

The 21st AIM International Workshop

November 13-15, 2015
Ohyama Memorial Hall, NIES
Tsukuba, Japan

DAY 1, November 13, 2015 (Friday)

8:30 **Bus will leave Hotel Okura.**

8:40-9:00 **Registration**

9:00-9:30 **Session 1: Opening Session**

Chairperson: Dr. Toshihiko Masui (NIES, Japan)

9:00-9:10 Welcome address
 Dr. Toshihiko Masui (NIES, Japan)

9:10-9:30 Overall activity in FY2014-2015 and future research plan
 Dr. Toshihiko Masui (NIES, Japan)

9:30-10:10 **Session 2: Impact and Adaptation Studies (1)**

Chairperson: Dr. Kiyoshi Takahashi (NIES, Japan)

9:30-9:40 Introduction to the session and recent activities of AIM/Impact [Japan]
 Dr. Kiyoshi Takahashi (NIES, Japan)

9:40-9:55 Climate Change Impact Assessment Considering Uncertainties and Integrated Modeling:
Recent Research Progress in Republic of Korea
 Prof. Dong Kun Lee and Mr. Sun Yong Sung (SNU, Korea) and
 Dr. Hui Chul Jung (KEI, Korea)

9:55-10:10 Predicting distributions of coniferous forest and Japanese pine sawyer beetle (*Monochamus
alternatus* Hope) to support climate change adaptation policy
 Dr. Jaeuk Kim (KEI, Korea)

10:10-10:25 **Coffee Break**

10:25-11:40 **Session 3: Impact and Adaptation Studies (2)**

Chairperson: Dr. Kiyoshi Takahashi (NIES, Japan)

10:25-10:40 High instability of Wheat Production on global food markets in the 2000s
 Prof. Yuji Masutomi (Ibaraki Univ., Japan)

10:40-10:55 Adaptation pathways to maintain global wheat production through the 21st century
 Dr. Akemi Tanaka (NIES, Japan)

10:55-11:10 ICA-RUS's risk management strategies
 Dr. Kiyoshi Takahashi (NIES, Japan)

11:10-11:25 Impact/adaptation research activities in Japan
Dr. Yasuaki Hijioka (NIES, Japan)

11:25-11:40 Discussion

11:40-12:30 Lunch Break

13:00-13:20 Welcome Address by Prof. Akimasa Sumi, President of NIES

12:30-14:00 Session 4: Poster session

* indicates the poster to be voted.

- (1) * Thailand's emission reduction potential under Shared Socioeconomic Pathway by AIM/CGE
Mr. Puttipong Chunark and Mr. Piti Pita (SIIT, Thailand)
- (2) * CGE model for Indonesia INDC and low carbon development scenarios
Mr. Bintang Budi Yuwono (ITB, Indonesia)
- (3) * Indonesia INDC modeling using AIM/Enduse model
Mr. Iwan Hendrawan (ITB, Indonesia)
- (4) * Impact development of renewable energy to GHG reduction, agriculture, production change mitigation in Indonesia
Dr. Lukytawati Anggraeni (IPB, Indonesia)
- (5) * Evaluation of China's INDC Target: An Application of AIM/CGE Model
Dr. Yihua Wu (ITRI, Taian)
- (6) * The Evaluation of Power Supply Change in Taiwan
Dr. Yihua Wu (ITRI, Taian)
- (7) * Economic consequences of climate-induced changes in the energy demand for heating and cooling
Dr. Chan Park (KRIHS, Korea), Dr. Tomoko Hasegawa, Dr. Shinichiro Fujimori,
Dr. Kiyoshi Takahashi, Dr. Yasuaki Hijioka and Dr. Toshihiko Masui (NIES, Japan)
- (8) * Identifying the Candidate Protected Area for Adapting to Climate Change
Mr. Yongwon Mo, Prof. Dong Kun Lee (SNU, Korea),
Dr. Chan Park (KRIHS, Korea), Dr. Sung-Ho Kil (Texas A&M, USA),
Mr. Sunyong Sung and Mr. Jin Han Park (SNU, Korea)
- (9) * Evaluating Landslide Hazard Areas Considering Uncertainty of Spatial Distribution Models
Mr. Ho Gul Kim, Prof. Dong Kun Lee (SNU, Korea), Dr. Chan Park (KRIHS, Korea),
Ms. Yoonjung Ahn (KEI, Korea), Dr. Sung-Ho Kil (Texas A&M, USA),
Mr. Sunyong Sung, Mr. Jin Han Park, Yongwon Mo (SNU, Korea)
- (10) * Climate Change Vulnerability Assessment for the Industry Sector
Ms. Eun Joo Yoon, Ms. Ji Eun Ryu, Ms. Mi Jin Lee, Mr. Ho Gul Kim,
Mr. Jin Han Park and Prof. Dong Kun Lee (SNU, Korea)
- (11) * GHG and air pollution emissions in Korea, 2010-2100 - Focused on Industrial Sector
Mr. Jin Han Park, Ms. Mi Jin Lee, Prof. Dong Kun Lee and
Mr. Yongwon Mo (SNU, Korea)
- (12) * Achieving carbon emission peak by 2030: the key options and economic impacts
Dr. Hancheng Dai (NIES, Japan)

- (13) * Energy service demand projections and CO2 mitigation potentials in rural households in 31 Chinese provinces
Dr. Rui Xing (NIES, Japan)
- (14) * Bridging greenhouse gas emissions and renewable energy deployment target: comparative assessment of China and India
Dr. Shivika Mittal (NIES, Japan)
- (15) * Low carbon scenarios for cities in Vietnam - A case of Ho Chi Minh City
Dr. Tran Thanh Tu (NIES, Japan)
- (16) * Is INDC justified from the perspective of generation equity? Comparative assessment with RCP2.6
Dr. Jingyu Liu (NIES, Japan)
- (17) * Analysis of optimal locations for power stations and their impact on industrial symbiosis planning under transition toward low-carbon power sector in Japan
Dr. Hiroto Shiraki (NIES, Japan)
- (18) * Uncertainty in long-term forecasting: State space modeling of crude steel production in Japan
Dr. Keita Honjo (NIES, Japan)
- (19) * Economic impacts from PM2.5 pollution-related health effects in China: A provincial-level analysis
Ms. Yang Xie (NIES, Japan)
- (20) * Toward the development of a flood forecasting system for cooperation of flood fighting activities
Prof. Takahiro Yamamoto (Nagaoka National College of Technology, Japan)
- (21) * Comparative Assessment of Climate Change and Mitigation on Hydropower: Model-Based Analysis
Dr. Qian Zhou, Dr. Naota Hanasaki, Dr. Shinichiro Fujimori,
Dr. Yoshimitsu Masaki and Dr. Yasuaki Hijioka (NIES, Japan)
- (22) Impacts of climate change on global irrigation water requirement and its sources
Dr. Yoshimitsu Masaki, Dr. Naota Hanasaki, Dr. Kiyoshi Takahashi and
Dr. Yasuaki Hijioka (NIES, Japan)
- (23) * Papers published in 2015 (including in press)
Dr. Naota Hanasaki (NIES, Japan)
- (24) * The gap between INDC proposals and optimal climate policy: economic impacts and climate change consequences
Dr. Xuanming Su (NIES, Japan)
- (25) * Assessment of linearity of climate-change impacts to global mean temperature
Dr. Akemi Tanaka (NIES, Japan)

14:00-14:30 Coffee Break

- 14:30-15:40** **Session 5: JCM (1)**
Chairperson: Dr. Junichi Fujino (NIES, Japan)
- 14:30-14:45 Overall activity of JCM
Mr. Go Hibino and Mr. Kazuya Fujiwara (MHIR, Japan)
- 14:45-15:00 Decarbonizing AFOLU Sector toward Low Carbon Society in Indonesia
Prof. Rizaldi Boer and Dr. Lukytawati Anggraeni (IPB, Indonesia)
- 15:00-15:15 Indonesian Energy Climate Change Research Using AIM: An Update
Prof. Retno Gumilang Dewi, Prof. Ucock WR Siagian, Mr. Bintang Budi Yuwono, and
Mr. Iwan Hendrawan (ITB, Indonesia)
- 15:15-15:30 Discussion
- 15:30-16:00** **Coffee Break**
- 16:00-17:00** **Session 6: JCM (2)**
Chairperson: Dr. Junichi Fujino (NIES, Japan)
- 16:00-16:15 Thailand's INDC 2030 and Peak CO2 Scenarios in 2050
Prof. Bundit Limmeechokchai, Mr. Puttipong Chunark and Mr. Piti Pita
(SIIT, Thailand)
- 16:15-16:30 Climate change mitigation strategies from energy and AFOLU sectors in Nepal
Prof. Ram Shrestha (AITM, Nepal)
- 16:30-16:45 Mainstreaming climate change and green technology policy into National Development plans
in Malaysia
Prof. Chin Siong Ho (UTM, Malaysia)
- 16:45-17:00 Discussion
- 17:15** **Bus will leave NIES**
- 18:00-20:00** **Reception at Watami in BiVi (Tsukuba Center)**

DAY 2, November 14, 2015 (Saturday)

8:30 **Bus will leave Hotel Okura**

9:00-17:30 **Session 7: Special lectures on Integrated Assessment Model in the Future**
Chairperson: Prof. Koji Shimada (Ritsumeikan Univ., Japan)

9:00-9:30 AIM approach on regional low carbon development in Asian region, 2015
Prof. Yuzuru Matsuoka (Kyoto University, Japan)

9:30-9:50 Offsets: The macro consequences of project-based programs
Dr. Jae Edmonds (PNNL, USA)

9:50-10:10 Modelling approach to bridge the climate change and SDGs
Dr. Mikiko Kainuma (NIES, Japan)

10:10-10:20 Discussion

10:20-10:40 **Coffee Break & Photo Session**

10:40-12:00 **Session 8: Global Model Analysis**
Chairperson: Dr. Yasuaki Hijioka (NIES, Japan)

10:40-10:55 Economic implications of climate change on human health through undernourishment
Dr. Tomoko Hasegawa (NIES, Japan)

10:55-11:10 Climate change impacts on agriculture in 2050 under a range of socioeconomic and
emissions scenarios
Dr. Ron Sands (USDA, USA)

11:10-11:25 Assessment of GHGs and SLCPs emissions projections in Asia based on SSP scenarios by using
AIM/Enduse[Global]
Dr. Tatsuya Hanaoka (NIES, Japan)

11:25-11:40 Assessment of INDCs using AIM/CGE [Global]
Dr. Shinichiro Fujimori and Dr. Toshihiko Masui (NIES, Japan)

11:40-12:00 Discussion

12:00-13:00 **Lunch Break**

13:00-14:20 **Session 9: China Model Analysis**
Chairperson: Dr. Tatsuya Hanaoka (NIES, Japan)

13:00-13:15 ERI's Research Activities in 2014
Prof. Hu Xiulian and Prof. Jiang Kejun (ERI, China)

13:15-13:30 TBD
Prof. Zhao Daiqing and Prof. Liao Cuiping (GIEC, China)

13:30-13:45 Study on Production-based and Consumption-based CO2 Emissions in China
Dr. Fu Jiafeng (CRAES, China)

13:45-14:00	Abatement Performance Evaluation of Climate Policies in China -A Study based on an Integrated Assessment Model Dr. Zhu Lei (CAS, China)
14:00-14:20	Discussion
14:20-14:40	Coffee Break
14:40-16:00	Session 10: Asian Model Analysis Chairperson: Dr. Yuko Kanamori (NIES, Japan)
14:40-14:55	Integrated Assessment Modelling Activities in India in 2014-15 Prof. P. R. Shukla (IIM, India) and Dr. Shivika Mittal (NIES, Japan)
14:55-15:10	Technology Options for Emission Mitigation in Indian Residential and Transport Sectors Prof. Manmohan Kapshe (MANIT, India)
15:10-15:25	Future GHG and Air-pollutant emission range consistent with the RCP and SSP in Korea Dr. Chan Park (KRIHS, Korea), Prof. DongKun Lee, Mr. Jin Han Park, Ms. Mi Jin Lee, Prof. Tae Yong Jung, Mr. Yongwon Mo (SNU, Korea) and Prof. Jung-Hun Woo (Konkuk University, Korea)
15:25-15:40	Recent Progress of Air Pollution Modelling for co-benefit estimation Prof. Gakuji Kurata (Kyoto Univ., Japan)
15:40-16:00	Discussion
16:00-16:20	Coffee Break
16:20-17:20	Session 11: Japan Model Analysis Chairperson: Dr. Toshihiko Masui (NIES, Japan)
16:20-16:35	Energy consumption in Japan's household sector Dr. Yuko Kanamori (NIES, Japan)
16:35-16:50	A new framework of LCS scenario development with coupled macro, spatial, and technology models in Tokyo metropolitan region Dr. Kei Gomi (NIES, Japan)
16:50-17:05	Assessment of Japan's INDC using AIM/Enduse [Japan] Dr. Ken Oshiro (MHIR, Japan)
17:05-17:20	Discussion
17:20-17:30	Session 12: Closing session Chairperson: Dr. Toshihiko Masui (NIES, Japan)
17:20-17:30	Closing address Dr. Mikiko Kainuma (NIES, Japan)
18:00-20:00	Dinner at Chimney
20:00	Bus will leave NIES

DAY 3, November 15, 2015 (Sunday)

8:30 **Bus will leave Hotel Okura**

9:00-10:00 Malaysia

10:00-11:00 Thailand and Nepal

11:00-12:00 Indonesia

12:00-13:00 **Lunch break**

13:00-14:00 China

14:00-15:00 India