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2009 CCICED Annual General Meeting Issues Paper

China's Green Prosperity Future – Environment, Energy and Economy --Executive Summary

Of the multiple crises facing the world at present, those posing the greatest threat to environment and development include the 2008 financial meltdown and its economic consequences, climate change, and poverty. Crises breed both challenges and opportunity, a point well realized within China. Thus China is seeking to mitigate the impacts of the global economic downturn with a stimulus package that will shift emphasis towards domestic consumption and accelerated infrastructure development, while continuing to build a modern economy in both urban and rural areas. It hopes to continue its march towards 2020 goals for improving both income levels and quality of life, including becoming a more environmentally friendly society. This Issues Paper, prepared for the CCICED 2009 Annual General Meeting, explores how China might achieve a Green Prosperity Future through linking its future growth to better environment, energy and economy relationships. It will be essential to do this in order to address global climate change.

The unprecedented level of international cooperation to deal with economic recovery has shifted attention to the role of the G20 group of nations including China and other emerging large economies. In the dialogue at the UN, in G8 and G20 meetings, and in many other international gatherings during this past year, concern has been expressed that economic stimulus should not be at the expense of the environment, and, indeed, that economic recovery should be based on Green Growth. G20 leaders and many other nations have pledged significant action to address climate change, including efforts based on energy efficiency improvement, shifts towards greater reliance on renewable energy, and on pursuit of a low carbon economy. These commitments to new approaches have to be long-term, certainly with a need to set goals to 2020, 2030 and 2050, with very substantial investment, innovation and capacity development.

China has given energy and environment high priority in its economic stimulus package, drawing on

goals set for the 11th Five Year Plan. The overall approach to environmental protection should continue to be improved during the next few years of recovery period. Structural changes within 10 key industrial sectors are being undertaken, including environmental protection action and more efficient use of resources and energy. In cities and rural areas environmental improvements, including better planning and design of infrastructure are happening and it is critical to accelerate progress. China also hopes to gain international competitiveness through its investment in new green technologies and products for which there will be both domestic and international markets. However, the growing income levels of people will significantly raise the per capita levels of energy use and greenhouse gas emissions. Therefore, how domestic sustainable consumption issues are addressed will become a key matter for concern. Chinese citizens at present are savers rather than spenders and frugal in their consumption. But that is not a guarantee of future sustainability, especially depending on shifts in lifestyles and decisions regarding urban design, transportation and other infrastructure. Greater emphasis on energy productivity and structural shifts in the economy towards more emphasis on tertiary, service based industry is important.

This year five CCICED Task Forces will report their findings and recommendations on various aspects of energy and environment. The topics include: Sustainable Use of Coal, Urban Energy and Environment, Rural Energy and Environment, Economic Instruments for Energy and Environment, and Low Carbon Economy. These studies cover the most critical issues that China needs to address for continuing its high rate of economic growth, but gradually decoupling this growth from increases in energy use and from environmental degradation.

With more than three years of the 11th Five Year Plan completed, it is possible to examine where progress has been made, and what remains to be done. For example, of the mandatory targets related to energy and environment, it should be possible to meet the very important 10% reduction goal for SO₂ emissions a year ahead of schedule. However, to reach the goal of 20% energy reduction per unit GDP from 2005 levels will require further reduction levels of 5.89 % in 2009 and in 2010. Now that renewed levels of economic growth is definitely a strong prospect for China, the reliance on intensity indicators (tied to GDP) rather than total loading is dangerous in that absolute amounts of pollutants and energy use are still likely to be on the increase. Furthermore, many important pollutants such as NOx, ground level ozone, mercury and other heavy metals, and POPs are not subject to targets, or even control strategies. Greenhouse gases and carbon reduction strategies were not incorporated into the 11th Five Year Plan.

Looking ahead, China can continue along the pathway of transformative change concerning environment and development. The opportunities associated with Low Carbon Economy in particular should provide both competitive advantages and improved quality to future growth. There are many specific topics that may be highlighted for consideration in the 12th Five Year Plan and beyond. In addition there are a number of specific drivers that should be taken into consideration in China's national planning and action for Green Prosperity. Those with direct links to environment, energy and economy include the following:

- ◆ Energy conservation and energy efficiency needs in a variety of sectors to bring energy intensity in line with, or better than, existing international norms.
- Reduction in energy intensity for urban buildings, infrastructure construction and operations, and urban transportation.
- Continued efforts to expand as rapidly as possible the use of renewable energy sources in China, focusing particularly on wind, solar, marsh gas (methane), and small-scale hydro.
- Specific actions related to international arrangements on energy, environment and climate change, including carbon pricing and possible trading, CDM, bilateral and multilateral agreements on technology transfer and partnerships, IPR, and investment arrangements.
- ◆ Adaptation needs concerning climate change.
- ◆ Mandatory targets for reduction in GHG emissions and carbon intensity of development.
- ◆ Continued improvement in environmental quality through more stringent reductions in pollutants covered under the 11th Five Year Plan mandatory targets, plus a broader range of pollution control (e.g. mercury from coal burning, NOx).
- A system for reduction in total pollution load for some sectors and regions.
- ◆ Improved protection for ecological services, and eco-compensation.
- ◆ Environment and health targets designed to reduce or eliminate mortality and cases related to specific causes, and improvement in environmental safety associated with key sectors such as coal mining and various types of industrial sectors.
- Full achievement of the MDGs within China, including those related to environmental sustainability.
- ♦ Strengthening frameworks to improve green growth opportunities, including scientific R&D, innovation technology investment, institutional strengthening and capacity building related to advanced efforts that will provide China with new economic growth opportunities and export potential related to meeting international demand especially those related to environment and energy.
- Improvement to the statistical information base for both energy and for environmental performance.

Key themes where China must build new or revised policies are:

- ◆ Strategy for sustainable use of coal.
- ◆ Immediate and longer-term steps towards Low Carbon Economy and Development, including implementation in both urban and rural settings, in various industrial sectors, and shifts towards green growth for both domestic and export products.
- ◆ An energy productivity strategy, including a progressive, predictable approach to energy pricing and the use of an improved mix of regulatory and economic incentives.
- Carbon pricing, which may be based on carbon tax, cap and trade, or other arrangements.
- ◆ Targets for energy efficiency and energy-related environmental concerns, with some based on absolute amounts rather than intensity.

This Issues Paper has examined several global shifts of historical dimension taking place virtually simultaneously. On economic recovery and associated institutional changes there is a sense of optimism gradually emerging, in part due to the rapid action by political leaders to avert worst-case scenarios. The power sharing that is taking place in the restructuring of global institutions, and in the decision-making among the world's major economies is an outcome that would have hardly been believed possible only a year ago. China has strengthened its potential for international cooperation as a result.

The second great shift has been the depth of dialogue on the issue of climate change. Unfortunately getting a solid agreement about the best approach, with high levels of immediate action, is proving to be extremely difficult in the lead-up to Copenhagen. Whatever the immediate outcome, it is the start of a new way of thinking about our planet, and particularly about developing the Low Carbon Economies needed for the future.

The third shift is international cooperation concerning poverty reduction, and global capacity to address this serious problem. China's strides towards meeting its Millennium Development Goals present a remarkable success story, but one that is tempered by growing inequalities in wealth, and the realization that a fair part of China's population remains far too close to the poverty line. Yet China also can contribute much through expanded international cooperation throughout the developing world. The technologies that China is diffusing in its rural areas, its experience with renewable energy, and the advantages it brings in driving down the costs of production of many products are examples of unique contributions China can bring to many others in the world. Poverty is interlocked with climate change

impacts and adaptation and with better environment and development relationships.

The fourth and hopefully very enduring shift is towards societies based on innovation that can more rapidly address the changing circumstances and demands on productive forces within national economies and globally. Green growth involves new forms of both production and consumption. It should influence all sectors of economic productivity, ranging from primary and secondary industries to the commercial, tourism, telecommunications and other aspects of modern tertiary activities. It is understandable that much of the focus on green growth currently centres around energy, environment, and climate change, but ultimately it is transformation of lifestyle, infrastructure design, and the way business is carried out that will determine better outcomes—a future of Green Prosperity.

Will China be the global leader in developing this new future? China's potential is great because it has the means to address key challenges and opportunities precisely at the point in time where it is building the infrastructure to house, transport, meet energy needs, water supply of its people at a better level; and because it is prepared to invest in social improvements, especially for health and education. China also has demonstrated its tremendous capacity to succeed in the global marketplace. With the great size of its domestic markets, its export marketing skills, and its ability to be adaptive, smart and fast, China has advantages that will be put to good use in coming years.

It is well to seriously consider the meaning of Ecological Civilization, a phrase used mainly in China. If nations can prosper at low levels of ecological damage—with a deeply felt respect for nature and the ecological services provided by the global commons and by the rich resources of the planet—then we might achieve an Ecological Civilization globally. China's leadership has called for this state of harmony between people and the planet, and we must presume that it will become a central part of China's on-going development philosophy. Other countries will have much to learn, and hopefully much to contribute, during this common journey towards a prosperous future.