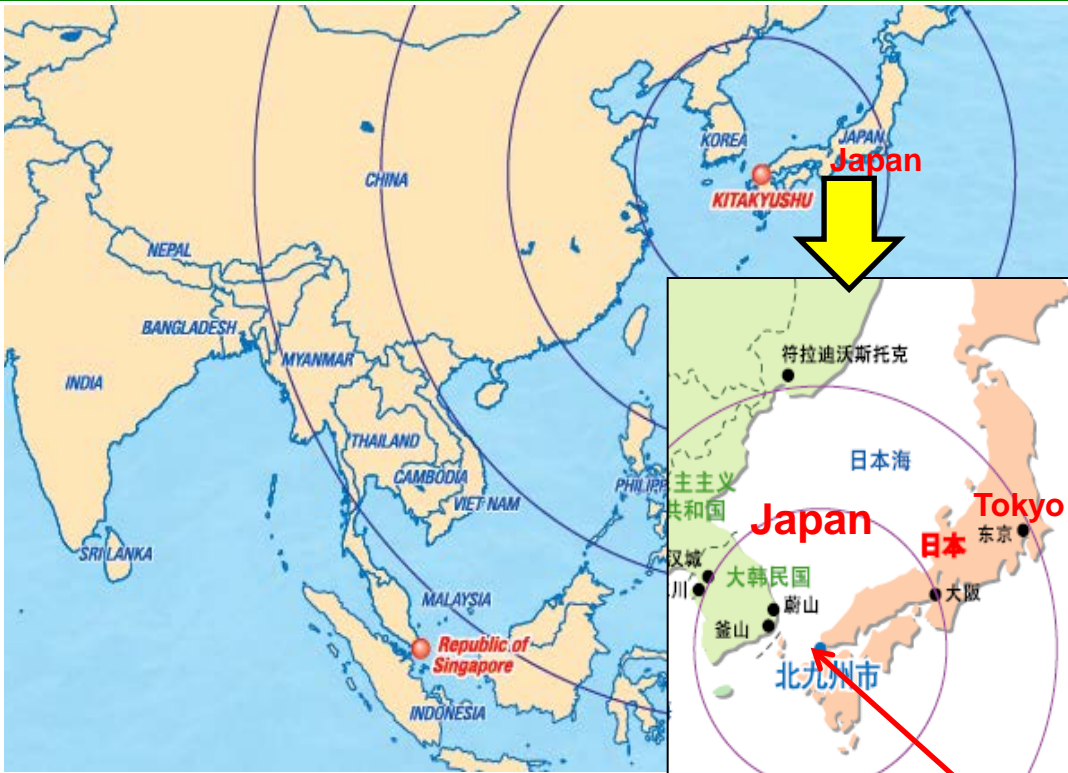


Kitakyushu City's Activities for Low Carbon Society in Asia

October 2018

Kitakyushu Asian Center for Low Carbon Society

City located near to other Asian nations, rich in nature, and developed as a manufacturing area



■ **Kitakyushu City**
 Population: 977,000 (2010) Area: 487.88 Km²
 GDP: 3,430 billion yen (2010)

Kitakyushu City

Rich nature and branded food materials



Karst Plateau Hiraodai



Wakamatsuhoku Beach



Ouma Bamboo Shoots



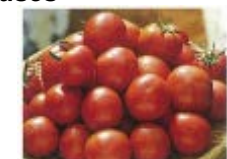
Kanmon Straits Octopuses



Kokura Beef



Buzen-Sea Oysters



Wakamatsu Special Tomatoes

Major companies in Kitakyushu area



Nippon Steel Corporation



Yaskawa Electric Corporation



TOTO Ltd.



Mitsubishi Chemical Corporation



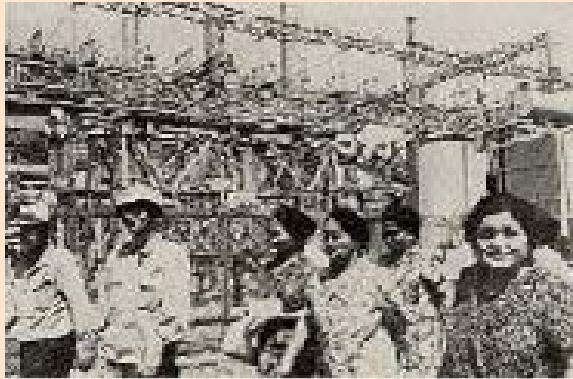
Toyota Motor Corporation · Nissan Motor Co., Ltd.



Mitsubishi Materials Corporation

Regional resources

(Experience with overcoming pollution problems, international environmental cooperation)



Company visit by citizens

Citizens

Partnership

Government

Companies



Reinforcement of restrictions and supervision



Agreement to prevent pollution

Kitakyushu City with recovered environments

1960s



Present



Solution of pollution problems is a starting point for international cooperation on environmental issues.

Transferring the experience of overcoming pollution problems so that developing nations need not repeat the same mistake !!

Starting International Environment Cooperation from 1980

Received trainees: 8,671 persons from 161 nations
Dispatched specialists: 199 persons to 25 nations

Taking on the Challenge of a Resource Recycling Society Kitakyushu Eco-Town Project



Automobile recycling

Japan's Largest Eco-Town

Approved 1997, Started operations 1998

No. business facilities: 27

No. research facilities: 8



R&D on recycling technologies for solar power systems



Collection/treatment of rare metals

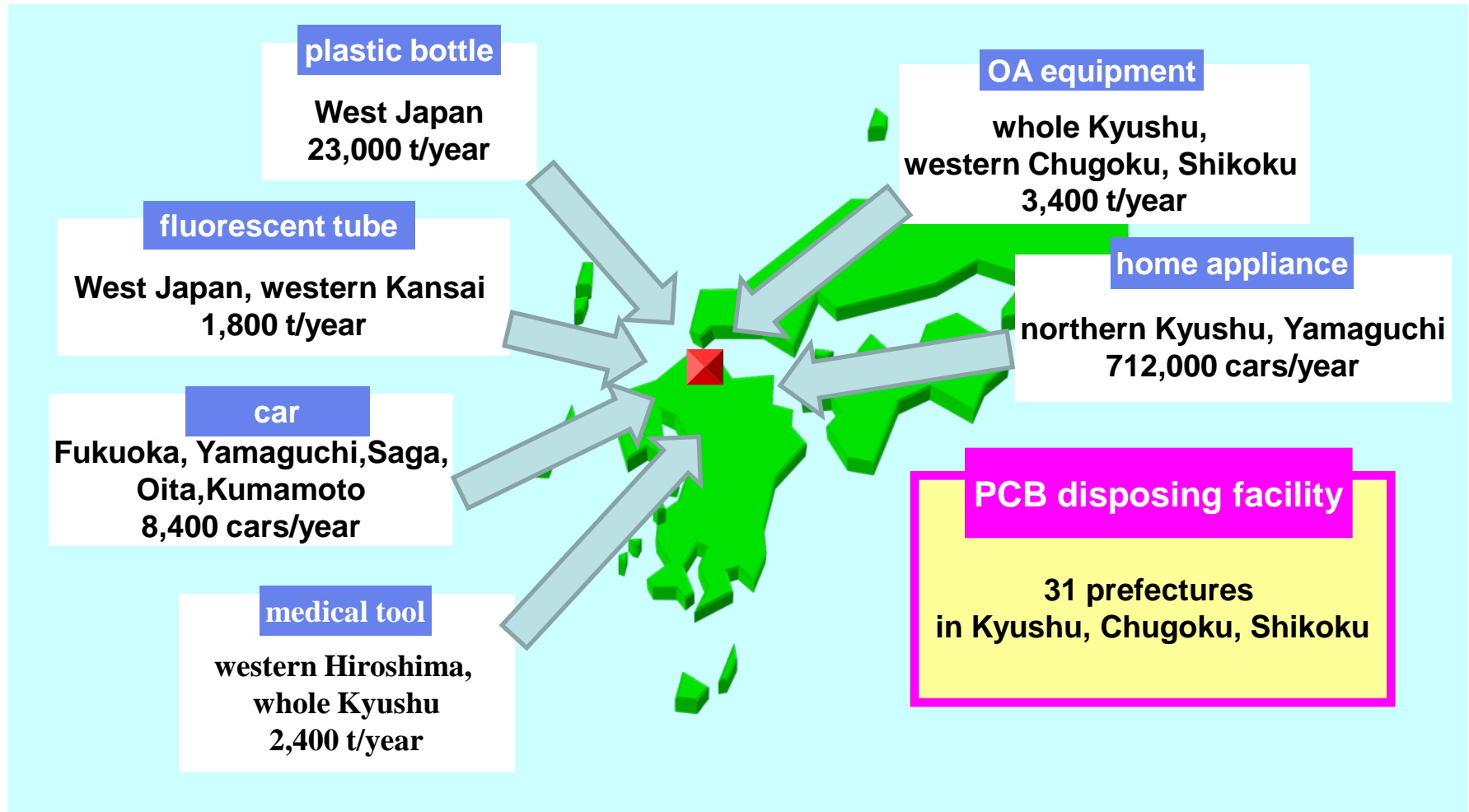
- Investment ~77 billion yen
- Employees ~1,063
- Visitors ~1,640,000 (1998-March 2017)



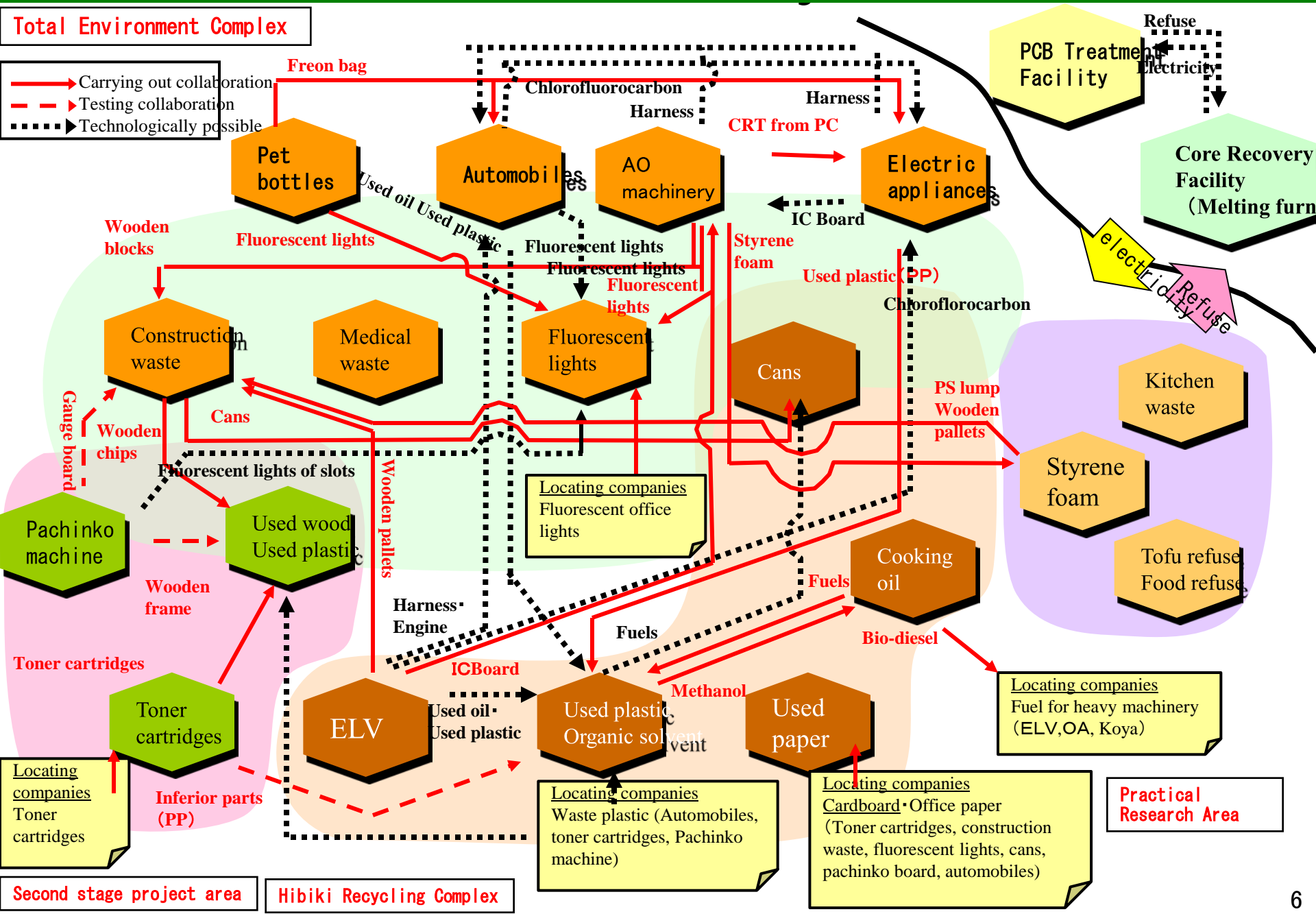
PET bottle recycling

Kitakyushu Eco-Town know-how

Acceptance Situation of Waste Products from Vast Area



Kitakyushu Eco-Town know-how



Efforts to Reduce and Recycle Plastic in Kitakyushu

| Start Date | Activity |
|------------|---|
| Nov 1997 | <u>Start of separation and collection of PET bottles</u> |
| Jul 2000 | <u>Start of base collection of trays (supermarkets, civic centers, etc.)</u> *White trays (started in 2000), color trays (started in 2002) |
| Jul 2006 | Review of household waste collection system (Revision of charges, introduction of paid bags for recycling, <u>start of separation of plastic containers and packaging</u>) |
| 2009 | <u>Bus tours on recycling of plastic containers and packaging</u> |
| Jun 2018 | <u>Discontinuation of distribution of free plastic shopping bags</u> on the basis of agreements with businesses (about 80 supermarkets in the city) |

Bus Tours on Recycling of Plastic Containers and Packaging



○ Objective

Learn about recycling-oriented and low-carbon societies through tours on sorting and recycling plastic containers and packaging for the effective utilization of resources and to solve global warming issues

○ **Target:** 5th and 6th graders in public elementary schools

○ **Tour contents:** Separation work at plastic recycling centers, etc.

○ **Number of participants:** About 2,000 in total (Since 2009)

Food Loss Measures in Kitakyushu

Kitakyushu's Fundamental Plan for Establishing a Sound Material-Cycle Society

- Promotion of measures to control food loss, such as the "Nokoshima Sengen" ("Waste Not" Declaration)



Clean your plate!



Drain water from kitchen waste before throwing it away



Nokoshima Sengen
"Let's all get started today, right away!"
"Let's work together to reduce 'food loss'."

Examples of Actions Under the “Nokoshima Sengen” Movement (“Waste Not” Declaration)

For
households



Cooking class on reducing
food waste

Nokoshima Sengen
“Let’s all get started
today, right away!”
“Let’s work
together to reduce
‘food loss’.”

Widely publicize the Nokoshima Sengen
("Waste Not" Declaration)

Cooking class on reducing food waste

Awareness raising activities for preschoolers (picture-
story show and film)



And more!

Examples of Actions Under the “Nokoshima Sengen” Movement (“Waste Not” Declaration) (For Businesses)

“There’s really quite a bit of food here.”
“Do you serve smaller portions?”
“Yes, we do.”



【Example of a shop supporting the Nokoshima Sengen】
Adjust portions in accordance with a customer’s preference



Nokoshima Sengen
“Let’s all get started today, right away!”
“Let’s work together to reduce ‘food loss’.”

For businesses

Shops supporting the “Nokoshima Sengen” (“Waste Not” Declaration) (Recruitment and publicity)

“Clean Your Plate” Campaign

Campaign for Shop Supporters of the Nokoshima Sengen (“Waste Not” Declaration)



Organic Waste Composting Courses (for Households)

Kitakyushu's Fundamental Plan for Establishing
a Sound Material-Cycle Society

Promote the recycling (composting) of food waste
(organic/kitchen waste) at home

Organization of organic waste composting
courses for residents



<Organic waste composting courses>

- Start of activity: FY 2009 -
- Number of courses held: 145
- Number of course attendees:
About 5,400

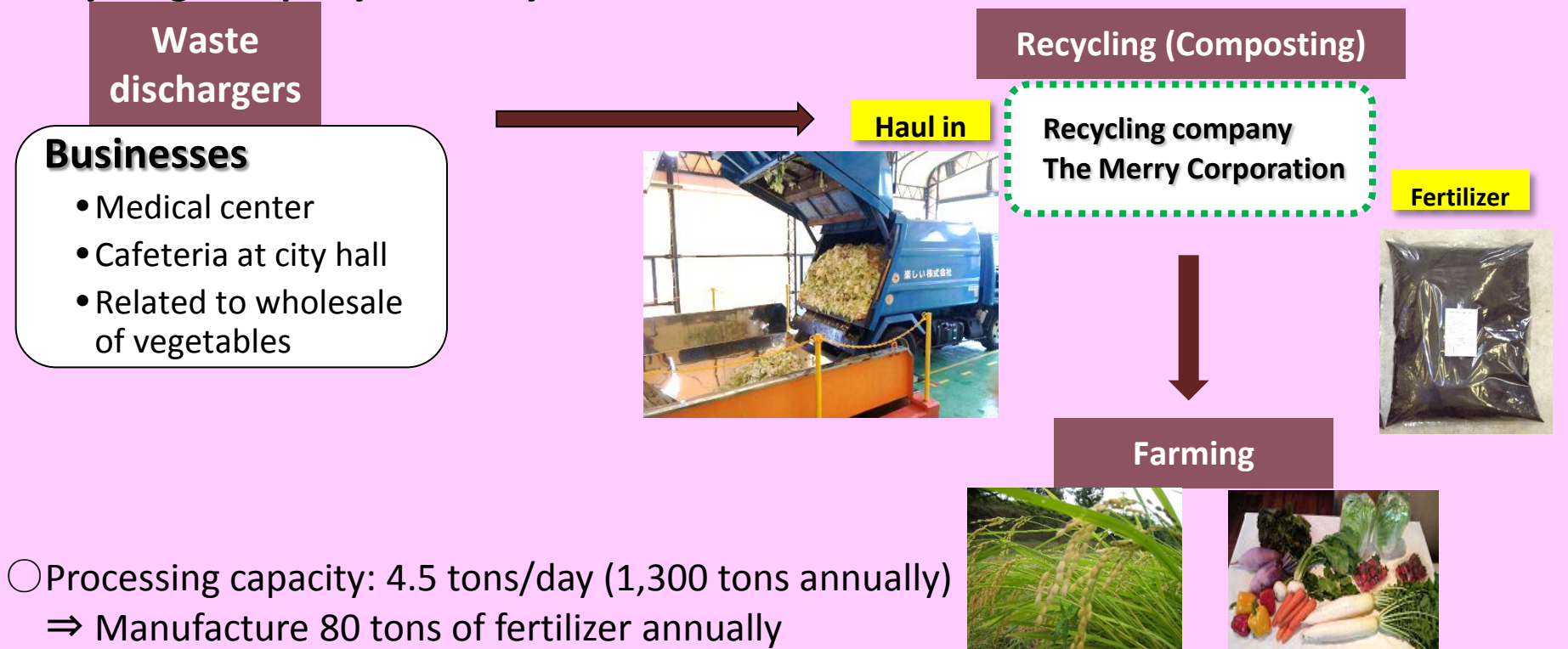
※As of the end of FY 2017

Composting by Recycling Companies (For Businesses)

Kitakyushu's Fundamental Plan for Establishing a Sound Material-Cycle Society

Steady promotion of food recycling activities, such as guaranteeing the processing capability of private recyclers by providing support to existing and new businesses

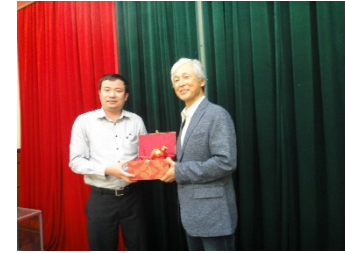
<Case example of The Merry Corporation, a local recycling company in Kitakyushu>



○ Processing capacity: 4.5 tons/day (1,300 tons annually)
⇒ Manufacture 80 tons of fertilizer annually

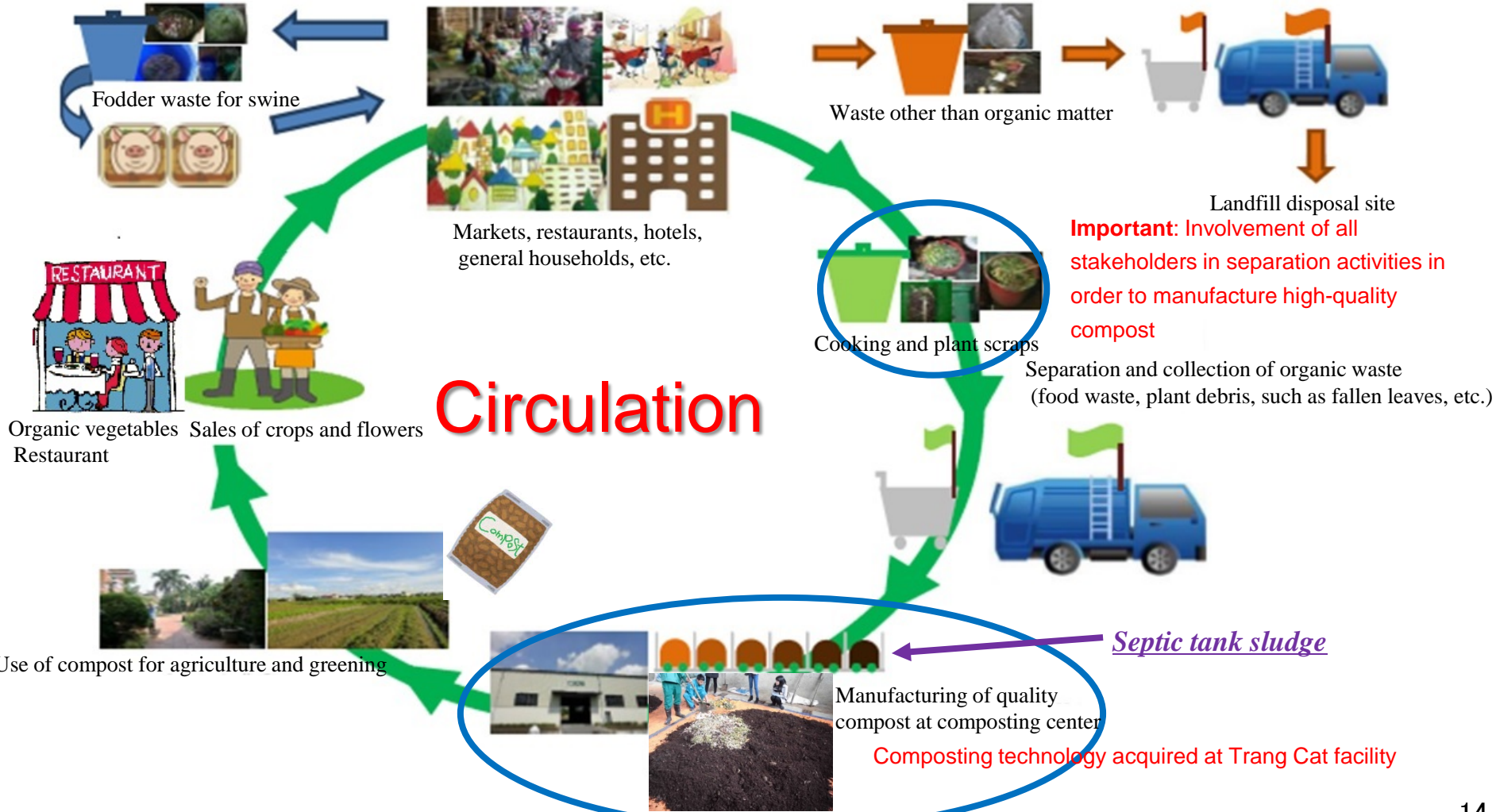
Haiphong City Composting Production Project

2017, The transfer of composting technology has been completed under the technical assistance and supervision of Japanese Experts.



Hai Phong's Aim to "Circulate Organic Waste"

Under implementation



Improvement of Solid Waste Management in Fraser's Hill, Malaysia

Hibikinada Development, The Merry Corporation, Kitakyushu City Environmental Preservation Association

Grassroots Technical Cooperation Project (Special category of local economy revitalization) (2014~)

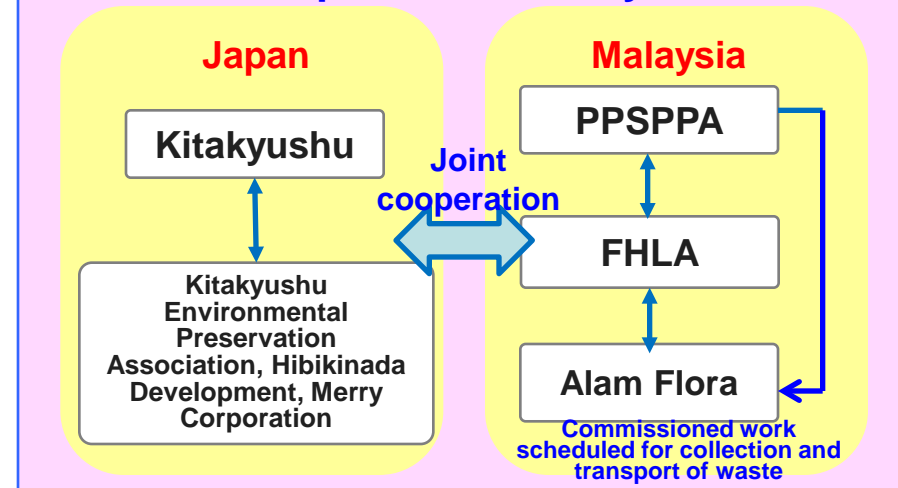
Fraser's Hill is a typical tourist spot in Malaysia. However, immediate measures are needed to respond to pressure on the remaining capacity of the final disposal site and groundwater contamination.

The Solid Waste Management and Public Cleansing Corporation (PPSPPA) of Malaysia supports the improvement of waste management and capacity by providing guidance to the Fraser's Hill Local Authority (FHLA).

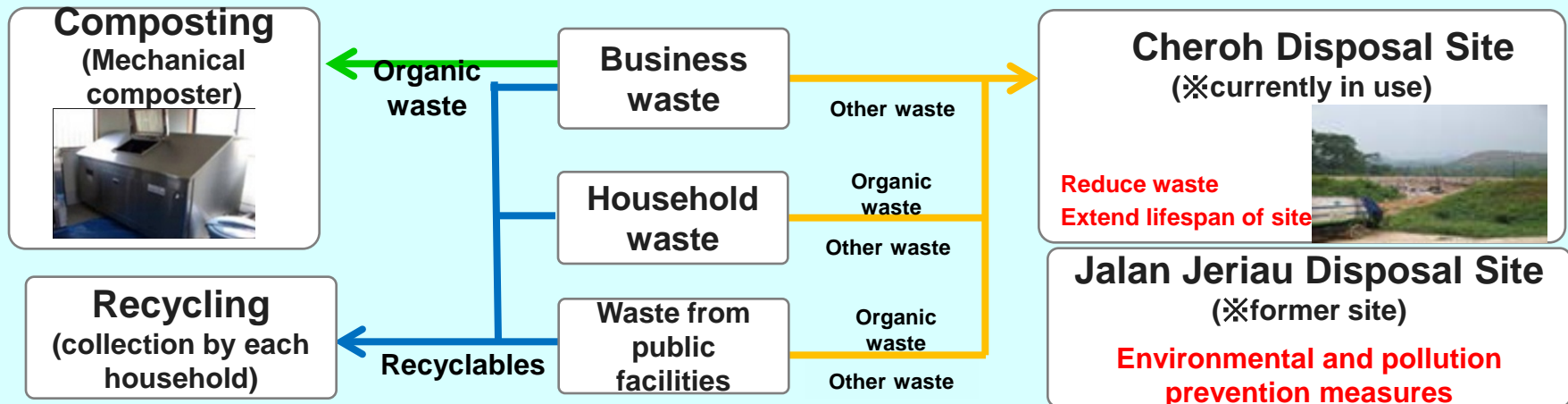
【Activities】

- Separation and collection of recyclables and development of a recycling system
- Separation and collection of organic waste from businesses and development of a composting system
- Surveys on the current state of environmental pollution at the former disposal site, development of pollution prevention guidelines, and recommendations for measures to extend the life of the current disposal site.

Implementation System



Flowchart of waste separation and recycling in Fraser's Hill





SDGs Pilot Model City

OECD selecting **SDGs Pilot Model City**
for territorial approach (Apr. 2018)

SDGs Awards by
Gov. of Japan
(Dec. 2017)



**SDGs Future City
Initiative** by Gov. of
Japan (Jun. 2018)



Voluntary Review for SDGs
in city in cooperation with **IGES**
(July. 2018)

First voluntary Review for SDGs by city based on
UN VNR guideline all over the world

■ **IGES Kitakyushu Urban Centre:**
(Institute for Global Environmental Strategies)



Natural Symbiosis Society

Information Disclosure and Environmental Learning Hub Upgrade

Information disclosure



Factory tour



Exhibition in eco-center

Bidirectional communication

Purpose :

better mutual-understanding,
risk avoidance and reduction

Method :

information-sharing for risk
management and risk assessment



Eco-town center

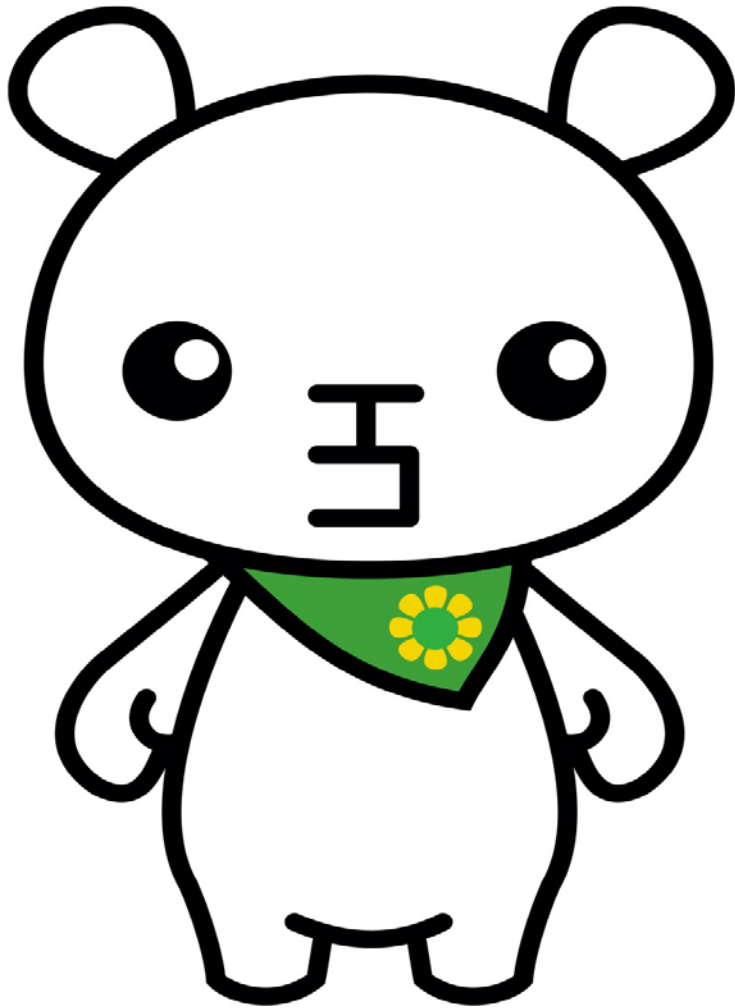
Elimination of uneasiness, distrust and discomfort of citizen

Understanding and
confidence of citizen

Various Activities of City of Kitakyushu in Environment Field

3R Concept, Education System, Public Awareness attract
Elementary School in Thailand. Start to receive students from
“**Srinakharinwirot University Prasanmit
Demonstration School (Elementary)**” since 2016





Thank You
Hiroshi YASUTAKE, Deputy Director
City of Kitakyushu