FEALAC (Forum for East Asia-Latin America Cooperation) Eco-Business Promotion Conference

# International Environmental Strategies in Kitakyushu

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# Kazuhide UMEMOTO

Deputy Mayor, City of Kitakyushu



# **City Profile**

# Location: between Tokyo and Shanghai



(as same as Prefecture Government )



# Overcoming Severe Pollution: Kitakyushu's Experience

# 1960s









# **Key Factors: Partnerships among Multi-Stakeholders**

**Residents** 



Residents observing a private company

Study session on air pollution measures with university professors

# **Partnership**



Environmental supervision & environmental infrastructure

# **Local Government**



Cleaner Production & pollution control equipment

# **Private Enterprises**



# Compatibility of Environmental Improvement and Economic Growth

Environmental pollution (Sulfur oxide) (mg-SO<sub>3</sub>/100cm<sup>2</sup>/day)



Source: World Bank, MEIP Report, 1993

# Kitakyushu's Leading Project: Eco Town Project

# **Facilitating Resource Circulation and Eco-Industries**



Practical Research Area Practical Research Facilities : 16 Practical Research Projects : 56

#### **Outcome of Projects**



Comprehensive Eco-Industrial Complex, Hibiki Recycling Area Industrial Plants: 29

Environment: Reduction of Environmental Impact  $\checkmark$  0.38 million ton CO<sub>2</sub>, Saving Resources and Energy

Economy: Investment: 66 billion yen Private sector: 71.7%, National Government: 18.2%, Local Government:10.1%) Employees: 1,340 people Visitors: 1million people (as of October 2011)

#### International Environmental Strategies for Green Growth in Asia

#### International Environmental Cooperation for Green Growth in Asian Countries



#### International Cooperation Organisatons in Kitakyushu

Japan International Cooperation (JICA) Kyushu International Centre Kitakyushu International Techno-cooperative Association (KITA) Institute for Global Environmental Strategies (IGES) Kitakyushu Urban Centre Kitakyushu Forum on Asian Women (KFAW) Kitakyushu Asian Center for Low Carbon Society



Joint Beach Cleaning Project by 10 cities of 3 countries

# **Environmental Cooperation (China)**

### Japan-China Recycling Society Cooperation Project (Eco-Town)



At the Prime Minister's official residence (May 2008)

Cooperation for actions to create resourcerecycling cities in China, using Kitakyushu's Eco-Town Project as reference

2007-08 Qingdao2008-09 Tianjin2009-10 Dalian

### **Environmental Improvement Project in Dalian**





#### XDalian received the Global 500 award in 2001

# International Environmental Cooperation (Indonesia)

#### Environmental improvement in Surabaya, Indonesia's 2<sup>nd</sup> largest city



Spread of organic waste composting techniques from Kitakyushu to over 60,000 households in Surabaya

30% reduction of waste

Koji Takakura of JPEC teaching about the composting technique



City in 2001 Streets overrun by garbage

Surabaya's streets today Increased greenery in parks and along roads using compost

# Export Of Green City(Case-1: Surabaya City)

# **Effluent Treatment (Riverine Purification)**

Draw up a master plan on the effluent management of tributaries of Karimasu River focusing around Gundy area. Promote and expand distributed effluent treatment systems controlled by citizen in the model community. Construction and administrative operation of medium sized treatment facilities now in operation.

(JICA Grassroots Cooperation Project)



# Export Of Green City(Case-2: Surabaya City)

# Drinking water supply business by PV and compact sized desalination system

Supply weak infrastructure area of electricity & water with low-cost clean drinking water by water purification system equipped with PV and desalination capability of TORAY and Suidokiko. Build a manufacturing & maintenance center of the drinking water supply system.

(JICA • BOP Project)



# Export Of Green City(Case-3: Surabaya City)

# Waste Treatment

Request of support from Surabaya to design a waste treatment project, and study feasibility of resource recovery from waste to make better living of scavenger (JICA Project)



# Export Of Green City(Case-4: Surabaya City)

#### **Cogeneration (steam + electricity) & Energy** saving project Surabaya Industrial Complex : SIER Export of the tech & know-how of Higashida Smart Community Project Surabaya City (SIER, others Kitakyushu City (KITA, others) Backup coordination Strategic Environ. Partnership Electric Co. power city planning education power Local Operating Company local power Industrial cogeneration of natural complex Design & construction gas steam gas Operation & management (SIER) company energy save Raw procurement Energy saving

METI : Export Promotion & Investigate Program of Infrastructure System

# International Environmental Cooperation (Cambodia)

# Since cooperation began in 1999, there has been rapid improvement in Phnom Penh's water supply



Kitakyushu staff providing on-site technological guidance

#### (1996⇒2006)

Water supply diffusion rate: 25%=>90%

Water supply time: 10h => 24h

%of non-revenue water: 72% => 8%



#### October 2011

A friendship award was granted to staff involved in cooperation activities by the Government of Cambodia to commemorate the many years of cooperation.

# Water Business with Hai Phong, Viet Nam

### Development of new water-based business in Hai Phong

chievements

emen

#### April 2009

# MoU with Hai Phong for exchange and cooperation

Carrying out cooperation, such as enhancing support for businesses, implementing governmental exchange activities, and developing human resources



(L: Mr. Trinh Quang Huy, Chairman of the People's Committee Hai Phong)

# October 2011

A comprehensive MoU on water projects was concluded between the two cities based on past exchange and cooperative agreements



(L: Deputy Chair, Hai Phong Diet Affairs Committee) Hai Phong authorized the introduction of the water block system adopted by Kitakyushu and is targeting improvement within five years

# New Challenges (1) Water Plaza (Water recycling demo plant)



# New Challenges **2** Kitakyushu Smart Community Development Project

Creating a new lifestyle with locally produced and locally consumed energy Selected as one of four bases in Japan in April 2010



### International Environmental Strategies for Green Growth in Asia

# Kitakyushu Asian Center for Low Carbon Society

Transferring of Packaged Environmental Management & Technologies through City-to City International Cooperation Network Towards Realizing Low Carbon Society and Green Business in Asia



# Leading Projects: Asian Center for Low Carbon Society

Striving to forge models for an export of urban development regarding an export of urban Infrastructure centering on environment in Japan through leading projects in Indonesia, India, and China.

#### **1** Indonesia (Projects in Surabaya City)

Surabaya City has a population of 3million and is the second largest city in Indonesia. Interrupt industrialization since electric power is low quality and it is difficult to ensure stable supply.



Maharashtra state (Mumbai City) and Gujarat state (Dahej district) are representing industrial areas in India.

Introduce not only the state-of-the-art environmental technologies in Japan, but also environment-oriented urban development.



3 China (Eco-town cooperation with Dalian City and Tianjin City, MoU with China Beijing Environment Exchange)

Dalian City is representing eco city in China.

Aim to be an eco-city including residential development and recycling complex.



The Organisation for Economic Co-operation and Development (OECD) selected Kitakyushu as a green growth model city in June 2011, having been evaluated for its activities and achievements in international environmental cooperation and the city's Eco-Town project.



L: Ms. Yoshie Nakatani (Director, OECD Tokyo) Other cities selected include Paris, Chicago, Stockholm

# Realizing a Sustainable Society through Green Growth

# World Capital of Sustainable Development City of Kitakyushu

My name is teitan



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