

# LOW CARBON CONSUMPTION PROJECT NEWSLETTER

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LCCP Team Energy Foundation China Q2 2022 LOW CARBON CONSUMPTION PROJECT

## **NEWSLETTER**

**01** Macro-policies **02** City Actions **03** Industry Voices



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.

## MACRO-POLICIES

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

In June, seven ministries and commissions of China, including the Ministry of Ecology and Environment (MEE) and the National Development and Reform Commission (NDRC), released the Implementation Plan for Synergistic Effect of Pollution Reduction and Carbon Reduction, indicating "speeding up the formation of a green lifestyle" in "Enhancing Source Control". Specific contents are as follows: Expanding the supply and consumption of green and low carbon products, speeding up the establishment of a unified green product certification and identification system, improving the green product promotion mechanism; conducting the construction of green communities and the like, thoroughly launching the campaign of opposing waste in the whole society; popularizing green packaging, pushing the reduction of packing and printing, reducing printing area and varieties of colors; guiding the public to give preference to public transit, bicycle, walking and other green and low carbon travel modes; giving play to the guiding and demonstration role of public institutions, especially Party and government offices, in energy conservation and emission reduction; and exploring the establishment of "carbon accounting" and other public engagement mechanisms.

In June, the Ministry of Transport, the National Railway Administration, the Civil Aviation Administration of China and the State Post Bureau released the Opinions on Implementing the Working Guidance for Carbon Dioxide Peaking and Carbon Neutrality in Full and Faithful Implementation of the New Development Philosophy of the CPC Central Committee and the State Council, emphatically mentioning "actively guiding green transportation", including comprehensively pushing forward the construction of national public transit-oriented cities. Specifically, prioritizing the development of public transit, vigorously improving the service quality of public transit; promoting the development of biking, walking and other non-motorized transportation, and energetically cultivating the green travel culture, etc.

#### LCCP's INTERPRETATION

As the national "1+N" policy system oriented towards the carbon peaking and carbon neutrality goals is improved gradually, many policies have been rolled out related to green consumption in all fields. Green transportation, green logistics, green packaging, green identification system, green community construction and other work directions have become clearer. However, these policy documents still lack quantitative objectives on the whole. As green consumption scenarios are multifarious and disordered, it is truly important how stakeholders involving clothing, food, housing, travel and daily use items, supply chains, and multiple competent authorities will put the policy documents into practice after the documents make clear the work directions. How to spur up relevant parties in the field to take actions at lower costs (including the cost of capital, time cost, institutional improvement cost, etc.), and recognize corresponding contribution will be critical.

# 02 CITY-ACTIONS

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

#### # GREEN CONSUMPTION #

After seven ministries and commissions, including the NDRC and the Ministry of Industry and Information Technology (MIIT), released the Implementation Plan for Promoting Green Consumption, Hebei, Xinjiang, Fujian, Jiangsu and Chongqing have responded to the document. Specifically, Jiangsu came up with several concrete actions and indicators. For example, by 2025, the proportion of green food consumption in the consumption of agricultural products will exceed 70%; the proportion of renewable energy vehicles either newly increased or replaced-such as ground public transportation, urban logistics vehicleswill amount to 80%; the proportion of green travel in cities of the province with more than 1 million urban permanent residents will top 70%; more than 50% of large shopping malls (with 100,000 and more covered area) will basically meet the national green shopping mall creation requirements; and over 99% of e-commerce express items will not undergo secondary packaging. Moreover, Chongqing mentioned in its exposure draft that 300 green and organic agricultural products and farm produces with geographical indication will be newly certified; the proportion of green building materials used in new urban buildings will be no lower than 70%; the share ratio of public transit in motorized travel in central urban areas will amount to 68%; and 10 green shopping malls will be established,

In June, Chengdu released the Development Plan of Chengdu for Green Transition during the 14th Five-year Plan Period, underlining that Chengdu will facilitate lifestyle transition, including expanding the supply of green products, supporting and guiding enterprises to design and develop green products; and advancing the green transition of consumption in key fields—such as actively popularizing green residential consumption and improving the policies that encourage the purchase of new energy vehicles. Besides that, it will perfect the price mechanism that facilitates green development, comprehensively pursue the differential pricing systems of residential

electricity, water and gas, improve the policies on sewage treatment fee and garbage disposal fee, put in place the dynamic adjustment mechanism of urban sewage treatment fee, and gradually establish the charge system for domestic waste treatment that is featured by meterage charge collection and unbundling.

#### **# CARBON LABELING #**

In June, Guangdong province held the Carbon Labeling Conference. By pasting carbon footprint label ("carbon labeling" for short) on products, the carbon labeling mechanism of Guangdong discloses carbon emission information of products/services generated within a designated scope through label as per relevant technical standards. This move will help guide low carbon production and consumption, enable enterprises to actively respond to international rules for green trade, and elevate the green competitiveness of the foreign trade industry. The first batch of carbon labeling evaluation institutions and enterprises receiving carbon labeling of Guangdong province have obtained licenses and certificates.

### # CONSUMPTION CARBON ACCOUNTING #

In May, the Department of Ecology and Environment of Shandong Province issued the notice of soliciting public opinions on the Work Plan of Shandong Province for Establishing the Carbon Inclusion System (Exposure Draft), indicating that between 2022 and 2023, Shandong will formulate the top-level design of the carbon inclusion system, set up relevant system standard and methodology system, build the carbon inclusion platform, create individual carbon accounts, explore and set up the multilevel absorption channel of carbon inclusion certified emission reductions. Regional operation sub-centers will be established in cities with sound low carbon development foundation, such as Jinan, Qingdao, Yantai, Weifang and Weihai, so as to prompt the establishment of the carbon inclusion cooperation mechanism in the Yellow River basin.

In June, **Tianjin Carbon Footprint**—the official carbon inclusion platform of the Tianjin Municipal Transportation Commission—was officially launched on Alipay and WeChat. Currently, citizens may obtain individual carbon credits on the Tianjin Carbon Footprint WeChat miniprogram via walking, daily attendance, finishing quiz and other means. Subway, bus, sharing bike and other travel means will be added to the carbon credit acquisition function in the future. Carbon credits can be used to exchange souvenirs or equities.

The Several Rules of Shanghai Municipality on the Development of Green Finance in Pudong New Area—the first regulation of Shanghai on green finance—has been put into force as of July 1, 2022. It clearly indicates that enterprise and individual carbon accounts will be explored and established, the connection with the municipal carbon inclusion platform will be enhanced and the development of the voluntary emission reduction market will be boosted.



#### # GREEN STANDARDS #

In June, the **Shenzhen** Ecology and Environment Bureau released the Carbon Inclusion Methodology of Shenzhen Municipality for Low Carbon Residential Electricity Consumption (For Trial Implementation). The document specified the calculation process and methods of emission reductions generated from low carbon household electricity consumption for individuals, setting the stone for the residents to participate in carbon trading via low carbon electricity consumption. Citizens of Shenzhen can see their daily emission reductions, accumulated carbon reduction amount, carbon reduction ranking, carbon reduction calendar and other information about their household electricity consumption via the China South Power Grid App, 95598 mini-program and other payment platforms. It is predicted that by 2023,

the China Emissions Exchange will list the authorized residential emission reductions on its trading platform so that high energy-consuming social groups or enterprises can buy them.

Earlier, Shenzhen also released the Carbon Inclusion Methodology of Shenzhen Municipality for Low Carbon Travel by Public Transit (For Trial Implementation), providing scientific methods for calculating emission reductions generated by the citizens when using bus, subway and other low carbon public transit means. When the citizens the travel QR code, Shenzhentong and other travel platforms, these platforms can be authorized and entrusted to use the travel data to develop carbon inclusion projects and apply for emission reductions.

In June, the Lucid Waters and Lush Mountains are Invaluable Assets-General Rules on Green Life Evaluation—the local standard of **Huzhou** city—was officially implemented. As China's first local standard in the field of green life, the document specified such contents as the green life evaluation indicator system, basic principles, evaluation indicator classification and requirements, evaluation methods and the order of evaluation, and is applicable to green life evaluation in the districts and counties of Huzhou city. It includes both quantitative and qualitative indicators, with the former covering over 30 indicators in five aspects, namely green residence, green travel, green consumption, green services and green accomplishment. Before then, Huzhou released the Implementation Opinions on Carrying out the Green Lifestyle Campaign, the Implementation Plan of Huzhou City for Green Life Creation Campaign and the Index Report on Green and Low Carbon Life of Huzhou, etc.

#### LCCP's INTERPRETATION

Local cities have made ample explorations on the topic of green consumption. The quantitative indicators put forward by Jiangsu and Chongqing serve as important references for other cities to implement policies related to green consumption. The green development price mechanism of Chengdu, and the general rules on green life evaluation of Huzhou and the evaluation/honor system supported by it can also become powerful means for cities to advance green lifestyle. Regarding the establishment of the carbon inclusion system, different media have been used. For example, governments rely on Alipay, WeChat mini-program, while banks and enterprises resort to their own apps to set up the user side to record users' low carbon behavior. As the method is tried widely, how the two sets of systems will coordinate with each other and whether they can successfully obtain and retain users remain to be seen. As for emission reduction standards, Shenzhen was the first to make breakthroughs in the two relatively simple scenarios, i.e., transportation and electricity consumption. Although the benchmark line setting and other issues are not sophisticated and cannot directly connect with the carbon market, they have verified the effective route of infrastructure construction in this field. Generally speaking, cities vigorously engage in work related to green and low carbon consumption, and their positive explorations and attempts are worth learning. Going forward, we will keep a watchful eye on and track them, shortlist best cases and popularize the cases extensively.

# 03 INDUSTRY VOICES

Collect the latest practices of industrial sectors, enterprises and iNGOs

#### **# CARBON ALLIANCE #**

In April, nine state-level carbon emissions trading platforms—including Sichuan United Environment Exchange, Guangzhou Emissions Exchange, Shanghai Environment and Energy Exchange, China Beijing Green Exchange, Tianjin Climate Exchange, China Hubei Emission Exchange, Haixia Resource and Environment Exchange, Chongqing United Equity Exchange Group Co., Ltd., and China Emissions Exchange—jointly launched the "Consumption Carbon Accounting Common Mechanism" and released the Declaration of the Consumption Carbon Accounting Common Mechanism. The contents include establishing a scientific method system, quantifying behaviors that conform to the carbon inclusion value, formulating an inclusive low carbon incentive mechanism, and promoting the mutual recognition of carbon inclusion products under the consistent rules of conduct.

In June, the "Consumption Carbon Accounting Cooperation Network" was co-initiated and co-founded by the Center for Environmental Education and Communications of the MEE, the All-China Environment Federation, the China Internet Development Foundation, the International Cooperation Center of the NDRC, and the China Ecological Civilization Research and Promotion Association. As a voluntary and non-profit coordination mechanism, the Network will utilize the cooperation mechanism to advance nationwide consumption carbon accounting work, try to unleash the potential of all stakeholders in deep participation in a maximum way, and emphasize forcing emission reduction on the production side from the consumption side.

#### # CONSUMPTION CARBON ACCOUNTING #



#### Figure:Interface and Functions of Lenovo **Happy Carbon Circle**

Recently, **Lenovo** rolled out "Lenovo Happy Carbon Circle", a carbon inclusion platform for its employees. The platform covers the two daily scenarios of green office and low carbon life, where employees can obtain carbon credits through a wide range of behaviors, such as low carbon business trip, low carbon commuting, online meeting, second-hand clothes, book donation, and recovery of electronic products. Employees can also assist large events to realize carbon neutrality and carbon credit trading through their own carbon emissions. The platform can also automatically import employees' sports data from Lenovo Sports Circle, and employees can claim haloxylon ammondendron by donating their sports steps.

In May, China Unionpay released the "Green and Low Carbon" function on the "Quick Pass" App. Users can automatically accumulate "green and low carbon energy" and "carbon emission reductions" everyday by taking bus and subway with the "travel QR code" of the "Quick Pass" App. Later, users can exchange 50% off bus coupon, 20% off subway coupon, 3 yuan credit card repayment coupon, braised food coupon and many other gifts in the "Quick Pass" App. The first batch of cities involved include Harbin, Changsha, Hefei and Yinchuan.

#### # GREEN CONSUMPTION **SCENARIO** #



下单简单包装商品

参与快递盒回箱 获得5朵小绿花

Figure: Tmall's Interactive Gameplay 'Green Paradise'

During the 618 (June 18) shopping festival, Tmall released the interactive gameplay of "Green Paradise". This year, Taobao and Tmall had more than one million commodities with green labels that meet national or industrial environmental certifications. Consumers buying such commodities can obtain corresponding number of "green flowers" as incentives to exchange green products or participate in green public benefit activities. Tmall launched the "Green Innovator Community" and received support from nearly 40 brands such as P&G, Yili, Legend, Haier, Coca Cola, Mars and Merries. It also sponsored the "Simple Package" initiative, advocating the green transformation of product packages by reducing the use of plastics, print by ink, packaging materials and recycling. Some brands used cartons produced from recovered materials. Tmall also worked with Cainiao to reduce the carbon emissions of the logistics link by promoting delivering goods with original box, reuse of cartons in the warehouse, packing algorithm and other means. Since June 23, consumers can obtain incentives in the "Green Paradise" if sending parcels with green package and using green recycled cartons at Cainiao.

During the 618 (June 18) shopping festival, JD rolled out the "Green Plan", advocating "guiding green value, and working with brands to build the green value chain". Nearly one million kinds of products, including energy-efficient and watersaving household products and decoration products, organic food, mother and baby products, and those using replaceable products and recyclable packages, were provided with "green" label. If buying such products, consumers can enjoy preferential price and obtain "green credits" to exchange exclusive green equities. The Home Appliances Channel of JD also worked with 100 leading brands to conduct the "Rejuvenating Services Event", with trading-in old home appliances for new ones at the core. During this period, the "low carbon life" search demands of JD in the recent 30 days grew up by 61% year on year, while the search for contents related to "environmental education" rose by 72% year on year.

#### # GREEN SUPPLY CHAIN #

In June, **Apple** announced that all of its major suppliers in China had made clean energy commitments. These 55 suppliers located in Shandong, Fujian, Zhejiang, Guangdong and other regions will produce Apple products with 100% renewable energy. The data grew by nearly 75% in the past year. This move will speed up the realization of 100% carbon neutrality objective in the supply chain and the entire product lifecycle by 2030. Currently, a total of 213 Apple production partners have made such commitments.

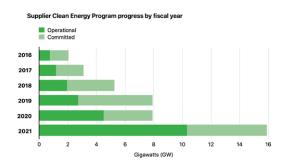


Figure: Progress of Apple's Supplier Clean Energy Program

At the 2022 Huawei Supplier Carbon Emissions Reduction Conference, **Huawei** announced that green and environmental requirements have been integrated into the quality-first strategy of procurement and all processes of the purchase business, and been clarified in all links of the whole processes of supplier certification, selection, field review and performance management. Huawei plans that it will finish the setting of carbon emission reduction goals of top 100 suppliers before 2025. In so doing, it will gradually boost the green, low carbon and sustainable development of the entire supply chain.

#### **# GREEN STANDARDS #**

In March, the China National Institute of Standardization joined hands with the China Association for Standardization in convening the "2022 High-quality Development Exchange & Company Standard 'Leaders' Conference, providing guidance for effectively supporting small and medium-sized enterprises in their green and low carbon work. Nearly 20 group standards related to green and low carbon development were successively released at the event. Among others, the General Rules on the Evaluation of Sustainable (Green and Low Carbon) Factories and evaluation standards for seven industries—such as textile, ceramics, daily use chemicals, special construction machinery, plastics, papermaking, and electronics and electrical appliances-established the evaluation indicator system for sustainable (green and low carbon) factories, to guide enterprises in their green and low carbon work. The General Technical Rules on Carbon Reduction Evaluation of Energy-efficient Products and the carbon emission evaluation standards for 17 types of energy-using terminal products such as room air conditioner provided a methodology for evaluating the carbon reductions of energyefficient products, providing a standard basis for the circulation domain to explore and promote the carbon credit mechanism. The Principle of Admissibility of Green Commodities offered unified principles and basis for platforms to shortlist green products. Alibaba participated in the drafting of the above-mentioned 17 green and low carbon standards, including the General Rules on the Evaluation of Sustainable (Green and Low Carbon) Factories, and in addition to this, its e-commerce platform Tmall adopted all the green and low carbon group standards released at the event.

In April, the All-China Environment Federation officially released the group standard—the Guidelines for Quantifying Greenhouse Gas Emission Reductions of Citizens' Green and Low Carbon Behavior. The document recommended 40 green and low carbon behaviors in seven major types, such as clothing, food, residence, travel, daily use items, office and digital finance. For example, green and low carbon behavior in the field of clothing includes old clothes recycling, and using clothes and quilts produced from sustainable raw materials; behavior in the food field includes reducing the use of disposable tableware, Clean Your Plate Campaign, etc.; behavior in the residence field includes using clean energy, saving water, saving electricity, household waste classification, etc. The document is compiled by the All-China Environment Federation together with many institutions, such as the Committee of Green, Circular, and Inclusive Development of the Federation, Beijing Green Inclusive Network Technology Co., Ltd., Green Inclusive and Carbon Neutrality Technology (Suzhou) Co., Ltd., the Center for Environmental Education and Communications of the MEE, the China Internet Development Foundation, the Chinese Academy of Environmental Planning of the MEE, Peking University, Tsinghua University, Renmin University of China, Meituan, Alibaba, Tencent, and JD.

In June, the Chinese Society of Technology Economics approved and released the group standard—the Technical Specification for Project-based Greenhouse Gas Emission Reductions—Second-hand Transaction Platforms. Initiated by the China National Institute of Standardization, the document was jointly drafted by Zhuanzhuan Group (Beijing Zhuanzhuan Spirit Technology Co., Ltd.), Tsinghua University, Frost & Sullivan, and other enterprises and institutions. Platforms can calculate the emission reductions of their business activities based on the standard, and connect with local carbon inclusion policies.

#### LCCP's INTERPRETATION

- 1. To promote low carbon consumption, governments, industries and enterprises need to harness their synergy. In particular, with the background of the "unified market in China", it is imperative to establish the "Carbon Alliance", which is the basis for building infrastructure in the field.
- 2. All kinds of group standards will bloom together in the future as the topics gain increasing attention, and supply chain upgrading will be boosted gradually. The key to harness the synergy lies in clear consensus, unified principle, general standard and methodology, which will directly push forward the implementation of carbon labeling, carbon inclusion, etc. However, there remains no common cornerstone.
- 3. Big challenges remain when advancing consumption carbon accounting system and individual carbon accounts at a large scale from top to bottom. Given the low carbon price and the high cost of institutional improvement, the bottom-up pathway deserves attention. Carbon credit practices oriented towards employees offer valuable reference in terms of setting up effective incentives, cultivating user habit, and building the honor system.
- 4. Although the actual carbon emission intensity of e-commerce is smaller than that of energy and industrial sectors, it is powerful when it comes to the value communications towards the industry and the general public. Platform enterprises and leading industrial enterprises will force the green transformation of the supply chain through flow placement and purchase policy. For now, Chinese enterprises are relatively prudent, so policies can give more guidance and support.

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