

# Kitakyushu's initiatives for realizing a zero-carbon city

## Session 2: Technology and Innovation for local climate actions

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# Kitakyushu City – Profile



## Surrounded by Nature



Hiraodai  
Karst Plateau



Wakamatsu  
North Coast



Kokura Castle



Mt. Sarakura

## Regional Specialties



Kokura Beef



Buzen Sea Oysters



Kanmon Strait Octopuses



Wakamatsu  
Tomatoes

## Leading Companies of Kitakyushu City



Yaskawa Electric



TOTO

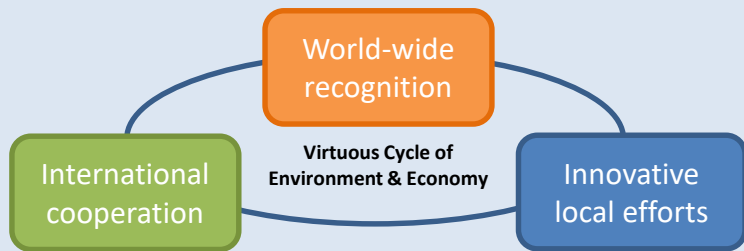


Mitsubishi  
Chemical



Toyota

# Self-branding: World Capital of Sustainable Development



- Green growth backed by the private-public-academia-residents partnership
- Accumulation of environmental technologies and know-how
- Attracting ESG investment
- Fostering civic pride

1960s –  
Overcoming pollutions



1990s -  
Recycling-oriented & low-carbon society



Kitakyushu Eco-Town (1997)

Eco-Model City (2008)

SDGs Future City (2018)



2020s -  
Carbon neutral society

SDGs sustainability bonds (2021)

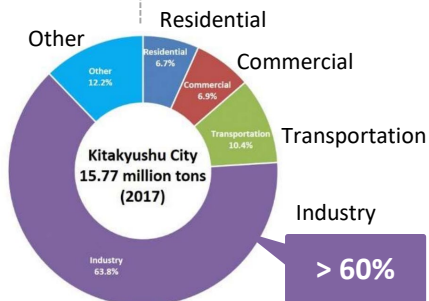
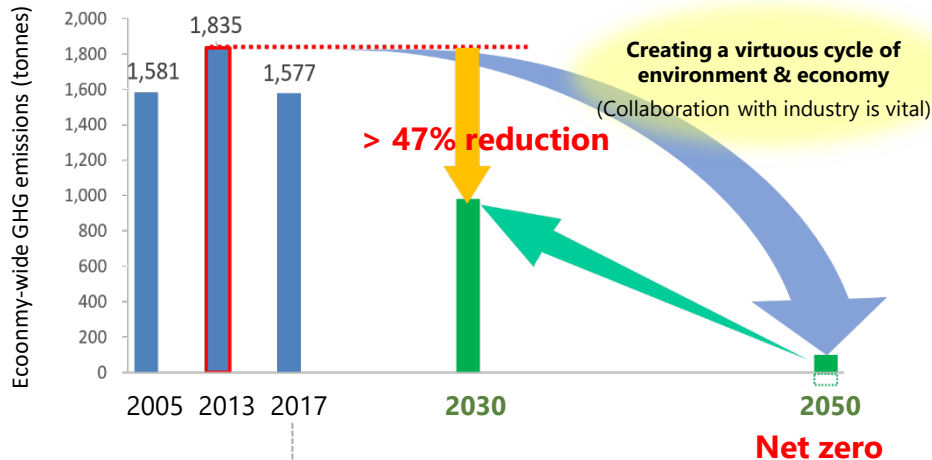
Decarbonization Leading Area (2022)

Green transformation support for SMEs (2022)

and more

# Kitakyushu's 2050 Zero Carbon City Declaration

## Image of reduction target



## Policy framework

- Zero Carbon City Declaration (2020)
- Climate Emergency Declaration (2021)
- Kitakyushu Climate Change Action Plan (2021)
  - ✓ Economy-wide climate actions
- Kitakyushu Green Growth Strategy (2022)
  - ✓ Focus on the energy-related policies

< Basic strategy >

**Decarbonization of existing industries & creation of new industries**

Hub for promoting **decarbonized electricity**

Hub for **hydrogen** supply & use

Promote the decarbonisation of the power sector and electrification of non-electric sectors, while also promoting the supply and use of hydrogen in areas that are difficult to electrify.

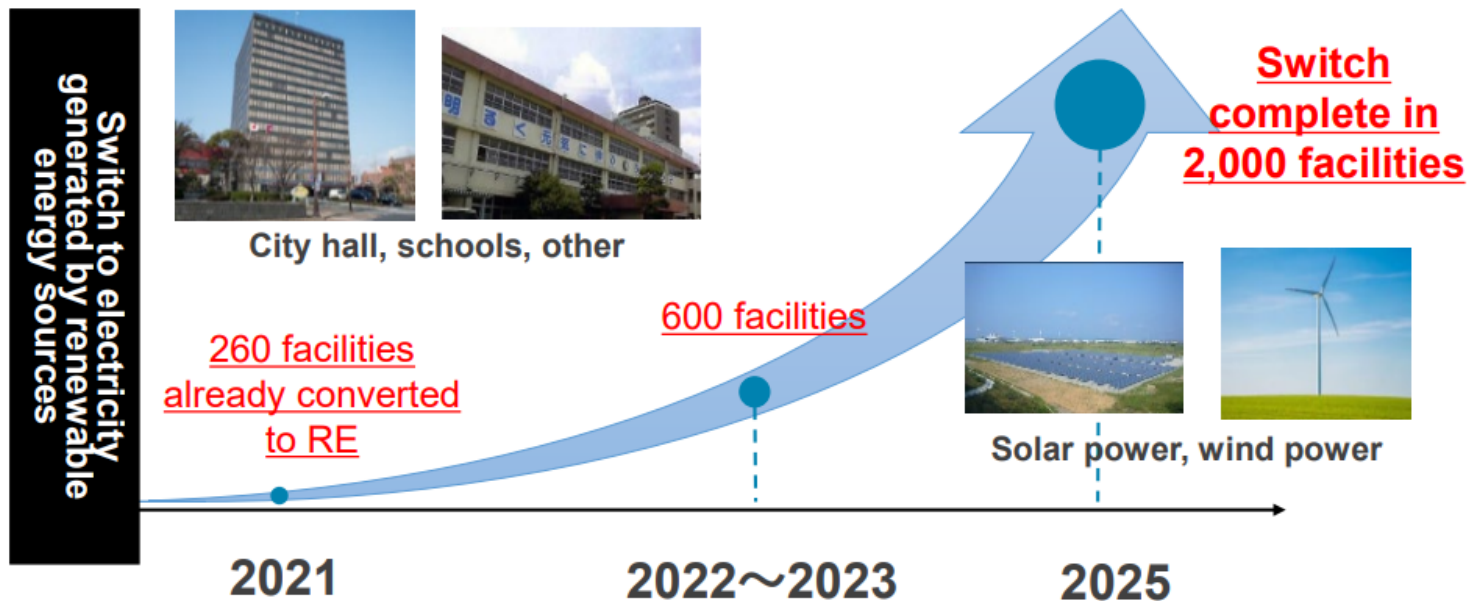
**Support companies to drive innovation**

Comfortable & decarbonized city  
(Urban & transportation policies)

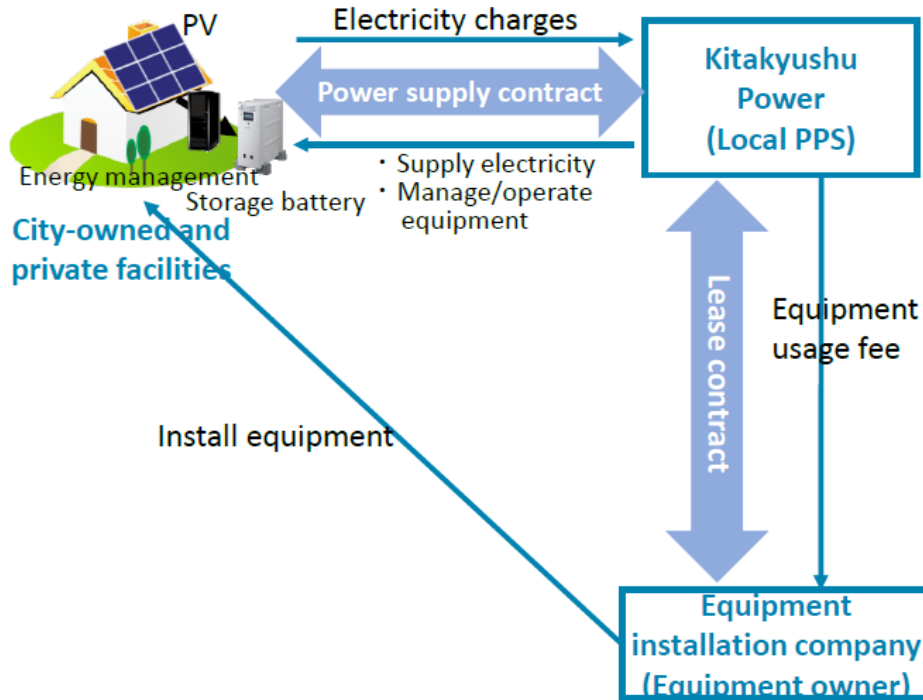
Expansion to overseas markets

# Kitakyushu Model for 100% Renewable Energy

1. Earliest\* conversion of public facilities to 100% renewable energy in Japan (\*Among Prefectures and designated cities)
2. Third-party ownership model for solar + energy storage facilities to create a low-cost PPA model



# Third-party Ownership System



- Speedy introduction of RE with no initial costs
- Reduction in overall costs with IoT to optimize energy use and extend service life of equipment

# Visualizing the progress – RE100 Map

**Number of facilities with equipment  
(Greater Kitakyushu)**

**626**  
Facilities

**Amount of CO<sub>2</sub> reduction  
(Greater Kitakyushu)**

**10,936.5**  
t / year

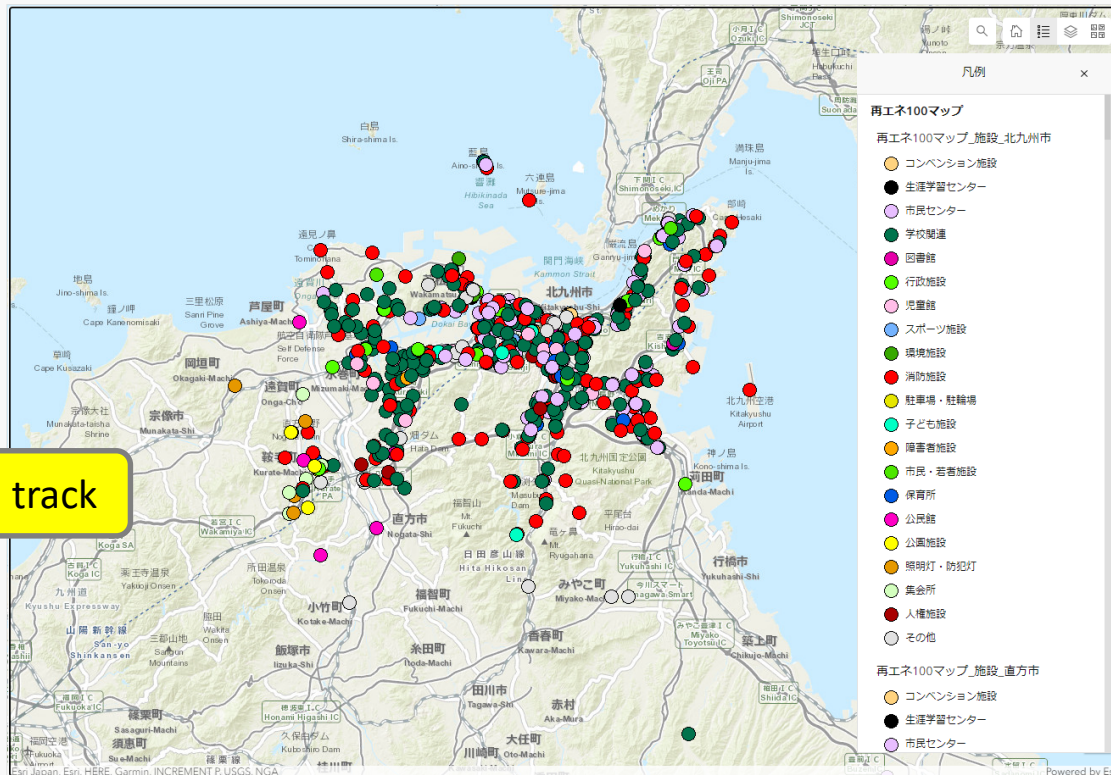
**Number of facilities with equipment  
(Kitakyushu only)**

**586**  
Facilities

On track

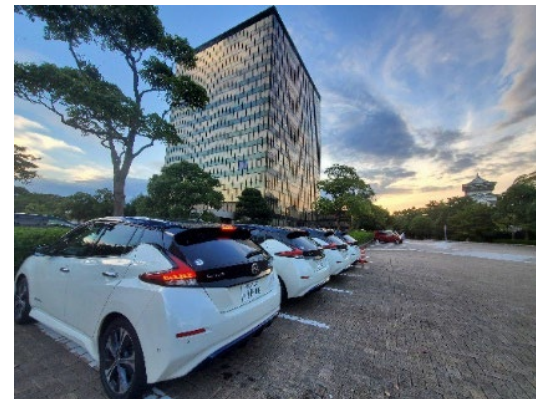
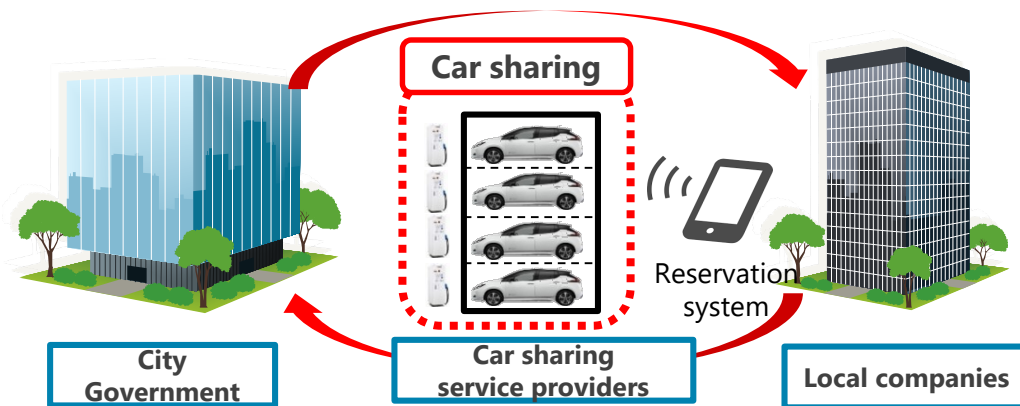
**Amount of CO<sub>2</sub> reduction  
(Kitakyushu only)**

**10,544.03**  
t / year



# Official Vehicles - Electrification & Effective Use

- Promoting the **electrification** of official vehicles  
Aim at 100% electrification of official vehicles (approx. 800) by FY2030
- Enhancing **disaster response capabilities with EVs**:  
Enables electricity supply to evacuation centers in the event of a disaster
- **Car sharing demonstration project with private companies (FY2022~)**  
Collaborate with companies to promote the introduction of EVs





# Thank you for your attention

For further readings:

- Kitakyushu City Action Plan for Global Warming Countermeasures (<https://www.city.kitakyushu.lg.jp/files/000964812.pdf>)
- Initiatives for 100% renewable electricity in the Kitakyushu metropolitan area (<https://kankyo-kitakyushu.hub.arcgis.com/>)
- Kitakyushu City Newsletter, JANUARY 2023 (<https://www.city.kitakyushu.lg.jp/files/001032244.pdf>)
- Kitakyushu Asia Center for Carbon Neutrality HP (<https://asiangreencamp.net/eng/>)
- IGES Kitakyushu Urban Centre HP (<https://www.iges.or.jp/en/about/research-units/kitakyushu-urban-centre>)