

July 31, 2007

Mojiko Hotel



Kokura Castle



Environment Policies of Kitakyushu City for a Sustainable Society

Hiraodai Karst Tableland



"River Walk" Mall

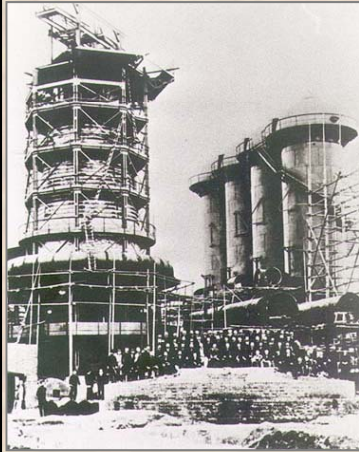


MIZOGUCHI Hiroshi, Director
Office for International Environmental Cooperation

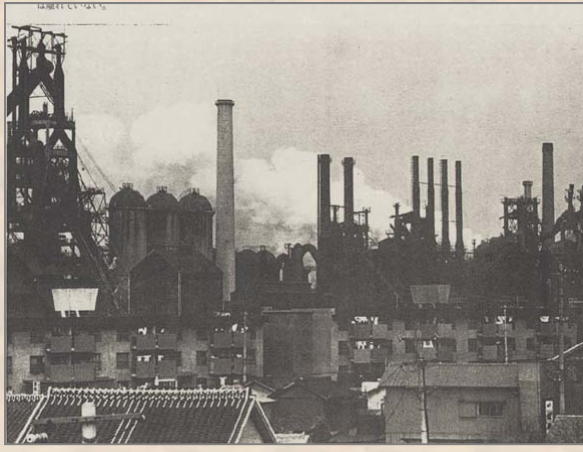
World Capital of Sustainable Development of Kitakyushu



Kitakyushu's Industries Led to Modernization in Japan



Yawata Steel Mill began operation in 1901



Kitakyushu Industrial Area in 1950s

World Capital of Sustainable Development

City of Kitakyushu

“Machines working with growling sound, blast furnaces smelting and brightening up a night sky, and everything are vivid and vital. Yawata is called the capital of steel.”



World Capital of Sustainable Development



《Osaka Printing Corp. in 1961》

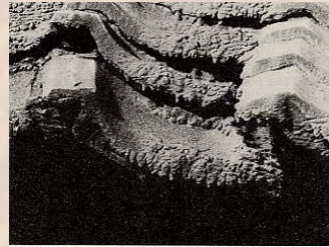
(Presented by Prof. Takeuchi, Tokyo University)

City of Kitakyushu

Air Pollution and Water Contamination



Stacks emitting smoke



Dust-fall on roof-top



Wastewater Discharged into the Dokai Bay

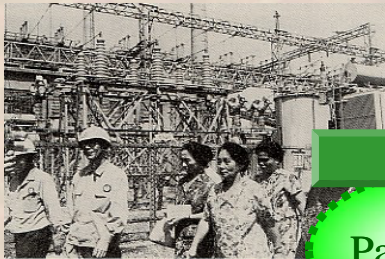


A Screw
Dissolved
in the Bay

World Capital of Sustainable Development

S 45 . 5 . 23 ©朝日新聞社 ty of Kitakyushu

Anti-pollution Movements by Stakeholders



Company watching

Citizens

Partnership



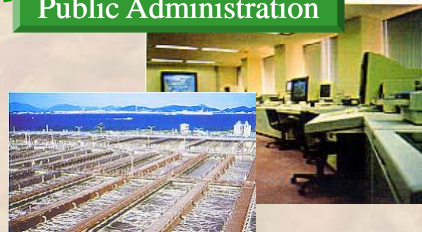
Study with scholars

Industries

Public Administration



Anti-pollution equipment

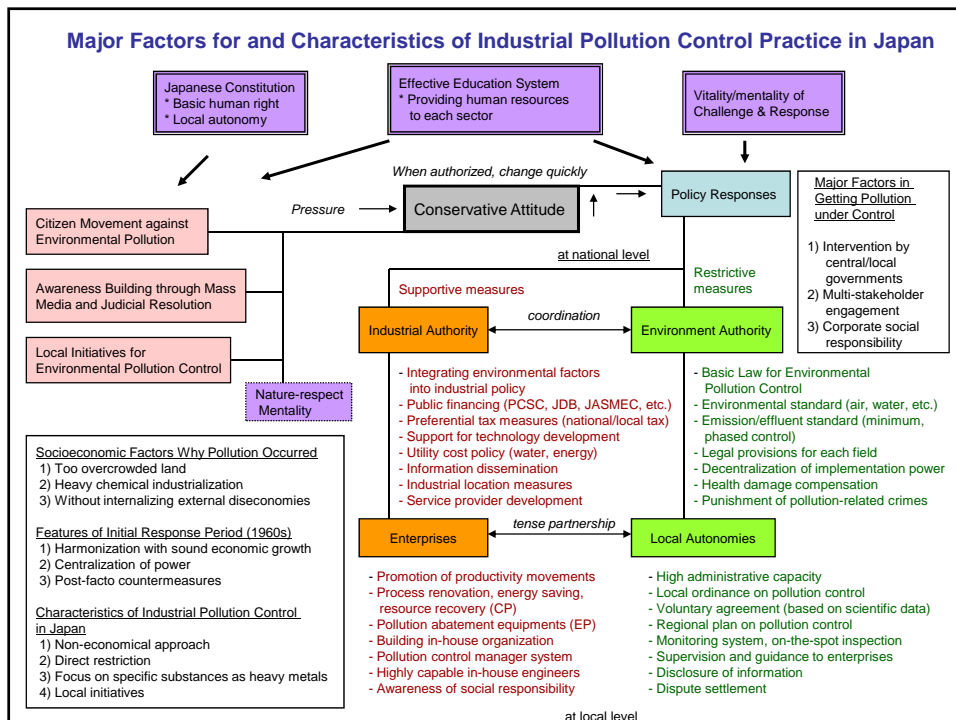
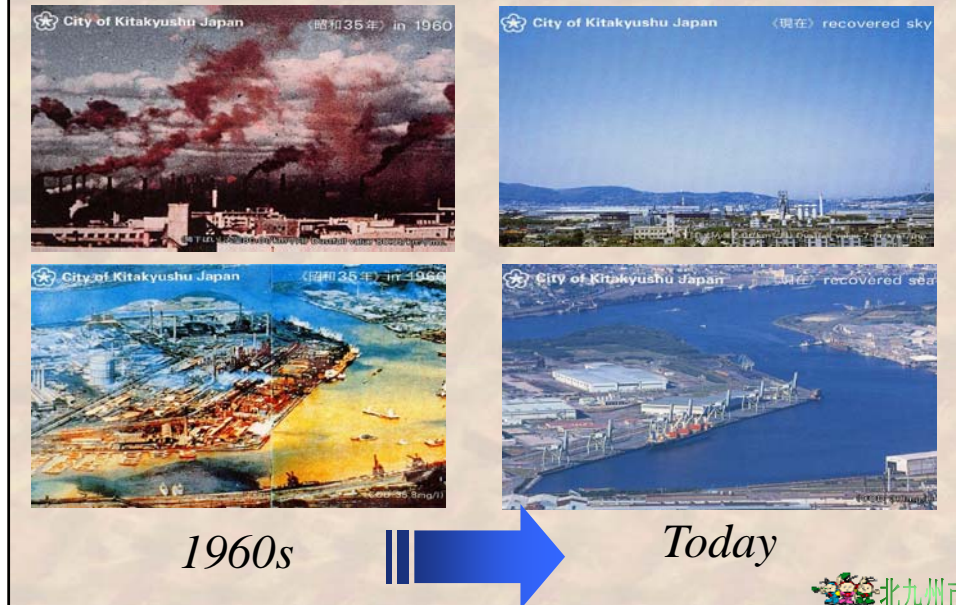


Sewage treatment and monitoring facility

World C.

City of Kitakyushu


Kitakyushu's Experience in Getting Pollution under Control - A Miracle in the World History -



Cleaner Production (CP)

Change: from end of pipe technology (EP)
to environmentally sound production
technology with low emission (CP)

(Case-1) SOx reduction in a steel works in Kitakyushu

	<u>SOx emission</u>	<u>Measures</u>	
1970	27, 575 ton/y	fuel conversion	42%
		energy/material saving	32%
1990	607 ton/y	EP equipments	25%



Achievements in Greening Production Process

■ Emission ratio per electric power generation (1980)

	Japan	Ave. of 5 advanced countries	
SOx	1.0	8.0	g/Kwh
NOx	0.69	3.5	g/Kwh

■ Energy consumption per unit GDP

	Japan	USA	Germany	China	
1980	105	380	197	2,558	TOE/million US\$
2001	92	253	130	827	TOE/million US\$

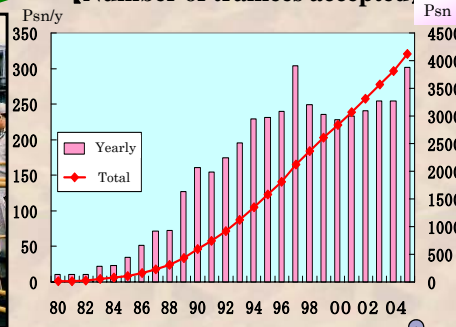


From “Sea of Death” to International Environmental Leadership

Technologies and human resources accumulated through Pollution abatement



【Number of trainees accepted】



Trainees accepted: 148 countries 4,360 pns (1980~2005)

Experts dispatched: 34 countries 135 pns (1978~2005)

北九州市

Cooperation with Dalian, China

1979	Friendship-City concluded by Kitakyushu and Dalian
1993	Technical Exchange Seminar held in Dalian
1993	“Environment-Specific Zone” proposed to Chinese government by KITA
1994	“Dalian Environmental Demonstration Zone Project” authorized as an important policy by Chinese government
1996	Demonstration Zone Project decided as an ODA project, and Environmental Exchange Seminar was held
1996-2000	Study on the Demonstration Zone Project conducted
2000~	Transfer of CP technologies (8.5 billion yen in total) Includes: electric furnace (1.84 billion), cement-mill (1.38 billion), process improvement at a dye-production plant (1.52 billion), etc.

Environmental Improvement in Dalian, China



1994



2000

Improvement of Ambient Air Quality

Year	1990	2001			** Dalian was given the Global 500 Award by UNEP in June 2001
SO _x	0.090	0.031	mg/m ³	(1/3)	
TSP	0.245	0.123	mg/m ³	(1/2)	
CO	1.94	0.59	mg/m ³	(1/3)	

Promotion of Environmental Cooperation Through City-to-City Network



City-to-City Cooperation in South-East Asia

1997	Environmental Cooperation Network of Asian Cities established
1997-2001	Seminar on CP Technologies for Small Enterprises held in Ho Chi Minh, Vietnam
2001-2004	River Environmental Improvement Project conducted in Semarang, Indonesia
2000	Cooperation for regional environmental improvement in Cebu, the Philippines, focusing on introduction of CP technologies
2002	Study on appropriate waste management system conducted in Surabaya, Indonesia and Chongqing, China
2003	Cooperation for regional environmental improvement in Cebu, the Philippines, focusing on domestic wastewater treatment
2004~	Garbage composting project conducted in Surabaya, Indonesia



Technical guidance at a Tofu plant in Semarang, Indonesia



Guidance on monitoring technologies in Cebu, the Philippines

River Beautification Model Project in Semarang, Indonesia

A river in Semarang has been polluted by many Tofu industries. KITA Environmental Cooperation Center was asked to cooperate in recovering environmental quality in the river. The Project was conducted by many stake-holders, including universities, NGOs, private industries and public administration.

A river polluted by waste water from a Tofu industry



Technical instruction at a Tofu industry



WASTE, A Serious Problem in Surabaya And A Compost Project



Garbage depot



Waste dumping



Waste analysis



Compost center

Expansion of Kitakyushu-Based Composting



地域住民に対してのコンポスト設置普及活動：個人会館を通じて各家庭に普及させている。登録費安価（約 900 円）で販売、未開拓の熱心も高い。



ごみの減量化の必要性や地球温暖化への貢献を含めた堆肥化技術移転セミナーを現地で開催。NGOや市民団体に広く講習を行っている。



世界銀行によるタイ・インドネシア・日本を結ぶサテライト会議においても、日本側からジョイベックがこの技術について説明。各国/またスロバキアでは市民団体を集めてごみの減量化に向けたセミナーを開催し取り込みの拡大が決定された。



- Expansion plan of Surabaya City
 - About 12,000 households as of July, 2007
 - To be expanded to 200 thousand for next 4 years (equivalent to 1/3 of all households)
- To be disseminated in Medan, Den Pasar, etc.
- Transferred to Bangkok through a distance learning seminar in 2005
- Experiment began in Bangkok in 2006



Dissemination activities in Surabaya

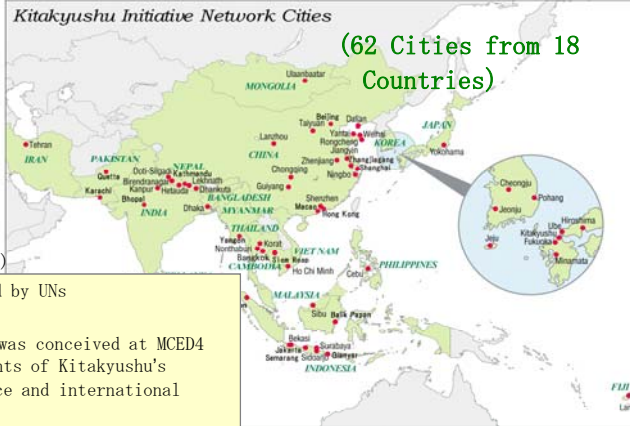
"Keep market clean" by KITA/ECC

City of Kitakyushu

Kitakyushu Initiative Network



UN/ESCAP Ministerial Conference on Sustainable Development (2000)



- Inter-city network: established by UNs
- Chronology:
 - 2000 "Kitakyushu Initiative" was conceived at MCED4 based upon the achievements of Kitakyushu's pollution control practice and international cooperation
 - 2001 Kitakyushu Initiative Network established
- Activities: Pilot projects, thematic seminars, collection and analysis of member's best practices, etc.
- Field: Air pollution, water quality management, solid waste management (including 3R)
- Secretariat: IGES Kitakyushu Office
- Evaluation: Evaluated at MCED5 in Seoul, Korea in 2005, and continuation was declared by ministers

32 % waste reduction
(Nonthaburi, Thailand)

Burning Efficiency
improvement
(Ulanbaatar, Mongolia)



Profile of Kitakyushu Eco-Town Project

Practical Research Area



Comprehensive Environmental Industrial Complex, Hibiki Recycling Area



Background

- 1901 Government-run Yawata Steel Mill began operation
 - Has grown up to be a material-production base for 100 years
- 1960s Faced serious environmental pollution
 - Experience of getting pollution under control by multi-stakeholder engagement ⇒ "Kitakyushu Method"
- 1980s ~ International environmental cooperation has been conducted

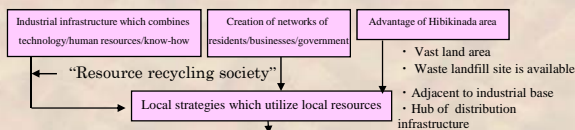
Progress of Eco-Town Project

(as of April 2006)

- Facilities on practical research: 17
- Industrial plants under operation: 25

Project results to date

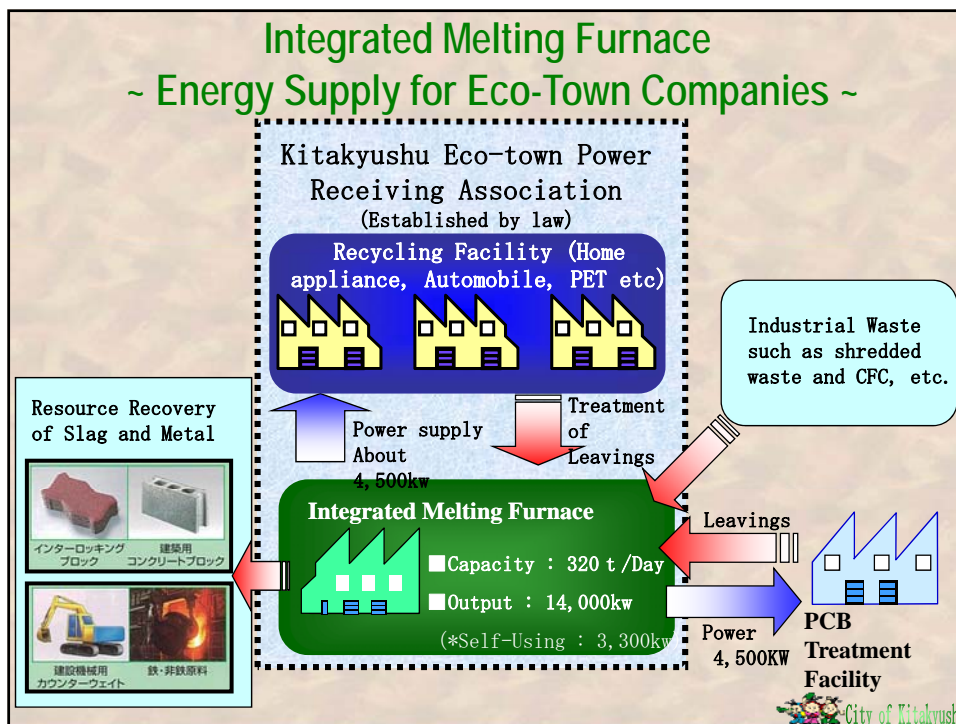
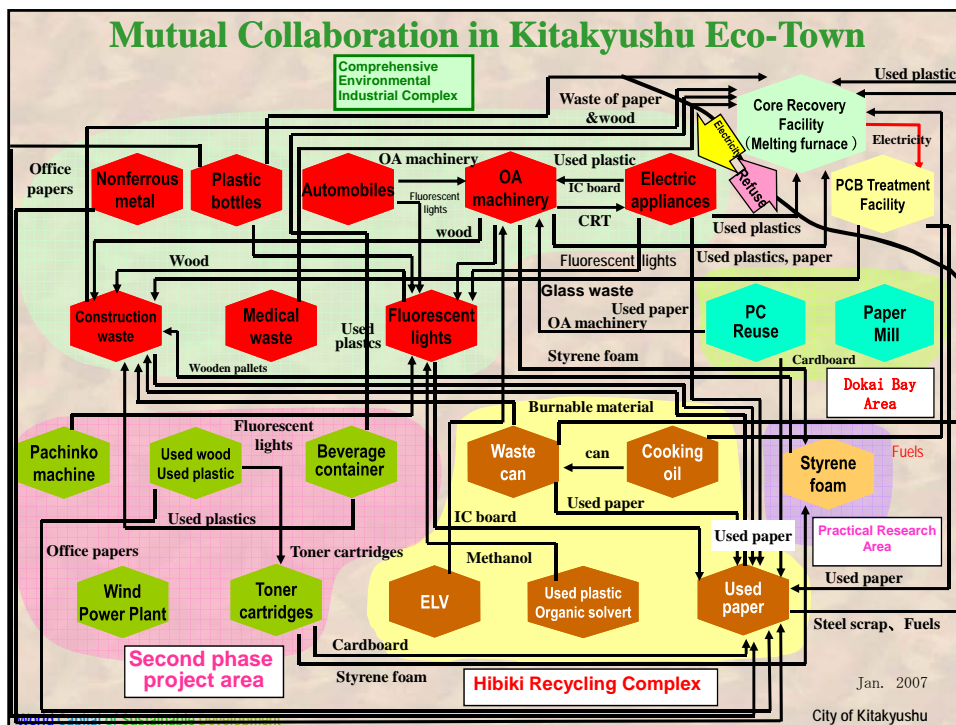
- Total investment: about 52.3 billion yen
(City: 5.9 billion, National: 10.6 billion, Private sector: 35.8 billion)
- Employee: about 1,200 pns including part-time workers
- Visitor: about 490,000 pns (1998-2006.3)

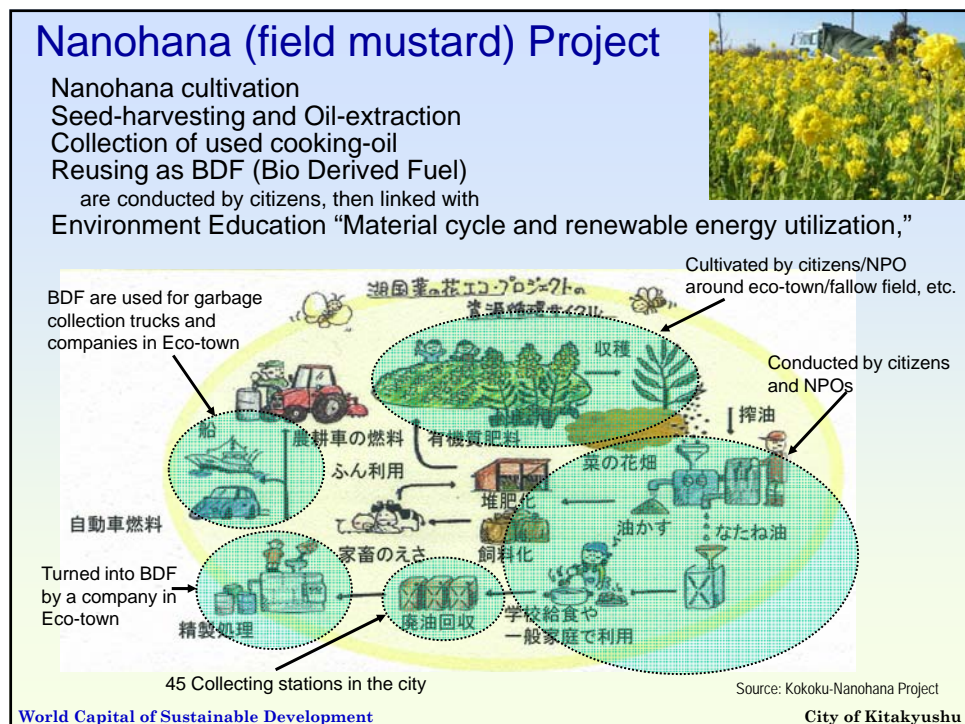
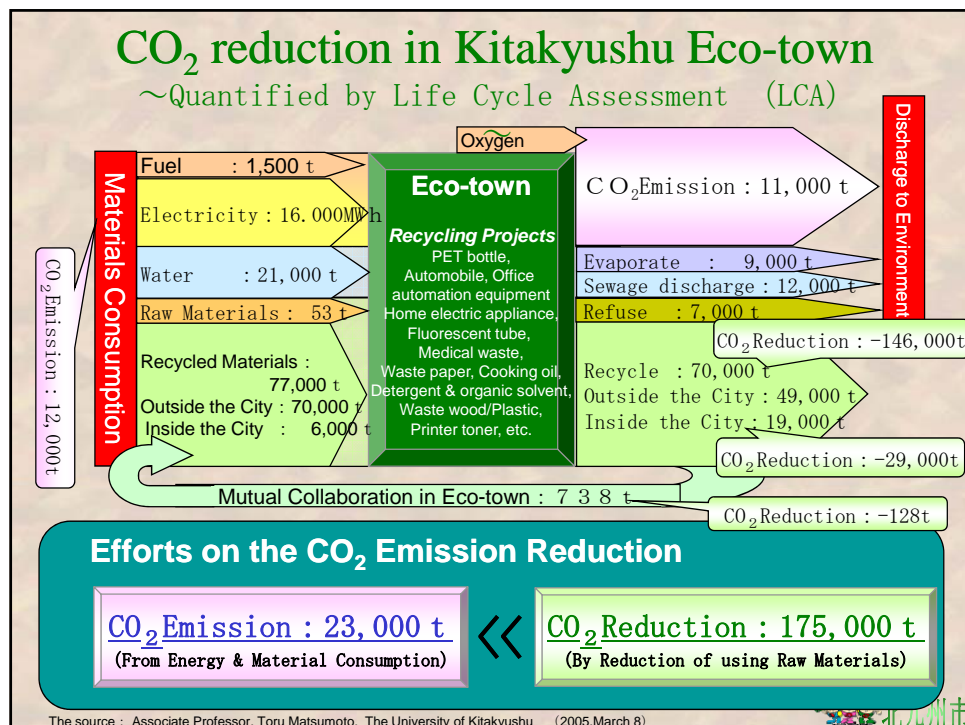


Eco-Town Project (Phase-I: 1997-; Phase-II: 2002-)

"Win-win policy for environmental, socio-economic co-benefits," playing a leading role toward a sound material-cycle society.

City of Kitakyushu





Kitakyushu City Won the 1st Prize in 2006 Environment Capital Contest



Organizer:
All Japan Network of
Environment Capital
Contest (consisted
of 11 NGOs)

"Environment Capital" of Japan: selected from the view of
NPOs having initiated environmental movements
Participated by: 74 municipalities across Japan

World Capital of Sustainable Development

City of Kitakyushu

World Capital of Sustainable Development

Thanks for Your Attention

Creation of a city with true wealth and prosperity,
to be inherited by future generation