

» Outline of the Plan



Kawasaki City's Basic Plan for General Waste Treatment Action Plan for the 3rd Term

—Overview—

Eco-gurashi Plan in the Future

Reduce Waste



Basic Plan		Action Plan for the 3rd Term		Focused Policy	Decarbonization	Indices	Qualitative	Living an ecological life
Basic Policies		Concrete Policies						
I. Initiatives to become Environmentally Conscious Citizens	(1) Promoting environmental education and learning	① Promoting the spread of knowledge on the environment among children and the younger generation	★					●
		② Enhancing environmental education and learning using ICT	★					●
		③ Promoting the spread of knowledge on the environment among a variety of citizens	★					●
		④ Enhancing the awareness-raising activities using the public-awareness-raising centers						●
		⑤ Enhancing the awareness-raising activities at such opportunities as events						●
	(2) Promoting information sharing	① Providing information using a variety of media	★					●
		② Effectively providing a variety of citizens with information on how to separate and take out recyclable and other waste	★					●
		③ Informing citizens about how to separate waste in case of a disaster	★					●
	(3) Encouraging citizens to participate	① Strengthening liaison with the leaders of the promotional activities for waste reduction	★					●
② Fostering regional leaders on the environment							●	
③ Promoting activities that welcome citizens' participation, such as the Zero Waste Café		★					●	
④ Recognizing persons who contributed to the environment							●	
II. Initiatives to Reduce the Volume of and Recycle Waste	(1) Reducing the volume of and recycling domestic waste	① Promoting efforts to improve the ratio of separation and reduce waste	★	●				●
		② Promoting appropriate packaging of products	★	●			●	
		③ Promoting collection of recyclable waste at designated locations and stores	★	●			●	
		④ Enhancing the collection of recyclable waste by resident groups	★	●			●	
		⑤ Promoting the reduction of plastic waste	★	●			●	
		⑥ Promoting the initiatives utilizing the achievement in the model area, Carbon Zero Action Mizonokuchi.	★	●			●	
		⑦ Promoting recycling of plastic products	★	●			●	
	(2) Reducing the volume of and recycling industrial waste	① Promoting a system to certify stores that work on 3Rs						●
		② Enhancing PR and giving thorough guidance to reduce the volume of industrial waste						●
		③ Promoting recycling industrial recyclable waste	★	●				●
	(3) Reducing the volume of and recycling waste at the initiative of the City government	① Promoting the initiatives to reduce the volume of waste in the government office buildings and other facilities						●
		② Promoting green procurement						●
	(4) Reducing the volume of and recycling food waste	① Promoting the "3 Kiri" initiative (use all, eat all and dehydrate food waste)	★	●				●
		② Promoting the initiatives to reduce and recycle food waste	★	●				●
		③ Promoting the recycling of food waste from school lunch						●
		④ Promoting the measures to reduce food loss and waste at home	★	●				●
⑤ Promoting the measures to reduce food loss and waste by businesses		★	●				●	
III. Initiatives to Establish a Waste Treatment System	(1) Establishing a safe and secure waste treatment system	① Conducting research on waste treatment technologies and passing on the skills						●
		② Appropriately managing the waste incineration ash (ash to be landfilled) and landfills						●
		③ Treatment of waste that are hazardous and difficult to dispose of	★					●
		④ Repairing and maintaining waste treatment facilities						●
		⑤ Ensuring safe and secure operation of a waste disposal system at the time of disaster	★					●
	(2) Operating a system consisting of three waste treatment centers stably	① Ensuring stability in the operation of a waste treatment system	★					●
		② Reconstruction of the Tachibana Waste Treatment Center	★	●				●
		③ Reconstruction of the Tsutsumine Waste Treatment Center	★	●				●
		④ Improvement of recycling facilities	★	●				●
	(3) Establishing an effective and efficient waste treatment system	① Following up the plan						●
		② Conducting research on effective economic approaches						●
		③ Reconsidering the division of roles between the public and private sectors, including participation by the private sector	★					●
IV. Initiatives to Create a Healthy and Comfortable Living Environment	(1) Promoting cleaning of neighborhood	① Cleaning neighboring environment	★				●	
		② Implementing various public-awareness-raising campaigns	★				●	
	(2) Promoting the initiatives that meet the needs of citizens	① Enhancing consultation service on waste	★					●
		② Promoting a service to support garbage disposal, taking a super-aged society into consideration	★					●
		③ Waste collecting methods that meet the needs of citizens						●
		④ Implementing measures against illegal waste dumping						●
(3) Initiatives to implement measures against inappropriate waste disposal	① Giving thorough guidance on improper waste disposal	★					●	
	② Enhancing the measures against improper looting of valuable waste	★					●	
	③ Preventing prohibited items from being mixed into waste to be collected	★					●	
	④ Promoting the use of residual heat from waste treatment, including power generation	★	●				●	
V. Initiatives to Build a Society where Decarbonized and Co-existence with Nature are Realized	(1) Using energy resources effectively	① Promoting the use of residual heat from waste treatment, including power generation	★	●				●
		② Studying the possibility of new ways to use power generated from waste	★	●				
		③ Survey and research for the promotion of the use of biomass resources						●
	(2) Using resources effectively to achieve decarbonization and co-existence with nature	① Promoting the initiatives conducted in liaison with various regional groups						●
		Repetition of II (1) ① to ⑦, (2) ① to ③, (3) ① to ②, (4) ① to ⑤, III (2) ② to ③, V (1) ① to ③, (3) ① to ②, (4) ① to ② and ④						●
		② Establishing an environmentally friendly transportation system						●
		③ Operating a waste treatment center utilizing the environmental management system						●
	(3) Establishing an environmentally conscious waste treatment system	① Conducting research on the extension of service life of landfills						●
		② Creating an environment to promote the development of environmentally conscious products						●
		③ Liaising with environmental industries						●
		④ Promoting international contribution						●
	(4) Initiatives to use the environmental technologies accumulated	① Promoting the Kawasaki brand for its efforts toward low CO ₂						●

※In the table above, "decarbonization" refers to the policies to achieve decarbonization and "living an ecological life" refers to the policies that encourage a shift particularly to an ecological lifestyle.

Inquiry to

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 Kawasaki City official website : <http://www.city.kawasaki.jp>



Kawasaki City Formulated in March 2022

Basic Plan

① Basic Principle Realizing a city that is friendly to the global environment and thus sustainable

- ② Basic Policies
- ① Responding to the changes in social circumstances appropriately and realizing a society that generates as little waste as possible
 - ② Living an ecological life and further promoting 3Rs through collaboration between citizens, businesses, and the government
 - ③ Protecting comfortable living environment where citizens can live a healthy life with peace of mind

③ Period Covered by the Plan From fiscal 2016 to fiscal 2025 (10 years)
Action plans formulated for a period of **two to four years to ensure the feasibility of the plan**

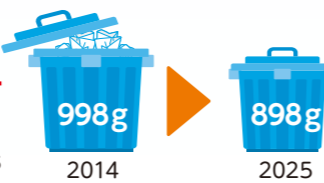


Periods for the Action Plans	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
	1st term		2nd term			3rd term				

Targets of the Basic Plan

Target 1 10% reduction of the volume of waste generation per person per day

※Total of waste generated by households and industries
※In order to achieve the target for reducing the volume of incinerated waste to 330,000 tons even during the period of population growth, this target was changed in the Action Plan for the 3rd Term (to be explained later).



Target 2 Reduction of the volume of incinerated waste by 40,000 tons

※Reducing waste generated by households and industries by 20,000 tons, respectively Equivalent to a reduction of 18,000 tons-CO2 (equivalent to 1.28 million Japanese cedar trees)



For your reference

Progress of the Action Plan for the 2nd Term

	Reference value 2016	Actual 2020	Target 2021
Target 1 Reduction of the volume of general waste*by 36 grams per person per day	443g	447g	407g
Target 2 Ratio of recycled waste to 32%	27.7%	25.8%	32.0%
Target 3 Reduction of the volume of incinerated waste by 22,000 tons	366,000 t	358,000 t	344,000 t

※Out of all waste, it means general waste taken out twice a week by households.

Initiatives taken in the 2nd Term of the Action Plan (extracts)



Environmental education for elementary and nursery schools and neighborhood associations



Campaign to promote the use of eco-friendly shopping bags at major stations



Introduction of electric-powered garbage trucks



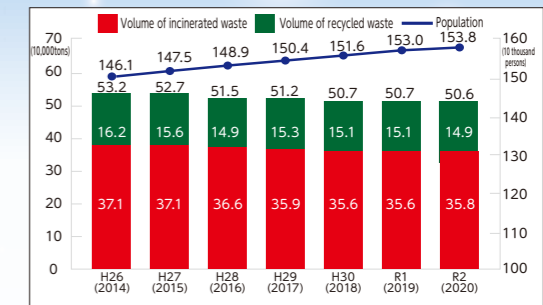
Information provision about the preparedness for waste at the time of a disaster

Current Status and Issues on the Treatment of General Waste



① Reduction of the Total Volume of Waste Generation

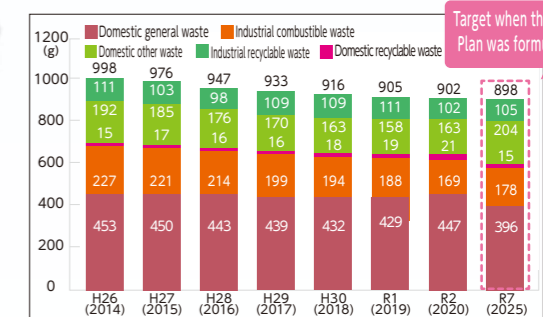
While the City's population increased by about 80,000 (about 5%) from fiscal 2014 to fiscal 2020, the volume of waste generated per person per day was reduced as a result of the collaborative efforts for 3Rs (Reduce, Reuse, and Recycle) among citizens and businesses, also reducing the total volume of waste generated by about 26,000 tons (about 5%) from 532,000 tons in fiscal 2014. In the recent years (last three years), however, the volume has stayed flat.



① Total Waste Generation and Population

② Reduction of the Volume of Waste Generation per Person per Day

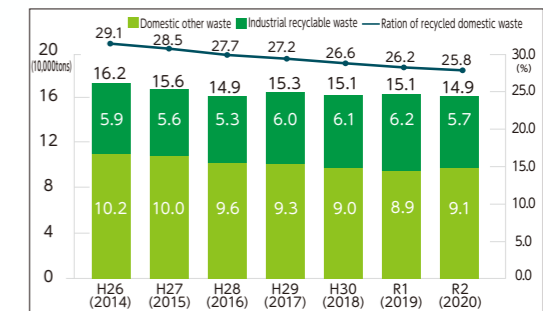
The volume of waste generated per person per day has been reduced by nearly 100 grams from 998 grams in fiscal 2014 to 902 grams in fiscal 2020 and one of the targets of the Basic Plan is expected to be achieved in the near future. On the other hand, the volume of domestic general waste generated per person per day, which had been on a decreasing trend, showed an increase in fiscal 2020. This was due to the increase in the time spent at home as a result of teleworking and refraining from going out to prevent the COVID-19 infection.



② Volume of Waste Generation per Person per Day

③ Promotion of Recycling Waste

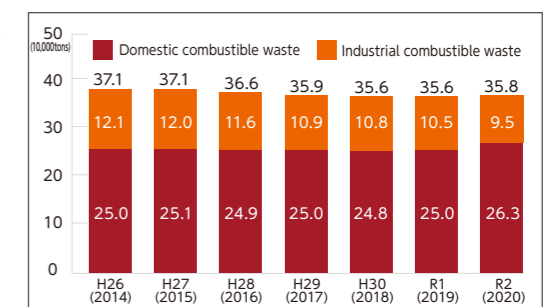
The ratio of recycled waste has been on a downward trend in recent years. One of the factors is the significant decline in the volume of recyclable paper and mixed paper collected by resident groups. The background to this decline is considered to be the shift to a paperless society. Examples include a decrease in subscriptions to newspapers due to the spread of online news and a decrease in demand for printing paper.



③ Volume (Ratio) of Recycled Waste

④ Reduction of the Volume of Incinerated Waste

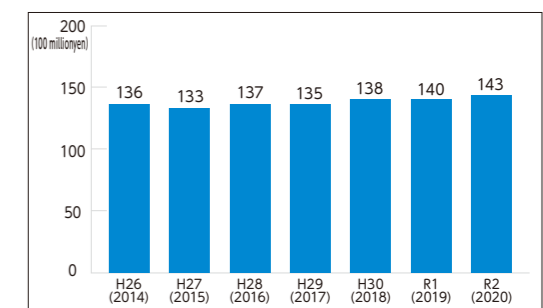
In the last three years, the volume of incinerated waste has stayed flat. This is due to the rise in population exceeding the projection, damage caused by the East Japan Typhoon in 2019, and the circumstances cause by the COVID-19 infection. The current landfill is expected to be full around 2053. As it is difficult to secure a new landfill in the City, it is necessary to extend the duration of the current landfill to the maximum extent by promoting the reduction and recycling of waste.



④ Volume of Incinerated Waste

⑤ Costs of Waste Treatment

The City has established an effective and efficient waste treatment system by outsourcing the collection and transportation of recyclable and other waste and the operation of waste treatment facilities to private businesses. On the other hand, the costs of waste treatment have remained flat at around 14 billion yen for the last three years due to such external factors as the sharp rise in the costs of labor, materials, and equipment. As the costs of waste treatment are expected to rise further, with a plan for reconstructing the incineration plant, it is necessary to continue to pursue effectiveness and efficiency in the service.



⑤ Costs of Waste Treatment

※Costs of waste treatment refer to the costs required for the collection, transportation, treatment, and disposal of domestic waste.

» Action Plan for the 3rd Term

1 **Period Covered by the Plan** From fiscal 2022 to fiscal 2025 (4 years)

2 **Targets** The Action Plan for the 3rd Term formulated this time is the last action plan during the period for the Basic Plan. Since an action plan is designed to support the achievement of the goals of the basic plan, the goals of the Action Plan for the 3rd Term are basically the same as the ones for the Basic Plan. In addition, a new goal has been set that will incorporate the progress of the 2nd Term and the viewpoint of decarbonization.

Targets in the 3rd Term of the Action Plan

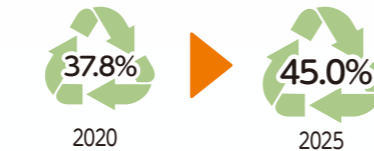
Target 1 Reduction of the volume of waste generation per person per day by **30 grams**



Target 2 Reduction of the volume of incinerated waste by **28,000 tons**



Target 3 Ratio of separation of plastic container and packing waste to **45%**



Based on the situation up to the present, we placed the recycling of plastic resources at the center of this plan.

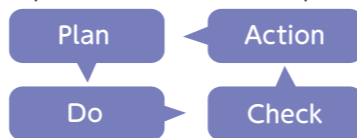


3 **Indices** Setting qualitative indices

● Citizen's needs are becoming more and more diverse and complex in accordance with the changes in social conditions, such as the coming of a super-aged society and changes in the required response to large-scale disasters.

● As the importance of policies that cannot be evaluated by target values is increasing, we set indices to further improve the quality of services for citizens.

● We set a goal to be attained (qualitative indices) for each policy that addresses an issue.
● The status of initiatives is managed, evaluated, and then made public every fiscal year based on a PDCA cycle.



[Policies evaluated by target values vs policies evaluated by indices]

Policies related to the reduction and recycling of waste are evaluated by target values, while policies not related to them are evaluated by indices.

[What are the SDGs?]

The SDGs stand for Sustainable Development Goals and constitute the core of the 2030 Agenda for Sustainable Development adopted by the United Nations in September 2015. They are composed of 17 goals and 169 targets. In the Action Plan for the 3rd Term, the following goals are linked to each policy to promote the initiatives.

4 **質の高い教育をみんなに** Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.

7 **エネルギーをみんなに
そしてクリーンに** Ensure access to affordable, reliable, sustainable, and modern energy for all.

11 **住み続けられる
まちづくりを** Make cities and human settlements inclusive, safe, resilient, and sustainable.

12 **つくる責任
つかう責任** Ensure sustainable consumption and production patterns.

13 **気候変動に
具体的な対策を** Take urgent action to combat climate change and its impacts.

14 **海の豊かさ
を守ろう** Conserve and sustainably use the oceans, seas, and marine resources for sustainable development.

17 **パートナーシップで
目標を達成しよう** Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development.

» Strengthening the Initiative of Recycling Plastic Resources

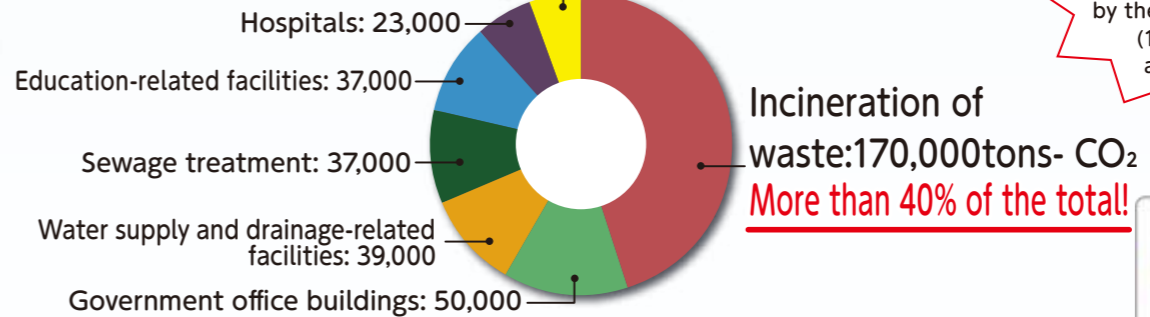


Necessity of reducing greenhouse gas emissions in the waste field

Reduction of plastic waste is effective for the reduction of greenhouse gas emissions.

● Greenhouse Gas Emissions from City's Administrative Services in Fiscal 2020

City-owned cars: 18,000 ※Unit: ton-CO₂



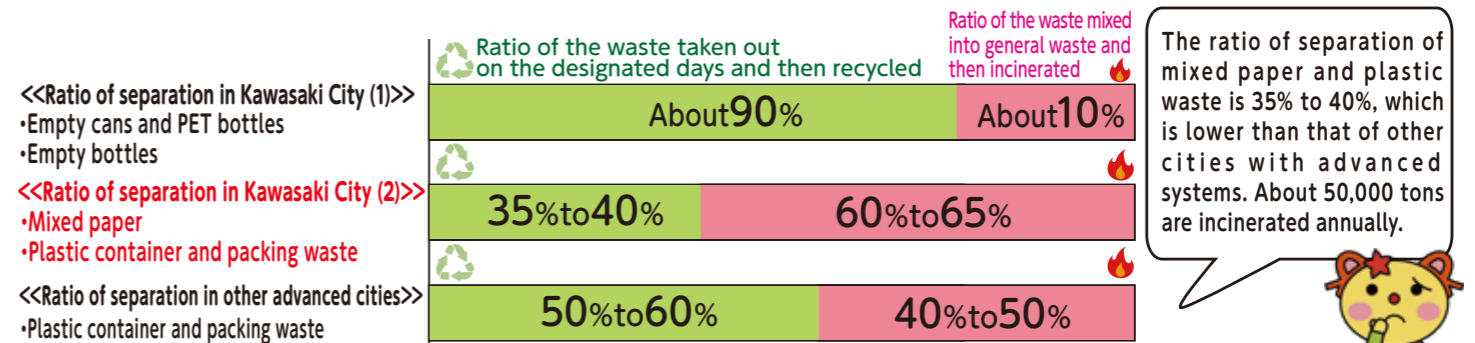
About 80% of greenhouse gases generated by the incineration of waste (170,000 tons-CO₂) are from **plastics**.

Incineration of waste: 170,000 tons-CO₂
More than 40% of the total!



The Kawasaki City Basic Plan for the Promotion of Measures against Global Warming sets the goal of a 50% reduction in global warming gases emitted from the city's administration services by fiscal 2030 compared to the result in fiscal 2013. To achieve this goal, it is necessary to reduce greenhouse gases from the incineration of waste by about 29% (49,000 tons-CO₂) compared to the fiscal 2020 level. For this purpose, the reduction of plastic waste is effective.

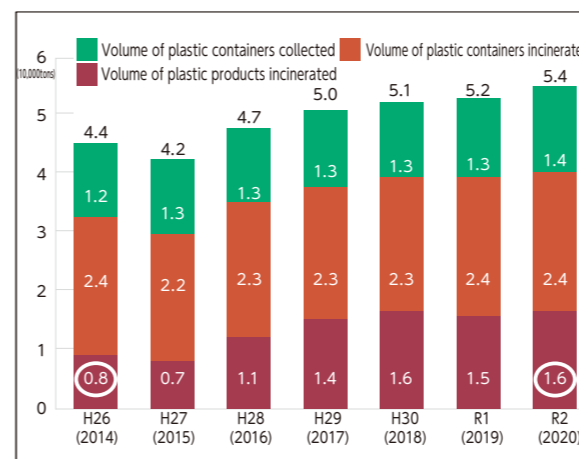
Ratios of separation of mixed paper and plastic container/packing waste are still low.



The ratio of separation of mixed paper and plastic waste is 35% to 40%, which is lower than that of other cities with advanced systems. About 50,000 tons are incinerated annually.

A lot of mixed paper and plastic container and packing waste, which should be treated as resources, are incinerated as general waste. Some cities with advanced systems have the separation ratio at or over 50%. Therefore, we need to promote initiatives to improve the ratio.

As a matter of fact, the volume of incinerated plastic is increasing.



The volume of incinerated plastic products, which are not currently subject to separation, has increased by as much as 8,000 tons since fiscal 2014. In order to reduce the emission of greenhouse gases, the recycling of plastic resources needs to be accelerated.



We are preparing for the implementation of a trial in some areas, in which plastic products, such as toothbrushes and combs, and plastic containers and packings, such as packaging of snacks, are collected together at once and recycled.

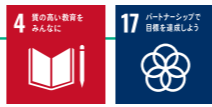
》 Focused Policies



After having further clarified the basic policies of the Basic Plan, we chose the policies that are highly effective in promoting “living an ecological life” and stable waste treatment and designated them as focused and priority policies in each basic policy.

In the Action Plan for the 3rd Term, 36 out of 61 policies are designated as focused policies.

Basic Policy I Initiatives to become Environmentally Conscious Citizens



In order to promote integrated efforts for resource recycling, decarbonization and co-existence with nature and to realize a city that is friendly to the global environment and thus sustainable, citizens, businesses, and the government will exchange opinions about what “living an ecological life” is like and how it should be implemented. They will also make an interactive effort to reflect the opinions in other policies.

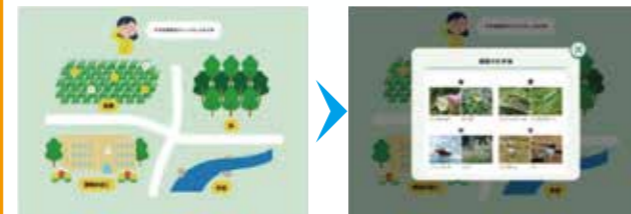
《Eight Focused Policies》

- Promoting the spread of knowledge on the environment among children and the younger generation
- Enhancing environmental education and learning using ICT
- Promoting the spread of knowledge on the environment among a variety of citizens
- Providing information using a variety of media
- Effectively providing a variety of citizens with information on how to separate and take out recyclable and other waste
- Informing citizens about how to separate waste in case of disaster
- Strengthening liaison with the leaders of the promotional activities for waste reduction
- Promoting activities that welcome citizens' participation, such as the Zero Waste Café.

Enhancing environmental education and learning using ICT

To respond to the COVID-19 infection and the GIGA School Program, we will work on creating opportunities for environmental education and learning using ICT. Interesting learning processes that can only be realized by digital devices!

Interesting learning processes that can only be realized by digital devices!



Basic Policy II Initiatives to become Environmentally Conscious Citizens



Citizens, businesses, and the government will make a collaborative effort to accomplish the reduction and recycling of waste

《Twelve Focused Policies》

- Promoting efforts to improve the ratio of separation and reduce waste
- Promoting appropriate packaging of products
- Promoting collection of recyclable waste at designated locations and stores
- Enhancing the collection of recyclable waste by resident groups
- Promoting the reduction of plastic waste
- Promoting the initiatives utilizing the achievement in the model area, Carbon Zero Action Mizonokuchi
- Promoting recycling of plastic products
- Promoting recycling industrial recyclable waste
- Promoting the “3 Kiri” initiative (use all, eat all, and dehydrate food waste)
- Promoting the initiatives to reduce and recycle food waste
- Promoting the measures to reduce food loss and waste at home
- Promoting the measures to reduce food loss and waste at businesses

Promoting the reduction of plastic waste 《Kawasaki Plastic circulation Project》

This project was established to link the various initiatives in collecting plastic waste at designated locations and recycling them as resources implemented by citizens, businesses, and the government in order to promote behavioral change to further expand plastic recycling and to make a platform on which people can plan and implement new initiatives.

《Project Details》

- (1) Implementing an initiative for plastic recycling in Kawasaki City by the collaboration among citizens, businesses, and the government
- (2) Collecting and transmitting information on the above initiative, grasping its needs and seeds, and supporting its implementation
- (3) Other work required to achieve the objectives of the project



Basic Policy III Initiatives to Establish a Waste Treatment System



Waste treatment is a critical service that supports the lives of all citizens, and the construction of facilities costs a large amount of money. Therefore, we will work on it systematically and consistently from a long-term perspective.

《Seven Focused Policies》

- Treatment of waste that are hazardous and difficult to dispose of
- Ensuring safe and secure operation of a waste disposal system at the time of disaster
- Ensuring stability in the operation of a waste treatment system
- Reconstruction of the Tachibana Waste Treatment Center
- Reconstruction of the Tsutsumine Waste Treatment Center
- Improvement of recycling facilities
- Reconsidering the division of roles between the public and private sectors, including participation by the private sector

Reconstruction of the Tachibana Waste Treatment Center

The former Tachibana Waste Treatment Center was dismantled, and the construction of a new waste incineration plant and a mixed paper recycling facility is underway. (Rendering of new facilities)



Basic Policy IV Initiatives to Create a Healthy and Comfortable Living Environment



We will work to maintain the living environment, improve public sanitation, and build a safe and secure living environment that helps citizens live a healthy and comfortable daily life.

《Seven Focused Policies》

- Cleaning neighboring environment
- Implementing various public-awareness-raising campaigns
- Enhancing consultation service on waste
- Promoting a service to support garbage disposal, taking a super-aged society into consideration
- Giving thorough guidance on improper waste disposal
- Enhancing the measures against improper looting of valuable waste
- Preventing prohibited items from being mixed into waste to be collected

Cleaning neighboring environment

We will promote the efforts for cleaning of neighboring environment through carrying out a large-scale campaign named “Day of Zero Garbage” on May 30, participating in the Plastic Smart program hosted by the Ministry of the Environment, and transmitting information about the various activities of cleaning the neighboring environment.



Basic Policy V Initiatives to Build a Society where Decarbonized and Co-existence with Nature are Realized



From the perspective of resource recycling, we will tackle the highly effective policies to build a society where decarbonization and co-existence with nature are realized.

《Two Focused Policies》

- Promoting the use of residual heat from waste treatment, including power generation
- Studying the possibility of new ways to use power generated from waste

Studying the possibility of new ways to use power generated from waste

To increase the use of renewable energy in the City, we will explore more effective ways to use the power generated from waste. We will establish an effective method to liaise with private businesses in time for the start of the operation of the Tachibana Waste Treatment Center.

