

Overall activities in FY2015-2016 and future research plan

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The 22nd AIM International Workshop
Ohyama Memorial Hall, NIES
December 9, 2016



Asia-Pacific Integrated Model

<http://www-iam.nies.go.jp/aim/index.html>

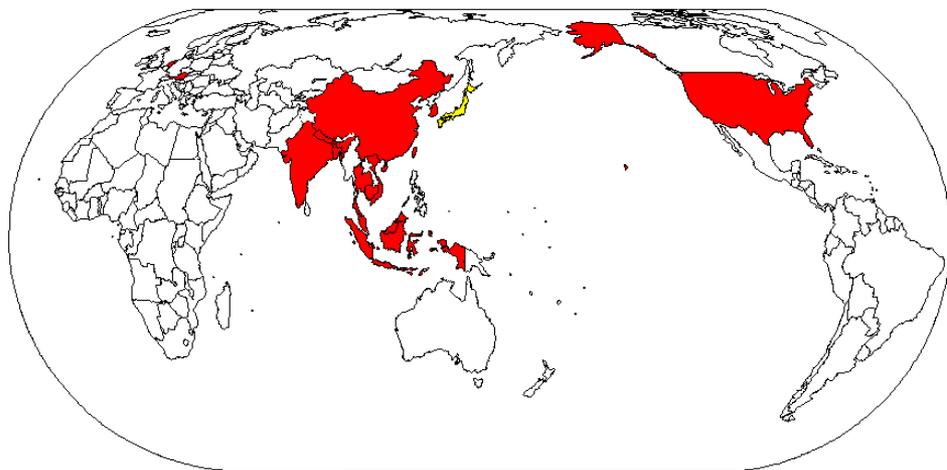


Welcome to The 22nd AIM (Asia-Pacific Integrated Model) International Workshop!

AIM Project, development of an integrated assessment model to assess mitigation options to reduce GHG emissions and impact/adaptation to avoid severe climate change damages, started in 1990.

The model is extended to assess sustainable development policies together with Asian researchers.

<http://www-iam.nies.go.jp/aim/>



The 21st AIM International Workshop
2015, NIES

Overview of AIM

Mitigation Target, Climate Policy, Capacity building, ...

Real World

Emission Model

carbon tax

IPCC/WG3

GHG emissions

Simple Climate Model

long-term vision

temperature

Impact/Adaptation Model

IPCC/WG2

Agriculture

Water

Human health

【Global】 ↔ 【National/Local】

adaptation

AIM/Impact
[Policy]

feedback

- 【Account model】
- ↕
- 【Enduse model】
- ↕
- 【Economic model】

- ↗
- 【Global】
- ↕
- 【Country】
- ↕
- 【Local/City】

mid-term target

【sequential dynamics】

↔ 【dynamic optimization】

low carbon scenario

IPCC/integrated scenario

↕ future society

Model World

Other Models

Population

Transportation

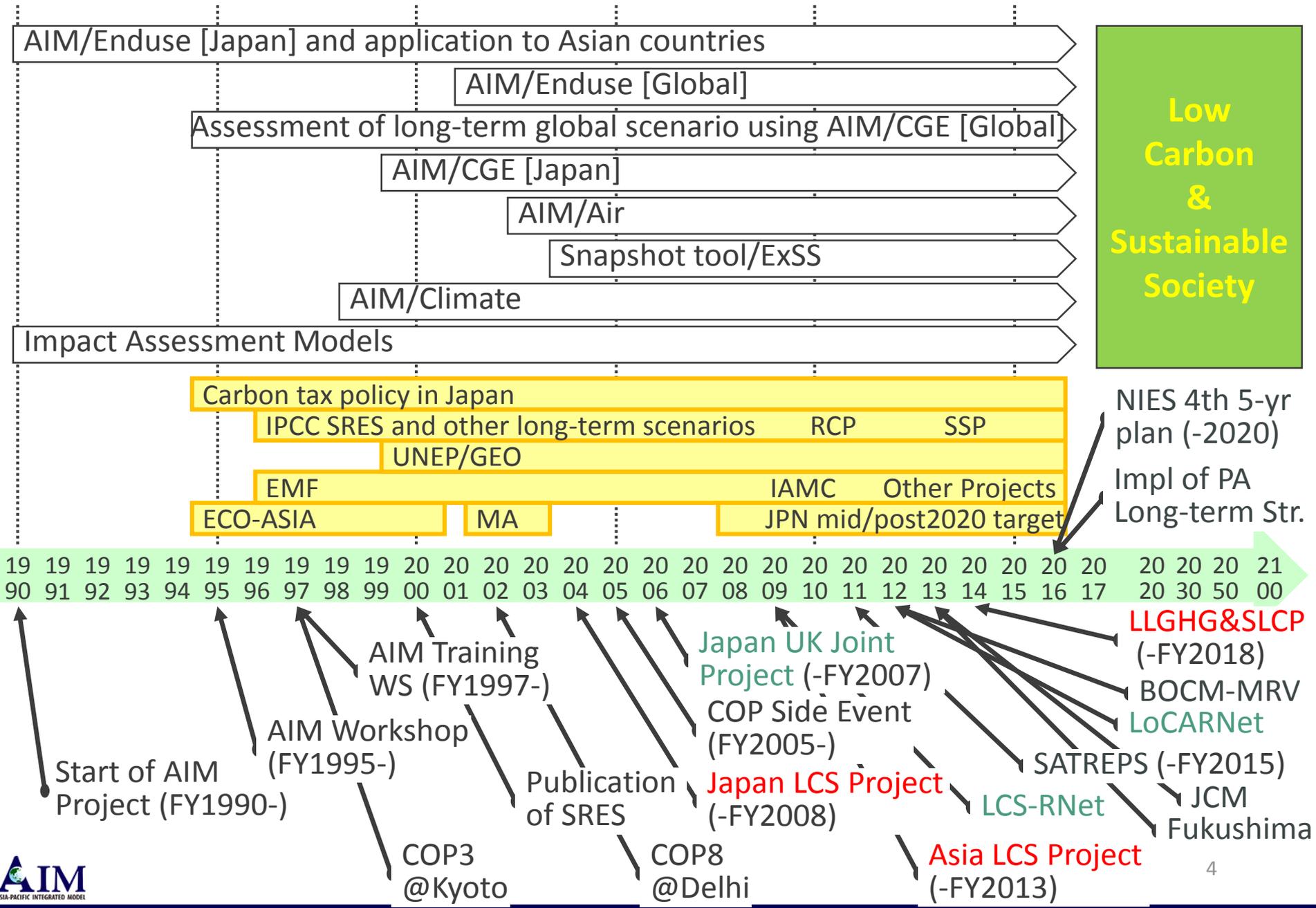
Residential

Burden share

Stock-flow

Life-style

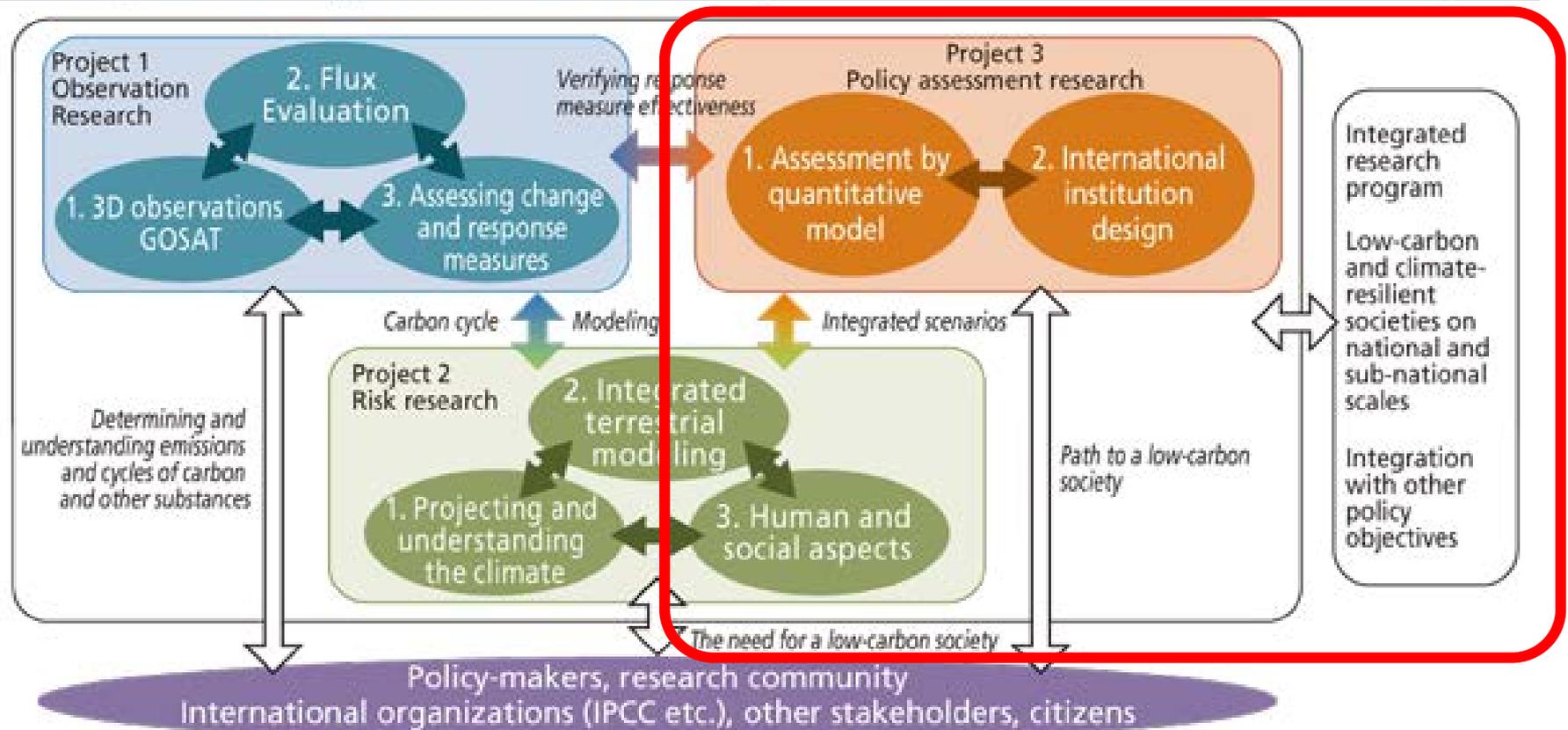
Brief History of AIM and its application



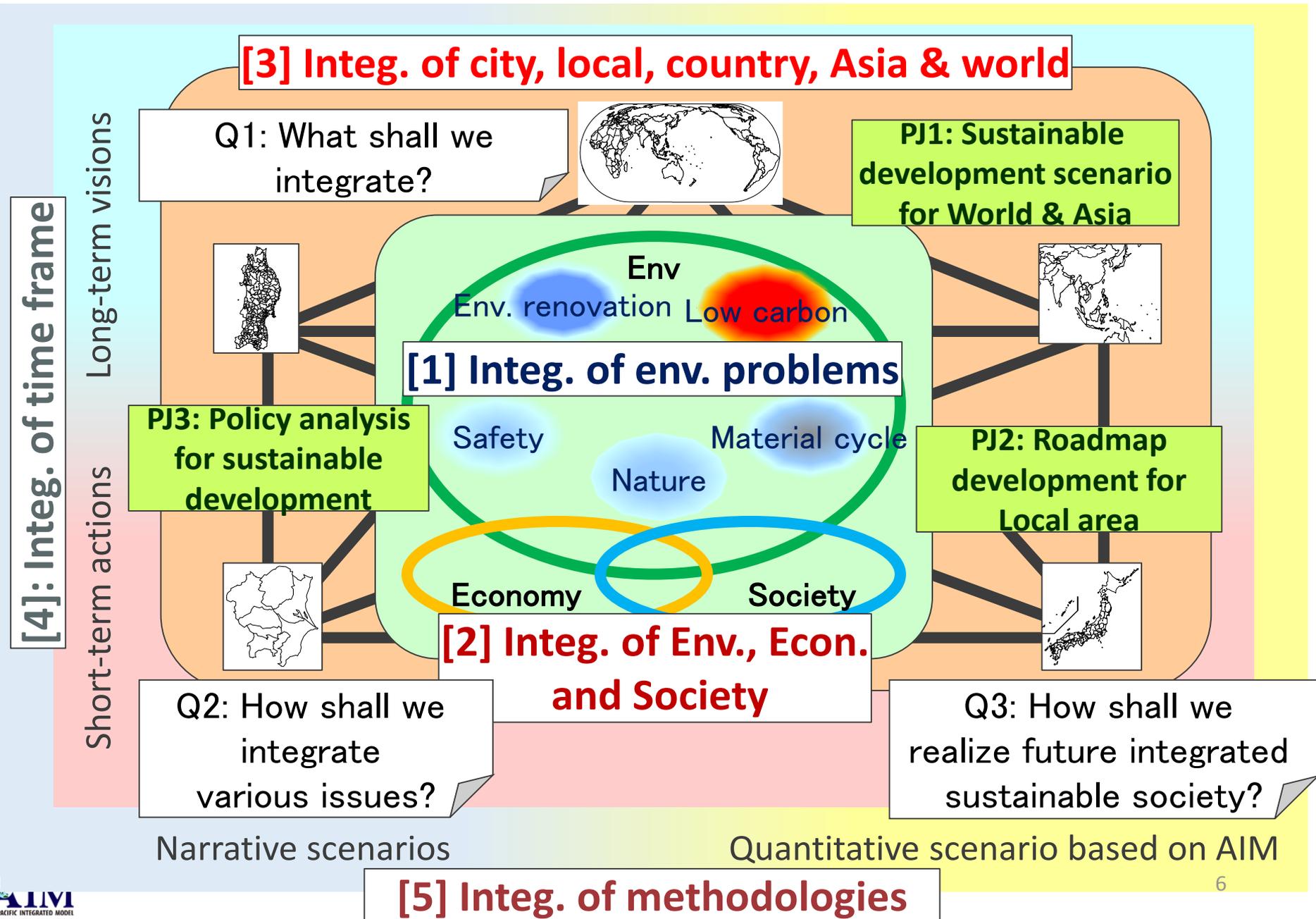
Low-Carbon Research Program led by Center for Global Environmental Research

Low-Carbon Research Program

A global-scale approach aimed at achieving a low-carbon and climate-resilient society



Various issues in Env-Econ-Soc Integration research program



Climate change research in the 4th Five-year Plan at NIES (National Institute for Environmental Studies)

• Issue-Oriented Research Programs

- Low carbon research program [Center for Global Env. Research]

- PJ1: Observation research

- PJ2: Risk research

- PJ3: Policy assessment research [Center for Social and Env. Systems Res.]

Global

- Environment-economy-society integration research program [Center for Social and Env. Systems Research]

- PJ1: Global and Asian sustainable society scenario development

- PJ2: Local roadmap development for sustainable society

- PJ3: Evaluation of sustainable development policies

Asia
Country
Local

- Sustainable material cycles research program

- Harmonization with nature research program

- Research program on health and environmental safety

- Environmental emergency research programs @ Fukushima branch

- Environmental renovation research program [Center for Social and Env. Systems Res.]

Toward sustainable development

- Many projects related to sustainable development;
 - SDGs
 - TWI2050
 - ...
- Sustainable development is very broad idea;
 - Which is priority area in Asia and each country?
 - How will AIM contribute to this issue?
 - Strength
 - Weakness
 - We will discuss at Session 11.

Paris Agreement and toward IPCC AR6

- Assessment of 2 degree and 1.5 degree target.
- From "Low carbon" to "Zero carbon."
 - IPCC 1.5SR
 - Topics in AR6
 - We will discuss at Session 10.
 - What is the main message? necessary breakthrough for transition.
- Contribution to assessment of NDC and Long-term Strategy.
 - Training will continue.
 - Preliminary workshop will be held from January 30 to February 1, 2017, at SIIT TU, Thailand (Prof. Bundit Lim).
 - Next fiscal year, we will move to full-scale training.
- For domestic discussion in Japan, research collaboration between Japan and France started.

Agenda of DAY 1 (December 9, 2016)

AM

Session 1: Opening session

Session 2: Implementation of Paris Agreement (1)

Session 3: Roadmap toward low carbon Asia (1)

Photo Session

PM

Session 4: Poster session

Session 5: Roadmap toward low carbon Asia (2)

Session 6: New regional scenario development in Asia

Session 7: Implementation of Paris Agreement (2)

Dinner at Chimney

Agenda of DAY 2 (December 10, 2016)

AM

Session 8: Climate change and SLCP scenarios

Session 9: Progress of AIM modeling

Session 10: Toward the 1.5/2 degree target (Discussion)

PM

Session 11: New direction toward sustainable development
(Discussion)

Session 12: Impact study (1): Global

Session 13: Impact Study (2): National/Regional

Session 14: Take a look back on impact studies

Session 15: Closing session

Dinner at

- We will discuss zero carbon society at this workshop!