

# Yokohama City Master Plan for General Waste Management Promotion Plan

2018 - 2021  
Digest Edition

Reduce

Recycle

Reuse





## Promotion Plan for the Yokohama City Master Plan for General Waste Management

The Yokohama City Master Plan for General Waste Management is a long term plan with a duration of 16 years, running from FY 2010 to FY 2025.

The plan's goal is to promote "Reduce", the most environmentally friendly of "3Rs" (Reduce, Reuse and Recycle). Initiatives aim to reduce the burden placed on the environment by reducing the amount of waste generated by households, and to effectively utilize and secure resources and energy.

The Promotion Plan for the Yokohama City Master Plan for General Waste Management (2018 - 2021) (hereafter, "Promotion Plan") is a plan which sets out the specific initiatives that will be taken over the course of the 4 years starting in FY 2018 to promote the Yokohama City Master Plan for General Waste Management.

|                     | FY 2010   | FY 2014                  | FY 2018                  | FY 2025        |
|---------------------|---|--------------------------|--------------------------|----------------|
| Master Plan         | The Yokohama City Master Plan for General Waste Management (16 years) |                          |                          |                |
| Promotion Plan      | Promotion Plan (4 years)  | Promotion Plan (4 years) | Promotion Plan (4 years) | Over 16 years: |
| Waste and resources | - 5%: Achieved  |                          | - 3%                     | -10%           |
| Greenhouse gases    | - 25%: Not achieved   |                          | - 25%                    | -50%           |



## Overview of the Promotion Plan

### Concept

Promote initiatives aimed at realizing a "Yokohama-style recycling-oriented society" while placing value on individual 3R actions of citizens and businesses

### 5 Leading Projects

Amid the dramatic changes taking place in society, future waste policies need to be implemented in ways which bridge a variety of different fields, such as welfare, disaster prevention, civil society, and industry. To achieve this, the City of Yokohama drew up the 5 Leading Projects. These projects set out directions for implementing a range of policies in the Promotion Plan, and are earmarked as important projects which play leading roles in the plan. For more details, see p. 5.

### 9 Promotion Policies

With the understanding, cooperation and collaboration of citizens and businesses, we have been promoting waste management in a manner which supports the safety of civilian life.

To continue doing so, we have set out 9 Promotion Policies covering initiatives that will be implemented while undergoing appropriate revisions based on changes in people's behavioral patterns, values, etc. For more details, see p. 6.



# SDGs and the Promotion Plan

The SDGs (Sustainable Development Goals) are a series of goals for sustainable development adopted at a United Nations summit held in September, 2015. Based on the principles of partnerships and leaving no one behind, the SDGs set out 17 goals and 169 targets that are to be met by 2030.

The SDGs aim to create a future sustainable world that will enrich the lives of all people in terms of society, the economy and the environment.

Our Promotion Plan goes beyond merely encouraging people to reduce their environmental impact and promoting recycling; it also adopts the approaches taken in the SDGs which recognize the importance of simultaneously solving a series of other issues. To reflect this, it contains among other things initiatives linked with welfare, economic revitalization, and detailed policies based on the needs of citizens.

## SUSTAINABLE DEVELOPMENT GOALS 17 GOALS TO TRANSFORM OUR WORLD



The 17 Sustainable Development Goals (SDGs)

Source: United Nations Information Centre

### 5 Leading Projects



### Leading roles

### 9 Promotion Policies



### Steady promotion



Yokohama-style  
recycling-oriented  
society

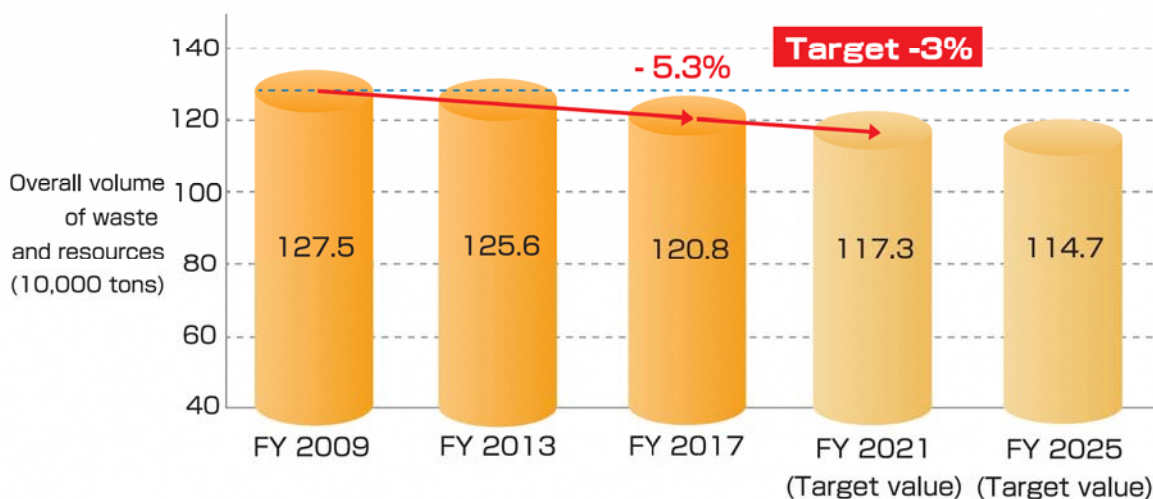




# Basic Targets

## Basic Target 1

Reduction of more than 3% in the volume of waste and resources (compared with FY 2017)



Transitions in overall volume of waste and resources

We were able to achieve a reduction of 5.3% in the overall volume of waste and resources by FY 2017. We aim to make a further reduction of at least 3% by FY 2021, and aim to achieve the target set out in the Yokohama City Master Plan for General Waste Management, which is to achieve by FY 2025 a reduction of at least 10% compared with FY 2009.

### Overall volume of waste and resources (Target)

- 3% or more compared with FY 2017  
(- 8% or more compared with FY 2009)

1.173 million tons

### Performance in past FY (reference)

|         |                    |
|---------|--------------------|
| FY 2017 | 1,208 million tons |
| FY 2009 | 1,275 million tons |

## Basic Target 2

Reduction of at least 25% in greenhouse gases emitted as a result of waste treatment

(compared with FY 2009)

We aim to achieve a reduction of at least 25% compared with FY 2009 based on the same criteria.

### Greenhouse gases emitted as a result of waste treatment (Target)

- 25% or more compared with FY 2009

212,000 t - CO<sub>2</sub>

### Performance in past FY (reference)

|         |                             |
|---------|-----------------------------|
| FY 2017 | 286,000 t - CO <sub>2</sub> |
| FY 2009 | 282,000 t - CO <sub>2</sub> |

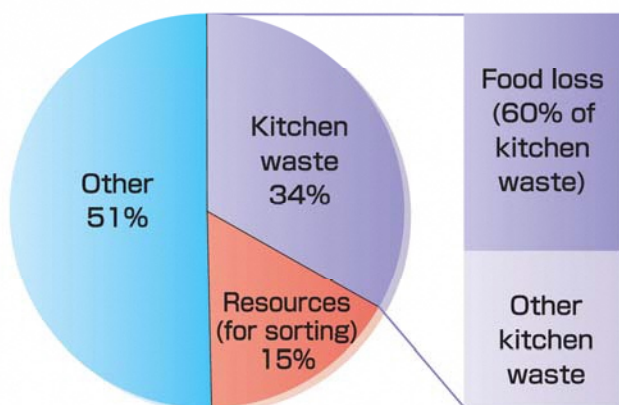


## Strategic Targets

- Priorities during the implementation of the Promotion Plan -

### Strategic Target 1

**Reduction of at least 20% in food loss generated by households (compared with FY 2015)**



Results of a survey on the composition of burnable waste (FY 2015)

| Types of food loss    | Ratio in kitchen waste | Generated amount of food loss |
|-----------------------|------------------------|-------------------------------|
| Uneaten food products | 10.3%                  | 111,000 t/year                |
| Leftovers             | 36.7%                  |                               |
| Food scraps           | 10.7%                  |                               |

Ratio of food loss in kitchen waste (estimates for FY 2015)

Approximately 60% of kitchen waste generated by households is food loss caused by food that has been thrown away untouched, leftovers, and food scraps such as vegetable peelings.

Starting in FY 2018, we have set targets for the next 4 years, aiming to halve the amount of food loss generated by households by FY 2030. We aim to reduce the food loss generated by households by at least 20% compared with FY 2015, contributing to reducing the overall volume of waste.

### Strategic Target 2

**Increase the electricity provided by waste incineration by at least 5%**

**by improving their efficiency through better energy management and energy-saving measures (compared with FY 2017)**

We aim to increase the amount of electricity generated at waste incineration plants through technological developments and better energy management, and to save energy by introducing high efficiency equipment like LED lighting and revising operating methods for equipment.



## Guideline

The facility shown on the right is Minami-Honmoku Block #5 Final Disposal Site, which opened in 2017. It is the only final disposal site for general waste in the City of Yokohama. Therefore, in order to ensure that this precious asset can be used for as long as possible, in FY 2017 we set a guideline to ensure a lifespan of at least 50 years, and informed citizens of this.

We aim to prolong the life of this final disposal site by reducing the amount of waste and by taking steps to turn incinerated ash into a resource.





# 5 Leading Projects

## “Project 1 : Welfare”

### Outline of goals

We are promoting a range of initiatives in collaboration with a local welfare network, such as community waste collection for people in need, measures to deal with houses overflowing with garbage as a result of hoarding, giving assistance to areas in which non-Japanese residents are having trouble putting out their garbage properly, and food programs.

### Specific initiatives

- ① Community waste collection, measures to deal with houses overflowing with garbage
- ② Assistance to non-Japanese nationals for putting out garbage
- ③ Promotion of food bank and food drive activities

Community waste collection ▶



## “Project 2 : Community”

### Outline of goals

We are encouraging independent activities among communities by laying the foundations for better connections between exchanges, proposals and co-creations.

### Specific initiatives

- ① Promotion of enhanced cooperation with local organizations
- ② Promotion of projects initiated through local ingenuity
- ③ Promotion of diverse types of information exchanges

Public awareness activities by environmental committee members▲



## “Project 3 : Disaster Prevention Measures”

### Outline of goals

Yokohama City is creating a system enabling the prompt disposal of waste in the event of disasters. And members of the local community have been deepening their understanding of how we deal with toilets and waste created by disasters.

### Specific initiatives

- ① Initiatives to promptly secure temporary storage sites
- ② Initiatives to create initial response systems
- ③ Initiatives to encourage self-help and mutual assistance

Portable toilet in the event of disaster ▶



## “Project 4 : Public & Private Initiatives for Vitality”

### Outline of goals

We are introducing in Asia various initiatives that we created in partnership with the private sector. We are also implementing operational reforms such as the introduction of IoT, which has helped bring new vitality to our work in supporting recycling-oriented societies.

### Specific initiatives

- ① Utilization of IoT, AI, etc.
- ② Introduction of our expertise to other parts of Asia
- ③ Foster individuals who will supporting recycling-oriented societies

▶ Demonstration of waste sorting in Da Nang City, Vietnam



## “Project 5 : Recycling Infrastructures for the Future”

### Outline of goals

We are planning and designing a new next generation of incineration plants with the support of citizens.

### Specific initiatives

- ① Planning and designing the next generation of incineration plants
- ② Emphasis on proactive promotional activities, information dissemination, and dialog with citizens, especially those who live near those facilities



# 9 Promotion Policies

1

## Environmental Learning and 3R Promotion

- Visiting lecture courses
- Community environmental learning
- Development of a 3R culture by encouraging people to bring their own bag or drinking bottle



▲Booth at an event

2

## Improvement of Citizen Services and Safety

- Community waste collection
- Measures to deal with houses overflowing with garbage
- Exhaustive support for non-Japanese residents
- Disaster response



▲Multilingual leaflets

3

## Food Loss Reduction

- Food bank and food drive activities
- Wider range of soil mixture methods
- Popularization and promotion of restaurants that support food loss reduction



▲Tomato picking experience for nursery school children

4

## Urban Beautification

- Beautification measures for busy areas, etc.
- Designation of no smoking zones
- Beautification of areas which will be used for Rugby World Cup 2019™ and Tokyo 2020 Olympics and Paralympics



▲Local litter picking activities

5

## Recycling Promotion

- Promotion of resource collection by community groups
- Promotion of the recycling of small household appliances
- Inquiry into separate collections for cans, glass bottles and PET bottles

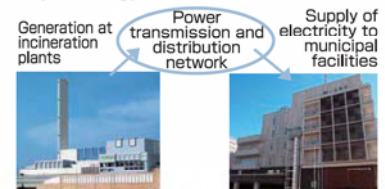


▲Collection box for small household appliances

6

## Energy Management and Global Warming Countermeasures

- Reduction of the greenhouse gas emissions of incineration plants
- Introduction of energy-saving facilities
- Utilization of energy creation as a city strategy



▲Effective use of electricity generated at incineration plants

7

## Sustainable Facility Management

- Measures to prolong the life of Incineration plants
- Development of new plants
- Extending the life of a final disposal site
- Effective utilization of unused land



▲Tsurumi Incineration Plant

8

## Promotion of International Expansion and Technological Development

- Support through Y-PORT
- Support of African countries and cities
- Utilization of chat-bots



▲Cultural exchanges with African countries during training

9

## Promotion of Appropriate Treatment

- Processing of high concentration PCB wastes
- Dealing with filled final disposal sites
- Dissemination of digital manifestos



▲Devices containing PCB

\* The above examples are only a selection of the initiatives which have taken place under each Promotion Policy

## Reduction of Food Loss

The City of Yokohama generates approximately 30 kg of food loss per person per year. More people need to adopt a lifestyle in which they do not generate food loss, such as by making it a habit to check the contents of their fridge before going shopping and only buying what they need. In addition to introducing recipes for using up leftover vegetables, we have also been promoting food bank and food drive activities in which households provide food products with a long shelf life to facilities that need them.



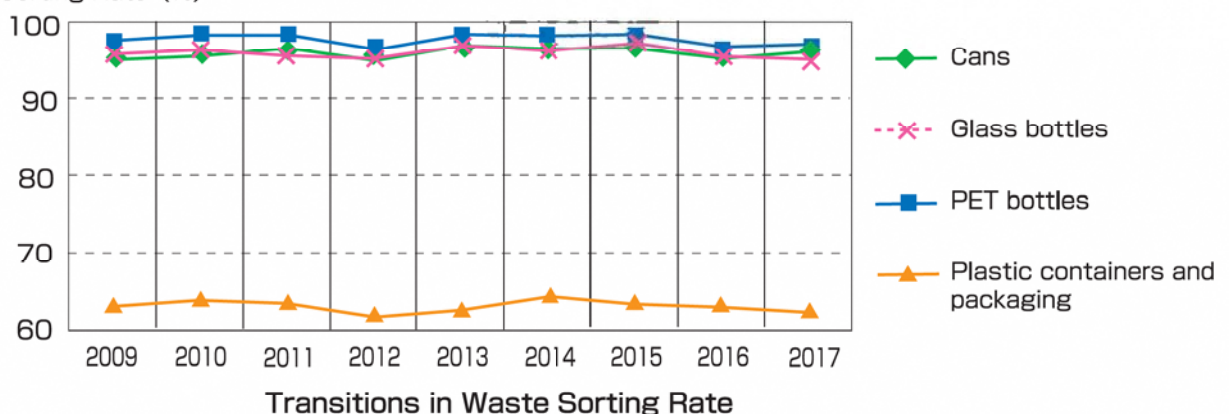
## Sorting of Plastic Containers and Packaging

While the separation rate for cans, glass bottles and PET bottles in household waste is over 90%, for plastic containers and packaging it is only around 60%.

Plastic containers and packaging that have been sorted and separated from burnable waste are recycled and used as materials for plastic products, etc. On the other hand, unsorted plastic containers and packaging that are disposed of as burnable waste emit greenhouse gases when they are burned at the incineration plant, a cause of global warming. More efforts need to be made to sort garbage properly.

\* Plastic containers and packaging: Things which contain products (containers) or in which products are wrapped (packaging) that are no longer needed when the product is removed.

Waste Sorting Rate (%)



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