Introduction: Overcoming global shocks while creating green opportunities

The world faces a future likely to be ridden with shocks of many types. Many will involve environmental risks. Important nations seek to withdraw from environmental and other international agreements; trade wars can influence global climate change; biodiversity loss affects poverty reduction. China is already a very significant player in green development. The great challenge now is for China to deepen its domestic progress while at the same time strengthening its international efforts. This is necessary to secure a Beautiful China and a Healthy Planet for future generations.

CCICED Members welcome China’s enhanced role in global environmental governance improvements, including its strong commitment to the 2015 Paris climate change agreement, participation in the UN 2030 Sustainable Development Goals, efforts to green its Belt and Road Initiative (BRI) and its effort on environment and development for South-South Cooperation. CCICED Members also believe that it is timely for China to take a stronger role in global ocean sustainability including helping to reduce the plastics and other pollution burdens; and to accelerate efforts under the Global Convention on Biological Diversity (CBD) and other global and regional agreements, especially with a view to Beijing hosting the CDB COP15 in 2020. Clearly the world needs prominent torchbearers to successfully secure innovative paths towards a healthy planet.

Specific Policy Recommendations

1. Upgrade China’s contribution to global climate governance through enhanced action on climate change mitigation within China

The recent IPCC Special Report on Global Warming of 1.5°C tells us that the gap between action taken since the Paris Agreement and needed global action to avert catastrophic climate change is larger than previously thought. Domestic efforts and international collaboration must be intensified. Innovation will be needed at the systems level— not only technological innovation, but also institutional, policy, economic, business model, consumer and behavioral innovation.

Given China’s impressive progress so far, it is evident that China’s greenhouse gas emissions can peak earlier and at a lower overall level. Action on climate change can play a useful role in promoting financial stability, poverty alleviation and pollution control, as well as supply side structural reform.

To capture the opportunity of recent Chinese institutional reforms, the government should:

1) Institutionalize an effective coordination mechanism, led by the National Leading Group for Climate Change and Energy Conservation and Emission Reduction, for harmonizing action on climate change with multiple strategic goals, based on increasingly ambitious plans in the short term via the 14th Five Year Plan, in the medium term via a revised Nationally Determined Contribution (NDC) for 2030 and Beautiful China 2035, and in the longer term via 2050 Strategy.
2) Provide a strong institutional basis for co-management of climate change and air pollution and synergy with other environmental issues across the dimensions of regulation, data transparency, monitoring, enforcement, supervision and accountability. Climate change targets should be incorporated into the existing environmental protection supervision system led by the Central Committee of the Communist Party of China Environmental Protection Supervision Committee. Local capacity building will be essential.

3) Tighten coal control policies and the promotion of renewable energy and energy efficiency. Specifically, China should end coal quotas and long-term contracts, control industrial coal use and help coal-dependent provinces to transition to other sources of prosperity. Renewable energy subsidies which had already been agreed upon should be fully paid. In terms of efficiency, China is well positioned to lead in the implementation of the Kigali Amendment to the Montreal Protocol by introducing world-leading standards for domestic and exported air-conditioning and demonstrate centralized cooling at scale.

2. Play a strong leadership role in developing effective post-2020 global biodiversity goals under the Convention on Biological Diversity (CBD)

The 15th Conference of the Parties (COP15) of the CBD will be hosted by China in 2020. This event is a major opportunity to set a new course in global green governance, and a platform to demonstrate China's commitments and achievements towards becoming an ecological civilization and actively participate in biodiversity and ecosystem global governance. The desired outcome would be to dramatically reduce and reverse biodiversity losses in all parts of the world (in short, to ‘bend the curve’ of biodiversity loss). COP 15 is a major opportunity to accomplish objectives noted below.

1) Establish an effective mechanism to ensure that the CBD strategic goals can be achieved on schedule, including the following considerations: (i) active participation of business, civil society and all actors in society; (ii) creative implementation mechanisms, periodic review and scaling up instruments; (iii) continuously increased ambitions reflected in clearly defined Nationally Determined Contributions (NDCs), as well as contributions by other stakeholders; and (iv) actively communicated and aligned CBD goals that promote synergies with other international agendas including climate change and ocean governance, trade and investment and the SDGs.

2) Showcase China's biodiversity conservation experience to other nations and to the international community. Focus on China’s domestic and global efforts, including but not limited to ecological civilization, redlining, green finance, natural resource assets accounting and auditing, strengthened ecological law enforcement, national park-centered nature conservation systems and mainstreaming biodiversity concerns into other sectors. Spatial planning for infrastructure or renewable energy should be done in ways that to avoid, minimize or offset adverse impacts.

3) COP15 will cast a spotlight on the overseas impacts of China’s investment and trade. China should be ready by taking immediate steps to strengthen greening of the Belt and Road Initiative (see section 4 below), and to reduce environmental, climate and biodiversity impacts arising from China’s massive imports of commodities such as timber, palm oil, soybeans, and seafood.

4) Build successful and on-going engagement involving heads of state. There is a need for proactive outreach linked to a proposed Heads of State Summit at the UNGA in 2020, and to build a broad movement of support from all actors in society for the significance of the COP15 event similar to what occurred in the Paris Climate Change COP held in 2015. Appoint a Special Envoy for Nature for preparations of COP 15 and beyond.

3. Develop an ecological civilization approach for China in national and global ocean governance

Marine ecosystems are threatened in many parts of the world’s oceans amid unsustainable levels of fishing and marine aquaculture, coastal and offshore habitat destruction, mounting levels of pollution, climate change impacts, and limited efforts on creating marine protected areas and biodiversity conservation. China faces an emerging crisis in its coastal and marine ecosystems wrought by factors such as those mentioned above. Furthermore, through its distant water fleets and seafood imports, China has great influence on marine ecosystems in many parts of the world.

Recommendations related to biological resources:
1) China should enact a new aquaculture law that emphasizes best practices, and places clear limits and strict enforcement policies on waste discharge. The law should set out science-based carrying capacity limits that can be incorporated into China’s National Marine Functional Zoning. The law should mandate stock reporting by all facilities, authorize routine onsite inspections, and include other provisions that mitigate impacts arising from use of antibiotics or other chemicals.

2) Implement a high-tech monitoring system for marine science assessments to combat corrupt and illegal activities and that will highlight responsible fisheries, habitat and environmental protection.

3) Develop a national plan of action to restore lost marine ecosystem functions and services. The plan should include actions governed by the Ministries of Agriculture and Rural Affairs, Ecology and Environment, and Natural Resources, as well as coastal provincial and local agencies.

4) Establish a national “marine ecological report card” on the health of China’s coastal and marine ecosystems.

**Recommendations related to marine pollution and coastal habitat issues:**

1) Improve real-time monitoring of primary rivers and outlets discharging into the sea. Improve the connection of water quality standards between surface fresh water and seawater. Integrate governance mechanism between the Lake and River Chief System and the Bay Chiefs.

2) Formulate a national action plan for marine debris pollution prevention and control. Speed up the research and application of innovative approaches for substitution of plastic products and for waste treatment. Recognize the need to mobilize partnerships for action on plastic pollution and invite such platforms to take shape in China. The recently signed accord between China and Canada on reducing plastics affecting the oceans is an excellent example.

3) Strengthen Chinese research on emerging marine environmental issues of global concern. Priority topics include ocean acidification, ocean plastics and microplastics, oxygen deficiency in hotspot areas, and other emerging marine environment issues of global concern.

4. **Carry out the greening of the Belt and Road Initiative (BRI)**

With its strong emphasis on infrastructure, the BRI requires careful consideration of climate impacts and long-term ecological changes. Environmental impact assessments with public participation should be at its core. To help in the selection and design of projects, there should be alignment of BRI initiatives with the Paris Climate Change Agreement, global biodiversity targets, and the UN 2030 SDGs. China should apply internationally agreed environmental and social safeguards, transparency rules and public participation at an early stage of planning, to reduce environmental and social risks.

Several policy recommendations are proposed:

1) Commission independent feasibility studies and economic, social and environmental impact evaluations as well as solicit the views of the public at local levels. Recruit independent review and verification experts and ensure information transparency. Design and implement a green arbitration mechanism for Belt and Road projects. Establish a “BRI Ecology and Environment Big Data Platform” which is publicly accessible, for broad information disclosure.

2) Launch a ‘Greening cities along the Belt and Road’ initiative and create a network of partnerships among countries along the Maritime Silk Road to promote sustainable marine governance.

3) Provide support to national environmental agencies along the BRI on human, technical and scientific capacity building. Support the development of platforms for sharing knowledge and experience in green investment such as the Global Green Finance Leadership Program and the Sustainable Banking Network.

4) Set mandatory requirements for responsible investment overseas (replacing the current voluntary guidelines for responsible overseas investment). Implement gender mainstreaming as part of best practices in BRI projects.

5) Launch a ‘Greening the BRI’ fund to test and demonstrate the business case for selected sustainable Belt and Road infrastructure investments.

5. **Strengthen green development performance in the Yangtze River Economic Belt (YREB)**

The YREB concept is distinctive and represents a significant new way of approaching river basin management for China and indeed possibly the rest of the world:

1) Strategically focus remediation and restoration efforts on problems with large impact on the overall river basin health. The following actions are needed: (i) continue efforts to reduce the
volume of solid waste pollution causing serious water pollution in upstream and downstream areas through to the oceans; (ii) develop economic incentives for collecting and disposing solid wastes; (iii) promote the recycling of waste materials and reduce the incineration rate; (iv) improve livestock and poultry farming pollution control measures; (v) improve the performance of wastewater treatment plants and treatment of sludge; (vi) pay more attention to social concerns through public awareness campaigns on solid waste treatment and recycling activities.

2) Adopt a multiple stakeholder engagement approach to carefully identify and address any negative impacts on communities and livelihoods. Integrate gender via a multiple stakeholder engagement approach to good governance. Increase public awareness through education campaigns.

3) Develop both compulsory and voluntary instruments that will best ensure robust business-sector participation in conservation finance. ‘Development offsets’ is the most successful example of compulsory approaches internationally. In terms of voluntary approaches, ‘pay-for-performance’ contracts hold significant promise. The government should play a key role in establishing the scientific basis for such contracts.

4) Some existing government programs (e.g., eco-compensation) should be expanded to include pathways for business sector investments.

6. Lead green urbanization through technology, planning and policy innovation

With the emerging of the digital and green era, substantial changes of modality and pathway for future urbanization can be envisaged, including content of development, spatial layout, infrastructure, transport and logistics systems, business and organization approach, institutions and policies. Besides technical aspects, such innovations also involve mindset, theory, development content and approach, organization and business model, institutional mechanism and policy. Therefore, breakthrough and innovation in the following key areas are recommended:

1) Fully recognize the impact of the digital age and green development on the urbanization mode and avoid using the old mindset for green urbanization planning. Both the market and society should play key roles in determining urban layout and planning.

2) Fully incorporate green standards into urban-rural planning. Integrated urban and rural development must be considered in the development of green urbanization plan and relevant policies, with comprehensive consideration of impacts on rural economy, ecology, society and culture. Encourage the flow of urban talents into countryside. Gradually open the right of renting and use of rural housing land to urban residents with proper conditionalities.

3) Promote green technologies that are economically and technically feasible and have major impacts to unleash their potential in energy saving, emission reduction and industrial upgrading. For instance, energy saving technology for indoor air conditioning could be a possible breakthrough.

4) Give full play to the local spirit of innovation with respect to infrastructure construction, transportation and logistics systems, institutions and policies related to green urbanization. Nature-based solutions to such challenges as intensive storm-water flooding, sea-level rise/storm surges, enhanced urban heat should be evaluated, considered and adopted, as appropriate. Green construction using bamboo is another example.

7. Find and address synergies among issues

Most of the issues mentioned above are strongly interlinked. Some actions can be taken which contribute to two or more areas of importance. For example, ‘Nature and Climate Solutions’ can achieve both climate and biodiversity goals. Quality reforestation, investments in mangroves and coastal wetlands, and investments to protect watersheds can all be designed to enhance carbon sequestration and optimize biodiversity outcomes, while providing additional ecosystem benefits such as flood protection and soil retention. Reducing overfishing, improving aquaculture management, and restoring coastal and marine habitats will increase seafood economic production value, restore ecosystem functions, and biodiversity. Efforts to reduce climate, biodiversity and ocean impacts of the BRI will strengthen China’s position as 2020 CBD COP15 host. By addressing ecological impacts of trade and investment (e.g., on overseas rainforest conversions for beef, palm oil or soybean production), China can and will inspire other countries to take similar initiatives. Synergies that result in new, green livelihoods should be encouraged.