

Kitakyushu City's Initiatives to decarbonization of the world

1 Introduction to Kitakyushu City

2 History of overcoming pollution

3 Sustainable efforts through citizen environmental power

4 Initiatives to realize a decarbonized society

- Goals aimed at creating a decarbonized society through a virtuous cycle of environment and economy
- Examples of specific initiatives

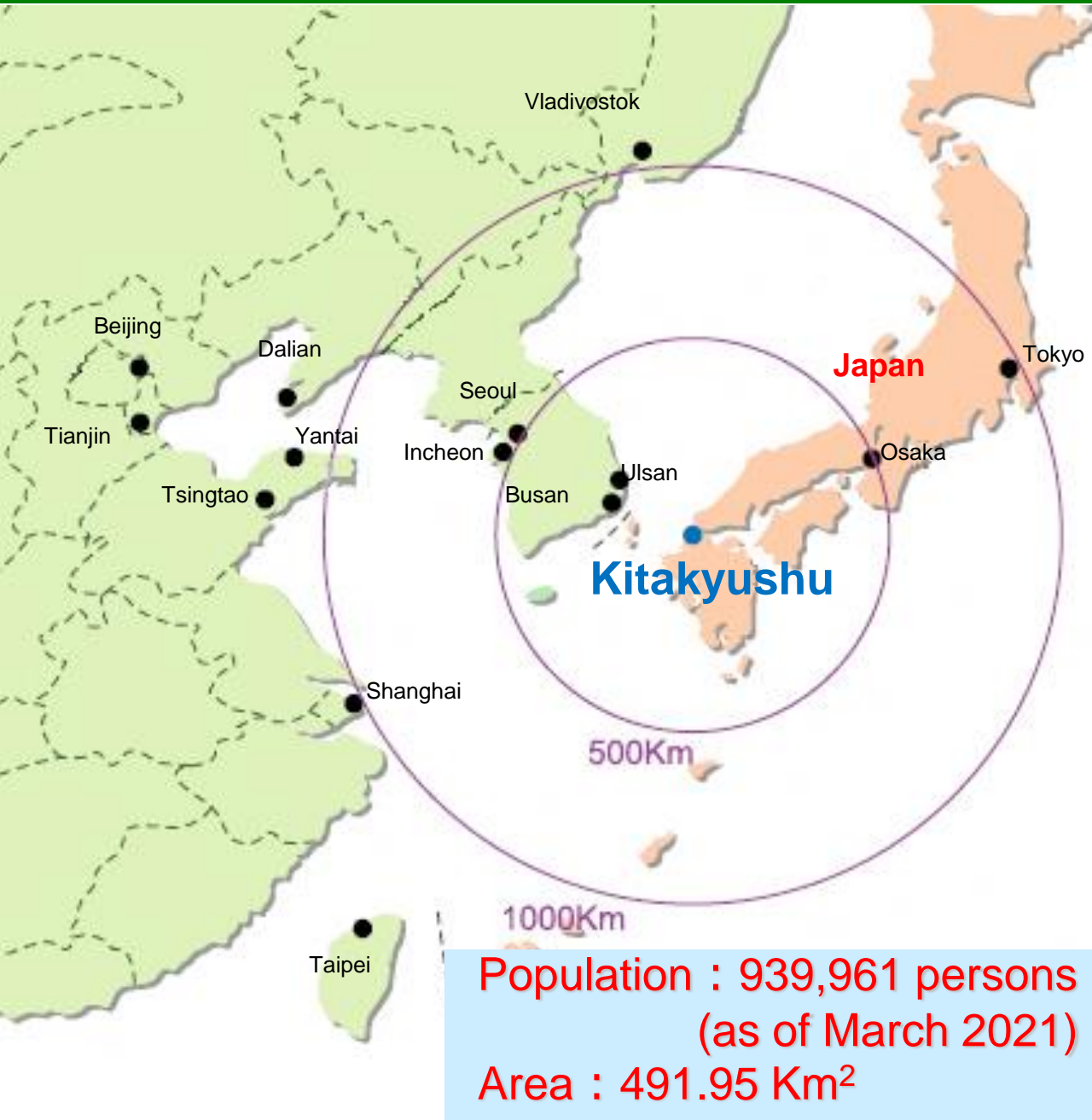
5 international contribution



2024年1月
北九州市環境国際戦略課



About Kitakyushu City



Abundant nature and special local agricultural and marine products



Karst plateau and Hiraodai



Northern shore of Wakamatsu



Kokura Beef



Buzen sea oyster



Wakamatsu specialty tomato

Representative Enterprises of Kitakyushu



Nippon Steel



Yaskawa Electric Corporation



TOTO

Experience in Overcoming Pollution & Environmental Policies

1901



Start of operations at Yawata Steel Works

Development as an iron-producing city

1950

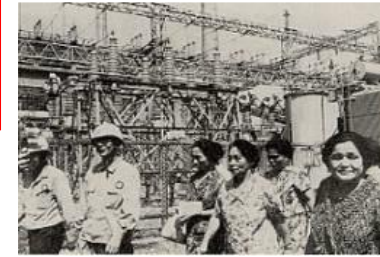


Intense pollution problems

1960~

Pollution control policies

**Anti-pollution movement
by women's groups**



Residents

Businesses

Government

企業の実践



Government initiatives



Overcame pollution

Trinity of Waste Management (3R) Initiatives

Kitakyushu Eco-Town Project

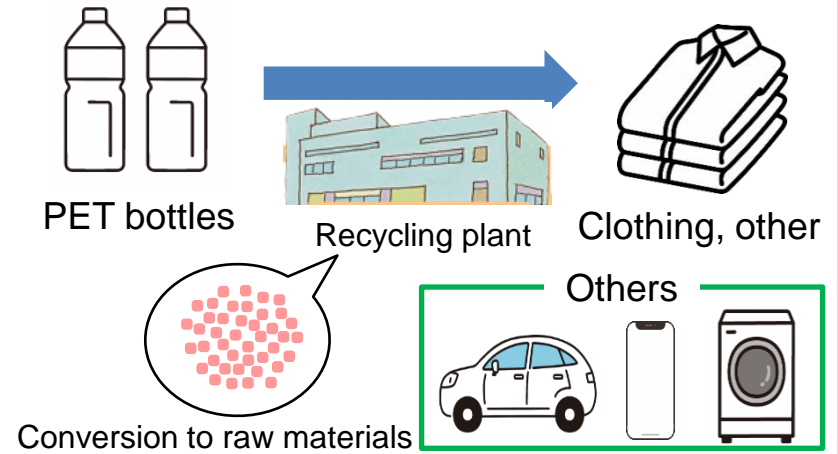
Japan's first and largest recycling complex

Regional impact (1997 to March 2021)

- Direct investment: JPY 86.3 billion
- Jobs created: 1,088 people
- No. visitors: 1.85 million
- CO₂ reduction effect: ▲433,000 t/year (FY 2016)



Example of recycling at Eco-Town



Companies

Trinity initiatives

Leverage the power of the people carefully shaped over the process of overcoming pollution

Residents

Government



Resource recycling through group and in store collection



Introduction of designated garbage bags



Prevention of illegal dumping

Aiming for the Top Runner of SDGs

Grand Design towards the Creation of a “World Capital of Sustainable Development” completed in 2004

COMMITMENT OF THE RESIDENTS OF KITAKYUSHU TO ALL PEOPLE, THE EARTH AND FUTURE GENERATIONS, born after many discussions by citizen, NPOs, businesses, and administrations etc



Period for development: 2 years
 Citizen's opinion: more than 1,000
 Holding of Citizens Forum: 2 times
 Examination meeting (34 members): General meeting 4 times, sectional meeting 10 times

Basic Philosophy

Creation of a city with true wealth and prosperity, inherited by future generations

Living together, creating together

Social

Enhancing sustainability of the city

Environmental

Developing economically through a healthy environment

Economic

Kitakyushu Basic Environmental Plan incorporating the SDGs (Nov. 2017)

Addressing various issues in Kitakyushu, Japan and the world from an environmental point of view



- Political goals
 - Basic objectives
 - Individual project measures



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



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

Kitakyushu's Ambitions as a Zero Carbon City

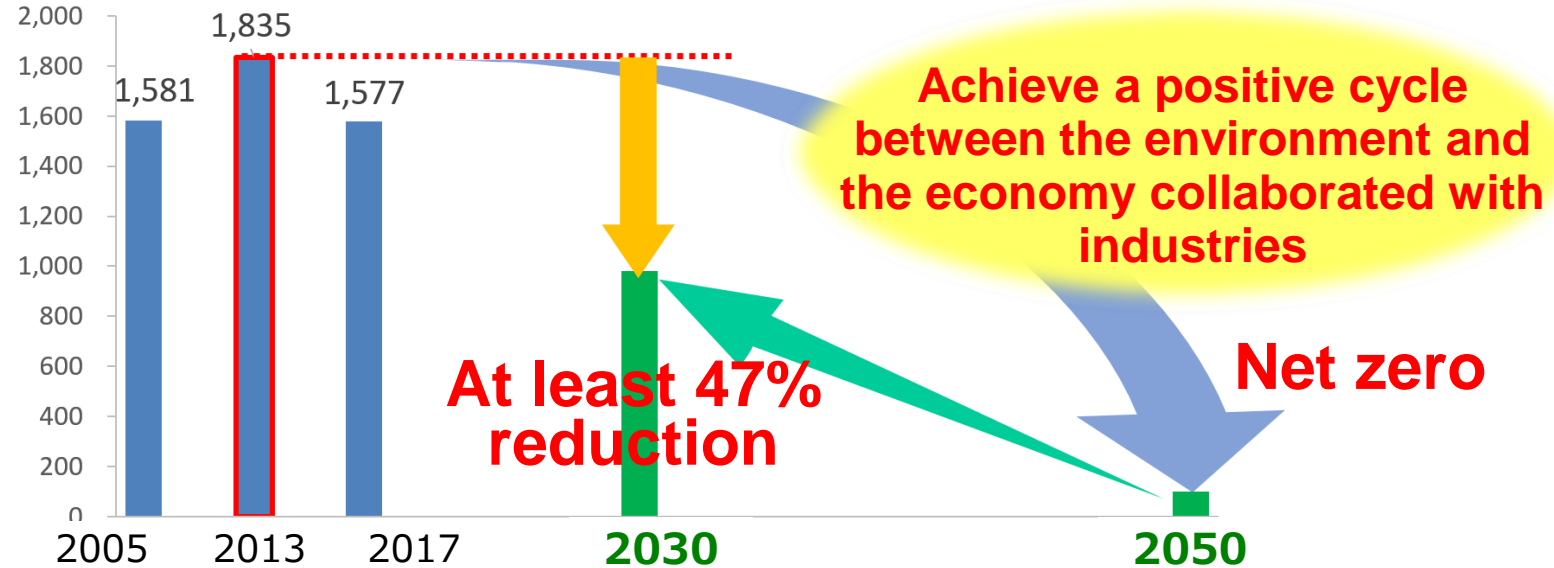
FY 2030 (Target)

2050 (Goal)

At least 47% reduction from FY 2013 levels

Aim for net zero greenhouse gas emissions in city

Image of reduction target



Five Pillars to Achieve Zero-Carbon Status

- I Use low carbon energy**
- II Advance innovation**

- III Change our lifestyle
- IV Become a resilient city that tackles climate change
- V Contribute to the international community**

“Kitakyushu Green Growth Strategy”
(Under formulating)

- i) Strategically secure low carbon energy sources
 - ① **Wind Power**
 - ② **Storage Batteries**
 - ③ **Hydrogen**
- ii) Encourage innovation for early realization

Kitakyushu Model for 100% Renewable Energy

- 1 Fastest* conversion of public facilities to 100% renewable energy in Japan
(*Prefectures and designated cities)

Switch to electricity generated by renewable energy sources



City hall, schools, other

RE already in use
in 255 facilities

2021

800 facilities

2022~

Switch complete in
2,000 facilities

2025



Solar power, wind power, other

- 2 Installation of solar + energy storage facilities and procurement on-site through third-party Power Purchase Agreements (PPA)

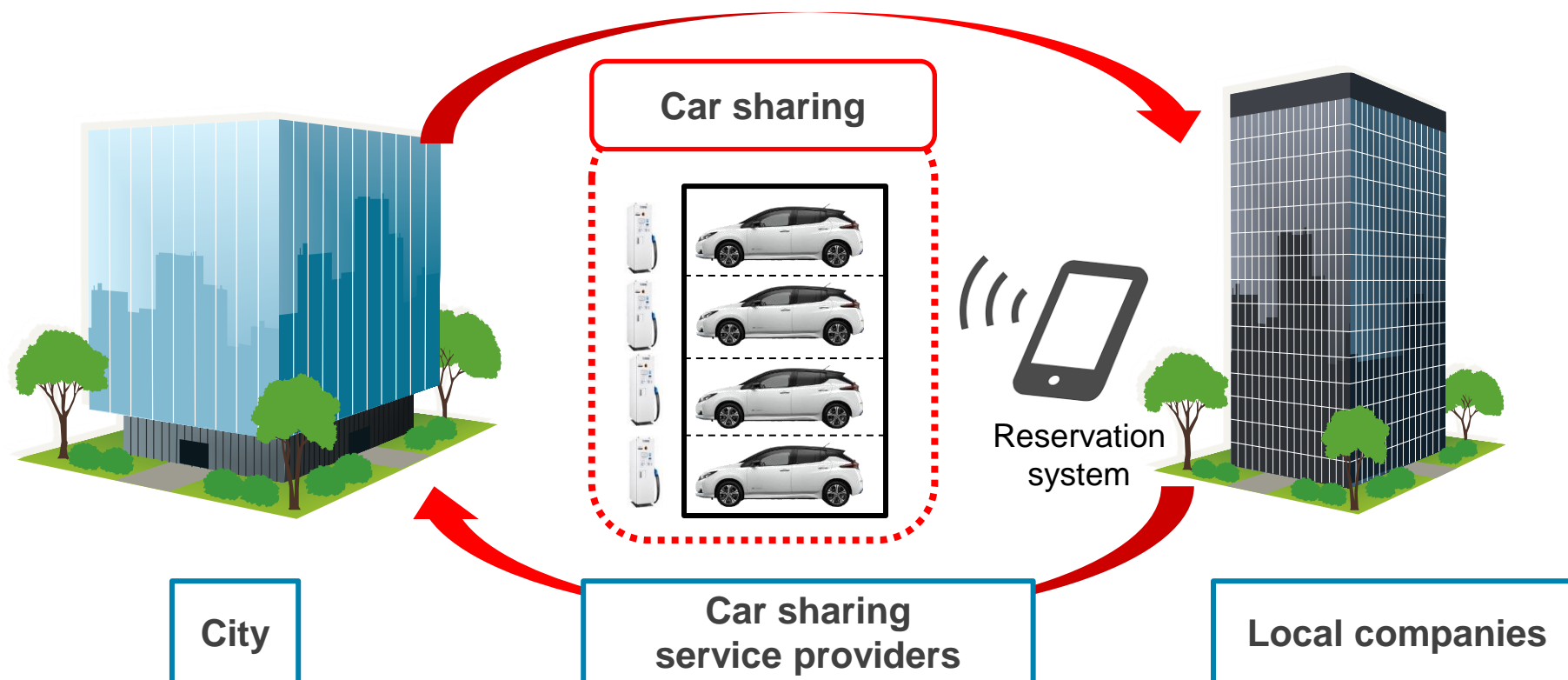
Promoting the Electrification of Public Vehicles & Car Sharing Demonstration

■ Promoting the electrification of public vehicles

Aim at **100% electrification** of general public vehicles (approx. 800), excluding special vehicles, **by FY 2030**

■ Car sharing demonstration project with private companies (FY 2022~)

Collaborate with companies to promote the introduction of EVs



Creation of a Comprehensive Base for Wind Power Industries

Features of the Hibikinada area

- Expansive industrial site located adjacent to the port
- Well-developed port facilities
- Concentration of companies supporting the manufacturing industry located behind the port
- Favorable wind conditions

Status of specific activities

Phase 1: Attracting empirical research facilities

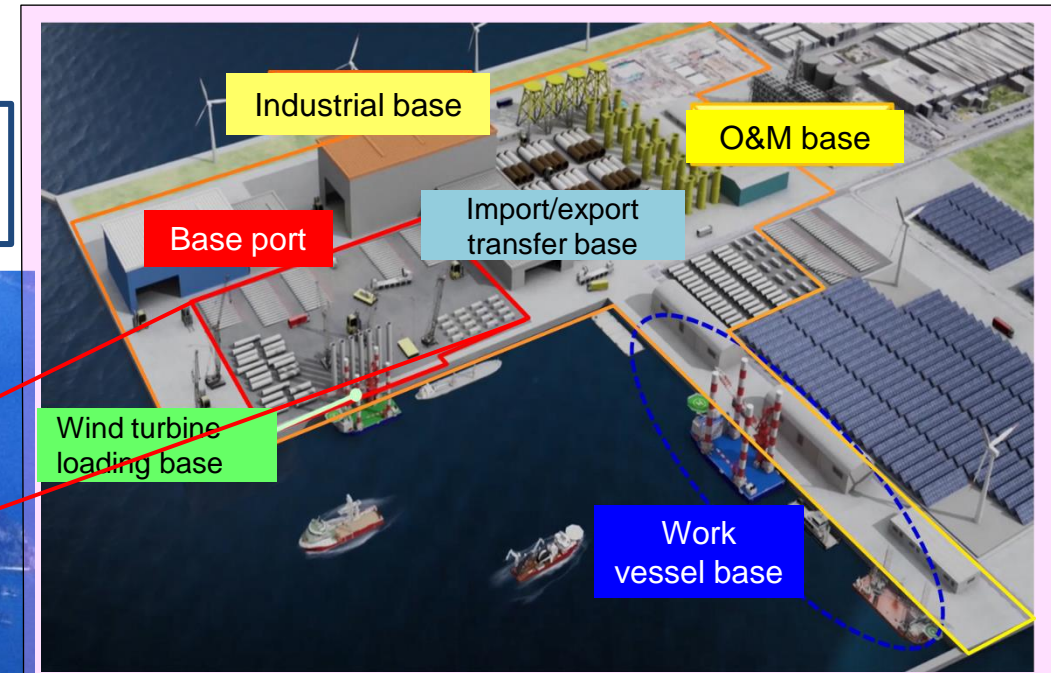
Phase 2: Attracting large-scale offshore wind farms

Phase 3: Improving the environment to develop the foundation for a comprehensive base and initiatives to enhance base functions

Development of a comprehensive base for wind power industries

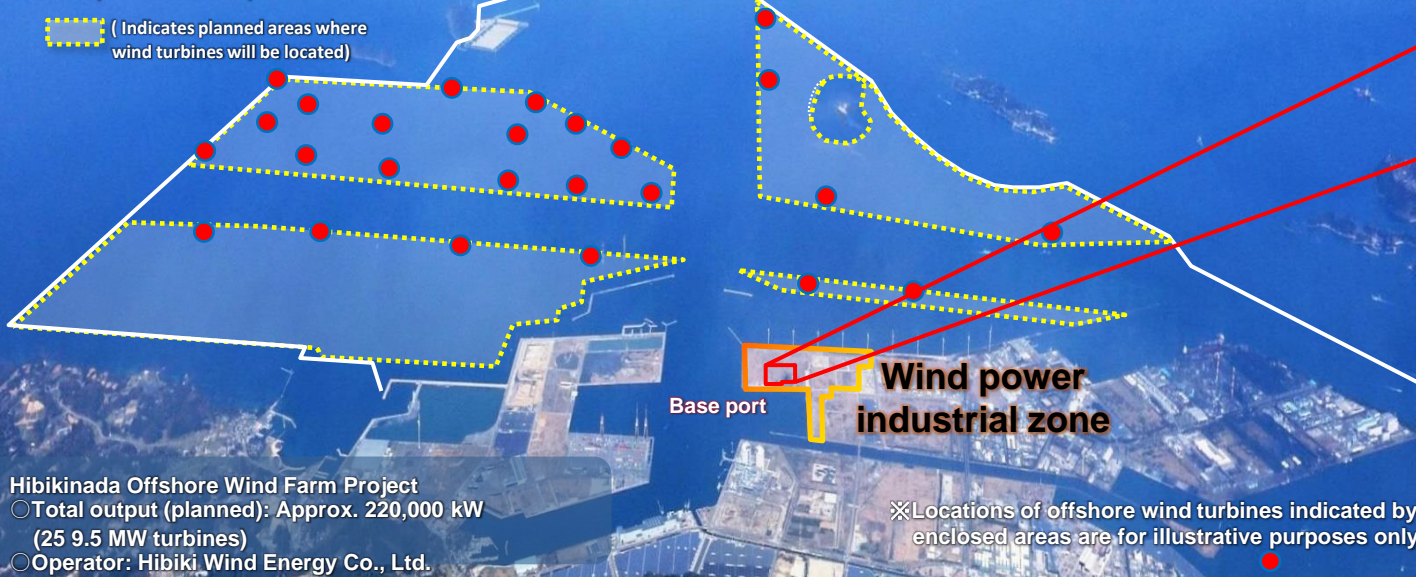
Promotion of wind power

Revitalization of industries, logistics, and local economy



Target waters open to public offering for offshore wind-power development and operations in the Hibikinada area

(Indicates planned areas where wind turbines will be located)



Hibikinada Offshore Wind Farm Project

○ Total output (planned): Approx. 220,000 kW

(25 9.5 MW turbines)

○ Operator: Hibiki Wind Energy Co., Ltd.

⊗ Locations of offshore wind turbines indicated by enclosed areas are for illustrative purposes only.

1. Wind turbine loading base

Functions as the final loading and unloading station for parts to wind turbine installation sites

2. Import/export transfer base

Functions as a base for the import, export and transfer of wind turbine parts

3. O&M base

Functions as a base for the operation and maintenance of wind turbines

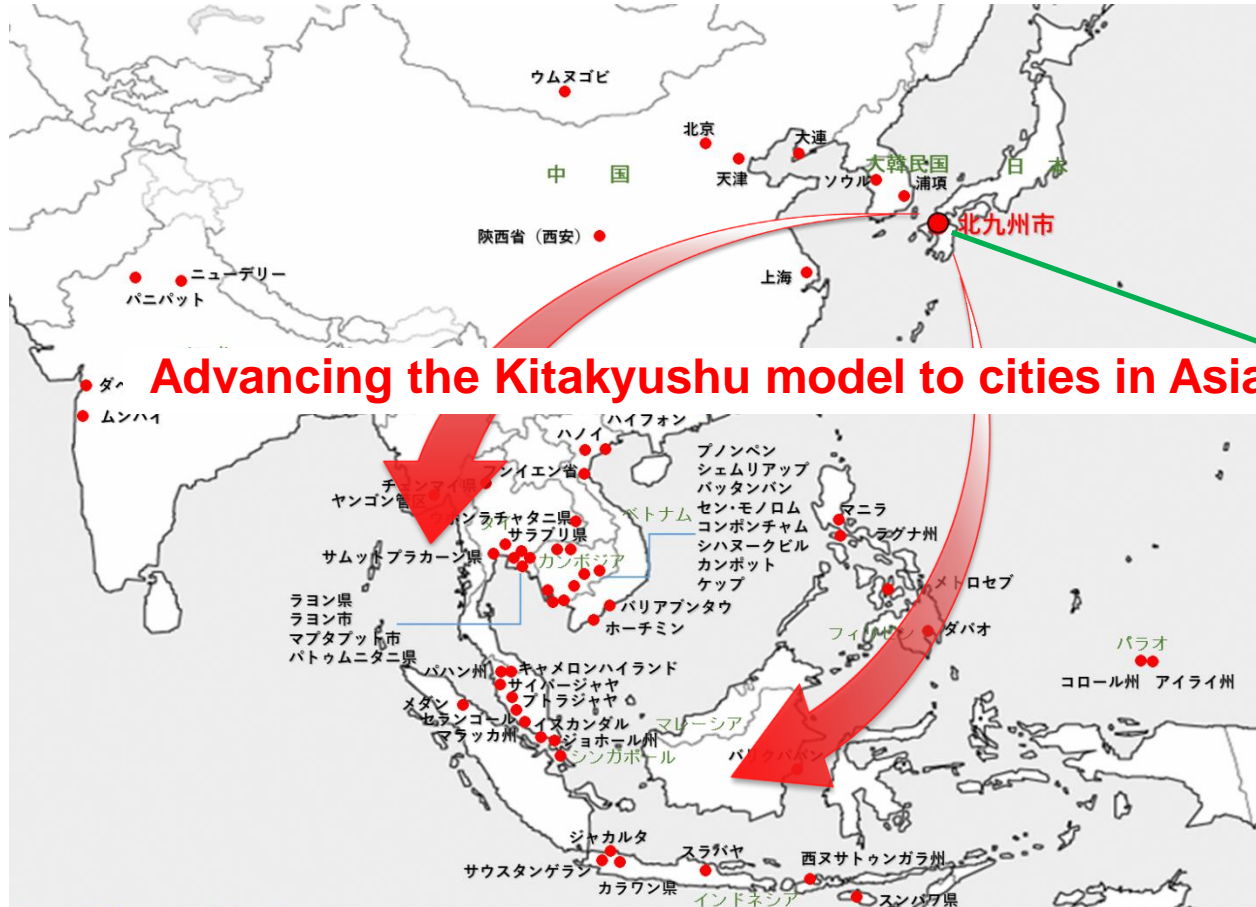
4. Industrial base

Functions as an industrial base with a concentration of wind turbine-related industries in back lying areas

Ambition to Contribute to Global Decarbonization

Partnerships with Asian countries for mutual prosperity

Progress of low carbon project in Asia: 16 countries and areas, 84 cities, 238 cases, over JPY 25 billion
Trainees accepted: **9,956 people from 166 countries** Sending specialists: **215 people to 25 countries**



Advancing the Kitakyushu model to cities in Asia

To develop together with cities through mutual connection

Export base of city infrastructures
Asia's Low Carbon Hub



Joint operation through mutual connection

Overall capability of leading environmental city (Kitakyushu City)

Experience of overcoming pollution

Advanced social system (Kitakyushu Eco Town and more)

Outstanding environmental technologies

Promoting low carbon in Asia through an environmental business technique

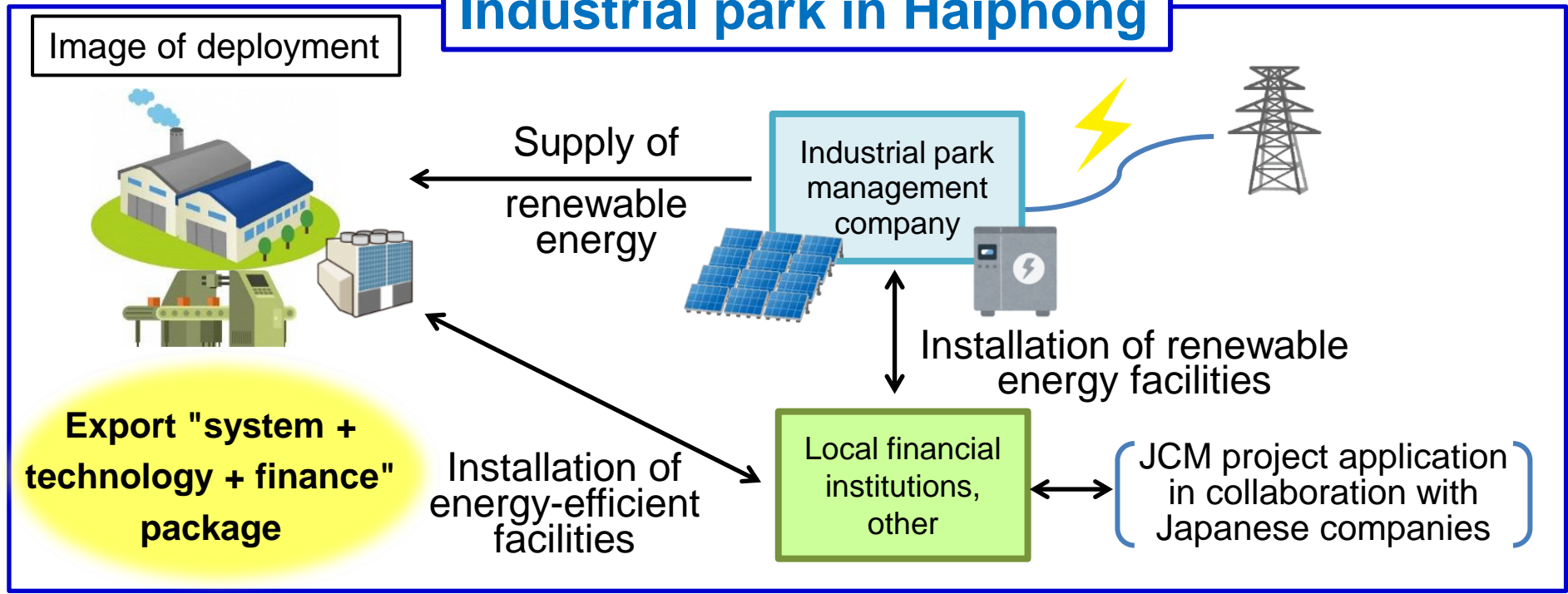
Creating an eco-friendly city to meet varying needs



Kitakyushu City's expertise on introducing renewable energy

Customized and deployed

Industrial park in Haiphong



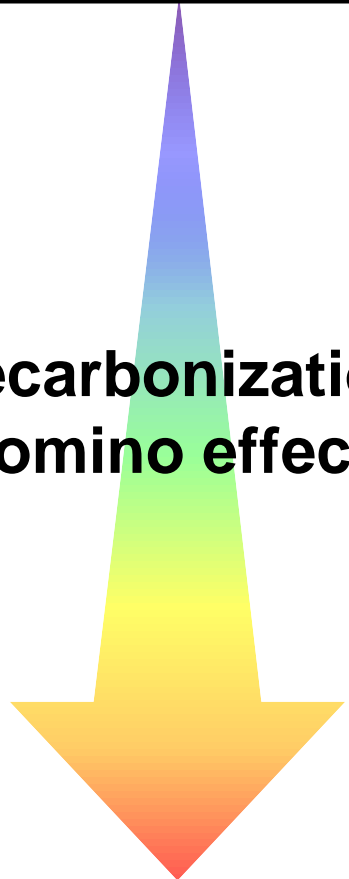
Customized and deployed

To other regions

To other regions



Decarbonization domino effect!



Resource Recycling of Marine Plastic Waste in Thailand



Utilizing

- Using produced oil, charcoal, water and salt within the island aiming to develop closed island plastic recycling system
- Promoting tourism as a Zero Plastic Island

Hotel owners / Ferry companies



SEA Circular Initiative (existing activities)

- Reducing plastic brought onto the island
- PET to PET recycling by Coca Cola



Collection system

- Collecting waste plastics and marine plastics and improve the solid waste management system on the island

北九州市 CITY OF KITAKYUSHU **Rayong Province**



Established Recycling System

- Recycling system using superheated steam to convert plastic and organic compounds into oil and charcoal

One World Corporation

Verification for Zero Plastic Island

- Measuring and verifying the plastic neutrality of the island to offset activities through recycling

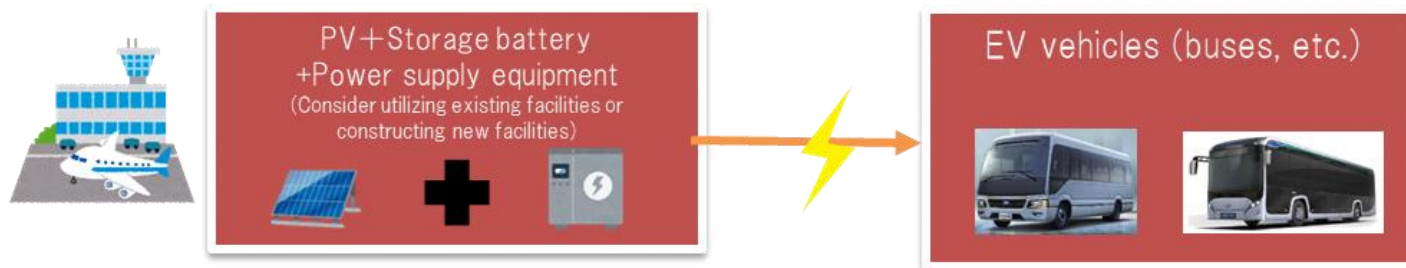
Feasibility Survey of the implementation of EV vehicles in the state of Koror, Republic of Palau



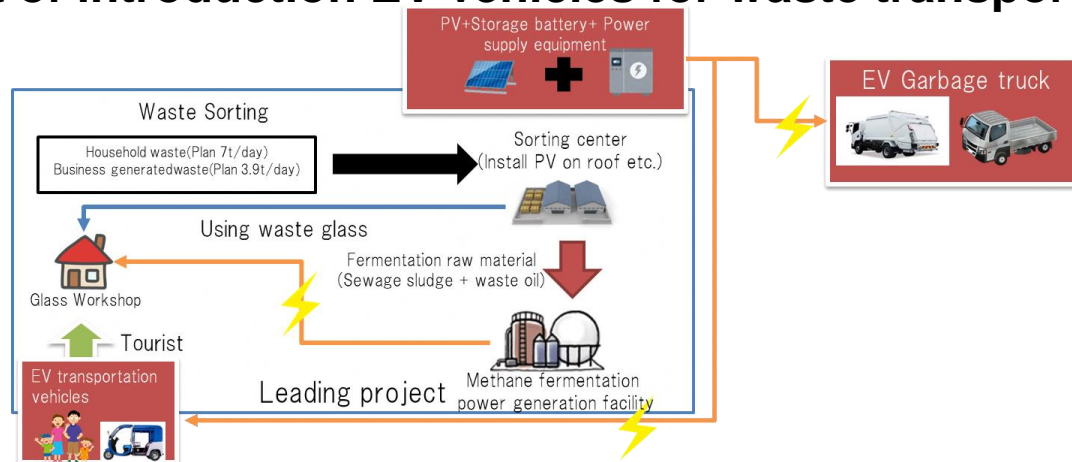
Koror and Kitakyushu have been cooperating for a long time to establish a comprehensive resource recycling system.

Since FY2020, City of Kitakyushu has been conducting a feasibility study for the introduction of EV buses and EV Garbage trucks.

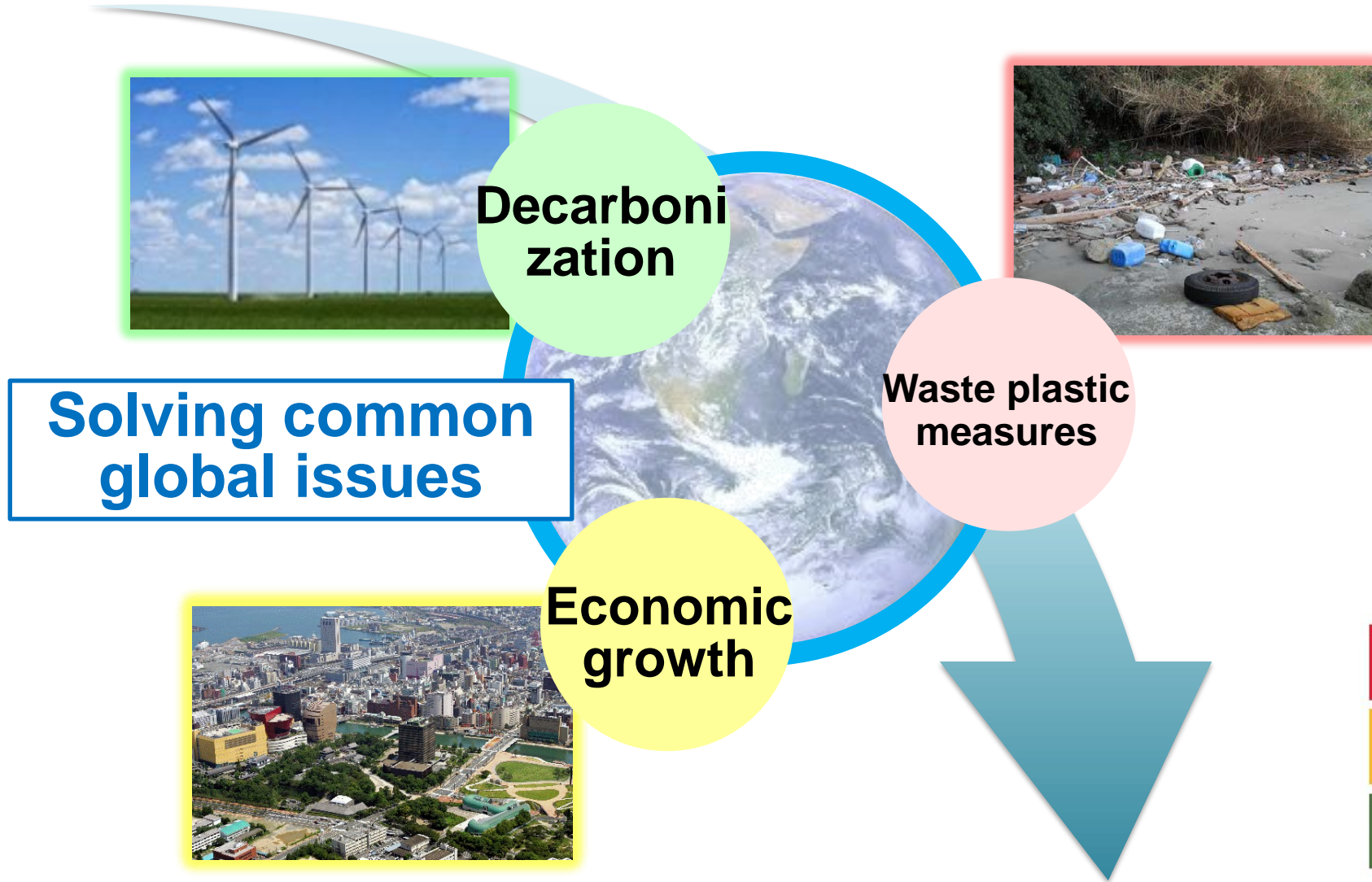
① Project of introduction EV vehicles for tourism sector



② Project of introduction EV vehicles for waste transportation sector



Kitakyushu's environmental technologies



SUSTAINABLE DEVELOPMENT GOALS



and helping the world achieve the SDGs!!