



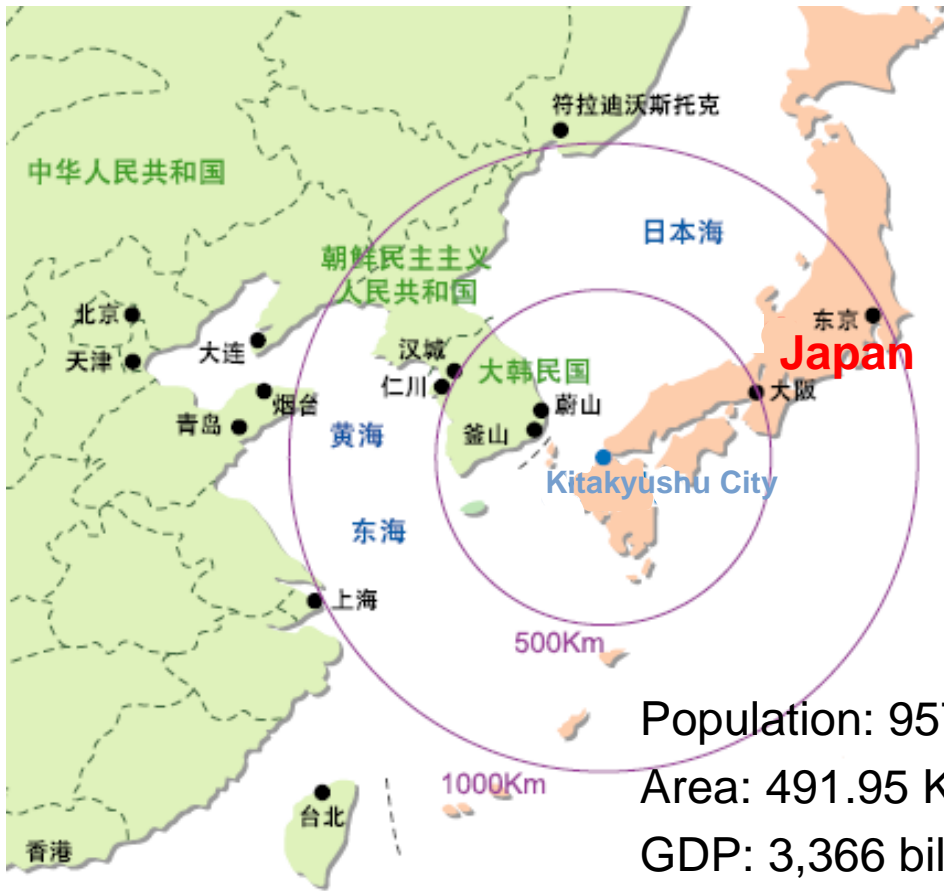
**Future City Kitakyushu**

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# **City-to-city projects with Kitakyushu**

**January 17 2020  
City of Kitakyushu**

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



## Rich nature and branded food materials



Karst Plateau Hiraodai



Wakamatsuhoku Beach



Ouma Bamboo Shoots



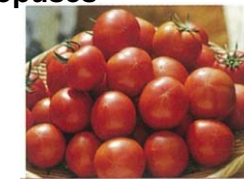
Kanmon Straits Octopuses



Kokura Beef



Buzen-Sea Oysters

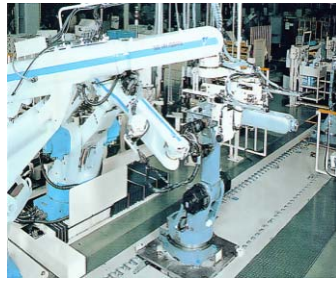


Wakamatsu Special Tomatoes

## Major companies in Kitakyushu area



Nippon Steel Corporation



Yasukawa Electric Corporation



TOTO Ltd.



Mitsubishi Chemical Corporation



Toyota Motor Corporation · Nissan Motor Co., Ltd.



Mitsubishi Materials Corporation



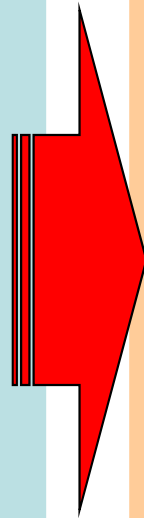
# Kitakyushu City With Long History





# Overcoming Severe Pollution: Kitakyushu's Experience

1960s



Today





# Kitakyushu Asian Center for Low Carbon Society

## Center established as engine for green growth activities

**Concept :** Developing interactions that place value on the relationship between cities and that will help Japan gain respect from international society in order to contribute to the creation of green cities in Asia



**Compile the experiences and know-how of the city from the process of overcoming pollution and becoming an environmental city in order to  
Create the “Kitakyushu Model”**



**192 projects in cooperation with 106 Japanese companies and  
universities in 80 Asian cities**

# **Projects in Davao, Philippines**

# Signing of a Memorandum of Understanding for a Green Sister City Relationship with Davao, The Republic of the Philippines

On November 28<sup>th</sup>, 2017, the City of Kitakyushu and the City of Davao, in the Republic of the Philippines, signed a Memorandum of Understanding creating a Green Sister City relationship between the cities that aims to create cooperative partnerships in the environmental field for the purpose of expanding mutual benefits and positively driving development through low-carbon societal initiatives, resource circulation projects, and development of local human resources.

The City of Davao is the City of Kitakyushu's second Green Sister City, and its first since Surabaya in the Republic of Indonesia, in November of 2012. Through the signing of a Memorandum of Understanding, cooperation between the public and private sectors can strongly support the export of city infrastructure systems, create a path for regional revitalization, and drive national growth strategies.



**Signing of the Memorandum of Understanding:  
Mayors Sara Duterte of Davao and Kenji Kitahashi of Kitakyushu**

# JCM City-to-city Cooperation Project between City of Kitakyushu and Davao City

Project to realize low carbon society in Davao City through a support for a development of  
Local Climate Action Plan (MoEJ : FY 2018)



## Support for a development of Local Climate Change Action Plan of Davao City

- A development of GHG inventory (supported by IGES)
- A development of mitigation measures (supported by Kitakyushu City and IGES)
- A development of adaptation measures (supported by Ateneo De Davao Uni.)

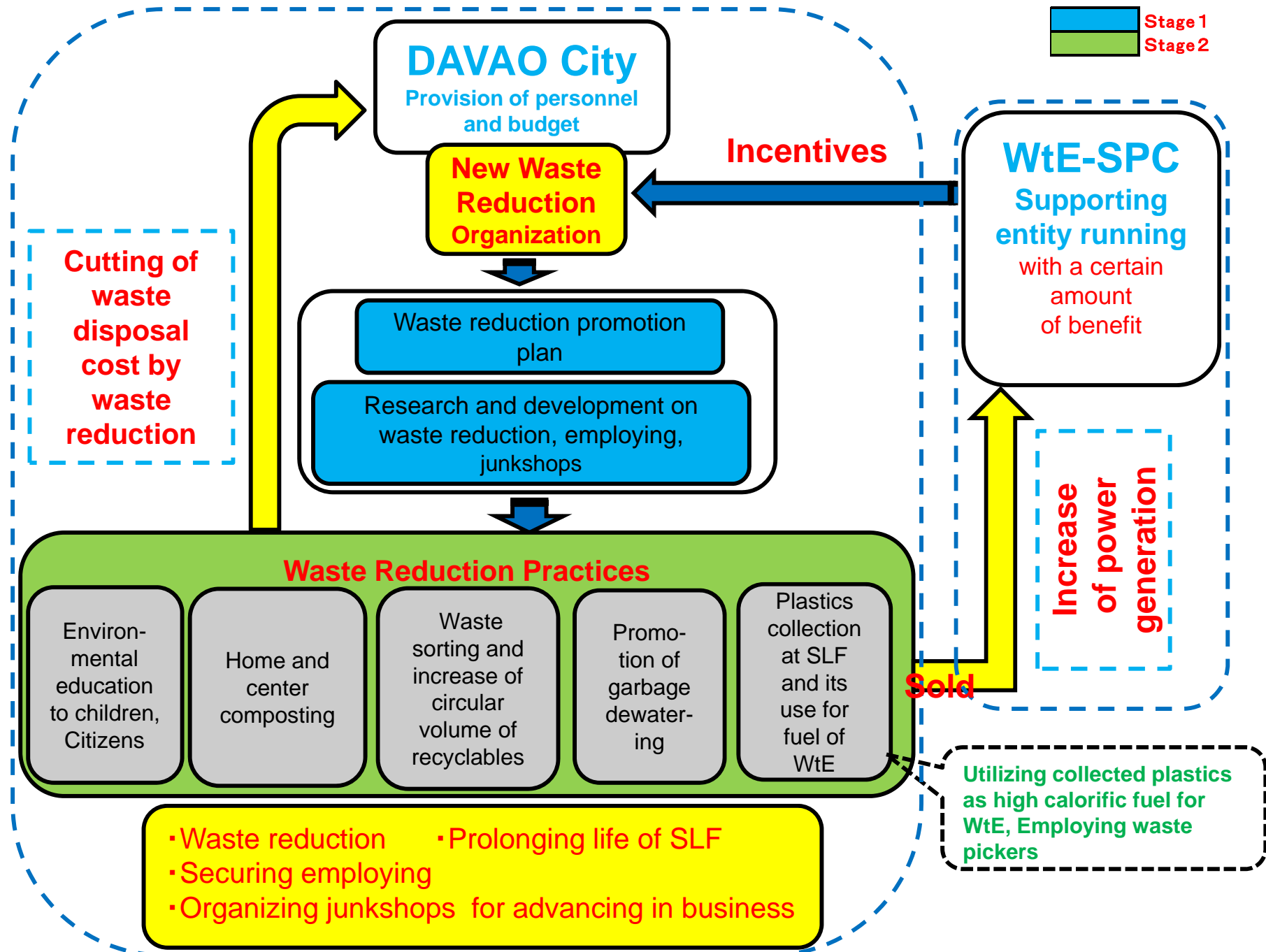
## An implementation of concrete mitigation measures

### Study on a feasibility of renewable energy project (for JCM model project)

- Waste-to-Energy (WtE) project (Nippon Steel & Sumikin Engineering Co., Ltd.)
- Feasibility study on other low-carbon projects (renewable energy and energy saving projects)
- Coordination with related-stakeholders for an implementation, technical study, evaluation of the amount of CO2 reduction, etc.
- Supporting for a preparation of applying JCM model project



# Solid Waste Reduction Mechanism in Davao



# **Projects in Iskandar, Malaysia**



# Outline of the projects in Iskandar



## Visions for Low Carbon Society: 58% emission reduction from by 2025 using 2010 as base year

- Iskandar Malaysia, in Johor Malaysia, is the second economic city. (Land Area: 2217km<sup>2</sup>, Population: about 1.95 million people)
- City of Kitakyushu has been cooperated with Iskandar Regional Development Authority to conduct projects in 2015 and 2016.
- IRDA launched the master plan, Low Carbon Society Blueprint for Iskandar Malaysia 2015, which identifies 3 them and 12 activities to achieve the goal. Forty five programs has been conducted so far.
- Action plan needs to be developed to ensure the goal success considering about the influence of regime change. Furthermore, the activities which has not been integrated yet will be focused on the scope in this project.

- Introduce low carbon technology which Japanese companies hold
- Introduce Joint Crediting Mechanism to UTM, etc.

- Survey project for expansion of low carbonization project in Iskandar in 2015

- Project to accelerate low carbonization model projects in Iskandar Development Area for Expansion of JCM (Kitakyushu-IRDA Cooperation Project)

City of Kitakyushu



Cooperative Agreement  
LOU

IRDA (Iskandar Regional  
Development Authority)



Provide Accumulated Know-Hows

### Kitakyushu-IRDA Cooperation Project in 2019

Activity1

Activity 2

Activity3

City of Kitakyushu, which has knowledge and experience about the development of a master plan organizing key components of projects, creates an Action Plan based on Low Carbon Society Blueprint for Iskandar Malaysia 2025(Figure1)

Action plan will identify each action steps to achieve the appropriate goal by 2025.



Figure1

Follow-up investigation based on the survey projects in 2015 and 2016 is held. The The following activities are some of expected projects. At least one activity will be implemented as JCM project in 1-2 years. Furthermore, the experience and knowledge will be transferred from the similar potential project to the next.

Introduction of Boiler

The following activities which are assumed to have potential as JCM projects based on the activity hold in 2016 are investigated. At least one activity will be implemented as JCM project in 1-3 years. Furthermore, the experience and knowledge will be transferred from the similar potential project to the next.

Introduction of Waste Heat Recovery System

Introduction of Vacuum cleaning & Drying Equipment(Energy saving)

# Organizations for FS



City of Kitakyushu

Inter-City Cooperation



Iskandar  
Regional  
Development  
Authority(IRDA)

- The entire project oversees based on the inter-city cooperation
- Coordination, discussions and approach with Government organizations etc.

NTTT Data  
Institute of  
Management  
Consulting, Inc.

NTT DATA

株式会社 NTTデータ 経営研究所

- Survey for activities (direct consultation, technical studies, economic evaluation, CO2 emissions reduction evaluation, etc.)
- Coordination with related organizations aim to commercialization
- Preparation for application of equipment subsidy, if necessary.
- Setting, preparation, participation, management, etc. for conferences

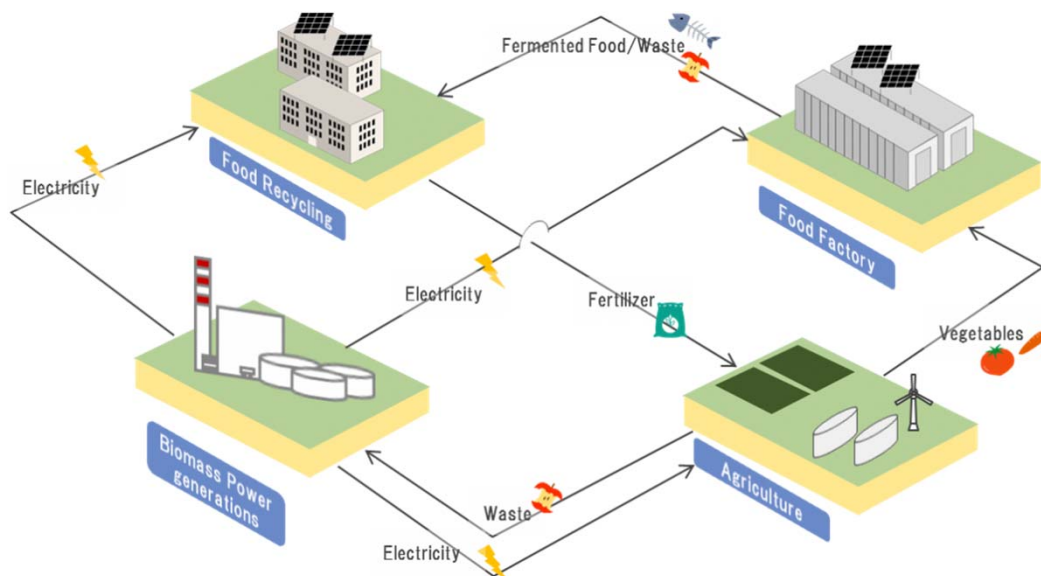


# Summary of FY 2019

## Activity1

### Development of Action plan

- IRDA is willing to develop industrial symbiosis (eco-town) in industrial area.
- In this year, Kitakyushu cooperates to create the action plan for Industrial symbiosis project to start it smoothly next year.



### 【Concept of Industrial Symbiosis】

Companies in different industries share and reuse the resources each other to create share value

## Activity 2

## Activity3

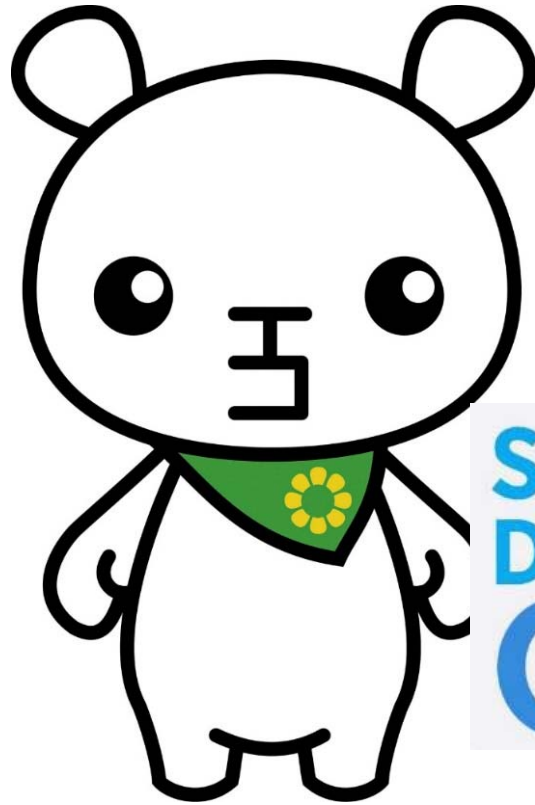
### Investigations of projects

Four potential projects in Malaysia are investigated. There are huge needs for JCM among companies in Malaysia.

Company	Technology to be adapted
1 Chemical company	Boiler (Biomass/Natural gas)
2 Manufacturing company	Vacuum cleaning & Drying Equipment(Energy saving)
3 Cement Company	Waste heat recovery power generation system
4 Chemical company	Boiler/PV/Chiller



Thank you very much!!



SUSTAINABLE  
DEVELOPMENT  
GOALS



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ご清聴ありがとうございました!!