## **Activities of the JAPAN FOOD ECOLOGY CENTER**



#### < Plant outline >

·Location: 1-17-13 Tanashioda, Chuouku, Sagamihara

City (plant site)

• Area : Site area:2800 m Structural area:909 m

Treatment method & capacity

 $: \quad Conversion \ into \ feed \ (shredding, fermentation) \\$ 

39tons/day

•Operating time : Shipping and receiving hours:

8:00 A.M. To 5:00 P.M. Operates 365 days/year









## Background of the Food Ecology Center (J.FEC)'s business



## **J.FEC** has two backgrounds:

#### The problems of waste disposal

- 1) Observance of the Food Recycling Law
- 2) Skyrocketing cost of waste disposal
- 3) Lack of final disposal sites

#### The problems of livestock farming

- 1) Rising costs of feed due to rising grain prices
- 2) Disease problems
- 3) Need for safe animal products





Simultaneous solving of multiple problems



Creating fermented feed from recycled food resources









Today, kitchen waste accounts for roughly half of all incinerated waste. It costs approximately 40,000 yen to incinerate per ton. Over half of this cost is paid by taxpayers.

The Food Recycling Law was put into effect in 2001 for the purpose of improving this situation.

The law targets all foodwaste-producing businesses. \*The law was revised in 2007 to reinforce its regulatory framework.

All foodwaste-producing businesses are required to report amounts of waste generated and recycling conditions.

#### **Favorites of the pigs**

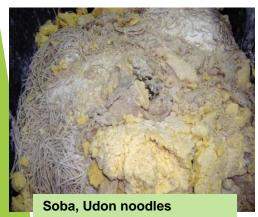
Rice Bread Noodles Cooking scrap

Delicatessen Vegetable waste Fruit waste



















Please treat these as materials for feed, not as garbage. Thank you.





Affiliated transport company collects waste from food factories, etc.



Special refrigerated car brings waste to the Food Ecology Center



2) Measure

#### 1) Transport of recycled food resources



3) Input of material



4) Sorting





5) Shredding



After shredding (in primary tank)



Sterilization



7) Fermentative treatment



8) Transport feed by tank truck



Feeding



#### 1. As a feed manufacturing business



#### Price competitiveness

Roughly 50% lower feed cost compared to general blended feeds



## **Safety**

- Computerized composition management
- Ensured safety with sanitary fermentation technology
- Probiotech effect from fermented feed

- Support structure
- Support structure for feed systems
- Management advice from specialist veterinarians
- Cooperative structure for pork branding and sales



#### 2. As a waste treatment business









A new system that can lower cost below incineration despite being recycling-based, and that does not require capital investment



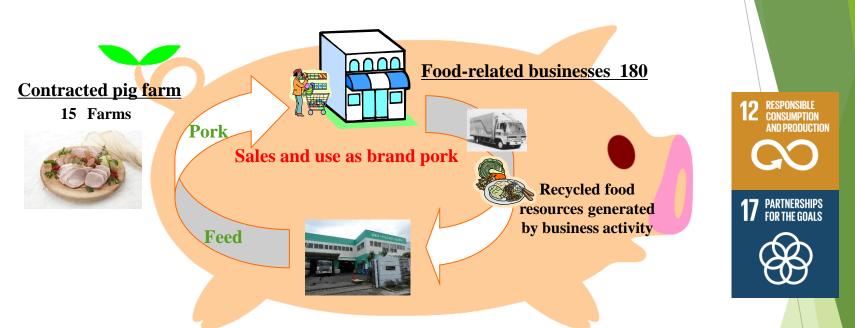
#### **Service**

- 365-day/year collection system
- Prevention of odor and sewage with container recovery system
- By-day/by-category generated-volume feedback system

#### **Trustworthiness**

- Licensed as a waste treatment business
- Licensed as a recycling business

# Manufacturing high-quality feed from food waste to create a 'loop of recycling'



Japan Food Ecology Center, Inc. (J.FEC) produces the liquid fermented 'eco-feed' (animal feed produced from recycled food waste), and contracts 15 farmers to supply it. Their stock farm products are processed into good quality meat and sold in department stores and supermarkets under the brand names Yuton (superior pork) and Umakabuta (delicious, flavorful pork). The special characteristic of J.FEC is to form a 'loop of recycling' through the use of food waste. It is the effort to reduce waste, and also the effort to create a recycling loop that involves farmers using the eco-feed. At present, the Japanese livestock industry relies heavily on the import of feed from overseas. This effort is expected to lead to improved feed self-sufficiency. This successful example in Japan is even getting attention from around the world.

## **Creating Customer Buy-in with Env. Ads**









Presenting the idea





Saving food through eating







小田急グループの食品リサイクル

小田急グループでは、残った食材もムダにはしません。 ブタの体に良い飼料にリサイクル。 ヘルシーでおいしいブタ肉を食卓に提供しています。

## ムダをなくす おいしさを生み出す 小田急グループの食品リサイクル











## Food Recycle project with local High School









Students at Kanagawa Prefectural Agriculture High School's Livestock Club are raising pigs using J.FEC's liquid feed.

They created and currently sell "Chuno-ton", an original pork brand. "Chuno-ton" is also used in the "Hamburger Steak Gift Set" - a traditional year-end-gift-giving product which was jointly developed with and is sold by Takashimaya Dept. Store and Rie Sangyo Co. Ltd.

Takashimaya promotes this product as "Way to go, Next Generation! Gift"

The students project was featured in many TV programs and newspaper articles







## Study tours, family visits, consumer education





J.FEC holds study tours for students, families, and other interested parties at a rate of 1-3 events every week.

In addition, we constantly hold guided tours upon request from food businesses, agricultural sector, and media. We are visited from overseas on a monthly basis.

