

# ***Smart City Management and City to City Collaboration***



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# ***Smart City Management of Yokohama***



**BEMS**

**Wind  
power**

**CEMS**

**“Smart City Management”  
Beyond “Smart City Technology”**

**Phot  
Po**

**ration**

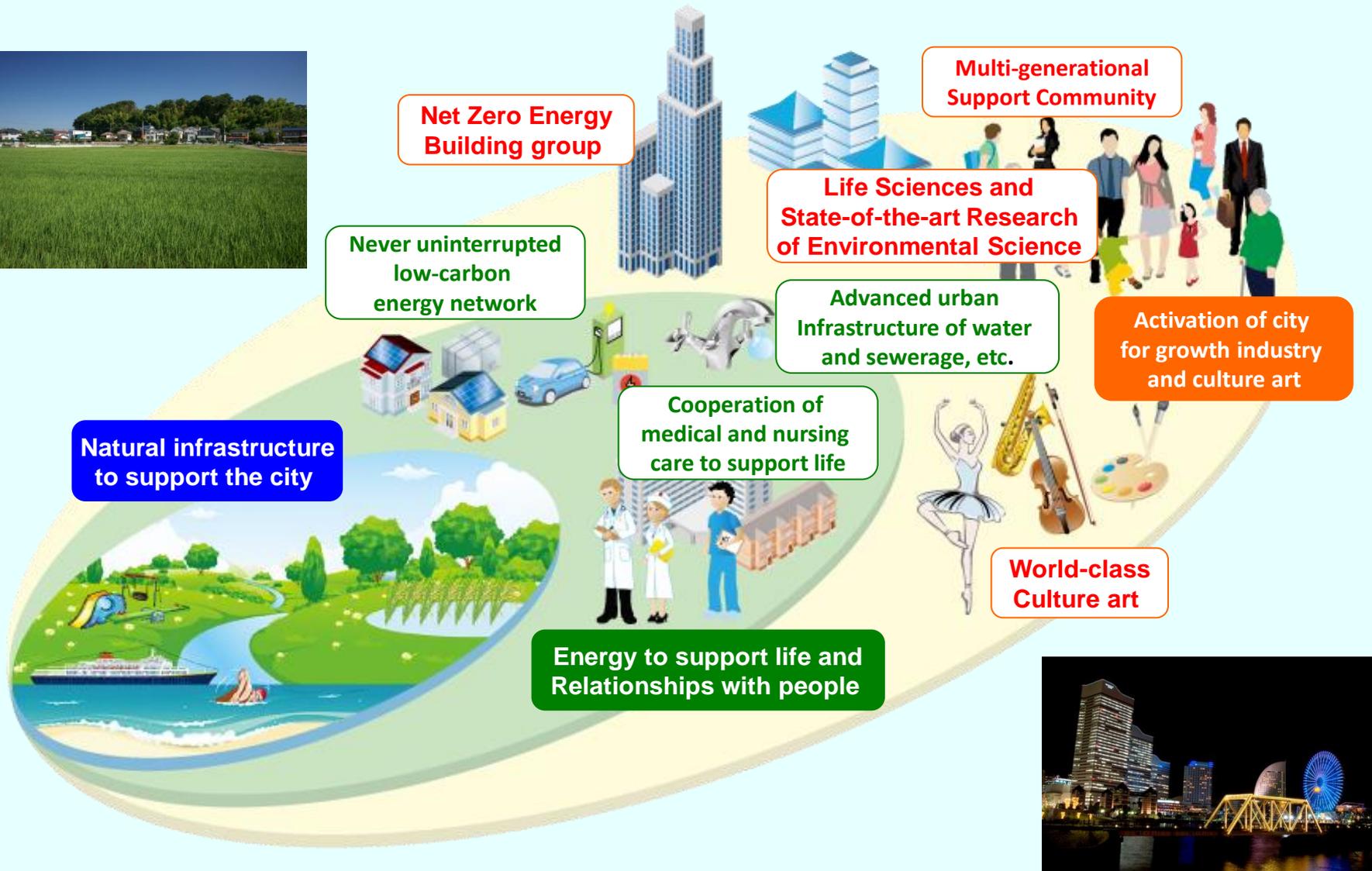
**Open Data**

**Smart  
meter**

**Storage  
battery**

**ITS**

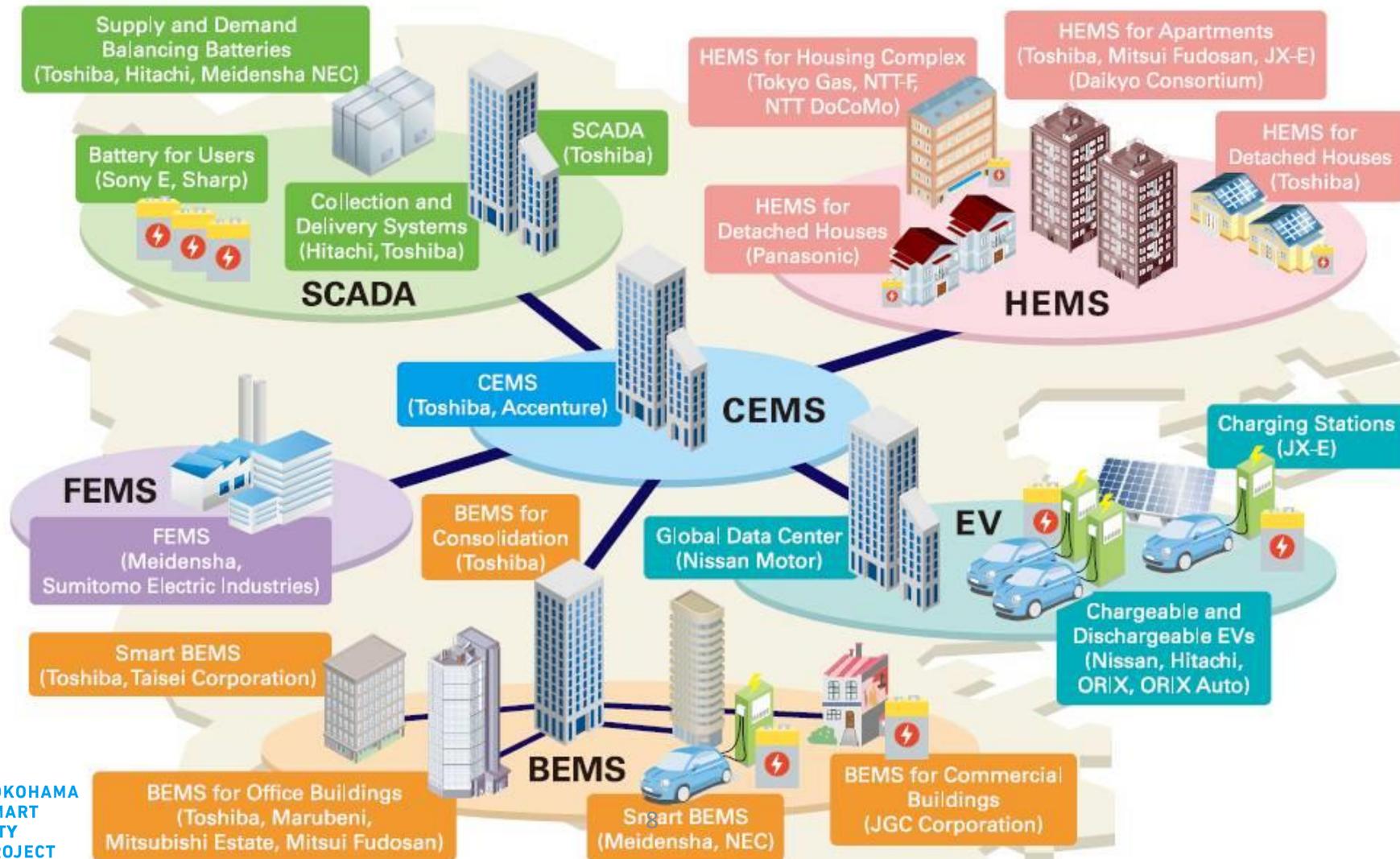
# Yokohama as “FutureCity”



# Overview of demonstration experiments

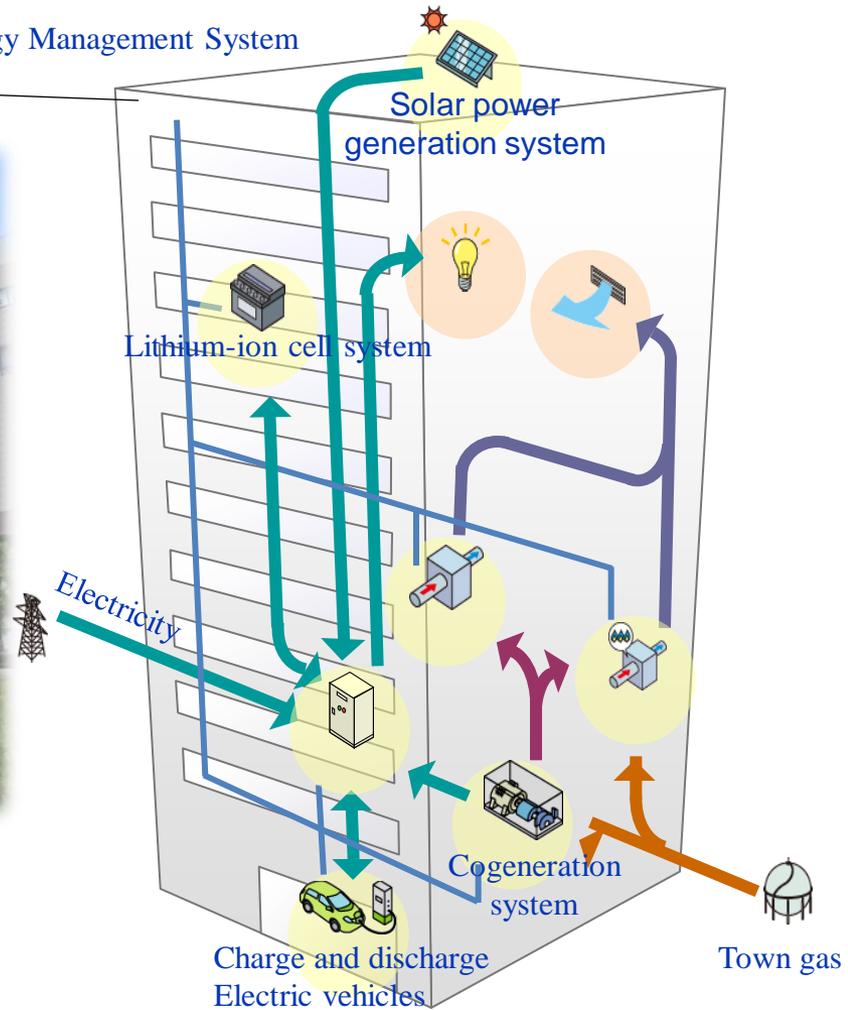
(Energy management systems)

Target by the end of 2014 PV 27MW / HMS 4,000 units / EV 2,000 vehicles



## BEMS (Building Energy Management System)

CEMS:  
Community Energy Management System





## Efforts in single-family house

- **Visualization of Electricity**  
Amount of electricity consumed from April to July 2011 was on average **reduced approximately 20%** from the previous year.  
**= Effect of introducing PV and HEMS**

## Efforts in Collective housing

- Application equipment of renewable energy
- Control all over collective housing by integrated control system and demonstration
- Visualization of energy and incentive setting **by HEMS**, and support for energy saving action in household



# <Transportation> Making Yokohama a City of Electric Vehicles



**EV sharing in industrial area and shopping district**



**Starting test utilization for visiting medical care and nursing care in a hospital**



**Not only means of transportation, but also function of storage battery**

# ● Minato Mirai 21 District: Showcase of Yokohama's urban development

Urban  
Planning

## ○ Greener City Center



Grand mall park



Cherry blossom street

## ○ Integration of History, Culture and Art



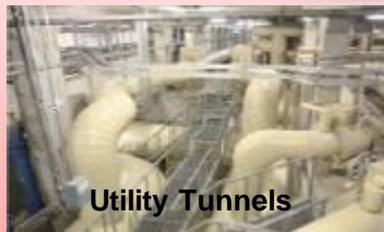
Nippon Maru  
Memorial Park



Red Brick Warehouses



## MM21 Pedestrian Bridge LED Lighting



Utility Tunnels



Moving walkway at  
Sakuragicho station

## Landmark Tower



Reusing rain and  
wastewater

## ○ Utilization of Renewable Energy towards Low Carbon Emission

# External Recognition on Achievement by the City of Yokohama

LEE KUAN YEW  
WORLD CITY ○  
PRIZE

## 2014 SPECIAL MENTION: CITY OF YOKOHAMA



- The Lee Kuan Yew World City Prize is a biennial international award that honours outstanding achievements and contributions to the creation of liveable, vibrant and sustainable urban communities around the world.
- In 2014, Yokohama was selected for Special Mention, and will be awarded during the World Cities Summit in June.
- Yokohama was recognised for overcoming its urban challenges faced over the last 40 years through excellent partnership with its citizens and stakeholders. Also the Y-PORT programme was mentioned for its clever marriage of economic growth and international contribution by tying up with local businesses to export urban solutions to emerging cities.



# ***Y-PORT Project***

***-Transferring Yokohama's Experiences -***

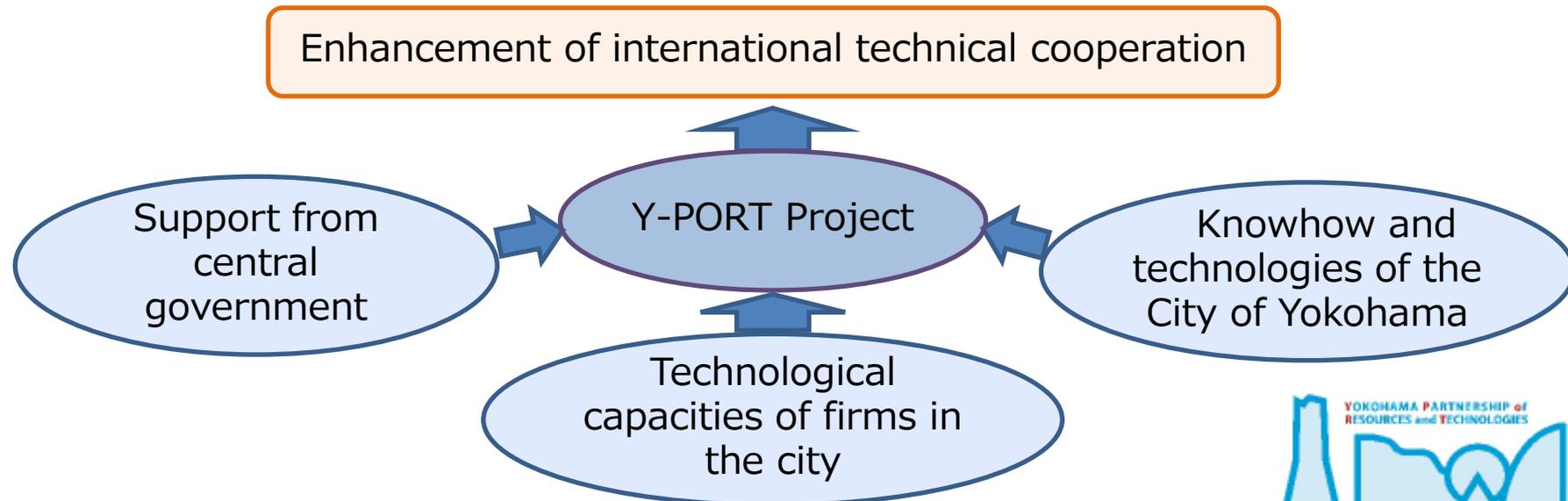


# Yokohama's International Technical Cooperation (What is Y-PORT?)

## Yokohama Partnership of Resources and Technologies

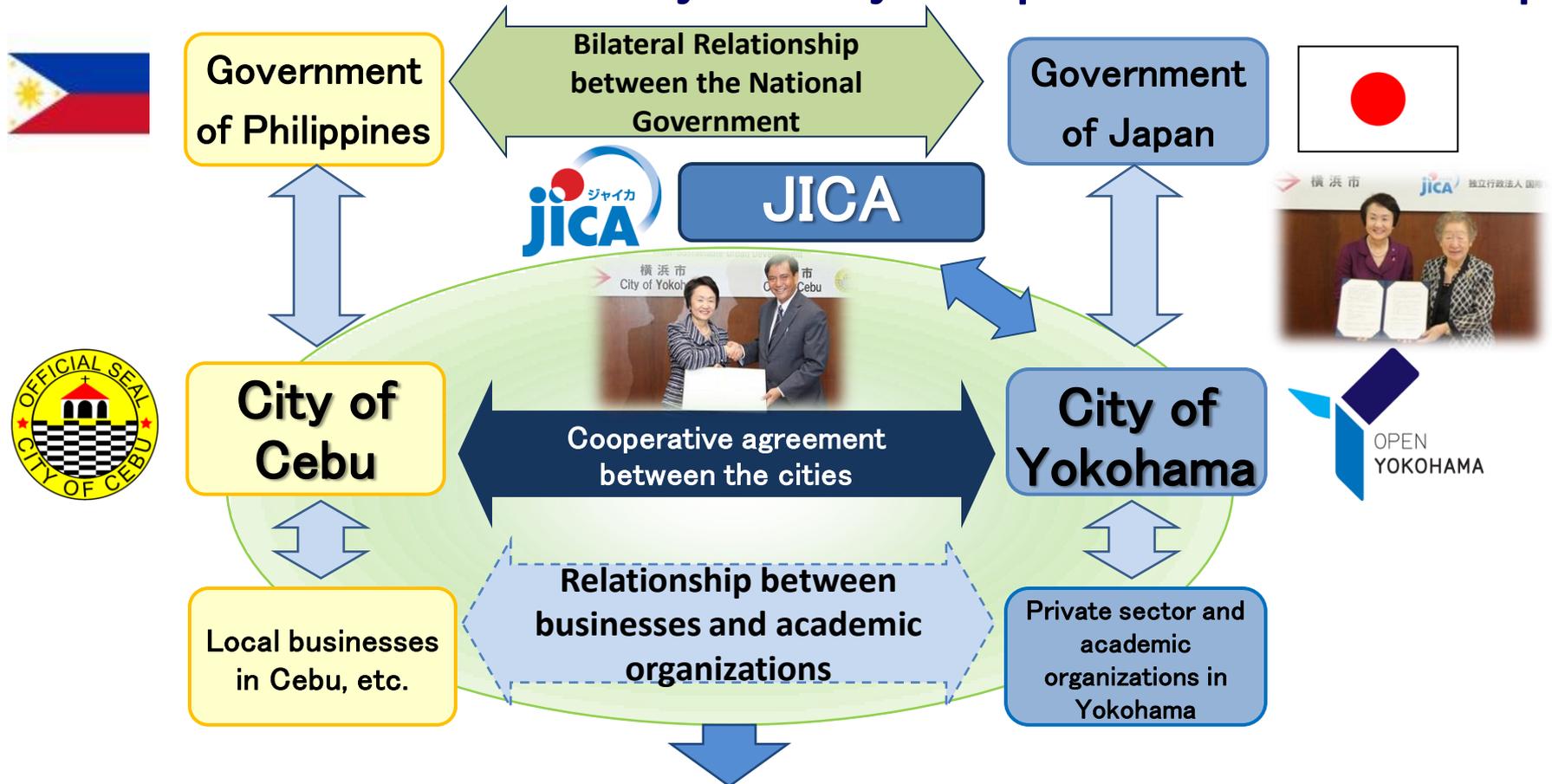
International technical cooperation based on public-private partnership and drawing on the resources and technology of Yokohama

- It is essential to provide not simple products but solutions through combining technologies and knowhow of the public and private sectors



# City to City's Cooperative Relationship

## Activities based on the City to City Cooperative Relationship



Supporting the City of Cebu's Urban Development Efforts through Public-Private Partnerships  
 -Beginning dialogs through public-private partnerships in order to resolve urban issues-

# PARTICIPATIVE PROCESS FOR MEGA CEBU 2050

## Vision Statement and Attributes



## 13 LGU Consultancy Meetings



**Next Phase ...**

**Endorsement**  
MCDCB Mar 20

**Second WS**  
(Validation)

**Consultancy Meeting**

**First WS**  
(Visioning)

**Steering Committee**

## Cities Comparison Best Practices



## SWOT Analysis with Stakeholders

<b>S</b> Strengths	<b>W</b> Weakness
<b>O</b> Opportunities	<b>T</b> Threats

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City of Yokohama  
Development  
Experience



LGU Presentations  
on Development  
challenges

## CONSULTANCY Meetings:

- SUBCOM Meetings
- ARENA 7
- Business Leaders
- Civil Society Leaders

## 2050 Statistical Forecasts

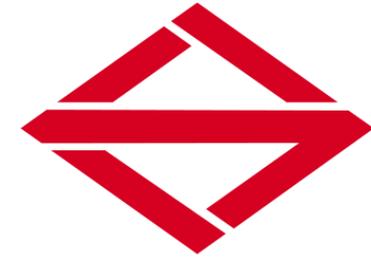
Metro Cebu  
in 2050



# Cooperation between BMA and Yokohama City toward sustainable city development



[Picture]  
Dr. Vallop Suwandee, Chairman of the Advisors to the Governor of BMA (right) and Ms. Fumiko Hayashi, Mayor of Yokohama City (left), are signing the inter-city cooperation agreement



横浜市  
City of Yokohama

## **Focal Areas of Cooperation**

- (1) Energy management, public transport, waste and wastewater etc.
- (2) Participation by the private sector, academia, and local communities
- (3) Call for participation by the Thai and Japanese Government and international organization for their support
- (4) Information sharing

# Bangkok Master Plan on Climate Change 2013-2023

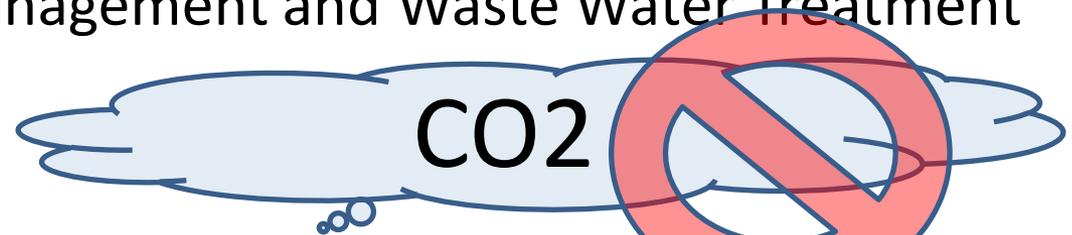
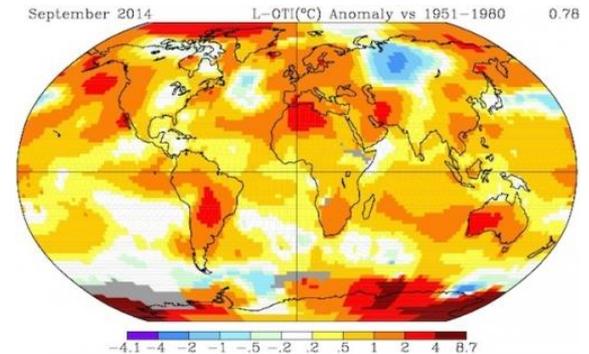
## Objectives

### with support by JICA

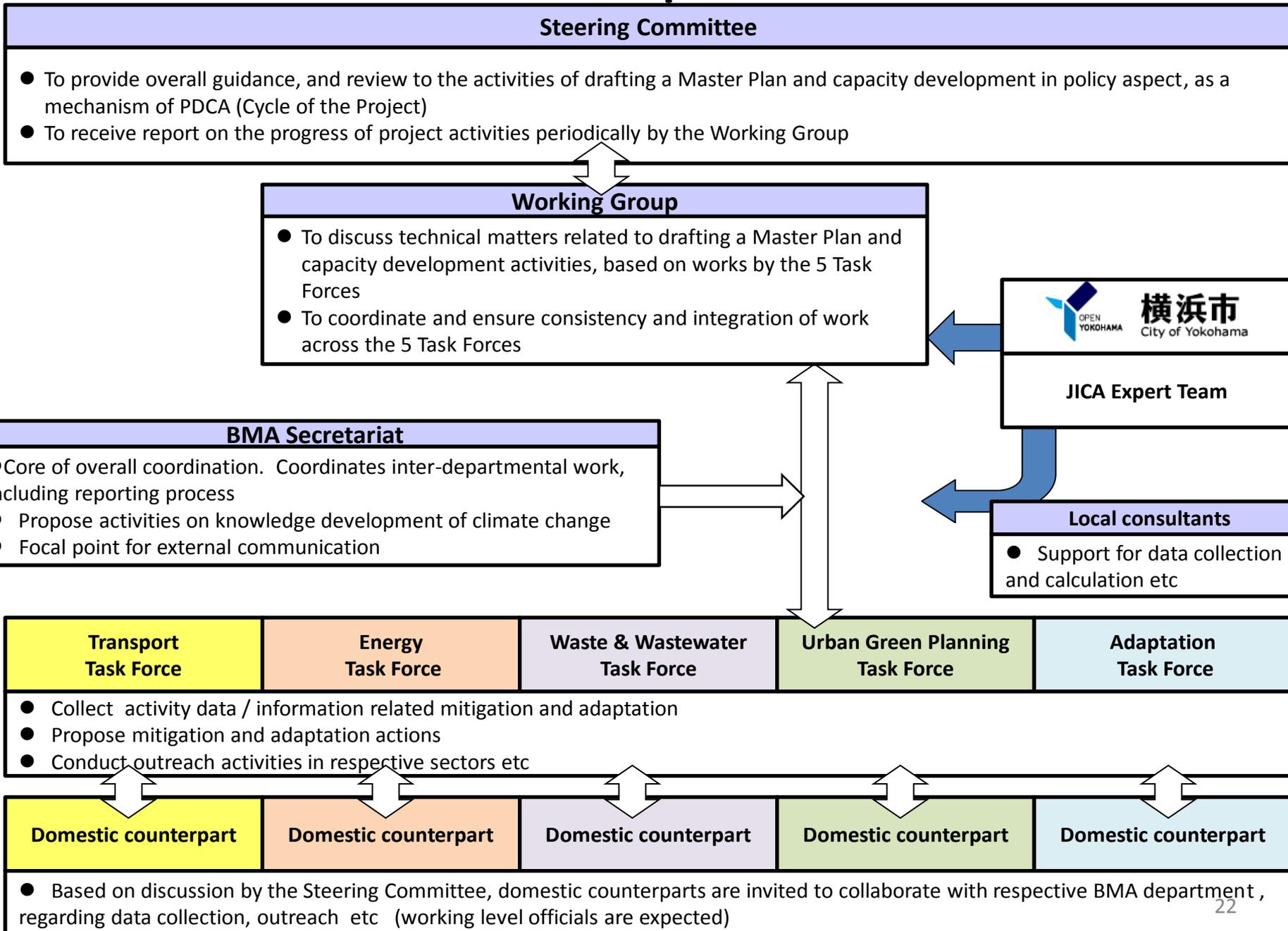
- (1) BMA drafts Bangkok Master Plan on Climate Change 2013-2023
- (2) BMA conduct capacity development for the implementation of the Master Plan

## Sectors Covered

- (1) Environmentally Sustainable Transport
- (2) Energy Efficiency and Alternative Energy
- (3) Efficient Solid Waste Management and Waste Water Treatment
- (4) Green Urban Planning
- (5) Adaptation Planning



# BMA established the Implementation structure



# For the Implementation of Bangkok Master Plan

## [Level 1]

Bangkok Master Plan on  
Climate Change  
2013-2023

Policy  
development &  
Capacity-  
building

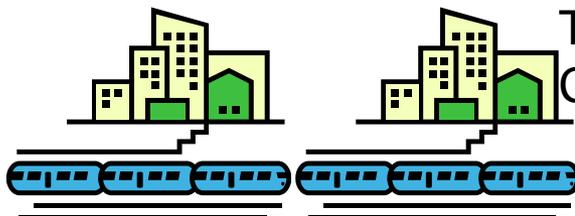


BMA



横浜市  
City of Yokohama

## [Level 2]



Sustainable  
Development &  
Technical  
Cooperation



BMA



横浜市  
City of Yokohama

## [Level 3]



Low Carbon City

Mobilizing advanced  
technology and  
incentives



Public/Business



横浜市  
City of Yokohama



Business

# JCM Project Study Schedule

## (Workshop in Bangkok and Study tour in Yokohama)

### ① September 2014

#### Business Matching and Networking in Bangkok

- Business matching and networking in Bangkok between Thai public agencies and private companies and Japanese companies
- Technology advice and/or site visits in Bangkok by Japanese experts

### ② December 2014

#### Study Tour in Yokohama

- Introduction to Advanced Japanese low-carbon technologies
- Information exchange and networking between Thai and Japanese stakeholders

### ③ January 2015

#### In-depth study mission in Bangkok

- Business matching and networking in Bangkok between Thai public agencies and private companies and Japanese companies
- Technology advice and/or site visits in Bangkok by Japanese experts
- Information/data collection for calculation of GHG emissions (reductions)

# ① Business Matching and Networking in Bangkok (2014.10)



## ② Study Tour in Yokohama (2014.12)



“Waste-to-Energy” Technology at an incineration plant



“Energy-Saving” Technology at hospitals



# ③ Flow of In-depth Study Mission

## Day 1 and 2: Lectures/presentations

- Day 1: Lectures on the JCM and financial/technical support
- Day 2: Presentations on technology needs / low-carbon technologies
  - Group 1: Energy efficiency improvement
  - Group 2: Solid waste / wastewater

Individual business talks

## Day 3: Site visits / energy audit (Optional)

- Site visits and energy audit at hospital and factory

## Day 4: Individual business talk sessions and additional site visits

Application for JCM support schemes!

# ③ In-depth Study Mission in Bangkok (2015. 1)



# Toward Promoting Collaboration with Asian Cities Through Active Cooperation with Aid and International Organizations and Private Sector Participation

- Providing Yokohama City's experience of urban development through masterplan formulation.
- Holding international conferences to share knowledge and know-how of participating cities ⇒Asia Smart City Conference.
- Encourage mutual dialogues through official visits and training programs



PARTNERSHIP of  
TECHNOLOGIES

# Sharing the Best Practices

## Asia Smart City Conference

The occasion where Asian cities and donors come across

**Date : October 30th, 2014**

**Organizer: City of Yokohama**

**Participants in this year**

**Cities (22):**

Angkor heritage area, Bangalore, Bangkok, Cebu City, Cebu Province, Colombo, Compostela, Da Nang, Danao, Dhaka North, Dhaka South, Hai Phong, Ho Chi Minh, Kien Giang Province, Kitakyushu, Makassar, Naga, Phnom Penh, San Fernando, Seberang Perai, Vientiane, Yokohama

**International Organizations and Ministries:**

ADB, C40, Fundación Metrópoli, IGES, JICA, MOE, MOFA, WRI (World Resource Institute)



# ***Creative Innovative Urban Solutions***

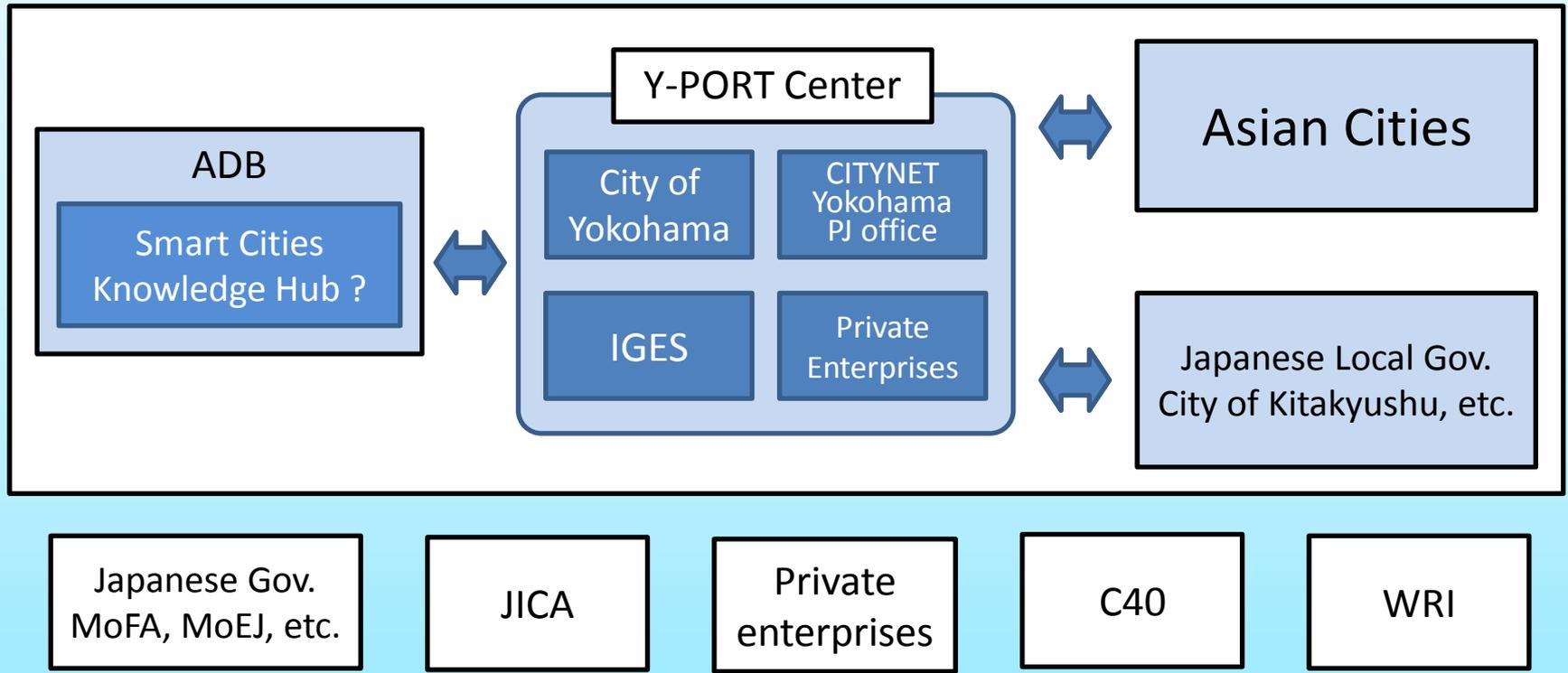


# Collaboration with Private firms in Yokohama City



UYENO GREEN SOLUTIONS LTD.

# Asia Smart City Network



- *Sharing knowledge about the effectiveness of "City to City collaboration on sustainable urban development".*
- *Discussing measures to create and strengthen competitiveness of the city by using visioning and planning processes and new technologies.*
- *Discussion with donors, about policies and methodologies to encourage collaboration among cities through donors' resources and networks.*

# Why Yokohama?

- Solid Achievement: Livable, Sustainable, Vibrant, and Culturally Rich City Development
- Continuous Social Innovation
- Yokohama is not Tokyo, London, Paris, Singapore nor New York: Secondary and Edge City
- Leadership and Full Collaboration by Stakeholders: Direction from Mayor and People centered approach
- Will to Share and Lead: Y-PORT
- Potential for Robust Partnership: including leading private sector firms



For Smarter Cities, For a Smarter Earth

