practical aspects of corporate human rights policies.

Date	Forum	Main content
October 14, Fudan University	Business and Human Rights China Forum 2023	Representatives from Handa Industries Co., Ltd. shared their practical experience, challenges, and pressing issues under the theme "Implement Corporate Policies that Respect Human Rights in Overseas Investments — Handa Industries' Practical Experience", in light of the company's and the textile industry's actual conditions.
November 19, Nankai University	2023 Model Business Seminar on ESG and Human Rights Training	Representatives from Li-Ning (China) Sports Goods Co., Ltd. gave a presentation titled "Research on Legal Issues of Corporate Social Responsibility". Drawing on the company's practical experience, the presentation highlighted the differences in understanding of ESG and CSR concepts among different groups, interpreted the essence of ethics and law regarding whether corporate social responsibility should be a mandatory obligation, and explored the feasibility of realizing social responsibility through the <i>Company Law</i> .



The first offline training session on the Guide for Social and Environmental Due Diligence of Chinese Textile and Apparel Enterprises was held successfully

On September 1, 2023, the Office for Social Responsibility of CNTAC and the Embassy of Sweden in China jointly hosted a training session on the Guide for Social and Environmental Due Diligence Management of Chinese Textile and Apparel Enterprises in Shanghai. The training session aims to localize social and environmental due diligence management practices in the context of the Chinese textile and apparel industry, and foster a more resilient, responsible, and sustainable supply chain. Over 50 people from brands such as H&M, Puma, Inditex, Lindex, Ikea, Li&Feng, and Primark, along with their supplier representatives, attended the training.

The training session has helped companies to identify and manage potential risks and enhance the resilience and capacity to resist risks in the supply chain by advocating the concepts and methods of due diligence management. It has also deepened cooperation between Chinese and foreign enterprises to create synergy for the sustainable development of the textile and apparel industry.



Site of the due diligence management training session

2.2 Responsibility for the Planet

2.2.1 Increase R&D investment to deepen the green production model

The Chinese textile and apparel industry is accelerating efforts to encourage enterprises to participate in energy conservation and emission reduction and strengthen textile recycling, thereby building a green, low-carbon industrial system for circular development in an all-round way.



"Green Linkage, Win-Win Cooperation" — National Printing and Dyeing Industry **Energy Conservation and Environmental Protection Annual Conference**

The printing and dyeing industry plays a connecting role in the textile supply chain, serving as a key link and an important embodiment of the textile industry's green development. As the world's largest textile printing and dyeing producer, China is accelerating green development by promoting the application of energy-saving and emission reduction technologies to set up a green, lowcarbon production mode. This approach is essential for addressing resource and environmental constraints and building a modern industrial system, which is also an inevitable choice for high-quality development.

On June 19, 2023, the China Dyeing and Printing Association (CDPA) hosted the "Mingkui 2023 National Printing and Dyeing Industry Energy Conservation and Environmental Protection Annual Conference", providing a favorable platform for exchange and cooperation among enterprises in the industry to promote green development, energy conservation, and emission reduction. The conference, themed "Green Linkage, Win-Win Cooperation", focused on the latest national environmental management policies, green low-carbon technologies and equipment R&D and application in the printing and dyeing industry, and high-efficiency printing and dyeing wastewater and waste gas treatment technologies. At the conference, experts and scholars engaged in comprehensive, multi-level, and in-depth discussions and exchanges on green development, energy saving, environmental protection, and workplace safety in the printing and dyeing industry.



Additionally, CDPA collected and released the Catalog of the 16th Batch of Recommended Advanced Energy Conservation and Emission Reduction Technologies for the Printing and Dyeing Industry, guiding enterprises in the industry to enhance green technological innovation and R&D investment.



China Cotton Textile Association (CCTA) makes progress in promoting the green manufacturing system

In recent years, cotton textile enterprises have systematically implemented technological upgrades step by step to make positive efforts and contributions to the new round of green low-carbon technology transformations and upgrades in the industry. By the end of 2023, more than 40 cotton textile enterprises have been successfully recognized as national-level green factories, located in 15 regions, including Shandong, Xinjiang, Guangdong, and Jiangsu provinces.

Formulate green standards for the cotton textile industry: Efforts have been made to formulate and release seven industry and group standards, including the Requirements for Assessment of Green Factory in Cotton Textile Industry, Requirements for Assessment of Green Factory in Spundyed Yarn Industry, Technical Specification for Eco-design Product Assessment — Spun-dyed Yarn, and Technical Specification for Eco-design Product Assessment — Denim;

Conduct third-party green manufacturing evaluations: CCTA has taken active steps to publicize relevant policies, regulations, advanced technologies, and exemplary cases related to green development among key cotton textile enterprises, promote advanced experience and measures that can be learned from and reproduced, continuously track the needs of the enterprises during their green development processes, and tailor-make green development and implementation plans for

Carry out green manufacturing projects and technology recommendation events: Since 2014, a total of 11 rounds of solicitation and recommendation events for "Green Manufacturing Projects and Technologies in the Cotton Textile Industry and Innovative Cotton Textile Enterprises" have been conducted;

CCTA has been accredited as an industrial energy efficiency diagnostic service provider by the Ministry of Industry and Information Technology. It has provided energy efficiency diagnostic services for nearly 30 enterprises, issued diagnostic reports, and offered recommendations and measures for improvements;

Set up industry benchmark enterprises: CCTA has actively cultivated and successfully recommended several leading cotton textile companies to be included in lists of "enterprises leading in energy efficiency", "enterprises leading in water efficiency", and "water-saving enterprises", setting a benchmark for the industry in terms of environmental protection.



Release of the Catalog of the 11th Batch of Recommended Green Technologies

2.2.2 Navigate green transformation and elevate corporate sustainability awareness

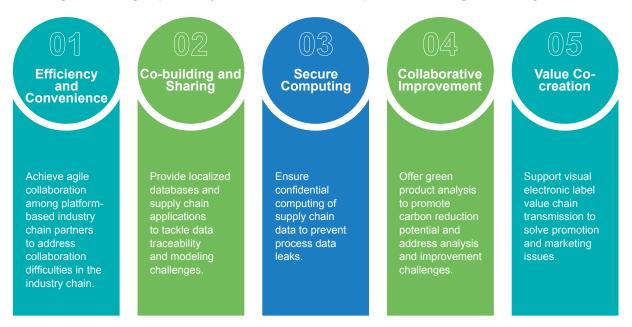
Release a collective sustainability action initiative. With the increasing economic level and lifestyle changes in China, nonwoven wipes like wet wipes and dry wipes have developed rapidly, placing considerable environmental pressure on the entire industrial chain of wipe products. To promote the sustainable development of the nonwoven wipe industry, the China Nonwovens & Industrial Textiles Association (CNITA), in collaboration with 11 key enterprises in the nonwoven wipe industrial chain, issued the "Sustainability Action Initiative for China's Nonwoven Wipe Industry" to the entire industry.

Based on our shared commitment to sustainable development and our dedication to long-term industry value, we hereby propose the following initiatives to the entire industry:
1. Adhere to innovation-driven principles, implement the sustainable development concept, address environmental challenges faced by the industry through technological advancements, and provide consumers with higher-functioning, more comfortable, and safer environmentally friendly products.
2. Actively develop and apply green and eco-friendly production processes, improve energy use efficiency, and proactively utilize green energy.
3. Increase the use of eco-friendly materials such as cotton fiber, viscose fiber, lyocell fiber, polylactic acid fiber, and wood pulp, and raise the proportion of biodegradable nonwoven wipe products.
4. Comply with relevant national laws and regulations to ensure consumer safety.
5. Enhance communication with the media and consumers, spread knowledge of wipe products, correctly label product information on packaging, help consumers choose appropriate nonwoven wipe products, and guide them in the proper disposal of used products.
Let us "wipe" the future with green initiatives! Let us start now and take concrete actions to protect the Earth and our common home, and together create a greener, better future.
—Sustainability Action Initiative for China's Nonwoven Wipe Industry

Continuous "Pursuer of Excellence in Sustainability" case collection. The China National Garment Association (CNGA) and the Office for Social Responsibility of CNTAC jointly hosted the 2023 "Pursuer of Excellence in Sustainability" case collection event. The event aims to raise the awareness of sustainable development among industry enterprises, and identify and promote exemplary enterprise cases in the Chinese textile and apparel industry. Themes like green materials, green technologies, green products, green manufacturing, and green consumption were included, covering the low-carbon, green circular system in the entire industrial chain. A total of 16 enterprises were selected through the evaluation process.

2.2.3 Launch life cycle assessment to enhance environmental footprint management efficiency

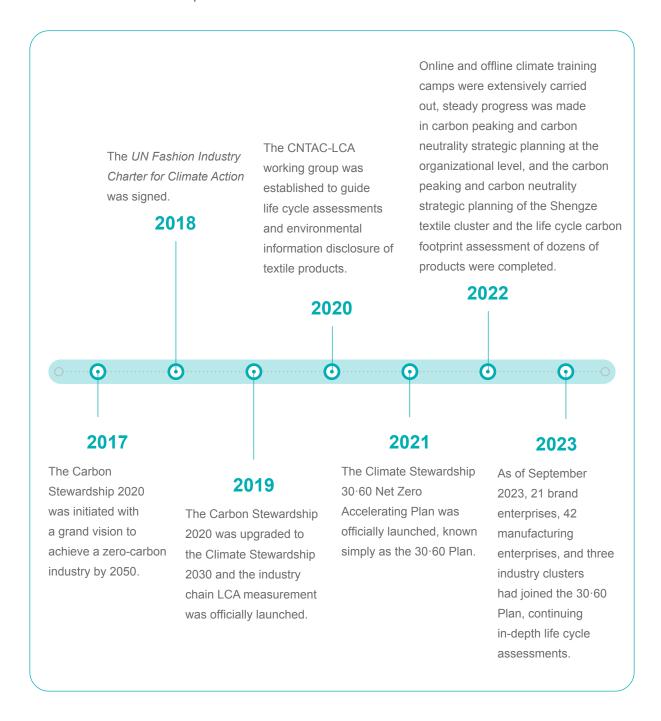
On October 26, 2023, the LCAplus platform for the life cycle assessment of textiles in China's textile and apparel industry (hereinafter referred to as the LCAplus platform)8was unveiled at the 2023 China National Apparel Conference. LCAplus is a digital industrial-grade platform for one-stop product carbon footprint assessment, certification, and label promotion, boasting seven key features, i.e., product modeling, supply chain management, comparative analysis, report management, information disclosure, database management, and process chain management. It offers enterprises comprehensive digital services for product environmental performance, including data collection, modeling, accounting, report analysis, emission reduction optimization, and green management.



Five features of the LCAplus platform

⁸ As a vital tool to promote green and low-carbon consumption, product carbon labeling is becoming one of the most effective means to guide and promote green production and consumption. Life cycle assessment (LCA) is the basis of resource and environmental protection at the product level, and is dubbed as the optimal assessment method by EU.

As of October 2023, the China Textile Information Center had completed on-site data collection and assessment for 32 terminal brands and 102 terminal consumer textile products, involving 173 suppliers. The data covered 13 fiber types, six spinning methods, 24 yarn types, two fabric weaving methods, and three dyeing methods across multiple textile and apparel segments such as garment, bedding, fabrics, and yarns. The platform also completed first-time assessments for specific categories, such as the full supply chain data measurement and tracing of Xinjiang cotton T-shirts for the first time in China, the carbon footprint assessment of the first business casual menswear sets in China, the carbon footprint assessment of the first bedding sets in China, and the carbon footprint assessment of the first one-piece bras in China.



2.3 Responsibility for Prosperity

2.3.1 CSC9000T membership begins to take shape to enhance corporate sustainability

CSC9000T members refer to companies joining the "CSC9000T China Social Compliance 9000 for Textile & Apparel Industry". They are a collection of enterprises covering the entire industrial chain that are guided by CNTAC, managed and served by the Office for Social Responsibility of CNTAC, and supported by relevant industry associations and organizations. These enterprises become CSC9000T members through a voluntary commitment to complying with and promoting the CSC9000T standards.

Since the launch of this initiative in 2022, 16 companies have officially signed up to become CSC9000T members, including Anta Sports Products Limited, Li-Ning (China) Sports Goods Co., Ltd., Beijing Fashion Holdings Co., Ltd., Weiqiao Textile Co., Ltd., Luthai Textile Co., Ltd., Shanghai Challenge Textile Technology Co., Ltd., Jiangsu Handa Industries Co., Ltd., Bosideng International Holdings Limited, Huafu Fashion Co., Ltd., Esquel Enterprises Limited, Jeanswest International (H.K.) Limited, Quanzhou Haitian Material Technology Co., Ltd., HOdo Group Co., Ltd., Aimer Co., Ltd., Wuxi No. 1 Cotton Mill Textile Group Co., Ltd., and Jiangsu Huajia Silk Co., Ltd.

We hereby solemnly promise to:

- 1. Confirm CSC9000T as our social responsibility code of conduct and establish and continuously improve our social responsibility management system accordingly.
- 2. Promote CSC9000T in our enterprise and supply chain and ensure at least one affiliated enterprise executes or continues to execute CSC9000T annually.
- 3. Earnestly fulfill the responsibilities of a CSC9000T member and actively participate in the public management of industry sustainable development.

—Letter of Commitment of CSC9000T China Social Compliance 9000 for Textile & Apparel Industry Members

2.3.2 Deeply engage in industry forefronts and lead the industrial development direction

The environmental, social, and governance (ESG) work in the industry continued to advance. Since the launch of the ESG indicator system and capability improvement platform for Chinese textile and apparel enterprises by the Office for Social Responsibility of CNTAC in August 2022, significant headway has been made in industrial ESG work.

On July 3, 2023, the Office for Social Responsibility of CNTAC and Far East Credit Management Co., Ltd. co-hosted an ESG promotion seminar in the textile and apparel industry with representatives from CCTA, CNITA, and ESG experts attending. They discussed methods and pathways for advancing ESG efforts in the textile and apparel industry, guiding enterprises in improving the quality and efficiency of information disclosure.



Site of the ESG promotion seminar in the textile and apparel industry

The ESG Performance Evaluation Report of Chinese Textile and Apparel Enterprises (2022-2023) was released at the 2023 China Fashion Industry ESG Summit on December 19, 2023. The evaluation was jointly conducted by the Office for Social Responsibility of CNTAC, Far East Credit Management Co., Ltd., and the Glorious Sun School of Business and Management (GSSBM) at Donghua University. The evaluation system consists of a three-level indicator framework, encompassing three primary indicators (environment, social, and corporate governance), 18 secondary indicators, and 119 tertiary indicators. A total of 116 textile and apparel enterprises listed on the A-share and Hong Kong Stock Exchange (HKEX) markets were evaluated. The Office for Social Responsibility of CNTAC will continuously monitor the ESG performance of these listed companies and adjust their ESG evaluation results to enhance the scientific accuracy and effectiveness of the evaluations.



ESG performance evaluation results of listed textile and apparel enterprises

The Sustainable Terms of Trade Initiative (STTI) continues to expand its influence. On November 15, 2023, during the China International Import Expo (CIIE), the Sustainable Textiles of the Asian Region (STAR) Network and Sustainable Terms of Trade Initiative (STTI) Meeting was held by the Office for Social Responsibility of CNTAC in Dongguan. This marked the first offline meeting of all STAR Network members since the COVID-19 pandemic. They discussed sustainable development in the Asian textile and apparel industry and shared the progress and cases of the STAR Network and STTI. The meeting also explored enhancing STAR Network's organizational governance and promoting its substantialized and independent development capabilities. STTI won the ITMF International Cooperation Award 2023 at the 2023 ITMF Annual Conference Keqiao Shaoxing China.



Group photo of guests from various countries attending the STAR Network and STTI Meeting

Promote industry compliance. Guided and entrusted by the Ministry of Industry and Information Technology, the Office for Social Responsibility of CNTAC has conducted a project to support special pilot work in advancing compliance supervision in the Chinese textile and apparel industry. A notable outcome of this project, the Baseline Research Report on Compliance Development in the Chinese Textile and Apparel Industry, was officially released at the Compliance and Sustainable Development International Forum for New Industrialization hosted by the Ministry of Industry and Information Technology, marking a significant step in compliance development in the industry. CNTAC will continue to lead in building industry compliance systems, help enterprises enhance their compliance management levels, and boost the sound, sustainable development of the industry.



Release site of the Baseline Research Report on Compliance Development in the Chinese Textile and Apparel Industry

2.3.3 Support industry layout optimization and drive high-quality development and transformation of industrial clusters

In 2023, CNTAC actively aligned with China's regional development strategy and strengthened cooperation with various levels of governments in inland and border provinces such as Hubei, Anhui, Jiangxi, Liaoning, Guangxi, Xinjiang, Henan, Heilongjiang, and Jilin by organizing targeted industry activities to promote mutual benefits and balanced development between the eastern and western regions. Efforts have been made to advance the construction of industrial parks, which serve as important spatial clusters for regional economic development, industrial restructuring, and upgrading.



These parks facilitate the systematic integration and supplementation of regional industries and ensure the rational connection and support of leading industries. Moreover, CNTAC has taken active measures to encourage the rapid aggregation of high-quality elements and resources towards clusters, enhance their unique features and specialties, boost value and impact, and accelerate the formation of modern industrial clusters with higher added value.



High Quality Development Forum of Modern Textile Industry Cluster and 2023 National Textile Industry Cluster Working Conference

On September 21, 2023, the 2023 High Quality Development Forum of Modern Textile Industry Cluster and 2023 National Textile Industry Cluster Working Conference were held in Hefei. At the conference, important outcomes in cluster construction were released and the list of clusters with over 100 billion and 10 billion yuan in annual industrial output value in the Chinese textile industry was announced. The participants jointly explored implementation paths for the high-quality development of modern textile industry clusters. To further deepen cluster services, CNTAC signed a strategic cooperation agreement for the digital transformation of textile industry clusters with various platform enterprises, aiming to continuously support the high-quality development of clusters.



Case

The pilot work of "Action Index for the Development of Textile Modernization System" for clusters was launched

On November 6, 2023, a special meeting of the textile industry clusters to promote the implementation of the Action Plan for Building a Modern Textile Industry System (2022-2035) was held in Shenzhen, where the "Action Index for the Development of Textile Modernization System" was officially launched. Taking connotations and characteristics of the modern textile industry system as basic reference standards, the index evaluates the development results and potential of the textile industry in specific regions across seven dimensions: Technological innovation, fashion upgrading, green sustainability, regional integration, international development, digital integration, and talent building. By the end of the 14th Five-Year Plan period, CNTAC plans to conduct pilot work of index research and release in 20 industry clusters/regions.

On December 19, CNTAC signed the framework agreement of Jointly Building Modern Textile Industry Clusters and Compiling and Releasing the Action Index for the Development of Textile Modernization System with 12 regions, including Shengze, Changshu, Nantong International Home Textile Industrial Park, E-fashion Town in Linping, Xucun, Puyuan, Kegiao, Jimo, Binzhou, Dalang, Humen, and Yudu. The agreement aims to deepen cluster services, improve the industrial chain and supply chain system, and enhance the development efficiency of cluster enterprises.



The inaugural Global Apparel Conference was successfully held in

In November 2023, the Global Apparel Conference 2023 was hosted in Humen. Themed "Together for a Shared Future," the conference attracted participants from nearly 20 countries and regions, including international organizations, industry associations, experts, scholars, and entrepreneurs, aiming to establish a worldwide long-term communication mechanism for the global apparel industry to foster cooperation and mutual benefits.

"Build development consensus, stimulate innovation vitality, encourage stakeholders to continuously pursue positive changes, and make concerted efforts to create new development opportunities, seek new impetus for development, and expand new development space.

The ultimate goal of the Humen Vision is to achieve balanced global development and common prosperity for humanity as the shared objective of the industry, and encourage the global apparel industry to work together for a better future of the industry through solidarity and cooperation."

—Humen Vision of the Global Apparel Conference



Global Apparel Conference 2023

During the Global Apparel Conference, the Office for Social Responsibility of CNTAC hosted a side event—the Asian Dialogues Conference, with representatives from the STAR Network in attendance. The conference centered on the regional collaboration on green development in the textile and apparel industry and paid special attention to the latest EU legislative requirements on sustainable development responsibility, highlighting four topics as follows:

- The shared value of green development, fairness and justice in the global 0 industry;
- The ways to enhance international cooperation and environmental governance;
- The impact of EU policies on circular supply chains; and
- 0 The shift towards a more circular production mode in the textile value chain.





Site of the Asian Dialogues Conference



Case

Xinjiang Textile and Apparel Industry High-Quality Development Conference

On August 17, 2023, the Xinjiang Textile and Apparel Industry High-Quality Development Conference, hosted by CNTAC and the Department of Industry and Information Technology of Xinjiang Uyghur Autonomous Region, was held to help the textile and apparel industry in Xinjiang fully utilize its resource advantages and chart a path for its development. During the conference, the Department of Industry and Information Technology of Xinjiang Uyghur Autonomous Region released the Guidance Catalog for High-Quality Development of Xinjiang Textile and Apparel Industry. Additionally, Qingyuan City in Guangdong Province signed a framework agreement with authorities of Xinjiang Uyghur Autonomous Region including the Development and Reform Commission, the Department of Industry and Information Technology, the Department of Commerce, and the Supply and Marketing Cooperative to jointly build a cotton textile industry chain and supply chain sales platform between the governments of Qingyuan and Xinjiang.



Case

National Textile and Apparel Industry Regional Cooperation **Development Conference**

Yanbian is a major window for the northward opening up of China's Belt and Road Initiative, serving as a key region for undertaking the gradient transfer of national processing trade and one of the most investment-friendly areas in Northeast China. The textile and apparel industry is traditionally robust in Yanbian Prefecture, with the entire industry distributed along the border, concentrating in counties and cities such as Hunchun, Tumen, Helong, and Longjing. The region has developed a processing system for a complete range of products, including fashion, suits, workwear, casual wear, down jackets, suitcases, bags, shoes, and hats, with a prominent feature on traditional ethnic clothing design and production.

On June 16, 2023, the 2023 National Textile and Apparel Industry Regional Cooperation Development Conference was held in Yanji City, Jilin Province, under the theme of "Land-Sea Linkage, South-North Integration". The conference delved into the internal logic of domestic textile industry transfer and actively promoted coordinated regional development of the industry. During the event, the government of Yanbian Korean Autonomous Prefecture signed a strategic cooperation framework agreement with CNTAC, and the governments of Hunchun, Tumen, Longjing, and Helong signed cooperation agreements with relevant enterprises to strengthen industrial resource connections.

2.3.4 Contribute to building multilateral communication platforms for a greater say in international affairs and influence

Give impetus to the Belt and Road Initiative. On October 16, 2023, the United Nations Global Compact (UNGC) organized the Sustainable Infrastructure for the Belt and Road Initiative to Accelerate the Sustainable Development Goals Action Platform High-Level Steering Committee Meeting at the Beijing Yanqi Lake International Convention & Exhibition Center, to celebrate the 10th anniversary of the Belt and Road Initiative. Sun Ruizhe, President of CNTAC and the International Textile Manufacturers Federation (ITMF), was invited as a member of the High-Level Steering Committee of this Action Platform. During the meeting, the Global Compact Ten Principles Applied in Infrastructure Sectors under the Belt and Road Initiative (BRI): A Practical Guide for Private Sector Players, primarily prepared by experts from the Office for Social Responsibility of CNTAC, was released. This guide aims to support enterprises from various countries in participating in infrastructure projects under the BRI and to expedite the realization of the 2030 Agenda for Sustainable Development.

The Global Compact Ten Principles Applied in Infrastructure Sectors under the Belt and Road Initiative (BRI): A Practical Guide for Private Sector Players is described as a beacon and compass, designed to steer enterprises towards responsible and sustainable pathways and become a benchmark for sustainability, inclusiveness, and high moral.

> —Sanda Ojiambo, Assistant Secretary-General of the United Nations and CEO of the United Nations Global Compact

CNTAC representatives attended the OECD Manufacturers Network Annual Meeting. On April 6, 2023, the Fifth Manufacturers Network Annual Meeting of the Organisation for Economic Cooperation and Development (OECD) was held online. The meeting brought together representatives from 11 organizations and enterprises in the textile and apparel industry from Europe, Japan, China, Turkey, India, Bangladesh, Brazil, and other countries. Representatives from the Office for Social Responsibility of CNTAC introduced the Guide for Social and Environmental Due Diligence of Chinese Textile and Apparel Enterprises during the meeting, elaborating on its structure, connotation, and implementation progress. The Office for Social Responsibility of CNTAC has been dedicated to promoting and implementing this guide, providing training and capacity-building support to over 80 enterprises. The meeting also discussed topics such as responsible procurement practices, audit fatigue, traceability, and support for SMEs. Additionally, suggestions were made for the 2023 work plan of the Manufacturers Network.





Part III Introduction to the Survey Report on the Impact of Order Fluctuations on the Employment Status of Textile and Apparel Enterprises

Part III

Introduction to the Survey Report on the Impact of Order Fluctuations on the Employment Status of Textile and Apparel Enterprises

The Survey Report on the Impact of Order Fluctuations on the Employment Status of Textile and Apparel Enterprises is a significant outcome of the investigation series on new employment trends in China's textile and apparel industry conducted by the All-China Federation of Trade Unions (ACFTU). Entrusted by ACFTU, the Office for Social Responsibility of CNTAC conducted industry investigations and prepared this report. The China Home Textile Association provided substantial support for the project research.

3.1 Background

In 2022, affected by factors such as the slowdown in resident income growth and restricted recovery of consumption scenarios, Chinese residents' willingness to spend on clothing weakened. On an international scale, global economic growth slowed down, and consumption demand in major developed markets like the US and Europe was slack, leading to varying degrees of decline in the demand for imported textiles and apparel.

To better compile and analyze the situation of enterprises under these circumstances, CNTAC employed questionnaire surveys and in-depth interviews to investigate enterprises' orders and revenue, production status, and employment situation. CNTAC distributed questionnaires to enterprises and collected them back, forming an investigation sample of 280 companies. There might be some degree of bias in the questionnaires completed by enterprises, and the sample enterprises involved in the in-depth interviews might lack sufficient representativeness, which could limit the research methods and conclusions.

3.2 Profile of Enterprises

The sample enterprises are distributed across 23 provincial-level administrative regions, with 53% located in Jiangsu, Zhejiang and Shanghai regions. Other provincial-level administrative regions with larger sample sizes include Guangdong (32 enterprises), Shandong (25 enterprises), and Liaoning (14 enterprises). This distribution pattern accurately reflects the current domestic layout of China's textile and apparel industry.

In terms of establishment time, 92% of the companies were founded in 1978 or later, with 55% established in 2001 or later. This timeline distribution mirrors the historical development of China's textile and apparel industry: The periods following the reform and opening-up policy and China's accession to the World Trade Organization (WTO) saw two major growth spurts, highlighting the industry's heavy reliance on export markets.

Regarding registered capital, enterprises with a registered capital of 10 million yuan or more constitute the highest proportion, about 74%, and those with a registered capital exceeding 100 million yuan account for approximately 24%. In terms of business nature, more than 70% of the sample enterprises are private, with state-owned enterprises comprising less than 5%. As for enterprise scale, the sample includes a balanced mix of large, medium, and small enterprises.

Concerning business types, the apparel and accessory sector is the most prevalent, followed by home textiles and cotton textiles. Some enterprises engage in multiple sectors, such as apparel, accessories and wool textiles, or cotton textiles, printing and dyeing. The majority of sample enterprises (about 71%) have not invested in the textile and apparel industry overseas. However, the scale of overseas investments varies across different sub-sectors, and there is a positive correlation between the likelihood of overseas investment and the scale of the enterprise to a certain extent. Most enterprises choose East Asia or Southeast Asia as their investment destinations.

China's textile and apparel companies have developed a pattern of "close reliance on both ends" regarding the overseas market. This means that investment and raw material exports are closely tied to less developed regions such as Southeast Asia and Africa, while finished product exports are heavily reliant on developed regions like Europe, the US, and Japan. Overseas orders have become a crucial market factor influencing the entire business process of China's textile and apparel industry from investment to sales.

3.3 Business Performance of Enterprises

According to the survey, compared to the same period last year, half of the sample enterprises experienced a decrease in revenue, with a widespread reduction in orders. Companies with a high proportion of exports faced greater challenges than those focused on domestic sales. Due to low confidence in overseas markets and the development of the "small order and quick response" model in cross-border e-commerce, the structure of orders has changed, making short-term small orders more common and increasing transaction costs such as customer communication.

Amid the global economic downturn, industry enterprises generally have pessimistic expectations for the future, believing that the decrease in orders and revenue are the main factors affecting their operations in 2023. The investigation shows that over 80% of enterprises are operating below capacity. However, enterprises choose to bear the pressure together with their employees. While more than a quarter of companies plan to reduce recruitment, very few opt to lay off workers. This indicates that enterprises have recognized the importance of retaining the current workforce despite the need to control recruitment to cope with reduced orders and revenue due to the broader environment.

The domestic market showed signs of recovery in 2023, but weak international demand and high inventory levels of international brands posed significant challenges such as insufficient orders and increased export pressure. The Uyghur Forced Labor Prevention Act and the US government's restrictions have significantly reduced the willingness of international brands to import cotton products from China. Currently, countries like India, Vietnam, and Bangladesh have partially replaced Chinese exports, which not only makes domestic cotton prices remain low and affects the income of cotton growers but also forces more enterprises to adjust their marketing strategies and shift their market focus to ASEAN, Central Asian, and Arab countries. This trend will to some extent dampen new investment confidence in the domestic cotton textile industry and expose China's local textile industry to more severe global market competition.

Against the complex and challenging internal and external environment, the massive loss of orders and customers is the greatest difficulty for enterprises, which presents an unprecedented challenge in the past 30 years for textile and apparel companies highly dependent on foreign trade and overseas markets.

3.4 Employment Situation of Enterprises

The median number of employees in the sample enterprises is 270, with women constituting a median of 65% of the total. Overall, employees have relatively low educational backgrounds, mainly graduating from high schools and vocational schools. Migrant workers are no longer the sole dominant labor source. More enterprises are increasingly employing local workers, leading to a higher percentage of local hires. The shift towards local hiring exacerbates the issue of workforce aging, particularly in SMEs. Since 2023, 90% of the sample enterprises have seen low employee mobility, with monthly turnover rates below 3%, indicating stable employment relationships, which is particularly pronounced among senior skilled workers. The tight employment situation in 2023 and the trend towards fixed employment may contribute to this stability, which also reflects that textile and apparel enterprises generally operate in a standardized way and adapt to market changes responsibly. Since enterprises choose to reduce or suspend production lines to cope with insufficient orders, employees have more rest time. Since 2023, labor costs have been stable with a slight increase, and there is no significant labor shortage.

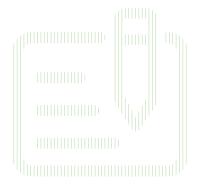
Despite diversified recruitment channels, hiring difficulties remain prominent. Data indicates that labor transformation is one of the main strategies for enterprises to address current challenges. Different-sized enterprises have different approaches to future operational and labor pressures. These include replacing manpower with automation, employing more high-skilled workers, choosing flexible employment, or seeking overseas labor, all focusing on the structure, mode and channel of employment. This indicates that enterprises need long-term efforts and more diversified support in this area.

3.5 Enterprises' Demands and Challenges

Many textile and apparel enterprises are at a critical juncture, facing reduced orders and revenue with pessimistic future expectations. Although labor shortages are not prevalent at this moment, hiring difficulties exist extensively. The aging trend among textile and apparel workers is worsening in some regions. Moreover, enterprises say that the textile and apparel industry faces pressures typical of traditional manufacturing industries, such as financing difficulties, insufficient water and electricity supply, and great social security burdens for labor-intensive enterprises, posing challenges to the future development of enterprises. Enterprises also put forward their suggestions and viewpoints on mitigating the impact of order fluctuations on employment. They hope that governments and associations take measures such as tax reduction, subsidies, and multiple channels to attract overseas orders and address employment issues through regional training. Internally, enterprises consider that they should enhance both hardware and software, such as increasing R&D capabilities, advancing automation to reduce labor needs, ensuring basic salary and benefits of employees, and improving compliance.

3.6 Recommendations

First, enterprises need to invest more in R&D to enhance the added value of products. They should gear towards consumer demands, fully leverage the supply chain advantages of crossborder e-commerce and "small order and quick response" model, and attract high-end talent through collaboration with colleges and universities to help them optimize production processes and improve product quality. Second, addressing employment issues requires efforts of all sectors of society. Local governments should identify enterprises' needs, cultivate applied technical talent, and collaborate with industry associations and industrial parks for regional recruitment. Enterprises should improve corporate culture and employee benefits by providing training opportunities for employees, establishing fair promotion systems, and protecting female workers' rights. Lastly, policy support for traditional manufacturing should be strengthened. Local governments should prioritize the financing needs of textile and apparel enterprises, unveil favorable policies, properly reduce taxes or social security burdens for such labor-intensive industries, and provide support for the sustainable production and eco-upgrades of the textile and apparel enterprises.







Part IV China's Textile and Apparel Industry During 2024-2025 Plan of Social Responsibility Construction

Part IV

China's Textile and Apparel Industry During 2024-2025 Plan of Social Responsibility Construction

From 2024 to 2025, the social responsibility construction of china's textile and apparel industry will focus on the key target of serving and facilitating the high-quality development of the industry, promote the implementation of various tasks in the following areas.

4.1 Launch CSC9000T membership pilots and promote support system

Develop the CSC9000T Guidelines for the implementation of social responsibility system for textile and apparel enterprises and the management indicator system based on the process management approach of risks and due diligence; Rely on key textile and apparel enterprises and continue to promote CSC9000T membership and executing enterprises; Continuously promote the application of CSC9000T information platform, supporting the empowerment of enterprises.

4.2 Upgrade the Big Data System Platform for the Design and **Development of Sustainable Products**

The systematic, quantitative and standardized appraisal and management on the "green" features of the textile supply chain based on "sustainable transparency" could improve the capacities of the companies in making "green design", act as an important method and tool to support the companies to efficiently ensure their product safety and disclose environmental footprint information, and realize the transfer and transformation of market value.



4.3 Improve the Transparency Management of ESG of Listed **Companies in the Textile and Apparel Industry**

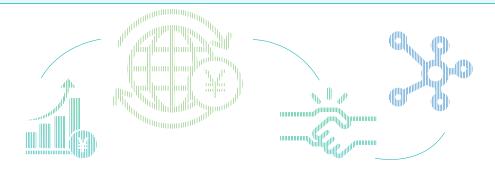
Working with CAPCO (CHINA ASSOCIATION FOR PUBLIC COMPANIES) and the Board Secretary Association of Listed Textile and Apparel Companies to complete industrial information disclosure tools, rely on the ESG capability enhancement platform of China's textile and apparel industry, improve the ESG information disclosure quality and effect of such companies, increase the transparency and trust of the textile and apparel industry in the capital market, and enhance the role of the capital in element optimization and sustainable development.

4.4 Support Responsible Investment Overseas of Textile and **Apparel Companies**

Continuously promote investment guidance and local training, meanwhile support the internet building and experience exchange. Such efforts include conducting further investigations on the sustainable development situation of textile and apparel companies in the area surrounding Lancang River and Meikong River and in African countries; Improve the competitiveness of Chinese textile and apparel companies overseas in the aspect of social responsibilities, especially those running their business in the Southeast Asia and Africa, and actively contribute to the work of "China's Corporate Social Responsibility Alliance in Africa".

4.5 Further Promotion of Cooperation among Multiple Parties to Improve the Resilience of the Supply Chain

Optimize dialogues and cooperation with UN organizations, international standard organizations, and international NGOs in the due diligence management of the supply chain of the textile and apparel industry so as to urge the upstream and downstream sectors to reach a consensus and work with each other, based on which the resilience of the industry against domestic and foreign non-business risks could be built.



Appendix 1 SDGs Index

Part I. Development of China's Textile and Apparel Industry and Its Impact on CSR Construction

1.1 Development Overview of China's Textile and Apparel Industry







1.2 Major Trends of China's Textile and Apparel Industry and Their Impact on CSR







Part II. CSR Construction of China's Textile and Apparel Industry in 2023

2.1 Responsibility for People













2.2 Responsibility for the Planet















2.3 Responsibility for Prosperity





Part III. Introduction to the Survey Report on the Impact of Order Fluctuations on the Employment **Status of Textile and Apparel Enterprises**

Part IV. China's Textile and Apparel Industry During 2024-2025 Plan of Social Responsibility Construction

Appendix 2 Chronology 2023

December

On December 19, the findings of "2022-2023 ESG Performance Assessment of Chinese Textile and Apparel Enterprises" were released at the 2023 China Fashion Industry ESG Governance Summit. The ESG performance assessment was jointly conducted by the Office for Social Responsibility of China National Textile and Apparel Council (hereinafter referred to as "CNTAC"), Far East Credit Management Ltd., and Glorious Sun School of Business and Management, Donghua University.

November

On November 16, the Asian Dialogue Conference held by the Office for Social Responsibility of CNTAC and the working group of GIZ on "Promoting Sustainability in the Textile and Garment Industry in Asia" (FABRIC) was successfully held in Dongguan, Guangdong Province, China. The forum focused on the latest requirements of the EU and German legislation on supply chain due diligence and explored the opportunities and challenges of regional cooperation in the field of green development in the textile and apparel industry.

On November 7, a series of research findings on the new trend of employment in China's textile and apparel industry, "Research Report on the Influence of Order Fluctuation on the Employment Situation of Textile and Apparel Enterprises" and "Research on Employment Problems in the Transfer of the Textile and Apparel Industry to the Central and Western Parts of China", passed the evaluation and acceptance. The research was commissioned by the Trade Union of Financial and Commercial Workers, Light Industry and Textile Workers, and Tobacco Industry Workers of China and executed by the Office for Social Responsibility of CNTAC.

On November 6, the Sustainable Terms of Trade Initiative (STTI), co-established by the Office for Social Responsibility of CNTAC, received the International Cooperation Award 2023 from the International Textile Manufacturers Federation (ITMF). The objective of STTI is to improve purchasing practices in the apparel industry and to promote purchasing practices that do not cause obvious and avoidable harm to manufacturers.

October

On October 16, the United Nations Global Compact (UNGC) held a press conference on the key deliverables launch event of UNGC "Sustainable Infrastructure for the Belt and Road Initiative to Accelerate the Sustainable Development Goals" Action Platform, and released the "Global Compact Ten Principles Applied in Infrastructure Sectors under the Belt and Road Initiative (BRI): A Practical Guide for Private Sector Players". A member of the Office experts team was the lead author of the guidance.

September

On September 1, the Office for Social Responsibility of CNTAC and the Embassy of Sweden in China jointly organized the third training session of the "Guidance on Social and Environmental Due Diligence for China's Textile and Apparel Enterprises". More than 50 representatives of international brands and suppliers attended the meeting.

June

On June 13, the Climate Training Camp for China's textile and garment enterprises (Shengze 2023 Special Session) was successfully held in Shengze Town, Wujiang District, Suzhou City, Jiangsu Province. The event was jointly organized by the Office for Social Responsibility of CNTAC and the Economic Development and Reform Bureau of Shengze Town.

April

On April 21, the Office for Social Responsibility of CNTAC held a preparatory meeting for the launching of the project "Accounting for Resource Value of the Recycling of Waste Textiles". The project aims to implement the work deployment of the "Implementation Opinions on Accelerating the Recycling of Waste Textiles," promote the green and low-carbon development of China's textile and apparel industry, further accelerate the promotion of recycling of waste textiles, and enhance the competitiveness of textile and apparel in the global market.

March

The "Family-Friendly Factories (FFF)" project was launched with a one-year pilot cycle, with plans to conduct a series of training for corporate management level and employees, as well as a reassessment of eligible pilot factories.









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