

The 25th AIM International Workshop

National Institute for Environmental Studies

November 18-19, 2019

DAY 1: November 18, 2019

8:45 Bus will leave Okura Frontier Hotel Tsukuba.

9:00-9:30 Registration

9:30-10:40 Session 1: Opening

Chairperson: Dr. Toshihiko Masui (NIES, Japan)

9:30-9:35 Welcome Address

Prof. Yuichi Moriguchi (NIES, Japan)

9:35-9:50 Overall activities in FY 2018-2019

Dr. Toshihiko Masui (NIES, Japan)

9:50-10:10 Keynote Speech (1): IPCC sixth assessment cycle: Key findings from the Special Reports and progress towards AR6 WGIII Mitigation Report

Prof. P. R. Shukla (Ahmedabad Univ., India)

10:10-10:30 Keynote Speech (2): Global energy transitions for the 1.5 degree target

Dr. Jae Edmonds (PNNL, USA)

10:30-10:45 Discussion

10:45-11:00 Coffee Break

11:00-12:40 Session 2: Climate Mitigation in Asia

Chairperson: Dr. Junichi Fujino (IGES, Japan)

11:00-11:15 Roadmap of coal phasing out in the 2C/1.5C scenarios for China

Prof. Xiulian Hu and Prof. Kejun Jiang (ERI, China)

11:15-11:30 tbd

Prof. Dong Kun Lee (SNU, Korea), Prof. Tae Yong Jung (Yonsei Univ., Korea) and
Prof. Chan Park (Univ. of Seoul, Korea)

11:30-11:45 Climate change mitigation and AIM in Thailand

Prof. Bundit Limmeechokchai (SIIT-TU, Thailand)

11:45-12:00 The case of Malaysian cities

Prof. Ho Chin Siong (UTM, Malaysia)

12:00-12:15 Prospects for reduction of energy use and GHG mitigation in four South Asian countries

Prof. Ram Shrestha (AITM, Nepal)

12:15-12:40 Discussion

12:40-12:50 Photo session

12:50-14:00 Lunch Break

14:00-14:50 Session 3: Global Sustainability

Chairperson: Dr. Kiyoshi Takahashi (NIES, Japan)

14:00-14:15 Tackling food consumption inequality to fight hunger without pressuring the environment
Dr. Tomoko Hasegawa (Ritsumeikan Univ., Japan)

14:15-14:30 Global Economics and Food Demand
Dr. Ron Sands (USDA, USA)

14:30-14:45 Global bioenergy potential under environmental protection targets
Dr. Wu Wenchao (NIES, Japan)

14:45-15:00 Asian sustainable development pathways
Dr. Shinichiro Fujimori (Kyoto Univ., Japan)

15:00-15:20 Discussion

15:20-15:40 Coffee Break

15:40-17:00 Session 4: Nation-scale Impact and Adaptation Research

Chairperson: Dr. Yasuaki Hijioka (NIES, Japan)

15:40-15:55 Climate change under uncertainty
Prof. Kwansoo Kim (SNU, Korea)

15:55-16:10 Developing decision supporting systems for local adaptation planning in Korea
Ms. Hyun Jung Hee (SNU, Korea), Dr. Huicheul Jung (KEI, Korea), and
Prof. Lee Dong Kun (SNU, Korea)

16:10-16:25 Assessing future heatwave risk change considering climate change scenarios
Dr. Chae Yeon Park and Prof. Lee Dong Kun (SNU, Korea)

16:25-16:40 Assessing climate sensitivity of hourly electricity demand in Japan
Dr. Yuki Hiruta (NIES, Japan)

16:40-16:55 Collaboration with local governments in Japan towards science-based adaptation strategies
Dr. Yoshifumi Masago, Dr. Tomohiro Fujita, Dr. Kazutaka Oka, and
Dr. Yasuaki Hijioka (NIES, Japan)

16:55-17:10 Discussion

17:10-17:30 Coffee Break

17:30-20:00 Session 5: Poster Session with Reception

- (1) Research on the synergic strategies of economic growth and energy-environmental-climate constraints in Guangzhou
Dr. Yunsheng Xie, Dr. Songyan Ren, Prof. Peng Wang and Prof. Daiqing Zhao (GIEC, China)
- (2) Analysis of Energy transformation scenarios for GuangDong-HongKong-Macao Greater Bay Area until 2035
Prof. Peng Wang, Dr. Songyan Ren, Dr. Yaojun Luo and Prof. Daiqing Zhao (GIEC, China)
- (3) Co-benefits of decarbonizing China's transport sector in air pollution improvement under 1.5- and 2-degree targets
Prof. Hancheng Dai (Pekin Univ., China)
- (4) Ambient particulate air pollution and hospitalization expenditures in China
Prof. Yang Xie (Beihang Univ., China)
- (5) Cost evaluation of multi-sector adaptation pathways: A case for nature-based adaptation strategies
Ms. Jung Hee Hyun (SNU, Korea)
- (6) Systematic conservation planning for conserving amphibians considering bioenergy potential and climate change
Prof. Yongwon Mo (Yeungnam Univ.), Dr. Haruka Ohashi (FFPRI, Japan),
Dr. Whenchao Wu (NIES, Japan), Dr. Tomoko Hasegawa (Ritsumeikan Univ.),
Dr. Yasuaki Hijioka (NIES, Japan), Prof. Dong Kun Lee (SNU, Korea),
Dr. Kiyoshi Takahashi (NIES, Japan) and Dr. Tetsuya Matsui (FFPRI, Japan)
- (7) A classification method to assess uncertainty on climate change impacts and capacity to climate adaptation at the local government level: The case of 226 local entities in Korea
Mr. Jongwoo Moon, Ms. Jaewan Kim, Prof. Tae Yong Jung, Ms. Dahyun Kang and
Mr. Hyo Chan Oh (Yonsei Univ., Korea)
- (8) The role of hydrogen power generation in the low-carbon electricity grid
Dr. Hiroto Shiraki (Shiga Pref. Univ., Japan)
- (9) Impacts of rising temperatures on energy demands in local industries: A case in the Saitama Prefecture of Japan
Dr. Keita Honjo (Center for Env. Science in Saitama, Japan)
- (10) The role of electric vehicle penetration in urban decarbonization scenarios: An integrated land use-transport-energy model
Prof. Runsen Zhang (Hiroshima Univ., Japan)
- (11) Analysis on GHG emission compositions and national reduction targets in Asian Countries
Mr. Tomoki Hirayama (MHIR, Japan)
- (12) Research proposal: the role of biomass greenhouse gas mitigation in Laos
Mr. BounEua Khamphilavanh (Tokyotech, Japan)
- (13) Interconnection of water, food, bio-energy, ecosystem and land investigated with MIROC-INTEG: a global bio-geophysical land surface model with human components
Dr. Tokuta Yokohata (NIES, Japan)
- (14) Improvement of the renewable energy penetration in power sector of Japan by willingness to pay
Dr. Lu Gao (NIES, Japan)
- (15) A method to assess the impact of the region specific factors on hourly electricity consumption.
Dr. Yuki Hiruta (NIES, Japan)
- (16) Future distribution and environmental impact of iron and steel industry in China

Dr. Zhaoling Li (NIES, Japan)

- (17) Macroeconomic impacts of climate change on four priority sectors of adaptation in Indonesia
Dr. Ambiyah Abdullah (NIES, Japan)
- (18) Measuring the potential impact of migration policies in Indonesia: the early finding
Dr. Marissa Malahayati (NIES, Japan)
- (19) Dynamics of energy transition in rural and urban household in India
Dr. Yawale Satish Kumar (NIES, Japan)
- (20) Response of global forest distribution to climate change
Dr. Akiko Hirata (NIES, Japan), Dr. Yuji Kominami, Dr. Haruka Ohashi,
Dr. Tetsuya Matsui (FFPRI, Japan) and Dr. Yasuaki Hijioka (NIES, Japan)
- (21) Enhancement of a state-of-the-art global hydrological model to simulate the bioenergy crop yield
Dr. Zhipin Ai (NIES, Japan)
- (22) High-resolution climate scenario in Japan for impact studies
Dr. Noriko N. Ishizaki (NIES, Japan)
- (23) Projecting future changes in Southeast Asia's aboveground forest carbon stock
Dr. Ronald C. Estoque (NIES, Japan)
- (24) Impact of major dams on global flood simulations
Dr. Boulange Julien Eric Stanislas (NIES, Japan)
- (25) Climate change, air quality and health co-benefits in South Korea
Dr. Satbyul Estella Kim (NIES, Japan)
- (26) Regional and sectoral attributions of recent climate change
Dr. Xuanming Su (JAMSTEC, Japan)

Reception starts at Chu-Kaigi-Shitsu (Middle Meeting Room), NIES at 18:00.

20:00 Bus will leave NIES.

DAY 2: November 19, 2019

8:45 Bus will leave Okura Frontier Hotel Tsukuba.

9:30-11:10 Session 6: Climate Mitigation in Asia and Africa

Chairperson: Dr. Tatsuya Hanaoka (NIES, Japan)

9:30-9:45 Indonesia NDC roadmap on AFOLU and energy sector

Prof. Rizaldi Boer (IPB, Indonesia) and Prof. Retno Gumilang Dewi (ITB, Indonesia)

9:45-10:00 Role of 'Swachh Bharat' (Clean India) Mission in GHG mitigation: A case of Indore, India

Prof. Manmohan Kapshe (MANIT, India)

10:00-10:15 tbd

Dr. Tung Lam Nguyen (ISPONRE, Indonesia)

10:15-10:30 The importance of producer price markups for carbon tax evaluations: Evidence from Taiwan

Dr. Yi-Hua Wu (ITRI, Taiwan)

10:30-10:45 How choosing a Carbon Tax revenue recycling scheme can & cannot contribute to decarbonizing an economy: An analysis with IMACLIM South Africa

Dr. Jules Schers (Univ. of Cape Town, South Africa)

10:45-11:10 Discussion

11:10-11:30 Coffee Break

11:30-12:30 Session 7: Research on Climate Mitigation at NIES

Chairperson: Mr. Tomoki Ehara (E-konzal, Japan)

11:30-11:40 Toward decarbonization and depollution pathways in Asian regions

Dr. Tatsuya Hanaoka (NIES, Japan)

11:40-11:50 tbd

Dr. Shuichi Ashina (NIES, Japan)

11:50-12:00 Localized scenario technique considering societal dimension of SDGs

Dr. Kei Gomi (NIES, Japan)

12:00-12:10 Estimation of food loss related with consumption behavior in Japan

Dr. Yuko Kanamori (NIES, Japan)

12:10-12:20 Assessment of climate mitigation goals with AIM/CGE

Dr. Diego Silva Herran (NIES, Japan)

12:20-12:30 Discussion

12:30-13:30 Lunch Break

13:30-15:00 Session 8: Discussion on Low Carbon Development Strategy and Stakeholder Dialogue

Chairperson: Dr. Toshihiko Masui (NIES, Japan)

13:30-15:00 Discussion 1

- Questions: Long-term strategy of AIM
- Meaning of research and stakeholder dialogue
- Introduction of recent activities: Dr. Junichi Fujino and Tomoko Ishikawa (IGES, Japan)
- How will AIM contribute to decision making on climate change issues?

15:00-15:20 Coffee Break

15:20-16:50 Session 9: Discussion on research collaboration among Asian countries

Chairperson: Dr. Toshihiko Masui (NIES, Japan)

15:20-16:50 Discussion 2

- Background
- Introduction of topics: Prof. Hancheng Dai (Peking Univ.), Dr. Diego Silva Herran (NIES, Japan) and Prof. Bundit Limmeechokchai (SIIT-TU, Thailand)
- Global research by Dr. Kiyoshi Takahashi (NIES, Japan)
- Impact and adaptation research by Dr. Yasuaki Hijioka (NIES, Japan)
- How to proceed research
- Future works

16:50-17:00 Session 10: Closing

Chairperson: Dr. Toshihiko Masui (NIES, Japan)

16:50-17:00 Closing Remarks

Dr. Mikiko Kainuma (NIES and IGES, Japan)

17:30 Bus will leave NIES.

18:00-20:00 Dinner at Wine Dining Bar Paccio on the 3rd floor of BiVi Tsukuba