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Special Policy Study on Green Transition and

Sustainable Social Governance

Main Findings

(For Discussion)

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Green Transition and Sustainable Social Governance

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The Current Situation of China's Green Consumption and Related Strategic Recommendations

Executive Summary

According to the research plan of the 6th Phase of the China Council for International Cooperation on Environment and Development (CCICED), the Task Force on Innovation and Sustainable Production and Consumption has been set up. Under this Task Force, a Special Policy Study on Green Transition and Sustainable Social Governance (SPS) has been initiated in 2018, and will finish the research programs in 2019. Given that this is a relatively new research area with rather weak research base in China, the SPS has held two expert seminars and several small-scale workshops to discuss the research content and framework. On this basis, the SPS held a kick-off meeting on September 17th. While this report offers preliminary observation and conclusions made by the SPS on the status quo of green consumption in China, it puts forward macro-level recommendations such as the strategic positioning of promoting green consumption and its role in accelerating the entire transition of social and economy system in China towards green consumption at the same time. The final and specific policy recommendations will be submitted at the 2019 Annual General Meeting (AGM).

Symbolized by the establishment of the environmental labeling system in 1994, China's sustainable consumption-related concepts and practices are basically in alignment with international process. In particular, the Chinese government has shown strong political will and has taken positive policy practices to promote green consumption in recent years.

The following five characteristics indicate that China's consumption has stepped into a transitional stage towards comprehensive upgrading: 1) consumption scale continues to expand rapidly; 2) consumption power will maintain an upward trend; 3) consumption structure has developed from a subsistence-based one to a well-off model; 4) Internet-based approach has constituted an important option of consumption activities; and 5) consumption has become an important engine for economic development. However, the expanding scale and changing structure of consumption has put mounting pressure on the resources and environment, resulting in a series of problems as follows. First, consumption has witnessed rigid growth in its demand for resource and energy. Second, such irrationally excessive and wasteful consumption methods have exacerbated resource and environmental problems. Third, the load from the consumer sector exceeds that of the production sector in many

aspects of environmental pollution.

China has already formulated a series of policy measures and achieved positive results in the area of green consumption, mainly reflected in four aspects: 1) a green consumption policy system is taking shape; 2) environmental labeling system has shown results in promoting corporate environmental management and reducing pollution; 3) the guidance role of government in green procurement and green printing has taken initial effect; and 4) the innovative model of green supply chain has stepped into a pilot phase.

However, China is still faced with some outstanding problems in promoting green consumption mainly including: first, there is a lack of systematic planning and top-level design in this regard; second, accordingly, enabling environment has not been nurtured yet to encourage green consumption activities; third, governmental missions and responsibilities for green consumption are scattered in different ministries, while the role of environment ministry needs to be strengthened, and the fragmentation of policies and management is quite prominent; fourth, environmental labeling certification and priority work areas of pollution control are not closely integrated, hindering the potential of certification practices being fully tapped; and fifth, the endogenous motivation of green consumption of enterprises and the public is insufficient.

At present, China is shifting from high-speed growth to high-quality development, in which consumption is the key driving force for economic growth and an important engine for promoting high-quality development. Judged from China's overall process of green transition, the problem of imbalance and lack of coordination is prominent. Comparatively speaking, the green transition of economy is developing faster and better, while the transition of green society is lagging behind in the entire economic and social system. While within the economic sector, strong measures have been taken in the production area but weak in the consumption area. Therefore, the issue of how to promote green transition in people's lifestyle and consumption pattern needs prompt attention and actions of the Chinese government. To solve the problem, the most urgent task at this stage is to clarify the strategic positioning and role of green transition of consumption in promoting green development, meeting people's growing need for a better life and improving environmental governance system in China. To this end, the SPS puts forward the main conclusions and strategic recommends to the Chinese Government as following: 1) attaching great importance to and making full use of the current historically opportunity of consumption upgrading to shape a new green model; 2) taking green consumption as a new area to meet people's growing need for a better life and as a new growth pole to promote high-quality development; 3) taking consumption as an important means to drive and push green transition process in the entire economic and social system and the structural reform on the supply-side; 4) taking green consumption as a key instrument to promote eco-civilization construction and the modernization of environmental governance

system; and 5) with the conclusive observations above, the Chinese government should put green consumptions issue high on its policy agenda in a bid to resolve pressing problems hindering its development. In this regard, the SPS will submit concrete policy recommendations to the 2019 AGM of the CCICED.

In 1992, the concept that “all countries should make every effort to promote sustainable consumption pattern”¹ was first proposed in *the Agenda 21* adopted by the United Nations Conference on Environment and Development. In 1994, the United Nations Environment Programme (UNEP, now known as UN Environment) held a symposium in Oslo and released the *Report on Policy Factors for Sustainable Consumption*, which defined sustainable consumption as “providing services and products to meet basic needs of human beings and improve lives quality, while minimizing the use of natural and toxic materials and the waste and pollutants generated during the service or product, thereby not endangering future generations demand”.

With the establishment of the environmental labeling system in 1994, China's sustainable consumption concepts and practices are basically in alignment with international progress. In particular, the Chinese government has shown strong political will and has taken positive policy practices to promote green consumption in recent years. In 2016, China issued the “*Notice on Guiding Opinions on Promoting Green Consumption*”, clarifying that green consumption refers to consumer behaviors characterized by resource conservation and environmental protection. The notion is specifically characterized by promoting diligence and thrift, reducing loss and wastage, selecting efficient and environment-friendly products and services and reducing resource consumption and pollution emissions in the consumption process. The definition emphasizes the “green” requirements of resource conservation and environmental protection in consumer behavior, and is basically consistent with internationally-recognized concept of sustainable consumption, but it does not explicitly emphasize the issue of inter-generational consumption equity.

In May 2017, the Political Bureau of the Central Committee of the CPC conducted a collective study on forming green development patterns and lifestyle. In the same year, special arrangement for promoting green production and consumption was deployed in the 19th National Congress of CPC. In general, China's green consumption can be interpreted from five dimensions: first, **in terms of concept**, green consumption encourages the sustainability and greening of consumption; second, **in terms of quantity**, green consumption reflects the appropriateness and reduction of consumption; third, **in terms of structure**, green consumption embodies the rationality and balance of consumption; fourth, **in terms of content**, the main concern is focused on such main aspects of people's daily life as food, housing and transportation at the present stage; and fifth, **in terms of method**, the whole-process greening from production, circulation to disposal is aimed for driven by consumption.

I . The Current Situation of China's Consumption and Consequent Resource and Environmental Problems

¹ <http://www.un.org/chinese/events/wssd/chap4.htm>

With regard to the growth rate, scale, structure or the contribution to economic growth, China's residential consumption has stepped into a transitional stage of upgrading and is gradually dominating the driving force of economic growth. At the same time, resource and environmental problems brought by irrational consumption structure and patterns are becoming prominent, and consumption exerts more impact on the environment than production does in many aspects.

1. Consumption in China: moving into a transitional stage towards comprehensive upgrading

The above-mentioned five characteristics indicate that China's current consumption has stepped into a transitional stage of comprehensive upgrading.

First, consumption scale continues to expand rapidly. The total retail sales of consumer goods in China has marked an average annual growth rate of 14.55% in the past 11 years with the figure of over 36 trillion Yuan in 2017, more than four times that of year 2007 (Figure 1), and more than seven times that of year 2000.

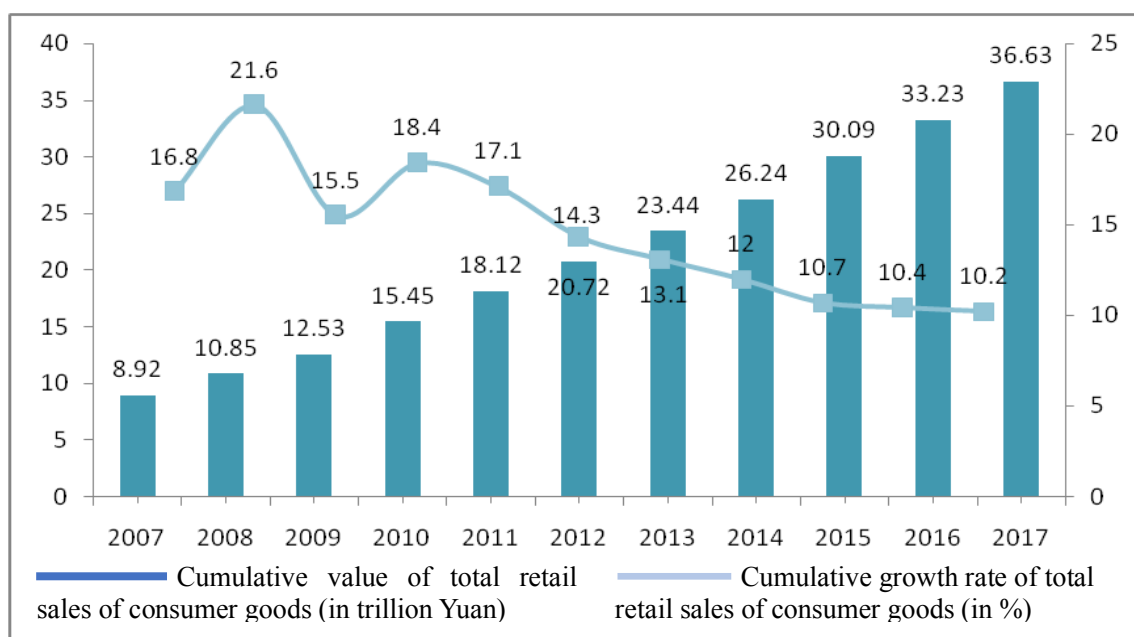


Figure 1. Total retail sale and growth rate of consumer goods in China (2007-2017)

Second, consumption power will maintain an upward trend. In recent years, consumption expenditure of urban residents is 3.5 times of that of rural residents. With the estimation that the proportion of urban population in China will increase to 60% in 2020, the potential for consumption growth in the near future is rather huge. Gauged by the standard of per capita household final consumption expenditure, currently the figure of China is only 2,700 US dollars, merely 13% of the average level of Japan, Europe, Singapore and other countries (US\$20,000), and the medium and long-term consumption growth potential of China is tremendous (Figure 2).

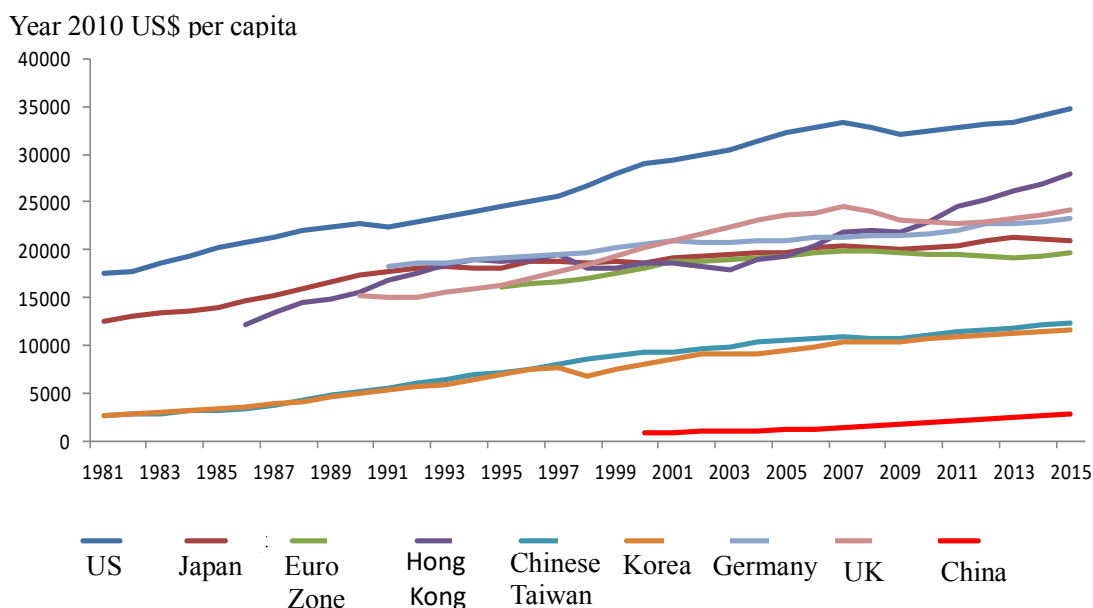


Figure 2. International comparison of final household consumption expenditure per capita

Third, consumption structure is shifting from a subsistence-based one to a well-off model. According to the data of Engel coefficient of 22 countries released in 2013, the living standards of Chinese residents have reached a well-off level. In terms of the basic necessities of life consumer goods, the proportion of clothing and food consumer goods had plummeted from 34.96% and 44.83% in 2001 to 18.10% and 26.14% in 2015 respectively; while that of housing and transportation consumer goods had rocketed from 3.49% and 16.72% in 2001 to 7.40% and 48.35% in 2015, fully indicating the trend of consumption structure of residents shifting from a subsistence-based one to a well-off model.

Fourth, Internet-based approach has constituted an important option for consumption activities. In 2016, the total volume of online retail goods of Chinese consumers reached 5.16 trillion Yuan, marking an increase of 26.2% over the same period of the previous year. Among the 772 million Internet users, 55.8% has had online transactions.

Fifth, consumption has become an important engine for economic development. Since 2011, consumption has become the dominant driving force for economic growth with the final consumption expenditure contributing 58.8% of GDP growth in 2017 in China. At the same time, the tertiary industry, which represents the level of consumption development, has grown rapidly. Starting from 2013, the share of added value of the tertiary industry in GDP has exceeded that of the secondary industry and rose to more than 50% after year 2015. In September 2018, the Chinese government issued “*Several Opinions on Improving Consumption Mechanism and Further Motivating Consumption Potential of Residents*”, proposing specific measures to further stimulate consumer spending potential and promote economic development.

2. Serious resource and environmental problems caused by consumption activities

The expanding scale and changing structure of consumption has put mounting pressure on resource and the environment of China, leading to a series of problems as follows.

First, consumption demand for resources and energy continues to grow rigidly. China's residents' resources and energy consumption has jumped rapidly. In specific, the per capita consumption of electricity, energy and water increased by 199.8%, 9.1%, and 4.0% in 2015 respectively compared with that of 2004 (Figure 3). In 2010, China's per capita ecological footprint was 2.2 global hectares of productive land, more than two times the per capita ecological carrying capacity of China in 2010 though it was below the global average of 2.6 global hectares (Figure 4). About 90% of China's ecological footprint is generated from such consumption activities as food, housing and transportation, bringing tremendous pressure on resources and the environment.

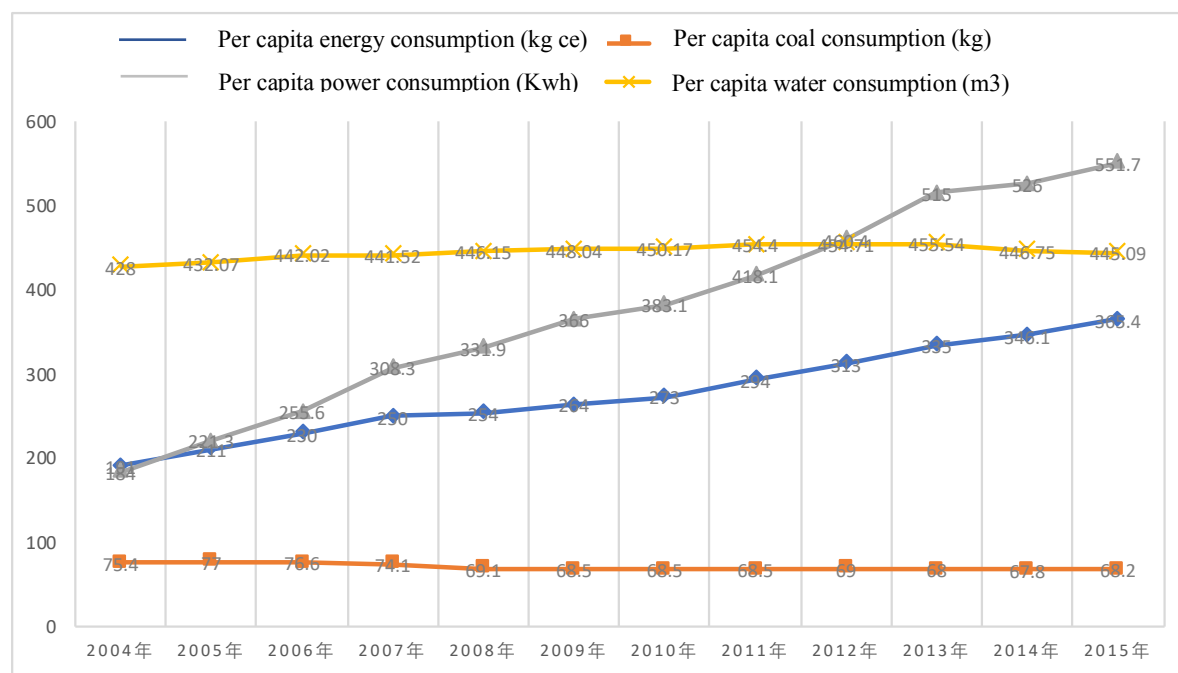


Figure 3. Change in per capita resource and energy consumption of residents (2004-2015)

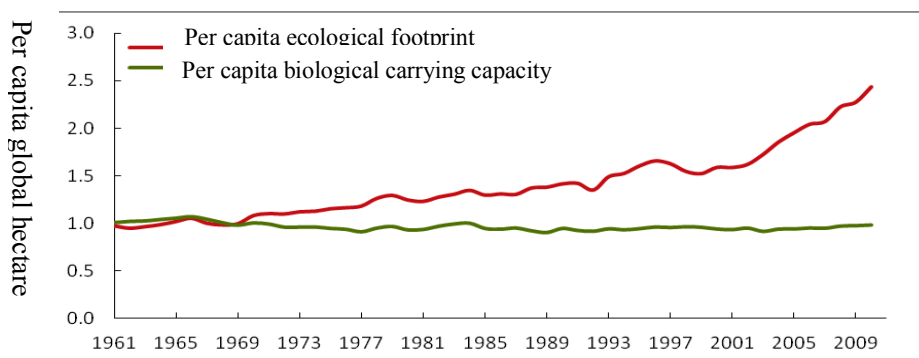


Figure 4. Change in per capita ecological footprint and biological carrying capacity (1961-2009)

Second, such irrationally excessive and wasteful style of consumption has exacerbated resource and environmental problems. Currently, the annual output of packaging products in China stands at 30-odd million tons with only less than 30% having been recovered. In 2015, the express delivery industry consumed 9.922 billion boxes, 16.985 billion meters of tape and more than 3 billion woven bags. It is estimated that more than 70 billion Jin (=1/2 kilogram) of food are wasted in China every year, and the number of car ownership in 2017 is close to 210 million. By 2013, 100 million units of used TV sets, refrigerators, air conditioners, washing machines and computers had been discarded in China, and the total amount of electric and electronic waste is expected to increase from 15million tons in 2020 to 28.4 million tons in 2030. With mobile phone users reaching 1.53 billion by February 2015, China generates approximately 200 million used cell phones every year.

Third, pollution load from the consumer sector exceeds the production sector in many aspects. Source apportionment of ambient fine particulate matter (PM) shows that emission from mobile sources has become the primary share of PM pollution in megalopolises like Beijing, Shanghai, Hangzhou, Guangzhou and Shenzhen. In particular, the similar portion of Shenzhen has reached even up to 52%, whereas motor vehicles are the leading source in urban areas (Figure 5). In 2015, the urban domestic sewage discharge volume was 2.68 times that of industrial sewage discharge nationwide. While in 1997, the ratio between the two was only 0.83, and the domestic sewage discharge volume witnessed 1.83 times growth in 18 years. The amount of domestic refuse generated in Beijing in 2015 has overtaken that of industrial waste (Figure 6), registering the leading source of municipal solid waste of the year.

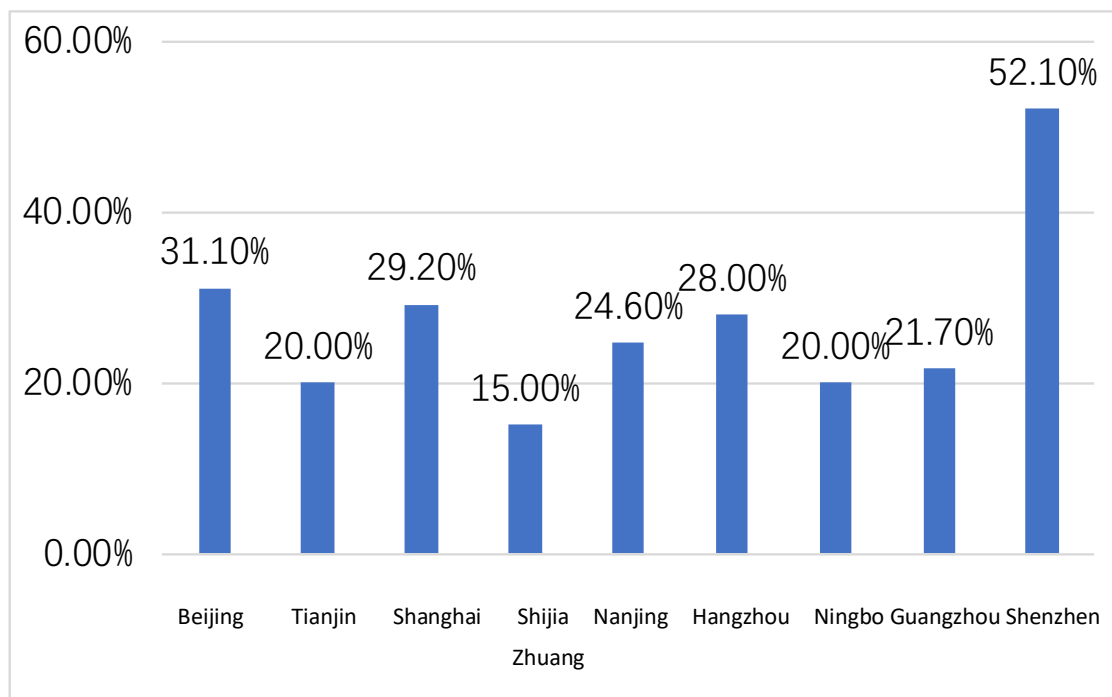


Figure 5. Contribution of mobile sources to fine particulate matter concentrations from local sources in major cities

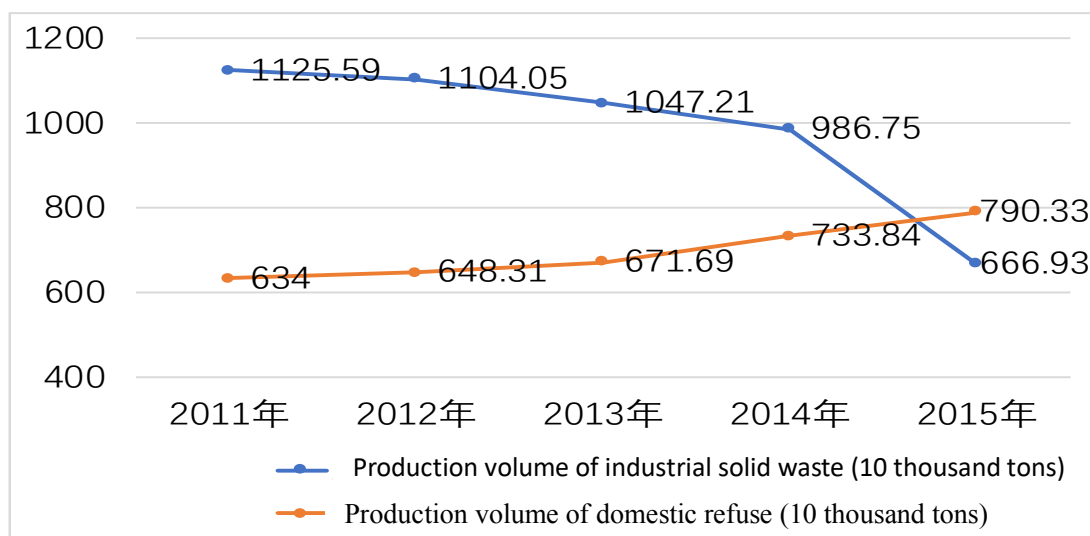


Figure 6. The production volume of solid waste and domestic refuse in Beijing

In light of China's development goal, resource and environmental problems consequently emerged in the future would be rather worrisome should China's consumption level reach the current level of some industrialized countries.

II. China's Current Policies and Practices of Green Consumption and their Underperformance in Effectiveness

Some positive results have already been reaped in China's green consumption practices. First, a green consumption policy system is taking shape. Relevant economic policies have been introduced in some key sectors, and departmental rules and standards have been issued regarding environmental labeling and government green procurement (Table 1). Second, the environmental labeling system has promoted enterprises to translate environmental management requirements into real practice through the certification of resource and environmental standards with relevant emission and pollution reduction efforts taking initial effect. Third, the role of the government in guiding green procurement practices has witnessed preliminary results, and environmental and social benefits of green printing are eminent. Fourth, the innovative model of green supply chain in enterprises has stepped into a pilot phase.

China's green consumption activities involve many areas of people's life including food, clothing, housing and transportation. In the food sector, the certification of uncontaminated farm produce and organic products were launched in 2003 and 2005 respectively, and green food certification was implemented in 2012. In addition, infrastructure construction on green transportation has been developed rapidly in recent years. In 2015, the total length of China's urban rail transit lines was 3,069 kilometers. During the "12th Five-Year Plan" period, a total of 1,640 kilometers of rail lines were put into operation, marking an average annual increase of 328 kilometers. By 2020, China's urban rail transit mileage will exceed 6,000 kilometers, and will dominate public transportation in first and second-tier cities across the country. In 2016, the number of shared bicycle users reached 18.86 million with an increase of 7 times over the previous year. Data show that in 2016, China's output of new energy vehicles exceeded 500,000 and its ownership exceeded 1 million units, both accounting for 50% of the global total.

Table 1 Key policies related to green consumption in China

Category	Title	Organization	Year
State-Level Strategies	Report of the 19 th National Congress of CPC	CCCPC	2017
	Report of the 18 th National Congress of CPC	CCCPC	2012
	Report of the 17 th National Congress of CPC	CCCPC	2007
	Several Opinions on Improving Consumption Mechanism and Further Motivating Consumption Potential of Residents	CCCPC, The State Council	2018
	Opinions on Accelerating the Construction of Ecological Civilization	CCCPC, The State Council	2015
	Guiding Opinions on Fully Exerting the Leading Role of New Consumption Model and Accelerating the Cultivation of New Supply and Impetus	The State Council	2015
	Circular Economy Development Strategy and Recent Actions	The State Council	2013

	Guiding Opinions on Promoting Green Consumption	Ten ministries led by NDRC	2016
	Notice on the Practice of Theme Activity of "Beautiful China, We Are Acting"	Five ministries including MEE	2018
	Citizens' Ecological Environmental Code of Conduct (Trial)	Five ministries including MEE	2018
	Opinions on the Implementation of Accelerating GreenLifestyle	MEP	2016
	The "13 th Five-Year" Plan on Ecological Environmental Protection	MEP	2016
	Implementation Plan on 2016 Special Action of Green Manufacturing	MIIT	2016
	Guidance on the Implementation of Green Manufacturing Projects (2016-2020)	MIIT	2016
	The Work Plan on Promoting Green Manufacturing Projects by the Ministry of Environmental Protection	MEP	2016
Relevant Policies in Key Areas	Notice on the Reduction of Consumption Tax on Low-Emission Cars	MOF	2003
	Notice on Encouraging the Development of Energy-saving, Environment-friendly and Low-Emission Vehicles	General Office of the State Council	2005
	Notice on Promoting Wall Materials Innovation and Energy-Efficient Buildings	General Office of the State Council	2005
	Notice on Adjusting and Improving the Consumption Tax Policy by the State Administration of Taxation	State Administration of Taxation	2006
	Notice on EstablishingMandatory Governmental Procurement of Energy-Saving Productsby the General Office of the State Council	General Office of the State Council	2007
	Notice on the Issuance of Financial Subsidies for Efficient Lighting Products (First Batch)	NDRC	2008
	Notice on Launching theProject of"Energy-Saving Products for the Benefit of the People"	MOF and NDRC	2009
	Notice on Adjusting the Financial Subsidy Policy for Promoting Energy-efficient Air Conditioners	MOF and NDRC	2010
	Notice on Launchingtrial operation of SubsidizedPurchase of New Energy Vehicles by Individuals	MOF	2010
	Notice on Further Implementation work on the Demonstration, Promotion and Pilots of Energy-saving and New Energy Vehicles	MOF	2011
	Specificationsfor the Promotion and Implementation of Energy-Efficientand Energy-Saving Flat-Panel TV for the Project of "Energy-Saving Products for the Benefit of the People"	MOF	2012

	Specifications for the Promotion and Implementation of Energy-Efficient and Energy-Saving Household Refrigerator for the Project of "Energy-Saving Products for the Benefit of the People"	MOF	2012
	Specifications for the Promotion and Implementation of Energy-Efficient and Energy-Saving Electric Washing Machine for the Project of "Energy-Saving Products for the Benefit of the People"	MOF	2012
	Provisional Regulations for the Administration of Special Funds on Renewable Energy Development	MOF	2015
	Notice On Increasing the Consumption Tax of Ultra-Luxury Cars	MOF and the State Administration of Taxation	2016
	Announcement on the Management of Levying Consumption Tax on Battery and Coating Materials	The State Administration of Taxation	2016
Relevant Policies of Environmental labeling	Notice on Unfolding Environmental Labeling Work in China	SEPA	1993
	Opinions on Implementing Government Procurement of Environmental Labeled Products	MOF and SEPA	2006
	Announcement on Implementing Green Printing	General Administration of Press and Publication and MEP	2011
	Notice On Implementing Green Printing of Textbooks in Primary and Secondary Schools	General Administration of Press and Publication, Ministry of Education and MEP	2012
	Guidance on Corporate Green Procurement (Trial)	MOC, MEP and MIIT	2014

The certification of energy-saving and environment-friendly product is an important cutting point for China to promote green consumption. Up to now, 145 categories of products made by 2,003 enterprises have been certified as energy-saving products. A total of 29 categories of energy-saving products covering 1,605 companies and 435,000 models are included in the government procurement list. By September of 2016, the number of projects having been awarded green building label across the country totaled 4,515, with a total building area of 523 million m³.

Up to now, a total of 99 product standards have been issued by China Environmental Label Program. More than 400 thousand products of over 4000 enterprises have passed the environmental label certification, with an annual output value of over 150 billion Yuan and the certification being accredited to products of over 400 companies every year. Starting from 2006, environmental labeling products have been included

in the government procurement list. Up to now, 19 batches of government procurement lists of environmental labeling products have been released, covering 66 categories of products from 2,309 companies featuring approximately 328,000 product models. In 2015, the government procurement of environment-friendly products reached 136 billion Yuan, accounting for 81.5% of government's procurement of similar products. According to a study on the environmental performance of 33 types of such environmental labeling products as furniture, printing, water-based coating, adhesive, printing ink and cement in 2014, in terms of pollution reduction, the reduced emission of VOC accounts for 1.1% of the total emission volume of VOC across China, the total phosphorus emission reduction is equivalent to about 1.5 times of Beijing's annual emission, the heavy metal of mercury is reduced by 9.19 tons, 4,606 tons of refractory plastic packaging are reduced, and 8.6 billion Kwh of power and 80.41 million tons of water had been saved.

By the end of 2016, more than half of the printing enterprises had adopted environment-friendly and energy-saving measures. In specific, green printing has been adopted for 1.2 billion volumes of primary and secondary school textbooks, 100 million copies of juvenile books, 40% of the publishing houses and 60% of bills.

Recently, the concept of green supply chain incorporating both green production and green consumption in a unified system is gaining popularity and begins to be piloted in cities of Shenzhen, Tianjin, Shanghai and Dongguan.

On the whole, China's green consumption activities are characterized by two major features. On the one hand, the supply of green consumer products is insufficient. In terms of green food, energy-saving product, green building, public transportation or environmental labeling product, the scale benefit on resource and environment relating to the choices of green consumption is relatively small, far from getting into the mainstream of consumer goods of food, clothing, housing and transportation. On the other hand, people's willingness to choose green consumer goods is growing faster, but with more attention paid to the impact of consumption on their own health with the status of certain consumer behaviors far from being gratifying. According to an analysis by the Ali Research Institute (Figure 7), the proportion of green consumers on the retail platform of Alibaba had jumped from 3.8% in 2011 to 16.2% in 2015 with the age group of 23-28 taking the lead. Moreover, the average premium rate of green commodities is 33% (the ratio of green commodity prices to non-green commodity prices). A public survey of environmental labels in China shows that 90% of the respondents are aware of the "China Environmental Label", and 78.4% of the respondents are willing to pay equal or even higher price for products certified by "China Environmental Label". However, the dilemma of the sorting system for waste and the current situation of excessive consumption and waste alluding to great challenge in the efforts of greening consumer behavior and lifestyle in China.

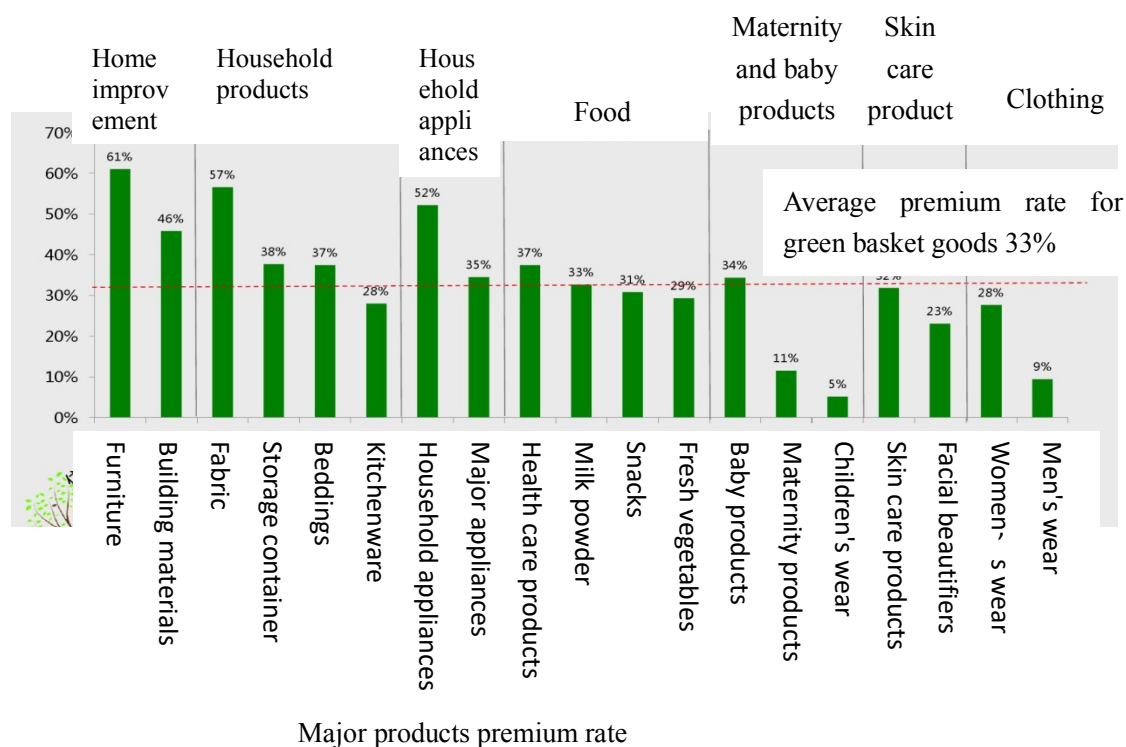


Figure 7 Premium rate for green basket goods (Quoted from Ali Research Institute)

Corresponding to the characteristics of green consumption activities, China's efforts to promote green consumption has not been integrated in government's agenda with no systematic policies nor sufficient incentives or binding forces in place. In specific, the problems are as follows: first, there is a lack of systematic planning and top-level design as relevant documents and regulations of the Party and the State only outline the concepts and principles of green consumption, whereas most of the specific policies are regulatory documents, notices, guiding opinions and specifications issued by government departments featuring incomplete categories, low level of administrative power and effectiveness which are hard to implement. Second, the promotion efforts of green consumption are insufficient, resulting in the inadequacy in its role for leading green consumption. In contrast, many policies are relating to resource and energy conservation with good effects in the field of green products, while the policies relating to environmental protection are few and weak with insufficient economic incentives and limited regulatory effects. Third, governmental missions and responsibilities for green consumption are scattered in different ministries, while the role of environment ministry needs to be strengthened, and the fragmentation of policies and management is quite prominent. Fourth,

relevant work on green consumption and priority work areas of pollution control are not closely integrated, hindering its potentials being fully tapped. Fifth, the endogenous motivation of green consumption of enterprises and the public is insufficient.

III. Conclusions and Strategic Recommendations to the Chinese Government

Presently, China is shifting from high-speed growth to high-quality development, in which consumption serves as the main driving force for economic growth and key momentum for high-quality development. As previously mentioned, due to the underlying factors of expanding scale and changing structure of consumption, China's consumption sector has put mounting pressure on resources and environment, hence creating a series of problems. Judged from China's overall process of green transition, the problem of imbalance and lack of coordination is prominent. Comparatively speaking, the green transition of economy is developing faster and better, while the transition of green society is lagging behind in the entire economic and social system. While within the economic sector, strong measures have been taken in the production area but weak in the consumption area. Therefore, the issue of how to promote green transition in people's lifestyle and consumption pattern needs prompt attention and actions of the Chinese government. To solve the problem, the most urgent task at this stage is to clarify the strategic positioning and role of green transition of consumption in promoting green development and the modernization of the governance system.

1. Attaching great importance to and making full use of the current historically opportunity of consumption upgrading to shape a new green model

At present, China is embraced by the opportunity as well as the window period for promoting green transition of consumption with the following features: consumption is undergoing a comprehensive upgrading from the subsistence-based one to a well-off model; the consumption pattern and willingness of the people are changing significantly; with the economy being increasingly driven by consumption, the new social consumption habits and patterns are under cultivation. As consumption stands out as the ultimate demand, it acts not only the ultimate purpose and motivation of production, but also the direct reflection of people's need for a better life. We should seize the window period to timely guide and expedite resource-saving and environment-friendly consumption patterns and lifestyle covering the whole society and every Chinese people, which is significant to China's overall achievement of high-quality development and ecological civilization.

China currently has a strong political will to promote green transition of green consumption. In May 2016, President Xi Jinping made special deliberation on

promoting green development mode and green lifestyle. The 19th National Congress of the Communist Party of China states that it is necessary to promote green development, accelerate the establishment of legal system and policy orientation for green production and consumption, establish and improve an economic system featuring green and low-carbon cycle, advocate a simple and modest, green and low-carbon lifestyle, oppose extravagance and waste, and launch conservation-oriented governmental departments, green families, green schools, green communities and green travel to foster the spatial pattern, industrial structure, production method and lifestyle highlighting resource conservation and environmental protection. This has provided powerful action guidance to promote green lifestyles and green consumption.

Presently, China's cause on green transition of consumption enjoys an increasingly mature social foundation and a sound practice basis, China's public awareness of environmental protection, participation of public affairs and safeguarding environmental rights has been significantly enhanced, and people's growing expectation for good living quality serves as the social basis for the cultivation of green consumption pattern. At the same time, China has accumulated some useful policies and practices in green consumption and has the access to the best practices of international community as well.

2. Taking green consumption as a new area to meet people's growing need for a better life and as a new growth pole to drive high-quality development

At this stage, China's consumption is undergoing continuous transition and upgrade, reflecting people's growing need for a better life. As the public is showing ever-growing willingness for green consumption with the premium rate of green products constantly climbing in the consumer market and more green behaviors in online consumption, green consumption constitutes a crucial part of people's growing need for a better life. In this connection, focusing on the solution and adapting to the change of major social conflict at the current stage and in the future by vigorously promoting green consumption can provide strong support to meet people's ever-growing need for the pursuit of a better life. At the same time, the green transition and upgrading of consumption can lead the innovation efforts for the supply of green products and services and create new green consumption demand through the supply of green products and services. The benign interactive cycle of green production and consumption, green supply and demand can act as not only a new driving force for boosting economic growth, but also the endogenous condition for the betterment of eco-environmental quality and new growth pole for promoting high-quality development. Since insufficient supply of green products and services stands out as one of the short-boards for the current scenario of green consumption, we should focus our efforts in meeting the green consumption needs of residents at different levels centered on such consumption links as that of food, clothing, housing, traveling and leisure; build a more mature and specifically-classified green consumer

market; step up certification and marketing promotion of green, environment-friendly and energy-saving products and technologies; enhance the social coverage of green products and services; vigorously improve the effective supply of green products and services in conformity with the social trend of green consumption upgrading so as to provide support and impetus to meet people's growing need for a better life and to promote high-quality social development.

3. Taking green consumption as a key component and a means to drive and push green transition process in the entire economic and social system and the structural reform on the supply side

Viewed from the dialectical relationship between consumption and production, consumption and resource & environment, consumption plays an essential role in economic development and has an important impact on the key ratios relating to national economy like the proportion between production and consumption. If the guidance in demand and supply-side structural reform can mutually promote each other, it will trigger economic transition and upgrading and promote high-quality development as well as the building of a modern economic system.

China is now in the final stage of building a well-off society in an all-round way, which also features a critical period for economic green transition and overall improvement of environmental quality. Under this context, the vigorous promotion of green consumption would be substantially significant to the transition of production pattern and people's lifestyle as well as environmental quality betterment.

First of all, we should regard green consumption as the basic content of economic green transition and an important driving force for promoting supply-side structural reform. The green transition of economy comprises the greening of both production and consumption with the latter playing a leading and reversing role towards the former. Changes in consumption scale, pattern, structure, quality, and preference guided by green concepts and measures will inevitably be transmitted to the production field, affecting the allocation of factor resources, improvement of production pattern as well as structural adjustment and quality improvement of products, thus pushing supply-side structural reform.

Second, we should treat green consumption as a key component and a means for social green transition. The core content of green lifestyle fostered by green consumption serves as an effective way to push real actions among the general public. As a concept of extensive connotation, lifestyle includes people's material life such as clothing, food, housing, transportation, labor, recreation and entertainment, social interaction as well as spiritual life such as people's core value, morality and related aspects, wherein consumption constitutes an important part of lifestyle. Green consumption activities can convey green concepts and requirements into all aspects of public life, guide and motivate the public to actively practice green concepts and

requirements so as to cultivate green life for all and improve governance system of social green transition.

4. Taking green consumption as a key instrument to promote eco-civilization construction and the modernization of environmental governance system

Green consumption is an integral part of green development and ecological civilization construction. There is an opinion upholding that consumption can have the transmission effect from upstream to downstream. Reducing consumption can cut resources and energy input at exponential rate and curb pollution discharge that would otherwise be tens of times the volume. Consumption has an elastic effect, and the increase of consumption tends to offset the effect of increasing production efficiency, resource conservation and pollution reduction. To this end, reasonable resource-saving and environment-friendly ways of consumption will play an important role in reducing pollution discharge, improving environmental quality and even the overall cause of ecological civilization construction.

In the field of modernizing eco-environmental governance system, China's current environmental policies are mostly concentrated in the production field focusing mainly on restraining and supervision methods targeting government and enterprises. The setup of the institutional mechanism highlighting the leading role of green consumption model can be very beneficial. First, it can expand eco-environmental governance system from the sector of production to that of consumption, thus widening the covering field of eco-environment governance and adding new incentives and voluntary leadership in this area, which are conducive to establish an institutional system featuring equal emphasis on both incentives and constraints. Second, consumption is a basic behavior choice made by the public, and green consumption can promote the public to truly enter the environmental governance process. Consequently, their green consumption behavior and choice of green products can reversely force enterprises to improve environmental performance and increase green products and green production supply, which is a practical way to involve spontaneous public participation in eco-environment protection. Third, the green transition on the consumption end can be transmitted to the production end through the practice of green supply chain, in which the “green-advanced” enterprises in the industrial chain can help to manage the “green-backward” enterprises so as to blaze new ways of eco-environmental governance and improve the related system.

5. The Chinese government should put green consumptions issue high on its policy agenda

After accurately grasping the strategic positioning and role of green consumption in promoting green development, meeting growing need of the people, and improving eco-environmental governance system, the Chinese government must incorporate green consumption promotion work into its daily routine. Only by doing this can its

strong political will be converted into a systematic strategic plan, specific and effective policy measures and social practice of the general public for comprehensive promotion of green transition of consumption based on its scattered theory and practice. **(The specific and feasible policy recommendations will be submitted to the 2019 AGM of CCICED.)**

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