

**City to City Collaboration
towards Smarter City Management
to be presented on Oct 30, 2014**



City to city collaboration towards smarter city management

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Instructions :

- introduce current project on urban development**
- discuss the management through city to city collaboration**
- share knowledge about effectiveness of “City to City Collaboration” on sustainable urban development**



Introduction of current project on urban development

Bangkok Master Plan on Climate Change 2013-2023



BMA is formulating a 10-year Master Plan , 2013 - 2023, which covers adaptation and mitigation plan supported by the City of Yokohama.





The Collaboration – The Cities of Yokohama and Bangkok

Environmentally Sustainable Transport

Technological Supports Provided :

- sources and provisions for clean energy
- low emission vehicles
- EV for vehicles and hybrid buses
- large scale of car-sharing schemes via micro mobility





The Collaboration – The Cities of Yokohama and Bangkok

Energy Efficiency and Alternative Energy

Technological Supports Provided :

- renewal of dilapidated equipment of heat sources**
- optimal control of energy by BEMS**
- environmental consideration systems for buildings**
- systems for incorporation of renewable energy**



The Collaboration – The Cities of Yokohama and Bangkok

Efficient Solid Waste Management & Wastewater Treatment

Technological Supports Provided :

- organic waste power generation**
- technology of treatment of sewage and sludge**





The Collaboration – The Cities of Yokohama and Bangkok

Green urban Planning

Technological Supports Provided :

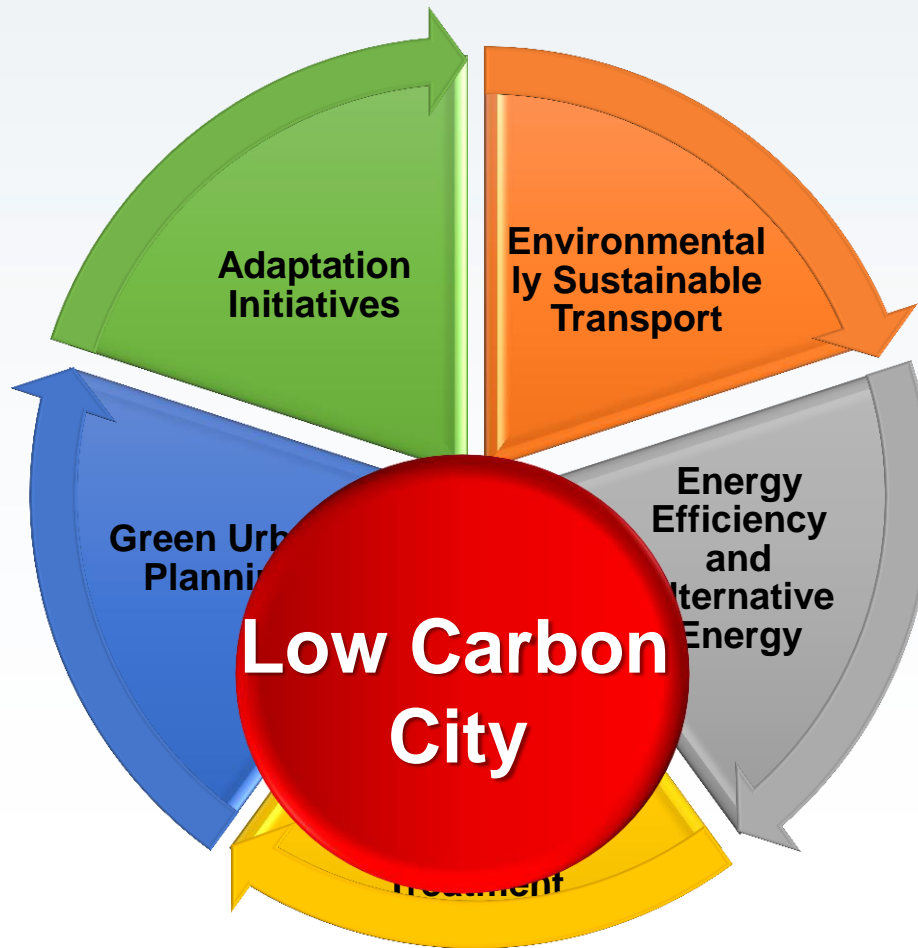
- “Yokohama Green Up” Plan
- land, roof-top, and wall greening





The management of the project through the city to city collaboration

Bangkok Master Plan on Climate Change 2013-2023



Bangkok Master Plan on Climate Change 2013-2023



**Low Carbon
City**

Bangkok Master Plan on Climate Change 2013-2023



**Low Carbon
City**

Bangkok Master Plan on Climate Change 2013-2023



Benchmark

Low Carbon City



Techniques of Constructing Measuring and Evaluating (M & E)

Low Carbon City



**Techniques of Constructing
Measuring, Reporting and Verifying (MRV)**

Low Carbon City



Techniques of Constructing Thailand Greenhouse Gas Organization(TGO)

Low Carbon City



Techniques of Constructing Thailand Greenhouse Gas Organization(TGO)

Low Applicability **Low Carbon City**

Not Pertaining to

- physical aspects
- geo – political aspects of Bangkok Metropolitan



**Techniques of Constructing
M & E and MRV upon the Collaboration**

Low Carbon City



Techniques of Constructing M & E and MRV upon the Collaboration

Systematic implementation of energy saving retrofitting works of existing buildings of BMA

Energy saving requirements for retrofitting works of BMA facilities

Setting of high-level of energy efficiency

Acquisition of certification for energy saving renovation work (CASBEE)



Techniques of Constructing M & E and MRV upon the Collaboration

- Introduction of low emission vehicles (LEV) to public vehicles
- Introduction of NGV to BMTA buses
- Promotion of Eco-driving
- Development / expansion of bikeways
- Expansion of “Bike-for-Rent” Scheme



Techniques of Constructing M & E and MRV upon the Collaboration

- Promotion of public participation on waste reduction and separation
- Encouragement on utilization of organic waste at sources
- Utilization of organic waste
- Construction of waste-to-energy incineration facilities
- Construction of new composting plants
- Construction of waste segregation plants



Techniques of Constructing M & E and MRV upon the Collaboration

Increase in new green areas of both public parks and public areas

Provisions on well-management

Provisions for maintenance of planted trees

Increase of the Biotope Area Factor (BAF) in investment on private lands

Provisions on planting new trees along roadside areas



The effectiveness of “City to City Collaboration” on sustainable urban development



**Techniques of Constructing
M & E and MRV upon the Collaboration**

Low Carbon City



Techniques of Constructing M & E and MRV upon the Collaboration

Provisions and measures for sustainable urban development could be derived from metropolitan or city to national level, i.e., bottom up rather than top-down schemes



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Thank You for Your Kind Attention

