# **Environmental Governance**

### **Session 1**

# Low Carbon: The Way of China's Economic Development to Global Environmental Changes

Organizer: Energy Research Institute, National Development and Reform Commission, P.R.C.

Fudan Tyndall Center **Host:** Jiang Kejun & Jiang Ping



Host: Jiang Kejun
Senior Researcher, Energy Research Institute, National
Development and Reform Commission

#### **Introduction of the Host:**

From 1993, Kejun Jiang began the research on climate change relative to energy policy analysis, which focuses on energy technology policy assessment, energy supply policy assessment, renewable energy development and energy conservation. Started from 1994, he has worked on Integrated Assessment Model (IAM) development for energy and GHG emission scenarios, policies, focusing on China and global analysis. At present, he is mainly working on policy assessment for energy and environment policy assessment by leading Integrated Policy Assessment Model for China (IPAC) team. His mainly interests include energy and emission scenarios, energy policy, energy system, energy market analysis, and climate change, local environment policies and international negotiation. Now he is CLA in WGIII of IPCCAR5, LA for IPCC AR5 Synthesis Report, and author for UNEP Emission Gaps. His recent research projects include energy and emission scenarios for 2030, low carbon emission scenarios up to2050, roadmap for air pollution control, assessment on energy tax and fuel tax, potential for energy target in China, development of Integrated Policy Assessment model, etc.



#### **Host: Jiang Ping**

Associate Professor of the Department of Environmental Science and Engineering,

Director Assistant, Fudan Tyndall Centre, Fudan University

#### **Introduction of the Host:**

Jiang Ping's research interests focus on the low carbon sustainability, which covers climate change, environmental management, energy saving technologies and social behaviour, management system and people behaviour change in building low carbon communities, and environmental sustainable development with co-benefits approach. Dr. Jiang has undertaken and completed 7 research projects as the leader, and published 19 papers in his research area.

Before starting his job at Fudan University, he was a JSPS-UNU Postdoctoral Fellowship at the United Nations University Institute of Advanced Studies (UNU-IAS) from 2010 to 2012. Before coming to UNU-IAS, Jiang received his PhD in Environmental Sciences from the University of East Anglia (UEA) in 2010 in the U.K. During that time, he undertook his PhD research in the U.K. and worked for the Carbon Connections Programme as a part-time project coordinator, responsible for the collaboration projects and activities between the University of East Anglia and Chinese universities/organizations. Prior to his PhD research in the U.K., Jiang worked in China for ten years in the environmental protection area. Jiang got his Bachelor of Engineering Degree from Beijing Science and Technology University in 1995.

#### **Theme Interpretation:**

After the United Nations Conference on Climate Change in Paris, the actual process towards achieving global warming target has been advanced intensively worldwide. For the past few years, the development of services and new industrial technology represented by low carbon technology has become the key driving fact or which determines the changes of the future international competition pattern. There is significant progress from industrial technology, transportation, power supply technology etc.. Technology is becoming more mature, cost is decreasing obviously and compared to a few years ago. The research, development and popularization of technology with low carbon as the core has become one of the key elements that determine whether this industry is developing well or not. Renewable energy power generation technology, eletric vehicles, fuel cell vehicles, ultra efficient household appliances, near zero emission buildings, low carbon innovative industrial production technology and so on can basically change the competition pattern in economy. Not going toward low carbon development path could be quite dangerous for our economy. Loss of competitiveness in economy brings burden on our country's longterm economic development.

Low carbon economic development has gained a great deal of academic research support, and many scholars have proposed findings on climate change new economics. The technology progress in reality and strategies of many countries and large enterprises have been recognized clearly. Also, the future economic development driven by low carbon is getting to be a clear picture. Recent discussions have been moving on to talking about the ambitious countries to support the ambitious climate change mitigation goals raised on the Paris Agreement. All the countries, which have been planning or will plan

on the low carbon economy transformations, are the strongest and most powerful economies. According to our study, a large amount of companies in our country might be faced with possibility of bankruptcy if they are not determined to carry out low carbon transformation, such as state owned enterprises. One fourth of state owned enterprises is unlikely to stay sustainably. Nowadays, China's attitude towards heading for low carbon economy in the future is not very firm, and China does not realize the enormous negative effects on economy if we would not conduct this transformation. Hopefully, this kind of voice will be intensified by strengthening continuous scholar discussions and forums to accelerate the process moving towards low carbon economy transformation in China.

The agenda covers the development pattern and trend of global low carbon economy, the impacts of low carbon development on company competitiveness, international governance structure of global low carbon economic development, the practical significance of the new ambitious goal raised in Paris aiming at 1.5°C temperature raising globally, the low carbon norms of overseas investments and the influences of China's low carbon process on the low carbon development of B&R (the Belt and Road).

It is expected that through the discussions in this forum, strong voice from a high-level scholar to promote our country's acknowledgement (confirmation/affirmation?) of moving towards low carbon transformation is made to present explicit viewpoints and to spread in different ways. We are considering that a paper would be published based on this forum in the Macroeconomic Research, Guangming Daily or Economic Daily, and media would be invited to report at the same time.

# **Environmental Governance**

#### Session 2

# Towards Healthy Asia 2030: Sustainable Environment for Child Growth and Development

Organizer: School of Public Health, Fudan University

Co-organizer: Fudan Global Health Institute

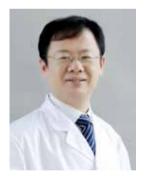
Host: Qian Xu & Kan Haidong



Host: Qian Xu
Professor, School of Public Health, Fudan University
Director, Global Health Institute, Fudan University

#### **Introduction of the Host:**

Qian Xu is a professor and the chair of Department of Maternal, Child and Adolescent Health, Professor of School of Public Health, Fudan University, Shanghai, China. She has been appointed as the Director of Global Health Institute, Fudan University since 2012. She also serves as the Vice Chair of Women's Health Care Association in Chinese Preventive Medicine Association. Prof. Qian is a member of the Scientific and Technical Advisory Group (STAG) of Department of Reproductive Health and Research in World Health Organization (2012-2017). Her main research areas cover safe motherhood program evaluation, adolescent reproductive health and care, evidence-based health care, maternal health policy and system research, etc. As the PI, her research projects have been supported by WHO, UNICEF, UNFPA, European Commission, US-NIH Fogarty Center and DFID.



Host: Kan Haidong

Professor and Doctorial Supervisor, School of Public Health, Fudan University

#### **Introduction of the Host:**

Kan Haidong obtained his Ph.D. degree in 2003 at Fudan University. He completed his postdoctoral training at the National Institutes of Health of the United States. He is now a professor of environmental health sciences at Fudan University in Shanghai, China. He is the regional editor of the journal *Environmental Health Perspectives*, the editorial board member of the journal *Epidemiology*, and the member of the China National Advisory Committee of Environment and Health. He has been recipients of several important awards, including the David Bates Award of the American Thoracic Society and the China Medical Board (CMB) Distinguished Professorship Award. His research is focused on the health impact of ambient air pollution and global climate change.

#### **Theme Interpretation:**

At the conference on August 26, 2016, the Political Bureau of the Communist Party of China Central Committee reviewed and approved the plan for a Healthy China 2030. The plan is a general guiding document for a healthier body of Chinese people in the coming 15 years. It emphasizes that health should be strengthened by combining with all related major policies, that is, Health in All Policies, such as fighting environment pollution and improving the nation's

healthcare provision. The emphasis should be put on disease prevention and solving the health problems of vulnerable population including women and children, the elderly, the disabled, floating and low income population.

The plan for a Healthy China 2030 is in coincidence with "The 2030 Agenda for Sustainable Development" adopted by the United Nations in the 68th general

assembly in September 2015. The 17 global sustainable development agenda to the year 2030 covers three aspects of sustainable development: economic, social and environmental. These new development goals put forward a wide range of economic, social and environmental goals while persisting on many developmental priorities (poverty elimination, healthcare, education, food safety, nutrition, etc.). Each country faces specific challenges in its pursuit of sustainable development. Thus, the most vulnerable countries and populations deserve special attention in particularly.

Children are the future of human development. To provide children with a safe, healthy and clean environment to meet their needs for survival, growth and development is the ultimate goal of all mankind should strive for. However, we have very limited knowledge about the effects of environment on children's health. In terms of appearance, children and adults are all human, but smaller in size. Children are not just small "adults" or "little adults", but have a lot of different characteristics from adults. For example, children's central nervous system, immune system, reproductive system and digestive system is under development and maturation continuously. In the early stages of growth and development, children exposed to certain environmental toxins or harmful factors may suffer lifelong irreversible damage. Per unit body weight, children breathe more air, consume more food and drink more water than adults. Therefore, children absorb more harmful substances than adults via respiratory tract, gastrointestinal tract and skin in the same environment. All these differences make children more sensitive to the environmental hazards, and the damage effects on the growth and development in childhood may have long adverse impacts on health in their whole life span. Therefore, while adult health and disease is the result of the interaction between environmental factors and genetic factors, the health and disease of children is the result of the interaction of environmental factors, genetic factors and growth and development.

With the keywords of "Health, children, environment and sustainable development", we choose "Towards Healthy Asia 2030: Sustainable environment for child growth and development" as the theme of this sub forum to discuss the effects of social and environmental factors on children's health and sustainable development, and wish to offer advice and suggestions for promoting the plans of Healthy China and Healthy Asia.

The topic of this sub forum is "Towards Healthy Asia 2030: Sustainable environment for child growth and development", which corresponds to the theme of Shanghai Forum 2017 to promote the Healthy China and its sustainable development. We will invite outstanding scholars of maternal and child health and environmental

medicine to deeply discuss and exchange their opinions on the health effects of social and environment factors on women and children in the context of globalization and social transformation of Chinese modernization. The invited scholars who participated in various international or domestic health policy making would have lots of consulting experience. They can introduce new technologies and research findings in the forum and give their comments and suggestions on how these technologies and findings can be transformed into policy. The view highlights and policy recommendation reports will be submitted to Shanghai Forum. We expect these documents will be helpful to improve Chinese maternal and child health service system and promote the sustainable development of Healthy Asia 2030 through South-South cooperation.

The invited guests in this sub forum will include maternal and child health policy experts from UNICEF and WHO, child and adolescent health experts from Peking University, Fudan University and Shanghai Jiaotong University, children's environmental health experts from Columbia University, Seoul University and INCHES, and birth cohort PIs from Shanghai Jiaotong University, Anhui Medical University and Nanjing Medical University. Focusing on the sustainable development for child growth and development, these experts will introduce their research findings on effects of social and environmental factors on children's health from bench work to policy transformation, and exchange their opinions on the maternal and child health problems in Asia, the optimization of sustainable environment of child development and maternal and child healthcare service system.

To promote the goal of "Healthy Asia 2030", the invited experts will list research priorities for domestic maternal and child health problems, give their suggestions on how to strengthen multidivisional and multidisciplinary cooperation, and on how to promote the transformation of basic research to policy. We will highlight their point of view and draft the policy recommendation report which will be submitted to Shanghai Forum. We expect these documents will be helpful to improve the construction of Chinese maternal and child health service system and promote the sustainable development of Healthy Asia 2030 through South-South cooperation.

# **Environmental Governance**

# Green Development and Ecological Civilization (GDEC): Performance Assessment, Implementation Path and Decision-making

**Session 3** 

**Organizer:** Department of Environmental Science and Engineering, Fudan University **Host:** Bao Cunkuan & Zhang Hao

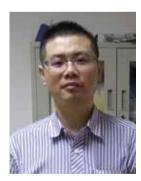


#### Host: Bao Cunkuan

Professor, Department of Environmental Sciences and Engineering, Fudan University Specially-appointed Researcher, Fudan City Development Institute

#### Introduction of the Host:

Bao Cunkuan is one of the earliest scholar engaged in Strategic Environmental Assessment (SEA) and the co-author of the first book Principles for Strategic Environmental Assessment in the mainland of China. He has been involved in researching and writing Technical Guideline for Plan Environmental Impact Assessment (On trial)" and Technical Guidelines for Plan Environmental Impact Assessment: General Principles, and other 4 state standards (in drafting) such as Technical Guidelines of Environmental Impact Assessment for Urban Plan, Land-use Plan, Traffic Plan, and Industrial Park Plan. He also has been consultants and experts for MEP and EPB of several provinces and cities. He and the group has finished over 30 projects on EP and SEA, such as: Research on Indicator System of Environmental Impact Assessment for Urban Planning Based on Sustainability, Techniques and methods, framework and case study of implementing SEA in Shanghai, Planning of Changshu, Taichang Eco-city in Jiangsu Provinces, etc. He is the writer of five books related to SEA and Planning Environmental Impact Assessment (EIA), Environmental Planning and Management, Sustainability Appraisal, especially based on his doctoral thesis; he published the first book of SEA subject in the mainland of China in 2003. In addition, over 130 papers published in journals, includes six papers in international academic journals Environmental Impact Assessment Review and International Journal of Environment and Pollution and international workshop and academic symposium.



#### Host: Zhang Hao

Associate Professor, Department of Environmental Science and Engineering, Fudan University

#### **Introduction of the Host:**

Zhang Hao is the Associate Professor of Department of Environmental Science and Engineering, Fudan University, Member of International Association of Landscape Ecology and Member of Shanghai Environmental Science Association. ZHANG Hao teaches Urban Ecology and Environmental Statistics for undergraduates and postgraduates. His research field focuses on using integrated approach of Remote Sensing (RS) and Geographical Information System (GIS) to examine the relationship between land use/ land cover (LULC) change and associated environmental consequences, including degradation of regional ecological services in respond to human activities, spatiotemporal patterns of urban heat island in respond to land consumption, urban form evolution, exploring urban forest pattern and its influence on building energy efficiency, landscape fragment, nighttime lit area and light pollution. Recently, based on aforementioned researching hotspots, he has published 19 papers in international journals, such as Cities, Applied Geography, Journal of Environmental Management, International Journal of Applied Earth Observation and Geoinfomation, Remote Sensing.

#### **Theme Interpretation:**

As embodied in the report of CPC's 18th national congress, the concept and theory of ecological civilization have been widely accepted as one of the key strategies, which determine China's future development in the context of discarding purely GDP-orientated development pattern with the sacrifice of environmental sustainability. To achieve the goals of green development and ecological civilization (GDEC), there are urgent demands of accurate performance assessment, management policies, and institutional aspects, which may be very complicated when performed in multiple scales with spatial dependency and political relevancy. Accordingly, to fulfill aforementioned tasks, there are three issues that should be deeply addressed and discussed, including (1) how to perform accurate performance assessment of GDEC; (2) how to choose the acceptable implementation paths for GDEC; and (3) how to develop and optimize the decisionmaking system.

Governmental officials, experts, and scholars with international reputation will be invited to participate in the coming conference. The issues will focus on the linkage between accurate performance assessment, implementation paths, and decision-making system of GDEC in the context of China's transitional development. The output of this sub-forum is expected to summarize the latest knowledge system of GDEC, and thus provide the scientifically-based guidance for governance.

#### Key topics:

- (1) Multiple-level accurate performance assessment systems for practice of GDEC, focusing on up-to-bottom levels accurate performance assessment systems across province, region, county, and industrial park;
- (2) Multiple objectives and options of implementation paths for GDEC, focusing on industry transformation

- and upgrading, industrial ecological pattern, regional socioeconomic-environmental inequality and conflicts, balanced development and ecological compensation, as well as recycling economy and cyclic development;
- (3) Decision-making system of GDEC and strategic environmental assessment (SEA), focusing on integrated approach of administrative decision-making and SEA, optimized implementation paths for GDEC, and mechanism of decision-making system;
- (4) The essential relationship between performance assessment systems, implementation paths, and mechanism of decision-making system.

#### Expected objectives:

- (1) To systematically diagnose and summarize the shortcomings and problematic issues of regional socioeconomic-environmental inequality and conflicts due to unbalanced development in China; to discuss the solution to cracking the barriers of sustainable development of China's socio-economic-environmental system.
- (2) To create an opportunity for exchanging new ideas and innovative thinking among international and domestic scholars and decision-makers, who are engaged in creating new knowledge and developing management policies for GDEC.
- (3) To develop a cooperative platform aiming at developing new knowledge and management policies for GDEC, and thus enhance the holistic study of GDEC, including the theoretical study and practice of GDEC.
- (4) To discuss the mechanism for long-term cooperation and maintain a sharing platform for research output.  $\blacksquare$