## **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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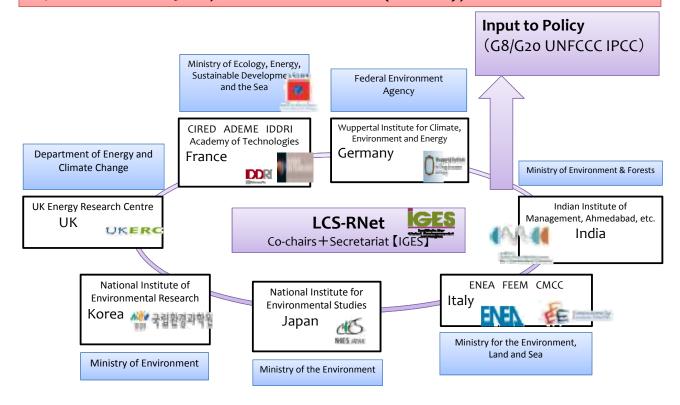


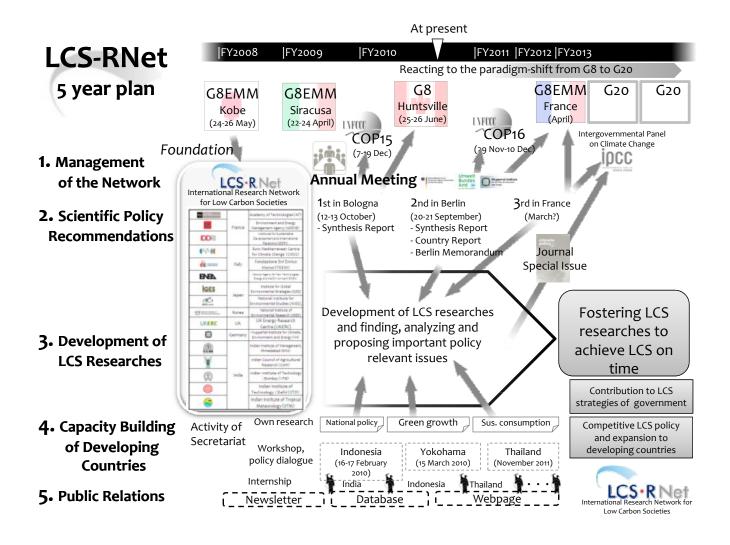
#### Solution oriented decision process **Implement** Investment Hard/soft on the **Finance** social ground **Burden sharing** infrastructure Building **Target** consensus Scenario/Roadmap setting to LCS **Minimize** Policy and its Technology roadmap transition Socio-economic Low & assessment friction evaluation carbon

Collaborative works between policy makers and interdisciplenary 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)





### **Activities and Publications**





2<sup>nd</sup> Annual Meeting Sept. 2010, Berlin, Germany

3<sup>rd</sup> Annual Meeting Oct. 2011, Paris, France



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

Annual Report: Low Carbon Society Research March 2010

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

> Indonesia Thailand, Cambodia, Vietnam, Malaysia



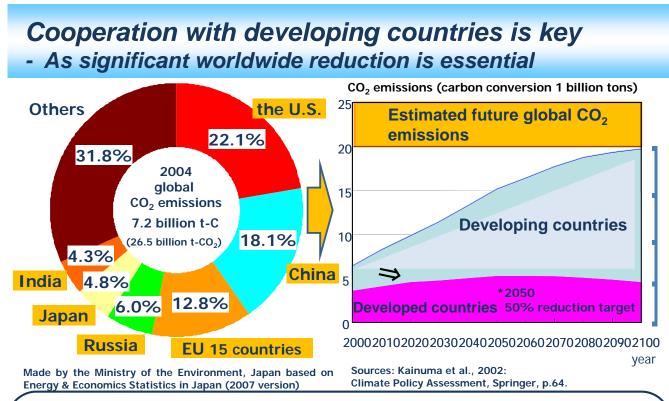
Policy Dialogue: Low Sustainable and Low-Carbon Development in Indonesia and Asia 16-17 February 2010 Bogor, Indonesia

### Major findings from Berlin Meeting -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 <u>short-term</u> <u>costs are countered by longer-term benefits</u>
- 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
- Modeling implications and limitations must be correctly understood

### **Major findings from Berlin Meeting -2**

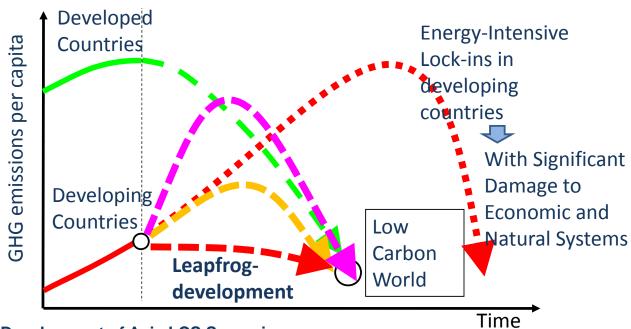
- Multi-level governance in a multi-level world is necessary for promoting LCS
- 7. International cooperation is central to the LCS transition
- 8. Mobilising <u>private sector</u> investment in a desirable direction is a key to achieving LCS
- 9. Civil society <u>participation</u> is crucial to mobilizing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



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 Developme nt Plan
Institution al support particularl y for LCS	© Led by the Presidential Committee on Green Growth	0	×	×	×	×	×
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)		Crown Standard for EE for cities,		Decentralisa tion and deconcentra tion strategy

	Korea, Republic of	China	India	Indonesia	Thailand	Vietnam	Cambodia
Socio- economic consideratio n	0	Gradually yea	OLow Carbon Strategy for Inclusive Growth as Indian version of green growth	0	0	0	0
Local level initiative		Pilot City Programme Gaps amongst provinces	Pilot City Programme	Gaps amongst provinces	Bankgok city programme		
Private sector involvement	0	0	0				
Technology focus and consideratio ns		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, decentraliz ed supply system	Decentrali zed supply system
Approach	Top-down with participatory approach	Top-down or combination	Top-down or combination  NGOs play important roles	Decentralized administration system	Sufficiency economy Traditional	•	Top-down
			for Bottom-up		resource managemen t		

# 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.

