



China Council for International Cooperation on Environment and Development

**Progress on Environment and Development Policies in China and
Impact of CCICED's Policy Recommendations
(2018-2022)**

About the report

As a high-level policy advisory body approved by the Chinese government, the China Council for International Cooperation on Environment and Development (CCICED) is mainly tasked of studying and proposing policy recommendations on major issues of environment and development. As the highest form of policy consultation, CCICED's Annual General Meeting (AGM) invites Chinese and international members, invited advisors and experts from home and abroad to have policy discussions on major environmental and development issues based on CCICED's SPS reports, focusing on urgent and long-term domestic issues while responding to major concerns of the international community and building consensus on ideas. On this basis, annual policy recommendations will be formed and submitted to the State Council and relevant departments of the central government.

Since 2008, CCICED Chief Advisors' Expert Support Group has been commissioned by the CCICED Secretariat to draft the report on "Progress on Environment and Development Policies in China and Impact of CCICED's Policy Recommendations". This report reviews China's major environment and development policies introduced in the previous year and the related progress, as well as the inclusion of the main policy recommendations of CCICED in recent years, especially in the previous year, in China's relevant legislation and policies. This report itself is not, however, an assessment of the impact of CCICED. By reviewing and comparing China's policies and practices and CCICED's policy recommendations, this report is prepared to show the relevance of CCICED' SPSs and policy recommendations to the policy progress. This is the 15th report presented by CCICED Chief Advisors' Expert Support Group.

This report reviews the progress of China's environment and development policies over the past five years since 2018. In the same writing style as previous ones, the report is divided into several parts. Each part sums up the policy recommendations of CCICED and the corresponding measures taken at home. A comparison of policy recommendations with policy progress is made at the end of the report for reference.

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The 18th CPC National Congress proposed to “give high priority to making ecological progress and incorporate it into all aspects and the whole process of advancing economic, political, cultural and social progress, work hard to build a beautiful country, and achieve lasting and sustainable development of the Chinese nation.” Since then, the Five-sphere Integrated Plan for building socialism with Chinese characteristics in the new era has kicked off. The 19th CPC National Congress put forward an institutional framework for promoting ecological progress with the overarching goal of building a beautiful China, and made strategic arrangements for speeding up reform of the system for developing an ecological civilization, promoting green development and building a beautiful China. It also called for establishing the understanding that lucid waters and lush mountains are invaluable assets as the guiding principle, pursuing the vision of innovative, coordinated, green, and open development that is for everyone, adopting a holistic approach to conserving mountains, rivers, forests, farmlands, lakes and grasslands, and putting in place the systems and mechanisms for national environmental governance and natural resource management.

Since the 19th CPC National Congress, China has strengthened overall planning, organization and leadership for building an ecological civilization by focusing on “improving the system of natural resource property rights and the system of natural resource utilization control, delimiting the red line for ecological protection, implementing sound compensation systems for use of resources and for damage to the ecological environment, and reforming the ecological protection management system”. Moreover, China has established regulatory agencies to manage state-owned natural resource assets and monitor natural ecosystems, improved environmental management systems. These agencies perform, in a unified way, the duties of the owner of public-owned natural resource assets, the duties of regulating the use of all territorial space and protecting and restoring ecosystems, and the duties of monitoring the discharge of all pollutants in urban and rural areas and conducting administrative law enforcement.

Over the past five years, the Five-sphere Integrated Plan has been fully implemented, a modern system for promoting ecological progress has been basically formed, President Xi Jinping’s Thought on Ecological Civilization has been enriched, deepened and sublimated, and the Beautiful China Initiative and the concept that lucid waters and lush mountains are invaluable assets have taken a deeper root in the hearts of the people. A sweeping victory has been achieved in the battle against pollution, resulting in a historic turnaround with wide-ranging implications in the efforts to promote environmental protection and significantly increasing the greenness and quality of comprehensively building a moderately well-off society.

Since President Xi Jinping announced the international commitment of having CO₂ emissions peak before 2030 and achieving carbon neutrality before 2060 in September 2020, China has entered a critical period of ecological conservation, in which it will create synergies between pollution abatement and carbon reduction, and promote green transition in all areas of economic and social development, with carbon reduction as the key strategic direction, to bring about quantitative improvements in the quality of ecosystems and the environment. At this major historical turning point for sustainable development in China, CCICED has given full play to its role as a platform for international cooperation on environment and

development, and made a large number of policy recommendations for promoting ecological progress by pooling the ideas of top-notch experts at home and abroad. The policy recommendations have been either consulted or adopted by the Chinese government, giving a strong impetus to China's sustainable development.

I. Environmental and Development Planning

a. Building systems for an ecological civilization and building a beautiful China

The year 2018 is of particular importance, as it is the first year of implementing the task of "Speeding up Reform of the System for Developing an Ecological Civilization, and Building a Beautiful China" as proposed at the 19th CPC National Congress, the first year of exploring the modernization of China's governance system and the first year following the reform of Party and government institutions. In the history of China's eco-environmental protection, each major change has injected new vitality into the environmental protection cause, which moves forward amidst further reforms.

The National Ecological and Environmental Protection Conference was held on May 18-19, 2018 in Beijing. This conference was unprecedentedly high-profile since it was attended by General Secretary Xi Jinping and other NPC Standing Committee members in addition to Li Zhanshu, chairman of the Standing Committee of the 13th National People's Congress (NPC). In his important speech at the conference, Chinese President Xi Jinping stated the six principles that should be upheld in the efforts to build an ecological civilization in the new era, including that man and nature live in harmony, that our natural environment is precious, that there is no welfare more universally beneficial than a sound natural environment, that our mountains, rivers, forests, farmlands, lakes and grasslands together form a biotic community, that the strictest regulations and laws should be applied in protecting the environment and that joint efforts should be made in building a global ecological civilization. By moving faster to building systems for an ecological civilization, we will see that by 2035, fundamental improvements are made in environmental quality, that the goals of the Beautiful China Initiative are essentially met. By the middle of the century, we will complete all-round improvements in the material, political, intellectual, social and ecological domains. At that time, environmentally friendly ways of living and developing will be fully formed, humans and nature will coexist in harmony, modernization of our national governance system and capacity in the environmental field will be fully realized, and our efforts to build a beautiful China will be successful.

Since 2018, China has won the battle against pollution, preliminarily addressed the weaknesses in ecology and environment, and basically built the systems for an ecological civilization. Since the beginning of the 14th Five-Year Plan (FYP) period, China has been advancing the battle against pollution, thoroughly implementing central environmental protection inspections and exploring how to put into practice the concept that "lucid waters and lush mountains are invaluable assets", with environmental quality significantly improved and green development becoming the basic feature of high-quality development in the new era.

b. All-round green transition driven by the 13th FYP

During the 13th FYP period, China was committed to the building of an ecological civilization by focusing on the goal of “winning the battle against pollution” in line with the Five-sphere Integrated Plan to promote coordinated progress in the economic, political, social, cultural and ecological fields. This had led to marked changes in China’s energy, industrial, transportation and land use structures, overfulfilment of the nine binding environmental targets as set forth in the 13th FYP, and a new landscape of promoting high-quality economic development through ecological and environmental protection. Achievements have been made in the following five spheres:

1. Fruitful results have been achieved in ecological and environmental legislation. Since the 13th FYP period, 13 laws, including the Environmental Protection Law and the Yangtze River Protection Law, and 17 administrative regulations, including the *Regulations on the Administration of Pollutant Discharge Permits* and the *Regulations on the Administration of Environmental Protection in Construction Projects*, have been established or revised. There are 15 environmental laws enforced mainly by the Ministry of Ecology and Environment (MEE), taking up nearly 1/20 of all the laws currently in force, and 84 regulations established by the MEE. As of November 2021, there were 32 environmental administrative regulations. In addition, there are more than 40 intra-Party disciplines and rules closely relate to ecology and environment. A system of ecological and environmental laws and regulations has basically taken shape, providing a legal basis for nearly all areas of ecology and environment.

2. Major progress has been made in the construction of a system of ecological and environmental standards. During the 13th FYP period, 673 national ecological and environmental standards were revised and released. In recent years, MEE has amended and enacted the *Measures for the Administration of Eco-environmental Standards* and *Rules for the Formulation and Revision of National Eco-environmental Standards*, further improving the top-level design of the ecological and environmental standards management system and setting the direction of future work on the formulation and implementation of ecological and environmental standards.

3. The reform of the system of compensation for ecological and environmental damage has been in full swing. Case practice has made positive progress. As at the end of November 2021, over 7,600 cases of ecological and environmental compensation had been handled nationwide, which involved more than RMB 9 billion of compensation, pushing forward the management and remediation of damaged environment. A system of compensation for ecological and environmental damage has been incorporated into 19 local environmental protection regulations at the provincial level.

4. Intra-Party regulations and normative documents have played a key leading role. A number of intra-Party environmental regulations, such as provisions on central environmental protection inspections and the measures for holding Party and government leaders and cadres accountable for ecological and environmental damage, have been formulated or revised successively, which have not only promoted the fulfillment of the political duties for ecological progress and environmental protection, but also effectively facilitated the process of rule of law in environmental protection.

5. Rules and regulations have been put in place for law-based pollution control. A series of documents have issued for law-based governance in all dimensions, such as a law-based country, government and society, and the awareness about the rule of law. MEE has issued the *Guiding Opinions on Deepening Eco-environmental Administration and Continuously Strengthening Pollution Control in accordance with the Law*, which is a comprehensive document for promoting law-abiding pollution control in the ecological and environmental protection system.

c. Improvement of environmental governance propelled by green urbanization

Urban and rural development is an important vehicle for driving green development and building a beautiful China. The 13th FYP period was vital to promoting the implementation of green urbanization and fully achieving the national new urbanization targets for 2020. Early in 2015, the CPC Central Committee and the State Council released the *Guideline on Accelerating the Building of an Ecological Civilization*, which proposes to energetically advance green urbanization, protect natural landscapes and speed up the building of beautiful countryside.

In terms of laws and regulations, a legal framework for green urbanization has been established. This covers laws and regulations such as the *Energy Conservation Law of the People's Republic of China* (Amended in 2018), the *Law of the People's Republic of China on the Prevention and Control of Atmospheric Pollution* (Amended in 2018), the *Regulation on Energy Conservation in Civil Buildings*, and the *Regulation on Energy Conservation in Public Institutions*; and comprehensive policies such as the *Guideline of the General Office of the State Council on Scientific Greening* (GBF [2021] No.19), the *Master Plan for Creating Green Lifestyles* (FGHZ [2019] No.1696) and the *14th Five-Year Plan for the Development of a Circular Economy* (FGHZ [2021] No.969).

In terms of assessment mechanisms, an accounting system for green urbanization has been established. The *Guideline of the CPC Central Committee and the State Council on Supporting Shenzhen in Building a Pilot Demonstration Area of Socialism with Chinese Characteristics*, which was issued in August 2019, explicitly proposes to “explore the implementation of an accounting system for the value of ecosystem services”. Later, the *Guideline of the CPC Central Committee and the State Council on Supporting Zhejiang's High-quality Development and Construction of a Demonstration Zone for Common Prosperity* promulgated in June 2021 proposes to “explore how to improve the gross ecosystem product (GEP) accounting and application system with Zhejiang's characteristics”. The *Guideline of the State Council on Supporting Guizhou in Blazing New Trails in the Development of the Western Region in the New Era* introduced in January 2022 proposes to explore the inclusion of GEP in relevant performance appraisal systems and put into effect the assessment of both economic development and GEP. So far, Zhejiang and Guizhou have both issued their own technical specifications for GEP accounting. Provinces (autonomous regions and municipalities directly under the central government) such as Qinghai, Hainan and Inner Mongolia, 23 cities (prefectures and leagues) including Shenzhen and Lishui, and more than 100 counties (county-level cities and districts) including Arxan and Chishui, have conducted pilot programs for GEP accounting. MEE has enacted several GEP accounting standards,

including the *Ecosystem Assessment: Technical Specification for Accounting Gross Ecosystem Product (GEP)*, thereby laying a foundation for the implementation of GEP accounting.

In practice, local governments have pushed for green urbanization with local characteristics in light of their respective development realities. China-Singapore Tianjin Eco-City emphasized job-housing balance and mixed land use, established an economical, efficient and circular energy system, and paid attention to waste collection and recycling. Xiong'an New Area in Hebei Province created a national land and space pattern that gives priority to ecological protection within 1,770 square kilometers, with blue and green spaces accounting for no less than 70%, and formed urban forms that conform to nature. Chongqing energetically upgraded urban and rural infrastructure, built the Yulu Avenue, improved the environment around the native Yueyin Lake, and advanced regional iconic eco-housing projects including Luneng Star City by upholding the principle of “weighing protection over development”.

Moreover, the General Office of the State Council issued the *Work Plan for Pilot Construction of “Zero-Waste Cities* in February 2018 and later the MEE published a list of 11 pilot “zero-waste” cities on April 30, 2019. In June 2021, 15 ministries including the Ministry of Housing and Urban-Rural Development (MOHURD) issued the *Opinions on Strengthening Green and Low-Carbon Development in Counties*, so as to peak carbon dioxide emissions and achieve carbon neutrality. On October 24, 2021, the State Council issued the Action Plan for Carbon Dioxide Peaking Before 2030, which requires peaking carbon emissions in urban and rural development, promoting green and low-carbon development of urban and rural areas, and implementing green and low-carbon development requirements. In February 2022, the State Council approved the *Guiding Opinions on Accelerating the Construction of Environmental Infrastructure in Cities and Towns*, which proposes to build an environmental infrastructure system that integrates waste disposal facilities and monitoring and supervision capabilities by 2025 and establish a modern environmental infrastructure system that is systematic and complete, efficient and pragmatic, intelligent and green, safe and reliable by 2030.

On the whole, eastern coastal provinces such as Guangdong, Jiangsu, Shandong and Zhejiang have a higher level of green urbanization, and are all at the forefront across the country. Central provinces like Henan, Hubei and Hunan are in the middle; while western remote provinces including Tibet and Gansu generally lie at the bottom and lag far behind in terms of green urbanization.

d. High-quality development fueled by major river basin development plans

The Yellow River and the Yangtze River, two “mother rivers” of the Chinese nation, are the cradles of Chinese civilization. For historical reasons, the two river basins have suffered from problems such as ecological damage and environmental pollution to varying degrees, seriously containing the sustainable development of the two regions. The Yellow River basin sees outstanding problems with water ecology and water resources exploitation and utilization, with the shrinkage of wetlands in the source region yet to be fundamentally curbed. The Yangtze River basin is faced with numerous problems including water loss and soil erosion, lake eutrophication and soil salinization, depletion of fish resources, and severe water pollution in some areas.

Since the 18th CPC National Congress, issues regarding the green development and long-term healthy and sustainable development of the two river basins have been put on the national agenda. The CPC Central Committee has put forward in succession major national strategies for regional development in the new era, including “development of the Yangtze River Economic Belt (YREB)” and “ecological protection and high-quality development of the Yellow River basin”. Over the past five years, relevant provinces, autonomous regions and municipalities within the two river basins have actively practiced the ecological civilization concept that “lucid waters and lush mountains are invaluable assets”, further implemented the new development philosophy and advanced ecological protection and high-quality development of the river basins, with significant progress made.

1. High-quality development of the Yellow River basin

On September 18, 2019, Chinese President Xi Jinping chaired and addressed a symposium on the ecological protection and high-quality development of the Yellow River basin in Zhengzhou. In his speech, Xi emphasized that we should adhere to the concept that lucid waters and lush mountains are invaluable assets, give priority to ecological protection and green development, take into account the conditions of the upper, middle and lower reaches, the main stream and tributaries, and both banks of the Yellow River, and strengthen coordinated protection and harnessing of the river to ensure the long-term stability of the Yellow River, promote high-quality development of the river basin and turn the river into a happy river that benefits the people. On January 3, 2020, Xi stressed at the sixth meeting of the Central Committee for Financial and Economic Affairs that the Yellow River basin should make great efforts to protect and harness the river in a coordinated manner, and take the path of ecological protection and high-quality development. In August 2020, the Political Bureau of the CPC Central Committee deliberated the *Outline of the Plan for the Ecological Protection and High-Quality Development of the Yellow River Basin*, and required improving the ecological environment in the Yellow River basin by adjusting measures to local conditions and conforming to the laws of nature, and striving to make significant progress during the 14th FYP period.

On February 1, 2021, MEE issued the *Key Tasks for Promoting Ecological and Environmental Protection in the Yellow River Basin in 2020*. Later, 18 provinces (municipalities) released and put into force their respective “three lines and one list”. In August 2021, the National Development and Reform Commission (NDRC), together with the MOHURD, issued the *Implementation Plan for Municipal Sewage and Garbage Treatment in the Yellow River Basin during the 14th Five-Year Plan Period* to guide the orderly implementation of urban sewage and waste treatment, promote high-quality construction and high-level operation and maintenance of facilities, and facilitate ecological protection in the basin.

Provinces and autonomous regions in the Yellow River basin have taken corresponding actions. On November 29, 2019, Sichuan specified 17 key tasks with respect to environmental protection and ecological restoration of the Yellow River. In April 2020, Shaanxi issued and enacted the *Key Work Points for Promoting Ecological Protection and High-quality Development of the Yellow River Basin in 2020*, which specifies 22 key tasks. In January 2022,

Shanxi laid down a list of key tasks for ecological and environmental protection for 2022. In March 2022, Gansu issued the *Plan for Ecological Protection and High-quality Development of the Yellow River Basin* and other related documents. At this point, the dynamics of ecological protection and high-quality development in the upper, middle and lower reaches of the Yellow River basin have taken shape. Shandong also prepared a provincial plan for ecological protection and high-quality development of the Yellow River basin and formulated policies and measures for the protection and harnessing of the Yellow River, supporting high-quality development of the Yellow River basin and preserving, inheriting and carrying forward the intangible cultural heritage within the basin.

On June 5, 2020, the Supreme People's Court promulgated a guideline on providing judicial services and guarantees for ecological protection and high-quality development of the Yellow River basin. The guideline explicitly proposes to punish environmental pollution and other crimes by adhering to the strictest rule of law.

2. High-quality development of the Yangtze River basin

In April 2018, President Xi Jinping stressed at a symposium on further promoting the development of the YREB that “The key to promoting the development of the YREB in new circumstances is to correctly understand the relationship between comprehensive advance and breakthroughs at key points, between environmental protection and economic development, between overall planning and unremitting efforts, between eliminating old drivers of growth and fostering new ones, and between self-development and coordinated development”.

In order to implement General Secretary Xi Jinping's important instructions of “stepping up conservation of the Yangtze River and stopping its overdevelopment”, the CPC Central Committee and the State Council issued the *Outline of the Plan for the Integrated Regional Development of the Yangtze River Delta* in December 2019. In July 2020, the General Office of the State Council distributed the *Notice on Effectively Carrying out the Fishing Ban in the Yangtze River Basin*. In response to this, the Ministry of Agriculture and Rural Affairs (MARA), the Ministry of Public Security (MPS) and the State Administration for Market Regulation (SAMR) took the lead in formulating the Implementation Plan for Further Strengthening the Resettlement of Fishermen in Key Areas of the Yangtze River where Fishing is Prohibited and Fishermen are Retired, the Action Plan for a Special Campaign on Combating Illegal Fishing in the Yangtze River and the Special Action Plan for Cracking down on Market Sales of Illegal Catches in the Yangtze River respectively. The Yangtze River Protection Law, which was put into force on March 1, 2021, is China's first legislation on a specific river basin. In 2021, MEE deliberated and adopted in principle the *Action Plan for Deepening the Protection and Restoration of the Yangtze River*, the *Action Plan for the Ecological Conservation and Governance in the Yellow River*, the *14th Five-Year Action Plan for the Control of Urban Black and Odorous Water Bodies and Environmental Protection*, the *Action Plan for the Comprehensive Improvement of Key Marine Areas*, and the *National Plan on Marine Dumping Areas (2021-2025)*, and put into effect the *Law of the People's Republic of China on the Protection of the Yangtze River*.

After five years of green development, the YREB is becoming the main force of high-quality economic development in China and contributing a growing share to China's GDP. The

YREB has been integrated into initiatives such as the Belt and Road Initiative (BRI), the Western Region Development and the New Western Land-Sea Corridor, and provinces and cities along the Yangtze River have continued to advance green transition of project financing and industrial orientations, and spare no efforts to build new economic growth poles. The YREB has undergone major changes in three areas: first, fundamental changes in the ideas and concepts of cadres and the masses; second, significant changes in the water quality of the Yangtze River; third, marked changes in the ecological environment. The improvement of the Yangtze River shoreline has been promoted on all fronts, with green ecological corridors basically formed on both sides of the river.

e. CCICED policy recommendations

Over the past five years, CCICED has put forward a whole raft of constructive policy recommendations such as biodiversity conservation, improvement of living conditions, and pollution control, mainly covering the following three areas:

1. Ecological progress

With ongoing concerns about the building of an ecological civilization, CCICED proposed in 2020 once again that in terms of development concepts, China should unswervingly promote ecological conservation, implement the concept that “lucid waters and lush mountains are invaluable assets, promote a comprehensive green transition of the economy and society, and realize people-centered green and high-quality development. In terms of policy objectives, China should maintain the strategic focus on making ecological progress and align the green development targets in the 14th FYP with the United Nations 2030 Agenda for Sustainable Development.

2. Green urbanization

With respect to the greening of cities and towns, CCICED proposed in 2018 to change traditional mindsets and fully integrate green standards into urban and rural planning; advance energy conservation, emission reduction and industrial upgrading; and come up with innovative solutions in light of local conditions. It provided systematic policy recommendations in 2019, including that the 14th FYP should contain a strategy for reshaping China’s urbanization based on ecological conservation, seek endogenous growth and turn green urbanization into an important driver of high-quality economic development in China; that a new understanding of the urban-rural relationship should be developed; that under the new development philosophy, we should go beyond the traditional knowledge of “agriculture, rural areas and farmers” and expand new green supplies in rural areas by making full use of the Internet and other new technologies as well as unique natural, environmental, cultural and other advantages of the countryside.

The 2020 and 2021 CCICED Policy Recommendations proposed to push ahead with green transition of cities with the goal of green prosperity, low carbon and intensiveness, recycling, fairness and inclusiveness, safety and health. Besides, China should step up efforts to build green and low-carbon infrastructure in cities, perfect county-level green development strategies, combine efficiently using land resources with the transformation and upgrading into modern green agriculture, industrial layout adjustment, farmers’ employment and

continuous income increases, and stick to the “one-pole, multi-wing” integrated rural development model which is dominated by green development and supported by diversified development forms.

3. Green development of major river basins

With respect to the green development of the two river basins, CCICED put forth policy recommendations for a Yangtze River protection law early in 2005. In the new stage, CCICED put forward the following recommendations in 2018: (1) strategically, China should give priority to specific areas having a significant impact on the health of the entire river basins, especially solid waste pollution, in the environmental governance and ecological restoration. (2) China should accelerate the legislation on Yangtze River protection, which should reflect systematic, differentiated and targeted protection of the river basin. (3) China should guide the participation of multiple stakeholders, scientifically identify and address the negative impacts of environmental pollution and ecological damage on the production and life of community residents. (4) Both mandatory and voluntary mechanisms should be established to ensure active engagement of commercial capital in ecological and environmental protection. (5) Existing government projects should be expanded to open up financial channels for commercial capital investment, for example, setting up an ecological fund for the Yangtze River.

In the 2019 Policy Recommendations, CCICED proposed from a long-term perspective to make the YREB a strategic priority in the 14th FYP and build it into a model and benchmark for green development of river basins. Relevant policy recommendations include quickening the formulation of an ecological and environmental protection strategy for the YREB, accelerating the establishment of a basin-wide ecological compensation mechanism involving a vertical compensation option and multiple horizontal compensation options, and strengthening the hard constraints on ecological protection in the YREB, among others.

II. Environmental Governance and Rule of Law

a. Exploring the further reform and modernization of national environmental governance system

Xi’s Report to the 19th CPC National Congress sets forth the strategic arrangements such as speeding up reform of the system for developing an ecological civilization, promoting green development and building a beautiful China. The report also states that China will strengthen overall planning, organization and leadership for building an ecological civilization, establish regulatory agencies to manage state-owned natural resource assets and monitor natural ecosystems, and improve environmental management systems. Over the past five years, the country has provided safeguards for the building of an ecological civilization by deepening the reform of the management systems for natural resources and the ecological environment, implementing the strictest ecological and environmental protection system and establishing an environmental governance system in which government takes the lead, enterprises assume main responsibility and social organizations and the public also participate.

The first session of the 13th NPC approved the *Institutional Reform Plan of the State Council* to set up the MEE and the Ministry of Natural Resources (MNR). MEE is mainly responsible

for establishing and improving the fundamental systems with respect to the ecological environment, coordinating, supervising and regulating major ecological and environmental issues, and supervising and administering to ensure the attainment of national emission reduction targets. It also supervises the work of nuclear and radiation safety, takes the leading role in the regulation of ecological environment access and in eco-environment monitoring, initiates the Central Government's supervision over the protection of the ecological environment, guides and coordinates educational campaigns over eco-environmental protection. MNR is mainly responsible for coordinating the conservation of mountains, rivers, forests, farmlands, lakes and grasslands, unifying the power over national land and space utilization and ecological protection and restoration, and solving problems such as omission committed by the owners of natural resources and overlapping spatial planning.

In November 2018, the *Guideline on Comprehensively Strengthening Ecological and Environmental Protection and Resolutely Putting up the Uphill Battles against Pollution* revealed the connotations of the environmental governance system and key directions of reform, and proposed a framework consisting of five systems such as the environmental supervision system, the economic policy system, the rule of law system, the capacity assurance system and the social action system. This provides an important institutional guarantee for achieving milestones in the battle against pollution.

In November 2019, the *Decision of the CPC Central Committee on Some Major Issues Concerning Upholding and Improving Socialism with Chinese Characteristics and Modernizing National Governance System and Capacity* defined the important position of the system of institutions for ecological progress in China's national governance system, making the environmental governance system a key part of the national governance system.

On March 3, 2020, the *Guiding Opinions on Building a Modern Environmental Governance System* set the target of establishing a sound system of leadership responsibility, corporate responsibility, universal action, regulation, market, credit and laws, regulations and policies for environmental governance by 2025, and forming an environmental governance system featuring clear orientation, scientific decision-making, efficient execution, effective incentives, multi-party engagement and benign interactions.

In September 2021, the General Office of the State Council issued the *Opinions on Deepening the Reform of the Compensation System for Ecological Protection*, which aims to improve the classified compensation system that targets ecological elements, determine the level of compensation according to the economic and social development of the ecological protection areas and the performance in ecological protection, provide appropriate compensation for the protection costs of diverse ecological elements, and implement a comprehensive compensation system that takes into account ecological space functions.

The *Opinions of the CPC Central Committee and the State Council on the Complete and Accurate Implementation of the New Development Concept to Peak Carbon Emissions and Achieve Carbon Neutrality* was issued on September 22, 2021. The guideline states that to achieve carbon dioxide peaking and carbon neutrality, we should place strict control over fossil energy consumption, accelerate coal reduction, actively develop non-fossil fuels, turn to renewable energy alternatives and deepen the reform of energy systems and mechanisms in the principle

of “overall planning by the central government, conservation first, dual-wheel drive, coordination of domestic and international energy resources, and risk prevention”.

The *Opinions of the CPC Central Committee and the State Council on Deepening Pollution Prevention and Control* issued on November 2, 2021 lays down the general requirements, main objectives, major tasks and safeguard measures for furthering the battle against pollution. According to the guideline, the structural, fundamental and tendency pressures on ecological and environmental protection in China have not yet been eased, and pollution problems are still acute in key regions and industries, indicating a long way away from achieving carbon dioxide peaking and carbon neutrality and from building an ecological civilization.

The *Measures for Special Inspections on Ecological and Environmental Protection* was brought into effect on May 10, 2021. It regulates and guides the special inspections by inspection teams by defining the targets and priorities of inspection, standardizing the procedures and authority of inspection, tightening up the disciplines and requirements for inspection and further regulating the special inspections on ecological and environmental protection, thus facilitating the resolution of outstanding environmental issues and the fulfillment of environmental responsibilities.

Environmental information disclosure is a social responsibility of enterprises and an important means of eliminating market failures caused by information asymmetry. On May 24, 2021, the General Office of the MEE issued the *Reform Plan for the Law-based Environmental Information Disclosure System*, which sets forth the general idea and key tasks of the reform and provides the top-level design for a law-based environmental information disclosure system, which focuses on enterprises’ responsibility for ecological and environmental protection. The aim is to establish a law-based environmental information disclosure system that features corporate self-regulation, effective management, strict supervision and strong support.

b. Judicial support for environmental governance

The enforcement of a sound legal system entails a powerful judicial system, and standardized and strict judicial action is an integral part of environmental governance and an important tool that ensures the effective implementation of systems and regulations. The *Catalogue for Guiding Integrated Administrative Law Enforcement Matters for Eco-environmental Protection*, which was issued on March 9, 2020, provides for the requirement of unifying law enforcement for ecological and environmental protection, specifies the comprehensive administrative law enforcement functions in this regard, and lays down the administrative penalties and administrative mandatory items for ecological and environmental protection in accordance with relevant laws and administrative regulations. On January 7, 2021, MEE promulgated the *Guiding Opinions on Optimizing the Way of Law Enforcement for Eco-environmental Protection to Improve the Effectiveness of Law Enforcement*, which points out the general direction and path of the current work for environmental law enforcement teams nationwide, systematically sums up the law enforcement systems and mechanism, and provides the clear direction and specific systems for the enforcement work across the country.

In 2021, MEE organized the review of typical cases of environmental violations and crimes

with respect to hazardous waste across provincial administrative regions, including the case of illegal collection of waste motor oil and suspected illegal disposal of hazardous waste by a waste oil recovery company in Ningbo, Zhejiang Province, the case of illegal dumping of waste mineral oil across administrative regions in Linyi, Shandong Province, and the case of illegal collection and transfer of waste mineral oil and disturbance of social administration order in Changde, Hunan Province. In these cases, some offenders illegally dumped, landfilled and disposed of hazardous waste across provinces, some sold simply disposed hazardous waste as quality products or mixed the same with products, and some related to the criminal gangs that had been long engaged in the dark industrial chain of illegal disposal of hazardous waste to pollute the environment. Local environmental authorities worked closely to ensure the smooth operation of the joint law enforcement mechanism for trans-provincial crimes, collaborated with public security and procuratorial organs to form synergies, and organized inter-provincial investigations based on the clues from the public and grassroots grid service managers, effectively deterring environmental violations and criminal acts related to hazardous waste.

On April 27, 2020, MEE announced the first case where illegal use of ozone depleting substances (ODS) constituted the crime of environmental pollution and was subject to criminal punishment in China. The person held liable was sentenced to 10 months' imprisonment by the local court for polluting the environment. On October 29, 2021, MEE launched a special ODS-related enforcement campaign, with each of the four illegal producers fined RMB 1 million.

c. Introducing pollutant discharge permits

On January 24, 2021, the State Council unveiled the *Regulations on the Administration of Pollutant Discharge Permits* (hereinafter referred to as the “*Regulation*”). As the core system that administers stationary pollution sources, the Regulation concerns the building of a system of institutions for ecological progress and an environmental governance system, and lays a legal basis for improving the environmental quality and the stationary pollution source management system.

The *Regulation* specifies that pollutant discharging units are primarily responsible for controlling pollutant discharge. Pollutant discharge permits are legal instruments whereby pollutant discharging units undertake the obligations and responsibilities for pollutant discharge control, which are legally binding and mandatory and return the responsibilities for controlling pollutant discharge to enterprises. The *Regulation* stipulates the scope of responsibilities of pollutant discharging units for controlling pollutant discharge, information recorded on a pollutant discharge permit, requirements for outlet setting and standardized management of outlets, as well as specific requirements for monitoring, environmental management ledger records, executive reports on pollutant discharge permits, among others.

The *Regulation* strengthens the responsibilities of competent environmental authorities for ongoing and ex-post oversight, and requires competent environmental authorities to establish a nationally unified information platform for the management of pollutant discharge permits, thus creating conditions for routine law enforcement and supervision on pollutant discharging units for the purpose of optimizing their environmental protection performance levels. It also

provides a nationally unified information platform for the disclosure of discharge information and regulatory information by introducing social supervision, establishes a mechanism for sharing information on environmental compliance and integrity of enterprises, and enhances the credit constraints of pollutant discharge permits.

d. Continuing to improve environmental laws and placing climate legislation on the agenda

Environmental laws are an important and essential way of maintaining the environmental governance order, and regulate the environmental protection behaviors of the public and enterprises. Sound environmental laws can lead to more scientific, normative and well-grounded environmental governance work, with clearly defined responsibilities of polluters to promote the improvement of the environmental governance system. Below lists some environmental laws issued or revised between 2018 and 2022, which provide important support for the administration and management of environmental protection and escort the reform and development of environmental protection in China.

The *Nuclear Safety Law of the People's Republic of China* (the “Nuclear Safety Law”) came into force on January 1, 2018. It is of great significance to guaranteeing nuclear safety, preventing and dealing with nuclear accidents, safely using nuclear energy and protecting the safety and health of the public and those engaged in the nuclear sector.

The *Law of the People's Republic of China on Prevention and Control of Soil Pollution*, adopted on August 31, 2018, aims to strengthen the concept of prevention from the source and reduce pollution generation, establish a sound soil pollution liability mechanism, impose severe punishments on pollution and achieve innovation in multiple systems: risk control and classified management; clear responsibilities and strict supervision; meticulous regulation and thorough control; special management of sensitive land uses.

On October 26, 2018, the sixth meeting of the Standing Committee of the 13th NPC adopted the *Decision on Amending 15 Laws Including the Law of the People's Republic of China on the Protection of Wildlife*, under which the *Environmental Protection Tax Law of the People's Republic of China* was amended, greening the tax system and accelerating the green reform of the tax system. The *Law of the People's Republic of China on the Prevention and Control of Desertification* was amended to better prevent and control land desertification, and promote sustainable economic and social development. The *Energy Conservation Law of the People's Republic of China* was amended to promote society-wide energy saving, improve the energy utilization efficiency and boost coordinated and sustainable economic and social development. The *Law of the People's Republic of China on the Prevention and Control of Atmospheric Pollution* was amended to protect and improve the environment, prevent atmospheric pollution, strengthen the responsibilities of local governments with respect to environmental protection and improvement of air quality with the aim of improving ambient air quality, with the supervision over local governments intensified.

According to the second amendment to the *Law of the People's Republic of China on Environmental Impact Assessment* adopted on December 29, 2018, China will implement a sustainable development strategy to prevent environmental pollution and ecological damage,

curb the adverse impacts of the implementation of planning and construction projects on the environment, and advance coordinated development in economic, social and environmental spheres.

On December 28, 2019, the *Forest Law of the People's Republic of China* was amended to uphold four principles: 1) giving priority to ecology and protection and promoting sustainable development; 2) respecting and conforming to nature and following the laws of forest protection, cultivation and utilization; 3) ensuring sustainable use of forest resources through classification and scientific management; 4) sticking to the principles while being flexible, having in place strict management and protection systems in line with national conditions while leaving room for the formulation of specific measures and further reforms.

The *Law of the People's Republic of China on the Prevention and Control of Environmental Pollution Caused by Solid Wastes* was amended on April 29, 2020. It is an important foundation and the main basis for the environmental management of solid waste in China. With the law in place, China has established sound systems for the prevention and control of pollution from solid waste.

Adopted on December 26, 2020, the *Yangtze River Protection Law* is the first law on a specific river basin in China.

The third amendment to the *Grassland Law of the People's Republic of China* was adopted on April 29, 2021, which aims to protect, develop and make rational use of grasslands, improve the ecological environment, maintain biodiversity, modernize animal husbandry and promote the sustainable development of the economy and society.

Adopted on December 24, 2021, the *Law of the People's Republic of China on the Protection of Wetlands* protects the ecological environment of wetlands through institutions and regulations. Committed to making wetlands shared green spaces for the people, the law is a guideline for society at large to strengthen wetland protection and restoration, and a key move for China to lead global ecological governance.

In order to better cope with climate change and support the attainment of the carbon peaking and carbon neutrality targets, MEE issued the *Guideline on Coordinating and Strengthening Climate Change Response and Ecological and Environmental Protection* on January 7, 2021. The guideline specifies the main areas and key tasks for coordinating and strengthening climate change response and ecological and environmental protection, and defines the tasks for promoting the coordination of regulations and policies in five areas: laws and regulations, standards, environmental and economic policies, synergies between pollution abatement and carbon reduction, and coordination between climate change adaptation and ecological protection and restoration.

e. Deepening the green financial system

Marked by the *Guideline on Building a Green Financial System* jointly issued by the People's Bank of China (PBOC), the Ministry of Environmental Protection (MEP) and five other ministries and commissions in August 2016, China has initiated the building of a green financial system across the board. In June 2017, PBOC, CBRC, the Standardization

Administration of China (SAC) and other departments jointly issued the *Development Plan for the Construction of a Standardized System for the Financial Sector (2016-2020)*, listing the “green financial standardization” as a priority in the standardization of the financial sector. After several years of continuous efforts, the development of green finance in China has achieved remarkable results: first, the green financial products and market system have basically taken shape. By the end of 2021, the balance of China's green loans in domestic and foreign currency had reached nearly RMB 16 trillion, a YoY increase of 33%, ranking first in the world in terms of stock size. 2021 saw the issuance of over RMB 600 billion of green bonds in China, a YoY increase of 180%, with a balance of RMB 1.1 trillion, ranking among the top in the world.

Second, the framework and organizational structure of green financial standards have been basically established. In January 2018, according to the *Development Plan for the Construction of a Standardized System for the Financial Sector (2016-2020)* jointly issued by PBOC and four other ministries and commissions, the China Financial Standardization Technical Committee (CFSTC) approved the establishment of the Working Group on Green Finance Standards led by PBOC. In September 2018, the first plenary meeting of the Working Group was held in Beijing, and the organizational structure for the development of green finance standards was established. The six major categories of green finance standards studied by the Working Group are general basic standards on green finance, green financial products and service standards, green credit rating and assessment standards, green finance information disclosure standards, green finance statistics and sharing standards, and green financial risk management and protection standards. Based on this, China's framework system for green finance standards has also basically formed.

Third, a sound incentive and constraint mechanism for green finance has been gradually developed. The carbon-reduction supporting tool and the special refinancing loan to support the clean and efficient utilization of coal created by PBOC have driven more social capital to invest in green and low-carbon areas. In the meantime, PBOC has also carried out a comprehensive evaluation on green finance in banking financial institutions, and has included green loans and green bonds in the scope of quantitative evaluation, guiding financial institutions to increase green asset allocation in an orderly manner.

Fourth, regional green finance standards are gradually being established and improved. The pilot zones for green finance reform in six provinces and nine regions have been vigorously developing green finance in the past few years, and local green finance standards have been introduced. At present, Huzhou, Quzhou, Guangdong Huadu District, Ganjiang New Area and Gui'an New Area, as pilot zones for green finance reform, have all made great progress in the construction of green finance standards systems. In addition, there are increasing innovative standards for financial instruments, products and services. Among them, work related to the certification standards for green enterprises, project standards for green project libraries and evaluation standards for green banks has been actively carried out in the pilot zones, and the regional green finance standards systems have been increasingly improved. For example, the Huzhou Pilot Zone for Green Finance Reform and Innovation released four local green finance standards in June 2018, including the *Evaluation Standards for Green Financing Projects*, the *Evaluation Standards for Green Financing Enterprises*, the *Evaluation Standards for Green Banks*, and the *Construction Standards for Green Finance Franchise*

Institutions.

Fifth, international cooperation on green finance has been deepened. In September 2018, ISO officially established the Technical Committee on Sustainable Finance (ISO/TC322). According to the *China Green Finance Progress Report (2018)* released by PBOC, TC322 will develop a framework guide for sustainable finance management, clarifying relevant concepts, terminology, principles and practical guidelines. In March 2019, the first meeting of TC322 was held in London, which elected Ma Jun, Director of the Green Finance Committee, China Society for Finance and Banking as the vice-chair of TC322, and unanimously approved to launch the project of Sustainable Finance Terminology Standards. In 2021, PBOC chaired and drafted the *G20 Sustainable Finance Roadmap* and the *G20 Sustainable Finance Synthesis Report*. PBOC also participated in and launched the Central Banks and Supervisors Network for Greening the Financial System (NGFS), which is becoming one of the most influential international cooperation platforms for green finance.

The “three functions” of green finance (i.e. resource allocation, risk management and market pricing) are emerging. Firstly, through monetary policy, credit policy, regulatory policy, mandatory disclosure and green evaluation, financial resources have been guided and leveraged towards low-carbon projects, green transition projects, CCS and other green innovation projects. Secondly, the financial system's ability to manage climate change-related risks has been enhanced. Thirdly, a national carbon trading market is under construction, and carbon futures and other derivative products have been developed, with reasonable carbon price set through trading. The “five pillars” (i.e. green financial standards system, regulation and information disclosure requirements for financial institutions, the incentive and restraint mechanism, green financial products and market system, and international cooperation in green finance) have also taken initial shape, and are playing an increasingly important role in supporting China's low-carbon transition and high-quality development. China's multi-level green financial products and market system has basically taken shape.

On April 21, 2021, PBOC, NDRC and CSRC jointly issued the *Notice on Printing and Distributing the Green Bond Endorsed Project Catalogue (2021 Edition)*, with which the *Green Bond Endorsed Project Catalogue (2021 Edition)* (hereinafter referred to as the “2021 Edition Catalogue” or the “New Edition Catalogue”). This is the first update to China's Green Bond Endorsed Project Catalogue and an important document marking the harmonization of green bond taxonomy.

On May 27, 2021, PBOC issued the *Green Financial Evaluation Program for Banking Financial Institutions*. The *Program* has revised the 2018 program and upgraded from green credit to green finance: firstly, it has expanded the business coverage for assessment, taking into account the development of green loans and green bonds in an integrated manner, and reserving space for further assessment of new business models such as green equity investment and green trusts; secondly, it has revised the corresponding evaluation indicators based on the expanded assessment scope; thirdly, it has expanded the application scenarios of evaluation results, and incorporated the results of green finance performance evaluation into the rating of financial institutions by PBOC.

On November 4, 2021, the International Platform of Sustainable Finance (IPSF), a joint initiative of China, Europe and other economies, held its annual meeting during the UN

Climate Change Conference (COP26), and released the *Common Ground Taxonomy: Climate Change Mitigation*. The Common Ground Taxonomy, jointly released by China and the EU, marks the gradual convergence of green finance standards between countries. On October 15, 2021, the Sub-forum themed “Financial Sector Supporting Biodiversity” was held during the Ecological Civilization Forum of the first part of the 15th meeting of the Conference of the Parties to the Convention on Biological Diversity (COP15), launching a global phase of biodiversity finance development. In October 2021, 13 institutions including the Asian Infrastructure Investment Bank (AIIB), Industrial Bank, the International Finance Forum (IFF), the United Nations Environment Programme (UNEP) and the World Bank (WB) launched the “Global Joint Initiative on the Partnership of Biodiversity and Finance” in Beijing, calling on financial institutions to incorporate biodiversity conservation into their business strategies, decision-making processes and financing policies; and encouraging financial institutions to work with environmental protection organizations in developing more financial instruments and financing products, and in mobilizing more financial resources to support biodiversity conservation. In April 2022, the joint research group set up by the Central Banks and Supervisors Network for Greening the Financial System (NGFS) and the International Network for Sustainable Financial Policy Insights, Research, and Exchange (INSPIRE) released a report titled “Central Banking and Supervision in the Biosphere: An Agenda for Action on Biodiversity Loss, Financial Risk and System Stability”, calling upon central banks and financial regulators all over the world to take action to address the risks associated with nature and biodiversity.

The deepening of the green financial system can help push the development of green finance, thereby accurately guiding the allocation of resources, controlling the flow of capital, safeguarding the market order, preventing market risks, accurately energizing the development of key areas such as environmental protection, pollution prevention and control and clean emission reduction, reducing the pressure on resources and the environment, and contributing to ecological progress.

f. Incorporating carbon emission impact assessment (CEIA) into environmental impact assessment (EIA)

On May 31, 2021, MEE issued the *Guiding Opinions on Strengthening Prevention and Control from the Source in Energy-Intensive and High-Emission Projects for Ecological and Environmental Protection* (hereinafter referred to as the *Guiding Opinions*, HHP [2021] No.45). Article 7 of the *Guideline* requires incorporating CEIA into EIA. Environmental authorities and administrative approval departments at all levels should actively advance the pilot EIA program for these “two-high” projects, and align and implement carbon dioxide peaking action plans for relevant regions and industries and policy requirements such as clean energy alternatives, clean transportation and total coal consumption control. In the EIA process, identification of the source items of pollutants and carbon emissions, source intensity accounting, analysis of the feasibility of pollution abatement and carbon reduction measures and comparison of different solutions should be carried out in a coordinated manner, with a view to bringing forth the optimal solution to coordinated control. Eligible localities and enterprises are encouraged to explore and implement pilot projects for coordination between pollution abatement and carbon reduction, and carbon capture, utilization and storage

(CCUS).

g. Improving the environmental credit system

In order to “improve our systems for credibility assessment based on environmental protection performance, for mandatory release of environmental information, and for imposing severe punishment for environmental violations” as set forth in the Report to the 19th CPC National Congress, MEE and NDRC have continuously improved the system for credibility assessment based on environmental protection performance, actively built an environmental credit information sharing platform and guided localities to develop new approaches to application of assessment results, with positive results achieved.

First, improving the system for credibility assessment based on environmental protection performance. MEE, together with NDRC and other ministries, issued in succession the *Measures for Assessing Corporate Environmental Credit (for Trial Implementation)* and the *Guideline on Strengthening the Construction of the Corporate Environmental Credit System*, to regulate the information collection, rating, release and application of the results with respect to enterprises’ environmental credit. In 2020, MEE and NDRC drafted and submitted to the General Office of the CPC Central Committee and the General Office of the State Council for the issuance of the *Guiding Opinions on Building a Modern Environmental Governance System*, which clearly proposes to “improve the environmental credit assessment system and implement hierarchical supervision based on the assessment results”.

Second, promoting the construction of an environmental credit information platform. NDRC has completed and put into operation a national credit information sharing platform, and launched creditchina.gov.cn, a website that provides the public with “one-stop” credit information inquiries. MEE has completed the environmental credit information sharing system, a task assigned to it under the “National Credit Information Sharing Platform (Phase II)” project, and set up sub-portals for environmental credit information sharing, so that it can guide local environmental authorities at all levels to collect, push and share environmental credit information and then push complete environmental credit assessment results and information on enterprises’ environmental violations to the national credit information sharing platform. Moreover, MEE and NDRC have worked together to build ministerial data.

Third, strengthening the application of environmental credit assessment results. MEE has actively coordinated with departments concerned to apply the environmental credit assessment results to areas such as green finance, market supervision and price regulation. In 2021, MEE, in conjunction with the General Administration of Customs (GACC), verified the environmental violations of 91 dishonest enterprises subject to integrated punishment for serious breach of laws over the past three years, and studied the continued implementation of punishment for dishonesty on enterprises with environmental violations in accordance with the law. Anhui has encouraged banking financial institutions to provide enterprises with high environmental credit ratings with simplified credit procedures and preferential interest rates, and Jiangsu has limited the maximum increase in interest rates for loans to enterprises with good environmental credit ratings and above to 15%.

Fourth, promoting and applying the experience in environmental credit assessment

management. MEE and NDRC have actively guided localities to promote an apply experience in environmental credit assessment management, and established a three-level assessment system that covers provinces, cities and counties. Environmental authorities in more than 20 provinces, 80 cities and 230 counties across the country have carried out environmental credit assessment among enterprises, with over 30,000 enterprises assessed, including key enterprises under state monitoring, heavily polluting enterprises and enterprises in industries with serious overcapacity. Some localities have gradually expanded the ranks of enterprises to be assessed as necessary. Provinces including Guangdong, Chongqing and Zhejiang have included enterprises and public institutions engaged in EIA, environmental inspection and testing and third-party control of environmental pollution in the scope of mandatory assessment. Some localities have adjusted their environmental credit assessment models in time. Hebei, Henan and Fujian have put into practice dynamic management of environmental credit, and have all realized real-time assessment and facilitated the application of assessment results to green credit, financing through listing, tax refunding, awarding of honorary titles and application for research projects.

h. Promoting green and low-carbon lifestyles

For the first time, the *Outline of the 14th Five-Year Plan (2021-2025) for National Economic and Social Development and the Long-Range Objectives Through the Year 2035* elaborates on green development in a separate chapter and sets the targets for promoting green production and consumption: by 2025, remarkable results will be achieved in a shift towards eco-friendly work and lifestyle; by 2035, eco-friendly work and lifestyle will be advanced to cover all areas of society.

On April 29, 2021, the 28th meeting of the NPC Standing Committee adopted the *Law of the People's Republic of China on Food Waste*. This law sets out clear requirements for relevant departments of the State Council, people's governments at all levels and relevant units, as well as penalties for breaking the law. The adoption of the law is of great importance, as it has raised food waste from a moral and public order constraint to a legal one.

On September 22, 2021, the CPC Central Committee and the State Council issued the *Guideline on Carbon Dioxide Peaking and Carbon Neutrality in Full and Faithful Implementation of the New Development Philosophy*. The *Guideline* proposes to accelerate the development of green modes of production and lifestyles; expand the supply and consumption of green and low-carbon products, advocate green and low-carbon lifestyles; include green, low-carbon development in the national education system; launch demonstration campaigns to build a green and low-carbon society; build social consensus and accelerate the formation of a good pattern of universal participation.

On October 24, 2021, the *Action Plan for Carbon Dioxide Peaking Before 2030* was published. The *Action Plan* proposes to advocate green and low-carbon living patterns. It states that we should curb luxury, waste, and unnecessary consumption, put a resolute stop to wasteful behaviors, and work tirelessly to reduce food waste in the catering industry; promote energy conservation throughout whole society, launch demonstration campaigns to build a green and low-carbon society, intensify initiatives to promote eco-friendly living patterns, select and publicize a group of role models, and foster new trends for green and low-carbon

living patterns; vigorously expand green consumption, promote green and low-carbon products, and improve the system for green product certification and labeling; and increase the proportion of green government procurement.

In January 2022, NDRC and other ministries issued the *Implementation Plan for Promoting Green Consumption*, which proposes that by 2025, the concept of green consumption will gain ground, extravagance and waste will be effectively curbed, the market share of green and low-carbon products will be raised sharply, marked results will be achieved in green transformation of consumption in key sectors, green ways of consumption will be generally adopted and a consumption system for green, low-carbon and circular development will take shape. By 2030, green consumption will become a conscious option of the public, green and low-carbon products will be mainstreamed in the market, a green and low-carbon development model for consumption will be substantially formed in key sectors, and green consumption systems, policies and mechanism will be basically established.

i. CCICED policy recommendations

1. Deepening the reform of environmental systems

The 2019 CCICED Policy Recommendations proposed to invite public participation and feedbacks before final decision-making for a project and renew the understanding of the urban-rural relationship. The 2020 CCICED Policy Recommendations stated that in terms of implementation mechanisms, comprehensive measures should be adopted to align short-term targets with mid- and long-term goals and ensure coordinated systems and mechanisms. Efforts should be made to create synergies among legislative, judicial and administrative organs in promoting ecological progress, establish a sound modern environmental governance system, and improve coordination and efficiency in green governance.

2. Judicial support for ecological and environmental governance

In 2016, CCICED proposed to strengthen the construction of judicial support systems and mechanisms for ecological and environmental protection in the following ways: 1) by giving citizens, enterprises, communities and social organizations access to justice with regard to environmental affairs; 2) by reforming environmental justice systems across administration regions; 3) by advancing public interest litigation over ecological and environmental damage. It recommended improving the public interest litigation system for environmental protection, relaxing restrictions on plaintiff qualification, encouraging citizens and environmental social organizations to take an active part in environmental public interest litigation, and increasing public participation and judicial publicity in trials over the environmental and resources; promoting the establishment of an environmental public interest litigation fund system; advancing the alignment between environmental litigation and non-litigation procedures, and supporting people's procuratorates in filing environmental public interest lawsuits in accordance with the law.

3. Constantly improving environmental laws

In 2018, CCICED proposed to strengthen the legal protection of marine and coastal ecosystems. The legislation on Yangtze River protection should be accelerated, which should

reflect systematic, differentiated and targeted protection of the river basin. In 2019, CCICED proposed to amend the government procurement law; revive the carbon market; further improve the total emission control target, speed up the legislation and enhance the binding force of the national carbon trading system; promote allowance auctioning while increasing the industries and sectors covered and establishing a “carbon price” mechanism, so as to build a robust carbon market with effective execution mechanisms. In 2021, CCICED proposed to put into action the *Law on Food Waste*, raise public awareness, change eating habits and reduce food waste; formulate operable implementation rules and schemes in accordance with specific provisions; and establish a coordination mechanism where government takes the lead, industry associations and social governments play a guiding role, catering enterprises set the pace, and consumers are self-disciplined.

4. Deepening the green financial system

In 2020, CCICED proposed to improve the green standards system, green fiscal and taxation system, and green financial system, form policy incentives that are commensurate with green development, and promote the implementation of these policies through policy compliance, regulation and enforcement. The value accounting methods and realization mechanisms for ecological capital services should be perfected to promote the high-quality development of the Yangtze and Yellow River basins. Biodiversity conservation indicators should be integrated into the green finance framework to promote the mainstreaming of conservation finance.

The 2021 CCICED Policy Recommendations put forward three important suggestions on deepening the instrumental role of green finance. First, it is suggested to expand investment and financing related to biodiversity conservation, make ecological conservation, restoration and regeneration an important area of green finance, and further identify necessary initiatives to advance pilot ecological conservation finance; secondly, it is proposed to give play to the role of green finance instruments in the traceability of fisheries sustainability; thirdly, it is recommended to support the sustainable development and post-epidemic green and low-carbon recovery in BRI countries, and promote cross-sectoral cooperation in green energy, green infrastructure and green finance.

5. Improving the environmental credit system

In 2019, CCICED proposed to implement market incentives, establish a scientific and coherent green labeling & certification system, and build a statistical indicator system for green consumption and a national green consumption information platform. Market-based means and mandatory regulations on green products should be combined, differentiated tax and market credit incentives should be brought into force, and subsidies that discourage or even hinder the circulation of green products should be phased out. Environmental safeguards and EIA mechanisms should be established to reduce the environmental risks of projects to be built. Green investment principles should be put into action and risk information associated with the environment and climate should be disclosed.

6. Advocating green and low-carbon lifestyles

In 2018, CCICED proposed to guide multi-stakeholder participation, and identify and address

the negative impacts of environmental pollution and ecological damage, among others, on community residents' production and life. Gender issues should be integrated into good ESG (Environmental, Social and Governance) practices through multi-stakeholder participation. Public environmental awareness should be raised via publicity and educational campaigns.

In 2019, CCICED proposed to incorporate green consumption into the 14th FYP as one of the important tasks to build an ecological civilization, and initiate green life campaigns. The demand for green products should be boosted and the exemplary role of celebrities in green consumption should be brought into full play, so that green consumption can become a social fashion.

In 2020, CCICED recommended improving the systems and mechanisms for promoting green consumption, establishing economic incentives and market-driven systems, especially in terms of price, taxation, credit, regulation and market credit, and guiding the supply of green ecological products and services and residents' green consumption choices. Priority areas for green consumption should be established. Priority should be given to increasing the effective supply of green products and services in key areas such as clothing, food, housing, transportation (and communication), daily necessities and tourism.

In 2021, CCICED suggested to establish a unified national green consumption information platform to publish information on green products and services; and raise public awareness of low-carbon, biodiversity-friendly consumption through capacity building and training related to green consumption and the establishment of a network of interested parties.

III. Energy, Environment and Climate

a. Building a new power system dominated by new energy

On March 15, 2021, Chinese President Xi Jinping pointed out at the ninth meeting of the Central Committee for Financial and Economic Affairs that the 14th FYP period would be a critical window period for carbon dioxide peaking and that the reform of the power system should be deepened to build a new power system with new energy as the mainstay.

To realize the goal, national energy authorities and relevant enterprises and institutions have carried out a large amount of work. In September 2021, NDRC and the National Energy Administration (NEA) issued an official reply to State Grid Corporation of China (SGCC) and China Southern Power Grid (CSG) to promote the pilot program for green electricity trading.

In November 2021, the 22nd meeting of the Central Commission for Comprehensively Deepening Reform deliberated and adopted the *Guiding Opinions on Accelerating the Construction of a National Unified Power Market System*. According to the meeting, China will improve the multi-level unified power market system, build a national power market at a quicker pace, establish unified rules and technical standards for electricity trading, and push for a diversified and competitive electricity market pattern. China will advance the establishment of a power market mechanism that is compatible with its energy transition, orderly promote the participation of new energy in market transactions, scientifically guide power planning and effective investment, and give play to the role of the power market in

supporting clean and low-carbon energy transition. SGCC also officially issued the *Inter-provincial Electricity Spot Trading Rules (for Trial Implementation)*, resulting in orderly preparations for the trial operation of inter-provincial electricity spot trading. The launch of inter-provincial electricity spot trading will motivate market players to regulate power surplus and deficiency throughout the grid by market-based means, drive large-scale clean energy accommodation, facilitate the building of a new power system dominated by new energy, and help achieve carbon dioxide peaking and carbon neutrality.

In January 2022, NDRC and NEA released the *Guiding Opinions on Accelerating the Construction of a National Unified Power Market System*, which states that by 2025, a national unified power market system will be preliminarily established, the national market and provincial/regional markets will operate collaboratively, with integrated design and joint operation of mid- and long-term, spot and auxiliary service markets of electric power and significant improvements in cross-provincial and cross-regional market allocation of resources and green power trading scale, and market trading and pricing mechanisms that are conducive to the development of new energy and energy storage will take shape. By 2030, the national unified power market system will be basically completed.

In achieving the carbon peaking and carbon neutrality targets, energy is the main battlefield, where electricity plays a key role. With new energy flooding power grids, the power system will need to strike a balance between randomly fluctuating load demand and power supply, resulting in fundamental changes in its structure, operation control mode, and planning, construction and management. Then, a new generation power system with new energy power production, transmission and consumption as the mainstay will be formed. Building a new power system dominated by new energy is a complicated task, which requires government leadership, enterprise participation and the concerted efforts from all parties as opportunities and challenges coexist.

b. Continuously adjusting and optimizing the energy structure

Continuing to promote the optimization of the energy structure is vital for reducing pollution and emissions, winning the battle against air pollution, and peaking carbon emissions and achieving carbon neutrality.

On June 27, 2018, the State Council issued the *Three-Year Action Plan for Keeping Skies Blue*, which proposes to optimize the energy structure, advance key initiatives such as saving energy and resources across the board, and effectively promote clean heating in northern China, implement total coal consumption control, launch comprehensive upgrading of coal-fired boilers, accelerate the development of clean and new energy, and develop a green transportation system in key regions including the Beijing-Tianjin-Hebei (BTH) region and surrounding areas, the Yangtze River Delta and the Fen-Wei Plain.

A sound industrial system should be established for biogas. On November 5, 2019, NDRC unveiled the *Catalogue for Guiding Industrial Restructuring (2019 Edition)*, in which biomass power generation and biogas are repeatedly highlighted in the part concerning new energy. On December 6, 2019, 10 ministries including NDRC jointly issued the *Guiding Opinions on Promoting the Industrialization of Bio-Natural Gas*, which sets the goal for the

country's annual biogas output at over 10 million cubic meters by 2025. On June 18, 2020, the *Circular on Addressing Overcapacity in Key Areas in 2020* was issued, which proposes to accomplish all the tasks for cutting coal overcapacity during the 13th FYP period by the end of 2020, address the issue of “zombie enterprises” proactively yet prudently, classify and dispose of coal mines with a capacity of less than 300,000 tons/year and accelerate the phase-out of coal mines that fail to meet relevant environmental requirements. From May 9 to August 16, 2020, State Grid Qinghai Electric Power Company supplied clean energy power to the Sanjiangyuan region for 100 consecutive days, setting a new world record for 100% power supply through clean energy and reducing coal consumption by 61,000 tons and CO₂ emissions by 166,000 tons.

In the past five years, China's installed renewable energy capacity has grown at an annual average rate of about 12%, and ranks first in the world in terms of installed hydro, wind and photovoltaic power capacity. As of 2021, China's non-fossil energy installed capacity exceeded that of coal power for the first time and the total installed capacity of non-fossil energy power generation reached 1.12 billion kilowatts. The energy supply system is shifting from a coal-based one to a diversified one, and renewable energy is gradually becoming the main source of new installed capacity.

c. Continuing to promote energy conservation and energy efficiency improvement

Continuing to promote energy conservation and energy efficiency improvement is an important long-held policy whereby China can fundamentally remove resource and environmental constraints and bottlenecks, build an ecological civilization, promote high-quality development and achieve carbon dioxide peaking and carbon neutrality.

1. Promote energy-efficient technologies and products. On June 27, 2018, the State Council issued the *Three-Year Action Plan for Keeping Skies Blue*, which proposes to improve energy use efficiency; further implement the control over both total energy consumption and energy intensity; and encourage the development of county-level biomass cogeneration of heat and power, biomass briquette boilers and biogas in places where resources permit. The Central Economic Work Conference on December 8, 2021 proposed to promote clean and efficient utilization of coal, enhance the new energy consumption capacity, optimize the mix of coal and new energy and concentrate on breakthroughs in green and low-carbon technologies, taking into account the situation that coal still prevails in China.

2. Accelerate low emission transformation and advance energy conservation in industry and the energy sector. In 2018, NEA and MEE introduced the *Notice on Issuing the 2018 Targets and Tasks for Coal Power Ultra-Low Emission Renovation and Energy Efficiency Renovation in Each Province (Region and City)*, which sets the national target of improving 48.68 million kilowatts of coal-fired power generators to achieve ultra-low emissions and 53.905 million kilowatts energy conservation. As at the end of 2018, about 810 million kilowatts of coal-fired power generators had been renovated for ultra-low emissions, and 689 million kilowatts for energy conservation, with the target for 2020 beaten ahead of schedule.

In December 2020, the Ministry of Industry and Information Technology (MIIT) proposed at the National Work Conference on Industry and Information Technology to encourage and

guide industrial enterprises to improve the quality of electric power, strengthen the transformation and IT-based development of electric equipment, and comprehensively improve energy efficiency and demand response capability. On November 17, 2021, the State Council executive meeting decided to set up another special refinancing loan of RMB 200 billion to support the clean and efficient utilization of coal, on top of previous financial instruments for carbon emission reduction, thus forming a policy scale to drive green and low-carbon development.

3. Focus on energy conservation and environmental protection to mobilize green upgrading. According to the *Guiding Opinions of the State Council on Accelerating the Establishment and Improvement of a Green and Low-Carbon Circular Economic System*, which was issued on February 22, 2021, establishing a sound green and low-carbon circular economic system and promoting green transition in all areas of economic and social development is the fundamental solution to the problems in the field of resources and the environment in China. On September 12, 2021, the General Office of the CPC Central Committee and the General Office of the State Council issued the *Opinions on Deepening the Reform of the Compensation System for Ecological Protection*, which mentions the implementation of preferential tax policies for energy conservation and environmental protection, new energy and ecological construction.

4. Accelerate the revision of relevant laws and regulations, and establish energy conservation and efficiency improvement mechanisms. On October 9, 2021, a National Energy Commission meeting deliberated the plan for a modern energy system during the 14th FYP period, the implementation plan for carbon dioxide peaking in the energy sector, and the guideline on improving the systems and mechanisms as well as the policies and measures for green and low-carbon energy transition, among others.

d. Enhancing climate action and adaptation

In the past years, China incorporated climate adaptation as an important component of its climate strategy, and has achieved positive outcomes. In particular, President Xi Jinping put forward the decarbonization targets (carbon peaking and carbon neutrality). It signifies that climate action has been incorporated, as a significant part of the development of ecological civilization and a community of shared future for mankind, into the *Outline of 14th Five-Year Plan for National Economic and Social Development and the Long-Range Objectives Through the Year 2035*. With the guidance of the carbon peaking and carbon neutrality targets, China has raised the importance of climate action and climate adaptation to an unprecedented level.

In 2018, China initiated the institutional reform, transferring the responsibility of climate actions to the MEE, which facilitated the coordinated management of climate action, environmental governance and ecological governance at the institutional level.

On September 22, 2022, Chinese President Xi Jinping solemnly pledged, in the general debate at the 75th United Nations General Assembly, that China will strive to achieve carbon peaking by 2030 and carbon neutrality by 2060. During the two sessions of 2021, Carbon Peaking and Carbon Neutrality were officially included as an important component of the

14th Five-Year Plan for National Economic and Social Development and the Long-Range Objectives through the Year 2035. In January 2021, MEE issued the *Guideline on Optimizing the Ways of Ecological and Environmental Protection Law Enforcement to Improve the Efficiency of Law Enforcement*, which defines the main tasks and scope for coordinating and enhancing climate actions and ecological protection.

On September 23, 2021, Chinese President Xi Jinping announced, at the 76th United Nations General Assembly, that China would no longer increase overseas thermal power projects.

On February 18, 2022, MEE reviewed and in principle approved the *National Climate Strategy for 2035*. The strategy is of great significance in preventing risks and adverse impacts of climate change, safeguarding social and economic development and ecological safety, and illustrating China's role as a major responsible country to build a community of shared future for mankind.

e. Initiating the building of a national carbon market

MEE is working to accelerate the building of a national carbon emissions trading market by establishing and improving complete system and strengthening the foundation of carbon emission data, stepping up push for building a basic support system and enhancing capacity building.

The building of national carbon credit registry system and carbon emissions trading system has been advanced steadily. The *Notice on Doing a Good Job in the Formulation of 2018 Carbon Emission Report and Verification and Emission Monitoring Plan* was issued in January 2019, which requires governments at provincial, municipal and district levels to urge major carbon emitters to continuously monitor, report and verify carbon emission data. In May 2019, MEE published the *Circular on Doing a Good Job in the List of Key Emitters in the Power Generation Industry and the Submission of Related Materials in the National Carbon Emissions Trading Market*, urging provincial supervising departments to submit lists of key emitters in the power generation industry to be included in the national carbon market and their account-opening materials, in order to lay solid foundation for registering in the carbon credit registry system and carbon trading system, carbon quota allocation, carbon market testing and operation, as well as online carbon emissions trading.

On December 25, 2020, MEE held a ministerial executive meeting, deliberated and adopted the *Measures for the Administration of Carbon Emissions Trading (for Trial Implementation)*, which officially took effect on February 1, 2021. On July 16, 2021, the national carbon market was officially put into operation, signifying the launch of the largest carbon market in the world.

On September 12, 2021, the General Office of the CPC Central Committee and the General Office of the State Council issued the *Opinions on Deepening the Reform of the Compensation System for Ecological Protection*, in a bid to expedite the construction of national energy rights and carbon emissions trading market.

The national carbon market is both a major institutional innovation and complex, systematic project. It should be supported by a complete legal system, a sound management mechanism,

effective market mechanism and solid carbon emission data. On December 31, 2021, the national carbon emissions trading market officially closed with a satisfactory conclusion in that year. From its initiation on July 16 to December 31, the cumulative volume of carbon emission allowances (CEA) traded was 179 million tons, with a cumulative turnover of RMB 7.661 billion. The successful operation of national carbon market has played a key role in carbon abatement of power industry, while offering helpful experience for inclusion of other industries into the market. Overall, the national carbon market has begun to fulfill its role as an important policy tool in controlling and reducing greenhouse gas emissions, promoting the realization of carbon peaking and carbon neutrality.

f. CCICED policy recommendations

In recent years, energy, environmental and climate issues have received widespread attention from the international community. CCICED put forward many policy recommendations for development of the energy sector, such as building a new energy-oriented electricity system, continuously optimizing energy structure, continuously promoting energy conservation and improving energy efficiency, facilitating climate actions and adaptation, as well as launching the national carbon market.

1. Continuously optimizing energy structure

The 2019 CCICED Policy Recommendations advised to achieve synergistic advancements in economic development and energy reform, eco-environmental protection and climate change tackling. To achieve, that, it is suggested to further curb use of coals by developing national long-term zero-emission strategy, gradually eliminating the use of coals and increasing subsidies and financial supports for renewable energies.

The 2020 CCICED Policy Recommendations advised to roll out hydrogen economy policies at the national level, promote fuel cells in transportation and co-generation, and increase the proportion of sustainable biomass gas production in the energy structure.

The 2021 CCICED Policy Recommendations advised to accelerate decarbonization in the manufacturing industry, strictly control the new production capacity in energy-intensive and high-emission industries, and facilitate net-zero emission technology innovation and the application of sci-tech achievements in steel, non-ferrous metal, cement, chemicals, petrochemicals and other industries where it is hard to reduce emissions.

2. Continuously promoting energy conservation and improving energy efficiency

Energy conservation and energy efficiency has attracted ongoing attention from CCICED. The 2018 CCICED Policy Recommendations proposed to "promote energy conservation, emission reduction and industrial upgrading; and taking economically viable and high-impact green technologies as a breakthrough, unleash the potential for energy conservation, emission reduction and industrial upgrading through institutional and policy innovation". With regard to energy saving in indoor air conditioning, it is proposed to "strengthen control of coal use, promote renewable energy, and expand energy efficiency gains; play a leading role in the implementation of the *Kigali Amendment to the Montreal Protocol* and develop world-leading energy efficiency standards for air conditioning".

The 2019 CCICED Policy Recommendations stressed to promote innovative technologies in urban infrastructure and energy systems; expand nature-based urban green areas and green infrastructure; develop high-standard green buildings and clean, low-carbon energy systems; and introduce strict energy efficiency standards applied to consumer areas such as refrigeration and lighting systems, etc.

The 2020 CCICED Policy Recommendations proposed to promote green buildings, comprehensively promote the design, construction and operation of green and healthy buildings, strengthen the environmental labeling of green household products, especially low carbon and energy efficiency certification, and expand the effective supply of energy-efficient green household products. For the “new infrastructure” to support green development, it is proposed to cover renewable energy, low-carbon and resilient infrastructure, and building energy efficiency improvements, etc.

The 2021 CCICED Policy Recommendations emphasized urban renewal as a major opportunity to transform green urbanization. To this end, it is necessary to strictly control large-scale demolition and construction, and attach importance to brownfield restoration; and enhance green renovation of older blocks and buildings, including the use of green and recycled building materials, and energy efficiency improvements.

3. Strengthening climate actions and adaptation

In 2018, CCICED proposed that China should redouble efforts to mitigate climate change, make more contributions to global climate governance, take coordinated actions against climate change, and become more coordinated in tackling climate change and addressing other environmental problems. In 2019, CCICED advised to strengthen researches and capacity building with regard to climate adaptation and nature-based solutions. In 2020, CCICED proposed to focus on energy transition and upgrading to actively tackle climate change and build a low-carbon society. In 2021, CCICED recommended to conduct climate risk assessments related to extreme weather events caused by climate stressors such as floods, heat waves, coastal storms and droughts, and further enhance adaptive capacity at the scale of the Yangtze and Yellow River basins; and develop sustainable partnerships on the basis of South-South Cooperation Initiative and the Green Silk Road Envoys Programme under the Belt and Road Initiative.

4. Initiating the national carbon market

In 2019, CCICED proposed to activate the carbon market by further refining the goals for emission cap control, strengthen the binding force of national carbon emission trading system by accelerating the establishment of legal framework, and set up a carbon pricing mechanism to build robust carbon market with an effective enforcement mechanism. In 2021, CCICED proposed to accelerate incorporating industries with high emissions into the carbon market, and improve the establishment of the trading system. It was suggested to adopt incentive measures based on different realities in different regions as early as possible, and take opportunities to build a blended carbon pricing system.

IV. Pollution Prevention and Control

a. Achieving major victory in air pollution prevention and control

Pollution control is a complex, systematic project which requires unremitting and strenuous efforts. The year 2013 saw an important milestone as the *Circular of the State Council on Issuing the Action Plan on Air Pollution Prevention and Control* was unveiled and implemented.

In June 2018, the CPC Central Committee and the State Council released the *Guideline on Comprehensively Strengthening Ecological and Environmental Protection and Resolutely Putting up the Uphill Battles against Pollution*. It proposed to focus on the BTH region and its surrounding areas, the Yangtze River Delta and the Fen-Wei Plain as the main battle field to promote industrial, energy, transportation and land structuring. It also advised greater efforts to strengthen regional joint control, tackle heavily polluted weather, and further reduce PM_{2.5} and days of heavy pollution, in order to improve air quality and make people benefit from the blue sky and clean environment.

For three consecutive years, MEE has continued to conduct enhanced monitoring for prevention and control of air pollution in three key regions, including and “2+26” cities surrounding the BTH region. The air quality of the three key regions has seen continuous improvement thanks to the actions for comprehensive governance of air pollutions in autumns and winters. In the autumn and winter of 2020, the PM_{2.5} of the BTH region and the Fen-Wei Plains declined by 37.5% and 35.1%, and the days of heavy pollution dropped by 70% and 65%, respectively, compared with the same period in 2016.

In 2020, days with good air quality in municipal and above cities reached 87%, up by 5.8% (target: 3.3%) over 2015; the average concentration of particulate matter in cities failing to meet PM_{2.5} target dropped by 28.8% (target 18%) compared to 2015. In the course of three years, the enforcement of various policies and measures has greatly facilitated the fulfillment of pollutants goals and decoupling of economic growth from air pollutions, which allowed us to outperform the binding targets for air quality improvement during the 13th FYP.

The *Outline of the 14th Five-Year Plan (2021-2025) for National Economic and Social Development and the Long-Range Objectives Through the Year 2035* was adopted on March 11, 2021. The document proposes to fight the battle of pollution prevention and control, enhance coordinated control and management of multiple pollutants across regions, in order to basically eradicate days of heavy pollutions. The *Guideline of the CPC Central Committee and the State Council on Moving forward the Battle against Pollution* issued on December 2, 2021 states that attention should be focused on eradicating days of heavy pollution, facilitating prevention and control of o₃-zone pollution, and advancing governance of pollution from diesel trucks.

b. Accomplishing remarkable results in water pollution prevention and control

Over the past years, China has unveiled a series of policies and regulations on water pollution, signifying the strategic role of water pollution control industry in the country.

On January 1, 2018, the *Decision on Amending the Law of the People's Republic of China on Water Pollution Prevention and Control* (Second Amendment) was officially put into

enforcement. The document further specifies the responsibilities of governments at various levels for water environment quality, intensified efforts for prevention and control of agricultural pollution and strict punishment on illegal activities. In addition, the new amendment also added and revised contents regarding public health and impacts of ecological environment, illegal pollution discharge activities and data fraud, operation of urban sewage treatment plants, prevention and control of livestock and poultry pollution, as well as protection and management of drinking water sources.

Dealing with dark and fetid bodies of water is the first task among the five battles against water pollution. MEE cooperated with MOHURD to launch the special action against dark and fetid bodies of water. Tours of inspection were initiated in September and October, 2018, and those haven't addressed issues identified during the tours would be held accountable under the central environmental inspection. Water bodies located at sources of drinking water will be held as the first priority in prevention and control of pollution of the Four Water Bodies. MEE cooperated with MWR to initiate a special environmental campaign for protecting drinking water sources.

2020 marks the final year of the critical fight against water pollutions, and it is also a crucial year to usher in the 14th FYP period. In the year, significant progress has been achieved in the battle to keep water clear. 2,804 drinking water sources and 10,363 ecological problems have been rectified nationwide, improving the safety of drinking water for around 770 million residents. 95% of municipal and above built-up regions across the country have eradicated black and odorous water bodies. Sewage outlets at estuaries of the Yangtze River and the Bohai Sea were screened. Rivers of the Yangtze River Basin and the Bohai Sea estuaries which have been incorporated in the Campaign to Eradicate Inferior Water Bodies have been removed from the Inferior V category. Efforts have been intensified for governance of rural domestic sewage and black and smelly water bodies. During the 13th FYP period, environments of 136,000 administrative villages have been renovated. The water pollution control industry has reached a mature stage, with a market size of 1.06913 trillion yuan.

As China's environmental protection industry gradually focuses on systematic governance, the water pollution treatment sector will transition towards comprehensive environmental governance which focuses on water governance with comprehensive governance of multiple segments. That means to change the segmented, rough treatment methods, take into consideration of the circular logic of water, air, solid waste and soil pollution, and respect the evolutionary process of the nature. That's how we realize comprehensive governance of multiple segments.

In 2021, a series of documents, such as the *Outline of the 14th Five-Year Plan (2021-2025) for National Economic and Social Development and the Long-Range Objectives Through the Year 2035* and the *Water Eco-environmental Protection Plan for Key River Basins (2021-2025)* were successively released, which clarifies the requirements for continuous improvement of ecological environment and the future development direction of the industry. That symbolizes the coordinated transition of the industry from prevention and control of water pollution to governance of water environment, water ecology and water resources.

On March 1, 2021, the *Law of the People's Republic of China on the Protection of the Yangtze*

River officially took effect. As China's first law for watershed protection, the document ushers into a new era of legally protecting the Yangtze River. According to the law, vessels carrying toxic materials and dangerous chemicals are prohibited from traveling in the Yangtze River, and a ten-year long fishing ban will be implemented.

In November 2021, the *Opinions of the CPC Central Committee and the State Council on Deepening Pollution Prevention and Control* proposed to consolidate and maintain the achievements of pollution prevention and control during the 13th FYP period, and deepen efforts to secure victory in a range of iconic battles, such as the Fight to Keep Water Clear, Black and Smelly Water Body Governance, Critical Battle for Restoration of Yangtze River, the Critical Battle for Protection and Governance of the Yellow River, as well as the Critical Battle for Comprehensive Governance of Key Sea Areas. In addition to that, a series of regulations, such as the *Joint Protection Planning of Regional Ecological Environment in the Yangtze River Delta*, the *Outline of the Plan for the Ecological Protection and High-Quality Development of the Yellow River Basin* and the *Regulations on the Management of Groundwater*, were successively promulgated, which further specifies the definition of collaborative governance of water pollution and clarifies the strategy for watershed governance. In particular, the promulgation of the *Yellow River Protection Law* is being accelerated according to relevant procedures.

Promoting ecological progress is a long-term, arduous task, and the demands of the water governance market are to be further released. The policy principles, such as Pollution Control and Carbon Reduction for Synergetic Effects and Curb Pollution in a Scientific and Targeted Way, will guide the development of sewage treatment technologies.

c. Continuously strengthening soil pollution prevention and control

Soil is the final victim of atmospheric and water pollution and solid wastes. Once the soil is polluted, the restoration and governance is difficult and takes long time and huge costs. In recent years, the problem of soil environment has become increasingly prominent, arousing wide concern in the society. Since 2013, CCICED has been, in its policy recommendations, calling for targeted measures for preventing and controlling soil pollution, and concentrated force to effectively resolve prominent environmental issues, such as air, water and soil pollutions. In June 2018, the CPC Central Committee and the State Council issued the *Guideline on Comprehensively Strengthening Ecological and Environmental Protection and Resolutely Putting up the Uphill Battles against Pollution*. According to the document, work should be done to comprehensively implement the action plan for prevention and control of soil pollution, with a focus on key areas, industries and pollutants, while effectively controlling the environmental risks of agricultural lands and lands for urban construction. In August, the *Law of the People's Republic of China on Prevention and Control of Soil Pollution* was promulgated, which fills the gap for laws of pollution control, especially in terms of soil pollution, and further improves the legal framework for environmental protection. The document specifies basic framework and principles for planning and risk control standards, general survey and monitoring of soil pollution, as well as prevention, protection, risk control and restoration of soil pollution. Its enforcement signifies China has reached a higher level in soil governance and will gradually promote the restructuring of the

industry. Since 2020, Hunan, Shanghai, Sichuan, Jiangsu, Henan and other regions have further refined the directory of and policies regarding agricultural lands and lands for urban construction. The requirements for construction lands, information of pilot programs, as well as engineering requirements, have been made clearer, and the requirements for monitoring and comprehensive governance have been continuously refined.

On June 3, 2020, the *Guidance on Overall Planning for Pandemic Prevention and Control and Ecological and Environmental Protection for Economic and Social Development* was introduced, which requires classified and enhanced measures for soil pollution control and restoration and prevention of solid waste pollution. According to the document, cooperation should be conducted to facilitate the inspection of enforcement of the *Soil Pollution Control Law*. Guidance should be provided to local governments to establish a directory of risk control and restoration for soil pollution. The *Ban on the Entry of Foreign Garbage to Promote the Reform of Solid Waste Import Management System* should be well implemented, and efforts should be continued to slash the imports of solid wastes, in order to basically realize zero import of solid waste by the end of 2020.

2021 marks the start of the 14th FYP period. We will endeavor to protect our clean lands and take full launch of the campaign to control pollution in agriculture and in rural areas. On December 29, 2021, the *14th Five-Year Plan for the Protection of Soil, Groundwater and Rural Ecological Environment* (HTR[2021] No. 120) was issued. The Plan has put forward a series of goals: by 2025, the quality of soil environment and groundwater environment should keep stable, and safe utilization of polluted agricultural lands and key construction lands should be improved; agricultural pollution should be preliminarily controlled, and construction of environmental infrastructure in rural areas should be steadily promoted, and rural ecological environment should be continuously improved. By 2035, the quality of soil environment and groundwater environment should be steadily improved, and safety of soil environment in agricultural land and key construction land should be effectively guaranteed, and risks of soil pollution should be held under comprehensive control; agricultural pollution should be curbed, and environmental infrastructure in rural areas should be upgraded, and rural ecology should be fundamentally improved.

d. Prevention and control of marine pollution

Since the 13th FYP period, China has made remarkable accomplishments in protecting marine environment. The phased targets for the crucial battle of comprehensive governance of Bohai Sea have been fulfilled. Efforts have been continued to prevent and control the pollution in offshore areas, in order to promote land and marine development in a coordinated way. The Blue Bay rectification action and the coastal zone protection and restoration project have been well implemented. As a result, the overall quality of marine environment has been improved, and the roles of local sea areas in the ecological system of have been significantly enhanced.

The top-level planning for protection of marine environment during the 14th FYP period has been gradually strengthened. The *Implementation Opinions on Strengthening Supervision and Management of Outlets into Rivers and Sea*, the *14th Five-Year Plan for Marine Eco-environmental Protection*, the *Action Plan for the Battle for Comprehensive Management of Key Sea Areas*, the *Opinions on Strengthening the Supervision of the Ecological*

Environment of Mariculture and the *National Plan for Marine Dumping Sites (2021-2025)* were issued and put into implementation. The amendment of *Marine Environment Protection Law* has been initiated. The timeline and roadmap for marine environment protection during the 14th FYP period have become clear.

On January 11, 2022, MEE, NDRC, MNR, MOT, MARA and the China Coast Guard (CCG) jointly issued the *14th Five-Year Plan for Marine Eco-environmental Protection*. The document explicitly states that the construction of beautiful bay should be taken as the priority and focus of the protection of marine environment during the 14th FYP period, with the bay (bay area) as an important unit. Besides, it also proposes to build a cascaded bay governance pattern at national, provincial and municipal levels. Besides, systematic planning should be conducted based on actual realities to promote comprehensive governance of the ecological environment at the bay area and facilitate the construction of beautiful bay by breaking down the key tasks during the 14th FYP period and implementing them into 283 bay areas.

On February 10, 2022, MEE, NDRC, MNR, MOHURD, MOT, MARA and CCG jointly issued the *Action Plan for the Battle for Comprehensive Management of Key Sea Areas*, which specifies the overall requirements, main objectives, key tasks and guarantee measures for the comprehensive management of three key sea areas (including coastal areas of the Bohai Sea, the Yangtze River-Hangzhou Bay, and the Pear River). According to the *Action Plan*, by 2025, the proportion of three key seas areas with good water quality should be increased by around 2% compared to 2020. The rectification of sewage outlet at estuaries should be steadily promoted. Estuaries of main rivers should be basically removed from the Inferior V category. Coastal wetlands and shorelines should be effectively protected. The marine environment risk prevention and emergency response capacities should be significantly improved. The purpose is to build a beautiful bay bearing values for national demonstration.

On March 2, 2022, the State Council released the *Implementation Opinions on Strengthening Supervision and Management of Outlets into Rivers and Sea*, which made systematic deployments for strengthening and regulating the supervision and management of outlets through outlets identification and tracking, classification and rectification, and strict supervision and management, etc., and put forward the phase-based objective of “completing the investigation of outlets into key bays and the rectification of outlets into the Bohai Sea by 2023”.

In the past years, the principle of promoting land and marine development in a coordinated way and restricting land activities to protect the marine environment has been well implemented, which has been supported by the deepening of reform and administration by law. Besides, the strictest ecological protection system has been executed. As a result, remarkable achievements have been accomplished in the battle for marine pollution control, and the quality of marine environment has been gradually promoted.

e. CCICED policy recommendations

Research on air, water and soil pollution control has been the primary work of CCICED. Over the past 5 years, CCICED has carried out plenty of researches and proposed numerous

constructive policy recommendations which have been accepted by the Chinese government. These efforts have promoted, to varying degrees, the introduction of action plans for prevention and control of air, water and soil pollution in the new era, thus accelerating the green transition in China.

1. Prevention and control of air pollution

Over the past few years, CCICED has focused heavily on the priority issue of air pollution prevention and control, but the focus has been on synergies between air pollution control and combating climate change. The 2018 CCICED Policy Recommendations advised to strengthen coal use controls, promote renewable energy, and expand energy efficiency gains; eliminate quota systems or long-term contracts, control industrial coal use, and increase support for the economic transition of coal-dependent provinces (regions and cities).

The 2019 CCICED Policy Recommendations proposed that to achieve high-quality development, China should accelerate climate actions and coordinate air quality improvement and GHG emission reduction. Besides, it also advised to advance the optimization of utilization structure of industrial, energy, transportation and land resources under the guidance of the crucial battle against pollution. In addition, efforts should be made to coordinate the objectives of economic development, energy reform, ecological protection and climate actions, and promote sustainable development.

The 2020 CCICED Policy Recommendations stressed to maintain the strategic focus on ecological civilization and align the green development goals in the 14th Five-Year Plan with the UN 2030 Agenda for Sustainable Development, center on energy transition and upgrading, actively address climate change, and build a low-carbon society.

The 2021 CCICED Policy Recommendations stated that a climate-friendly strategy for air pollution control should be implemented to realize the carbon peaking and carbon neutrality targets in a coordinated and orderly way.

2. Prevention and control of water pollution

From 2018 to 2022, CCICED has put forward many recommendations to the Chinese government for water pollution control. The 2019 CCICED Policy Recommendations proposed to establish strict energy efficiency standards in refrigeration, lighting systems and other consumer areas, and build a circular economic system covering solid waste disposal, water treatment and garbage disposal. The 2020 CCICED Policy Recommendations advised to establish an innovative ecological compensation mechanism so as to accelerating horizontal ecological compensation of river basins from the standpoint of water resources, water environment and water ecology. The 2021 CCICED Policy Recommendations advised to improve the joint technology breakthrough mechanism to enhance science-based marine management, including tackling point-source and non-point source pollutions. Besides, it also advised to enhance pollution control for coordinated land and marine development, strengthen analysis, monitoring and source-tracing of mercury pollutants, and tighten the control of marine plastic pollution and sources of micro-plastic, so as to reduce plastic pollution, and improve waste management and disposal capacities.

3. Prevention and control of soil pollution

The 2019 CCICED Policy Recommendations stated that high-quality afforestation and measures such as investing in the protection of mangroves, coastal wetlands and watershed can all enhance carbon sequestration and biodiversity, and achieve more ecosystem benefits such as flood control and soil and water conservation. The 2020 CCICED Policy Recommendations advised to implement labor-intensive ecological public works such as afforestation, wetland and coastal area restoration, soil and water body restoration, green buildings and renovation to houses. Besides, it also advised to compile and release a list of major innovative green technologies in key fields, such as waste management, land utilization and planning, and restoration of pollution sites.

4. Protection of marine ecology

In 2018, CCICED summarized global ocean governance experiences, and proposed to strengthen legal protection for marine and coastal ecosystems, and formulate a national action plan to restore the functions and services provided by marine ecosystems. The 2019 CCICED Policy Recommendations advised to continue to promote integrated ocean governance and launch a network of protected areas including marine ecosystem protection red lines and the national park system. The 2020 CCICED Policy Recommendations proposed to step up the protection and restoration of coastal wetlands and rebuild key habitats; and delineate marine ecosystem protection red line areas and marine protected areas to help with marine biodiversity conservation and fishery development. The 2021 CCICED Policy Recommendations advised to conduct a baseline study on the accounting of the value of marine ecosystems, step up the protection and restoration of important marine species and their habitats, and improve the quality and stability of marine ecosystems.

V. Protection of Ecological System and Biodiversity

a. Ecological redlines and compensation

As two basic systems for China's ecological protection, the ecological redline system and the ecological compensation system play important roles in protecting the ecological system and biodiversity.

1. The ecological redline system

The ecological redlines are not only the bottomline and lifeline for protecting China's ecology security, but also the basis for constructing spatial layout system. In the report to 19th CPC National Congress, it is explicitly stated that "We will complete work on drawing redlines for protecting the ecosystems, designating permanent basic cropland, and delineating boundaries for urban development". In January 2017, the CPC Central Committee and the General Office of the State Council jointly issued the *Several Opinions on Delineating and Strictly Observing Ecological Red Lines*, which proposes to designate ecological protection redlines for the provinces (municipalities directly under the central government) along the BTH region and the Yangtze River Economic Zone by the end of 2017 and complete the delineation of the redlines for national ecological protection before the end of 2020.

In August 2019, MEE and MNR published the *Notice on Issuance of the Technical*

Specification for Delineating Boundaries of Ecological Protection Redlines, which requires further efforts to promote the designation of the ecological protection redlines. In November 2020, MEE approved 7 documents, including the *Technical Specification for Supervision of Ecological Conservation Redline-Baseline Investigation (Trial)*, as national environmental protection standards, in order to deepen the implementation of the *Several Opinions on Delineating and Strictly Observing Ecological Red Lines*.

On December 23, 2021, the “Three Line and One List” project (ecological protection redline, environmental quality bottomline, resource utilization upperline and Ecological Environment Entry List, covering all provinces and municipalities), was completed, and a region-specific ecological governance system has been basically established.

Currently, the designated ecological redlines cover more than 2.4 million km², around one fourth of Chinese mainland area.

2. Ecological compensation

In order to further promote ecological protection, the General Office of the State Council and the State Council issued the *Reform Plan of Compensation System for Ecological Damage* in December 2017. According to the document, the system would be put into trial operation from January 1, 2018, and it was required to basically build an ecological compensation system with clearly defined responsibilities, smooth channels, technical specification, strong supports, sound compensation measures and effective restoration measures by 2020.

In the end of 2018, NDRC and other 8 ministries issued the *Action Plan for Building a Market-oriented, Diversified Ecological Compensation Mechanism*. The *Action Plan* proposes to improve the mitigation and compensation system for resource exploitation, reduction of pollutants discharge, water conservation and carbon emission rights, in order to guide ecological beneficiaries and investors to compensate ecological protectors.

In September 2021, the General Office of the CPC Central Committee and the State Council released the *Opinions on Deepening the Reform of the Compensation System for Ecological Protection*. According to the document, an ecological compensation system consistent with the social and economic development status should be basically established by 2025; a categorized compensation system based on ecological protection costs should be improved; a comprehensive compensation system aimed at improving steady delivery of public services should be improved; and a market-oriented, diversified compensation landscape based on the “Beneficiary Pays” principle should be basically formed. Besides, it also proposes that an ecological compensation system which aligns with the requirements for ecological civilization in the new era should be basically completed by 2035.

At present, relevant ministries and commissions are working actively to promote the formulation of the *Ecological Compensation Ordinance*. It is planned that on the basis of the *Guideline on Improving the Ecological Compensation Mechanism* published by the State Council General Office in 2016, the Ordinance will summarize China’s experience in ecological compensation in the past two decades and incorporate effective principles and practices as legal rules, in order to provide legal basis for promoting ecological compensation at larger scales.

b. Success of the CBD COP15 (Part 1)

On October 12, 2021, the High-level Segment of the United Nations Conference on Biological Diversity was convened in Kunming, China. At the leaders' summit during CBD COP15, President Xi Jinping delivered a keynote speech titled "Ecological Civilization: Building a Shared Future for All Life on Earth". President Xi pointed out that biodiversity makes Earth full of vigor vitality, and lays the foundation for human survival and development. Protecting biodiversity helps protect Earth, our common homeland, and contributes to humanity's sustainable development.

The *Kunming Declaration* was unanimously adopted at COP15. It put forward 17 commitments such as to develop, adopt and implement an ambitious and transformative post-2020 global biodiversity framework. The purpose is to put biodiversity on a path of recovery by 2030 at the latest, move the world toward the 2050 Vision of "Living in harmony with nature", and send out a message of biodiversity conservation to the whole world. To show the spirit of COP15, China took the initiative to invest 1.5 billion yuan in building the Kunming Biodiversity Foundation, in an effort to support developing countries to contribute to biodiversity conservation work. China calls for and welcomes financial supports from various parties to the Foundation.

If we do not fail Nature, Nature shall never fail us. COP15 marks a new beginning for global biodiversity governance. At this point, the international community should unite as one to build a beautiful planet for the mankind.

c. An all-round protection system has been basically formed

In 2018, MEE and MNR were formally established, which provides institutional guarantee for the coordinated and systematic governance of mountain, water, forest, land, lake and grass environments and for the unified ecological protection and restoration.

The Ministry of Finance, in collaboration with MEE and MNR, initiated the trial program of Protecting and Restoring Mountains, Waters, Forests, Farmlands, Lakes and Grasses. In 2018 and 2019, a total of 10 billion yuan was distributed to support 10 trial programs in key regions. In 2019, leveraging the natural resources satellite remote sensing technologies, an all-round all-factor monitoring system was built for protecting mountains, waters, forests, lakes, farmlands and grasses.

In June 2020, the *Master Plan for the Major Projects for the Protection and Restoration of Ecosystems (2021-2035)* was released. The *Plan* includes 9 key restoration projects, including the Qinghai-Tibet Plateau ecological shield area, key ecological areas along the Yellow River, and key ecological areas along the Yangtze River, involving the protection and restoration of all natural ecosystems such as mountains, waters, forests, fields, lakes, grasses and oceans. In October, the Third Plenary Session of the 12th CPC Central Committee further stressed the importance of "promoting green development and harmonious coexistence of human and nature.

On February 9, 2021, the General Office of the Ministry of Finance, MEE and MNR jointly issued the *Circular on Organizing and Applying for Central Finance to Support the*

Integrated Protection and Restoration Project of Mountains, Waters, Forests, Farmlands, Lakes, Grasses and Sands, in a bid to coordinate and promote the comprehensive, systematic and source-oriented governance and integrated protection and restoration of these environments. Besides, it has also been incorporated into the *Resolution of the Central Committee of the Communist Party of China on the Major Achievements and Historical Experience of the Party over the Past Century*.

Mountains, waters, forests, farmlands, lakes and grasslands are part of a community of life. From the proposal to practice of this concept, its connotation has been continuously extended. From constant release of documents and planning to the involvement in pilot programs for ecological protection and restoration by various departments, China has made remarkable progresses in this regard, and has basically formed an all-round ecological protection and restoration system.

d. Exploration of realizing values of ecological products

On February 19, 2021, the 18th Meeting of the Central Commission for Comprehensively Deepening Reform adopted the *Opinions on Establishing a Sound Mechanism for Realizing the Value of Ecological Products*. According to this document, establishment of such mechanism is a key pathway for implementing the concept of “lucid waters and lush mountains are invaluable assets”, but it is also a necessary action for modernizing national ecological governance system and governance capacity, and bears profound significance for green transition of social and economic development.

In April 2021, the General Office of the CPC Central Committee and the State Council issued the *Opinions on Establishing a Sound Mechanism for Realizing the Value of Ecological Products*. In the document, it is required that by 2025, a framework of system for realizing the values of ecological products should be basically formed; a relatively scientific system for calculating the values of ecological products should be basically established; the policy system for ecological protection compensation and ecological damage reparation should be improved; the government assessment mechanism for realization of values of ecological products should be basically formed; the ecological problems, such as being hard to measure, pledge, trade and liquidate, should be largely resolved; a benefit-oriented ecological protection mechanism should be basically established; and the capacity of converting ecological advantages into economic advantages should be significantly strengthened. Besides, it also proposes that by 2035, the system for realizing the values of ecological products should be improved, and a new mode for ecological civilization development with Chinese characteristics should be formed, and a green production and living mode should be universally built, as strong support to attain the goal of Building a Beautiful China.

Focusing on the *Opinions on Establishing a Sound Mechanism for Realizing the Value of Ecological Products*, various localities have gradually been engaged in exploration and practices in this regard. In April 2022, the *Implementation Plan for Establishing a Sound Mechanism for Realizing the Value of Ecological Products in Tianjin* was published and enforced. Jinnan District of Tianjin promoted the construction of main battle field for green ecological defense, which covered 25% of forestry area and 65% of the blue and green space. Besides, the District also advanced the demonstration area

for carbon peaking and carbon neutrality by approving a series of zero-carbon or low-carbon innovative high-tech enterprises, in a bid to diversify the pathways. In the same period, Jiangsu Province published the *Implementation Plan for Establishing a Sound Mechanism for Realizing the Value of Ecological Products in Jiangsu*. The document specifies several goals: By 2025, an initial institutional framework for the realization of the value of ecological products will be formed; and by 2035, a comprehensive mechanism for the realization of the value of ecological products will be fully established. Regions such as Liyang worked actively to build such mechanism, and constructively proposed to build an ecological products trading market, in order to build a government-led model of ecological protection with the participation of multiple entities.

e. Effectively enhancing protection of wild animals

China is one of the countries with the most diversified wild animal species, including more than 7,300 vertebrates. Among them, more than 470 terrestrial vertebrates, such as giant panda and golden monkey, are species which only live in China. China is taking a leading position in terms of wild animal protection. By now, China has established 11,800 natural habitats of various types, covering 18% of the Chinese land territory, which allows effective protection of more than 85% of national protected wild animal species.

On June 5, 2018, MEE, the Office of the Spiritual Civilization Development Steering Commission, the Ministry of Education, the Central Committee of the Communist Young League, the All China Women's Federation jointly issued the *Code of Conduct among Citizens for the Protection of the Ecological Environment (for Trial Implementation)* at the main venue of June 5 National Environment Day. The document advocates simple, moderate, green and low-carbon lifestyles. In particular, Article 7 “Caring for the Natural Ecology” explicitly proposes to protect wild animals, avoid damaging habitats of wild animals, refrain from stepping into natural reserves, avoid buying or using products made of rare wild species, and reject to eat wild animals.

On February 24, 2020, the 16th Meeting of the Standing Committee of the 13th National People's Congress adopted by vote the *Decision on a Complete Ban of Illegal Wildlife Trade and the Elimination of the Unhealthy Habit of Indiscriminate Wild Animal Meat Consumption for the Protection of Human Life and Health*, in a bid to completely ban and punish illegal wildlife trade, eradicate the unhealthy habit of indiscriminate wildlife meat consumption, maintain bio-security and ecological safety, effectively prevent major public health risks, safeguard human life and health, strengthen ecological progress, and promote the harmonious coexistence of mankind and nature. From May to June of the same year, the inspection group of the National People's Congress Standing Committee went to Guangxi, Jiangxi, Fujian, Yunnan and other regions to inspect the protection of wild animals; and the Standing Committee of the People's Congress of Hebei carried out field inspection on wild animal protection.

In February 2021, the National Forestry and Grassland Administration and MARA published the newly updated *List of National Key Protected Wildlife*. Relevant departments of China are required to implement the work identified in the List according to relevant laws and

regulations, and step up efforts to protect wild animals. Besides, it is also required to define the responsibilities of governments of different regions based on the species in the List, in order to ensure the safety of the species and their habitats, and avoid indiscriminate capturing or killing of wild animals and damages of their habitats. The rules should be strictly enforced, in order to severely punish illegal activities, and prohibit eating or illegal trade of wild animals.

f. The national park management system begins producing good results.

In June 2019, the General Office of the CPC Central Committee and the State Council published the *Guiding Opinions on the Establishment of a Nature Reserve System Dominated by National Parks*. The document proposes to build a nature reserve system with national parks as the main body, promote the scientific setting of the nature reserves, and build a new institution, new mechanism and new mode for the natural ecological system to ensure healthy, stable and efficient operation of the system.

In October, 2020, the Third Plenary Session of the 19th Central Committee of the Chinese Communist Party put forward the Major Project for Biodiversity Conservation. It is suggested to initiate a national park institutional trial program and build a nature reserve system with national parks as the mainstay. In October 2021, the General Office of the CPC Central Committee and the State Council issued the *Opinions on Further Strengthening Biodiversity Conservation*. According to the document, efforts should be continued to advance the investigation and assessment of the biodiversity conservation prioritized areas and national strategic areas by 2025, so that the area of nature reserves with national parks as the mainstay account for 18% of the territorial land area; by 2035, typical ecological systems, national key protected wild animal species, endangered wild animals and plants and their habitats should be well protected.

At the UN CBD COP15 in October 2021, Chinese President Xi Jinping pointed out that in order to strengthen biodiversity conservation, China is accelerating the construction of a nature reserve system with national parks as the mainstay, and gradually incorporating into the national park system the areas with the most important natural ecosystems, the most unique natural landscapes, the best natural heritage and the richest biodiversity. Since the pilot national park system was implemented in 2015, 10 national parks have been constructed, including the Northeast China Tiger and Leopard, Qilian Mountain, Giant Panda, Sanjiangyuan, Hainan Tropical Rainforest, Wuyishan, Shennongjia, Pudacuo, Qianjiangyuan and Nanshan. In October 2021, the first national parks such as Sanjiangyuan, Giant Panda, Northeast China Tiger and Leopard, Hainan Tropical Rainforest and Wuyishan were officially established. In 2022, China will advance the construction of three national parks, including the Asian Elephant National Park. By now, China has established more than 11,800 protected areas, covering 1/4 of the territorial land area.

g. CCICED policy recommendations

Over the past years, CCICED has proposed many valuable policy recommendations for ecological system and biodiversity conservation.

1. Ecological red lines, restoration and compensation

The 2021 CCICED Policy Recommendations advised to expand investment and financing related to biodiversity conservation, which means to include ecological conservation, restoration and regeneration as an important area of green finance; carry out pilot ecological protection finance, risk disclosure, reporting and stress testing, and defining responsibilities of the private sector for public investments so that public and private sectors' financial flows are aligned with biodiversity goals; and expand the application of fintech in biodiversity conservation by such ways as launching "Fintech+Biodiversity Conservation" pilot demonstrations .

In addition, CCICED also suggested to actively implement the post-2020 global biodiversity framework, set up goals for construction of ecological corridor targeted towards ecological redline and protected areas, establish an efficient, stable ecological safety network, and protect the integrity of the ecological system. Besides, it also advised to adopt transformative ecosystem-based approaches to support high-quality and green development.

2. CBD COP15

The 2018 CCICED Policy Recommendations advised China to leverage strong leadership to facilitate the realization of the five goals at CBD COP 15, including the establishment of the post-2020 biodiversity framework and of an effective mechanism, timely fulfillment of strategic goals of the convention, and enhanced biodiversity conservation in overseas investment and trade. The 2019 CCICED Policy Recommendations advised, based on the experience of Paris negotiation on climate actions, to leverage the political wills accumulated through green diplomacy to enhance the green BRI construction, and promote the biodiversity conservation. The 2020 CCICED Policy Recommendations called for building on the success of CBD COP15 in 2021 to stimulate ambitious multilateral cooperation, and strengthen national actions to protect nature and human well-being. The 2021 CCICED Policy Recommendations advised to promote the mainstreaming of biodiversity conservation in different economic sectors; integrate nature conservation and nature-based solutions into public and private sectors' investment plans; set scientifically based, quantifiable, ambitious and pragmatic biodiversity targets with indicators to track progress, and pay attention to the pressures on biodiversity, the current status and the impact and effectiveness of solutions.

3. National park management system and wild animal protection

By reviewing the experience in building national park management system and wild animal protection, the 2021 CCICED Policy Recommendations advised to step up the construction of national parks and protected areas; identify cost-effective priority areas of protection, and improve the effect of protection based on their respective capabilities; vigorously safeguard the integrity of the ecosystems of national parks and protected marine areas and wilderness areas; assess the overall potential of carbon sequestration in ecological protection red line areas, and identify areas with greater carbon sequestration potential.

In terms of wild animal protection, CCICED Policy Recommendations advised to promote the protection and management of productive landscapes, such as those in the field of agriculture, forestry and fishing; incorporate avoiding alien species intrusion as a national priority and in the post-2020 biodiversity framework; make efforts to expand the forestry, wetland and

grassland areas to enhance climate resilience; impose strict ban on illegal trade of wild animals, illegal production and use of pesticides, illegal fishing activities, and illegal change of purpose of land uses; endeavor to eliminate the behavior of eating wild animals and enhance control of wild animal products for medical purposes; and mobilize the whole society to protect the health of livestock, wildlife and plants, safeguard ecosystem integrity, carry out disease prevention, and develop early warning systems under the framework of “One Health”.

VI. Regional and International Engagement

a. Leading the way in international climate change governance

The Chinese government attaches great importance to tackling climate change. In the past few years, China has continued to play a constructive role in this regard, and stepped up its efforts with unprecedented intensity to promote international cooperation on addressing climate change.

On May 20, 2018, at the 26th BASIC Ministerial Meeting on Climate Change, the joint statement of the BASIC countries included “building a community with a shared future for mankind, in terms of climate resilience and low greenhouse gas emissions development” under the advocacy of China. This is the first time that the concept of ‘building a community with a shared future for mankind’ is reflected in a multilateral international document in the field of climate change.

In 2019, at the UN Climate Action Summit, China and New Zealand co-led the establishment of the Nature-Based Solutions Coalition and released the widely supported *Declaration on Nature-Based Solutions for Climate*. During the Summit, China also released the *Policy Proposal on Nature-Based Solutions*, suggesting the establishment of a Group of Friends for Nature-Based Solutions (NBS).

On September 22, 2020, President Xi Jinping announced at the general debate of the 75th session of the UN General Assembly that China would increase its nationally determined contributions (NDCs) and adopt stronger policies and measures to peak carbon dioxide emissions by 2030 and achieve carbon neutrality by 2060. This was the first time China had proposed to achieve the carbon peaking and carbon neutrality targets, which drew great attention from the international community. On December 12, President Xi Jinping further improved the new target of the NDCs at the Climate Ambition Summit, saying that by 2030, China’s carbon dioxide emissions per unit of GDP will drop by more than 65% compared to 2005, non-fossil energy will account for about 25% of primary energy consumption, forest stock will increase by 6 billion cubic meters compared to 2005, and total installed capacity of wind and solar power will reach over 1.2 billion kilowatts. This is the most ambitious emission reduction target for 2030 in the world, and fully demonstrates China’s significant role in addressing global climate change and achieving the world’s 2050 target of zero carbon emission.

In January 2021, the Ministry of Ecology and Environment (MEE) issued a policy prioritizing “nature-based solutions” (NBS) as a means to address climate change and form synergy in the areas of climate, nature and pollution control. China’s afforestation program has increased the country’s forest coverage from 21.37% to 22.96%, making China the largest contributor to the

growth of green space globally.

At the Leaders Summit on Climate on April 22, 2021, Chinese President Xi Jinping proposed that “we should be committed to harmony between man and Nature, green development, systemic governance, people-centered approach, multilateralism and the principle of common but differentiated responsibilities”. On June 17, 2021, China decided to ratify the *Kigali Amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer* and will make new contributions to the protection of the global ozone layer and to the response to climate change. China not only played a key role in the reaching of the *Paris Agreement*, but also led its implementation.

On September 21, 2021, Chinese President Xi Jinping proposed at the general debate of the 76th session of the UN General Assembly that China will vigorously support the green and low-carbon development of energy in developing countries and will not build any new coal power projects outside China, demonstrating China’s sense of responsibility as a major power.

In October 2021, Chinese President Xi Jinping attended the Leaders’ Summit of the 15th meeting of the Conference of the Parties to the Convention on Biological Diversity (CBD COP15) and delivered a keynote speech, emphasizing that in order to help achieve the carbon peaking and carbon neutrality targets, China will issue implementation plans and a series of supporting measures for peaking carbon emissions in key fields and key sectors, and build up a “1+N” policy framework for carbon peaking and carbon neutrality; vigorously develop renewable energy and accelerate the planning and construction of large-scale wind power and photovoltaic base projects in deserts and Gobi areas. Since 2015, China’s domestic climate mitigation actions have become more aligned with global governance goals. On October 28, 2021, the Chinese government officially submitted *China’s Achievements, New Goals and New Measures for Nationally Determined Contributions*, which injected a strong impetus for the international community to actively address climate change.

On November 1, 2021, President Xi Jinping delivered a written message to the 26th session of the Conference of the Parties (COP26) to the UN Framework Convention on Climate Change, proposing to uphold multilateral consensus, focus on concrete actions and accelerate the green transition, in response to some major issues of the era, such as tackling climate change and promoting world economic recovery. On November 16, 2021, China and the United States released the *Joint Glasgow Declaration on Enhancing Climate Action in the 2020s* at the UN Climate Change Conference UK 2021 in Glasgow. The *Declaration* mentions that in addition to its recently communicated NDC, China intends to develop a comprehensive and ambitious *National Action Plan* on methane, aiming to achieve a significant effect on methane emissions control and reductions in the 2020s. The *Declaration* also states that the United States and China intend to convene a meeting in the first half of 2022 to focus on the specifics of enhancing measurement and mitigation of methane, including through standards to reduce methane from the fossil and waste sectors, as well as incentives and programs to reduce methane from the agricultural sector.

On November 16, 2021, Chinese President Xi Jinping had a virtual meeting with U.S. President Joe Biden. On the issue of climate change, Xi noted that China and the United States had worked together to facilitate the reaching of the *Paris Agreement* to address

climate change, and that climate change can well become a new highlight of China-U.S. cooperation as both countries are transitioning to green and low-carbon economy. Xi said all countries need to uphold the principle of common but differentiated responsibilities, and strike a balance between addressing climate change and protecting livelihoods. He pointed out that what the world needs is less finger-pointing or blame game, but more solidarity and cooperation, and that actions speak louder than words. He called on developed countries to earnestly fulfill their historical responsibilities and due obligations and maintain policy consistency.

b. Promoting South-South cooperation

In international cooperation for development, China sees North-South cooperation as the main platform and South-South cooperation as a supplement. China strives to drive developed countries to increase development assistance to developing countries and construct a new type of global development partnership that is more equal and balanced to create a favorable external environment for poverty reduction.

In January 2018, in promoting cooperation among BRICS countries, China Council for BRICS Think Tank Cooperation (CCBTC), the Chinese coordinator for the BRICS think tank cooperation, held the 2018 CCBTC Annual Meeting and Wanshou Forum to facilitate the exchanges and cooperation of think tanks of BRICS countries. In September 2018, the Beijing Summit of the Forum on China-Africa Cooperation (FOCAC) was held, at which the *Beijing Declaration-Toward an Even Stronger China-Africa Community with a Shared Future* and the *Beijing Action Plan* were adopted, pushing China-Africa relations to a new height marked by a stronger community with a shared future. In 2018, a new round of government institutional reform saw the establishment of a new agency directly under the State Council, the China International Development Cooperation Agency (CIDCA), which consolidates the foreign assistance coordination and other responsibilities of the Ministry of Commerce and the Ministry of Foreign Affairs, and unveils a new chapter for China to conduct South-South cooperation.

China has actively carried out South-South cooperation on climate change with the large number of developing countries. Since 2011, China has allocated a total of RMB 1.2 billion for South-South cooperation on climate change, signed 40 cooperation documents with 35 countries, and helped related countries improve their capacity to cope with climate change by building low-carbon demonstration areas and providing meteorological satellites, photovoltaic power generation systems and lighting equipment, new energy vehicles, environmental monitoring equipment, cleaner cooking stoves and other materials as assistance. At the same time, China has trained about 2,000 officials and technicians in the field of climate change for nearly 120 developing countries.

At a time when de-globalization and COVID-19 pandemic are posing a significant impact on the development cooperation pattern, China is sharing its governance experiences and applicable technologies, bringing more developing countries into the international division of labor and cooperation system, and boosting the confidence and determination of the world to participate in the supply of public goods and achieve win-win results through sharing. On September 4, 2021, the 2021 International Forum on South-South Cooperation and Trade in

Services, with a theme of “Digital Economy for South-South Cooperation”, was held, proposing that the large number of developing countries should make full use of the opportunities in digital economy, actively address the challenges, and mobilize all parties to form a development synergy to bridge the digital divide.

c. Greening the “Belt and Road Initiative” at a deeper level

Guided by the concept of green BRI, China has continuously reinforced the foundation of cooperation with countries along the Belt and Road on the basis of the achievements made in green and low-carbon development, in a bid to make green development a common feature in the development of BRI countries. The CCICED policy recommendations in recent years have encouraged to promote green BRI.

At the end of 2018, the electric buses, the Chinese Red, produced by Chinese companies BYD and Yutong became a unique sight on the streets of Santiago, and were highly praised by Chilean President Pinera. On April 16, 2019, the Industrial and Commercial Bank of China (ICBC) issued the world’s first green bonds focusing on Belt and Road inter-bank regular cooperation (BRBR), and the funds raised will be used to support green BRI.

In Adama City, Ethiopia, the second largest wind farm in Africa built by China has been put into operation, supplying a total of 2.6 billion kilowatt hours of power to the power grid, equivalent to reducing consumption by 810,000 tce and reducing the emission of soot, sulfur dioxide and nitrogen oxides by 2,158 tons. In Thailand’s Sirindhorn Reservoir in Ubon Ratchathani Province, there is also a blue “island”, which is the Sino-Thai hydro-floating solar hybrid project at Sirindhorn Dam, in which the floating solar farm and the hydropower equipment generate electricity alternately or simultaneously, reducing about 47,000 tons of greenhouse gas emissions per year.

In 2020, against the backdrop of the spread of the COVID-19 pandemic, the downward pressure on the world economy, and a complex and changing international situation, the BRI became the biggest highlight of international cooperation. BRI countries stepped up trade and economic cooperation, through which a large quantity of supplies and products were sent to the related countries to combat the pandemic as the trade volume continued to expand. A total of 6,354 China-Europe freight trains departed, a year-on-year increase of 41%. The trains played an important role in ensuring smooth flow of goods and stable supply of materials amid the pandemic. Studies show that the BRI will lift 7.6 million people out of extreme poverty and 32 million people out of moderate poverty in the related countries.

In April 2021, President Xi Jinping noted at the Boao Forum for Asia that a closer partnership on green development would be built. Xi called for efforts to strengthen cooperation on green infrastructure, green energy and green finance, etc. Xi also called for improving the BRI International Green Development Coalition, the Belt and Road Green Investment Principles and other multilateral cooperation platforms to make green a defining feature of Belt and Road cooperation.

On March 16, 2022, four departments including the National Development and Reform Commission jointly issued the *Opinions on Promoting the Green Development of the Belt and Road Initiative*. The *Opinions* puts forward 15 specific tasks in three respects, which are

promoting green development cooperation in key areas, promoting the green development of overseas projects, and improving the supporting system for green development, covering key areas such as connectivity of green infrastructure, green energy, green transportation, green industry, green trade, green finance, green science and technology, green standards, and addressing climate change.

It can be said that in the past ten years, the BRI green development partnership has become stronger, which is reflected in the joint initiation of the Initiative for Belt and Road Partnership on Green Development with 28 countries, the facilitation of the construction of the BRI International Green Development Coalition and the BRI Environmental Big Data Platform, the implementation of the Belt and Road South-South Cooperation Initiative on Climate Change, and the establishment of the Belt and Road Energy Partnership. Belt and Road cooperation will become a model for international cooperation on green development in the new era.

d. New advances in global ocean governance

China has always attached great importance to international ocean governance and strengthened international ocean cooperation with relevant countries. In 2018, the State Oceanic Administration released the *National Marine Eco-environmental Protection Plan (2017-2020)*. In November 2018, China and Canada jointly released the *Joint Statement of the Government of the People's Republic of China and the Government of Canada on Marine Litter and Plastics*, underlining that both sides agree to reduce the unnecessary use of disposable plastic products and enhance the capacity to control the entry of plastic waste into the ocean from the source. In March 2019, China and France issued a joint statement, proposing to strengthen existing multilateral mechanisms such as the *Basel Convention*. As part of the country's "ecological protection red line" program, China will work to identify about 30% of its coastal waters as completely development-forbidden.

China is deeply involved in international ocean governance. In the *Outline of the 14th Five-Year Plan (2021-2025) for National Economic and Social Development and the Long-Range Objectives Through the Year 2035* adopted in March 2021, it is explicitly stated that China should "deeply participate in the formulation and implementation of international ocean governance mechanisms and related rules, promote a just and reasonable international maritime order and a maritime community with a shared future". China is actively engaged in international negotiations on ocean-related issues, such as the UN consultations on an international agreement on the sustainable use of marine biodiversity in areas beyond national jurisdiction, as well as negotiations and consultations under the UN Regular Process for World Ocean Assessment, the *Convention on Biological Diversity*, the International Seabed Authority and other mechanisms. 2021 also marks the start of the UN Decade of Ocean Science for Sustainable Development, to which China gives active responses by participating in the research of cutting-edge scientific issues such as sci-tech innovation for comprehensive understanding of oceans, conservation of marine ecology and biodiversity, ocean solutions to carbon neutrality targets, and the discovery of special habitats in the deep sea, in order to help achieve sustainable ocean development.

On March 2, 2022, heads of state, environment ministers and other delegates from 175

countries adopted a historic resolution at the resumed 5th session of the UN Environment Assembly (UNEA-5.2) in Nairobi: End plastic pollution: Towards an internationally legally binding instrument by 2024. This resolution considers prevention and control from an entire life cycle perspective, including the production, design and disposal of plastics.

China is actively involved in global marine litter control. In January 2020, China issued the *Opinions on Further Enhancing Plastic Pollution Control*; Hainan Province, Fujian Province and Dalian City of Liaoning Province, among others, explored the implementation of a sea cleaner system. At the regional level, under the framework of the mechanisms such as the Trilateral Summit Meeting among China, Japan and the Republic of Korea, the ASEAN-China Summit, the G20 Summit, and the Asia-Pacific Economic Cooperation (APEC), China has actively cooperated with neighboring countries to enhance regional capacity to deal with marine plastic litter through joint scientific expedition, scientific and technological research and development, technical assistance, academic conferences, etc. In addition, China has also cooperated in a deep-going manner with the UN Environment Programme and other international institutions to create demonstration projects, share governance experiences and promote practical experiences; it has conducted exchanges and cooperation with nearly 50 countries in marine environmental protection, disaster prevention and mitigation, climate change response, blue carbon, ocean acidification and marine litter management, and signed more than 30 bilateral cooperation agreements and constructed 8 institutions and platforms of international organizations in China.

e. CCICED Policy recommendations

The mission of CCICED is to push forward the international exchanges and cooperation between China and other countries on environment and development. Whether it is on climate change, South-South cooperation or the BRI, the research work conducted by CCICED has integrated leading international and domestic experts and promoted two-way policy exchanges and interactions between China and the wider world. The details are summarized as follows.

1. Strengthening international cooperation on climate change

The 2018 CCICED Policy Recommendations proposed to step up climate change mitigation actions and enhance China's contribution to global climate governance.

The 2020 CCICED Policy Recommendations suggested that as the global outbreak of the COVID-19 pandemic highlights the importance of integrated measures, China should address environmental challenges in an integrated manner, actively respond to climate change with energy transition and upgrading at the core, and build a low-carbon society. Moreover, efforts should be made to strengthen the economic evaluation of coal power and develop a roadmap for its gradual reduction and eventual phase-out; and enhance multilateral climate cooperation with Europe and other developing countries through the Ministerial Meeting on Climate Action and other initiatives to forge new global climate leadership.

The 2021 CCICED Policy Recommendations proposed to uphold the holistic nature of the global ecosystem; promote the mainstreaming of climate change, biodiversity conservation, pollution prevention and control; and strengthen cross-sectoral and cross-regional policy

convergence; and explore the establishment of green responsibility accounts through ecological capital accounting to consolidate the micro-foundation of green and low-carbon development and guarantee the comprehensiveness, smoothness and universality of the transition.

2. Advancing South-South cooperation

The 2019 CCICED Policy Recommendations proposed to support sustainable trade and to take joint actions to strengthen green supply chains and push forward South-South cooperation. The 2020 CCICED Policy Recommendations advised to study the establishment of a traceability system for commodity trade and related due diligence standards, and to support the related countries in transitioning to sustainable production methods through South-South cooperation. The 2021 Policy Recommendations proposed to make use of the Belt and Road South-South Cooperation Initiative on Climate Change to publicize the advantages of green solutions to the countries involved in BRI cooperation, and to create a closer partnership on green and sustainable development.

3. Promoting green BRI

CCICED has continued to pay attention to and study the greening of the BRI. The 2018 CCICED Policy Recommendations proposed to jointly build the BRI International Green Development Coalition and to align the BRI with the *Paris Agreement*, the global biodiversity goals and the UN 2030 sustainable development goals. The 2019 CCICED Policy Recommendations advised to promote the alignment of the sustainable development strategies of the countries involved in the cooperation for green BRI. The 2020 CCICED Policy Recommendations proposed to push forward green BRI and global green supply chains, strengthen green international cooperation and achieve a green prosperity globally. The 2021 CCICED Policy Recommendations proposed to expand the BRI to cover a wider scope of green development and align the BRI with the UN 2030 Agenda for Sustainable Development, incorporate climate mitigation and adaptation, affordable and applicable clean energy, biodiversity conservation and other sustainable development goals into the construction of the Green Silk Road, and strengthen the synergy among the goals. CCICED also advised to strengthen multilateral cooperation platforms such as the BRI International Green Development Coalition, the BRI Environmental Big Data Platform, and Belt and Road Green Investment Principles.

4. Striving for new advances in international ocean governance

The 2018 CCICED Policy Recommendations stated that China should cooperate with other countries to tackle plastic pollution. China should intensify the research on emerging ocean environmental issues of global concern, including the priority issues of ocean acidification, plastics and microplastics in oceans, oxygen-deficient hot spots and other emerging ocean environmental issues that have an impact on the globe. The 2019 CCICED Policy Recommendations advised China to strengthen comprehensive ocean governance, actively participate in global ocean governance, and enhance its capacity in marine ecosystem protection and governance. The 2020 CCICED Policy Recommendations advised China to actively work with the international community to establish clear and quantifiable targets for

the conservation and restoration of the global terrestrial and marine ecosystems. The 2021 CCICED Policy Recommendations proposed to diversify global marine public goods and participate in global marine environmental governance in a deep-going manner.

VII. Conclusions

The past five years have witnessed several major achievements in the sustainable development process of China. China has implemented the Five-sphere Integrated Plan to promote coordinated progress in the economic, political, cultural, social and eco-environmental fields. With the overriding purpose of building a beautiful China and realizing a harmonious coexistence between human beings and nature, China strives to build a national governance system for ecological progress, and has pushed forward the reform of the systems and mechanisms for eco-environmental management in a deep-going manner, organized the refining and revision of the relevant laws and regulations, and implemented special campaigns for the improvement of the atmosphere, water and soil. In addition, China has constructed a green financial system and tightened the regulation of corporate environmental credit, and worked to drive the comprehensive green transition of the economy and society. In the meantime, focused efforts have been made to carry out global climate and environment cooperation, develop green BRI, facilitate the fulfillment of the UN 2030 Agenda for Sustainable Development, and build a community with a shared future for mankind.

On the whole, the past five years have been a decisive period for China's eco-environmental governance, a turning point for the improvement of the country's ecological environment, and a critical period for its economic and social development to transition to a high-quality and green one. The past five years witnessed the fundamental formation of the Xi Jinping thought on ecological civilization, the basic establishment of a modern national environmental governance system under the framework of ecological civilization, the full establishment of laws, regulations and policies for eco-environmental governance in line with the national situation, the successful dissemination of the new development concept and the idea that lucid waters and lush mountains are invaluable assets, and the comprehensive green transition in economic and social sectors as a general trend. In the past five years, the system of major function-oriented zoning in China has been gradually improved, and the national park system has been actively piloted; comprehensive resource conservation has been effectively implemented, with the intensity of energy and resource consumption significantly reduced; major ecosystem protection and restoration projects have progressed smoothly, with forest coverage continuously increased; eco-environmental governance has been significantly strengthened, with the environment improved. China has participated in and led international cooperation on climate change, and has become an important player, contributor and leader in the cause of global ecological progress.

In the past five years, the global spread of the COVID-19 pandemic has once again sounded the alarm to mankind that we should get rid of the old models of production and lifestyle that over-consume energy and resources and destroy the ecological environment. Instead, we should work together to cope with climate change, protect the eco-environment, protect the Earth and foster the harmony between man and nature. The global ecosystems are an interrelated whole, and no country or region can stay intact alone. The world needs to unite immediately. There is only one Earth for mankind. Despite the differences in national situations, achieving sustainable development has always been a common goal of all countries. Currently, the comprehensive agendas for achieving carbon neutrality, protecting nature, reducing waste and pollution, and supporting holistic health, as well as the commitment to

achieving social equity, are penetrating into different countries and various social levels. China, while addressing domestic environment and development challenges, has also worked with the international community to tackle global challenges. It is dedicated to building green BRI and global green supply chains, deepening international cooperation on sustainable development, and facilitating stronger, green and healthy global development.

Over the past five years, CCICED has maintained its development orientation as a strategic, early-warning and forward-looking international high-end think tank, and carried out research in line with domestic needs and the new situation of international governance. CCICED has achieved a wide range of outcomes with various highlights, and its influence has continued to expand. CCICED's policy recommendations have been highly valued by the Chinese government, and many of the policy recommendations have been translated into documents issued by the central and local governments and into active social actions through various forms. CCICED has fully played its key supporting role as a think tank. The past five years also witnessed the continuous development, growth and expansion of CCICED. In the 30 years of development since its establishment in 1992, CCICED has never forgotten its original aspiration. It has always paid close attention to China's environmental and development issues with an internationally leading perspective. It is always thinking about how a large developing country should deal with the relationship between environment and development, and is always coordinating the relationship between China's domestic eco-environmental governance process and the international sustainable development agenda.

In the past three decades, China's development has benefited from international cooperation; in the next three decades, China's development will still be inseparable from international cooperation. As a platform for two-way international exchanges and cooperation, CCICED will, in light of the changing domestic and international situation, summarize and share China's unique sustainable development path, especially the country's explorations and achievements under the framework of ecological civilization, and contribute Chinese wisdom and solutions to building a clean and beautiful world.

Appendix: Overview on the Relevance of China’s Environmental and Development Policies and CCICED Policy Recommendations during 2018-2022

Field	Time of Release of Policy	Policy Progress (2018-2022)	Content
Environmental and Development Planning	June 2018	In June 2018, the Central Committee of the Communist Party of China and the State Council issued the <i>Opinions on Comprehensively Strengthening Ecological and Environmental Protection and Securing a Decisive Victory in Pollution Prevention and Control</i> .	<p>1. Ecological civilization</p> <p>In terms of development concept, the 2020 CCICED Policy Recommendations proposed to resolutely strive for ecological progress and implement the idea that lucid waters and lush mountains are invaluable assets, promote a comprehensive green transition in the economy and society, and achieve people-oriented green and high-quality development. In terms of policy goals, the Recommendations proposed to maintain the strategic focus on ecological civilization and align the green development goals in the <i>14th Five-Year Plan</i> with the UN 2030 Agenda for Sustainable Development.</p> <p>2. Green cities and towns</p> <p>The 2018 CCICED Policy Recommendations advised to change the traditional thinking and fully integrate green standards into urban and rural planning; promote energy conservation, emission reduction and industrial upgrading; innovate solutions with full consideration of the local realities. The 2019 CCICED Policy Recommendations advised to</p>
	December 2018	The General Office of the State Council issued the <i>Work Plan for Pilot Construction of “Zero-Waste Cities”</i> .	
	March 2019	The National Development and Reform Commission released the <i>Key Tasks for New Urbanization Construction in 2019</i> .	
	December 2020	The Ministry of Ecology and Environment revised and released the <i>Measures for the Administration of Eco-environmental Standards and Rules for the Formulation and Revision of National Eco-environmental Standards</i> , which further improved the top-level design of the management system of eco-environmental standards and clarified the future direction of the formulation and implementation of eco-environmental standards.	
	June 2021	15 departments including the Ministry of Housing and Urban-Rural Development issued the <i>Opinions on Strengthening Green and Low-Carbon Development in Counties</i> to strengthen green and low-carbon development in counties and help achieve carbon peaking and carbon neutrality targets.	

October 2021	<p>The State Council issued the <i>Action Plan for Carbon Dioxide Peaking Before 2030</i>, which requires urban and rural areas to take actions to achieve carbon peaking, promote green and low-carbon development, and implement the relevant requirements for green and low-carbon development.</p>	<p>reshape the urbanization strategy and re-examine urban-rural relations.</p>
November 2021	<p>The Ministry of Ecology and Environment issued the <i>Guiding Opinions on Deepening Eco-environmental Administration and Continuously Strengthening Pollution Control in accordance with the Law</i>. This is a comprehensive document for the eco-environmental protection authorities to promote pollution control in accordance with the relevant laws and regulations.</p>	<p>3. Green development of major river basins</p> <p>The 2018 CCICED Policy Recommendations advised to promote the green development of the Yangtze River Economic Belt and advance the legislation process for the protection of the Yangtze River.</p> <p>The 2019 CCICED Policy Recommendations advised to make the Yangtze River Economic Belt a strategic priority in the <i>14th Five-Year Plan</i>, and build it into a model and benchmark for green development of river basins.</p>
February 2022	<p>The State Council agreed to the <i>Guiding Opinions on Accelerating the Construction of Environmental Infrastructure in Cities and Towns</i>, which proposes to build an environmental infrastructure system that integrates waste treatment and disposal facilities and monitoring and supervision capabilities by 2025.</p>	
December 2019	<p>The Central Committee of the Communist Party of China and the State Council issued the <i>Outline of the Plan for the Integrated Regional Development of the Yangtze River Delta</i>.</p>	
July 2020	<p>The General Office of the State Council issued the <i>Notice on Effectively Carrying out the Fishing Ban in the Yangtze River Basin</i>.</p>	
August 2020	<p>The Political Bureau of the CPC Central Committee deliberated the <i>Outline of the Plan for the Ecological Protection and High-Quality Development of the Yellow River Basin</i>.</p>	
December 2021	<p>The Ministry of Ecology and Environment deliberated and adopted in principle the <i>Action Plan for Deepening the Protection and</i></p>	

		<i>Restoration of the Yangtze River, the Action Plan for the Ecological Conservation and Governance in the Yellow River, the 14th Five-Year Action Plan for the Control of Urban Black and Odorous Water Bodies and Environmental Protection, the Action Plan for the Comprehensive Improvement of Key Marine Areas, and the National Plan on Marine Dumping Areas (2021-2025).</i>	
	February 2018	The <i>National Marine Eco-environmental Protection Plan (2017-2020)</i> was released.	1. Deepening the reform of environmental mechanisms
	September 2018	Provisions were made on the functions, internal bodies and staffing of the Ministry of Ecology and Environment.	The 2019 CCICED Policy Recommendations suggested that a preventive mechanism for green finance be established.
	March 2020	<i>Catalogue for Guiding Integrated Administrative Law Enforcement Matters for Eco-environmental Protection</i>	The 2020 CCICED Policy Recommendations suggested that the legislative, judicial and administrative authorities conduct cooperation and form a synergy for achieving ecological progress, and that a sound modern environmental governance system be established to improve the coordination and efficiency of green governance.
Governance and Rule of Law	January 2021	The Ministry of Ecology and Environment issued the <i>Guiding Opinions on Optimizing the Way of Law Enforcement for Eco-environmental Protection to Improve the Effectiveness of Law Enforcement.</i>	
	September 2021	The General Office of the State Council issued the <i>Opinions on Deepening the Reform of the Compensation System for Ecological Protection.</i>	2. Exploring modern environmental governance
	October 2021	The General Office of the State Council prepared the <i>Outline of the Plan for the Ecological Protection and High-Quality Development of the Yellow River Basin.</i>	The 2018 CCICED Policy Recommendations advised to step up innovation in all respects including policy, planning and technology to realize green urbanization in China in an era of digital and green development.
	October 2021	The General Office of the State Council issued the <i>Opinions on Promoting Green Development in Urban and Rural Areas.</i>	The 2020 CCICED Policy Recommendations proposed to improve the accounting methods and realization mechanisms for the value of services provided by ecological capital to promote
	June 2018	The State Council issued the <i>Three-Year Action Plan for Keeping Skies Blue.</i>	

January 2020	The <i>Guiding Opinions on Reforming and Improving the Working Mechanism on Complaints and Proposals to Promote the Settlement of Acute Eco-environmental Problems for the People</i> was released.	the high-quality development of the Yangtze River Basin and the Yellow River Basin.
March 2020	The General Office of the CPC Central Committee and the General Office of the State Council issued the <i>Guiding Opinions on Building a Modern Environmental Governance System</i> .	The 2021 CCICED Policy Recommendations proposed to pay attention to digital technology innovation and empowerment, coordinate sustainable production and consumption, build a global green value chain, and remove the impediments in the green “dual circulation” development pattern.
May 2021	The General Office of the Ministry of Ecology and Environment issued the <i>Reform Plan for the Law-based Environmental Information Disclosure System</i> .	3. Change of lifestyle
2018-2022	On January 1, 2018, the <i>Nuclear Safety Law of the People’s Republic of China</i> (hereinafter referred to as the <i>Nuclear Safety Law</i>) was officially implemented.	The 2018 CCICED Policy Recommendations advised to guide multi-stakeholder participation to scientifically identify and address the negative impacts of environmental pollution and ecological damage on the work and life of community residents.
	On August 31, 2018, the 5th Meeting of the Standing Committee of the 13th National People’s Congress adopted the <i>Law of the People’s Republic of China on Prevention and Control of Soil Pollution</i> .	The 2019 CCICED Policy Recommendations advised to launch a green lifestyle campaign to stimulate the demand for green products. Celebrities could be invited to play a demonstration and leading role in terms of green consumption so as to make green consumption a social trend.
	On December 28, 2019, the 15th Meeting of the Standing Committee of the 13th National People’s Congress amended the <i>Forest Law of the People’s Republic of China</i> .	The 2020 CCICED Policy Recommendations advised to focus on people and promote green models of production and lifestyle by pushing forward green technology innovation, sustainable production and consumption, and green urban development.
	On April 29, 2020, the 17th Meeting of the Standing Committee of the 13th National People’s Congress amended the <i>Law of the People’s Republic of China on the Prevention and Control of Environmental Pollution Caused by Solid Wastes</i> for the second time.	
	On December 26, 2020, the 24th Meeting of the Standing Committee of the 13th National People’s Congress adopted the <i>Law of the People’s Republic of China on the Protection of the Yangtze River</i> .	
	On December 24, 2021, the 32nd Meeting of the Standing Committee of the 13th National People’s Congress adopted the <i>Law of the</i>	

		<i>People's Republic of China on the Protection of Wetlands.</i>	
	January 2021	The State Council promulgated the <i>Regulations on the Administration of Pollutant Discharge Permits</i> , which took effect on March 1, 2021.	
	October 2020	The 45th Meeting of the Standing Committee of the 6th People's Congress of Shenzhen adopted the <i>Regulations on Green Finance in Shenzhen Special Economic Zone</i> (hereinafter referred to as the <i>Regulations</i>).	
	October 2020	The Ministry of Ecology and Environment, the National Development and Reform Commission, the People's Bank of China, the China Banking and Insurance Regulatory Commission and the China Securities Regulatory Commission jointly issued the <i>Guiding Opinions on Promoting Investment and Financing to Address Climate Change</i> .	
	May 2021	The Ministry of Ecology and Environment issued the <i>Guiding Opinions on Strengthening Prevention and Control from the Source in Energy-Intensive and High-Emission Projects for Ecological and Environmental Protection</i> , which clearly states in Article 7 that carbon emission impact assessment will be incorporated into the environmental impact assessment system.	
	September 2021	The CPC Central Committee and the State Council issued the <i>Opinions of the CPC Central Committee and the State Council on the Complete and Accurate Implementation of the New Development Concept to Peak Carbon Emissions and Achieve Carbon Neutrality</i> .	
Energy, Environment and Climate	September 2021	The General Office of the CPC Central Committee and the General Office of the State Council issued the <i>Opinions on Deepening the Reform of the Compensation System for Ecological Protection</i> .	1. Continuous energy restructuring
	June 2018	The State Council issued the <i>Three-Year Action Plan for Keeping Skies Blue</i> .	The 2019 CCICED Policy Recommendations advised to achieve synergistic advancements in economic development and energy reform, eco-environmental protection and climate change tackling.
	August 2018	The National Energy Administration and the Ministry of Ecology and Environment issued	The 2020 CCICED Policy Recommendations advised to

	<p>the <i>Notice on Issuing the 2018 Targets and Tasks for Coal Power Ultra-Low Emission Renovation and Energy Efficiency Renovation in Each Province (Region and City)</i>, proposing the national targets of 48.68 million kilowatts of coal power ultra-low emission renovation and 53.905 million kilowatts of energy efficiency renovation.</p>	<p>formulate a national-level hydrogen energy economic policy, promote fuel cells in transportation and co-generation, and increase the proportion of sustainable biomass gas production in the energy structure.</p>
December 2019	<p>Ten departments including the National Development and Reform Commission jointly issued the <i>Guiding Opinions on Promoting the Industrialization of Bio-Natural Gas</i>, proposing that China's annual production of biogas will exceed 10 billion cubic meters by 2025.</p>	<p>The 2021 CCICED Policy Recommendations advised to accelerate decarbonization in the manufacturing industry and strictly control the new production capacity in energy-intensive and high-emission industries, and facilitate net-zero emission technology innovation and the application of sci-tech achievements in steel, non-ferrous metal, cement, chemicals, petrochemicals and other industries where it is hard to reduce emissions.</p>
February 2021	<p><i>Guiding Opinions of the State Council on Accelerating the Establishment and Improvement of a Green and Low-Carbon Circular Economic System</i></p>	
November 2020	<p>The State Council issued the <i>Plan for the Development of the New Energy Vehicle Industry (2021-2035)</i>.</p>	
December 2020	<p>The Ministry of Ecology and Environment held a ministerial executive meeting, which deliberated and adopted the <i>Measures for the Administration of Carbon Emissions Trading (for Trial Implementation)</i>, which took effect on February 1, 2021.</p>	<p>2. Continuous energy conservation and energy efficiency improvement</p> <p>The 2018 CCICED Policy Recommendations proposed to push forward energy conservation, emission reduction and industrial upgrading.</p>
January 2021	<p>The Ministry of Ecology and Environment held a briefing on the management policy of carbon emissions trading, at which it was proposed that the CPC Central Committee and the State Council attach great importance to the work of addressing climate change, and that China will strive to peak its carbon dioxide emissions by 2030 and achieve carbon neutrality by 2060, fully demonstrating China's confidence and determination to actively address global climate change.</p>	<p>The 2020 CCICED Policy Recommendations proposed to strictly implement the system in which government departments purchase energy-efficient products in priority or on a compulsory basis, and clarify the binding provisions on green procurement by government departments.</p>

	September 2021	The General Office of the CPC Central Committee and the General Office of the State Council issued the <i>Opinions on Deepening the Reform of the Compensation System for Ecological Protection</i> to accelerate the construction of a national energy rights and carbon emissions trading market.	The 2021 CCICED Policy Recommendations advised to encourage innovation in climate investment and financing products and instruments, launch local pilots, develop an applicable, efficient and advanced classification standards system for climate investment and financing, and actively push for the elimination of fossil fuel subsidies.
	January 2022	The National Development and Reform Commission and the National Energy Administration issued the <i>Guiding Opinions on Accelerating the Construction of a National Unified Power Market System</i> , aiming to realize the sharing and optimal allocation of power resources in a wider scope, improve the stability and flexibility of the power system, and promote the formation of a new power system with stronger new energy consumption capacity.	<p>3. Launch and operation of the national emissions trading system</p> <p>The 2021 CCICED Policy Recommendations proposed to incorporate high-emission industries into the carbon market as soon as possible; provide long-term, clear and consistent market expectations and an effective price conduction mechanism; improve the national carbon emissions trading system.</p>
Pollution Prevention and Control	June 2019	The Ministry of Ecology and Environment issued the <i>Plan for Comprehensive Control of Volatile Organic Compounds in Key Sectors</i> .	<p>1. Atmospheric pollution prevention and control</p> <p>The 2018 CCICED Policy Recommendations advised to strengthen climate change mitigation actions and enhance China's contribution to global climate governance. The potential in energy conservation, emission reduction and industrial upgrading may be unleashed by making use of green technologies that are economically viable and have a big influence and through institutional and policy innovation.</p>
	March 2020	The General Office of the CPC Central Committee and the General Office of the State Council issued the <i>Guiding Opinions on Building a Modern Environmental Governance System</i> .	The 2019 CCICED Policy
	November 2021	The <i>Opinions of the CPC Central Committee and the State Council on Deepening Pollution Prevention and Control</i> was issued.	
	March 2019	The Ministry of Ecology and Environment, together with the Ministry of Natural Resources, the Ministry of Housing and Urban-Rural Development, the Ministry of	The 2019 CCICED Policy

	Water Resources and the Ministry of Agriculture and Rural Affairs, issued the <i>Notice on Issuance of the Implementation Plan for the Prevention and Control of Groundwater Pollution</i> .	Recommendations proposed that to achieve high-quality development, China should accelerate climate actions and coordinate air quality improvement and GHG emission reduction.
2021	The <i>Outline of the 14th Five-Year Plan (2021-2025) for National Economic and Social Development and the Long-Range Objectives Through the Year 2035</i> , the <i>Water Eco-environmental Protection Plan for Key River Basins (2021-2025)</i> and other documents were successively issued, making important deployments for the continuous improvement of the ecological environment and the future development direction of the industry, marking China's transition from water pollution prevention and control to the coordination of water environment, water ecosystem and water resources.	The 2020 CCICED Policy Recommendations advised to maintain the strategic focus on ecological civilization and align the green development goals in the <i>14th Five-Year Plan</i> with the UN 2030 Agenda for Sustainable Development, center on energy transition and upgrading and actively address climate change, and build a low-carbon society.
July 2019	The Ministry of Ecology and Environment, the Ministry of Agriculture and Rural Affairs and the Ministry of Natural Resources jointly issued the <i>Implementation Opinions on Enforcing the Soil Pollution Prevention and Control Law and Promoting the Settlement of Acute Soil Pollution Problems</i> .	The 2021 CCICED Policy Recommendations stated that the integration of low-carbon development, nature conservation and pollution prevention and control should become a strategic priority for the current economic recovery. The integrity of global ecosystems should be kept in mind.
December 2021	The <i>14th Five-Year Plan for the Protection of Soil, Groundwater and Rural Ecological Environment</i> was issued.	2. Water pollution prevention and control
November 2018	The Ministry of Ecology and Environment, the National Development and Reform Commission and the Ministry of Natural Resources jointly issued the <i>Action Plan for the Integrated Management of the Bohai Sea</i> , which sets out the timeline and roadmap for the action.	The 2018 CCICED Policy Recommendations advised to promote the green development of the Yangtze River Economic Belt and accelerate the legislation process for the protection of the Yangtze River.
January 2022	The Ministry of Ecology and Environment, the National Development and Reform Commission, the Ministry of Natural	The 2019 CCICED Policy Recommendations advised to establish strict energy efficiency standards in refrigeration, lighting systems and other

Resources, the Ministry of Transport, the Ministry of Agriculture and Rural Affairs, and the China Coast Guard, among other departments, jointly issued the *14th Five-Year Plan for Marine Eco-environmental Protection*.

February 2022

The Ministry of Ecology and Environment, the National Development and Reform Commission, the Ministry of Natural Resources, the Ministry of Housing and Urban-Rural Development, the Ministry of Transport, the Ministry of Agriculture and Rural Affairs and the China Coast Guard jointly issued the *Action Plan for the Integrated Management of Key Marine Areas* (hereinafter referred to as the *Action Plan*), which sets out the overall requirements, main objectives, key tasks and safeguard measures for the integrated management action on three key marine areas, the Bohai Sea, the Yangtze River Estuary-Hangzhou Bay and the Pearl River Estuary adjacent sea areas during the 14th Five-Year Plan period.

March 2022

The General Office of the State Council issued the *Implementation Opinions on Strengthening Supervision and Management of Outlets into Rivers and Sea*, which made systematic deployments for strengthening and regulating the supervision and management of outlets through outlets identification and tracking, classification and rectification, and strict supervision and management, etc., and put forward the phase-based objective of “completing the investigation of outlets into key bays and the rectification of outlets into the Bohai Sea by 2023”.

consumer areas, and build a circular economic system covering solid waste disposal, water treatment and garbage disposal.

3. Soil pollution prevention and control

The 2018 CCICED Policy Recommendations proposed to set up a collaborative management system for achieving ecological progress.

The 2019 CCICED Policy Recommendations stated that high-quality afforestation and measures such as investing in the protection of mangroves, coastal wetlands and watershed can all enhance carbon sequestration and biodiversity, and achieve more ecosystem benefits such as flood control and soil and water conservation.

The 2020 CCICED Policy Recommendations advised to implement labor-intensive ecological public works such as afforestation, wetland and coastal area restoration, soil and water body restoration, green buildings and renovation to houses.

The 2021 CCICED Policy Recommendations stated that integrating low-carbon development, nature conservation and pollution prevention and control should be a strategic priority for the current economic recovery.

4. Marine ecosystem protection

In 2018, CCICED summarized global ocean governance

experiences and proposed to strengthen legal protection for marine and coastal ecosystems, and formulate a national action plan to restore the functions and services provided by marine ecosystems.

The 2019 CCICED Policy Recommendations advised to continue to promote integrated ocean governance and launch a network of protected areas including marine ecosystem protection red lines and the national park system.

The 2020 CCICED Policy Recommendations proposed to step up the protection and restoration of coastal wetlands and rebuild key habitats; delineate marine ecosystem protection red line areas and marine protected areas to help with marine biodiversity conservation and fishery development.

The 2021 CCICED Policy Recommendations advised to conduct a baseline study on the accounting of the value of marine ecosystems, step up the protection and restoration of important marine species and their habitats, and improve the quality and stability of marine ecosystems.

Conservation
of
Ecosystem
and
Biodiversity

November
2020

In order to implement the *Environmental Protection Law of the People's Republic of China* and *Several Opinions on Delineating and Strictly Observing Ecological Red Lines*, the Ministry of Ecology and Environment approved and released seven standards, including the *Technical Specification for Supervision of Ecological Conservation*

1. Ecological red lines, ecological restoration and compensation

The 2021 CCICED Policy Recommendations advised to expand investment and financing related to biodiversity conservation; include

	<p><i>Redline-Baseline Investigation (on Trial)</i> as national standards for environmental protection.</p>	<p>ecological conservation, restoration and regeneration as an important area of green finance; further identify necessary initiatives and carry out pilots of ecological protection finance, risk disclosure, reporting, stress testing, and responsibilities of the private sector for public investments to ensure public and private sector financial flows are aligned with biodiversity goals.</p>
September 2021	<p>The General Office of the CPC Central Committee and the General Office of the State Council issued the <i>Opinions on Deepening the Reform of the Compensation System for Ecological Protection</i>.</p>	
January 2022	<p>The <i>Opinions of the CPC Central Committee and the State Council on Comprehensively Advancing the Key Work for Rural Revitalization in 2022</i> proposed to implement hard and fast measures for arable land protection. The Party organs and the government departments will both be responsible for the protection of arable land, in a bid to safeguard the red lines of 1.8 billion mu (about 120 million hectares) of arable land.</p>	<p>2. Biodiversity Conference</p> <p>The 2021 CCICED Policy Recommendations advised to promote the mainstreaming of biodiversity conservation in different economic sectors; integrate nature conservation and nature-based solutions into public and private sectors' investment plans; develop science-based, quantifiable, ambitious and pragmatic biodiversity goals, and establish related indicators to track the progress; pay attention to the pressure on biodiversity, the current situation and the impact and effectiveness of response measures.</p>
October 2021	<p>The high-level meetings at the 2020 UN Biodiversity Conference kicked off in Kunming, Yunnan Province. The theme of the conference is Ecological Civilization-Building a Shared Future for All Life on Earth.</p>	
June 2020	<p>The <i>Master Plan for the Major Projects for the Protection and Restoration of Ecosystems (2021-2035)</i> was released. The <i>Plan</i> includes 9 key restoration projects, including the Qinghai-Tibet Plateau ecological shield area, key ecological areas along the Yellow River, and key ecological areas along the Yangtze River, involving the protection and restoration of all natural ecosystems such as mountains, waters, forests, fields, lakes, grasses and oceans.</p>	<p>3. National park management system and wildlife protection</p> <p>The 2021 CCICED Policy Recommendations advised to step up the construction of national parks and protected areas; identify cost-effective priority areas of protection, and improve the effect of protection based on their respective</p>
April 2021	<p>The 18th Meeting of the Central Commission for Comprehensively Deepening Reform deliberated and adopted the <i>Opinions on Establishing a Sound Mechanism for Realizing the Value of Ecological Products</i>.</p>	

June 2018	<p>Five departments, including the Ministry of Ecology and Environment, the Office of the Central Steering Commission for Spiritual Civilization Development, the Ministry of Education, the Central Committee of the Communist Youth League and the All-China Women's Federation, jointly released the <i>Code of Conduct among Citizens for the Protection of the Ecological Environment (for Trial Implementation)</i> (referred to as the <i>Ten Articles on Citizens' Conduct</i>) at the National Event on World Environment Day, advocating a simple, moderate, green and low-carbon lifestyle.</p>	<p>capabilities; vigorously safeguard the integrity of the ecosystems of national parks and protected marine areas and wilderness areas; pay special attention to green connectivity in cross-regional biodiversity hot spots; assess the overall potential of carbon sequestration in ecological protection red line areas and identify areas with greater carbon sequestration potential.</p>
June 2019	<p>The General Office of the CPC Central Committee and the General Office of the State Council issued the <i>Guiding Opinions on the Establishment of a Nature Reserve System Dominated by National Parks</i>.</p>	<p>4. Marine ecosystem protection</p> <p>In 2018, CCICED summarized global ocean governance experiences and proposed to strengthen legal protection for marine and coastal ecosystems, and formulate a national action plan to restore the functions and services provided by marine ecosystems.</p>
September 2021	<p>The Ministry of Natural Resources approved the establishment of the Sanjiangyuan (Three-River-Source) National Park. In 2022, the creation of 3 national parks, including the Asian Elephant National Park, will be pushed forward.</p>	<p>The 2019 CCICED Policy Recommendations advised to continue to promote integrated ocean governance and launch a network of protected areas including marine ecosystem protection red lines and the national park system.</p>
October 2021	<p>The General Office of the CPC Central Committee and the General Office of the State Council issued the <i>Opinions on Further Strengthening Biodiversity Conservation</i>.</p>	<p>The 2020 CCICED Policy Recommendations proposed to step up the protection and restoration of coastal wetlands and rebuild key habitats; delineate marine ecosystem protection red line areas and marine protected areas to help with marine biodiversity conservation and fishery development.</p>
February 2022	<p>The 16th Meeting of the Standing Committee of the 13th National People's Congress adopted by vote the <i>Decision on a Complete Ban of Illegal Wildlife Trade and the Elimination of the Unhealthy Habit of Indiscriminate Wild Animal Meat Consumption for the Protection of Human Life and Health</i>, in a bid to completely ban and punish illegal wildlife trade, eradicate the unhealthy habit of indiscriminate wildlife meat consumption, maintain bio-security and ecological safety, effectively prevent major public health risks, safeguard human life and</p>	<p>The 2021 CCICED Policy</p>

Regional and International Engagement		health, strengthen ecological progress, and promote the harmonious coexistence of mankind and nature.	Recommendations advised to conduct a baseline study on the accounting of the value of marine ecosystems, step up the protection and restoration of important marine species and their habitats, and improve the quality and stability of marine ecosystems.
	April 2019	At the Second Belt and Road Forum for International Cooperation held in Beijing, China announced that it will implement the Belt and Road South-South Cooperation Initiative on Climate Change together with the relevant countries.	1. Promoting international cooperation on climate change and highlighting the historical responsibility
	June 2021	The Permanent Mission of China to the United Nations deposited with the Secretary-General of the United Nations an instrument of ratification by the Chinese government of the <i>Kigali Amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer</i> .	The 2018 CCICED Policy Recommendations proposed to strengthen climate change mitigation actions and enhance China's contribution to global climate governance.
	September 2021	President Xi Jinping proposed at the general debate of the 76th session of the UN General Assembly that China will vigorously support the green and low-carbon development of energy in developing countries and will not build any new coal power projects outside China, demonstrating China's sense of responsibility as a major power.	The 2019 CCICED Policy Recommendations stated that to achieve high-quality development, China should coordinate air quality improvement and GHG emission reduction. To this end, China needs to formulate a clear low-carbon development strategy to achieve synergy between economic development and energy reform, eco-environmental protection and climate change tackling.
	September 2021	The 2021 International Forum on South-South Cooperation and Trade in Services, with a theme of "Digital Economy for South-South Cooperation", was held at the China National Convention Center.	The 2020 CCICED Policy Recommendations suggested that as the global outbreak of the COVID-19 pandemic highlights the importance of integrated measures, China should coordinate public health, economic activities, ecosystem changes (including climate,
December 2021	The Council for Promoting South-South Cooperation (CPSSC) convened the 2021 Annual General Meeting and the 4th Meeting of the 2nd Board.		

April 2019	The Thematic Forums of the Second Belt and Road Forum for International Cooperation were held in Beijing.	oceans and rivers) and other areas, implement the concept of “holistic health”, promote the alignment of terrestrial-marine actions, achieve synergy between climate response and biodiversity conservation, and address environmental challenges in an integrated manner.
April 2021	President Xi Jinping delivered a keynote speech via video at the opening ceremony of the Boao Forum for Asia Annual Conference 2021. He proposed to improve the BRI International Green Development Coalition, the Belt and Road Green Investment Principles and other multilateral cooperation platform, and to build a closer partnership on green development.	The 2021 CCICED Policy Recommendations advised to make concerted efforts to achieve the carbon peaking and carbon neutrality targets; implement a climate-friendly air pollution prevention and control strategy; and carry out integrated and coordinated governance with the implementation of the carbon peaking and carbon neutrality targets as the work direction in the coming years.
July 2021	The Ministry of Commerce and the Ministry of Ecology and Environment issued a notice on the issuance of the <i>Guidelines on Foreign Investment and Cooperation for Green Development</i> .	
January 2018	The State Council Information Office published a white paper on <i>China’s Arctic Policy</i> .	
September 2019	The International Ocean Governance Workshop was held in Beijing on September 29, 2019.	2. Promoting South-South cooperation
March 2022	On March 16, 2022, four departments including the National Development and Reform Commission jointly issued the <i>Opinions on Promoting the Green Development of the Belt and Road Initiative</i> . The <i>Opinions</i> puts forward 15 specific tasks in three respects, which are promoting green development cooperation in key areas, promoting the green development of overseas projects, and improving the supporting system for green development, covering key areas such as connectivity of green infrastructure, green energy, green transportation, green industry, green trade, green finance, green science and technology, green standards, and addressing climate change.	The 2018 CCICED Policy Recommendations proposed that there is still a huge gap between the existing global actions after the execution of the <i>Paris Agreement</i> and the global actions that should be taken to avoid catastrophic climate changes. With the challenges far greater than expected, governments of countries should strengthen domestic measures and international cooperation. The 2019 CCICED Policy Recommendations proposed to support sustainable trade and to take joint actions to strengthen green supply chains, with a

focus on building green supply chains for bulk commodities such as soybeans, palm oil, fish and beef, and timber, so as to push forward the South-South cooperation.

The 2020 CCICED Policy Recommendations advised to study the establishment of a traceability system for commodity trade and related due diligence standards, and to support the related countries in transitioning to sustainable production methods through South-South cooperation.

The 2021 CCICED Policy Recommendations advised to further implement capacity building projects in conjunction with the Belt and Road South-South Cooperation Initiative on Climate Change and the Green Silk Road Envoy Program, publicize the advantages of green solutions to the countries involved in BRI cooperation, and create a closer partnership on green and sustainable development.

3. Promoting green BRI

The 2018 CCICED Policy Recommendations proposed to promote green BRI, jointly build the BRI International Green Development Coalition, and align the BRI with the *Paris Agreement*, the global biodiversity goals and the UN 2030 sustainable development goals.

The 2020 CCICED Policy Recommendations advised to push forward green BRI and

global green supply chains, strengthen green international cooperation and achieve a green prosperity globally.

The 2021 CCICED Policy Recommendations proposed to expand the BRI to cover a wider scope of green development and align the BRI with the UN 2030 Agenda for Sustainable Development.