

# International Low Carbon Society Research Network: LCS-RNet

Researchers community dedicating to scientific policy making  
process towards Low Carbon World

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UNFCCC AWG34, 7 June 2011, Bonn



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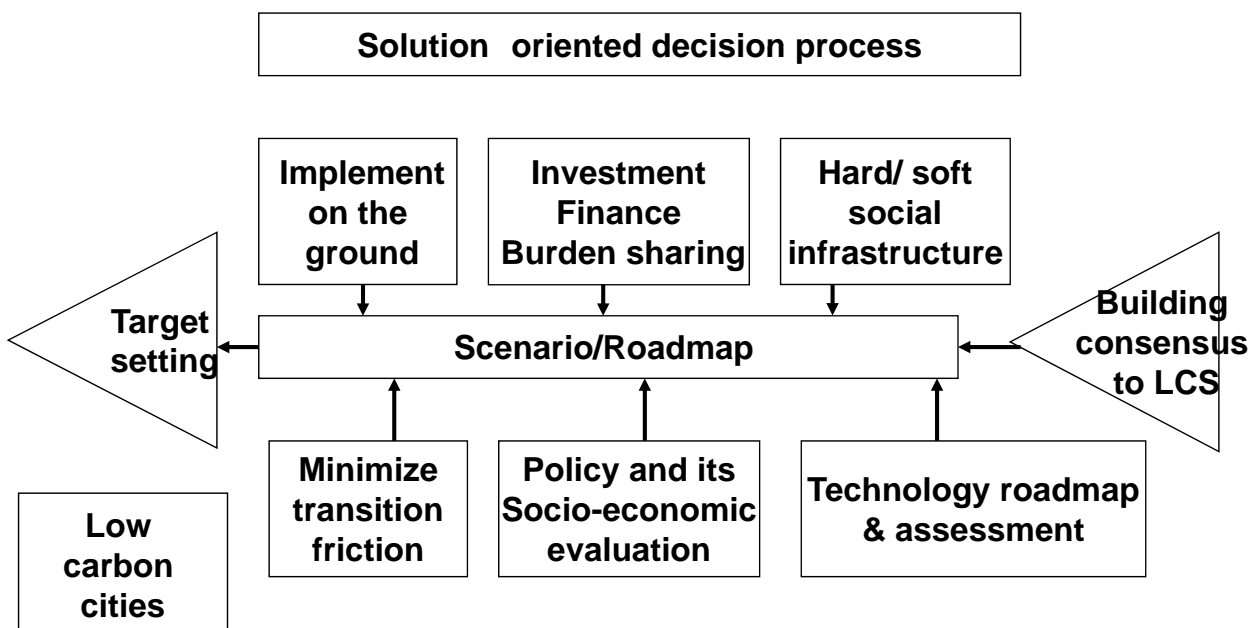
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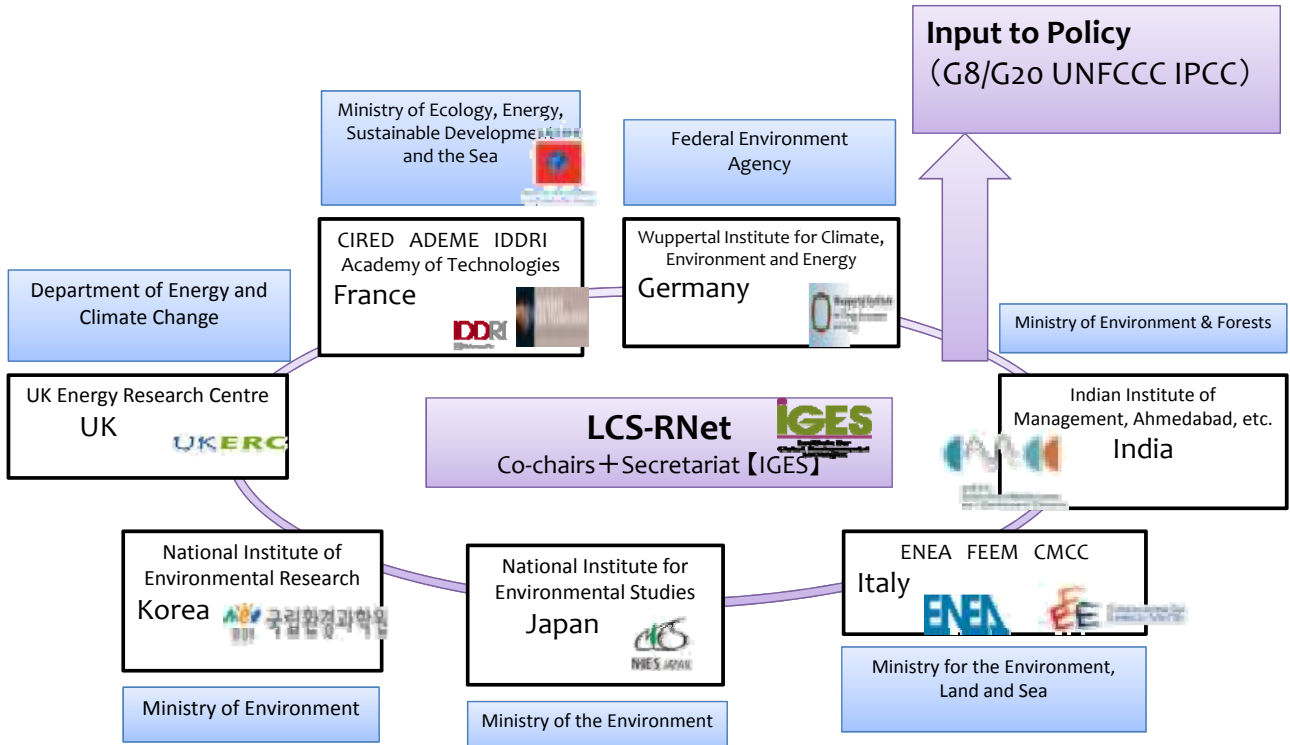
## Formulation of LCS



Collaborative works between policy makers and interdisciplinary research society to achieve Low Carbon Society

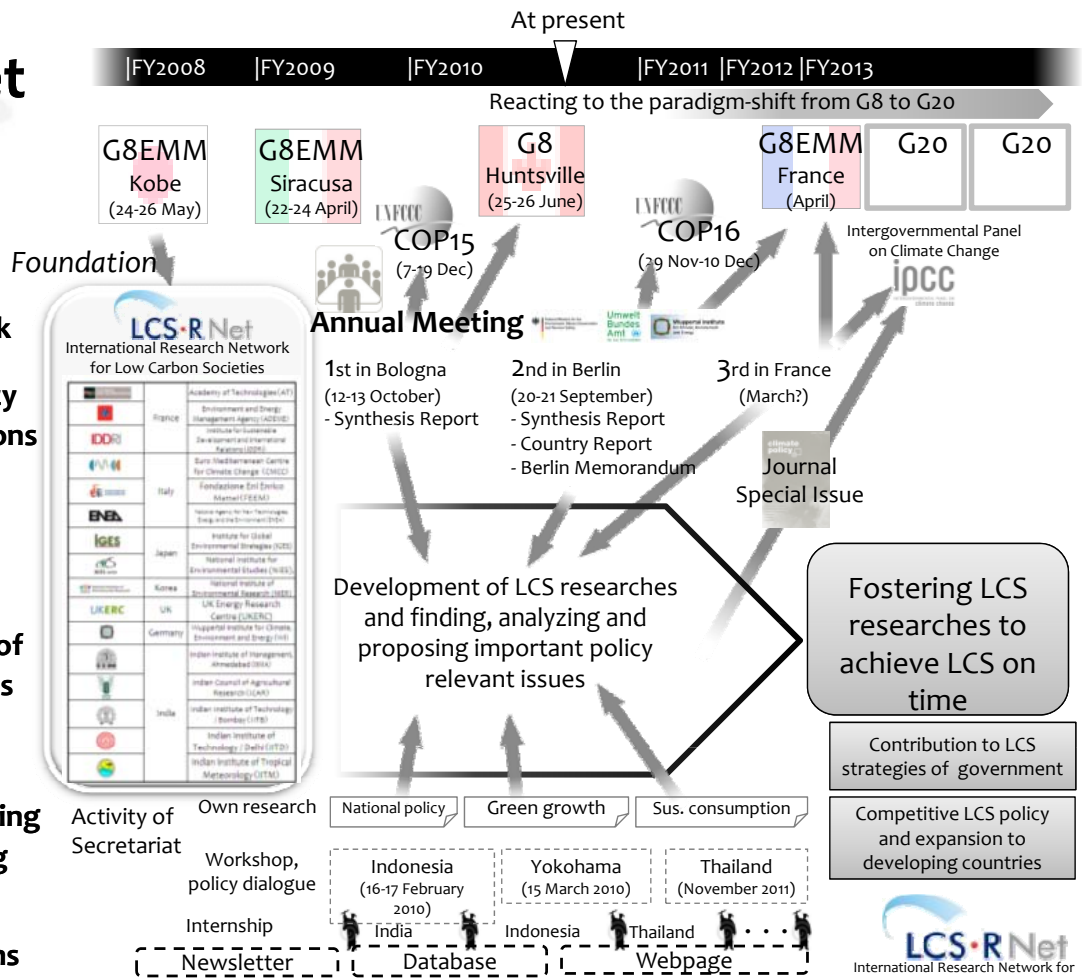
# LCS-RNet(International Research Network for Low Carbon Societies)

- Supported its foundation by G8 Environment Ministers Meeting.
- Research network to foster researches to realize low-carbon societies.
- 7 countries and 15 major research institutes (currently)



## LCS-RNet 5 year plan

1. Management of the Network
2. Scientific Policy Recommendations
3. Development of LCS Researches
4. Capacity Building of Developing Countries
5. Public Relations



# Activities and Publications



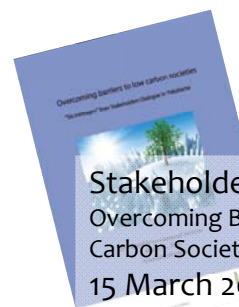
1st Annual Meeting  
12-13 October 2009  
Bologna, Italy

2nd Annual Meeting  
Sept. 2010, Berlin, Germany

3rd Annual Meeting  
Oct. 2011, Paris, France



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



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

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

Indonesia  
Thailand, Cambodia,  
Vietnam, Malaysia

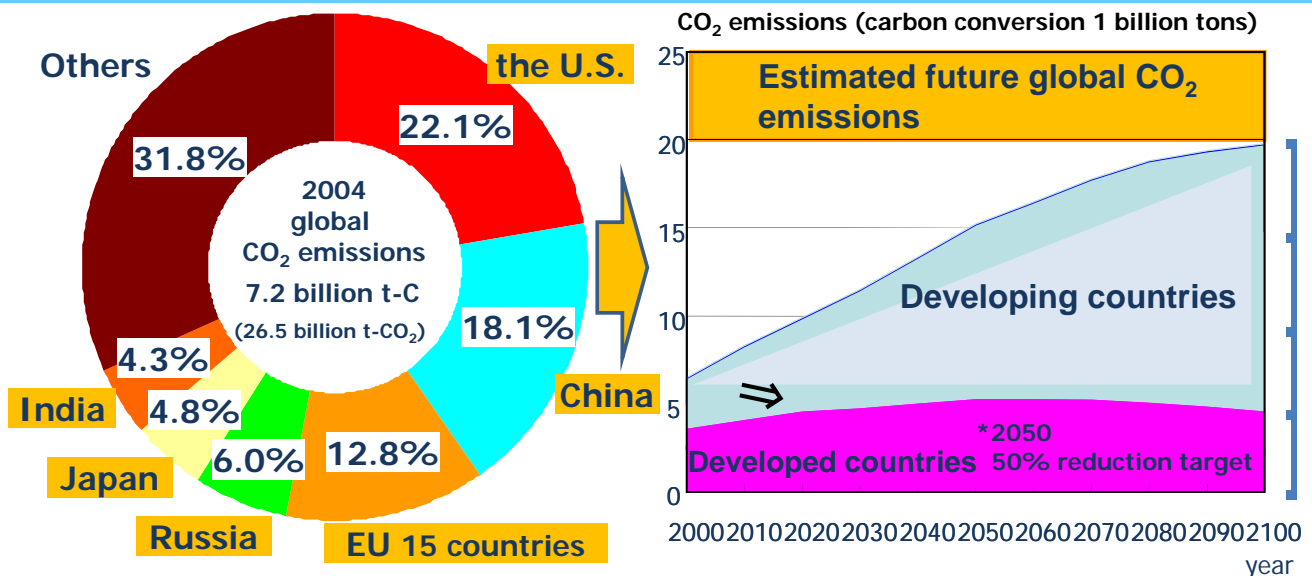
## Major findings from Berlin Meeting -1

1. Using the significant progress that has been made in LCS research and policy design, it is time to craft measures for implementation.
2. All stakeholders need to be made aware that short-term costs are countered by longer-term benefits
3. Inter-linkages among society's components must be understood in the effort to devise feasible and effective policy
4. Technologies and R&D alone cannot attain LCS
5. Modeling implications and limitations must be correctly understood

## Major findings from Berlin Meeting -2

6. Multi-level governance in a multi-level world is necessary for promoting LCS
7. International cooperation is central to the LCS transition
8. Mobilising private sector investment in a desirable direction is a key to achieving LCS
9. Civil society participation is crucial to mobilizing acceptance for LCS actions
10. 'Science in transition' can forge inter-linkages among issues, and more importantly, can be an agent of change

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



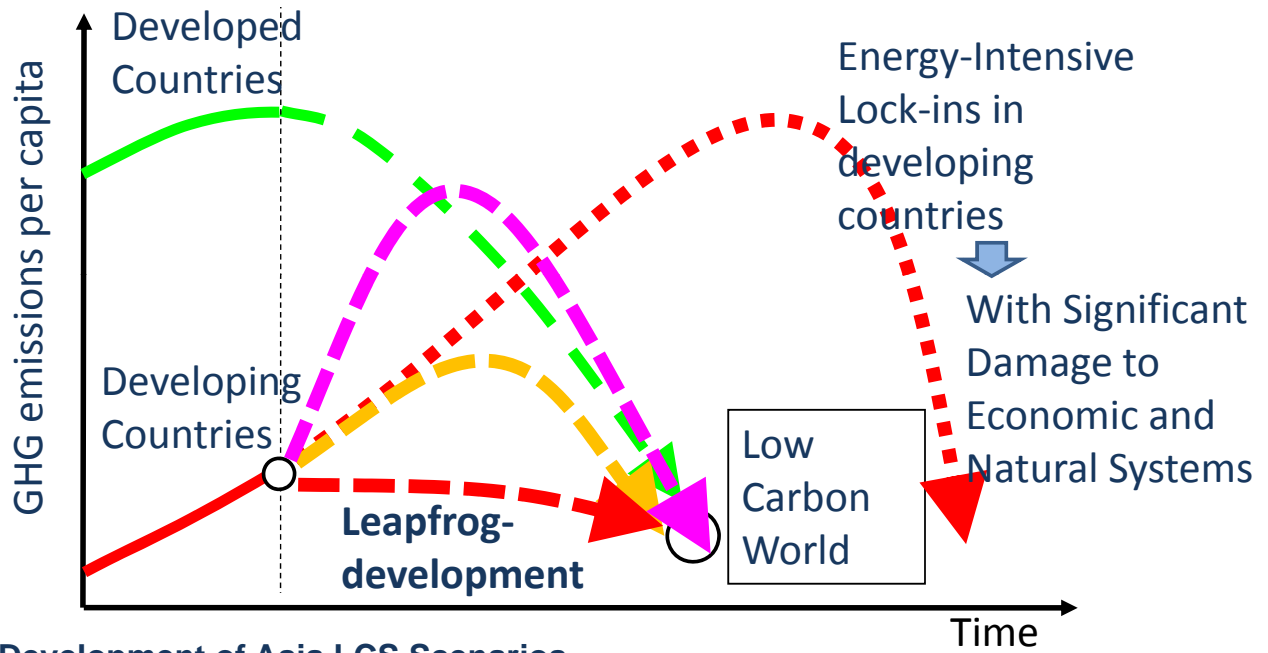
Made by the Ministry of the Environment, Japan based on Energy & Economics Statistics in Japan (2007 version)

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

	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)	12 <sup>th</sup> Five Year Plan	National Action Plan for Climate Change (2008)	National Action Plan Regional AP	11th National Development Plan		National Strategic Development Plan
Institutional support particularly for LCS	◎ Led by the Presidential Committee on Green Growth	○	×	×	×	×	×
Policy/focused 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(Performance Achievement and Trade )	Sustainable peatland and land use management EE, renewable, transportation	Crown Standard for EE for cities,		Decentralisation and deconcentration strategy
Coordination with other policies	○ Combined foreign policy and resource security			○	○	○	○



	Korea, Republic of	China	India	Indonesia	Thailand	Vietnam	Cambodia
Socio-economic consideration	○	Gradually year	○ 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	Bankgok city programme		
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, forest fire	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

## 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, <sup>z1</sup> knowledge of local people for adaptation and natural resource management are important in designing mitigation.



Thank you for your attention!