An aerial photograph of Osaka City, Japan, showing a dense urban landscape with numerous skyscrapers and modern buildings. A wide river, the Yodogawa, flows through the center of the city, with several bridges crossing it. The sky is blue with scattered white clouds. The text "Business Related Waste Reduction in Osaka City" is overlaid on the top half of the image in a white, italicized font with a black outline.

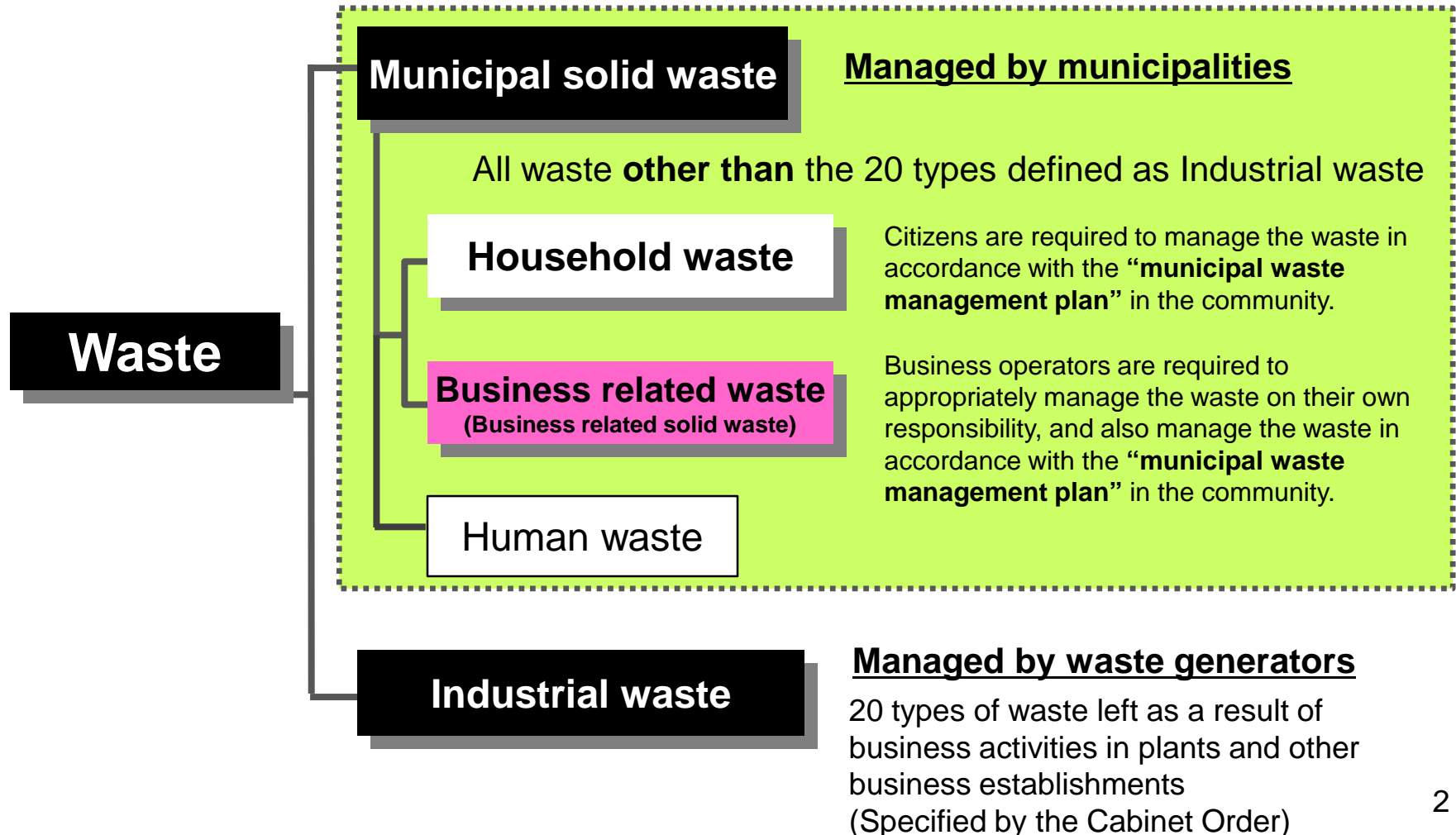
Business Related Waste Reduction in Osaka City

September 2018

City of Osaka

Classification of Waste in Japan

Waste Management and Public Cleansing Law (Waste Management Law)





Operation of Waste Disposal in Osaka City

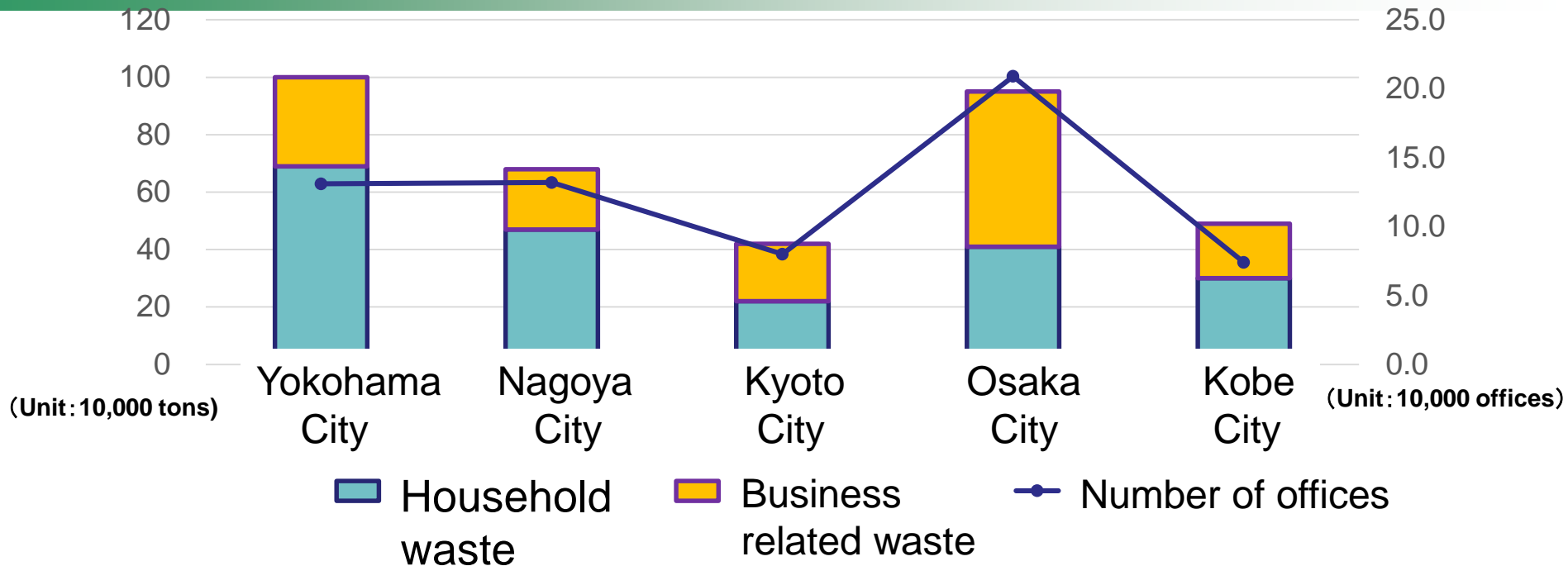
Types of waste	Collection and transportation	Intermediate disposal(※)	Landfill disposal
Household waste	Osaka City (Direct management and consignment)	Osaka City, Environmental facilities association(※)	Environmental facilities association
Business related waste	Waste service companies licensed by Osaka City, and businesses		
Environmental waste	Osaka City (Direct management and consignment)		

※ Intermediate disposal indicates incineration and crusher.

※ The part of intermediate facilities and landfill sites are operated by Environmental Facilities Association whose members included Osaka City, Yao City and Matsubara City.



Amount of Waste Collection in Major Cities



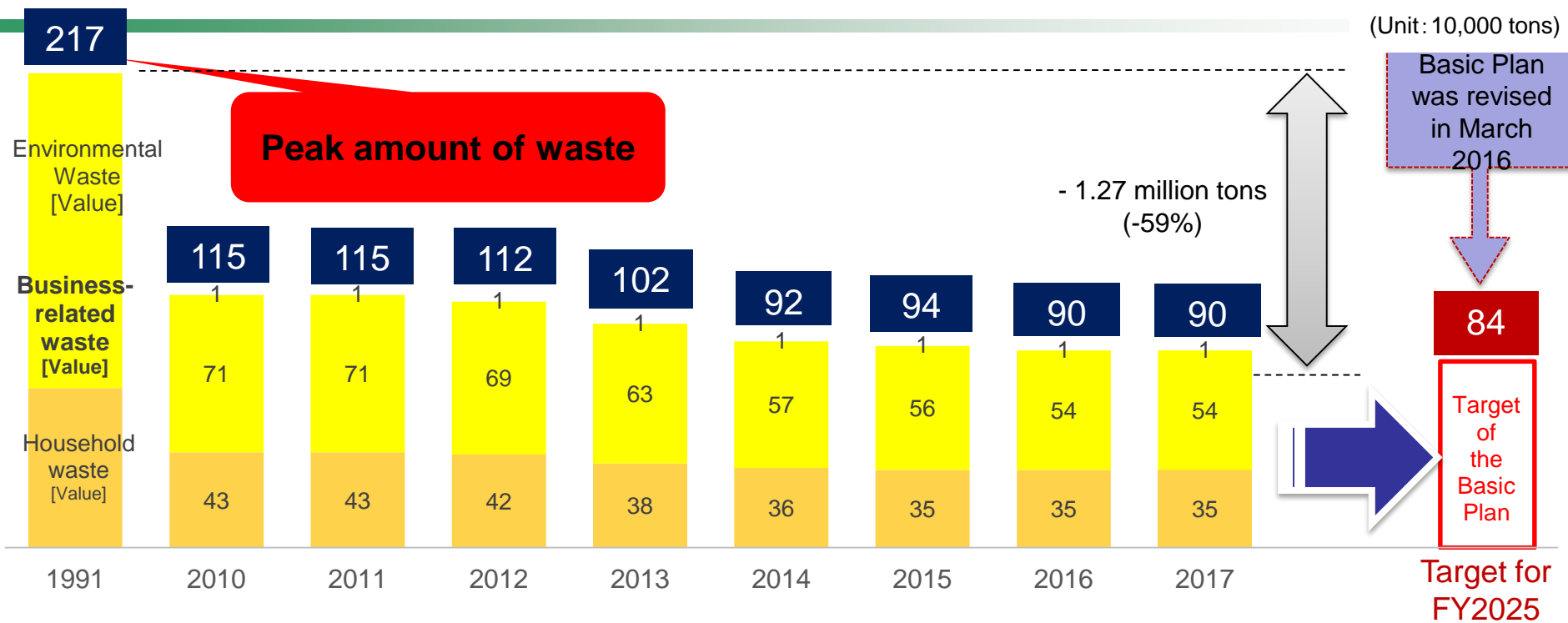
※Amount of waste collection : amount of waste carried to municipal disposal facilities

- **Number of offices** 209 thousand offices
(Second largest is Nagoya City, 131 thousand offices)
- **Daytime population in Osaka city** 354 millions people
(Second largest is Yokohama City, 341 millions people)
- **Rate of daytime population** 131.7%
(Second largest is Nagoya City, 112.8%)
- **Rate of business related waste in Osaka City** 57.1%
(Average of other major cities, 36.9%)



Treated Amount of Municipal Waste in Osaka City

(Unit: 10,000 tons)



- Waste reduction guidance for specified buildings (Apr '93)
 - Mandatory submission of waste reduction plan and assignment of a responsible person
 - On-site inspection and advice roughly once a year
- Expanded scope: Office total floor area 3,000 m² → 2,000 m² (Apr '99)
- Factories & warehouses with the total floor area of 3,000 m² or more (Apr '03)
- Office total floor area 2,000 m² → 1,000 m² (Apr '07)

● Use of clear plastic bags at waste discharge (Jan '08)

● Disposal charge was raised from 58 yen to 90 yen per 10 kg (Apr '12)

● Implementation of measures for waste paper (Oct. 2013)

- Prohibition on recyclable paper carried to incineration facilities

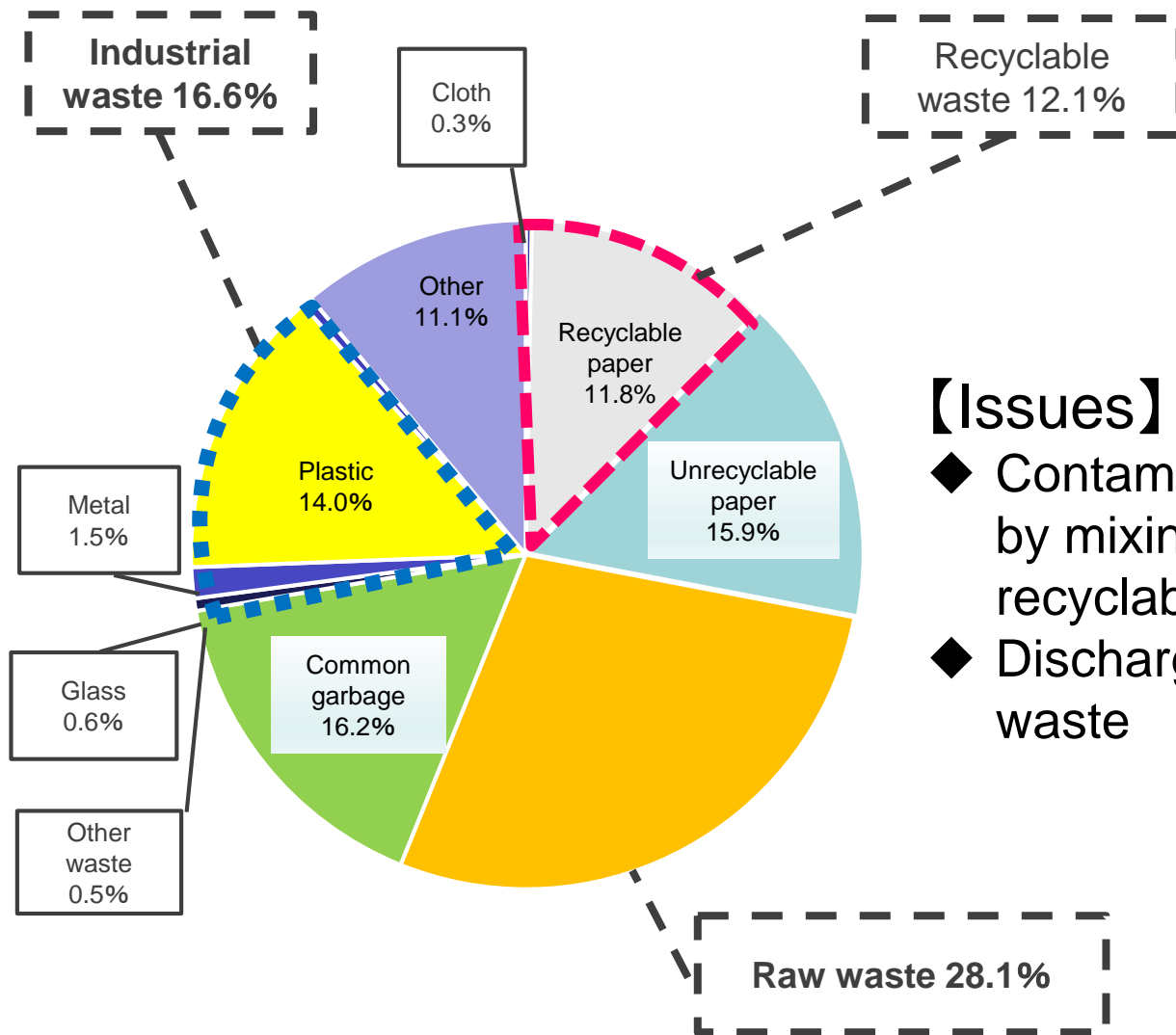
● Promotion of proper separation and disposal of waste (Apr '09)

- Enhancement of inspection of waste at incineration facilities
- Regulations for businesses and waste service companies



Composition of Business Related Waste

FY 2017 survey of business related waste in Osaka City



【Issues】

- ◆ Contaminating municipal waste by mixing industrial and recyclable waste
- ◆ Discharge of too much raw waste

Business Related Waste Measures

For reduction and proper disposal of waste,

1. Guidance for businesses



2. Checking for improper waste at incineration facilities



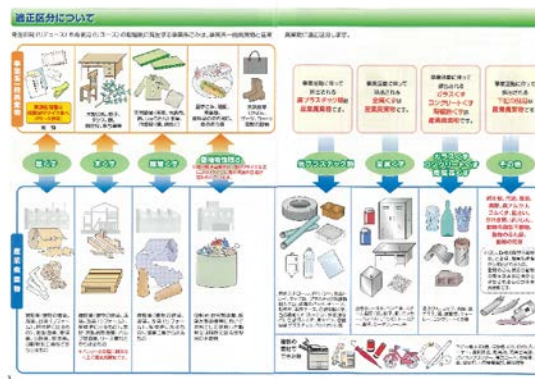
Guidance for Businesses

Guidance of waste reduction for specified buildings

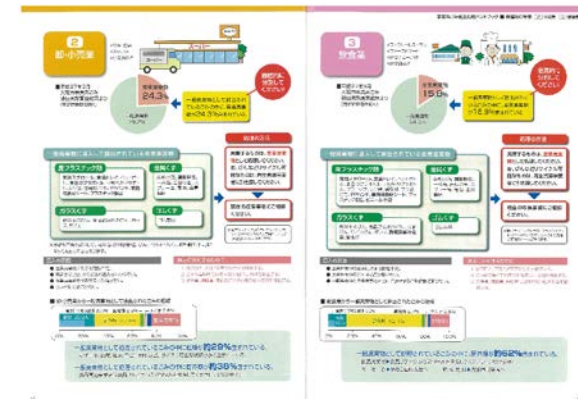
- The target of guidance is offices, stores and other structures with a total floor area of 1,000 m² or more.
Number of buildings ; 4,287
- Mandatory submission of waste reduction plan yearly and assignment of a person in charge
- On-site inspection and advice roughly once a year
- Dissemination of waste reduction



Basic information on waste management



Separation, recycling and disposal of waste by business sector





Seminar and Award for Waste Reduction Promotion



Seminars

(2017 theme: reduction of food loss)



Introduction of good practice cases

Osaka city is establishing a system to officially commend owners and administrators of buildings for excellent performance as initiatives for waste reduction and proper disposal.



Award



Waste Inspection at Incineration Facilities

【FY 2017】

- Number of waste collection vehicles at incineration facilities ; 388,038 vehicles
- Rate of inspection ; 5.4%
Inspected vehicles ; 20,883 vehicles
- Number of cases instructed ; 852 cases
Rate of instruction ; 4.1%
- Number of guidance cases ; 2,817 cases



【Instructed items】



Industrial waste



Recyclable paper



Not using clear plastic bags



International Environmental Cooperation



UNEP-IETC



City of Osaka	Support policies on environmental and climate change through intercity cooperation
Global Environment Center (GEC)	Support development of environmental and low carbon projects utilizing Joint Crediting Mechanism (JCM),etc.
Businesses in Osaka and Kansai	Proposing solutions based on advanced environment and low carbon technology



Thank you very much

