

Opinions of the CPC Central Committee and the State Council on Further Promoting the Development of Ecological Civilization

(April 25, 2015)

The development of ecological civilization is an essential part of the socialist undertaking with Chinese characteristics. It is vital to the people's wellbeing and the future of the Chinese nation and the realization of the Two Centenary Goals, and the Chinese Dream of the great rejuvenation of the Chinese nation. The CPC Central Committee and the State Council attach great importance to the development of ecological civilization. A series of major decisions and plans have been unveiled in this regard. Considerable progress and positive achievements have been made in the development of ecological civilization. From an overall perspective, however, the development of ecological civilization in China still falls behind economic and social development. Resource constraints are tightening, environmental pollution remains severe, and the ecosystem is deteriorating. The contradictions between development and population as well as resources and environment are increasingly prominent, which have become a serious bottleneck hindering sustainable economic and social development.

Working harder to promote the development of ecological civilization is a basic requirement for accelerating the transformation of the economic growth model and improving the quality and benefits of development, an inevitable choice for adhering to the principle of "putting people first" and promoting social harmony, a key strategy for finishing building a moderately prosperous society in all respects and realizing the Chinese Dream of the great rejuvenation of the Chinese nation, and a significant initiative for actively tackling climate change and safeguarding global ecological security. We must fully understand the utmost importance and urgency of further promoting the development of ecological civilization, earnestly enhance our sense of responsibility and mission, and firmly establish the awareness of respecting nature, obeying the law of nature and protecting nature. We must recognize the great value of lucid waters and green mountains, mobilize all members of the CPC and the general public to take proactive and persistent actions to promote the development of ecological civilization, speed up the creation of a new environment for modernization featuring harmonious development between man and nature, and usher in a new era of socialist ecological civilization.

I. Overall Requirements

- i. Guidelines. Follow the guidance of Deng Xiaoping Theory, the important thought of Three Represents, and the Scientific Outlook on Development; comprehensively implement the guiding principles of the 18th National Party Congress and the second, third and fourth plenary

sessions of the 18th CPC Central Committee; put into practice the guiding principles from General Secretary Xi Jinping's major speeches; earnestly implement the decisions and plans of the CPC Central Committee and the State Council; adhere to the principle of putting people first and carrying out work according to law; stick to the basic state policy of conserving resources and protecting the environment; place the development of ecological civilization at a prominent strategic position and integrate it into all aspects and the entire process of economic, political, cultural and social development; cooperatively promote new-type industrialization, application of information technologies, urbanization, agricultural modernization and greening; focus on improving the system of ecological civilization; optimize the development pattern of space for land and resources; comprehensively promote resource conservation and utilization; make more efforts to protect the natural ecosystem and the environment; vigorously promote green development, circular development and low-carbon development; promote the ecological culture; advocate a green life, speed up the development of a beautiful China; ensure we always have blue skies, green mountains and lucid waters, and realize the sustainable development of the Chinese nation.

ii. Basic principles

We need to stick to the basic principle of giving priority to conservation and protection and focusing on natural recovery. Regarding resource development and conservation, conservation is given priority to shore up sustainable economic and social development with the minimum resource consumption; regarding environmental protection and development, protection is given priority to realize the interdependence between development and protection; regarding ecological development and restoration, natural recovery is the basis, accompanied by human-induced restoration.

We need to stick to the basic approach of pursuing green development, circular development and low-carbon development. Economic and social development must be based on the prerequisites that resources are efficiently recycled and the ecological environment is strictly protected, resource utilization and the development of ecological civilization is well-coordinated, and the spatial pattern, structure of industry and production mode featuring resource conservation and environmental protection are established.

We need to stick to the basic driving force of deepening reform and seeking innovation-driven development. Efforts shall be made to give full play to the decisive role of the market in resource allocation and strengthen the role of the government, constantly deepen institutional reform and S&T innovation, establish a complete system of ecological civilization, give prominence to the leading role of S&T innovation, and give vitality to the development of ecological civilization.

We need to stick to the essential pillar of fostering the ecological culture. Efforts shall be made to include ecological civilization in the system of core socialist values, strengthen dissemination and education on the ecological culture, advocate diligent and thrifty, green and low-carbon as well as civilized and healthy lifestyles and consumption patterns, and increase public awareness of ecological civilization.

We need to stick to the working method of pursuing comprehensive development with breakthroughs made in key areas. Efforts shall be made to focus on the present on one hand, i.e. striving to address outstanding issues which seriously constrain sustainable economic and social development and cause widespread complaints and criticism among the public, and fight to win the battle of the development of ecological civilization; and take a long-term perspective on the other hand, i.e. combining enhancing top-layer design with encouraging local experimentation, and promote the development of ecological civilization comprehensively and persistently.

iii. Main targets

Targets for 2020: Major progress are made in building a resource-saving and environmentally-friendly society; the basic layout of main functional areas is formed; the quality and benefits of economic development considerably improve; the mainstream values of ecological civilization is promoted in the whole society; and the development level of ecological civilization is adapted to the target of finishing building a moderately prosperous society in all respects.

— The development pattern of space for land and resources is further optimized. Economic layout and population distribution are increasingly balanced, the development intensity of space for land and sea and the scale of urban space are effectively controlled, and the urban-rural structure and spatial layout is significantly optimized.

— Resource utilization is more efficient. The carbon intensity (CO₂ emissions per unit of GDP) decreases by 40%-45% from that of 2005, the intensity of energy consumption continuously declines, resource-based output ratio rises by a big margin, the total water consumption is controlled under 670 billion m³, water consumption for RMB 10,000 worth of industrial added value decreases to less than 65 m³, the coefficient of effective utilization of farmland irrigation water rises to above 0.55, and the proportion of non-fossil energy in primary energy consumption rises to around 15%.

— The overall quality of the ecological environment improves. The total emissions of major pollutants continuously decreases, the quality of the atmospheric environment and the water environment at key river basins and offshore areas improves, the rate of water quality of functional areas in key rivers and lakes rises to above 80%, the safety level of drinking water continuously increases, the overall quality of the soil environment keeps stable, and environmental risks are effectively controlled. The forest coverage reaches above 23%, the vegetation coverage of

grassland reaches 56%, the area of wetland is at least 800 million *mu*, at least 50% of sanded land that can be harnessed is harnessed, the ratio of preserved natural shorelines is not lower than 35%, the loss of biodiversity is basically contained, and the stability of the national ecological system is significantly enhanced.

— The major system of ecological civilization is basically established. The system of ecological civilization in source-based prevention, process control, compensation for damages and accountability investigation, significant progress is made in the development of key systems regarding regulation on the ownership and use of natural resource assets, the bottom line of ecological protection, compensation for ecological protection, and management of protecting the ecological environment.

II. Strengthening the Position of Main Functional Areas, Optimizing the Development Pattern of Space for Land and Resources

Land and resources are the spatial carriers of the development of ecological civilization. We need to unswervingly implement the strategies for main functional areas, improve the spatial planning system, make scientific and reasonable layout, and transform and improve production, living and ecological space.

- iv. We need to implement the strategies for main functional areas. We will comprehensively implement the plans for main functional areas and improve supporting policies on finance, investment, industry, land, population and the environment and specific performance evaluation systems. We will require cities and counties to put in place the position of main functional areas and promote the integration of the plans on economic and social development, urban and rural development, land use, protecting the ecological environment, etc. to realize the target of one plan and one blueprint for one city/county. The formulation of regional plans and the layout of major projects must conform to the position of main functional areas. We will implement differentiated market access policies towards the industry projects of different main functional areas, determine access items of areas where development is forbidden or restricted, and determine industries whose development is forbidden or restricted in areas where development is optimized or given priority. We will formulate and put into force the National Land Planning Outline, further promote comprehensive national land consolidation. We will establish a balanced and proper system of urban and rural development space, properly expand living space and land for ecological use, and protect and expand ecological space such as green land, water areas and wetland.
- v. We need to vigorously promote urbanization. We will earnestly implement the National New-type urbanization Plan (2014-2020), define scientific and reasonable macro urbanization layout

according to the carrying capacity of resources and environment, strictly control the scale of megacities, enhance the carrying capacity of small and middle cities, and promote the coordinated development of small, middle and big cities and counties and towns. We will respect the natural pattern, define the reasonable layout of various urban spaces based on existing landscape grains and meteorological conditions, and minimize disturbance and damage to nature. We will protect natural landscapes, inherit the historical culture, advocate the diversity of forms of cities and towns, maintain characteristic styles and features, and avoid monotony. We will scientifically determine the intensity of urban development, improve the efficiency of land use in cities and towns and the population density of built-up areas, demarcate the boundary of urban development, strictly supply land for urban development, and promote the transformation of urbanization from expansion to improvement. We will define stringent conditions and procedures of setting up new towns and districts. We will strengthen the concept of energy conservation during urbanization, make zealous efforts to develop green buildings and low-carbon and convenient transportation systems, advance the development of green and ecological urban districts, and improve the construction of infrastructure in urban water supply and drainage, flood prevention, rainwater collection and utilization, heating, gas supply and the environment. All county towns and key towns must have the capacity of sewage and waste treatment and improve construction, operation and management. We will enhance the management of “three areas and four lines” in urban and rural plans (areas where development is forbidden, areas where development is restricted and areas where development is given priority, green lines, blue lines, purple lines and yellow lines), maintain the authority and seriousness of urban and rural plans, and put an end to large-scale demolition and construction.

- vi. We need to press ahead with the development of a beautiful countryside. We will improve the plan on villages in county regions and increase the scientific and constraint level of the plan. We will strengthen rural infrastructure construction, intensify the comprehensive management of mountains, waters, forest, farmland and roads, step up renovation of rural dilapidated buildings, support contiguous treatment of the rural environment, carry out special treatment on rural waste, and make more efforts in rural sewage treatment and latrine improvement. We will transform the agricultural growth model, promote the readjustment of the agricultural structure, work hard to develop a circular economy, prevent and control agricultural pollution, and improve the safety level of the quality of agricultural products. We will rely on countryside ecological resources to speed up the development of the rural tourism and leisure industry under the precondition of protecting the ecological environment. We will guide farmers to plant trees and protect greens around their houses and along roads. We will enhance rural cultural and

ideological development, focus on environmental treatment and moral improvement, and make steady headway in the development of model villages and towns.

- vii. We need to strengthen the scientific development of marine resources and the protection of the ecological environment. We will scientifically work out marine functional zoning and define the main functions of different sea areas in line with the environmental carrying capacity of marine resources. We will adhere to the principle of "spot-based development and area-based protection", control the intensity of marine development, accelerate the readjustment of the economic structure and the industrial layout in marine areas suitable for development, work hard to develop strategic emerging marine industries, strictly conduct assessments on the ecological environment, improve the intensive and economical utilization and comprehensive development of resources, and minimize the influence on the marine ecological environment. We will strictly control the total emissions of land-sourced pollutants to the sea, put in place the system of controlling the total emissions of pollutants to key sea areas, enhance marine environmental management, comprehensive management of sea areas and islands and ecological protection and restoration, effectively protect important, sensitive and fragile marine ecological systems. We will strengthen pollution control of ships and ports, work actively to prevent and control ship pollution, and enhance the capacity of ports and wharfs in pollution prevention and control. We will control the development of marine culture and carry out scientific conservation of marine fishery resources. We will carry out comprehensive assessments on marine resources and the ecological environment. We will implement the strict system of controlling the total amount of sea reclamation and natural shorelines, and set up the mechanism of protecting and restoring the marine ecological environment featuring coordinated development of land and sea and regional linkage.

III. Promoting Technological Innovation and Structural Adjustment, Improving the Quality and Benefits of Development

To radically mitigate the contradiction between economic development and resources and environment, we must establish the structure of industry featuring high scientific and technological content, low resource consumption and little environmental pollution, speed up the process towards green production modes, substantially increase the green economy index, and effectively reduce resource and environmental costs on development.

- viii. We need to promote S&T innovation. We will deepen the reform of the S&T system and establish the management system and operating mechanism according to the features of scientific and research activities in the development of ecological civilization. We will strengthen research on major S&T issues, strive to make technological breakthroughs in energy

conservation, resource recycling, new energy development, pollution prevention and control and ecological restoration, and make breakthroughs in basic research and the R&D of cutting-edge technologies. We will improve the status of enterprises as major players in technological innovation and give full play to the decisive role of the market in determining the orientation of green industries and choosing technology routes. We will improve the system of technological innovation, enhance the capacity of comprehensive integration and innovation, and strengthen technical innovation and experimentation. We will support the establishment of engineering and technology research centers, laboratories and experimental bases in ecological civilization, improve the mechanism of commercialization of S&T innovations, set up a number of platforms for innovation commercialization and intermediary service agencies and speed up the demonstration and promotion of mature and applicable technologies. We will enhance the cultivation of talents engaged in basic research, experimentation, S&D, engineering application and market service in ecological civilization.

- ix. We need to make adjustments in the structure of industry. We will promote the healthy development of strategic emerging industries and advanced manufacturing industries, adopt advanced and applicable energy-efficient, low-carbon and environmentally-friendly technologies to transform and upgrade traditional industries, further develop the service industry, and make reasonable layouts in infrastructure construction and basic industries. We will work actively to mitigate the contradiction of seriously excess production capacity, intensify early warning control, adjust the list of industries with seriously excess production capacity in good time, and strictly forbid the approval of projects with new production capacity in industries with seriously excess production capacity, speed up efforts to close down outdated production facilities, gradually raise standards in this regard, and forbid the transfer of outdated production facilities to central and western regions. We will do a good job in closing down outdated production facilities and carrying out staff resettlement of outdated production facilities which are closed down. We will promote the global allocation of element resources, encourage industries with advantages to go global, and raise the level of participating in international division of labor. We will adjust the energy mix, promote the safe and green development and clean and low-carbon utilization of traditional energy, develop clean energy and renewable energy, and continuously increase the proportion of non-fossil energy in the energy consumption mix.
- x. We need to develop green industries. We will channel great energy into developing energy-efficient and environmentally-friendly industries, stimulate consumption demand by promoting energy-efficient and environmentally-friendly products, fuel investment growth by enhancing the capacity of engineering and technological capacity in energy conservation and environmental protection, tap potential market demand by improving policies and mechanisms, promote the

considerable improvement of energy-efficient and environmentally-friendly technologies, equipment and service, and step up efforts to foster new areas of growth. We will implement projects of industrialization of major technological equipment in energy-efficient and environmentally-friendly industries, plan and build up industrialized demonstration bases, regulate the development of markets of energy conservation and environmental protection, attract social capital through multiple channels, and establish new pillar industries. We will accelerate the R&D and promotion of new materials and equipment of nuclear power, wind power and solar PV power generation, advance the application of biomass power generation, biomass energy, biogas, geothermal energy, shallow geothermal energy and ocean energy, develop distributed energy, build up smart grids, and improve the operating and management system. We will work actively to develop energy-efficient and new energy vehicles, improve innovation capacity and industrialization, strengthen supporting infrastructure construction, and make more efforts in promotion and popularization. We will develop organic agriculture and ecological agriculture as well as forestry-related industries such as special economic forestry, economic crops and animals under forests and forest tourism.

IV. Comprehensively Promoting the Economical, Recycling and Efficient Resource Utilization, Moving Forward in the Fundamental Transformation of Utilization Methods

Saving resources is the primary policy to break down the bottleneck restraint of resources and protect the ecological environment. We need to further promote the public to conserve energy and reduce emissions, work hard to develop the circular economy in all areas including production, circulation and consumption, and realize the economical and efficient utilization of various resources.

- xi. We need to promote the process of conserving energy and reducing emissions. We will give play to the synergized and coordinated role of conserving energy and reducing emissions and support key areas in conserving energy and reducing emissions. We will carry out energy-saving and low-carbon campaigns in energy-intensive organizations and execute plans of improving energy efficiency of key industries. We will strictly implement standards for energy-efficient buildings, further promote energy-efficient retrofitting and reform of heat metering in existing buildings, work actively to promote the application of renewable energy in buildings in standards, design and construction, and promote construction modes such as building industrialization. We will give priority to the development of public transportation, optimize modes of transportation, promote energy-efficient and new energy transportation equipment, and develop swap body transport. We will encourage the use of energy-efficient agricultural production equipment. We will organize campaigns for the demonstration and creation of energy-efficient public organizations. We will strengthen emission reduction in structure, engineering and management and continuously reduce the total emissions of major pollutants.

- xii. We need to develop a circular economy. We will speed up the establishment of circular systems for industry, agriculture and the service sector according to the principles of 3R (Reduce, Reuse, Recycle) and raise the resource-based output ratio of the whole society. We will improve the system of recovery of renewable resources, carry out classified garbage collection and recovery, develop and utilize "urban mines", promote the recycling and reuse of agricultural and forestry waste such as straws, building waste and kitchen waste, develop remanufactured and recycled products, and encourage the recycling of waste materials and items such as textiles and tires. We will promote the comprehensive utilization of large solid waste such as tailings and slag. We will organize campaigns for the demonstration of a circular economy and work hard to promote typical modes of a circular economy. We will promote the circular combination of industries, promote the circular linkage between the production system and the living system, and establish a system of resource recycling covering the whole society.
- xiii. We need to make more efforts to save resources. We will save and intensively use resources such as water, land and mines, strengthen whole process management, and dramatically reduce the intensity of resource consumption. We will enhance management of water demand, determine actual demand according to the amount of water, curb unreasonable water demand, work hard to realize the balance between population, economy and water resources, and build a water-saving society. We will promote efficient water-saving technologies and products, develop water-saving agriculture, strengthen the development of water-saving cities, and promote water-saving transformation of enterprises. We will actively develop and utilize unconventional water resources such as reclaimed water, mine water, cloud water in the air and seawater, strictly control disorderly water diversion and artificial waterscape projects, and raise the safety and supply level of water resources. We will strengthen plan, regulation, market-oriented adjustment, standard control, examination and supervision of land use, conduct stringent regulation on land use, and promote the application of land-saving technologies and modes in line with the principle of strictly controlling newly-developed land, making full use of existing land, optimizing the structure and improving efficiency. We will develop the green mining industry, speed up the construction of green mines, promote the efficient utilization of mining resources, and increase the rate of recovery, beneficiation and comprehensive utilization of mining resources.

V. Enhancing the Protection of the Natural Ecosystem and the environment, Earnestly Improving the Quality of the Ecological Environment

A good ecological environment is the fairest public good and the most essential people's wellbeing. We must strictly carry out prevention from the source and forbid new damages to the ecological environment and speed up efforts to address prominent and deep-rooted issues regarding the

ecological environment so that people can breathe fresh air, drink clean water and work and live in a healthy environment.

- xiv. We need to protect and restore the natural ecosystem. We will accelerate the construction of ecological security shelter and establish the strategic pattern of ecological security with the Qinghai-Tibet Plateau, the Loess Plateau - Sichuan and Yunan Provinces, the Northeast Forest Zone, the Northern Sand Belt, the Southern Hilly and Mountainous Zone, offshore and coastal ecological zones as well as major rivers and waters as the framework, other key ecological functional areas as the essential backbone, and areas where development is forbidden as the important component. We will carry out major projects of ecological restoration, expand the area of forests, lakes and wetlands, raise the coverage of vegetation of desert areas and grasslands, and realize rehabilitation in an orderly manner. We will cement forest protection, expand the protection area of natural forests to the whole country; actively carry out afforestation and forest management, maintain and expand the scope of the conversion of cropland to forest, speed up the development of the system of key shelter forests; improve the operating and management system of state-owned forest farms and forest zones, and deepen the reform of the collective forest property rights. We will strictly implement the system of grazing prohibition, rest from grazing and forage-livestock balance, accelerate the delimitation and protection of basic grasslands; make more efforts to return livestock pastures to natural grasslands, continuously implement policies of granting subsidy and incentives to those engaged in grassland ecological protection; maintain and improve the system of contractual grassland operation. We will initiate compensation for the ecological benefits of wetlands and convert croplands to wetlands. We will enhance the protection of aquatic organisms and carry out breeding and releasing in important waters. We will continuously promote the harness of sandstorm sources in Beijing and Tianjin, comprehensive management of the Loess Plateau and rocky desertification and carry out pilot programs of closure and protection of sanded land. We will enhance water and soil conservation and promote comprehensive management of small watersheds according to local conditions. We will carry out underground water protection and comprehensive management of overexploited and funnel-shaped areas, and realize the balance between exploitation and replenishment of underground water step by step. We will intensify the ecological protection of farmlands, carry out quality protection and improvement of croplands, make more efforts to improve and restore farmlands which are deteriorated, polluted and damaged, and strengthen survey, monitoring and assessment on the quality of croplands. We will implement major projects of biodiversity protection, establish the systems of monitoring, assessment and early warning, improve the mechanism of safety inspection on imported organisms, effectively prevent the loss of species resources and the invasion of alien species, and actively participate

in the negotiations on and performance of the Convention on Biological Diversity. We will enhance the construction and management of nature reserves, implement compulsory protection on important ecosystems and species resources, and earnestly protect rare and endangered wild animals and plants, old and famous trees as well as natural habitats. We will set up the system of national parks, implement level-to level and unified management, and preserve the authenticity and completeness of natural ecosystems and natural and cultural heritages. We will put in place the mechanism of water supply for ecosystems of rivers and lakes. We will accelerate the establishment of disaster prevention and mitigation such as disaster survey and assessment, monitoring and early warning as well as prevention, control and emergency management.

- xv. We need to carry out comprehensive pollution prevention and control. We will adhere to the principle of putting people first, combining prevention and control, combining immediate and long-term measures and implementing comprehensive policies, establish the environmental management system with the core of ensuring human health, the target of improved environmental quality and the baseline of prevention and control of environmental risks, improve the mechanism of coordinating trans-regional pollution prevention and control, and step up efforts to address prominent environmental problems regarding air, water and soil pollution which cause widespread complaints and criticism among the public. We will continuously implement the Action Plan for Air Pollution Prevention and Control, gradually eliminate weather with heavy pollution, and thoroughly improve the quality of the atmospheric environment. We will implement the Action Plan for Water Pollution Prevention and Control, strictly protect sources of drinking water, comprehensively promote environmental management of places with water sources such as conservation areas and headwater areas, intensify management of the whole process of water supply, and guarantee the safety of drinking water; strengthen prevention and control of water pollution in key river basins, regions and offshore areas and protection of the ecological environment of lakes with good water quality, control and regulate freshwater aquaculture, and conduct strict management of pollutant discharged into rivers (lakes and seas); and promote prevention and control of underground water pollution. We will work out and implement the Action Plan for Soil Pollution Prevention and Control, give priority to the protection of the soil environment of croplands, intensify management of sites with industrial pollution, and carry out pilot programs of soil pollution treatment and restoration. We will enhance the prevention and control of nonpoint source pollution in agriculture, make more efforts in the prevention and control of pollution in the crop and plant cultivation and breeding industry, particularly large-scale livestock breeding, scientifically apply chemical fertilizers and pesticides, promote energy-efficient and environmentally-friendly cooking ranges, and purify

origins of agricultural products and the living environment of rural residents. We will enhance comprehensive management of urban and rural environments. We will promote the treatment of heavy metal pollution. We will carry out rehabilitation and comprehensive management of the geological environment of mines, promote the safe and environmentally-friendly storage of tailings, and properly dispose of large solid wastes such as slag. We will put in place the working mechanism for prevention, control and emergency management of environmental risks such as chemicals, persistent organic pollutants and hazardous wastes. We will further strengthen the operation and regulation of nuclear facilities to ensure nuclear safety in all circumstances.

- xvi. We need to actively tackle climate change. We will combine immediate interests with long-term orientation, promote both mitigation and adaptation, and effectively control emissions of GHG, such as CO₂, methane, HFCs, PFCs and sulfur hexafluoride by conserving energy and improving energy efficiency, optimizing the energy mix, and adding carbon sink of forests, grasslands, wetlands and oceans. We will enhance the capacity of climate change adaptation and coping with extreme weather and climate accidents in particular, strengthen monitoring, early warning and prevention, and raise the level of climate change adaptation of key sectors such as agriculture, forestry and water resources and ecologically fragile areas. We will make steady headway to carry out pilot programs of low-carbon provinces, cities, towns, industry parks and communities. We will adhere to the principle of common but differentiated responsibility, the principle of equality and the principle of individual capacity, actively and constructively participate in international negotiations on tackling climate change, and help establish a fair and reasonable global pattern of tackling climate change.

VI. Improving the System of Ecological Civilization

We need to speed up the establishment of the comprehensive system of ecological civilization, guide, regulate and restrict various behaviors of development, utilization and protection of natural resources, and make use of the system to protect the ecological environment.

- xvii. We need to improve legislation. We will abrogate all stipulations in existing laws and regulations conflicting with the requirement for further promoting the development of ecological civilization and improve the compatibility between different laws and regulations. We will conduct research and formulate laws and regulations regarding climate change, ecological compensation, wetland protection, biodiversity protection and protecting the soil environment, revise the Land Administration Law of the People's Republic of China, the Law of the People's Republic of China on the Prevention and Control of Atmospheric Pollution, the Water Pollution Prevention and Control Law of the People's Republic of China, the Energy

Conservation Law of the People's Republic of China, the Circular Economy Promotion Law of the People's Republic of China, the Mineral Resources Law of the People's Republic of China, the Forest Law of the People's Republic of China, the Grassland Law of the People's Republic of China, the Law of the People's Republic of China on the Protection of Wildlife, etc.

- xviii. We need to improve standards and systems. We will speed up the formulation of a number of standards regarding energy consumption, water consumption, land consumption, pollutant emissions and environmental quality, implement the system of "leading runner" in energy efficiency and pollution intensity, and accelerate standard upgrading. We will raise the construction standards of buildings, roads, bridges, etc. Regions with small environmental capacity, a fragile ecological environment and high environmental risks must implement the limits of pollutant emissions in selected industries and projects. We will encourage different regions to work out more stringent local standards according to law. We will establish the systems of label certification regarding energy efficiency and environmental protection that is geared to international practice and adapted to the specific conditions of China.
- xix. We need to improve the system of property rights of natural resource assets and the system of use regulation. We will carry out confirmation of rights and registration for natural and ecological space such as waters, forests, mountains, grasslands, wastelands and mudflats, and define the owner and regulator of natural resource assets in the spaces of land and resources and their responsibilities. We will improve the system of use regulation on natural resource assets, delimit the boundaries of development, utilization and protection of various spaces of land and resources, and realize the quality-based classification and cascade utilization of energy, water resources and mineral resources. We will put in place the strict systems of evaluation and examination on energy conservation, argumentation on water resources and water licensing. We will stick to and improve the most stringent systems of cultivated land protection and land conservation, intensify the regulation on the overall plan and the annual plan on land use, and reinforce the management of approval procedures regarding conversion of land. We will improve the system of plans on mineral resources and strengthen the management of access to mineral exploitation. We will promote the reform of the state management system for natural resource assets in an orderly manner.
- xx. We need to improve the system of monitoring the ecological environment. We will establish the system of environmental protection management for strict regulation on all pollutant emissions. We will improve the system of license for pollutant emissions and prohibit discharging pollutants without license and beyond the scope of stipulated standards or total amount. The facilities and equipment for discharging pollutants of organizations and individuals that illegally discharge pollutants, have caused or are likely to cause severe pollution must be closed down and

detained according to law. We will implement the system of eliminating technologies, equipment and products causing severe environmental pollution. We will implement the system of controlling the total emission of pollutants discharged by enterprises and institutions, adjust the indexes and categories of major pollutants when appropriate, and apply obligatory targets. We will improve the systems of environmental impact assessment, cleaner production examination, environmental information disclosure, etc. We will set up the mechanisms of regional linkage for ecological protection and restoration and pollution prevention and control.

- xxi.** We need to strictly observe the red lines of resources, environment and ecology. We will cultivate the thinking of sticking to bottom-lines, define and strictly observe the upper limits of resource consumption, the bottom lines of environmental quality and the red lines of ecological protection, and restrict all types of development activities within the scope of the carrying capacity of resources and environment. We will determine the reasonable "ceilings" of resource consumption, reinforce the management and control of strategic resources such as energy, water and land, intensify the control of energy consumption intensity, and carry out effective management of total energy consumption. We will continuously carry out management of three red lines, i.e. controlling the development and utilization of water resources, improving water-use efficiency and controlling the total emissions of pollutants discharged into water functional areas. We will designate permanent basic farmlands, implement strict permanent protection, control the total amount of new construction land occupying cultivated land, balance land requisition and compensation, and ensure that the amount of cultivated land does not decrease and the quality of cultivated land does not decline. We will strictly stick to the bottom-lines of environmental quality, define the principle of "focusing on improvement and preventing deterioration" for the quality of the air, water and soil environment as the redline of performing the responsibility of environmental protection by local governments at all levels, and specify the limits of total pollutant emissions and measures of environmental risk prevention and control. We will define the redlines of ecology in key eco-functional areas, areas sensitive to the ecological environment and areas with a fragile ecological environment, ensure that ecological functions are not weakened, the area is not reduced and the nature is not changed; scientifically define the redlines of ecology in forests, grasslands, wetlands, oceans, etc., carry out stringent management of requisition/occupancy of natural and ecological spaces, and effectively contain the trend of deterioration of the ecological system. We will establish the monitoring and early warning mechanism regarding the carrying capacity of resources and environment and take restrictive measures such as regional approval restriction in time in regions where resource consumption and environmental capacity are close to or exceed carrying capacity.

- xxii.** We need to improve economic policies. We will improve pricing, fiscal, taxation and financial policies and motivate and guide various entities to actively take part in the development of ecological civilization. We will deepen the reforms of natural resources and their product prices. Wherever possible, the price must be determined by the market. Prices set by the government shall reflect a. the difference between basic demand and non-basic demand as well as the efficiency of resource utilization, b. the costs of damages to the ecological environment and the benefits of ecological rehabilitation. We will further deepen the reform of the system of paid-use of mineral resources and adjust the standards of fees for using mining rights. We will appropriate more fiscal fund, conduct financial pooling, and render support to resource conservation and recycling, the development and utilization of new energy and renewable energy, ecological rehabilitation and development, R&D and demonstration of advanced and applicable technologies, etc. We will include products with high energy consumption and severe pollution in the scope of consumption tax. We will promote the fee-to-tax reform in environmental protection. We will speed up the reform of ad valorem collection of resource taxes, eliminate relevant charges and funds, and gradually extend the scope of resource taxes to the occupancy of various natural and ecological spaces. We will improve preferential tax policies in energy conservation, environmental protection, new energy and ecological development. We will promote green credit and help qualified projects in capital market financing. We will explore financing modes such as emission right mortgage. We will further promote pilot programs of liability insurance against environmental pollution, and conduct research and establish the catastrophe insurance system.
- xxiii. We will promote the market-based mechanism. We will accelerate the implementation of mechanisms regarding contract energy management, certification of energy-efficient, low-carbon and organic products, energy efficiency label management. We will promote energy-efficient power generation and dispatching, give priority to dispatch power generation resources based on renewable energy, and use power generation resources based on fossil energy in order of the energy consumption of power generation units and pollutant emissions. We will establish the system of the amount of energy saving and carbon emission rights, intensify pilot trading programs, and promote the establishment of the national trading market of carbon emission rights. We will step up efforts to carry out the pilot trading programs of water rights and foster and regulate the water rights market. We will comprehensively promote the establishment of the mining rights market. We will expand the scope of paid-use of pollutant emission rights and pilot trading programs, and develop the trading market of pollutant emission rights. We will actively promote the third-party treatment of environmental pollution and introduce non-governmental organizations to take part in the treatment of environmental pollution.

- xxiv. We need to improve the mechanism of compensation for ecological protection. We will scientifically define the rights and obligations of those engaged in ecological protection and beneficiaries and step up efforts to establish the operating mechanism of compensation by those damaging the ecological environment, payment by beneficiaries and reasonable compensation by those engaged in ecological protection. We will deepen the reform of the fiscal and taxation system, improve the system of transfer payment, merge and regulate the existing channels of compensation for ecological protection, enhance transfer payment in key ecological function areas, and steadily improve basic public service in this regard. We will establish the horizontal mechanism of compensation for ecological protection across different regions, guide compensation between areas benefiting from the ecological environment and areas carrying out ecological protection, as well as upper reaches and lower reaches of the river basin by subsidizing funds, industry relocation, talent training, and jointly developing ecological zones. We will set up an independent and fair system of assessing damages to the ecological environment.
- xxv. We need to improve the system of government performance assessment. We will establish the target system, assessment method as well as merit and punishment mechanism that reflect the requirements for ecological civilization. We will include targets for resource consumption, environmental damage and ecological benefits in the system of comprehensive assessment on economic and social development, significantly raise the weight of these targets, intensify target restriction, and abandon the concept of regarding economic growth as the only criterion in government performance assessment. We will improve methods of assessing government performance and implement differentiated assessment systems according to regional main functional areas. We will cancel assessment of GDP of areas where development is forbidden or restricted and key counties of national poverty alleviation and development with a fragile ecological environment; implement performance assessment with priority given to agriculture and ecological protection to main areas of agricultural products and key ecological function areas respectively; mainly assess the authenticity and completeness of natural and cultural resources in key ecological function areas where development is forbidden. We will commend and award regions, organizations and individuals that make outstanding achievements in the development of ecological civilization. We will work actively to prepare the balance sheet of natural resources and audit the responsibility of outgoing officials in natural resource assets and the environment.
- xxvi. We need to improve the accountability system. We will establish the accountability system of officials for the development of ecological civilization and improve the system of assessment and accountability on targets of energy conservation and emission reduction. We will strictly

implement the accountability system, place officials that run counter to the requirements for scientific development and severely destroy resources, the environment and the ecosystem on record, implement a lifelong accountability system for them, forbid them from being transferred to other key positions or promoted, and investigate the accountability of those who have left their office under order. We will implement the system of persuasion and admonition for officials who don't do their best to promote the development of ecological civilization; seriously investigate the accountability of officials who ignore resources and the ecological environment, blindly make decisions and cause severe results; and investigate the regulatory accountability of officials who perform their duty perfunctorily, conduct weak regulation, neglect their duty and perform malfeasance according to discipline and law.

VII. Enhancing Statistical Monitoring and Law Enforcement Supervision of the Development of Ecological Civilization

We need to adhere to the problem-oriented principle, focus on weak points, enhance statistical monitoring and law enforcement supervision, and strive to ensure the smooth development of ecological civilization.

- xxvii. We need to enhance statistical monitoring. We will establish the comprehensive target system of evaluating ecological civilization. We will speed up capacity building in statistics, monitoring and calculation in the fields of energy, mineral resources, water, air, forests, grasslands, wetlands, oceans and water losses and soil erosion, sanded land, soil environment, geological environment, and GHGs, enhance application of information technologies, improve accuracy and timeliness, and realize information sharing. We will accelerate the establishment of the online system for monitoring energy consumption of energy-intensive organizations. We will establish the system of statistical targets for a circular economy and the system of evaluation targets for the reasonable exploitation and utilization of mineral resources. We will use technical approaches such as satellite remote sensing to carry out round-the-clock monitoring on the protection of natural resources and the ecological environment and improve the monitoring network system covering all resource and environmental elements. We will enhance the capacity of preventing and controlling environmental risks and conducting emergency management of environmental accidents and improve the system of survey, monitoring and risk assessment on the environment and health. We will carry out the national survey and assessment on ecological status regularly. We will allocate more fiscal fund of governments at all levels, including budgetary investment, to basic capacity building in fields such as statistical monitoring.

xxviii. We need to reinforce law enforcement supervision. We will reinforce legal supervision and administrative inspection. We will execute "zero tolerance" towards various behaviors violating environmental laws and regulations, intensify investigations, and impose severe punishment on illegal behaviors and irregularities. We will strengthen law enforcement inspection and special supervision over behaviors such as wasting energy and resources, illegally discharging pollutants and destroying the ecological environment. Regulatory departments of resources and environment must carry out administrative law enforcement independently. Officials are forbidden to illegally intervene in law enforcement activities. We will improve the mechanism connecting administrative law enforcement with criminal justice and reinforce the cultivation of personnel responsible for local law enforcement and for emergency response and rescue of environmental accidents. We will strengthen the supervision over the ecological environment in resource development, transport construction, tourism development, etc.

VIII. Accelerating the Cultivation of Good Social Morals of Promoting the Development of Ecological Civilization

The development of ecological civilization is vital to all walks of life and households. We need to give full play to the enthusiasm, initiative and creativity of the people, enhance their cohesion, pool their wisdom, and gather their power and financial resources to create the green lifestyle.

xxix. We need to raise the public awareness of ecological civilization. We will actively cultivate the ecological culture and ecological morality and include ecological civilization into the scope of mainstream social values and the important content of core socialist values. We will guide the whole society to foster the awareness of ecological civilization, starting from education among children and youngsters, families and schools. We will define education on ecological civilization as an essential part of quality-based education and include it in the national education system and the official education and training system. We will define the ecological culture as an essential part in the establishment of the modern public cultural service system, tap excellent traditional thinking and resources related to the ecological culture, create a number of cultural works, and establish a number of educational bases to meet the public demand for the ecological culture. We will mobilize the public to take part in the development of ecological civilization by means of typical demonstration, exhibitions and displays, job creation, etc. We will effectively organize special publicity campaigns such as the World Earth Day, the World Environment Day, the World Forestry Day, the World Water Day, the World Oceans Day as well as the National Publicity Week of Energy Conservation. We will give full play to the role of news media, foster rational and positive public opinions, strengthen the dissemination on the national conditions of resources and environment, promote laws, regulations and scientific knowledge related to ecological civilization, report advanced models, expose negative examples, raise

public awareness of conservation, environmental protection and ecology, and create the social atmosphere of always advocating ecological civilization among the public.

xxx. We need to foster the green lifestyle. We will advocate the consumption value of being diligent and thrifty. We will carry out extensive green life campaigns, promote the public to choose the approaches of being diligent and thrifty, green and low-carbon, polite and healthy in the aspects of clothing, food, housing, transportation and travelling, and resolutely resist and oppose all forms of extravagance, waste and unreasonable consumption. We will actively guide consumers to buy energy-efficient, environmentally-friendly and low-carbon products, such as energy-efficient and new energy vehicles, energy-efficient home appliances and water-saving devices, reduce the use of disposable goods, and restrict excessive packaging. We will make zealous efforts to promote green and low-carbon travel, advocate the mode of green life and leisure, and strictly restrict the development of energy and water-intensive service sectors. Catering businesses, cafeterias and families must carry out campaigns against food waste. CPC and government departments and SOEs must take the lead to practice diligence and strict economy.

xxxi. We need to encourage active public participation. We will improve the system of public participation, accurately disclose various environmental information in time, expand the scope of disclosure, guarantee the public right to know, and safeguard the environmental rights and interests of the public. We will improve the systems of whistle blowing, hearing, public opinion and public supervision, and establish the system of public participation. We will establish the system of public environmental interest litigation. Relevant organizations may lodge a litigation of public interest against behaviors such as polluting the environment and destroy the ecosystem. We will expand public participation in the initiation, implementation and post-assessment of construction projects in an orderly manner. We will guide all types of social organizations engaged in the development of ecological civilization to pursue healthy and orderly development and give play to the role of NGOs and volunteers.

IX. Earnestly Strengthening Organizational Leadership

We need to improve the leadership system and working mechanism for the development of ecological civilization, strive to make explorations and innovations, and earnestly implement the blueprint regarding the development of ecological civilization.

xxxii. We need to reinforce overall planning and coordination. The CPC Committees and governments at all levels must assume the overall responsibility for the development of ecological civilization, set up the coordination mechanism, and develop the working pattern which is conducive to promote the development of ecological civilization. Relevant departments must conduct close

coordination and cooperation in line with the division of duties and responsibilities to create powerful synergy for the development of ecological civilization.

- xxxiii. We need to explore effective modes. We will lose no time to work out the overall scheme on the reform of the system of ecological civilization, carry out extensive development of model areas of ecological civilization, and conduct research on the effective modes for the development of ecological civilization in areas at different development stages, with different endowment of resources and environment as well as different positions of main functions. All regions must identify the bottleneck that restricts the local development of ecological civilization, work actively to practice innovations in the system of ecological civilization, and strive to make significant breakthroughs. We will summarize effective methods and successful experience in time, improve policies and measure, establish effective modes, and enhance promotion in this regard.
- xxxiv. We need to carry out extensive international cooperation. We will coordinate China's domestic and international efforts, step up efforts to promote the development of ecological civilization from the global perspective, build up the image of a major responsible country, and transform green development into new comprehensive national strength, comprehensive influence and new advantage in international competition. We will carry forward the spirits of inclusion, mutual reference, cooperation and win-win, reinforce the dialogue, exchange and pragmatic cooperation with other countries around the world in ecological civilization, introduce advanced technology, equipment and expertise, and help to realize global ecological security. We will intensify south-south cooperation, carry out green aids, and render support and assistance to other developing countries.
- xxxv. We need to ensure implementation. The CPC Committees and governments at all levels as well as relevant departments under the Central Government must lose no time to propose implementation plans according to the requirements of these Opinions, conduct research and formulate regional, sectoral and special plans based on these Opinions, define targets, tasks, division of duties and responsibilities as well as timing, and ensure all policies and measures are implemented to the letter. All regions and departments must report the progress of implementation to the CPC Central Committee and the State Council in time and send a duplicate to the NDRC. The Central Government must organize special supervision and inspection on implementation in due course.