



# Foreword

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The International Research Network for Low Carbon Societies (LCS-RNet) was established in 2009 on the initiative of the G8 Environment Ministers' Meeting (G8 EMM). At their 2008 meeting in Kobe the G8 Environment Ministers recognised the need for each country to develop its own vision of a low carbon society (LCS) and how such transition might be achieved. This vision would aim to cut global greenhouse gas emissions by more than 50 per cent by 2050, in order to prevent average global temperatures rising above 2 degrees Celsius and avoid dangerous impacts on Earth's major eco-systems. The G8 Ministers initiated RNet as a strong endorsement of this pathway towards LCS.

The sixth Annual Meeting of LCS-RNet was held over 1-2 October 2014 in Rome, Italy, and was co-hosted by Italy's National Agency for New Technologies, Energy and Sustainable Economic Development (ENEA), The Ministry of the Environment and Protection of Land and Sea (MATTM), and The Municipality of Rome, Italy.

The meeting presented a wide range of discussion on four key issues that are at the forefront of the climate change debate. These issues included: integration of climate policies with the more traditional policies in the energy sector, i.e. security of supply and cost reduction; climate mitigation and resource efficiency improvement nexus; securing adequate financing for mitigation and adaptation activities, as well as strengthening international collaboration.

Each of these themes was tackled to offer an in depth analysis from different perspectives. In the energy sector, the status of the technologies was offered together with an investigation of the impact of the behavioral change on GHG emissions; resource efficiency improvement was analysed from industrial and territorial management perspective; finance was tackled analysing barriers and opportunities of financing/investing in mitigation and adaptation together with the issue of building consensus to support climate policies; international cooperation focused on the challenges in developing countries and on the use of pathway modeling to raise ambition level of nationally determined contributions (NDCs) and raise awareness of the existence of serious opportunities for alternative development paths and leapfrogging to avoid carbon lock-in.

It also considered future plans and expectations of the LCS-RNet in the run-up to 21<sup>st</sup> meeting of the United Nations Framework Convention for Climate Change (COP 21) in Paris. The authors hope that an international agreement on climate change will be agreed in 2015, national policy frameworks will then be developed over the next five years and implemented from 2020. However, we acknowledge the challenges this will involve and will use this network to inform discussions under the UNFCCC. The articles in this special issue of the ENEA journal



are organized in four groups representing each theme tackled; each group of articles is preceded by an introductory article that can help the reader to realize the background of the theme, guide him through the storyline the articles are presenting and let him know about the next steps and gaps to be filled. This publication is intended to be a basis for the next LCS-RNet annual meeting in Paris in spring 2015. The goal of the meeting in Rome and the next meeting in Paris is to elaborate a “policy brief” that will be a contribution of LCS-RNet to the COP 21 in Paris.

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