China-Australia Carbon Market Design Expert Workshop

ZhongXiang Zhang
张中祥 复旦大学经济学院“千人计划”特聘教授
University Distinguished Professor and Chairman
School of Economics, Fudan University, Shanghai, China
Tel: +86 21 65642734; Fax: +86 21 65647719
Email: ZXZ@fudan.edu.cn

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Fudan University, Shanghai, China

• Michael Grubb, United Kingdom
• Axel Michaelowa, Germany
• Byron Swift, United States
• Tom Tietenberg, United States
• ZhongXiang Zhang, The Netherlands
International Rules for
Greenhouse Gas
Emissions Trading

Defining the principles, modalities, rules and guidelines for verification, reporting and accountability
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Tom Tietenberg, Michael Grubb,
Axel Michaelowa, Byron Swift and
Zhong Xiang Zhang

UNITED NATIONS
New York and Geneva, 1999
International Rules for
Greenhouse Gas Emissions Trading

Defining the principles, modalities, rules and guidelines for verification, reporting and accountability

Tom Tietenberg, Michael Grubb, Axel Michaelowa, Byron Swift and ZhongXiang Zhang
Ways to improve the design of the EU emissions trading scheme (2004)

U.S. Side
- Wallace Oates, Fellow, NAS; University of Maryland and RFF
- Ian Parry, Resources for the Future
- ZhongXiang Zhang, East-West Center

EU side
- Peter Bohm, Univ. of Stockholm
- Frank Convery, President, EAERE
- David Pearce, The First Recipient of the European Lifetime Achievement Award in Environmental Economics
Carbon market and the role of China: What economic models tell us?

The CDM Market Study for Asian Development Bank

  - About 60% of the total CDM flows in 2010 go to China
  - NGOs dubbed CDM China Development Mechanism 中国发展机制
But

- About 60% of the total CDM flows in 2010 go to China
  - China was a slow starter of CDM projects, left far behind and able to catch up the front runner until late 2005.
  - In percentage terms, CDM market since 2008 evolves very much in line with what my economic study projected.
- Zhang, Z.X. (2003), Reconstructing Climate Policy: How Best to Engage China and Other Major Emitting Countries?. The Plenary Presentation chaired by Prof. Robert Keohane (President, American Political Science Association) at the International Conference on Reconstructing Climate Policy: Moving Beyond the Kyoto Impasse, Duke University, 2 May 2003, with Dr. Richard Morgenstern (former Deputy Administrator, U.S. EPA) as the discussant for my presentation.
Market-based climate policy instruments

• **Environmental/carbon taxes**
  – Points of imposition
  – Impacts on the distribution of income
  – Revenue-recycling and tax-interaction effects in the second-best setting (Oates, Bovenberg, Goulder, Parry)
  – Double dividend (Pearce, Goulder)
  – Competitiveness/leakage concerns

• **CDM/JI**

• **Emissions trading**
  – Which pollutants to be included?
  – Scope of regime
  – Point of regulation
  – How to allocate permits?
  – If auctioned, how to use revenues?
  – Mechanisms to address supply-demand imbalance and the resulting price uncertainty
  – Banking and borrowing
  – Market power
  – The role of financial institutions
Contact with UNSW dated back to


- **Review** - “This study represents the first systematic and comprehensive attempt to provide a rigorous analysis of the economic implications of carbon abatement for the Chinese economy in the light of the economics of climate change, a pathbreaking entry into one of the most complicated aspects of contemporary energy/environmental economics” *Energy Policy*, SSCI, Vol. 25, No. 2.

- Tony Owen, Professor at UNSW & President, International Association for Energy Economics