

The 23rd AIM International Workshop

Ohyama Memorial Hall

National Institute for Environmental Studies

November 27-28, 2017

In memory of Prof. Gakuji Kurata (1969-2017)



Educational background:

Bachelor: Engineering, Kyoto University, 1992

Master: Engineering, Kyoto University, 1994

Doctor: Engineering, Kyoto University, 1998

Professional career:

1996-2007 Assistant, Toyohashi University of Technology

2001-2002 Post-doctoral fellow, The University of Iowa, USA

2007-2017 Associate Professor, Kyoto University

2017 Professor, Kyoto University

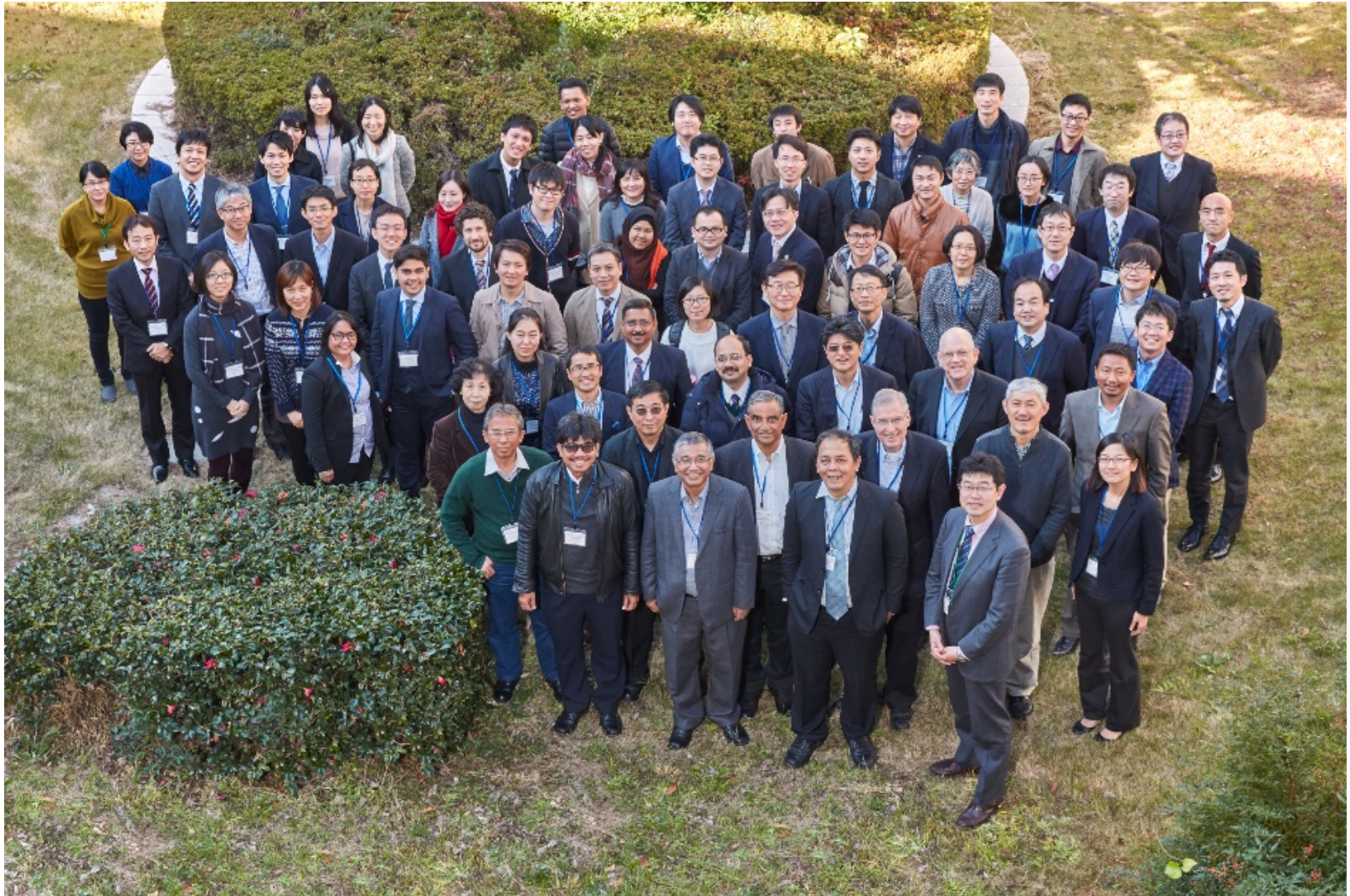
Activities 2016-2017

Toshihiko Masui

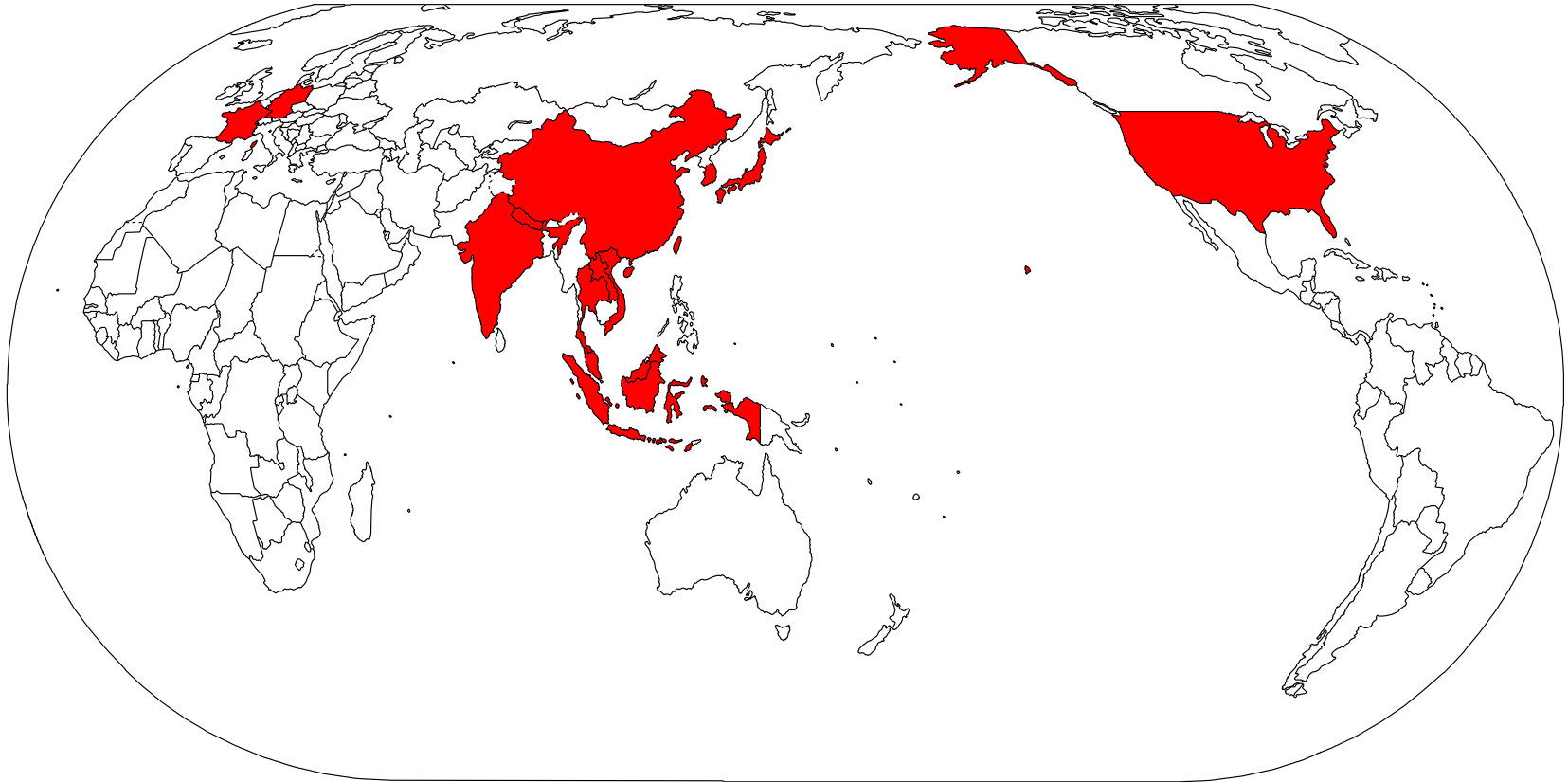
National Institute for Environmental Studies, Japan

The 23rd AIM International Workshop
Ohyama Memorial Hall, NIES, Japan
November 27-28, 2017

Since the 22nd AIM International Workshop

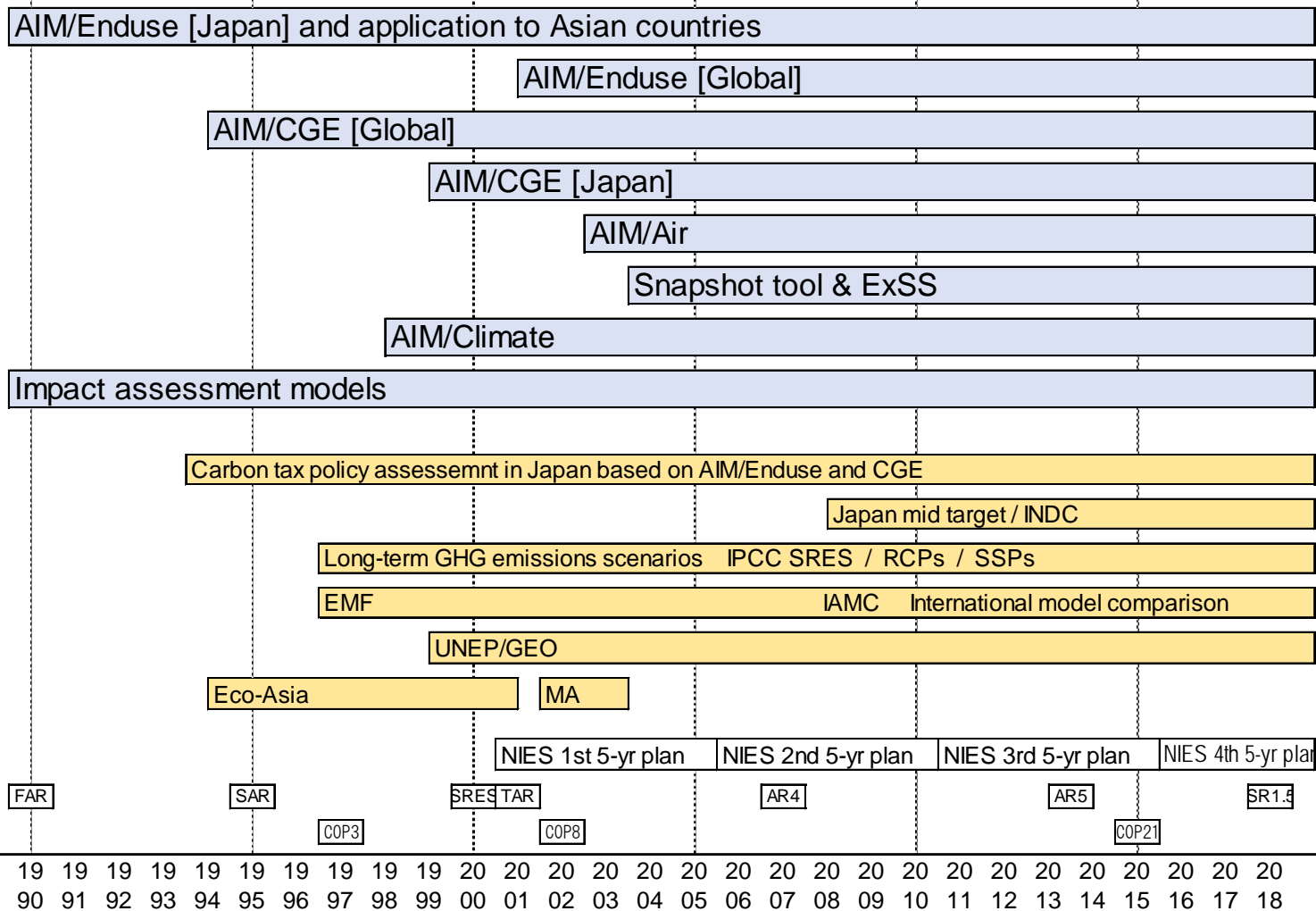


The 23rd AIM International Workshop



Total 75 participants from 14 countries visit NIES.

Brief History of AIM and its application



Development of
Sustainable
Low/Zero-
Carbon Society

Start of AIM
Project (FY1990-)

AIM Training
WS (FY1997-)

AIM Workshop
(FY1995-)

Japan UK Joint
Project (-FY2007)

COP Side Event
(FY2005-)

Japan LCS Project
(-FY2008)

LCS-RNet

Asia LCS Project
(-FY2013)

BOCM-
MRV

SATREPS (-FY2015)

LoCARNet

ICM

LLGHG&SLCP
(-FY2018)

Low-Carbon
Vision

Fukushima

Long-term
strategies

Long-term low GHG emission development strategy

- Following countries have already submitted the long-term strategies to UNFCCC.

Country	Date submitted	GHG reduction target
USA	Nov. 16, 2016	80% reduction of GHG in 2050 compared to 2005 level
Mexico	Nov. 16, 2016	50% reduction of GHG in 2050 compared to 2000 level
Canada	Nov. 17, 2016	80% reduction of GHG in 2050 compared to 2005 level
Germany	Nov. 17, 2016	80-95% reduction of GHG in 2050 compared to 1990 level
Benin	Dec. 12, 2016	
France	Dec. 28, 2016	75% reduction of GHG in 2050 compared to 1990 level

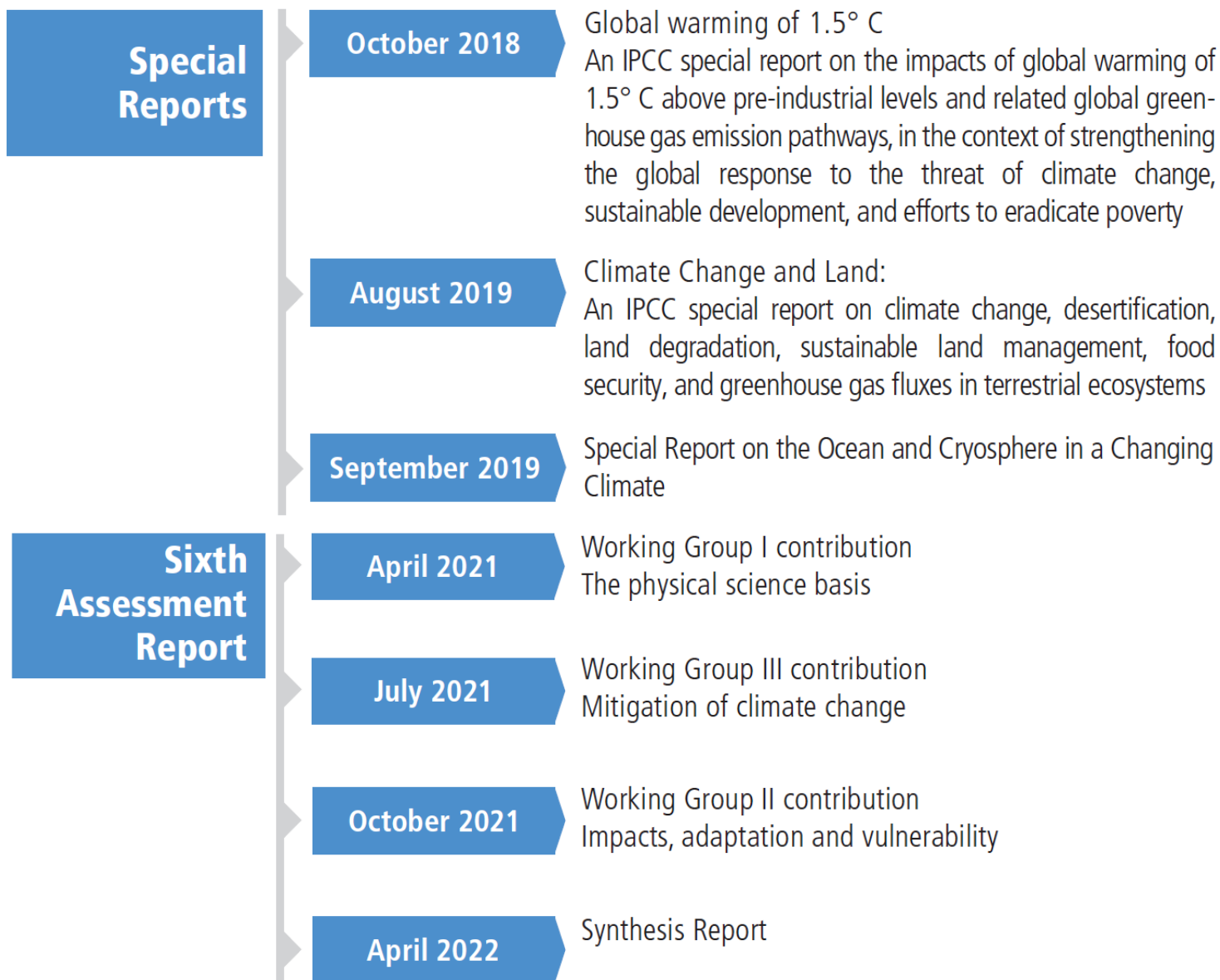
- Other countries are requested to submit their long-term strategy by 2020.

Long-term Low-carbon Vision by MOEJ (March 2017)

<http://www.env.go.jp/press/103822/713.pdf>

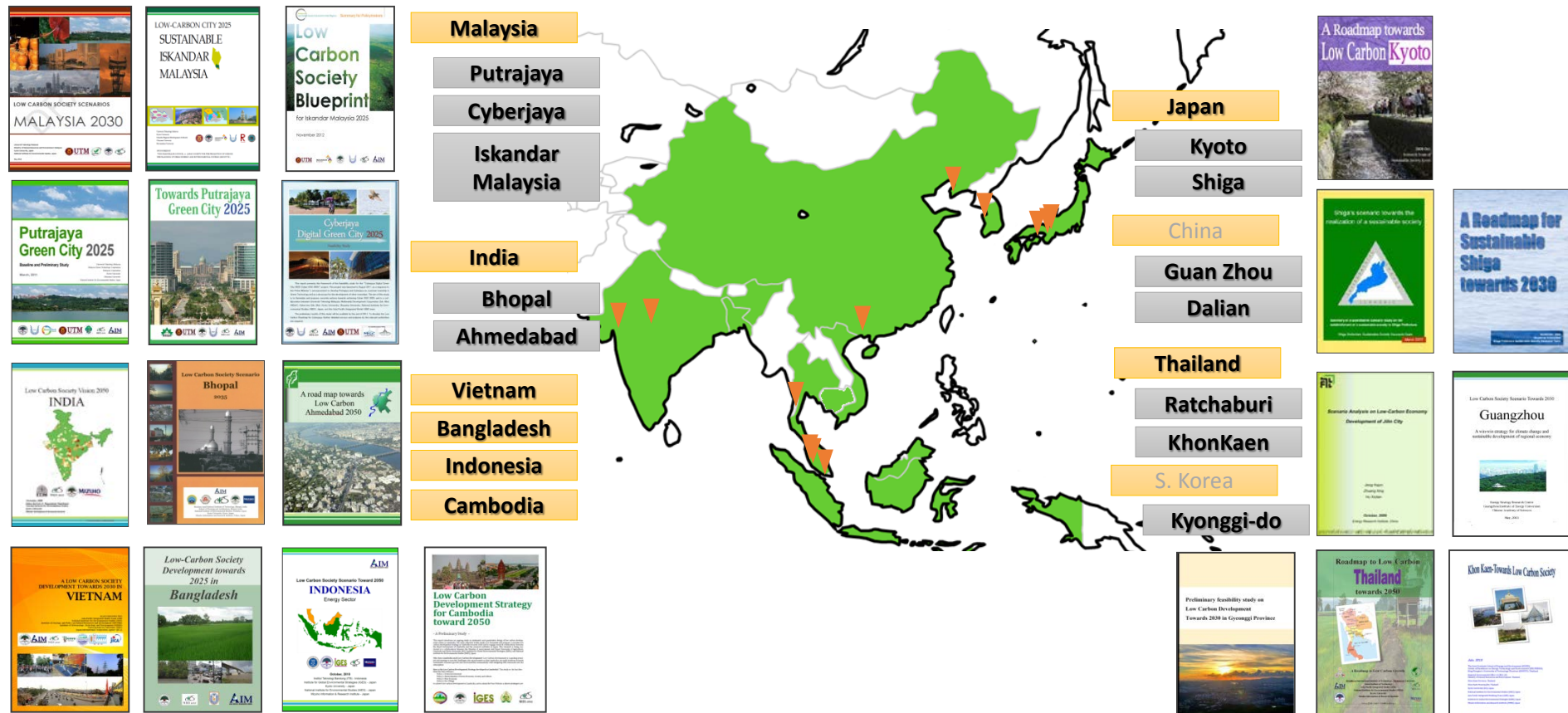
- Background: “Simultaneous solution” of economic and social problems such as population decrease and aging issue etc., and climate change
 - Contribution to global reduction as well as domestic reduction
 - Innovation (on technology, socioeconomic system and lifestyle) is the key
- Actions to reduce GHG by 80% by 2050
 - Energy efficiency,
 - Low-carbon energy supply, and
 - Switch to low-carbon energies in end-use
- Taking into account "Carbon budget"
- Avoiding "Lock-in" effects
- Introducing "Carbon Pricing" as a policy to strengthen market competitiveness

Toward IPCC AR6



Our research stocks on low-carbon society research in Asia

Collaboration among countries in Asia



A-PLAT: CLIMATE CHANGE ADAPTATION PLATFORM

<http://www.adaptation-platform.nies.go.jp/>

A-PLAT
気候変動適応情報プラットフォーム

ABOUT リンク集 海外情報 ツール English

Links Overseas info Tools English site

Google カスタム検索

適応しよう、未来に向かって。

変化する気候に、私たちの生活を、うまく適応させていくためにできること。
気候変動適応情報プラットフォームは、役立つ情報を発信していきます。

国内外の適応ニュース **News**
気候変動適応とは?
Climate Change Adaptation
ここ。

イベント情報 **Events**
政府の取組
Government activities related to adaptation

動画 **Movies**
地方公共団体会員ページ **Local Gov. Officers Only**
NEW WebGIS
全国・都道府県情報
National & Local Information

地方公共団体の適応
Info. for local government

JP
事業者の適応
Info. for private sector

個人の適応
Info. for Individuals

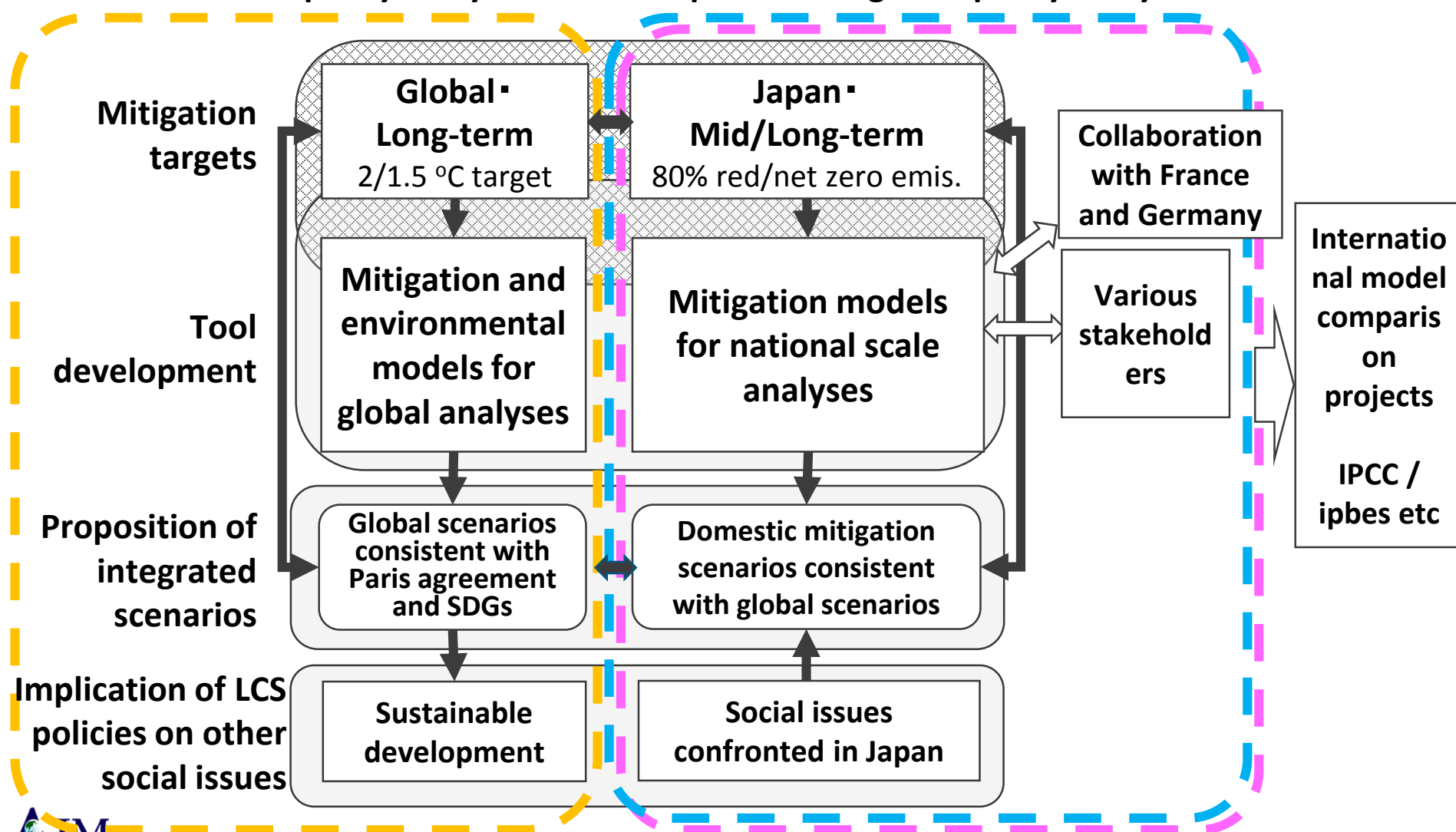
ERTDF 2-1702: Integrated Analyses of Climate Policies for Simultaneous Realization of the Paris Agreement and the SDGs (Dr. K. Takahashi)

Theme 1 (NIES)

Global climate policy analyses

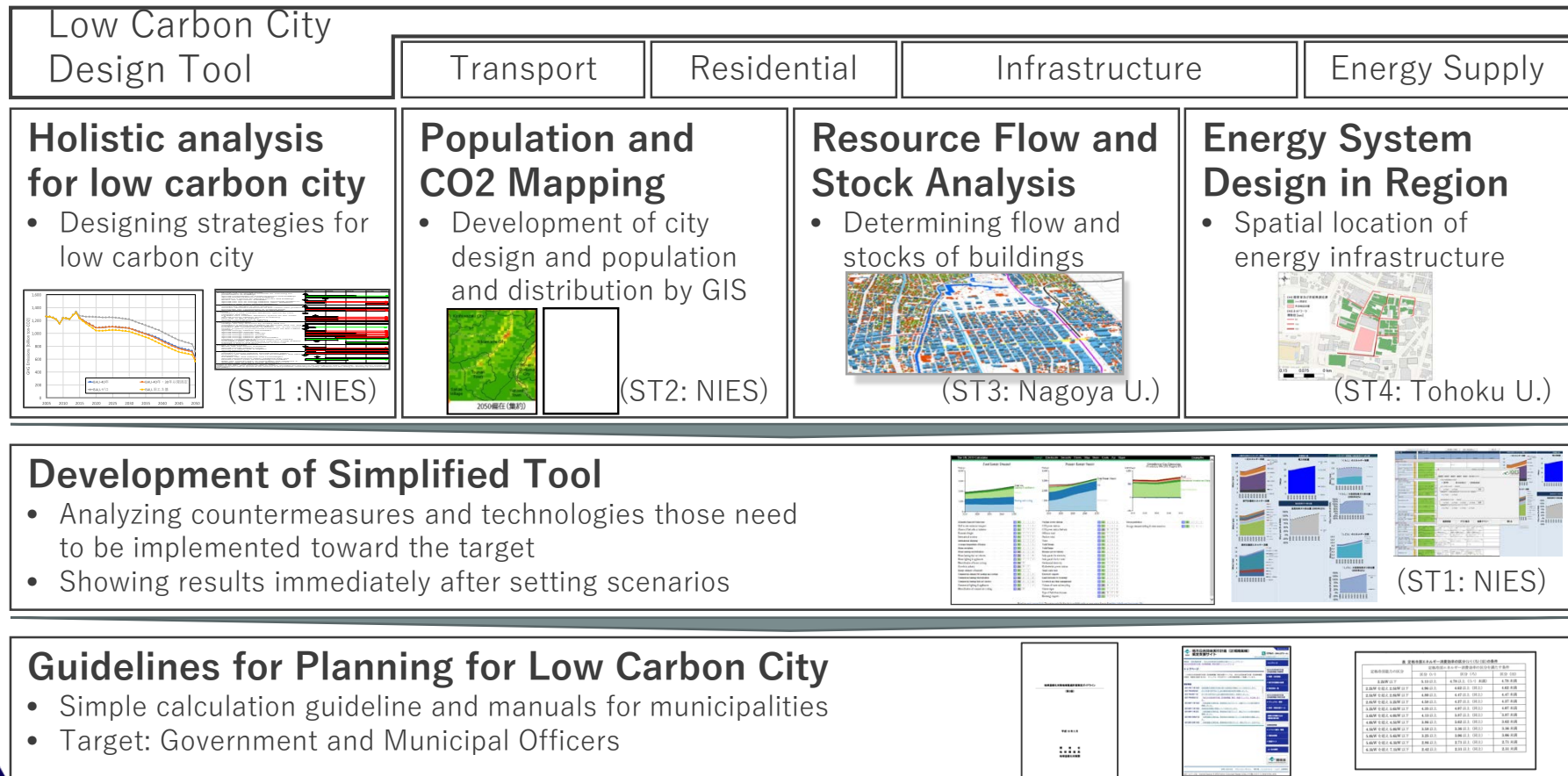
Theme 2 (NIES) • 3 (MHIR)

Japanese mitigation policy analyses



ERTDF 2-1711: Low Carbon Re-development Planning of Municipalities: Development and Application of Analytical Models coupling Resources and Energy Use (Dr. S. Ashina)

1. Development of **planning methodology and analytical models** for designing **Low Carbon & Resilient city** coupling resources and energy use.
2. **Application** of the methodology and models **to municipalities** in Japan.
3. Development of **simplified model and guidelines** those can be utilized by municipalities.



Tier 1

Tier 2

Tier 3

Contribution to international research cooperation

- IAMC
- EMF
- DDPP
- CD-LINKS
- MILES
- AgMIP
- ISI-MIP
- TWI2050
- IoP
- LCS-RNet
- LoCARNet
- ...
- Japan-France
- Japan-Germany
- Japan-UK
- Japan-Asian countries
 - Vietnam
 - Malaysia
 - Indonesia
 - Thailand
 - Bhutan
 - ...

Implications of Paris Research and Workshop Series (Dr. J. Edmonds)

- Fill High-Priority Research Gaps—Identify important gaps in understanding and conduct research to help fill those gaps.
- Conduct Workshops— The workshops serve two functions.
 - Identify the most important research gaps in our knowledge
 - Communicate to the most recent findings to key decision makers
- The first workshop: May 3-4, 2016 at the University of Maryland, USA
- The second workshop: March 5-6, 2017 at NTNU, Trondheim, Norway
- The third workshop: October 1-2, 2017 at Tokyo Institute of Technology, Japan

Implications of Paris Research and Workshop Series (Dr. J. Edmonds)

Third Workshop on the Global Stocktake; October 1-2 2017

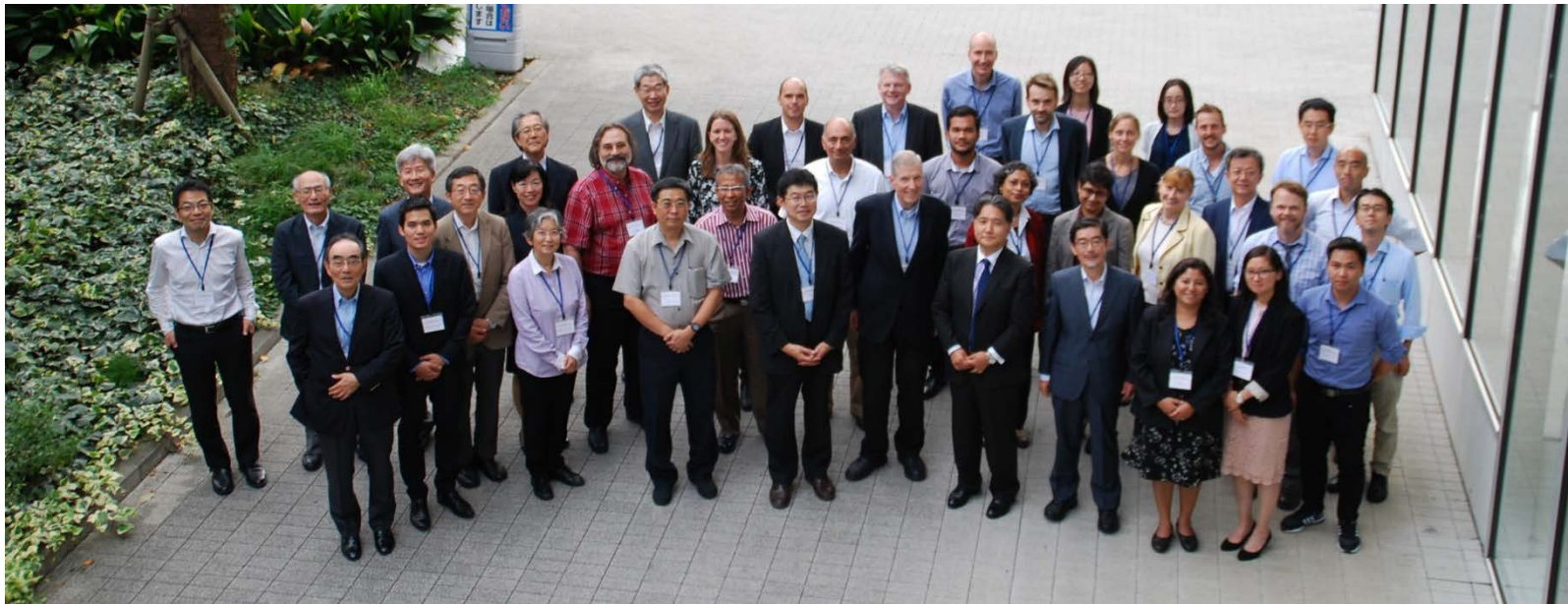
Session 1: Overview of the Workshop and Keynote

Session 2: Research to measure progress in emissions and land use, and non-CO₂

Session 3: Research to measure progress in technology, policy, institutions, communications and adaptation

Session 4: Research to measure progress toward business models, financial instruments, and green development strategies

Session 5: Research Needs and Future Directions



Contribution to LCS-RNet/LoCARNet

LCS-RNet Low Carbon Research Network

- Knowledge exchange and research cooperation amongst researchers/research institutes,
- Sharing updated scientific knowledge and information on the various policy tools required to realise low-carbon societies.
- International dialogues among researchers, policy-makers and other stakeholders from different countries in order to promote science and policy linkage.
- Scientific inputs and recommendations in international climate change policy-making fora.

LoCARNet Low Carbon Asia Research Network

- Network of prominent researchers who are deeply involved in low-carbon development policy processes in this region.
- Science-Science-Policy Dialogue: LoCARNet promotes research for policies towards low-carbon growth by enabling a sufficient amount of dialogue between scientists and policy-makers.
- Ownership of knowledge by countries: LoCARNet also encourages collaboration amongst researchers in-country whose research capacity and scientific knowledge are firmly grounded in their home countries.
- South-South-North Collaboration: LoCARNet aims to increase in research capacity in the AP region through knowledge sharing and information exchange, in the scheme of not only north-south cooperation, but also south-south regional cooperation.

Contribution to LCS-RNet/LoCARNet



Low Carbon Research Network

- 2009-
- The 9th annual meeting in Warwick (UK) in September 12-13.
- Dr. Mikiko Kainuma



Low Carbon Asia Research Network

- 2012-
- The 6th Annual meeting in Bangkok (THA) in November 1-3.
- Ms. Tomoko Ishikawa



Capacity development in Asia by AIM

- Jan. 30-Feb. 1 2017, SIIT-TU, Thailand
- Introduction of AIM (ExSS, Enduse & CGE)



Capacity development in Asia by AIM

- Sep. 4 - Oct. 13, 2017 at NIES: CGE
 - Bhutan, Malaysia, Nepal, Thailand and Vietnam



- Oct. 23 - 27, 2017 at NIES: Enduse
 - China, Sri Lanka and Vietnam



Schedule of the 23rd AIM International Workshop

DAY 1 (November 27, 2018)

Session 1: Opening

Session 2: Global

Session 3: Asia (1)

Photo

Lunch Break

Session 4: Asia (2)

Session 5: Developed countries

Session 6: Poster

Reception @ NIES

DAY 2 (November 28, 2017)

Session 7: Asia (3)

Session 8: Impact (1)

Lunch Break

Session 9: Impact (2)

Session 10: Discussion

Session 11: Closing

Dinner @ Sen-nen no Utage

Themes at Discussion (Session 10)

Research and Implementation toward decarbonized society

1. Research collaboration in short-term (research budget) and long-term (topics)
 - Short: S-12 (SLCP) will finish in March 2019 (FY 2018). What is the next topic? In order to start next research from FY 2019, we will apply ERDTF in November 2018.
 - Long: What is requests to AIM?
2. Research toward IPCC AR6
 - Presentation by Prof. Shukla on November 27.
3. Policy support based on the Paris Agreement (NDC, long-term low GHG strategy, adaptation strategies, etc.)
 - From model to implementation.
 - Linking SDGs.