



ENERGY
STUDIES
INSTITUTE

National University of Singapore

ESI Workshop

3rd Asian Modelling Workshop on Carbon Pricing and Investment towards Low Emissions: Uncertainties and Potential

25–26 February 2016
8:30 am to 6:00pm

Hotel Jen Tanglin
Malacca Room, Level 2A
1A Cuscaden Road
Singapore 249716

Please send us your name, organisation and email address via the ESI website [here](#). For enquiries, please contact Ms. Jan Lui at 65162000 or email to esilyyj@nus.edu.sg.

Abstract:

The observed increase in global temperatures, rise in sea levels and changes in weather patterns have drawn worldwide attention since the 1990s. Scientists have attributed these to the increase of greenhouse gas emissions from human activities. The resulting accelerated biodiversity loss, aggravated coastal erosion, and more frequent extreme weather events will have significant impacts on human beings. In order to prevent the acceleration of climate change, many countries/regions have launched comprehensive policy packages to mitigate emissions. Carbon pricing in the form of tax, emissions trading, border-tax-adjustments, and investment in emissions mitigation activities (such as energy efficiency improvement, low-carbon technology RD&D and the promotion of renewable energy) are the two major types of policy instruments. Nevertheless, uncertainty is inevitable throughout the policy design and implementation process.

In the early 1990s, the public became more concerned with issues such as the oil crisis and global warming. Since then, modelling has been widely used in the policy analysis of energy and environmental issues at the local, national, regional and global levels, providing quantitative insights into energy RD&D and investment strategy, climate mitigation and adaptation pathways, as well as the associated potential impacts on economic development, social welfare and ecosystem sustainability. In addition, simulating and comparing different scenarios enables us to explore innovative policy designs that could effectively constrain the impacts of uncertainty or uncover the potential of existing policy instruments and integrate with other instruments. This modelling workshop focuses on the quantitative analysis of carbon pricing policy and investment in low-emission activities around the world, and the implications for Asia and the ASEAN countries.

Programme:

Day 1 (25 Feb 2016)

08:30–09:00 Registration

09:00–09:10 Welcome Address by Professor Chou Siaw Kiang, Executive Director, Energy Studies Institute (ESI), National University of Singapore (NUS)

09:10–09:50 **Speaker 1:** Ms Lingshui Mo, Asian Development Bank (ADB), The Philippines
Topic: Carbon Pricing Mechanism and Carbon Market Linkage in Asia and the Pacific

09:50–10:30 **Speaker 2:** Dr Nico Bauer, Potsdam Institute for Climate Impact Research (PIK), Germany
Topic: Carbon Pricing, The 2°C Target and International Climate Policies: Main Insights from the Global Integrated Assessment Model REMIND-MAgPIE

10:30–10:50 Tea Break

10:50–11:30 **Speaker 3:** Professor Shaozhou Qi, Wuhan University, China
Topic: A Study on the Formation Mechanism of Chinese Carbon Market Price based on the EEDM

11:30–12:10 **Speaker 4:** Professor Peng Zhou, Nanjing University of Aeronautics and Astronautics (NUAA), China
Topic: Carbon Emissions Trading in China: Modeling Allowance Allocation

12:10–12:50 Panel Discussion

12:50–14:00 Lunch

14:00–14:40 **Speaker 5:** Dr Taoyuan Wei, Center for International Climate and Environmental Research—Oslo (CICERO), Norway
Topic: Business as Unusual: The Implications of Fossil Divestment for Financial Flows, Economic Growth and the Energy Market

14:40–15:20 **Speaker 6:** Associate Professor Koji Tokimatsu, Tokyo Institute of Technology (TIT), Japan
Topic: Global Scenario Analysis on Various Zero Emissions

15:20–15:40 Tea Break

15:40–16:20 **Speaker 7:** Professor Tiejun Ma, East China University of Science and Technology (ECUST), China
Topic: Optimizing the Layout of Initial AFV Refueling Stations and Experiments with Agent-based Simulations

16:20–17:00 **Speaker 8:** Dr Xunpeng Shi, Energy Studies Institute (ESI), NUS, Singapore
Topic: Gas Trading Hubs and Transition to Hub Indexed and Destination Flexible Contracts in East Asia

17:00–17:40 Panel Discussion

Day 2 (26 Feb 2016)

08:30–09:00 Registration

09:00–09:40 **Speaker 9:** Dr Xin Zhou, Institute for Global Environmental Strategies (IGES), Japan

Topic: Carbon Pricing and Border Carbon Adjustment: Implications for Industrial Competitiveness, Carbon Leakage and International Trade

09:40–10:20 **Speaker 10:** Dr Yu Sheng, Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES), Australia

Topic: The Implications of Carbon Price on Bunker Emissions in Australia: Application of GTEM Model

10:20–10:40 Tea Break

10:40–11:20 **Speaker 11:** Professor Yongsung Cho, Korea University, South Korea

Topic: Prospects of Korea Carbon Emission Trading: Linking Schemes between Korea and Japan, and The Role of Offsets

11:20–12:00 **Speaker 12:** Dr Yu Liu, Institute of Policy and Management, Chinese Academy of Sciences (IPM-CAS), China

Topic: The Impacts of Hubei ETS Pilot in China: A CGE Analysis using TermCO₂ model

12:00–12:40 Panel Discussion

12:40–14:00 Lunch

End of Programme