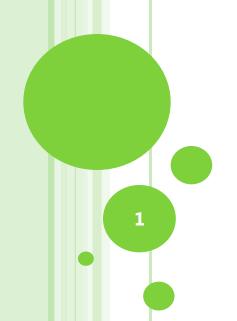
# HIERARCHY OF WASTE MANAGEMENT POLICY AND CITIZENS INVOLVEMENT IN JAPAN

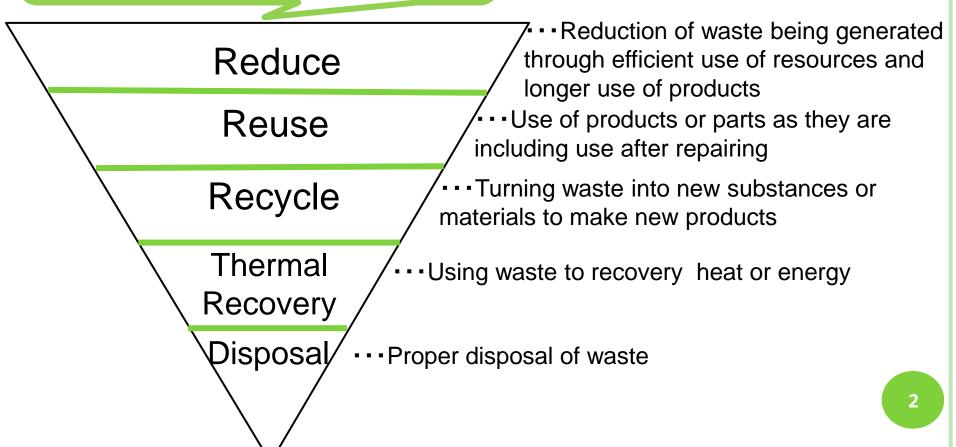


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# Waste Management Hierarchy in the Basic Act for Establishing a Sound Material-cycle Society

Reduction of natural resource consumption and environmental impact



## MORE RS THAN THREE AT THE LOCAL GOVERNMENT LEVEL

4R

Refuse Reduce Reuse Recycle 5R

Refuse Reduce Reuse Repair Recycle 6R

RefuseRefuseReduceReduceReuseReuseRepairRepairRemakeRecycleRecycleRental

# RESPONSIBILITIES AND MEASURES ARTICULATED IN THE BASIC ENVIRONMENT ACT AND THE BASIC ACT FOR ESTABLISHING A SOUND MATERIAL-CYCLE SOCIETY

#### The National Government

is responsible for formulating and implementing <u>fundamental and comprehensive</u> <u>policies and shall take necessary measures</u> concerning the following;

- ☆Promotion of Environmental Education / Learning
- **☆Enrichment of Public Relations**
- **☆**Provision of Information
- **☆**Supporting Initiatives of NGOs/NPOs

#### **Local Governments**

are responsible for formulating and implementing policies corresponding to national policies and other policies in accordance with the natural and social conditions of their own jurisdictions

#### **Citizens**

are responsible in making effort to formulate a sound material-cycle society and to cooperate with policies and measures implemented by the national and local governments

## Measures to Realise Waste Management Hierarchy and 3R or more Rs

#### Measures such as

- ☆ Promotion of Environmental Education / Learning
- ☆ Enrichment of Public Relations
- ☆ Provision of Information

are taken



<u>Municipalities</u> as the closest government body to the citizens, <u>have the primary responsibility and</u> <u>also are at the position to take effective measures</u> <u>to enhance citizens involvement and initiatives</u>

#### Result in

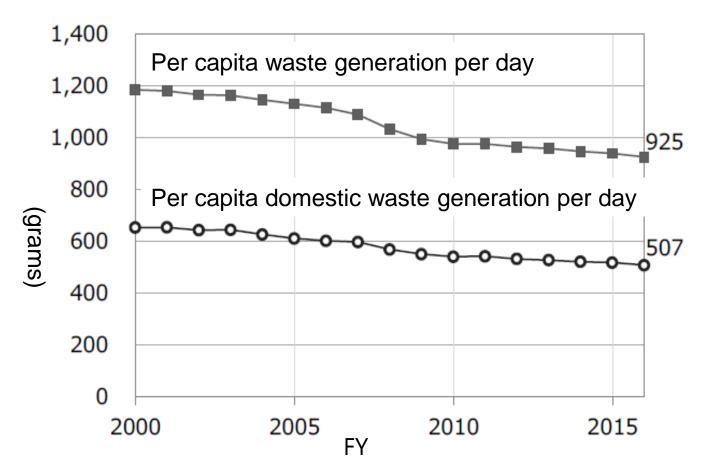
- ☆ Citizens' Participation/Involvement
- ☆Citizens and NGOs/NPOs own initiative

# Indicators and Numerical Targets and Target Years in the 4<sup>th</sup> Fundamental Plan for Establishing a Sound Material-Cycle Society (June 2018)

Indicators	Numerical Targets	Target Fiscal Year
Per capita waste generation per day	around 850g	2025
Per capita household waste generation per day	around 449g	2025
Rate of people who have awareness on waste reduction, circular use of waste or green purchasing	around 90%	2025
Rate of people who actually practice 3R	raise by 20% from public opinion pole of 2012*	2025
Household food loss	50% reduction from FY2000	2030

<sup>\*</sup>see slide #8

# FY2025 TARGET: PER CAPITA WASTE GENERATION PER DAY: AROUND 850G PER CAPITA DOMESTIC WASTE GENERATION PER DAY: AROUND 449G



Source: https://www.env.go.jp/recycle/circul/keikaku/gaiyo\_4\_2.pdf

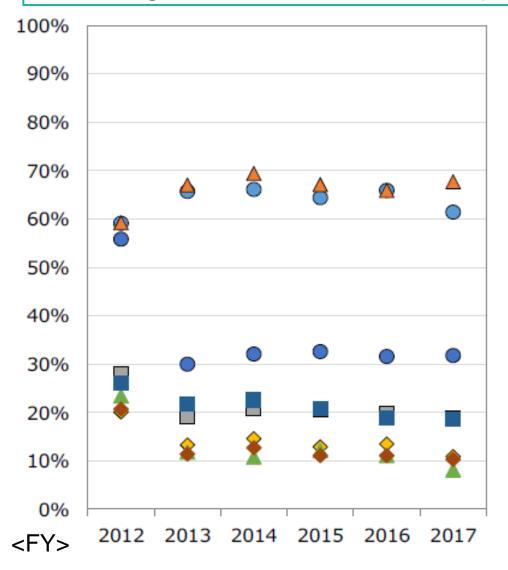
## \*Opinion Poll on Environmental Problems Cabinet Office (June 2012)

The result of the survey concerning practice rate of concrete 3R action – Percentage of citizens engaging in actual efforts (main topics only)

- △ Use refill products 59%
- Refrain from using plastic shopping bags or ask for less packaging 59%
- Do not leave food uneaten or try not to throw away foodstuff 56%.
- Do not purchase one-way products 28%
- Cooperate in collection at shops of small-sized electronic devices such as mobile phones 26%
- Buy products that use reusable containers such as beer and milk bottles 23%
- Buy recycled products made of recycled materials 21%
- Use rental/lease services in order not to buy unnecessary products 20%

### Percentage of People who are Actually Practicing 3R

FY2025 Target: raise about 20% from the opinion pole of FY2012



#### Reduce

- Refuse plastic bags(bring own bags), demand less packaging
- ▲ Often use refill products
- Not buying one-way products
- Trying to use rental or lease products
- Making effort not to produce food waste

#### Reuse

Use returnable bottles

#### Recycle

- Cooperating with collection of small electronic appliances at shops
- Buying recycled products produced from recycled materials

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## FY2030 TARGET: REDUCE HOUSEHOLD FOOD LOSS BY 50% FROM FY2000

FY	2000	2012	2013	2014	2015
Domestic Food Loss (million ton)	4.33	3.12	3.02	2.82	2.89

Source: https://www.env.go.jp/recycle/circul/keikaku/gaiyo\_4\_2.pdf

## Measures or Actions taken at the Municipality Level 1.Environmental Education/Learning

☆Primary school students (usually 4<sup>th</sup> year students) visit recycle centres, clean centres or environmental education centres as a part of school program.

☆Staff of municipalities or clean centres visit schools and give

lectures to students



Photo provided by the City of Hachioji

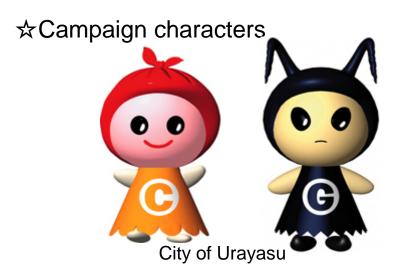
After learning about 3R and waste streams, students draw posters. These posters are put up on pillars and walls where many people can see.





Photos provided by the City of Hachioji

### 2.AWARENESS RAISING CAMPAIGN









City of Hachioji

☆Send advisors on 3R to communities, companies or households

☆Introduce varieties of instruments to disseminate knowledge on how to reduce and sort waste – newsletter, homepage, cable TV, SNS, smartphone application, etc.



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City of Kodaira

### 3. 3R CONCERNING FOOD WASTE

#### 1 Reduction of food loss

☆Featuring "Food Loss" in a City's Newsletter and describing the way to buy, stock and cook food, how to put things in order in the fridge, difference between "use by" date and "best before" date (case of Hachioji City).

☆ "3010" campaign – encourage people to eat rather than to talk for the first 30 minutes and the last 10 minutes at a party.

☆ "Nationwide Delicious Eat All Campaign Network Association" was founded in October 2016 (Secretariat: Fukui Prefecture) - 363 local authorities are participating (as of 2018/9/19)



#### 2 Reuse/Redistribution of Food

#### ☆ Food Drive is becoming a trend!

Citizens or municipality staff would bring food that is more than they can consume at home to designated collecting points at designated time periods. The food will be donated to food banks, social welfare associations, diners for children or other NPOs, so that the food can reach people who really need.





### 3 Recycling of food waste

☆Composting using cardboard box or composting containers usually provided or lend by municipalities

☆Collecting food waste from households to produce fertilizer by lending a bucket to a group of more than three households – case of Kodaira City ☆Recycling of school lunch left overs to produce fertilizer, livestock feed or biogas – case of Urayasu City in other municipality's facility

☆Children would bring food waste from home to school and make compost that would be used for flower bed in the public area – case of Hachioji City

(see below)





## Toward Efficient and Effective 3R and Citizens Involvement

- ☆Cooperation and information sharing among municipalities
- ☆Role of regional government in facilitating and assisting municipalities
- ex.) Kanagawa Prefecture and municipalities which constitute regional waste treatment promotion meeting draw a manual on how to survey food loss in food waste from household
- ☆Citizens involvement at regional level (covering broader region)