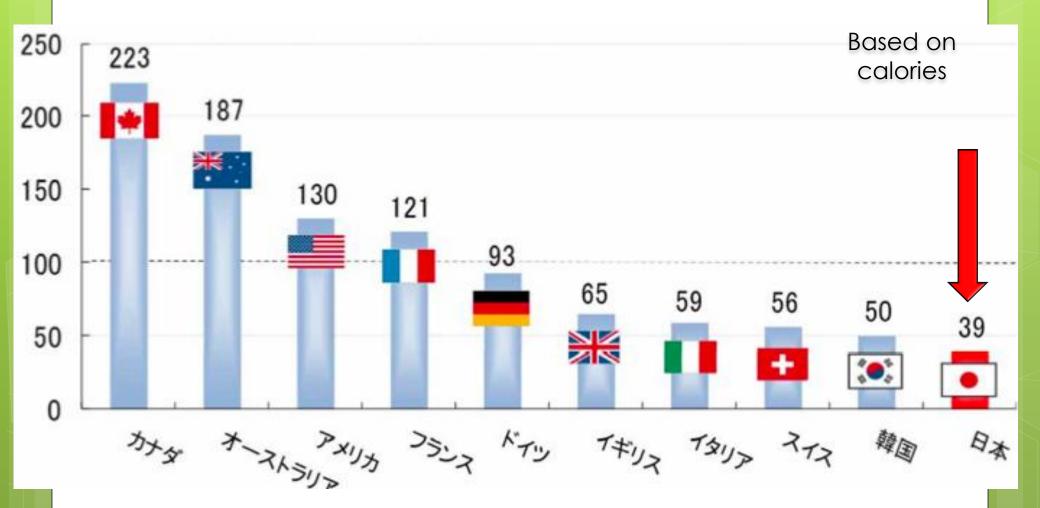
Food Recycling Law in Japan

Tokyo Environmental Public Service Corporation Shoji Kobayashi 1 Why This Law was Established

Self-sufficiency ratio in Japan Japan imports 60% of its food



Amount of food waste discarded in Japan

Amount of discarded food waste 17 million tons

Business waste 7 million tons

Household waste 10 million tons

Food Loss in Japan

Amount of discarded food waste 17 million tons

Food loss
5–8 million tons

Cooking scraps and similar 9-12 million tons

Amount of food that could be eaten but is discarded instead

Scale of Food Loss

Food loss in Japan 5–8 million tons



Global food assistance 4 million tons

Food Recycling

Amount of discarded food waste 17 million tons

Incinerated and landfill disposal

13 million tons

and heat recovery)

4 million tons

2 Food Recycling Law

Food Recycling Law

©Establishment Established in May of 2001

OPurpose

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

Amount of discarded food waste 17 million tons

Business waste 7 million tons

Household waste 10 million tons

Incinerated and landfill disposal 4 million tons

Recycled 3 million tons

Incinerated and landfill disposal 9 million tons

Recycled
1 million tons

Definition of "Businesses in Food Industries" in this Law

1. Food manufacturers and processors

Food manufacturers and so on

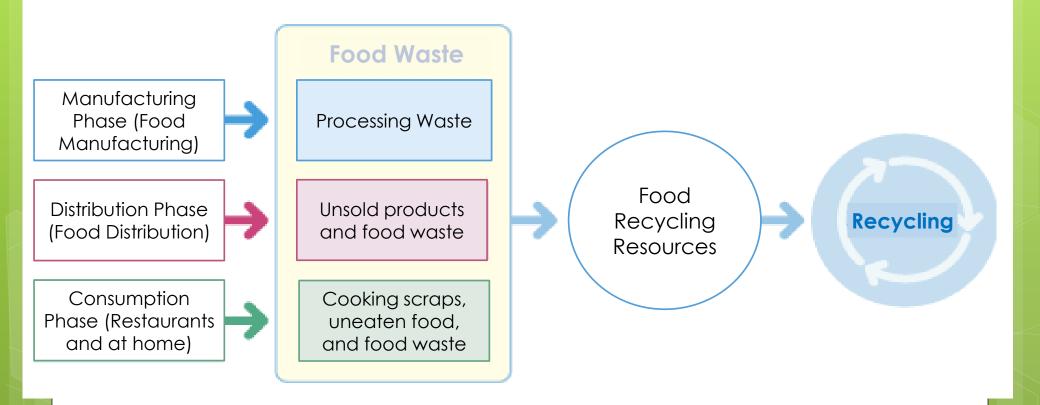
2. Food wholesale and retailers

Food wholesalers, supermarkets, convenience stores, etc.

3. Restaurants

Cafeterias, restaurants, hotels, etc.

Definition of "Food Waste" in this Law



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"

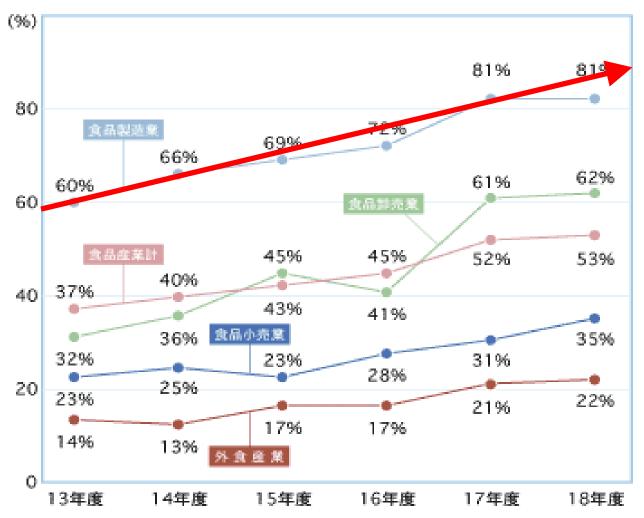
Businesses in the Food Industry



Source: Food Industry Center

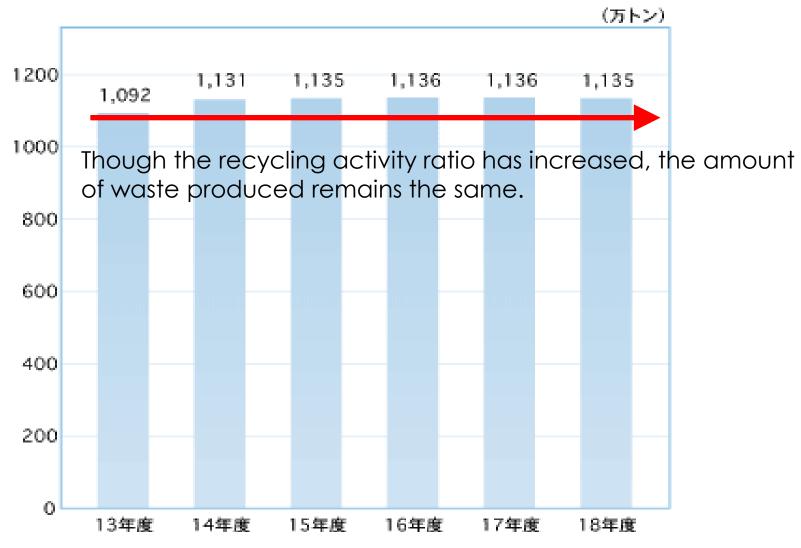
3 Law amendment (in 2007)

Trends in Recycling Ratios



Source: Food Industry Center

Trends in amount of Food Waste Produced



Source: Food Industry Center

I. Setting ratio goals for each business

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

Recycling Activity
Ratio

```
Amount of reduced production +
Amount recycled
+ Amount of heat recovered energy
= x 0.95 + amount of weight reduction
```

Amount of reduced production +
Amount of production

II. Setting goals for different industries

Recycling activity ratio goals

Food manufacturers	85%
Food wholesalers	70%
Food retailers	45%
Restaurants	40%

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!