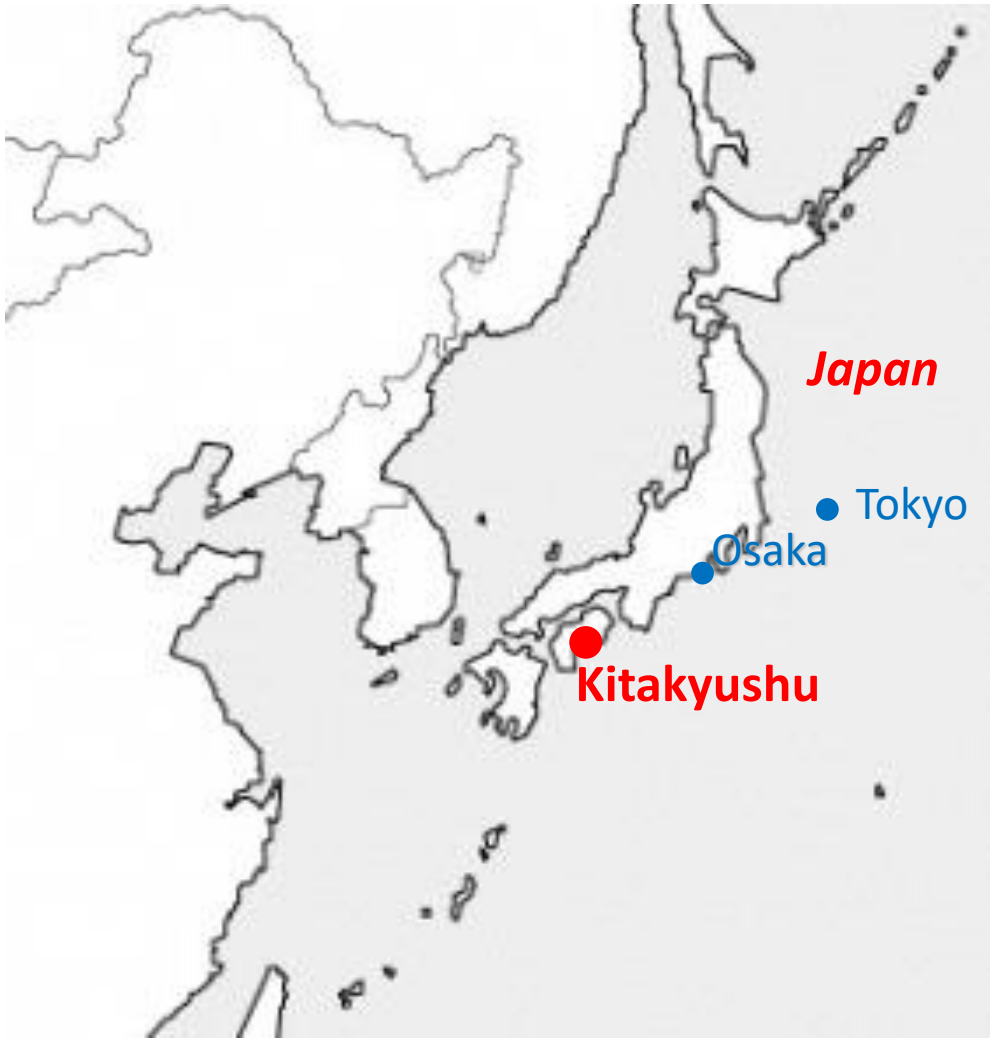
Green Growth Strategy of Kitakyushu City

Rie Kudo
Director
Green Growth Promotion Division
Environment Bureau
City of Kitakyushu

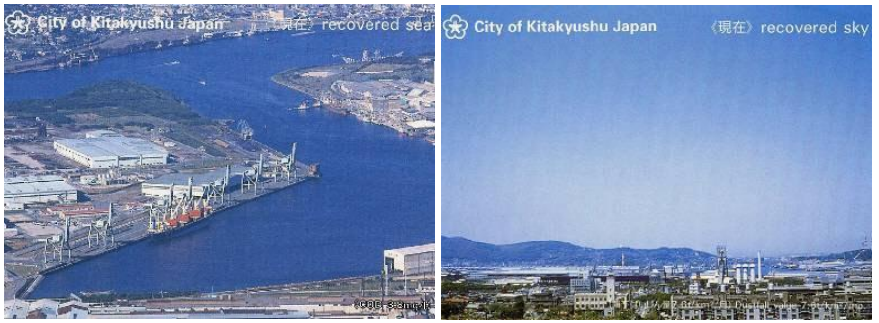
History of Overcoming Pollution Problems



Population: 939,961 (March 2021)
Area: 491.95 km^2

1960s

Today



Selection as Model City

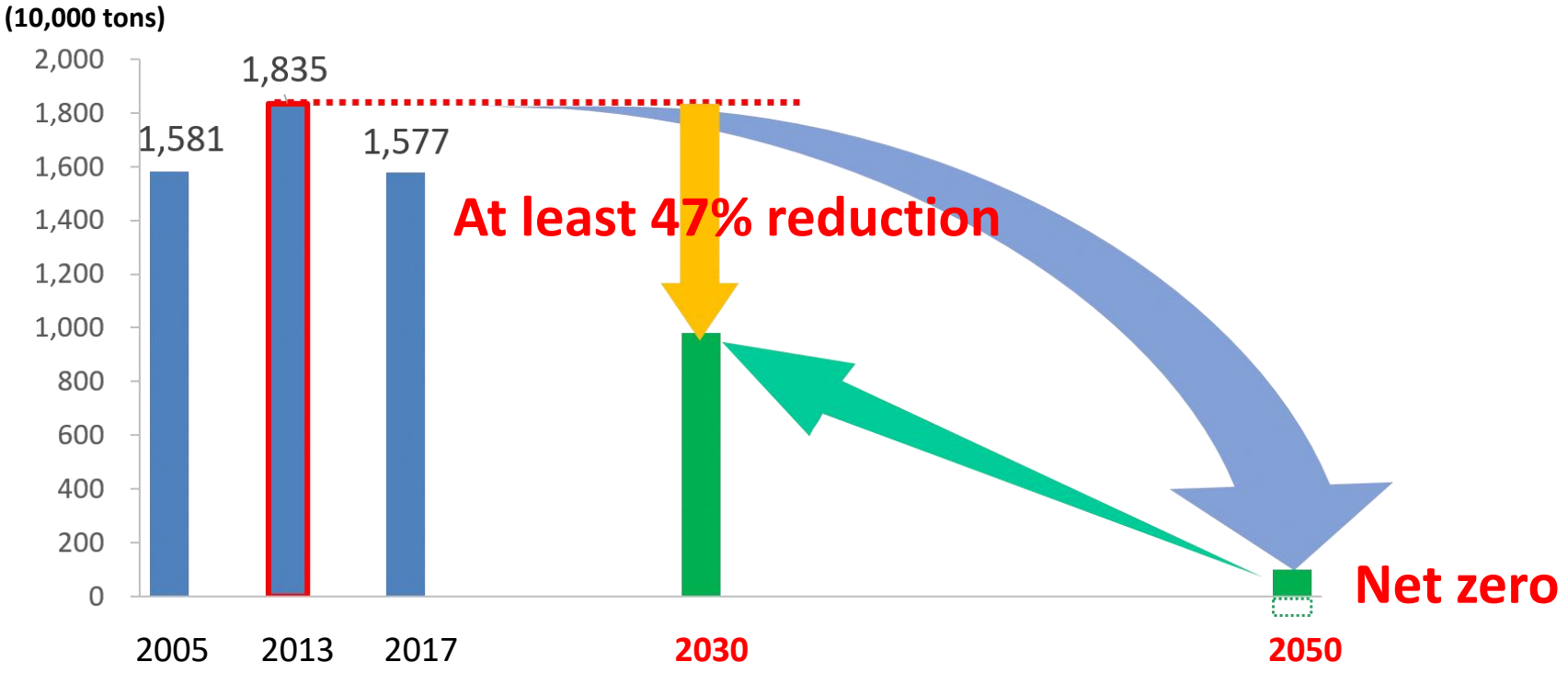
- 2009 Certified as **Eco-Model City** (Japan)
- 2011 Selected as **FutureCity** (Japan)
- 2018 Selected as **SDGs FutureCity** (OECD)

Targets as a Zero-Carbon City

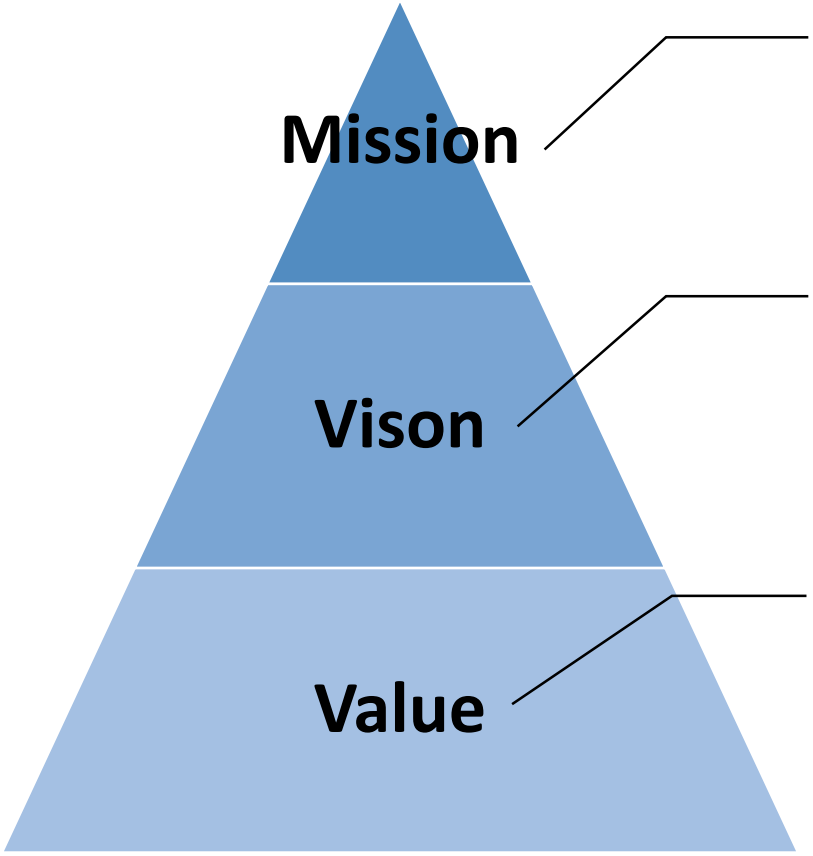
Zero Carbon City Declaration (2020.10)

Reduction Targets

2050	Net zero greenhouse gas emissions in city
2030	At least 47% reduction from FY2013



Kitakyushu City's Green Growth Strategy (1/2)



Increase city's competitiveness and appeal

Creation of a Zero-Carbon City through a positive cycle between the environment and economy

3 Cs

- **C**ircular Economy
- **C**ooperation
  (between industry, government and academia)
- **C**hallenge (in taking progressive approaches)

Kitakyushu City's Green Growth Strategy (2/2)

① Supply highly-economical decarbonized energy

Create systems to ensure the stable use of decarbonized power
- Maximize the introduction of renewable energy, such as wind power
- Establish a stable supply of power through the use of EVs and storage batteries

Utilize hydrogen in industrial processes that are difficult to electrify
- Use hydrogen through methanation, etc.
- Develop base for the import and supply of hydrogen from overseas and renewable hydrogen

② Create new industries and services in green sectors and decarbonize existing industries

Decarbonized power

Promote the use of decarbonized power to create new industries and improve the competitiveness of existing industries
- Establish comprehensive base for wind power industries
- Expand markets for reuse of PV and storage batteries, recycling industries
- Decarbonize SMEs (automotive, niche top)

Hydrogen (heat)

Hydrogen zero-carbon logistics using advanced technologies
- Use FCVs for long-distance logistics
- Apply cutting-edge technologies, such as autonomous driving, etc.

③ Create an environment to encourage innovation

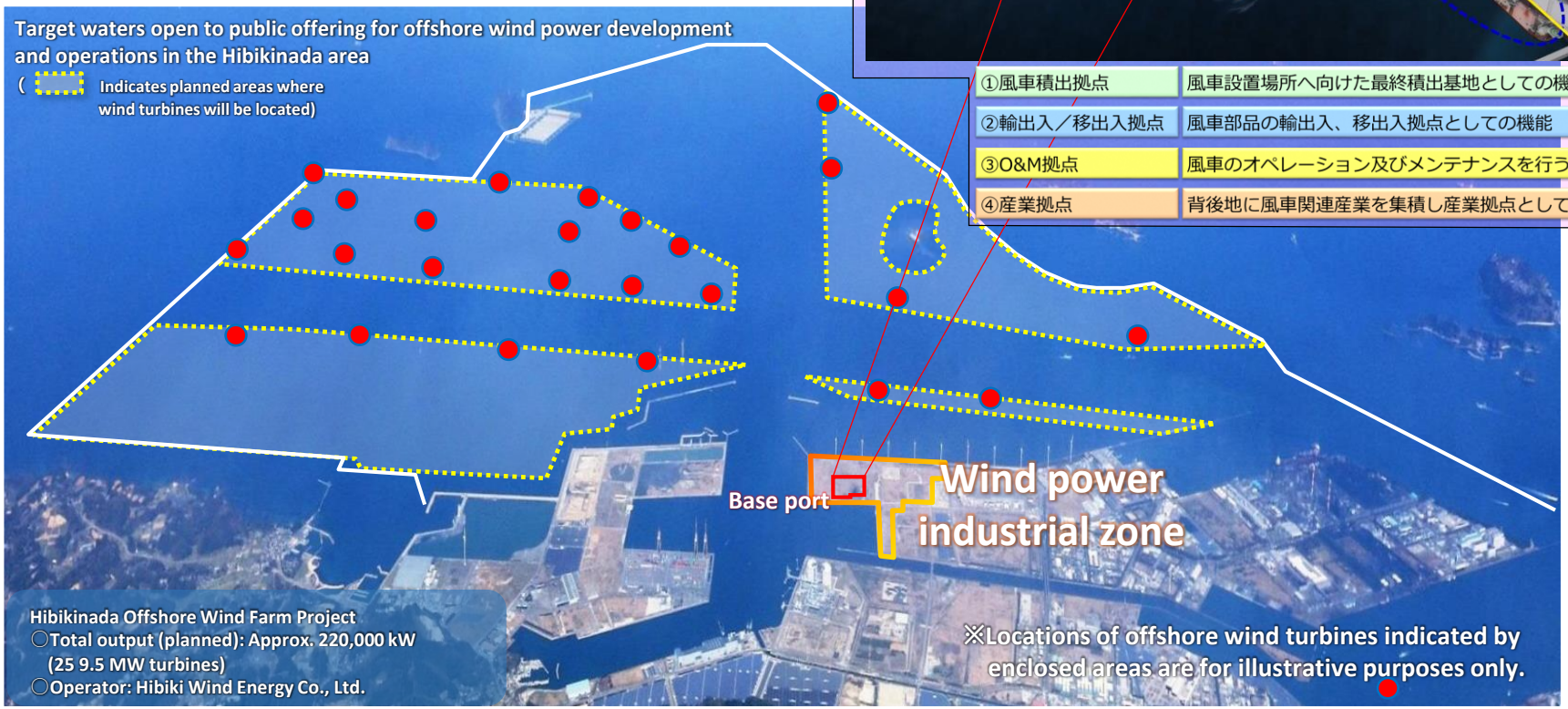
- Establish a platform for the creation of decarbonization-related businesses
- Provide accompanied support for the effective use of public funds and acquisition of private funding
- Train and acquire human resources to promote the creation of a decarbonized society

④ Expand into overseas markets, especially in Asia which is expected to grow in the future

Creation of a Comprehensive Base for Wind Power Industries

- Formation of a **comprehensive base** with four functions
- Designated as the only **base port in western Japan for offshore wind power** in September 2020 under the Port and Harbor Act
- Implementation of activities in cooperation with the prefectural government on **designating promotional zones in the general sea area based on the Act on Promoting the Utilization of Sea Areas for the Development of Marine Renewable Energy Power Generation Facilities**, in addition to the port area mentioned above.

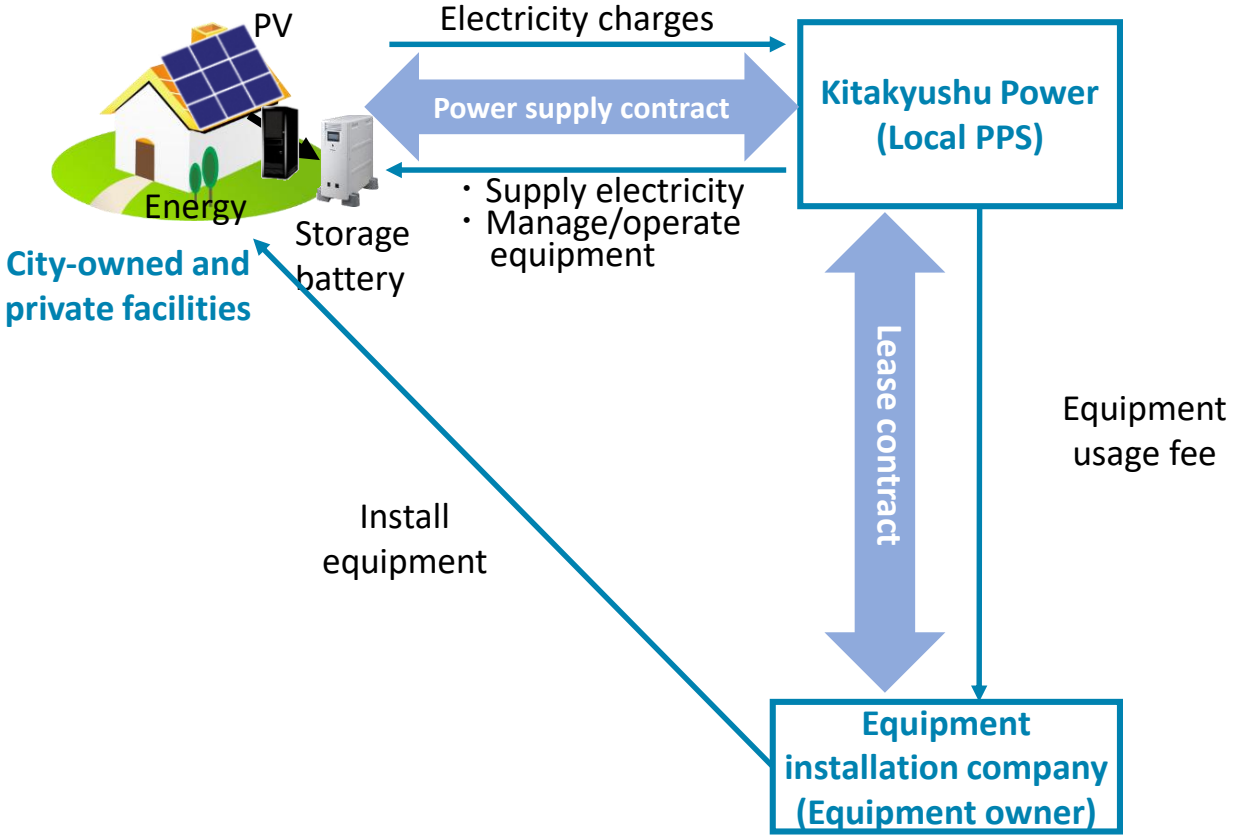
①風車積出拠点	風車設置場所へ向けた最終積出基地としての機能
②輸出入／移出入拠点	風車部品の輸出入、移出入拠点としての機能
③O&M拠点	風車のオペレーション及びメンテナンスを行う機能
④産業拠点	背後地に風車関連産業を集積し産業拠点としての機能



RE100 for Public Facilities (Kitakyushu Model for 100% Renewable Energy)

Solar plus storage PPA (Power Purchase Agreement)

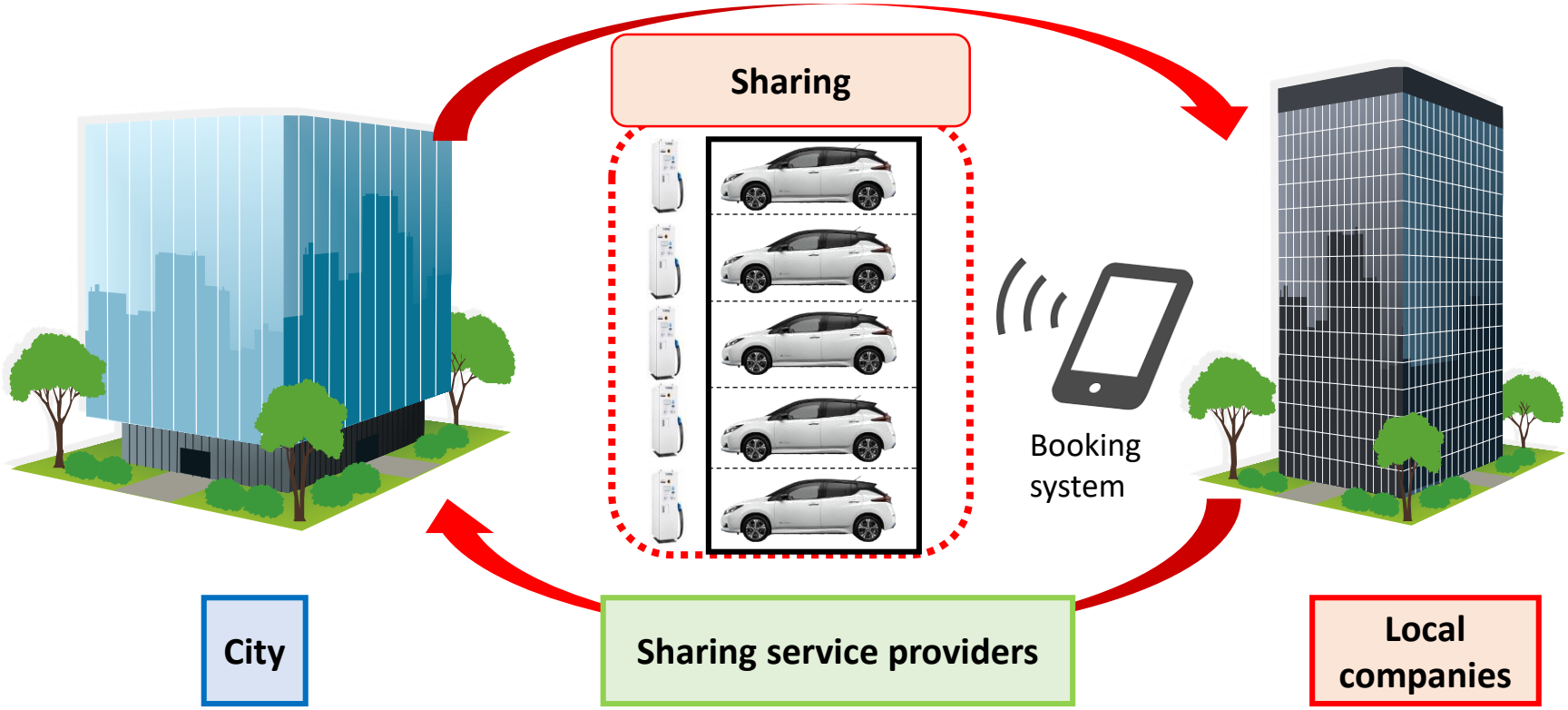
No initial investment	Speeds up introduction	Reduces total cost by extending service life with IoT



Car Sharing Initiative for EV Public Vehicles with Local Companies (under consideration)

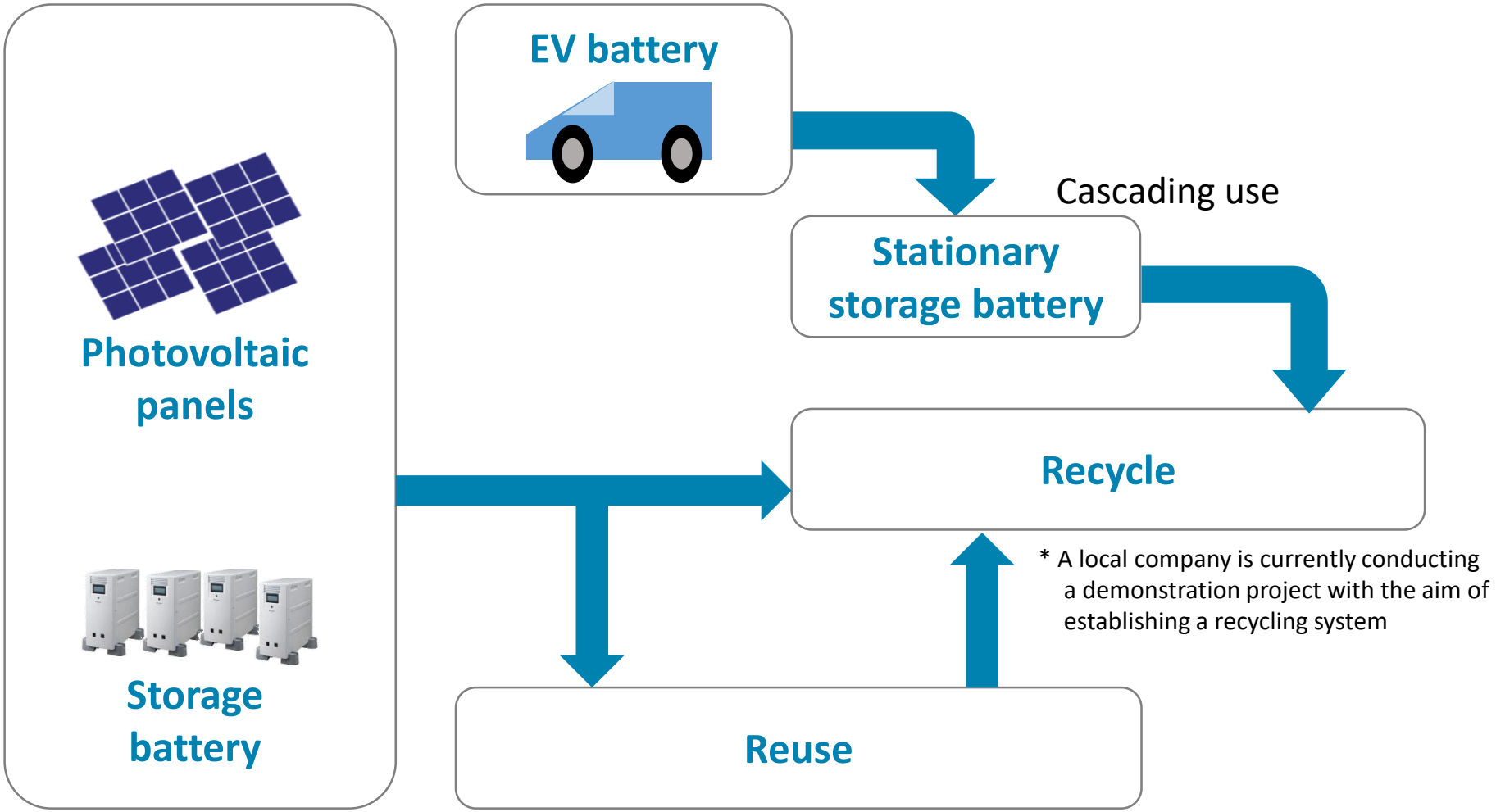
Reduce waste through the use of idle assets

- Optimize number of vehicles with the introduction of a vehicle management system
- Improve operation rates through sharing
- Create opportunities to ride in EVs



Reuse & Recycling of PV Panels and Storage Batteries

Establishment of reuse market
Promotion of recycling with focus on Eco-Town



Initiatives for Establishing Bases for Hydrogen Supply & Use

Demonstration projects and PR in Hydrogen Town

Supply of hydrogen to fuel cells in residences via hydrogen pipeline (1.2km)

◆9 demonstration projects, 10 participating companies

Kitakyushu Hydrogen Town

Demonstration project on the production of CO_2-free hydrogen

Implementation of demonstration project on the production of hydrogen using surplus renewable energy generated locally and supply of produced hydrogen around the city (2019-2022)

Widespread use of FCVs and hydrogen stations

Promotion of the widespread use of FCVs and other vehicles and development of hydrogen stations to expand use and increase the public's understanding of hydrogen.

◆Local hydrogen stations (2 locations)
Introduction of FCVs for official public use (4 vehicles)

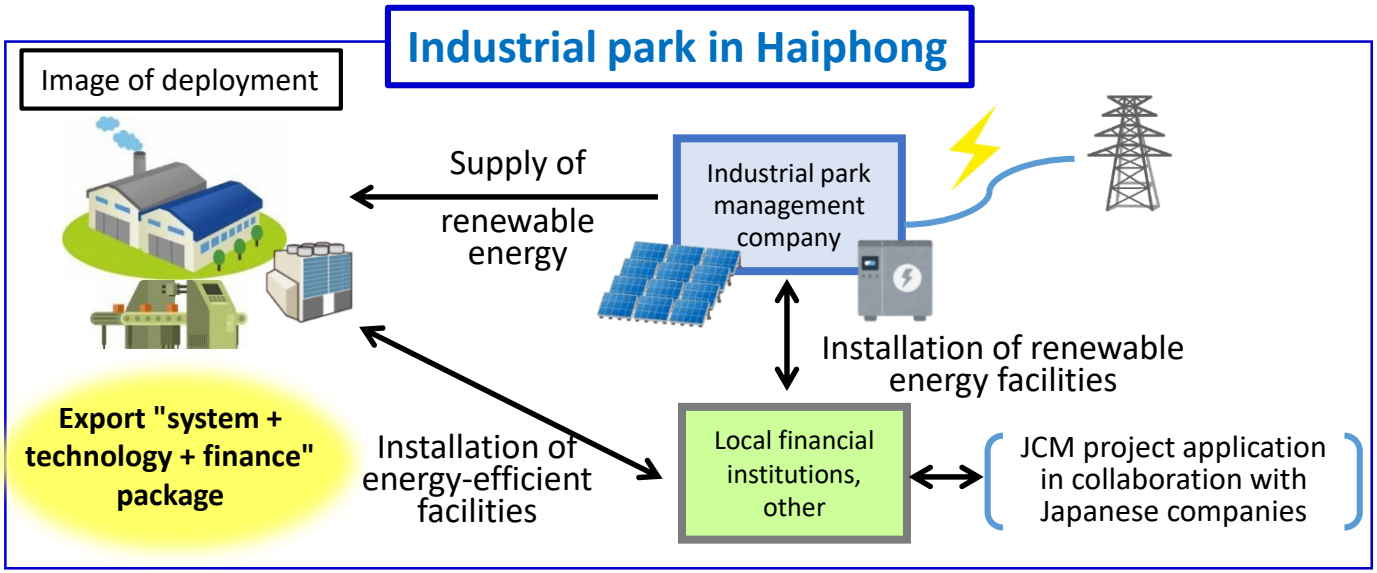
International Cooperation

Partnerships with Asian countries for mutual prosperity

- Status of projects for low-carbon development in Asia:
  16 countries and regions, **84** cities (**238** projects)
  Over JPY **25 billion**
- Trainees accepted: **9,956 people** from 166 countries
- Experts dispatched : **215 people** to 25 countries

Project on the formation of an eco-industrial park in Haiphong City, Vietnam

(Supported by the Ministry of the Environment, Japan)



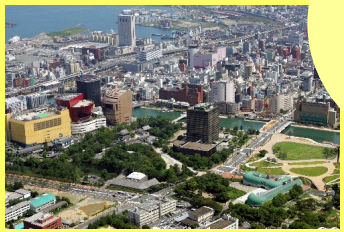
For the Future

Kitakyushu's environmental technologies

Decarboni-
zation

Waste plastic
measures

Solving common global issues



Economic
growth

Helping the world achieve the SDGs