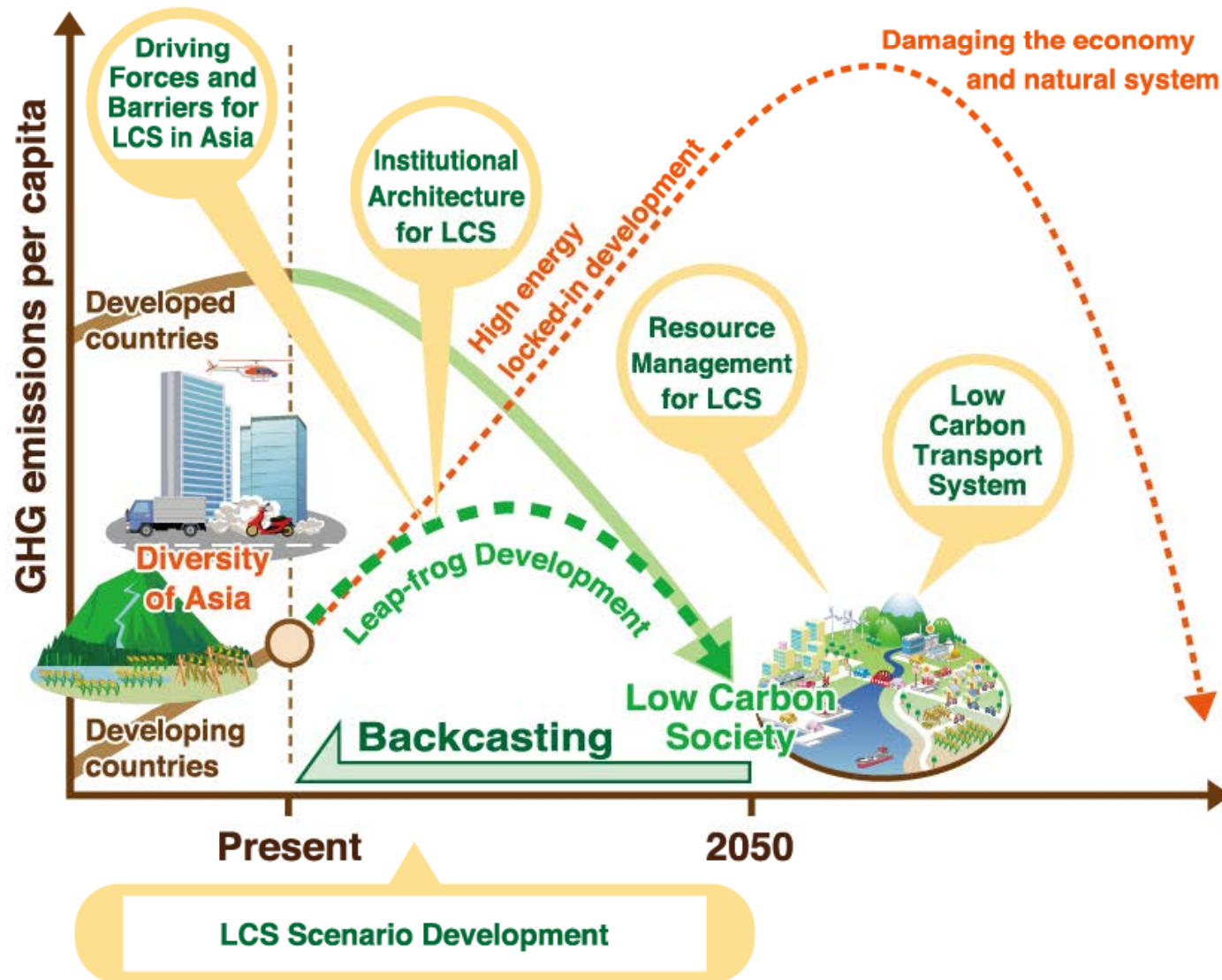


Research Activities for Low-Carbon Asia

Junichi Fujino

The 17th AIM International Workshop
Ohyama Memorial Hall
National Institute for Environmental Studies
17-19 February, 2012

Scenario approach towards LCS



Two approaches for ASIA LCS

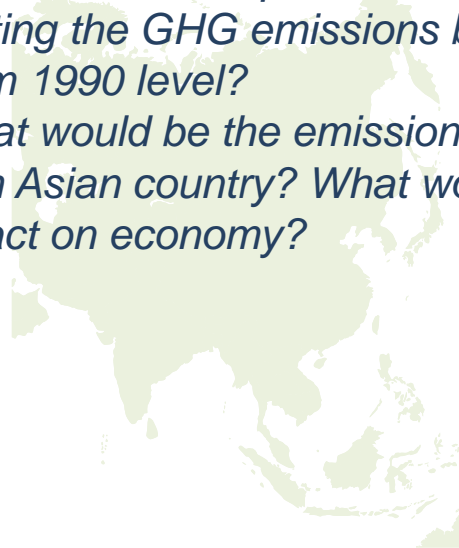
[Top-down approach]

Global emissions scenario analysis using CGE model

Identify the emission allowances for each Asian country to ensure the global emissions by half by 2050.

Japan, China, India, Korea, Thailand, Malaysia, Vietnam, Philippine, Singapore, Indonesia and Taiwan.

- *Is it feasible to implement a scenario with cutting the GHG emissions by half in 2050 from 1990 level?*
- *What would be the emission allowance for each Asian country? What would be the impact on economy?*



ASIA LCS

[Bottom-up approach]

National, local, city-level approach using a simplified tools

Discuss LCS visions which consider the local conditions & targets with local researchers/policy makers individually.

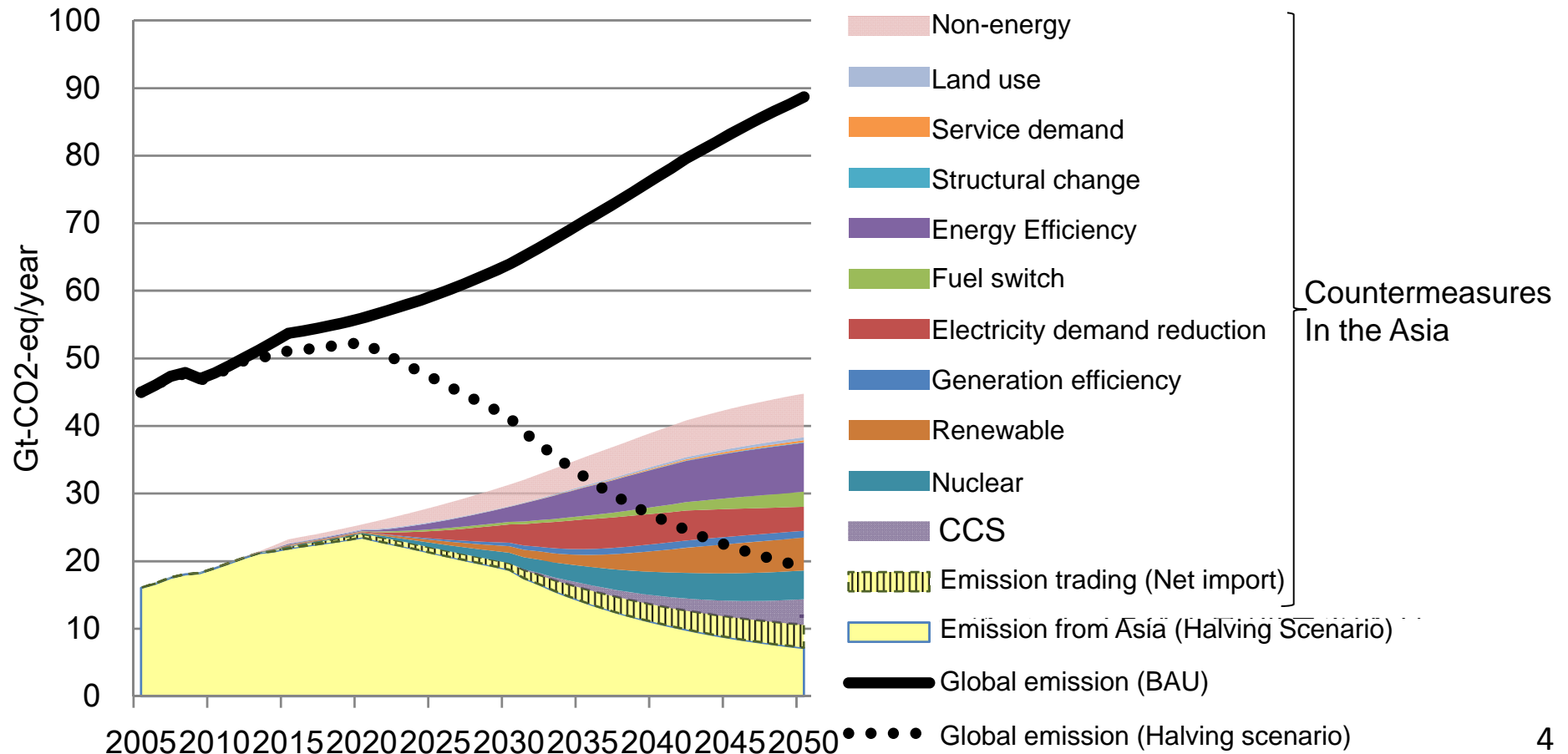
Malaysia, India, China, Thailand, Indonesia, Vietnam, Ahmedabad city (India), Bhopal city (India)

- *What is the LCS in each region look like?*
- *Is it possible to achieve the LCS together with solving the other socio economic issues in the region?*
- *What should be done to achieve the vision?*



Assessment of the “50% reduction” scenario

- Reducing GHG emissions by half by 2050 to the 1990 level: Feasible
- Marginal Abatement Cost: 458 \$/tCO₂ in 2050
 - Cost reduction (possible? How?) : need further discussion
- Impact on GDP: 2% (In some regions >10%)
- Share of GHG emissions from Asia is increasing. Need to avoid lock-in of high carbon infrastructure.



Two approaches for ASIA LCS

[Top-down approach]

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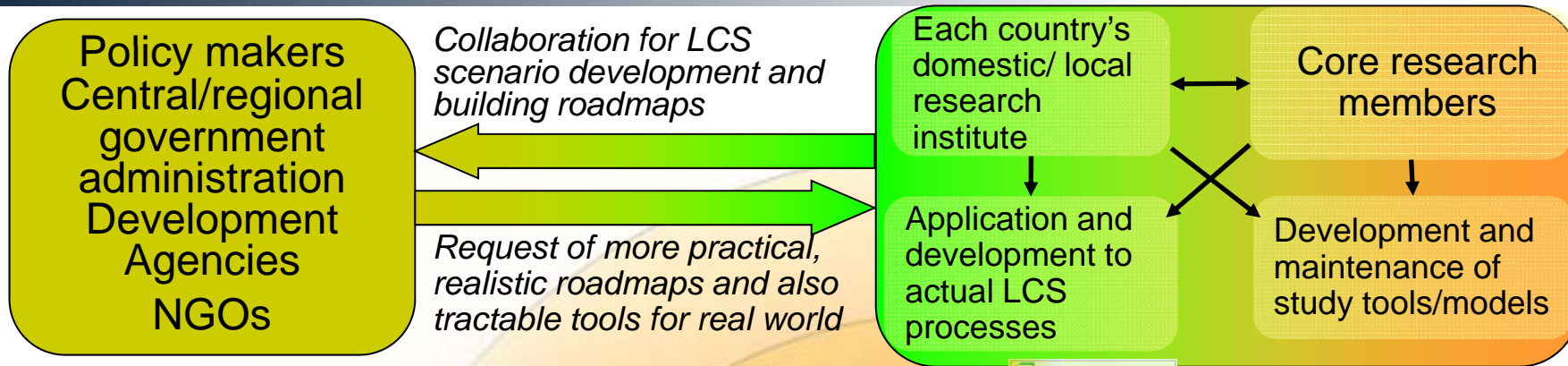
Discuss LCS visions which consider the local conditions & targets with local researchers/policy makers individually.

China, India, Korea, Indonesia, Malaysia, Thailand, Vietnam, Bangladesh, Ahmedabad, Bhopal, Iskandar, Putrajaya, Cyberjaya, Rachaburi, Guanzhou, Kyonggi

- *What is the LCS in each region look like?*
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ASIA LCS

How to deploy our study to real world



“Sustainable” Low-Carbon Society

To Make it Happen!

- Model Development+ Scenario/Action Making
& Consensus Building
- Co-benefit/Multi-benefit => QOL
- Networking => Knowledge sharing
& collective creation of SLCS design