

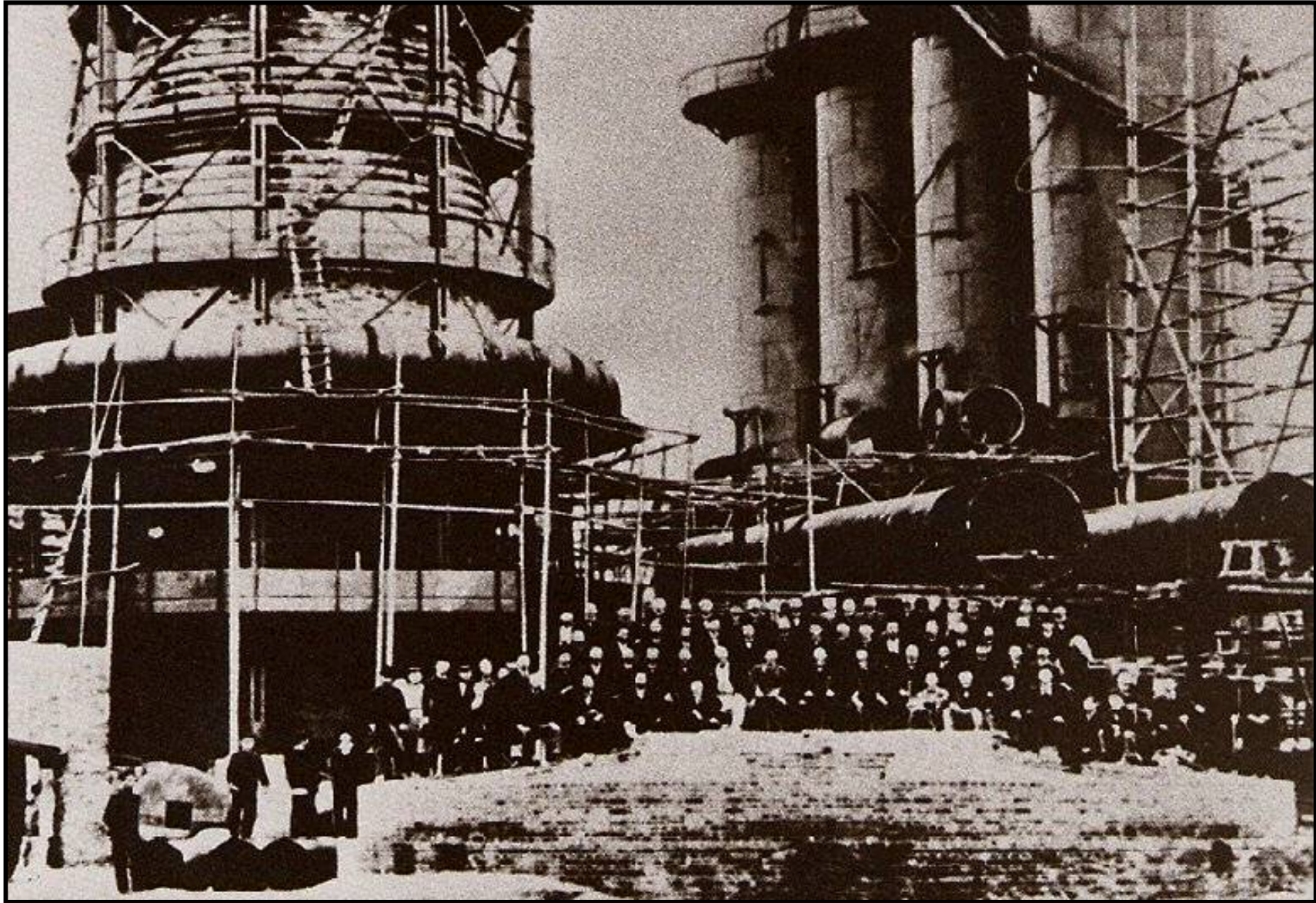


Environmental Projects in Kitakyushu

19.01.2015

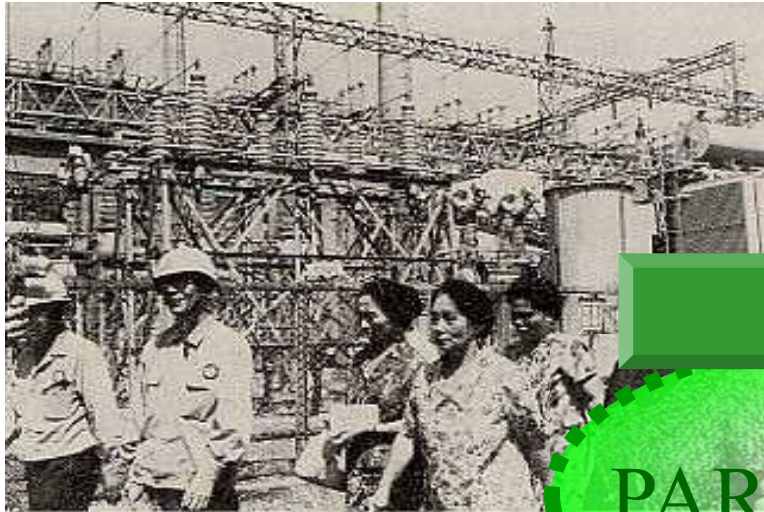
Environmental Future City Promotion Office
Environment Bureau, City of Kitakyushu

About Kitakyushu

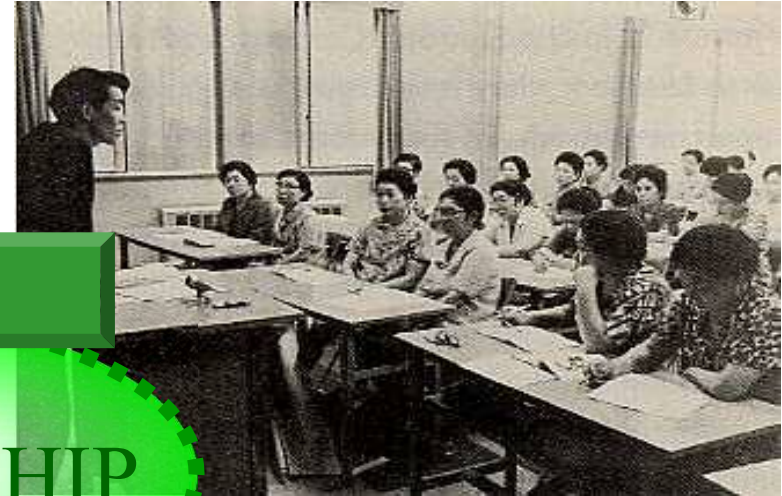


1901 Firstly established government-run “Yawata Steel Works”.

Actions to overcome the pollution



Site visit



Class in the university

Citizens

PARTNERSHIP

Companies

Local governments



Energy saving and pollution control system



Environmental monitoring and
Environmental infrastructure



Recovered environment in Kitakyushu



Process of consensus building on environmental policy



Civic Forum (10.12.2003)

Public comment

- April to December 2003
- More than 1,000 of opinion

Stakeholder meeting

- 34 representatives from industry, the local government, and academia
- March to October 2004
- held more than 10 times

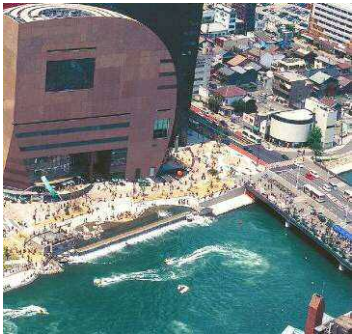



Citizen declaration for the world environmental capital

(9.10.2004)


Environment-friendly area around MURASAKIGAWA-river

Eco-City showcase set up a new energy of solar power generation, etc. in the city center area near the MURASAKIGAWA-River



 Solar power



 Wind power



 Electric Vehicle



 LED

 rooftop greening



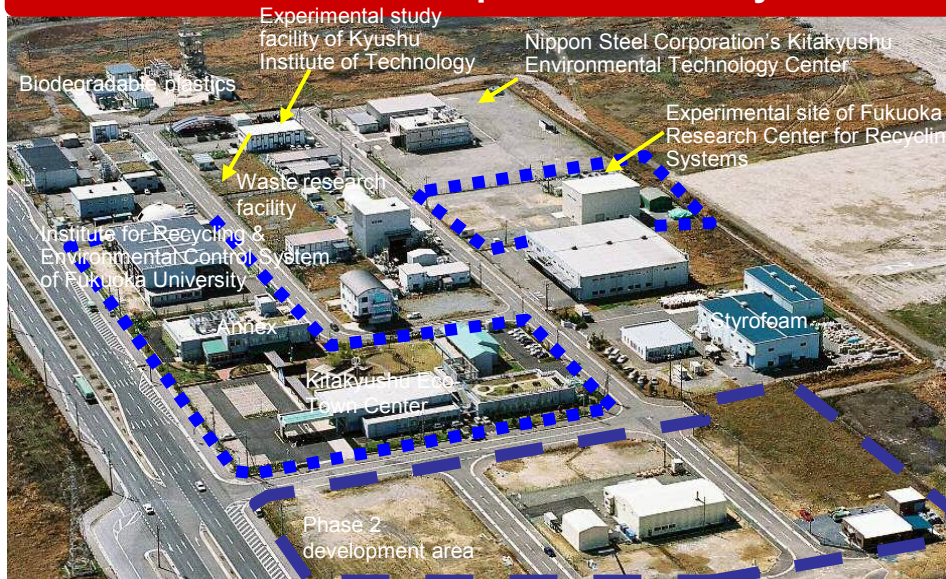
Electric bicycle

HIBIKINADA District ; Harbor area where various facilities are integrated

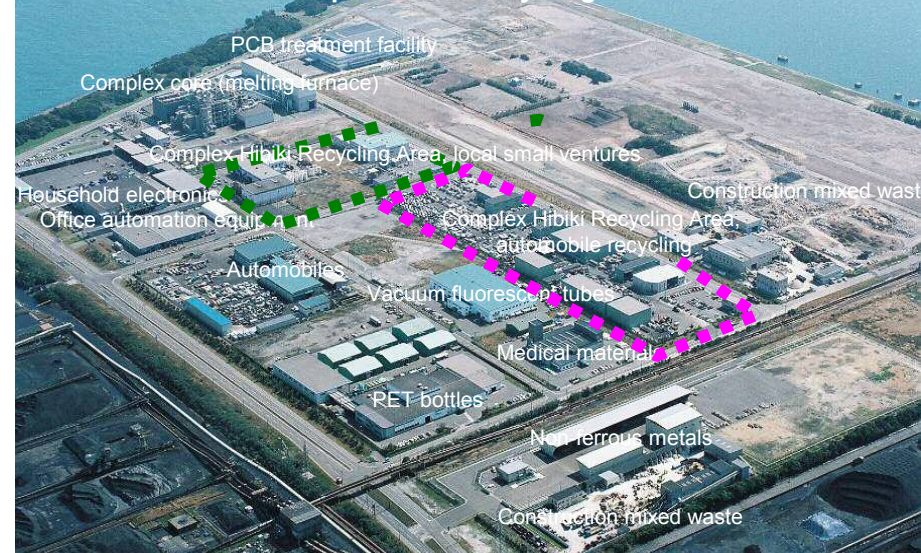


Effect of Kitakyushu Eco-Town Project

Panoramic view of experimental study area



Panoramic view of Comprehensive environment complex and Complex Hibiki Recycling Area



Progress of Eco-Town Project

- Number of research facilities 16
- Number of project facilities 29

Effect of the project

- Investment amount: approx. 66 billion yen
- Number of employees: approx. 1,400
- Number of visitors: approx. 1,000 thousand (cumulative total, 1998-2012)

- Carbon dioxide reduction, About 380,000 tons per year
- Promotion of citizen understanding by the public facility
- Number of visitors from abroad, 3,905 (2012)

Citywide events that residents, NPO and businesses to introduce their daily efforts



Environmental Examination and Residents' participation type of projects



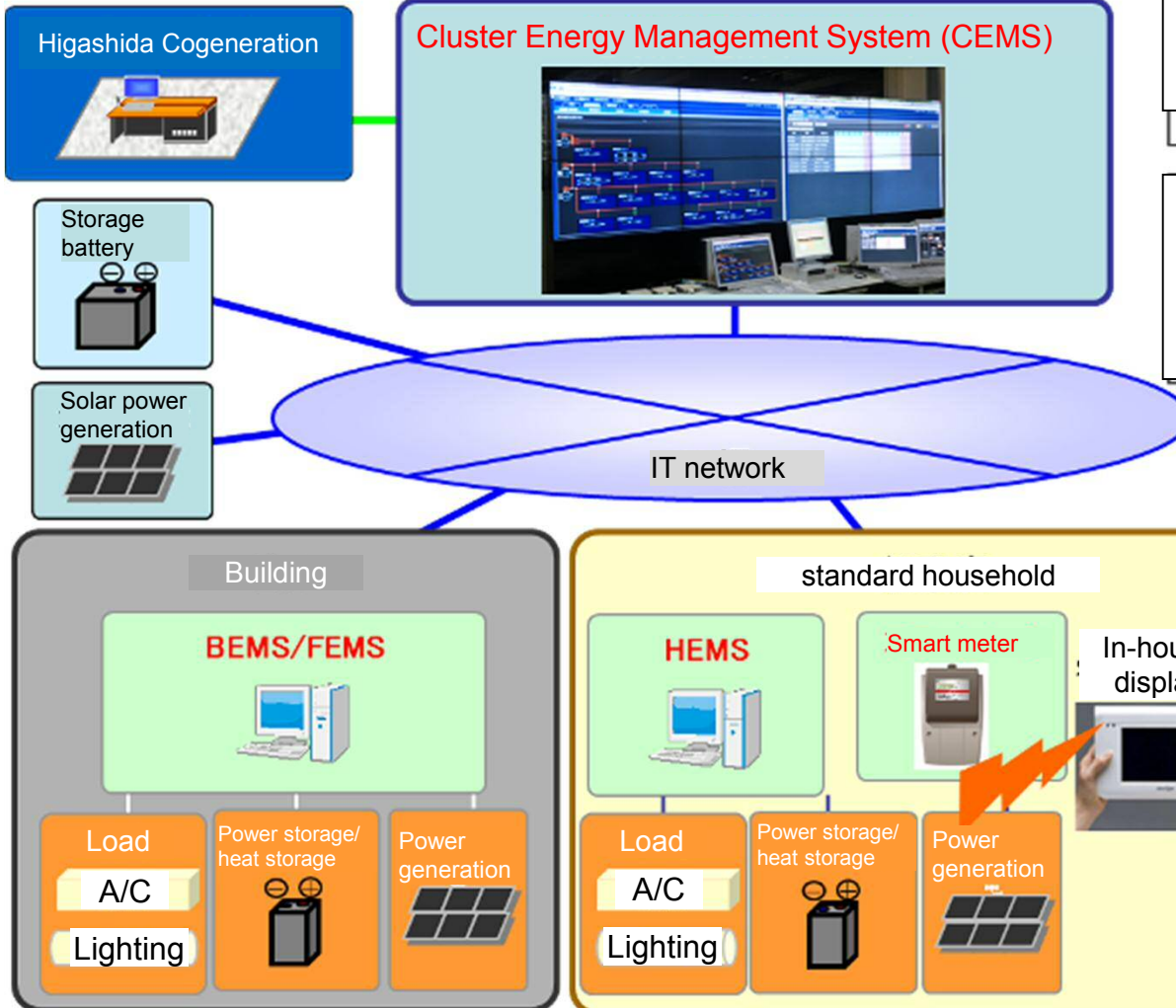
Overall Structure of the Kitakyushu Smart Community Creation Project (In the field of energy)

[Smart meter]

Receive notifications for power pricing, etc. and send power consumption through bi-directional communication with CEMS

[CEMS]

(CEMS: Cluster Energy Management System)
Promotes optimal energy management by connecting with renewable energy in the community, BEMS, HEMS, and backbone power via IT network



[HEMS]

(HEMS: Home Energy Management System)
Coordinates with CEMS and automatically provides power control for households

[BEMS]

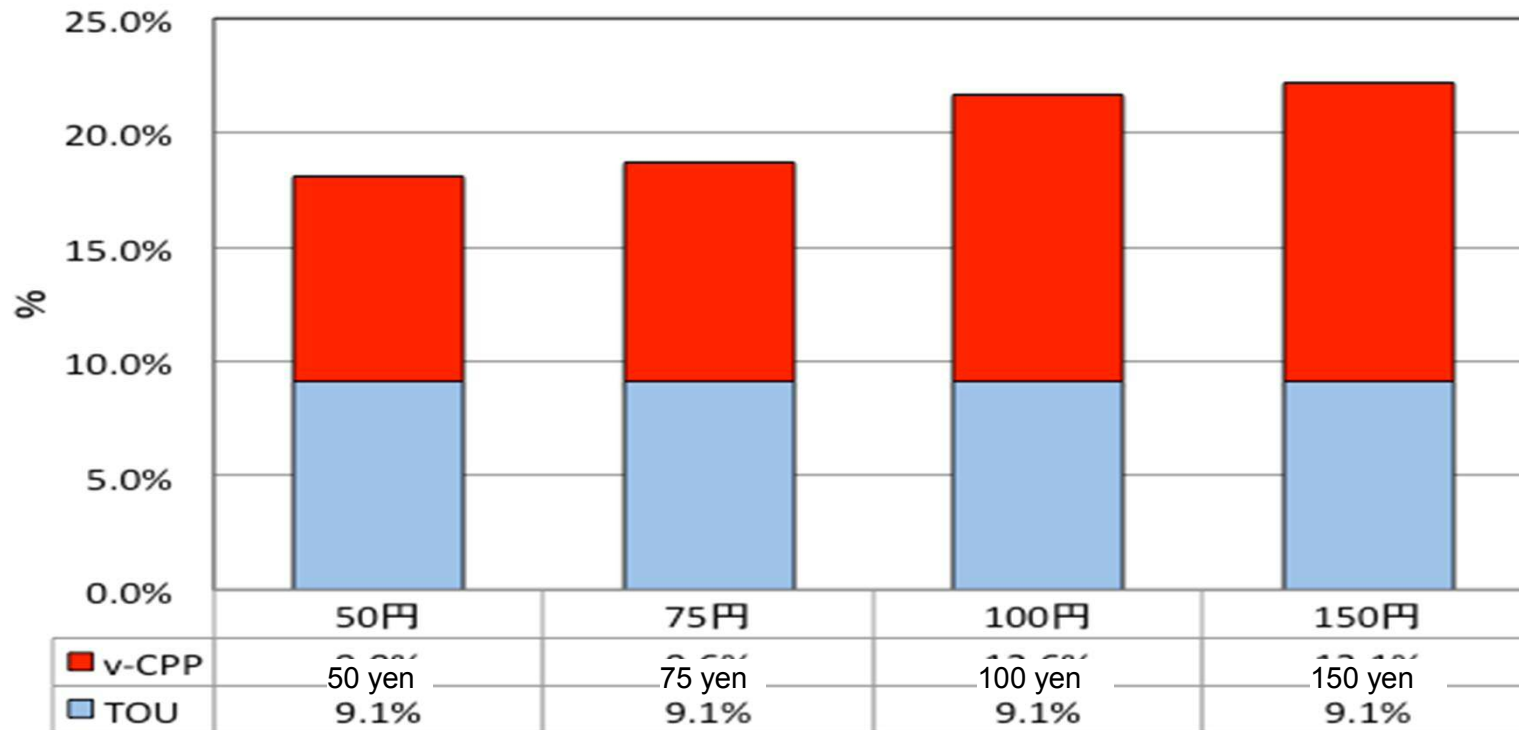
(BEMS: Building Energy Management System)
Coordinates with CEMS and automatically provides power control for buildings

[FEMS]

(FEMS: Factory Energy Management System)
Coordinates with CEMS and absorbs natural energy and energy fluctuations unique to factories in order to secure power stability

Total Effect from Seasonal and Time of Day Pricing + Dynamic Pricing

Energy consumption peak cut effect



- ✓ Households already installed seasonal and time of day pricing, in which prices are modulated, are the targets. Measurement of seasonal and time of day pricing effect is excluded from this demonstration.
- ✓ According to the social demonstration for seasonal and time of day pricing (2011) by the Ministry of Economy, Trade and Industry and TEPCO, the peak cut effect from seasonal and time of day pricing was 9.1%.
- ✓ With this addition, **the total peak cut effect including Dynamic Pricing is 18 – 22%.**

Development of international cooperation on environmental issues

Partnership with other Asian nations for mutual prosperity

Accepted trainees: 6,638 persons from 140 nations; Dispatched specialists: 165 persons to 25 nations
 Promotion of cooperation networking between Asian cities and environmental improvement projects



UN ESCAP Ministerial Conference on Environment and Development (2000)

Kitakyushu Initiative Network (62 cities in 18 nations)



Contribution to environmental improvements in Dalian, China
 (Dalian City received the Global 500 Award in 2001.)



Exchanged memorandum for cooperation on ecotown with Tianjin City
 (At the Prime Minister's official residence)



Water supply project at Phnom Penh



Air pollution survey in Mongolia



Driving forward the waste composting project with Surabaya City, Indonesia
 (Adopted by over 20,000 families)

Fractionation business in Surabaya, Indonesia

Safe and hygienic recycling of plastic and metal



Dramatic improvement of the working environment

Garbage composting (2004~)

- Reduction of waste generation, 30%
- Improve awareness of environmental issues

