Bangkok Knowledge Sharing Workshop on Urban Green Growth in Dynamic Asia

6-7 August 2014 Sukosol Hotel, Bangkok, Thailand

OECD Green Cities Programme

Bangkok Knowledge Sharing Workshop on Urban Green Growth in Dynamic Asia

Urban Green Growth and Climate Change Resilience in Bangkok

Agenda

Bangkok, Thailand, 6-7 August 2014

Kamolmart Room, 6th Floor, Sukosol Hotel

477 Si Ayuthaya Road, Phaya Thai

This document details the agenda and objectives of the Knowledge Sharing Workshop on Urban Green Growth in Dynamic Asia, that will be held in Bangkok on 6-7 August 2014, organised by the OECD jointly with Bangkok Metropolitan Administration (BMA). It is a part of the OECD project "Urban Green Growth in Dynamic Asia" and its Knowledge-Sharing Platform. Bangkok is the first city case study of the project.

Wednesday 6 August 2014 – Bangkok – Roundtable Discussions

8:30-9:00	Registration
9:00-10:00	Opening remarks and Introduction
	• Pusadee Tamthai, Deputy Governor, Bangkok Metropolitan Administration • William Tompson, OECD Urban Development Programme • Martina Kampmann, OECD Knowledge Sharing Alliance
10.00-11:15	Session 1: Land use and infrastructure policies to reduce Bangkok's exposure to threats from storms and flooding
	The physical capital and urban form conditions in Bangkok should be paid high importance in view of reducing the city's vulnerability to storms and floods. In the case of Bangkok, a strong emphasis should be placed on the following policy issues: • **Urban infrastructure**: Infrastructure related to flood protection is central to manage excesses of water. BMA has developed massive flood-protection infrastructures to

protect the city against floods, in particular a polder system. In spite of such efforts, the 2011 mega flood still underlined a shortfall in such infrastructure in Bangkok, as they have been primarily developed to cope with localised flooding from heavy rainfalls, and not with water runoff which in 2011 originated upstream. Also, the quality of other infrastructure related to urban services strongly influence a city's climate change resilience capacity, notably those related to water supply, energy, transport, and solid waste management.

- **Land subsidence**, which has markedly increased the city's vulnerability to floods over the past decades, is finally a specific issue not to be neglected in the case of Bangkok. It is mainly due to intense groundwater pumping and is therefore closely connected to land use, water management and infrastructure issues.
- **Land use/urban planning**: in particular, the sprawl of Bangkok has extended the vulnerability of the city to outlying areas and destroyed natural environments that used to play a critical role in containing floods (e.g. mangrove). Inefficient land use is also responsible for the encroachment of new urban development into risk-sensitive zones. It will also be important to discuss the vulnerability assessment strategies used in Bangkok, as they can give strong indications on how to use land more effectively to reduce threats from storms and floods.

Presentation of Bangkok's challenges (max 30 minutes)

- Loïc Daudey, OECD Urban Development Programme
- Vichai Somboon, Department of Drainage and Sewerage, BMA
- Orapim Pimchaoren, Department of City Planning, BMA

Open discussion (40 minutes)

- Discussion among all core Asian cities, and with other cities *(see details page 8)*.
- Discussion between national governments *(see details page 8)*.
- Discussion between institutions for development co-operation *(see details page 8)*.

Summary by the rapporteur (5 minutes)

- Richard Friend, Researcher, Institute for Social and Environmental Transition (ISET)

11:15-11:45 **Coffee Break**

11:45-13:00 Session 2: Economic and social policies for urban climate change resilience

The second element which should be explored in view of improving urban resilience is economic and social policies for urban climate change resilience. The following items are of critical importance in the case of Bangkok:

- **The involvement and protection of the private sector**: the manufacturing sector, which is strongly established in the region of Bangkok, suffered a loss of USD 32 billion from the 2011 mega-flood, at the country level (out of USD45 billion total losses). It is also likely to be the sector most significantly affected by future storms and floods in Bangkok. However, they also have a key role to play in mitigating disasters and ensuring the continuity of business operations and rapid economic growth. In this

	regard, the public sector can help them design contingency plans, strengthen insurance schemes, and encourage public-private partnerships (e.g. to improve infrastructure conditions). • **The involvement of local residents and communities** should finally be given full consideration as they can provide a precious help to local authorities to minimise the impact of disasters. Issues of awareness raising, capacity building and disaster response co-operation should be discussed, in particular. Likewise, the protection of local residents and local communities, through social safety nets and primary care in case of disaster, is critical to avoid human losses and not to deepen social inequity in the city. In this regard, a strong emphasis should be placed on slums and informal settlements, which are highly vulnerable to storms and floods. ***Presentation of Bangkok's challenges (max 30 minutes)*** • William Tompson, OECD Urban Development Programme • Keerati Sripramai, Fire and Rescue Department, BMA • Vichai Somboon, Department of Drainage and Sewerage, BMA ***Open discussion (40 minutes)*** • Discussion among all core Asian cities, and with other cities *(see details page 8).* • Discussion between national governments *(see details page 8).* • Discussion between institutions for development co-operation *(see details page 8).* ***Summary by the rapporteur (5 minutes)*** • Loraine Gatlabayan, Coordinator and Interim Board Member, Asia-Pacific Roundtable on Sustainable Consumption and Production (APRSCP)
13:00-14:00	**Lunch**
14:00-15:15	**Session 3: Institutional mechanisms for urban climate change resilience in Bangkok**
	The third session will focus on institutional mechanisms to improve urban climate change resilience in Bangkok. The objective of the discussions is to identify implementation obstacles for the efficiency of policies and how to overcome them. The following governance issues will be explored: • **Horizontal coordination and vertical coherence among different levels of government**: storm and flood disasters affect not only the administrative area within BMA's jurisdictions but also surrounding provinces of the Bangkok Metropolitan Region. Floods in Bangkok are also a consequence of upstream runoffs due to destruction of natural environments. The co-ordination among cities/provinces in the watershed is therefore critical to adopt a comprehensive strategy to improve urban resilience. It is also crucial to have clearer allocation of responsibilities between the local and national governments. • **International co-operation**: the involvement of international experts on urban climate change resilience and the use of resources granted/loaned by development

	agencies/banks should be efficiently managed to improve Bangkok's resilience. *1. Presentation of Bangkok's challenges (max 30 minutes)* • Tadashi Matsumoto, OECD Urban Development Programme • Panyalaln Thawonrat, Air Quality and Noise Management Division, Department of Environment, BMA • Makoto Kato, Overseas Environmental Cooperation Center (OECC) *2. Open discussion (40 minutes)* • Discussion among all core Asian cities, and with other cities *(see details page 8).* • Discussion between national governments *(see details page 8).* • Discussion between institutions for development co-operation *(see details page 8).* *3. Summary by the rapporteur (5 minutes)* • Napaporn Yuberk, Regional Project Manager, Clean Air for Smaller Cities in the ASEAN region, GIZ Thailand
15:15-15:30	**Coffee Break**
15:30-17:30	**Session 4: Policy Recommendations and Wrap Up**
	The objective of the last session is to formulate policy recommendations to improve urban climate change resilience in Bangkok. *1. Group brainstorming, facilitated by Martina Kampmann (OECD) (45 minutes)* First, participants will be gathered in 5-6 smaller groups to propose policy recommendations. Participants should make use of the discussions of the previous sessions and their own policy experience to best advise Bangkok on the policy options to be considered. A particular emphasis should be placed on the use of policy instruments for urban climate change resilience, and their efficiency. *2. Presentation of each group's recommendations (20 minutes)* Second, each group will present their policy recommendations. *3. Open discussion (25 minutes)* Third, an open discussion will follow to exchange on the policy recommendations of each group. *4. Closing remarks* • William Tompson, Head of the Urban Development Programme, OECD • Pusadee Tamthai, Deputy Governor, Bangkok Metropolitan Administration
17:30	**Reception**

Thursday 7 August 2014 - Bangkok – Site Visits

	Site visits will complement discussions and ensure further exchange on practical experiences. They will be organised over half a day or a full day by BMA and be tailored to the topic of urban resilience. They will give participants the opportunity to learn from Bangkok's infrastructural and operational capacities and challenges with regard to urban resilience. Site visits will allow BMA to illustrate some key features of its urban resilience policies which will take place during discussions, and they will provide unique insights on urban resilience policies which are less convenient to discuss around a table (e.g. disaster emergency response systems). The detailed programme will be communicated before the workshop.
9:00	**Departure from The Sukosol Hotel**
Morning	Bang-Sue domestic wastewater treatment plant and mega drainage tunnel.
	Lunch
Afternoon	Bangkok Metro Public Company Limited (Operator of MRT) Waste scavengers operated recycling center, 14 Rai Community, Prawet district
17:00	**Return to The Sukosol Hotel**

1. Background: urban green growth and climate change resilience in Bangkok

The development of Asian cities is characterised by rapid and continuous urbanisation on an unprecedented scale, with rapid economic growth led in most places by the manufacturing industry, and rapidly increasing motorisation. The result has been escalating greenhouse gas emissions, sprawling urban development and local environmental impacts, as well as disparities in income, education levels and job opportunities in the urban population. In such Asian cities, fostering green growth should have high priority.

The urbanisation and economic trends in Asian cities present both challenges and opportunities. Local environmental problems such as management of water resources, waste disposal and air pollution must be tackled on an unprecedented scale. Yet there will be opportunities too in the choices made about urban form and infrastructure; they will have implications for both economic performance and environmental impact. Effective environmental policies can be good for urban growth, as they can enhance cities' efficiency and attractiveness.

Cities have the potential to address such opportunities and challenges. The fact that they are closer to citizens' needs, have better knowledge of local conditions, and can test and refine innovative ideas locally creates conditions for successful policies. However, national governments also play a key role in enabling cities to realise this potential. For example, local governments' capacity to raise their own revenues tends to be subject to national laws and regulations. It is essential to understand how national and sub-national governments interact with regard to green growth and development strategies and to explore how cities can best achieve urban green growth.

Bangkok has experienced rapid urbanisation and industrialisation since 1960. The city became the economic, commercial, agricultural, industrial and administrative centre of Thailand notably thanks to its business and tourism revenues, but also a regional commercial and transportation hub thanks to its strategic location in Asia. Bangkok is producing in average 30% of Thailand's GDP and hosts major financial institutions and regional headquarters of international companies. On the other hand, the rapid development of Bangkok has led to environmental problems such as air and water pollution, solid and hazardous waste issues, and land subsidence. Most of such challenges faced by Bangkok are also found in similar mega-cities in Asia.

Among others, **urban climate change resilience (UCCR)** is a priority policy issue in Bangkok concentrating critical social, economic and environmental stakes. The city is vulnerable to storms and flooding which occur every 2-3 years. The vulnerability is driven by the fact that it is located on a low-lying coastal zone, which makes the city exposed to threats from sea level rise. It is also driven by heavy rains and runoffs, and by land subsidence, which is happening at a fast pace, along with urban development. The Chao Phraya River is the main stream of a water network made of a multitude of canals which can carry excesses of water all over the city. Bangkok was particularly hit by the 2011 mega-flood, which resulted in severe disruption of its activities as well as estimated country-level damages of $45 billion to global supply chain, out of which only $10 billion were insured. This underscores that urban climate change resilience is key to long-term economic growth.

2. Objective of the Bangkok Workshop: sharing knowledge in view of improving urban climate change resilience in Bangkok

The Bangkok Knowledge Sharing Workshop is part of the Knowledge-Sharing Platform of the OECD project Urban Green Growth in Dynamic Asia, which articulates several activities to increase the impact of the project. In particular, each city case study organises a knowledge sharing workshop to discuss one specific urban green growth policy topic. Urban climate change resilience was selected as the topic of the Bangkok Knowledge Sharing Workshop.

The objective of this workshop is to discuss a wide range of urban green growth issues, with a strong focus on the urban resilience challenges mentioned below. Participants will have the opportunity to share their experience on urban climate change resilience in Asian and OECD cities to feed discussion on how to reduce urban vulnerability to storms and flooding. The workshop also aims to provide specific policy recommendations for urban climate change resilience in Bangkok.

The following policy challenges should be paid particular attention in view of improving Bangkok's resilience. First, the physical capital and urban form challenges and strategies of the city should be discussed: infrastructure are indeed critical to contain floods (e.g. dykes) and to withstand crises (e.g. constant access to energy and water services in case of disaster) for instance, while land use strongly impacts the vulnerability of some areas (e.g. encroachment of new development into risk-sensitive zones) and the capacity of the city to resist heavy floods (e.g. mangrove preservation, building codes), among other benefits. Second, policies to cope with economic and social stakes related to storms and floods in Bangkok should be explored: the involvement and protection of the private sector from such risks is critical to help the local economy absorb shocks and bounce back, while the social issues (e.g. social safety nets, co-operation with local communities) should not be neglected to avoid natural disasters to deepen social equity and inclusion issues. Third, it would be worth exploring the implementation obstacles of resilience policies in Bangkok, in particular the institutional mechanisms. Horizontal policy coordination and vertical coherence among different levels of government, but also co-operation with foreign organisations/governments, are key levers to efficient resilience policies. These challenges are also of high relevance for other Asian cities which face similar challenges, and illustrate well the connection between urban resilience and urban

green growth as they are central to ensure long-term economic growth and environmental preservation.

3. Benefits for Participants of the Bangkok Knowledge Sharing Workshop on Urban Resilience

Participants of the Workshop

Three axes of knowledge sharing are developed in priority in view of increasing the impact and quality of urban green growth policies in dynamic Asia: *i)* between participating cities; *ii)* between participating cities and national governments; and *iii)* between cities in dynamic Asia and institutions for development co-operation. The following governments/organisations are therefore invited to participate in the Bangkok Knowledge Sharing Workshop on Urban Resilience:

- **Cities** interested in mutual learning. This includes:
  - The other confirmed and potential Asian city case studies of the project Urban Green Growth in Dynamic Asia: Hai Phong City (Viet Nam), Johor Bahru/Iskandar Regional Development Authority (Malaysia), and Surabaya (Indonesia);
  - Other Asian and OECD cities interested in mutual learning. Their contribution will mainly be to bring their own experience and other perspectives from local governments on urban resilience, in addition to the (potential) city case studies.
  - City networks.
- **National governments in dynamic Asia and in the OECD countries** interested in mutual learning. Their participation will be critical to explain the role of national governments in improving the resilience of cities (e.g. capacity building programs), which is paramount given the development context.
- **Institutions for development co-operation interested in mutual learning.** Their contribution to the workshop will be particularly beneficial as they have been strongly involved in local urban resilience projects and are familiar with the different needs of Asian cities in this regard. Their participation will be useful because it also creates the opportunity to support further implementation of the activities identified in Bangkok and other Asian cities.

The collective benefits of the workshop

The Bangkok Knowledge Sharing Workshop will facilitate exchange on urban green growth policies, in particular urban climate change resilience, along these three axes of exchange, through peer learning on an equal footing. The discussions will provide evidence-based policy advice to help bridge the knowledge gap and inform decision-making on urban resilience, in particular with regard to the reduction of Bangkok's vulnerability to storms and floods and with regard to institutional mechanisms. Asian cities and national governments could mutually learn from each other and therefore better design and implement resilience policies, especially considering the overlap of responsibilities to manage disasters. Meanwhile, institutions for development co-operation will support participating cities and countries from dynamic Asia more effectively by sharing their accumulated knowledge on this topic and will benefit from the discussions to increase their own knowledge and therefore the impact of their implementation activities in Bangkok and in other Asian cities.

Increasing the quality of the Bangkok case study report

The Bangkok Knowledge Sharing Workshop will also directly feed into the case study analysis report of Bangkok, which will contain a special chapter on urban climate change resilience. The case of Bangkok will therefore be at the centre of workshop discussions and subsequent feedback activities presented below, but the workshop will also place strong emphasis on the opportunities and challenges observed in other Asian and OECD cities, as comparative analysis is a critical component of the project.

4. Structure of the Workshop

Preparing the workshop in advance: the discussion paper

The OECD Secretariat will prepare a discussion paper on urban resilience in Bangkok that will support the knowledge sharing workshop. This document will be circulated to all participants before the knowledge sharing workshop. It will guide participants on the kind of knowledge and expertise they are encouraged to bring to the workshop. It is critical that each participant stands ready to provide evidence-based policy advice on urban resilience and receive inputs from others. The workshop is indeed not a peer review activity: the objective is not to assess Bangkok's resilience policies but to learn from each other's experience and design solutions collectively.

Agenda of the workshop

The Bangkok Knowledge Sharing Workshop will be first organised around 3 roundtable discussions, each focusing on a broad challenge of urban resilience. During each of these 3 sessions, the OECD and BMA will make an initial presentation. After the presentation, the three axes of exchange mentioned earlier will then structure an open discussion, in each session:

1. Discussion among all core Asian cities, and with other cities (**Core Asian cities:** *Bangkok, Hai Phong, Johor Bahru, Surabaya;* ***other cities****: Bandung, Chicago, Paris, Yokohama, Kitakyushu*)
2. Discussion among national governments (*Thailand, Viet Nam, Malaysia, Indonesia, Cambodia*)
3. Discussion among institutions for development co-operation (*AFD, GIZ, CDIA, JICA, UNEP, UN-HABITAT, USAID, IGES, etc.*)

A fourth session will then focus on policy recommendations for urban climate change resilience in Bangkok and other Asian cities, based on the discussion of the first three sessions. This will allow for in-depth debates and help participants provide concrete policy advice.

Site visits will be organised on 7 August 2014.

4. Feedback Comments: Ensuring the Continuity and Quality of Knowledge Sharing

Roundtable discussions and site visits during the Bangkok Knowledge Sharing Workshop will bring critical knowledge to enhance the understanding of all participants of urban resilience in Asian cities – and particularly in Bangkok. However, due to time constraints and the necessity to give all participants the opportunity to speak up, the 2 days knowledge sharing activities in Bangkok may be limited in the sense that participants will not necessarily be able to contribute as much as their knowledge allows. Also, new ideas and suggestions may thrive *after* the workshop because participants will digest a lot of information during the activities. Moreover, the participants could consult their colleagues at their institutions who are more relevant to some issues discussed during the Workshop and bring more knowledge.

For such reasons, participants will be given the chance to further contribute a few weeks after the workshop, through feedback comments on the Bangkok discussion paper:

1) This document will be first amended by the OECD Secretariat taking the discussions and findings of the workshop into account.

2) It will then be circulated to all participants of the workshop so that they can give more details on their contribution or add other perspectives they did not mention in Bangkok.

3) Participants will provide comments directly on the file of the document (with track changes or in comment boxes) or in a text as a separate file and will send the document back to the OECD Secretariat.

4) The OECD Secretariat will amend the document taking the feedback comments into account and integrate the final document into the Bangkok case study report's special chapter on resilience.

5) The final Bangkok case study report will be shared with all participants of the Knowledge-Sharing Platform.

The feedback activity, although organised remotely (through exchange of e-mails between the OECD and each participant) is a critical step to ensure the continuity and quality of knowledge sharing. BMA and the OECD will directly benefit and it will also give other participants (and their organisations) the opportunity to give more food thought for reflection based on their policy experience and initiatives. The contribution of all participants will be acknowledged in the Bangkok case study report.

5. Contacts

Please contact Tadashi Matsumoto (Tadashi.matsumoto@oecd.org) for any questions related to the project Urban Green Growth in Dynamic Asia and its Knowledge-Sharing Platform. More information on the Urban Green Growth in Dynamic Asia project and on the OECD KSA can also be found at:

www.oecd.org/greengrowth/greening-cities-regions/citiesclimatechangeandgreengrowth.htm
www.oecd.org/knowledge-sharing-alliance/