

LCS-RNet / LoCARNet activities update

June - July 2015

Joint Sessions at " Our Common Future Under Climate Change (CFCC) " in Paris, France
9th July 2015

This forum was held by the French government and scientific organisations such as Future Earth, ICSU and UNESCO. LCS-RNet organised a joint session with the Social Learning group of South Africa and the National Institute for Environmental Studies (NIES) entitled, "Transformative Solutions Across Scales: Social Learning, Science, Policy and Dialogues". We presented mainly from the point of view of mitigation using specific examples, such as a discussion to resolve the structural shift of the coal industry in north Westphalia (Dr. Stefan Lechtenböhmer, WI); a dialogue between north and south / science and policy in the context of cooperation for developing countries in Asia (Dr. Mikiko Kainuma, IGES / NIES); Can scientists persuade policymakers in China? (Dr. Kejun Jiang, ERI); a dialogue among citizens on the national low-carbonisation plan (Dr. Emilio Lèbre La Rovere, Federal University of Rio de Janeiro); and Networks across generations (Dr. Hugo Dayan) . In conclusion, LCS-RNet suggested the next decade should be the "Decade for Accelerating Transformative Action to Low Carbon Society", meaning that world-wide promotion for bottom-up activities is essential for supporting mutual studies or opinion exchanges so that various stakeholders can take action towards transition in the next decade.



7th Annual Meeting of LCS-RNet
in Paris, France
15th - 16th June 2015

LCS-RNet held its seventh Annual Meeting entitled : **Towards an equitable low carbon development, a science - policy dialogue for COP21** on Jun 15 and 16 at Paris, France. About 80 participants from 15 countries attended the meeting. The Meeting focused on issues of COP21 as well as on visions for the transformation of the energy system, spatial dynamics and decarbonisation, international collaboration towards a low-carbon society, and financing transition. At this meeting, many speakers emphasised the **need for adaptation** and the **importance of a practical finance system for action implementation**. The outcomes of each session were compiled into the **Statement** which can be downloaded via the LCS-RNet website. http://lcs-rnet.org/lcsrnet_meetings/2015/05/1099
The Statement was distributed at "CFCC" in Paris, "RFCC" in Bangkok and "ISAP2015" in Yokohama. It is also expected to be announced and reported at the UNFCCC COP21 towards the end of the year, as well as other international opportunities before COP21. The **synthesis report** of this meeting is also being edited and will be published in October.



Side Event at "Regional Forum on Climate Change (RFCC)"
in Bangkok, Thailand
2nd - 3rd July 2015

This climate change scientific meeting was held by French government in cooperation with ASEAN and UNESCO as one of a series of campaigns in the run up to COP21. The forum had about 7 plenary sessions and 20 side sessions. LCS-RNet and LoCARNet organised 4 sessions as side events at the scientific policy and mitigation study session, which were "Mitigation potential and implemented target in ASEAN countries towards 2 degree target" (led by Dr. Toshihiko Masui, NIES); "Integration of regional mitigation and adaptation" (led by Dr. Rizaldi Boer, IPB); "Capacity Development in ASIA as a Tool to Leapfrog" (led by Dr. Sirintornthep Towprayoon, JGSEE); and "City as a pioneer" (led by Dr. Chin Siang Ho, UTM & Dr. Junichi Fujino, NIES). At the last plenary, a Statement of 15 items was presented by the RFCC secretariat. **The proposal from LCS-RNet / LoCARNet was incorporated into the statement in items 12 and 13.** This forum was a good opportunity to enhance the relationship between EU and ASEAN, which holds the key for developing countries.



IGES / TERI Side event at UNFCCC SB42
in Bonn, Germany
4th June 2015

The Institute for Global Environmental Strategies (IGES) and The Energy and Resources Institute (TERI) held a joint side event at the 42nd Subsidiary Body session of the United Nations Framework Convention on Climate Change (UNFCCC SB42) entitled "**Enhancing ambition for Intended Nationally Determined Contributions (INDCs)**" on 4th June 2015 in Bonn, Germany. At this side event, the Intended Nationally Determined Contributions (INDCs) submitted by ten nations to the UNFCCC (as of May 2015) were reviewed and there were discussions on Japan's target for GHG emissions reduction towards 2030. IGES / LCS-RNet also proposed the "**Decade for Accelerating Transformative Action to Low Carbon Society (DATALoCS)**", appealing to the international community at all levels and communities, and outlining the necessity and urgency of practical actions using cross-sectoral cooperation for a transformation into a Low Carbon Society. Download is available via LCS-RNet website. http://lcs-rnet.org/lcsrnet_meetings/2015/06/1165



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 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 network is composed of 15 research institutes from seven countries.

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Newsletter Vol.17 (September 2015)

Special Issue: ISAP ~ Road to COP21 ~

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IGES and the United Nations University's Institute for the Advanced Study of Sustainability (UNU-IAS) organised the International Forum for Sustainable Asia and the Pacific (ISAP2015) ※ on 28-29 July 2015 in Yokohama, Japan.

This year, the global community expects to reach two major milestones for climate change and sustainable development – a future climate regime and the sustainable development goals (SDGs) until 2030.

ISAP2015 invited leaders, experts, and representatives for up-to-date discussions on how to forge multistakeholder partnerships that go beyond levels and sectors to meet the climate change targets and the SDGs as one overarching goal.

As many reports indicate, the current global warming may cause the increase of natural disasters: droughts, famines, and adverse affects on the health of people. In this regard, the background issues of the SDGs and climate change have been considered to be closely connected with each other.

ISAP2015 started with the keynote speech by **Jeffrey D. Sachs** (Director, Sustainable Development Solutions Network (SDSN)/ Director, The Earth Institute, Columbia University) In his presentation, he stressed the importance of understanding how unsustainable development has given rise to a sense of unease, dislocation, and tension in many parts of the world.

He also underlined the deep decarbonisation pathways project of the Sustainable Development Solutions Network (SDSN) as fundamental to a sustainable future.

Hironori Hamanaka (Chair of the Board of Directors, IGES) declared the launch of the Tripartite Climate Policy Research Forum for Japan, China, and the Republic of Korea. Prof. Hamanaka, as its

chair, led the session entitled: Japan, China, and Korea's Roles for Climate Policy.

At the beginning of the session, **Yasuo Fukuda** (former prime minister of Japan) appealed for and stressed the importance of international collaboration across borders in climate actions. He is also optimistic about the collaboration of Asia's three largest scientific-based nations' collaboration towards low carbon societies.

In many other sessions, the topic of COP21 was argued from various perspectives.

This newsletter posts the summary reports of ISAP which are: How we should create a dynamic cycle towards/beyond COP21 to ratchet up Climate Action; The three influential nations in Asia - Japan, China, and Korea's Roles for Climate Policy; and How to Bridge Climate Change and the SDGs.

We also ran the article by Prof. Tae Yong Jung of Yonsei University, Republic of Korea, which deals with the thoughts and expectations for the Tripartite Climate Policy Research Forum for Japan, China and Republic of Korea.

Further details regarding the conference and each session are available from the website: <http://www.iges.or.jp/isap/2015/en/>

※ The International Forum for Sustainable Asia and the Pacific (ISAP) is a two-day forum, held once a year with a timely theme, to promote diverse discussions on sustainable development in Asia and the Pacific. It also aims to provide opportunities to boost information-sharing and strengthen collaborative efforts with front-line experts and diverse stakeholders from international organisations, governments, business and NGOs, drawing upon the international/ regional networks in which IGES plays an important role.



Jeffrey D. Sachs, Director of SDSN
Director, The Earth Institute, Columbia University

Prof. Hironori Hamanaka,
Chair of the Board of Directors, IGES

Yasuo Fukuda, Former Prime Minister of Japan

Contribution: Expectation for Japan, China, and the Republic of Korea High Level Research Forum

Prof. Tae Yong Jung
Graduate School of International Studies, Yonsei University, Republic of Korea

Halving greenhouse gas (GHG) emissions by 2050 to achieve climate stabilisation is not only the common objective of the world but also the biggest challenge of humankind in this century. Accounting for 30% of the world's emissions, **Japan, China, and the Republic of Korea may play a pivotal role in stabilising the global climate system.** The three countries have been taking various initiatives toward low-carbon and climate resilient societies. They may have unique roles in the world economy with outstanding low-carbon and technologies, climate resilient infrastructures, high levels of industrial development, and a substantial amount of financial resources.

Japan, China, and the Republic of Korea have a major presence in global climate policy development. **Especially, the climate policy of China will be one of the critical factors to determine the global trajectory of greenhouse gas emissions.** Bringing together the knowledge and experiences that they have accumulated at various levels, the three countries could contribute to the transformation to low-carbon and climate resilient societies in Asia and across the entire globe. In order to share our knowledge and experience, research institutes in each country jointly proposed at ISAP the launch of an international cooperative framework called, **"the Japan-China-Republic of Korea Tripartite Climate Policy Research Forum"** which will be supported by various stakeholders. The Tripartite Research Forum consists of three levels: high level; key researcher level; and working level. The high level forum is expected to provide long-term visions and to communicate to the

global community. The key researcher level forum is expected to provide guidance for the direction of the Tripartite Research Forum, as well as actual three-year research activities that will be conducted by the working level.

At the ISAP2015 launching plenary session, high level and key researcher level speakers discussed common issues and challenges that the three countries are facing when promoting climate policy and sustainable energy policy. Based on the discussions, potential joint research activities will be finalised. Comparative study on the climate policies of the three countries to share knowledge and experiences on global common issues and challenges will be initiated to **not only harmonise and standardise climate change policies, but also to play a leading role for the rest of the globe.** In particular, **Asia 2 degrees proposed by China** will be an excellent initiative of the three countries' partnership on climate change policy and be a trigger for the global 2 degrees researches.

Dr. Tae Yong Jung is current a professor at the Graduate School of International Studies and the Deputy Executive Director at Institute for Global Sustainability (IGS), Yonsei University, Republic of Korea. He was the Deputy Executive Director of the Global Green Growth Institute (GGGI). He worked at the Asian Development Bank and was at the World Bank as a senior energy economist. He was also one of lead authors of IPCC Special Report on Emission Scenario.



Report from ISAP

Japan, China, and Korea's Roles for Climate Policy - Partnership for a New Age

Key Messages

- Japan-China-Korea Tripartite Climate Policy Research Forum – officially launched at ISAP 2015 – plans to conduct the joint research on science-based climate policies with an aim to reduce GHGs emissions within and beyond the three nations.
- The three nations collectively account for approximately 30% of global GHG emissions, and have significant technological and financial capacity to reduce these emissions.
- Key areas for this collaborative research include renewable energy, sustainable city planning, a transnational electricity grid and a natural gas grid, integrated carbon policy and market, and nuclear safety regulations.

This session, moderated by **Hironori Hamanaka** (IGES), served as the launch of the **Japan-China-Republic of Korea Tripartite Climate Policy Research Forum**, which aims to initiate joint research on science-based climate policies.

Yasuo Fukuda (former prime minister of Japan) emphasised in his video message the need to pursue a more sustainable way of development and the importance of **strengthening the international collaboration between these three nations** in climate actions.

Yoriko Kawaguchi (Meiji University, former minister of environment/foreign affairs) emphasised the effectiveness of tripartite cooperation by referring to the characteristics of the three nations: a close geological and economic relationship; high technical and financial capability; the significant role that renewable energy can play.



She also mentioned that the three nations have several common issues such as **the modernisation of the electricity grid and the dependence on coal-fired power, which can be a potential research topic for this forum.** She concluded that transnational efforts to build **more innovative social and economic systems** will be beneficial not only for the three nations but also for the rest of the world.

Hoesung Lee (Korea University/IPCC) argued that it is **economically reasonable** to form strong cooperation in climate actions beyond country borders compared to individual countries working alone. He proposed some potential research topics for this forum including studies on: **a transnational electricity grid and/or natural gas grid; nuclear safety regulations; and integrated carbon policy and market.**

Kejun Jiang (ERI) introduced China's recent climate policy which aims to achieve the 2 degrees target by optimising economic efficiency, improving energy efficiency, introducing CCS, and changing lifestyles. He also presented the **recent change in China's economic structure** in which the share of renewable energy and nuclear power is increasing and replacing the share of coal-fired power.

Hikaru Kobayashi (Keio University) shared his idea for potential research topics such as a study on: **the supply chain among the three nations focusing on scope 3;** resilient and compact city planning; and a means to connect climate actions with economic growth for the purpose of bringing the private sector closer to climate activities.

At the panel discussion session, speakers emphasised that transnational cooperation on climate efforts will benefit not just the climate, but also many other areas of national interest. **They discussed the importance of: securing the transparency of this joint study;** contributing to the 2 degree target of Asia; involving all relevant stakeholders including policy-makers and universities. They also indicated their optimism for this forum to generate beneficial results around the world.

Rapporteur: Masahiro Suzuki, IGES

For more details : http://www.iges.or.jp/isap/2015/en/day1/p_3.html

Report from ISAP

New Climate Regime at COP21: Creating a Dynamic Cycle for Ratcheting up Climate Actions

Key Messages

- Additional efforts to reduce GHG emissions in the future are needed with ambitious targets and measures.
- For transformation to low-carbon society, we are still in the learning process and it is important to find out how to realise decoupling of environmental impacts from economic growth.
- For decarbonisation, policy implementation by all countries are crucial.
- Collaboration on R&D across countries is important for low-carbon society by increasing technology transfer and creating opportunities for investment.

Shuzo Nishioka(IGES) emphasised the need for an ambitious target to construct a dynamic cycle for climate actions of post 2015 in COP21. **Thierry Dana** (Ambassador of France to Japan) mentioned **four pillars for the Paris agreement:** intergovernmental agreement with sufficient outcomes with ambitious target setting of both developed and developing countries; financial and technology transfer; decoupling of environmental improvement and global growth of economy; and the agenda of solutions with involvement of every stakeholder.

Kentaro Tamura (IGES) introduced key messages from the upcoming IGES report **"The Paris Climate Agreement and Beyond"** to link short-term climate actions to long-term goals. **Akimasa Sumi** (NIES) explained that to achieve the 2 degrees target, global carbon management system, and measurement, reporting and verification (MRV) is needed not only for greenhouse gas (GHG) emissions from energy but also from **land use and land use change.** **Nobuo Tanaka**(IEA /SPF) stated that decoupling of GHG emissions from economic growth is possible **by increasing nuclear and renewable energy and shifting from coal to gas.** **The IEA bridge scenario** indicates that in order to meet the 2

degrees target, the mixtures of various actions are needed including energy efficiency, technology investment, removal of subsidies of fossil fuels, reduction of methane emissions from oil and gas extraction, and reconsideration of nuclear energy policy. **Rae Kwon Chung** (UN) mentioned that one fundamental issue is how to make the transformation to lowcarbon society happen. **Success stories and evidences should be shared among countries.** In addition, he stated that the mind-set of current indication from an economic model should be changed using various models with different options and perspectives. Emphasis was placed on the need for different indicators to assess the growth of a country. **Bindu N. Lohani** (AIT) emphasised that **long term investments and actions are needed for decarbonisation.** He also stated that policies to remove fossil fuel subsidies and to provide subsidies for renewable energy can also enhance low-carbon investments.

Rapporteur: Takako Wakiyama, IGES

For more details : http://www.iges.or.jp/isap/2015/en/day1/p_2.html



Report from ISAP

Bridging Climate Change and the SDGs

Key Messages

- By comparing financial crisis with climate change, there had been no preparedness to financial crisis while we currently have scientific evidence as for climate change. There will be no bail-out for climate change, unlike financial crisis. The cost of the financial crisis is USD22 trillion but the cost will be much larger for climate risks.
- This gives us an urgent need to stop climate change, without which the SDGs are not achievable. The 17 goals have strong synergies but also conflicts and trade-offs. Complementarity of two processes is important to ensure the safe operating space. Current SDGs are comprehensive and flexible but must be also effective and implementable.
- The roles of countries must be differentiated according to their capacity to implement the goals, but people always need to be placed in the center of the stage while considering these synergies and trade-offs between the SDGs and climate change.

Rintaro Tamaki (OECD) compared the financial crisis with climate change, saying there had been no preparedness to the financial crisis while we currently have scientific evidence for climate change. **There will be no bail-out for climate change,** unlike for a financial crisis. The cost of the financial crisis is USD 22 trillion but **the cost will be much larger for climate risks.** **Magnus Bengtsson** (IGES) pointed out the need to **stop climate change, without which the SDGs are not achievable.** The 17 goals have strong synergies but also conflicts and trade-offs. Climate change is like an escalator moving down faster and faster, we will have to be jogging even to stay where we are, and need to run really fast in order to make progress. **Satoshi Kojima** (IGES) talked about complementarity of two processes to ensure the safe operating space. Current SDGs are comprehensive and flexible but must be also effective and implementable. **The roles of countries must be differentiated according to their capacity** to implement the goals. **Qazi Kholiqzaman Ahmad** (Institute of Microfinance), his main point was that **people need to be placed in the centre of the stage.** Primary responsibility of advanced countries is to help developing countries, particularly in terms of technology and production processes. In case of proliferation of institutions and funds, things are getting more complicated. **Masakazu Ichimura** (CAPSA) emphasised that any development should be designed within the planetary boundaries. Previous investment was focused on short-term gains. Long-term co-benefits exist but we **need intervention in the governance structure.** **Surendra Man Shrestha** (UNEP-IETC) said we need political **ownership, resources and public support to elect enlightened leaders.**

Rapporteurs: Polina Ivanova, Peter Bungate and Ikuho Miyazawa, IGES

For more details : http://www.iges.or.jp/isap/2015/en/day2/p_4.html