Transition to Low-Carbon Resilient Societies: From Theory to Reality

Report of the LCS-RNet 5th Annual Meeting – Accelerating the Transition to Low Carbon Societies –

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Co-chairs of the 5th Annual Meeting of the LCS-RNet

Japan Pavilion at COP19

19 November 2013

COP19/CMP9 UNITED NATIONS CLIMATE CHANGE CONFERENCE WARSAW 2013
IGES
ENEA
NIES JAPAN

Accelerating the transition towards low carbon societies

-from theory to reality -

Low Carbon Society Research Network (LCS-Rnet) established in 2009 under G8 scheme

- Scientific Research Contributing to Low Carbon Policy-making Process -

The LCS-RNet 5th Annual Meeting in Yokohama









Member of Steering Committee, Advisor and Secretary General

CIRED cmcc Fondazione Eni Enrico Mattei IDDRI SciencesPo. IGES NIES JAPAN 환경부 국립환경과학원 UKERC Wuppertal Institute for Climate, Environment and Energy ADEME ENEA

IIMA ICAR IIT Delhi IIT Bombay IITM

OUTLINE

1. Summary of the key findings of the Yokohama meeting;
2. Summary of the various sessions of the meeting;
3. Conclusions.

Three highlights of the LCS-RNet 5th Annual Meeting

The transition to a low-carbon society is a matter of urgency

The world is entering a huge transition phase historically. For stabilizing climate, now is the time to formulate concrete action plans and implement them, as the world works towards the initiation of a new international climate regime from 2020. In order for society to break free from and avoid having further lock-in to energy-intensive alternatives, it will be imperative to collect and then mobilise global wisdom.

Use transitions to a low carbon society as powerful leverage for sparking wider transitions

Apart from climate issues, the world today is undergoing transitions in economic and social aspects whilst also confronting major issues such as the economic crisis and poverty expansion. A low carbon society and green economy can be considered as two kinds of effective leverage that have the potential to induce wider transitions towards a sustainable world.

Three highlights of the LCS-RNet 5th Annual Meeting (Cont'd)

Sharing wisdom of both developed and developing countries will be key

Given that a substantial portion of future emission reductions worldwide must be made in developing countries, the activities of this network should be expanded as a means for discussing low-carbon development in both developed and developing countries. In developing countries, it is essential for each country to strengthen ownership of policy process, to establish organizational infrastructure for planning and execution and to clarify their own low-carbon development paths. Funds offered from developed countries must be utilized effectively for such activities.

Session title: Transition to Low Carbon Society

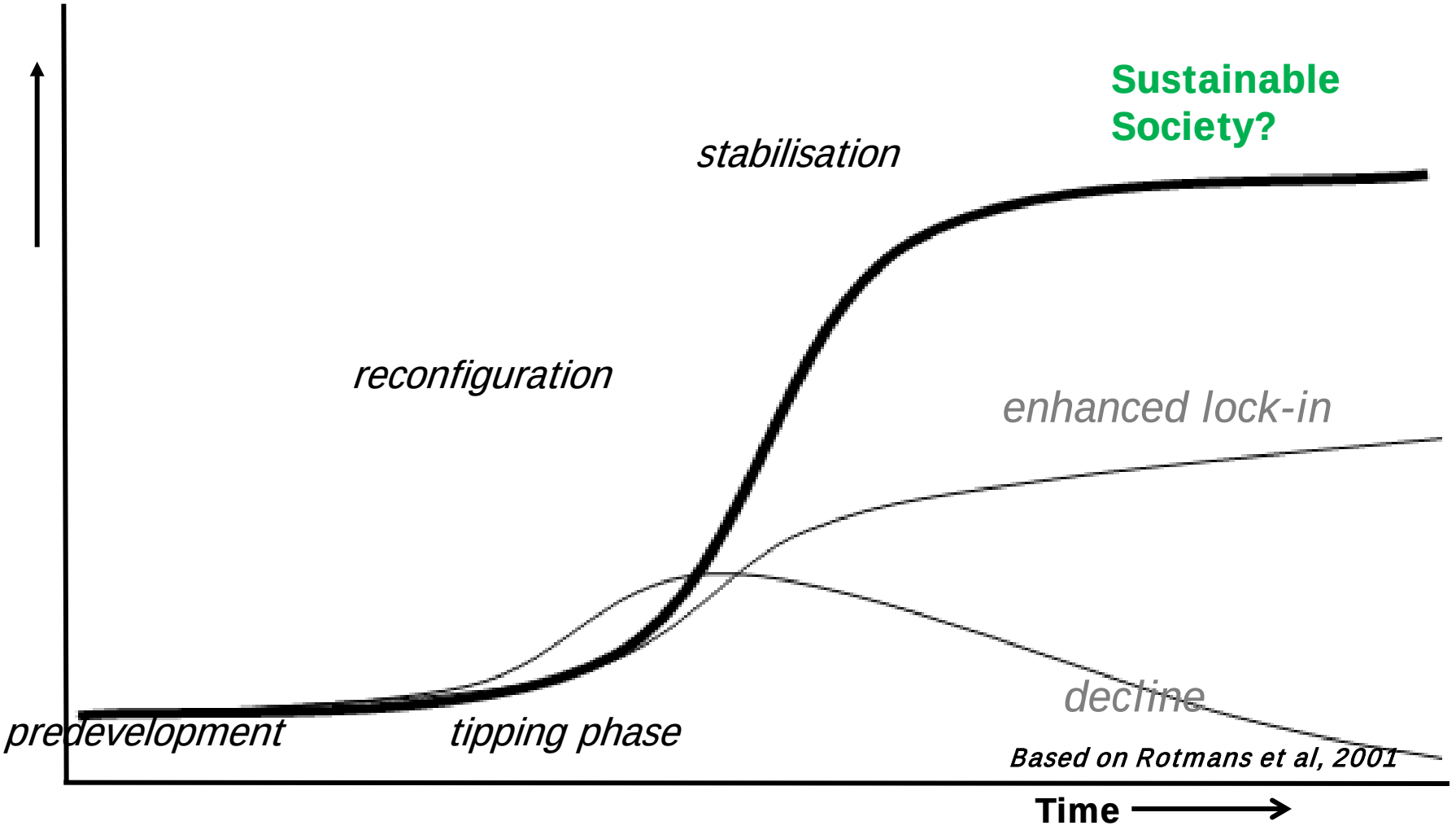
Speakers: Jim Skea, Imperial College London, UK; Derk Loorback, Drift, the Netherlands, Andrea Bigano, FEEM/CMCC, Italy

Chair: Sergio La Motta, ENEA, Italy

Key Question addressed:

Why is transition to an LCS difficult and how can key climate policies contribute to it?

Transition phases



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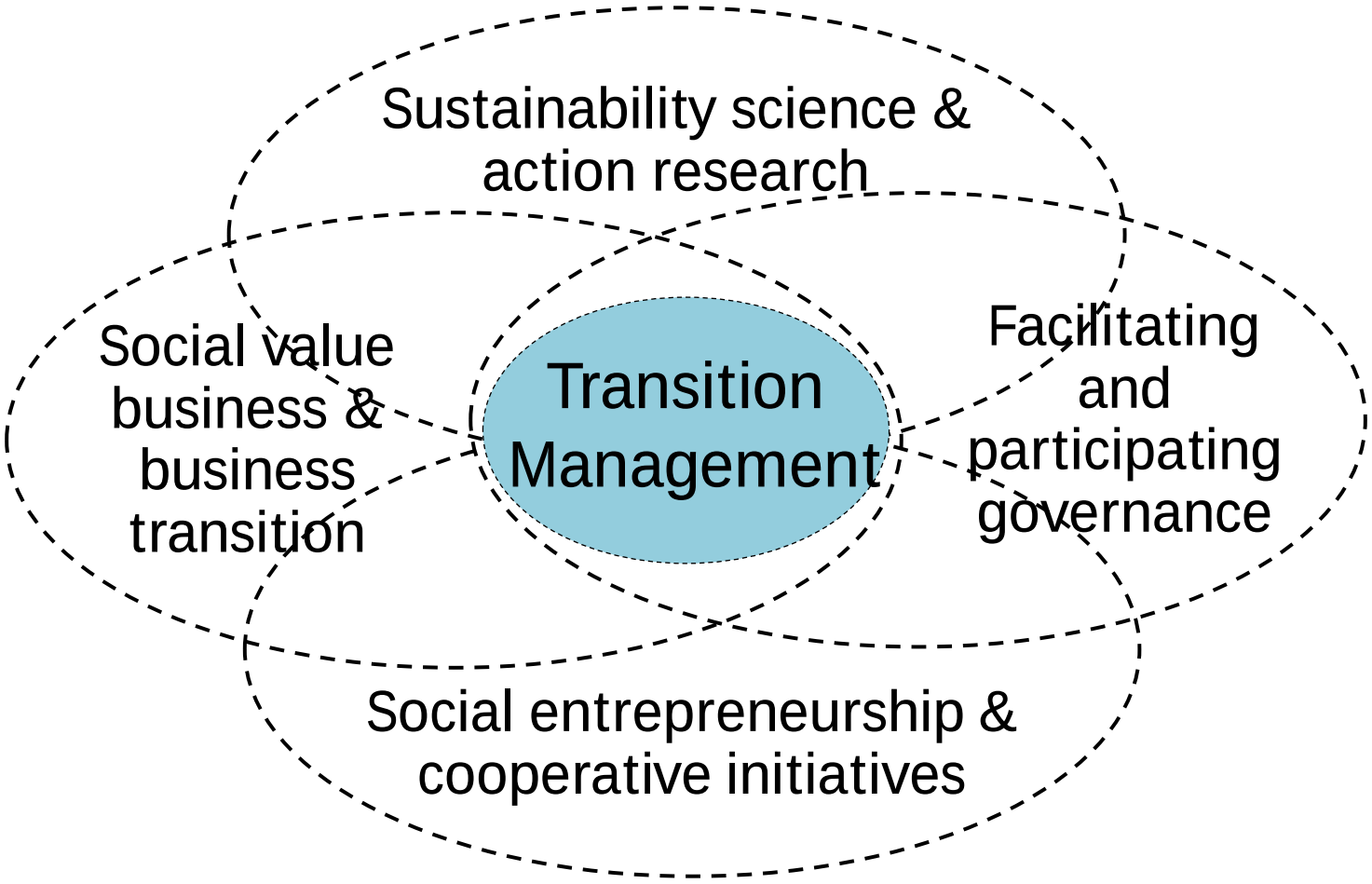

Source: Derk Loorbach, 2013


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Session title: Low Carbon Future Cities

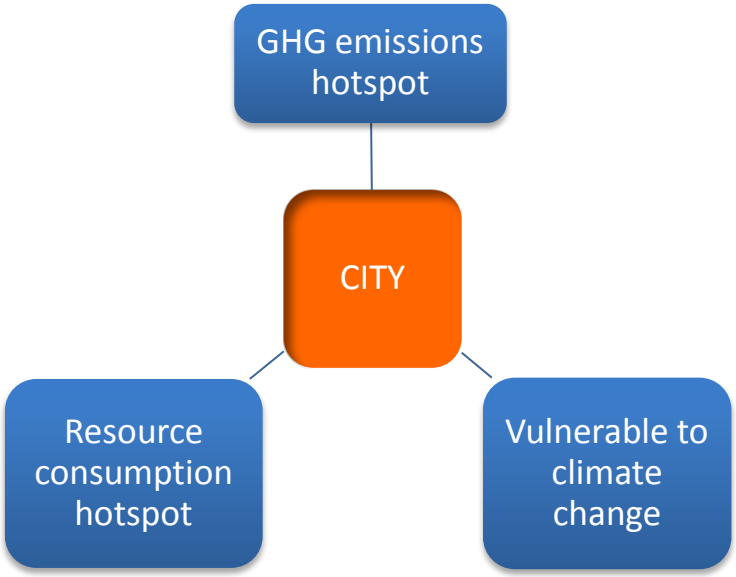
Speakers: R. Del Ciello, ENEA, Italy; Tsuyoshi Fujita, NIES, Japan; Chun Xia, WI, Germany; Niels Schulz, UNIDO, Germany.

Chair: Derk Loorback, Drift, the Netherlands.

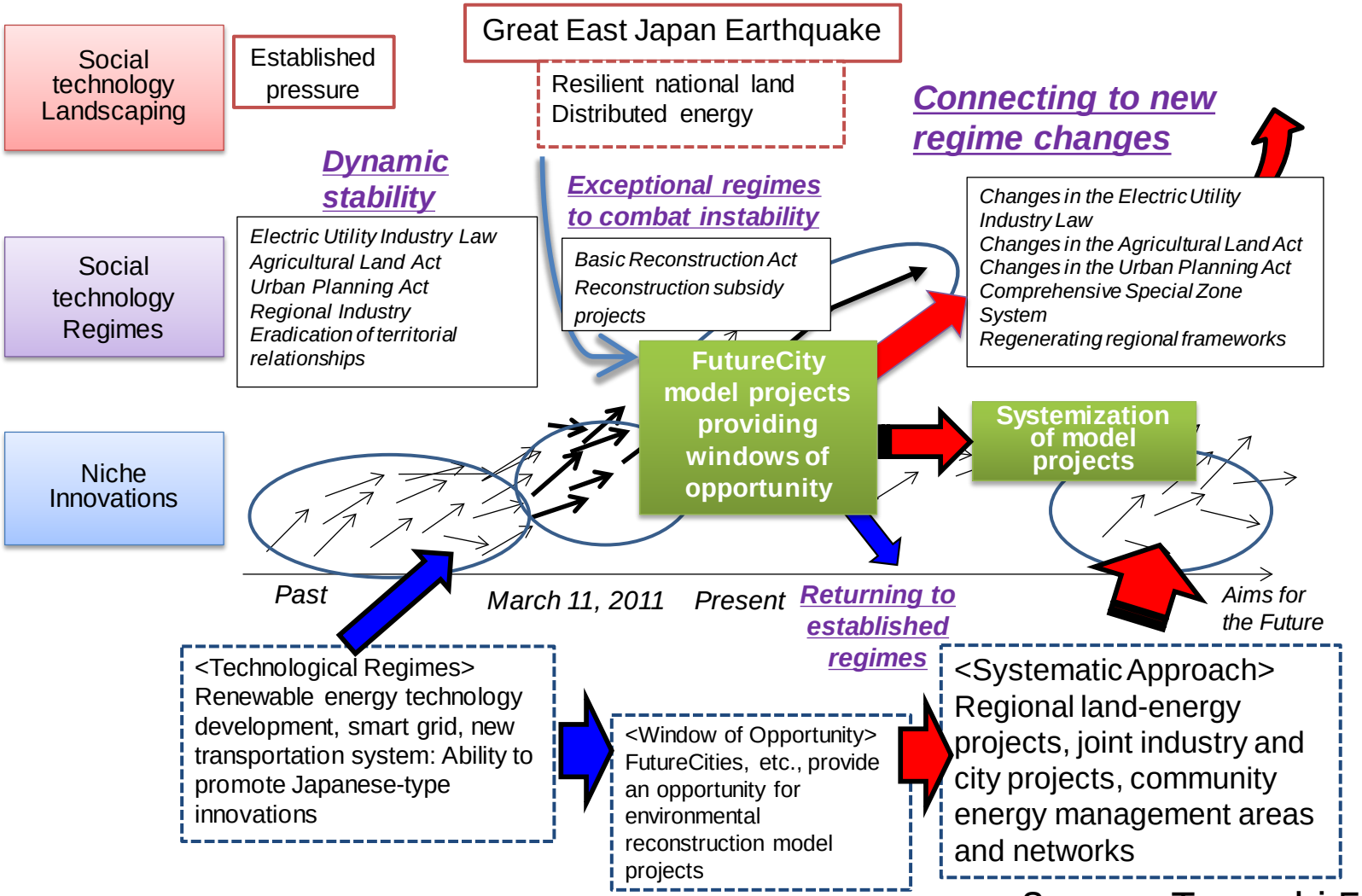
Key Question addressed:

How can a bottom-up approach stimulate a global transition to LCS?

The importance of the cities



Analyzing reconstruction-based town planning with social innovation is a key for low carbon future cities.



Source: Tsuyoshi Fujita2013

Session title: Resource Management for Low Carbon Transition

Speakers: Seiji Hashimoto, Ritsumeikan University, Japan; Julia Nordmann, WI, Germany; Magnus Bengtsoon, IGES, Japan

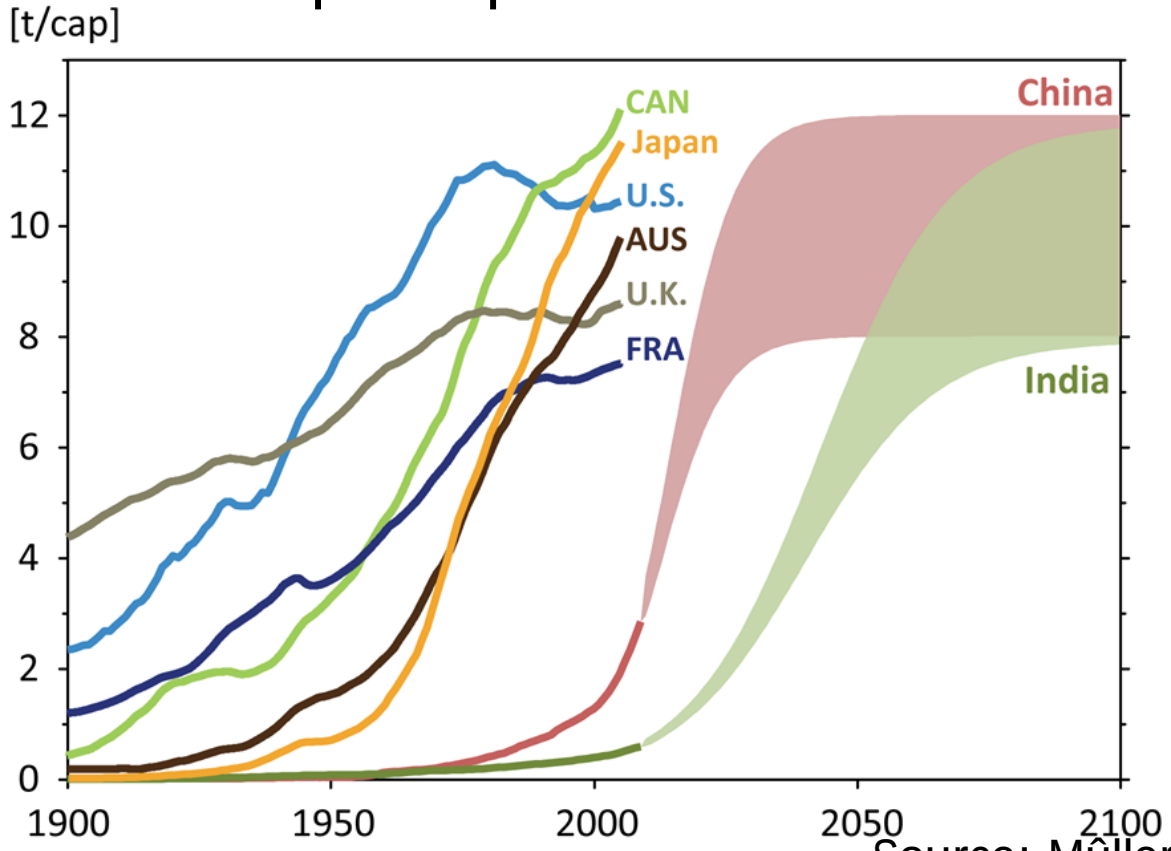
Chair: Yuichi Moriguchi, University of Tokyo, Japan

Key Question addressed:

How can material use and efficient product design contribute to realization of a low carbon society?

Dematerialization (improvement of resource efficiency) will play a major role in reducing demand, as will improving and disseminating technologies to end-users.

Lower per capita stock of iron and steel



Source: Müller and Wang, 2009

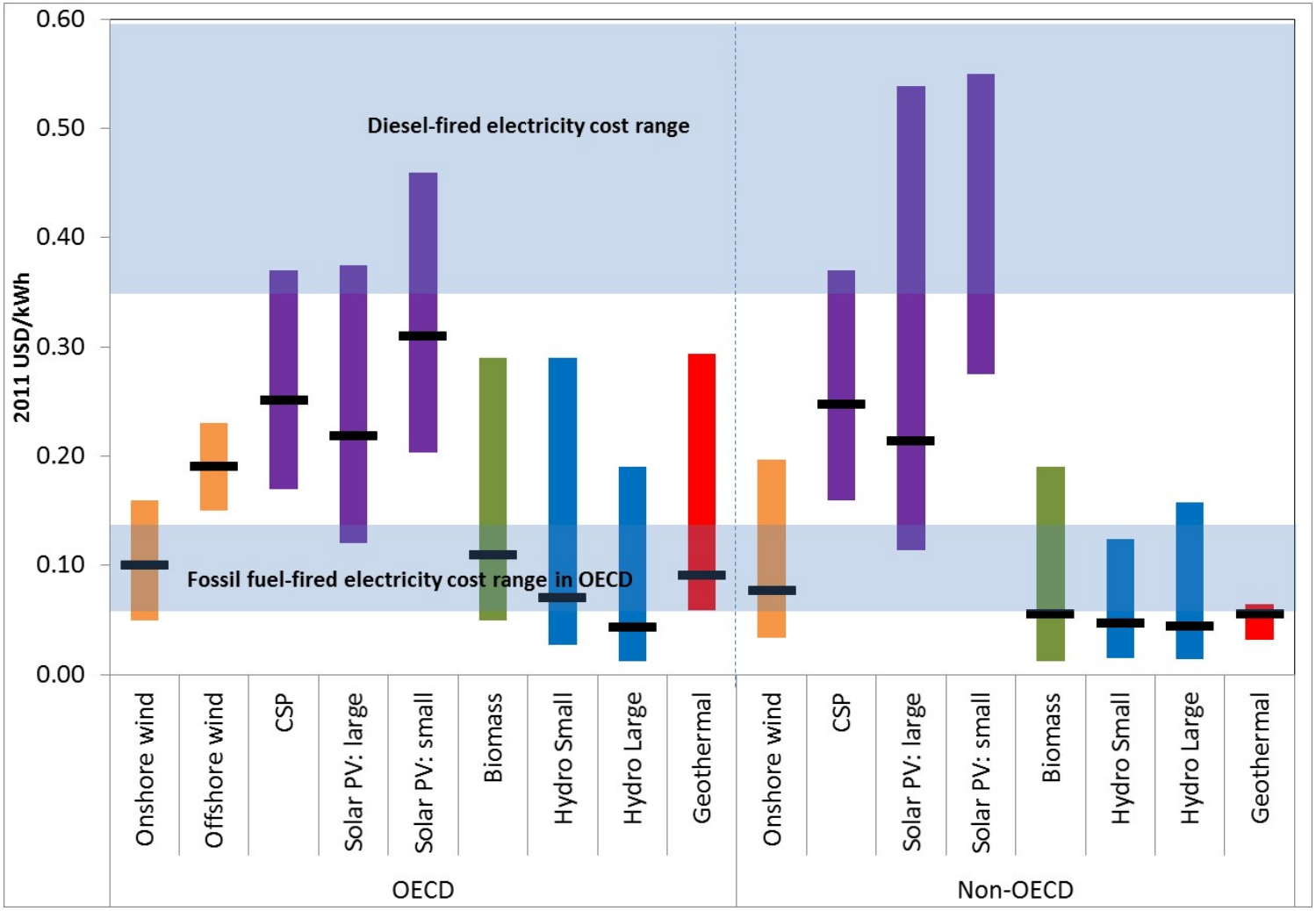
Session title: Re-Designing Energy Markets for Green Growth and a Low Carbon Future

Speakers: Yuji Matuo, IEEJ, Japan; Ram Shrestha, AIT; Ruud Kempener, IRENA
Chair: P.R. Shukla, IIMA, India

Key Question addressed:

How can the competition and co-operation of the energy market be bridged to meet the 2 degrees Celsius target?

Both competition and cooperation in energy markets are required to achieve 2 degrees target



Source: International Renewable Energy Agency (IRENA), 2013

Session title: Financing for Low Carbon societies

Speakers: Bindu N. Lohani, ADB; Marinella Davide, CMCC, Italy; Baptiste Perssin Faber, CIREF, France

Chair: Tomonori Sudo, JICA, Japan

Key Question addressed:

How can we find, tack and scale-up the flow of finance in climate change actions?

Challenges and Opportunities

- **Climate change finance:** There is a need to develop an agreed definition of climate change finance so as to be able to track such finance more accurately and to pinpoint the focus of negotiations regarding climate change finance.
- **Scale up:** Development finance institutions should work as catalysts to leverage climate change finance and as developers of risk sharing schemes and knowledge sharing platforms in order to scale up climate change finance.
- **Instrument:** Traditional financial tools are not necessarily addressing funding needs toward low carbon societies. It is necessary to develop new instruments to increase finance in actions that contribute to creating low carbon societies.

LCS·R Net

Low Carbon Society Network : The Way Forward

An experts' community who dedicates to scientific & practical policy making

UNFCCC process

2013 *discussion* → 2015 *national plan* → 2020 *implementation* → 2030

Timely & focused issues

Demand/supply integrated energy system; Carbon pricing measures; Multi-layer governance; Dematerialization; Low carbon investment; City as lead transformer; Technology transfer; Interaction between mitigation & adaptation; Communication tool among stakeholders; Lifestyle change

Low Carbon & Resilient Society/ Green economy as leverage to SD

Tools & methods

Policy dialogues between policymakers &experts community/ Web discussion/Focused workshop Larger assembly/Policy brief/Journal

Climate crisis

Financial crisis

Instable employ-ment

Widening disparity

Organizational structure

Developed/Developing countries' cooperation

Low Carbon Society Network

Steering members＋Secretariat

LoCARNet

Low Carbon Asia Network

Civil society

Business & Industry

Experts community

Academia

International organizations

Sustainable world

Conclusions

1. **Vision:** A global vision and a set of coordinated policies and measures are necessary to direct investment towards low carbon project/programmes at the global level.
2. **Governance:** Cooperation is essential if social and environmental goals are to be achieved; while competition will help to achieve goals cost-effectively.
3. **Economy:** Delays in the transition will cause lock-in of the economy into less cost-effective alternatives. Transitioning to a low carbon society can stimulate the economy and create new industries.
4. **Scale:** Local (e.g. City) level actions can accelerate the transition to low carbon societies at a global scale.
5. **Social:** The transition to a low carbon society will imply fundamental changes in the underlying culture, structure and behaviour of societies.

Thank you for your attention!

http://lcs-rnet.org/