Food Recycling Law in Japan

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1 Why This Law was Established
Self-sufficiency ratio in Japan
Japan imports 60% of its food

Source: Ministry of Agriculture, Forestry and Fisheries
Amount of food waste discarded in Japan

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount (in millions of tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business waste</td>
<td>7</td>
</tr>
<tr>
<td>Household waste</td>
<td>10</td>
</tr>
</tbody>
</table>

**Amount of discarded food waste**  
17 million tons

Source: Ministry of Agriculture, Forestry and Fisheries (FY2011 estimation)
## Food Loss in Japan

<table>
<thead>
<tr>
<th>Amount of discarded food waste</th>
<th>Cooking scraps and similar</th>
</tr>
</thead>
<tbody>
<tr>
<td>17 million tons</td>
<td>9–12 million tons</td>
</tr>
</tbody>
</table>

**Food loss**: 5–8 million tons

Amount of food that could be eaten but is discarded instead

Source: Ministry of Agriculture, Forestry and Fisheries (FY2011 estimation)
Scale of Food Loss

Food loss in Japan
5–8 million tons

Global food assistance
4 million tons

Source: Ministry of Agriculture, Forestry and Fisheries (FY2011 estimation)
## Food Recycling

<table>
<thead>
<tr>
<th>Amount of discarded food waste</th>
<th>17 million tons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incinerated and landfill disposal</td>
<td>13 million tons</td>
</tr>
<tr>
<td>Recycled (feed, fertilizer, and heat recovery)</td>
<td>4 million tons</td>
</tr>
</tbody>
</table>

Source: Ministry of Agriculture, Forestry and Fisheries (FY2011 estimation)
2 Food Recycling Law
Food Recycling Law

◎ Establishment
Established in May of 2001

◎ Purpose
To reduce the amount of food waste produced and promote recycling into feed and fertilizer
Order of Recycling Precedence

1. Reduce production (at every phase in the cycle including manufacturing, distribution, restaurants, etc.)

2. Recycle into feed and fertilizer

3. Heat recovery (power generation at incineration facilities)

4. Weight reduction (dehydrated and dried products)
The establishment of this law has increased recycling of food waste by business in food industries.

<table>
<thead>
<tr>
<th>Amount of discarded food waste</th>
<th>17 million tons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business waste</td>
<td></td>
</tr>
<tr>
<td>Incinerated and landfill disposal</td>
<td>4 million tons</td>
</tr>
<tr>
<td>Recycled</td>
<td>3 million tons</td>
</tr>
<tr>
<td>Household waste</td>
<td></td>
</tr>
<tr>
<td>Incinerated and landfill disposal</td>
<td>9 million tons</td>
</tr>
<tr>
<td>Recycled</td>
<td>1 million tons</td>
</tr>
</tbody>
</table>

- Business waste: 7 million tons
- Household waste: 10 million tons
Definition of "Businesses in Food Industries" in this Law

1. Food manufacturers and processors
   Food manufacturers and so on

2. Food wholesale and retailers
   Food wholesalers, supermarkets, convenience stores, etc.

3. Restaurants
   Cafeterias, restaurants, hotels, etc.
Definition of "Food Waste" in this Law

- Manufacturing Phase (Food Manufacturing)
- Distribution Phase (Food Distribution)
- Consumption Phase (Restaurants and at home)

Food Waste
- Processing Waste
- Unsold products and food waste
- Cooking scraps, uneaten food, and food waste

Food Recycling Resources

Source: Food Industry Center
Legal Binding

*Target*
Producers of large amounts of waste (100 tons or more per year)

*Consequences*
1. Warnings
2. Publicizing
3. Legal orders
4. Penalties

*Guidance and advice to be provided to business that produce less than 100 tons per year*
Promoting Recycling into Feed and Fertilizer

1. Establishment of system to register businesses that produce feed and fertilizer

<Benefits of registration>
- Increased feed and fertilizer contracts
- Reduction of administrative proceedings through provisions of laws and regulations
Promoting Recycling into Feed and Fertilizer

2. Establishment of system to certify the "Food Recycling Cycle"

Source: Food Industry Center
3 Law amendment (in 2007)
Trends in Recycling Ratios

Source: Food Industry Center
Trends in amount of Food Waste Produced

Though the recycling activity ratio has increased, the amount of waste produced remains the same.

Source: Food Industry Center
I. Setting ratio goals for each business

The standard activity ratio for each business needs to be raised every year.

\[ \text{Recycling Activity Ratio} = \frac{\text{Amount of reduced production} + \text{Amount recycled} + \text{Amount of heat recovered energy} \times 0.95 + \text{amount of weight reduction}}{\text{Amount of reduced production} + \text{Amount of production}} \]
II. Setting goals for different industries

Recycling activity ratio goals

<table>
<thead>
<tr>
<th>Industry</th>
<th>Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food manufacturers</td>
<td>85%</td>
</tr>
<tr>
<td>Food wholesalers</td>
<td>70%</td>
</tr>
<tr>
<td>Food retailers</td>
<td>45%</td>
</tr>
<tr>
<td>Restaurants</td>
<td>40%</td>
</tr>
</tbody>
</table>
III. Establishment of a system to receive “regular reports” from business that produce large amounts

Business in the food industry that produced at least 100 tons in the last fiscal year must report every year on the amount of food waste being produced and the status of recycling activities.

*The determination of whether franchise chains are large producers is based on the total output of all stores in the chain.
Continue promoting reducing and recycling the amount of food waste!