

China's Policies and Actions for Addressing Climate Change (2019)

Ministry of Ecology and Environment of the People's Republic of China

November 2019

Contents

Foreword	1
I. Climate Change Mitigation	3
(I) Adjusting the Industrial Structure	3
(II) Promoting Energy Saving and Improving Energy Efficiency	4
(III) Optimizing the Energy Structure	7
(IV) Controlling GHG Emissions from Non-Energy Activities	8
(V) Increasing Carbon Sinks.....	9
(VI) Strengthening the Coordinated Control of GHG and Air Pollutants	11
(VII) Low-Carbon Pilots and Local Actions.....	11
II. Climate Change Adaptation	12
(I) Agriculture	12
(II) Water Resources	12
(III) Forestry and Other Ecosystems.....	13
(IV) Coastal Zones and Coastal Ecosystems	14
(V) Human Health	15
(VI) Comprehensive Disaster Prevention and Mitigation	15
(VII) Risk Control and Early Warning of Climate Disasters	16
(VIII) International Cooperation on Climate Change Adaptation	16
III Planning Development and System Construction	16
(I) Strengthening Planning Formulation	16
(II) Advancing Institutional Construction.....	17
(III) Promoting the Construction of Carbon Market.....	17
IV. Strengthening Basic Capacity	18
(I) Enhancing the Construction of GHG Statistical and Accounting System	19
(II) Enhancing Scientific and Technological Support.....	19
(III) Strengthening Disciplines Construction.....	20
V. Broad Social Participation	21
(I) Active Government Guidance.....	21
(II) Extensive Media Publicity.....	22
(III) Proactive Enterprise Action.....	23
(IV) Broad Public Participation	23
VI. Active Involvement in Global Climate Governance	24
(I) Multilateral Processes under the UN Framework.....	24
(II) Climate Change Negotiations and Cooperation on Other Multilateral Platforms	25
(III) Building New Political Momentum for Multilateral Processes of Climate Change	26
VII Enhancing International Communications and Cooperation	26
(I) Addressing Climate Change: An Important Part of High-level Communication	26
(II) Strengthening Communications and Cooperation with All Parties	27

(III) Strengthening South-South Cooperation on Climate Change.....	27
VIII Basic Standpoints and Positions of the 25th Conference of Parties (COP 25) to the <i>United Nations Framework Convention on Climate Change</i>.....	28

Foreword

The Chinese government has always attached great importance to addressing climate change. Chinese President Xi Jinping emphasized for many times, addressing climate change should not be done at others' requests, but on our own initiative. It is not only the internal needs to achieve sustainable development but also the due responsibility to promote the development of the community with a shared future for mankind. At the National Conference on Ecological and Environmental Protection, President Xi Jinping clearly proposed that we would implement a national strategy for actively addressing climate change. This would include advancing and guiding the establishment of a global climate governance system featuring equity, rationality and win-win cooperation.

The local governments and relevant departments adhered to the guidance of Xi Jinping Thought on ecological civilization, implementing the arrangements and requirements of the National Conference on Ecological and Environmental Protection, as well as implementing the “13th Five-Year Plan”(FYP) tasks of greenhouse gas (GHG) emission control, and made new progress in addressing climate change proactively.

According to preliminary estimation, in 2018, China's carbon dioxide emissions per unit gross domestic product (GDP) (hereinafter referred to as carbon intensity) fell by 4.0%, cumulatively declined by 45.8% compared to 2005, equivalent to 5.26 billion tons of carbon dioxide emissions reduction, and non-fossil energy accounted for 14.3% of primary energy consumption, which basically reversed the rapid growth trend of carbon dioxide emissions. Large-scale land greening and ecological protection and restoration engineering projects continued to advance, the ability to adapt to climate change has been continuously enhanced, the institutional mechanisms for addressing climate change has been continuously improved, and the awareness of climate change in the whole society has been improved, making an important contribution to address global climate change.

China is still a developing country with GDP per capita lower than the world average, faced with the prominent problem of insufficient and imbalanced development. It is also facing a series of arduous tasks, such as economy development, people's livelihood improvement, poverty eradication, and winning the battle against pollution. As a responsible country, China has actively undertaken the international responsibilities in line with its own development stage and national conditions and has made painstaking effort to effectively implement climate change policies and actions, so as to contribute to the construction of global ecological civilization.

In the next step, we will continue to thoroughly following on and implement Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era on economy, ecological civilization and diplomacy, fully implement the decisions and arrangements of the Communist Party of China (CPC) Central Committee and the State Council, and unswervingly implement the national strategies of actively addressing climate change. We will promote international cooperation of climate change on the basis of principles of common but differentiated responsibilities, equity, and respective capabilities, and implement the deployment decided on the meetings of the National Leading Group for Addressing Climate Change and Energy

Conservation and Emission Reduction, to ensure the fulfillment of the 13th FYP targets for addressing climate change.

This report has been prepared to help all interested people fully understand China's policies and actions and their performance and effects in addressing climate change since 2018.

I. Climate Change Mitigation

Since 2018, China has achieved positive results through a series of proactive actions, including adjusting the industrial structure, conserving energy and improving energy efficiency, optimizing the energy structure, controlling GHG emissions from non-energy activities, increasing carbon sinks, strengthening coordinated control of GHG and air pollutants and promoting low-carbon pilots and local actions. According to preliminary estimation, in 2018, China's carbon intensity fell by 4.0%, a cumulative decline by 45.8% compared to 2005.

(I) Adjusting the Industrial Structure

Continuing the resolution of overcapacity. In 2019, the National Development and Reform Commission (NDRC) issued the *Notice on Addressing Overcapacity in Key Fields in 2019*, putting forward the key points of resolving overcapacity of steel, coal, and coal power in 2019. By the end of 2018, the localities and relevant departments have made solid progress in resolving overcapacity in key fields in accordance with the decisions and arrangements of the Central Committee of the Communist Party of China (CPC) and the State Council on supply-side structural reform, reducing crude steel production capacity by more than 150 million tons in total, among which, the year of 2018 saw a reduction of over 35 million tons. During 2018 to July 2019, state-owned enterprises resolved 12.65 million tons of overcapacity for coal. By the end of 2018, China had eliminated and shut down over 20 GW of backward coal-fired power generation units, overfulfilling the 13th FYP target two years ahead of schedule.

Energetically developing the service industry. In 2018, the overall development of China's service industry was stable. With the deepening of supply-side structural reform, new momentum grew rapidly and the structure continued to optimize, effectively promoting the economic transformation and upgrading, and market expectations had a good momentum with steady growth. The tertiary industry realized an added value of CNY 48,970 billion, accounting for 53.3% of the national GDP, 13.6% higher than the secondary industry, leading the growth of the national economy continuously. The service industry continued to play a key role in the smooth operation of China's economy, and its contribution rate to economic growth was close to 60%. In 2018, the service industries above designated size had reached a year-on-year growth of 11.4% in the operating revenues and 6.5% in the profits.

Supporting the development of strategic emerging industries. The National Bureau of Statistics (NBS) issued the *Classification of Strategic Emerging Industries (2018)* to modify the structures and contents. In the document, 126 categories that conform to the characteristics of modern strategic emerging industries were added to the corresponding national economic industry categories, totaling 485 sectors, and the new materials industry was divided more detailly. Among the industries above designated size, the added value of strategic emerging industrial sectors increased by 8.9% over the previous year. The added value of high-tech manufacturing industry increased by 11.7% and took up 13.9% of the added value of industrial sectors above a designated size. The added value of equipment manufacturing industry grew by 8.1%, accounting for 32.9% that of industrial sectors above designated size. In the whole year of service industry above designated size, the revenue of strategic emerging services grew by 14.6% over the previous year. The investment in high-tech industries increased by 14.9% over

the previous year and that in industrial technological transformation increased by 12.8%. The annual output of new energy vehicles was 1.15 million, an increase of 66.2% over 2017. Mass entrepreneurship and innovation continued to surge nationwide, with an average of over 18,000 new businesses opened daily and the total number of market entities exceeding the 100 million mark.

In 2018, China's economic structure was further optimized, the added value of the primary industry took up 7.0% of GDP, the second industry 39.7% and the tertiary industry 53.3%.

(II) Promoting Energy Saving and Improving Energy Efficiency

Advancing the energy-efficiency in construction. Beijing, Tianjin, Jiangsu, Zhejiang and other cities have implemented the green building standards comprehensively in new buildings in urban areas. The accumulated green buildings in cities and towns nationwide exceeded 3.2 billion square meters. In 2018, 56% of new urban buildings met the green building standards, completing the target of 13th FYP ahead of schedule. Over 13,000 green building evaluation and signage projects design have been carried out nationwide, with a building area of 1.39 billion square meters. At present, 30 demonstration cities and 195 industrial bases for prefabricated and modularized buildings have been cultivated. For new buildings in cities and towns in severe cold and cold regions, a 65% energy-saving design standard has been put into effect thoroughly, and construction demonstration of ultra-low energy consumption buildings and near-zero energy consumption buildings were carried out actively. Built-up energy-saving buildings covered an area of 18.2 billion square meters cumulatively in urban areas nationwide. The urban areas cumulatively completed 1.4 billion square meters of heat metering and energy-saving transformation of existing residential buildings, and China accumulatively completed 210 million square meters of energy-saving transformation of existing public buildings, which have obvious benefits of energy-saving.

Advancing energy conservation in transport. In 2018, to promote the recycling of traction batteries for new energy vehicles, the Ministry of Industry and Information Technology(MIIT) issued the *Interim Measures for the Management of Recycling Traction Batteries of New Energy Vehicles* and the *Notice on Working Effectively on the Pilot Projects of Recycling Traction Batteries for New Energy Vehicles*, with pilot projects launched in 17 provinces and municipalities, including Beijing, Tianjin, Hebei, Shanghai, Guangdong, and Hunan. MIIT vigorously promoted the development of the new energy vehicle industry and put the *Passenger Car CAFC and NEV Credit Regulation* into effect. In recent years, in accordance with the requirements of the *Guiding Opinions on Accelerating the Construction of Electric Vehicle Charging Infrastructure* issued by the General Office of the State Council, with the strong support of all interested parties, development of China's electric vehicle charging infrastructure was accelerated, forming the largest charging infrastructure network in the world. According to preliminary statistics, by the end of May 2019, the number of all kinds of charging piles in the country had reached 976,000, including 401,000 public charging piles, ranking the top in the world. While satisfying the current demand, it laid a solid foundation for the rapid development of electric vehicles. At the same time, the charging facilities management system has been further improved. City-level operation management platforms for charging infrastructure have been established in Beijing, Shanghai, Shenzhen, etc., and key charging operation enterprises

such as State Grid Corporation of China have also established monitoring platforms. The new national standard for charging interface has been put into effect, basically unifying the interface standard. The Electric Vehicle Charging Infrastructure Promotion Association has been founded and plays an active role in promoting the construction of charging facilities. Civil Aviation Administration of China (CAAC) has completed the *Mid-term Evaluation Report of Civil Aviation Development in the 13th FYP Period*, issued the *Implementation Opinions on Further Promoting the Development of Green Civil Aviation* and prepared and issued the *Work Plan of Civil Aviation on Implementation of the “Three-Year Action Plan on winning the battle for the Blue Sky”*, which puts forward clear work objectives and requirements for the implementation of the projects of “replacing oil with electricity” and aircraft auxiliary power unit (APU) alternatives in the next three years. In 2018, the Ministry of Transport (MOT) issued the *Opinions on Comprehensively Enhancing Ecological and Environmental Protection and Resolutely Winning the Tough Battle for Prevention and Control of Pollution* and issued jointly with 8 departments including the Ministry of Ecology and Environment (MEE) the *Implementation of the “Three-Year Action Plan for Promoting Transport Structure Adjustment (2018-2020)” Issued by the General Office of the State Council* to increase railway traffic volume, reduce pollutant emissions from transport production links, vigorously develop rail-water intermodal transport, promote road-rail intermodal transport, and improve the container transport capacity of railway. The National Railway Administration of the People’s Republic of China (NRA) has successively issued *Notice on Issuing and the Goals and Measures for Implementing the Spirit of the First Session of the Central Finance and Economics Committee and the National Conference on Ecological and Environmental Protection to Win the Battle for the Blue Sky* and *Opinions on Comprehensively Enhancing Ecological and Environmental Protection and Resolutely Winning the Tough Battle for Prevention and Control of Pollution in the Railway Industry* successively. In addition, China State Railway Group Co., Ltd. issued the *Notice on Comprehensively Promoting Green Railway Development*.

Advancing energy conservation in public institutions. Since 2018, Government Offices Administration of the State Council has issued the regional energy saving targets in the 13th FYP in a “differential” manner on an annual basis in accordance with the requirements of the 13th Five-Year Plan on Energy Conservation of the Chinese Public Sectors, and issued *Guidelines for the Preparation and Application of Energy Consumption Quota Standards for Chinese Public Sectors (Trial)*, the *Management Specifications for Water Conservation on Public Institutions*, the *Guidelines for the Construction of Green Data Centers in Public Institutions*, and the *Guidelines for the Construction of Distributed Photovoltaic Systems in Public Institutions* to strengthen guidance, enhance supervision and assessment, continuously improve the management systems of energy management, monitoring, assessment and audit in public institutions.

Strengthening the implementation of key energy-saving transformation projects. China continued to push forward the elimination of outdated coal-fired power generation units and implemented ultra-low emissions and conservation transformation of coal-fired power. In 2018, the National Energy Administration (NEA) and the MEE jointly issued the *Notice on Issuing the Provincial (Regional and Municipal) Targets of Ultra-Low Emission and Conservation Transformation of Coal-fired Power Generation in 2018*. By the end of 2018, China's coal-fired

power generation units that have reached ultra-low emission levels have accumulated to over 810 GW, overfulfilling the total transformation target of 580 GW ahead of schedule. A total of 689 GW energy-saving transformation has been completed, overfulfilling the 13th FYP transformation target ahead of schedule. At present, the proportion of thermal power generation units of 600,000 kW and above in China has increased to 46%, and the coal consumption for power supply of in-service coal-fired power generation units has decreased from 325 g/kWh at the end of 2012 to 308 g/kWh, forming the most efficient clean coal-fired power generation system in the world. MEE, NDRC and the State Administration for Market Regulation (SAMR) have issued the *Notice on Strengthening Energy Conservation and Environmental Protection of Boilers* to promote energy conservation and emission reduction of boilers.

Speeding up the development of circular economy. In 2018, NDRC and the Ministry of Housing and Urban-Rural Development (MOHURD) issued the *Notice on Promoting the Construction of Resource Recycling Bases* to support projects including public infrastructures and platforms and various renewable resource recycling. NDRC and the Ministry of Finance (MOF) released the acceptance results of the 2018 pilots for demonstration of the park recycling transformation and the “Urban Mining” demonstration base. MOF has continuously improved the government green procurement policy and optimized the enforcement mechanism for government procurement of energy-saving and environment-friendly products. Since April 1, 2019, MOF and relevant departments have issued energy-saving and environment-friendly product categories that are procured preferentially or mandatorily in the form of a list of items. Products that fall within the list of items can enjoy policy support as long as having passed certification.

Perfecting the energy conservation standard labeling. Since 2018, SAMR has approved the release of 32 energy conservation standards for energy efficiency and consumption, energy management, energy conservation assessment, etc., including *Minimum Allowable Values of Energy Efficiency and Energy Efficiency Grades for Unitary Air Conditioners*, *The Norm of Energy Consumption Per Unit Product of Premixed Concrete*, and *Implementation Guidance for Energy Management Systems in Aluminum Electrolysis Industry*. SAMR issued the first list of 12 assessment standards and certification catalogue for green products and issued the *Guidance on Promoting Green Building Material Product Standards, Certification and Labelling* together with MOHURD and MIIT, taking the lead in promoting green product certification for building materials. Two batches of low-carbon product certification catalogues involving seven products have been approved and issued successively. By July 2019, 327 certificates have been issued, with 168 enterprises involved.

Popularizing energy conservation technologies and products. In 2018, MIIT further promoted the *special action on power demand side management in the industrial field (2016-2020)*, prepared the *Guides for Power Demand Side Management of Industrial Enterprises*, and released the third batch of demonstration enterprises (40) and demonstration parks (3) in power demand side management in the industrial field. National mandatory and preferential procurement of energy-saving and water-saving products totaled CNY 165.38 billion in value, accounting for 90.1% of the procurement of similar products. The national preferential procurement of environmental protection products totaled CNY 164.74 billion in value,

accounting for 90.2% of the procurement of similar products. In order to strengthen industrial energy conservation and reduce GHG emissions, MIIT selected and released 728 advanced and applicable industrial energy-saving technologies and equipment and accelerated the popularization and application of high-efficiency energy-saving technologies and equipment. The research and preparation of 715 industrial energy conservation and green standards were promoted, industrial energy conservation supervision was strengthened, and enterprises were urged to implement mandatory energy conservation standards.

According to preliminary estimation, in 2018, China's energy consumption per unit GDP decreased by 3.1% over the previous year, and the energy efficiency continued to improve.

(III) Optimizing the Energy Structure

Controlling the total coal consumption. Structural reform on the coal supply side was promoted and a solid work was carried out in the resolution of overcapacity of coal. From 2016-2018, China had withdrawn 810 million tons per year of coal outdated capacity, completed the 13th FYP target ahead of schedule. In July 2018, the State Council issued the *Three-Year Action Plan on Winning the Battle for the Blue Sky*, proposing to continue implementing the total coal consumption control in key areas. The total coal consumption in Beijing, Tianjin, Hebei, Shandong and Henan provinces and municipalities dropped by 10% compared to 2015, the Yangtze River Delta region, by 5%, and Fen-wei Plain, negative growth. Besides, new coal-consuming projects are subject to coal consumption reduction and substitution, and the proportion of coal for power generation in the total coal consumption should reach over 55% by 2020. According to preliminary estimation, China's coal consumption accounted for 59% of the total energy consumption in 2018, decrease 1.4 % over the previous year. MOF, jointly with relevant departments, supported local governments to carry out clean heating and elimination of coal-fired boilers through funds for air pollution prevention and control, so as to promote the control of scattered coal and reduce pollution emissions.

Pushing ahead the clean use of fossil energy. Coal power generation has actively adapted to the trend of replacing fossil energy with non-fossil energy, making room for the prior development of non-fossil energy. It is gradually transforming from the main power supply that supplies electricity to the power system to a basic power supply that supplies safe, clean, efficient, and reliable electricity with flexible regulation capability, providing support for large-scale consumption of new energy and power transformation. China earnestly implemented the relevant provisions of the *Opinions by the State Council on Resolution of Overcapacity to Achieve a Turnaround in the Coal Industry*, raised the entry threshold for the industry, and stopped approving high-sulfur and high-ash coal projects. Besides, the upgrading of oil product quality was pushed ahead continuously. Since January 1, 2019, vehicle gasoline and diesel that meet the China VI emission standard has been put into the market all over the country. NEA, together with MOT and the Standardization Administration, studied and revised the standards, *Petroleum Products - Fuels - Specifications of Marine Fuels* and *Automobile Diesel Fuels*, to add the index of fuel oil for large inland river ships. At the same time, the standard, *General Diesel Fuels*, was abolished to realize the “uniform standards” for vehicle diesel fuels, general diesel fuels, and some marine fuels.

Effectively promoting clean heating in northern areas. Effort was made in promoting clean heating in urban areas, and the winter clean heating pilots were launched in northern areas. MOHURD jointly with four departments including NEA, organized the mid-term assessment of clean heating in northern areas to guide localities to promote clean heating related work according to local conditions. NDRC, NEA, and MOF jointly released the *Plan for Winter Clean Heating in Northern Areas (2017-2021)*, proposing that by 2019 the clean heating rate in northern areas should have reached 50% with 74 million tons of bulk coal (including coal for low-efficiency small boilers) replaced, and by 2021 the clean heating rate in northern areas should have reached 70% with 150 million tons of bulk coal (including coal for low-efficiency small boilers) replaced. China adhered to the principle of “adapting to local conditions” and took timely effective measures to ensure heating supply for the masses during the winter. Besides, it actively promoted the use of clean coal for heating and replaced inferior bulk coal with clean coal. In the two heating seasons of 2017 to 2018 and 2018 to 2019, a total of 3.6 billion square meters of clean heating area was increased in the northern areas, with a clean heating rate reaching approximately 50.7%, and 100 million tons of bulk coal replaced.

Energetically developing non-fossil energy. NDRC and NEA made every effort to push ahead clean energy consumption. They have carried out a lot of works in orderly planning and development, capacity-building of transmission channels, capacity-building of system regulation, improvement of supporting policy system, and establishment of market-oriented mechanism. Besides, they have issued the *Action Plan for Clean Energy Consumption (2018-2020)*, *Notice on Establishing and Perfecting the Guarantee Mechanism for Renewable Energy Electricity Consumption*, *Notice on Actively Promoting Non-subsidized Affordable on-Grid Wind Power and Photovoltaic Power Generation*, and *Notice on Announcing the First Batch Projects on Affordable on-Grid Wind Power and Photovoltaic Power Generation in 2019*. By the end of 2018, the installed capacity of renewable energy-based power generation in China reached 730 GW, increased by 12% over the previous year, accounting for 38.3% of the total installed capacity, up 1.7% year on year. The national electricity generation from renewable energy reached 1.9 trillion kWh, accounting for 26.7% of the total electricity generation. The Ministry of Natural Resources (MNR) has initially built a demonstration base for the cascade comprehensive utilization of geothermal resources in Beijing-Tianjin-Hebei region, realizing the first two-stage comprehensive utilization of 280 kW of geothermal resource based power generation and 30,000 square meters of building heating, thus forming a new model featuring efficient utilization of deep carbonate heat storage in Beijing-Tianjin-Hebei region. Through a series of measures, China's energy structure has been further optimized. According to preliminary calculation, coal, oil, natural gas and non-fossil energy consumed accounted for 59.0%, 18.9%, 7.8% and 14.3% of energy consumption in 2018, respectively down 1.4%, up 0.1%, up 0.8%, and up 0.5% compared to 2017.

(IV) Controlling GHG Emissions from Non-Energy Activities

Controlling GHG emissions from the industrial sector. China continued to push ahead the destruction of hydrofluorocarbons (HFCs). In December 2018, MEE issued the *Notice on Launching Relevant Work on the Disposal of Hydrofluorocarbons in 2018*, arranged for the disposal verification of HFCs, publishing the auditing results of a total of 11 enterprises in 4

provinces and providing quota-based subsidies to enterprises that destructed HFCs with a subsidy amounting to over CNY 200 million. In order to promote the recycling of renewable resources and actively cultivate key leading enterprises in the comprehensive utilization of renewable resources such as scrap iron and steel, MIIT published the list of the sixth batch of enterprises that meet the entry requirements for the scrap iron and steel processing industry in September 2018. Due to the strict control of the production capacity of cement clinker, by the end of 2018, the country's total production capacity of cement clinker was 1.716 billion tons, decrease 54 million tons year-on-year. China fully implemented the green manufacturing project, carried out a number of major green manufacturing projects and built a number of green plants and green industrial parks in accordance with the principles of intensive factory buildings, harmless raw materials, clean production, waste recycling, low-carbon energy, and green industries.

Controlling GHG emissions from agricultural sector. Efforts were continued to implement the action to achieve zero growth of chemical fertilizer use. The demonstrations of reducing the quantity and improving the efficiency of chemical fertilizers were conducted in 300 counties. The chemical fertilizer use rate of the three majors (cereal crops, paddy, corn and wheat) was 37.8%, with negative growth in the use of chemical fertilizers was achieved ahead of schedule. The livestock and poultry excrement resources utilization was promoted county-wide in 585 major counties for animal husbandry, and support was given to construction of facilities for collection, storage, treatment and utilization of excrement resources, resulting in a 70% comprehensive utilization rate of excrement resources nationwide and a facilities and equipment installation rate of 63% in large-scale livestock farms. The comprehensive utilization of straw was enhanced, and pilot projects in 100 counties within 10 provinces have been implemented, with the overall utilization rate of straw in the country reaching 83%.

Controlling GHG emissions from waste disposal sector. In 2018, the domestic waste sorting work was started step by step from point to face. The classification of waste in residential areas has been pushed forward in an all-round way, the structure of domestic solid waste disposal has been continuously optimized, and the proportion of the national domestic solid waste incineration capacity in the total domestic solid waste disposal capacity has been continuously increasing. The three-year action of improving the quality and efficiency of urban sewage treatment has been launched. By the end of 2018, a total of 4,332 sewage treatment plants have been built in cities and counties nationwide, with a sewage treatment capacity of 195 million cubic meters per day.

(V) Increasing Carbon Sinks

Increasing forestry carbon sinks. China speeded up the implementation of the *Outline of National Afforestation Plan (2016-2020)*, formulated and issued the *2018 Key Work Arrangement and Division Plan of Forestry to Address Climate Change*, and issued the *Opinions by the National Afforestation Committee and the National Forestry and Grassland Administration of China on Actively Promoting Large-Scale Land Greening Action*, so as to innovatively promote all-people voluntary tree-planting, and further advance the pilot project of “Internet + all-people voluntary tree-planting” with the pilot area expanded to 10 provinces including Shanxi. In addition, China kept pushing forward key ecology restoration engineering,

such as the Grain for Green, the sandstorm source control of Beijing and Tianjin, integrated control of stony desertification, construction of shelterbelt networks in the Three Norths, the Yangtze River and Pearl River Basins and coastal areas. The National Forestry and Grassland Administration (NFGA) issued the *Notice on Accelerating the Preparation of Forest Management Plans* and the *Specifications for the Preparation of County-level Forest Management Plans* to implement the first batch demonstration projects (18 in total) for precision improvement of forest quality and to start the second batch demonstration projects (30 in total). In 2018, forests planted in an area of 7.267 million hectares and cultivated in 8.667 million hectares. The national forest coverage rate reached 22.96% and the forest stock reached 17.56 billion cubic meters, making China the largest contributor to the global green area. China fully protected natural forests and grassland resources, completed construction of 385,000 hectares of public welfare forests and cultivation of reserve forest resources, and 1.753 million hectares of natural forests cultivation.

Increasing grassland carbon sinks. Efforts were made to strengthen grass land protection, and continued to implement grassland ecology remediation projects such as returning grazing land and cultivated land to grass land and governance of reclaimed grassland at farming-pastoral zone. China fully implemented the system of grazing land prohibition and resting, the system of balancing forage and animal, and the policy of subsidies and incentives for grass land ecological protection, with the areas of grazing land prohibition and balancing forage and animal across China stabled at 80 million hectares and 173 million hectares respectively. In 2018, the comprehensive vegetation coverage of grassland nationwide reached 55.7%, 0.4% higher than the previous year. The protection of desert vegetation was strengthened. The *Measures for Supervision and Administration of Construction Activities such as Railway and Highway Construction within the National Closed Zones for Preservation of Desertified Land* was formulated to strengthen the construction of the sanctuary of desertification land. In 2018, a total of CNY 200 million was spent on the construction of closed zones for preservation of desertification land, with six new closed zones of 120,000 hectares added. The total area of closed zones for preservation of desertification land nationwide reached 1.663 million hectares, and 16 national desert parks were approved. China continued to enhance the infrastructure and capacity construction of national nature reserves. Seven ministries, including MEE and MNR, have jointly launched the “Green Shield 2018” special supervision and inspection campaign for national nature reserves. NFGA has carried out a large-scale inspection campaign for nature reserves nationwide.

Increasing other carbon sinks such as wetlands. In 2018, an investment of CNY 300 million within the budget of the Central Government was arranged for wetland protection projects and a total of CNY 1.6 billion of wetland fiscal subsidy of the Central Government was arranged. China restored 71,300 hectares of degraded wetlands and returned 20,000 hectares of farmland to wetland. Besides, 112 national wetland park pilots passed the acceptance, 6 cities were among the world first batch cities awarded the title of “international wetland city”, and thirteen places such as Yunnan have released 541 provincial-level important wetlands. In 2019, the wetland protection law was officially included in the *Legislation Plan of the Standing Committee of the Thirteenth National People's Congress*. All provinces (regions and municipalities) across the country have issued provincial institution programs for wetland

protection and restoration. The *Program for Returning Farmland to Wetlands in Yangtze River Economic Belt* was prepared, and the *Opinions on Further Strengthening the Construction and Management of Wetland Park* was drafted. MNR has actively explored methods to increase karst carbon sinks, including artificial afforestation and grass planting, soil improvement, irrigation with exogenous water, and cultivation of aquatic plants. In terms of the investigation into marine carbon sinks, the Ministry of Agriculture and Rural Affairs (MARA) organized the research of fishery carbon sinks.

(VI) Strengthening the Coordinated Control of GHG and Air Pollutants

In 2018, the functions of addressing climate change and emission reduction were assigned to the newly established MEE, which strengthened the overall coordination of ecological and environmental protection. This is an important institutional arrangement of the Central Committee of the CPC and the State Council to further enhance the synergy between addressing climate change and the prevention and control of environmental pollution, as well as to strengthen the integrity of ecological and environmental protection. In June 2018, the State Council issued the *Three-Year Action Plan on Winning the Battle for the Blue Sky*, setting out the requirements for coordinated control of GHG and air pollutants. In May 2019, MEE issued the *China Environmental Status Bulletin 2018*, which incorporated relevant data information on GHG emission control. In June and July 2019, MEE issued the *Comprehensive Control Plan for Volatile Organic Compounds in Key Industries* and *Comprehensive Control Plan for Air Pollution in Industrial Kilns and Furnaces* to jointly control GHG emissions while promoting air pollution control. China actively carried out the capacity building of the ecological and environmental system to address climate change, and promoted the coordination and integration of data collection, statistics, monitoring and other related work areas.

(VII) Low-Carbon Pilots and Local Actions

Deepening provincial and municipal low-carbon pilot demonstration. The pilot provinces and municipalities earnestly implemented various tasks and requirements put forward by the country and strengthened the organizational guarantee for low-carbon development. Some pilot projects explored the establishment of total carbon emission control institution, carbon emission assessment institution for major projects, and low-carbon product standard labeling and certification institution, with a number of supporting policies promulgated. All pilot provinces and municipalities have carried out regional GHG inventory development, strengthened fundamental capacity building such as GHG emission inventory and the statistical and accounting system, and some cities have built carbon emission data management platforms. Some pilot areas advocated a green and low-carbon lifestyle and consumption patterns through carbon credits, carbon emission trade coins, carbon credit cards, carbon Generalized System of Preference (GSP) and other means to cultivate a social fashion of low-carbon life, which have achieved positive results in promoting low-carbon development. The overall carbon intensity in the pilot areas dropped faster than the national average.

Increasing support for carbon capture, utilization and storage (CCUS) technology. In terms of policies and regulations, the Ministry of Science and Technology (MOST) issued *Technology Roadmap on Carbon Capture, Utilization and Storage in China (Edition 2019)* to

systematically and orderly deploy the development of China's CCUS technology. In terms of technology research and development, more than 10 CCUS research and development projects and demonstration projects were supported by the national key research and development plan in 2019. In terms of technology application and promotion, dozens of CCUS demonstration projects have been completed by August 2019, greatly strengthening the engineering practice ability. In terms of capacity building, a CCUS special committee has been established under the Chinese Society for Environmental Sciences (CSES). Through the China CCUS Industry Innovation Alliance, multilateral and bilateral cooperation were actively carried out and efforts were made to build an international cooperation platform for CCUS industry-university-research integration.

All regions actively promote low-carbon development. By June 2019, 9 provinces (regions and municipalities) have put forward a clear overall carbon emission peak time in their provincial work plan for GHG emission control during the 13th FYP Period. Some provinces (regions and municipalities) have put forward peak year targets for key areas, pilot cities or major industries according to their respective situations and have carried out studies on carbon emission peak reaching. Some regions have issued three-year action plans for low-carbon development. Hebei Province has issued the *Implementation Plan for Carbon GSP Pilot Work in Hebei Province* to promote the development of carbon GSP work. Shenzhen City and Jinan City have launched a “double-reach” study on peak-reaching of both urban carbon emissions and pollutant emissions to explore a win-win path for coordinated governance and development.

II. Climate Change Adaptation

Since 2018, continued efforts have been made to advance the cause of adapting to climate change and positive progress has been made in agriculture, water resources, forests and other ecosystems, coastal zones and coastal ecosystems, human health, comprehensive disaster prevention and mitigation, risk control and early warning of climate disasters and international cooperation on adaptation to climate change.

(I) Agriculture

Policy documents including *National Agricultural Modernization Plan (2016-2020)* were promulgated to actively response adverse effects on agricultural production caused by climate change-induced drought and flood, sudden outbreaks of plant diseases and insect pests, and extreme climate events. The localities are actively developing water-saving agriculture and promoting dry farming, drought-resistant and moisture-conserving adaptation technologies; making efforts to protect and improve the quality of cultivated land, and to increase soil organic matter by means of returning straw; vigorously improving the crop seed cultivation ability, and cultivating high temperature resistant, cold resistant and drought resistant varieties of crops with strong adaptability. The effective irrigated area of farmland in China has increased from 55.0 million hectares in 2005 to 68.1 million hectares in 2018.

(II) Water Resources

Flood control and drought relief water conservancy projects were implemented to further improve the flood control, drought relief and disaster mitigation system, having successfully

responded to floods surpassing the warning level in many rivers of six major basins (the Yangtze River Basin, Yellow River Basin, Huaihe River Basin, Pearl River Basin, Song-Liao River Basin and Taihu Lake Basin), as well as droughts in Northeast, North China, Southwest, south of the Yangtze River and Yangtze-Huaihe Regions. Policy documents promulgated include the *Water Pollution Prevention and Control Action Plan*, *Water Function Zoning of National Key Rivers and Lakes (2011-2030)*, *Opinions on Implementing the Strictest Water Resources Management System*, and *Action Plan on Industrial Water Saving in Beijing-Tianjin-Hebei Region*; the *National Water Saving Action Plan* was issued and implemented; the strictest water resources management system was implemented nationwide, with four-level river chief system involving the provincial, municipal, county and township levels established for overall planning of water resources protection, river and lake shoreline management, water pollution prevention and control, water environment management, water ecological restoration and law enforcement supervision; the hydrological and water resources monitoring system was promoted and improved to strengthen surface water and groundwater monitoring, enhance water resources analysis, evaluation, prediction and forecast. The construction of a water-saving society was speeded up across the country, with the first batch of counties (districts) (65 in total) having met the standard for the construction of a water-saving society, where major water-saving actions were implemented such as agricultural water saving and production increase, industrial water saving and efficiency increase, and urban water saving and consumption reduction. Comprehensive treatment and protection of water resources were launched throughout the country, to promote the construction of key water source projects, strengthen hygienic supervision and monitoring of drinking water, and improve the water supply guarantee ability of urban and rural areas. The water resources allocation pattern in China was further optimized. By June 2019, the Phase I project of the Project of South-to-North Water Diversion Middle Route had supplied 20.9 billion cubic meters of water to the north accumulatively, including 1.96 billion cubic meters of ecological water replenishment. Water security was further strengthened, with rural drinking water security having been basically addressed. The urban sewage treatment rate has increased from 82.3% in 2010 to 95.49%.

(III) Forestry and Other Ecosystems

First, strengthen forest ecology protection. According to *the 13th Five-Year Plan for Forestry Development*, *Forestry Action Plans to Adapt to Climate Change (2016-2020)*, and the key points of the forestry five-year action in response to climate change, the afforestation ratio of fire-resistant, drought /humidity-resistant, pest-resistant, and extreme temperature-resistant tree species were increased, the forest cultivation and management mode adapted to climate change was promoted, and the protection of forests and natural forest resources was strengthened. More efforts were made in the monitoring and prevention of forest disasters such as fire hazard and pest invasion, to enhance the adaptability and resilience of forestry ecosystem to climate change.

Second, promote the positive cycling of the grassland ecology. In top-down designs of grassland sector such as the *13th Five-Year Plan for National Grassland Protection, Construction and Utilization* and the *Plan for Recuperation of Cultivated Land, Grassland, Rivers and Lakes (2016-2030)*, China emphasized adaptation to climate change factors, made efforts to change the production mode of grassland animal husbandry, and expanded the conversion of farmland,

forests and grasslands. From 2018 to 2019, MOF supported the implementation of subsidy awards for grassland ecological protection with the subsidy funds for agricultural resources and ecological protection, which were mainly used for grassland grazing prohibition subsidies and grassland-grazing balance awards.

Third, strengthen wetland protection and desertification control. Wetland restoration and comprehensive treatment projects were launched and the wetland protection system was further improved, so as to enhance wetland protection. Actions were taken for vegetation restoration in desertified areas, species protection in sandy areas, dynamic monitoring of desertification, and vegetation restoration in degraded lands, so as to promote comprehensive treatment of desertification, stony desertification and soil erosion and water loss.

Fourth, strengthen the ecosystem protection. The three control lines, namely, the red line for ecological protection, permanent basic farmland, and the urban development boundary, were subject to overall setting and implementation in the spatial planning of territory; the basic information platform for territorial space were consolidated; and the ecological security barrier system was optimized. Demonstration of comprehensive treatment of stony desertification was adopted; the technical system was established for karst ecological restoration, and a generalizable ecological industrial model was formed according to local conditions. At the same time, the preparation of the *National Master Plan for Momentous Project on Major Ecological Systems Protection and Restoration* was initiated. China has identified 14 pilot projects (the third batch) for ecological protection and restoration of mountains, waters, forests, fields, lakes, and grasslands. The quality and stability of the ecosystems were improved by stepping up efforts in ecological protection and restoration, improving the recuperation system of cultivated land, grasslands, forests, rivers and lakes, establishing a market-oriented and diversified ecological compensation mechanism, building ecological corridors and biodiversity protection networks, and implementing major ecological protection and restoration projects such as terrestrial wildlife protection, and nature reserve construction. In 2018, MARA continued to improve the marine midsummer moratorium system, achieving full coverage of the fishing moratorium system in seven key inland basins and fostering the perennial ban on fishing in key waters of the Yangtze River Basin. The protection of aquatic wild animals and their habitats was strengthened, with (rescue) action plans issued and implemented for six key species including sea turtles. In 2018, a total of 37 billion fingerlings and seedlings of aquatic organisms were released nationwide.

(IV) Coastal Zones and Coastal Ecosystems

In order to implement the requirements of the *Marine Environment Protection Law of the People's Republic of China* and those set forth in the national planning and administrative regulations on marine industry, marine observation and forecast, disaster prevention and mitigation, etc., China intensified the penalties for marine environmental pollution, and strengthened the institutional construction with respect to marine adaptation to climate change; strengthened coastal ecological restoration and vegetation protection, built coastal forest shelter belts and tide-prevention engineering, and enhanced the ability of coastal zones and coastal ecosystems to resist climate disasters; enhanced the three-dimensional monitoring and forecasting of marine disasters such as storm surges, waves, sea ice, and coastal erosion, with

the marine disaster early warning frequency increased significantly; issued technical guidelines for assessing areas vulnerable to sea level rise, and carried out vulnerability assessment of key areas such as coastal provinces and cities, sea level change impact investigation, and coastal erosion monitoring and evaluation; conducted a trend study on the long-term changes of marine disasters and environmental factors in China's coastal waters to predict the possible impacts of future climate change on marine disasters; worked on the monitoring of sea-air carbon dioxide exchange flux in sea areas under the jurisdiction of China to have initially grasped the source-sink status of atmospheric carbon dioxide in different seasons there. China conducted research on marine ecosystem restoration and response to climate change, implemented mangrove restoration and coastal wetland restoration projects, and launched pilot work in terms of reforestation and sustainable utilization of abandoned shrimp ponds. China strengthened the protection and restoration of marine ecology by carrying out the “Blue Gulf” rectification campaign and the comprehensive treatment of Bohai Sea, promoting the restoration of ecological functions along the coastline and in island waters.

(V) Human Health

China improved the government's public service ability and management level in adapting to climate change, promoted the establishment of health monitoring, investigation and risk assessment institutions and standard systems, and provided sound medical and health services in case of high temperature weather. It strengthened disease prevention and control, dynamic monitoring of epidemics and research on influencing factors closely related to climate change, and formulated public health emergency plans and rescue mechanisms in close relation to climate change induced epidemics such as the Middle East Respiratory Syndrome (MERS), human infection with H7N9 avian influenza, and dengue fever. In various provinces (regions and municipalities), pilots were designated for public place health hazard factors monitoring, and high-temperature heat wave and health risk early warning systems were established. China also strengthened research on people's health to adapt to climate change, organized human health protection programs in the context of adaptation to climate change to improve the public's ability to cope with extreme weather such as high-temperatures heat wave.

(VI) Comprehensive Disaster Prevention and Mitigation

China strengthened research on the mechanism of how climate change affects the causing, occurrence, development and impact of natural disasters, firmly established the concept of disaster risk management and comprehensive disaster mitigation, and effectively enhanced the prevention, response and resolution of disaster risks. The Ministry of Emergency Management (MEM) explored and developed effective working mechanisms such as a flat organization and command mode for emergency response and rescue of national-level disasters and accidents, and an integrated operation mode for prevention, rescue and relief, having successfully responded to a series of major disasters such as super-strong typhoon Lekima, four dammed lake disasters on Jinsha River and Yarlung Zangbo River. Besides, attention was paid to strengthening the establishment of a comprehensive disaster risk monitoring, early warning and assessment systems, intensifying risk situation study and judgment, organizing the implementation of disaster risk investigation and key hidden danger identification projects, enhancing the overall planning and coordination of key natural disaster prevention and control

projects, establishing national comprehensive disaster mitigation communities and demonstrative counties, and consolidating the grassroots foundation for adapting to climate change and its impacts.

(VII) Risk Control and Early Warning of Climate Disasters

China strengthened research on the impact of warming and wetting in the west on the improvement of ecological system and the utilization of water resources as well as the countermeasures. It promoted the forecast of extreme weather and climate events and measures to prevent and mitigate disasters such as high temperature heat wave, rainstorm, typhoon, forest fire and other disasters. It also accelerated study on sea level rise, storm surge and other disasters in coastal mega-cities, and the formulation of new long-term plans to prevent the aggravation of comprehensive disasters.

(VIII) International Cooperation on Climate Change Adaptation

In October 2018, with the support of President Xi Jinping and Premier Li Keqiang, China, as a co-sponsor, promoted the launch and operation of the Global Commission on Adaptation. Li Ganjie, MEE, served as a member on behalf of China. In June 2019, the Global Center on Adaptation, which is the executing agency of Global Commission on Adaptation, established an office in Beijing, which was unveiled jointly by Li Keqiang, Premier of China, Mark Rutte, Prime Minister of the Netherlands, and Ban Ki-moon, former UN Secretary-General. In September 2019, MEE supported the activities of Global Commission on Adaptation in Beijing to publicize the report *Adapt Now: A Global Call for Leadership on Climate Resilience*.

III Planning Development and System Construction

Since 2018, the Chinese government has achieved a series of positive results in strengthening the planning formulation, advancing institutional construction, and promoting the construction of the carbon trading market.

(I) Strengthening Planning Formulation

Proactively planning medium and long-term targets with regard to climate change. In 2018, MEE launched a research plan on overall thinking of the next phase on addressing climate change. It organized the research and preparation of the *Progress Report on Nationally Determined Contributions of China* and the *Mid-century Long-term Low Greenhouse Gas Emission Development Strategy*. These documents, on the basis of a summary of realization of “Nationally Determined Contributions (NDC)”, analyze the current situation and overall trend of GHG emission control, and studied the main goals, implementation paths and supporting conditions of GHG emission control in China by the middle of the century.

Strengthening the planning preparation to address climate change in various fields. NEA conducted research on the development strategy of renewable energy for 2035 and 2050 to strengthen the top-down design for industrial development. In 2018, MNR of China issued the *Outline for the Technological Innovation and Development Planning for Natural Resources*, which incorporated climate change into the technological planning of natural resources. China Meteorological Administration (CMA) has completed the *Construction Planning on*

Meteorological Support Services for Ecological Civilization Construction and issued relevant division schemes. NFGA has issued the *Long-term National Forestry and Grassland Research Base Planning (2018-2035)*, the *National Forest City Development Planning (2018-2025)*, and the *National Reserve Forest Construction Planning (2018-2035)*.

(II) Advancing Institutional Construction

Improving systems and mechanisms. In July 2019, Li Keqiang, Premier of the State Council and head of the National Leading Group on Addressing Climate Change, Energy Conservation and Emission Reduction, chaired a meeting of the Leading Group to study and deploy the work on addressing climate change. In July 2018 and October 2019, the State Council adjusted the members of the Leading Group twice. MEE revised the assessment methods and scoring rules according to the assessment experience of carbon intensity reduction targets for the first two years of the 13th FYP with consideration of the actual situation of organizational reform. Efforts to address climate change have been progressing steadily in various regions, and the chronological progress target of carbon intensity reduction for 2018 was well realized.

Developing green finance. The People's Bank of China (PBOC) guided and urged financial institutions to implement differentiated credit policies for industries with overcapacity by strengthening macro credit policies and other measures. It fostered financial institutions to actively innovate in financial products and services, guided them to improve green credit mechanism, and encouraged to launch green credit businesses. It promoted the issuance of green bonds, promulgated the *Notice by the People's Bank of China of Issues Concerning Strengthening the Supervision and Administration of Green Financial Bonds in the Duration (2018)* to strengthen management of green financial bonds in the duration, and issue the *Notice by the People's Bank of China of Supporting the Issuance of Green Debt Financing Instruments in Green Finance Reform and Innovation Pilot Zones* to continue to open up financing channels. In December 2018, PBOC and China Securities Regulatory Commission (CSRC) jointly promoted the establishment of the Green Bonds Standard Committee.

Promote Climate Investment and Financing. MEE, together with the relevant departments, closely follows the needs of the Peaking Action and the realization of NDC, based on the financial system to make a systematic response to China's climate change policies and goals, and accelerate the improvement of climate investment and financing policies and standards. In August 2019, MEE and the People's Bank of China, the Banking Regulatory Commission, NDRC, MOF and other relevant departments promoted the establishment of the CSES climate Investment and Financing Professional Committee, establishing a good platform for the exchange of information in the field of climate investment and financing, industry and financial docking and international cooperation. In October 2019, the first International Symposium on climate investment and financing was successfully held in Beijing.

(III) Promoting the Construction of Carbon Market

Steadily pushing forward the construction of national carbon market. MEE accelerated the construction of the national carbon trading system in terms of establishing and perfecting the institutional system, constructing basic support system, and carrying out capacity building. It has been actively promoting the legislative process of the *Provisional Regulations on the*

Administration of Carbon Credit Trading, widely listen to and absorb the opinions of all parties and improve the provisions. In addition, it has actively studied and drafted the *National Scheme for Total Quotas Setting and Quotas Allocation of Carbon Credits*, *Technical Guidelines for Quotas Allocation in Power Generation Industry*, as well as supporting policies and regulations including the management measures for reporting, auditing, and trading of GHG emissions of key emission units. Issued the *Notice on Doing a Good Job in the 2018 Carbon Emission Report and Verification and Emission Monitoring Plan Preparation*, requiring all provinces (autonomous regions, municipalities) to organize key emission units to continue their carbon emission data monitoring, reporting and verification. The construction of the national carbon market registration system and trading system was steadily advanced. In May 2019, MEE issued of the *Notice on Effective Submitting of the List of Key Emission Units from the Power Generation Sector in the National Carbon Credit Trading Market and Relevant Materials*, organizing the provincial-level competent department to submit the lists and account opening data of units to be included into the national key emission units from the power sector in the carbon market, thus laying a solid foundation for the account opening in the registration and trading systems, quota allocation, carbon market test run and online trading.

Continuing to deepen the construction of pilot carbon markets. The pilot carbon markets in Beijing, Tianjin, Shanghai, Chongqing, Hubei, Guangdong and Shenzhen have begun to take shape and have shown initial results in reducing emissions. The institutional system has been deepened in the pilot carbon markets, gradually expand the coverage, exploring methods to optimize quota allocation, improve technical specifications and data quality management of carbon emission monitoring, accounting, reporting and auditing strengthen comprehensive measures like management of honoring an agreement. Pilot carbon market emissions reductions are beginning to bear fruit. Up to June 30, 2019, the quota trading in the pilot carbon markets in seven provinces and municipalities had been running smoothly, with a cumulative spot goods trade volume of the quotas approximating to 330 million tons of carbon dioxide, and a cumulative trade amount approximating to CNY 7.11 billion.

Proactively promoting reform in the trading mechanism for Chinese Certified Emission Reduction (CCER) of GHG gases. MEE organized reform in the trading mechanism for CCER of GHG gases based on the relevant requirements of the State Council “to delegate power, improve regulation, and upgrade services”. CCER was actively involved in the offsetting with agreement honoring in pilot carbon markets. By August 2019, about 18 million tons of carbon dioxide had been used in the pilot carbon market for quota offsetting with agreement honoring, accounting for about 22% of the total registered issued CCER. In June 2019, the *Implementation Guidelines for Carbon Neutrality of Large-Scale Events (Trial)* was issued, which standardized the basic principles, evaluation methods, relevant requirements and procedures for implementing carbon neutrality in large-scale events, and laid a foundation for promoting CCER to be used in “carbon neutrality” in large-scale events and ecological poverty alleviation.

IV. Strengthening Basic Capacity

Since 2018, the Chinese government has continuously improved the basic capabilities to address climate change by further enhancing the construction of the GHG statistical and

accounting system and strengthening scientific and technological support and discipline construction.

(I) Enhancing the Construction of GHG Statistical and Accounting System

Improving the basic statistical system for GHG emissions. Implementation of the *Opinions on Strengthening the Statistics for Addressing Climate Change continued*, NBS has established the *Statistical Report System for Addressing Climate Change (Statistics Yearbook 2018)* and the *Demand Schedule of Statistics on Addressing Climate Change for the Comprehensive Statistical System of the Government*. The reduction rate of CO₂ emission per CNY 10,000 GDP nationwide was once again included in the *Statistical Communique of the People's Republic of China on the 2018 National Economic and Social Development*. NFGA accelerated the construction of the national forestry carbon sinks measurement monitoring system, formulated and issued the *Notice on Launching the Construction of the National Forestry Carbon Sinks Measurement Monitoring System in 2018*, and prepared the *Technical Specification for the Survey of Forest Ecosystem Carbon Pool* and other standards.

Advancing GHG inventory compilation and emissions accounting. MEE organized relevant departments and experts to prepare and complete the *Third National Communication on Climate Change of the People's Republic of China* and the *Second Biannual Update Report on Climate Change of the People's Republic of China*, which were submitted to the United Nations in June 2019. In October 2018, MEE organized provincial joint review of GHG inventory for 2012 and 2014.

Pushing ahead corporate GHG emissions data reporting. In January 2019, MEE issued the *Notice on Efficiently Launching the Carbon Emission Reporting and Inspection and Emission Monitoring Planning of 2018*, requesting eight major industries, such as power generation, steel, and cement, to carry out 2018 reporting of corporate GHG emissions data, so as to provide data basis for carbon emission quota allocation and enterprise honoring an agreement. SAMR approved the release of two national standards, *Requirements of the Greenhouse Gas Emissions Accounting and Reporting - Part 11: Coal Production Enterprise* and *Requirements of the Greenhouse Gas Emissions Accounting and Reporting - Part 12: Textile and Garment Enterprise*. In December 2018, CAAC issued the *Interim Measures for CO₂ Emission Monitoring, Reporting and Auditing Management of Civil Aviation Activities*, laying an important foundation for civil aviation enterprises to participate in domestic and foreign market-based emission reduction mechanism.

(II) Enhancing Scientific and Technological Support

Conduct basic scientific research. Since 2018, MOST has deployed a series of projects of basic scientific research in the field of climate change. MOST, Chinese Academy of Sciences (CAS), CMA, and Chinese Academy of Engineering (CAE) jointly led the compilation of the *National Assessment Report on Climate Change*. CMA has been working on research and development of global and regional climate model, initially establishing the high-resolution global climate model; it participated in the sixth phase of inter-comparison of global climate model; it has been promoting the development of integrated assessment model of climatic change, completing the projection of drought, extreme precipitation and extreme temperature

change in case of temperature rise of 1.5°C and 2°C, and the associated social-economic risk assessment, with new progress made in the study of the trend of climate change and attribution of extreme events. CAS launched strategic leading science and technology projects such as revolutionary clean energy key technology and demonstration, CAS Earth, Pan-Third Pole World Environmental Change and Green Silk Road Construction, and “Beautiful China” Science and Technology Project on Ecological Civilization Construction. By the end of 2018, a major national science and technology infrastructure - earth system numerical simulation device, was launched, which would greatly improve China's long-term climate change prediction capability.

Strengthening the research and application of low-carbon technology. NEA accelerated the popularizing and application of flexible charging technology, strengthened key technological innovation in wireless charging and intelligent charging as well as equipment development, so as to get prepared technologically. MOST launched the preparation of the third batch of *List for Popularizing Transformation of Energy-Saving, Emission Reduction, and Low-Carbon Technological Achievements* and has initially screened 77 technological achievements. NFGA released *100 Key Forestry Technological Achievements for Popularizing 2018*. The Ministry of Education (MOE) issued the *Notice on Announcing the List of First Batch Higher Education Institutions Authenticated as Bases for Scientific and Technological Achievements Transformation and Technology Transfer*, by which 47 higher education institutions including Tsinghua University were authenticated. supporting and encouraging higher education institutions to actively promote industrialization of green and low-carbon, clean and environmentally- friendly and energy-related technology and strengthen application demonstration.

Actively participating in international cooperation in climate change sciences. CMA continued to play the leading role of the domestic department as a member of the Intergovernmental Panel on Climate Change (IPCC), and actively organized and participated in the preparation and review of reports such as *2019 Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories, Climate Change and Land, and Ocean and Cryosphere in a Changing Climate* during the sixth assessment cycle of the IPCC. In conjunction with relevant departments, CMA recommended candidates for the authors of the three working group reports to the IPCC, and finally 38 experts were selected, laying a good foundation for further participation in the sixth assessment report of the IPCC.

(III) Strengthening Disciplines Construction

The establishment of the CCUS and Climate Investment and Finance Association under the CSES further strengthened technical support and academic exchanges. MOE enhanced the construction of relevant disciplines in the field of climate change. In 2018, MOE issued China's first *National Teaching Quality Standards for Regular Undergraduate Education*, clarifying the connotation, disciplinary base and talents cultivation orientation of Atmospheric Sciences and Energy-related majors. It launched dozens of national-level Massive Open Online Courses related to climate and new energy such as Meteorology, Climate Change and Human Society, which are open to college students and social learners. Up to now, there are 29 undergraduate specialties in connection with Atmospheric Sciences in China, including 17 under Atmospheric

Sciences and 12 under Applied Meteorology; there are 176 undergraduate specialties in connection with New Energy, including 67 under New Energy Materials and Devices, 91 under New Energy Science and Engineering, and 18 under Energy and Environmental Systems Engineering.

V. Broad Social Participation

Since 2018, a green and low-carbon development pattern with broad social participation has been formed by guidance of the Chinese government, using multi-media communication, and encourage enterprises and citizens to take active actions.

(I) Active Government Guidance

MEE and relevant departments carried out the National Low-Carbon Day publicity activities with the theme of “Low-carbon activities to protect the blue sky”, and co-hosted Low-Carbon Day publicity activities with the People's Government of Jiangxi Province. MEE continued to carry out the thematic practice activity, “Beautiful China, I’m the Practitioner”, demonstrated the progress and achievements of the government and the social circles in improving low-carbon development, and practicing green lifestyles, and publicized green and low-carbon concepts; it organized the training seminar with the theme of “Addressing Climate Change and Capacity Building for Low-Carbon Development” for officials at the departmental level in a ministry or a provincial government to enhance the awareness and understanding of the provincial-level ecology and environment departments of addressing climate change. NDRC, together with relevant departments, carried out the National Energy Conservation Publicity Week with the theme of “Saving Energy for Green Development” and released the *Action Plan for Green and Efficient Refrigeration* to promote green consumption and guide the public to actively practice green lifestyles. MOF, together with relevant departments, thoroughly implemented the winter heating pilot policy in northern areas, promoting clean heating instead of burning bulk coal for heating in pilot areas, guiding residents in rural areas to form green lifestyles and reduce pollution emissions. MOE launched student social practice and technological innovation activities on energy saving & emission reduction for university students, and publicity activity themed “Energy-Saving Campus, Start from me”, so as to push ahead the new custom advocating frugality and low-carbon development. MIIT formulated the roadmap “*Actions of China Textile Industrial Value Chain for Addressing Climate Change 2030*”, launched climate leadership project, and promoted enterprises to set targets of voluntary emissions reduction. MOHURD launched publicity and training activities with regards to the 2019 edition of the national standard *Evaluation Standard for Green Building* so as to improve the technical level of practitioners, promote the implementation and application of the standard, and disseminate the idea of green building standard to the public. MOT organized the 2019 green trip publicity month and bus trip publicity week, so as to proactively guide the public to give preference to green trip modes like public transport. MARA organized the environmental protection practice “Plastic Reduction in Action”, calling on the public to practice plastic reduction and reduce the harm of plastic to aquatic wildlife. The National Health Commission organized the “Environment and Health Publicity Week” to strengthen health education related to climate change and improve public health protection skills to adapt to climate change. MEM focused on specialized training to strengthen capabilities of leaders at all levels in addressing

climate change and its impacts, natural disaster prevention and emergency management. In conjunction with the Organization Department of the Central Committee of the CPC and Party School of the Central Committee of CPC (National School of Administration), specialized training courses at the provincial and ministerial level, and departmental level were held in April and September 2019 respectively. It paid attention to the publicity and guidance to the public and made use of the “Disaster Mitigation Day”, “International Day for Natural Disaster Reduction”, “National Fire Prevention Day” and other key time nodes and fully considered the time periods liable to seasonal weather change and disaster accidents to carry out various forms of publicity and education activities so as to popularize safety knowledge, train self-rescue and mutual-rescue skills, and made good preparation on forecasting, warning and science popularization, publicity and education. According to incomplete statistics, during the “Disaster Mitigation Week”, more than 50 million copies of various publicity materials were distributed nationwide, around 50,000 trainings and lectures were held, nearly 100,000 emergency drills of different scales and around 30,000 themed publicity and education activities were held, 430 million pieces of public welfare message were sent, and more than 80 million people benefited from the on-site activities. CMA held the 15th International Workshop on Climate System and Climate Change, actively popularized the knowledge related to climate change, compiled and printed a series of science popularization painting albums on climate change and prevention of meteorological disasters, and launched the first domestic meteorological emergency disaster survival kit, which were distributed as materials for activities such as the publicity of meteorological laws and regulations, World Meteorological Day, Disaster Mitigation Day and Science and Technology Week. It carried out meteorological activities for science popularization in various places, so as to popularize meteorological knowledge related to climate change to the public, and to promote public attention to weather and climate. CMA and the Organization Department of the Central Committee jointly organized a special seminar of local leaders and cadres on disaster mitigation and meteorological guarantee for safe production. Relying on the project on knowledge renewal of professional and technical personnel launched by the Ministry of Human Resources and Social Security, CMA held the advanced seminar on the development and utilization of climate resources. NFGA strengthened the training of professionals to address climate change, actively promoted the climate change adaptation work of forestry industry. It held the national training courses on forestry policies and management with regards to climate change and the training courses on forestry carbon sink trading and project management. MOE continued to promote and support universities to strengthen the construction of high-level scientific research platform for addressing climate change. Beijing Organizing Committee for the Olympic Winter Games organized Winter Olympics themed event “Run to 2022, A Green Start, All People Involved” on the International Olympic Day, released the *Low-Carbon Management Working Plan for Beijing 2022 Olympics and Paralympic Winter Games* and created the “Beijing Case” of the Olympic Carbon GSP.

(II) Extensive Media Publicity

Major central news media and Internet media such as People's Daily, Xinhua News Agency, Economic Daily, China Daily, China News Service, Xinhua Net, China Central Television, China National Radio, and China Radio International have paid great attention to major news events in the field of addressing climate change by the United Nations Climate Action Summit

and the United Nations Climate Change Conference, and made comprehensive reporting in multiple forms such as text, pictures, and videos. The media timely publicized, reported and further interpreted the important low-carbon strategic plans and the introduction of policy documents addressing climate change, such as the carbon emissions trading market and the construction of a green “Belt and Road”, and guided the public to raise awareness and formed a good public opinion atmosphere by reporting the activities on annual “National Low-Carbon Day”. The 10th “Green Development • Low-Carbon Life” Public Welfare Exhibition jointly organized by China News Service and China Newsweek called for the public to practice a moderately economical, green, low-carbon, civilized and healthy lifestyle through an image exhibition with combination of knowledge, interaction and interest. CMA and the major media jointly reported on the “Address Climate Change • Record China” series of climate change field trips and publicity activities for science popularization to witness climate change from a scientific perspective and publicize climate change addressing to the public. The Natural Resources Conservation Association and other organizations held the theme activity of “Energy Saving in Summer, Starting with Cooling”, to cooperate with the country in the work of the National Energy Conservation Publicity Week, enhancing consumers' awareness of the importance of energy saving in cooling. Beijing Daily and other media actively reported the Winter Olympics themed events held on the 2019 International Olympic Day, calling for the public to actively participate in sports and advocating a low-carbon lifestyle.

(III) Proactive Enterprise Action

Domestic enterprises conscientiously implemented and actively practiced the concept of green and low-carbon development. The banking industry actively opened new businesses to promote the green and low-carbon development of entity enterprise. The Industrial Bank signed cooperation agreement on “Green and Innovative Investment Business” with China Clean Development Mechanism Fund Management Center and Fujian Provincial Department of Finance to build a new mechanism for the development of green and low-carbon, energy-saving and emission-reduction industries in Fujian Province. Steel industry proactively explored the green transformation. The energy industry proactively pushed ahead the transformation of low-carbon development, the State Grid Corporation of China conscientiously implemented the national policies and measures on promoting new energy consumption and solving the problem of wind and light curtailment, constantly improved the energy resource allocation ability and intelligentization level, strove to advance the high-quality development of the power grid, ran the concept of comprehensive environmental management through all aspects of the development of the Company, integrating the power supply, power grid and market.

(IV) Broad Public Participation

The All-China Environment Federation held the 10th Environmental Protection Drama Public Welfare Show, which promoted the concept and conveyed the awareness of environmental protection by means of free tickets, services for the benefit of people and exhibitions of elaborate works, thus encouraging the public to actively participate in environmental protection and public welfare undertakings for the health for all. The China National Textile and Apparel Council, together with 31 global brands and textile enterprises, as well as 11 industry organizations, signed the *UNFCCC Fashion Industry Charter for Climate Action*, on which

basis the “Carbon Management Innovation 2020 Action” was upgraded to the “Climate Innovation 2030 Action” road map. “Climate Change Lecture” held by Institute for climate change and sustainable development, Tsinghua University strengthened understanding and recognition of climate change in college students and promoted international exchanges on climate change. The fourth China (Shenzhen) International Climate Change Film Festival collected more than 5,000 films and television works on ecological civilization from 130 countries and regions across the world. The 2019 China International Low-Carbon Technology Expo was held in Changsha, Hunan Province, which promoted the awareness of enterprises and the community to jointly improve the development of low-carbon technologies and promoted the industrialization of advanced low-carbon technologies. In 2019, Shanxi held the “Taiyuan energy low-carbon development BBS”. Zhenjiang held the “International (Zhenjiang) Low Carbon Expo”, which promoted and popularized the concept of low-carbon development.

VI. Active Involvement in Global Climate Governance

Since 2018, the Chinese government has played a positive and constructive role in international negotiation of climate change with a highly responsible attitude, and made great contributions on promoting global climate governance and deepening international cooperation to address climate change through firmly upholding multilateralism, strengthening multi-level dialogue and exchanges on climate change with all countries and promoting relevant parties to build consensus.

(I) Multilateral Processes under the UN Framework

Actively participating in the negotiation process under the *United Nations Framework Convention on Climate Change (UNFCCC)* (hereinafter referred to as the *Convention*).

China has proactively advanced the negotiations on the implementation of the *Paris Agreement* with all parties, and promoted the establishment of an equitable, rational, cooperative and win-win global climate governance system. Before the 2018 United Nations Climate Change Conference in Katowice, President Xi Jinping called on the leaders of the Group of Twenty (G20) Buenos Aires to call on all parties to continue to take responsibility for building a community of shared future for mankind and provide political impetus for international cooperation to address climate change, showing China's support for the Katowice Conference and provides key political guidance for the success of the Conference. State Councilor and Foreign Minister Wang Yi held a small-scale climate change meeting and issued a press communique during the G20 summit with French Foreign Minister Ledrien and UN Secretary-General Guterres, reaffirming cooperation on addressing climate change and promoting sustainable development, and support the Katowice Conference to reach the implementation details of the Paris Agreement as scheduled. In 2018, China fully participated in a series of negotiation meetings including the United Nations Conference on Climate Change Bonn, the Bangkok Negotiations Conference, the preliminary meeting of the Katowice Conference, and the New York Informal Consultation on Key Issues of the Paris Agreement, actively and constructively participate the negotiation of detailed implementation rules and issues of the Paris Agreement; attending ministerial meetings on climate change in the “BASIC Countries”, coordination meetings of “Like-minded Developing Countries”, consultation meetings of the “Group 77 + China”, dialogue and communicate with small island countries, least developed

countries, and African countries, strengthen close coordination with the United States and the European Union, extensively coordinate and communicate with all parties on key issues, and guide key parties to reach consensus; invite the President of the United Nations General Assembly, the Deputy Secretary-General of the United Nations, the Executive Secretary of the Convention, chair of the Climate Conference to visit China to exchange views on advancing the global climate governance and negotiation process in-depth, and fully preparing for promoting the successful outcome of the Katowice Conference to reach the package of implementation rules of the Paris Agreement.

At the Katowice Conference, China's Minister of Ecology and Environment Li Ganjie attended the summit as a representative of China and held talks with the UN Secretary-General Guterres, the UN Deputy Secretary-General and the Executive Secretary of the Convention, serving as a positive political signal of the success of the Katowice Conference. China's Special Representative on Climate Change Xie Zhenhua attended the high-level meeting of the General Assembly and intensive consulted, coordinated positions and actively mediated with all parties. The group of Chinese delegation actively and constructively participated in the negotiations, contributed Chinese wisdom to key issues, and proposed a Chinese plan. UN Secretary General Guterres appreciated China's central role in reaching a solution, and highly praised the good cooperation between China and the UN team during the meeting.

Leading the work on “Nature-Based Solutions” (NBS) and profoundly participating in the UN Climate Action Summit. On September 23, 2019, the United Nations Climate Action Summit was held at the United Nations Headquarters in New York. Wang Yi, State Councilor and Foreign Minister, attended the Summit as Chinese President Xi Jinping's Special Representative and delivered a speech. The Chinese government actively participated in the preparation of the UN Climate Action Summit, issued the *UN Climate Action Summit: China's Position and Action*, and as a co-leader of the summit's NBS, worked with all parties to promote positive results in this field, issued the *Policy Proposition on Nature-Based Climate Solutions*, proposing the initiative to build a follow-up cooperation platform for a “Group of Friends for NBS”. More than 180 action initiatives and optimal practice cases such as “Delimit Red Line for Ecological Protection” and “Belt and Road” have been collected worldwide, and the *NBS Initiative Case Collection of the UN Climate Action Summit* has been formed and released during the summit. Meanwhile, China actively promoted the incorporation of the NBS into the Global Biodiversity Protection Framework 2020. China's position and actions in actively addressing climate change and the active progress made in leading the “Nature-Based Solutions” have attracted widespread attention and have been highly appreciated by the Secretary-General of the United Nations and relevant agencies.

(II) Climate Change Negotiations and Cooperation on Other Multilateral Platforms

China has taken an active part in climate change negotiations through the Petersburg Climate Dialogue, the Ministerial Conference on Climate Change and the Meeting of the Parties to the Montreal Protocol other than the UNFCCC. China submitted its best practices and cases to the G20 Working Group on Climate Sustainability which were incorporated in the outcome document of the Working Group. Guided by the principles and spirit of the *Convention* and the *Paris Agreement*, China actively participated in negotiations on emission reduction at the

International Civil Aviation Organization and the International Maritime Organization and advanced the implementation of green civil aviation cooperation projects with foreign countries. China promoted interested parties to deliver a common voice at multilateral platforms such as “Belt and Road” Forum for International Cooperation, China-Africa Cooperation Forum, Summit of Central and Eastern European Countries & China, BRICS Summit, to enhance the confidence of the international community in jointly addressing climate change. Besides, China continued to focus on and participated in climate change-related activities and discussions on General Assembly of the United Nations, Asia-Pacific Economic Cooperation (APEC) and other multilateral platforms. It promoted domestic think tanks and stakeholders of non-contracting parties to participate in the “Talanoa Dialogue” and shared the advanced concepts and practices of China's ecological civilization construction.

(III) Building New Political Momentum for Multilateral Processes of Climate Change

China actively promoted and participated in the China-France-UN Tripartite Conference on Climate Change held during the Group-20 Summit in Buenos Aires and Osaka. During the G20 summit in Osaka in June 2019, Wang Yi, Chinese State Councilor and Foreign Minister, Jean-Yves Le Drian, French Foreign Minister, and António Guterres, UN Secretary-General, jointly issued a press communique on the Climate Change Conference to reaffirm their firm commitment to strengthen international cooperation in addressing climate change and promoting the full and effective implementation of the *Paris Agreement*. China proactively participated in the BASIC (China, India, Brazil, and South Africa) Ministerial Meeting, and held the Ministerial Meeting of the BASIC as the rotating presidency in October 2019, conducted in-depth discussions and proposals on the global climate governance situation and key issues, and issued a joint statement, conveying a strong political signal of the firm support for multilateralism and promoting implementation of the Paris Agreement. China continued to participate in consultation mechanisms such as LMDC, proactively launched close coordination with small island countries, least developed countries and African Group to enhance consensus and safeguard the rights and interests of developing countries. In addition, it continued to deepen the dialogue and communication with developed countries, improving understanding and expanding consensus with relevant parties so as to jointly make contributions in strengthening global climate governance.

VII Enhancing International Communications and Cooperation

In the principle of “mutual benefit, win-win, pragmatic and effective cooperation”, the Chinese government actively carried out dialogue, communication and practical cooperation with interested parties on climate change and green and low-carbon development, promoted the South-South cooperation on climate change proactively, and played a positive and constructive role in global cooperation to address climate change.

(I) Addressing Climate Change: An Important Part of High-level Communication

In July 2018, during the China-EU Summit, the *China-EU Leaders' Statement on Climate Change and Clean Energy* was issued, demonstrating a firm determination to jointly address climate change. In September 2018, President Xi Jinping said at the opening ceremony of the Beijing Summit of the Forum on China-Africa Cooperation that China is willing to strengthen

communication and cooperation with Africa in the field of ecology and environment protection such as addressing climate change. In November 2018, at a group meeting in Papua New Guinea with leaders of Pacific island countries with which China has established diplomatic relations, President Xi Jinping said that China would provide assistance to all countries within its capacity. During President Xi Jinping's visit to France in March 2019, China and France issued a joint statement reaffirming that the two countries will jointly address challenge of climate change and fully implement the *Paris Agreement*. In April 2019, China and New Zealand jointly published the *China-New Zealand Leaders' Statement on Climate Change*. During the Chilean President's visit to China in April 2019, the two countries issued a joint statement stating that China actively supported Chile's role as the host state of the UN Climate Change Summit and had promoted the positive results of the Summit. In June 2019, President Xi Jinping and the Russian President signed the *Joint Statement to Upgrade Bilateral Relations to A Comprehensive Strategic Partnership of Coordination for A New Era*, and proposed to strengthen cooperation in the field of natural disaster prevention and emergency relief, including addressing climate change, welcomed the conclusion of the implementation rules of the *Paris Agreement*, and would further strengthen climate action. In November 2019, during French President Macron's visit to China, China and France jointly published *Beijing Call for Biodiversity Conservation and Climate Change*.

(II) Strengthening Communications and Cooperation with All Parties

In July 2018, MEE and the European Union signed a memorandum of understanding (MOU) on strengthening cooperation on carbon emissions trading. In November 2018, the first China-Canada Ministerial Dialogue on Climate Change was held in Beijing and a MOU on climate change cooperation was signed between MEE and the Environment Canada. In April 2019, the 8th China-EU Energy Dialogue was held, and NEA and the European Commission signed a *Joint Statement on the implementation of China-EU Energy Cooperation*, emphasized the significance of clean energy cooperation for the implementation of the *Paris Agreement*.

In September 2018, China and South Africa signed the *MOU between the Government of the People's Republic of China and the Government of the Republic of South Africa on Cooperation in Climate Change*. In November 2018, China and Argentina published a joint declaration stressing that the two countries would promote cooperation in environmental protection, sustainable development and other areas to jointly address climate change. In July 2019, China and the United Arab Emirates signed a MOU on environmental protection cooperation. In October 2019, during the third China-Pacific Island Countries Economic Development and Cooperation Forum, a sub-forum on environmental protection and climate change was held with relevant Pacific island countries, and views on climate change challenges and future cooperation were exchanged.

(III) Strengthening South-South Cooperation on Climate Change

China actively pushed forward the South-South cooperation on climate change and provided assistance to other developing countries within its capacity. Till September 2019, China has signed more than 30 MOUs on climate change South-South cooperation with other developing countries, cooperated in the construction of low-carbon demonstration zones, carried out

climate change mitigation and adaptation projects, and held several training sessions for South-South cooperation on climate change. Since 2019, China actively promoted cooperation, consultation and implementation with low-carbon demonstration zones in Cambodia, Laos, Kenya, Ghana and Seychelles, pushed ahead the implementation of climate change mitigation and adaptation material donation projects with more than 10 countries, including Ethiopia, Egypt and Guinea, and consulted with Botswana, Uruguay and the Philippines on new projects. Besides, nine training sessions on climate change South-South cooperation was held, including two training sessions for the “Belt and Road” countries, and two sessions for Pacific island countries. Effort has been made in promoting tripartite cooperation and strengthening exchanges and cooperation with the secretariats of the UNFCCC, UNESCO, the World Food Programme, Food and Agriculture Organization of the United Nations, the Green Climate Fund and the Global Energy Internet Cooperation Organization in the area of climate change South-South cooperation. The Chinese government has also carried out cooperative projects with other developing countries in the fields of climate adaptation, clean energy, disaster prevention and mitigation, and ecology and environment protection through project implementation, material donation and technical assistance. In April 2019, the International Coalition for Green Development on the “Belt and Road” was established in Beijing to promote ecology and environment protection, address climate change and achieve green and sustainable development in the “Belt and Road” countries. China further increased the role of the Asian Infrastructure Investment Bank in addressing climate change and promoting green development, and helped member countries to enhance their ability to address climate change through fund mobilization, capacity building, and technology transfer.

VIII Basic Standpoints and Positions of the 25th Conference of Parties (COP 25) to the United Nations Framework Convention on Climate Change

The COP 25 to the UNFCCC is an important meeting connects the past with the future. Regarding the expected achievements of COP25, China believes that:

Firstly, actively promote the completion of negotiations on the remaining issues of the implementation rules of the *Paris Agreement*, which is an important basis for the comprehensive and effective implementation of the Paris Agreement and is related to the authority and effectiveness of the multilateral mechanism.

Secondly, promote positive progress in finance issues. The biggest problem that the current climate multilateral process facing is the insufficient political will of developed countries to provide support. Finance with different names have been double-counted under the label of “climate”. China urges developed countries to provide developing countries with adequate, continuous and timely support in a transparent, predictable, and public funding-based manner, including fulfilling their commitment to provide climate finance of USD 100 billion to developing countries annually by 2020; new collective quantitative finance goals starting from \$ 100 billion as soon as possible, including detailed roadmaps and timelines; earnestly improving transparency in finance support; and accelerating strong commitments to contribute to the Green Climate Fund.

Thirdly, take stock of actions and efforts before 2020. The international community should

clearly sort out the gaps of developed countries in terms of emission reduction efforts and support for developing countries before 2020, make clear arrangements to further fill the gaps, and ensure that responsibilities will not be passed on to developing countries after 2020.

Fourthly, firmly send a strong political signal in support of multilateralism. In November 2019, the United States officially launched the legal process of withdrawing from the *Paris Agreement*. Some developed countries have indicated that they are considering a carbon border adjustment tax. These unilateral acts will seriously undermine the international community's willingness and confidence to cope with climate change and will ultimately affect the collective efforts and effects of the global addressing climate change.

As the largest developing country, China has always firmly supported multilateralism, fulfilled its commitments 100% based on national circumstances, and actively and constructively advanced the climate multilateral process. We are willing to work with all parties to fully support the COP25 presidency in an open, transparent, consensus-driven, party-driven way to promote the success of COP25 and lay a solid foundation for the comprehensive and effective implementation of the *Paris Agreement*.