

Commitment of Yokkaichi City to the 3Rs

3R Conference for Asian Local Governments

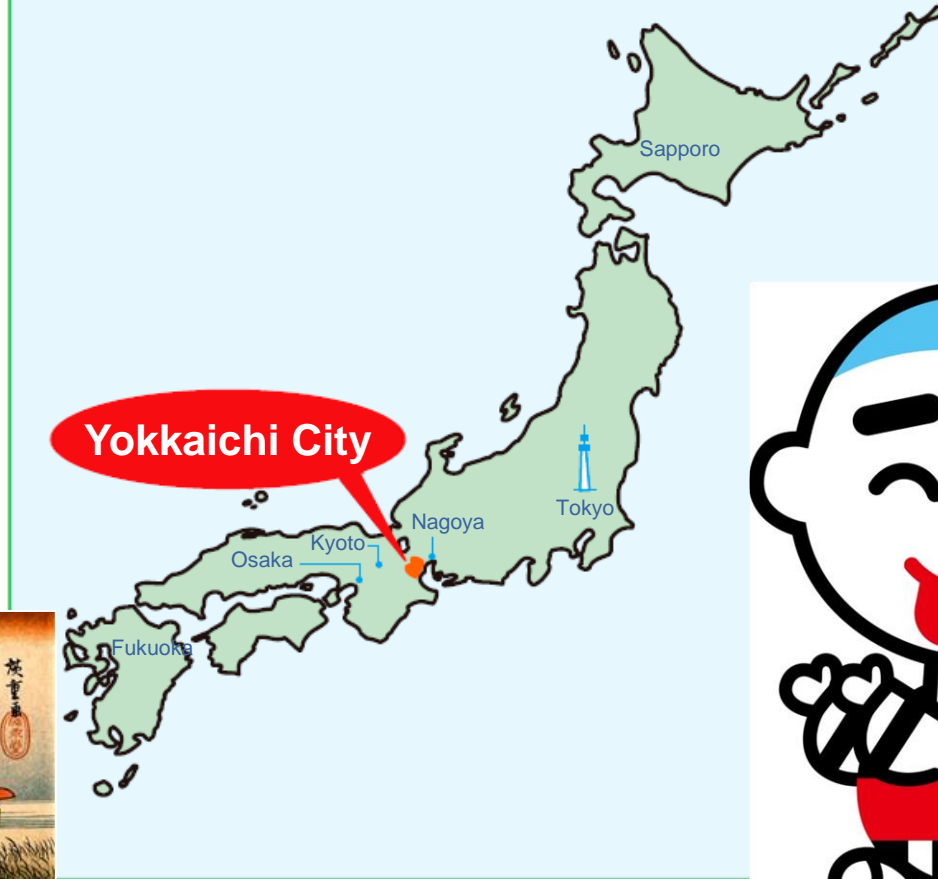
Yokkaichi City

Overview of Yokkaichi City

Population:
312,582

No. of households:
133,363

Location



An Aerial View of Industrial Complexes



Post-War Yokkaichi City

Completed complexes



- ▶ **Air pollution was caused by smoke and soot discharged from the stacks**

Smoke from factories (1960-1970)



Efforts in Yokkaichi City

Tall stacks



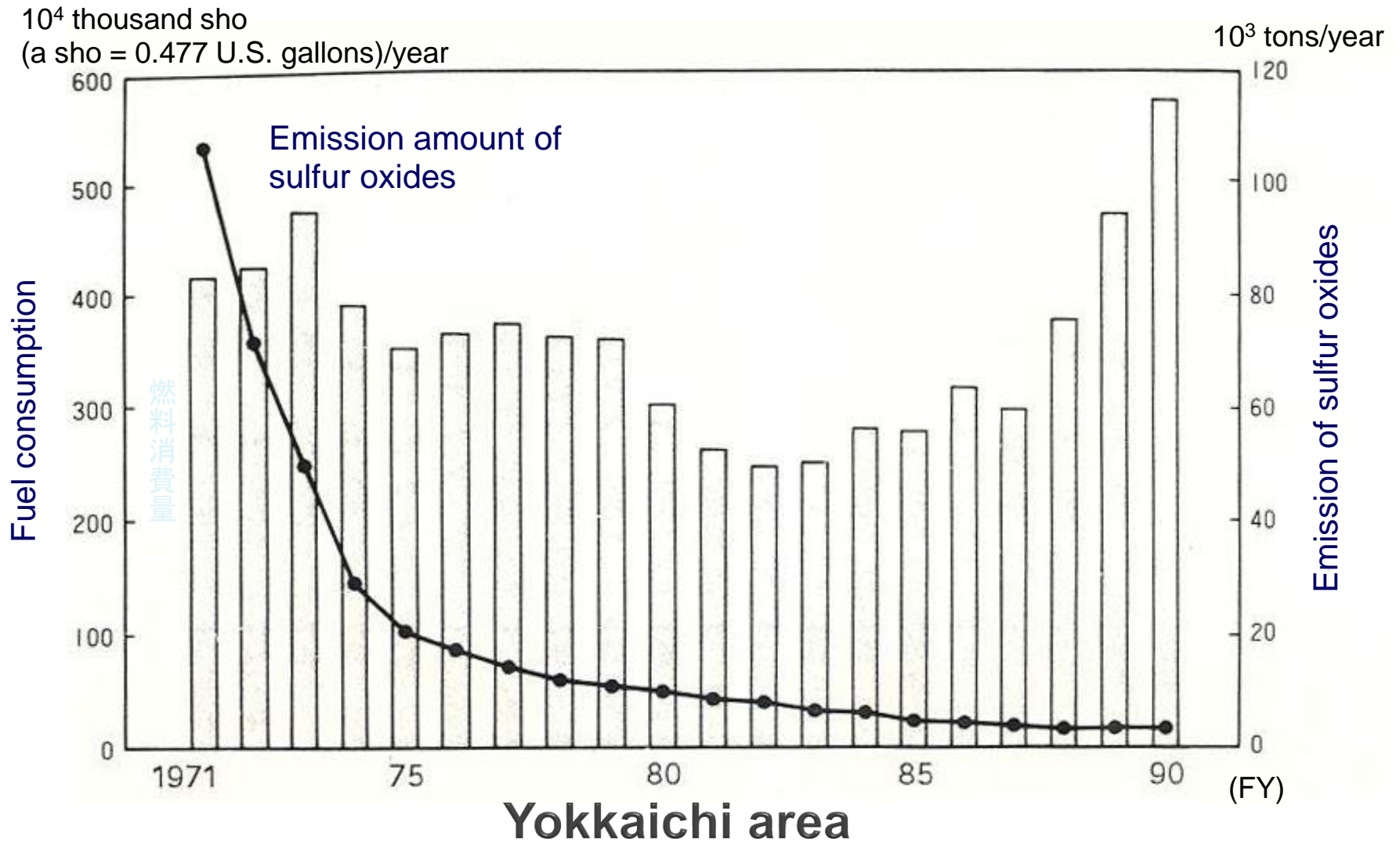
Exhaust gas
desulfurization facility



- ① Leveraging of diffusion and dilution effect of tall stacks
- ② Setting of sulfur-oxide emission allowance for each factory (regulation of total emissions)
- ③ Removal of sulfur from exhaust gas
- ④ Introduction of system for the provision of medical fee aid for asthmatic patients

Efforts in Yokkaichi City to Prevent Pollution and Improve the Environment

Trends in the emission of sulfur oxides and fuel consumption



Mass Production, Mass Consumption and Mass Waste

Mass
production

Mass
consumption

Mass waste



Introduction of
laws



Current Waste Treatment Methods

In Yokkaichi City:

① Disposal by incineration

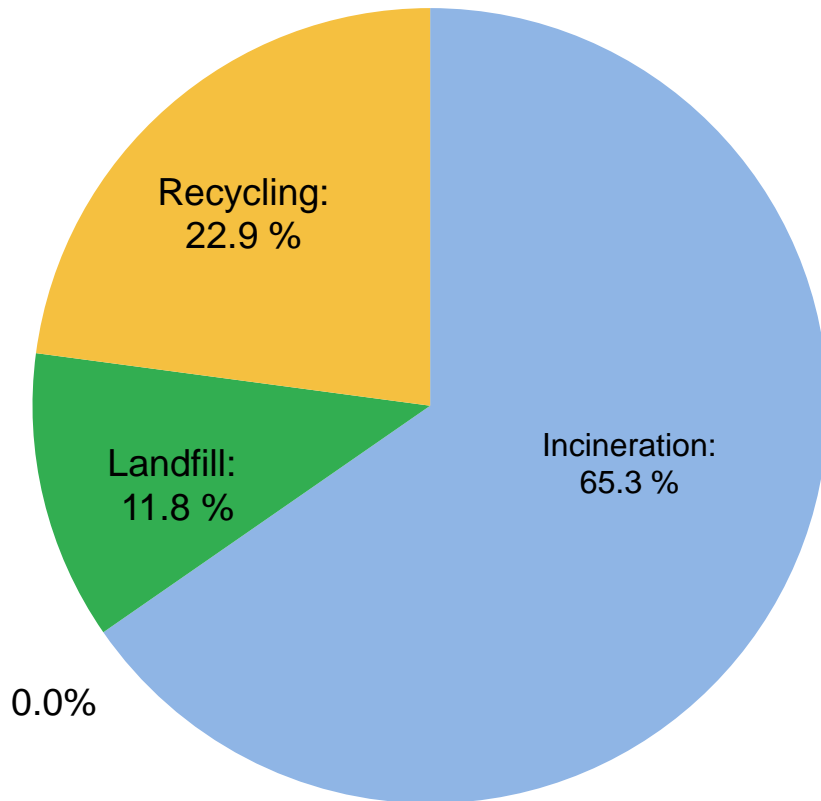
② Disposal in landfill

③ Recycling



Recyclable waste is separated into 7 categories

Waste Treatment in Yokkaichi City (FY2014)

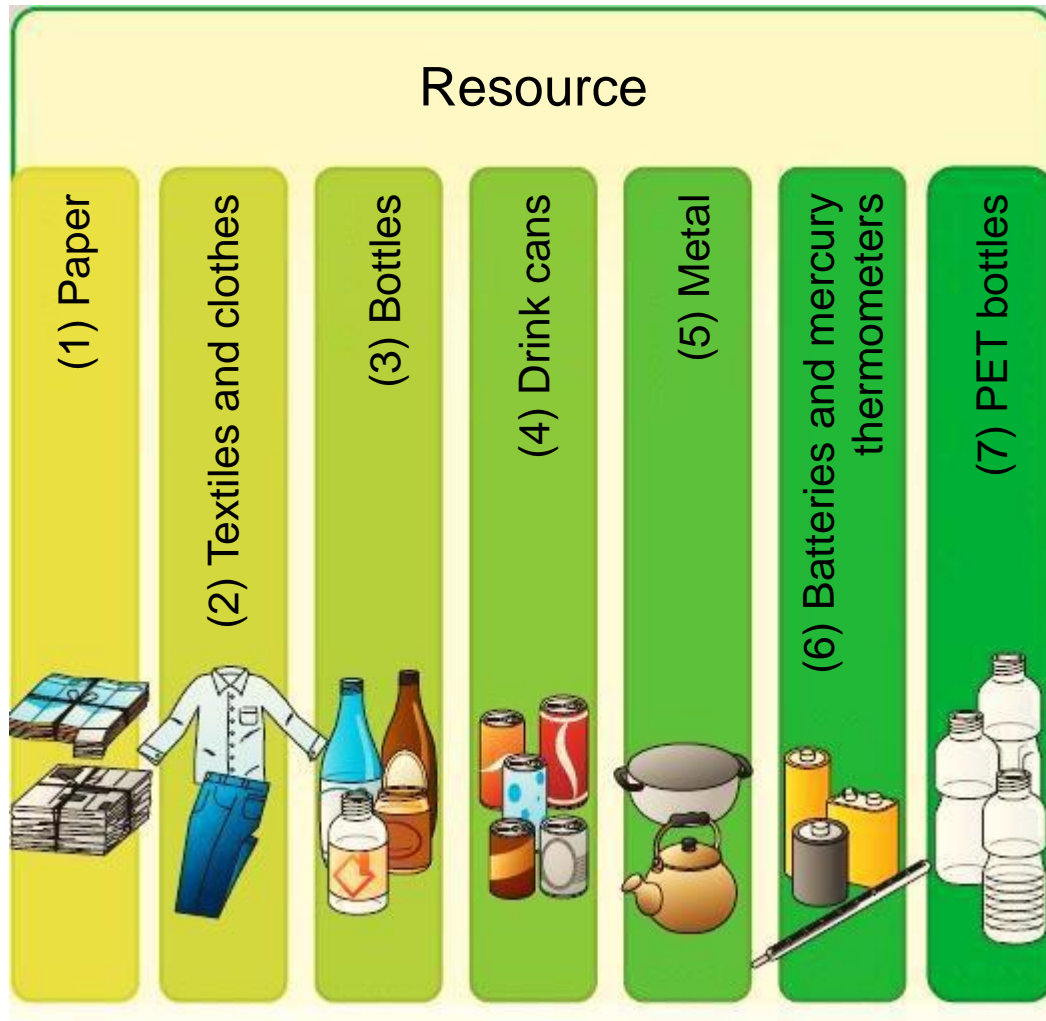


Total amount of waste treated:
126,917 t

941 g per person per day

It is important to reduce
the total amount of
waste

Recycling Initiatives in Yokkaichi City



The cooperation of local residents is needed to facilitate the collection of resources according to their type.

Residents cooperate with this system of collection by attending the waste collection sites according to a duty roster system.

Eco-Station (Collection Point for Recyclable Items)



**Business operators
(supermarkets, etc.)**

Offer sites for collection
points
(part of a parking area, etc.)

**Citizens'
organizations
(including NPO)**

Collection of recyclable
waste

Yokkaichi City

Subsidy

Environmental Education and International Cooperation

Environmental Education for Elementary School Children



Target: Fourth grade elementary school children
Content:

- Waste treatment and recycling
- Experience of throwing waste into a refuse truck
- Tours through waste disposal facilities, landfill sites, etc.

International Center for Environmental Technology Transfer (ICETT)

ICETT carries out various activities with regard to environmental conservation and promotes the smooth transfer of technology to meet the unique characteristics of various foreign countries.



Established in March 1990

No. of trainees accepted:
2,387 from 89 countries

Main countries:
China and Southeast Asian countries

GLOBAL 500 Award

June 1995

Yokkaichi City and its mayor were presented with the GLOBAL 500 award by the United Nations Environment Programme (UNEP).

The fact that citizens, local enterprises, and the local government united in their efforts to deal with Yokkaichi pollution was recognized by the rest of the world as well.

Exchanges with a Sister City and a Friendship City

Project for human resources development in the environmental field: Global environmental study group

Project content

Junior high school and high school students from Tianjin City (friendship city) and City of Long Beach (sister city) are encouraged to think about environmental problems from an international perspective through exchanges and training.



Future Initiatives

Yokkaichi City Clean Center

Gasification melting furnace (shaft type) (accompanied by crush treatment facilities)

☆Utilization of heat energy: Sufficient electric power to service 9,000 households can be generated

A stable and effective treatment for
incineration ash
Recycling (production of slag)

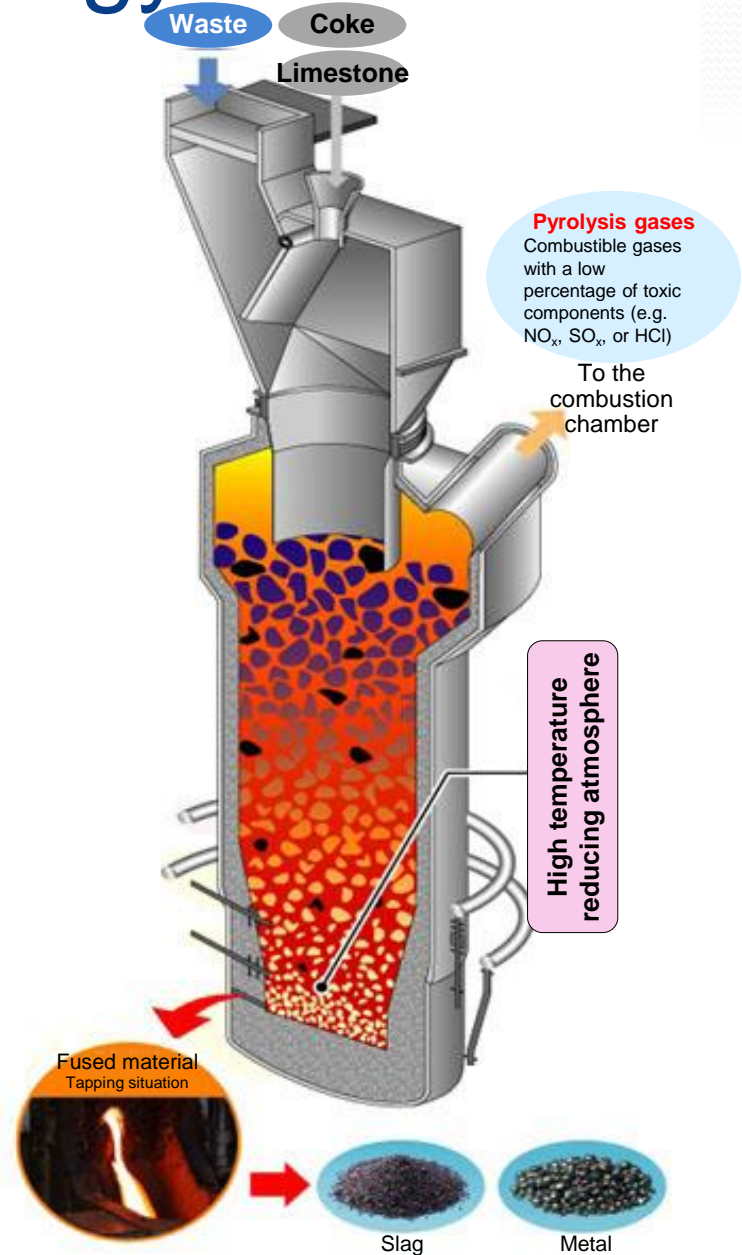
Significant reduction in final volume of
waste for disposal

Utilization of Heat Energy

Waste heat from incineration

Power generated by a turbine

Electricity for 9,000 households



Importance of the Reduce Part of the 3Rs

3Rs

Reduce

Reuse

Recycle

•It is possible to reduce waste by reviewing your lifestyle

Used products should be recycled

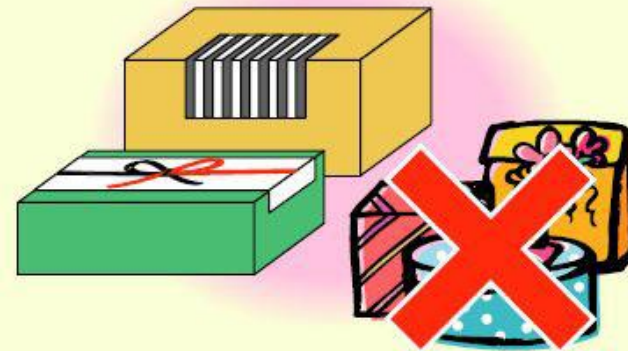
•Requires a lot of manpower and energy
•Requires creation of a social mechanism and the use of technology

System for Shops Promoting Waste Reduction and Recycling

(1) Implementation of measures to reduce the use of plastic shopping bags



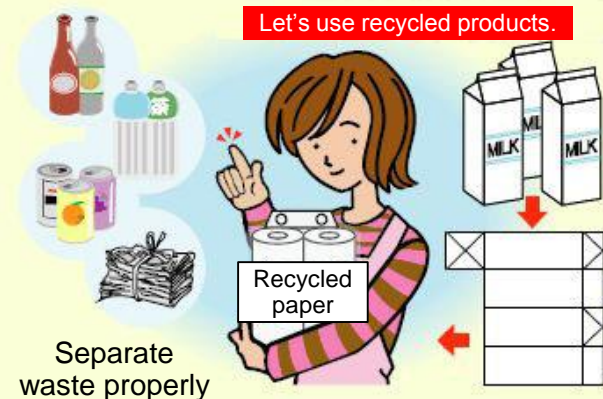
(2) Implementation of simple packaging



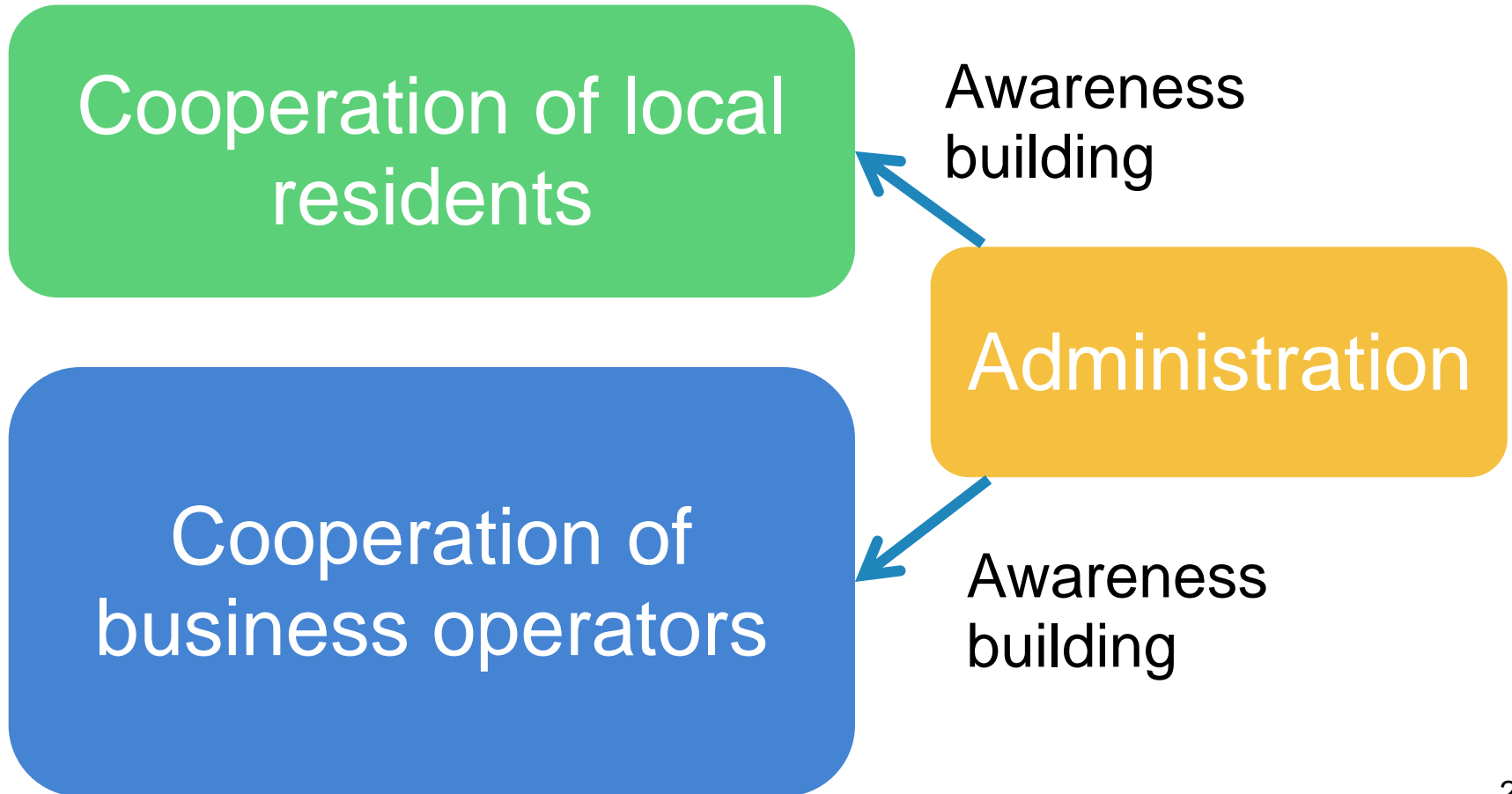
(3) Implementation of separate collection and recycling of waste from shops



(4) Implementation of simple packaging



Important Factors in Reducing Waste



View of the Yokkaichi Industrial
Complex at Night

Thank you for your attention.

