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# LOW CARBON CONSUMPTION PROJECT NEWSLETTER

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ENERGY FOUNDATION  
能源基金会

**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 regrantor, 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

In April, **11 departments—including Standardization Administration, National Development and Reform Commission (NDRC), and Ministry of Industry and Information Technology**—jointly issued the **Guidelines for the Construction of a Standard System for Carbon Peaking and Carbon Neutrality**, proposing a host of goals including: by 2025, China will formulate and revise no less than 1,000 national standards and industry standards (including foreign language versions); the degree of consistency with international standards will be significantly improved; China will substantively participate in no less than 30 green and low carbon-related international standards; green and low carbon international standardization level will be significantly improved. Specifically, the standard system will involve product carbon footprint, green and low-carbon evaluation, circular economy, clean production, carbon asset management, among other contents.

In April, **Ministry of Industry and Information Technology** announced the preparation of the **Catalog of Technologies and Products Encouraged by the Building Materials Industry for Promotion and Application (2023 Version)**, and introduced 48 items of technologies and products in the building materials industry, of which there are 17 items including “low-carbon cement” under the category of “green”.

In April, **China National Light Industry Council** formulated and issued the **Carbon Peaking Implementation Plan in Key Fields of Light Industry**, which put forward “28 key tasks in 6 aspects” and “9 carbon peaking actions across key sectors”, with a view to efficiency improvement and structure optimization. The specific targets of the Implementation Plan include: a) By 2025, the proportion of products in use with an energy efficiency above level 2 will increase by 10 percentage points compared with 2021 for air conditioners, refrigerators, washing machines, water heaters, range hoods, gas stoves, etc. and will increase to 50% compared with 2021 for general lighting equipment; b) To enhance the supply capacity of green travel products; c) To continue to promote low-carbon environmental products, enable light-weight glass bottles and cans to account for 50% of total production by 2030, and enable environment-friendly printing ink to become the workhorse; d) To promote green packaging across the whole chain, guide enterprises to embrace green design, and scale up simple packaging in each link; e) To expand the recycling and utilization of renewable resources and accelerate the scale-up of cogeneration in the papermaking industry (allow its proportion to reach 85% by 2025 and over 90% by 2030).

In May, **General Office of the Ministry of Housing and Urban-Rural Development** announced the **first three-star green building identification projects** in 2023, including 6 civil building projects, 2 industrial building projects, as well as the carbon emission intensity, renewable energy utilization rate, and other indicators during their operation stage.

In May, **NDRC and National Energy Administration** jointly issued the **Implementation Opinions on Accelerating the Construction of Charging Infrastructure** to Better Support New Energy Vehicles (NEVs) Going Rural and Rural Revitalization, proposing to innovate the models for the construction, operation, and maintenance of charging infrastructure in rural areas and to support the purchase and use of NEVs there.

In June, **General Office of the State Council** issued the **Guiding Opinions on Further Building a High-quality Charging Infrastructure System**, proposing goals including China will have built a high-quality charging infrastructure system with an extensive coverage, a moderate scale, a reasonable structure, and perfect functions, and key work contents by 2030, as well as work priorities such as optimizing and improving the network layout, accelerating the construction of key regions, and improving the operation and service ability.

In June, **State Administration for Market Regulation** issued the list on the evaluation standards for green products and certification catalog (the fourth batch), proposing the evaluation standards for green kitchen & bathroom, hardware products and household gas products.

In June, **five departments—including Ministry of Ecology and Environment, Central Office of Spiritual Civilization Construction, Ministry of Education, Central Committee of Communist Youth League, and All-China Women's Federation**—jointly issued the newly revised **Ten Codes on Ecological Environment Conduct of Citizens**. Article 3 and Article 4 directly put forward the practice of green consumption and the choice of low-carbon travel. Specifically, they include rational consumption, prioritizing green and low-carbon products, buying and using fewer disposable items, taking shopping bags and water cups when going out, transforming idle items or donating them through exchanges; prioritizing

walking, cycling or public transportation, using more shared transportation, and prioritizing NEVs or energy-saving cars for family use.

## LCCP's INTERPRETATION

The issuance of documents such as the Guidelines for the Construction of a Standard System for Carbon Peaking and Carbon Neutrality indicates that the policy system under the carbon peaking and carbon neutrality (“dual carbon”) goals will take a more systematic and global perspective. It is also supporting the development of more quantitative targets and standards. Along with the promotion of governance in key industries and key areas, we have seen the introduction of policies across more industrial fields, and these policies for the whole green value chain will spawn greater changes.

# 02 CITY-ACTIONS

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

## # GREEN VALUE CHAIN #

In late March, Economy and Information Technology Department of **Zhejiang** issued the **Work Essentials on Green Manufacturing of Zhejiang Province** in 2023 which proposed major targets including: a) To build 10 green and low-carbon industrial parks and 100 green and low-carbon factories above the provincial level; b) To organize the implementation of about 100 provincial-level energy-saving and carbon reduction technological transformation projects, and more than 2,000 energy-saving and carbon reduction technological transformation projects to be jointly carried out by cities and counties; c) To strive to increase the added value of the new energy industry by more than 10% year-on-year; d) To allow 700+ enterprises to have completed clean production audit; e) To have built 200+ provincial-level water-saving enterprises; and f) To increase the comprehensive utilization in

rate of general industrial solid waste to over 98%. Meanwhile, Zhejiang will also consider introducing the Evaluation Guidelines for Green Supply Chain Construction in Zhejiang Province and the Action Guide towards Carbon Peaking and Carbon Neutrality for Industrial Enterprises in Zhejiang Province, in a bid to create a green manufacturing standard system taking on Zhejiang characteristics. In addition, Zhejiang will improve the province-city-county gradient cultivation mechanism, and contemplate introducing the Dynamic Management Measures for Green and Low-carbon Industrial Parks and Factories in Zhejiang Province.

In April, General Office of the **Tianjin** Municipal People's Government issued the Notice on **Several Policies and Measures to Promote the High-quality Development of the Manufacturing Industry** in Tianjin, clearly proposing to promote the green transformation of the industry, support the construction of a green manufacturing system, and to guarantee the production of green and low-carbon enterprises. In addition, the Notice put forward a clear amount of incentive funds.

In May, **Beijing** Municipal Bureau of Economy and Information Technology released a notice on the public solicitation of opinions on the **Green Diagnosis Work Rules for the Manufacturing Industry** in Beijing (2023 Version) (Exposure Draft). The content of this release featured revisions to the Green Diagnosis Work Rules for the Manufacturing Industry in Beijing (Trial), and explanations to the work rules and work processes, as well as the amount of reward funds.

In June, 10 departments in **Fujian**—including Fujian Provincial Department of Industry and Information Technology—jointly issued the **Implementation Opinions on Comprehensively Promoting the Construction of “Electric Fujian”** (2023-2025), proposing nine measures including cultivating and strengthening the NEV industry chain, expanding the promotion and application of NEVs, and promoting the whole-industrial chain development of electric ships. In addition, the Implementation Opinions clearly proposed the amount of subsidy funds for relevant enterprises.

In June, 10 departments in **Sichuan**—including the Sichuan Provincial Economic and Information Technology Department—jointly issued the **Notice on Strengthening the Promotion and**

**Application of Green and Low-carbon Technology, Equipment, and Products**, which focused on six key tasks and established the “task book” and plotted the “construction drawings” for strengthening the promotion and application of green and low-carbon technology, equipment, and products. As noted by the Notice, by 2025, with enhanced innovation capacity and significantly improved supply capacity, green and low-carbon technology, equipment, and products will gradually become the mainstream of the market and enjoy a much higher market share; the institutional policy system, regimes, and mechanisms to support the promotion and application of green low-carbon technology, equipment and products will be largely put in place, and driven by them, the green and low-carbon transition in key sectors will achieve obvious results; meanwhile, green and low-carbon production modes and lifestyles will have been basically formed.



In June, 10 departments in **Guangdong**—including Guangdong Provincial Development and Reform Commission—jointly issued the **Implementation Plan on Comprehensively Adopting Clean Production in Guangdong Province** (2023-2025), proposing a series of goals including by 2025, the energy consumption per unit of regional GDP and the energy consumption per unit of industrial value added above designated size will decline by 14% compared with 2020; urban green buildings will preferably account for 100% of newly built buildings; and prefabricated buildings will account for 30% of newly built urban buildings. In addition, the Implementation Plan mentioned accelerating the construction of a green manufacturing system, developing green catering, and promoting green transportation infrastructure, among others.

In June, **Suzhou** Municipal Bureau of Industry and Information Technology issued an announcement on public solicitation of opinions on the Implementation Plan on **Creating Green Factories in Suzhou** (Trial). The Implementation Plan divides green factories in Suzhou into 5

levels: 1A, 2A, 3A, 4A, and 5A from low to high. The green factory evaluation system includes indicators in building, equipment, lighting, energy input, procurement, ecological design, land conservation, clean production, and management measures, among others. Moreover, on the premise of ensuring product function and quality as well as the occupational health and safety of employees in the manufacturing process, green factories should introduce the idea of life cycle to meet the comprehensive evaluation requirements of infrastructure, management system, energy and resource input, products, environmental emissions, and environmental performance.

## # CONSUMPTION CARBON ACCOUNTING SYSTEM #

In April, General Office of **Wuhan** Municipal People’s Government issued the Implementation Plan for the Construction of **Wuhan Municipal Carbon Accounting System (2023-2025)**, proposing that Wuhan will strive to achieve the following goals by 2025: a) To build a well-structured, scientific, and standardized carbon inclusion institutional system with outstanding characteristics by 2025; b) To explore the formation of more than 10 evaluation standards on carbon inclusion methodologies and carbon emission reduction scenarios; c) To attract 20+ carbon inclusion technology service institutions; and d) To develop and construct 50+ carbon emission reduction projects and scenarios in key areas.

on this platform, and the cumulative “emission reductions” can be exchanged for a wide variety of gifts such as commercial vouchers, physical goods, or cycling cards in low-carbon shopping malls. Wuhan Carbon Inclusion Platform can integrate the emission reductions contributed by individuals, households, and enterprises. The platform is operated by Wuhan Carbon Inclusion Management Co., Ltd., the first state-owned enterprise in China specializing in the operation of carbon inclusion.



**Figure: Tan Hui Rizhao mini program encouraged people to submit environmental problems**

In June, **Rizhao City** launched the “Tan Hui Rizhao” mini program, setting up six scenarios such as green public transportation, shared bicycles, and green organs. Citizens can obtain “carbon credits” through green travel methods such as green cycling, fun running in Rizhao, low-carbon walking, and green public transportation. “Tan Hui Rizhao” was jointly developed by Rizhao Municipal Bureau of Ecology and Environment and Bank of Rizhao. In addition, the Committee for Departments Directly Under the CPC Rizhao Municipal Committee has launched a series of activities for the city’s government officials, and participants can participate in the ranking of credits per capita of their unit under the “organ first” scenario.



**Figure: Wu Tan Jiang Hu mini program**

In June, **Wuhan** Carbon Accounting Platform was officially launched. Via the “Wu Tan Jiang Hu” WeChat mini program, users can log in to their personal low-carbon life platform. If users participate in low-carbon activities such as taking the bus, subway, NEVs or cycling, bringing their own shopping bags, they can obtain the corresponding “emission reductions”

As of June this year, the “Tan Pu Hui” App, a residential low-carbon electricity application jointly created by **Shenzhen** Power Supply Bureau of China Southern Power Grid, Shenzhen Municipal Bureau of Ecology and Environment, and China Emissions Exchange, had been online for more than a year. A total of 805,000 households have opened carbon accounts, cumulatively reducing carbon by about 12,000 tons and equating to saving about 4,516 tons

of standard coal. At present, Shenzhen Power Supply Bureau is carrying out third-party accounting certification, and the carbon reductions after accounting certification can be traded in China Emissions Exchange or used for public welfare.

## LCCP's INTERPRETATION

Different regions have their own characteristics in promoting the formation of green production modes and lifestyles. Despite the long and complex green value chain, there is no shortage of levers available across production, green evaluation, consumption and lifestyle, among other links. Various regions also provide ample examples of government guidance in policy, financial support, activating market feedback, and the honor system. More feedback at the implementation level remains to be accumulated and observed.

# 03 INDUSTRY VOICES

Collect the latest practices of industrial sectors, enterprises and iNGOs

## # CONSUMPTION CARBON ACCOUNTING SYSTEM #

In May, Ping An Group announced the official launch of a carbon account platform covering 300,000 employees and an upgrading of the Group's "1+N" carbon account system. The low-carbon office behavior, daily low-carbon behavior, and carbon emission data of each Ping An employee's carbon account will be included in the operating carbon emission reductions of Ping An Group to facilitate the overall statistics and management of carbon emissions. According to the 2022 Sustainability Report of Ping An China, the total greenhouse gas emissions from workplace operations of Ping An in 2022 were nearly 322,670 tons of carbon dioxide equivalent, or 0.95 tons of carbon dioxide equivalent per capita, down by 23% and 21% respectively, as compared with 2021.



Figure: CITIC Carbon Account interface

Since the release of "CITIC Carbon Account" in April 2022, its registered users have crossed 1 million, with the cumulative carbon emission reductions exceeding 800 tons. Currently, "CITIC Carbon Account" has launched the "Green Mall" function, which covers more than 20 products in four categories, including consumer payment coupons, mall coupons, financial product instant discount coupons, and e-book members. After selecting their favorite products in the "Green Mall", users can initiate "low-carbon exchange"—directly exchanging for each product online using their accumulated carbon emission reductions. In addition, the "Green Life Consumer Guide" e-journal has been introduced for users.

## # GREEN VALUE CHAIN #

At the “Press Conference for 2023 Green Recycled Plastics Supply Chain Forum”, Green and Recycled Plastic Joint Working Group (“GRPG”) released China’s first local standard for green recycled plastics regarding its production and marketing chain of custody. GRPG was jointly established by China Petroleum and Chemical Industry Federation and China National Resources Recycling Association. The standard for green recycled plastics regarding its production and marketing chain of custody, which fills China’s gap in this respect, raises specific requirements for enterprises in the plastics recycling management and production process, including corporate social responsibility, process control, material procurement, sales, and outsourcing.

China’s automobile industry chain carbon publicity platform, supported by China Automotive Carbon Digital Technology Center Co., Ltd., has been officially launched. In the carbon footprint data of the first nearly 1,400 models on the platform, the average carbon footprint comes in at 259.67 grams of carbon dioxide per kilometer. The platform currently has more than 5,000 (measured by models on sale) carbon emission data of three types of products, including passenger cars, parts, and automotive materials. These carbon emission data—which include 10 information items such as product carbon footprint, carbon emission reductions, carbon emission reduction measures, and carbon labels—support retrieval, download, and statistical analysis of carbon footprint information, and access to history information on emission reduction, etc. The data are open to governmental departments, research institutions based in China and elsewhere, universities, financial institutions, and media, among others.

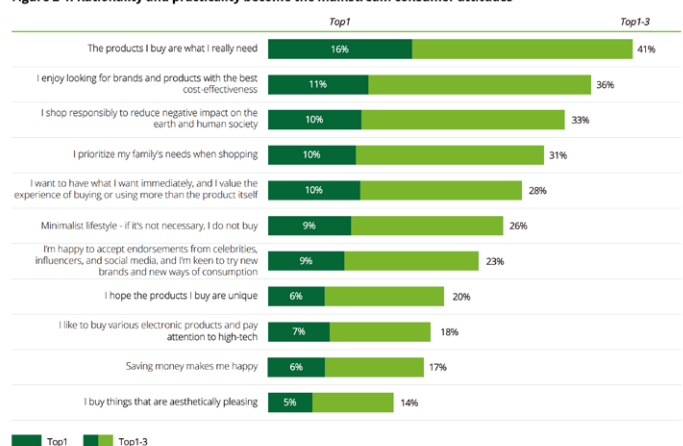
In June, the first session of the Shanghai International Carbon Neutrality Expo in Technologies, Products, and Achievements was held. With an exhibition area of nearly 100,000 square meters, the Expo coincided with the “Low-carbon and Smart Travel Exhibition”. For the first time, the Expo launched a technical map covering production and supply of low-carbon energy, low-carbon transition of energy consumption, optimization of the energy operation system, auxiliary support for carbon emission management, and absorption and

recycling disposal of carbon emission, based on the main links across the full life cycle of carbon emissions. The four-day event showcased 1,081 low-carbon technologies and products, receiving more than 80,000 visitors. The keynote forum of the Expo saw the release of the 2023 Shanghai International Carbon Neutrality Expo Green and Low Carbon Casebook and the announcement of the Shanghai Low-Carbon Initiative Declaration, proposing that June 11 be designated as the “World Low-Carbon Day”.

## # GREEN CONSUMPTION #

According to the 2023 China Consumer Insight and Market Outlook White Paper released by Deloitte, the five major trends of the Chinese consumer insights for the consumer goods and retail industry include: returning to rational consumption, embracing diverse innovation, and being green and sustainable. The survey results show that more than 60% of consumers are willing to pay a premium for green consumption, but the premium would be within 10% or less for most consumers (56% of the total population); in addition, “green and sustainable practices” have become an important consideration for consumers when purchasing food and beverage, toys, and nutrition and health products. “Responsible consumption” has become a consumption concept widely recognized by consumers.

Figure 2-1: Rationality and practicality become the mainstream consumer attitudes



Survey Question: Which of the 1 to 3 descriptions below best align with your consumer mindsets? Please select the top 3 descriptions (1 = most aligned, 3 = least aligned). [Ranking]

Figure: Consumer mindsets analyzation

In June, China International Electronic Commerce Center released the China E-commerce Green Development Report, showing that the proportion of green consumption in China is growing significantly; and the transformation of the e-commerce supply chain, driven by policies, has initially achieved results; but the overall green transformation is facing a prominent bottleneck; R&D and application are costly and need continuous investments.

## LCCP's INTERPRETATION

On the enterprise side, we have seen how to establish a minimum closed-loop controllable by the enterprise through the carbon account. The Carbon Neutrality Expo held in Shanghai is the highlight of the second quarter, which has effectively promoted industry communication and industrial development, enhanced the work of the host city, and strengthened influence towards consumers. The Expo highlights the importance of platform construction as well as its enormous energy and influence.



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