

Asia3R Forum, 2009/11/11

Kawasaki Eco-Town

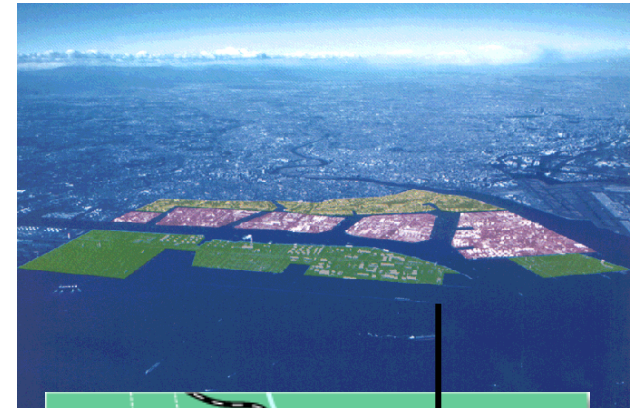
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Outline of Kawasaki Eco-Town

- The plan was approved by MITI (at present, METI) in 1997
- Appointed area : Whole Kawasaki Coastal zone (2,800ha)
- Purpose 1: Facilitate companies operating there to develop resources recycling production and install new equipments for resources recycling
- Purpose 2 : Construct Kawasaki Zero Emissions Industrial Park oriented to waste reuse and recycling



Realization of a Mutually Beneficial Cycle between the Environment and Industry

Image of Kawasaki Eco-Town Concept



→ Flow of discharged resources
 → Flow of recycled products

Background to the Development of Eco-Town Plan

- Transformation of industrial structure and revitalization of the local economy
- Revitalization of the Coastal Industrial Area; From arterial industry to venous industry
- Government's move toward institutionalizing the establishment of the recycling-based society
- Model projects by Japan Environment Corporation

Background

- Accumulation of environmental and energy technologies triggered by complete recovery from industrial pollution and the oil crisis in the 1970's
- Landfill crisis → Waste emergency declaration in 1990
- Highly environment-conscious citizens
- Application for the Urban Rejuvenation Project and for designation as an Urgent Urban Rejuvenation Area and special zone “Special international environment zone” by the national government
- Crisis awareness among companies in the coastal area and cooperation with City of Kawasaki

Resources Recycling Facilities

SHOWA DENKO K.K.

Material production for ammonia from waste plastics



PET REFINE THCHNOLOGY CO.,LTD

Material production for new PET bottles (PET to PET)



DC CO.,LTD.

Recycling cement production



JFE group companies

Reusing material for blast furnace from waste plastics/Concrete setting frame production from waste plastics/Used electric appliances recycling

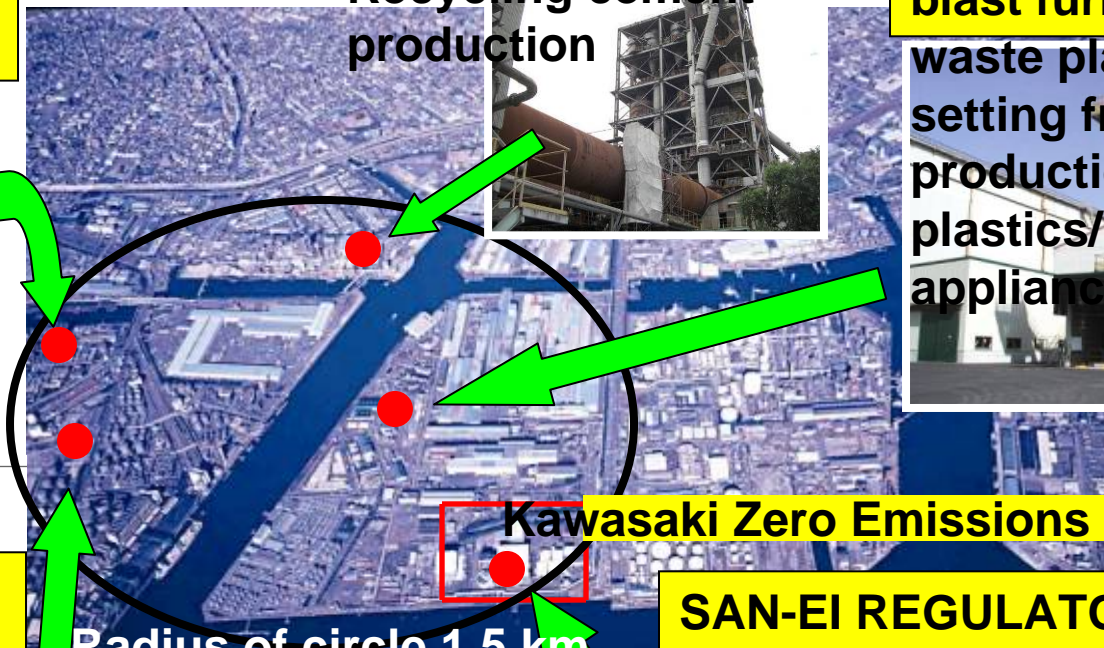


Kawasaki Zero Emissions Industrial Park

Radius of circle 1.5 km

SAN-EI REGULATOR CO.,LTD.

Toilet and tissue paper production from mix paper in used papers



Experience in Environmental Measures



Dramatic improvement in air quality as a result of the concerted efforts of businesses, residents and government



Very serious pollution and environmental destruction problems in Kawasaki City in the 1960's led the city to enact the Ordinance for Pollution Prevention in 1972, the first of its kind in Japan, and the Environmental Impact Assessment Ordinance in 1976, making the city a pioneer in environmental administration in Japan.

Support for Eco-Town Project Once Initiated

- PET bottles Leading-edge PET to PET recycling
 - The only plant that recycles PET bottles into PET bottles
 - Stagnant initial operating rate; framework of the Containers and Packaging Recycling Act
 - Rehabilitation process under the Civil Rehabilitation Act, but gone into personal bankruptcy
 - Business model that cannot succeed without the input of processing fees
- Mixed paper
 - Recycling plant for waste mixed paper
 - Waste paper collection started in some areas in 2006, and the whole city in FY2010

Regional Advantage

- Wide-ranging industrial agglomerations
- Dedicated industrial site
- Major market
 - Green consumers

Transfer of the Eco-Town Concept through International Cooperation

- Asia-Pacific Eco-Business Forum and UNEP Eco-town project in cooperation with UNEP
 - The 6th forum scheduled for February 2–3, 2010; an exhibition started in 2009
- Workshops by experts
- February 2009: Circular Economy Development Cooperation Agreement with Shenyang, a 20-year friendship city of Kawasaki City
- June 2009: Cooperation for the Establishment of Environment-Friendly Shenyang and Kawasaki Cities between Chinese and Japanese governments

Carbon Challenge Kawasaki

Basic Point of View

The entire city of Kawasaki will direct its energies toward realizing a sustainable society on a global scale by promoting harmony and a mutually beneficial cycle between “the environment” and “the economy.”

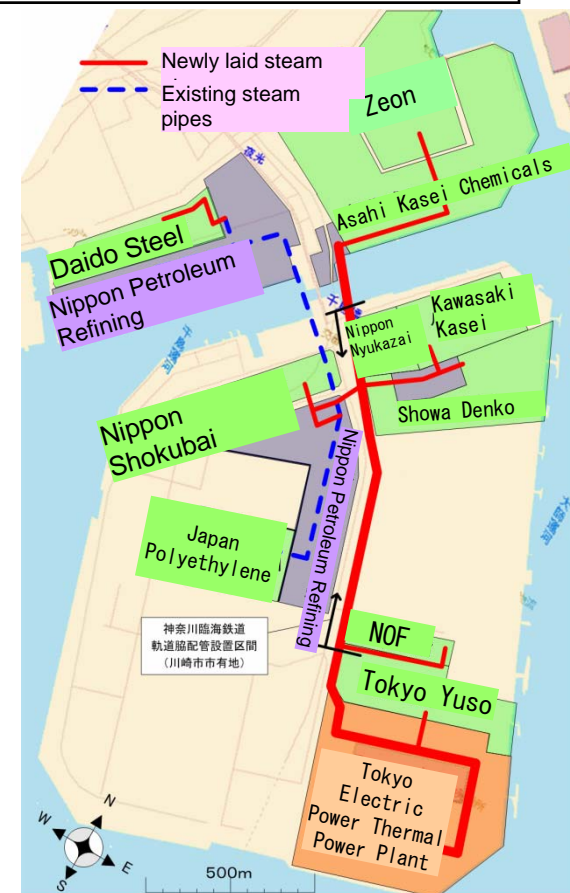
I. Promote environmental measures that fully utilize Kawasaki's unique characteristics and strengths

II. Promote efforts toward making a global contribution through environmental technology

III. Promote initiatives to reduce CO₂ through the cooperation of a wide range of entities

Energy Cycle and Effective Energy Use Initiative in Collaboration with Companies

This autumn Kawasaki plans to commence a large-scale energy-saving project with Tokyo Electric Power Company (TEPCO) to supply steam from a thermal electric power plant to factories in the surrounding areas.



Mega Solar Power Generation Project

Kawasaki City and Tokyo Electric Power Co. are moving ahead with a joint mega-solar power generation project to construct solar electric power plants with a combined total output of 20,000kW in the Kawasaki City coastal area. These plants are set to commence operation in FY2011.

Tokyo Electric Power: Construction of the solar power facilities; operation and management of the electric power plants

Kawasaki: Construction and operation of a PR facility

- 2 electric power plants with a total output of about 20,000kW (7,000kW + 13,000kW)
- Will generate about 21 million kWh, equivalent to the amount of electricity used by about 5,900 ordinary households annually
- Annual CO2 reduction effects of about 8,900t

