

## Low Carbon Society in Asia (3)

Panel discussion on bridging modeling and policy making toward LCS

### AIM research activities towards Low Carbon Society in Asia

Mikiko Kainuma (NIES, Japan)

To avoid severe climate change impacts, it is essential to hold the increase in global average temperature below 2°C above the pre-industrial level. A milestone to achieve that goal is to reduce greenhouse gas (GHG) emissions by 50% from the 1990 level by the year 2050. In order to achieve the target, it is imperative to develop the Low Carbon Societies (LCS) in Asia, as Asian countries account for more than half the global population and GHG emissions. It is thus necessary to enable a shift to low carbon emissions and low-resource consumption while simultaneously improves standards of living through economic growth.

We have developed AIM which assists in developing LCS scenarios to realize 50% GHG reduction by 2050. LCS scenario development processes are divided into two stages.

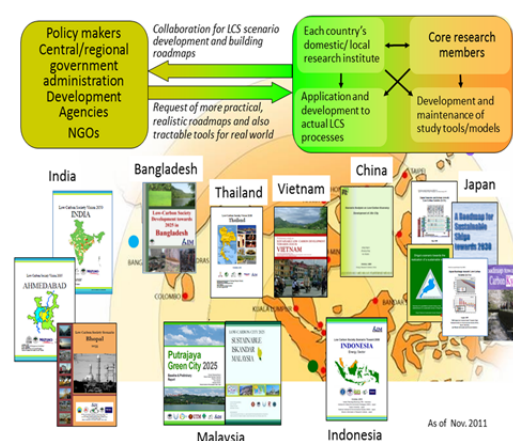
#### Stage one: Design of a Low Carbon Society

1. Creation of narrative storylines of future Low Carbon Societies
2. Description of sector-wise details of the future LCSs.
3. Quantification of the Macro-economic and social aspects of the LCSs.
4. Identification of policy measures and packaging the measures

#### Stage two : Construction of a policy roadmap toward the Low Carbon Society

1. Design of policy roadmaps toward the Low Carbon Society
2. Feasibility analysis of the roadmaps considering uncertainties involved in element policies
3. Analysis of robustness of the roadmap caused by societal, economical and institutional uncertainties and acceptability

These processes have been applied to develop Asian LCS scenarios in collaboration with research institutes in Asia.



How to deploy LCS study to real world