

Kitakyushu City's Approach to Creating a Decarbonized Society

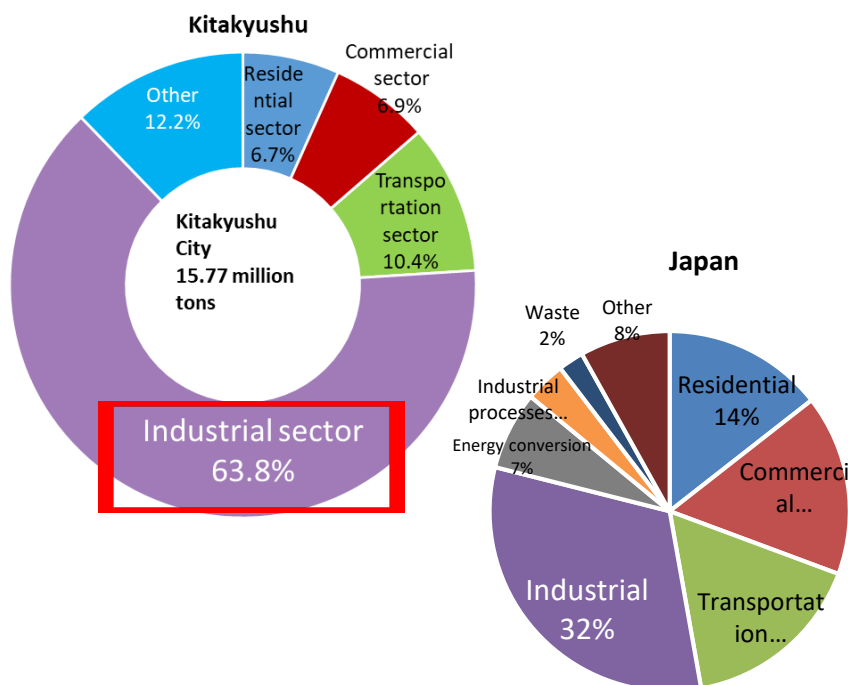


Creating a Zero-Carbon City through a “Virtuous Circle for the Environment and Economy”

- The creation of a decarbonized society poses a major challenge for the industrial city of Kitakyushu.
- Changing our mindset about responses to global warming will transform industrial, economic and social structures and bring about significant growth.

Zero-Carbon City Declaration (October 2020)

GHG emissions (2017)



Strategies to Achieve Zero-Carbon

Revision of the **Kitakyushu City Action Plan for Global Warming Countermeasures** (August 2021)

<5 Pillars>

I Decarbonize energy

II Promote innovation

III Transform lifestyles

IV Develop resilient cities capable of adapting to climate change

V Contribute to global society

Plan to formulate **“Kitakyushu City Green Growth Strategy”** (in FY2021)

Formulating the Kitakyushu City Green Growth Strategy

【Virtuous Circle for the Environment and Economy】

Enhance the competitiveness of cities and local businesses, and create a comfortable, disaster-resilient, and livable society centered on decarbonization

Requires responses for **decarbonization in the industrial sector**, which accounts for about 60% of CO₂ emissions in Kitakyushu

1 Energy

Decarbonization of energy across the board to support socioeconomic activities, and development of a stable, low-cost supply system

2 Innovation

Achievement of innovation with full support to local companies for developing technology and training/sourcing human resources

1 Energy

Strategic acquisition of decarbonized energy

Current Status and Necessity

Promote **wind power**

- 【National】 **Renewable energy** positioned as **priority** energy source
- 【Kitakyushu】 **Designated as the only base port in western Japan**

(1) Maximize spread of **renewable energy** and stabilize supply with **storage batteries**

- Need to **integrate spread of renewable energy with storage batteries**
- Issues with **high costs and recycling systems**

(2) Establish base for production and supply of **CO₂-free hydrogen**

- Alternative to **thermal power** that meets **high heat demand**
- Covers **unstable aspects and surplus issues with renewable energy**

Kitakyushu's Vision

- ◆ **Develop as a total hub for wind power industries**
- ◆ Local production and consumption of renewable energy centered on local energy companies

- ◆ Develop **low-cost, stable and efficient energy storage systems**, promote establishment of wind power
- ◆ **Supply low-cost PV and storage batteries**

- ◆ **Produce and import CO₂-free hydrogen from overseas**
Harness the potential of the Hibikinada area
Use wind power surplus

2 Innovation

Promote innovation (Financial and institutional support for companies)

Current Status and Necessity

Enhance the **global competitiveness of companies** through decarbonization

- Create conditions where **decarbonization leads to increased corporate value and improved competitiveness**
- Requires that support be provided to companies to **accelerate R&D for the practical application** of decarbonization technologies at an **early stage**

Kitakyushu's Vision

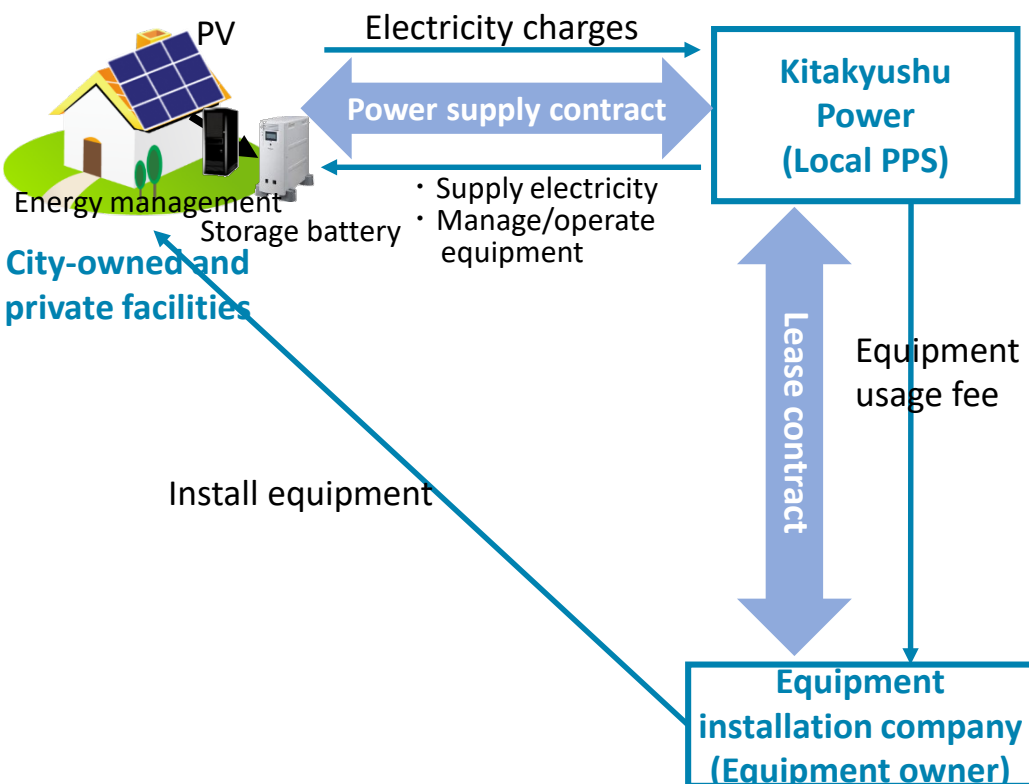
- ◆ Provide **indirect support for R&D on decarbonization technologies of local companies** to achieve innovation as quickly as possible
- ◆ Develop and source human resources in collaboration with local universities

RE100 for Public Facilities

(Kitakyushu Model on the Use of 100% Renewable Energy)

【Significance of the Kitakyushu Model on the Use of 100% Renewable Energy】

- Speedy introduction of renewable energy with no initial costs through TPO (Third-Party Ownership)
- Reduction in overall costs with the application of IoT management to optimize energy management and extend the service life of equipment
- Introduction of systems over a wide area in collaboration with 17 towns and cities, including smaller municipalities with limited expertise and experience



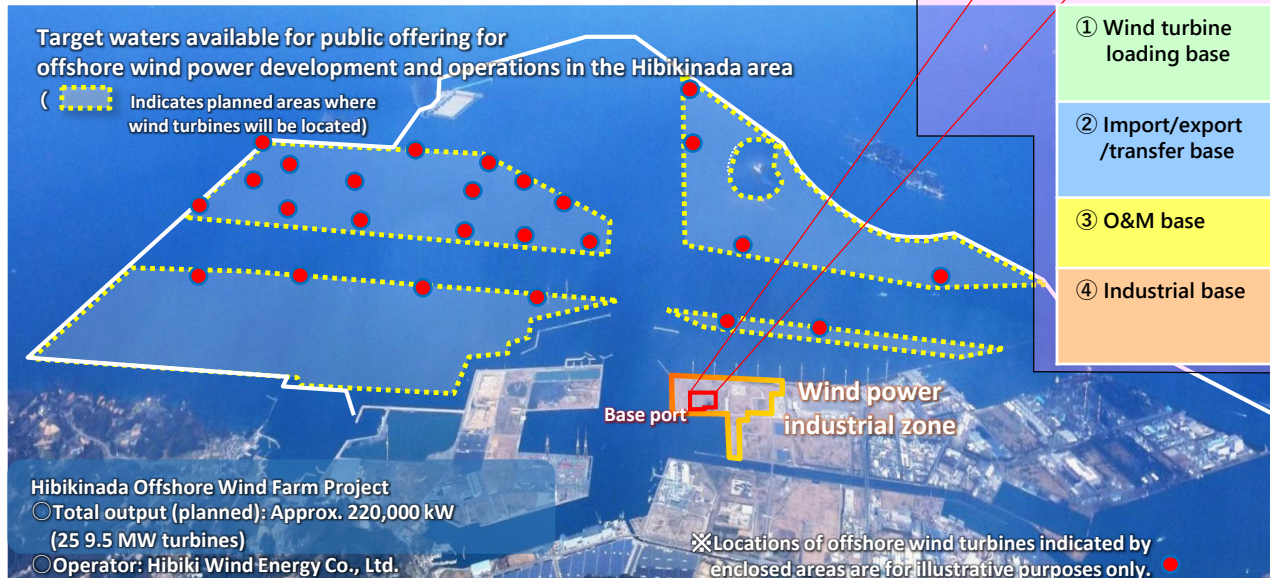
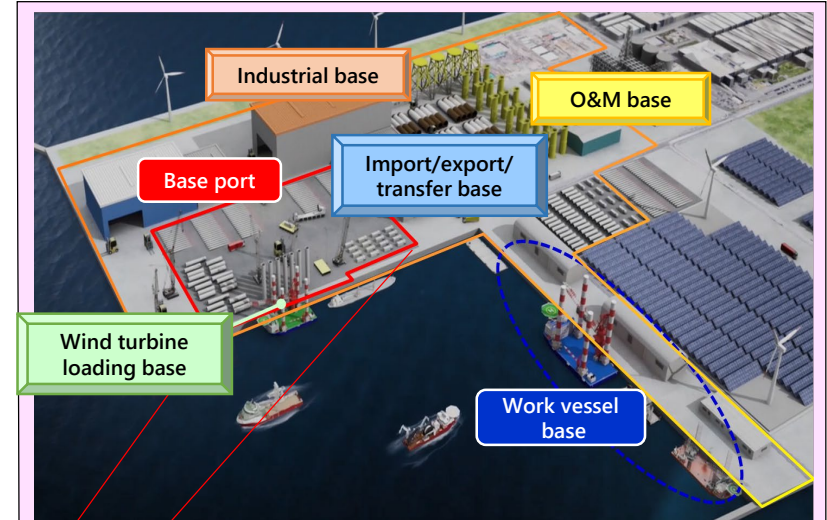
Joint announcement on procurement of RE100 power by Kitakyushu and 6 municipalities (June 24, 2021)



*Number of facilities switched over to RE100: 246

Creation of a Comprehensive Base for Wind Power Industries

- Formation of 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 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



SDGs Future City
Kitakyushu City

**Setting our sights on becoming a trusted
"Green Growth City", abounding with "true wealth"
and committed to making a difference in the world**

Thank you for your kind attention.

<https://www.city.kitakyushu.lg.jp/>