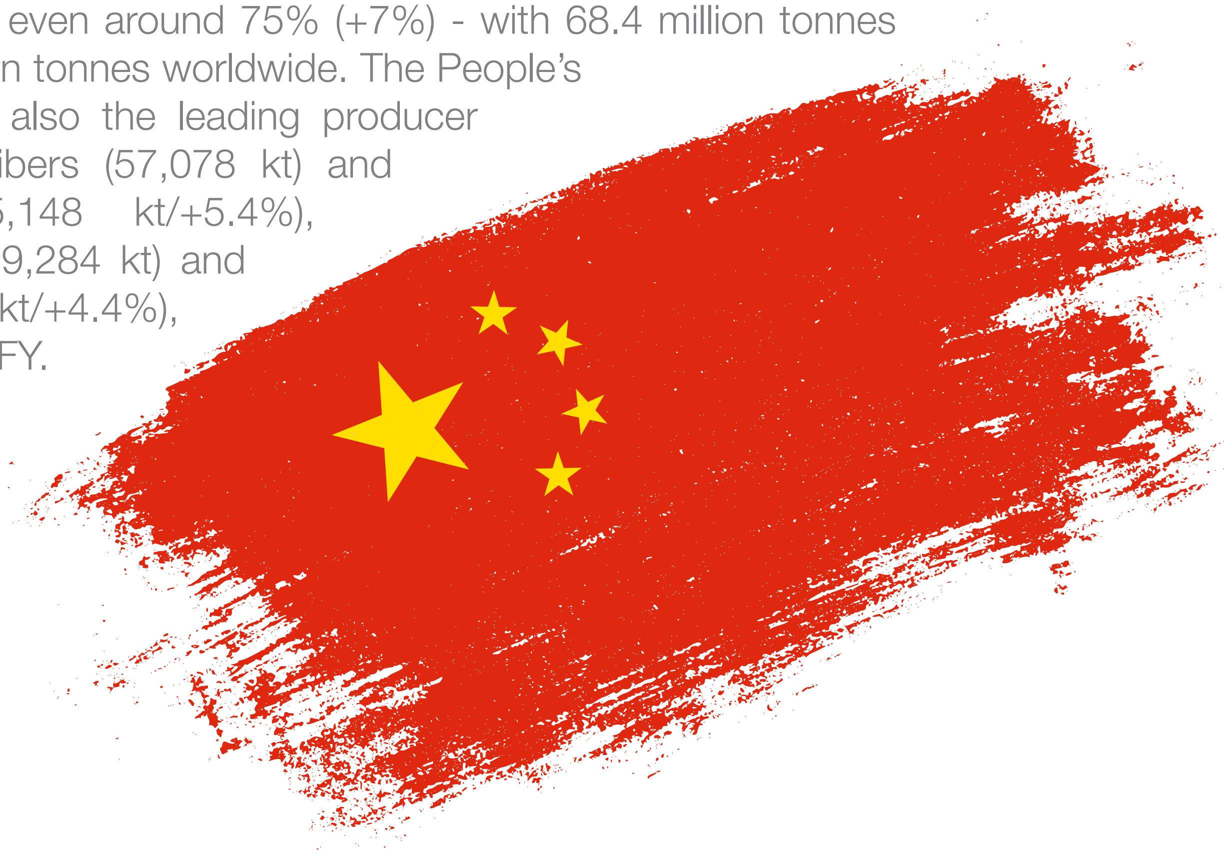
Balancing between adaptation and self-sufficiency

As the undisputed number one, China is literally shaping the entire textile world with every fiber. However, the many-armed empire of competitors is striking back: South and South-East Asia are flexing their muscles, increasing trade conflicts are putting the People's Republic in a headlock and consumption in the vast Middle Kingdom is weakening. China has to adapt and at the same time wants to become more independent. A balancing act.

With 301.1 billion US dollars (USD) worth of goods, according to the Chinese customs authority, China once again topped the global ranking of textile and clothing exporters in 2024. According to the yearbook "The Fiber Year" (TFY), the country produced 24,085 kilotonnes (kt/+9.5%) in 2023, almost half of the global staple fiber production of 59,851 kt. As a manmade fiber (MMF) producer, the market share was even around 75% (+7%) - with 68.4 million tonnes out of 91 million tonnes worldwide. The People's Republic was also the leading producer of polyester fibers (57,078 kt) and filaments (45,148 kt/+5.4%), cotton yarn (19,284 kt) and cotton (5,980 kt/+4.4%), according to TFY.



Despite its successes, the class leader is at a critical turning point, as the crisis-ridden, unstable environment demands greater adaptability and resilience - both internally and externally. According to the information portal Germany Trade and Invest (GTAI), China's GDP growth fell from 5.3% in the previous year to 4.8% in 2024 and is expected to fall steadily to 4.1% by 2026. The economy and administration are struggling with the ongoing property crisis, highly indebted regional authorities, high unemployment, particularly among young people, and weak domestic demand in this huge country with a population of around 1.4 billion. Light on the horizon is provided by the middle-income group, around 400 million consumers in 2023, which will have doubled in ten years and is expected to boost consumption. At the same time, however, the birth rate is low and society is ageing rapidly. Last but not least, the ongoing crisis in the global economy as a result of geopolitical conflicts and the resulting uncertainties and obstacles to demand in foreign trade are clouding the prospect of an early recovery.

In China's textile and clothing industry, rising labour costs are forcing more automation or, where appropriate, the relocation of production to more cost-effective regions such as Southeast Asia, which are also becoming increasingly competitive in the global textile market thanks to better trade and customs conditions. The resource-intensive Chinese textile industry, with its high use of chemicals and water consumption, also faces the urgent task of further reducing its ecological footprint and setting an example in the market with a greater focus on sustainability.

Against this backdrop, the government wants to make the domestic industry more technologically independent and therefore promote innovation and digitalisation even more. China has also committed to becoming carbon-neutral by 2060. This is why its 14th Five-Year Plan (2021-2025) and certainly the follow-up plan will focus on sustainable, technology-driven and brand-orientated development of the textile and apparel industry.

From the Silk Road of antiquity to the race track of modern times

In order to master these challenges, the tradition-rich country is building on a solid foundation that has grown over thousands of years. The beginnings of textile craftsmanship in what is now China date back to the Neolithic period, with early relics dating back to between 5000 and 3000 BC. Silk production began around 2700 BC and later became a symbol of China as a trading power, which also established itself in the West via the Silk Road and soon included elaborate brocades, embroidery, woven goods and cotton among its goods. Silk and wool also marked the beginnings of the Chinese textile industry in modern times, but the mechanical processing of cotton into yarn quickly gained in importance. The busy industry experienced considerable growth, particularly in the cities along the coast and rivers. The textile industry itself was also of central importance as a pioneer for the industrialisation of China, its economic progress and socio-economic development. It retained its important position even after the founding of the People's Republic in 1949, and was given further impetus in the late 1970s when China began its reform and opening-up policy and thus also the development of textile production, which was unbeatable in terms of costs at the time - supported by advanced machine technology from Europe in particular. The breakthrough came with China's accession to the World Trade Organisation (WTO) in 2001 and the complete abolition of import quotas. The Chinese textile and clothing industry experienced double-digit annual growth rates and became the world's largest exporter.

Key provinces as textile engines

China's textile industry is concentrated in several key provinces, specialising in different products. The centres on the east coast in particular are the more successful, faster-growing exporters among the provinces. **Zhejiang**, for example, has made a name for itself in fabric production, particularly from synthetic fibers but also from natural fibers. Shaoxing, the „China Textile City", is regarded as the world's largest textile distribution centre and one of the most important global textile exporters. The provincial capital of Hangzhou combines traditional silk production with state-of-the-art manufacturing of innovative textiles, while Dangshan and Zhouquan are strong in the manmade fiber industry. Also in the east, **Jiangsu** province leads the way in yarn production and fabric weaving. The city of Changzhou is famous for its high-tech textiles such as functional fabrics for sports and outdoor clothing, Suzhou can look back on over 2,500 years of tradition as the „City of Silk" and Nantong is known for its bedding and home textiles. The southern province of **Guangdong** - especially its capital Guangzhou - focuses primarily on the production of (ready-made) clothing, but is also a centre for textile machine construction and automation. In **Fujian**, on the south-east coast, there is a strong focus on synthetic fibers, sportswear and sports shoes. An important player in the production of cotton and linen fabrics is the eastern province of Shandong, which also stands for the further development of environmentally friendly textile production. Other production sites for cotton textiles are located in the north and centre, for example in the provinces of **Henan** and **Hebei**.

China's textile industry seeks more resilience

China's textile production base is well developed, rich in natural resources and encompasses all stages of the value chain, highly efficient processes and modern infrastructure. According to the Chinese market research and consulting company BtoBers, the Chinese textile and apparel industry accounted for around 5% of China's GDP in 2023 (USD 17,758 billion according to GTAI). Although this share has declined over the past ten years, the industry remains an important pillar of the Chinese economy and a source of livelihood for many people. According to the National Bureau of Statistics, around 2.49 million people were employed in large textile companies in China in December 2024. However, this figure does not include the considerable number of employees

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in small and medium-sized enterprises (SMEs) or in the informal sector with many migrant workers. It is estimated that 20 to 22 million people work in the entire Chinese textile and garment industry.

Reports from the magazine China Textile Leader (CTL), published by the state-owned China Textile Information Centre (CTIC), paint a positive picture of the development of China's textile and apparel industry in 2024, according to which the vast majority of sectors in the industrial chain developed well throughout the year; the industrial value added of the manmade fiber, wool spinning, filament weaving and technical textile industries grew faster compared to the

China's textile industry covers all stages of the value chain and boasts highly efficient processes and modern infrastructure.

previous year. Important main categories such as manmade fibers, yarns, printed and dyed fabrics and clothing recorded positive production growth. The level of industrial earnings continued to recover, and the operating income of textile companies above a certain size increased moderately.

Due to increased Chinese labor costs and corresponding price advantages of other South or Southeast Asian competitors, China is increasingly focusing on high-quality products.

However, the industry is struggling with the ongoing complex development environment and is undergoing profound change. Thanks to its high capacity for mass production and fast delivery times, China is still an important platform for the fast fashion industry and brands such as Zara, H&M and Uniqlo or online retailers such as Shein. However, due to rising Chinese labour costs and the corresponding price advantages of other South and Southeast Asian competitors, the country is increasingly focusing on higher-quality products. In line with the government's goals, including the corresponding incentives, subsidies and grants, the following priorities are determining the necessary further development of the industry:

- **Technological innovation and digitalisation:** automation, robotics, artificial intelligence and digital platforms should open the door to intelligent textile production with less manual labour and more efficiency and productivity. China's textile companies are also realising this: According to the National Bureau of Statistics, there was a double-digit percentage increase in fixed asset investment in the first quarter of 2025 compared to the same period last year. There was already a similar increase in 2024 compared to 2023. More emphasis is being placed on domestic research to develop innovative products.
- **Cultivating a high-quality productive workforce:** Technologisation, high-quality products and research require more skilled personnel, meaning that the industry must focus on training and retaining a highly qualified workforce.
- **Green transformation:** Outdated production facilities with high emissions and high energy and water consumption should make way for green manufacturing systems. The state is promoting this, enacting stricter environmental regulations and also wants to boost recycling.
- **Higher quality standards, more branding:** Product quality is to increase, including with the introduction of functional, intelligent and high-quality fibers. This is to be accompanied by the development of national brands with international recognition. The government is promoting this as well as the professional development of companies, including mergers and acquisitions to improve competitiveness.
- **Regional clusters and international cooperation:** Regional industrial clusters are to strengthen the value chain with specific initiatives. Jiangsu province, for example, is focussing on building quality infrastructure, promoting smart manufacturing and developing high-end textiles; Zhejiang province is promoting the intelligent transformation of the printing and dyeing industry and the development of high-end textiles and fashion. Cooperation with countries along the Belt and Road Initiative is also set to grow in order to secure the supply of raw materials and drive technological innovation.

The first target of these strategic measures is the huge domestic market, which absorbs a large proportion of Chinese textile production. Here, government support policies have been able to revitalise weakening consumption over the last two years: TFY speaks of a 15% increase in retail sales of apparel in 2023, CTL pointed to a slight growth in domestic sales of China's textile and apparel industry in 2024. Urbanisation, higher disposable incomes, more and more online shopping as well as a shift towards fashion-conscious, sustainable consumption and new growth areas such as sports/outdoor and China chic are expected to further grow the domestic apparel market, which was worth USD 200 billion in 2023, predicts BtoBers. High-performance fibers are certainly also a future market, with China already accounting for a third of global production capacity, according to TFY.

Textile trade under growing pressure

China dominates the global textile trade and also became the world's leading exporter in 2024 with a goods value of USD 301.13 billion (+2.8%), of which USD 141.98 billion for textiles (+5.7%) and USD 159.15 billion for clothing (+0.4%), according to the Chinese customs authority. According to CTL data, the slight upward trend continued in the first quarter of 2025 with 1% growth in textile and clothing exports compared to the same period last year. In contrast, total exports of textiles and apparel fell by -2% to USD 21.27 billion in 2024, while apparel imports rose by+ 4.7% to USD 10.44 billion, particularly from ASEAN countries (+17.3%). ASEAN has been the most important export region for the People's Republic for three consecutive years, which shipped 17.7% of its total textile and clothing exports to these countries in 2024, totalling USD 53.18 billion (+6.8%). The USA followed in second place with USD 50.96 billion (+9.1%), followed by the European Union with USD 40.04 billion (+5.6%). Japan was in fourth place with USD 15.72 billion (-7.6 %).

With these positive figures, China has shown resilience in the face of slowing global economic growth, increasing trade protectionism and geopolitical conflicts. However, this external pressure is growing: according to CTL forecasts, the recovery in demand and the inventory replenishment cycle in Europe, the United States and other developed economies is likely to come to an end. In addition, Western markets are increasingly paying attention to sourcing risks such as forced labour in supply chains or geopolitical tensions. For example, a benchmark study conducted by the US

A growth market, especially for manmade fibers: the sports and outdoor clothing sector.

Polyester yarn production in particular is a major growth market, and not just for China.

Fashion Industry Association (USFIA) in 2024 revealed that the majority of leading US fashion companies surveyed intend to further reduce apparel sourcing from China by 2026 due to such risks. The escalating trade conflict between the world‘s largest economies, the USA and China, caused by the Trump administration and its tariff policy is adding fuel to the fire and potentially favouring competitors in the global textile market.

China‘s textile and clothing industry would therefore do well to strengthen its resilience. The collaborations and investments within the Belt and Road Initiative are helping to expand China‘s influence on the global textile market. In the intensified competition with other Asian low-cost countries such as Bangladesh and Vietnam, Chinese textile companies such as the Huali Group and Shenzhou International are reportedly utilising the customs and cost advantages of such countries by establishing production capacities there. Chinese clothing manufacturers are now even gaining a foothold in Europe with their own factories . Joint ventures and the takeover of companies also offer opportunities. In order to diversify trade, China‘s textile exporters are also intensifying relations with partners such as Turkey and Africa or economies from the Regional Comprehensive Economic Partnership (RCEP).

Successful basis for manmade fibers with a question mark

According to the China Chemical Fibers Association, manmade fiber production in 2024 totalled 74.75 million tonnes - an increase of 8.8% compared to the previous year. According to TFY, manmade fibers accounted for around 85% of China‘s total textile fiber processing in 2022. In 2023, China produced three quarters of global manmade fiber production. The Chinese manmade fiber industry is the key basis for the economies of scale and innovative strength of the country‘s entire textile industry.

This development began largely with the establishment of large manmade fiber factories in the 1970s, including plants at Shanghai Petrochemical, Liaoyang Petroleum Chemical Fiber, Tianjin Petroleum Chemical Fiber and Sichuan Vinylon, and the subsequent reform policy and market-oriented transformation under Deng Xiaoping. Supported by European machine technology and increasing investor activity, China has become the world‘s largest producer of manmade fibers since the turn of the millennium, with accession to the WTO acting as a booster for this breathtaking development. The production of manmade fibers in China rose from 6.9 million tonnes in 2000 to 23.9 million tonnes in 2007 - a growth of 245% in seven years. During this time, private companies such as Xin Feng Ming Group, Hengyi Group, Rongsheng Holding Group, Hengli Group and Shenghong Group also began to rapidly gain strength.

Today, polyester production in particular is a major growth market, and not just for China. The leading nation in polyester production commissioned around 10 million tonnes of new polyester capacity in 2023, according to TFY, followed by a further 1.96 million tonnes for polyester fibers in 2024, CTL states. In the same year, the average capacity utilisation of direct spun polyester filaments in China was over 90% (+7.8%) - the fastest growing market according to TFY. The production of polyester staple fibers also reached a record high in 2023.

China mainly supplies its polyester textile filaments to India, Turkey and Egypt, and its polyester staple fibers to Vietnam, Pakistan and Indonesia. However, some of these countries are likely to increasingly become competitors in the future, as some experts see a tendency for some manmade fiber production to migrate away from China. The Turkish chemical fiber giant SASA, for example, is increasingly investing in the production of polyester polymers, and there are also signs and potential in the cotton countries of Pakistan and India to move more into the production of chemical fibers and polyester in particular. Headwinds are also coming from the EU, which renewed and increased its anti-dumping duties on imports of high-tenacity polyester yarns from China in 2023.

Cotton: exports top, imports fluctuate

China is traditionally a cotton country - and has always been one of the largest in the world. With 19,284 tonnes of cotton yarn, the Middle Kingdom was the top producer in 2023 and accounted for almost half of the global volume of 39,610 tonnes, according to TFY data. China is also the number one producer of cotton, with a share of around 30% of global production, according to BtoBers. Cotton is mainly grown in the northern, climate-friendly regions of Xinjiang, Shandong and Hebei, with Xinjiang now accounting for over 90% of domestic cotton production and the yarn spinning mill there also expected to increase in capacity, according to the latest China Cotton Report from the US Department of Agriculture (USDA).

However, dependence on imports is increasing due to water shortages in the country, and yields in some regions are lower than expected. The growing demand for imported cotton, particularly from the USA, Australia, India and now also Brazil, has made China the world‘s largest cotton importer. However, there are currently major fluctuations in demand and supply: According to CTL, China imported 338,000 tonnes of cotton in the first quarter of 2025 - a decrease of 67.4% compared to the same period last year. This was also due to the current trade war between China and the US, which reduced its cotton exports to the People‘s Republic by 73% from August 2024 to February 2025 due to the USDA‘s counter-tariffs, according to the USDA report. Accordingly, China‘s total demand for raw cotton could fall to a five-year low in the 2024/25 financial year due to insufficient domestic demand and limited growth in textile and apparel exports.

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Progress is green

China has been the world‘s largest CO2 emitter for some time, currently accounting for around a third of global emissions; the country has also been

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doing something about it for some time, aiming to peak its emissions by 2030 and become CO2-neutral by 2060. For the Chinese government, environmental protection now plays a key role on many levels, including with regard to trade, international acceptance and political measures such as the EU carbon tariffs. The resource-intensive textile industry, which contributes significantly to environmental pollution, is subject to correspondingly high targets, regulations and guidelines:

Recycling of textile waste: Around 22 million tonnes of textile waste are generated in China every year. A recycling system for textile waste is to be in place by 2025, with which 25% is to be recycled and 2 million tonnes of recycled fibers are to be produced annually. By 2030, the target is 30%, with an annual production of 3 million tonnes of recycled fibers. The policy is accompanied by support measures and at the same time restricts the use of disposable textiles.

Industrial water protection: Directives and laws stipulate the reuse of water when dyeing and washing textiles, set strict limits for the discharge of harmful substances such as dyes and surfactants and oblige large industrial laundries to carry out environmental impact assessments and monitor water consumption. Innovative dyeing technologies such as waterless dyeing should also contribute to improvements.

Environmentally friendly, low-emission production: Environmental regulations require environmental protection measures to be taken into account when planning, building and operating new production facilities. Further guidelines, incentives and environmental taxes should help textile companies to control and reduce their emissions, increase energy efficiency, utilise non-fossil energy sources, introduce clean production techniques, monitor and conserve resources and invest in the necessary automation.

Fokus on recycled and alternative materials: The research and production of sustainable fabrics such as bamboo or hemp, which requires 50% less water than cotton and no pesticides, as well as recycled synthetic materials is becoming increasingly important. The most common sustainable fabrics produced in China include recycled polyester and nylon, organic cotton, Tencel/Lyo-


China aims to be carbon neutral by 2060. This goal will be difficult to achieve without high recycling rates and energy-efficient technologies.

cell and hemp. Shenghong Chemical Fiber New Materials, for example, has become the world's largest bottle-to-textile direct spinning mill with an annual production of 600,000 tons, recycling 36 billion used plastic bottles annually and reducing carbon dioxide emissions by 37% compared to the production of new polyester. As part of its green transformation, the company has switched more than 90% of its differentiated products from virgin materials to recycled materials. Huafu Top Dyed Melange Yarn Co. manufactures and dyes melange yarns using 30% less water and recycles over 6 billion plastic bottles into polyester yarn every year. The Zhejiang Huafon Fiber Group uses a special depolymerisation process to reduce CO_2 emissions in the production of recycled nylon by 90% compared to conventional nylon production.

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Eco-certifications: Awareness of and demand for environmentally friendly textiles is growing. In order to convince customers and consumers, more and more Chinese textile companies are striving for global sustainability certifications such as OEKO-TEX or GOTS (Global Organic Textile Standard). China itself is also working on a certification system for recycled fibers. In addition, the China Chemical Fibers Association and the National Advanced Functional Fiber Innovation Center operate a platform for Chinese textile companies that makes the entire production process transparent, from the fiber to the recycled end product.

An elephant with stamina

This year in particular, China's textile industry has to deal with a lot of external economic pressure and a difficult sales situation at home. However, some industry experts believe that its global economies of scale and cost advantages are too overwhelming to fear too much migration and losses. Especially as the country is still building up further capacities. The decisive factor will be how well politics and industry adapt and invest in technology, digitalisation and sustainability in order to remain competitive. Activating demand in the large domestic market will play an important role. However, if China also wants to make its own industry more technologically independent and strengthen its ability to be self-sufficient, this will not be a short journey overall. An elephant has stamina - but sometimes it also has to show that it can balance.

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