Circular Food Systems in Cities
- In the Case of Yokohama -

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Overview of Yokohama

<table>
<thead>
<tr>
<th>Population</th>
<th>3.74 million</th>
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<tbody>
<tr>
<td>Area</td>
<td>435.43 km²</td>
</tr>
<tr>
<td>Population density</td>
<td>8,590 persons/km²</td>
</tr>
<tr>
<td>District</td>
<td>18 wards</td>
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</tbody>
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(as of September 1, 2018)
Classification of Wastes

Waste produced by households

General Waste
- Household General Waste
  - Specially controlled general wastes

Business General Waste
  - Specially controlled industrial wastes

Industrial Waste
- 20 types of wastes

< Municipality’s responsibility >
(city, town and village)

< Corporations’ responsibility >
Waste produced by business activities
Waste Volume and Population

1960~2000
Population: × 2.5
Waste Volume: × 16

▼43.2%
Flow of Waste & Resources

Sorted disposal

Collection

Burnables
Non-burnables
Recyclables

Collection site

Incineration

Incineration Plant

Intermediate treatment

Recycling Center

Recycling

Ash

Disposal site

Final disposal
Flow of Waste & Resources

100% 1,208,000 t
72.7% 878,000 t
26.9% 325,000 t
0.4% 5,000 t

※ Performance for 2017 (weight ratio)
Sorted Disposal

Sorting Categories: 10 categories, 15 types

- **Burnables**
- Oversized waste
- Cans, glass bottles, plastic bottles
- Small metal items
- Plastic containers/wrapping
- Non-burnables
- Spray cans
- Used batteries
- Paper
  - Newspapers
  - Cardboard
  - Cartons
  - Magazines/other paper
- Clothes/Fabrics
Current status of burnable waste (household)

Status of generated food waste

- Total: 578,938 tons
- Kitchen waste: 33.8% (Approx. 111,000 tons (58%))
- Food waste discovered in burnable waste (one example of untouched food)

Targets to be tackled as a matter of priority

Reduction of at least 20% in food waste generated by households (compared with FY 2015)
Initiatives by the City of Yokohama

~Food waste reduction~

Main initiatives

Public awareness activities and environmental education for citizens

- Environmental education
- Symposium
- Wider range of soil mixture methods
- Distribution of recipes for using up ingredients
- Promotion of Food bank and food drive activities
Initiatives by the City of Yokohama
~Food waste reduction~

<Main initiatives>
Initiatives in collaboration with business operators

Popularization of restaurants that support food waste reduction

Awareness-raising activities in cooperation with business operators

Award system for business operators
Examples of initiatives taken by companies

<Company case studies>

Food Recycling Loop

- Manufacturing plants
- Retail stores

Food leftovers

Recycling operators

- Composting
- Fodder

Agricultural products

Farmers

Methane gas processing facilities

- Methane
- Fermentation residues

Utilization of Biomass Energy

- Electricity
- Gas
- Heat

Urban areas
- General households, stores, etc.

Farmers, etc.
- Cattle farmers
- Farmers
Aiming to reduce food waste

Movements to encourage people to reduce food waste

Know

Think

Creation of an environment that makes it easier for people to take action

Learn know-how
Thank you for your attention.

INQUIRIES:
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