

✓ Outline of the Plan

The Waste Disposal Master Plan was established by Minato City as a basic policy to promote systematic waste disposal and domestic wastewater treatment from a long-term and comprehensive perspective, pursuant to the provisions of Article 6, Paragraph 1 of the “Waste Disposal and Public Cleaning Law.” It consists of the Basic Plan for Waste Disposal and the Basic Plan for Domestic Wastewater Treatment.

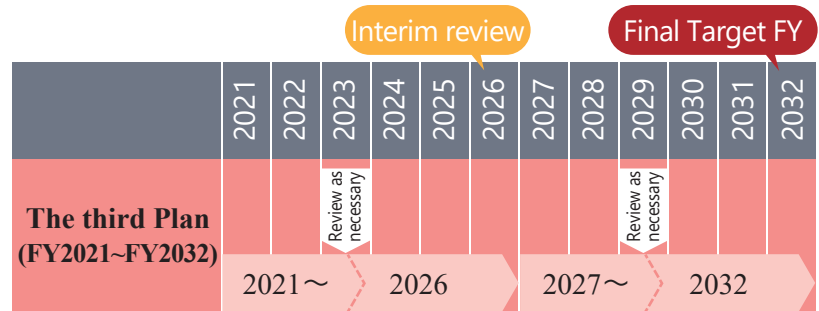
Nowadays in the industry of waste and resource recycling, efforts are required to further reduce the amount of waste and recycle resources by accelerating the movement toward realizing the SDGs and responding to food loss and plastics problems, to improve preparedness against increasing natural disasters such as frequent torrential rainfall and earthquakes directly under the Tokyo metropolitan area, and to improve the convenience of cleaning operations using ICT-technologies. In addition, it is necessary to carefully observe the impact of COVID-19 on waste administration, and respond flexibly to issues that need to be prioritized and focused on in accordance with population trends and financial conditions.

The “Minato City Waste Disposal Master Plan (Third Edition)” (hereinafter referred to as the “Plan”) was formulated based on changes in the environments surrounding waste administration and new issues, and incorporates the Food Loss Reduction Promotion Plan stipulated in the “Act on Promotion of Food Loss Reduction,” in addition to previous efforts by Minato City to date.



✓ Schedul


The plan will be formulated as a 12-year plan from FY2021 to FY2032, and will be reviewed in FY2026, which is an interim year, in order to develop measures while coordinating with the period of the high-ranking plans, such as “Minato City Environment Basic Plan.”



✓ Basic Policy

Aiming to become an environmentally friendly and sustainable society, we will promote integrated efforts in order to create a sound material-cycle society and a low-carbon society together with the City’s residents and businesses.

Basic Policy 1
Promote 3R with the participation and collaboration of the residents of the City



Basic Policy 2
Promote waste reduction control and resources recycling based on the social responsibility of businesses.



Basic Policy 3
Carry out proper and efficient waste disposal that will support the safe and secure life of residents.





Quantitative targets

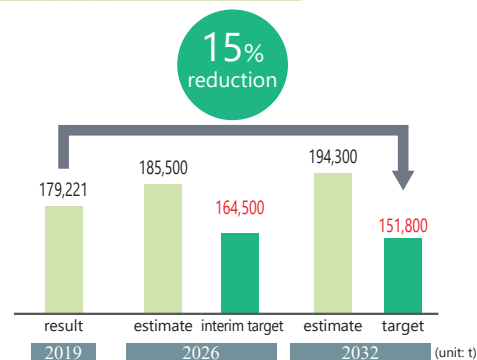
			Actual value	Target value	
			FY2019	Interim FY FY2026	Final FY FY2032
1 Total amount of waste	annual amount	t / year	179,221	164,500	151,800
	daily amount per person	g / person / day	1,880.6	1,583	1,313
2 Amount of combustible waste collected by the City	annual amount	t / year	50,665	41,300	33,200
	daily amount per person	g / person / day	531.6	397	287
3 Percentage of resources in combustible waste		%	25.7	24	21
4 Amount of food loss	annual amount	t / year	5,287	3,800	2,600
	daily amount per person	g / person / day	55.5	37	22
5 Amount of plastic waste	annual amount	t / year	12,658	12,100	11,600
	daily amount per person	g / person / day	132.8	116	101
6 Resource recovery rate		%	29.3	40	50
7 Amount of resources recovered	annual amount	t / year	22,353	30,100	36,700
	daily amount per person	g / person / day	234.6	289	317
8 Amount of resources recovered by group collection activities	annual amount	t / year	5,643	6,800	7,700
	daily amount per person	g / person / day	59.2	65	67
9 Percentage of proper separation of waste and recyclable resources		%	39.7	53	65
10 Amount of waste brought in		t / year	103,020	90,100	79,000
11 Percentage of waste recycled under the Recycling Plan		%	paper : 60.0 kitchen waste : 14.0	paper : 66 kitchen waste : 20	paper : 72 kitchen waste : 25
12 Amount of GHG emissions		t-CO ₂ / year	22,372	18,300	14,900

Selected Major Targets

➤ Total amount of waste

The total amount of waste collected by the City, brought in and the amount of recovered resources, and is an index that forms the basis of the Waste Disposal Master Plan. It confirms the progress of efforts to reduce and recycle waste throughout the City, including by residents and businesses, and comprehensively manages the results of these efforts.

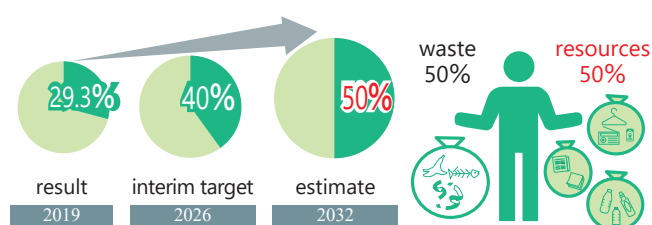
The target is to reduce the total waste in FY2019 (179,221 t) by around 15% to 151,800 t by FY2032.



➤ Resource recovery rate

The ratio obtained by dividing the amount of resources collected by the total amount of waste collected by the City and the amount of resources collected, and is an indicator of the results of efforts related to the reduction and recycle of household waste.

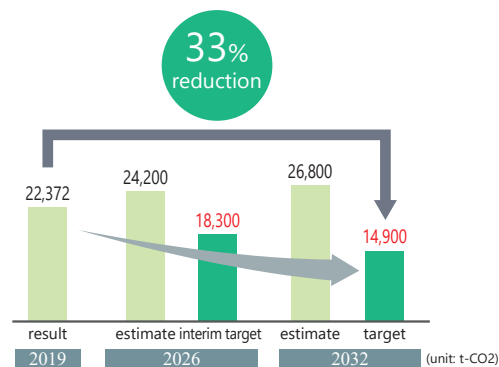
The City is aiming to further improve the resource recovery rate, and achieve a 50% resource recovery rate by FY2032.



➤ Amount of GHG emissions

The figures are a sum of figures converting the emissions of methane (CH₄) and nitrous oxide (N₂O) from incineration into carbon dioxide (CO₂), and the carbon dioxide emitted from plastic incineration, and is an indicator of the outcome of efforts to realize a low-carbon society in the waste management of the City.

The target is to reduce the amount of GHG emissions in FY2019 (22,372 t-CO₂) by around 33% to 14,900 t-CO₂ by FY2032.





Let's take action towards the realization of our goals!

Guidelines for Residents Activities

- In order to reduce items that will become waste, only buy the necessary amount of what you need.
- About 26% of recyclable resources is mixed into combustible waste, which makes up a large portion of the waste collected by the City, so actively separate waste.
- Collect cartons, wrappers, envelopes, etc. in paper bags and put them out on a "used paper" collection day.



Combustible waste
in FY2019

531.6 g / person / day

- For plastic containers such as boxed lunches and side dishes, lightly rinse and dry them, and then put them out on a "recyclable plastic" collection day.



Plastic waste
in FY2019

132.8 g / person / day

- Before you shop, check the food in your kitchen to ensure that you do not buy too much.
- Use a food drive when you cannot finish unused food.



The amount of food loss
in FY2019

55.5 g / person / day

Guidelines for Targets to be achieved over the 12-years period (FY2032)

Individual efforts to sort correctly will lead to the reduction of the total amount of waste and GHG emissions and advance recycling.

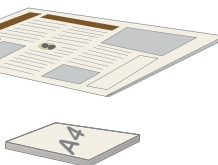
Combustible waste will be reduced by **244.6 g** / person / day

For news paper

About one day's worth

For A4 paper

About 60 sheets of paper



Plastic waste will be reduced by **31.8 g** / person / day

For a 2L PET bottle

About 1 container

For pasta containers with lids

About 1 piece



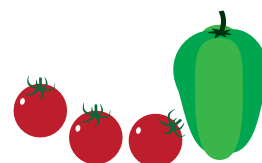
The amount of food loss will be reduced by **33.5 g** / person / day

For mini-tomatoes

About 3 tomatoes

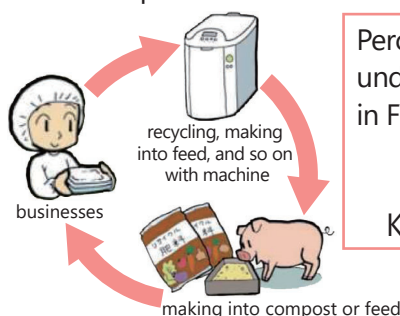
For a pepper

About 1 pepper



Guidelines to action for businesses

- Reduce paper and food waste and refrain from the use of plastics to reduce items that will become waste.
- Separate resources and waste properly, and promote the reuse of resources.
- Promote switching to materials with less environmental impact, and promote the development and use of products.



Percentage of waste recycled
under the Recycling Plan
in FY2019

Paper : **60%**

Kitchen waste : **14%**

The percentage of waste recycled in large-scale buildings will be increased by

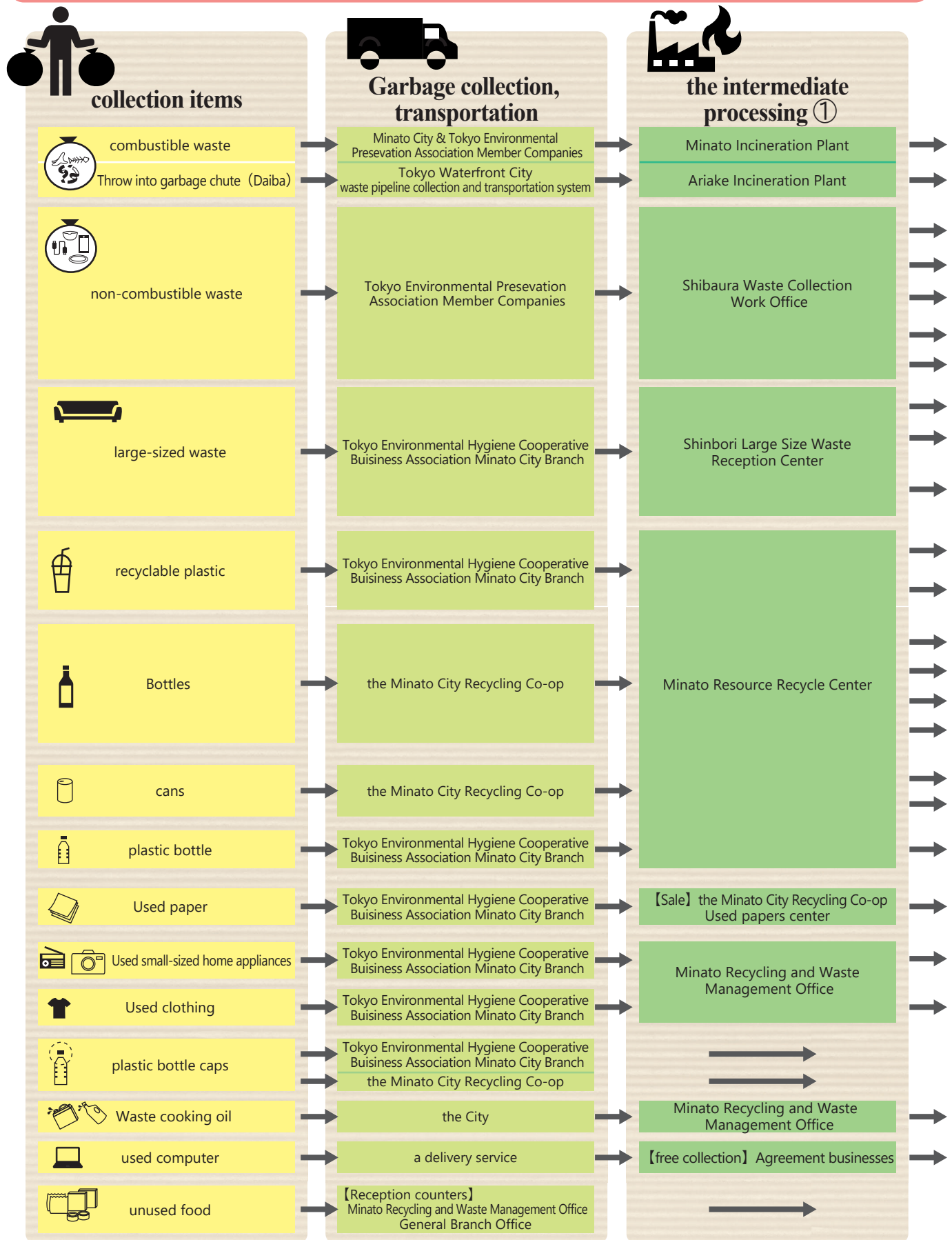
12 points for paper

11 points for kitchen waste

(Examples of initiatives)

- Recycling used paper such as from shredders etc., changing to paperless work
- Limiting kitchen waste and increasing recycling at stores etc.
- Reduce the use of plastic and excessive packaging

Flow of Resources and Waste Recovered by the City



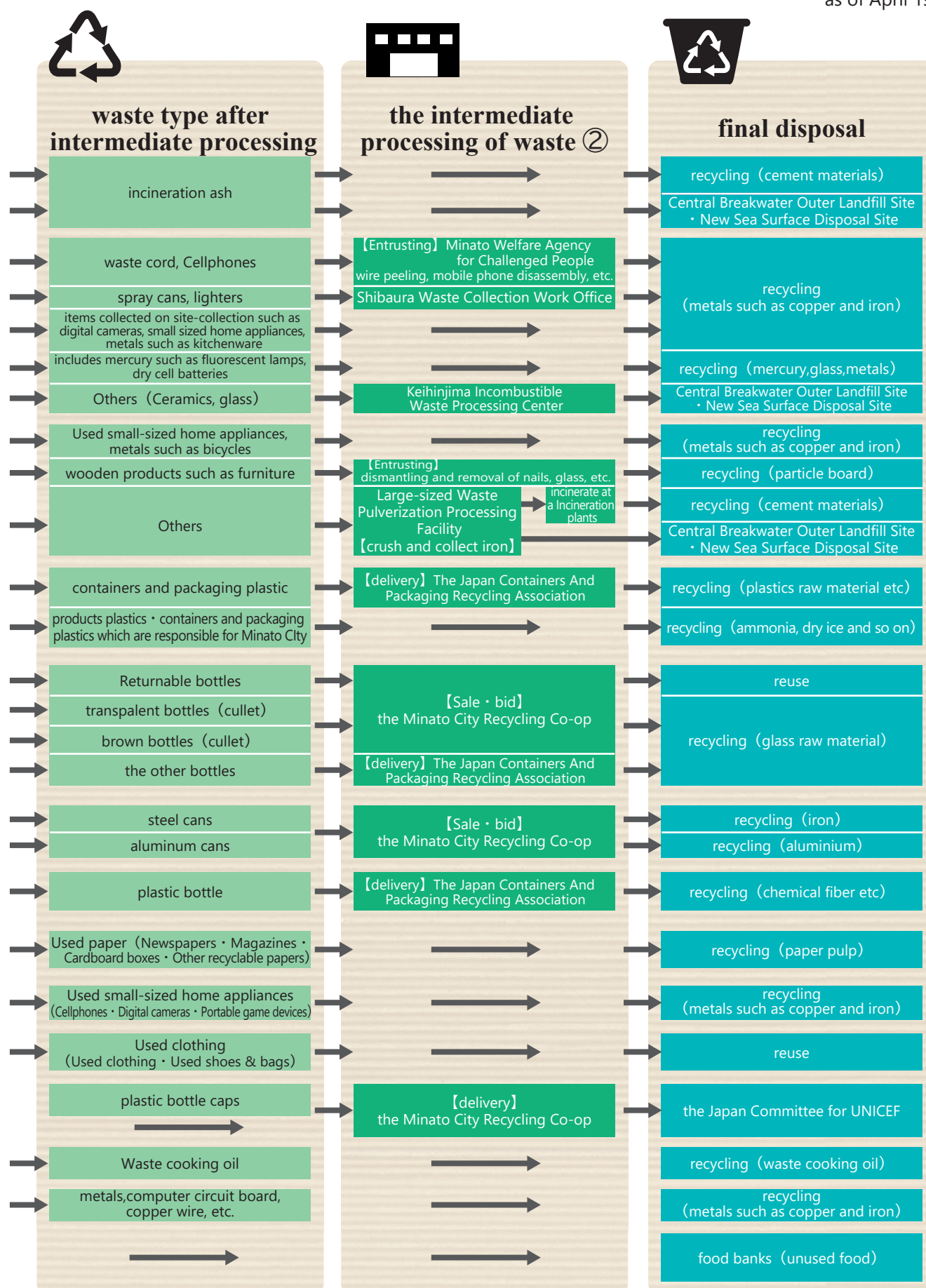
Minato Recycling and Waste Management Office



Shibaura Waste Collection Work Office



Shinbori Large Size Waste Reception Center



Minato Resource Recycle Center



Minato Incineration Plant

Central Breakwater Outer Landfill Site
• New Sea Surface Disposal Site

✓ Measures to focus on

1. Restricting the generation of businesses waste



- Enforce obligations of owners of large-scale buildings
- Promote proactive efforts by tenants
- Promote the transition to private-sector collection

2. Restricting the use of plastics and recycling resources



- Spread and raise awareness of marine plastic problems
- Improve recycling and support the development of alternative products by businesses
- Reduce the use of plastic shopping bags and promote the use of personal bags
- Reduce the use of plastic bottles and promote the use of personal bottles
- Promote the use of reusable dishes, etc.
- City-led initiatives for the reduction of disposable plastics
- Improve disposable bags
- Reinforce extended producer responsibilities

3. Reduction of food loss



- Expansion of food drives
- Collaboration with universities and other educational institutions
- Expansion of the number of cooperation restaurants without leftover and establishing an award system
- Spread and raise awareness during food loss reduction months and food loss reduction days

4. Expansion of resource recovery



- Expansion of collection of used clothing at sites
- Recovery of ceramics and glass resources
- Promotion of resource recovery of other recyclable paper
- Expansion of resource recovery through collaboration with apartment houses
- Enhancement of recycling furniture exhibitions

5. Establishment of a Sustainable Collective Collection System



- Review cash incentives for groups implementing collective collection
- Support for collection operators in response to fluctuations in used paper prices
- Establishment of a collection operator registration system

6. Improvement of operations of safe, secure and convenient cleaning businesses and collection services



- Expanding the scope of door-to-door collection and large-sized waste transport
- Early morning collection in summer season
- Reinforce appropriate disposal of dangerous materials, etc.
- Raise awareness of waste etiquette in downtown areas
- Promote ICT for various procedures
- Reduced waiting time for large-sized waste collection
- Renovation of working liaison office of the Minato Recycling and Waste Management Office
- Upgrade and extend the life of Minato Resource Recycle Center facilities

7. Improvement of Disaster Response Capabilities



- Formulate a Disaster-related Waste Disposal Plan
- Ensure the collection system after typhoons and snowfall
- Business continuity during periods when infections spread
- Improve the safety of work clothing and protective equipment for cleaning personnel

8. Effective spread and awareness-raising, and enhancement of environmental education



"Let's think about marine plastics" lecture
March 6th 2021

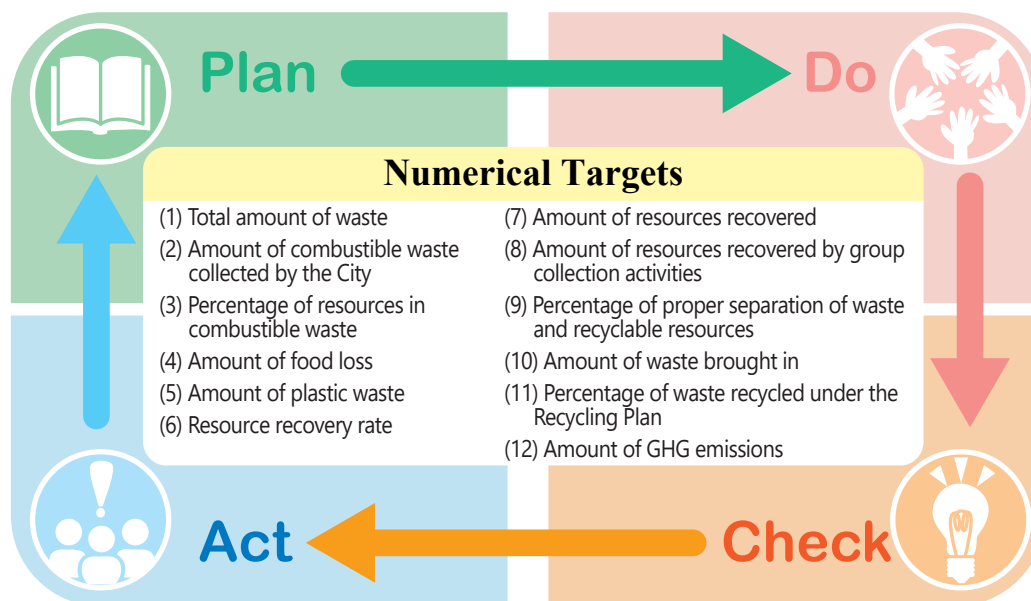
- Disseminate information to ensure the reduction and separation of waste
- Strengthen cooperation with cleaning cooperation organizations
- Foster environmental human resources who will lead the next generation
- Expand surveys on the actual state of waste emissions



Progress management of the Plan

In managing the progress of the Plan, the Minato City Environment Council confirms and evaluates the progress of measures implemented or being developed every year.

Based on the basic philosophy and basic policies, the citizens, businesses, and the City government are aware of their respective responsibilities and roles, and are proactively working to reduce and recycle waste. In addition, in order to promote awareness-raising and behavioral change of each group toward the achievement of numerical targets, the progress of each initiative and the achievement of targets will be widely publicized through being publicly disclosed on the City's website or through providing information to cleaning partner organizations.



Goals of the SDGs related to the Plan and initiatives in the waste field

 2 ZERO HUNGER Reduce food loss, and reduce food and energy loss throughout society.	 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE Encourage businesses to improve resources efficiency, promote sustainable industries, and promote innovation.	 14 LIFE BELOW WATER Prevent the impact of marine plastic on marine and its resources through waste reduction and proper disposal.
 3 GOOD HEALTH AND WELL-BEING Maintain stable and efficient waste disposal and ensure a healthy and comfortable life for all.	 11 SUSTAINABLE CITIES AND COMMUNITIES Establish an appropriate and tough waste treatment system to maintain a safe and comfortable life.	 15 LIFE ON LAND Conserve, restore, and sustainably use terrestrial ecosystems through waste reduction and proper disposal.
 4 QUALITY EDUCATION Deepen the understanding of waste problems among a wide range of generations by disseminating information on waste reduction and recycling and providing a place for learning.	 12 RESPONSIBLE CONSUMPTION AND PRODUCTION Actively restrict the amount of waste produced through each level of consumption and production, and ensure a sustainable consumption and production system by promoting reducing, reusing, and recycling.	 17 PARTNERSHIPS FOR THE GOALS Promote partnerships between residents, businesses, and the City in order to achieve the goals of waste reduction and resource recovery.
 8 DECENT WORK AND ECONOMIC GROWTH Improve resources efficiency in consumption and production by reducing waste and promoting resources recovery, and establish sustainable economic growth and environmental conservation.	 13 CLIMATE ACTION In order to mitigate climate change and its effects, improve efficiency of waste treatment and reduce GHG emissions, by reducing waste and promoting resources recovery	

SUSTAINABLE DEVELOPMENT GOALS

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