



Colors, Future!

いろいろって、未来。

川崎市

Kawasaki City Municipal Solid Waste Management Basic Plan Phase 2 Action Plan —Summary Version—

Waste Reduction → For the Future
Eco-gurashi Plan



Eco-Chans



Kwarun



Morion



KAWASAKI CITY

Formulated March 2018



Basic Plan

Basic Principle

Working to achieve a sustainable, environmentally-friendly community

Basic Policies

- 1 Respond effectively to social changes and strive for a society that generates as little waste as possible.
- 2 Implement “Eco-gurashi”^{*} through collaboration among residents, businesses, and municipal governments, and further promote the 3Rs.
- 3 Ensure a comfortable living environment where people can live healthy with peace of mind.

^{*} “Eco-gurashi” is to take environmentally friendly actions in everyday life, including activities that contribute to waste reduction, energy-saving actions such as saving electricity, and promotion of greening gardens and flower beds.

Plan Duration

Ten-year period between FY 2016-FY 2025

Action Plans with a range of two to four years are formulated to ensure the effectiveness of the Basic Plan



Duration of Action Plan

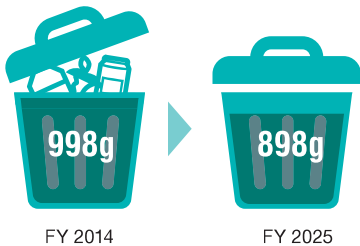


Goals of the Basic Plan (By FY 2025)

Goal 1

Waste volume* per person per day **Reduce by 10%**

* Waste volume is the sum total of household wastes (ordinary waste, oversized waste, regular recyclables, and recyclables collected by groups), waste generated by businesses (incinerated waste and recyclables), and roadside cleanup waste.

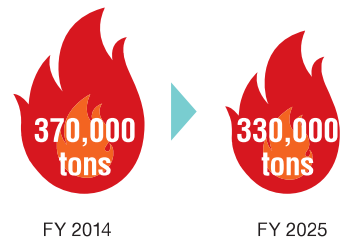


Goal 2

Incinerated waste volume **Reduce by 40,000 tons***

* Reduce household waste by 20,000 tons
Reduce business-generated waste by 20,000 tons

Cut CO₂ by 18,000 tons
(comparable to 1.28 million cedar trees)



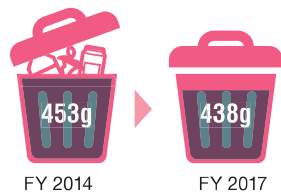
Reference...The Initiatives of the Phase 1 Action Plan (FY 2016-FY 2017)

Goals of the Phase 1 Action Plan

Goal 1

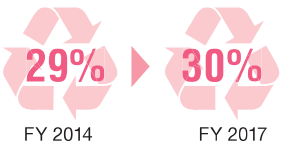
Ordinary waste volume* per person per day **Reduce by 15g**
⇒ **Progressed steadily**
(Achieved 443g in FY 2016)

* Of the total waste, the ordinary waste volume is the amount discharged from homes twice a week.



Goal 2

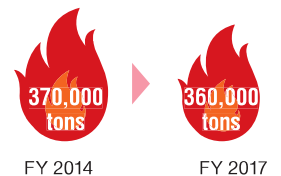
A household waste recycling rate **30%**
⇒ **Sluggish growth in recent years**
(Achieved 27.7% in FY 2016)



Goal 3

Incinerated waste volume **Reduce by 10,000 tons***
⇒ **Progressed steadily**
(Achieved 366,000 tons in FY 2016)

* Reduce household waste by 4,000 tons
Reduce business-generated waste by 6,000 tons



Major initiatives in FY 2016



Zero Waste Café was held (three times).



Ozenji Recycling Treatment Facility was opened. Environmental events were held for ten days (1,434 participants).



A garbage separation application was put into service. (the annual number of views: 308,922)



Awareness campaigns on the 3R Promotion Day



Municipal Solid Waste Management : Current Status and Issues



1 Reduction of the total waste volume

While the population has increased by nearly 120,000 since FY 2007, the total waste volume has decreased from about 590,000 tons in 2007 to about 515,000 tons in FY 2016, which illustrates the increase in residents/businesses' awareness concerning waste reduction.

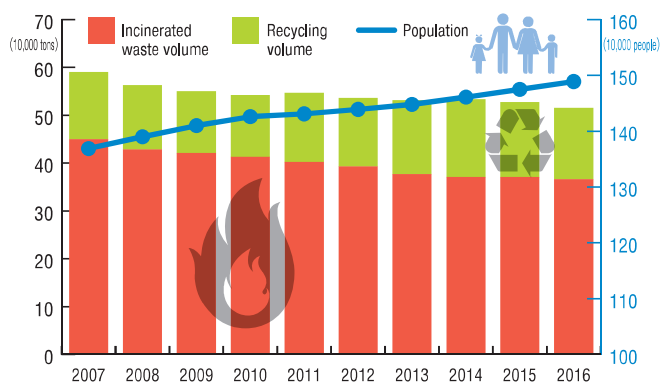


Figure 1 Changes in the total waste volume and population

2 Reduction of waste volume per person per day

The waste volume per person per day has decreased from 1,178g in FY 2007 to 947g in FY 2016.

In particular, the ordinary waste volume discharged from homes has decreased the most, from 602g in FY 2007 to 443g in FY 2016.

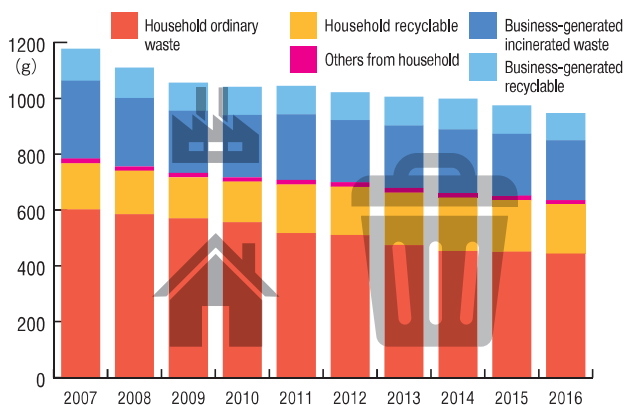


Figure 2 Reduction of waste volume per person per day

3 Promotion of recycling

The volume of recyclable waste has increased since March 2011, when the entire city began collecting mixed paper and also when a couple of the wards of the city (Kawasaki, Saiwai and Nakahara wards) launched plastic containers and packaging collection. In recent years, however, the amount recycled has been decreasing due to promotion of waste generation reduction such as going paperless.

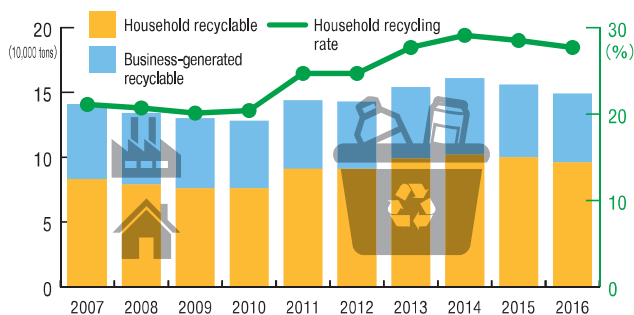


Figure 3 Changes in the volume (%) of recyclable

4 Reduction of incinerated waste volume

The incinerated waste volume has been reduced by more than 80,000 tons from FY 2007 to FY 2016.

This led to the reduction in the amount of incineration ash disposed of in landfills and as a result, extended the life of landfill sites, but landfill sites are in either case expected to be full by about FY 2053. In light of the difficulty in securing new landfill sites in the city, it is necessary to aim to maximize the life of landfill sites by promoting waste reduction/recycling.

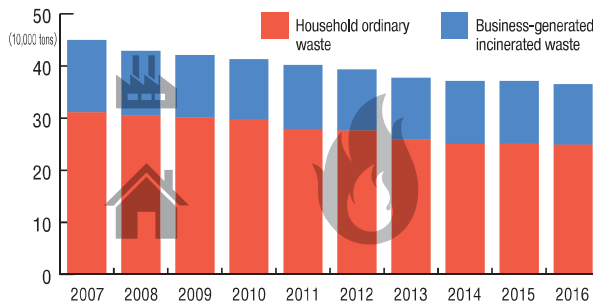


Figure 4 Changes in incinerated waste volume

5 Waste management costs*

Kawasaki City initiatives, including the utilization of private businesses and changes to the number of times household waste is collected, have contributed to considerable reduction in household waste management costs. However, costs of waste and recyclable collection, transport, and treatment amount to approximately 13.7 billion yen in FY 2016, indicating the need to continue effective and efficient waste management.

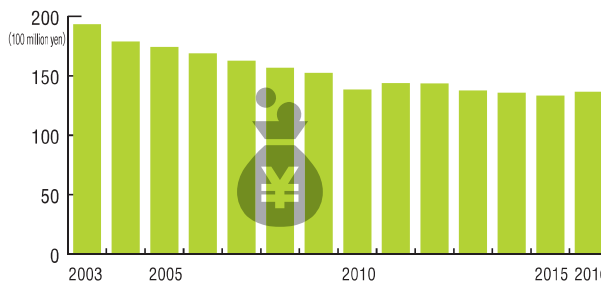


Figure 5 Changes in waste management costs

* Waste management costs = Costs of household waste collection, transport, treatment and disposal.



Phase 2 Action Plan

1. Plan Duration

FY 2018-FY 2021 (4 years)

2. Goals

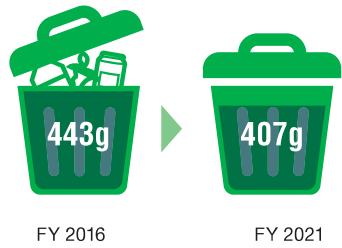
In Phase 2 Action Plan, we have continued to set three goals following Phase 1 Action Plan. With regard to Goals 1 and 2, we have not targeted all wastes, including business-generated waste, but household waste alone, in order for residents to be able to see the results of their efforts in everyday life.

Goals of the Phase 2 Action Plan (By FY 2021)

Goal 1

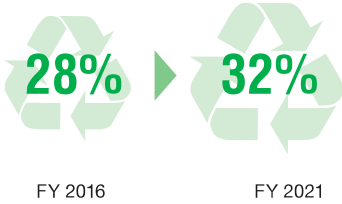
Ordinary waste volume* per person per day **Reduce by 36g**

* Of the total wastes, ordinary waste volume is the amount discharged from homes twice a week.



Goal 2

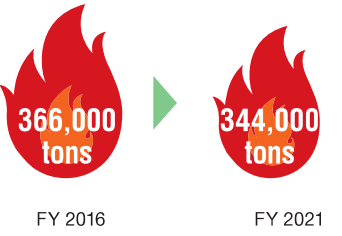
A household waste recycling rate of **32%**



Goal 3

Incinerated waste volume **Reduce by 22,000 tons***

* Reduce household waste by 12,000 tons, and business-generated waste by 10,000 tons



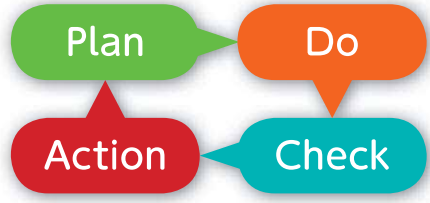
Important Viewpoint of Phase 2 Action Plan

In Kawasaki City, the population is increasing exceeding our previous assumption, and the future population projections were revised in May 2017. In order to achieve the goals, individual efforts of residents are essential to curb the impact of the population growth on the volume of incinerated waste.

3. Indicators

Setting Indicators

- Resident needs are increasingly becoming diverse and complex, accompanying changes in social circumstances such as the arrival of a super-aging society and the response to large-scale disasters.
- Due to the increasing importance of the measures that cannot be evaluated against Goals, we set **Indicators that further improve the quality of civic service.**
- We set what we should **achieve** (qualitative **indicator**) for each measure, manage and evaluate the progress made using PDCA cycle, and announce the results every year.



[Measures evaluated against Goals] and [Measures evaluated against Indicators]

Measures concerning waste reduction/recycling are evaluated against Goals, and measures not related to waste reduction/recycling are evaluated against Indicators.



New initiatives to achieve Goals/Indicators

New initiatives to achieve Goals

〈Response to the population growth exceeding our previous assumption〉

Raise awareness of 1.5 million “Eco Residents” about separation/reduction of waste

Implement effective public relations activities for each target group, such as the young, the elderly and foreign nationals, to improve the separation rate of mixed paper and plastic containers/packaging.



Publicize waste separation rules to new residents

Working with waste reduction advisors, etc., thoroughly publicize waste disposal and separation rules to about 100,000 new annual residents.



Separation rate of recyclables

35%-40%.....	mixed paper/plastic containers and packaging
90%-95%.....	empty cans/PET bottles/empty bottles

.....
〈Promotion of initiatives that meet the needs of the times〉

Tackle food waste pledged by the international community (SDGs)*

Considering the purpose of the sustainable development goals (SDGs), examine new methods of implementing food waste measures.



* Sustainable Development Goals (SDGs) (adopted by the United Nations in September 2015)
Halving per capita global food waste by 2030 is listed as one of the 17 Sustainable Development Goals and 169 targets.

Taking the opportunity of the Tokyo 2020 Olympic and Paralympic Games, expand the number of collection sites of small home appliances to promote recycling

With a growing interest in the Tokyo 2020 Medal Project, expand the number of collection sites of small home appliances to promote recycling.



* Sponsor: Tokyo 2020 Organising Committee

What is the Tokyo 2020 Medal Project?

It is a project to manufacture approximately 5,000 gold, silver and bronze medals for the Tokyo 2020 Olympic and Paralympic Games from recycled metal collected from all over the country. In Kawasaki city, small home appliance collection boxes are placed at each ward office, etc. to promote civic engagement.

New initiatives to achieve the Indicators

〈Response to the super-aging society and disasters〉

Promote initiatives in collaboration with the Integrated Community Care System

Considering the arrival of the super-aging society, strengthen initiatives such as the “Fureai” collection service that comes to pick up waste at the door of the elderly. In addition, enhance collaboration with wards offices and communities, including “Mimamori (watch with care)” at the time of daily waste collection.



Promote disaster control even at ordinary times

Explore how to separate and dispose of household waste in times of disaster, compile in an easy-to-understand format how to separate waste during disasters, and publicize it to the residents at ordinary times.



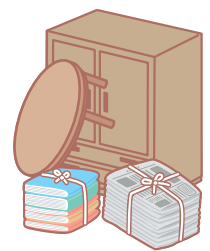
What is the Integrated Community Care System?

It is a system to provide necessary services, including nursing care, medical care, insurance, welfare/livelihood support, etc., to the residents in need, in order to help everyone including the elderly continue living in places where they have lived for a long time or they want to live. With the aging population and declining birthrate, the importance of this system is expanding even more than before.

〈Further development of municipal services〉

Promote appropriate disposal of a large one-time volume of waste and hazardous waste/difficult items to dispose of.

Establish appropriate collection routes to respond quickly to a large one-time volume of waste and hazardous waste/difficult items to dispose of.



Disseminate the idea of “Eco-gurashi” and Kawasaki's clean streets to the world.

Taking the opportunity of the Tokyo 2020 Olympic and Paralympic Games, enhance the city beautification initiatives.



Beautifying the city with the Zero Waste Campaign

The Zero Waste Campaign is carried out on May 30 every year. There are many other campaigns being launched for city beautification such as the No Littering Campaign.

◎ Priority Measures

In order to further clarify the Basic Policies of the Basic Plan, we have developed measures that can effectively promote “Eco-gurashi” and stable waste management and set them up as Priority Measures for each Basic Measure.

Phase 2 Action Plan contains a total of 66 specific measures of which 32 are Priority Measures.

Basic Measure I “Eco Resident” Initiatives

In order to promote comprehensive initiatives related to resource recycling, low carbon and coexistence with nature and to aim for a sustainable, environmentally-friendly community, we will exchange opinions among residents, businesses and municipal governments regarding what type of life Eco-gurashi really is and how it should be practiced. And then we will work to reflect the idea in other measures as well.

◎ Promote citizen participation initiatives such as the Zero Waste Café.

We will enhance initiatives such as the Zero Waste Café, in which diverse participants such as residents of every age and businesses concerned about waste problems exchange various ideas.



Additionally, we will widely disseminate ideas gained at the Zero Waste Café to residents to promote Eco-gurashi.

Zero Waste Café News

◎ 8 Priority Measures

- ◎ Promote dissemination of initiatives to toddlers/young children.
- ◎ Promote dissemination of initiatives to the young and the elderly as well as foreign nationals.
- ◎ Promote dissemination of initiatives to local residents.
- ◎ Promote dissemination of initiatives to new residents.
- ◎ Popularize the Household Waste Diet Checklist and review Indicators.
- ◎ Publicize how to separate waste in times of disaster.
- ◎ Boost collaboration with waste reduction advisors and other related parties.
- ◎ Promote citizen participation initiatives such as the Zero Waste Café.



Basic Measure II Waste Reduction/Recycling Initiatives

Being directly related to achieving the goals of the Basic Plan and the Action Plan, waste reduction/recycling initiatives should be tackled by residents, businesses and municipal governments in collaboration.

◎ Thoroughly publicize waste disposal rules.

The City's separation rates of plastic containers/packaging or mixed paper are as low as 35-40% (cf. 90-95% for empty cans/empty bottles/PET bottles). We aim at achieving a comparable level to those cities with higher rates (50-60%) by thoroughly publicizing waste disposal rules.

◎ 8 Priority Measures

- ◎ Thoroughly publicize waste disposal rules.
- ◎ Expand the number of collection sites.
- ◎ Enhance collection of recyclables by group.
- ◎ Strengthen initiatives related to clothing recycling.
- ◎ Expand recycling routes for business-generated recyclables.
- ◎ Promote “the three things to remember” about kitchen waste: 1) use everything, 2) eat everything, and 3) drain water.
- ◎ Promote kitchen waste reduction/recycling initiatives.
- ◎ Promote measures against food waste.

Paper Resources Separation Image

Cardboards, newspapers, magazines, milk cartons
 <Collection of recyclables by group>

Paper with strong smell and dirty paper
 <Ordinary waste>

All papers other than those listed in the left columns
 <Mixed paper>

Plastic Resources Separation Image

Plastic products (toys, etc.)
 <Ordinary waste>

Plastic products other than those listed in the left column
 <Plastic containers and packaging>



Basic Measure III Initiatives to Establish Waste Management Systems

Waste management is one of important lifelines that supports the lives of all residents. For initiatives that incur tremendous costs such as facility construction, etc., we will steadily work with a long-term perspective.

◎ Reconstruct the Tachibana Processing Center.

With regard to the plan of reconstructing the Tachibana Processing Center, the existing Tachibana Processing Center will be dismantled and removed, and a new waste incineration processing facility and mixed paper recycling treatment facility will be set up.



(Image of New cities)

◎ 7 Priority Measures

- ◎ Respond to the hazardous waste/difficult items.
- ◎ Secure safe/secure waste management systems in times of disaster.
- ◎ Operate stable waste management systems.
- ◎ Reconstruct the Tachibana Processing Center.
- ◎ Reconstruct the Tsutsumine Processing Center.
- ◎ Review the roles to be shared between private and public sectors, including the use of private-sector initiatives.
- ◎ Reorganize Waste Collection Offices.



Basic Measure IV Initiatives to Create A Healthy and Comfortable Living Environment

We will strive to maintain good living environment and enhance public health, and work to ensure a safe and secure living environment where residents can enjoy a healthy and comfortable daily life.

◎ Provide more definite guidance to prevent inappropriate waste disposal, etc.

We will give guidance to business-related waste generators through on-site investigations, etc. With regard to household waste, we will also strengthen measures to prevent recyclables being mixed into ordinary waste.



It's so troublesome to separate wastes. I'll put everything in the ordinary waste!

Separate them properly, or your precious resources will be wasted!



◎ 7 Priority Measures

- ◎ Clean up the areas around waste collection sites, etc.
- ◎ Implement various education and training campaigns.
- ◎ Expand waste consultation desk services.
- ◎ Promote the "Fureai" collection services.
- ◎ Respond to a large one-time volume of waste.
- ◎ Provide more definite guidance to prevent inappropriate waste disposal, etc.
- ◎ Prevent items that are prohibited from collection being mixed into collected garbage.



Basic Measure V Initiatives Aimed at A Low-carbon Society/ Society in Harmony with Nature

We will work on effective measures to establish a low-carbon society/ society in harmony with nature from the perspective of resource recycling.

◎ Develop new means of utilizing waste power generation.

We will introduce EV garbage trucks, etc. utilizing waste power generation.

◎ 2 Priority Measures

- ◎ Promote waste heat utilization such as waste power generation businesses.
- ◎ Develop new means of utilizing waste power generation.



EV garbage truck (the truck used at the field test)

Structure of the Plan

The following shows the structure of the Plan.

Of 66 specific measures,
 ★...Indicators (8 measures)
 ○...Priority measures (32 measures)
 ●...“Eco-gurashi”-related initiatives (36 measures)

Basic Plan (FY 2016-FY 2025)		Phase 2 Action Plan (FY 2018-FY 2021)	
Basic Principle	Basic Policies	Goals	Goals
Working to achieve a sustainable, environmentally-friendly community	<ul style="list-style-type: none"> ○ Respond effectively to social changes and strive for a society that generates as little waste as possible. ○ Implement “Eco-gurashi” through collaboration among residents, businesses, and municipal governments, and further promote the 3Rs. ○ Ensure a comfortable living environment where people can live healthy with peace of mind. 	<ul style="list-style-type: none"> ① Reduce waste volume by 10% per person per day. ② Reduce incinerated waste volume by 40,000 tons. 	<ul style="list-style-type: none"> ① Reduce ordinary waste volume by 36g per person per day ② Achieve a household waste recycling rate of 32% ③ Reduce incinerated waste volume by 22,000 tons
		Basic Measures	Specific Measures
		I “Eco Resident” Initiatives	<ul style="list-style-type: none"> (1) Promotion of environmental education and learning <ul style="list-style-type: none"> ① Promote dissemination of initiatives to toddlers/young children ○● ② Promote dissemination of initiatives to the young and the elderly as well as foreign nationals ○● ③ Promote dissemination of initiatives to local residents ○● ④ Expand education and training projects using the base for conducting projects ● ⑤ Expand education and training projects utilizing events, etc. ★● ⑥ Promote dissemination of initiatives to new residents. ○● (2) Promotion of information-sharing <ul style="list-style-type: none"> ① Provide information utilizing various types of media ● ② Effectively provide information about separation/disposal of recyclables and waste ● ③ Popularize the Household Waste Diet Checklist and review Indicators ○● ④ Publicize how to separate waste in times of disaster ★○ (3) Enhancement of citizen participation <ul style="list-style-type: none"> ① Boost collaboration with waste reduction advisors and other related parties ○● ② Develop regional environmental leaders ● ③ Promote citizen participation initiatives such as the Zero Waste Café ○● ④ Promote the Environmental Partnership Kawasaki initiative ● ⑤ Environmental Merit Award initiative ●
		II Waste Reduction/Recycling Initiatives	<ul style="list-style-type: none"> (1) Reduction/Recycling of household waste <ul style="list-style-type: none"> ① Thoroughly publicize waste disposal rules ○● ② Enhance appropriate product packaging ● ③ Expand the number of collection sites ○● ④ Enhance collection of recyclables by group ○● ⑤ Strengthen initiatives related to clothing recycling ○● (2) Reduction/Recycling of business-generated waste <ul style="list-style-type: none"> ① Expand certification systems for establishments engaged in the 3Rs ● ② Enhance public relations and give more definite guidance to reduce business-generated waste, etc. ● ③ Expand recycling routes for business-generated recyclables ○● (3) Reduction/Recycling of waste led by the city <ul style="list-style-type: none"> ① Promote waste reduction initiatives at municipal government buildings, etc. ● ② Promote green purchasing ● (4) Reduction/Recycling of kitchen waste <ul style="list-style-type: none"> ① Hold Eco-cooking classes ● ② Promote “the three things to remember” about kitchen waste ○● ③ Promote subsidy systems for kitchen waste reduction/recycling ● ④ Promote kitchen waste reduction/recycling initiatives ○● ⑤ Promote kitchen waste reduction/recycling at public facilities, etc. ● ⑥ Promote lunchtime waste recycling at schools ● ⑦ Promote measures against food waste, etc. ○●
		III Initiatives to Establish Waste management Systems	<ul style="list-style-type: none"> (1) Establishment of a safe and secure waste management system <ul style="list-style-type: none"> ① Conduct research on waste treatment technology and pass on related skills ② Appropriately manage incineration ash (landfill ash) and landfill sites ③ Respond to the hazardous waste/difficult items ★○ ④ Maintain and renovate waste disposal facilities, etc. ⑤ Secure safe/secure waste management systems in times of disaster ★○ (2) Stable operation of the three waste processing center system <ul style="list-style-type: none"> ① Operate stable waste management systems ○ ② Reconstruct the Tachibana Processing Center ○ ③ Reconstruct the Tsutsumine Processing Center ○ ④ Develop policies regarding construction of recycling treatment facilities, etc. (3) Establishment of effective and efficient management systems <ul style="list-style-type: none"> ① Follow up on the plan ② Study effective economic measures ③ Review the roles to be shared between private and public sectors, including the use of private-sector initiatives. ○ ④ Reorganize Waste Collection Offices ○
		IV Initiatives to Create A Healthy and Comfortable Living Environment	<ul style="list-style-type: none"> (1) Promotion of city beautification <ul style="list-style-type: none"> ① Clean up the areas around waste collection sites, etc. ★○● ② Implement various education and training campaigns ★○● (2) Promotion of initiatives to meet residents needs <ul style="list-style-type: none"> ① Expand waste consultation desk services ○● ② Promote the “Fureai” collection services ★○ ③ Waste collection to meet residents needs ④ Respond to a large one-time volume of waste ★○ (3) Initiatives to prevent inappropriate waste disposal <ul style="list-style-type: none"> ① Implement measures to combat illegal dumping ② Give more definite guidance to prevent inappropriate waste disposal, etc. ○ ③ Develop measures to prevent taking recyclables from collection sites ④ Prevent items that are prohibited from collection being mixed into collected garbage ○
		V Initiatives Aimed at A Low-carbon Society/ Society in Harmony with Nature	<ul style="list-style-type: none"> (1) Effective use of energy resources <ul style="list-style-type: none"> ① Promote waste heat utilization such as waste power generation businesses ○ ② Develop new means of utilizing waste power generation ○ ③ Implement research and study to promote use of biomass resources (2) Effective use of recyclables with a view to low carbon and coexistence with nature <ul style="list-style-type: none"> ① Promote initiatives in collaboration with various community groups, etc. ● ②~⑧ are the same as 【II (4)③, II (4)④, II (4)⑤, II (4)⑥, II (4)⑦, III (2)②, III (2)③】 (3) Establishment of environmentally-friendly management systems <ul style="list-style-type: none"> ① Establish environmentally-friendly transport systems. ② Operate processing centers utilizing environmental management systems ③ Conduct research on extending landfill life (4) Initiatives utilizing our accumulated environmental technologies <ul style="list-style-type: none"> ① Create an environment to promote the development of environmentally friendly products ② Collaborate with the environmental industry ③ Promote international contributions ④ Promote the Low CO₂ Kawasaki brand ●

Contact

Kawasaki City Environment Bureau Waste Policy Postcode: 210-8577 (No need to write the address)
 Tel : 044-200-2558 Fax : 044-200-3923 Email : 30haise@city.kawasaki.jp
 Kawasaki City Website : <http://www.city.kawasaki.jp> 川崎市一般廃棄物処理基本計画 Search

