Comparative Analysis of Energy Transformation Policy:

China, Germany, E.U., and U.S.

Introduction

In face of climate change, energy security and air pollution, China has become a major investor and global player in renewable energy development since 2007. A new report by the National Renewable Energy Research Center suggests that by 2050 China's renewable energy will account for over 60% of total primary energy consumption. This percentage has not become a policy target so far in China. However, a similar objective (no less than 60%) has been set in German government energy transformation strategy. In the E.U. level, renewable energy is expected to supply over two thirds of primary energy by 2050. Like China, U.S. has not set up a policy target on 2050 renewable energy development. However some researchers, such as Dr. Mark Jacobson from Stanford University, argue that it is feasible to achieve a 100% renewable energy system by 2050 in America.

A policy target has to be justified by the process or procedures to reach it. The ways to reach the aim is usually called "Roadmap". This roundtable meeting is to compare the major economies' roadmaps of transforming fossil fuel energy system to 100% renewable energy one in decades to come. We expect this meeting promote the research exchange and policy discussion on energy transformation among China, E.U., U.S., and Germany.

Agenda：

Date & Time：3rd Nov, 2015, 9:00－15:00

Venue：Swan Port Coffee (Galaxy Soho, Block A, 3F), close to Chaoyangmen Metro Station(Line 2/6, Exit G)；朝阳门银河SOHO, A座三层鸿芷咖啡馆

Meeting Language: English

Schedule:

Time	Content	Speaker
8:50-9:00	***Registration***	
9:00-9:15	***Opening Remark***	***Mr. Ang Zhao*** ***Rock Environment & Energy Institute***
9:10-9:40	Energy Transformation in China: Driver, Consumption and Supply	***Professor Yuan Xu (via Skype)*** ***Chinese University of Hong Kong***
9:40-10:00	***Q&A***	
10:00-10:30	Decarbonizing China's Power Sector: Potential, Prospects, and Policy	***Professor Gang He (via Skype)*** ***Stony Brook University***
10:30-10:45	***Q&A***	
10:45-11:15	The Energy Transformation in Germany: Progress so far and Challenges ahead	***Ms. Susanne Langsdorf,*** ***Ecologic Institute***
11:15-11:30	***Q&A***	
11:30-12:45	***Lunch (provided)***	
12:45-13: 15	Policy Challenges to Achieve 100% RE System by 2050: China vs. U.S.	***Professor Mark Jacobson (via Skype)*** ***Stanford University***
13:15-13:30	***Q&A***	
13:30-14:00	The Low-Carbon Development and Energy Transformation: a Cast of China	***Professor. Kejun Jiang,*** ***Energy Research Institute, NDRC***
14:00-14:15	***Q&A***	

14:15-14:45	Restructuring E.U. Electricity System for a Renewable Energy System (draft)	***Professor Miranda Schreurs*** ***(via Skype) Freie Universität Berlin***
14:45-15:00	***Q&A***	
	Closing remark	***Mr. Ang Zhao*** ***Rock Environment & Energy Institute***

Short Bios of Guest Speakers

- **Ms. Susanne Langsdorf**

Susanne Langsdorf is a Fellow at Ecologic Institute. She works primarily on projects related to resource policy, environmental and energy governance, and urbanisation and transformation processes. Regionally, her work focuses on China and Europe and she coordinates Ecologic Institute's China related activities.

- **Dr. Yuan Xu**

Dr. Xu is now an assistant professor in the Department of Geography and Resource Management and the leader of the Environmental Policy and Governance Programme in the Institute of Environment, Energy and Sustainability, The Chinese University of Hong Kong (CUHK). Before joining CUHK in August 2010, he received a Ph.D. degree in public policy from Princeton University and conducted postdoctoral training at Massachusetts Institute of Technology. Dr. Xu's research has been focusing on the enforcement and compliance of energy and environmental policies, primarily on China-related issues.

- **Dr. Gang He**

Dr. Gang He is an assistant professor in the Department of Technology and Society at Stony Brook University, as well as a visiting faculty affiliate for the China Energy Group at Lawrence Berkeley National Laboratory. Dr. He's work focuses on energy modelling, energy economics, energy and climate policy, energy and environment, domestic coal and power sectors and their

key role in both the global energy supply and international climate policy framework. Dr. He holds a Ph.D. from University of California, Berkeley.

- **Dr. Kejun Jiang**

Dr. Jiang is the senior researcher at Energy Research Institute (ERI), National Development and Reform Commission, China. He began his research on energy technology policy assessment, energy supply policy assessment, renewable energy development and energy conservation since 1990s. From 1997, Dr. Jiang participated in Working Group III of the International Panel on Climate Change Third Assessment Report and was a lead author for the the IPCC Fourth Assessment Report (Working Group Three Chapter 3) and for GEO-4 Chapter 2. His recent studies include energy and emission scenarios, assessment on energy and fuel tax, research on China's potential to achieve its energy targets and development of the Integrated Policy Assessment model. He received his Ph.D. from Tokyo Institute of Technology.

- **Dr. Mark Jacobson**

Dr. Jacobson is a professor of Civil and Environmental Engineering at Stanford, senior fellow at Precourt Institute for Energy, and senior fellow at Stanford Woods Institute for the Environment. The main goal of Dr. Jacobson's research is to understand physical, chemical, and dynamical processes in the atmosphere better in order to solve atmospheric problems, such as global warming and urban air pollution, with improved scientific insight and more accurate predictive tools. He also evaluates the atmospheric and health effects of proposed energy- and transportation solutions to global warming and air pollution, maps renewable energy resources, and studies optimal methods of integrating renewable electricity into the grid. He holds a Ph.D. degree from University of California, Los Angeles.

- **Dr. Miranda Schreurs**

Dr. Schreurs is the director of the Environmental Policy Research Centre and professor of Comparative Politics at the Freie Universität Berlin. Prior to this, she was an associate professor in the Department of Government and Politics, University of Maryland. Schreurs' work focuses on comparative environmental politics and policy in Europe, the US, and East Asia. She got her

Ph.D. from University of Michigan and has also spent time researching or teaching at Harvard University, Utrecht University, Keio University, Chuo University, and Rikkyo University. Dr. Schreurs has held fellowships from the SSRC-MacArthur Foundation Program on International Peace and Security Affairs, the Fulbright Foundation, and the National Science Foundation/Japan Society for the Promotion of Science.