

## POTENTIAL OF CITY-TO-CITY COOPERATION FOR LOW-CARBON DEVELOPMENT IN ASIA: A CASE OF THE COOPERATION BETWEEN SURABAYA CITY AND KITAKYUSHU CITY

### Objectives

With rapid urbanisation throughout the Asian region many local governments are struggling to maintain the environment and create opportunities for all in line with the three pillars of sustainable development. In recent years, city-to-city cooperation has been an effective way of improving the environment through technology transfer and capacity building, with the long standing cooperation between Surabaya, Indonesia and Kitakyushu, Japan being one of the pre-eminent examples within the region. This has led to Surabaya being selected as one of the flagship cities for a feasibility study for the Joint Crediting Mechanism project (JCM) which will help green Surabaya's economy by reducing GHG emissions across Surabaya through cooperation between the Indonesian and Japanese national and local governments as well as the private sector. It is envisioned that the project will not only introduce environmentally-friendly technology and lower emissions but will also boost employment, establishing clear co-benefits and a strong benchmark for similar projects across the region.

This session introduced a city-to-city cooperation model between Surabaya City, Indonesia and Kitakyushu City for low-carbon development in order to use the Joint Crediting Mechanism (JCM) promoted by the Government of Japan. This session intended to share practical measures and policies for reducing GHG emissions in various sectors, including energy, transportation, solid waste, and water supply and wastewater management, at a city level. In addition, the session discussed the constraints and challenges to transfer low-carbon technologies and systems from Japan to other Asian cities in terms of legal, institutional and technical aspects, as well as the advantages of a city-to-city cooperation arrangement to address them.

### List of Speakers

#### [ Moderators ]

**Toshizo Maeda**, Leader / Principal Policy Researcher, Sustainable Cities Area, Kitakyushu Urban Centre, IGES

**Shiko Hayashi**, Programme Manager, Kitakyushu Urban Centre, IGES

#### [ Speakers ]

**Kotaro Kawamata**, Director, Office of International Cooperation, Global Environment Bureau, Ministry of the Environment, Japan

**M. Taswin, SE, MM**, Mayor's Assistant, Surabaya City

**Kengo Ishida**, Executive Director, Kitakyushu Asian Center for Low Carbon Society, Environment Bureau, City of Kitakyushu

**Motoshi Muraoka**, Partner, Senior Executive Manager, Socio & Eco Strategic Consulting Sector, NTT Data Institute of Management Consulting, Inc.

**Yasuhiro Nishihara**, Senior Managing Director, Nishihara Corporation

### Key Messages

- Private sector can capitalise on the framework provided by established city to city co-operation – the long-standing relationship between Kitakyushu and Surabaya has meant that this project could go straight to the heart of the industrial complex.
- Technological transfer should not be the sole focus, but also organisation improvement through capacity building is vital for sustainable change.
- Cross-ministerial support is key – both Surabaya and Kitakyushu has been able to leverage support from a variety of ministries.
- Long-term co-operation can ensure that although projects will end, new projects and opportunities can be pursued due to long standing relationships built on mutual trust and understanding.

### Summary of the Session

Alongside Ho Chi Minh City, Viet Nam and Iskandar, Malaysia, Surabaya City is one of the three flagship cities of the JCM project which will conduct 17 feasibility studies in 12 cities during this fiscal year. Upon the successful completion of the feasibility study, Japan will provide substantial funds for comprehensive support in order to realise low-carbon city development through cooperation between the Indonesian and Japanese private sector and local and national governments.

NTT Data Institute of Management Consulting Inc. aims to assess the possibility of co-generation and energy conservation through the picking of low-hanging fruits of large energy consumers in buildings, industrial estates and lighting. Generating electricity through the use of waste steam and heat will also be pursued. As the commercial and industrial sectors jointly contribute to more than 50% of GHG emissions in Surabaya it should be possible to achieve large reductions.

Nishihara Corporation has established a pilot waste management project through the creation of a model waste depot which introduced modern waste management techniques by formalising the role of the waste pickers, introducing a conveyor belt for more efficient waste separation and decreasing transportation costs and emissions through re-organising collection arrangements. By introducing these more efficient waste separation and transportation technologies, Nishihara will be able to both create employment and commercial opportunities as well as reducing associated GHG emissions.

Surabaya City aims to create a green city through concentrating on five sectors – green open spaces, transportation, solid waste and wastewater, energy and food security. Green spaces are being increased through the establishment of parks and conservation areas, green rooftop projects and the greening of roadsides; transportation is being improved through car free days, emissions tests and development of mass transport; solid waste and waste water management has been tackled through community based solutions with technical assistance from Japan; energy policies are focusing on both usage reductions and renewables; food security is being improved through support for urban farming. During its 10 year cooperation with Japan, Surabaya has managed to leverage Japanese technology through the commitment of the local people and government to create effective partnerships for change.

Kitakyushu City has been involved with Surabaya City for 10 years, a relationship which has culminated in the establishment of a Green Sister City agreement in November 2012. Kitakyushu City is not simply interested in exports and technology transfer but aims to establish a Low Carbon City development model. The city is well-supported by its citizenry in these efforts and has also managed to leverage substantial support from the national governments.