

Waste Reduction and Recycling Initiatives in Kyoto City

—Tourism and Youth Education (3Rs/Citizen Participation)—



Meguru-kun

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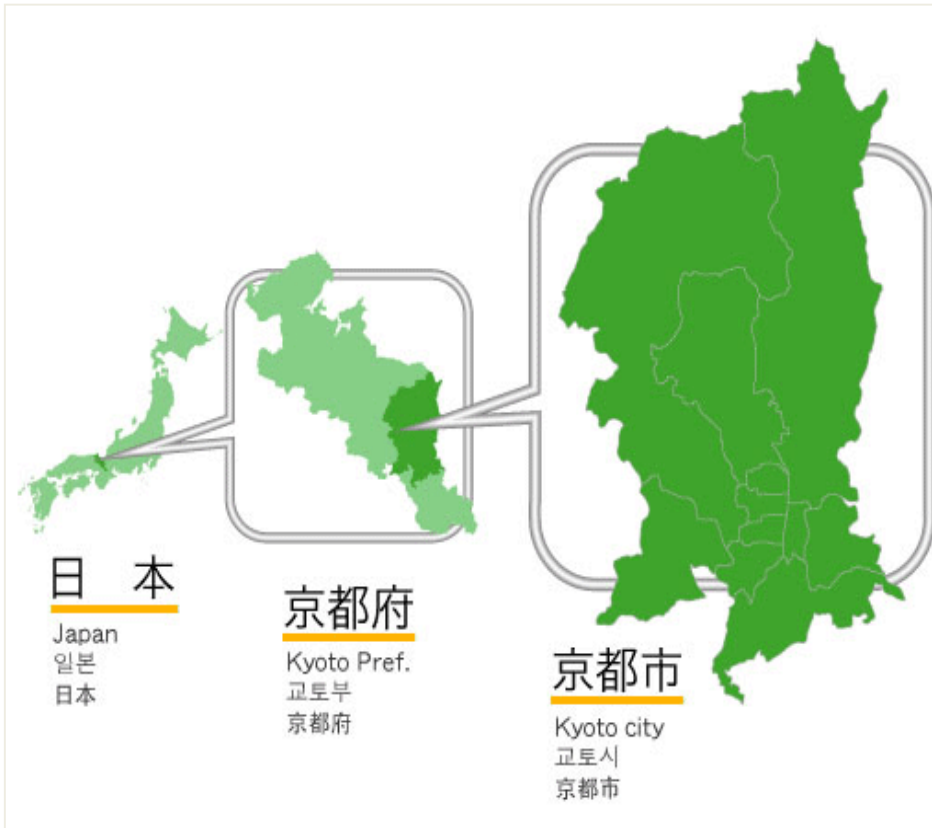


Kogomi-chan

Junko Katsumi
Director in Charge of Technology
Waste Reduction Promotion Section,
Environment Policy Bureau, Kyoto City

Outline of Kyoto City

■ Geographical features



Population: 1.47 million

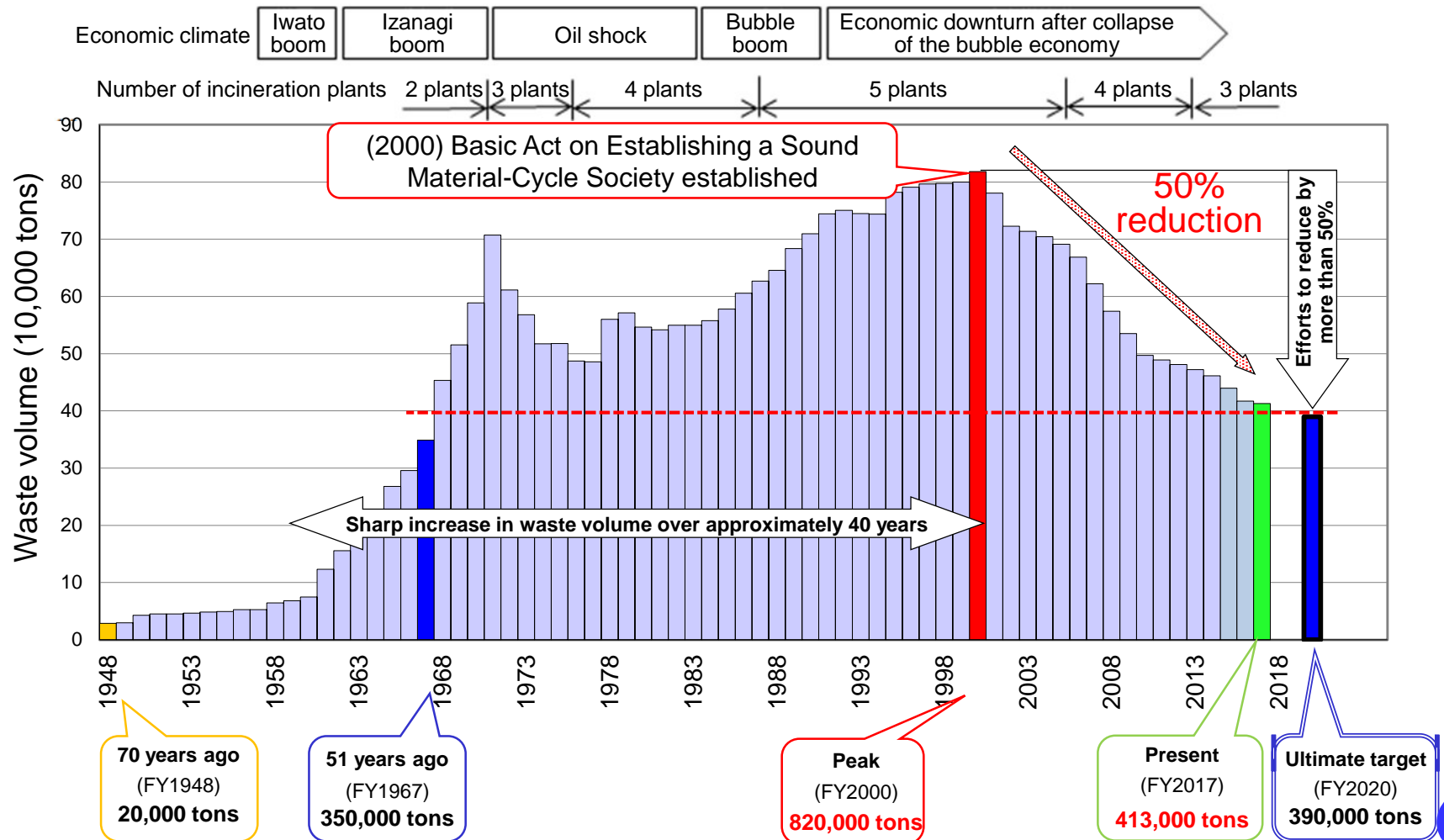
Area: 827.8 km²

City Characteristics

Historic city	<ul style="list-style-type: none">• Kyoto holds about 20% of all national treasures• 13 shrines and temples, and one castle designated as a UNESCO World Heritage Site
Tourist city	<ul style="list-style-type: none">• More than 50 million visitors a year
University city Student city	<ul style="list-style-type: none">• 38 universities and junior colleges• Students account for 10% of the population
Rich natural environment	<ul style="list-style-type: none">• 3/4 of the area is forest

Waste Volume Trends in Kyoto —Halved from Its Peak—

- Waste volume in Kyoto City (volume accepted by the City) increased sharply in line with the high economic growth to reach its peak of 820,000 tons in FY2000. However, as a result of various efforts to reduce the waste generated, with the understanding and cooperation of citizens and business operators, waste volume nearly halved from its peak by FY2017 (household waste per capita per day of 402 g; the least of all ordinance-designated cities).
- FY2017 results fell 23,000 tons short of the target of 390,000 tons. With the pace of reduction decelerating, new initiatives are currently underway towards making further reductions.



Major Waste Reduction Measures Taken by Kyoto City So Far

Household waste

- **Enhanced separate collection, collection at City-designated locations and mobile collection services (to expand recycling opportunities)**
26 items to be separated, the largest number of all ordinance-designated cities
- **Charges for waste collection**
Designated pre-paid household waste bags (October 2006); Bulky waste (October 1997)
- **“Shimatsu-no-Kokoro Ordinance”** (meaning an awareness of cleanliness and tidiness) **aimed at reducing waste by half** (October 2015)
Setting 2R initiatives which every household must strive to achieve; Making it obligatory to separate recyclable waste

Business waste

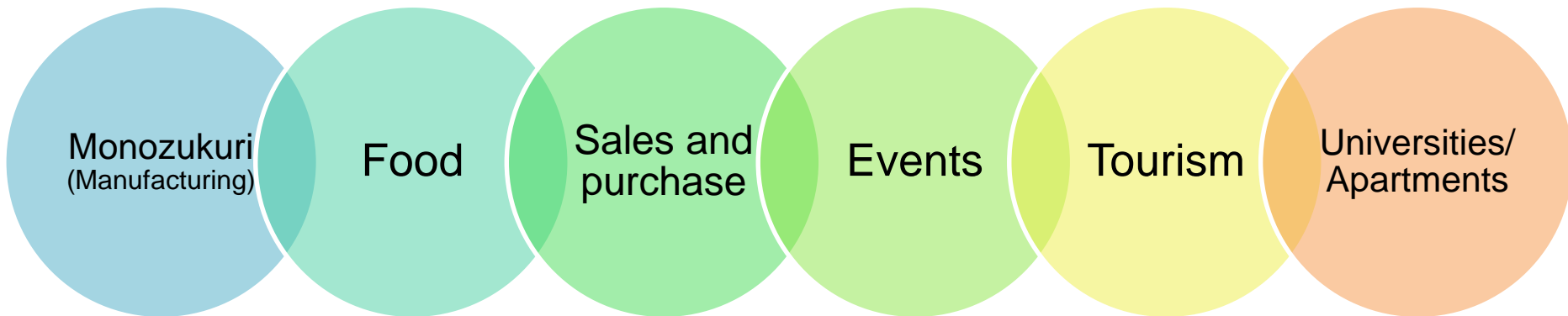
- **System that requires business operators to submit a waste reduction plan**
Large business establishments (April 1994); Specific food business operators (April 2011)
- **Revision of waste collection charges (increased charges)**
- **Transparent collection bags for business waste** (June 2010)
- **Well-rated business establishment recognition system** (April 2012)
- **“Shimatsu-no-Kokoro Ordinance” aimed at reducing waste by half** (October 2015)
Setting 2R initiatives which every business operator must implement/strive to achieve; Making it obligatory for business operators to report the implementation status of 2R initiatives and to separate recyclable waste

Citizen - business operator - government collaboration

- **Establishment of “Kyoto City Council for Waste Reduction Promotion”** comprised of citizens, business operators and the government (November 1996)
- **Agreement on promoting the use of “My Bags” and reducing the use of single-use shopping bags** (Kyoto method; January 2007)
Charging for plastic carrier bags provided by supermarkets across the city (All supermarkets with a floor area of 1,000 m² or more)

“Shimatsu-no-Kokoro Ordinance” —2R Initiatives in 6 Fields—

The ordinance makes it obligatory to implement 2R initiatives in 6 fields unique to Kyoto.



- Kyoto is:
- (1) an advanced monozukuri city where a wide range of industries from traditional to emerging enjoy a technological edge.
 - (2) a city of “Washoku” (Japanese cuisine), which has been recorded on UNESCO’s Intangible Cultural Heritage List.
 - (3) a city with thriving retail stores where merchandise and citizens meet.
 - (4) a city where a variety of events such as festivals, school festivals and the Jizo-bon Festival are held.
 - (5) an international, cultural and tourist city.
 - (6) a university city/student city.

Field	Sector	Initiatives
Tourism, etc.	Hotels and other accommodation facilities	(Business operators) Provide an environment where customers are able to separate their recyclable waste before disposal or if such waste is separated by employees, make customers thoroughly understand the need for separation; Refrain from supplying customers with disposable toiletries as much as possible <hr/> (Citizens) Separate recyclable waste generated from accommodation facilities before disposal
	Souvenir manufacturing and sales	(Business operators) Produce and supply different types of package for one product, i.e. a simple package if consumed at home vs. decorative package if a gift; Make both simply-packaged and decoratively-packaged products available in the same section of the store and make customers aware there are alternatives to choose from; Conduct advertising campaigns for simply-packaged products at food and product fairs held in other cities

Initiatives to Reduce Food Loss

—2R Behavior Guidelines “Shimatsu-no-Kokoroe”—

With the aim of helping **citizens and tourists** implement the **2Rs** including **food loss reduction**, we have compiled 2R behavior guidelines, “Shimatsu-no-Kokoroe”, by behavior setting, namely banquets, day-to-day life, and trips (3 volumes: Utage-no-maki, Kurashi-no-Maki and Tabi-no-Maki).

(English, Chinese and Korean editions are available.)



Utage-no-Maki



Kurashi-no-Maki



Tabi-no-Maki

“Shimatsu-no-Kokoroe” Tabi-no-Maki

This volume gives **tourists** tips to reduce food waste on various occasions and in various settings such as before going out and at accommodation facilities, tourist sites, restaurants and shops.

(Before going out) When making a dinner reservation, check whether an appropriate amount of food is served and if there are any ingredients you need to avoid.

(Restaurants) When ordering, check the amount of food and the ingredients;
Share food with your friends and family members;
When having a buffet meal, do not leave uneaten food on your plate, etc.

Initiatives to Reduce Food Loss —Recognition System for Premises That Promote the No Leftovers Campaign—

- In December 2014 we established a system to recognize **restaurants** and **accommodation facilities** that promote the “**Namagomi (Food waste) 3-Kiri Campaign**”, which is focused on “**Tsukaikiri**”, to use all the food; “**Tabekiri**”, not to leave food uneaten; and “**Mizukiri**”, to drain food waste before disposal, as “**Premises That Promote the No Leftovers Campaign**” (818 premises as of the end of August 2018).
- In addition, a new recognition system which recognizes **food retailers** that make efforts to reduce food loss as “**Premises That Promote the No Leftovers Campaign (food retailer version)**” was established in September 2018.

Conditions of recognition

Restaurant and accommodation facility version: Of the 8 initiatives such as, (1) use all the food, and (2) not leave food uneaten, put two or more initiatives into practice

Food retailer version: Of the 8 initiatives such as, (1) reduce food left on the shelf (expired food), and (2) encourage consumers not to leave food uneaten and to use all the food, put two or more initiatives into practice

■ Certified restaurants and accommodation facilities implement the following 3 measures



Display the issued sticker, etc.
on the premises



Proactively inform customers and
visitors of the initiatives which they
are working on



Push ahead with implementing their
chosen initiatives and strive to
eliminate or minimize the generation
of food waste, etc.



<Restaurant and
accommodation
facility version>



<Food retailer
version>

Issue certificates and
stickers

Environmental Education —Cultivation of Shimatsu-no-Kokoro—

Environmental education and the basic educational policy of Kyoto City

- As the place where the Kyoto Protocol was signed (1997), Kyoto has so far provided environmental education including waste reduction, in collaboration with schools, local communities, NPOs, companies, etc.
- In order to further improve the quality of the education, we formulated basic environmental education and learning promotion policies tailored to suit the various stages of individuals' life cycles (April 2017).

Supplementary reading material on the environment (4th-grade pupils/junior high-school students)

This material explores environmental issues, including waste separation, tips for reducing waste, discarded food, and reasons why we have to reduce waste, in depth, and is distributed to all relevant pupils and students.

Excursion to environmental facilities, “Waste Reduction Eco Bus Tour”

In FY2008, we started a free bus tour service that takes visitors to waste management facilities, private-sector recycling facilities, etc. (134 tours in FY2017 for a total of 2,673 visitors)

Community study meeting, “Shimatsu-no-Kokoro Gakko”

Calling for the participation of local communities across the city, in June 2017 we started **study meetings** chaired by City officials, etc. with the concept, “Let's **have fun discussing** waste reduction!” (287 meetings in FY2017)



Environmental Education —Eco School Trip Project—

- Since there is **a need to spread the 2R initiatives on tourism-related waste reduction across the country**, of all the visitors to Kyoto, we focus on those who: (1) learn effectively from environmental education; (2) visit the city in a group as part of school activities; and (3) are highly likely to re-visit the city in the future.
- **Kyoto City provides eco bags to students on school excursions** (1.1 million students in 2014) from schools that issued the **“Eco School Trip Declaration.”** This project is aimed at encouraging schools to put eco-friendly school trips into practice. (20,000 eco bags)

2R practice involved in the “Eco School Trip Declaration”

Schools are asked to declare that they will have their students put the three initiatives into practice, namely: **to use their own toothbrush; to bring eco bags with them; and not to leave food uneaten.**

Effects of providing eco bags

- **Reduced use of single-use shopping bags** when students buy souvenirs
- **Kyoto’s environmental initiatives are to be spread across the country** by students who continue to use the eco bags even after returning home

Survey on effects of the initiative to encourage students **not to leave food uneaten**

- By encouraging elementary school pupils on school excursions to do their best not to leave dinner food uneaten, leftovers per pupil reduced to around two-thirds.



Environmental Education

—University Student Waste Reduction Supporter Project—

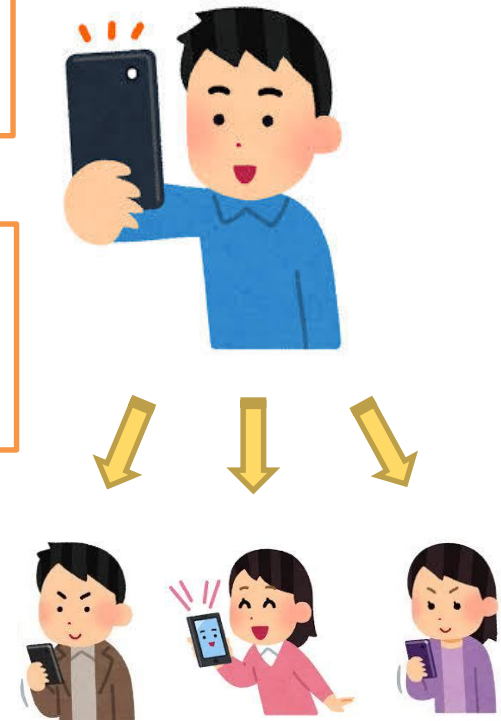
- We appoint **university students** as “University Student Waste Reduction Supporters” and ask them to widely share their daily **efforts to reduce/separate waste** including efforts to reduce paper and food waste through **SNS (Instagram and Twitter)**.
- We aim to raise awareness of waste separation and recycling mainly among the youth, make waste reduction a habit for them, and establish a waste reduction network.

Student supporters have fun sharing information about waste reduction, separation and recycling with their contemporaries through SNS and capitalizing on their unique ideas.



The objective is to expand the network of students who actively tackle waste reduction, separation and recycling with the help of information posted by student supporters (to share relevant information).

- ◎ University-based teams composed of 3-5 students each are set up. They consider what to post and share relevant information through Instagram and Twitter on a routine basis. (26 students from 7 universities participate in the project.)
- ◎ Teams will be ranked by the number of Likes their pages have received or the number of people their pages have appealed to. Top-ranked teams will win a prize.



Thank you for your attention.

