



The 5th Asian Energy Modelling Workshop

Achieving a Sustainable 2050: Insights from Energy System Modelling

10-11 September 2018 Park Avenue Rochester Hotel Scorpio & Taurus Room, level 2 31 Rochester Drive Singapore 138637

Please send us your name, organization and email address via the ESI website <u>here</u>. For enquiries, please contact Ms. Jan Lui at 6516 2000.

Synopsis

Creating development strategies for Asia and beyond till 2050 requires careful studies that deal with the dynamic environment where heterogeneous agents operate. It involves a wide range of policies from areas such as energy, environment, technology, innovation and public finance. Interactions among economic, energy and other environmental aspects grow strongly, which makes the pursuit of a comprehensive sustainable development strategy increasingly complex for policymakers. The systematic perspective derived from economy-energy-environment interactions seems well-suited to deal with the aforementioned challenges.

This workshop slated for September 2018 will focus on efforts to achieve a sustainable 2050. It will be a two-day event that broadly covers INDC and 2050 targets, carbon markets, energy-water-waste nexus, and others. The workshop will focus on a wide range of energy system models, such as bottom-up technology rich model, top-down macroeconomic model, sector specific model, integrated assessment model, agent-based model, climate impact model and decision making model. The target audiences include students, scholars, policy experts, business strategists as well as those who are interested in energy modelling.

Workshop Program

September 10, 2018 (Monday)

Time	Speaker	Topic / Title	
09:20 - 09:30	Prof. Ang Beng Wah, Executive Director of Energy	Welcome address	
	Studies Institute (ESI), National University of		
	Singapore (NUS)		
Session 1: INDC & 2050 Sustainable Targets (I)			
09:30 - 10:10	Dr. Edward Byers, International Institute for	Global vulnerability hotspots assessment and integrated	
	Applied Systems Analysis (IIASA), Austria	assessment models	
10:10 - 10:50	Prof. Qiaomei Liang, Beijing Institute of	An integrated assessment of INDCs under Shared	
	Technology, China	Socioeconomic Pathways: an implementation of C3IAM	
10:50 - 11:10	Coffee break		
11:10 - 11:50	Dr. Anna Krook-Riekkola, Luleå University of	Analysis of ambitious Sweden's long-term climate strategies	
	Technology, Sweden	using integrated model(s) – insights from the linking	
11:50 - 12:30	Dr. Martin Cames, Institute for Applied Ecology,	Modelling and scenario analysis of aviation and climate change	
	Germany		
12:30 - 14:00	Lunch break		
Session 2: INDC & 2050 Sustainable Targets (II)			
14:00 - 14:40	Prof. David Stern, Australian National University,	How big is the economy-wide rebound effect?	
	Australia		
14:40 - 15:20	Dr. Fei Teng, Tsinghua University, China	Exploring non-CO2 mitigation potential in China	
15:20 - 15:40	Coffee break		
15:40 - 16:20	Dr. François Lafond, University of Oxford, UK	Time series forecasting of technological progress in renewable	
		energy technologies	
16:20 - 17:00	Dr. Jooyoung Park, Korea University, South Korea	Resource-based paradigm and approaches for a circular	
		economy	

September 11, 2018 (Tuesday)

Time	Speaker	Topic / Title	
Session 3: Carbon Market and Climate Change			
09:30 - 10:10	Prof. Maosheng Duan, Tsinghua University, China	Modelling analysis of carbon market in China	
10:10 - 10:50	Prof. Toshihide Arimura, Waseda University, Japan	Modelling analysis of carbon market in Japan	
10:50 - 11:10	Coffee break		
11:10 - 11:50	Dr. Young-Hwan Ahn, Korea Energy Economics Institute (KEEI), South Korea	Korean case on emissions trading systems and energy modelling	
11:50 – 12:30	Dr. Xin Zhou, The Institute for Global Environmental Strategies (IGES), Japan	Integrated green economy modelling framework & SDG interlinking tools	
12:30 - 14:00	Lunch break		
Session 4: IEA-ETSAP Tools & Applications			
14:00 - 14:40	Mr. Maurizio Gargiulo, E4SMA s.r.l., Italy	IEA-ETSAP technology collaboration programme: community, tools and application examples	
14:40 - 15:20	Dr. Luke Reedman, Commonwealth Scientific and Industrial Research Organisation (CSIRO), Australia	Considerations in developing a TIMES model for Australia	
15:20 - 15:40	Coffee break		
15:40 - 16:20	Dr. Kannan Ramachandran, Paul Scherrer Institute (PSI), Switzerland	Incorporating detailed technology data in bottom-up energy systems models: Insights from Swiss and international studies	
16:20 - 17:00	Speaker to be confirmed		
17:00 - 17:10	Concluding Remarks by Dr. Su Bin, Senior Research Fellow and Deputy Head, ESI, NUS		

*This preliminary program is subject to change.

** The next IEA-ETSAP VEDA-TIEMS Training workshop will be held in ESI Conference Room, 29 Heng Mui Keng Terrace, Block A #10-01, Singapore 119620 on 12-14 September 2018. The registration form and detailed agenda of IEA-ETSAP training workshop are available at: <u>https://iea-etsap.org/index.php/training-singapore</u> (registration fee applies and will be charged by IEA-ETSAP).