

City-to-City Cooperation: Community-based Composting Project in Indonesian Cities



A community in Balikpapan presenting their compost products

Since the 1980's, Kitakyushu City has been actively promoting international cooperation through a number of activities from cultural learning, promotion of peace through international exchange, sharing of research information, gender empowerment to promotion of sustainable development and environmental protection. A number of organizations to support international cooperation have been established under the city government that have conducted intensive trainings and dispatched experts to promote these activities abroad.

The Kitakyushu International Techno-cooperative Association (KITA), one of the organizations established to promote the

transfer of industrial technology in Kitakyushu overseas, has been carrying out technical cooperation in many Asian cities. One of its many projects is in the area of solid waste management (SWM) by applying "low-cost and low-tech" composting method to reduce the overall waste generation in Surabaya City, Indonesia. The joint efforts of the two cities

reached an outstanding achievement of 10% reduction in the overall waste generation in the span of three years.

Considering this important achievement, the Kitakyushu City government in partnership with the Institute for Global Environmental Strategies (IGES) presented a National Waste Management Program proposal to the National Development Plan Bureau (BAPPENAS), Bureau of Public Works (PU), and the Ministry of Environment (KLH) of Indonesia in October 2008. The proposal includes the application of the composting practice in Surabaya City to all Indonesian cities by starting with five cities namely Makassar, Central Jakarta, Palembang, Balikpapan and Tarakan.

An individual action plan for the composting project implementation was prepared by each participating cities together with Kitakyushu City, IGES, KITA with the support from the Japan International Cooperation Agency (JICA). The composting project will officially start in April 2010.



Kitakyushu City team in Tarakan City.



Initial discussion with Honourable Palembang City Mayor H. Eddy Santana Putra, MT and Palembang City officials for the proposed composting project.

KI Secretariat in Action!

Date	Activities
September 2009	Evaluation of environmental commitment in selected cities in Philippines.
October 2009	Evaluation of environmental commitment in Bangkok and Nonthaburi Municipality, Thailand and Kathmandu City, Nepal
November 2009	Organic waste composting training in Surabaya City, Indonesia
December 2009	Organic waste compost training in Sibu Municipality and Kuala Lumpur City, Malaysia
February 2010	The 5th Kitakyushu Initiative Network Meeting (KIN-5)

The Kitakyushu Initiative for a Clean Environment, a programme of the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), was adopted at the 4th Ministerial Conference on Environment and Development in Asia and the Pacific in 2000. The Kitakyushu Initiative has mandated to achieve measurable progress in improvement of the environment in Cities in the Asia-Pacific region and focuses on the sharing of experiences to improve the urban environment.



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Your gateway to a clean environment

Bridging the Gap Between Solid Waste Management Policy and Local Action



Speakers during the panel discussion on development of sanitary landfills.

Like many cities in Asia and the Pacific region, city and municipality governments or the local government units (LGUs) in the Philippines play a key role in solid waste management (SWM). The Republic Act 9003 of 2000 (RA 9003) otherwise known as the Ecological SWM Act of the Philippines provides the basic policy framework on SWM that highlights the pivotal and the institutional role that LGUs play in the whole life cycle of SWM. However, despite a good number of intention and some efforts, the implementation of RA 9003 still remains a challenge to many LGUs in the Philippines as they are bounded with limited technical, financial and administrative capacity.

Understanding the need for strategic solutions and innovative approaches to help LGUs in the Philippines implement RA 9003, the Kitakyushu Initiative for a Clean Environment (KI) in cooperation with the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), the Provincial Government of Negros Occidental and the City Government of Bago organized a

two-day conference in Negros Occidental Province, Philippines on 28 and 29 May 2009 entitled "National Conference on Solid Waste Management: Bridging the Gap between Policy and Local Action".

Representatives from municipal, city and provincial government and selected national and regional government agencies attended the conference. Likewise, international organizations, private companies and local NGOs also graced the conference primarily to learn the successful strategies, limiting factors, lessons learned and recommendations of Bago City government in the implementation of its project on "Solid Waste Management as a Social Enterprise".

In addition, the conference also discussed and identified innovative strategies of local initiatives in promoting at-source waste segregation, improving environmental awareness, public participation, capacity building and resource mobilization as mandated by the RA 9003. The conference also presented a number of technological and financial options for the development of final disposal sites.

The complete summary of the conference can be downloaded at: <http://kitakyushu.iges.or.jp>.

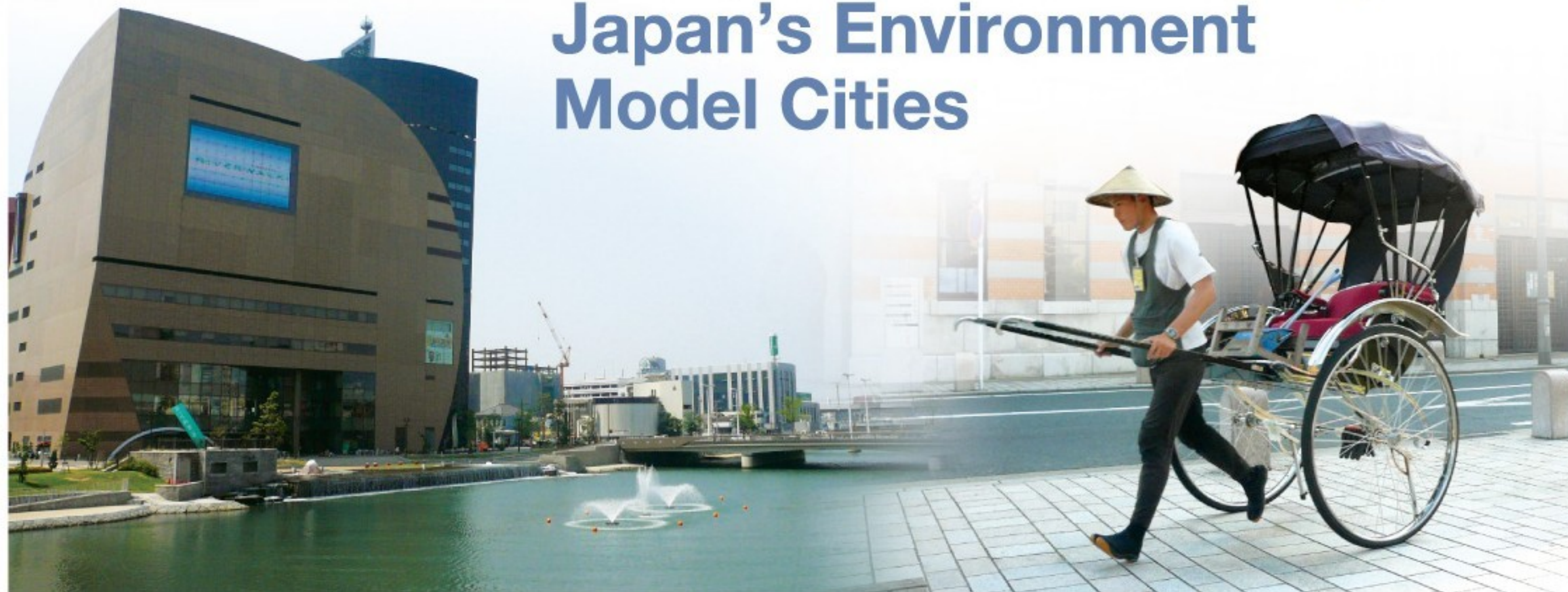


Honourable Mayor Ramon D. Torres, Bago City Mayor, during the opening session.



Ms. Emelita Aguinaldo, Deputy Executive Director of the Philippine National Solid Waste Management Commission, delivering her keynote presentation.

Kitakyushu City: Leading Japan's Environment Model Cities



Much of massive urban transition is occurring in many developing nations. The World Bank projected that towns and cities of developing countries will have tripled their entire built-up urban area and estimates an 80% economic growth between 2000 and 2030. As much as urbanization is associated with higher or improved socio-economic conditions, it also comes with a heavy price as it is accompanied by unprecedented consumption and loss of natural resources. Thus, one of the biggest challenges that confront developing nations today is on how to reconcile the often-competing demands of economic growth and environmental protection.

Severe environmental impacts of urbanization could be well observed in mega cities of today, across nations. And while these cities continuously struggle to improve its urban environmental condition, a number of successful stories have emerged from today's leading environmental cities that could be used as a model for developing countries. Case in point, Kitakyushu City in Japan has once experienced severe industrial pollution however; succeeded in transforming itself from gray to a green city and now designated as one of Japan's environmental model cities.

A City of One Million

The merger of five cities Moji, Kokura, Wakamatsu, Yahata and Tobata in 1963 forms today's Kitakyushu City that embraces a population of one million people. Strategically located at the northernmost point of Kyushu Island, the westernmost island of the Japanese major islands brings Kitakyushu closest to East Asian countries. Decades of

economic thrusts, this metropolitan city has evolved from an important trading center to a progressive industrial region moving towards becoming an "international and technological city".



Wakamatsu area, Kitakyushu City (Photo courtesy of Kitakyushu City)



Tobata area, Kitakyushu City (Photo courtesy of Kitakyushu City)



Yahata area, Kitakyushu City

Transformation from Gray to Green City

The high economic growth and heavy industrialization that occurred after the Second World War marks an important period in the history of Kitakyushu City. The city opened itself to heavy industries such as cement, steel and chemical industries forming the framework of "Kitakyushu Industrial Zone" that was considered one of the four biggest industrial zones in Japan. The heightened economic growth had been manifested by the "seven-colored smoke" from heavy industries that have become a symbol for "prosperity" and lead to serious environmental pollution problems.

Factories have swarmed the area of Dokai Bay and polluted its water with untreated domestic and industrial wastewater discharges. Fish and shellfish have completely disappeared by 1960 and the bay became known as the "Sea of Death". Similarly, dark smoke filled the city's air due to the unregulated emissions of nitrogen and sulfur oxides from factories.

These environmental problems that confronted the city lead to massive public protests. The women of Kitakyushu in particular, played a significant role being the first to rally stringent control measures on heavy industries as air and water pollution in the city become life threatening. Together with other key stakeholders; residents, private companies

and the local government worked together for the rapid improvement in the city's environment. Years after this challenging flight, Kitakyushu City has been regarded as a miracle city that had accomplished environmental regeneration from heavy pollution.

Leading Japan's Model Environment Cities

Japan's national government has designated the City of Kitakyushu as a "model

environmental city" in July 2008 in light of Kitakyushu's pioneering initiatives to ensure a transition to the world's 'low carbon society.'

To promote the transition, the Japanese government launched a contest for the best environmental model cities. These are cities that have developed plans to reduce their



Honorable Prime Minister Taro Aso with Eco-model City Mayors.

carbon emissions by 60%-80% from the 1990 emission levels by 2050. In order to be certified, the proposals submitted by local authorities had to satisfy five selection criteria: large scale greenhouse gas reduction targets, pioneering/model credentials, local adaptability, feasibility, and sustainability.

Eighty-four cities and towns entered the contest but only thirteen were selected. Together with Yokohama, Kyoto and Sakai, Kitakyushu was chosen on the big city category. Basing on the 2005 emission level, Kitakyushu City aims to reduce city-wide carbon emission by 50% and 150% for the entire Asia and the Pacific region by 2050.

As a model city, Kitakyushu represented Japan in the Organization for Economic Cooperation and Development (OECD) international conference and promoted the city's environmentalism and environmental technological prowess. Not only is the City moving to enact concrete measures to create a low carbon society, but the city is actively advocating the initiative in its neighboring cities in the region.

Mr. Kenji Kitahashi, the mayor of Kitakyushu is proud with this new branding. Aside from being a local environment champion, Kitakyushu City has been one of the most active cities in Japan for international environmental co-operation. This new brand is an addition to Kitakyushu's tags as the 'Environmental Capital of the World' and 'Technological Capital of Asia.'

This report made use of information from the following sources:

- 1) Eco, thereby enhancing Global Partnership, Kitakyushu International Environmental Cooperation
- 2) Kitakyushu (Japan): Coexistence of Industry and Community, Institute for Global Environmental Strategies (IGES)
- 3) West Japan Industry and Trade Convention Association (<http://www.convention-a.jp/eng/cpg/con01.html>)
- 4) Eco2 Cities: Ecological Cities as Economic Cities, the World Bank

Kitakyushu City's Path to Overcoming Pollution

1901	Government-run Yahata Steel Works is launched; which became a key of Kitakyushu's development as a steel town.
1953	The Tobata deposit gauge (dust fall measuring equipment) is installed.
1960's	Pollution becomes serious as heavy and chemical industries develop (pollution by soot dust and wastewater).
1963	Pollution Control Sub-section (consisting of four personnel) is established within the Sanitation Bureau's Public Health Section.
1964	Automatic air pollution measuring equipment is installed for sulfur oxides and suspended particulate matter.
1965	The annual average of dust fall reaches 80t/km2/month around the Dokai Bay area (maximum: 108t/km2/month). The Tobata Women's Association produced a documentary film entitled "We Want Our Blue Skies Back".
1968	The Air Pollution Prevention Law and the Noise Regulation Law were enacted.
1969	The first smog warning of Japan is issued in Kitakyushu. The Dokai Bay was referred as the "Sea of Death". A comprehensive preliminary survey on industrial pollution in Kitakyushu is launched. The Kitakyushu Liaison Association for Prevention of Air Pollution is established.
1970	The authority to issue smog warnings is transferred to the Mayor of Kitakyushu. Pollution Monitoring Center is set up in the City Hall. The Sanitation Bureau's Pollution Monitoring Department is established (with 20 personnel). The public sewage treatment facility starts operations. Fourteen laws related to pollution control are passed at the so-called the pollution countermeasure national parliament session.
1971	Special weather information notification system is established. The city of Kitakyushu establishes the Pollution Control Bureau with 45 personnel). The Kitakyushu Pollution Prevention Ordinance is promulgated. A full-scale waste incineration facility is completed.
1972	A pollution prevention agreement is reached between the City of Kitakyushu and 54 industrial plants in the city.
1974	The dredging of Dokai Bay start and continues until July 1975; a total of 350,000m3 of polluted sludge, containing more than 30ppm of mercury, is removed.
1979	The green belt program (planting trees along with industrial zone) starts and continues until fiscal year 1983.
1980	A large-scale waste disposal site is built in the coastal area. A sludge dredging and removal project at Murasaki River is completed, having been started in fiscal year 1969.
1982	The city receives the Prime Minister's Award for Urban Greening.
1985	The OECD Environmental White Paper introduces Kitakyushu as "a city that was transformed from gray to green city".
1987	Kitakyushu is awarded the title Star Light Town, where stars can be dearly viewed through clean air by the Environmental Agency (currently the Ministry of Environment).

Source: Kitakyushu International Environmental Cooperation