ISAP2013 PL-7: Potential of City-to-City Cooperation for Low-Carbon Development in Asia: A case of cooperation between Surabaya City and Kitakyushu City

Project on Low-Carbon and Environmentally Sustainable City Planning in Surabaya, Indonesia

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Project on Low-Carbon and ESC Planning in Surabaya

Objectives of the Project

- Assist Surabaya City in developing **low-carbon and environmentally sustainable city plans** in energy, transport, waste and water sectors
- **Identification of projects** which can reduce CO2 emissions (save energy and cost) in a short term
- **Identification of projects** which can reduce CO2 emissions and bring about multiple social, economical and environmental benefits in a long run
- Support development of **a data management system** to measure CO2 emission reductions and establish a CO2 measurement methodology

Inception Meeting in Surabaya on July 10th

Centre, Ir. Tri Rismaharini, MT., Hon. Mayor of Surabaya City

Project on Low-Carbon and ESC Planning in Surabaya

Japan-side

City of Kitakyushu

Project Management

IGES

Kitakyushu Asian Center for Low Carbon Society

Green Sister City (Nov. 2012)

Indonesia-side (counterpart)

City of Surabaya

Development Planning Agency（BAPPEKO）

Cooperation Div.

Energy sector

NTT DATA Institute of Management Consulting Inc.	FS for energy saving and dispersed power system	Local companies, city hall, universities, hospitals, shopping malls, data centres etc.
Cooperation: Fuji Electric Co., Ltd., Nippon Steel & Sumikin Engineering Co., Ltd.	Cogeneration technology	PT SIER, local companies, National Electricity Company (PLN)
Cooperation: Japan NUS Co., Ltd.		National Highway Corporation (PERSERO)

Solid waste sector

IGES		
Cooperation: **Nishihara Corp. and NTT DATA Institute of Management Consulting Inc.**	Waste sorting, recycling, composting	Dept. of Cleanliness and Landscaping (DKP), Environment Dept. (BLH)
Hitachi Zosen Corp.	FS for incineration	Ministry of Energy and Mineral Resources, Ministry of Public Work, Ministry of Environment
Amita Corp.	Waste to energy for industrial waste	Local company, cement company

Transportation sector

Public transportation, Improvement of traffic system for waste collection vehicles, low emission vehicles

ALMEC VPI Corp.		Transportation Section, Taxi company, DKP

Water resource sector

Matsuo Sekkei Corp., City of Kitakyushu, Kitakyushu City Waster and Sewer Bureau	Energy saving at water and sewage plant	PDAM, Keputih sludge treatment plant, Industrial Estate Company (PT SIER)
	Distributed sewage treatment	
Cooperation: TOTO Ltd.	Introducing water-saving equipment	Community, Hotels, etc.

Project on Low-Carbon and ESC Planning in Surabaya

Targeted sectors and expected GHG emissions reduction

Energy sector

- Co-generation system at SIER Industrial Park **38,000t-CO2/year**
- Energy saving in buildings **10,000t-CO2/year**
- LED highway lights **630t-CO2/year**

Solid waste sector

- Solid waste sorting and recycling **21,000 t-CO2/year**
- Waste-to-energy project **8,000 t-CO2/year**
- industrial waste Incineration at cement kilns **12,000 t-CO2/year**

Total reduction: 130,000t-CO2/year

Transportation sector

- Fuel switch for vehicles (public buses, public vehicles, taxis) **26,000t-CO2/year**
- Waste hauling vehicles replaced with low-emission vehicles and operation management improvement **3,000t-CO2/year**

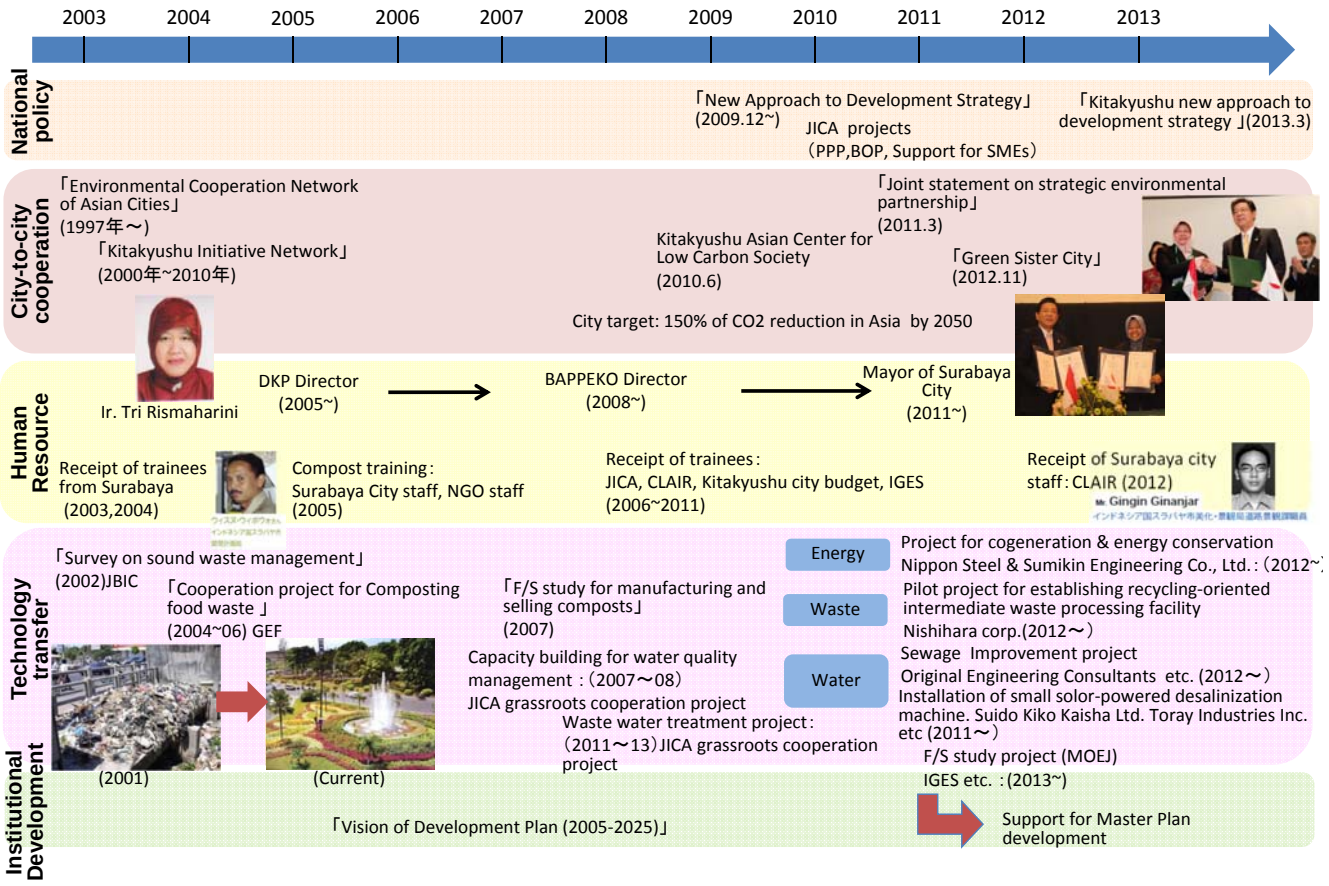
Water resource sector

- Energy saving at water purification plants and pumping stations **3,200～4,200 t-CO2/year**
- Water supply leakage reduction **3,800～7,700 t-CO2/year**
- Sewage treatment in SIER and Keputih sludge treatment plant **60 t-CO2/year**

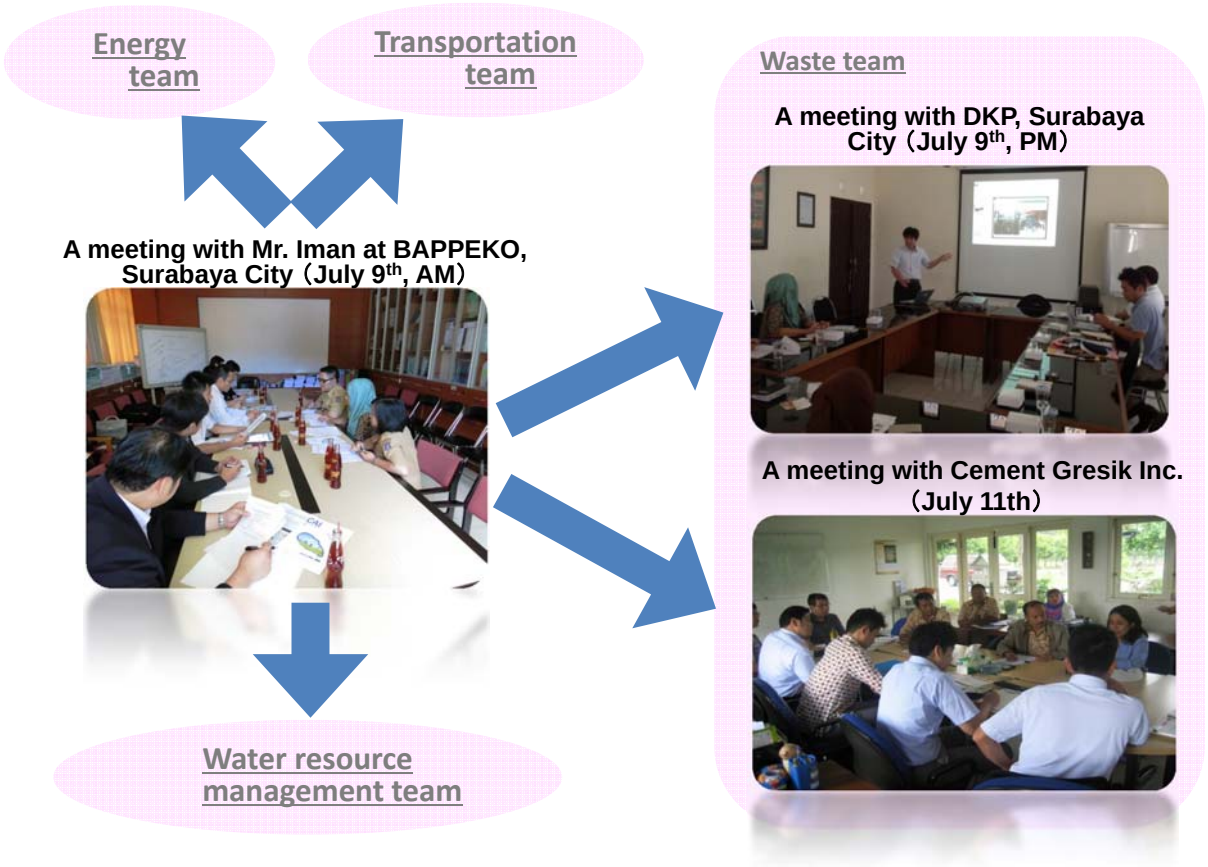
Work Plan and Upcoming Events

June 26	**Kick-off Meeting in Kitakyushu**
June 17 - July 5	JICA NAMA/MRV Capacity Development Training in Kitakyushu (2 officials from BAPPEKO Surabaya attended)
July 8 - 12	1st Field Survey, July 10 (Wed): **Inception Meeting**
July 23 - 24	International Forum for Sustainable Asia and the Pacific (ISAP) 2013, Yokohama (4 officials from Surabaya City attend)
Sep. 2 - 6	2nd Field Survey, progress report
Sep. 26 - 27	ASEAN + 3 Environment Ministers Meeting and East Asia Summit Environment Ministers Meeting in Surabaya
Oct. 18 - 21	Kitakyushu City 50th Year Anniversary, co-jointly organized with International Forum on Future City and OECD Green City Forum (Surabaya to be invited)
Oct. 21 - 25	3rd Smart City Week, Yokohama Oct. 22 - 24: Low-Carbon and ESC Planning Sessions (Surabaya to be invited)
Nov. 18 - 22	3rd Field Survey, Project Meeting (**Interim Meeting**)
Jan. 27 - 31	4th Field Survey, **Project Outputs Seminar**
Feb. or Mar.	International Seminar on Low-Carbon and ESC Planning in Japan 5th High Level Seminar on ESC? (5th Regional 3R Forum in Asia, in Surabaya ?)

Transition of city-to-city cooperation between Surabaya city and Kitakyushu City



Access to counterparts based on the city-to-city cooperation



Project on Low-Carbon and ESC Planning in Surabaya

Main messages of today's session

Potential of City-to-City Cooperation for Low-Carbon Development in Asia

Through utilizing a city-to-city cooperation framework, benefits are:

- Private companies can promote their low-carbon technologies and systems directly to relevant departments in the targeted city;
- Which can be supplemented by capacity building support for formulating regulatory framework and improving the management system;
- Cross-ministerial cooperation is possible; and
- Follow-up after closing of a project is expected.