



LOW CARBON CONSUMPTION PROJECT NEWSLETTER

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ENERGY FOUNDATION
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LCCP Team
Energy Foundation China

Energy Foundation China is a professional grantmaking charitable organization registered in California, U.S. Our vision is to achieve prosperity and a safe climate through sustainable energy. Our mission is to achieve greenhouse gas emissions neutrality, world-class air quality, energy access, and green growth through transforming energy and optimizing economic structure. We deliver the mission by serving as a regnantor, facilitator, and strategic advisor.

01 MACRO-POLICIES

Summing up policies recently released by relevant ministries and commissions on green and low carbon consumption and relevant topics

GREEN CONSUMPTION#

In January 2022, **the National Development and Reform Commission (NDRC) and other six ministries and commissions of China**, released **the Implementation Plan for Promoting Green Consumption**. The Implementation Plan mentioned that China will promote the green transformation of consumption in key areas (food, clothing, housing, transportation, products, culture and tourism, electricity and public institutions); strengthen the support of green consumption technologies and services (green technologies, connecting the whole chain of production, supply and marketing, green logistics, second-hand transactions, and recycling of waste and old materials); enhance the supporting system (laws, standard and certification, statistics monitoring and evaluation, information platform); stimulate constraint policies and organize implementation. The Implementation Plan proposed the following goals: By 2025, the market share of green and low carbon products will see a significant rise; the green transformation of consumption in key areas will score remarkable results, and the green consumption pattern will be popularized on the whole. By 2030, green and low carbon products will become the mainstream products on the market, green and low carbon development mode will basically take shape when it comes to consumption in key areas, and the policy system and institutional mechanism for green consumption will be basically sound.

As of April 2022, Chongqing, Xinjiang and Hebei had responded to the Implementation Plan, and formulated and released their own implementation plans.

CIRCULAR ECONOMY# # ZERO-WASTE CITY#

In February 2021, **the Guiding Opinions on Accelerating the Establishment and Improvement of a Green, Low-carbon and Circular Development Economic System** released by **the State Council** indicated that China will perfect the consumption system with green, low carbon and circular development, promote the consumption of green products, and advocate a green and low carbon lifestyle.

As of April 2022, many localities—Shanghai Municipality, Chongqing Municipality, Tianjin Municipality, Guangdong Province, Zhejiang Province, Jiangsu Province, Shandong Province, Shaanxi Province, Gansu Province, Qinghai Province, Inner Mongolia Autonomous Region, Heilongjiang Province, Jilin Province, Liaoning Province, Guangxi Zhuang Autonomous Region, Jiangxi Province, Anhui Province, Hainan Province, Yunnan Province, Hebei Province, Henan Province, Ningxia Hui Autonomous Region and Hubei Province—had responded to the Guiding Opinions, and released their own implementation plans and the system plans for circular economy, etc.

In November 2021, the **Ministry of Industry and Information Technology (MIIT)** mentioned in the **14th Five-year Plan for the Green Development of Industrial Sectors** that China will stimulate new demands for green products with high-quality green supply, and guide the new consumption of green products; supply more green and low carbon products and green and environment-friendly equipment, guide green consumption, create new demands, and cultivate new modes.

In December 2021, the **Ministry of Ecology and Environment (MEE)** and other **17 ministries and commissions** released the **14th Five-year Work Plan for Building of “Zero-Waste Cities”**, proposing to propel the formation of a green and low carbon lifestyle, and facilitate the reduction and recycling of solid waste generated from daily life. Hebei Province, Guangdong Province, Jiangsu Province and Zhejiang Province have responded to the plan. In April 2022, the General Office of the MEE issued the **List of Builders of “Zero-Waste Cities”** during the “14th Five-year Plan” Period, defining the list of municipalities, provinces and eight special regions in this regard.

In January 2022, the **NDRC** and other six **ministries and commissions of China** successively issued the **Guiding Opinions on Accelerating Establishment of System for Cyclic Utilization of Waste and Old Materials** and the **Notice on Organizing Building Demonstration Cities in Cyclic Utilization of Waste and Old Materials**, in which the following objectives were proposed: 1) By 2025, China will build over 1,000 green distribution centers; 2) The cyclic utilization amount of nine major types of renewable resources will reach 450 million tons, and 3) About 60 large and medium-sized cities will take the lead in completing basically sound systems for the cyclic utilization of waste and old materials.

In March 2022, the **NDRC** and other two **ministries and commissions** issued the **Implementation Opinions on Accelerating Cyclic Utilization of Waste and Old Textile Products**, raising the following objectives: 1) By 2025, the cyclic utilization ratio of waste and old textile products will reach 25%; and 2) The output of regenerated fiber from waste and old textile products will amount to 2 million tons.

LCCP's INTERPRETATION

By summing up China's macro-policies, we have found out the following: 1) These macro-policies focus on three keywords, namely “green consumption”, “green and low carbon lifestyle” and “low carbon and circular economy”; 2) These documents involve the State Council, the NDRC, the MIIT, the Ministry of Commerce (MOC), the MEE, etc., but the NDRC is the main facilitator; 3) Emerging from measures and methods, these documents mentioned green production, transportation, consumption, cyclic utilization and other macro-directions for many times, but low carbon consumption area was short of quantitative objectives and indicators; 4) The document on building the low carbon and circular economic system, issued by the State Council, has been highly valued and responded to by local governments, and thereby has been more effectively implemented.

Generally speaking, in the context of carbon peaking and carbon neutrality, the intensive release of policy documents related to green consumption/green and low carbon lifestyle has laid a solid foundation for advancing relevant work. But it can be also found that it is necessary to enhance the practical operation of relevant documents, and therefore, massive research and practical exploration remain to be done. We believe that facilitating the construction of “infrastructure”, mechanisms and systems and top-level design that promote green and low carbon consumption can become important approaches in the future.

02 CITY-ACTIONS

Summing up sub-national level and city level's recent green and low carbon consumption practices and actions

CONSUMPTION CARBON ACCOUNTING SYSTEM#

In February 2022, the **Shanghai** Municipal Bureau of Ecology and Environment released the **Work Plan of Shanghai Municipality for Establishing Carbon Accounting Mechanism (Exposure Draft)**, specifying that Shanghai will explore and establish regional personal carbon accounts, and guide carbon inclusion emission reduction to enter the carbon emissions trading market of Shanghai via the offset mechanism. Based on the “Shanghai QR Code” App, Shanghai will gradually put in place the declaration and evaluation mechanism of personal emission reduction scenario, and promote the access and development of personal emission reduction scenario in an orderly manner. Efforts will be made to release the mechanism this year, thus facilitating the integrated development of carbon inclusion in the Yangtze River Delta region.

In April 2022, the Department of Ecology and Environment of **Guangdong** Province released the **Measures for Administration of Carbon Inclusion Trading of Guangdong Province**, which will be put into force as of May 6, 2022. The Measures aims to fully motivate the whole society for energy conservation and carbon reduction, push for the establishment of a production method and lifestyle with green, low carbon and circular development, deepen and improve the voluntary emission reduction mechanism of carbon inclusion of Guangdong Province, and further regulate the administration and trading of carbon inclusion.

In March 2022, “**Zhejiang Carbon Accounting**” App, developed under the initiation of the Zhejiang Provincial Development and Reform Commission, was officially released on Zhejiang QR Code App. As the first provincial carbon inclusion App in China, “Zhejiang Carbon Accounting” App will record the low carbon behaviors of residents in their daily life—such as green travel and online transaction—after green and low carbon scenario is opened, and accumulate the low carbon behaviors to carbon credits. The App has achieved data connection with Alipay Ant Forest, Huge Recycle and other platforms.



Figure: Interface of “Zhejiang Carbon Accounting” App

In April 2022, the **Xiamen** Development and Reform Commission, Xiamen Transport Bureau, Xiamen Bureau of Industry and Information Technology, and other departments worked with Xiamen Rail Construction Development Group and Ant Group in releasing the Xiamen metro carbon credits system. Registered users of “**Xiamen Metro**” App will automatically accumulate carbon mileage (as per the mileage of taking the subway) and carbon coin (as per the out-of-pocket amount of taking the subway and daily sign-in), which can generate low carbon benefits via the carbon inclusion platform later.

GREEN CERTIFICATION#

In March 2022, the **Jiangsu** Provincial Administration for Market Regulation, Jiangsu Provincial Development and Reform Commission and Jiangsu Provincial Department of Industry and Information Technology jointly released **the Opinions on Further Advancing Green Certification and Promoting Green, Low Carbon and Circular Development**, with a view to advancing the establishment of a unified system for green standards, certification and labelling, increasing the supply of green products and services, and guiding green production and green consumption.

LCCP's INTERPRETATION

By summing up local practices, we have found out the following: 1) Carbon accounting is a major lever used by many localities to stimulate individuals' low carbon consumption, though in various forms. If carbon accounting involves voluntary emission reduction market, carbon trading and other work, most of the work is facilitated by local ecology and environment authority as the governing body (such as Shanghai, Guangdong, etc.); but if carbon inclusion involves behavior record and the like, local development and reform commission serves as the governing body; 2) Challenges remain in promoting individuals' low carbon consumption via carbon accounting, such as complicated low carbon consumption scenario and dispersive data; complexity in the scientific soundness and reliability of quantifying carbon reduction behavior and in proving additionality; difficulties in connecting different data platforms (between enterprises and individuals, between enterprises, between enterprises and governments, etc.); and operational sustainability (absorption of CCER via voluntary emission reduction market or commercial incentive mechanisms).

In general, although many provinces and cities have successively launched studies and practices related to carbon inclusion, we believe they are still at the initial stage of explorations, and a host of issues call for solutions, such as how to scientifically design the quantification and certification system of carbon reduction behaviors, how to accurately capture low carbon behaviors, how to design the incentive mechanism so that it can truly promote the transformation of consumption behaviors, how to ensure the sustainability of platform operation, and how to control the risks of carbon reduction trading.

03 INDUSTRY VOICES

Collect the latest practices of industrial sectors, enterprises and iNGOs

CONSUMPTION CARBON ACCOUNTING SYSTEM

In March 2022, **Amap** announced that it has released the “**green travel carbon accounting system**” platform in many cities in China, such as Beijing, Hangzhou, Guangzhou, Chengdu, Chongqing, Wuhan, Fuzhou, Guiyang, Tianjin, Kunming, Xi'an, Zhengzhou, Changsha and Suzhou. Users can register at Amap to obtain their personal carbon energy account, and gain corresponding carbon emission reduction energy when they use public transit, cycling, walking navigation and other green travel-related services on the App, which can be used to exchange for various incentive rights and interests.

In March 2022, the closed beta version of “**CITIC Carbon Account**” released by **CITIC Bank** for personal users was released, and issued open invitation to 1,000 users to participate in experiencing test. As the first personal carbon account initiated and launched by CITIC Bank, a Chinese Bank, it is the product jointly researched and developed by CITIC Bank and CIAM Carbon Assets Management Ltd., a professional organization in China, based on cooperation and communication with China Emissions Exchange and Shanghai Environment and Energy Exchange.

In April 2022, **Eleme/Alibaba's Local Life Department** released “**e-carbon**”, the first consumer carbon account in the **take-out industry**. If choosing no tableware, small dish and having other low carbon and environment-friendly behaviors when they place an order at Eleme, users can obtain corresponding credits and exchange for rights and interests, or use the credits to participate in carbon neutrality public welfare projects.

Recently, the China Chain Store & Franchise Association (**CCFA**) is advancing the project of “Study on the Low Carbon Transformation Route of China's **Chain Store** Industry and Explorations and Practices of Corporate ‘**Carbon Account**’”.

GREEN CONSUMER

In March 2022, the 2022 Green Paper on Low-carbon Life released by **CITIC Bank** mentioned that generally speaking, 76% of the respondents perceive low carbon campaigns, but **only 32% of the respondents have low carbon actions**.

In April 2022, **BCG and TMALL** jointly rolled out the illustration of the green consumer group, indicating that most of the green consumers are **women who demonstrate the features of young age, high income and high purchasing power**. Green consumers spend 53% more on goods on average.

In April 2022, the **Capgemini Research Institute** (CRI) released the 2022 Follow-up Report on Consumer Behaviors of Consumer Goods and Retail Industry, showing that **Generation Z and the Millennials are more willing to pay premium for sustainable products**. 63% of the consumers believe that sustainable products should not be more expensive than similar products that are unsustainable.

Figure: The younger generations are most conscious of sustainability



Source: Capgemini Research Institute, consumer demand survey, October-November 2021, N=2,347 shoppers willing to pay a higher price for organic sourcing; N=915 shoppers willing to pay a higher price for information on the environmental impact; N=1,483 shoppers willing to pay a higher price for sustainable packaging.

*Shoppers paid a higher price the last time they were shopping for groceries.

GREEN CONSUMPTION SCENARIO

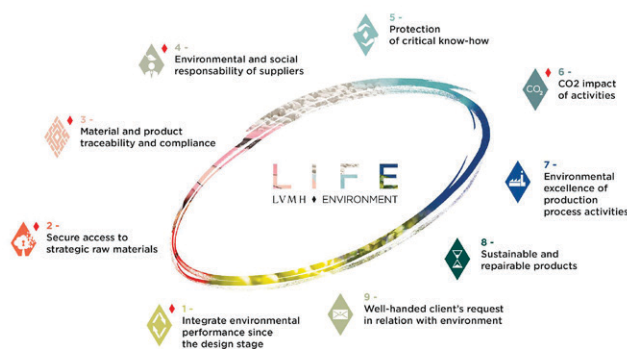


In April 2022, **KFC** announced the initiation of the first batch of “**small green stores**” in Beijing and Hangzhou. By integrating and applying photovoltaic roof, IOT and other energy-saving and carbon reduction technologies, KFC aims to promote the application of green and environment-friendly technologies in the real operation of dining halls. Consumers’ low carbon behaviors when they order food and dine will be recorded and stimulated via the App.

In April 2022, **OMO** launched the campaign of “**Buying OMO Commodities with Green Package** (laundry detergent in reprocessed plastic bottle) and **Getting Ant Forest Energy**”, becoming the first household chemicals brand that achieves the digital exchange of Ant Forest energy.

In April 2022, **Xinhuanet** worked with **Shenzhen Starfield Food Science & Technology Co., Ltd.** and the **Institute of Environment and Sustainable Development in Agriculture**, the Chinese Academy of Agricultural Sciences in releasing the 2022 China Report on **Carbon Reduction of Vegetable Meat**, indicating that vegetable meat has evident carbon reduction effects, and the carbon emission of equal traditional meat products is 4.7-44.4 folds of that of “Starfield” vegetable meat products.

LVMH proposed that it will realize the “renewable design” of all products by 2030, and **25% of its profits will come from circular services**. Its circular economy strategy is based on its efforts to upgrade and reform services via advanced maintenance, recycle rare raw materials and look for alternative materials.



LCCP's INTERPRETATION

We find that in the context of carbon peaking and carbon neutrality, enterprises have demonstrated increasingly higher enthusiasm for promoting green and low carbon consumption. Based on their own strength and characteristics, enterprises carry out work with different focuses, methods and contents. Items we should consider are as follows: 1) How to encourage enterprise participation via top-level design or the design of mechanisms and systems, and avoid that “low carbon” becomes a transitory marketing hotspot; 2) How to propel enterprises, merchants and platforms to harness their synergy, and how to mobilize upstream and downstream industrial chains to harness their synergy; 3) How to recognize and quantify enterprises’ carbon reduction behaviors via standardized work, so as to provide enterprises with incentives or awards. Solutions to these questions will enable enterprises to transform their work in promoting low carbon consumption into internal driving force, and make continuous inputs.

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