

How to reach a Low Carbon Society ?

International Low Carbon Society Research Network (LCS-RNet)



International researcher's community responds to G8 and world leaders' requirements



Shuzo Nishioka
Secretary General of LCS-RNet
Institute for Global Environmental Strategies (IGES)

Transition towards Low Carbon Societies in Thailand and Asia
 17-18 Nov. 2010 Bangkok



Jean-Pier
TABET



Antonio
NAVVARA



Stefan
LECHTENBÖHMER



Jim
SKEA



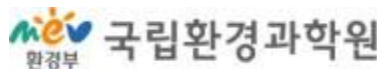
David
MCLAUGHLIN



Mikiko
KAINUMA



P.R. Shukla

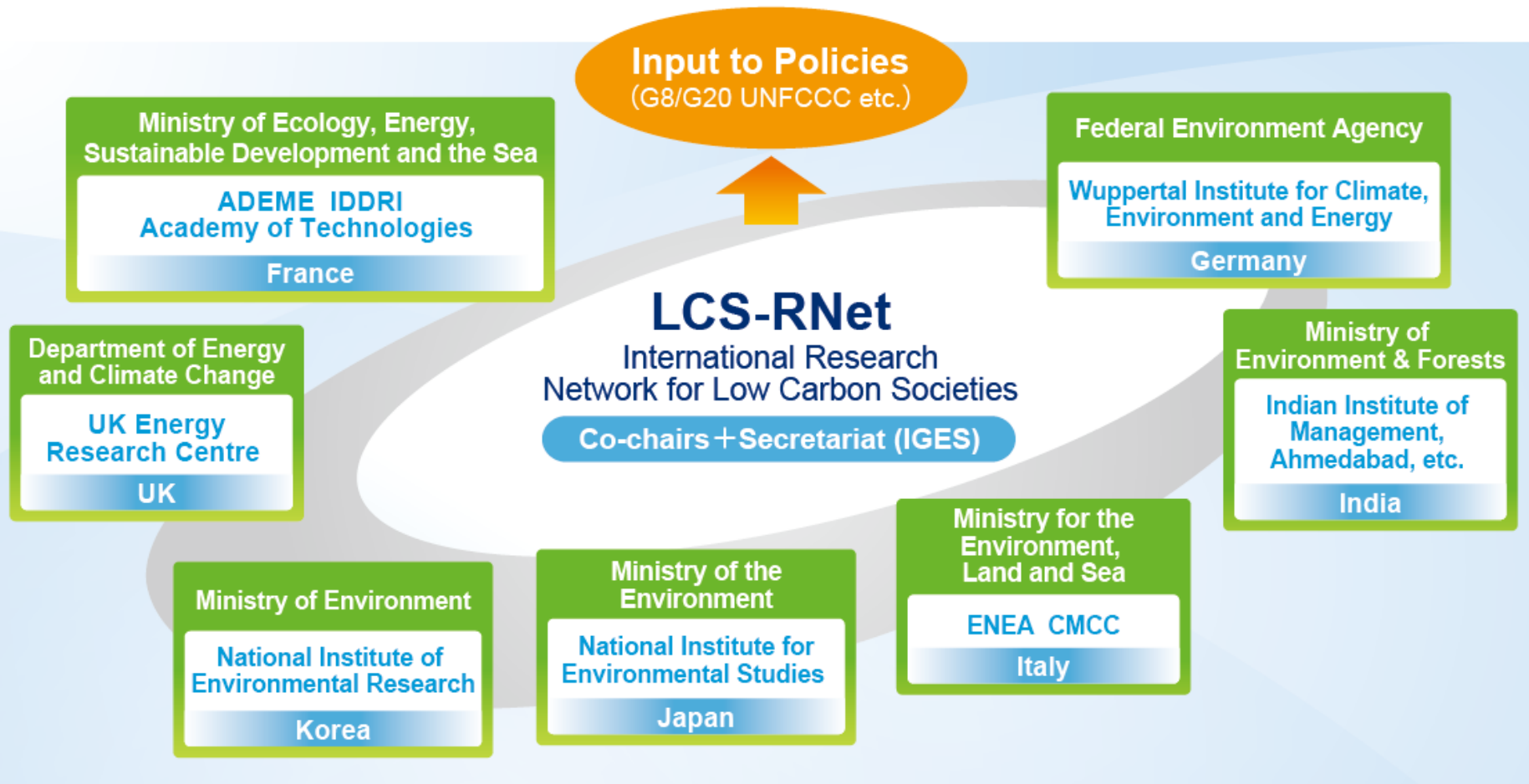


International Low Carbon Society Research Network (LCS-RNet)

- Established in 2009 on the initiative of the **G8 Environment Ministers Meeting**
- LCS-RNet promotes:
 - 1) information exchange amongst researchers to share updated scientific knowledge and information on the various policy tools required to realize low carbon societies and green growth (hereafter “**LCS research**”);
 - 2) **research cooperation** amongst researchers;
 - 3) international dialogue between researchers, policy-makers and other stakeholders from different countries in order to learn from knowledge and experience and to reflect them in LCS research (“**LCS dialogue**”);
 - 4) the diffusion of **scientific inputs and recommendations** to international climate change policy-making forum including G8, G20 and the UNFCCC COP’s
- Network of research institutions: **15 institutions from 7 countries** in 2010
- Secretariat: Institute for Global Environmental Strategies (IGES), Japan
- Annual Meeting: 2009 in Bologna, October 2009 hosted by Italy
- 2010 in Berlin, September 2010 hosted by Germany
- Other information is provided in <http://lcs-rnet.org/>

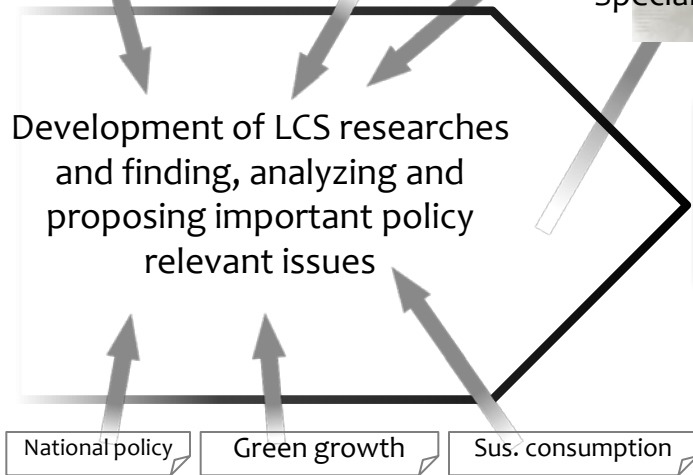
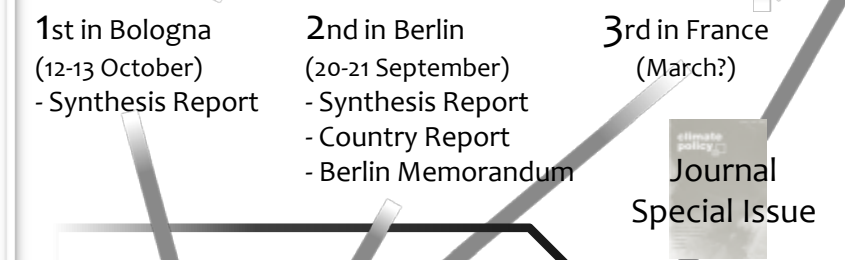
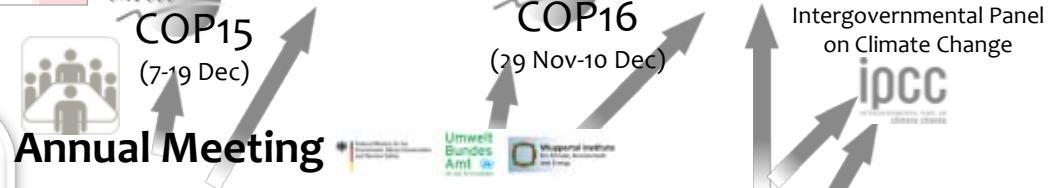
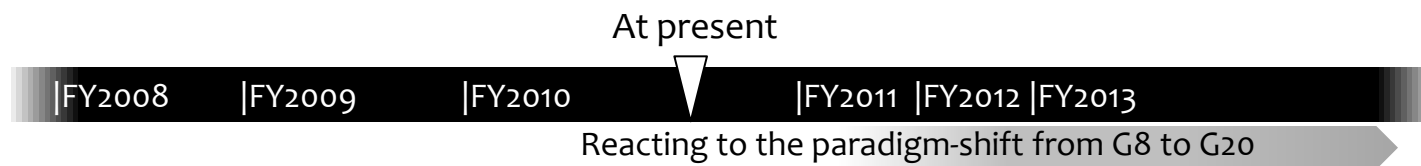
LCS-RNet(International Research Network for Low Carbon Societies)

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



LCS-RNet

5 year plan



Fostering LCS researches to achieve LCS on time

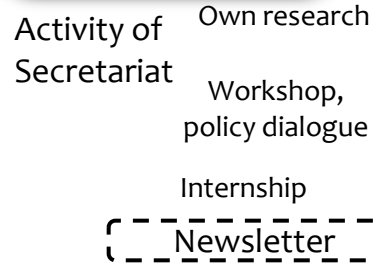
Contribution to LCS strategies of government

Competitive LCS policy and expansion to developing countries

Foundation

LCS-RNet
International Research Network for Low Carbon Societies

	France	Academy of Technologies (AT)
	France	Environment and Energy Management Agency (ADEME)
	France	Institute for Sustainable Development and International Relations (IDRI)
	Italy	Euro-Mediterranean Centre for Climate Change (CMCC)
	Italy	Fondazione Eni Enrico Mattei (FEEM)
	Italy	National Agency for New Technologies, Energy and Sustainable Development (ENEA)
	Japan	Institute for Global Environmental Strategies (IGES)
	Japan	National Institute for Environmental Studies (NIES)
	Japan	National Institute of Environmental Research (NIER)
	Korea	National Institute of Environmental Research (NIER)
	UK	UK Energy Research Centre (UKERC)
	Germany	Max-Planck-Institut für Klimaschutz, Umwelt und Energie (MPE)
	India	Indian Institute of Management, Ahmedabad (IIM-A)
	India	Indian Council of Agricultural Research (ICAR)
	India	Indian Institute of Technology, Bombay (IITB)
	India	Indian Institute of Technology, Delhi (IITD)
	India	Indian Institute of Tropical Meteorology (IITM)



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

Formulation of LCS

Solution oriented decision process

**Implement
on the
ground**

**Investment
Finance
Burden sharing**

**Hard/ soft
social
infrastructure**

**Target
setting**

Scenario/Roadmap

**Building
consensus
to LCS**

**Low
carbon
cities**

**Minimize
transition
friction**

**Policy and its
Socio-economic
evaluation**

**Technology roadmap
& assessment**

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

Publications

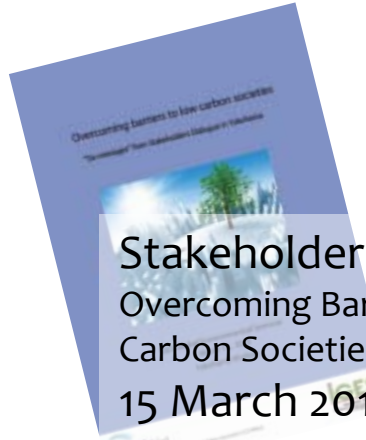


1st Annual Meeting
12-13 October 2009
Bologna, Italy

by Secretariat



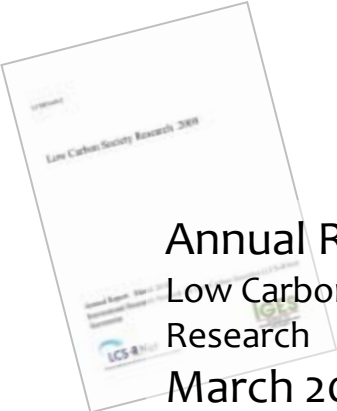
Expert Meeting
Stakeholder Dialogue
on Low Carbon
Societies
26-27 June 2009
Hayama, Japan



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

Key Findings in Berlin meeting of International Low Carbon Society Research Network

1. Using the significant progress that has been made in LCS research and policy design, it is time to craft measures for implementation.

Developed countries have devised methodologies, analyzed scenarios, and identified priority areas for policy -- they are already in the implementation stage. Many emerging and developing countries are currently undertaking efforts to establish targets and policy measures, which vary depending on country-specific developmental and geographic factors. In both contexts, sharing knowledge and good practices of policies, institutions, and financial and technical instruments is desired. Supporting the advancement of scientific knowledge is crucial for such efforts.

2. All stakeholders need to be made aware that short-term costs are countered by longer-term benefits

Raising stakeholder awareness about costs and benefits is a prerequisite to gaining their support and participation. This, in turn, requires transparency in policy making and recognition of long-term, non-monetary, welfare benefits. Policy-makers and scientists need to effectively explain the impacts of policies, including costs. However, in explaining such costs, an emphasis should be placed on the trade-off between the short-term pain due to action and the loss of longer-term welfare from zero or inadequate action.

3. Inter-linkages among society's components must be understood in the effort to devise feasible and effective policy

The real world comprises inter-linkages among various factors that cut across different sectors. Some examples are: land use for bio-energy, agriculture and forests; urban design and transport.. A conscious effort is required by the scientific and modeling community to understand and explain such inter-linkages. Analysis of these inter-linkages would help to better coordinate top-down visions and policies with bottom-up

4. Technologies and R&D alone cannot attain LCS

The barriers to diffusion of new technologies are embedded in the systems of society, economy and the market. These barriers must be identified and removed in order to make progress. Examples of such barriers are: low awareness of consumers, producers, and policy makers; inertia of existing institutions and infrastructures that inhibit penetration of new technologies; prevalence of mechanisms that incentivize high carbon technologies and lifestyles; and inertia of existing cultures.

5. Modeling implications and limitations must be correctly understood

Short-term economic models would evaluate options based on several simplified assumptions about the behaviour of decision makers and the dynamics of a market. In reality, a multitude of factors – a migratory labour market, particular land use policies, infrastructural inertia, informal economies – affect behaviours and outcomes that may not conform to those predicted by many models. Results of economic models must be interpreted with clear understanding of these limitations.

6. Multi-level governance in a multi-level world is necessary for promoting LCS

A new role of government is required in a world of multi-level governance, one that is characterized by multiple actors from business, communities and individuals. Stakeholders' participation in the decision-making process, as well as the government's active role as a facilitator and enabler, is crucial for the social acceptance of LCS. This change is exemplified by many cities around the world. Cities are acquiring an important role in promoting LCS, representing experimental sites for designing and implementing innovative policies and programmes.

7. International cooperation is central to the LCS transition

Cooperation among countries is essential for designing tax policies, preventing carbon leakage, accelerating technology R&D and exchange, and reducing pressure on global natural resources. At the same time, international climate policies and frameworks of cooperation must recognize specific domestic goals, for example, challenges for sustainable growth in developing and emerging countries.

8. Mobilising private sector investment in a desirable direction is a key to achieving LCS

Careful examination is required in promoting investment in existing technologies and industries that are expected to undergo rapid transition to achieve LCS. Financing existing technologies may cause future “lock-in”. Therefore standard policy instruments may not be sufficient for LCS financing. The inter-dependence of political, economical and societal needs must be taken into account while evaluating investment options. Policy can play a role by linking investments with incentives, building competitive advantage of industries in the areas of energy-efficient and sustainable development based innovations.

9. Civil society participation is crucial to mobilizing acceptance for LCS actions

Civil society organizations are among a country's major stakeholders. They represent domestic development issues such as poverty reduction, sustainable development, local environment and climate change adaptation. They can play constructive roles, forming 'pressure groups' to mobilise mass awareness, acting as 'participants' in the target-setting process, in the designing and implementation of low-carbon projects, and as 'watchdogs'. These roles for civil society organizations need to be mainstreamed in international and domestic climate policies.

10. 'Science in transition' can forge inter-linkages among issues, and more importantly, can be an agent of change

In promoting transformative change, the inter-linkages among inherently complex issues must be clearly explained by scientists. Scientists have the responsibility to fill in the gaps that exist between policies, knowledge, and actors. In such a global transition, there must be mechanisms that use our wisdom to turn risks into opportunities. Timely delivery of knowledge that is needed by policymakers and reaching out to the target audience and helping them to understand risk management during a complex, but necessary, transition are crucially important roles of science.

Conclusion

- We have no other choice but Low Carbon Development
- Urgency pushes us to concentrate our wisdom into drawing roadmap for the LC future and to implement it immediately
- Dialogues between policy makers and research society, and among them , are crucial
- Low carbon development is attainable by well designed policy, positive civil participation and strong international cooperation
- Science plays the key role and can be the change agent

