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# Realization of a Decarbonized Society and Sustainable Development of Cities through City-to-City Collaboration



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# 1 . Overview of Sakai City



- The second largest city in Osaka, Kansai
- There is "Nintoku-Tenno-Ryo-Kofun" which is registered as a world cultural heritage site by UNESCO.



- Population : 815,235 (As of January 1, 2023)
- Area : 149.82km<sup>2</sup> (57.8 sq mi)
- Sister/Friendship Cities : Berkeley (U.S.A)  
Lianyungang (China)  
Wellington (New Zealand)  
Da Nang (Vietnam)

# Exchange with ASEAN countries

- SAKAI was the center of trade between Japan and Southeast Asia in the past.
- Today, we continue to exchange with ASEAN countries in a various fields.



Ethnic Costume Experience for Kids



Sale of Ethnic Goods



Angklung Performance Experience



Cooking Demonstrations and Sales

# One of the leading industrial cities in Japan

- Sakai City is one of the leading industrial cities in Japan. Many Companies in Sakai City have advanced environment/decarbonization technologies.
- In waterfront area, there is a big base for several refineries, thermal power plants, gas production plants, and liquid hydrogen production plant. About 70% of the energy consumed in Kansai region is produced in Sakai City.



The waterfront area of Sakai City

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## 2 . Sakai City's Decarbonization Policy

- We have “Sakai Environmental Strategy”, a long-term environmental vision for 2050.
- We aim to become a world-leading environmentally advanced city centered on achieving carbon neutrality by 2050, with the four “C’s” as our keywords.

① **Decarbonized City  
with future innovation**

**Carbon Neutral**

② **Circular City  
with virtuous circle of the  
environment and the economy**

**Circular**

③ **Safe, Secure, Attractive and  
Comfortable City  
in harmony with nature**

**Comfortable**

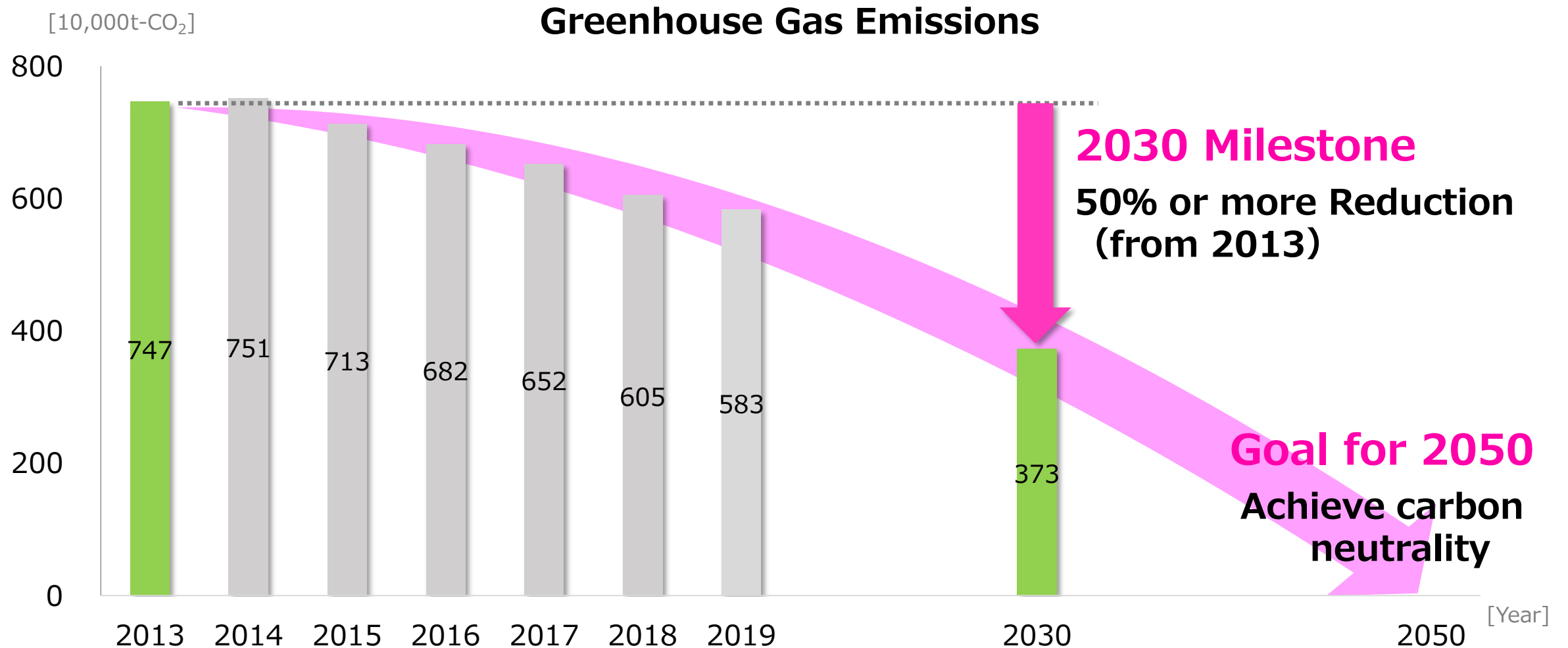
④ **Contributing and Collaborative  
City that create and deploy  
innovations**

**Cooperation**



# Greenhouse Gas Reduction Targets

- To achieve carbon neutrality by 2050, we aim to reduce greenhouse gas emissions by more than 50% by 2030.



# Examples of Initiatives to Decarbonize

- Promotion of ZEH (net zero energy house) and electric vehicles



- Support for install of energy-saving equipment to factories, etc

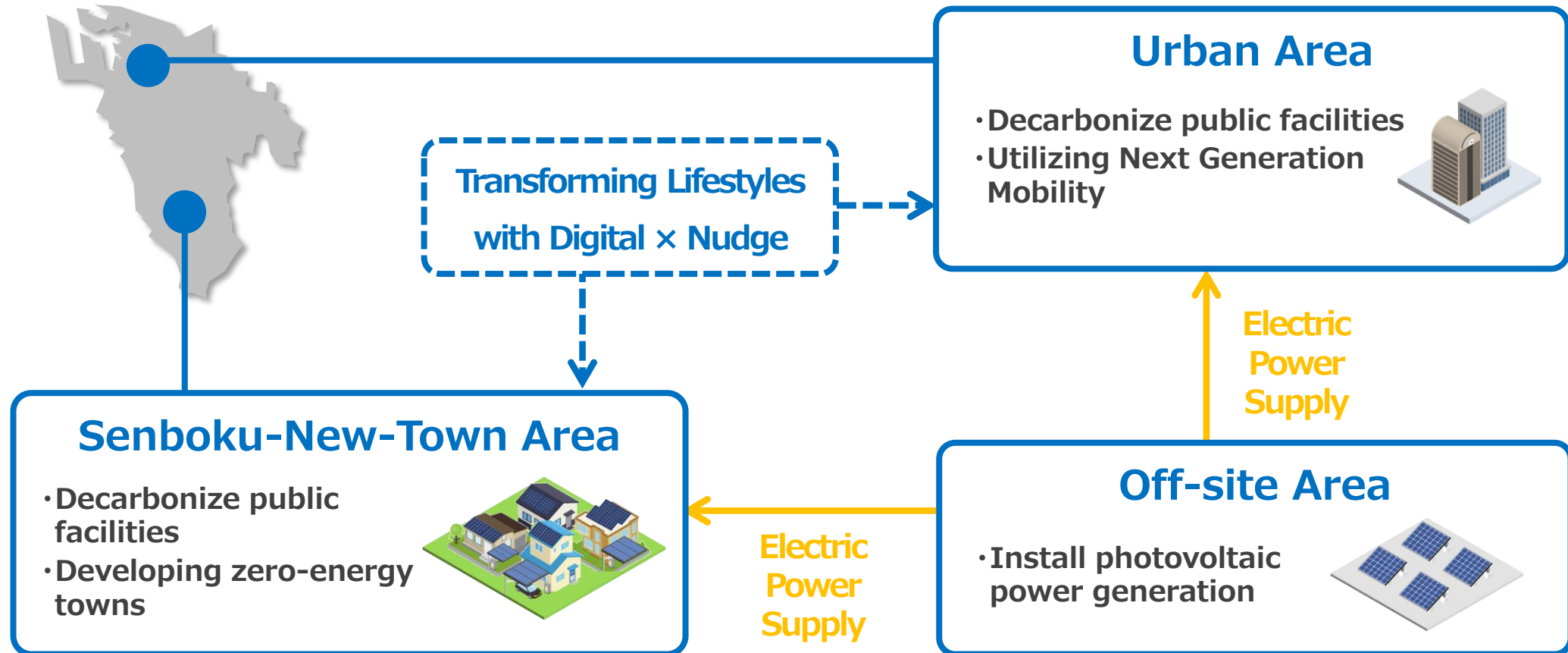


- Utilization of unused energy sources, such as heat from reclaimed sewage water and waste-to-energy



# Selected by the Japanese government for Decarbonization Leading Area “Sakai Locally Produce and Consume Energy Project”

- In Urban area and New-town area where houses are concentrated, we will promote the development of zero-energy buildings and zero-energy towns with the aim of carbon Neutrality by 2030.



### 3 . City-to-City Collaboration for Decarbonization

- In our newly formulated “Sakai Environmental Strategy”, we have clearly stated our intention to “Promote International City-to-City Collaboration in the environmental field”.
- We promote City-to-City Collaboration that will lead to sustainable development in both cities, by leveraging our experience in pollution control and decarbonization initiatives and the advanced decarbonization technologies of companies involved.

## Background

Exchanges with ASEAN Countries

Experience in pollution control and decarbonization initiatives

Decarbonization technologies of companies in the city

## Promote

# City-to-City Collaboration

Building a collaborative framework for decarbonization

Promote environmental and decarbonization businesses in the city

Solving local environmental issues in overseas cities

Addressing global environmental issues such as Climate Change

## Sustainable Development in both Cities

# Achievements in international exchange and collaboration in the environmental field

## Quang Ninh Province (Vietnam)

Worked with Osaka Prefecture University (at the time) to improve the environment of Halong Bay.

(2013-2016)

(JICA Partnership Program)

## Gwangju City (Korea)

Signed cooperation agreements on climate change, waste management, etc. (2011)

## Berkeley City (U.S.A)

Conversation between mayors to exchange views on the theme of carbon neutrality

## Wellington City (New Zealand)

Conversation between mayors to exchange views on the theme of decarbonization initiatives

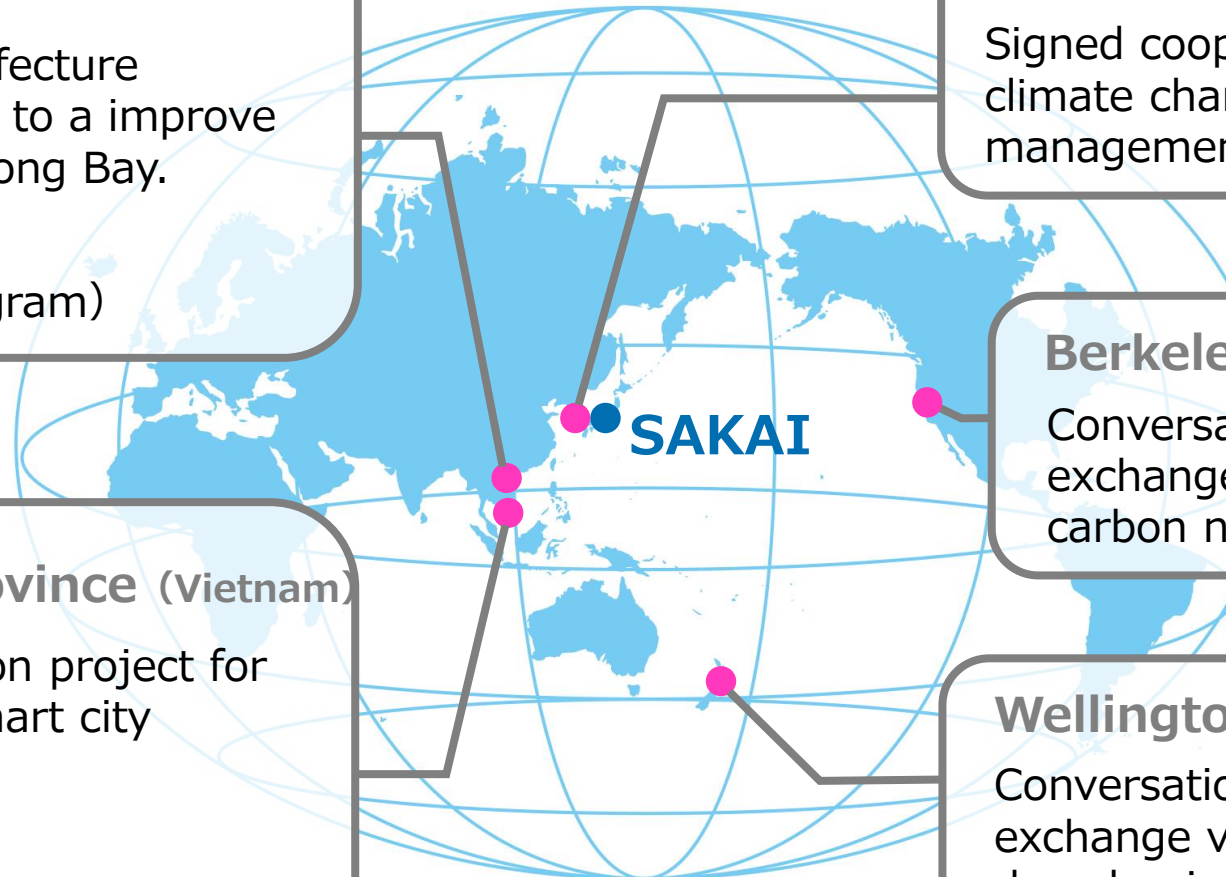
**NEW**

## Ba Ria-Vung Tau Province (Vietnam)

City-to-City Collaboration project for decarbonization and smart city formation

(2022~)

(MoEJ : City-to-City Collaboration program for Zero-Carbon Society)



# Progress of collaboration with Ba Ria-Vung Tau Province



Phu My 3 Special Industrial Park

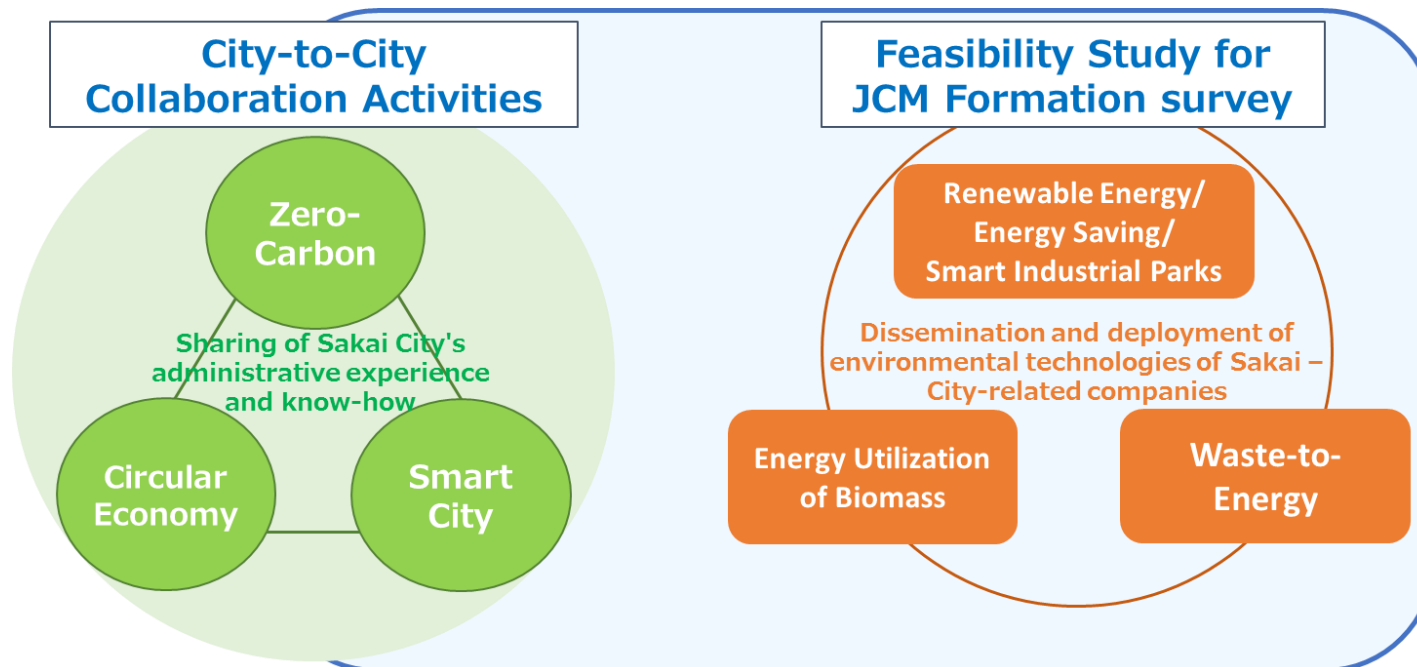
(source : Thanh Binh Phu My Joint Stock Company)

- We conducted a study in 2021 and selected Ba Ria-Vung Tau Province as a candidate city for collaboration for the following reasons:
  - Similar regional characteristics to Sakai City, with the international logistics hub Kai Mep Chi Bai Port and a concentration of petrochemical and manufacturing industries.
  - With the development and expansion of industrial parks, they are required to transform themselves into sustainable industries through pollution control, eco-friendly and smart.
  - The location of Phu My 3 Special Industrial Park, where many Japanese companies are located, facilitates the formation of projects for the installation of Japanese decarbonization technologies.
- In April 2022, officials from both cities exchanged views and agreed to prepare for City-to-City Collaboration to decarbonization.



# City-to-City Collaboration Project with Ba Ria-Vung Tau Province (Summary)

## Project to promote decarbonization and smart city formation through City-to-City Collaboration between Sakai City and Ba Ria-Vung Tau Province

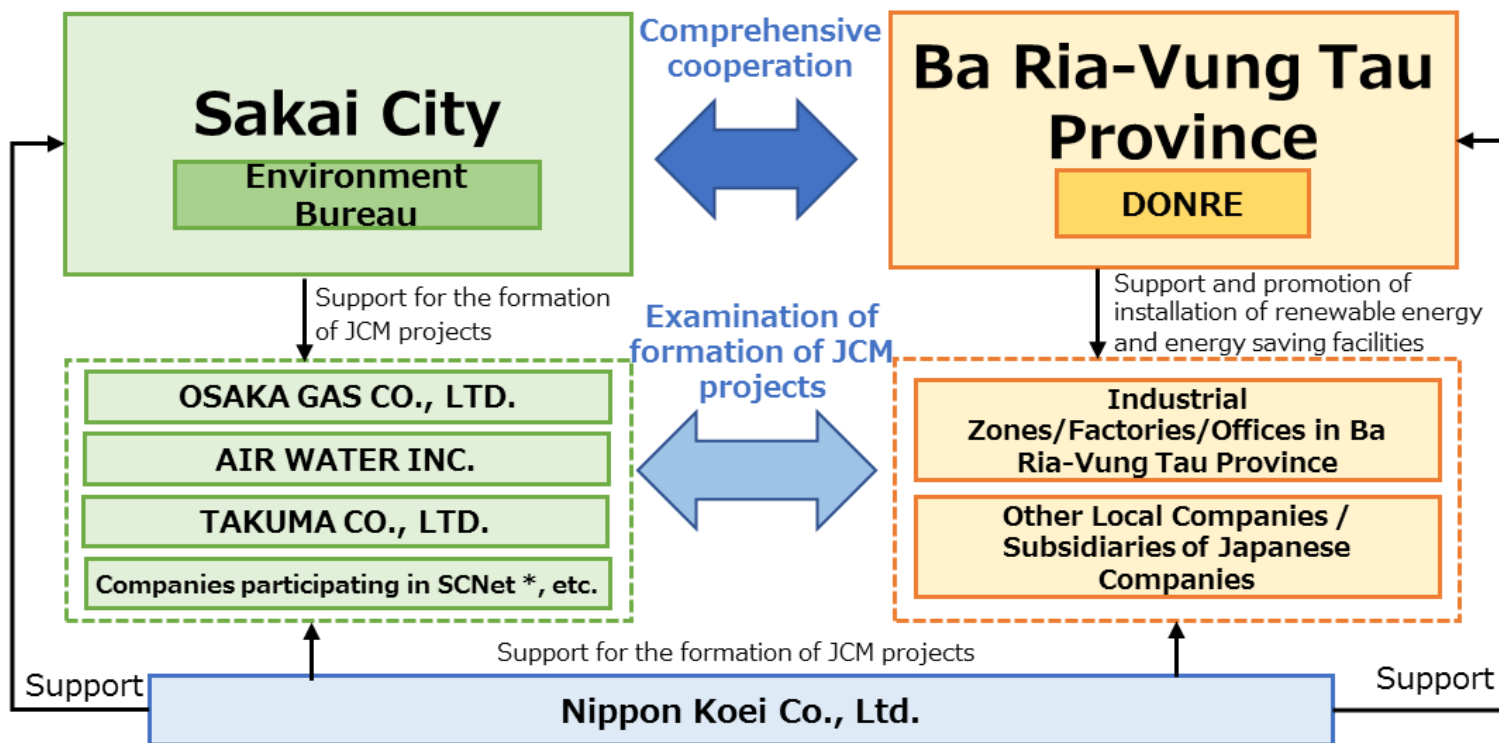


<b>Decarbonization</b>	Study of install renewable energy/energy saving equipment to industrial parks
<b>Circular Economy</b>	Study of install waste power generation and use of biomass
<b>Smart City</b>	Study of formation of smart industrial parks

Currently in discussions to conclude a Memorandum of Understanding (MOU) in decarbonization and related environmental fields



# City-to-City Collaboration Project with Ba Ria-Vung Tau Province (Organization)



## Main Fields of Cooperation

### OSAKA GAS CO., LTD.

Photovoltaic Power Generation,  
Energy-saving Equipment,  
Smart Industrial Park(AEMS, etc.)

### AIR WATER INC.

Use of Biomass

### TAKUMA CO., LTD.

Waste-to-Energy

\*SCNet : Sakai Carbon Neutral Overseas Expansion Network

We will continue to gradually expand collaborated companies

**Aiming for form JCM (Joint Crediting Mechanism) projects  
through high quality decarbonization technologies of companies involved.**

Thank you