

China Council for International Cooperation on Environment and Development 2017 AGM

Open Forum on Environment and Development 9 December 2017 Beijing, China

Business Roundtable on Innovation and Green Development

FORUM OBJECTIVE

We recognize that innovation can produce both *incremental changes* such as driving down the cost of new technologies, and *highly disruptive* social and economic effects. Each type of innovation is essential for green development. The coming three decades—a period described as a 'New Era' for China—will be a time of remarkable technological, managerial and institutional innovation. The Forum will identify policies for how government and businesses working together can speed up green development innovation and successful outcomes. We are particularly interested in what needs to be done in the coming 5 to 10 years since that will set the stage for the longer-term.

VALUE OF THE FORUM

Enterprises will need to take on greater responsibilities to meet social and environmental needs in the societies where they operate. Certainly many adjustments and there will be many new business entrants taking advantage of emerging S&T trends. It is now time to understand the value of advanced breakthroughs and the broader environment and development concerns facing society. It also should be possible to highlight some specific policy needs or recommendations that may be of value for CCICED's 2017 recommendations to the State Council. Hopefully the forum will be of direct benefit to the participating companies and others from both China and other countries.

KEY QUESTIONS

- 1. What types of policy-oriented dialogues and partnerships will help to bring innovator, businesses and technology developers and providers together with environmental experts and governments to co-develop innovations and to ensure they are developed for the public good, while minimising risks of unintended environmental consequences?
- 2. Are there currently overlooked ways for environment and sustainable development business innovators in China and other countries to become more collaborative?
- 3. Are there good Chinese or international innovative investment platforms, financing structures, and business models that can accelerate the scaling of promising environmental innovations, regardless of whether they have a clear commercial proposition or are less profitable 'public good' applications?
- 4. Is there a need for more bilateral and multilateral help on the part of governments and international institutions in China to enable the development of more agile governance systems including the championing of common policy principles for managing new technologies and the development of specific policy frameworks and protocols?

BACKGROUND

Green Development in China and the World

Throughout the current decade, green development has been a key element of Chinese government policy, and the 13th Five Year Plan (2016-2020) embodies both the concept and necessary steps towards improved environmental protection and sectoral innovation for sustainable development and an Ecological Civilization approach. Globally, progress on green growth and green development has been mixed. However there is no question that businesses have made substantial shifts towards green innovation. They are doing so in part because they are driven by compliance criteria put in place by national and international laws and accords. However increasingly, business participation in green development is recognized by its win-win potential, social responsibility, and enhanced profitability, efficiency and license to operate. The Fourth Industrial Revolution is already producing dramatic changes, and many more are anticipated through digital technology innovation.

Incremental and Disruptive Innovation

Businesses drive down the cost of vital technologies through incremental innovation in manufacturing processes and technology: reduced cost of solar and wind facilities, lithium power packs, new farming techniques to reduce input costs and wastes, and making computational equipment so small and cheap that super computer power can reside in a smartphone or in a miniature drone or submersible capable of real-time pollution monitoring. These are among the many examples where Chinese S&T, market power, and needs have played a significant role in their development and introduction.

Chinese businesses have also learned quickly how to innovate with products of national and global significance. The digital car ride company Didi has over 20 million daily orders and operates in 400 cities across China, engaging 17.5 million drivers and car-pools about 2 million passengers every day, with estimated GHG emissions avoided in 2016 of 1.4m tonnes of CO₂, plus associated benefits of reduced air and HFC pollution from vehicle air conditioners. A leading Chinese house-builder, China Vanke, has become a forerunner in China's green construction by pioneering the use of prefabricated homes. Some business innovations have been highly disruptive, but also significant in terms of employment, new business models, sources of insight into consumer interests and demands, plus in some cases offering genuine shifts towards a green future.

The Old Way: Government Regulates – Sometimes Business Innovates

When it comes to environment and development, the old way of thinking about the roles of government and business was often entrenched around compliance-driven approaches. The features include highly directive legislation, legislated restraints on collaborative approaches for solving difficult problems, and sometimes simply too much red tape, and overlapping administrative functions. A great need is to have enabling mechanisms that will encourage innovation (including institutional innovation) so that businesses receive the right incentives (1) to take on the risks associated with bringing new green products forward, and (2) to engage with universities and others in the public sector to support and turn basic science into green tech or other innovations.

Through the government's planning approach and ability to set in place such efforts as the targeted S&T strategy, support for solar and wind even when markets fell off, and the regulatory shifts to promote electric vehicle introductions, China not only has put itself into a leading position on renewable energy, but also through the governmental enabling support, has accelerated global progress. There is much more to be done, however, on developing better ways of building new business-government collaboration.

The Fourth Industrial Revolution

China has already started along important pathways for another transition, the Fourth Industrial Revolution. This transformative change involves data and technology capabilities combined with merging digital, physical and biological realms—and the impacts on society and the environment. There is great potential in exploring how technologies of the Fourth Industrial Revolution could be applied to improving environmental and natural resource management arrangements, including ways

that we might not yet even be able to imagine. For the Fourth Industrial Revolution to be the first fully "sustainable" industrial revolution an effective enabling environment is necessary—approaches that help governments create smart safeguards, protocols, policies, and effective oversight and recourse mechanisms. Only in this way can we avoid unintended consequences and ensure that all in society, and ecosystems, benefit from this revolution.

Improving Public-Private Collaboration

Given all of these factors—the vital importance of businesses in enacting green development; the effect of incremental technological change on unlocking the economics which enable environmental protection; business model innovation that will unlock new ways of consuming and the coming drastic transformations brought by the fourth industrial revolution—the importance of alignment, communication and meaningful cooperation between business and government is more important than ever.