

# Smart City Management and City to City Collaboration



**Toru HASHIMOTO**

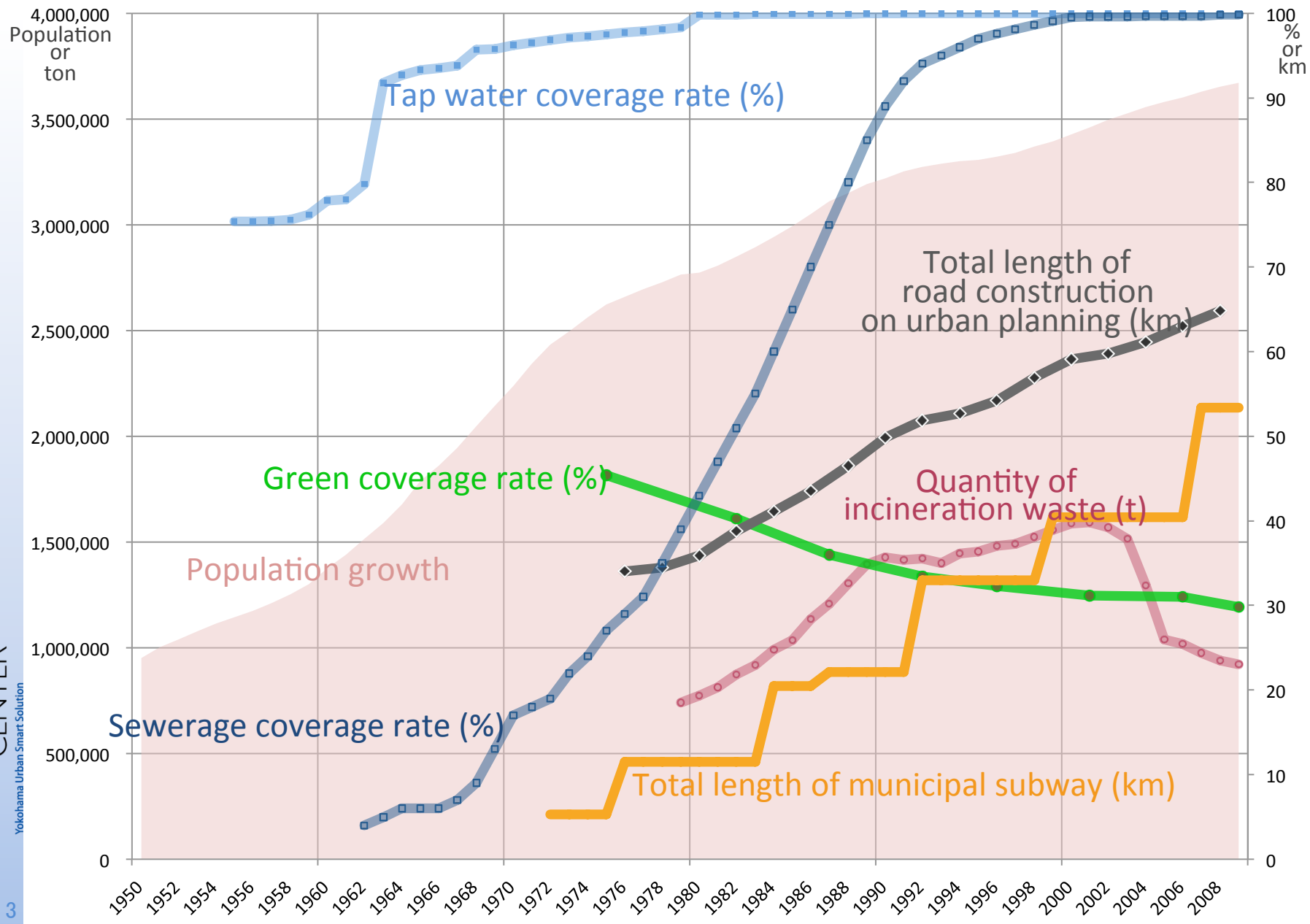
Executive Director of Development Cooperation Dept., City of Yokohama

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

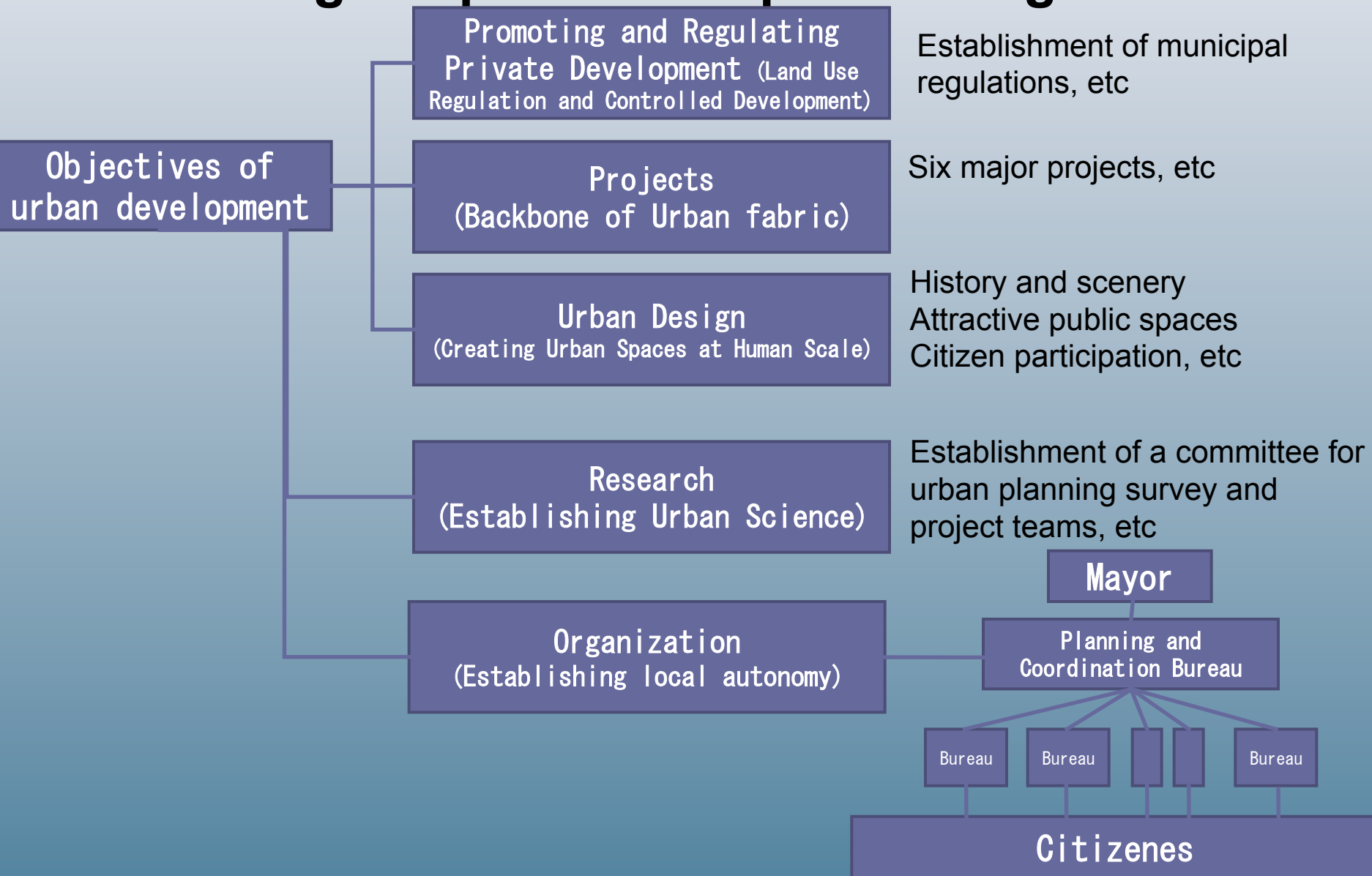




# Population growth and infrastructure



# Diagram of urban planning of Yokohama during the period of rapid urban growth





1960s

Mayor's meeting with 10,000 citizens



# Citizen's Participation

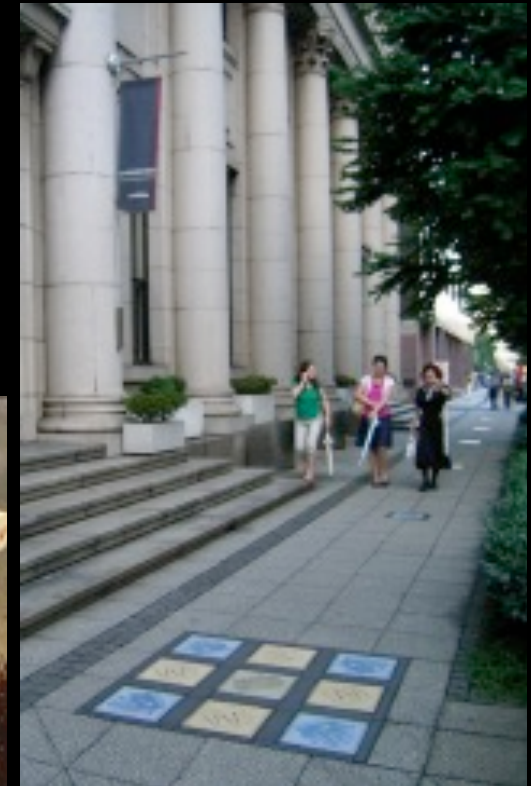
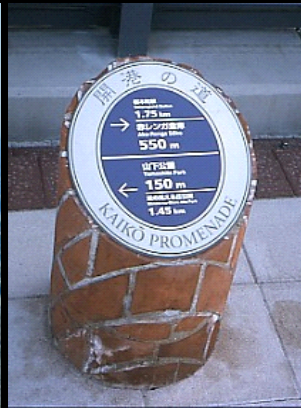


# Local Good YOKOHAMA





# Creation of Pedestrian Spaces





# Development of Shopping District



**Isezaki Mall**



**China Town**



**Bashamich Shopping Street**



**Motomachi Shopping Street**





# Urban Planning that incorporates the history (Modern Architect)

Yokohama Information Culture Center (Public facility)



Strong building (Hotel)



Nipponkoa Bashamichi building (Office)



Red-Brick Warehouse (Commercial facility)



# Creative Cities and Cultural Interaction



YOKOHAMA TRIENNALE



YOKOHAMA  
OTOMATSURI



DANCE DANCE DANCE  
YOKOHAMA 2012



イルミネーションが輝き始めた夕暮れ、潮風と幻想的な雰囲気満点のなかでの「ギリシャの踊り」  
photo: Kiyonori Hasegawa





# ● 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



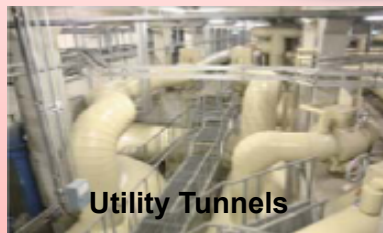
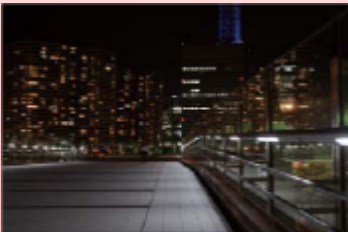
Nippon Maru  
Memorial Park



Red Brick Warehouses



MM21 Pedestrian Bridge  
LED Lighting

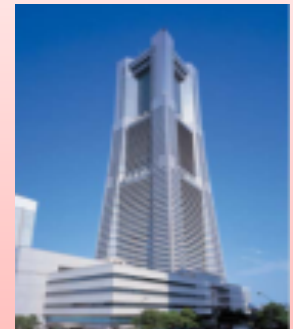


Utility Tunnels



Moving walkway at  
Sakuragicho station

Landmark Tower



Reusing rain and  
wastewater

## ○ Utilization of Renewable Energy towards Low Carbon Emission

# Achievements of “Yokohama G30”

- ◆ **Problem:** Waste emissions increasing faster than population
- ◆ **Target:** Cut waste emissions by 30% by 2010 (from 2001 level)

Full separation of waste

Started in 2003

Collection/recycling of used products

- ◆ **Target achieved 5 years ahead of schedule**  
(about 40% reduction as of 2009)
- ◆ **Effects of reduction**
  - Saved ¥110 billion it would have cost to replace two incineration plants
  - Saved ¥3 billion in running costs
  - Equivalent to a 47% cut in CO<sub>2</sub>

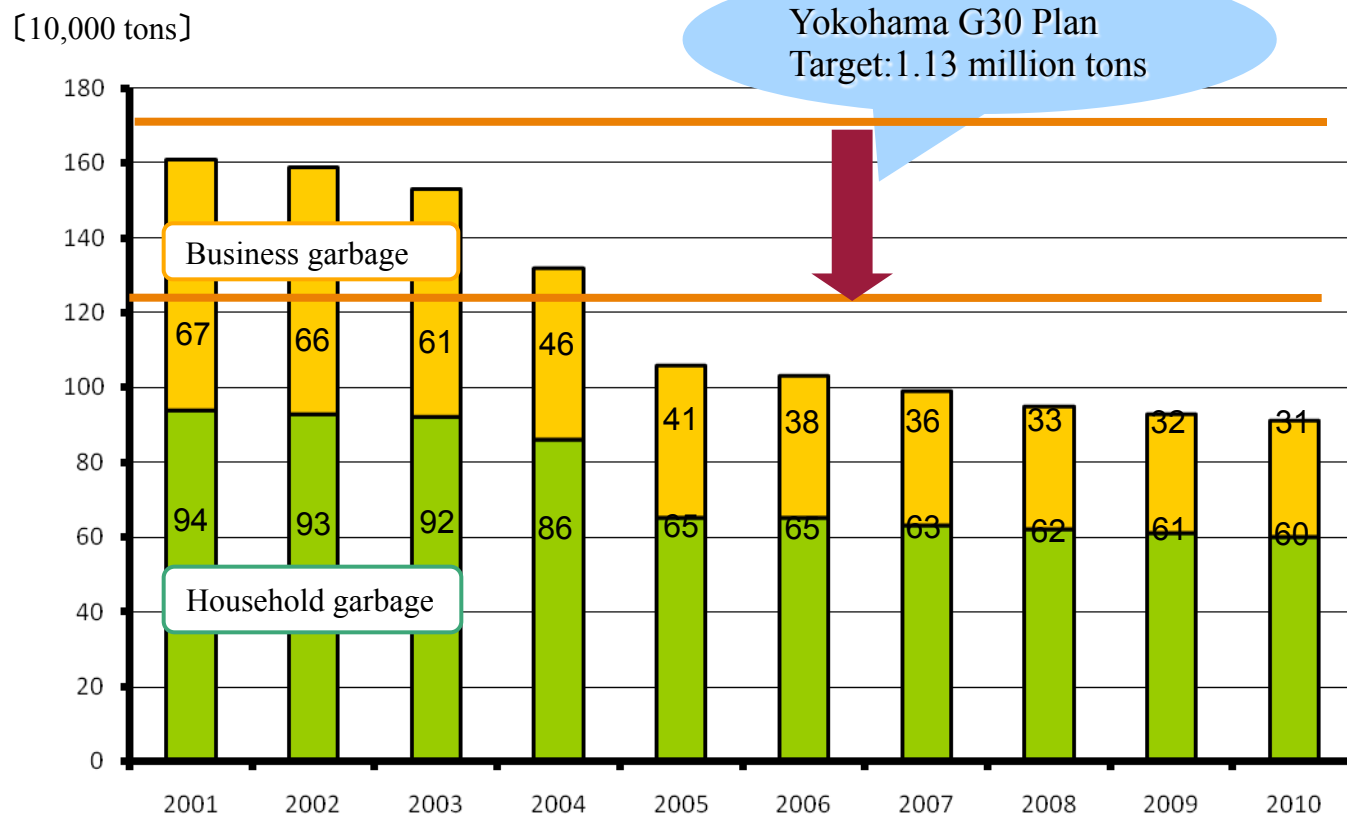


**Taking every opportunity to enlighten, explain and encourage**

- Explanatory meetings for citizens (more than 11,000 times).
- Campaigns at all stations; events,<sup>13</sup> etc.

# <G30> Achievement and next steps forward

## Power of Yokohama Citizens



Yokohama G30 Plan (Jan. 2003)

Yokohama 3R  
Dream (Slim)  
(Jan. 2011)



# Yokohama's Expertise on Urban Management and Infrastructure Development

## Urban Development

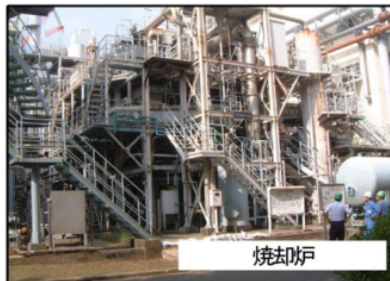


## Solid waste management



G30 Plan, aimed at achieving 30% reduction of solid waste generation. Formulation of "Yokohama 3R Dream (Slim) Plan" for further reduction by 3R (Reduce, Reuse, Recycling).

## Water treatment



## GHG emission reduction



## Yokohama Smart City Project

Introduction of the optimal energy management system in districts with various land use such as business, commercial and residential, etc.

# Transformation of Urban Space

Last Two Decades



# Accumulation of core business in the central business district

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1985



1989



2010



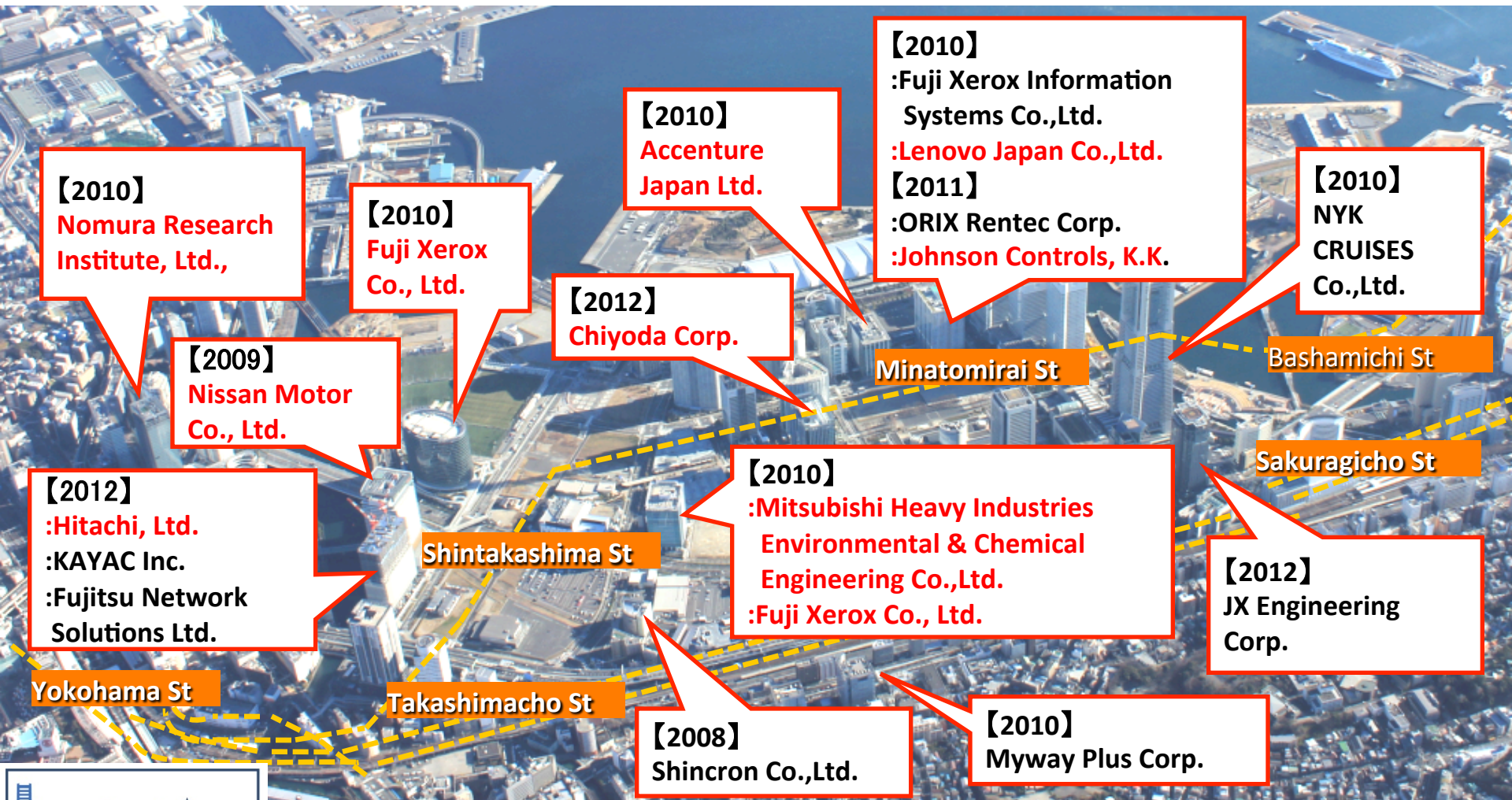
# Urban Development in Yokohama City

## Present





# \*Examples of the companies which relocated to MINATOMIRAI21 (2008~)





# Enhanced Convention Facilities and Major International Events





# 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.



# ***City to City Collaboration***

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





# Yokohama's International Development Cooperation – Y-PORT

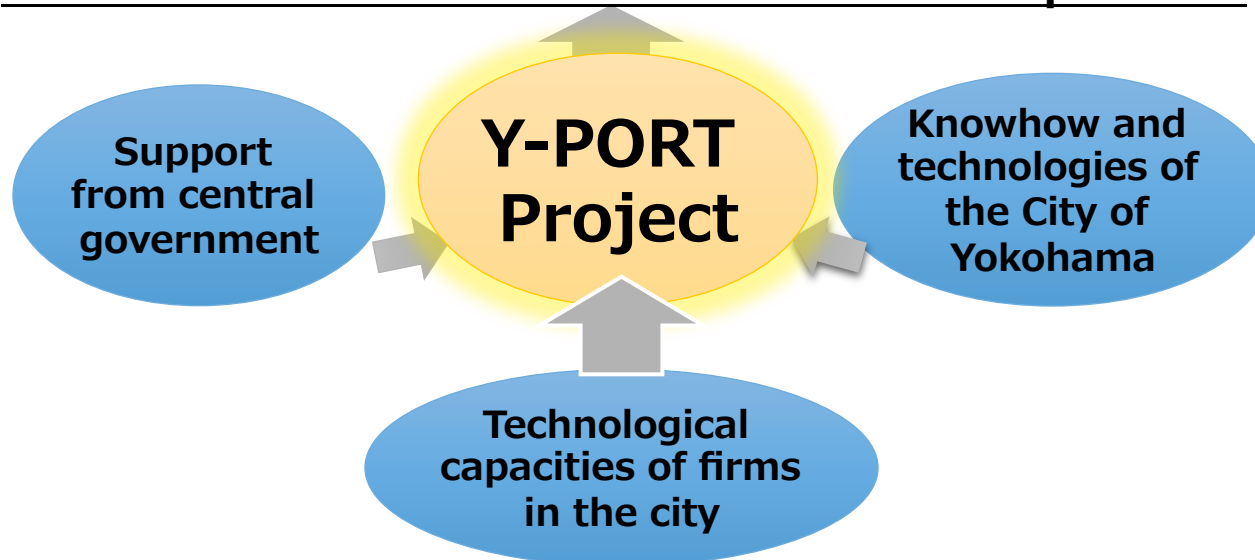
**Yokohama**

**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

**Enhancement of international technical cooperation**



# Collaboration with Governmental/International authorities and Cooperation with Cities



## Comprehensive Partnership Agreement with JICA (25th October, 2011)

- Strengthening cooperation to **solve urban problems in developing regions**

## Memorandum of Understanding on Collaboration with Asian Development Bank on 16th October, 2013)

- Utilizing knowhow and **technologies of the City of Yokohama and Yokohama private firms** to ADB Project

*\* It was the first time for JICA and ADB to conclude the comprehensive agreement or MOU with a local government.*



## Memorandum of Understanding on Technical Cooperation for Sustainable Urban Development Signed with BMA on 21st October, 2013.



### Contents of Agreement

1. The City of Yokohama will offer technical advice in promoting sustainable urban development of Bangkok in the area such as energy management, public transportation, solid waste and waste water management, etc.
2. The Parties will encourage participation of the private sector, academic institutions, and local communities which have expertise and knowledge on low carbon society development to achieve the above mentioned objective.
3. The Parties will call for support of Central Governments of both sides and international organizations in pursuing appropriate assistance to implement technical cooperation.
4. The Parties will share and exchange information which is essential to implement the above collaboration effectively.



# Yokohama's Contributions Abroad ~City to City Cooperation~

## Bangkok, Thailand

Population: 8.25 million

Area: 1,568 km<sup>2</sup>

MOU: Oct. 21, 2013

## Cebu, Philippines

Population: 0.87 million

Area: 291 km<sup>2</sup>

MOU: March 28, 2012

## Batam, Indonesia

Population: 1.15 million

Area: 715 km<sup>2</sup>

MOU: May 26, 2015

## Da Nang, Vietnam

Population: 1.01 million

Area: 1,283 km<sup>2</sup>

MOU: April 9, 2013

# Yokohama's Contributions Abroad

~Master Plans~

## Bangkok, Thailand

Bangkok Master Plan on Climate Change



## Cebu, Philippines

Mega Cebu Roadmap 2050



## Batam, Indonesia

Project Mapping based on Batam Green City Action Plan(ongoing)

## Da Nang, Vietnam

Action Plan for sustainable Development

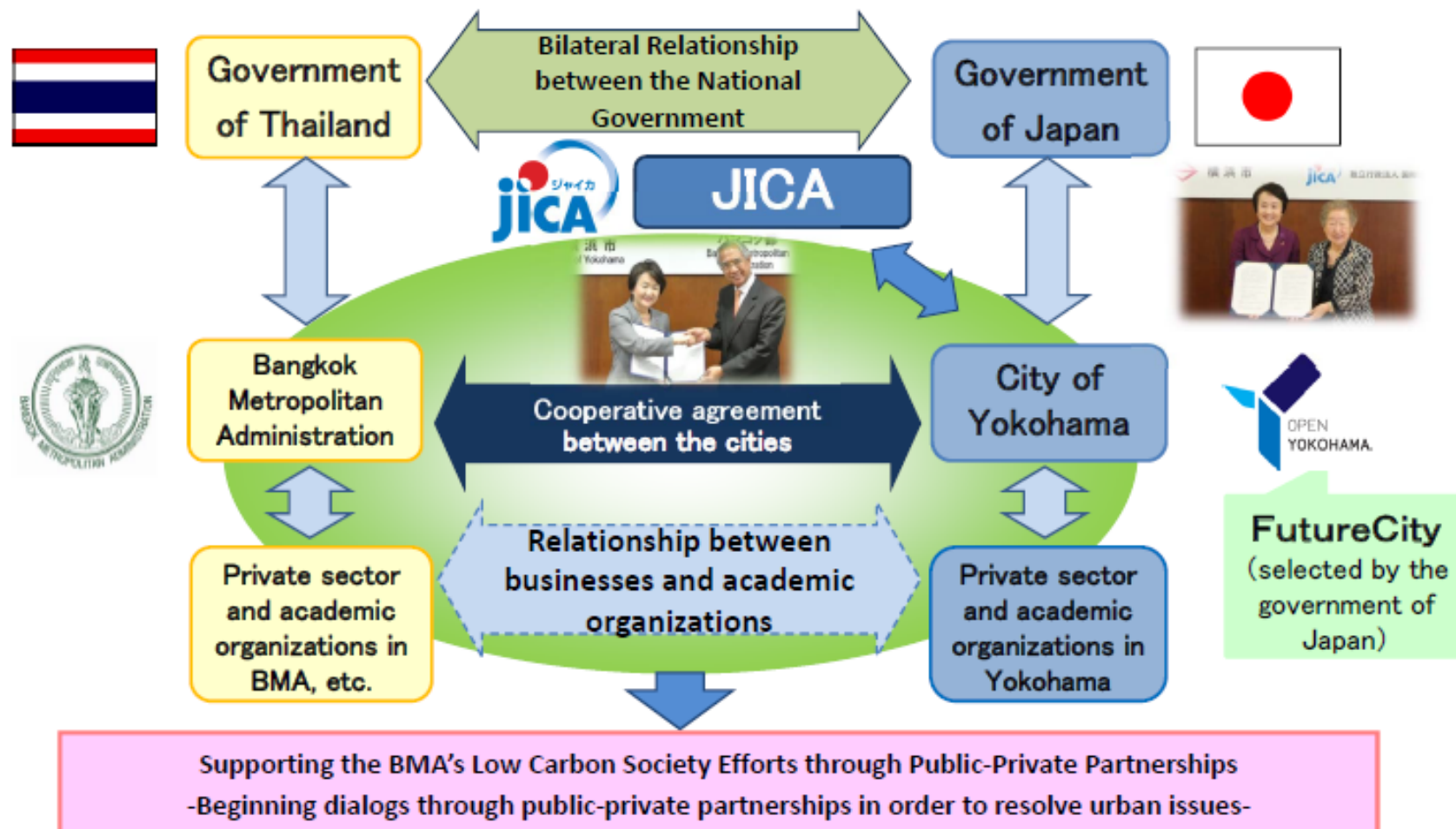




# City to City's Cooperative Relationship



## Activities based on the City to City Cooperative Relationship



# PARTICIPATIVE PROCESS FOR MEGA CEBU 2050

## Vision Statement and Attributes



### 13 LGU Consultancy Meetings



## Cities Comparison Best Practices



## SWOT Analysis with Stakeholders

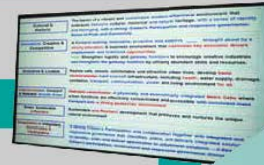
[illegible]

	Helpful To achieve our purpose	Harmful To achieve our purpose
Internal Origin	<b>S</b> Strengths	<b>W</b> Weakness
External Origin	<b>O</b> Opportunities	<b>T</b> Threats

## Steering Committee



## First WS (Visioning)



## Consultancy Meeting



## Second WS (Validation)

**Endorsement**  
MCD CB Mar 20

## Next Phase ....

CONSULTANCY Meetings:

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

## 2050 Statistical Forecasts

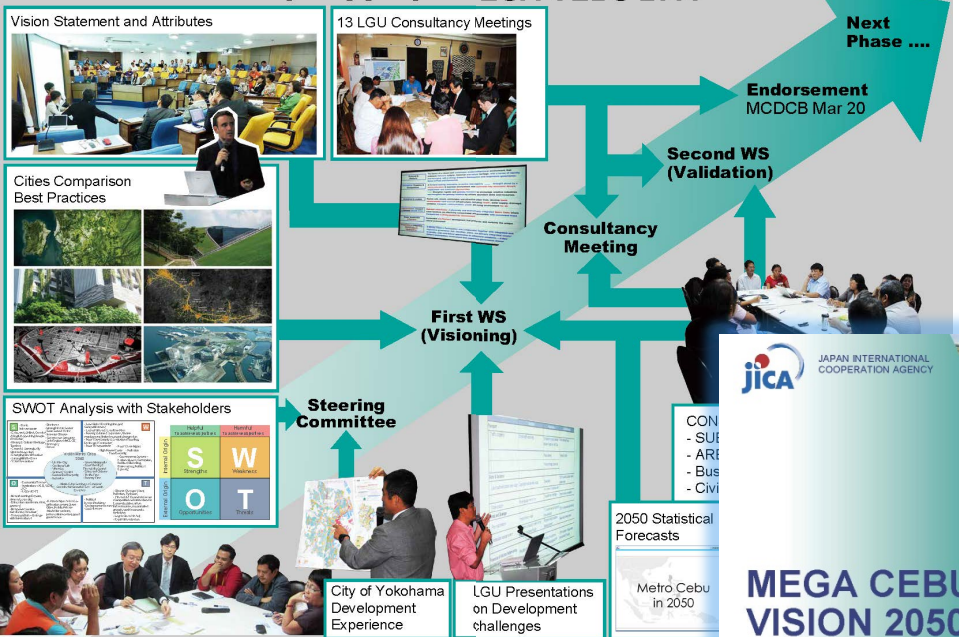


City of Yokohama  
Development  
Experience

## LGU Presentations on Development challenges



# PARTICIPATIVE PROCESS FOR MEGA CEBU 2050



セブ市都市圏の都市開発計画  
都市開発ビジョンの策定





Inmates in Cebu dance to the Mega Cebu jingle - October 30, 2014



Club Mega initiates first Youth Convention - July 23, 2014



Mega Cebu campaigns in Don Carlos Gothong Memorial High School - July 23, 2014



セブ市都市圏の都市開発計画  
市民との合意形成



## Business Matching & Technical Visit in Yokohama



## Citizen Participation



# Collaboration with Private firms in Yokohama City



Yokohama Water Co., Ltd.



Discussion between Private firms from Yokohama, MCD CB and the City of Yokohama, June, 2013

UYENO GREEN SOLUTIONS LTD.



Mansei Recycle Systems Co., Ltd.



## Pilot project in Cebu by the Yokohama-based private companies



## Solid Waste Management and Resource Recycling in Cebu City by Mansei Recycle Systems Co., Ltd. & Carbon Free Consulting Corporation





**Business through Y-PORT Center  
the Guun Corporation's waste plastic recycling plant opens in Cebu  
(12 May 2017)**





## Environmental challenge to sewage treatment in Cebu City

Before the project starts





# Applicability of Dewatering Equipment for Septage Management of Cebu City by AMCON INC. & EX Research Institute Ltd.



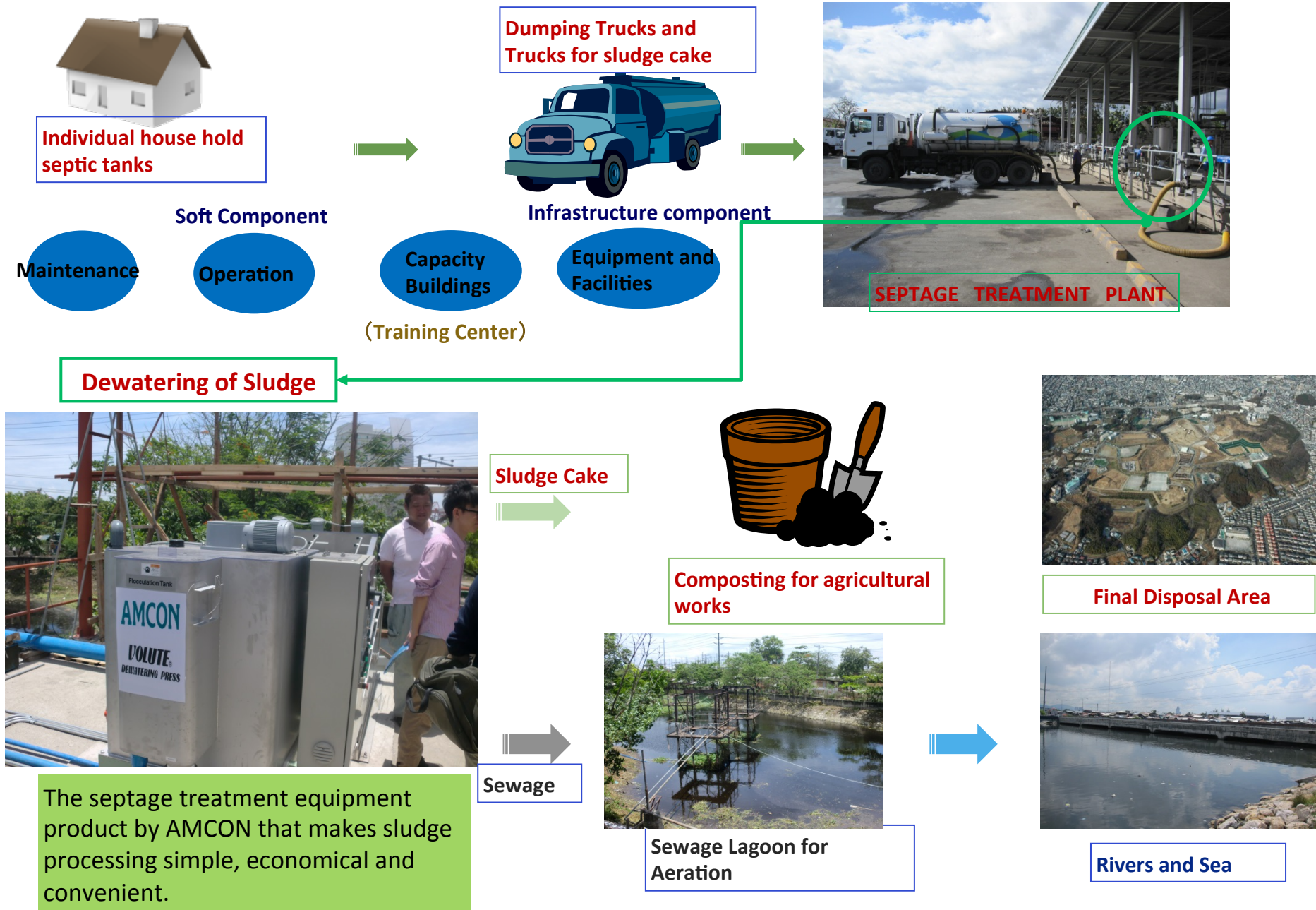


under implementation





# Simple, economical and convenient septage management with treatment Technologies of Yokohama based companies.



# ***Creative Innovative Urban Solutions***





# 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

# Y-PORT CENTER – Knowledge hub for smart city management

## **Yokohama Urban Smart Solution Alliance**

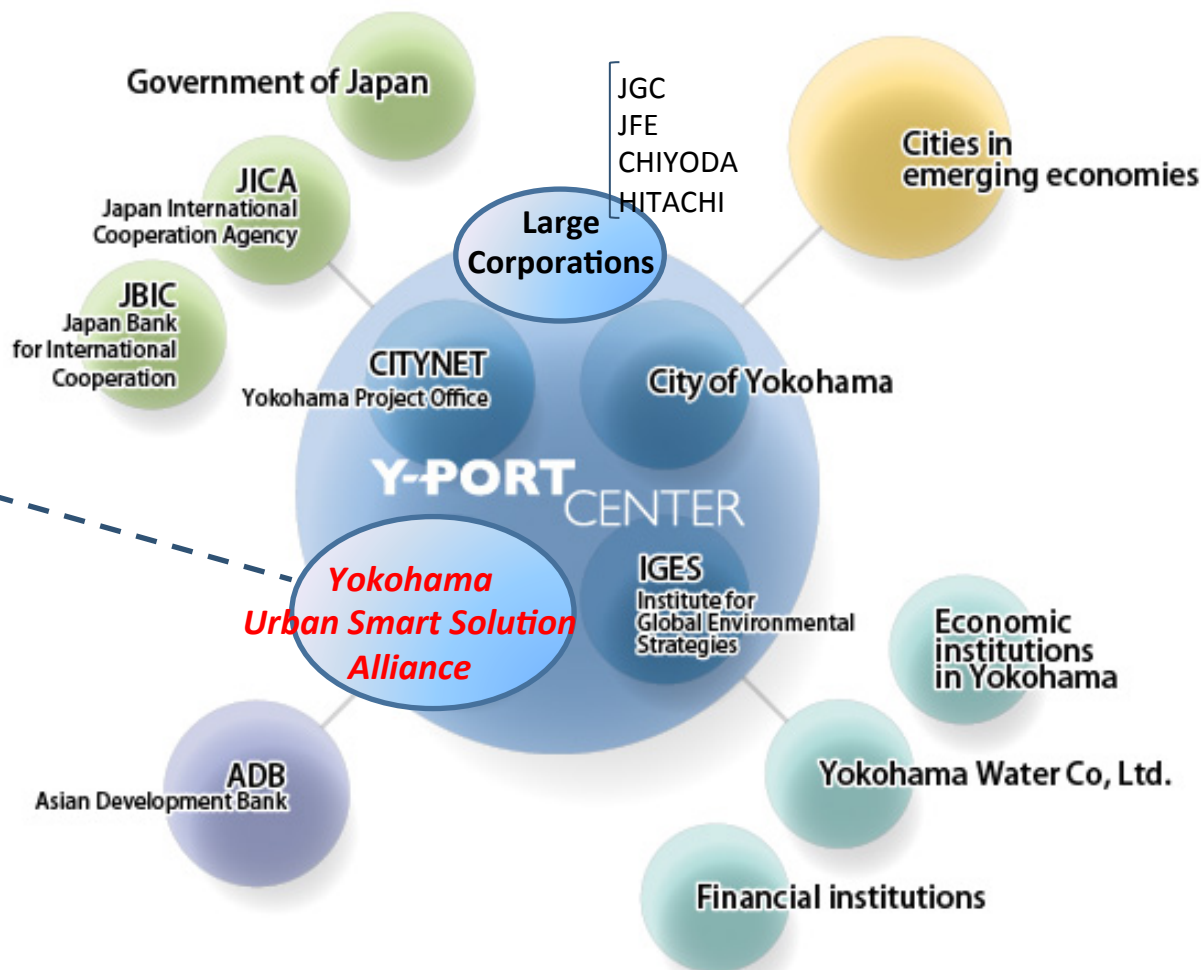
Over 10 Leading Private SMEs in Yokohama form up an alliance under the roof of Y-PORT CENTER to;

- Provide best available smart solutions
- Establish a showcase of smart urban solutions
- Serve and promote as one-stop shop with SME's knowledge and technologies

to cities in Asia and the world.

# **Y-PORT** CENTER

## Yokohama Urban Smart Solution





# The Asia Smart City Conference organized by Yokohama



Aiming furthering city-to-city  
cooperation through Asian  
city's network

## *The Fifth Asia Smart City Conference*

**Date of plenary session: November 18, 2016**

**Next Year on Oct 27**



### Participants

- 46 Cities
- Over 30 international Organizations and Ministries of Japanese Government



# Asia Smart City Conference





# Networking through Asia Smart City Alliance(ASCA)



The image shows a screenshot of the Facebook page for the Asia Smart City Alliance (ASCA). The main header features a large group photo of members in formal attire. To the left of the photo is the ASCA logo, which includes a map of Asia and the text "Asia Smart City Alliance" and "will enable members to link with one another to play active roles in contributing to smart sustainable development in Asia." Below the photo, the text "Asia Smart City Alliance Organization" is displayed. To the right of the photo are buttons for "Create Call to Action", "Like", "Message", and a menu icon. Below the header, there are tabs for "Timeline", "About", "Notes", "Photos", and "More". The "Timeline" tab is selected. Below the tabs, there is a search bar with the text "Search for posts on this Page". To the right of the search bar are icons for "Status", "Photo / Video", and "Event, Milestone +". Below the search bar, there is a section titled "See Pages Feed" with the text "Posts from Pages you've liked as your Page". Below this, there is a section titled "ABOUT" with a right-pointing arrow. Below the "ABOUT" section, there are links for "Add street address", "City, State, Zip", and "Save". Below the "ABOUT" section, there is a post from "Asia Smart City Alliance" published by "横浜市国際協力課" on March 25 at 3:18pm. The post has two sections: "Inputs to International Discussion" and "Identification of Future Collaboration".

**Asia Smart City Alliance**  
will enable members to link with one another to play active roles in contributing to smart sustainable development in Asia.

**Asia Smart City Alliance Organization**

Create Call to Action Like Message ...

Timeline About Notes Photos More ▾

Search for posts on this Page

See Pages Feed  
Posts from Pages you've liked as your Page

ABOUT ▸

▸ Add street address City, State, Zip Save

**Asia Smart City Alliance**  
Published by 横浜市国際協力課 [?] · March 25 at 3:18pm · 🌐

Inputs to International Discussion Identification of Future Collaboration





## Transit Oriented Urban Area Development with Yokohama's Experiences



## Industrial parks and Residential area along Mass Transit In the Reclamation Land of Kanazawa, Yokohama



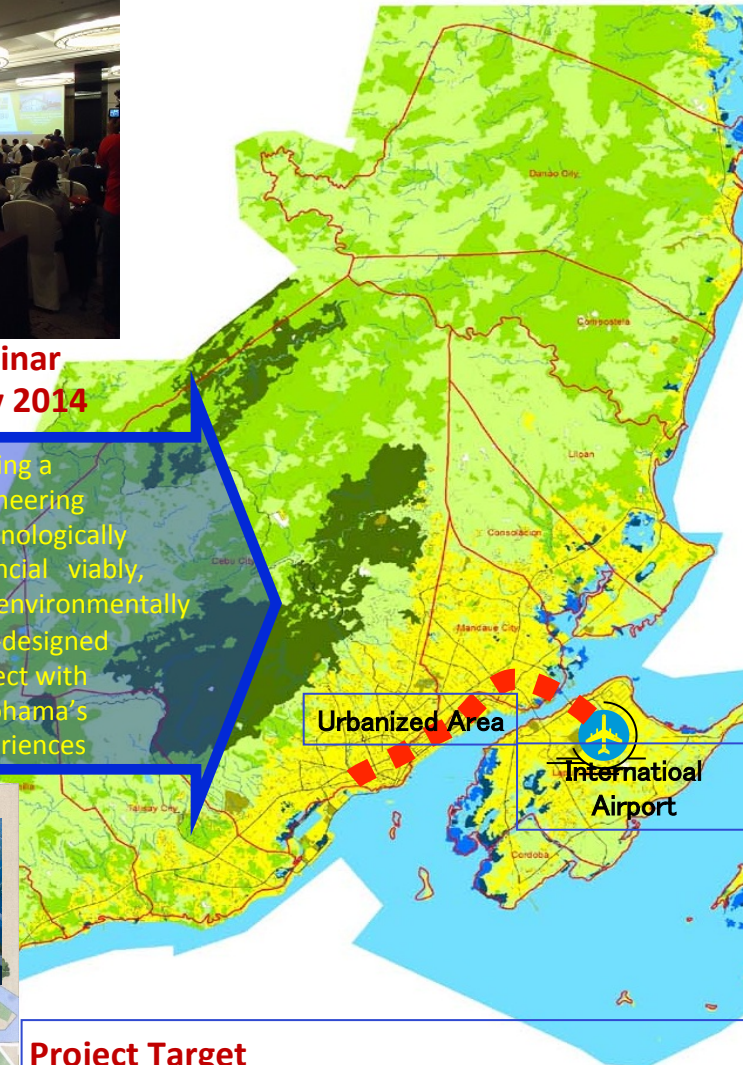
## Multi purpose facilities development along Mass Transit In the Reclamation Land of Kanazawa, Yokohama



**Public Private Partnership Seminar  
By MCD CB, MLIT and JICA in Nov 2014**

A map of Japan is shown in the background, with a yellow text overlay on the left side. The text reads: "Making a Engineering Technologically Financial viably, and environmentally well-designed project with Yokohama's Experiences".

Making a  
Engineering  
Technologically  
Financial viably,  
and environmentally  
well-designed  
project with  
Yokohama's  
Experiences



## Project Target

- Mitigation of Traffic Congestion in the urbanized area
- Enhancement of Accessibility to the Airport
- Area Development along mass transit



# Key Words for Sustainable Development

## ➤ **Leadership and Full Collaboration by Stakeholders:**

Direction from Mayor and People-centered approach

## ➤ **Robust Partnership:** including leading private sector firms

## ➤ **Continuous Social Innovation:**

Human resources and institutional development is the key

## ➤ **Holistic Approach:**

Livable, Sustainable, Vibrant, and Culturally Rich City Development

## ➤ **Yokohama is not Tokyo, London, Paris, Singapore nor New York:**

Secondary and Edge City

