Green Consumption in China's Apparel Sector
Background Concept Note

1. Situate Green Consumption in the Context of China's Green Transition and High-Quality Development

Cultivating green awareness and promoting green consumption are necessary for achieving high-quality economic development and will be critical for achieving China's carbon neutrality goal. Because the "dual carbon" goal is leading the transformation and upgrade of various industries, green consumption in China is rapidly expanding. In its report, China's 20th Party Congress explicitly highlights "the implementation of a comprehensive conservation strategy, the development of green, low-carbon industries, the promotion of green consumption, and the formation of green, low-carbon production, and lifestyle." In 2022, the National Development and Reform Commission released the "Implementation Plan for Promoting Green Consumption" with specific targets: by 2025, green, low-carbon, circular consumption patterns should be initially established; by 2030, green consumption should become a voluntary choice among the public, and green, low-carbon products should become mainstream. Additionally, green, low-carbon consumption should be achieved in key sectors, and related policy mechanisms should be soundly developed.

As China's economic growth enters a consumption-driven phase, young consumers' consumption behaviours and patterns have important policy implications for the promotion of green consumption. On the one hand, young consumers have anchored China's consumption growth. With a population of nearly 400 million, Millennial and Gen-Z consumers are gradually shaping the future of consumption in China. On the other hand, young consumers adopt multiple consumption channels and place more importance on the quality of goods and services.

2. Previous CCICED Special Policy Study on Green Transition and Sustainable Social Governance

Recognizing the rapidly growing consumption in China and its significant and far-reaching impacts on and implications for environmental, resource, and climate challenges both in China and globally, during its Phase VI (2017–2022), the China Council for International Cooperation on Environment and Development (CCICED) initiated the Special Policy Study (SPS) on Green Transition Sustainable Social Governance in 2018 under the Task Force for Innovation, Sustainable Production and Consumption, with the overall objective of supporting China's decision making on promoting green consumption, a green lifestyle, and green production, as well as improving the corresponding social governance system in the process of advancing ecological civilization.

The SPS was organized in three phases, focused specifically on moving green consumption strategies and policies onto the national agenda.[1] Phase I (2018–2019) focused on questions of *"Why"*—why sustainable consumption is important, and why it is time to move it onto the national policy agenda. The initial phase of the SPS primarily made a quantitative analysis of the status and trends of consumption and its impacts on resources and the environment in China, and discussed the mechanisms for green consumption to promote a green transition. It also reviewed green consumption policies and practices in China,

summarized the international experience of green consumption, and put forward strategic (but rather general) recommendations for promoting green consumption in China.

Targeting the 14th Five-Year Plan policy process, Phase II (2019–2020) concentrated on outlining a national strategy and a set of key "*What*" questions: What would a comprehensive policy framework to strengthen the strategic positioning of green consumption look like? What would be its goals and targets? What are the priority areas? The second phase of the SPS further assessed the status and trends of consumption and its impacts on resources and the environment in China; it examined national strategies, policy frameworks, goals, and targets; proposed a monitoring and assessment index system, and conducted in-depth case studies for selected priority sectors such as green buildings, automobile production and consumption, greening of the power market, as well as green circulation of materials, digital and low-carbon lifestyle platforms, and so on.

Phase 3 (2020–2021) started to examine critical issues of implementation (i.e., the question of *"How"*). This last phase examined new policies needed to launch green production and consumption during the 14th Five-Year Plan period in light of the new situation of eco-civilization construction in China and green and low-carbon trends worldwide, zoomed in particularly on taxation reform for green and low-carbon development of the automobile industry, green design for the iron and steel industry, eco-design for waste disposal facilities, green consumption of food, and green labelling. This is the highlight of the research.

Taken as a whole, the three phases of the SPS on Green Transition and Sustainable Social Governance generated a wide yet targeted range of policy recommendations to the Government of China. It has had notable policy impacts, evidenced by a series of national policies steering and strengthening green consumption transition, as well as the grand and in-depth targets and measures for a social-economic green transition and green production and consumption specified in the 14th Five-Year Plan for National Economic and Social Development and the Long-Range Objectives through the Year 2035.

One of the key areas that has been repeatedly identified by the SPS as a critical, however yet to be examined in-depth, is the engagement and mobilization of the public toward green consumption and sustainable lifestyle transition, of which understanding consumption pattern, consumer behaviours and their changing dynamics is essential.

3. Mapping Out This Scoping Study

This section provides an overview of the proposed Scoping Study on green apparel consumption among young consumers. It first establishes the rationale for this research and then introduces the main research question. The last part of this section lists five questions for consideration at the February 15 meeting.

3.1 Research Rationale

This subsection establishes the rationale for this research by explaining why we should focus on young consumers and on the apparel sector.

3.1.1 Why Focus on Young Consumers?

First, young consumers between the age of 16 and 40 account for 54% of the global population and nearly half (48%) of the world's total spending, and their share of total spending is projected to increase to 69% by 2040 (Klerk at al., 2022).

Second, various studies have characterized young consumers in China, including Millennials and Gen-Zers, as environmentally conscious, willing to pay a premium for green products and potential drivers of green consumption, as explained below.

Klerk et al. (2022) conducted a survey in 10 countries with a total of 10,000 respondents between the ages of 16 and 40. Half of the respondents lived in high-income countries, while

the other half lived in low- and middle-income countries, including China. They found that young consumers in low- and middle-income countries demonstrate significantly stronger engagement with green consumption than those in high-income countries, and that China is ranked the third highest among 10 countries based on young consumers' overall environmental awareness and their willingness to take on sustainable consumption. More than 15% of survey participants in China state that they only purchase sustainable products.

In the same vein, based on a survey of 1,000 consumers in China, Daxue Consulting (2022) reports that 88% of Millennials and 89% of Gen-Z consumers are willing to pay a premium for green garments. It also finds that, although only 15% of consumers have bought second-hand clothing, 40% of Millennial and Gen-Z participants are willing to give it a try. Additionally, through a survey of 2,500 Chinese consumers between the ages of 18 and 40, Iyiou (2022) reported that 43.5% of respondents have purchased green apparel, footwear, or bags at least once, 37% have recycled or donated used garments, and 66.4% call for stronger policy support of garment recycling and for transparency in the recycling infrastructure.

Studies have distinguished young consumers into subgroups by age and compared their engagement with green consumption. Klerk et al. (2022) report that Millennials are more engaged than Gen-Z and the 25–30 age group shows the strongest engagement including with green apparel. Iyiou (2022) identifies the 31–35 subgroup as the most engaged, followed by the 26–30 subgroup.

3.1.2 Why Focus on the Apparel Sector?

Globally, the apparel sector has significant carbon, water, and waste footprints. It is estimated that the appeal sector is responsible for between 2% (Sadowski et al., 2021) and 6.7% (Quantis, 2018) of global greenhouse gas emissions. Additionally, the fashion industry contributes to "20% of all global wastewater, with an anticipated 50% increase in greenhouse gas emissions by 2030" (Bailey et al., 2022, p. 1).

Circularity isn't close to being achieved in the apparel sector. Globally, less than 1% of discarded clothing is reused in the production of new clothing (Ellen MacArthur Foundation, 2019). For example, in 2018, over 85% of textile waste in the United States ended up in landfills or being burned (United States Environmental Protection Agency, 2022). This sector is also linked to hazardous working conditions and is a major contributor to microplastic pollution in the ocean (United Nations Economic Commission for Europe [UNECE], 2018): around 60% of the world's clothing is made of plastic, and washing plastic-based clothing releases half a million tons of plastic microfibers into the ocean annually (Savelli, 2019).

China has been the world's largest apparel producer and exporter for a decade. According to Statista (Ma, 2022), despite the impact of COVID-19, China still produces over half of the world's textiles and garments and accounts for over 30% of total apparel exports. According to Daxue Consulting (2022), each year 26 million metric tons of garments are disposed of in China—less than 1% of them are reused or recycled.

3.1.3 Green Apparel Innovations and Initiatives

Although there has yet to be a one-size-fits-all solution to unsustainable apparel, various sustainable innovations and initiatives have emerged. This subsection reviews two of them– adopting sustainable fibre and extending the life of garments.

First, compared with synthetic fibre, recycled and sustainably sourced fibres can be renewable, biodegradable, and less carbon intensive. As an example, UNECE launched the FORESTS4FASHION initiative in 2014 to encourage the adoption of certified forest fibre to reduce the environmental footprint of the apparel industry (UNECE, 2022). Sustainably sourced forest fibre creates recyclable, renewable, and biodegradable clothing while significantly reducing carbon and water footprints: forest fibre requires only approximately 1/60 of the water needed by cotton and generates only 1/13 of carbon emissions compared to polyester (Programme for the Endorsement of Forest Certification, 2018).

Second, consumers can extend the life of garments by purchasing second-hand clothing and recycling used garments. A study by the Terrassa Institute of Textile Research and Industrial Cooperation found that reusing 1 kilogram of clothing reduces 25 kilograms of carbon emissions (2022). Furthermore, this report states that doubling the lifespan of garments can reduce the sector's carbon emissions by 44%, while just prolonging the active life of garments by 9 months will lead to a 20%–30% reduction in carbon, water, and waste footprints.

3.2 Key Research Question

The key research question is this: *How can policy-makers engage young consumers to "sew up" a green transition in the apparel sector?*

3.2.1 Two Kinds of Drivers of Behavioural Change Among Consumers

Drivers of behavioural change can be arranged into two categories—internal and external. Internal drivers are demographic factors, such as gender, age, education, and income levels. External drivers include market incentives, social pressure, technology innovations, and the ever-changing social media and Internet environment. This study draws on existing knowledge about the internal drivers (e.g., green consumption patterns among young consumers) and focuses on the external drivers, particularly how such drivers can be created by multiple stakeholders. For example, the research can discuss policy incentives for policy-makers, marketing strategies for e-commerce actors, and innovations by green apparel brands.

3.2.2 Issues for Consideration at the February 15 Meeting

Five issues can be considered: a) to further narrow down the research focus. For example, this study can focus on the contributions of green apparel consumption to *dual carbon goals* while highlighting the role of young consumers; b) to identify strategies to motivate youth consumers to adopt green consumption from a multistakeholder perspective. The research aims to draw on insights from multiple stakeholders, including policy-makers, e-commerce actors, green apparel brands, and environmental organizations; c) to summarize challenges faced by different stakeholders in promoting green consumption and envision possible solutions; d) to identify criteria to select international and Chinese case studies; e) to create initial ideas on recommendations.

- Paying attention to consumption behavior in China
- Align the recommendations with China's national consumption strategy
- Regenerative growth is top priority for China, with growth based on consumption
- Rank of recommendations based on impact?

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[1] The CCICED SPS Reports on Green Transition and Sustainable Social Governance, both English and Chinese versions, can be accessed at http://www.cciced.net/ccicedPhoneEN/PolicyResearch/Annual/