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

Formulation of LCS

Solution oriented decision process

Implement on the ground
Investment Finance
Burden sharing
Hard/soft social infrastructure

Scenario/Roadmap

Minimize transition friction
Policy and its Socio-economic evaluation
Technology roadmap & assessment

Target setting
Low carbon cities

Building consensus to 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)

At present

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

Recovering 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
Activities and Publications

Expert Meeting
Stakeholder Dialogue on Low Carbon Societies
15 March 2010
Yokohama, Japan

Stakeholder Dialogue: Overcoming Barriers to Low-Carbon Societies
26-27 June 2009
Hayama, Japan

Annual Report: Low Carbon Society Research
March 2010

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

Series of policy-research dialogue workshops on Asian Low Carbon Development
Indonesia
Thailand, Cambodia, Vietnam, Malaysia

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

2nd Annual Meeting
Sept. 2010, Berlin, Germany

3rd Annual Meeting
Oct. 2011, Paris, France

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

Estimated future global CO₂ emissions (carbon conversion 1 billion tons)

- Developed countries: 50% reduction target
- Developing countries: *2050

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

<table>
<thead>
<tr>
<th>Appendix I &amp; II of CA and NAMA</th>
<th>South Korea</th>
<th>China</th>
<th>India</th>
<th>Indonesia</th>
<th>Thailand</th>
<th>Vietnam</th>
<th>Cambodia</th>
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<tbody>
<tr>
<td>30% GHG reduction by 2020 (from BAU scenario)</td>
<td>Voluntary lower CO2 emissions per unit of GDP by 40-45% by 2020 (2005 level)</td>
<td>Reduce the emissions intensity of its GDP by 20-25% by 2020 (2005 level)</td>
<td>Voluntary reduce emissions by 26% in 2020 (from BAU) or 41% if international fund available</td>
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<td>NAMA</td>
<td>Positive</td>
<td>Positive, No international MRV</td>
<td>Positive, MRV with the external fund</td>
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<td>Institutional support particularly for LCS</td>
<td>Led by the Presidential Committee on Green Growth</td>
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<td>Policy/focused areas</td>
<td>Cap-and-trade with targets</td>
<td>Domestic Emission Trading for Energy and Environment non-fossil fuels, forest coverage and stock</td>
<td>Carbon tax, EE, transportation Star system for EE PAT (Performanc e Achievement and Trade)</td>
<td>Sustainable peatland and land use management EE, renewable, transportation</td>
<td>Crown Standard for EE for cities,</td>
<td>Decentralisation and deconcentration strategy</td>
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<td>Coordination with other policies</td>
<td>Combined foreign policy and resource security</td>
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<td>Korea, Republic of</td>
<td>China</td>
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<td><strong>Socio-economic consideratio</strong></td>
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<td>○Low Carbon Strategy for Inclusive Growth as Indian version of green growth</td>
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<td><strong>Local level initiative</strong></td>
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<td>Pilot City Programme</td>
<td>Pilot City Programme</td>
<td>Gaps amongst provinces</td>
<td>Bankgok city programme</td>
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<td><strong>Private sector involvement</strong></td>
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<tr>
<td><strong>Technology focus and consideratio</strong>ns</td>
<td>Clean coal technology, nuclear, solar and solar heater, other renewables</td>
<td>EE and solar, building</td>
<td>Potential of nuclear may be not so high</td>
<td>Off-grid energy self-sufficient system in rural area, forest fire</td>
<td>Nuclear</td>
<td>Off grid, decentralized supply system</td>
<td>Decentralized supply system</td>
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<td><strong>Approach</strong></td>
<td>Top-down with participatory approach</td>
<td>Top-down or combination</td>
<td>Top-down or combination</td>
<td>Decentralized administration system</td>
<td>Top-down or combination, Sufficiency economy Traditional resource management</td>
<td>Top-down</td>
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**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.
Thank you for your attention!