International Research Network for Low Carbon Societies

LCS·R Net

To assist countries integrating research into policy-making process towards LCS

Low-Carbon Society Research in Asia

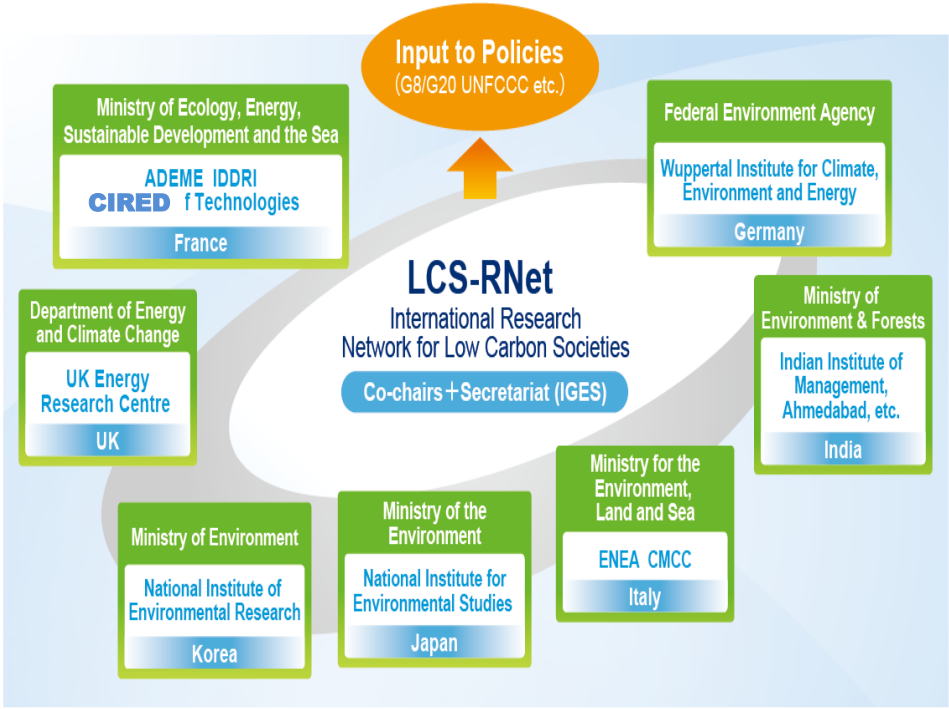
Malaysian Workshop on Asian Low Carbon Society Research Network

4-5 July 2011

Johore Bahru, Malaysia

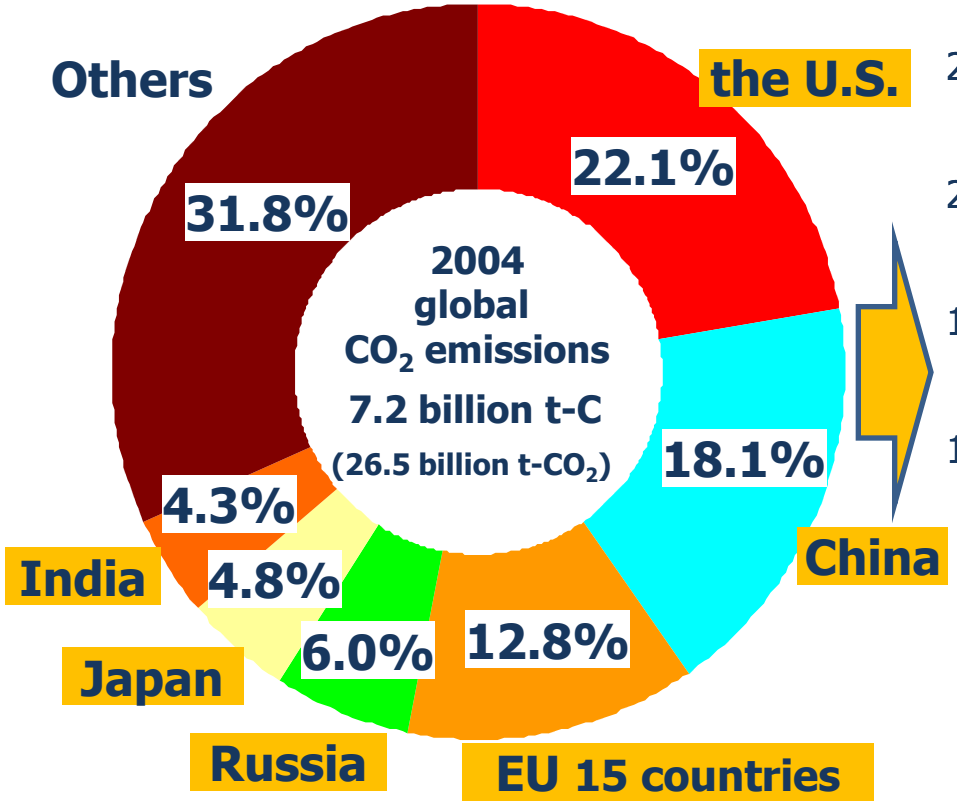
Shuzo Nishioka

LCS-RNet Secretariat/IGES

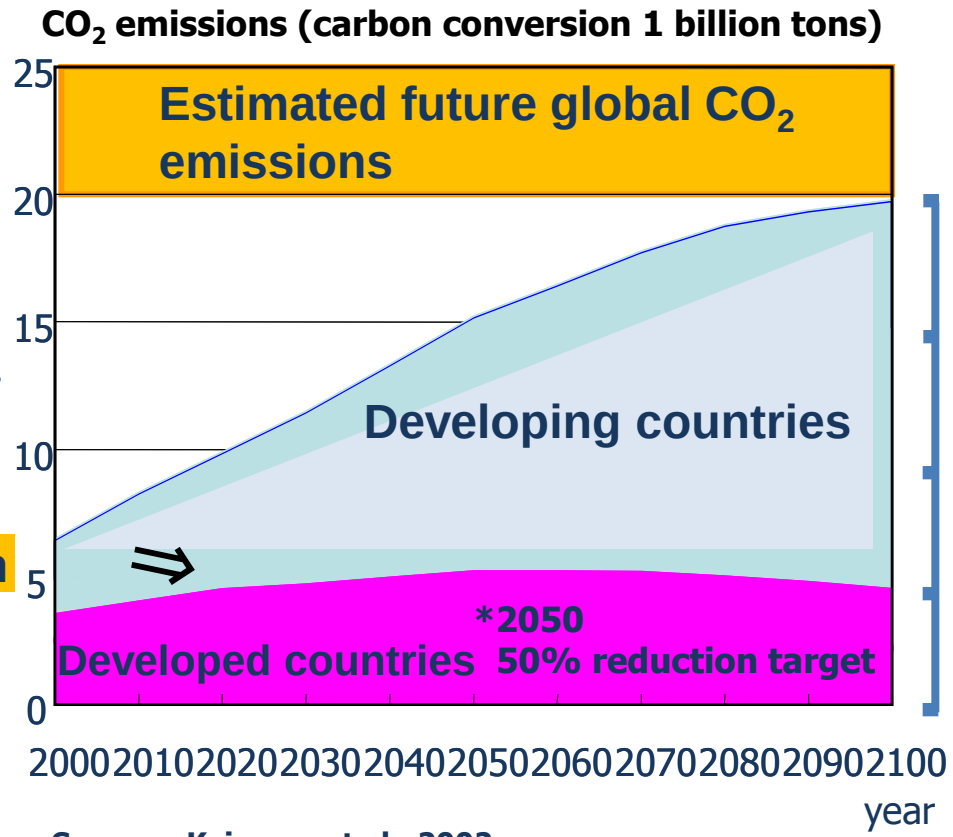


- The importance of LCS in Asia
- Activities of LCS-RNet and its findings in Asia
- National and local actions

Cooperation with developing countries is key
- As significant worldwide reduction is essential



Made by the Ministry of the Environment, Japan based on Energy & Economics Statistics in Japan (2007 version)

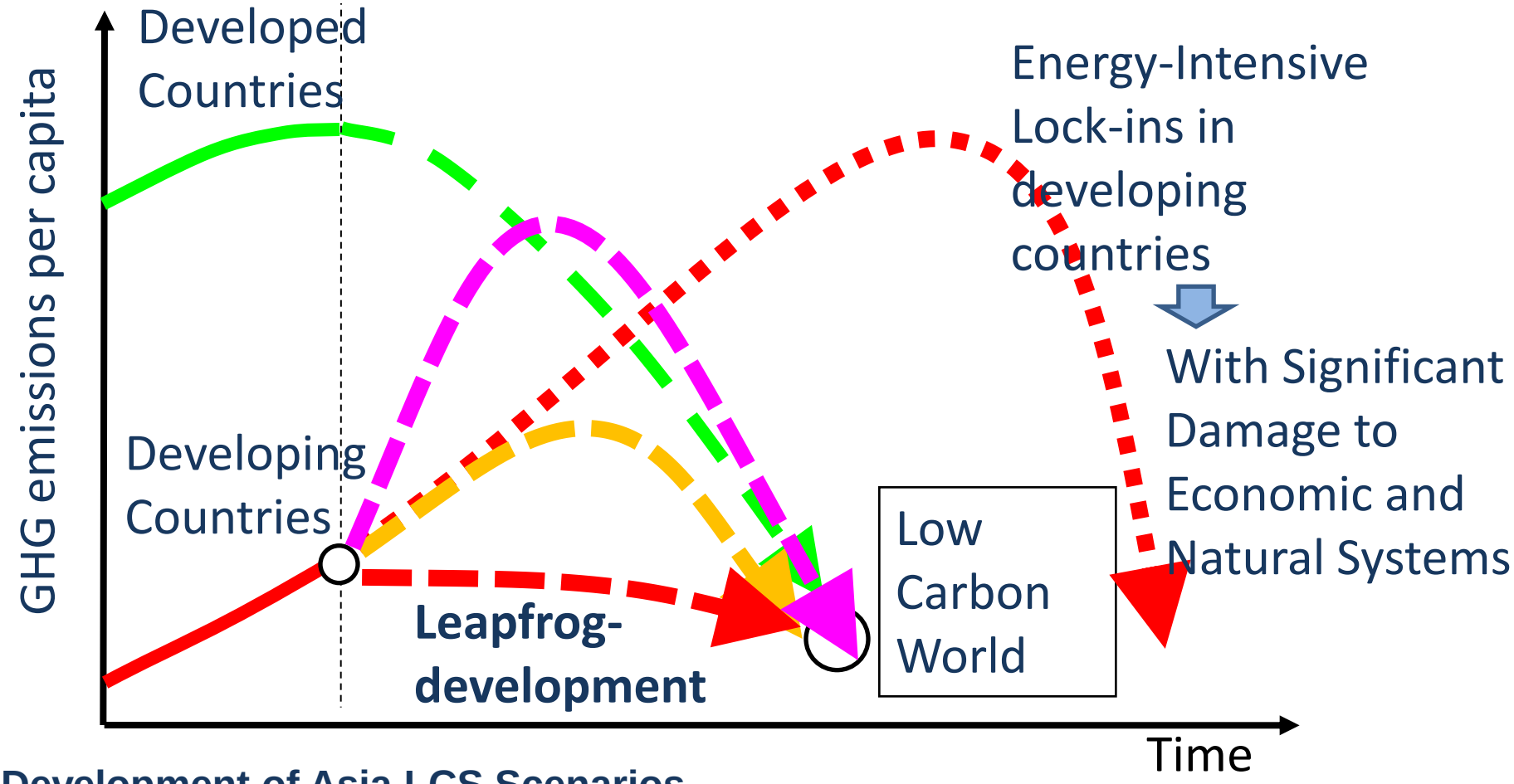


Sources: Kainuma et al., 2002: Climate Policy Assessment, Springer, p.64.

Kyoto Protocol framework for period subsequent to first commitment period (2013 onwards)

- *An effective framework capable of promoting maximum efforts to reduce emissions by non-signatory U.S. and exempt developing major emitter nations such as India and China is needed.*

Asian LCS scenario studies



Development of Asia LCS Scenarios

(1) Developing narratives for LCS scenarios
(2) Quantifying future LCS visions
(3) Developing robust roadmaps

Policy Packages for Asia LCS

- Encouraging the framing of LC policy in each Asian country
- Assistance for international negotiations scientific basis
- Networking among LCS research in Asia

LCS-RNet

-Low Carbon Society Research Network-

Researchers' network who dedicate to governmental policy making process to reach a Low Carbon Society responding to G8 and world leaders' requirements

- 16 institutions from France, Germany, India, Italy, Japan, Korea, UK
- 2nd Annual Meeting (2010, Berlin): 88 participants from **57 institutions from 23 countries** (including BRICs, Indonesia, South Africa) and 2 IGOs

From findings of 2nd Annual Meeting in Berlin 2010

- Inter-linkages among society's components must be understood.
- Technologies and R&D alone cannot attain LCS.
- Modelling implications and limitations must be correctly understood.

http://lcs-rnet.org/

Activities and Publications

LCS·R Net

1st Annual Meeting
12-13 October 2009
Bologna, Italy

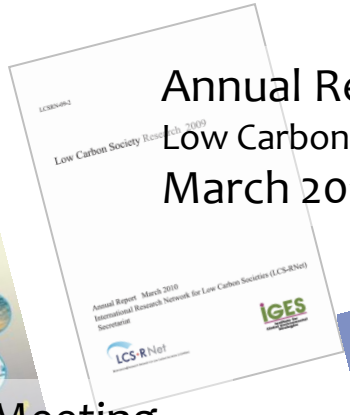
2nd Annual Meeting
Sept. 2010, Berlin, Germany

3rd Annual Meeting
Oct. 2011, Paris, France

Series of policy-research dialogue workshops on Asian Low Carbon Development

Indonesia
Thailand, Cambodia, Vietnam, Malaysia

Policy Dialogue:
Sustainable and Low-Carbon Development in Indonesia and Asia
16-17 February 2010
Bogor, Indonesia

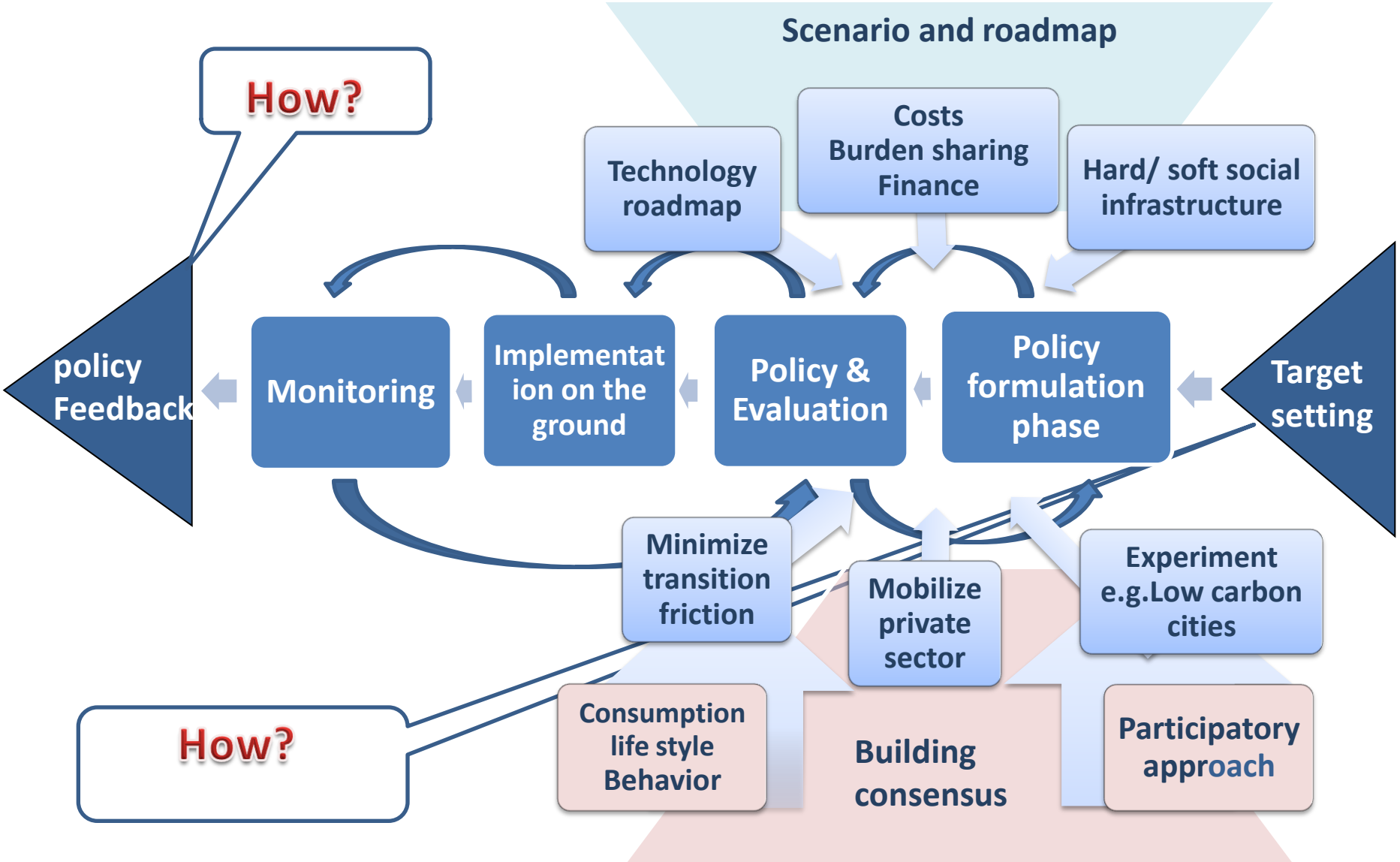


Annual Report:
Low Carbon Society Research
March 2010

Expert Meeting
Stakeholder Dialogue on Low Carbon Societies
26-27 June 2009
Hayama, Japan

Stakeholder Dialogue:
Overcoming Barriers to Low-Carbon Societies
15 March 2010
Yokohama, Japan

Formulation of LCS
- To make real progress



Activities with countries in Asia by the LCS-RNet Secretariat/IGES

Dialogue between Policy-makers and researchers

- to identify research needs to support LCS policy -

Indonesia, Thailand, Cambodia, Vietnam

Malaysia (July 2011)

LCS-RNet fellowship

- To provide opportunities to learn methods and tools for LCS policy-making, develop local LCS scenarios

India, Indonesia, Thailand

Cambodia (scheduled in 2011)

- to improve national and local level capacity to develop science based LCS policy of their own -

LCS model capacity-building WSs

NIES/Kyoto Univ builds capacity for AIM in China, South Korea, Vietnam, India, Thailand, Vietnam, Malaysia (July 2011)

Interviews with policy-makers and researchers

China, Republic of Korea, Vietnam, India, Cambodia

In Asia

Strong commitments of governments towards LCS

- Governments are considering LCS as an opportunity
- Technology transfer, international finance, capacity-building for their SD
- Governments are showing a strong policy signal towards LCS
- Governments are willing to develop science-based policy-making

Diversity amongst countries in the region

- Due to the different stages of development, various geopolitical and graphical conditions, policies and target areas are varied and country-specific.
- No common generalised approach/policy can be applicable to different country
- Learning good practice from other countries is important when capacity is limited.

Background: After Copenhagen

Developed countries

- **Working on domestic legislation to fulfill international commitments, facing difficulty to gain public acceptance**

Developing countries – both of major emitting countries and others

- **Recognizing Sustainable Green Growth/Development must the core of the national development plans**

Key Findings - 1 -

Inventories can provide a strong basis for a scientific approach

- Countries that develop reliable inventories could be in a good position for CDM.
- As a next step, cooperation between researchers and policy makers is urgently required for research agenda setting.
- Lack of reliable activity data is a barrier for developing LCS scenarios.

Low carbon is not just about energy

- Major emission sources/target areas are;
  - Energy
  - Agriculture and Forestry
  - Transportation

Both adaptation and mitigation are important

- Adaptation is still given a priority in most countries
- For the effective use of limited resources, coordination of adaptation and mitigation policies is necessary.
- In urban areas, co-control of air pollution and GHGs is called for. Pollution control measures can be a good entry point to mitigate GHGs.

Key Findings - 2 -

Localization of transferred technology is necessary

- Technical know-how to support the localization of such technologies, as well as infrastructure changes for LCS, are important.

Decentralization is a key for various reasons

- Tradition of its political system (e.g. Indonesia)
- For energy supply – it is a way to improve the access to electricity promoting off-grid system using biofuels.
- For strategic national development plan
  - Sound agriculture community is important for the national development plan to become a food commodity supplier to neighboring countries (India, Cambodia), as well as to avoid problems of urbanization in big cities by keeping people in the agriculture communities for some countries

Innovative governance is called for

- Coordination of land use and energy policies and supporting institutional arrangement is needed.
- Inter-ministerial coordination is needed.

Key Findings - 3 -

Traditional values to promote LCS

- Sufficiency economy (Thailand) and “Mottainai” (Japan) as examples of traditional wisdom for the sustainable utilization of natural resource
- Mitigation in forestry sector: depend on the social system and local voluntary actions.

Coordination is a key in many ways

- Inter-ministerial coordination of LCS policy is necessary (i.e. land-use policies)
- Cooperation between policy and research communities

Sub-national level initiatives are important

- Since agriculture, forests and natural resources are target areas for mitigation, knowledge of local people for adaptation and natural resource management are important in designing mitigation.

Conclusion

- The time is now to avoid carbon-intensive lock-ins and enable low carbon leapfrogs in Asia.
- Data and methods for inventorying GHGs, particularly from cities, are needed.
- Policy signals from central governments, supported by local initiatives, are becoming more visible in Asia.
- There is no one-size-fits-all LCS: policies and scenarios need to be tailored to local contexts.
- LCS is a two way street: LCS research should inform policy, experiences with policies should inform research.
- Innovative governance with the institutional coordination (horizontal and vertical) must be sought.

	South Korea	China	India	Indonesia	Thailand	Vietnam	Cambodia
Appendix I & II of CA and NAMA	30 % GHG reduction by 2020 (from BAU scenario)	Voluntary lower CO2 emissions per unit of GDP by 40-45% by 2020 (2005 level)	Reduce the emissions intensity of its GDP by 20-25% by 2020 (2005 level)	Voluntary reduce emissions by 26% in 2020 (from BAU) or 41% if international fund available	-	-	-
NAMA	Positive	Positive, No international MRV	Positive, MRV with the external fund	Positive	Positive	Positive	Positive
Legislation	Framework Act on Low Carbon, Green Growth (2009)	12th Five Year Plan	National Action Plan for Climate Change (2008)	National Action Plan Regional AP	11th National Development Plan		National Strategic Developme nt Plan
Institution al support particularl y for LCS	◎ Led by the Presidential Committee on Green Growth	○	×	×	×	×	×
Policy/focu sed areas	Cap-and-trade with targets	Domestic Emission Trading for Energy and Environment non-fossil fuels, forest coverage and stock	Carbon tax,, EE, transportation Star system for EE PAT(Performanc e Achievement and Trade)	Sustainable peatland and land use management EE, renewable, transportation	Crown Standard for EE for cities,		Decentralisa tion and deconcentra tion strategy
Coordination with other policies	○Combined foreign policy and resource security			○	○	○	○

	Korea, Republic of	China	India	Indonesia	Thailand	Vietnam	Cambodia
Socio-economic consideration	○	Gradually yea	○Low Carbon Strategy for Inclusive Growth as Indian version of green growth	○	○	○	○
Local level initiative		Pilot City Programme Gaps amongst provinces	Pilot City Programme	Gaps amongst provinces			
Private sector involvement	○	○	○				
Technology focus and considerations		Clean coal technology, nuclear, solar and solar heater, other renewables	EE and solar, building Potential of nuclear may be not so high	Off-grid energy self-sufficient system in rural area	Nuclear	Off grid, decentralized supply system	Decentralized supply system
Approach	Top-down with participatory approach	Top-down or combination	Top-down or combination NGOs play important roles for Bottom-up	Decentralized administration system	Top-down or combination、Sufficiency economy Traditional resource management	Top-down	Top-down

LCS-RNet
5 year plan

At present

|FY2008 |FY2009 |FY2010 |FY2011 |FY2012 |FY2013

Reacting to the paradigm-shift from G8 to G20

G8EMM Kobe (24-26 May)

G8EMM Siracusa (22-24 April)

G8 Huntsville (25-26 June)

G8EMM France (April)

G20

G20

UNFCCC COP15 (7-19 Dec)

UNFCCC COP16 (29 Nov-10 Dec)

Intergovernmental Panel on Climate Change

Foundation

1. Management of the Network

2. Scientific Policy Recommendations

3. Development of LCS Researches

4. Capacity Building of Developing Countries

5. Public Relations

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Annual Meeting

1st in Bologna (12-13 October)
- Synthesis Report

2nd in Berlin (20-21 September)
- Synthesis Report
- Country Report
- Berlin Memorandum

3rd in France (March?)

Journal Special Issue

Development of LCS researches and finding, analyzing and proposing important policy relevant issues

Fostering LCS researches to achieve LCS on time

Contribution to LCS strategies of government

Competitive LCS policy and expansion to developing countries

Activity of Secretariat

Own research

National policy | Green growth | Sus. consumption

Workshop, policy dialogue

Indonesia (16-17 February 2010)

Yokohama (15 March 2010)

Thailand (November 2011)

Internship

India Indonesia Thailand . . .

Newsletter | Database | Webpage

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