

Rizaldi Boer (Bogor Agricultural University) introduced his modeling analyses in the AFOLU sector, by applying three scenarios, BAU, government (following development plan and target), and deep decarbonisation (following a development plan and target using an improved system and intensified mitigation actions). He mentioned that, towards realising low-carbon development, the development of tools and models by research communities, dialogues with government and other stakeholders, and the formulation of policies and development plans should be promoted in relation to each other, with mutual inputs and feed-backs.

Then, Nguyen Tung Lam (ISPONRE) explained that the AIM team has been promoting low-carbon society scenario development for Danang and Ho Chi Minh City (at the city level) from this fiscal year. He mentioned that policy dialogues have been and will continue to be organised to foster an exchange of opinions and information. He also stated that activities towards realising low-carbon cities have been promoted in Viet Nam, as well.

Lastly, P.R. Shukla (IPCC WG III), who was the chair and facilitator of this session stated that, for implementation from 2020, every country must strengthen their NDCs further. He added that it is necessary to build-up a cycle to reinforce NDCs while conducting periodical reviews. More importantly, policy development should be promoted using integrated assessment models, such as the AIM. He also mentioned that the AIM team has been collaborating with researchers in-country in various countries in Asia. The fact that Asian researchers have been making presentations themselves on their models has sent a strong message about Asia's growing potential to contribute to GHG reduction.

Prof. Shukla also expressed his gratitude for Japan's package-type support to Asia for more than 20 years.

For more details, please visit our web page: http://lcs-met.org/locamet_meetings/2015/11/1577



LCS-RNet / LoCARNet activities update September - October 2015

Capacity Building Workshop "Enhancing Actions for a Better Response to Climate Change – towards COP21 and Beyond" in Phnom Penh, Cambodia
21 September 2015

LoCARNet held a capacity building workshop on 21 September back-to-back with the JICA-sponsored "Capacity Building Training on Low-Carbon Planning".

Approximately 100 participants from both policy and research sectors in Cambodia, Lao PDR, Myanmar, Malaysia and Thailand listened intently on how each countries' INDC and low-carbon studies are currently proceeding. Following COP21 last December, it is generally expected that the process will get underway to seek ways to implement previous research and experiences into public policy on a global level. Reflecting this shared awareness, one of the key points at this workshop and training was how to bridge the gap between the policymaking sector, research sector, economic and agriculture sector and citizen sector using co-benefits. The role of networking from this standpoint was also mentioned by some participants.

For more details, please visit our web page: http://lcs-met.org/locamet_meetings/2015/09/1358



4th Annual Meeting of the LoCARNet
in Johor Bahru, Malaysia
11th-13th October 2015

The Fourth Annual Meeting of LoCARNet entitled "Positive Action from Asia – Towards COP21 and Beyond" was held on 11-13 October 2015 in Johor Bahru, Malaysia. The meeting was intended to share the direction of research agenda from the perspective of the global climate policy, with six breakout sessions on cities (adaptation, education, low-carbon), finance, the situation after COP21, LULUCF and SCP, as well as keynote speeches presented by ten eminent persons from the Asian region.

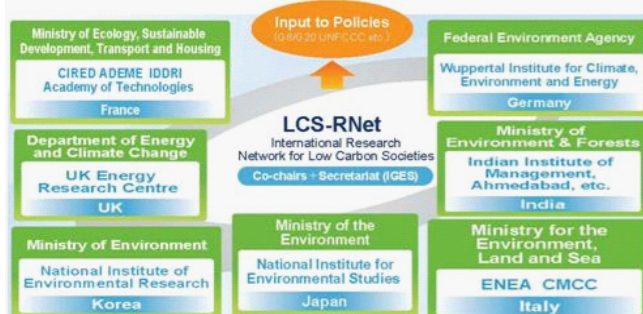
At this meeting, the LoCARNet Iskandar Malaysia Declaration was launched and finalised by the steering group members and the participants of the Annual Meeting. It was disseminated to the world at COP21 as well as other international opportunities.

For more details, please visit our web page: http://lcs-met.org/locamet_meetings/2015/09/1371
More details of Iskandar Malaysia Declaration: http://lcs-met.org/locamet_meetings/2015/10/1398



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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Special Issue : LCS-RNet in COP21

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LCS-RNet circulated a position statement, "A moment of truth for climate and sustainable development"

The International Research Network for Low Carbon Societies (LCS-RNet) circulated a position statement after its seventh annual meeting (Paris, June 2015) in the context of COP21. The objective was to demonstrate the possibility of scientists of various disciplines, sharing diverse cultures, coming from countries at different development stages, to express common views about the conditions for triggering climate action in the current economic context.

As of October 2015, the position statement was signed by 217 experts and scientists amongst 74 authors, chairs and co-chairs of the IPCC WGIII, top level development economists and five former ministers. Even more importantly the signatories come from 48 countries covering all world regions.

The statement was translated to five languages -- English, French, Spanish, Arabic and Japanese. It was disseminated at several international opportunities before COP21 and was then distributed and introduced at COP21.

The position statement is downloadable from the following link: http://lcs-met.org/lcsnet_meetings/2015/10/1489

LoCARNet published open access e-book "Enabling Asia to Stabilise the Climate"

The Low Carbon Asia Research Network (LoCARNet) has developed a book entitled "Enabling Asia to Stabilise the Climate" as a joint project with like-minded researchers in Asia who work for low-carbon development in this region.

The first part of the book states that Asia holds the key to global climate stabilisation, and that the region has plenty of potential to develop while decreasing GHG emissions, by presenting research results conducted by AIM model researchers in Asia.

The second part of this book introduces several cases whereby modelling results are effectively applied to low-carbon development policies at both national and local levels.

Then, in the third part, the book gives a couple of good practices that have been conducted so far, on how low-carbon development activities and measures could address barriers in each major policy field to implement potential reduction into the real.

LoCARNet announced its publication at a launch event at COP21 to which the authors of the book were invited.

The book is downloadable from the following link: <http://link.springer.com/book/10.1007/978-981-287-826-7>



LoCARNet is a sister network of LCS-RNet. It is an open network of researchers of low-carbon development in the Asian region. It aims at promoting capacity building, knowledge sharing and dialogue between scientists and policymakers through workshops and meetings in ASEAN countries so that each country will be able to have ownership of their own policy-making on low-carbon development.



Positive carbon pricing and the paradigm shift in the climate negotiations at COP21 and beyond

5 December 2015, France Pavilion

Organisers: International Research Center on Environment and Development (CIRED),
Commissariat au Développement durable,
Ministère de l'écologie, du développement durable et de l'énergie (MEDDE),
Brazil Climate Center (BCC), France Stratégie

This event gathered academic experts from international financial institutions, companies and diplomats. The first session looked at the political and economic rationale of the Cancun Paradigm shift. In the second session, discussions focused on the conditions and possibilities regarding the implementation of innovative initiatives regarding financial mechanisms based on the social and economic value of avoided carbon emissions (positive carbon pricing). In this newsletter, we introduce the session report from the first session.

Firstly **Shuzo Nishioka** (IGES) introduced the International Research Network for Low Carbon Societies (LCS-RNet) and the **Position statement which LCS-RNet circulated after its seventh annual meeting** (Paris, June 2015). As of October 2015, the position statement was **signed by 217 experts from 48 countries covering all world regions**.

JC Hourcade (CIRED) emphasised there is a problem in financing the transition with North-South opposition. The question is **now how to redirect the excess of global savings towards sustainable development and climate change action**. He stressed the need for price mechanisms in which prices are relative to development levels and also the need to secure risks for investors.

PR Shukla (IPCC WG III) insisted that to shift the climate framing, rather than focusing on the climate problem, we need to **focus on and push the agenda forward regarding sustainability, co-benefits and innovation opportunities**.

Jim Skea, (Imperial College) mentioned that companies would prefer a contract-type carbon price first, then an ETS



system second and a tax system last because businesses do not trust governments to keep the price stable. But in any case, **businesses need a price signal on how the carbon pricing will be set**.

Teresa Ribera (IDDRI) emphasised the missing link to close the GHG target gap is the financial side. Political guidance is needed first. She insisted that the **UNFCCC has a role in providing guidance to support this financial movement**. She also mentioned that climate action needs to be brought into the mainstream of development and it should be dealt with through the SDGs.

Everton Lucero (MoE, Brazil) mentioned the **new notion of recognising the social and economic value of carbon reduction, and mitigation action**. He emphasised that the UNFCCC is the only organisation that can give political support to this notion. He also pointed out that government money could instead be provided in support of guarantees of investments.

For more details, please visit our web page:
http://lcs-met.org/lcsnet_meetings/2015/12/1648

From INDCs to 2 degrees, bridging the gaps in mitigation & implementation

3 December 2015, EU Pavilion

Organiser: PIK, DG Clima (EU commission), LCS-RNet
Moderator: Laura Cozzi (IEA)

This side event had two sessions -- "Bridging the INDCs and 2 degrees" and "INDC implementation and measurement". In this newsletter, we introduce the report from the first session.

How can pathways below 2°C be reached? A panel of leading scientists presented & discussed their work on this topic, including the progress made and remaining challenges implied by the INDCs.

Alban Kitous and **Toon Vandyck** (JRC) said according to the analysis, putting the world on a **low-carbon pathway** goes hand in hand with **robust economic growth**. We can notice a shift of employment in the forecasts. They also pointed out that INDCs will put the world on a 3 degree increase trajectory as of now.

Elmar Kriegler (PIK) insisted **aggressive mitigation action has to be taken beforehand** to overcome the implementation difficulty after 2030. He also mentioned that a credible long-term goal from the Paris Agreement is also needed. Policies to incentivise low-carbon energy and disincentive fossil fuel use are complementary.

P.R. Shukla (IPCC WG III) explained that India's INDC will bring the country's emissions below BAU levels but fall short of the 2 degrees target. He emphasised not only ambition, but also stated that **trust is a major point to be highlighted in the INDCs**, so that investors know that in case of failure, someone will support and provide backup.

Nicklas Forsell and **Giacomo Grassi** (IIASA) highlighted that



LULUCF's role in climate change is paramount. Indeed, one third of GHG emissions are absorbed by forests and another third by oceans. That is why it is so important to preserve these ecosystems for climate mitigation. They explained LULUCF will contribute from 20 to 25% of countries' emission reductions.

Liwayway Adkins (IEA) explained that mitigation components in INDCs comprise complication factors. She recommended developing rules for land sector and accounting, gathering **more information on implementing policies and linking short-term national targets to long-term ambitious goals**.

Jean-Charles Hourcade (CIRED) proposed to redirect household savings, pension funds, insurance schemes and sovereign funds towards long-term and sustainable financial investments. **Carbon pricing** is a pre-condition. Such carbon pricing might be acceptable to China or India **if it is embedded in financial schemes** that reduce the financial risks of low-carbon investments.

For more details, please visit our web page:
http://lcs-met.org/lcsnet_meetings/2015/12/1642

How deeply can Asia decarbonise?

- Launch event on "Enabling Asia to Stabilise the Climate"

5 December 2015, Japan Pavilion

Organiser: Institute for Global Environmental Strategies (IGES)

This side event was held as a launch event on the LoCARNet open access e-book "Enabling Asia to Stabilise the Climate", published by Springer. The session report is introduced below.

First of all, **Prof. P.R. Shukla** (IPCC WG III) overviewed the book. He mentioned that this book aims to outline the challenges faced by each Asian country on **how they are progressing in building up low-carbon societies**, and it aims to share information with other countries across the world. He stressed that, by doing so, global cooperation for developing low-carbon societies can be further promoted.

Following Prof. Shukla's overall presentation, a couple of the authors of this book who are making serious efforts to realise low-carbon development in Asia, briefly explained the contents.

The first part of this book clarifies that **Asia holds the key to worldwide climate stabilisation**, and examines model analyses of China, India, Japan, Viet Nam, and Asia as a whole, showing that there is large scope for achieving development while reducing GHG emissions. **Nguyen Tung Lam** (ISPONRE) from Viet Nam outlined his model analysis.

The second part introduces good practices showing **how the results of the examination of model analyses are actually incorporated into national and local-level** low-carbon development policies and how they effectively work for policy formulation. **Ho Chin Siong** (UTM) from Malaysia mentioned that results from the model analysis were applied as a scenario in the development of a low-carbon society in Iskandar. It is likely that **urban areas will take a front-line role** in the formulation of low-carbon societies. He stressed that the example of Iskandar shows one good practice in low-carbon society formulation.

The third part explains **how to overcome barriers** to measures implemented in each country's major policy sectors so that possible GHG emissions reduction is actually realised by utilising good practices developed so far. Here, **Prof. Shukla** introduced the promotion of public transportation and the formulation of **compact and energy-efficient cities**.

Rizaldi Boer (Bogor Agricultural University) from Indonesia then highlighted the importance of **forest conservation** for enhancing carbon sinks and **biomass energy use**. Moreover, **education and research communities are essential** for formulating science-based policies.

In this regard, **Jakkant Kananurak** (CITC) from Thailand introduced advanced examples which **CITC has been functioning as a knowledge hub in ASEAN countries**.

Following this, **Tomoko Ishikawa** (IGES) explained about the **Low Carbon Asia Research Network (LoCARNet)**, which fosters **capacity building** in Asia, facilitates discussions between policymakers and the research community, and promotes **knowledge-sharing** in the region by making full use of regional cooperation.

To wrap-up, **Shuzo Nishioka** (IGES) mentioned that Japan has been conducting substantial international cooperation with Asian nations contributing to GHG reduction for approximately 20 years. However, it is high time for Asian countries to **blaze a new trail towards realising low-carbon Asia under their own initiative**.

For more details, please visit our web page:
http://lcs-met.org/locarnet_meetings/2015/11/1585
"Enabling Asia to Stabilise the Climate" is downloadable from :
<http://link.springer.com/book/10.1007/978-981-287-826-7>



Partnership for a new age for Asia and Japan - towards realising low-carbon societies in Asia

5 December 2015, Japan Pavilion

Organiser: Mizuho Information & Research Institute, Inc. (MHIR),
National Institute for Environmental Studies (NIES),
Kyoto University, E-konzal, Institute for Global Environmental Strategies (IGES)

This event focused on the **AIM (Asia-Pacific Integrated Model)** in the context of predicting that integrated assessment models will increase in importance after COP21 towards implementation of INDCs from 2020. The following is a report from the session.

First of all, **Junichi Fujino** (NIES) gave a keynote speech entitled "**AIM in Asia**". He explained the contribution made by Japan to Asia over the past 20-plus years and the importance of applying AIM to policy review. He mentioned that **AIM is a large-scale computer simulation model**, and was developed to promote and facilitate an integrated assessment process in certain areas and regions. At the same time, **AIM has been promoting international cooperation**, for example by developing low-carbon society scenarios and roadmaps in selected counties and regions in Asia. It has become a network for information exchange, with more than 400 researchers. In this context, Dr. Fujino further explained a project commissioned by MOEJ on the

development of low-carbon society scenarios and roadmaps. He introduced components of the commissioned work, such as; developing appropriate low-carbon scenarios and roadmaps in each country and region by customising AIM; organising policy dialogues based on this roadmap and so on. AIM team also developed PDCA guidebook for progress management of low-carbon society planning.

Ho Chin Siong (UTM) explained that in **Iskandar Malaysia, a low-carbon society blueprint and roadmap were developed**. He pointed out the importance of bridging low-carbon research with policymaking and actual implementation (**from science to action**). He also mentioned that receiving commitments and endorsement from leaders, as well as involving local communities and stakeholders concerned are the keys to promote actions.