International Environmental Strategies in Kitakyushu

November 14, 2012

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Deputy Mayor, City of Kitakyushu
City Profile

Location: between Tokyo and Shanghai

Population: 1 million
Area: 488 km$^2$
Status: Designated City

(as same as Prefecture Government)
~Green Frontier~ City of Kitakyushu’s Environmental Policy

1901: Government-run Yawata Steel Works, We have developed as an Industrial City

1950

1960’s

Pollution Control Policy

1980’s

Establishment of “KITA” (1980)

Local Diplomacy Policy

Resource-Circulating Society Policy

2002

Sustainable Society Policy

2008

Low Carbon Society Policy

Creation of Local and Global Sustainable Society

1901

1950

1960’s

1980’s

2002

2008

We have developed as an Industrial City

Aggravation of Pollution Problems

Women’s Movement against Environmental Pollution

City Government

Private Enterprise

Organizational Arrangement, Ordinance, and Pollution Control Agreement with Companies

Cleaner Production

Improvement of Production Process

Treatment of Pollutant, Tree Planting

Pollution Control Policy

Overcoming Environmental Pollution

Environmental International Cooperation (1988～)

Agenda 21 Kitakyushu (1996)

Kitakyushu Eco-Town (1998)

Environmental Preservation and Industrial Promotion

Local Diplomacy Policy

Resource-Circulating Society Policy

Sustainable Society Policy

Low Carbon Society Policy

Reduction of Domestic Waste by Introducing New System and Citizen Participation (First one at Designated Cities)

Decision of Establishing PCB Treatment Facility (2001)

Johannesburg Summit (2002) identified Kitakyushu Initiative for a Clean Environment

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Implementation and Evaluation of Practical Activities

Eco-Model City

Green Frontier plan (2009)

Green Growth Model City selected by OECD (2011)

Creation of Local and Global Sustainable Society

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Overcoming Severe Pollution: Kitakyushu’s Experience

1960s

Today
Key Factors: Partnerships among Multi-Stakeholders

Residents observing a private company

Study session on air pollution measures with university professors

Resident Partnership

Environmental supervision & environmental infrastructure

Cleaner Production & pollution control equipment

Local Government

Private Enterprises
Compatibility of Environmental Improvement and Economic Growth

Environmental pollution (Sulfur oxide)
(mg-SO₃/100cm²/day)

Achieving economic development together with environmental improvement

Facilitating Resource Circulation and Eco-Industries

Kitakyushu’s Leading Project: Eco Town Project

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

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

Outcome of Projects

Environment: Reduction of Environmental Impact / 0.38 million ton CO₂,
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: 1 million people (as of October 2011)

Source: Environment Bureau, City of Kitakyushu
International Environmental Strategies for Green Growth in Asia

International Environmental Cooperation for Green Growth in Asian Countries

140 countries
6,638 people
As of 31 March 2012

Number of Participants from Overseas (KITA)

International Cooperation Organisations 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

City-to-City International Environmental Cooperation

Joint Beach Cleaning Project by 10 cities of 3 countries
Environmental Cooperation (China)

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

Cooperation for actions to create resource-recycling cities in China, using Kitakyushu’s Eco-Town Project as reference

- 2007-08 Qingdao
- 2008-09 Tianjin
- 2009-10 Dalian

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

Environmental Improvement Project in Dalian

1994 ➔ 2000

※ Dalian received the Global 500 award in 2001
Environmental improvement in Surabaya, Indonesia’s 2\textsuperscript{nd} 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)
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)
Cogeneration (steam + electricity) & Energy saving project

**Surabaya Industrial Complex : SIER**

Export of the tech & know-how of Higashida Smart Community Project

- Kitakyushu City (KITA, others)
- Surabaya City (SIER, others)
- Strategic Environ. Partnership
- Local Operating Company
  - cogeneration of
    - Design & construction
    - Operation & management
    - Raw procurement
    - Energy saving
- Local natural gas company
- Electric Co.
- Industrial complex (SIER)

**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

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

Hai Phong authorized the introduction of the water block system adopted by Kitakyushu and is targeting improvement within five years

(L: Deputy Chair, Hai Phong Diet Affairs Committee)
New Challenges
Water Plaza (Water recycling demo plant)

Water Plaza:

The Water Plaza is a demo plant for recycling water, integrating the processes of sewage membrane treatment (sewage reuse system) and seawater desalination.

(Capacity: 1,400m³/day)

- Development/testing of world class technology
- Showroom disseminating info
- Used for on-site training for overseas trainees

Started operations in April 2011

Product water from sewage: 1,000m³/day
Product water from seawater: 400m³/day
New Challenges
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

President
Hiroshi Komiyama
(Former President of University of Tokyo)

Advisory Board

President

KITA
City of Kitakyushu
IGES

Asian Green Camp

Utilize regional resources

☑ Integrate excellent environmental technologies
  • Resources-saving or energy-saving technologies
  • Cleaner Production
☑ network of Asian cites

Assist technology transfer

Develop experts

Conduct research/survey/info dissemination

Promotion of CO₂ reduction & stimulate Asian economy
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.

2  India (Dehli-Mumbai Industrial Corridor)
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.

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