

*Asia  
Smart  
City  
Conference  
in  
Yokohama*

**The 2nd Asia Smart City Conference**

**Report**

October 24, 2013



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# 1. Conference Outline

■ **Date & Time** : October 24 (Thu.) 2013, 9:30-12:50

■ **Venue** : PACIFICO Yokohama Conference Center 5F, Room 503  
1-1-1, Minato Mirai, Nishi-ku, Yokohama 220-0012, JAPAN

■ **Organizer** : City of Yokohama

■ **Supported by** : Ministry of Foreign Affairs, Ministry of the Environment,  
JICA (Japan International Cooperation Agency)

■ **Outline :**

City of Yokohama has been promoting International technical cooperation project based on public-private partnership titled, "Yokohama Partnership of Resources and Technologies" (Y-PORT), and drawing on the resources and technologies of Yokohama.

As part of this effort, City of Yokohama is organizing the Asia Smart City Conference during the "Smart City Week", a prestigious international convention and exhibition held at Pacifico Yokohama, welcoming the mayors and the representatives from emerging Asian countries, as well as representatives of International organizations.

11 Asian cities, Japanese government, JICA (Japan International Cooperation Agency), and International organization participated in the 1st Asia Smart City Conference last year to share the progressive vision and technology towards realizing the low-carbon society, and to strengthen the relationship between Yokohama and the participating cities.

City of Yokohama is again, hosting the 2nd Asia Smart City Conference during the Smart City Week 2013. This time, participating cities have increased to 21 cities, with the continued support of Japanese government and International organizations etc. Focused mainly on thorough discussions, participant cities exchanged opinions towards prospects and challenges of each city.

The Asia Smart City Conference contributed to strengthening the relationship and alliances between the emerging Asian economies.

■ **The total number of participants** : 150

## 2. Conference Agenda

Time	Contents	Speakers
1. Opening		
9:30-9:40	Opening Remarks	Ms. Fumiko Hayashi Mayor of Yokohama
2. Keynote Speech		
9:40-9:50	Japan's Support to Realize "Leapfrog" Low Carbon Development in Asia	Mr. Tomokatsu Kitagawa Senior Vice-Minister of Environment
9:50-10:00	Support Programs for the Globalization of Local Governments to Benefit Sustainable Development in Asia	Mr. Seiji Kihara Parliamentary Vice-Minister for Foreign Affairs
10:00-10:05	Short Break	
3. Panel Discussion – Sharing Practical Methods for Sustainable Urban Development in Asia – Summarizing Needs of Emerging Cities in Asia and Resources of International Aid Organizations against Their Needs		
10:05-11:05	Discussion by Participating Cities • Challenges of Sustainable Urban Development in Emerging Cities in Asia and Expectations for Donors of Supporting Programs and Advanced Cities	Participating Cities Ms. Mary Jane Ortega (Moderator)
11:05-11:20	Tea Break	
11:20-12:20	Discussion by Donors • Supporting programs for Sustainable Urban Development	ADB, JICA, OECD, MOE, MOFA, WRI Ms. Mary Jane Ortega (Moderator)
4. Closing		
12:20-12:40	Conclusion	Ms. Mary Jane Ortega
12:40-12:50	Photo Session	
13:00-14:00	Lunch Reception organized by City of Yokohama (Nice/Canne @InterContinental Hotel)	

### 3. Participants List



**Fumiko Hayashi**  
Yokohama, Japan  
Mayor



**Vallop Suwandee**  
Bangkok, Thailand  
Chairman of Advisers to  
Governor of Bangkok



**Nestor Archival**  
Cebu, Philippines  
City Councilor



**Titus Perera  
Ukwatta Loku Liyanage**  
Colombo, Sri Lanka  
Deputy Mayor



**Luong Minh Sam**  
Da Nang, Vietnam  
Director, Department of  
Foreign Affairs



**Bipan Kumar Saha**  
Dhaka North, Bangladesh  
Chief Waste Management  
Officer,  
Dhaka North City  
Corporation



**Khan Mohammad Rezaul  
Karim**  
Dhaka South, Bangladesh  
Secretary



**Le Hoang Quan**  
Ho Chi Minh, Vietnam  
Mayor



**Phan Van Hai**  
Hue, Vietnam  
Vice-director,  
Hue City Centre for  
International Cooperation



**Boyd Dionysius Joeman**  
Iskandar, Malaysia  
Senior Vice President,  
Environment



**Thushantha Mahindra  
Ratwatte**  
Kandy, Sri Lanka  
Mayor



**Kengo Ishida**  
Kitakyushu, Japan  
Executive Director,  
Environment Bureau



**Ilham Arief Sirajuddin**

Makassar, Indonesia

Mayor



**Hidayati Wan**

North Sumatra, Indonesia

Director, Environmental Protection Agency



**Mohd. Razif Mohd. Yusoff**

Penang, Malaysia

Engineer, Heritage Division



**Vannak Seng**

Phnom Penh, Cambodia

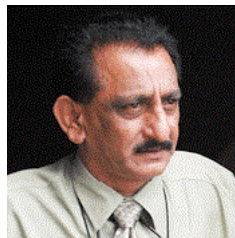
Director of The Urbanization Office



**Maimunah Mohd Sharif**

Seberang Perai, Malaysia

Municipal President



**Chandra Kant Umaria**

Suva, Fiji

Special Administrator / Lord Mayor



**Bat-Erdene Togooch**

Ulaanbaatar, Mongolia

Vice Mayor in charge of Ecology and Green Development



**Keophilavanh Aphaylath**

Vientiane, Laos

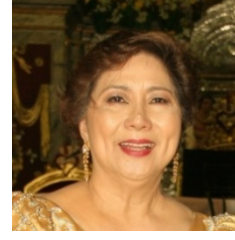
Vice Governor



**San Shwe Tun**

Yangon, Myanmar

Head of Department, Market



**Mary Jane C. Ortega**

Moderator, Philippines

Director-General, CITYNET



**Gil Hong Kim**

Asian Development Bank (ADB)

Director, Sustainable Infrastructure Division



**Kazunori Miura**

Japan International Cooperation Agency (JICA)

Director General, Economic Infrastructure Development



**Tomokatsu Kitagawa**

Ministry of the Environment, Japan

Senior Vice-Minister of the Environment



**Seiji Kihara**

Ministry of Foreign Affairs (MOFA), Japan

Parliamentary Vice-Minister for Foreign Affairs



**Kotaro Kawamata**

Ministry of the Environment, Japan

Director, Office of International Cooperation, Global Environment Bureau



**Kaname Araki**

Ministry of Foreign Affairs (MOFA), Japan

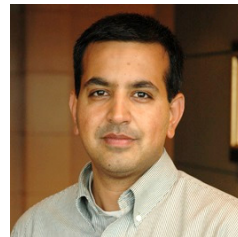
Senior Coordinator, Aid Policy and Management Division, International Cooperation Bureau



**Tadashi Matsumoto**

Organization for Economic Cooperation and Development (OECD)

Senior Policy Analyst, Regional Development Policy, Public Governance and Territorial Development Directorate



**Sanjay Sridhar**

World Resources Institute (WRI)

Country Lead, Sustainable and Livable Cities



## 4. Conference Summary

### Opening

#### Opening Remarks



#### **Ms. Fumiko Hayashi, Mayor of Yokohama**

After the first Asia Smart City Conference last year, Yokohama took the opportunity to sign a MOU for technical cooperation with Da Nang and Bangkok, and to strengthen ties with Asian cities, including Cebu with which a memorandum had already been concluded. Y-PORT Project, an international technical cooperation scheme based on Public Private Partnership utilizing Yokohama's resources and technologies, has been utilized with these cities, and cooperative work in a variety of

fields, such as disposal processing and water and sewer services is being advanced for the purpose of environmentally-friendly city infrastructure development. Further initiatives will be made in the future, and we hope that the Asia Smart City Conference will become a platform to produce concrete accomplishments. Only a few decades ago, Yokohama suffered from difficulties such as overpopulation caused by its rapid urbanization. With the expertise and know-how acquired while overcoming these difficulties together with citizens and companies, Yokohama would like to contribute to the development of Asian cities. We hope that in the second conference today, we can produce positive results through more detailed discussions.

### Keynote Speech

#### Japan's Support to Realize "Leapfrog" Low Carbon Development in Asia



#### **Mr. Tomokatsu Kitagawa, Senior Vice-Minister of Environment**

The environment is a significant key-word when thinking about Smart City. City expansion in developing countries in Asia is progressing rapidly, the spread of superior environmental technologies is imperative in order for these cities to make the shift to low-carbon communities while continuing economic growth. For this reason, through the utilization of the joint crediting mechanism and through coordination with JICA and Asian

Development Bank, Japan intends to begin financial support towards implementing excellent low-carbon technologies in the Asia-Pacific region from next year.

In addition, during ASEAN ministerial discussions last month, we received requests to further promote city to city cooperation, such as that between Kitakyushu and Surabaya (Indonesia), as well as Osaka and Ho Chi Minh (Vietnam), where the signing ceremony of the city to city cooperation was held only recently. As the Ministry of the Environment, we would like to support these initiatives. In March next year, the IPCC (Intergovernmental Panel on Climate Change) Team Meeting and Session of the Working Group II will be

held in Yokohama. Smart Cities should ideally be developed from the perspective of "creating cities that are strong against weather-related impacts" such as floods.

## **Support Programs for the Globalization of Local Governments to Benefit Sustainable Development in Asia**



### **Mr. Seiji Kihara, Parliamentary Vice-Minister for Foreign Affairs**

The ODA is an important policy measure for achieving both the prosperity of developing countries as well as economic growth in Japan. Through the ODA, Japan has been providing a variety of support including city rail construction in Hanoi (Vietnam) and the public transport system in Jakarta (Indonesia). In the Metro Cebu Area, JICA has coordinated with Yokohama to support formation of a city development vision policy "Mega

Cebu Vision 2050".

Furthermore, JICA have begun supporting overseas development of active local governments and outstanding medium and small businesses. JICA's grass-roots cooperation includes technical assistance for Yokohama's water supply improvement business in the Metro Cebu water supply zone (Philippines). Medium and small businesses in Yokohama are participating in the spread of sludge removal equipment for water-purification tanks in the Philippines, those in Toyama are cooperating in improving rice milling technology in Cambodia. The Ministry of Foreign Affairs will continue to coordinate closely with local governments and private financial circles in order to further promote these types of initiatives.

(Tea Break)

## **Panel Discussion**

- Sharing Practical Methods for Sustainable Urban Development in Asia
- Consolidating Needs of Emerging Cities in Asia and the Resources of International Aid Organizations

### **Moderator**

**Ms. Mary Jane Ortega, CITYNET**

### **Ms. Mary Jane Ortega (Moderator):**

What defines the term 'Smart City'? According to many people, we must pursue basic city services. Targets have been set for sustainability, debt relief, and civil QOL improvements in the management of solid waste and wastewater, reduction of disaster risks and weather changes, and in city planning that integrates transport planning. We would like you all to hear about initiatives in each city.





**Dr. Vallop Suwandee  
(Chairman of Advisers to Governor, Bangkok Metropolitan Administration):**

Bangkok (Thailand) is promoting a waste processing program called the Bangkok Green Community, and holds "civil participation", "capability development", and "support" as the three pillars. Organizations such as religious groups, educational institutions, and private businesses are being utilized for rubbish collection and processing. We would like to receive support for capability

development such as civil participation capabilities, problem-solving capabilities, and strategy formulation. In terms of support, recycle credit is becoming an important aspect for rubbish collection and management.

**Mr. Nestor Archival  
(City Councilor, Cebu City Government):**

The population of Cebu (Philippines) is growing exponentially as it is becoming a center of trading, and various challenges are emerging from this phenomenon. Firstly, the cooperative relationship in terms of "mobility" includes donation of buses and compactor trucks from Yokohama. Secondly, in terms of "rubbish and hygiene", the first hygienic rubbish processing facility has been constructed, with JICA as a sponsor. Furthermore, a model project has already begun at a local community level (Barangay) using equipment provided by a waste plastic company in Kitakyushu. Thirdly, with regard to the challenge of "increased expenditure", we would like to reduce electricity cost by replacing city lighting with LEDs, and we hope to achieve this through networks and relationships such as Yokohama, JICA, and Asian Development Bank.



**Mr. Luong Minh Sam  
(Director, Department of Foreign Affairs):**

Da Nang (Vietnam) is a developing city, and requires a variety of resources to be provided, including technical and intellectual resources, as well as knowledge on business management. In April 2013, Da Nang and Yokohama signed a Memorandum of Understanding on technical cooperation on sustainable urban development, making it possible for Da Nang to share in a variety of experience and knowledge regarding city development. In



the field of education, there is a plan to establish a security and risk management research center in Da Nang through coordination between the University of Da Nang and the Yokohama National University. We will continue to create an environment where Japanese investors can launch in the city easily in order to create a broader base for support, we would like to deepen cooperative work with Yokohama in education and HR development also.

**Ms. Maimunah Mohd Sharif**

**(Municipal President of Seberang Perai):**

We believe that one of the challenges in Seberang Perai (Malaysia) is training within the organization to acquire necessary processes for realizing a Smart City. We would like to ask for some ideas regarding internal training. In addition, the Smart City concept and master plan towards 2007 are not yet being formulated. There is a need for technologies for rubbish sorting, as well as technology to convert oil that is discharged from street stalls into energy.

We would also like to ask for cooperation in flood measures, mobility, and city planning.



**Mr. Kengo Ishida**

**(Executive Director, Environment Bureau, in charge of Kitakyushu Asian Center for Low Carbon Society)**

At Kitakyushu, the Kitakyushu Asian Center for Low Carbon Society opened in June 2010. And in November last year, Kitakyushu and Surabaya (Indonesia) signed a Memorandum of Understanding as Green Sister Cities. Projects such as waste and sewage processing and tap water purification are being implemented with a focus on a shift to smart industrial areas in both cities. In exporting

such Smart City technologies, we have accumulated a variety of experience and know-how (as the 'Kitakyushu Model') in the process of overcoming pollution and becoming an environmentally advanced city in four areas: waste processing, energy, water/sewer, and environmental protection. Using the Kitakyushu Model, we would like to form a green growth model in Asia.

**Mr. Bipan Kumar Saha**

**(Chief Waste Management Officer, Dhaka North City Corporation):**

Dhaka North (Bangladesh) is attempting to disperse waste processing by managing the waste at each city section. In addition, we were able to formulate a master plan for the next 10 years based on the studies conducted mainly by JICA specialist team. With JICA's efforts, two landfills have been tidied up, and we have also received a donation of approximately 100 rubbish collection trucks as part of the local community project. Appropriate maintenance and repairs are also possible thanks to various training such as workshops. Furthermore, we plan to introduce rules for polluter payment through PPP.

In the past few years, the Asian Development Bank has been cooperating with local governments in Bangladesh. However, we hope that they will be able to provide support directly to each city. We would like to ask JICA to maintain a landfill site that could be shared by four to five cities. We also hope that



technological cooperation between JICA and Bangladesh, which is currently suspended, will resume. We still have a shortage of rubbish collection trucks.

**Ms. Fumiko Hayashi (Mayor of Yokohama):**

To solve city-related issues we have, it is imperative to coordinate with other cities. Since its founding in 1987, CITYNET (The Regional Network of Local Authorities for the Management of Human Settlements), which has its Project Office in Yokohama, has developed into an international network involving 131 cities and organizations. Yokohama also utilizes the Y-PORT project that involves coordination of public and private sectors, and is working proactively on inter-city coordination. In addition, we will further strengthen bilateral coordination such as with Cebu, Da Nang and Bangkok, and will share practical methodologies and know-how gained through the coordination with other Asian cities. We will utilize the Asia Smart City Conference as a place to consolidate resources that Yokohama's businesses and associated institutions have. By seeing both the inter-city coordination and sharing with other Asian cities as a single large cycle, we hope to strongly promote creating cities in Asia that are sustainable.

(Tea Break/Video Showing)

**Discussion by Donors**

- Supporting programs for Sustainable Urban Development

**Moderator**

**Ms. Mary Jane Ortega, CITYNET**

**Ms. Mary Jane Ortega:**

We must undertake Millennium Development Goals (MDGs) until 2015. In addition, while SDG (Sustainable Development Goal) is being considered post-Rio+20, we would like to ask each donor institution what kind of program they are considering for sustainable city development.



**Mr. Gil Hong Kim (Asian Development Bank):**

The requirements for Smart Cities are economic sustainability such as creating employment and provision of services, toughness that enables recovery from environmental and societal risks, and inclusiveness that accepts all residents including those who are in need. From the Asian Development Bank's perspective, we focus on aspects such as development/maintenance of the public transport system, energy efficiency, supply/waste water processing, and solid waste

processing. Flood prevention in city areas is also an important issue.

Each city should share its knowledge through inter-city networks, and partnerships should also be formed for developing solutions. The Asian Development Bank not only provides subsidies and finance, but also gives out funding assistance for sharing knowledge. For example, training programs regarding city utilities have led to the improvement of business management by water bureaus in many cities.

It is also possible to carry out feasibility studies through Cities Development Initiative for Asia (CDIA). In terms of Dhaka North's proposal raised beforehand, we would like to consider the forecast for development programs and future support.

**Mr. Kazunori Miura**  
**(Director General, Economic Infrastructure Development Dept., Japan International Cooperation Agency):**

At JICA, we emphasize inclusiveness as the vision within the city development sector. We provide technology and financial support especially for creating a good circulation of economic growth and poverty reduction. We always strive to use the unique strengths of each city, and we believe that self-ownership and the growth of local governments' capabilities are imperative when providing assistance.



Through inter-city cooperation between Yokohama and Cebu, JICA have been continuously providing support for formulating and realizing Mega Cebu Vision 2050. We are also contributing to the new master plan for cooperation between Yokohama and Curitiba. The two cities are learning each other through giving advice and feedback, and both are taking ownership and undertaking their own projects. The staff of JICA, including a consultant team with small numbers, is participating in these initiatives, and a large volume of expertise is provided by Yokohama. This type of cooperation is a new initiative for JICA.



**Dr. Tadashi Matsumoto**  
**(Senior Policy Analyst, Regional Development Policy, Public Governance and Territorial Development Directorate, Organization for Economic Cooperation and Development):**

OECD does not directly give funding or technical support to each city, but contributes to forming and executing policies by collecting a variety of successful cases and promoting policy-related exchanges between leaders of each region. As part of the OECD Green City Program that

was commenced in 2010, case studies are being conducted in Chicago, Paris, Stockholm, and Kitakyushu. As the second phase of the project, we will select several cities from Asia and carry out case studies there. We welcome proposals from each city and encourage participation. We also welcome cities who would like to hold workshops and seminars that are based on the framework of the Green City Program.

Green growth policies should be considered in the scale of the metropolitan area. OECD cities and Asian cities face a common set of challenges. Multi-level governance that considers how the boundary is being expanded through urbanization will be necessary. On the other hand, we continue our efforts to grasp the characteristics of the scale of metropolitan areas in order to fully take into consideration the difference in city's dispersion.



**Mr. Kotaro Kawamata**  
**(Director, Office of International Cooperation,**  
**Global Environment Bureau):**

At the Ministry of Environment, we will implement JCM (Joint Crediting Mechanism) for support in various areas such as traffic congestion, waste processing, and water/sewer processing. We hope to provide support for cities that are making initiatives to reduce greenhouse gas, and we have already signed with eight countries including Mongolia, Bangladesh, Vietnam, Indonesia, and Laos.

For example, in addition to advanced waste processing technologies such as the renewable energy through smart grid technology (already commercially available in Japan), we hope to expand business models which require no initial investments, such as ESCO, in Asia. We believe that superior water saving technologies that allow CO<sub>2</sub> to be reduced would also be effective in Asian cities. It is possible to provide these types of support by forming inter-city cooperation with Japan. Please contact us if you are interested in JCM.

**Mr. Kaname Araki**  
**(Senior Coordinator, Aid Policy and Management**  
**Division, International Cooperation Bureau,**  
**Ministry of Foreign Affairs):**

In the midst of declining birthrates and aging population, Japan's ODA is in need of a qualitative change. The grass-roots cooperation schemes of the past have been targeted to NGO etc., but from 2012 these have been expanded to also include local governments. And from 2013 it is possible to send University staff as specialists.

There are many successful cases including Yokohama, however, we would like to further strengthen this scheme and support initiatives of staff of local governments and other related organizations. The Japanese government is also very appreciative of local government initiatives that promote international expansion.



**Mr. Sanjay Sridhar**  
**(Regional Head, Sustainable and Livable Cities,**  
**World Resources Institute):**

In Bangalore (India), there is only two city planning staff for a population of approximately 10 million, and we need to firstly increase capacity. In order to introduce best practice, we also require high levels of capability. While India prioritizes basic service provision rather than sustainability, WRI promotes a co-benefit approach.

We have issues such as transport, freight, solid waste management, water, energy, and city planning. However, we are in the process of introducing best practice for solid waste management through the partnership with Yokohama. We have been receiving support from JICA, Asian Development Bank, and

Yokohama for introducing the best practice as well as for building capability in order to achieve it. We also believe that it is important to link city planning and green finance.

## Closing

### **Conclusion**

#### **Ms. Mary Jane Ortega, CITYNET**

With the attendance of 21 cities and institutions, the Second Asia Smart City Conference has grown to become an event that promotes the development of participating cities into environmentally-friendly communities through a wide variety of smart city-infrastructure technologies. In addition, based on the discussion in the First Asia Smart City Conference, participating cities share the understanding that the establishment of Smart City in developing countries will lead to creating a sustainable and hospitable society as well as improving the livelihood of its residents. Through which, all participants have agreed to support the spirit of the Asia Smart City Conference declaration adopted last year. All participants have also agreed to regularly hold the Asia Smart City Conference in Yokohama.

#### **Ms. Fumiko Hayashi, Mayor of Yokohama**

The aims Yokohama set for the Second Asia Smart City Conference were to deepen links between Asian cities, to share practical methods in a bid to realize sustainable development and strengthen competitiveness, and to collect resources of international aid organizations that cater to the needs of developing countries in Asia and assistance programs. I believe that these three aims have been achieved in the main. We would like in the third conference to share information regarding the best practice of each city as well as further challenges.

## Photo Session





## **5. Conclusion**

### **The 2nd Asia Smart City Conference**

#### **Conclusion**

With the attendance of 21 Asian cities and international donor organizations, the 2<sup>nd</sup> Asia Smart City Conference has encouraged the participating local authorities to foster advanced and environmentally friendly communities by utilizing the smart technologies in the various urban infrastructural development.

While the participating cities exchanged opinions and shared knowledge through their best practices with regard to the challenges they face, donor organizations gave appropriate and useful advice and suggestions, which were well recognized and appreciated by the participating cities. Partnership between the two sectors will help achieve the goals of this conference.

Taking the discussion of the 1st Asia Smart City conference into consideration, the participating cities came to a common understanding that the establishment of a smart city in the emerging nations will go a long way for the creation of sustainable and livable society and contribute to the prosperity and betterment of citizens.

Thus, the participants also endorsed the “Declaration of the Asia Smart City Conference”, which was adopted last year, and everyone agreed to uphold the spirit of the Declaration.

In conclusion, the participants agreed that the Asia Smart City Conference will be held regularly in Yokohama to become a platform of city to city cooperation and collaboration in realizing Smart Cities in Asia.

## 6. Presentation Materials

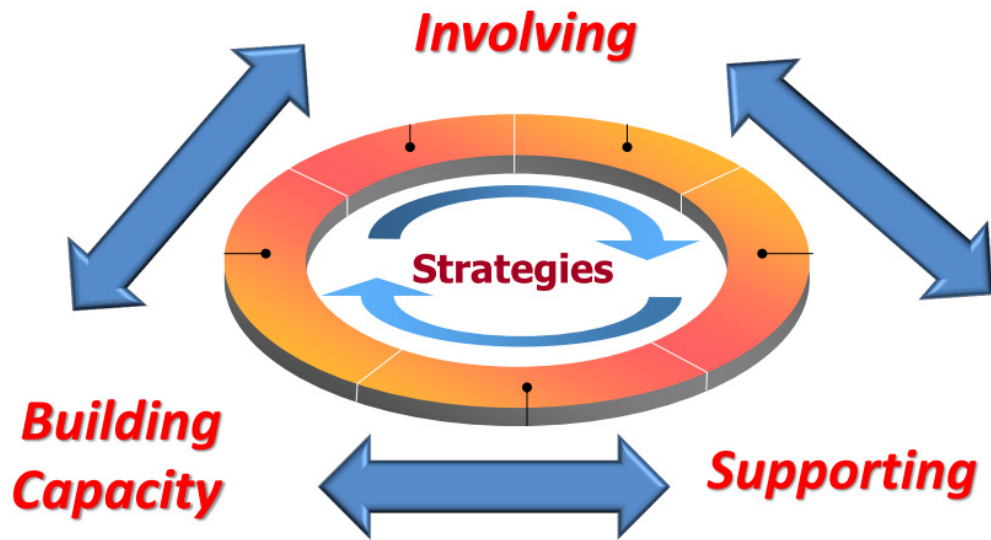
### I. Title Slide



### II. Presentation Materials/Bangkok



## Bangkok Green Community



## Bangkok Green Community



## Bangkok Green Community

Leadership programs  
Participative provisions  
Awareness induction  
Joint solution seeking  
Common solution adoption  
Cooperative strategies



**Building  
Capacity**



**Supporting**

## Bangkok Green Community



Recycling credit provisions  
Manufacturing processes  
Branding of products  
Marketing strategies  
Funding

**Building  
Capacity**




**Supporting**




III. Presentation Materials/Kitakyushu

## Kitakyushu Asian Center for Low Carbon Society

**Utilization of the environmental technologies developed through the solution of pollution problems and manufacturing processes, and the inter-city network established by international cooperation in the past**




Kitakyushu Asian Center for Low Carbon Society opened in June 2010.




Accumulating environmental technologies in Kitakyushu City and throughout Japan, for building low carbon societies in Asia through environmental business skills

Waste disposal




Waste water disposal



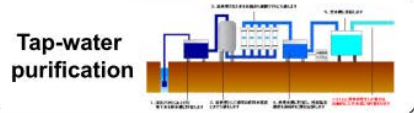
Exporting Green City

Cogeneration & energy conservation




Investigating methods for quantifying CO<sub>2</sub> reduction

Tap-water purification



Drinking water supply operations



1

# Kitakyushu Model Summary

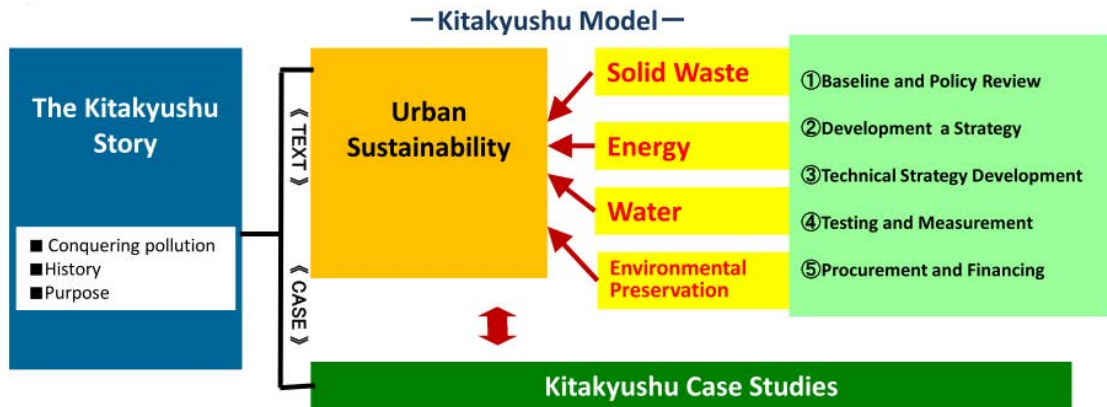
## 1 Purpose of the Kitakyushu Model

- Asia is beginning to confront pollution problems, and Kitakyushu is Japan's most advanced in creating an environmentally sound city.
- After conquering pollution to arrive at present state, the "Kitakyushu Model" is systematically created there as a support tool to transfer skill and know-how.
- Applying the Kitakyushu Model, Kitakyushu will implement its "Package-Type Environmental Infrastructure Export" to cities overseas for joint growth in Asia.

## 2 Kitakyushu Model Implementation Method

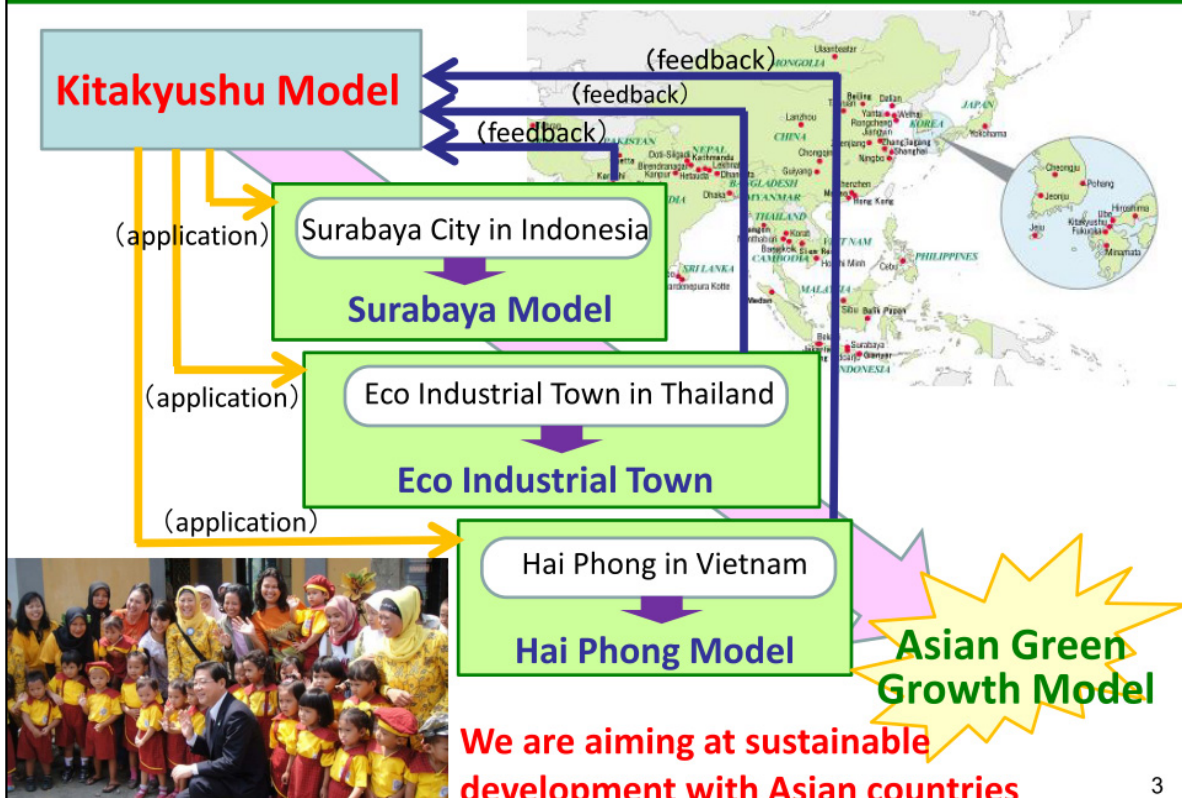
Provides

- Support tools for using this process to find your own solutions in the future
- Support tools for management systems of solid waste, energy, water, and environmental preservation
- Support tools for master plans to integrate solid waste management, energy, water and wastewater services and environmental preservation.



2

# Development of Kitakyushu Model



3

# Sustainable Urban Development

## ADB's Role

Presentation by  
Gil-Hong Kim  
October 2013

ADB

## Asia's urban challenge

- Globally, 6.2 billion people in urban areas and 53% in Asia by 2050 (World Urban Prospects, 2011 Revision)
- By 2050, 64.4% of population of Asia is in urban areas
- 23 megacities, 13 of which are in Asia
- Approximately 75% of GDP today comes from the urban areas- *urban areas of engines of growth in Asia*
- 44 million people are added to city populations in Asia every year (*that's roughly a third of total Japanese population*)
  - equivalent to 120,000 people each day who require construction of more than 20,000 new dwellings, 250 km of new roads and additional infrastructure to supply more than 6 megaliters of potable water

ADB

# ADB Urban Operational Plan

## Inclusive Cities:

**Making Cities Inclusive**  
Providing appropriate livelihood, service, shelter, and infrastructure solutions to poor and vulnerable communities.



## Competitive Cities:

**Building the Economy**  
Providing strategic physical, social, and institutional infrastructure for inclusive growth.



## Green Cities:


**Promoting Improved Environment**  
Developing resource use efficient and climate change resilient cities.



- **Urban Financing Partnership Facility (UFPF)**
- **Cities Development Initiative for Asia (CDIA)**
- **Urban Climate Change Resilience Partnership (UCCRP)**







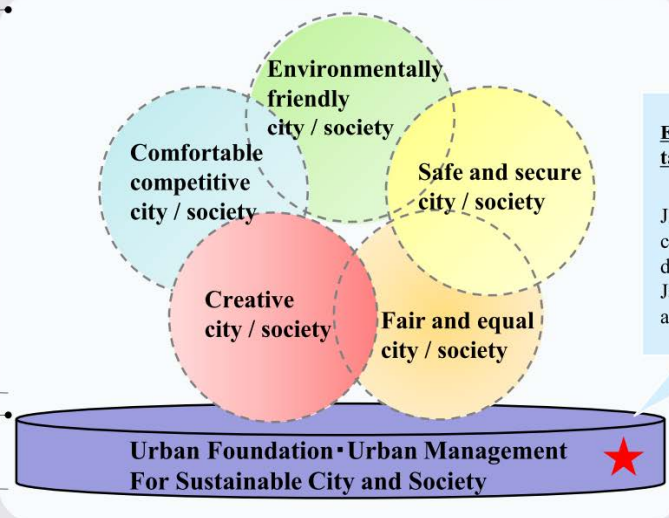
**JICA Assistance for Sustainable Urban Development**

JICA Peace Building and Urban and Regional Development Group  
Economic Infrastructure Department

**JICA Vision**

**Urban development that benefits all,  
bringing about a virtuous circle of economic growth  
and poverty reduction**

5 Requisite for Sustainable City and Society



**Effective Measure to tackle on this weakness**

↓

JICA promote inter-city cooperation between developing country and Japanese local government as bridging role.

国際協力機構



**Philippines Cebu × Yokohama City Cooperation MP**

JICA Peace Building and Urban and Regional Development Group  
Economic Infrastructure Department

① Application of knowledge of the local governments of Japan (Urban management, Dialogue with citizens, support for private enterprises)

② To formulate the road map and action plan for the realization of Mega Cebu Vision 2050



**Brazil Smart City Project in Curitiba × Yokohama City**

- ① A type of cooperation implemented in a form of mutual Learning.
- ② To develop a master plan, based on the experience of Japan in the past, but does NOT develop a master plan itself. The master plan will be developed by Brazilian side.



**Mongolia Capacity Development in Urban Development Sector**

Application of administrative experience, technologies adapted for cold-climate conditions, which were used for the redevelopment of “Asahikawa City” with development consultants.





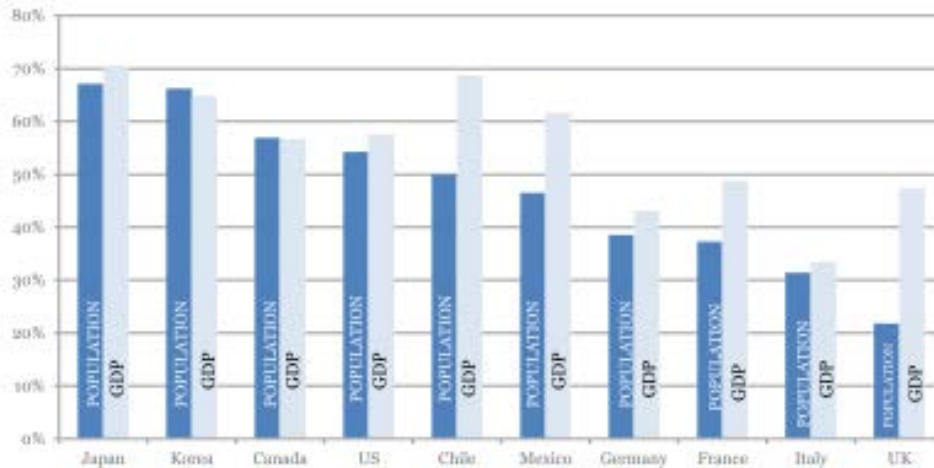
VI. Presentation Materials/OECD





Metropolitan areas generate most economic growth.  
---Japan, G7 and Emerging Countries compared.

### % of population and GDP in large metropolitan areas (2008)



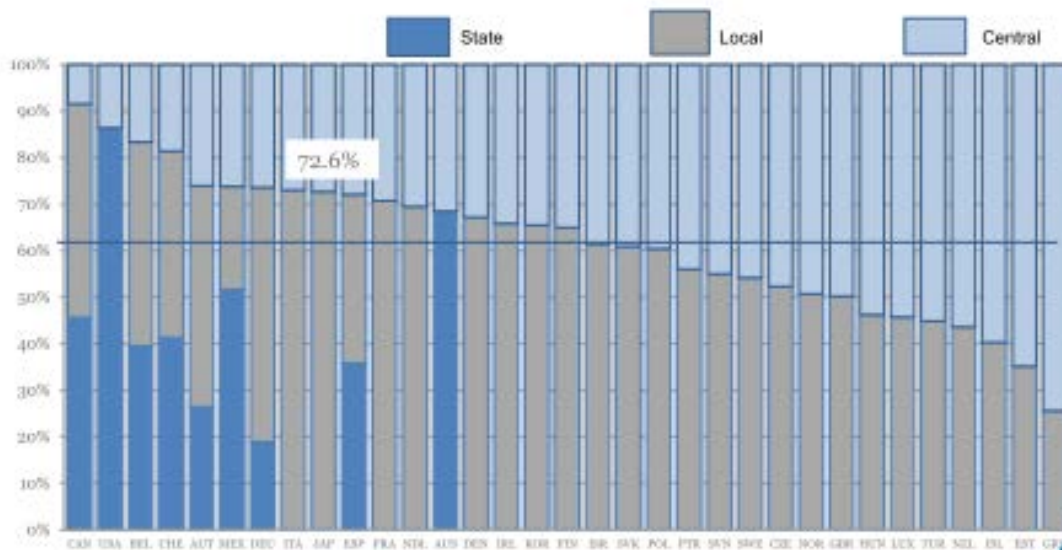
Source: OECD metropolitan database; the large metropolitan areas have at least 500,000 population

2



Potentials of cities: Sub-national governments play significant roles in investment: More than 60% of public investment is made by sub-national government

### Sub-national governments as a share of total public investment, 2009



Source: OECD National Accounts Statistics Database

3



## Urban green growth in dynamic Asia

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- Asian cities exhibit development characterized by:  
Rapid and continuous urbanisation, fast economic growth, manufacturing industry, motorisation, ...



- Need for a green growth model, addressing the specific circumstances of Asian cities
- But there are many commonalities (governance, finance, etc.)



## OECD's Knowledge sharing activities under Green Cities Programme

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- The OECD-ADB Joint Workshop (February 4-5, 2013, in Manila, the Philippines)
- 1<sup>st</sup> Knowledge Sharing Workshop (May 24, 2013, in Stockholm, Sweden)
- Mayors Forum (October 18-20, 2013, Kitakyushu, Japan)



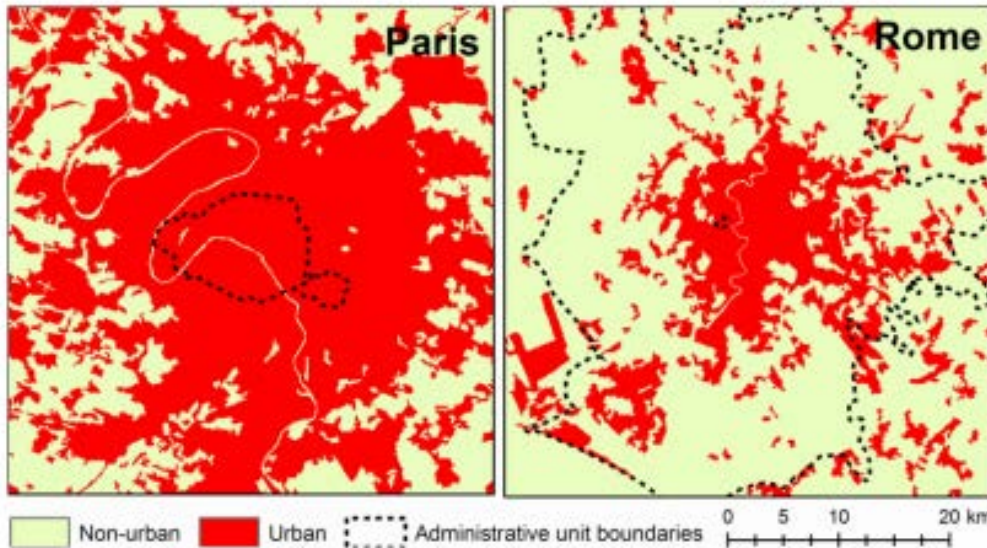
*Thank you for hosting and participating in workshops in Asian cities (2014 - ) !*





## Shifting towards Functional regions

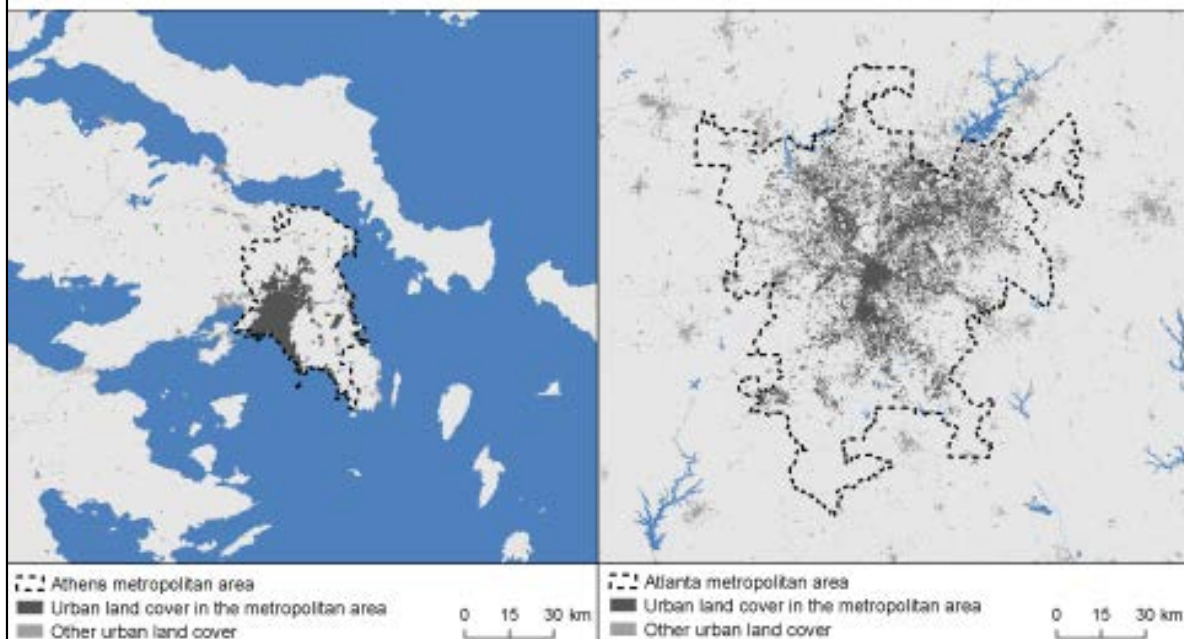
Core cities (cities de facto) vs. administrative cities



## Need for metropolitan policies/governance

Athens (3.4 million)

Atlanta (4.6 million)



## **Japan's support to realize "Leapfrog" Low Carbon Development in Asian Cities**

Ministry of the Environment, JAPAN

24 October, 2013

0

## **Table of Contents**

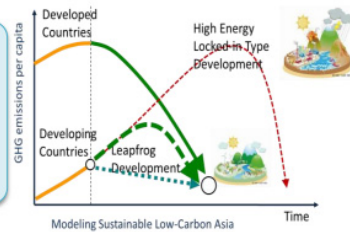
- 1. Japan's New Support Program Enabling "Leapfrog" Development**
- 2. Joint Crediting Mechanism (JCM)**
- 3. 17 ESC Feasibility Studies using JCM**

1

# (1) Japan's New Support Program Enabling "Leapfrog" Development

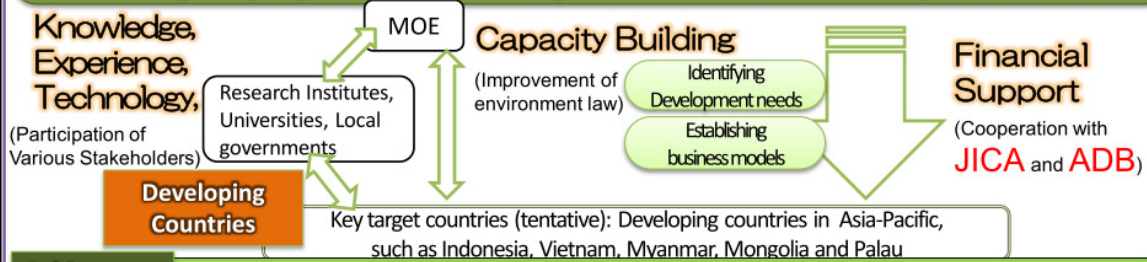
## Objective

To support **developing countries to leapfrog to low carbon societies** with Japan's knowledge, experience, technology, human capital and finance by utilizing **JCM (Joint Crediting Mechanism)**, with establishing the concept of a **"human society that harmonizes and enriches the environment and life"** as a new paradigm for the 21st century.



## Scheme

Achieving "Leapfrog" Development through creation of low carbon society in Asia-Pacific.



## Subject area

### Environmentally Sustainable Cities

Energy Saving and Renewable			Transport	Waste management	Water treatment
✓ Photovoltaic	✓ Independent distributed power	✓ ESCO Project	✓ Public transportation system	✓ Incinerator	✓ Water supply
✓ Wind	✓ Battery, HEMS	✓ Inverter	✓ Electric bike and vehicle	✓ Separate collection	✓ Sewage system
✓ Micro hydro	✓ Smart meter	✓ Heat pump	✓ Logistics and traffic flow measure	✓ Compost	✓ Water saving device
✓ Marine energy	✓ Waste heat recovery			✓ Landfill	
✓ Biomass					

# (2) Joint Crediting Mechanism (JCM)

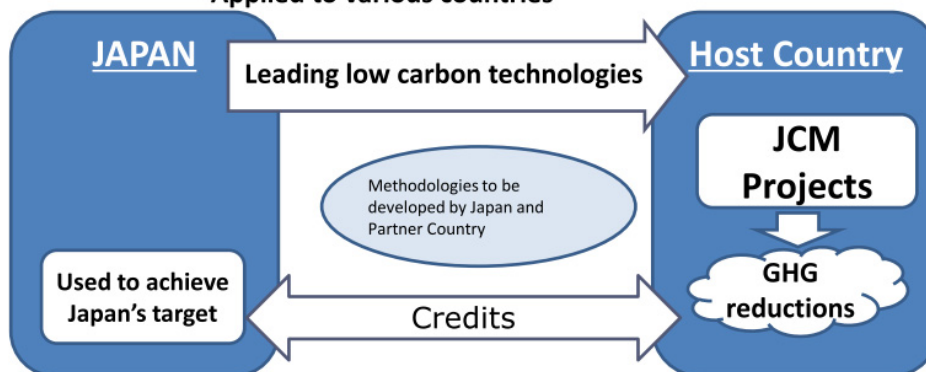
## Purpose of JCM

- To facilitate diffusion of low carbon technologies
- To evaluate GHG emission reductions
- To contribute to the ultimate objective of the UNFCCC

## Advantage of JCM

(Compliment to CDM)

- Maintaining simplicity and practicality based on the rules and guidelines
- Applied to broader areas with co-benefits, including energy saving, transport, wastewater and waste management
- Applied to various countries



Signatory Countries

Mongolia, Bangladesh, Ethiopia, Kenya, Maldives, Viet Nam, Lao PDR, Indonesia



### (3) 17 ESC Feasibility Studies using JCM

	Country	Area	Projects
1	Bangladesh	Dhaka,	Low carbon & safe water supply in rural area:CO2 free & green water supply project
2	Cambodia	Phnom Penh City	Quantification of GHG reduction effect of countermeasures in water supply sector and study of MRV methodology
3	Indonesia	Jakarta	Feasibility study of dissemination of Japanese standard digital tachometer and unification of regional standard for traffic pollution countermeasures in ASEAN metropolis
4	Indonesia	Jakarta	Strategic promotion of recovery and destruction of fluorocarbons
5	Indonesia	Jakarta	Theme development project for promoting energy efficiency equipment
6	Indonesia	Medan	Water supply project for promoting energy efficiency equipment
7	Indonesia	North Sumatra	Water supply project for promoting energy efficiency equipment
8	Indonesia	Surabaya	Water supply project for promoting energy efficiency equipment
9	Malaysia	Iskandar	Large-scale formation of greenhouse gas emission reduction projects
6	Malaysia	Iskandar	Water supply project for promoting energy efficiency equipment
4	Malaysia	Iskandar	Water supply project for promoting energy efficiency equipment
10	Malaysia	Penang	Water supply project for promoting energy efficiency equipment
11	Mongolia	Ulaanbaatar	Water supply project for promoting energy efficiency equipment
12	Myanmar	Yangon	Water supply project for promoting energy efficiency equipment
13	South-Pacific Island Countries		Water supply project for promoting energy efficiency equipment
3	Thailand	Bangkok	Water supply project for promoting energy efficiency equipment
4	Thailand	Bangkok	Water supply project for promoting energy efficiency equipment
14	Vietnam	Ho Chi Minh	Water supply project for promoting energy efficiency equipment
6	Vietnam	Ho Chi Minh	Water supply project for promoting energy efficiency equipment
15	Vietnam	Ho Chi Minh	Water supply project for promoting energy efficiency equipment
16	Vietnam	Ho Chi Minh City and Da Nang City	Water supply project for promoting energy efficiency equipment
17	Vietnam	Da Nang City	Water supply project for promoting energy efficiency equipment

## 7. Conference Photos



Registration Desk



Opening Remarks by Ms. Fumiko Hayashi,  
Mayor of Yokohama



Keynote Speech by Mr. Tomokatsu Kitagawa,  
Senior Vice-Minister of the Environment



Keynote Speech by Mr. Seiji Kihara, Parliamentary  
Vice-Minister for Foreign Affairs

## Panel Discussion



Moderator: Ms. Mary-Jane Ortega,  
Secretary-General, CITYNET



Discussion by Participating Cities & Donors



Networking



Tea Break



Photo Session

# Lunch Reception

InterContinental Yokohama Grand Hotel Ballroom (Nice/Canne)

