City-to-city Cooperation with JCM

Ho Chi Minh City & Osaka City

COP20 side event "How to develop Low Carbon City Climate Change Action Plan (CCAP) using Asia Pacific Integrated Model (AIM) and our next challenge" at the Japan Pavilion

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Global Environment Centre Foundation (GEC)

Note: "JCM" stands for "Joint Crediting Mechanism".

GEC

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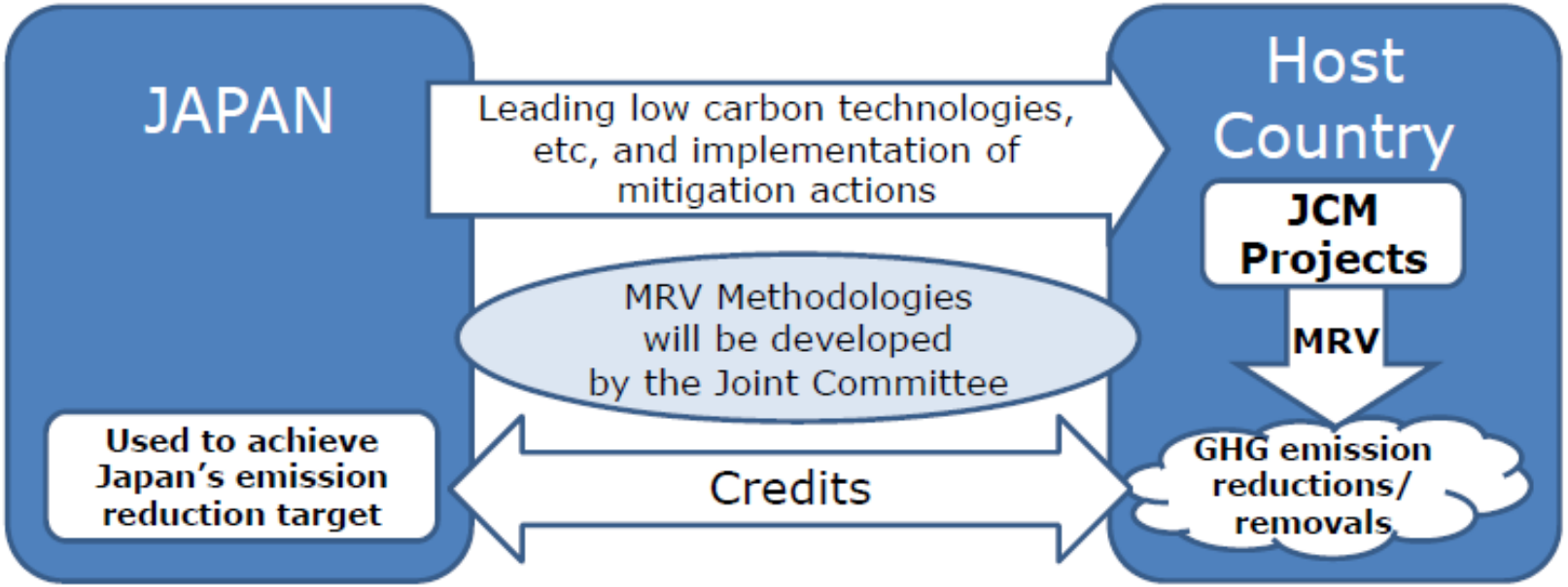
Basic Concept of the JCM

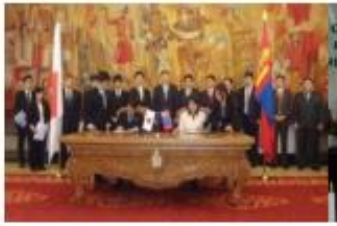
- Facilitating diffusion of leading low carbon technologies, products, systems, services, and infrastructure as well as implementation of mitigation actions, and contributing to sustainable development of developing countries.
- Appropriately evaluating contributions from Japan to GHG emission reductions or removals in a quantitative manner, by applying measurement, reporting and verification (MRV) methodologies, and use them to achieve Japan's emission reduction target.
- Contributing to the ultimate objective of the UNFCCC by facilitating global actions for GHG emission reductions or removals, complementing the CDM.



Source: P. 3, "Recent Development of The Joint Crediting Mechanism (JCM)" (October 2014), Government of Japan

Countries with which Japan has signed on bilateral documents

- Japan has held consultations for the JCM with developing countries since 2011 and signed the bilateral document for the JCM with Mongolia, Bangladesh, Ethiopia, Kenya, Maldives, Viet Nam, Lao PDR, Indonesia, Costa Rica, Palau, Cambodia and Mexico.



Mongolia
Jan. 8, 2013
（Ulaanbaatar）

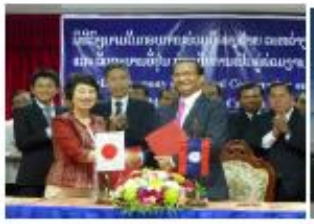
Bangladesh
Mar. 19, 2013
(Dhaka)

Ethiopia
May 27, 2013
(Addis Ababa)

Kenya
Jun. 12,2013
(Nairobi)

Maldives
Jun. 29, 2013
(Okinawa)

Viet Nam
Jul. 2, 2013
(Hanoi)



Lao PDR
Aug. 7, 2013
(Vientiane)

Indonesia
Aug. 26, 2013
(Jakarta)

Costa Rica
Dec. 9, 2013
(Tokyo)

Palau
Jan. 13, 2014
(Ngerulmud)

Cambodia
Apr. 11, 2014
(Phnom Penh)

Mexico
Jul. 25, 2014
(Mexico City)

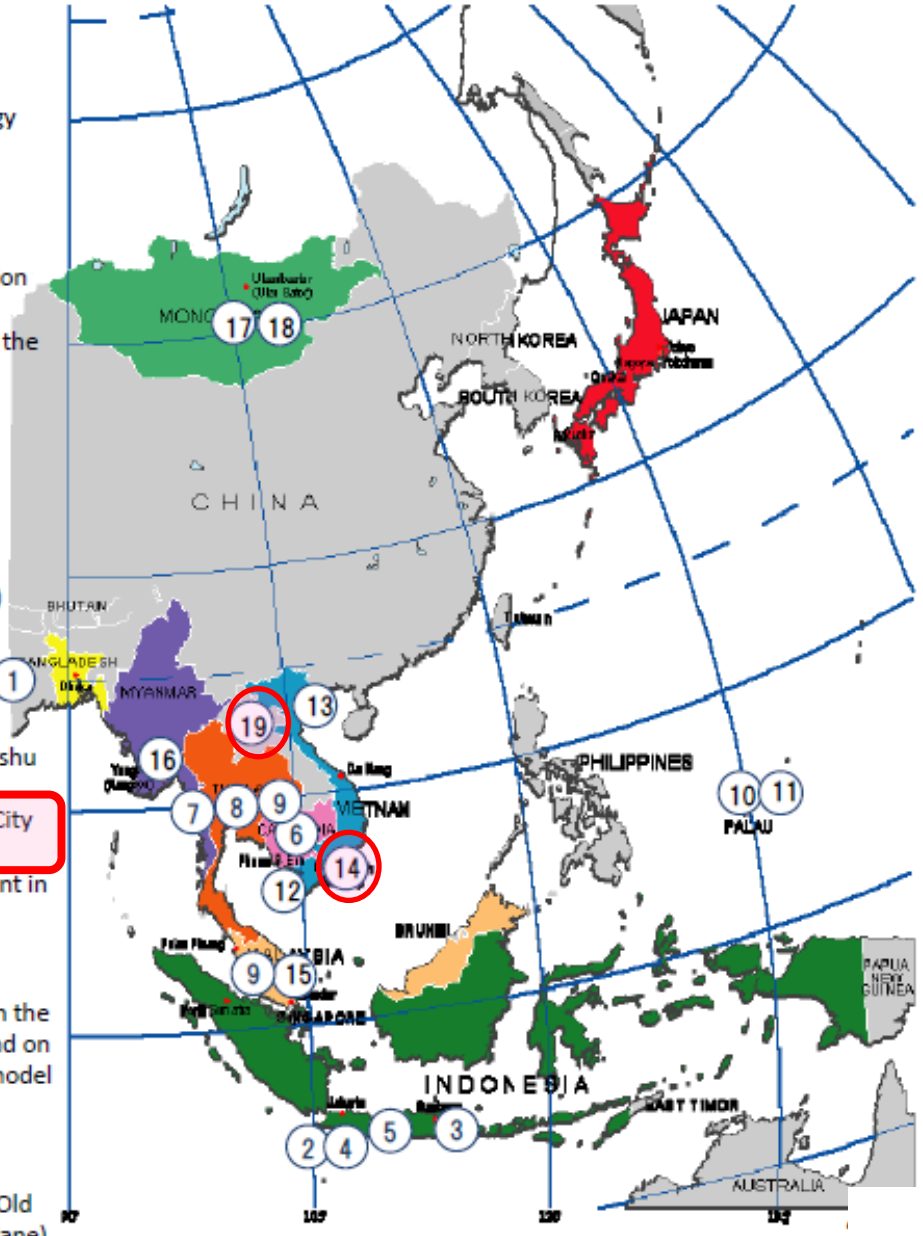
- Japan held Joint Committee meetings with Mongolia, Bangladesh, Ethiopia, Kenya, Maldives, Viet Nam, Lao PDR, Indonesia and Palau respectively.

Source: P. 11, “Recent Development of The Joint Crediting Mechanism (JCM)” (October 2014), Government of Japan

Large Scale JCM Feasibility Study in 2014 by MOEJ

Selected Studies

1. The feasibility study to promote Low Carbon Technology application in India(Gujarat , Maharashtra ,Pumjab)
2. Feasibility study on financing scheme development project for promoting energy efficiency equipment installation in Indonesia(Jakarta, Bali etc.)
3. Low Carbon City Planning Project in Surabaya, Indonesia(Surabaya City)
4. Feasibility Study on Eco-Lease Scheme for Low Carbon Vehicle towards Joint Crediting Mechanism Projects Expansion (Indonesia National Level)
5. Collaboration on Project for Developing a Low Carbon Society under collaboration between Bandung city and Kawasaki cityin Bandung, Indonesia(Bandung)
6. Study for Developing Environmentally and Culturally Sustainable Cities through the Joint Crediting Mechanism in Siem Reap(Angkor Park and Siem Reap city)
7. Study on the Accelerating Implementation of Bangkok Master Plan on Climate Change through the JCM(Bangkok)
8. Introduction of a recycling system for cars and parts in Thailand(Bangkok)
9. Strategic Promotion of Recovery and Destruction of Fluorocarbons (Bangkok/Johor Bahru)
10. Demonstration Project on Installing an Evacuation Shelter with Renewable Energy as a "Low-Carbon/Resilient Model for Small Island Countries"(Palau etc.)
11. Feasibility study on comprehensive resource circulation system for low carbon society in Republic of Palau(Palau)
12. The feasibility study toward eco-island in cooperation between Kien Giang Province and Kobe City(Kien Giang Province)
13. Hai Phong Green Growth Action Plan Development in Association with Kitakyushu City (Hai Phong City)
14. Ho Chi Minh City – Osaka City Cooperation Project for Developing Low Carbon City (Ho Chi Minh City)
15. Feasibility Study on a Large-Scale GHG Emissions-Reduction Project Development in the Iskandar Development Region, Malaysia(Iskandar Development Region)
16. Feasibility Study on Rice Husk Power Generation System for Low-carbon Communities in Ayeyarwady Region, Myanmar(Ayeyarwady)
17. Study for the development of JCM projects for comprehensive improvements in the power generation, transmission and distribution systems in Ulaanbaatar City and on the possibility of nationwide horizontal application of the same improvement model in Mongolia(Ulaanbaatar)
18. Feasibility study on a programme-type finance scheme for the JCM in Mongolia(Ulaanbaatar)
19. JCM Feasibility Studies of GHG Mitigation Projects Contributing to Low Carbon Old Capital based on City-to-City Cooperation between Vientiane and Kyoto("Vientiane)



Source: P. 42, "Recent Development of The Joint Crediting Mechanism (JCM)" (October 2014), Government of Japan

"Ho Chi Minh City – Osaka City Cooperation Project for Developing Low Carbon City"

Ho Chi Minh City – Osaka City Cooperation Project for Developing Low Carbon City

Ho Chi Minh City (HCMC), Viet Nam

- HCMC is the biggest city in terms of population and economy in Viet Nam.
- HCMC faces environmental problems including GHG increase due to its rapid urbanization and economic growth.

Supports from MOEJ

- July 2013: Signed MOU on JCM between Viet Nam and Japan
- 2013- : Adopted this project as one of Large-scale JCM FS

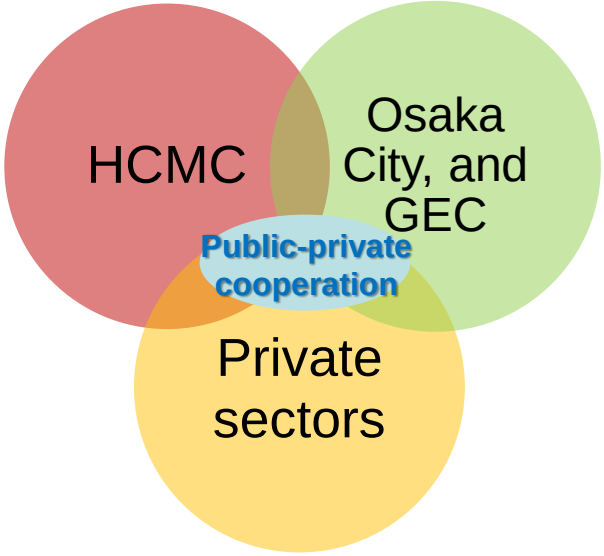
Supports from Osaka City

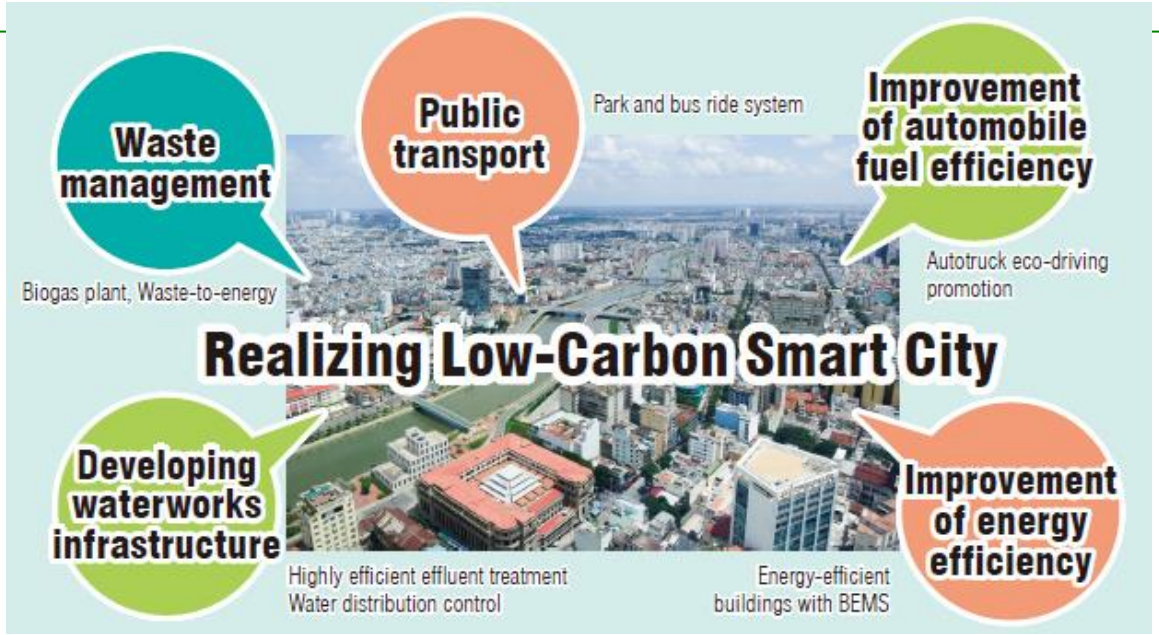
22 October 2013: HCMC PC Chairman and Osaka City Mayor signed MoU on developing low-carbon city.

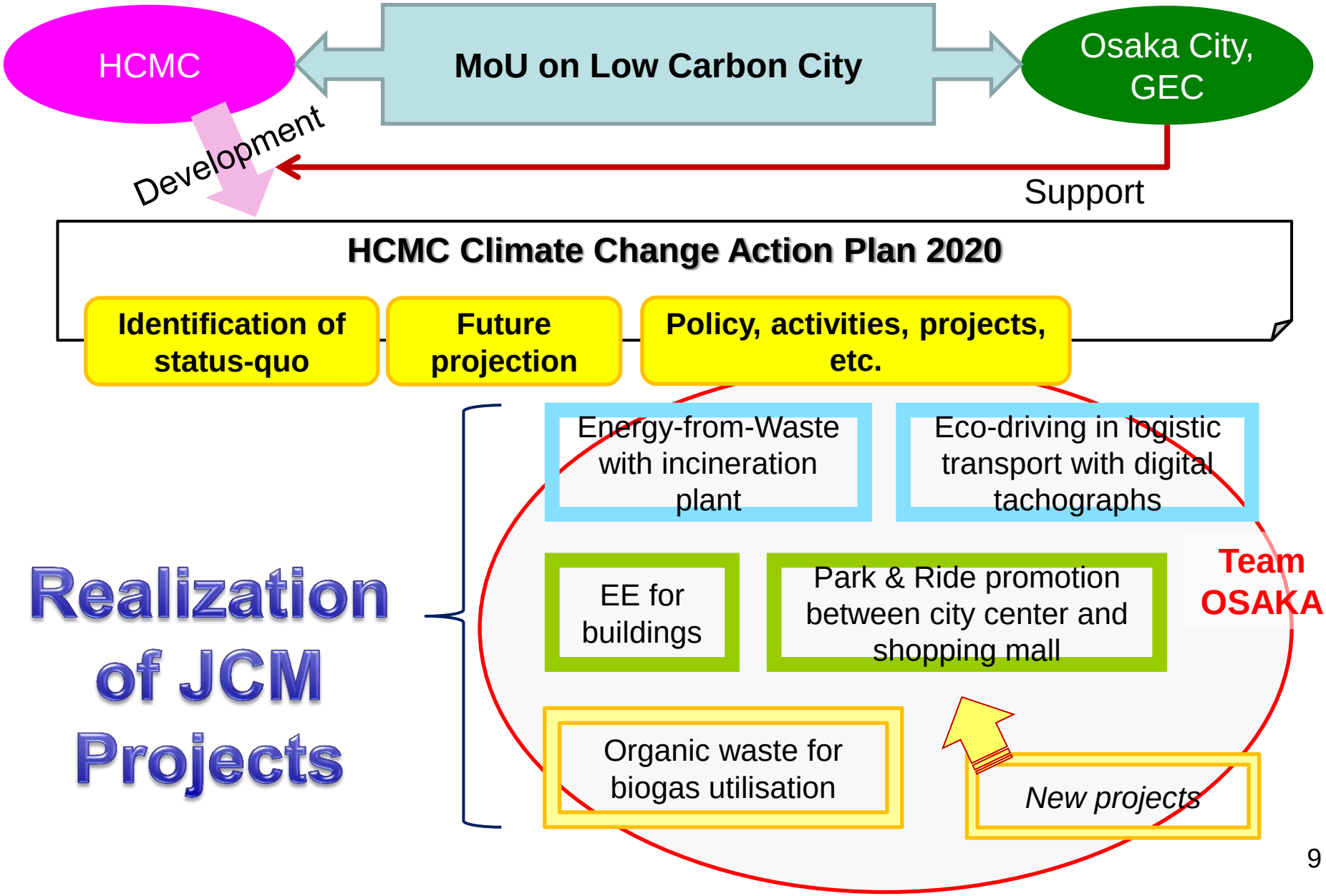
Toward the development of Low-Carbon Mega-City in HCMC, through the implementation of the MoU

Objectives of Project

- To provide environmental technologies and administrative operation of Japan and Osaka City as a package, to support “low-carbon city in HCMC”
- To establish low-carbon city’s administrative institutions (including the development and implementation of climate change action plan and human resources capacity development), to maintain a core of long-term efforts
- To explore fund sources: JCM support initiative will be one of promising financial mechanisms to realize the transfer of low-carbon/environmental technologies to HCMC






HCMC
MoU on Low Carbon City
Osaka City, GEC
Development
Support
HCMC Climate Change Action Plan 2020
Identification of status-quo
Future projection
Policy, activities, projects, etc.
Realization of JCM Projects
Energy-from-Waste with incineration plant
Eco-driving in logistic transport with digital tachographs
EE for buildings
Park & Ride promotion between city center and shopping mall
Team OSAKA
Organic waste for biogas utilisation
New projects

JCM Projects developed by “Team OSAKA”

2 JCM model projects based on last year’s feasibility studies (FS)

* JCM model projects: MOEJ provides financial support to initial investment cost (up to 50%)

➔ **Japanese low-carbon technologies are introduced in HCMC.**

1. Anaerobic digestion of organic waste for biogas

Japanese implementer: Hitachi Zosen

EPC: 2014-2016

Emission reductions:

3,355tCO2/yr

2. Eco-driving with the use of digital tachographs

Japanese implementer: Nippon Express

Emission reductions: 315tCO2/yr

(note: Sum of HCMC and Hanoi projects)

Next JCM projects of “Team OSAKA”

- Implementing FS for next JCM model projects
- Finding new project candidates

FS: Integrated energy efficiency improvement at buildings

Japanese implementer: Shimizu Corporation

FS: Promotion of modal shift to public transport (route bus) through park & ride system with shopping mall parking lots

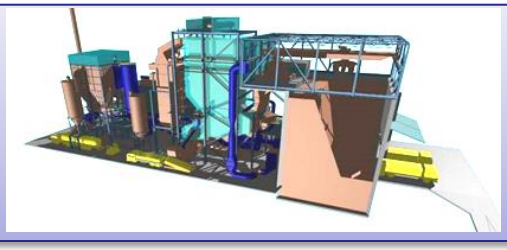
Japanese implementer:

Nikken Sekkei Research Institute

Project Planning Study:

Introduction of Energy-from-Waste Project

Japanese implementer: Hitachi Zosen



Conclusion

- The **JCM** is one promising mechanism to promote low-carbon technology transfer to developing countries.
- City-to-city cooperation with public-private cooperation accelerates the low-carbon technology transfer to developing countries.
  ← Showcases from HCMC & Osaka
- Further diffusion (city-wide, and then nation-wide) of JCM projects and low-carbon environmental technology transfer is expected, through city-to-city cooperation.

Thank you for your attention!

Global Environment Centre Foundation (GEC)
Secretariat of city-to-city cooperation programmes
(HCMC-Osaka)

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