Make Fashion Circular

OUTLOOK FOR

A NEW TEXTLIES ECONOMY IN CHINA

Report Summary



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SUMMARY

The fashion industry is the seventh largest economy in the world, largely as a consequence of Mankind's unceasing pursuit of new fashions in the search for beauty. By 2018, the market size of the global fashion industry had reached US\$2.5 trillion, providing jobs for one sixth of the global population. Despite the fact that growth has started to slow, the world's population is projected to reach 8.5 billion by 2030, 9.7 billion by 2050 and close to the peak of 11 billion by the end of the century, according to a UN population forecast in 2019. Population growth means more demand for fibers, textiles, and clothes. If the fashion industry continues to develop in the traditional linear way of "mass production - mass consumption - mass waste", it will consume more resources and bring about irreversible environmental pollution and economic losses. The fashion industry needs to innovate a development model to achieve new growth at a time when the global economy is facing a downturn. The fashion industry is in the process of rethinking how it manufactures, consumes and disposes of textiles and apparel. Circular fashion is an industrial system conceived by various stakeholders as a solution to bring about sustainable industrial development. The vision is in line with the principle of the circular economy, and aims to maximize the value of fiber, textile and apparel in design, production use and recycling, reduce the consumption of resources and the generation of waste, thus reshaping the textile industry towards a more resilient and responsible future.



The circular economy is an important engine for future economic growth. According to statistics, the circular economy could create economic benefits worth US\$4.5 trillion by 2030 by retaining the value of resources, materials and products as much as possible and creating new value by extending the service life of products through reuse, renovating, remanufacturing and recycling. Taking China as an example, it is estimated that if the circular economy in three key areas is implemented in cities, the overall cost of access to goods and services can be greatly reduced, and about RMB 32 trillion of expenditure for high-quality products and services can be saved by enterprises and households by 2030.*

^{*} Ellen MacArthur Foundation. The Circular Economy Opportunity for Urban and Industrial Innovation in China. 2018.

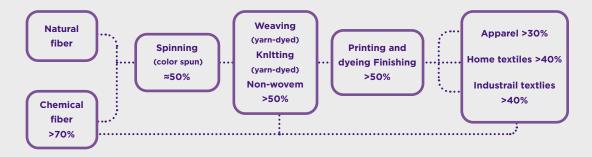
CHINA'S TRANSITION TO A CIRCULAR TEXTILE AND APPAREL INDUSTRY IS CRUCIAL TO THE FUTURE OF GLOBAL CIRCULAR FASHION

China's textile and apparel industry plays an important role in the global fashion industry. Its transition to a circular textile and apparel industry is crucial to the future of global circular fashion and will have a profound impact on its course.On the one hand. China is the world's largest textile and apparel producer and exporter. In 2018, China's total fiber processing volume accounted for 50% of the world's total, and China's textile and apparel export volume accounted for 35% of the global total. On the other hand, China is also one of the largest textiles and apparel consumer markets in the world, and one of the top three markets for many well-known fashion brands and companies. The expanding new middle-class and improving consumer awareness will further unleash the potential of China's textile and apparel market and drive green consumption.

China has the world's largest and most complete industrial system from raw material supply. design and R&D to textile printing, dyeing and

processing, three terminal manufacturing, as well as retail operating. China leads the world in its manufacturing capacity and level in all links of the industrial chain. According to statistics from China National Textile and Apparel Council (CNTAC) in 2018. China's total fiber processing volume reached. 54.6 million tons, accounting for more than 50% of the world's total fiber processing volume. At the same time China's textile and apparel export volume reached US\$ 276.73 billion, accounting for about 35% of the global total. Eighty percent of the world's production of high count yarn (more than 60S) comes from China, more than 90% of the world's color-spun yarn production comes from China, 60% of the world's high-grade yarn-dyed shirt fabric production comes from China, 30% of the world's high-grade denim production comes from China, and the production technology of high count and high density fabric is mainly in China. China's textile industry still maintains an obvious international competitive advantage in a complex and volatile international trade environment.

Complete industry chain system of China's Textile industry Proportion of China's processing capacity in the world



Source: China's National Textile and Apparel Council (CNTAC)

Data shows that in the past decade, China's market has accounted for 38% of the total growth in all areas of the global fashion industry. Since 2012, China's market has accounted for 70% of the growth in the luxury industry, attracting the attention of the world.

With the continuous improvement of people's living conditions, a growing new middle-class and improving consumer awareness, the potential of China's textile and apparel consumption market will be further boosted. According to data issued by China's National Bureau of Statistics, per capita expenditure on clothes reached RMB 1,238 in 2017 and RMB 1,289 in 2018. However, this consumption level is far lower than that of developed countries' which is more than US\$ 1,000. Taking US as an example, the personal spending of American consumers on clothes and related services was US\$1,885 in 2017, accounting for 3.1% of total consumer expenditure. Rising consumer awareness on green textile and apparel consumption as well as potential consumer behaviour change will further drive the textile and apparel industry's circular and sustainable development.

THE FIRST CIRCULAR FASHION REPORT OF CHINA'S TEXTILE AND APPAREL INDUSTRY

From the perspective of the industry's entire supply chain, the report for the first time presents the current situation of China's textile and apparel industry, combing through the good practices and achievements of the industry's circular development. Furthermore, the report proposes the vision and opportunities for the industry's circular development based on international circular fashion trends. China has been promoting a circular economy since the 11th Five-Year Plan. Under the guidance of China's circular economy development strategy, the circular transition of China's textile and apparel industry has taken steps in exploring the circular economy.

China has vigorously promoted a circular economy at national level since 2005. In 2008, the *Circular Economy Promotion Law* was issued, providing a legal guarantee for developing a circular economy. In 2012, China promulgated the *Circular Economy Development Strategy and Near-term Action Plan*, which was the world's first national special plan

for a circular economy. In recent years, China has accelerated its circular development, transforming both the economy and society at all levels in a more systematic way. At the same time, a series of policies have been developed, including strengthening the management of solid waste. comprehensively promoting the classification of urban household waste, and launching the pilot project of "Waste-free Cities", etc. In 2020, China issued the Guiding Principles on Building a Modern Environmental Governance System, the Implementation Instructions on Promoting Consumption Expansion and Upgrading Quality and Accelerating the Formation of a Dynamic Domestic Market, and the Guidances on Accelerating the Establishment of a Regulatory and Policy System for Green Production and Consumption: the 13th National People's Congress Standing Committee has integrated the study on the comprehensive utilization of resources law into its legislative plan. The circular economy has become a new driving force for China's economic development.

Raw Materials



The optimization of raw material structure, the improvement of resource efficiency in production and the recycling of textile waste are the three main areas of circular economy practices in the industry. In the past 15 years, China's textile andapparel industry has made gradual progress in these areas and initially formed the basic features in its circular development. Specific to industry practice, the proportion of recycled fiber processing in China had increased from 9.6% in 2010 to 11.3% in 2015, and its output exceeded 7 million tons in 2018. Several bio-based chemical fibers have achieved industrial development, with a range of applications in apparel, home textiles, health and medical products. Levels of energy-saving and material

consumption-reduction, and resource recycling have been significantly improved. A large number of new technologies have made breakthrough and subsequently widely adopted. The setting up of an industrial chain of recycling, sorting and the comprehensive utilization of textile waste has also been largely completed. "Zero Discarding of Old Clothes" has been carried out, and the Extended Producer Responsibility system has also been introduced at company level.

Roughly estimated, China's resource utilization rate of textile waste reached 17% in 2018. At the same time, there are emerging trends in design and in the field of consumption that are favourable

to industrial circular development. The practice of green design is gradually increasing; some consumers have begun to turn to green textile and clothing consumption, embracing the concept of sustainable consumption. New business models such as clothes rental, sharing and resale are emerging.

However, as a whole, due to the large range of product categories, a long industrial processing chain, and large volumes, there is still a lot of room for China's textile and apparel industry to make

improvement in terms of the substitution scale of non-renewable raw materials, the resource utilization level in production, the recycling and reuse of textile waste, the design and consumption based on circular economy's principles. With increasing pressure on both resources and the environment, it is imperative to accelerate the circular transition of the industry and expand the scope of practices.

CHINA'S NEW TEXTILES ECONOMY VISION

China is building an ecological civilization and accelerating its circular transition. The idea and direction of global circular fashion is of great significance for China's textile and apparel industry to cope with various complex resource and environmental challenges. At the new stage of development, based on the current situation of the industry, a vision for a new textiles economy in China has been put forward in the report to keep pace with the nation's circular development strategy as well as the developments

in international circular fashion. The vision is to build a green, circular, and low-carbon textile and apparel industry system, so as to improve resource efficiency of the industry and reduce resource consumption and the negative impact on the environment. On the basis of the industry chain development in China, the new textiles economy will rely on five goals to address raw materials, design, production, consumption and after use. The goals include:



Goal 1

Further optimize the raw material structure to reduce the consumption of non-renewable resources.



Turn to textile design based on the principle of a circular economy.



Goal 3

Further improve resource efficiency in production.



Goal 4

Innovate business models and expand green consumption.



Upgrade the quality and efficiency of textile waste recycling.

It is obvious that a new textiles economy is not only a solution to resource and environmental risks but also a great growth opportunity. In recent years, various uncertain factors have increased the difficulties and risks of economic recovery, exacerbated by the outbreak of the COVID-19 Pandemic in early 2020. The textile and apparel industry, which is highly globalized, is facing serious challenges, putting different stakeholders under pressure. Transitioning to a circular economy is crucial to high-quality growth of China's textile and apparel industry. In the new era of an increasingly

complexity, various stakeholders in China's textile and apparel industry, including government, enterprises, designers, associations and research institutions as well as consumers, unified by the common vision of circular development and embracing the global value chain, should work together to strengthen and deepen cooperation, grasp new growth opportunities to build a more resilient industrial value chain. As China embarks on a path to circular economy transition in line with its national conditions, it will also contribute to global circular fashion with its own solutions.

Transitioning to a circular economy is crucial to high-quality growth of China's textile and apparel industry.



IN SUPPORT OF THE REPORT

Sustainable fashion opens up new growth opportunities for the global textile and apparel industry. As an important part of the global fashion industry, China's textile and apparel industry is now in the critical transition phase toward high-quality development.

We believe this report could help all stakeholders understand the status quo of circular practices for the Chinese textile and apparel industry, so as to accelerate the construction of a green, circular and low-carbon industrial system and jointly promote transition for more responsible and sustainable growth under the guidance of China's national strategy on circular development.

- Dapeng Chen, Vice President of China National Textile and Apparel Council

The fashion industry in China is in a critical stage of transition and green development has been taken as the strategic development goal for the textile and apparel industry. This report for the first time systematically combed through the circular economy practices and achievements of the industry from 2005 to the present, and furthermore expounded in detail upon the prospect of industrial transition based on international circular fashion practices, providing beneficial solutions and references for the industry to explore circular economy transition.

-Yan Yan, Director of Office for Social Responsibility, China National Textile and Apparel Council

I'm very delighted to learn from this report that more parties in the value chain are aware of the importance of design for circular fashion. Some designers in China have already been inspired by the principles of the circular economy in their work. We expect that more designers will unlock the innovative potential by thinking more about the circularity and recyclability of materials and shaping the future of responsible production and consumption.

- Qinghui Zhang, Chairman of China Fashion Association

A circular economy for fashion, where clothes are used more, are made to be made again and are made from safe and renewable materials, provides an opportunity to create an industry that can thrive in the long term while tackling issues like waste and pollution.

With momentum towards a circular fashion industry growing globally, this report is an exciting milestone that not only highlights the strong foundations upon which the Chinese fashion industry can build, but also sets practical goals for the industry to follow to accelerate its development.

- Francois Souchet, Lead, Make Fashion Circular initiative of the Ellen MacArthur Foundation

The fashion industry is the world's second most polluting industry, after oil. China's textile industry plays an important role in the global textile industry through its whole value chain, which means it can contribute a lot to global sustainable development by improving the industrial chain and promoting circular economy practices.

It was an honor for Lenzing Group to be involved in the report. Starting from a global perspective, the report sheds light on the circular economy transition of China's fashion industry, looks deep into its current status, challenges, and opportunities for circular fashion on the basis of numerous pieces of research as well as case studies and data analysis. It can also provide support and guidance to stakeholders systematically, so as to accelerate the industrial transformation.

-Jian Hu, Senior Vice President, Lenzing Group (North Asia)

Fashion represents an important trend in the global textile industry. It is important to introduce the concept of green development, emphasize the driving role of leading enterprises, incorporate the concept of a green and circular economy into corporate fashion development strategies, and continuously strengthen the management of the green supply chain, so as to reduce the impact of textiles on the environment throughout its life cycle and foster the sustainable development of the textile industry. The report released by the Social Responsibility Office of the China National Textile and Apparel Council (CNTAC) depicts a blueprint for the development of China's textile industry, and provides guidance for the industry's transition towards circular fashion.

— Tao Mao, Director, Institute of Energy, Resources and Environment, Center for International Economic and Technological Cooperation, Ministry of Industry and Information Technology of P.R. China

The production of green fiber, which adheres to the concept of a circular economy, constitutes an important part of industry's transition and upgrading. In terms of volume and scale, China is currently the world's largest producer and supplier of fiber raw materials, as well as a major producer of recycled fibers, bio-based fibers, dope-dyed fibers, and other fibers with green properties. As international brands attach importance to sustainability, setting their targets and proposing solutions, the demand for recycled fiber internationally and domestically has been amplified further.

China's textile and apparel industry should accelerate technological innovation to meet the market demands. With detailed data and future trends analysis, this report can provide relevant enterprises a systematic overview of the material chain.

Shidong Lin, Deputy Secretary General of China Chemical Fibers Association, Vice President of the Recycled
Fiber Commission of China Chemical Fibers Association

It has become a consensus globally to develop the circular economy and promote social sustainable development. The comprehensive utilization of textile waste contributes to sustainable development and has practical and far-reaching importance to society. The China Association of Circular Economy has a long commitment to building a system for textile waste recycling, establishing a graded utilization mechanism, promoting renewable and recycled products, and developing common key technologies. Circular fashion as proposed in this report is also the focus of the association. We hope that this report will attract more governments, institutions and businesses to jointly promote the industrial development for the comprehensive utilization of textile waste throughout the world.

- Mingming Gu, Secretary General of Technology Innovation Strategic Alliance for Waste Textiles Comprehensive **Utilization Industry**

This report is of great significance in advancing the circular economy transition of China's textile and apparel industry. It sets out an objective analysis of the importance of promoting the circular transition of the industry in China, It first puts forward the vision, ambitions, and principles of China's new textiles economy, then comprehensively reviews the current status and challenges involved in the industry's transition, and finally provides all stakeholders a systematic path to take action jointly.

- Xiaoyi Gao, Director of the Department of International Cooperation, All China Environment Federation

The report reshapes the future of fashion from the perspective of environmental strategy in a far-reaching way. It can increase the transparency of brands and the "healthy supply chain", and provide clearer implementation guidance strategically for the green and sustainable development of the industry.

As a player in the textile industry, we need to make continuous technological innovations to achieve waste reduction, resources utilization, and harmlessness in production, so that products and the environment can be integrated in an organic way, and contribute to human health.

- Fangsheng Long, General Manager of Zhejiang Mizuda Printing&Dyeing Group Co., Ltd.

No other industry is so closely connected with both the production and consumption ends as the textile and apparel industry. Therefore, the circular economy transition of the industry will not only promote the construction of a green industrial chain across the industry, but also involve tens of millions of consumers to participate, which can fuel the circular development of the industry through the practices of green consumption. The circular economy transition of China's textile and apparel industry plays an important role in shaping the future of global circular fashion and promoting a green lifestyle. It is also a best practice in terms of China pursuing green development. With detailed information and data, the report proposes the vision and implementation plan, which is of great guiding significance for the systematic circular economy transition of the industry, injecting new momentum into its further development.

- Ling Zhong eputy Director of the R&D Department, China Environmental United Certification Center

Recent years have seen rapid changes in society and the economy, as well as in the consumption habits, patterns, scenarios, and structure of consumers. To address the new opportunities and challenges faced by the textile industry, all stakeholders including brands, retailers, and manufacturers in the global textile and apparel supply chain should make joint efforts and the industry's leading enterprises should commit to social responsibility, promoting the development of the industry in a technological, green and fashionable way.

New opportunities coexist with new challenges, and the latter urgently requires new wisdom. It was an honor for Yuyue Home Textile to be involved in the report, which took more than a year of preparation and exploration through multiple channels online and offline. It presents comprehensively the current situation of China's textile and apparel industry in circular economy transition based on the analysis of massive quantities of data from stakeholders. Practically, the report also provides an analysis of opportunities. It, in a nutshell, helps the industrial players to make judgments more rationally.

- Yuping Wang, General Manager of Yuyue Home Textile Co., Ltd.

I was deeply moved to see the report. Sustainable fashion is a hot topic globally - one which many companies and brands in the industrial chain, including Sinotytex, are exploring and practicing. Environmental sustainability is a journey that is evolving from 0 to 100. To achieve real gains in sustainability, both the product and the business matter. This means producing fashionable, high-quality, and cheap clothing for ordinary consumers, gaining business success and then encouraging more companies to enter the field of sustainable fashion. Therefore, it far exceeds a story of environmental protection. Sinotytex has made certain achievements in the field of "zero dyeing" color spinning, which will drive more peers to engage in this field and reduce the consumption of water and energy and the discharge of sewage together. This also complies with our mission, which is "Let everyone enjoy sustainable fashion".

- Pin Dong, Vice President of Hangzhou Sinotytex Co., Ltd.

