

**Panel Discussion:** The role of, and way forward for, knowledge-sharing networks

Key questions to researchers who are involved in the policy-making process also constitute key agenda items for the activities of LCS-RNet. Questions include how to align researchers and policy makers concerning diverse issues, how to encourage researchers to address those issues to deepen examination of the issues, and how researchers can disseminate information and connect climate change issues with green growth and low carbon development. Climate change issues have become common issues found in different agenda. Rio+20, for instance, also took up climate change issues as one of its agenda items.

Knowledge-sharing network to be extended to multi-layered stakeholders

**Hiroshi Tsujihara**

Ministry of Environment, Japan



The Ministry of the Environment of Japan is happy to contribute to low-carbon, green growth development in close collaboration with other stakeholders, including existing knowledge-sharing networks.

Mr. Hiroshi Tsujihara stated that Japan's Ministry of the Environment would like to call for a deeper recognition of the importance of LCS-RNet, along with further cooperation from each government. He also spoke of his expectations for the knowledge-sharing network to be extended to multi-layered stakeholders, promoting collaboration not only within the climate change mitigation field, but also within the adaptation field, while also broadening its scope in an interdisciplinary manner.

Many options can be gleaned from different countries

**Jiang Kejun**

Energy Research Institute, China



Dr. Jiang Kejun raised the issue of how to share information on low-carbon development and disseminate messages amongst the public.

Since the Copenhagen agreement in 2009, many researchers have addressed the need to tackle emissions in a manner that will achieve the 2-degree target. There is a need for a transition to mitigate GHG emissions and to reach some climate change targets. To achieve these targets, each country needs to consider what it is capable of contributing and when its CO2 emissions will reach their peak. For instance, data

indicates energy and CO2 emission is slowing down, and it is possible CO2 emission could reach peak by 2025. There is great potential and many options for reducing CO2 emissions, including through enhanced energy efficiency and improved electricity technology. LED lighting, for example, is expected to account for one-third of the market in the near future. There is certainly progress and developments in the area of technology while uncertainty remains an issue in discussing climate change. Various options can be learned from different countries by examining their innovative activities and best practices and their technological development.

Best practices should be widely addressed

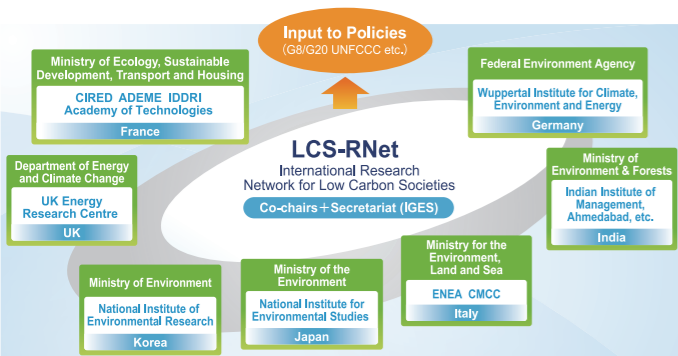
**Delia Villagrasa**

European Climate Foundation, the Netherlands



Ms. Delia Villagrasa addressed the reason why an interdisciplinary network is needed.

International initiatives can improve the quality of climate change policies and measures while also furthering their implementation. Although there are many actions, there is little learning from each other between countries or institutions. Therefore, best practices should be disseminated by assessing current practices in mitigation actions. Further communication is needed amongst researchers, policymakers and practitioners. ECF, in collaboration with GGGI, UNEP, OECD and other partners, established the Green Growth Best Practice (GGBP) initiative. This project combines the expertise and networks of end-users, researchers and policy-makers to help practitioners and policy leaders strengthen the quality of their green growth decision making, planning and implementation through analysis, peer to peer learning and a strong outreach programme.



**History of LCS-RNet**

At their meeting in Kobe in May 2008, G8 Environment Ministers recognised the need for countries to develop their own visions towards low-carbon societies, and supported the establishment of the International Research Network for Low Carbon Societies (LCS-RNet). In the G8 Environment Ministers Meeting (G8EMM) held in April 2009 in Siracusa, Italy, high expectations were placed on LCS-RNet, and the network was asked to report back its outcomes periodically. Currently this network is composed of 15 research institutes from seven countries.

**LCS-RNet Secretariat**

c/o Institute for Global Environmental Strategies (IGES)  
2108-11, Kamiyamaguchi, Hayama, Kanagawa, Japan, 240-0115  
URL: <http://lcs-rnet.org/>  
Fax: (81 46) 855-3809  
LCS-RNet@iges.or.jp



Printed on 70% recycled paper and 30% eco-pulp



International Research Network for Low-Carbon Societies

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

LCS-RNet Newsletter Vol.10 (December 2012)

Messages from Oxford (LCS-RNet 4<sup>th</sup> Annual Meeting)  
**Achieving Low-Carbon Societies: Common Challenges**  
*UNFCCC COP18 Side Event, Doha, Qatar*

The UK Department of Energy and Climate Change (DECC), UK Energy Research Centre (UKERC) and the International Research Network for Low Carbon Societies (LCS-RNet) Secretariat co-organised a side event entitled "Achieving Low-Carbon Societies: Common Challenges," held on 27 November 2012 at COP18 in the EU pavilion, Doha, Qatar.

The side-event overviewed the results of the LCS-RNet 4th Annual Meeting held last September in Oxford, UK, and

then discussed the roles of, and ways forward for, knowledge-sharing networks such as LCS-RNet. In addition, as the LCS-RNet will conclude its 1st Phase in March 2013, the event also featured a discussion on the future of LCS-RNet as it heads towards its 2nd Phase, including its structure and activities.



**Low Carbon Researchers seek to answer policy questions addressed by different societies.** World-prominent researchers gathered in Oxford in September 2012 to update cutting-edge findings regarding LCS. The resulting Key Findings and Synthesis Report of the Oxford Meeting was introduced at the COP Side Event.

**Contents**

- P1. COP18 LCS-RNet side event. Key Findings from LCS-RNet 4<sup>th</sup> Annual Meeting - NIES, Japan
- P2. Researchers' Efforts and Analysis to Contribute to Reduce Global GHG Emissions: Topics at the LCS-RNet Meeting - ENEA, Italy - Tyndall Centre, UK
- P3. Policy-makers' Perspectives and Expectations to Low-Carbon Research Network like LCS-RNet - MOEJ, Japan - DECC, UK - MEDDTL, France
- P4. Panel Discussion - MOEJ, Japan - ERI, China - ECF, Netherlands



**Mikiko Kainuma**

National Institute for Environmental Studies, Japan

**A transformation of the energy system is required**

Dr. Mikiko Kainuma pointed out noteworthy findings that had emerged through the meetings. For example, in the energy sector, researchers from around the G8 stated that domestic policies to boost both supply-side and demand-side reforms are underway in their home countries. Various papers were presented on progress in national energy policies.

On the supply side, in the UK, for instance, changes to the electricity market have been proposed, including the Carbon Price Floor (Treasury-led), a Feed-in Tariff

with Contracts for Difference to replace the Renewables Obligation, and an Emissions Performance Standard. On the demand side, a "Green Deal" for consumers has been proposed. The Green Deal financial mechanism eliminates the need to pay upfront for energy efficiency measures and instead provides reassurances that the cost of the measures would be covered by savings on the electricity bill (the "Golden Rule"). The new Energy Company Obligation will integrate with the Green Deal, allowing supplier subsidies and Green Deal Finance to come together into one seamless offer to the consumer.

Further details of the Key Findings and Synthesis Report of the LCS-RNet 4th Annual Meeting can be found through the following link: [http://lcs-rnet.org/publications/pdf/2012\\_LCS-RNet\\_Oxford%20Meeting\\_Synthesis%20Report.pdf](http://lcs-rnet.org/publications/pdf/2012_LCS-RNet_Oxford%20Meeting_Synthesis%20Report.pdf)





### Top Researchers from around the World Gathered to Update the Recent Research Findings on Low-Carbon Societies (LCS) at COP18.

The Key Findings from the Oxford Meeting lie in 5 areas:

(i) *Technology and behaviour change*; (ii) *green growth and finance*; (iii) *valuing carbon and the coordination of policies at multiple levels of governance*; (iv) *developing scientific evidence and the science policy interface*; and (v) *enhancing international collaboration*.



### Researchers' Efforts and Analysis to Contribute to Reduce Global GHG Emissions: Topics at the LCS-RNet Meeting



#### Sergio La Motta, Italy

A novel model of GHGs emission fiscal policy: Pros and cons

*The current recession pushes innovation for technology to simulate international investment through a new mechanism of international trade taxation*

Dr. Sergio La Motta introduced a preliminary study of trans-border tax in ENEA currently underway. He emphasised the growing wedge between production and consumption in countries, noting that developed countries are likely to be net importers of embodied emissions while developing countries are net exporters. The proposed GHG taxation mechanism consists of the obligation for each producer to account for CO<sub>2</sub>eq (carbon dioxide or other climate change gasses) related to the productive process of goods or services. On each receipt or invoice of the goods, the CO<sub>2</sub>eq emission related has to be clearly indicated. This carbon accountancy can identify the specific carbon emission of each product in a simple and reliable way and inform customers about it through the receipt. From this preliminary analysis, the Carbon Added Tax (CAT) novel method seems to offer a set of advantages, including being simple, transparent, shareable and applicable in different settings. This method also has the potential to be applied gradually in different contexts, for example moving beyond European countries to the multilateral and global levels.



#### Annela Anger, UK

On decarbonising the global economy

*Importance of international co-operation to achieve the 2-degree target as well as enhancement of domestic policy measures*

Dr. Annela Anger made a presentation on decarbonising the global economy. At the Tyndall Centre for Climate Change Research at Cambridge University, her colleague, Dr Terry Barker, and she conducted a study that considers climate change policies needed for a medium chance to achieve the 2-degree target by 2100. The study focuses on 2050 and examined 24 different scenarios with portfolios of climate change mitigation policies. The findings are that although market-based measures alone cannot achieve the targets, they can incentivise changes in technologies and cause technology spill-overs. The study also found that some non-Annex 1 countries such as China need to enhance emission reductions to help achieve the target. What will be needed in order to achieve the 2 degrees target? Necessary measures such as increased regulations, public and private investment in developed and developing countries, the removal of fossil fuel subsidies and the recycling of auctioning revenues by reducing personal taxes are needed. These policies should be carefully designed and coordinated as a policy portfolio to benefit the global economy and not to result in economic losses and unemployment. She also addressed the importance of international co-operation that gives proper consideration to regional differences.



*The LCS-RNet Oxford (4th Annual) Meeting was attended by 71 people, including researchers and policymakers from 14 countries and 4 international organisations.*

The meeting addressed issues and challenges held in common by developed and developing countries in working towards a low-carbon society. The issues discussed at the meeting were transforming the energy system, reducing energy demand and decarbonising the energy supply; implementing policies towards a low-carbon society; the role of science in policy formation; and low-carbon efforts that had been taken up by developing countries. In addition, the future of LCS-RNet was discussed, as it will reach the end of its first phase in 2013. Participants emphasized the uniqueness of LCS-RNet as a researchers' network focused on low carbon societies that focuses on interaction between researchers and policymakers. At the same time, participants noted the need to improve the organizational structure and to expand the network from the G8 to the G20-plus.

### Policy-makers' Perspectives and Expectations to Low-Carbon Research Network like LCS-RNet



#### Ryutaro Yatsu, MOEJ

*Japanese support for the activities of LCS-RNet as a low carbon research network to enhance domestic and international low carbon research and collaboration among various stakeholders*

Dr. Ryutaro Yatsu, Vice-Minister for Global Environment in the Ministry of the Environment of Japan addressed the importance of making policy decisions based on scientific evidence as well as of ensuring more opportunities for policy makers, researchers and other stakeholders to cooperate with each other. He also emphasised that in light of the rapid transition of our socio-economic system, there is an increasing importance for knowledge-sharing networks, such as LCS-RNet, through which various stakeholders can exchange their views and ideas internationally. Among these knowledge-sharing networks, LCS-RNet is unique as a researchers' network which focuses on the governmental policy making processes to promote low-carbon societies.



#### Paul Watkinson, MEDDTL

*Need for stakeholder cooperation to realise the transition to a low-carbon society*

Mr. Paul Watkinson, Head of Climate Negotiations in the Ministry of Ecology, Sustainable Development and Energy of France emphasised the importance of going beyond a focus on reducing marginal GHG emissions to making fundamental transitions towards low-carbon and climate resilient societies, requiring long-term, consolidated strategies and implementation plans in combination with contributions from various stakeholders. All actors need to be



involved in the development and implementation of activities in order to successfully make the transition. A network like LCS-RNet can foster inter-linkage among stakeholders to share knowledge and encourage policy-makers to drive the implementation of ecological and energy transition in order to become a low-carbon society and help identify the right questions so that negotiations under the UNFCCC towards COP21 in 2015 can respond and provide the right tools and incentives within the future multilateral deal.



#### David Warrilow, DECC

*Potentials and feasibility to reduce emissions and achieve LCS can be addressed through research communities*

Mr. David Warrilow of the UK Department of Energy and Climate Change noted that policymakers need to know the answers to the right questions. In particular they need to know what damage may be expected from different levels of climate change, what emission pathways can avoid serious damage and how we can achieve related global mitigation targets and a low carbon society, including the costs of doing so. A combination of technological, economic and behavioural change components will be necessary in order to succeed in moving towards low carbon societies and following low carbon development pathways. Countries face many different challenges, including the availability of renewables and public acceptance of new forms of technologies. Among the roles of policymakers are addressing the pros and cons of all available options and enhancing public awareness, understanding and acceptability of these issues and options. The challenge for a research network like LCS-RNet is to deliver information and knowledge that support such decision making by a range of stakeholders.

