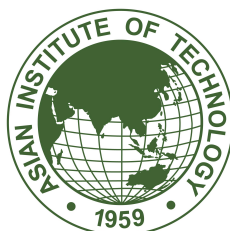


*Workshop on*  
**Climate Compatible Urban Development**  
Towards developing assessment framework for cities  
12-13 March 2013, Novotel Hotel at Siam Square, Bangkok



**Organized by**

Asian Institute of Technology (AIT), Thailand (<http://energy.ait.ac.th/>)  
CGER/National Institute for Environmental Studies (NIES), Japan ( <http://www.cger.nies.go.jp/>)  
Global Carbon Project (GCP) Tsukuba International Office, Japan (<http://www.gcp-urcm.org>)

*In collaborations with*



Urban Climate Change Research Network (<http://uccrn.org/>), and  
NSF-Research Co-ordination Network on Sustainable Cities



An environmentally sustainable urban system in the context of climate change is the one which, at one hand, mitigate GHG emission 'within' and 'outside' its physical boundaries, and, at the other hand, develops 'resilient' urban system against the risks of the climate change. This has to be done hand-in-hand with other existing challenges in urban environmental management. In the era of stalled-negotiation of global climate change mitigation regime and that climate change is already happening, aiming for mitigation to at least 2°C but preparing for climate change adaptation of over 4°C- the dual approach- has become essential. Accordingly, urban decision makers in many cities are already pressed to mitigate GHG emissions and climate risks simultaneously. Moreover, at an urban context, mitigation and adaptation are inter-connected through physical infrastructure planning, investment decisions and infrastructure costs, and alleviating phenomenon such as urban heat island and urban forest sinks<sup>1</sup>. Following CDKN<sup>2</sup> and others, the need for Climate Compatible Development is becoming important. Such approach to address climate change is already becoming necessary in the governance and institutional arrangements for cities for the benefit of broader planning and management system.

In the scientific community, at global context, IPCC AR4 had called for a unified way to look at the climate change problem (both mitigation and adaptation) from the perspectives of risk management. Further, the first Assessment Report on Cities and Climate Change (ARC3) - a collaborative report of over 100 scientists- addressed climate change assessment of cities from

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<sup>1</sup> See, Cities and Climate Change: the First Assessment Report of the Urban Climate Change Research Network, Edited by Cynthia Rosenzweig, William Solecki, Stephen Hammer and Shagun Mehrotra, Cambridge University Press, 2011

<sup>2</sup> <http://cdkn.org/wp-content/uploads/2010/11/CDKN-CCD-DIGI-MASTER-19NOV1.pdf>

unified perspectives of mitigation adaptation and, now, it is in the process to develop the next round of assessment.

It is thus important to enhance such unified idea with some framework, and assessment system. In this direction, this workshop aims to do brainstorming on three few key points.

- How to frame Climate Compatible Urban Development? What it involves- the framing approach, scope, and dimensions?
- What are the potential quantitative and qualitative sets of indicators that allow us to assess (a) the state of climate compatible urban development, and (b) the climate compatible urban development pathways over time?
- How to envision and frame future scenarios of mitigation and adaptation challenges and opportunities vis-à-vis urban development?

This workshop is a 1.5-day brainstorming workshop (back to back with half a day workshop, please see below). It will consists of about 20-25 key scholars. The workshop will hear few agenda-setting presentations but will consist largely of group discussions.

The deliverables of the workshop will include a short synthetic technical report from the workshop. We also hope to clarify the vision, conceptual framework, and a set of key defining indicators at an urban context to look at mitigation and adaptation challenges together. Mobilizing interests and supports from the research communities and creating network of researchers and collaborators on the topic for the future work will be accomplished in this workshop.

For more information, contact:

Dr. Shobhakar Dhakal  
Associate Professor, Energy Field of Study  
School of Environment, Resources and Development  
Asian Institute of Technology, Thailand  
Tel: +66 2 524 5403, Fax: +66 2 524 5439  
E-mail: [shobhakar@ait.ac.th](mailto:shobhakar@ait.ac.th), [shobhakar.dhakal@gmail.com](mailto:shobhakar.dhakal@gmail.com)

## Workshop Program

### Day 1, 12 March 2013

8:30 – 9:00 Registration, coffee and refreshments

9:00- 9:15 Welcome from organizers, goals and objectives

- *Dr. Shobhakar Dhakal, Asian Institute of Technology, Thailand*
- *Dr. Yoshiki Yamagata, National Institute for Environmental Studies, Japan*

9:15 – 11:15 Framing issues

Chair: TBC

- Challenges of climate compatible urban development: Needs for assessment and scenario framework, ***Dr. Shobhakar Dhakal, Asian Institute of Technology, Thailand***
- Framing mitigation challenges and opportunities in the climate compatible urban development and key indicators, ***Professor Anu Ramaswami, Humphray School of Public Affairs, University of Minnesota, United States***
- Opportunities and barriers to an integrated approach to climate compatible urban development: an adaptation perspective, ***Professor Darryn McEvoy, Climate Change Adaptation Program, Royal Melbourne Institute of Technology, Australia***
- Coffee break (10:30 – 10:45)
- Scenarios and integrated assessment framework for climate compatible urban development, ***Professor Priyadarshi R Shukla, Indian Institute of Management Ahmedabad and Dr. Minal Pathak, CEPT University, India.***

Discussions

**The participants divide into two parallel groups and discuss three questions outlined in the concept note. Each parallel session will be moderated by a assigned person and the group will report the outcomes to the plenary.**

**11:15-12:30 Parallel Session I- Framing climate compatible urban development**

*This session discusses the framework and elements of climate compatible urban development. What does it involve (key identified aspects of mitigation, adaption and urban development)? What are) the possible/best approaches to frame climate compatible urban development? What are the scope (coverage, boundaries) and dimensions (spatial, temporal etc) of the issues involved?*

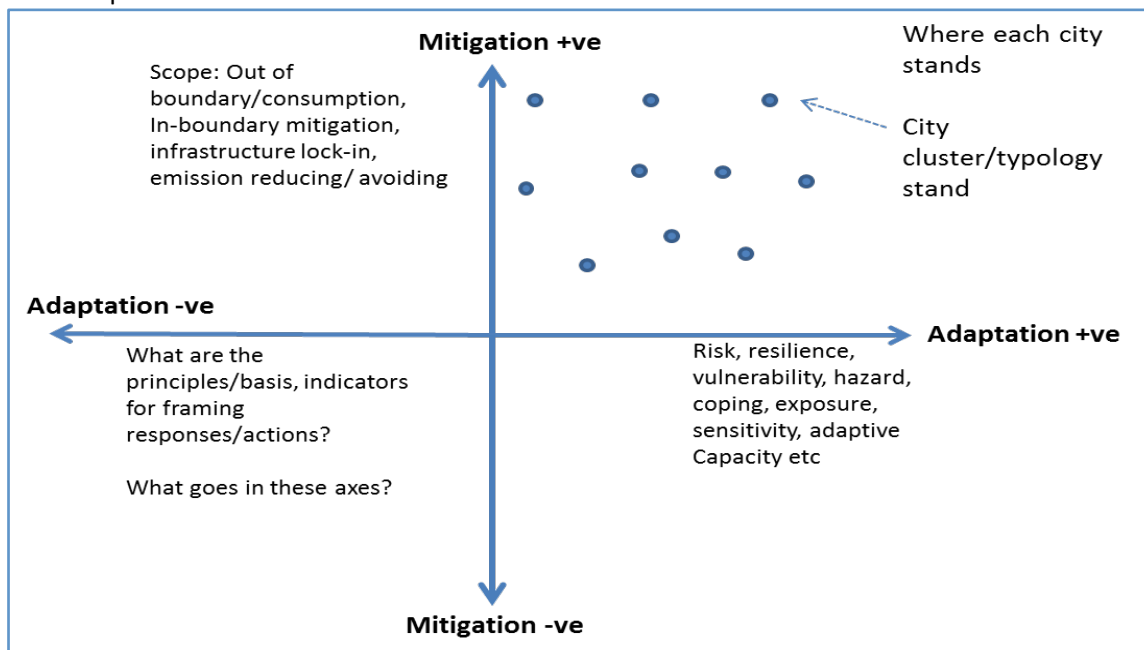
GROUP A

***Moderator: Professor Anu Ramaswami***

GROUP B

***Moderator: Professor Andrew Millington***

An example:



12:30 – 1:30 Lunch (at the hotel)

1:30 – 3:00 Perspectives on climate compatible urban development from ongoing programs

Chair: Dr. Yoshiki Yamagata

- Rockefeller Foundation's related activities and perspectives on climate compatible urban development, **Ms. Anna Brown, Asian Regional Office, Rockefeller Foundation, Bangkok**
- Second Assessment Report on Cities and Climate Change (ARC2) and needs for an assessment framework and indicators for mitigation, adaptation and urban development, **Dr. David C Major, Goddard Institute for Space Studies and Columbia University, United States.**
- Vulnerability and adaptation of coastal cities in South East Asia, **Dr. Vilas Nitivattananon, Asian Institute of Technology, Thailand**
- Cities and adaptation challenges and responses, framework and indicators for Bangkok. **Dr. Wijitbusaba Ann Marome, Faculty of Architecture, Thammasat University, Thailand**
- Mitigation and/or adaptation challenges of Tokyo for different urban forms, **Dr. Yoshiki Yamagata, National Institute for Environmental Studies, Japan.**

3:00 – 3:15 Coffee break

### 3.15 – 4:00: Plenary reporting from parallel session I and follow-up discussions

Chair: Dr. Shobhakar Dhakal, Asian Institute of Technology

### 4:00 -5:30 Parallel Session II – Assessment of climate compatible urban development

This parallel session discusses assessment framework and indicators for judging climate compatible urban development. What are the potential quantitative and qualitative sets of indicators that allow us to assess (1) the state of climate compatible urban development, and (2) the climate compatible urban development pathways over time?

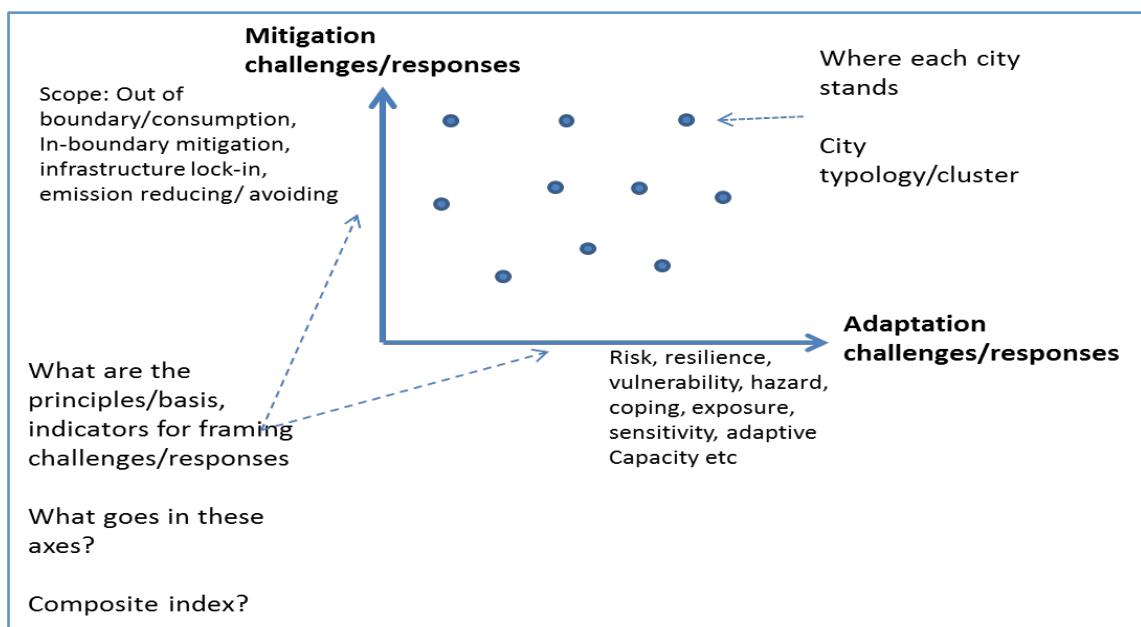
GROUP A

**Moderator: Dr. David C Major**

GROUP B

**Moderator: Professor Darryn McEvoy**

An example:



### 5:30 -5:40 Short recap of the day and closing of the first day

Dinner program: to be communicated

## **Day 2, 13 March 2013**

### 9:00 – 9:05 Welcome and plans for the Day 2

Chair: Dr. Shobhakar Dhakal, Asian Institute of Technology

### 9:05 – 9:30 Plenary reporting from parallel session II and follow-up discussions

Chair: Dr. Vilas Nitivattananon, Asian Institute of Technology

### 9:30-11:15 Parallel Session III- Scenario for climate compatible urban development

This session discusses how to envision and frame future scenarios of climate compatible urban development. What are possible scenario approaches? What are the defining elements of the scenario and how to capture that through the storylines and indicators?

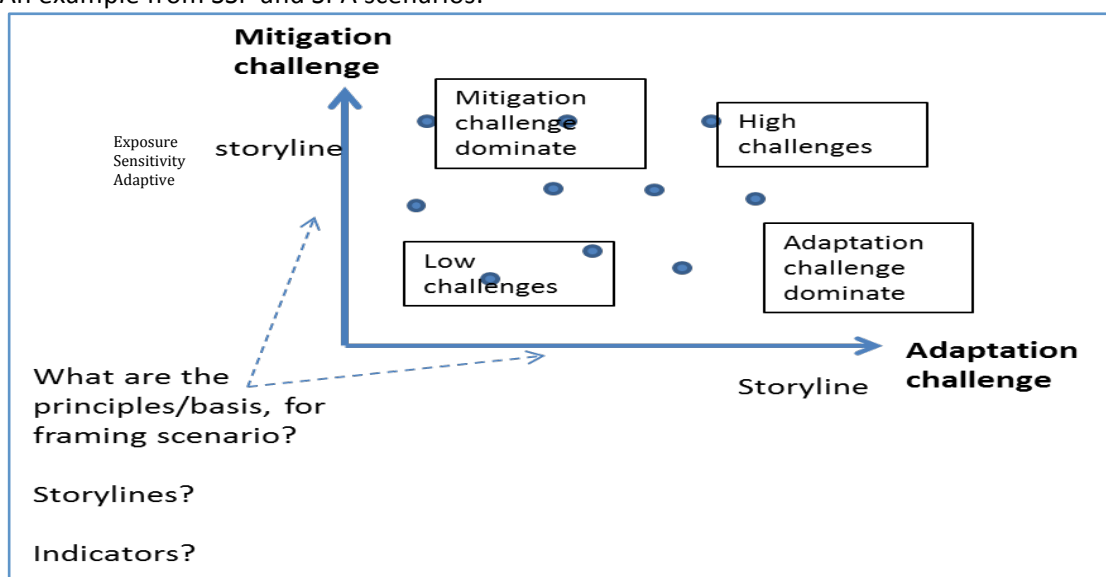
GROUP A

**Moderator: Professor PR Shukla**

GROUP B

**Moderator: Dr. Florian Kraxner**

An example from SSP and SPA scenarios:



**10:30-10.45 Coffee break in between**

**11:15 – 12: 00 Plenary reporting from parallel session III and follow-up discussions**

*Chair: Dr. Yoshiki Yamagata, National Institute for Environmental Studies, Japan*

**12:00 – 12:30 Major outcomes of the workshop, future plans and closing discussions**

*Chair: Dr. Shobhakar Dhakal and Dr. Yoshiki Yamagata*

**12:30 – 1:30 Lunch**

**1:30 – 5:30 Side workshop (all are expected to join)**

## Half-day Workshop on

# Linking Climate Compatible Urban Development to Resilience

1:30 – 5:30 pm, 13 March 2013, Novotel Hotel at Siam Square, Bangkok

**Moderator: Dr. Yoshiki Yamagata and Dr. Shobhakar Dhakal**

- Can we integrate climate change mitigation and adaptation into urban resilience?
- **Dr. Yoshiki Yamagata, National Institute for Environmental Studies, Japan**
- Reconceptualising peri-urbanisation: new ideas based on research in Adelaide. **Prof. Andrew Millington, Flinders university, Australia**
- Towards Development of a Geographically Explicit Landuse Change Model for Adelaide, **Dr. Simon Bengler, Flinders University, Australia**
- Geographically explicit modeling of urban ecosystems – examples in Vienna and further ideas, **Dr. Florian Kraxner, International Institute of Applied Systems Analysis, Austria**
- Urban growth strategies under uncertainty and from different perspectives, **Dr. Sabine Fuss International Institute of Applied Systems Analysis, Austria**

Break

- Modelling urban emergencies: Behavioural aspects, **Dr. Thomas Brudermann, University of Graz, Austria**
- Spatially explicit urban land-use model for managing climate risks, **Dr. Hajime Seya, National Institute for Environmental Studies, Japan**
- Evaluation of Direct/indirect CO<sub>2</sub> emissions under land-use change scenarios for climate mitigation and adaptation, **Dr. Kumiko Nakamichi, National Institute for Environmental Studies, Japan**
- Electricity Information Web-Based Visualization Towards Human Behavior Change for Energy Conservation, **Dr. Kanae Matsui, National Institute for Environmental Studies, Japan**

Discussions

This meeting continues in the evening 14<sup>th</sup> to create a proposal outline for a joint international research project (Japan S&T Agency: Deadline May)

### List of participants

Name	Position	Affiliation	City	Country	Email
Darryn McEvoy	Leader of Climate Change Adaptation Program	RMIT University	Melbourne	Australia	<a href="mailto:darryn.mcevoy@rmit.edu.au">darryn.mcevoy@rmit.edu.au</a>
David C Major	Senior Research Scientist	GISS/Columbia University	New York	USA	<a href="mailto:majorhart@earthlink.net">majorhart@earthlink.net</a>
Wijitbusaba Ann Marome	Associate Dean of International Affairs. Faculty of Architecture	Thammasat University	Bangkok	Thailand	<a href="mailto:wijitbusaba@yahoo.com">wijitbusaba@yahoo.com</a>
Anna Brown	Asian regional Office, Rockefeller Foundation	Rockefeller Foundation	Bangkok	Thailand	<a href="mailto:Abrown@rockfound.org">Abrown@rockfound.org</a>
P.R. Shukla	Professor	Indian Institute of Management	Ahmedabad	India	<a href="mailto:Shukla@iimahd.ernet.in">Shukla@iimahd.ernet.in</a>
Minal Pathak	Assitant Professor	CEPT University	Ahmedabad	India	<a href="mailto:minal.pathak@cept.ac.in">minal.pathak@cept.ac.in</a>
Anu Ramaswami	Professor, Humphray School of Public Affairs	University of Minnesota	Minneapolis	USA	<a href="mailto:anu@umn.edu">anu@umn.edu</a>
<b>B Mohanty (TBC)</b>	visiting Professor	Asian Institute of Technology	Pathumthani	Thailand	<a href="mailto:mohanty@ait.ac.th">mohanty@ait.ac.th</a>
Florian Kraxner	Research Scholar	International Institute for Applied System Analysis	Vienna	Austria	<a href="mailto:Kraxner@iiasa.ac.at">Kraxner@iiasa.ac.at</a>
Sabine Fuss	Research Scholar	International Institute for Applied System Analysis	Vienna	Austria	<a href="mailto:fuss@iiasa.ac.at">fuss@iiasa.ac.at</a>
Thomas Brudermann	Post-doctoral researcher, Research Scholar of IIASA	University of Graz	Graz	Austria	<a href="mailto:thomas.brudermann@uni-graz.at">thomas.brudermann@uni-graz.at</a>
Andrew Millington	Dean, School of the Environment	Flinders University	Brisbane	Australia	<a href="mailto:andrew.millington@flinders.edu.au">andrew.millington@flinders.edu.au</a>
Simon Bengert	Senior Lecturer in Spatial Information Systems	Flinders University	Brisbane	Australia	<a href="mailto:simon.bengert@flinders.edu.au">simon.bengert@flinders.edu.au</a>
Shobhakar Dhakal	Associate Professor	Asian Institute of Technology	Pathumthani	Thailand	<a href="mailto:shobhakar@ait.ac.th">shobhakar@ait.ac.th</a>
Yoshiki Yamagata	Principal Researcher	Center for Global Environmental Research, National Institute for Environmental Studies	Tsukuba	Japan	<a href="mailto:yamagata@nies.go.jp">yamagata@nies.go.jp</a>



<b>Name</b>	<b>Position</b>	<b>Affiliation</b>	<b>City</b>	<b>Country</b>	<b>Email</b>
Hajime Seya	Research Associate	Center for Global Environmental Research, National Institute for Environmental Studies	Tsukuba	Japan	<a href="mailto:seya.hajime@nies.go.jp">seya.hajime@nies.go.jp</a>
Kumiko Nakamichi	Assistant Professor	Tokyo Institute of Technology	Tokyo	Japan	<a href="mailto:nakamichi@ide.titech.ac.jp">nakamichi@ide.titech.ac.jp</a>
Kanae Matsui	Research Assistant	Center for Global Environmental Research, National Institute for Environmental Studies	Tsukuba	Japan	<a href="mailto:Matsui.kanae@nies.go.jp">Matsui.kanae@nies.go.jp</a>
Yukako Ojima	GCP Assistant	Center for Global Environmental Research, National Institute for Environmental Studies	Tsukuba	Japan	<a href="mailto:ojima.yukako@nies.go.jp">ojima.yukako@nies.go.jp</a>
Ayyoob Sharifi	Graduate Student	Nagoya University	Nagoya	Japan	<a href="mailto:sharifi.ayyoob@a.mbox.nagoya-u.ac.jp">sharifi.ayyoob@a.mbox.nagoya-u.ac.jp</a>
Aumnad Phdungsilp	Lecturer	Durakaji Pandit University	Bangkok	Thailand	<a href="mailto:aumnad@dpu.ac.th">aumnad@dpu.ac.th</a>
Anantaa Pandey	Assistant	Asian Institute of Technology	Pathumthani	Thailand	<a href="mailto:anantaa.pandey@ait.ac.th">anantaa.pandey@ait.ac.th</a>
Surjana Goteti	Research Associate	Asian Institute of Technology	Pathumthani	Thailand	<a href="mailto:srujana_goteti@ait.ac.th">srujana_goteti@ait.ac.th</a>
Ramraj Narasimhan	Team Leader-Climate Risk Management	Regional Integrated Multi-Hazard Early Warning System for Africa and Asia	Pathumthani	Thailand	<a href="mailto:ramraj@rimes.int">ramraj@rimes.int</a>
Vilas Nitivattananon	Associate Professor	Asian Institute of Technology	Pathumthani	Thailand	<a href="mailto:vilasn@ait.ac.th">vilasn@ait.ac.th</a>