2017 CCICED POLICY RECOMMENDATIONS

Ecological Civilization in Action for a New Era

Introduction

Since its inception in 1992, the China Council for International Cooperation on Environment and Development (CCICED) has provided the State Council with policy recommendations each year. We have appreciated the attention given to these recommendations, and now, in this first year of Phase VI (2017-2021), we are honored to continue this productive working relationship.

Members welcome the environment and development outcomes of the recent 19th CPC Congress. Clearly China will place major emphasis on ecological civilization. The shift to a 2020-2050 green pathway is very important to meet human and ecological needs, including planetary life support systems. The future will not be clean and green without the active and full participation of businesses, governments and the general public. By securing full public participation, the new 2050 pathway of a Beautiful China will speak to our hearts as well as our heads.

CCICED members support the efforts of China in its War on Pollution, environmental protection and management, and the mainstreaming of environment into the economy, for example in the efforts for a national carbon trading system and green taxation policies that we hope will be well underway next year. We support the 19th CPC Congress focus on technological and management innovation, and also on considerable attention to improved rule of law and green governance. CCICED Phase V recommendations on institutional reform, transparency and public participation, environmental rule of law improvement, and green finance remain highly relevant.

Also, welcome is China's enhanced role in supporting and sometimes leading global environmental governance improvements, including commitment to the Paris climate change agreement, UN 2030 Sustainable Development Goals (UN SDG2030), greening of the Belt and Road Initiative (BRI) and South-South Cooperation. CCICED Members also believe that it is timely for China to take a stronger role in global ocean sustainability and to help make oceans free of plastics and other pollutants; and to accelerate efforts under the Global Convention on Biological Diversity (CBD), including topics such as invasive species; and to stem global desertification.

China's voice and experiences in building an Ecological Civilization can be very powerful and inspirational for other countries. Such efforts could be further enhanced by advocacy and communication efforts that CCICED will be glad to support. Domestically, it is important to build a strong linkage between SDGs and China's five-year plans and to use the SDGs as a framework and basis for improving government policies and the efforts of business and communities.

China has made significant progress over the first two years of the 13th Five Year Plan; but there is an urgent need to speed up environment and development reforms during the remaining years of this Plan. Creating a moderately well off society by 2020 must include considerable improvement in environmental conditions. By accelerating

Ecological Civilization action now, positive outcomes during the following two or three Five Year Plans stand a better chance of being achieved.

Six Pillars for a Green Transition in the New Era

China's vision of *a community with a shared future for mankind* suggests a desire to find win-win solutions for problems nationally, regionally, and globally. Achieving domestic environmental goals will help China become a global leader in green development and secure the fulfillment of SDG2030 goals. The greatest opportunity of the 21st Century is the transition to green development. China can serve as a green beacon of hope for many others, if it is successful.

That China is setting New Era goals including pivot points of 2020, 2035 and 2050 is a significant step forward. But to secure a nationally and globally safe approach, development must remain within ecological planetary boundaries such as those for biodiversity, geochemical cycles, and climate change—tasks that will extend to 2100 and beyond. We must keep such long-term visions and aspirations in focus, while ensuring they influence today's decisions. Abstract concepts of ecological civilization and green development must become more actionable through innovative thinking, green education, and pilots followed by scaled up efforts. The following six policy pillars are suggested for a long-term, overarching approach to China's green transition.

Pillar 1: Establish new green development narratives for 2020 to 2050. *Build a consistent and coherent set of environment and sustainable development policy objectives from now to 2050, and identify the main policy and institutional reforms supporting implementation.* Stringent environmental policies and green development can be fully implemented only after there is a broad understanding that green development is not a burden but a driver for better lives and livelihoods. Let all levels of government and people throughout China truly understand differences between green development based on ecological civilization compared to other development models.

Pillar 2: Ensure a level playing field for green industries and other green development*. Create conditions for fair competition and provide appropriate incentives (e.g., payment for environmental services, subsidies, green tax reform).* Efforts may include: innovative and cost effective methods to internalize environmental costs of products and processes; reassessment of subsidy and support policies for fossil energy, chemical industry, and chemical agriculture; full implementation of recommendations from the G20 report on green finance; strengthened incentives to shift from end-of-pipe towards treating pollution at source; incentives for green industries and green products; implementation of a more aggressive environmental enforcement and compliance system in a fair and consistent manner across China's regions following rule of law principles; and consideration of how public support for both green and traditional industries (in terms of funding, R&D, talent development, infrastructure, and green government procurement) can best enhance their economic efficiency and environmental performance. Strict liability for environmental impacts is the greatest driver of the green economy and a multi-stakeholder approach engaging with the private sector and the public is needed.

Pillar 3: Introduce pro-green incentive mechanisms and conduct pilot projects. *Carry out systemic reform to overcome the inconsistencies among the many institutions and*

policies regarding green development. Many policies can be piloted in an all-round way on a small scale. Promote new development performance measurement based on standards of a better life, natural capital assessment, performance assessment of local officials, land management, taxation and finance.

Pillar 4: Build a digital green economy for the future through a new green stimulus plan. *Boost the confidence in green development by issuing a number of major landmark policies to accelerate development of green industries: implement a new stimulus plan for green investment.* Different from the conventional plans of investment in infrastructure, the new stimulus plan or plans should focus on investment in next-generation digital infrastructure, new eco-environment, culture, and other non-conventional green infrastructure intended to create demand for green goods and services; stimulate demand for green services by adjusting work arrangements and improving career flexibility; assess development objectives in areas such as new energy, electric vehicle, thermal power plants and green building, and explore the feasibility of conducting small-scale pilots to promote green transition with more bold approaches. Target adjustments of green development policies to include ecological function zones.

Pillar 5: Build a more inclusive society and resilient economy. *Provide assistance to specific groups, sectors, and regions that are adversely impacted by the green transition, and establish corresponding comprehensive risk management systems.* A green transition should not be perceived as threatening or dangerous. Thus—establish a unified national unemployment insurance system; provide special assistance and capacity building through education and training to assist workers affected by the shutdown of excess capacity and zombie enterprises; establish special transfer payments to help regions (especially counties) where the revenue is largely sourced from high-pollution enterprises in order to reduce their dependence on such sources; pay greater attention to the substantial overlap between impoverished areas and main functional zones, with promulgation of appropriate tailored measures; and develop integrated risk prevention and control mechanisms in order to improve economic resilience.

Pillar 6: Promote strengthening of the global green governance system. *Formulate new narratives of global green development based on ecological civilization thought.* Foster development of green governance systems and incentive mechanisms at the international level to promote green development in all countries. Facilitate climate change negotiation to shift from “burden sharing” to “opportunity sharing” and from “zero-sum” competition to “win-win” situations; incorporate green standards and objectives into appropriate international protocols for investment, trade and finance, as well as into other international mechanisms such as G20; establish a global knowledge center for green development under the framework of South-South Cooperation, BRI and BRICS+, to foster green transition in other developing countries. Implement strict environmental, social, and governance standards in strategies such as Belt and Road Initiative, South-South cooperation, and China's overseas investment. If China can successfully explore a new path towards green development, it will be a major contribution to common destiny and the modernization of low-income countries.

Five Specific Recommendations

1. Create a Fifteen-Year Strategy for War on Pollution Action Plans

For the 15 years ahead there should be a longer-term and integrated effort focused on cost-effectiveness, synergies, and ways to build public confidence about eventual results from the War on Pollution. Long-term risk reduction and management is required, with avoidance of technology and infrastructure lock-in. Clean coal and synthetic natural gas for power generation should be transient technologies, bridging from old to new during China's green transition. Large-scale deployment of 'clean coal' needs an exit plan and an exit budget to protect China from being locked into a path of prolonged fossil fuel use. Green adaptive planning should be part of the strategy.

While the Air Action Plan is the first to come up for renewal, it would be helpful to develop an overall plan that incorporates all three categories, plus one other—marine pollution. Ideally, an integrated rollout should be ready by 2020 with targets up to 2035, the pivot point when China expects to be a "basic modern country". The new Strategy should focus on innovation, for example, regulating plastic materials production and disposal at source in order to reduce the burden of such waste entering rivers and the sea.

Through co-benefits, China's pollution reduction plans can contribute to a steady transition for meeting the Paris targets of staying within a global 1.5 or 2 ^{0}C increase. Action on black carbon sources will also reduce $PM_{2.5}$ pollution and reduce ozone pollution. Action on methane emissions will become very important. Monitoring of co-benefit results is essential, especially for multi-pollutant, multi-region and multi-sectoral coordination locations. Prime cases are the Yangtze River Economic Belt, the Hebei-Beijing-Tianjin region as well as the international Belt and Road initiative. Capacity building is a key concern to address complex integrated pollution control.

2. Fully Incorporate Demographic, Cultural, Social and Public Participation Aspects into China's Ecological Civilization Action Plans

Considerable attention has been given to environment-economy relationships in China. In the longer-term, social-environmental linkages may be among the most significant. This is the case for environmental related social unrest ('Not in My Back Yard'), management of nature protected areas, ecological redlining, climate adaptation, urban migration, and relationships of poverty reduction and the environment. Demographic changes such as an aging population will influence environmental health impacts including mortality from pollution. Specific cultures bring forward their particular approaches to local resource management and stewardship. Full public participation in environmental decision-making is still lagging in China and in many partner countries. And all citizens require full access to the courts to protect their environmental rights. The intersection of eco-environmental protection with improved health, education, and access to rural and urban opportunities has unexplored possibilities. Over time, and with balanced economic and social reform, new sustainable livelihoods and improved living conditions will be created. Four components are highlighted below.

First is to act on environmental health issues more effectively. The War on Pollution needs specific targets to reduce health impacts from all major pollution sources. More efforts should be made to fully understand the linkages between environment and health, and results made readily available to the public. Environmental risk assessments need to be made part of standard procedures for both workplace safety and for encouraging green transitions in many industrial processes. Also, transparency in environmental

knowledge sharing can be used as a tool for avoiding local overreaction to some environmental incidents and for important planning decisions at all levels.

Second is the need to create more long-term livelihoods based on ecological construction (and restoration), especially for people in more remote parts of the countryside. The permanent nature of such employment needs to be guaranteed, including reform to existing eco-compensation programs. Cultural and gender specific experience can open new opportunities.

Third is to build Ecological Civilization co-management systems to improve ecological and other services in nature reserves, parks, ecological redline areas, and in other public lands that sometimes are considered to be of low value. Class 4 and 5 river zones and some contaminated lakes and coastal areas are important candidates for this type of management. Initiatives, when located in Autonomous Regions populated by minority cultures, should draw upon the skills and knowledge of local people. Forming a national Ecological Conservation Corps might be considered for improving contaminated soils, greening deserts, and creating ecosystem–based carbon sinks.

Fourth is to provide more opportunities for public participation in assessment of projects, voluntary efforts for improving ecological services in the countryside and cities, for wildlife conservation, etc. Multi-stakeholder involvement in decision-making processes and community-based conservation activities should be encouraged. As Chinese green transitions take hold there will be innumerable opportunities for local services: to maintain good conditions including environmental monitoring, to safeguard local ecological redline spaces, and to participate in local environmental planning and law enforcement. High biodiversity landscapes of tomorrow will become magnets for recreation and tourism, requiring trail-maintenance and many other initiatives suited to public responsibility. Protection and enhancement of ecological services is an excellent way to ensure that no man or woman is left out in the effort to eliminate poverty.

Each of these four components may be influenced by gender considerations. Providing eco-environmental and green development opportunities will reduce family-splitting through migration from rural areas. Tourism, protection of ecological services, and preservation of traditional culture should give opportunities to women and men in villages and towns. Gender-related aspects of climate change, whether risk of natural disasters, or climate adaptation initiatives require attention. Women and children exposed to toxic environmental situations are vulnerable.

3. Build a Comprehensive Eco-Reform Process for Green Development and Ecological Civilization

Fragmentation of decision-making remains a serious problem. At a fundamental level, integrated efforts for addressing land and water use on a regional scale are necessary, including better information sharing among regulatory agencies. Definition of responsibility for preservation and restoration of ecosystems can still be improved. The ecological redlining and integrated planning approach now being taken in the Yangtze River Economic Belt is a useful example. Today’s rapid urbanization must become green urbanization, including ecologically sensitive planning with improved utilization of resources like space, soil and waste. New data collection techniques can help to document resources of the city. We have to reduce materials wastes and pollution, and

enhance recycling inside the cities. Old manufacturing towns should be reinvented with people in focus. Many urban opportunities exist for greater use of citizen environmental monitoring and science.

The connection between urban and rural development requires a greater level of eco-reform. Some reforms must be very local and satisfy the desire of local citizens seeking a better life and improved lifestyle. Demands to be met include access to green transportation, comfortable and efficient living space, improved safety and environmental health, green space such as parks and other amenities. Smaller towns and peri-urban areas need to realize their own style of a green living environment. Ecological services must be bolstered throughout the countryside. In China and worldwide such services are under threat. There must be a dramatic reversal, so that ecological services become the prime value even for agricultural and other material-producing lands and waters.

3a. By 2020 every city and town in China should create and manage its own green development and Ecological Civilization goals for implementation during 2020-2035. Needed is a National Green Urbanization Dream that can be shared among communities large and small, old and new. This Dream would be to create highly livable neighborhoods and urban ecosystems with continuous improvement of environmental, social and economic conditions. The suggested period to 2035 coincides with the time of mass migration from countryside to cities that will complete the transition of China's people into 70% or more living as permanent urban residents. A 15-year time horizon will allow communities to act on their dreams as well as on meeting very specific short-term needs. Each urban community should creates its own green development destiny, with full public participation, and with the encouragement of governments. Plans can be based in part on the large number of experiments underway, including Low Carbon Cities, Ecological Civilization pilot initiatives, and many other efforts. It is also possible for China to draw more extensively on international experience of eco-cities, green cities, green urban renewal, and many urban planning successes elsewhere. Climate change (both mitigation and adaptation) must become an important element considered in all community green development plans. Also, better biodiversity conservation actions are needed so that there is respect for the role people in the countryside play in maintaining land and water in good condition, supplying ecological services and the food and natural resources that cities require. Eco-compensation by cities to support upstream stewards of land and water should be part of urban green plans.

3b. Make ecological services the prime value of China's rural landscapes and waters by 2035 to 2040. The services people and communities receive from ecosystems fall into four categories: *provisioning* (food and fiber, natural medicines), *regulating* (climate, water quality and runoff, disease control), *supporting* (nutrient cycles, pollination), and *cultural wellbeing* (spiritual and recreational benefits). Value of provisioning is generally the easiest to monetize and therefore quantify, while the value of the others generally are underestimated. The danger is that food, fiber, and other material needs may continue to expand at the expense of the other functions. These long-term matters affect rural employment potential, future green agriculture opportunities, the safety of urban communities, and protection of China's rich biodiversity. China must continuously expand regulating and supporting ecosystem services to reach double or triple today's level by 2040 to 2050. Also required is a better

balance among the four types of ecosystem services, and explicit recognition that all types are important to rural sustainable livelihoods. Fostering and protecting ecosystem services should be of major concern in the spatial planning of infrastructure, along with ecologically appropriate industrial site location, especially within rural areas. As soon as possible, but no later than 2035 to 2040, the primary objective of *all* land and water use should be enhancement and protection of the ecological services they provide—even in important agricultural regions and in peri-urban areas.

4. Create a High Profile National Campaign on Sustainable Production and Consumption

Government should use all available tools to promote sustainable production and consumption. Targeted strategies should be developed and implemented on a sector-by-sector, coordinated basis by the time of the 14th FYP. This effort should take into account major needs and desires: actions that will improve happiness, health and wellbeing but with reduced ecological footprint; comfort and convenience at home, in schools, and in the workplace; plus new green livelihood possibilities. More attention should be given to promoting sustainable consumption at household level. Dedicated centers and programs should be established, drawing on overseas and local examples. To guide consumers, encouraging measures are just as important as pricing. The sharing economy will bring more opportunities to reduce waste, but also bring their own waste and other problems. Such problems should be tackled without delay. A good understanding of social behavior is needed to nudge consumers towards new values. In addition, there must be eco-design and resource efficiency certification standards for products. Designers and manufacturers must adopt and adhere to these. Desirable policies include removal of harmful subsidies, phase-out of harmful chemicals, increased taxation of wasteful or polluting products and services, and ensuring that environmental and health liabilities are fully factored in and paid for by polluters.

There must be radical thinking for the future of sustainable production. The basics for a 'Fourth Industrial Revolution' provide a starting point for China and other countries that have invested heavily in science and technology capacity. Consider the world of 2025-2035 when the following technologies are widespread: wind and solar power; smart electrical power grids; electric automobiles, lithium battery production; robotization; innovation in land management including remote sensing and detailed mapping for ecosystems and sensitive landscapes; organic agriculture based on environmentally friendly, water-efficient biotechnologies; traceable green supply chains so that consumers, builders and institutions can make environmentally sound choices in their purchases, especially via continued advances and applications of IT.

Innovation in management approaches within enterprises, governmental agencies and communities is essential to create the enabling circumstances for behavioral change. Some important means are: (1) green financing, tax and fiscal reform to ensure a level playing field for green products; (2) more rigorous enforcement (and independent oversight) of environmental laws, regulations and standards; (3) greater access to credible information about environmental sustainability and safety of products; (4) better technologies; (5) better skills, and (6) better infrastructure (for recycling in particular). A shared vision of sustainable supply chains is required.

5. Strengthen Global and Regional Green Governance

It is timely for China to play a greater role in global environmental governance. China may transfer its experience and new models of environment and development to assist other countries in their green transitions. The power of examples is strong. There is a need for a solid strategy to identify feasible choices for leadership and partnership—climate change is the most important case. This topic, plus ocean green governance, and greening of the Belt and Road Initiative are briefly discussed below. Biodiversity protection and utilization should also be considered, especially since China will host the 2020 Biodiversity Global Convention Committee of Parties.

Climate change: Current commitments under the Paris Agreement, even if fully implemented, will be insufficient to achieve a satisfactory level of global warming mitigation. Given China's key roles as an emitter, and also as a highly engaged international partner in this global effort, new opportunities for improvements must be found. A 2050 pathway is a critical tool to address the long-term changes needed to solve the climate problem. China needs to start early to develop its own Mid-Century Climate Strategy and link it with others. Also, China's national Carbon Trading initiative could be a model for replication at an Asian regional level.

Oceans: The perilous ecological situation of the world's oceans is receiving global attention. Yet more national wealth generation is expected from the Blue Economy. Environmental and sustainable development matters are not fully covered by the existing ocean agreements, including the overarching Law of the Sea global framework. For example, the difficult matter of ocean contamination by macro and microplastics is not covered well. China should create a national strategy that will more clearly provide for green development of its Blue Economy. This strategy will need to focus attention not only to the use of China's own ocean space, but also on China's use of the high seas and waters subject to dual rights. Concurrently, China can play an important role in the ongoing implementation of global ocean governance. China can influence other countries to build a better foundation for global ocean health and blue economy by using its well-placed position and drawing on its own experience and solutions.

Belt and Road Initiative: The third suggestion for a high priority governance need is greening the BRI. China's green development approach, the UN SDG2030 goals, the Paris Climate Agreement, Biodiversity and Desertification global accords, and ecological civilization should become central features in the Belt and Road Initiative. Through the BRI, China can show ecological civilization in action, whether on land or sea. Significant institutional capacity building is needed in China as well as in BRI countries. Also, a Belt and Road Green Governance Mechanism including information disclosure, public participation and access to arbitration, should be established. Comprehensive early stage planning that highlights environmental and social concerns should be applied in BRI projects. Early ecosystem-scale planning in collaboration with partner countries where infrastructure development will take place is essential for BRI to be green and sustainable. The same reasoning should be applied to China's overall efforts in South-South Cooperation initiative.