

# 03 Impact Formation

The decade starting from COP21 will be a major turning point for global civilisation, with human survival at stake. If current trends continue, it will be entirely impossible to bring about a historic global transition unless Asia acts in earnest, as Asia is forecast to account for half of the planet's GDP, energy consumption and carbon dioxide emissions in 2050. On the other hand, as the world stands at the entryway to this enormous transition, if the robust development of the present day can be steered towards creating a low-carbon society, for the countries of Asia, which are not locked in to the high-carbon society of the past, the present represents a truly golden opportunity to create a new low-carbon civilisation with Asia leading the world. Indeed, this is a scenario the world eagerly awaits.

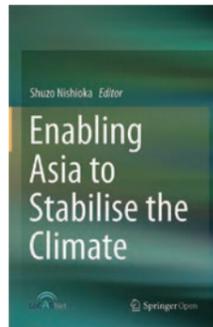
In order to send out widely to the world the message of Asia's latent and tremendous potential in contributing to GHG emission reductions, LoCARNet wrote the volume "Enabling Asia to Stabilise the Climate" from 2014 with leading LoCARNet researchers. It was unveiled on the occasion of COP21, at the "How deeply can Asia decarbonise?" launch event for "Enabling Asia to Stabilise the Climate."



## Enabling Asia to Stabilise the Climate

The book, published by Springer, was released in November 2015.

The first part of the book utilises analyses conducted by AIM model researchers in Asia to look into Asia as holding the key to global climate stabilisation and having ample potential to develop even while decreasing GHG emissions. The second section takes up some cases in which modeling results have been applied to low-carbon development policies at both the national and municipal levels and are operating effectively within policy formation. The third part introduces several good practices that have been underway regarding how barriers can be overcome through the policies and measures being pursued in various countries' major policy fields in order to bring potential reductions into reality.



• The book is available for download at the following URL.  
<http://link.springer.com/book/10.1007%2F978-981-287-826-7>

# 04 Enhancement of Research Capacity

## LoCARNet: Progress on the Centre of Excellence (CoE) Concept

In Asia, national governments amply recognise the importance of promoting scientific low-carbon development policies and are urgently seeking to form relevant research and training-related communities in their respective countries. On the whole, while the human resources needed to carry out policy formation with ownership by the country concerned are not yet sufficient, positive developments are evident in the appearance of multiple research organisations that provide specialised support for low-carbon development research and policy and serve as CoEs in their respective fields.

For example, in fiscal 2015, Indonesia's Bandung Institute of Technology and the Bogor Agricultural University organised a policy dialogue with the Ministry of Environment and Forestry, Indonesia. Research results presented at the dialogue will be utilised in evaluating existing climate change action plans (the RAN GRK and INDC). Those evaluation results will also be cited within governmental documents such as the second edition of the Biennial Update Report (BUR).

In light of this situation, LoCARNet provides support for participating organisations to capitalise on their respective characteristics and build capacity to support low-carbon development research and policy. Likewise, the network further strengthens the capacities of organisations that already conduct support for low-carbon research and policy in their fields of expertise or serve as CoEs in their particular fields. In this way, LoCARNet fosters collaboration among research institutes in Asia, plans the formation of CoEs that will lead the development of low-carbon Asia in the region and plans for a forum made up of these CoEs that will initiate activities autonomously within the Asian region.

Examples of institutions already engaged in support for low-carbon policy in their areas of specialisation include the Universiti Teknologi Malaysia (UTM) in the field of low-carbon urban development, Indonesia's Bogor Agricultural University in the field of agriculture, forestry, other land-use and adaptation, NIES, Thailand's Thammasat University, and Indonesia's Bandung Institute of Technology in the field of application of integrated assessment models to policy, and the Energy Field of Study of the Asian Institute of Technology (AIT) in the field of energy and technology. In this context, LoCARNet has until now provided support for workshops conducted by UTM and Bogor Agricultural University. In addition, in fiscal 2015, LoCARNet held four side-events at the Regional Forum on Climate Change (RFCC) organised by AIT.

Further, in order to enhance the CoEs, it is also necessary to raise the standards of institutions that, following in the footsteps of these institutions, engage in or aim to engage in low-carbon policy support. For that reason, LoCARNet has been providing support for the activities of Thailand's Joint Graduate School on Energy and Environment (JGSEE) and Viet Nam's Center for Information, Consultancy and Training (CENICT) established within the Institute of Strategy and Policy on Natural Resources and Environment (ISPONRE).

For further details, please contact

### LCS-RNet Secretariat

c/o Institute for Global Environmental Strategies (IGES)  
2108-11, Kamiyamaguchi, Hayama, Kanagawa, 240-0115, Japan  
Email: [lcs-rnet@iges.or.jp](mailto:lcs-rnet@iges.or.jp)  
Fax: +81 (0)46 855 3809  
Web: <http://lcs-rnet.org>



# 01 What is the Low Carbon Asia Research Network?

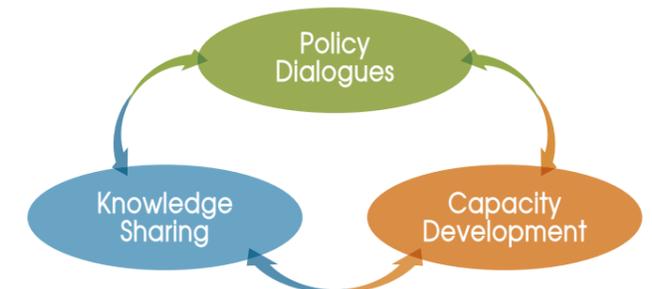
LoCARNet is an open network that shares the latest research results and knowledge with researchers, policymakers and relevant stakeholders and advances discussions among them in order to facilitate the formulation and implementation of science-based policies for low-carbon development in the Asian region.

The Institute for Global Environmental Strategies (IGES), together with the National Institute for Environmental Studies (NIES) in Japan, has since around 2010 conducted workshops that promote dialogue between policy-makers and researchers around Asia, primarily in ASEAN countries including Indonesia, Thailand, Cambodia, and Malaysia, while also fostering networking among the region's researchers to promote the formulation of low-carbon development policies in Asia. These workshops and networking opportunities have served as a catalyst for even stronger recognition of the importance of bringing about low-carbon development in Asia.

In October 2011, at the ASEAN+3 Environment Ministers' Meeting (EMM) in Cambodia, the Japanese government and IGES proposed the establishment of LoCARNet. The network was officially launched at the "East Asia Low Carbon Growth Partnership Dialogue" in April 2012 and has reported its progress to the ASEAN+3 EMM since that time.

### ● LoCARNet's Core Activities

To date, LoCARNet has facilitated dialogue among researchers, policymakers and relevant stakeholders. Further, placing particular focus on ASEAN countries, the network has supported the drafting of plans and strategies for low-carbon growth led by the researchers and research communities of each country, based on ownership through the research capacity and knowledge firmly grounded in each country. Additionally, the network aims to further enhance research capacity in the Asian region based on regional cooperation by providing opportunities for knowledge sharing and information exchange within the region.



## Policy Dialogues

In order to facilitate scientific policy-making, it is imperative to have dialogues in which policymakers indicate their needs to researchers and researchers inform policymakers about what they are capable of doing. LoCARNet has been working to foster dialogues between researchers and policymakers by holding a significant number of policy dialogues.

LoCARNet, together with the Asia-Pacific Integrated Assessment Model (AIM) team, comprised of NIES, Kyoto University, the Mizuho Information and Research Institute and other contributors, has conducted policy dialogues between researchers and policymakers in a number of Asian countries. Through these policy dialogues, policymakers in each country have come to recognise the necessity of involvement by researchers from their own countries in policymaking. Accordingly, science-based policy formation is beginning to make progress in these countries.

This joint team has also provided support for formulating systems to bring about a low-carbon society by developing a PDCA guidebook that compiles methods from initial planning through progress management, as well as by working in close collaboration with the Tokyo Metropolitan Government to promote knowledge sharing and training for introducing systems that reduce GHG emissions in operations divisions.



## Knowledge Sharing

LoCARNet has held three annual meetings until now. The first meeting in Bangkok took up scoping out topics for the network to address, while the second annual meeting in Yokohama focused on how to advance the network's activities. At the third meeting in Bogor in 2014, the network released the LoCARNet Bogor Declaration, proclaiming "Asia is ready to stabilise the climate," and emphasised to the world Asia's great potential role in attaining the two degrees target.

LoCARNet's fourth annual meeting was held in October 2015 in Johor Bahru, Malaysia, co-organised by Universiti Teknologi Malaysia (UTM), Iskandar Regional Development Authority (IRDA), NIES, IGES, and the Ministry of the Environment, Japan (MOEJ).

At this meeting, under the theme of "Positive action from Asia: Towards COP21 and beyond," the network discussed ways for research communities in Asia to contribute to Asia's next step, looking towards the upcoming COP21 in Paris and beyond.

Global, regional and local key figures made keynote presentations highlighting their appraisals and insights regarding the future direction of climate policies, including the road to Paris, the Sustainable Development Goals (SDGs), climate finance, Intended Nationally Determined Contributions (INDCs), and views from business and industry.

Cities are forecast to be home to 70% of the world's population in the near future, making them the biggest consumers of energy and resources. In light of this, they are among the stakeholders deserving the greatest attention in terms of low carbon societies. Co-organiser UTM has established a "Low Carbon Asia Research Centre" and serves as a leader in Asia on urban research in particular. The 2015 meeting featured presentations of research results as well as six breakout sessions taking up policy topics facing cities, namely resilience to climate change; sustainable consumption and production (SCP); concrete actions by multi-stakeholders; international cooperation including Joint Credit Mechanism (JCM); finance to mobilise participation from industry, technology transfer and infrastructure investment for low-carbon cities; and monitoring of policy impacts.

North-South cooperation was scheduled to be a major topic at the Paris COP21 meeting. At the same time, the world has been focusing on how Asia will work to tackle climate stabilisation going forward, in light of Asia's enormous presence in the area of climate policy in particular. In reflection of this situation, at this meeting, the network released the "LoCARNet Iskandar Malaysia Declaration" to highlight to the world Asia's earnest efforts to promote climate stabilisation and proposed the development of a worldwide cooperation scheme.



October 2012  
First Annual Meeting  
(Bangkok, Thailand)



July 2013  
Second Annual Meeting  
(Yokohama, Japan)



November 2014  
Third Annual Meeting  
(Bogor, Indonesia)



October 2015  
Fourth Annual Meeting  
(Johor Bahru, Malaysia)

• The synthesis reports of the LoCARNet Fourth Annual Meetings are available for download at the following URL.  
[http://cs-net.org/publications/#locarnet\\_annual\\_meeting\\_report](http://cs-net.org/publications/#locarnet_annual_meeting_report)

## Capacity Development Programme

Following the launch of LoCARNet in 2012, the network has developed gradually through the cooperation of low-carbon development policy researchers in the Asian region.

However, one problem is that a research community supporting scientific low-carbon policymaking has not yet fully developed in the Asian region. Reflecting the importance of GHG reductions for the region, LoCARNet has focused on capacity building programmes in the region in order to develop and enhance research communities that take into consideration the region's distinguishing characteristics. Against this backdrop, in fiscal 2015, LoCARNet conducted a capacity development workshop in Cambodia for researchers in Cambodia, Lao PDR and Myanmar, and another capacity development workshop for researchers in Bangladesh.



In addition, LoCARNet dispatches experts to the Climate Change International Technical and Training Center (CITC) established by the Thailand Greenhouse Gas Management Organization (TGO) with the support of the Japan International Cooperation Agency (JICA). The network is working to establish a route for delivering the knowledge of LoCARNet to policymakers and practitioners in Thailand and other ASEAN nations by designing the curriculum of a course on low-carbon societies set up at CITC, developing educational materials and providing guest lecturers. Further, as a research network on low-carbon development with its Secretariat in Japan, LoCARNet is working to reflect into the CITC's course on low-carbon societies the knowledge accumulated in Japan's relevant institutions and organisations, including NIES and IGES, and to inform others of the role Japan has played in Asia's low-carbon development.