



The JCM project development in Bangkok making effective use of city to city collaboration

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 - Bangkok Master Plan on Climate Change 2013-2023
 - Cooperation by Yokohama city
2. Survey on JCM project development under city to city cooperation

Rationale: Climate Change and Bangkok



- ✓ Climate change is one of the largest challenges to the current and future development of human society.

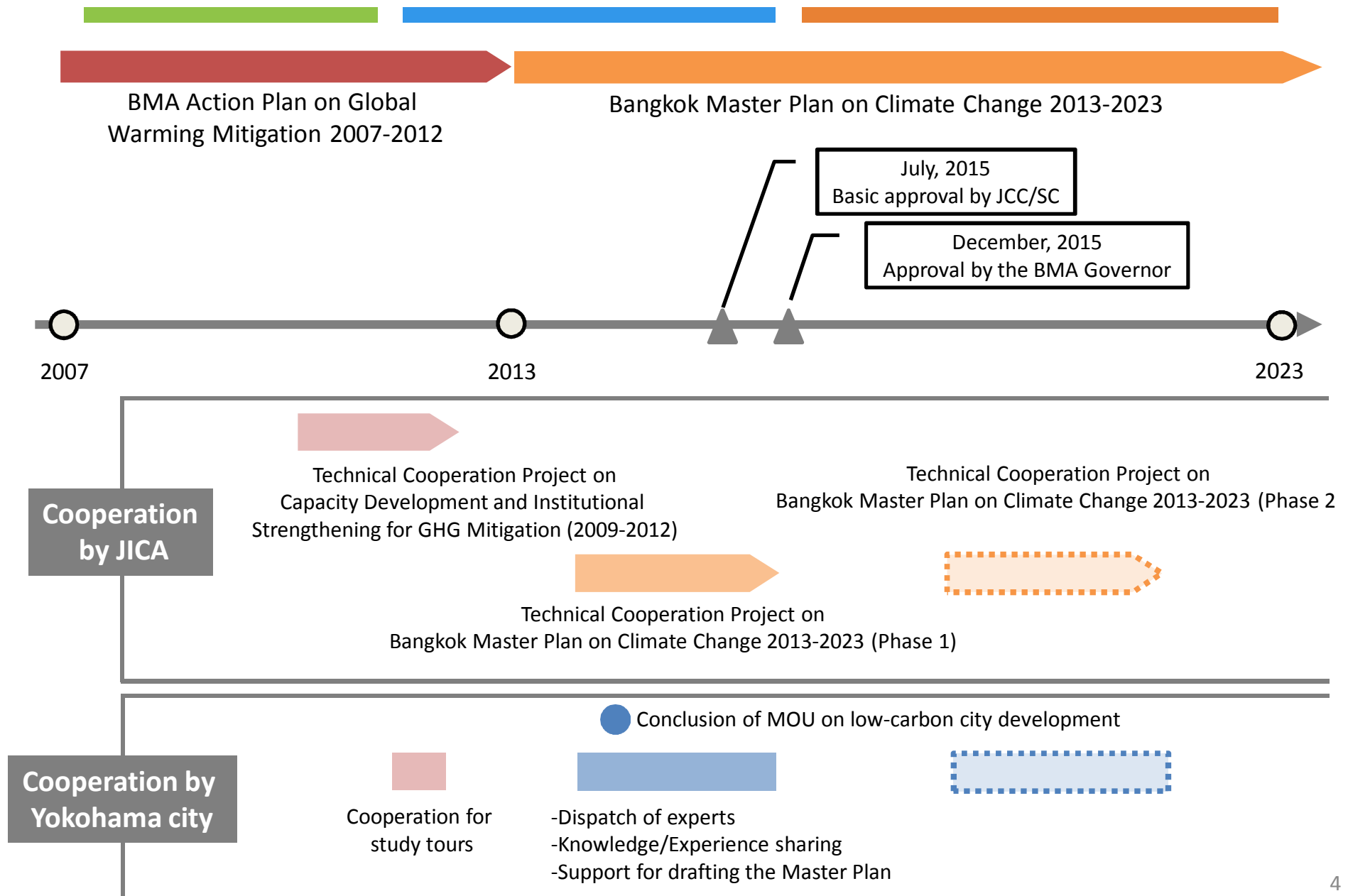


- ✓ For Bangkok, climate change has become a big and real challenge.



- ✓ At the same time, expanding economic and social activities in Bangkok has caused large emission of GHGs.

Climate policy in Bangkok and relevant JICA cooperation



JICA Technical Cooperation Project for BMA Master Plan on Climate Change 2013-2023

Objectives

- (1) Drafting a Bangkok Master Plan on Climate Change 2013-2023
- (2) Capacity development for the implementation of the Master Plan



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

December, 2015: Approval by the BMA Governor



1. Background
2. Basic Approaches to the Master Plan
3. Future Visions of Bangkok
4. Current and Future Mitigation
5. Mitigation Actions by Sector
6. Current and Future Adaptation
7. Adaptation Actions by Sector
8. Implementation of the Master Plan
9. Monitoring and Evaluation (M&E) and MRV
10. Capacity-building and outreach

Scope of the Master Plan

5 sectors:

- ✓ **Environmentally Sustainable Transport**
- ✓ **Energy Efficiency and Alternative Energy**
- ✓ **Efficiency solid waste management and wastewater treatment**
- ✓ **Green Urban Planning**
- ✓ **Adaptation Planning**

Transport



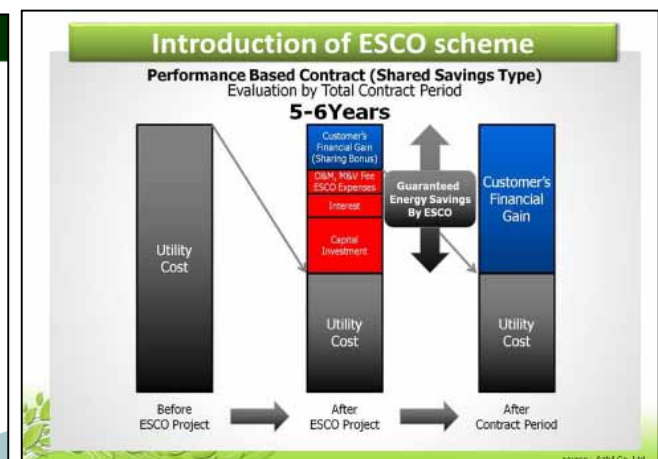
Development of bikeway

Waste management



Promotion of Waste separation

Energy efficiency



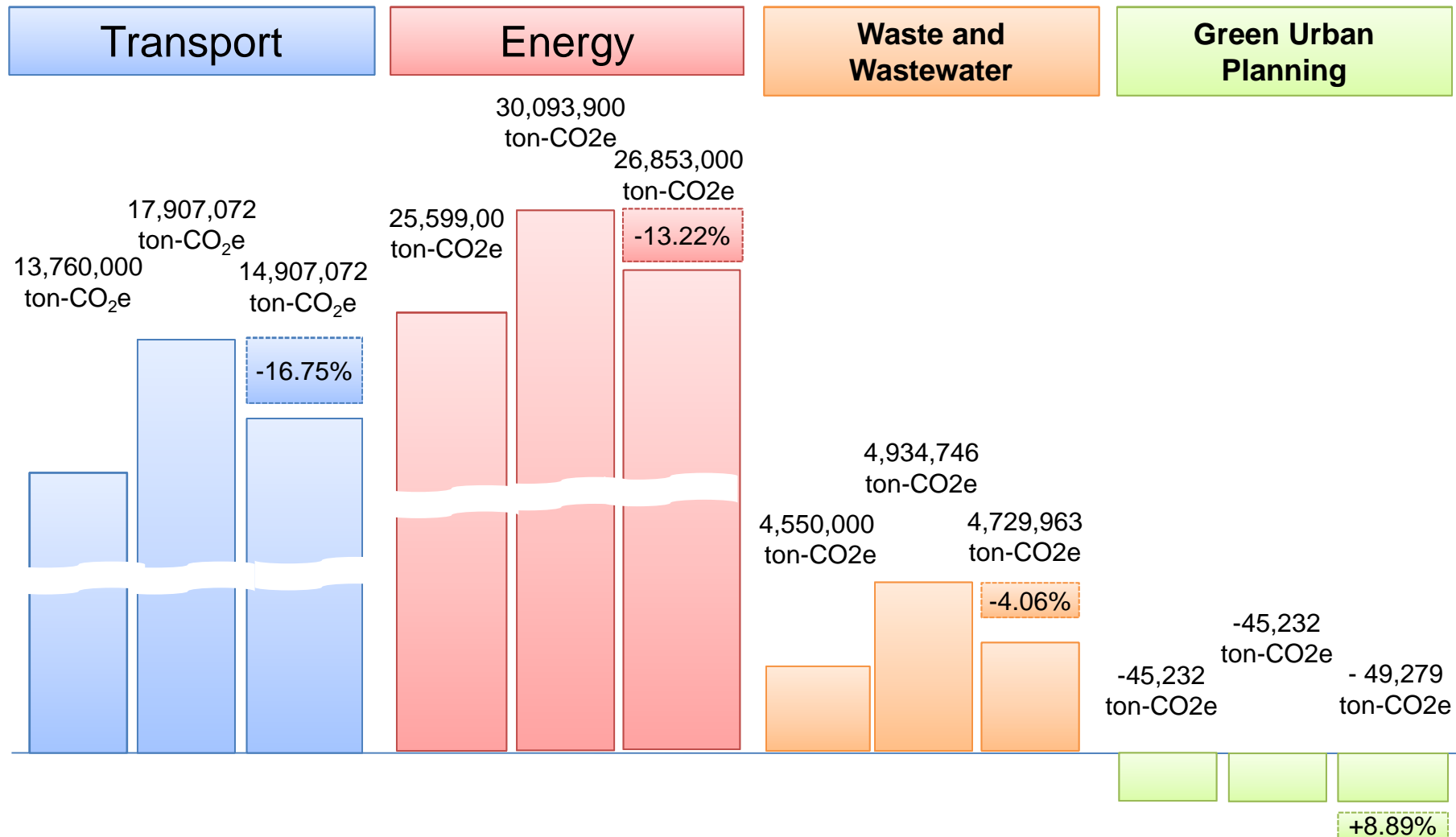
Promotion of ESCO business

An example of mitigation measure in energy sector

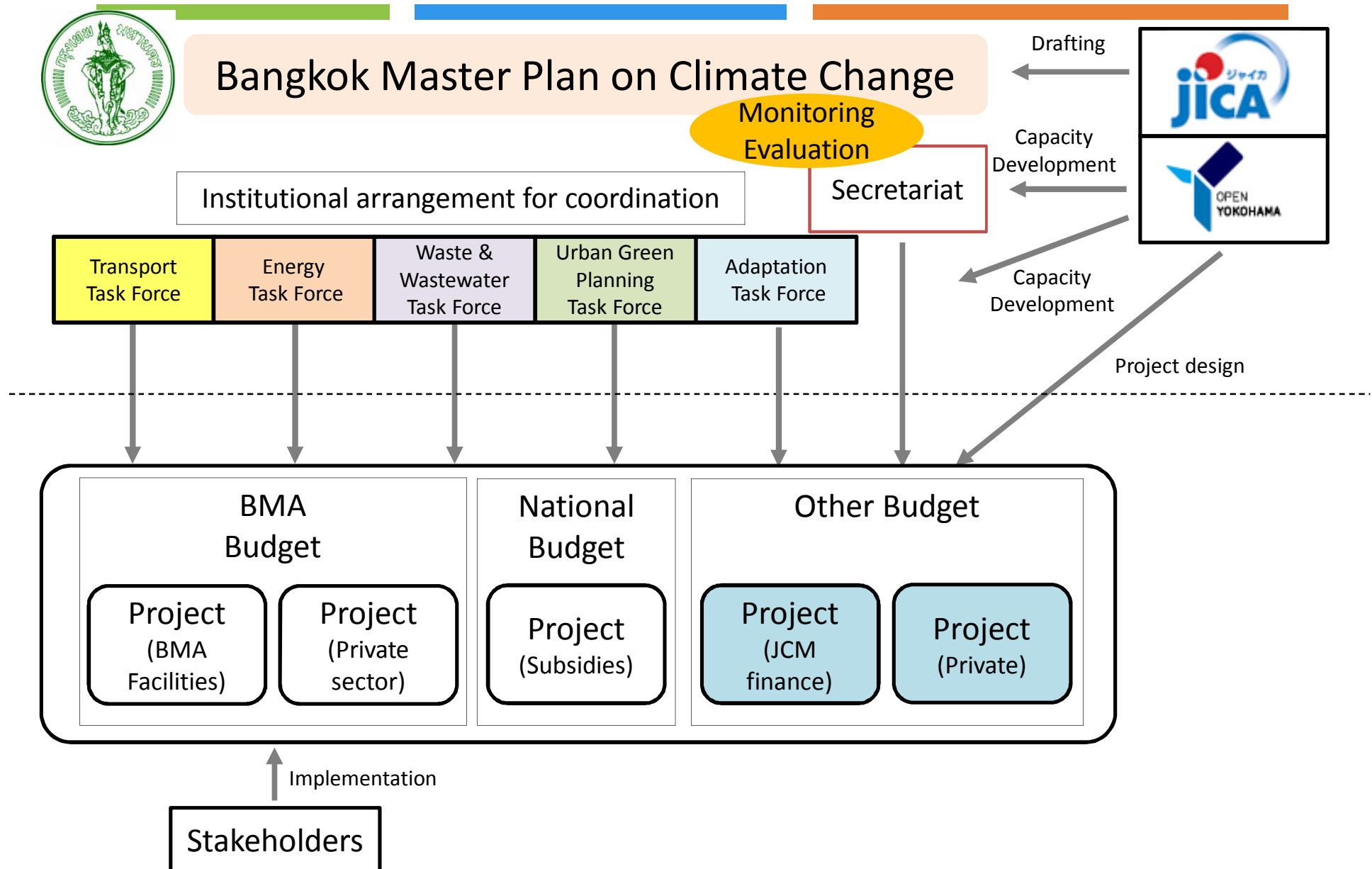
Title	"Promotion of ESCO business for existing buildings (Educate ESCO business, advertisement promotion support, subsidy system for energy saving diagnostic)"
Description	a. Promotion of ESCO business for existing buildings b. Educate ESCO business c. Advertisement promotion support d. Subsidy system for energy saving diagnostic e. Publicity of cost benefit f. Backup exhibition and provide advertising spaces at BMA facilities
BMA Responsibility	BMA: Support Other Organization: DEDE
Stakeholder	TCC
Plan	short term (2015-2013)
GHG Mitigation	Accumulate 10 years = 121.264 thousand CO2-eq/
Comment	ESCO fund program in Thailand started for more than five years

BAU emission and mitigation targets in 2020

2013 Emission | 2020 BAU | 2020 Target

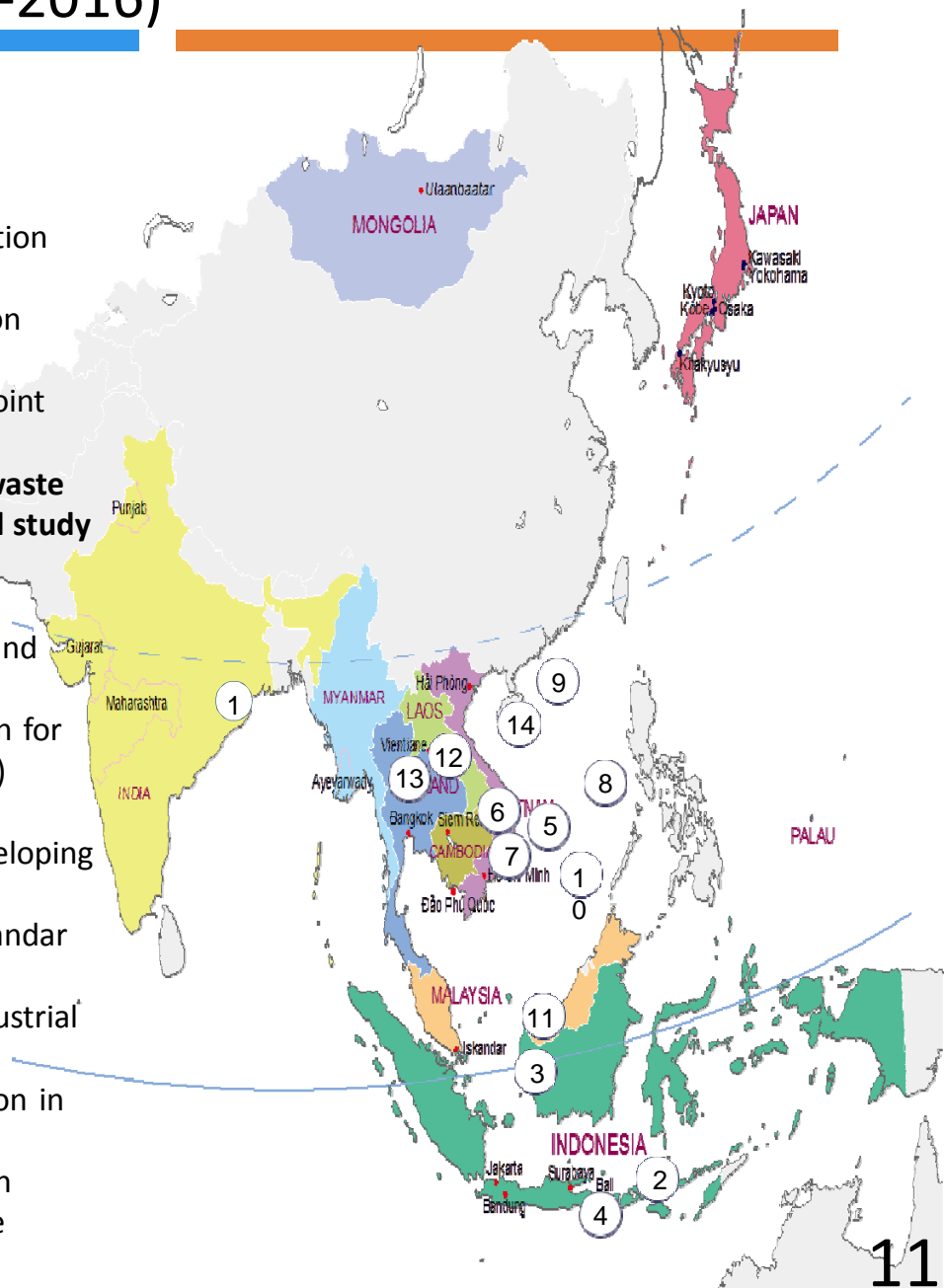


Towards implementation of Bangkok Master Plan



Feasibility studies for city to city collaboration project by MOEJ (2015-2016)

1. Promotion of low carbon city by properly developing material recycling systems in Bengaluru City(Bengaluru City)
2. Establishment of Base for Low-Carbon Project Expansion in Surabaya(Surabaya)
3. Project for Developing JCM projects under city-to-city collaboration between Yokohama city and Batam city(Batam)
4. Project for Low Carbon Society Development under Collaboration between Bandung City and City of Kawasaki(Bandung City)
5. Project for Developing Low-carbon Tourism Cities through the Joint Crediting Mechanism in Siem Reap (Siem Reap)
- 6. JCM projects development (energy efficiency, and waste and waste water) under the Bangkok Master Plan on Climate Change, and study on financial and other facilitation schemes for introducing low carbon technologies (Bangkok)**
7. Promotion of Decarbonizing of Municipal Waste Management and Ecological Industrial Town in Rayong Prefecture (Rayong Pref.)
8. JCM Feasibility Study in Da Nang through "Technical Cooperation for Sustainable Urban Development" with Yokohama City (Da Nang)
9. The whole city low carbonization in Hai Phong City (Hai Phong)
10. Ho Chi Minh City – Osaka City Cooperation Programme for Developing Low Carbon City(Ho Chi Minh)
11. Establishment of Base for Low-Carbon Project Expansion in Iskandar (Iskandar)
12. Study for building a sustainable low carbon city around the industrial zone in Patheingyi city, Ayeyarwady Division, Myanmar(Patheingyi)
13. JCM Project Formulation Study through City-to-City Collaboration in Yangon(Yangon)
14. Programme for the Establishment of Low-Carbon Historic City in Vientiane, based on City-to-City Cooperation between Vientiane Capital and Kyoto City(Vientiane Capital)



The diagram illustrates the JCM project development process, showing collaboration between Bangkok and Yokohama. At the top, a box states 'Collaboration with the component of the Bangkok Master Plan project (JICA)'. Below this, two main boxes represent the local governments: 'Local government: BMA' (orange) and 'Local government: Yokohama' (blue). Each box lists focal points and areas of interest. A central vertical arrow labeled 'Tech. transfer' connects the two local government boxes. To the right of the 'Tech. transfer' arrow is a box for 'OECC (Secretariat)'. Below the 'Tech. transfer' arrow, three horizontal arrows point from the right towards the 'JCM project development' box (a large rounded rectangle on the left). These arrows are labeled 'Support for MRV methodology', 'Proposal for JCM project', and 'JCM finance'. The 'Support for MRV methodology' and 'Proposal for JCM project' arrows originate from a box labeled 'Consulting comp etc.' (partially visible). The 'JCM finance' arrow originates from a box labeled 'Ministry of Environ' (partially visible). The 'JCM project development' box contains two bullet points: 'Introducing high efficient facilities in hospitals' and 'Developing projects in waste management facilities'.

Collaboration with the component of the Bangkok Master Plan project (JICA)

Local government: BMA

- Department of Environment (Focal point)
Transport/City Planning/Waste management, etc.

Local government: Yokohama

- International Affairs bureau (Focal point)
Global warming/Architecture, etc.

Companies in Thailand:

- Public corporations, Private companies
(ESCO, Renewable energy, Waste management, Water & Sewage, Transport, Low carbon city)

Companies in Japan:

- Companies in Yokohama, Y-PORT members
(ESCO, Renewable energy, Waste management, Water & Sewage, Transport, Low carbon city)

Tech. transfer

OECC (Secretariat)

Consulting comp etc.

Ministry of Environ

JCM project development

- Introducing high efficient facilities in hospitals
- Developing projects in waste management facilities

Support for MRV methodology

Proposal for JCM project

JCM finance

Scope of the FS in 2015-2016

Energy efficiency project development

Public sector

- ESCO project development in public hospitals
- Installation of energy efficient equipment at Bangkok port, etc.

Private sector

- Installation of PV power generation at commercial store/plant etc.
- Installation of energy efficient boiler at food plant, etc

Waste project development

Public sector

- Installation of large-scale incineration plant
- Installation of RDF plant
- (Improvement of Waste collection/segregation system)

Wastewater project development

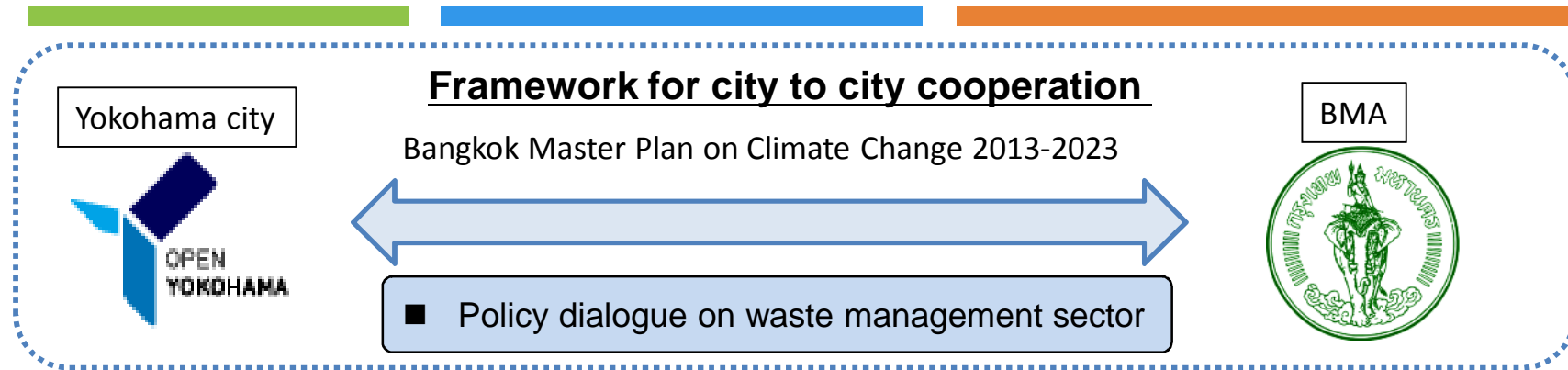
Public sector

- JCM project development at wastewater treatment plant
- JCM project development at community wastewater treatment plant

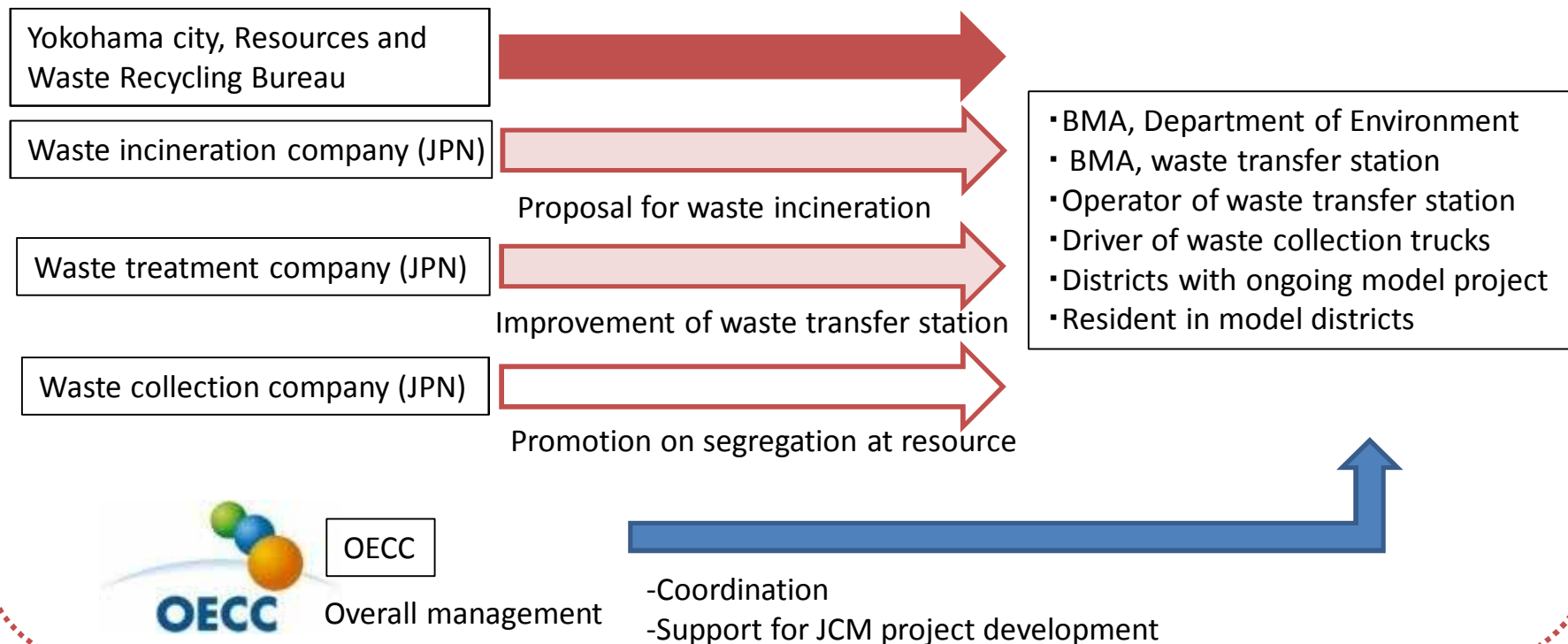
Activities for the survey

- Policy dialogues between BMA and Yokohama city
- Site visit and energy audit/technical consultation on potential project
- Match-making event in Bangkok
- Study tour in Japan

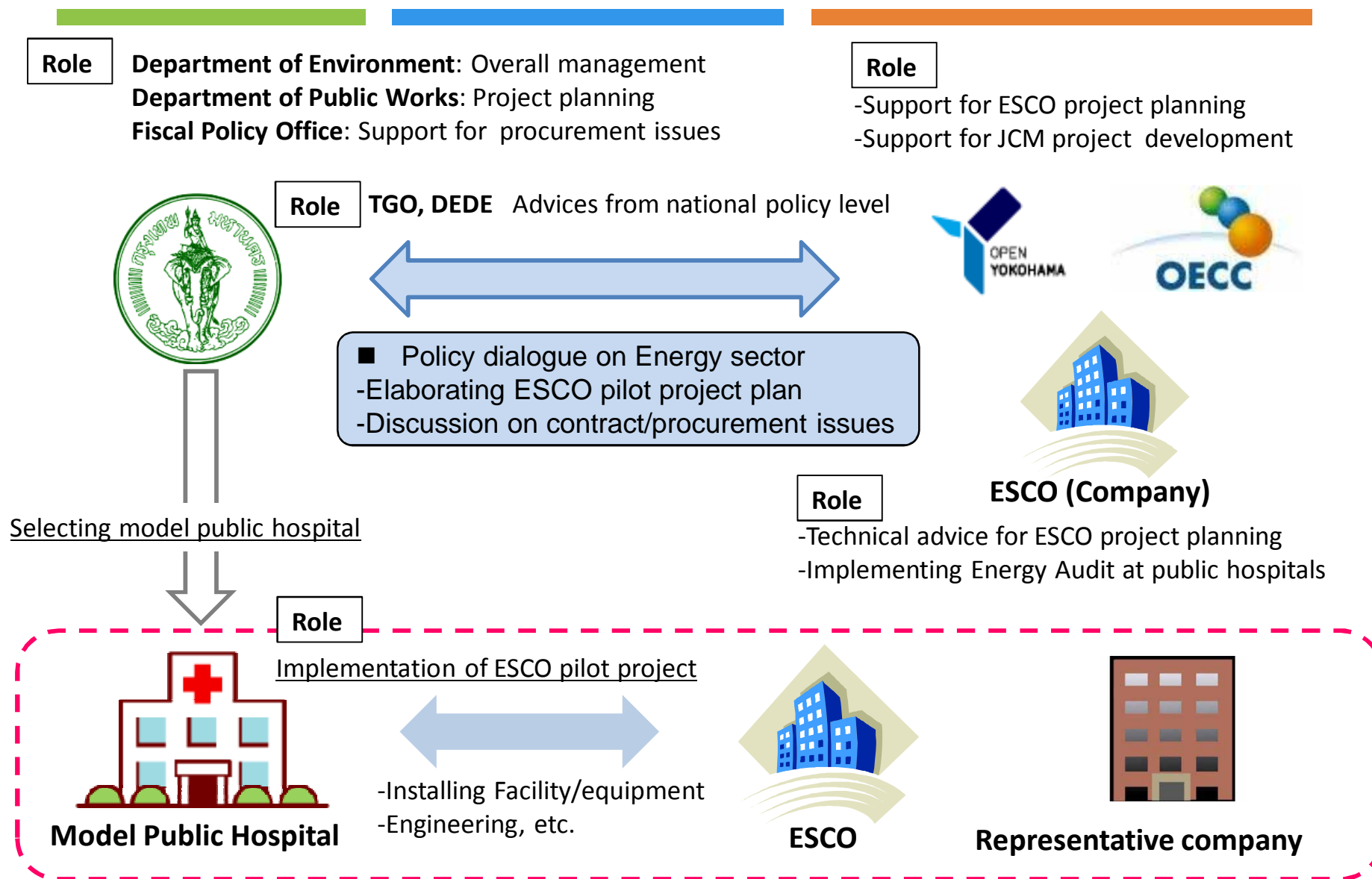
Structure and rolls for elaborating waste project with JCM scheme



Structure and rolls for elaborating waste management project



Structure and rolls for elaborating ESCO pilot project with JCM scheme



Case study: Project using JCM Financing Programme

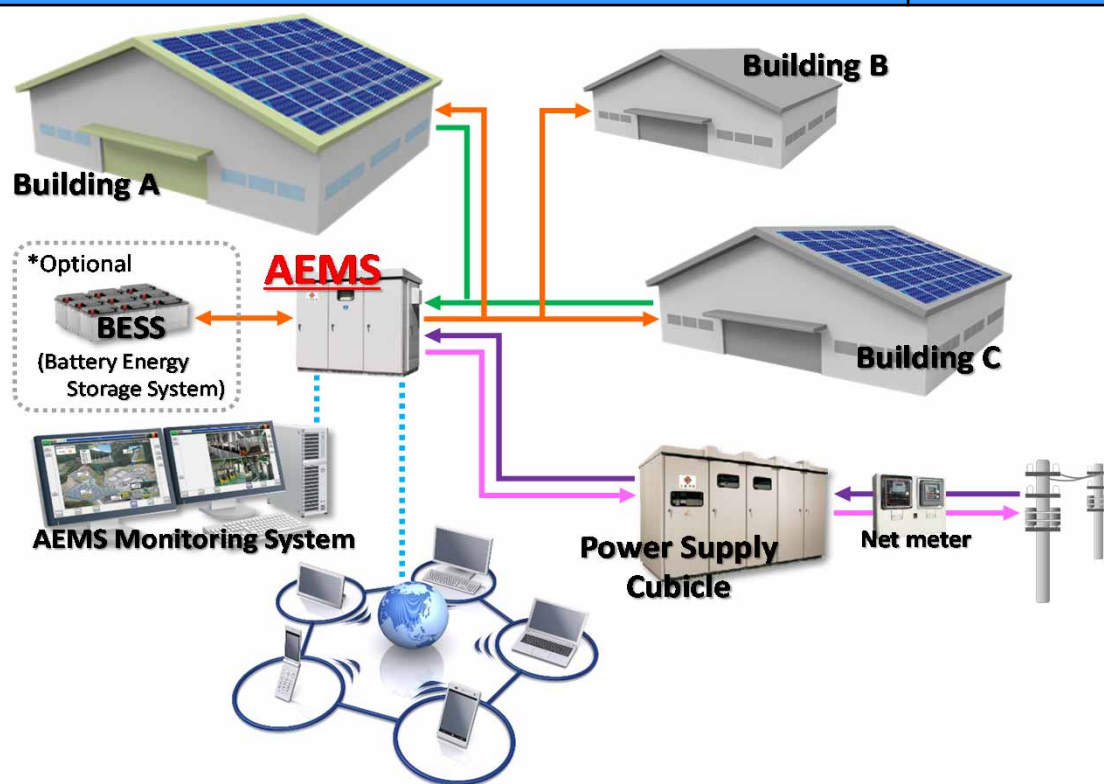
Introduction of 1.5MW Rooftop Solar Power System and Advanced EMS for Power Supply in Paint Factory

Project participants (Partner country)

Project participants (Japan)

TOA Paint CO., Ltd./ Prime Roof Top Co., Ltd.

FINETECH CO., Ltd.



Sectoral scope

Expected GHG reduction

Energy industries

1,344 t-CO2/Year



Thank you for your attention!