

## China Council for International Cooperation on Environment and

Development

## Progress on Environmental and Development Policies in China and

## Impact of CCICED's Policy Recommendations

(2020-2021)

#### 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) mainly carries out research and proposes policy recommendations on major issues of environment and development. The CCICED Annual General Meeting (AGM) is the highest form of policy consultation. Based on the CCICED policy research reports, AGM invites Chinese and foreign members, special advisors and experts of CCICED to have policy discussions on major issues of environment and development, which not only reflect urgent and long-term domestic issues, but also echo the major concerns of the international community, reach ideological consensuses, and finalize the CCICED annual policy recommendations for submission to the State Council and relevant departments of the central government.

Since 2008, the CCICED Chinese and International 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*, which fully sorts out China's major environmental and development policies and practices in the past year and elaborates the inclusion of the main policy recommendations of CCICED in recent years, especially in the previous year, in China's relevant legislation and policies. The report sorts out and compares China's policy practices with the CCICED's policy recommendations, to show the relevance of the CCICED policy research subjects and policy recommendations to the policy progress. This report is the 14<sup>th</sup> report provided by the Chief Advisors' Expert Support Group.

This report, in the same writing style as previous ones, focuses on the progress of China's environment and development policies in the past year. This report is divided into several parts. Each part sums up the policy recommendations of CCICED and 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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#### Forward

2021 sees the international community stumbling through "a resurgence of the COVID-19 pandemic". Countries in the world are actively engaged in the prevention and control of the pandemic, and are working to achieve economic and social recovery and development through cooperation in the international industrial chain. China has claimed a small victory in containing the spread of the virus, with its efforts to resume work and production paying off, and economic development and social activities gradually getting back on track and gaining momentum.

In 2021, China has ushered in a new stage of high-quality development and embarked on a new journey to fully build a modern country. Chinese President Xi Jinping proposed at the general debate of the 75<sup>th</sup> session of the UN General Assembly on September 22, 2020 to have CO<sub>2</sub> emissions peak before 2030 and achieve carbon neutrality before 2060, setting off several rounds of active international response to climate change, with scores of countries announcing more ambitious emission reduction commitments. The "30 60 target" has been incorporated into the 14<sup>th</sup> FYP and the Long-Range Objectives Through the Year 2035, and included in the new round of ecological and environmental protection as an important part of the development of an ecological civilization.

Over the past year, China has met the three-year goal of "the battle against pollution" in an excellent manner and promoting the 13<sup>th</sup> FYP a complete success by maintaining strategic focus on the development of an ecological civilization, continuing to drive business and social transformation through environmental protection and pushing the national economy toward a new stage of high-quality development. For example, Beijing has made significant progress in pollutant control, with the average PM2.5 concentration falling to 38  $\mu$ g/m<sup>3</sup> in 2020 for the first time.

Over the past year, the institutional framework for promoting ecological progress oriented towards "continuous improvements in the environmental quality and the ecological environment" continues to be upgraded. The central environmental protection inspection system has become a powerful weapon to promote local environmental protection actions given its strong deterrence against environmental violations, laying a solid foundation for the goal of basically building a beautiful China in 2035.

Over the past year, the Xi Jinping Thought on Ecological Civilization has been carried forward, with a series of new assertions put forward, including that "endeavors to protect green hills will definitely pay off", and ecological and environmental protection enhanced in all respects. The ruleof-law system for ecological and environmental protection has been improved. China has carried out inspections of the enforcement of the Law on the Prevention and Control of Soil Pollution, the Law on the Protection of Wildlife and relevant law enforcement inspection, enacted the Yangtze River Protection Law and the Biosecurity Law, completed the revision to the Law on the Prevention and Control of Environmental Pollution Caused by Solid Wastes, and pushed forward the legislation for the protection of the Yellow River, among others. By strengthening inspection and enforcement of ecological and environmental protection, launching a campaign to prevent and control pollution by focusing on the strategic goal of "winning the battle against pollution", advancing the optimization and adjustment of the industrial, energy, transportation and land use structures, and intensifying regional joint prevention and control, China continues to see positive results yielded in the blue-sky battle again. Also, China has been actively responding to climate change by launching the formulation of an action plan for peaking  $CO_2$  emissions before 2030. introducing the Measures for the Administration of Carbon Emissions Trading (for Trial *Implementation*) and getting the national carbon emission trading market in gear.

Through its efforts, China has successfully fulfilled the nine binding targets for ecological and environmental protection as set forth in the 13<sup>th</sup> FYP and the phased targets and tasks of the battle

against pollution, giving its natural ecology and social environment a new look and enabling its people to have an obvious sense of contentment and happiness.

As a direct channel to the Chinese government policies and a link, bridge and window for China's environmental cooperation with the international community, the CCICED upholds Bringing In strategy, has conducted research on topics with a significant impact on the environment and development at home and abroad, developed policy recommendations for promoting the ecological civilization in China by giving full play to the role of overseas and domestic top experts and scholars as top-level advisors; in the meantime, upholding the Going Global strategy, the CCICED works in an innovative way during the pandemic, continues to engage in think-tank exchanges and advisory activities, contributing wisdom and strengthen to the sustainable development across the world.

#### I. Environmental and Development Planning

During the 13<sup>th</sup> FYP period, authorities of ecology and environment collaborated with departments concerned and local governments in launching a campaign to prevent and control pollution by focusing on the strategic goal of "winning the battle against pollution" and successfully beaten the nine ecological and environmental binding targets. While consolidating the current outcomes that have achieved, the 14<sup>th</sup> FYP will continue to address the pollution problem by constantly promoting economic restructuring and green development and improving the quality of the ecological environment, thereby laying a sound environmental foundation for China's new journey toward the full construction of a modern socialist country.

In 2019, the CCICED recommended that the 14<sup>th</sup> FYP should embody and back up the vision of a beautiful China by 2035, efforts to tackle climate change and the global vision 2050 for biodiversity conservation. The 2020 CCICED Policy Recommendations systematically stated that the 14th FYP should further push forward a comprehensive framework for green development, including ideas, policy goals, priorities, systems and mechanisms of development, and set an example of sustainable development worldwide. Efforts should be made to unswervingly advance the development of an ecological civilization, put into practice the conviction that "lucid waters and lush mountains are invaluable assets" and facilitate green economic and social transformation in all aspects, in a bid to pursue people-oriented green high-quality development. In key areas, the formation of green production and lifestyles should be promoted driven by green technology innovation, aided by sustainable production and consumption and based on green development of cities. 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. All these recommendations epitomize the CCICED's systematic thinking and holistic approach, and are of strategic importance to the national 14<sup>th</sup> Five-Year Plan for ecological and environmental protection. especially the alignment and integration of the green development targets in the 14<sup>th</sup> FYP with the UN 2030 Agenda for Sustainable Development and addressing climate change.

#### a. The Outline of the 14<sup>th</sup> FYP and the Long-Range Objectives Through the Year 2035

The core of the Outline of the 14<sup>th</sup> FYP and the Long-Range Objectives Through the Year 2035 is to "realize harmony between man and nature", and general guiding principles have been put forward: adhering to the concept that "lucid waters and lush mountains are invaluable assets" and that of respecting, conforming to and protecting the nature, prioritizing conservation, protection and natural restoration, implementing the sustainable development strategy, improving coordination mechanisms that promote ecological progress, establishing an ecological civilization system, fueling green economic and social transformation across the board and building a beautiful China.

The Outline of the 14<sup>th</sup> FYP and the Long-Range Objectives Through the Year 2035 lay down the directions and targets mainly in three aspects, namely "ecosystem quality and stability", "continuous improvement of eco-environmental quality" and "acceleration of green transition of the development model", mapping out a clear blueprint and priorities for the next five years and through 2035:

(1) In terms of "ecosystem quality and stability", the Outline proposes to adopt a holistic approach to conserving maintains, rivers, forests, farmlands, lakes, and grasslands, with emphasis on enhancing the self-restoration capability and stability of ecosystems, hold the natural ecological security bottom line and ultimately promote the overall quality improvement of natural ecosystems, thus providing strong and continued support for the full construction of a modern socialist country. Specific measures include improving the ecological security barrier system, establishing a nature reserve system and perfecting the ecological protection compensation mechanism.

(2) In terms of "continuous improvement of eco-environmental quality", the Outline proposes to "step up the fight against pollution, establish a sound environmental governance system, advance accurate, scientific, law-based and systematic pollution control, promote pollution and carbon reduction in a coordinated manner, continue to improve the quality of air and water environment, and effectively control the risk of soil pollution". Through "continuous improvement of eco-environmental quality", people will enjoy a more fresh and beautiful production and living environment, cleaner air, clearer water and healthier soil, and have a stronger sense of contentment. Specific measures include intensifying the prevention and control of pollution, comprehensively improving environmental infrastructure, strictly preventing and controlling environmental risks, actively responding to climate change and upgrading the modern eco-environmental governance system.

(3) In terms of "acceleration of green transition of the development model", the Outline proposes to "uphold ecology first and green development, promote overall management, scientific allocation, comprehensive conservation and recycling of resources, and coordinate efforts to promote high-quality economic development and high-level environmental protection". The key to achieving "harmony between man and nature" lies in ecologicalization of industries, which means promoting green transformation of modes of production and high-quality development, and minimizing resource consumption and environmental load. Specific measures include improving the resource efficiency across the board, establishing a resource recycling system, vigorously developing green economy and building a policy system for green development.

In the Outline of the 14<sup>th</sup> FYP and the Long-Range Objectives Through the Year 2035, deepening VOCs emissions control and replacement of high-VOCs products and promoting co-control of pollutants and greenhouse gas (GHG) emissions are particularly emphasized. Local versions of the Outline of the 14<sup>th</sup> FYP will also be rolled out over time. For example, proposals of provinces and municipalities such as Hubei, Jiangxi, Hunan, Guizhou, Sichuan, Hainan, Liaoning, Jilin and Shanghai for their respective 14<sup>th</sup> fie-year plans state establishing sound eco-environmental governance systems that coordinate the conservation of ground and underground, land and water ecosystems; fully implementing pollution discharge permit systems and advancing market-oriented trading of pollution discharge permits, energy use rights, water use rights and carbon emission permits; supporting eligible areas in launching pilot projects and accelerating the establishment of value realization mechanisms for green development, and encouraging innovation in financial policies such as green funds, green credit, green bonds and green insurance.

Following the release of the Outline and the Long-Range Objectives Through the Year 2035, the 14<sup>th</sup> Five-Year Plan for ecological and environmental protection is being pushed ahead.

# **b.** Eco-environmental protection planning and high-quality development of the Yellow River basin

The 2020 CCICED Policy Recommendations proposed to perfect the value accounting methods and realization mechanisms for ecological capital services, and promote high-quality development of the Yellow River basin; seek development within the bearing capacity of the environment and resources, intensify the application of natural capital value accounting in spatial planning and safeguard the integrity and healthy, sustainable development of ecosystems in the basin; innovate the ecological compensation mechanism and expedite the transverse ecological compensation process in the basin from the perspective of water resources, water environment and water ecology.

In August 2020, the Political Bureau of the CPC Central Committee deliberated the *Outline of the Plan for 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. Intensive and economical use of water resources in the Yellow River should be energetically promoted, and water resources should be considered the biggest rigid constraints to save water and expand the space for development. A long-term perspective should be taken, the disaster prevention and reduction system be perfected, and the capability of dealing with various disasters be enhanced. Effective measures should be taken to promote high-quality development of the Yellow River basin, quicken the replacement of old growth drivers with new ones, build a modern industry system with distinctive advantages, optimize the urban development pattern and push forward rural revitalization. The Yellow River culture should be protected and carried forward to continue the historical context there. Coordination should be strengthened to have competent authorities in provinces and autonomous regions along the Yellow River fulfill their responsibilities and develop specific planning, implementation plans and policy systems as early as possible, with a view to making significant progress during the 14<sup>th</sup> FYP period.

The Supreme People's Court promulgated the *Opinions on Providing Judicial Services and Guarantees for Ecological Protection and High-quality Development of the Yellow River Basin* (the *Opinions*) on June 5, 2020. The *Opinions* contains specific requirements for people's courts to hear various cases in a law-based, fair and efficient manner and fully play to the judicial role in seven aspects, such as enforcing strict liability, promoting water and sediment regulation, advocating green water use and supporting an innovation-driven approach, and adheres to the strictest rule of law, a new concept of development and differentiated measures, so as to facilitate the overall improvement of the eco-environmental quality in the Yellow River basin. At present, courts in the nine provinces and autonomous regions in the Yellow River basin have set up 117 tribunals regarding the environment and resources, and 246 collegiate panels or judgment panels. Last year, Gansu Province, located in the upper Yellow River, set up a specialized court for the environment and resources to coordinate the judicial work on important environmental and resource cases across the province.

During his visit to Shandong in July 2021, Mr. Han Zheng, Vice Premier of the State Council, pointed out that we should implement the new concept of development completely, accurately and comprehensively, strengthen ecological protection and governance of the Yellow River basin, intensify scientific and technological innovation, and facilitate new progress in high-quality development. We should respect the nature and science, step up wetland and bird protection in the Yellow River Delta, reduce the impact of human activities on birds, and improve the quality of bird habitats. We should deeply study and demonstrate the evolution trend of the relationship between water and sediment in the Yellow River and reasonably regulate the water-sediment relationship to ensure safety along the Yellow River.

In May 2021, the Ministry of Water Resources (MWR) unveiled the Draft of the Yellow River Protection Law (Exposure Draft) to solicit opinions from the public. The Standing Committee of the National People's Congress has included the legislation on the protection of the Yellow River in its legislative work plan for 2021.

#### **II. Ecosystem and Biodiversity Conservation**

## a. The 15<sup>th</sup> Conference of the Parties to the Convention on Biological Diversity (CBD COP15) and biodiversity conservation

The 2020 CCICED Policy Recommendations proposed to motivate ambitious multilateral cooperation and strengthen national actions by taking the opportunity of successfully holding the CBD COP15, in a bid to protect the nature and people's wellbeing.

The Chinese government, as the host of the CBD COP15, will discuss global biodiversity conservation issues, develop a "post-2020 global biodiversity framework", set global biodiversity

targets for the next decade and strengthen the enforcement mechanisms together with other countries.

The Chinese government has done a great deal of work around biodiversity. As of May 2021, China was home to 11,800 various nature reserves at all levels, accounting for 18% of the land area and 4.1% of the sea area. Due to enhanced protection, populations of many endangered wild animals and plants have steadily increased, with continuous improvements in their living conditions. To be specific, wild pandas were downgraded from endangered to vulnerable as a result of an increase in the population from 1,114 in the 1970s and 1980s to 1,864. Meanwhile, China has accelerated the establishment of a nature reserve system led by natural parks and the National Forestry and Grassland Administration (NFGA) has successively launched ten pilot national parks, including those for giant pandas, northeast China tigers and leopards, and Sanjiangyuan (the sources of three rivers, namely the Yangtze, Yellow and Lancang Rivers). In August 2021, wild Asian elephants in Yunnan province returned safely southward after migrating north for more than 110 days, reflecting the progress of China's biodiversity conservation efforts.

Local biodiversity conservation has produced fruitful results. Tibet has adopted the strictest ever ecological protection policy to enclose around 50% of its territory within ecological red lines, giving rise to an obvious recovery in the quantity of rare wild animals endemic to the plateau. For example, the number of wild yaks in Tibet has reached over 40,000, an increase of about 25,000 from 2003; the number of Pantholops hodgsonii has grown to over 200,000 from 80,000, that of Equus kiang has climbed from 50,000 to approximately 90,000, five rare wild animals have been newly discovered, and the number of Cervus elaphus wallichii, which was thought to be extinct, has exceeded 10,000. Jiangsu Province has maintained strict ecological space control and built 31 nature reserves, which cover 5.5% of the provincial total area, with a natural wetland conservation rate of 46.2%, and protect nearly 60% of the species within the province, resulting in increasing populations of rare and endangered species such as Elaphurus davidianus and Grus japonensis. Henan Province has further improved its monitoring-based prevention and control system. As at the end of 2020, 95% of key wild animals were brought under protection, indicating significantly enhanced protection efforts.

#### b. Continuous advancement of the "Green Shield" special action

2021 marks the fourth year of the "Green Shield" special action on nature reserve supervision. Based on the "Green Shield 2020" special action, the "Green Shield 2021" mission furthers nature reserve supervision and inspection in the light of the progress in the rectification of key problems identified.

In 2020, the Ministry of Ecology and Environment (MEE), in conjunction with departments and units concerned, carried out the "Green Shield 2020" enhanced supervision of nature reserves. As at the end of 2020, of the 5,503 key problems with national nature reserves, 5,038 had been rectified, indicating that 92% were rectified; of the 1,388 key problems with national nature reserves in the 11 provinces (municipalities) along the Yangtze River Economic Belt (YREB), 1,217 had been rectified, implying a rectification rate of 87%.

At the local level, Shandong Province continues to deepen the "Green Shield 2020" mission, and has completed the rectification of four types of 1,099 key problems with seven national parks and 4,107 violations of laws and regulations in nature reserves at or above the provincial level. Ningxia Hui Autonomous Region has inspected 2,646 sites of human activities in nature reserves, with 2,632 ones retained and rectified, indicating a rectification rate of 99.47%. Of the 2,983 clues of human activities, Henan Province has rectified 91.9% of the key problems in nature reserves, such as stone or sand quarrying, land for mining and industry, tourism and hydropower facilities in core areas and buffer zones, through shutdown within a definite time, demolition, vegetation recovery and other measures.

#### c. New progress in ecological red line delineation and ecological protection

The 2020 CCICED Policy Recommendations proposed to set the target of building ecological corridors based on ecological red lines and ecological protected areas, build an efficient and stable ecological security network and protect the integrity of ecosystems.

In November 2020, the MEE approved and released seven standards, including the *Technical Specification for Supervision of Ecological Conservation Redline – Baseline Investigation (on Trial)*, as national environmental protection standards. In December 2020, the MEE issued the *Opinions on Strengthening the Supervision of Ecological Protection* (the *Opinions*). According to the *Opinions*, a system of laws and standards for supervising ecological protection and a national ecological monitoring network will be preliminarily established by 2025 to improve government regulation of nature reserves and ecological red lines and raise the level of biodiversity conservation, so that the quality and stability of ecosystems will be further enhanced. By 2035, a modern regulatory system for ecological protection and regulatory capacity that match the goal of a beautiful China will be built to promote harmony between man and nature.

In May 2021, the MEE published the *Opinions on Strengthening the Supervision of Ecological Protection* and the *Interim Measures for Ecological and Environmental Supervision in Nature Reserves*, developed indicators and criteria concerning the supervision of ecological red lines, and advanced the construction of an ecological red line supervision platform. The MEE also guided 12 provinces (municipalities), including those along the YREB and Qinghai, to release and implement "three lines and one list" (namely red line for environmental protection, bottom line for environmental quality, and upper-limit line for resource utilization, as well environmental access list), completed the technical review of the "three lines and one list" submitted by each province (autonomous region or municipality) and Xinjiang Production and Construction Corps, and quickened the establishment of an ecological and environmental zoning management system.

The implementation of "three lines and one list" has been pushed forward in different localities. As of December 2020, people's governments of the 12 provinces (municipalities) in the first echelon had all published their respective "three lines and one list" and entered the stage of implementation and application; and the "three lines and one list" of the 19 provinces (autonomous regions and municipalities) and Xinjiang Production and Construction Corps in the second echelon had passed the technical review.

# d. Exploration on ecological compensation mechanisms and value realization mechanisms for ecological products

The 2019 CCICED Policy Recommendations proposed to promote green development in the Yangtze River Economic Belt, accelerate the establishment of a basin-wide ecological compensation mechanism involving a vertical compensation option and multiple horizontal compensation options, which features the dominance of local finance, incentives from the central finance and active social engagement. The CCICED policy recommendations also have implications for the establishment of the basin-wide ecological compensation mechanism in the Yellow River basin.

In May 2020, the Ministry of Finance (MOF), the MEE, the MWR and the NFGA jointly issued the *Implementation Plan for Supporting and Guiding the Establishment of a Pilot Horizontal Ecological Compensation Mechanism throughout the Yellow River Basin* (the *Implementation Plan*), which requires Shanxi, Inner Mongolia, Shandong, Henan, Sichuan, Shaanxi, Gansu and other provinces to further improve the eco-environmental governance system and capacity in the Yellow River basin by gradually setting up a basin-wide ecological compensation mechanism and establishing a sound value realization mechanism for ecological products. Local authorities have developed specific measures in accordance with the document. For example, Shandong Province

published the *Guiding Opinions on Establishing a Horizontal Ecological Compensation Mechanism in the Yellow River Basin*, which sets the basis, including criteria, forms and amount of compensation, for the implementation of the *Implementation Plan* by different cities and prefectures in the province.

In April 2021, the General Office of the CPC Central Committee and the General Office of the State Council issued the Opinions on Establishing a Sound Value Realization Mechanism for Ecological Products (the Opinions). The Opinions points out that establishing a sound value realization mechanism for ecological products is the key path to practicing the concept that lucid waters and lush mountains are invaluable assets. It also states that by 2025, an institutional framework for value realization of ecological products should be preliminarily established, a science-based value system for ecological products be initially set up, policies and systems for compensation for ecological conservation and for damage to ecology and environment be gradually improved, a government assessment mechanism for value realization of ecological products take shape, problems such as "difficulty in measuring, mortgaging, trading or liquidating ecological products" be effectively settled, a benefit-oriented mechanism for ecological and environmental protection be basically formed, and the capability of turning ecological advantages into economic ones be remarkably enhanced. By 2035, a sound value realization mechanism for ecological products should be established, a new model of ecological civilization construction with Chinese characteristics be completed, and green production and lifestyles be formed extensively, thus providing strong support for basically realizing the goal of building a beautiful China.

Relevant work has been carried out at the local level in line with the *Opinions*. In June 2021, for example, the Party Committee and Government of Jiangxi Province held the conference on commending advanced collectives and individuals in ecological civilization construction and establishing a sound value realization mechanism for ecological products, where they proposed to establish the concept of ecology first and green development, deeply practice the conviction that "lucid waters and lush mountains are invaluable assets", ensure effective transformation of ecological value with institutional reform and innovation at its core and emphasis on industrialized utilization, value-based compensation and market-oriented trading, and lead in the construction of a value realization mechanism for ecological products.

#### **III. Energy and Climate**

The 2020 CCICED Policy Recommendations proposed to actively tackle climate change and build a low-carbon society with energy transformation and upgrading at the core; establish a clean, low-carbon, safe and efficient energy system; and set more ambitious binding targets for GHG emission reduction.

On September 22, 2020, Chinese President Xi Jinping declared that "China will scale up its Intended Nationally Determined Contributions (INDCs) by adopting more vigorous policies and measures. We aim to have  $CO_2$  emissions peak before 2030 and achieve carbon neutrality before 2060". During the subsequent nine meetings, including the Climate Ambition Summit and the Leaders Summit on Climate, President Xi repeatedly emphasized China's 30 60 target, endeavoring to promote the building of a fair and reasonable global environmental governance system with win-win cooperation.

On March 15, 2021, President Xi stressed at the 9<sup>th</sup> Meeting of the Central Finance and Economics Committee that achieving the peaking of  $CO_2$  emissions and carbon neutrality is a broad, profound systematic socioeconomic reform, and we should include achieving the peaking of  $CO_2$  emissions and carbon neutrality in the overall layout of ecological civilization construction, and take solid steps to achieve the target of peaking  $CO_2$  emissions before 2030 and achieving carbon neutrality before 2060 as scheduled.

In his remarks titled "For Man and Nature: Building a Community of Life Together" at the Leaders Summit on Climate on April 22, 2021, Chinese President Xi Jinping especially mentioned that China will strictly control coal-fired power generation projects, and strictly limit the increase in coal consumption over the 14<sup>th</sup> FYP period and phase it down in the 15<sup>th</sup> FYP period. China has committed to move from carbon peak to carbon neutrality in a much shorter time span than what might take many developed countries, and that requires extraordinarily hard efforts from China.

On May 26, 2021, the first plenary meeting of the leading group for peaking carbon dioxide emissions and achieving carbon neutrality was held in Beijing. Han Zheng, Member of the Standing Committee of CPC Central Committee Political Bureau and Vice Premier of the State Council, noted that feasible targeted policy initiatives should be put forward to promote the optimization of the industrial structure, advance the adjustment of the energy structure, support the R&D and promotion of green and low-carbon technologies, improve the green and low-carbon policy system, and perfect the system of laws, regulations and standards.

Under the unified deployment of the leading group for peaking carbon dioxide emissions and achieving carbon neutrality, the National Development and Reform Commission (NDRC) and other departments concerned are developing a top-level design document for peaking of  $CO_2$  emissions and carbon neutrality, compiling the action plan for peaking  $CO_2$  emissions before 2030 and sector-specific implementation plans, deliberating support plans covering financial, pricing, fiscal and tax, government procurement, standards and other policies, and accelerating the establishment of a "1+N" policy system for the peaking of  $CO_2$  emissions and carbon neutrality.

#### a. Building new power systems dominated by new energy

The 2020 CCICED Policy Recommendations proposed that China should increase the investment in infrastructure for power generation from renewable energy, including developing large-scale offshore wind power, smart grid and energy storage technologies, and advance the green electricity market reform; formulate hydrogen economic policies at the national level, popularize fuel cells in transportation and combined heat and power generation, and increase the share of sustainable biomass gas production in the energy structure.

On March 15, 2021, Chinese President Xi Jinping presided over the 9<sup>th</sup> Meeting of the Central Finance and Economics Committee and explicitly pointed out that we should establish a clean, low-carbon, safe and efficient energy system, control the total amount of fossil energy, improve the energy efficiency, implement the replacement of fossil energy with renewable energy, deepen the electricity system reform and build new power systems dominated by new energy. Earlier, the National Energy Administration (NEA) proposed to "build new power systems that suit the development of a high proportion of renewable energy".

On May 15, 2021, China Southern Power Grid (CSG) issued the *White Paper on the Action Plan for Building a New Power System* (2021-2030) in Guangzhou to speed up the construction of a new power system dominated by new energy and build a safe, reliable, green, efficient and intelligent modern power grid. The new power system is expected to be basically completed by 2030. On May 19, 2021, State Grid Corporation of China (SGCC) held a workshop on building a new power system with new energy at the core to promote the establishment of a new power system dominated by new energy, thus contributing to the target of achieving the peaking of  $CO_2$  emissions and carbon neutrality.

According to the NEA, as at the end of 2020, the installed capacity generated by renewable energy reached 930 million KW nationwide, accounting for 42.4% of the total. To break it down, the installed capacity in hydropower, wind power, PV power and biomass power registered 370 million KW, 280 million KW, 250 million KW and 29.52 million KW respectively. The NEA will enact more proactive new energy development policies, and build a clean, low-carbon, safe and efficient

energy system to meet the target of increasing the proportion of non-fossil energy consumption to 25% and installed wind and PV power capacity to 1.2 billion KW by 2030.

#### b. Strengthening energy conservation and energy efficiency improvement

In 2020, all localities and departments earnestly made arrangements for controlling both total energy consumption and energy intensity, pushed ahead with energy conservation in key sectors such as industry, construction, transportation and public institutions, strengthened the management of energy conservation in key energy consumption units, reinforced the constraints of energy conservation rules and standards, and intensified energy conservation publicity, giving rise to a continued drop in energy intensity, an obvious fall in energy consumption growth and a drastic increase in energy efficiency.

In December 2020, the NEA proposed at the national energy working conference to strive to raise the level of energy supply, accelerate the development of wind and PV power generation, steadily advance hydropower and nuclear power construction, vigorously enhance new energy absorption and storage capabilities, deeply promote clean and efficient exploitation and utilization of coal, and further optimize grid construction.

In December 2020, the Ministry of Industry and Information Technology (MIIT) proposed at the national industry and information technology working conference to encourage and guide industrial enterprises to improve the quality of electric energy, step up electric equipment transformation and IT application, and comprehensively improve energy efficiency and demand response capability. A number of demonstration enterprises and industrial parks should be set up and promoted in key regions and sectors on the basis of guidance for power demand side management. Industrial low-carbon initiatives and green manufacturing projects should be implemented, and industrial power demand side management be intensified to guide the transformation of energy consumption patterns and better facilitate energy conservation and emission reduction among industrial enterprises.

On May 30, 2021, the MEE released the Guidelines on Strengthening the Prevention and Control of Environmental Pollution at the Source for Energy-Intensive and High-Emission Construction Projects (the Guidelines). According to the Guidelines, departments of ecology and environment at all levels should expedite the application of the results of "three lines and one list" in the industrial layout and restructuring of energy-intensive and high-emission industries and site selection of key projects. Localities to which iron & steel, electrolytic aluminum and other industries are transferred should strictly enforce the ecological and environmental zoning management requirements and regard the bottom line for environmental quality as a hard constraint. The environmental impacts of energy-intensive and high emission projects should be assessed strictly before approval. Construction projects should be strictly inspected for environmental access. The construction, reconstruction and expansion of energy-intensive and high emission projects must comply with laws and regulations on ecological and environmental protection and relevant statutory planning, and meet the requirements for controlling the total emissions of key pollutants, the target of peaking CO<sub>2</sub> emissions, environmental access lists, relevant planning environmental impact assessment (EIA) and environmental access conditions for construction projects in specific industries, and the principles and requirements of examination and approval of EIA documents. Coordinated control of pollution and carbon should be promoted in energy-intensive and highemission industries, and impact assessment of carbon emissions should be included in the EIA system.

In June 2021, the NDRC General Office issued the *Notice on Further Strengthening the Supervision of Energy Conservation* to push for the peaking of CO2 emissions and carbon neutrality by enforcing energy conservation laws, regulations and standards, and securing the control of total energy consumption and energy intensity.

#### c. Actively promoting co-control of GHG emissions and atmospheric pollutants

The 2020 CCICED Policy Recommendations stated that China should actively respond to climate change by setting more ambitious binding targets for GHG emission reduction and covering non-CO2 GHGs such as methane and hydrofluorocarbons (HFCs), with emphasis placed on energy transformation and upgrading. Climate indicators should be included in the scope of central inspection on ecological and environmental protection.

Authorities of ecology and environment attach great importance to co-control of atmospheric pollutants and GHG emissions. Since the implementation of the *Air Pollution Prevention and Control Action Plan*, emissions of atmospheric pollutants have been significantly reduced through measures such as structural adjustment and end-of-pipe treatment, playing an important role in promoting GHG control. The *Three-Year Action Plan for Keeping Skies Blue* explicitly requires significantly cutting the total emissions of major air pollutants and at the same time reducing GHG emissions.

In late June 2020, the MEE promulgated the *Plan for Controlling Volatile Organic Compounds* (*VOCs*) *in 2020*, which mentions that China is facing the dual pressure of a grim situation of PM2.5 pollution and increasing ozone pollution, especially in summer, when ozone has become the primary factor of excessive air pollutants in some cities. This is particularly the case with the Beijing-Tianjin-Hebei region and its surrounding areas, the Yangtze River Delta, the Fenhe-Weihe River Plain and the intersections of Jiangsu, Anhui, Shandong and Henan provinces. Mainly originating from the combustion of fossil fuels, local atmospheric pollutants and GHG emissions present the physical basis of homologous emission reduction. Coordinated reduction of non-CO2 GHG emissions has a great positive impact on the improvement of local environmental quality and the protection of human health, while contributing significantly to mitigating global warming and its adverse impacts.

In January 2021, the MEE unveiled the *Guidelines on Coordinating and Strengthening the Work* on *Climate Change and Ecological and Environmental Protection* to accelerate the coordination of functions, work and mechanisms pertaining to addressing climate change and ecological and environmental protection, strengthen pollution control at the source, systematically and holistically, with a view to further advancing climate change response, creating synergies between pollution abatement and carbon reduction, providing support for realizing the peaking of  $CO_2$  emissions and carbon neutrality, and fueling the building of a beautiful China.

#### d. Launching the national carbon market

The 2020 CCICED Policy Recommendations proposed to expand the coverage of China's national carbon emission trading market and further promote the internalization of external costs.

After China set the "30 60" target in September 2020, the national carbon emission trading market has been rolled out at a quicker pace. On December 30, 2020, the MEE officially published the 2019-2020 National Total Carbon Emission Allowance Setting and Allocation Implementation Plan (for the Power Generation Industry) and the List of Key Emitting Units Included in the 2019-2020 National Carbon Emission Permit Trading Allowance Management. On February 1, 2021, the Measures for the Administration of Carbon Emissions Trading (for Trial Implementation) came into force. The publication of these documents marks the official launch of the national carbon market.

On May 27, 2021, the national carbon emission trading market was officially launched, with the trading center located in Shanghai and the registration system in Wuhan, Hubei Province. On June 22, 2021, Shanghai Environment and Energy Exchange released the *Announcement on the Matters Related to National Carbon Emission Trading*, which specifies the matters pertaining to the

national carbon emission trading, including venue, form, period and account of trading, among others.

On July 16, 2021, the national carbon trading market completed the first online transaction. The first transaction involved 2,162 power enterprises, with 4.5 billion tons of CO2 placed under control. In the future, iron & steel, cement and other key carbon-emitting industries will be included. In addition, the national carbon market will phase in Chinese Certified Emission Reductions (CCERs), carbon sink and other products into its trading system, establish a trading mechanism for carbon financial derivatives, and actively guide social investment.

#### e. Driving low-carbon development through green urbanization and sustainable consumption

The 2020 CCICED Policy Recommendations proposed to push ahead with green transformation of cities with the goal of green prosperity, low carbon and intensiveness, recycling, fairness and inclusiveness, safety and health. Meanwhile, the CCICED also recommended that the green consumption revolution be leveraged to improve society-wide awareness of green consumption and significantly increase the supply of green consumer goods and services.

The Outline of the 14<sup>th</sup> Five-Year Plan (2021-2025) for National Economic and Social Development and the Long-Range Objectives Through the Year 2035 contain special requirements for green urbanization and green consumption. To be specific, Chapter 8 "Improving the New Urbanization Strategy and Enhancing the Urbanization Quality" proposes to "advance coordinated layout of infrastructure, division of labor and cooperation, sharing of public services and joint environmental governance". Chapter 14 "Comprehensively Promoting Consumption" proposes to "follow the trend of household consumption upgrading, combine expanding consumption with improving the quality of people's lives, promote greener, safer and healthier development of consumption and steadily increase the household consumption level".

In February 2021, the State Council published the *Guidelines on Accelerating the Establishment of a Sound Economic System for Green, Low-carbon and Circular Development* (the *Guidelines*). The *Guidelines* proposes to "establish a sound consumption system for green, low-carbon and circular development", including "step up green government procurement, expand the scope of green procurement and gradually extend the green procurement system to cover state-owned enterprises (SOEs). Increase the guidance for enterprises and residents in purchasing green products and encourage localities to promote green consumption by means of subsidies, rewards, etc. Strengthen the management of certification of green products and services, and upgrade the credit supervision mechanisms of certification bodies".

On April 29, 2021, the 28<sup>th</sup> Meeting of the 13<sup>th</sup> National People's Congress (NPC) Standing Committee adopted an anti-food-waste law, which aims to promote sustainable economic and social development by preventing food waste, safeguarding national food security, advocating a civilized, healthy, resource-saving and environmentally friendly consumption style, and promoting a simple and moderate, green and low-carbon lifestyle.

#### **IV. Pollution Prevention and Control and Marine Governance**

#### a. Air pollution prevention and control

The 2020 CCICED Policy Recommendations proposed to strengthen economic evaluation of coalfired power and develop a roadmap for phasing out and finally eliminating coal-fired power; increase the investment in infrastructure for power generation from renewable energy, including developing large-scale offshore wind power, smart grid and energy storage technologies, and advance the green electricity market reform. The 2019 CCICED Policy Recommendations also suggested further controlling coal use and secure a victory in the blue-sky battle; developing a national long-term strategy for zero emissions and phasing out coal; increasing subsidies and other financial support for renewable energy and gradually eliminating fossil fuel subsidies; striving to completely ban bulk coal in the Beijing-Tianjin-Hebei region and the Fenhe-Weihe Plain region around 2020; and prioritizing absorption of electricity generated from non-fossil energy into power grids.

In September 2020, the MEE released the Action Plan for Comprehensive Atmospheric Pollution Control in the Beijing-Tianjin-Hebei Region and Its Surrounding Areas, and Fenhe-Weihe Plain in Autumn and Winter during 2020-2021, which states that during October through December 2020, the average number of days with heavy pollution and above should be controlled within five.

On June 3, 2020, the CPC Central Committee and the State Council the *Guidelines on Coordinating Epidemic Prevention and Control with Ecological and Environmental Protection for Economic and Social Development* (the *Guidelines*). The *Guidelines* points out that we should focus on cocontrol of fine particulate matters and ozone within key periods of time and emphasize VOCs and NOx control in key industries; comprehensively advance comprehensive control of VOCs in petrochemical, chemical, industrial coating, packaging and printing and other key industries as well as in oil storage, transportation and marketing, industrial parks and enterprise clusters.

On June 29, 2020, the MEE issued the *Technical Guidelines for the Formulation of Emergency Emission Reduction Measures by Key Industries for Heavy Pollution Weather (2020 Revision)* to implement differentiated control of 39 enterprises in key industries by management performance by dividing these enterprises into three grades A, B and C according to the achievement of differentiated indicators such as production process, pollution control technology, pollutant emission limits, management of unorganized emissions, monitoring level, environmental management level, mode of transportation, and transportation monitoring.

In 2021, the MEE continues to advance the air quality improvement campaign. It continues to promote clean heating in winter in North China, ultra-low-emission transformation of the iron & steel industry and comprehensive pollution control of boilers and furnaces, and advance in-depth management of cement, coking, glass, ceramic and other industries; strengthen the regulation over emissions from new vehicles, speed up the phase-out of old vehicles, and intensify the law enforcement and supervision over motor vehicles and non-road mobile machinery; actively facilitate the construction of special railway lines and increase the proportion of rail freight; enhance regional collaboration on air pollution prevention and control; and ensure good air quality for Beijing 2022 Olympic and Paralympic Winter Games.

#### b. Water pollution prevention and control

On June 3, 2020, the MEE released the *Opinions on Ensuring the Security in the Six Areas under the premise of the regular epidemic prevention and control, and Waging a Determined Battle to Prevent and Control Pollution* (the *Opinions*). The *Opinions* proposes to promote the control of black and odorous water bodies in cities, with equal emphasis on improving weak links and preventing resurgence; accelerate the pollution control in agriculture and rural areas; guide and complete the formulation of county-level special plans for rural domestic sewage treatment to advance rural sewage treatment in an orderly manner and launch a pilot program for controlling black and odorous water bodies in rural areas.

On November 3, 2020, the MEE adopted the *National Surface Water Monitoring and Evaluation Program during the 14<sup>th</sup> Five-Year Plan Period (for Trial Implementation)* and the *Discharge Standard of Water Pollutants for Electronic Industry*, which propose to further improve the methods of monitoring and evaluation, and optimize the allocation of monitoring resources to better support accurate, science-based and law-based pollution control. The two documents also suggest further optimizing surface water monitoring indicators and evaluation methods, and gradually exploring the implementation of monitoring and assessment of new pollutants in eligible river basins and regions; constantly strengthening the quality management of monitoring data, and ensuring that the data is "true, accurate and complete" and can objectively and genuinely reflect the quality of water environment; maintaining the disclosure of information on surface water environmental quality, consciously accepting social supervision and holding local governments accountable for water pollution prevention and control.

Furthermore, the 14<sup>th</sup> FYP suggests that we should continue to improve environmental quality; work to extend the sewage pipe network to all urban areas and basically eliminate black and odorous water bodies in urban areas; comprehensively implement the pollution discharge permit system and push forward market-oriented trading of pollution discharge permits, energy use rights, water use rights and carbon emission permits.

#### c. Soil pollution prevention and control

On June 3, 2020, the MEE released the *Opinions on Ensuring the Security in the Six Areas under the premise of the regular epidemic prevention and control, and Waging a Determined Battle to Prevent and Control Pollution* (the *Opinions*). The *Opinions* proposes to reinforce soil pollution control and remediation by category and actively cooperate with inspection of the enforcement of the law on soil pollution prevention and control; strengthen solid waste pollution prevention and control by category, put into effect the *Implementation Plan for Banning the Entry of Foreign Garbage and Promoting the Reform of the Administrative System for Solid Waste Import*, continue to slash solid waste imports and basically achieve zero solid waste imports by the end of 2020. It also requires deepening the pilot construction of no-waste cities; enhancing the environmental monitoring and risk control of "hazardous wastes, tailings and chemicals"; constantly advancing normative environmental management of hazardous wastes, speeding up the improvement of weak links in facilities collecting and treating medical and hazardous wastes, and launching a special campaign to identify and manage hazardous wastes.

On July 17, 2020, nine ministries, including the NDRC, the MEE, the MIIT, the Ministry of Housing and Urban-Rural Development (MOHURD), the Ministry of Agriculture and Rural Affairs (MARA), the Ministry of Commerce (MOFCOM), the Ministry of Culture and Tourism (MCT), the State Administration for Market Regulation (SAMR) and the All China Federation of Supply and Marketing Cooperatives, jointly issued the *Notice on Solidly Promoting the Work on Plastic Pollution Control*, which requires implementing specific measures in key areas of plastic reduction, standardizing the use of banned or restricted ultra-thin plastic shopping bags, ultra-thin agricultural plastic films, disposable foam plastic tableware and disposable plastic swabs, regulate the use of plastic shopping bags in retail & catering, and intensifying the classification, collection and disposal of plastic waste.

On September 1, 2020, the newly revised *Law on the Prevention and Control of Environmental Pollution Caused by Solid Wastes* was put into effect to promote the settlement of prominent problems according to law, implement the household waste classification system, tighten the management of hazardous waste treatment and create a good living environment. On September 9, 2020, the MEE held the national working conference on environmental management of hazardous wastes and the meeting for promoting the three-year action on hazardous waste control to enforce the newly revised *Law on the Prevention and Control of Environmental Pollution Caused by Solid Wastes*, strengthen environmental supervision over hazardous wastes, and push forward the three-year action on hazardous waste control and special action on law enforcement. In November 2020, the MEE, the NDRC, the Ministry of Public Security (MPS), the Ministry of Transport (MOT) and the National Health Commission (NHC) revised and published the *Directory of National Hazardous Wastes (Version 2021)*.

In 2020, soil environmental risks were basically controlled nationwide. Initial estimates show that about 90% of the polluted cultivated land was utilized safely, while over 93% of the polluted land

parcels were utilized safely, indicating that the worsening soil pollution was preliminarily contained. The soil environment of agricultural land was generally stable across China.

#### d. Marine ecological protection

The 2020 CCICED Policy Recommendations proposed to strengthen comprehensive ocean management, enhance the resilience of marine ecosystems and support the sustainable growth of a blue economy. We should tighten the control over sea reclamation, step up its efforts to protect and restore coastal wetland, and rebuild critical habitats; delineate marine ecological red lines and marine protected areas to assist marine biodiversity conservation and fishery development; strengthen scientific research and monitoring, reinforce law enforcement, push ahead with protection and restoration of marine ecosystems and high-quality development of the marine economy, and develop ecosystem-based comprehensive marine management policies by giving better play to the role of inter-ministerial coordination mechanisms and national marine advisory bodies. We should build green fishing boats and green fishing ports, develop green mariculture, establish a traceability system for marine aquatic products, and promote green shipping.

On July 30, 2020, the MEE convened the conference for promoting the formulation of the 14<sup>th</sup> Five-Year Plan for national marine ecosystem conservation. The conference pointed out that efforts should be made to push forward the construction of "beautiful bays" and solidly promote water quality improvement and ecological protection and restoration of bays in coastal cities; carefully plan a system of targets and indicators, with emphasis on ecological elements, and form a reasonable indicator system that is effectively aligned to the important indicators in the 13<sup>th</sup> FYP.

On September 17, 2020, the MEE held the video conference for coordinating the comprehensive environmental governance of the Bohai Sea in the first three quarters of 2020. The conference required consolidating and improving the marine environmental quality, keeping a close watch on key indicators such as the proportion of offshore areas with excellent or good water quality and water quality of state-controlled sections of rivers emptying into the sea, and taking harsh measures to promote steady improvements in offshore water quality; accelerating ecological restoration, and combining ecological restoration with the coordination of protection and construction of "beautiful bays".

In 2020, the quality of waters under China's jurisdiction was steadily improved and 96.8% of the waters met the Class I quality standard in summer. The proportion of the offshore areas with excellent or good water quality (Class I and II) was 77.4%, up 0.8% year on year; while the proportion of the offshore areas with water quality inferior to Class IV was 9.4%, down 2.3% year on year. To be specific, the proportion of the offshore areas of the Bohai Sea with excellent or good water quality rose by 4.4% year on year, and that of the offshore areas with water quality inferior to Class IV fell by 3.6%.

#### V. Environmental Governance and Rule of Law

#### a. Enactment and enforcement of new laws

In December 2020, the 24<sup>th</sup> Standing Committee session of the 13<sup>th</sup> National People's Congress voted to pass the *Yangtze River Protection Law*, which would come into force on March 1, 2021. As China's first basin-specific law, the *Yangtze River Protection Law* is of great significance to strengthen ecological restoration and environmental protection, promote reasonable and efficient utilization of resources and ensure ecological security in the Yangtze River basin, as well as maintain the harmony between man and nature and sustain the development of the Chinese nation. With respect to the legislation on the protection of the *Regulations on the Administration of the Protection of Water Resources and Water Environment of the Yangtze River*, and proposed in 2018 to formulate the *Yangtze River Protection Law*.

On January 22, 2021, the 25<sup>th</sup> Standing Committee session of the 13<sup>th</sup> National People's Congress adopted the revision to the *Law of the People's Republic of China on Administrative Penalty*, which would take effect on July 15, 2021. The revised *Administrative Penalty Law* provides for the implementation of comprehensive administrative law enforcement in urban management, market supervision, ecological environment, cultural market, transportation, emergency management, agriculture and other fields, including ecological environmental protection in the scope of comprehensive administrative law enforcement. Accordingly, there is a clear legal basis for comprehensive administrative law enforcement in the field of ecology and environment. After the revision comes into effect, the comprehensive administrative law enforcement team for ecological environmental protection can relatively concentrate the power of administrative penalty.

On May 28, 2020, the 3<sup>rd</sup> Standing Committee of the 13<sup>th</sup> National People's Congress voted to adopt the *Civil Code of the People's Republic of China*. The *Civil Code* lays down a punitive compensation system for ecological and environmental damage and clear rules on restoring and compensating for such damage, thus contributing to the establishment of a sound law-based environmental and ecological protection system.

On January 24, 2021, the State Council published the *Regulation on the Administration of Permitting of Pollutant Discharges* (the *Regulation*), which would enter into force on March 1, 2021. The *Regulation* is made to strengthen the administration of pollutant discharge permits, regulate pollutant discharge by enterprises, public institutions and other production operators, and can help control pollutant discharges and protect and improve the ecological environment.

# **b.** Advancement of reforms to streamline administration and delegate power, improve regulation and upgrade services

On January 7, 2021, the MEE issued the *Guidelines on Optimizing the Ways of Law Enforcement for Ecological and Environmental Protection and Improving the Efficiency of Law Enforcement* (the *Guidelines*), which require local authorities of ecology and environment to tighten law enforcement responsibilities, optimize the ways of law enforcement, improve law enforcement mechanisms and standardize law enforcement, thereby improving the efficiency of ecological and environmental law enforcement across the board. Ideas such as differentiated, intelligent and standardized supervision and increased support for law enforcement embodied in the *Guidelines* will help win support from enterprises and industries concerned and foster a good atmosphere of law enforcement in society at large.

In June 2021, the MEE issued the *Guidelines for Further Strengthening Oversight over the Ecological Environment in the Model of "Random Inspection and Public Release"* to align systems and mechanisms such as the positive list for environmental supervision and law enforcement, credit supervision, management of pollutant emission/discharge permits, response to heavy pollution weather and joint inspection, coordinate the work on supervision and law enforcement between environmental authorities at different levels and between environmental authorities and other authorities, so as to achieve information communication and mutual recognition of inspection results during a random inspection and prevent overlapping in administration.

#### c. Regular supervision of ecological and environmental protection

Effective supervision over ecological protection is a key part of ecological civilization construction, an important task in the battle against pollution, and a crucial step towards the reform of the ecological and environmental supervision system.

According to the decision of the CPC Central Committee and the State Council, a new round of inspections should be launched against the entities to be inspected from 2019 to 2021; and a "look-back" supervision will be launched against some localities and departments in 2022, when the second round of inspections will cover all provinces in China. Under this timeframe, the second

batch of inspections in the second round of central environmental protection inspections was launched in August 2020, targeting three provinces (municipalities) including Beijing, Tianjin and Zhejiang, and two central enterprises, namely Aluminum Corporation of China (CHINALCO) and China National Building Material Group Co., Ltd. (CNBM), and a pilot supervision was carried out on the NEA and the NFGA.

On January 29, 2021, the fifth central environmental protection inspection team pointed out the problems that existed and suggestions for rectification in its feedbacks to Beijing, Tianjin, Zhejiang and CNBM. On January 29, 2021, the sixth central environmental protection inspection team gave feedbacks to the NEA. The inspection results indicated that the NEA failed to give due attention to ecological and environmental protection, and its policy system lacked adequate environmental protection requirements. Measures such as the *Air Pollution Prevention and Control Action Plan* and the *Three-Year Action Plan for Keeping Skies Blue* had not been fully implemented. The NEA was required to establish a sound energy policy system for green development, fulfill the responsibility of supervising environmental protection when managing industries; continue to promote clean heating in northern areas, accelerate the adjustment of the energy structure, pursue the high-quality development of renewable energy, optimize the layout and structure of the coal-fired power development industry, and guide and supervise the settlement of universal environmental problems in different industries.

In April 2021, the third batch of inspections in the second round of central environmental protection inspections was launched across the broad, and eight inspection teams carried out inspection of eight provinces (autonomous regions) including Shanxi, Liaoning, Anhui, Jiangxi, Henan, Hunan, Guangxi and Yunnan. On April 16, the MEE released a circular, which said that the field inspection identified and verified a number of outstanding ecological and environmental problems. As of May 9, the inspection teams received 29,133 cases reported by the general public (excluding repeated ones), of which 12,732 ones were concluded and 6,393 ones were temporarily settled; 2,575 entities were fined a total of RMB 191,282,100; 160 cases were investigated, with 95 people detained; 1,708 Party and government leaders and cadres were grilled and 844 of them were held accountable.

It should be noted that curbing energy-intensive and high-emission projects has been included in the scope of the central environmental protection inspection. During its inspection in Shanxi Province, the first central environmental protection inspection team found that counties in Jinzhong City, including Jiexiu, Pingyao and Lingshi, blindly launched a number of water- and energyintensive and high-emission coking projects regardless of water resource endowment and the carrying capacity of the environment, bringing about serious ecological and environmental problems.

#### d. Improvement of ecological and environmental governance efficiency

The modernization of the system and capacity for environmental governance should be accelerated. A sound environmental problems system that matches the new development pattern should be established, and on the basis of the overall completion of the top-level design for the reform of the ecological civilization system, the systematicness, integrity and synergies of reform measures should be fully leveraged to mobilize the endogenous momentum of relevant entities. The 2019 CCICED Policy Recommendations proposed to enhance information disclosure and public engagement. To arouse the enthusiasm of individuals and non-governmental organizations (NGOs) for participation, the environmental information disclosure and public engagement system should be implemented on a full scale.

On April 22, 2020, the MEE introduced the *Guidelines on Implementing a Reward System for Reporting Ecological and Environmental Violations*. Encouraging public participation in ecological and environmental protection by implementing a reward system for reporting environmental violations is an important step in building an environmental protection pattern led by the government, dominated by enterprises and extensively participated by social organizations and the public.

On May 24, 2021, the 17<sup>th</sup> meeting of the central committee for deepening overall reform deliberated and adopted the *Reform Plan for the Law-based Environmental Information Disclosure System* (the *Reform Plan*). The *Reform Plan* fully strengthens the corporate disclosure responsibility and urges the fulfillment of the corporate disclosure obligation to effectively protect the public's right to know. Meanwhile, by focusing on key entities and key information, the document ensures that environmental information is timely, true, accurate and complete by strengthening departmental collaboration, guiding public scrutiny and improving the efficiency of law-based supervision and social supervision.

On June 3, 2021, the MEE and the General Office of the Central Commission for Guiding Cultural and Ethical Progress jointly issued the *Guidelines on Promoting the Development of Voluntary Services for the Ecological Environment* (the *Guidelines*). The *Guidelines* is the first national program of action on voluntary services for the ecological environment, which provides guidance for promoting the development of such voluntary services in six aspects including the guiding ideology, basic principles, enriching the contents and forms, enhancing team building, improving service management and strengthening security measures.

On June 30, 2021, the MEE released the *Implementation Opinions on Strengthening the Building of Comprehensive Administrative Law Enforcement Teams for Ecological and Environmental Protection* (the *Implementation Opinions*). The *Implementation Opinions* requires the strict implementation of the certification and qualification management system for law enforcement officials, the establishment of an appraisal and reward & punishment system, the active implementation of the law enforcement archives review and appraisal system, the establishment of an accountability and exemption system, the establishment and the implementation of an investigation and accountability system for leaders and cadres who violate laws and regulations to interfere in law enforcement activities and step in specific environmental protection cases, as well as the improvement of three mechanisms, including the error correction and accountability mechanism.

#### VI. Regional and International Engagement

#### a. New advances in greening the "Belt and Road Initiative"

The 2020 CCICED Policy Recommendations proposed to continue to participate in multilateral processes for environment and development, promote the development of Green BRI and global green supply chain, strengthen green international cooperation, facilitate the realization of global green prosperity, and build a shared future for all life on earth. To this end, it is necessary to give full play to the role of the BRI International Green Development Coalition, the Belt and Road Sustainable Cities Alliance and other platforms to advance green, environment friendly and renewable energy demonstration projects, support infrastructure projects for clean and efficient energy, strengthen case study and promotion of experiences for the green transformation of BRI-related countries, and seize the strategic opportunity of economic recovery after the COVID-19 epidemic to boost green development.

Since 2020, in the face of a complex international situation, especially the impact of the COVID-19 epidemic, China has worked with the relevant countries to overcome the difficulties and promote the development of the BRI. A series of new progresses and new results have been achieved.

At the 9<sup>th</sup> Meeting of the Central Finance and Economics Committee on March 15, 2021, it was pointed out that the 14<sup>th</sup> Five-Year Plan period is a critical period and window period for peaking carbon emissions, and that China should strengthen international cooperation on climate change and promote the formulation of international rules and standards to build a green Silk Road. On

April 20, 2021, in his keynote speech (video speech) at the opening ceremony of the Boao Forum for Asia Annual Conference 2021, Chinese President Xi Jinping proposed to perfect the BRI International Green Development Coalition, the Belt and Road Green Investment Principles and other multilateral cooperation platforms for the building of closer partnerships on green development.

On June 23, 2021, the Asia and Pacific High-level Conference on Belt and Road Cooperation was held in Beijing via video conferencing. The meeting announced the Initiative for Belt and Road Partnership on COVID-19 Vaccines Cooperation and the Initiative for Belt and Road Partnership on Green Development jointly initiated by 29 countries, emphasizing that mankind has only one earth and that protecting the ecological environment is the common responsibility of all countries. Countries were required to work together to promote green, low-carbon, and sustainable development, take actions to deal with climate change, carry out international cooperation to achieve a green and sustainable economic recovery and promote a low-carbon, resilient and inclusive economic growth after the epidemic, support the construction of the green Silk Road, strengthen cooperation in green infrastructure, green energy, and green finance, and facilitate green, low-carbon, and sustainable development.

On July 16, 2021, the Ministry of Commerce and the Ministry of Ecology and Environment issued a notice on the issuance of the *Guidelines for Green Development in Foreign Investment Cooperation*. The *Guidelines* pointed out that the key tasks for China's future development include supporting foreign investment in clean energy, such as solar energy, wind energy, nuclear energy, and biomass energy, participating in the global energy production and consumption revolution, and building a clean, low-carbon, safe and efficient energy system. Upholding the concept of a community with a shared future for mankind, the document shows China's ideas and positive attitude toward green development. It proposed to build a database of cases of Chinese enterprises making green investment and building green infrastructure, compile the green development index for the overseas investment by Chinese enterprises, and publish the report on green development resulting from such investment.

#### b. International cooperation on climate change

2020 is the last year before the formal implementation of the *Paris Agreement* on climate change, and also a crucial year for countries to submit and renew their nationally determined contributions (NDCs) under the *Convention*. However, the sudden outbreak of COVID-19 forced the scheduled United Nations Climate Change Conference to be postponed. In September 2020, at a critical moment when the global climate governance process may regress, China put forth the new emission reduction targets that it will strive to peak its carbon dioxide emissions by 2030 and achieve carbon neutrality by 2060. This move of China has boosted the confidence of the international community in tackling climate change and driven a new upsurge in international climate cooperation.

At the Leaders Summit on Climate on April 22, 2021, President Xi Jinping, based on China's practice in promoting ecological progress and addressing climate change, proposed that "we must be committed to harmony between man and Nature, green development, systemic governance, people-centered approach, multilateralism and the principle of common but differentiated responsibilities", clarifying the direction for China to participate in international climate governance.

On June 17, 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 *Kigali Amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer*. The *Amendment* will take effect in China on September 15, 2021 (not applicable to the Hong Kong Special Administrative Region of China for the time being). After the *Kigali Amendment* was approved, the *Montreal Protocol* opened a new chapter in the history marked by coordinated

response to ozone layer depletion and climate change. As the largest developing country, despite many difficulties, China has decided to accept the *Kigali Amendment* and will make new contributions to the protection of the global ozone layer and to the response to climate change.

By actively taking on international responsibilities, China has injected new impetus into the global fight against climate change and the promotion of green recovery. The international community has become increasingly aware that China not only played a key role in the reaching of the *Paris Agreement*, but also led its implementation.

#### c. Global ocean governance

The 2020 CCICED Policy Recommendations proposed to step up comprehensive ocean management, improve the resilience of the marine ecosystem, and support the sustainable growth of the marine economy.

The Chinese government has vigorously participated in international processes in response to marine litter and plastic pollution, joined the UNEP Regional Seas Programme, carefully observed the *Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal*, and facilitated the introduction of documents such as the *East Asia Leaders' Statement on Combatting Marine Plastic Debris* and the *Implementation Framework of the G20 Action Plan on Marine Litter*, with the aim of working together to promote global marine litter and plastic pollution prevention and control. Meanwhile, China has actively advanced bilateral cooperation and established a cooperation mechanism for marine litter prevention and control with Japan, Canada and the United States.

On October 11, 2020, the first *Industry Report on Ocean Protection in China* (2020) in the field of marine protection was released. By the end of 2019, China had established 271 marine protected areas. China's first national five-year plan specifically for marine eco-environment protection, the 14<sup>th</sup> Five-Year Plan for the Protection of the Marine Ecological Environment Nationwide, is about to be completed, which shows that China will coordinate matters related to marine protection with a greater determination and at a higher strategic level.

On June 23, 2021, the 31st Meeting of States Parties to the United Nations Convention on the Law of the Sea was held. Over the years, China has vigorously participated in the work of the three major bodies of the *Convention*, supported developing countries in strengthening capacity building, resolutely safeguarded the integrity and seriousness of the *Convention*, and made positive contributions to the construction of a modern maritime order.

China has been actively fulfilling its commitment to ocean protection by participating in related international cooperation. It put forth the concept of a maritime community with a shared future. It has established maritime partnerships with Portugal, the European Union, and Seychelles with the aim of jointly pushing the global ocean governance system to perfection. China has also promoted the application of autonomous marine environment security technology in countries along the 21st Century Maritime Silk Road, providing Chinese technologies and solutions in marine observation and monitoring, marine environmental forecasting, and marine ecological protection.

#### VII. Conclusions

Over the past year or so, the CCICED has continued to act as a high-end think tank for promoting progress in China's environment and development, and has put forward many systematic and forward-looking policy recommendations, which fully reflect the superb ability of the CCICED members, special advisors, Chinese and foreign experts to predict the situation at home and abroad, as well as their insights into the international environment and the laws of development. The CCICED Policy Recommendations continue to receive great attention from the Chinese government and have been reflected to varying degrees in policy practice and exploration. For

example, the 2020 policy recommendation that we should maintain the strategic focus on making ecological progress and align the green development targets in the 14<sup>th</sup> Five-Year Plan with the United Nations 2030 Agenda for Sustainable Development, especially with the climate change mitigation and adaptation actions has been fully reflected in the *14<sup>th</sup> Five-Year Plan for National Economic and Social Development* and the *Long-Range Objectives Through the Year 2035*. Another example is that the CCICED proposed to incorporate climate change tackling into the central ecological and environmental protection inspection system, strengthen local institutions, teams and capabilities for climate change tackling, make full use of the advantages of the existing ecological and environmental protection system, and effectively advance the implementation of climate change work, which fully demonstrate the forward-looking nature of the CCICED recommendations.

Over the past five years, China has made significant achievements in ecological & environmental protection and economic & social development, attracting worldwide attention. Blue sky, clear water and green land have become the new normal in many cities and regions, and a solid step has been taken in pursuing beautiful China. It took less than ten years for China to basically realize the transition to green and clean development that took industrialized countries more than 30 years or even longer. The transformation in China's environment and development has accelerated both its own and the world's sustainable development process.

Although the future world may face many uncertainties due to the impact of the epidemic and the tension in international politics, it has become an inevitable trend for countries to be open and to work together to build a community with a shared future for mankind. To address issues including global climate change, ocean governance, and biodiversity conservation, the international community will need to make concerted efforts. In view of the 14<sup>th</sup> Five-Year Plan for National Economic and Social Development and the Long-Range Objectives Through the Year 2035, China will continue to conduct comprehensive cooperation with the international community with an even more open attitude.

2021 marks the first year in China's 14<sup>th</sup> Five-Year Plan period. This year, the CCICED has provided many positive and effective suggestions based on various national planning outlines and long-term objectives. In the future, the CCICED will more accurately grasp the features of the new era and the development trend of the domestic and foreign environment when conducting policy research, focus on delivering innovative and forward-looking research results, and provide more strategic policy recommendations on green and sustainable development, climate governance, low-carbon transition and other issues of concern at home and abroad.

### Appendix: Overview on the Relevance of China's Environmental and Development Policies and CCICED Policy Recommendations during 2020-2021

Field	Time of Release of Policy	Policy Progress (2020-2021)	Content
Planning for Environment and Development	June 2020	The Supreme People's Court issued the Opinions on Providing Judicial Services and Guarantees for the Ecological Protection and High-Quality Development of the Yellow River Basin. From the 7 respects including the strict implementation of responsibilities, boosting water and sediment regulation, promoting green water use, and supporting innovation, the Opinions puts forward specific requirements so that people's courts will try various cases in a fair and efficient manner in accordance with the relevant laws and regulations and fully exert their judicial functions. The Opinions adheres to the most stringent law-based governance, the new development concepts, and targeted implementation of measures regarding the overall improvement of the ecological environment of the Yellow River Basin.	The 2020 CCICED Policy Recommendations put forth that during the 14th FYP period, China should further promote a comprehensive green development framework including development concepts, policy objectives, key areas, and institutional mechanisms, lay a solid foundation for achieving high- quality development and green prosperity, and establish a model of sustainable development worldwide. In terms of development concepts, China must unswervingly promote ecological conservation, implement the concept that lucid waters and lush mountains are invaluable assets, promote a
	August 2020	The Political Bureau of the CPC Central Committee reviewed the <i>Outline of the Plan for the Ecological</i> <i>Protection and High-Quality Development of the</i> <i>Yellow River Basin</i> , requiring that measures be taken in line with local conditions and the relevant patterns to improve the ecological environment of the Yellow River Basin. According to the <i>Outline</i> , China should vigorously promote the intensive and economical use of the Yellow River's water resources and take water	comprehensive green transformation 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 of the 14 <sup>th</sup> Five-Year Plan with the United Nations 2030 Agenda for

	resources as the largest rigid constraint to save water and expand the space for development. China must take a long-term perspective and improve the disaster prevention and mitigation system as well as the ability to respond to various disasters. Effective measures must be taken to promote the high-quality development of the Yellow River Basin, accelerate the transformation of old and new growth drivers, build a modern industrial system with distinctive advantages, optimize the pattern of urban development, and promote rural revitalization. The country should vigorously protect and carry forward the Yellow River culture so that the vein of the Chinese history and culture is sustained. It should strengthen overall planning and coordination, hold the provinces and regions along the Yellow River and the relevant departments accountable for their respective responsibilities, speed up the formulation and implementation of specific plans, implementation	Sustainable Development, especially with the climate change mitigation and adaptation actions. Regarding the ecological and environmental protection of the Yellow River Basin, it is necessary to improve the accounting methods and realization mechanisms for the value of services provided by ecological capital to promote the high-quality development of the Yellow River Basin. It was proposed to develop the basin area within the carrying capacity of resources and environment, strengthen the application of natural capital value accounting in spatial planning, and ensure the integrity and healthy and sustainable development of the river basin's ecosystem. It was proposed to build a standardized natural capital value accounting system and
	plans and policy systems, and strive to make significant progress during the 14th FYP period.	promote the construction of a natural ecological resource monitoring network. A pricing mechanism should be established for ecological products from the three aspects of market pricing,
May 2021	The Ministry of Water Resources issued the <i>Legislation Draft for Yellow River Protection</i> (Exposure Draft) and openly solicited opinions from the public. The Standing Committee of the National People's Congress has included the legislation on Yellow River protection in the 2021 legislative work plan.	government pricing and government- regulated market pricing. The ecological compensation mechanism should be innovated to accelerate the horizontal ecological compensation process in the river basin from the three dimensions of water resources, water environment and water ecology.

	November 2020	The Ministry of Ecology and Environment approved and issued seven standards including the <i>Technical</i> <i>Specification for Supervision of Ecological</i> <i>Conservation Red Line - Baseline Investigation (for</i> <i>Trial Implementation)</i> as national standards for environmental protection.	The 2020 CCICED Policy Recommendations proposed to take the
Ecosystem and Biodiversity Conservation	December 2020	The Ministry of Ecology and Environment issued the <i>Opinions on Strengthening the Supervision of Ecological Protection</i> . The <i>Opinions</i> proposes that by 2025, a system of regulations and standards for ecological protection supervision will be initially formed and a national ecological monitoring network will be initially established so as to improve the ability to supervise nature reserves and ecological protection red lines and the level of biodiversity protection. The demonstrative and leading role of ecological civilization construction will be enhanced. A guidance, coordination and supervision system that adapts to the supervision of ecological conservation and restoration will be initially formed, the ecological security barrier will be strengthened, and the quality and stability of the ecosystems will be further improved. By 2035, a modern ecological protection supervision system and supervision capabilities that can help meet the goal of a Beautiful China will be built to promote harmony between man and Nature.	successful holding of the 15th Conference of the Parties to the Convention on Biological Diversity in 2021 as an opportunity to stimulate ambitious multilateral cooperation, strengthen national actions, and protect nature and human well-being; actively work with the international community to set clear and quantifiable goals for the protection and restoration of global terrestrial and marine ecosystems; establish the ecological protection red line and the ecological corridor construction target for the protected area, build an efficient and stable ecological security network, and protect the integrity of the ecosystem; integrate biodiversity conservation indicators into the green finance framework and promote the mainstreaming of conservation finance.
	December 2020	The 24th Meeting of the Standing Committee of the 13th National People's Congress voted on and adopted the <i>Yangtze River Protection Law</i> .	

AI	pril 2021	The General Office of the CPC Central Committee and the General Office of the State Council issued the <i>Opinions on Establishing and Improving the Value</i> <i>Realization Mechanism for Ecological Products.</i> The <i>Opinions</i> points out that the establishment of a sound mechanism for realizing the value of ecological products is a key pathway to practice the concept that lucid waters and lush mountains are invaluable assets.	
М	lay 2021	In the report on the rectifications in response to the fifth round of inspection by the 19th CPC Central Committee, the Party Group of the Ministry of Ecology and Environment pointed out that it will further strengthen the supervision of ecological conservation. The MEE issued the <i>Opinions on Strengthening the Supervision of Ecological Protection</i> and the <i>Interim Measures for the Supervision of the Ecological Environment of Nature reserves</i> , developed relevant indicators and standards for ecological protection red line supervision, and promoted the construction of the supervision platform of ecological protection red line. It regularly carried out remote sensing surveys and assessments of changes in ecological conditions nationwide, strengthened ecological monitoring evaluation and law enforcement supervision, completed the rectification of 2,324 key problems in the nature reserves in the Yangtze River Economic Belt, conducted evaluations on the management and protection effectiveness in 20 national nature reserves in the Yellow River Basin, organized the monitoring and investigation of the ecological quality in key	

	October 2021	areas, and built an ecological quality index monitoring and evaluation system. The Ministry of Ecology and Environment pointed out in the 2021 work schedule during the 14th FYP period that it is necessary to prepare well for the convening of COP15, promote various negotiation processes under the Post-2020 Global Biodiversity Framework, and ensure the meeting is of landmark significance. The MEE proposed to formulate guiding opinions on further strengthening biodiversity protection, implement major biodiversity protection projects, establish a national biodiversity monitoring network, carry out protection demonstrations in key biodiversity areas, and promote legislation on biodiversity protection.	
Energy and Climate	June 2020	The Ministry of Ecology and Environment issued the <i>Plan for Combating Volatile Organic Compounds in 2020</i> , mentioning that China is facing the dual pressure of serious PM2.5 pollution and increasingly prominent ozone pollution, especially in summer when ozone has become a primary cause of poor air quality in some cities. This is particularly prominent in areas such as the Beijing-Tianjin-Hebei region and the surrounding areas, the Yangtze River Delta, the Fenhe-Weihe River Plain, and the junction of Jiangsu, Anhui, Shandong and Henan.	The 2020 CCICED Policy Recommendations advised China to increase investment in renewable energy power generation infrastructure, including the development of large-scale offshore wind power, smart grid and energy storage technology, and promote the reform for a green power market. China should formulate national-level economic policy on hydrogen energy, promote fuel cells in the fields of

September 2020	The central government has set the emission reduction targets that China will strive to peak its carbon dioxide emissions by 2030 and achieve carbon neutrality by 2060 to accelerate the implementation of the national emissions trading system.	transportation and cogeneration, and increase the proportion of sustainable biomass gas production in the energy structure. The 2020 CCICED Policy Recommendations suggested that China
September 2020	Chinese President Xi Jinping announced that "China will scale up its Intended Nationally Determined Contributions by adopting more vigorous policies and measures. We aim to have CO2 emissions peak before 2030 and achieve carbon neutrality before 2060".	should focus on energy transformation and upgrading, actively respond to climate change, and build a low-carbon society; build a clean, low-carbon, safe and efficient energy system; formulate stronger binding targets for greenhouse
December 2020The National Energy Administration held a national energy work conference and pointed out that efforts should be made to raise the level of energy supply, accelerate the development of wind power and PV power, steadily promote the development of hydropower and nuclear power, vigorously improve the capacity of new energy consumption and storage, advance the clean and efficient development and utilization of coal in a deep-going manner, and furtherstronger bindi gas emission a carbon dioxide methane and based on actu encourage key to put forward possible; integ government p	gas emission reduction, and cover non- carbon dioxide greenhouse gases such as methane and HFCs; adjust the NDCs based on actual national situation, and encourage key regions and key industries to put forward a plan to take the lead in peaking carbon emissions as soon as possible; integrate climate resilience into government plans and budgets at all levels; speed up the establishment of a	

December 2020	The National Industry and Information Technology Conference was held. The Ministry of Industry and Information Technology proposed to encourage and guide industrial enterprises to improve power quality, strengthen the transformation of electrical equipment and the application of information technology, and comprehensively enhance energy efficiency and demand response capabilities. On the basis of guiding the implementation of power demand side management, a group of demonstration enterprises and parks will be formed, and promotion will be done in key regions and industries. The MIIT proposed to implement industrial low-carbon actions and green manufacturing projects to resolutely reduce crude steel output and ensure a year-on-year decline in the output, increase efforts to advocate power demand side management in the industrial sector, guide industrial enterprises to transform energy consumption patterns, and better promote energy conservation and emission reduction.	national carbon pricing system; incorporate climate indicators into the central inspection of ecological and environmental protection; strengthen multilateral climate cooperation with Europe and other developing countries through the Ministerial on Climate Action and other initiatives, and form new global climate leadership. The 2019 CCICED Policy Recommendations proposed to further control the use of coal and resolutely win the fight against air pollution; formulate a long-term national zero-emission strategy to phase out coal; increase subsidies and financial support for renewable energy, and gradually cancel fossil energy subsidies.
January 2021	The Ministry of Ecology and Environment issued the <i>Guiding Opinions on Coordinating and Strengthening the Work Related to Climate Change Tackling and Ecological Environment Protection.</i> The main contents include accelerating the coordination of the functions, work and mechanisms related to climate change tackling and ecological environment	

	protection, strengthening source governance, system governance, and overall governance, and making greater efforts to advance climate change work so as to achieve synergy between pollution reduction and carbon reduction, provide support for achieving the carbon peak and carbon neutrality targets, and help build a beautiful China.	
March 2021	President Xi Jinping presided over the 9th Meeting of the Central Finance and Economics Committee and mobilized all relevant forces and deployed systematic tasks for peaking carbon emissions and achieving carbon neutrality. He also clearly pointed out that efforts should be made to build a new power system dominated by new energy sources.	
April 2021	President Xi Jinping attended the Leaders Summit on Climate via video link and expressed that "the targets of carbon peak and carbon neutrality have been added to China's overall plan for ecological conservation. We are now making an action plan and are already taking strong nationwide actions toward carbon peak. Support is being given to peaking pioneers from localities, sectors and companies. China will strictly control coal-fired power generation projects, and strictly limit the increase in coal consumption over the 14 <sup>th</sup> Five-Year Plan period and phase it down in the 15th Five-Year Plan period".	
May 2021	The first plenary session of the Leading Group on Carbon Peaking and Carbon Neutrality was held in Beijing. Han Zheng, Member of the Standing	

	Committee of the Political Bureau of the CPC Central Committee and Vice Premier of the State Council, pointed out that it is necessary to study and put forth targeted and operable polices and measures to promote the optimization of the industrial structure, advance the adjustment of the energy structure, support the research, development and promotion of green and low-carbon technologies, improve the policy system for green and low-carbon development, and improve the laws, regulations, and standard systems.	
May 2021	The State Grid Corporation of China held an expert seminar on the construction of a new power system dominated by new energy sources to promote the construction of such power system and help achieve the carbon peak and carbon neutrality targets.	
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 Construction Projects for Ecological and Environmental Protection.</i> The <i>Opinions</i> proposes that the ecological environment departments at all levels should accelerate the application of the results of "three lines and one list" in the industrial layout and structural adjustment of energy-intensive and high-emission industries, as well as in the site selection of major projects. Regions accepting the transfer of industries such as steel and electrolytic aluminum should strictly implement the requirements of zoned ecological environmental quality as a rigid constraint. EIA and approval processes should	

China Southern Power Grid Company Limited issued in Guangzhou the White Paper on the Action Plan of China Southern Power Grid for Building a New Power System (2021-2030) to accelerate the building of a new power system dominated by new energy sources and to comprehensively build a safe, reliable, green, efficient and intelligent modern power grid. The new power system is expected to be basically completed by 2030.		be tightened for energy-intensive and high-emission projects. Construction projects should be strictly scrutinized before being approved for environmental considerations. Energy-intensive and high-emission projects that are newly built, rebuilt or expanded must comply with ecological and environmental protection laws and regulations as well as relevant statutory plans, and meet the total emission control of key pollutants, carbon emission peak target, ecological and environmental access list, relevant plans, EIAs and environmental access conditions for construction projects in corresponding industries, as well as principles and requirements for approval of EIA documents. Pollution reduction and carbon reduction in energy-intensive and high-emission industries should be coordinated and the assessment of the impact of carbon emissions should be included in the EIA system.	
	May 2021	in Guangzhou the White Paper on the Action Plan of China Southern Power Grid for Building a New Power System (2021-2030) to accelerate the building of a new power system dominated by new energy sources and to comprehensively build a safe, reliable, green, efficient and intelligent modern power grid. The new power system is expected to be basically	

	June 2021	Shanghai Environment and Energy Exchange issued the Announcement on Matters Related to National Carbon Emissions Trading.	
	June 2021	The General Office of the National Development and Reform Commission issued the <i>Notice on Further</i> <i>Strengthening Energy Conservation Supervision</i> .	
	March 2021	The Outline of the 14 <sup>th</sup> Five-Year Plan for National Economic and Social Development and the Long- Range Objectives Through the Year 2035 proposes in Part 8 to improve the new urbanization strategy and the quality of urbanization.	
	March 2021	The Outline of the 14 <sup>th</sup> Five-Year Plan for National Economic and Social Development and the Long- Range Objectives Through the Year 2035 proposes in Chapter 14 (Section 1: Comprehensively Promoting Consumption) to "adapt to the trend of increasing consumption by residents, combine the expansion of consumption with the improvement of people's quality of life, promote the green, healthy and safe development of consumption, and steadily improve the consumption level of residents".	The 2020 CCICED Policy Recommendations proposed to facilitate the green transformation of cities to achieve green prosperity, low-carbon development and intensive utilization of resources, cyclic utilization, fairness and inclusiveness, safety and health. At the
	February 2021	The State Council issued the <i>Guiding Opinions on</i> <i>Accelerating the Establishment and Improvement of a</i> <i>Green and Low-Carbon Circular Economic System</i> , proposing to "improve a consumption system that is green, low-carbon and circular, including "increasing green procurement by government, expanding the scope of green product procurement, and gradually extending green procurement system to state-owned enterprises, etc.	same time, the CCICED also suggested that the green consumption revolution should be leveraged to raise the awareness of green consumption in the whole society and substantially increase the supply of green consumer products and services.

	June 2020	The Ministry of Ecology and Environment issued the <i>Technical Guidelines for the Development of Emergency Emission Reduction Measures for Key Industries in Heavy Pollution Weather (2020 Revised Edition)</i> to carry out performance rating and differentiated management and control of enterprises in 39 key industries. Enterprises will be classified into the three levels of A, B and C based on management performance and in accordance with the fulfillment of the differentiation indicators such as production processes, pollution control technologies, pollutant emission limits, management of fugitive emissions, monitoring level, environmental management level, transportation method, and transportation supervision.	
Pollution Prevention and Control and Ocean Governance	June 2020	The CPC Central Committee and the State Council implemented the <i>Guiding Opinions on Effectively</i> <i>Coordinating COVID-19 Prevention and Control,</i> <i>Economic and Social Development, and Ecological</i> <i>and Environmental Protection.</i> The document proposes to focus on the coordinated control of fine particulate matter and ozone in key periods, and to focus on the control of VOCs and nitrogen oxides in key industries. It also proposes to comprehensively advance the integrated control of VOCs in key industries such as petrochemicals, chemicals, industrial coating, packaging and printing, and oil storage, transportation and distribution, industrial parks, and enterprise clusters.	The 2020 CCICED Policy Recommendations advised China to guarantee the integrity of the ecosystem, promote land-sea governance, and comprehensively respond to environmental challenges; focus on energy transformation and upgrading, actively respond to climate change, and build a low-carbon society; build a clean, low-carbon, safe and efficient energy system; formulate stronger binding targets for reducing greenhouse gas emissions; adjust the NDCs based on actual national situation, and encourage key regions and
	June 2020	The CPC Central Committee and the State Council implemented the <i>Guiding Opinions on Effectively</i> <i>Coordinating COVID-19 Prevention and Control</i> ,	key industries to put forward a plan to take the lead in peaking carbon emissions as soon as possible; integrate climate

	<i>Economic and Social Development, and Ecological</i> <i>and Environmental Protection.</i> The document proposes to promote the treatment of black and odorous water bodies in cities and pollution in agriculture and rural areas.	resilience into government plans and budgets at all levels; speed up the establishment of a national carbon pricing system; incorporate climate indicators into the central inspection of ecological and environmental protection.
June 2020	The CPC Central Committee and the State Council implemented the <i>Guiding Opinions on Effectively</i> <i>Coordinating COVID-19 Prevention and Control,</i> <i>Economic and Social Development, and Ecological</i> <i>and Environmental Protection.</i> The document proposes to strengthen soil pollution control and restoration and step up prevention and control of solid waste pollution on a classified basis.	It was proposed to strengthen the comprehensive management of the ocean, enhance the resilience of the marine ecosystem, and support the sustainable growth of the marine economy; strictly control sea reclamation, step up protection and restoration of coastal wetlands, and rebuild key habitats; delineate marine ecological protection red line areas and marine protected areas to help protect marine biodiversity and fishery development; strengthen scientific research and monitoring, step up law enforcement, promote the protection and restoration of marine ecosystem and the high-quality development of marine economy, better make use of the inter- ministerial coordination mechanism and national marine consulting agencies, and formulate comprehensive ecosystem- based ocean management policies; build green fishing boats and green fishing ports, develop green mariculture,
July 2020	Nine departments including the National Development and Reform Commission, the Ministry of Ecology and Environment, the Ministry of Industry and Information Technology, the Ministry of Housing and Urban-Rural Development, the Ministry of Agriculture and Rural Affairs, the Ministry of Commerce, the Ministry of Culture and Tourism, the State Administration for Market Regulation, and the All China Federation of Supply and Marketing Cooperatives jointly issued the <i>Notice on Solidly Advancing Plastic Pollution Control</i> , making arrangements for furthering the plastic pollution control work, especially completing the phase-based targets and tasks at the end of 2020.	
July 2020	The Ministry of Ecology and Environment held a video conference on advancing the preparation of the 14 <sup>th</sup> Five-Year Plan for National Marine Ecological and Environmental Protection. It was pointed out at	establish a traceability system for marine aquatic products, and promote green shipping.

	the meeting that China should focus on the construction of "beautiful bays", solidly promote the improvement of bay water quality and ecological protection and restoration in coastal cities and regions, carefully plan the goal and indicator systems, further clarify the division of labor and responsibilities, establish a working mechanism for assistance, carry out field investigations, and extensively listen to public opinions and suggestions.	
September 2020	The newly revised Law of the People's Republic of China on the Prevention and Control of Environmental Pollution by Solid Wastes was implemented.	
September 2020	The Ministry of Ecology and Environment held a video conference on the scheduling of work for the comprehensive management of the Bohai Sea in the first three quarters of 2020. The meeting required that all localities should focus on key objectives and tasks, and strive to promote the execution of various tasks to ensure that the comprehensive management of the Bohai Sea ends successfully.	
November 2020	The Ministry of Ecology and Environment adopted the National Program for Surface Water Monitoring and Evaluation during the 14t <sup>h</sup> Five-Year Plan Period (for Trial Implementation) and the Electronic Industry Water Pollutants Discharge Standard.	
January 2020	The 25th Meeting of the Standing Committee of the 13th National People's Congress adopted the amendment to the <i>Law of the People's Republic of</i>	Recommendations proposed to strengthen

Environmental Governance and Rule of Law		<ul><li><i>China on Administrative Punishment</i>, which came into force on July 15, 2021.</li><li>The Ministry of Ecology and Environment issued the</li></ul>	participation. In order to encourage individuals and NGOs to participate, environmental information disclosure and
	April 2020	Guiding Opinions on Implementing the System of Rewarding for Reporting Violations of Ecological and Environmental Laws.	public participation systems should be fully implemented.
	May 2020	The 3rd Session of the 13th National People's Congress voted on and adopted the <i>Civil Code of the People's Republic of China</i> . The <i>Civil Code</i> stipulates on the system of punitive compensation for damage to the ecological environment, and clarifies the restoration and compensation rules for damage to the ecological environment.	
	January 2021	The State Council promulgated the <i>Regulations on the</i> <i>Administration of Pollutant Discharge Permits</i> , which came into force on March 1, 2021. The <i>Regulations</i> is conducive to strengthening the management of pollutant discharge permits, regulating the pollutant discharge behavior of enterprises, public institutions and other producers and undertakings, controlling pollutant discharge, and protecting and improving the ecological environment.	
	January 2021	The Ministry of Ecology and Environment issued the Guiding Opinions on Optimizing Law Enforcement Methods and Improving Law Enforcement Efficiency for Ecological and Environmental Protection.	
	June 2021	The Ministry of Ecology and Environment issued the Implementation Opinions on Strengthening the Construction of Comprehensive Administrative Law	

		Enforcement Teams for Ecological and Environmental Protection.	
	October 2020	The first Industry Report on Ocean Protection in China (2020) in the field of marine protection was issued.	
Regional and International Engagement	March 2021	President Xi Jinping presided over the 9th Meeting of the Central Finance and Economics Committee and pointed out that the 14 <sup>th</sup> Five-Year Plan period is a critical period and window period for peaking carbon emissions, and that China should strengthen international cooperation on climate change and promote the formulation of international rules and standards to build a green Silk Road.	The 2020 CCICED Policy Recommendations proposed to promote the development of Green BRI and global green supply chain, strengthen green international cooperation, and facilitate the realization of global green prosperity; give full play to the role of the BRI International Green Development
	April 2021	At the Leaders Summit on Climate, President Xi Jinping proposed that "we must be committed to harmony between man and Nature, green development, systemic governance, people-centered approach, multilateralism and the principle of common but differentiated responsibilities".	Coalition, the Belt and Road Sustainable Cities Alliance and other platforms to advance green, environment friendly and renewable energy demonstration projects, support infrastructure projects for clean and efficient energy, and strengthen case
	June 2021	The Asia and Pacific High-level Conference on Belt and Road Cooperation (via video conferencing) announced two initiatives jointly launched by 29 countries, one being the Initiative for Belt and Road Partnership on COVID-19 Vaccines Cooperation, which calls for stronger international cooperation on vaccine development, production and distribution and higher accessibility and affordability of vaccine in the world, especially in developing countries, and the other being the Initiative for Belt and Road Partnership on Green Development, emphasizing that countries should support the construction of the green	study and promotion of experiences for the green transformation of BRI-related countries. The 2020 CCICED Policy Recommendations advised China to strengthen comprehensive management of the ocean, improve the resilience of marine ecosystem, and support the sustainable growth of marine economy. The 2020 policy recommendations in the special policy research project on global ocean governance and ecological

		Silk Road, strengthen cooperation in green infrastructure, green energy, and green finance, and facilitate green, low-carbon, and sustainable development. 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</i>	conservation pointed out that the marine ecological environment should be clearly included in the "Beautiful China" framework and that the importance of the marine ecological environment as the foundation of life should be emphasized in the 14 <sup>th</sup> Five-Year Plan. Participating in global marine litter management is not only the call of the new era, but also an
	June 2021	Montreal Protocol on Substances that Deplete the Ozone Layer. The Amendment will take effect in China on September 15, 2021 (not applicable to the Hong Kong Special Administrative Region of China for the time being). After the Kigali Amendment was approved, the Montreal Protocol opened a new chapter in the history marked by coordinated response to ozone layer depletion and climate change.	important measure for China to achieve marine prosperity. In response to the increasingly serious ocean pollution, China has innovated the concept of ocean governance to effectively promote the construction of the 21st Century Maritime Silk Road and build a maritime power.
	June 2021	The 31st Meeting of States Parties to the United Nations Convention on the Law of the Sea was held. Over the years, China has vigorously participated in the work of the three major bodies of the <i>Convention</i> , supported developing countries in strengthening capacity building, resolutely safeguarded the integrity and seriousness of the <i>Convention</i> , and made positive contributions to the construction of a modern maritime order.	
	July 2021	On July 16, 2021, the Ministry of Commerce and the Ministry of Ecology and Environment issued a notice on the issuance of the <i>Guidelines for Green</i> <i>Development in Foreign Investment Cooperation</i> . The <i>Guidelines</i> points out that the key tasks for China's future development include supporting foreign investment in clean energy, such as solar energy, wind	

energy, nuclear energy, and biomass energy, participating in the global energy production and consumption revolution, and building a clean, low- carbon, safe and efficient energy system. Upholding the concept of a community with a shared future for mankind, the document shows China's ideas and positive attitude toward green development. It proposed to build a database of cases of Chinese enterprises making green investment and building green infrastructure, compile the green development index for the overseas investment by Chinese enterprises and publich the report on green	
enterprises, and publish the report on green development resulting from such investment.	