



上海论坛 2012 学术简报

Academic Bulletin of Shanghai Forum 2012

Low Carbonization, Security and Ever-increasing Demand: Restructuring of Asian Energy System (II)

May 27, 2012

In the afternoon of 27th May, the Shanghai Forum 2012 “Low Carbonization, Security and Ever-increasing Demand: Restructuring of Asian Energy System” sub-forum continued in Room 1001, West Main Building of Guanghua Towers, Fudan University. The topic discussed was divided into two parts: one is about low carbon development motivated by industrial and urban transformation while the other one is about policy design and market reform for low carbon transformation. Some famous experts and scholars in this field attended the forum, including Jim Watson, Giovanni Baiocchi, Christoph Bohringer, Shunsuke Managi, Benjamin Lutz, Minghua Hong, Kexi Pan, Libo Wu and etc.

Beng Wah Ang, famous Professor from National University of Singapore, was the first one to give the speech, whose primary research interests are systems modeling and analysis, and energy economics and policy. Prof. Beng Wah Ang talked about some recent patterns and development of the economy-wide and sectoral energy-related carbon emissions. He also pointed out that China has made great efforts in reducing emissions and also achieved significant results in some fields. However, the emission reduction in China, especially in the transport sector, still has a long way to go.

Pan Kexi, Associate Professor from School of Social Development and Public Policy, Fudan University, demonstrated his research about carbon flow analysis based on energy use. Prof. Pan said that the world would stay in traditional fossil energy era for a long time, and fossil energy use was still the most important source of global CO₂ emissions. Prof. Pan also demonstrated national, sectoral and regional greenhouse gas

list respectively and elaborated on key categories, priority areas and priority themes of the list.

Jim Watson, Professor from Tyndall Centre for Climate Change Research SPRU as well as Freeman Centre University of Sussex Brighton gave a speech on the role of carbon capture and storage technologies played in the transitions to sustainable energy systems. Prof. Jim Watson stated that CCS technologies had many uncertainties including policy / regulatory uncertainty, economic / financial viability, variety of pathways, public acceptance, scaling up and speed of innovation and so on. Besides, the interaction between uncertainties was also important. Thus, rapid progress with full-scale demonstration projects was essential. Prof. Jim Watson finally put forward and discussed about some policy choices and dilemmas.

Giovanni Baiocchi, Senior Lecturer in Norwich Business School, Tyndall Centre and University of East Anglia, was the last speaker in this section. He shared his opinion about the role of energy supply sources in reducing carbon emissions in the context of economic globalization. Prof. Giovanni Baiocchi first talked about the changes in the production structure and trade, and then explained the relationship between climate change, trade, and international agreements. He also mentioned the carbon emission situation in China and pointed out that China was undergoing massive structural change in its Economy while its fast growing CO₂ emissions had revisited.

After a short tea break, four speakers gave their speeches focusing on policy design and market reform for low carbon transformation.

The first speaker in this section was Christoph Böhlinger, Professor from University of Oldenburg. Prof. Christoph is well known as a CGE expert and his speech focused on embodied carbon tariffs. Combined with cases, examples and experiments, Prof. Christoph pointed out that global cost savings from tariffs appeared to be small unless leakage is a bigger problem than we think. Besides, wealth transfer and carbon leakage suppression are the main effects.



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Prof. Shunsuke Managi from Graduate School of Environmental Studies, Tohoku University, also the only present Japanese scholar, talked about emission trading and competitiveness of industries. Prof. Managi employed the SFA model and came to a conclusion that large gap in productivity efficiency and marginal abatement cost existed in different industries and therefore there was a large potential of emission trading.

Then, Doctor Tang Weiqi from Centre for Energy Economics and Strategy Studies, Fudan University gave a speech about his study on the allocation of carbon reduction burden in China. Doctor Tang Weiqi employed CGE model to decided the principle of emission reduction allocation, talked about whether to put more emphasis on efficiency or equality. He also simulated the potential situation under different policies.

The last speaker in this section was Benjamin Lutz from Centre for European Economic Research. His research interests are environmental economics and econometrics, especially the analysis of energy and environmental markets. In the speech, Doctor Benjamin Lutz first mentioned recent market developments in EU ETS Phase II and then came to the empirical evidence on firm behavior. He also talked about the results from the interview study about carbon management in German companies. Doctor Benjamin Lutz stated that management practices highly depended on individual emission levels, production patterns and reexisting structures and procedures. Large emitters were perfectly capable to carry out tasks relevant under regulation by quantities

In the Q&A session, all of the attendees had a heated discussion on today's speech. Christoph Böhlinger's topic about carbon tariff turned out to be the focus and many respectives raised questions on this topic. Professor Zhang Zhongxiang and Prof. Priyadarshi Shukla from India also shared their views on this subject.