

FY2025

City-to-City Collaboration Program for Zero Carbon Society

C3P City-to-City Collaboration Program

Creating Sustainable Cities with
Japan's Decarbonization Solutions



Program Overview

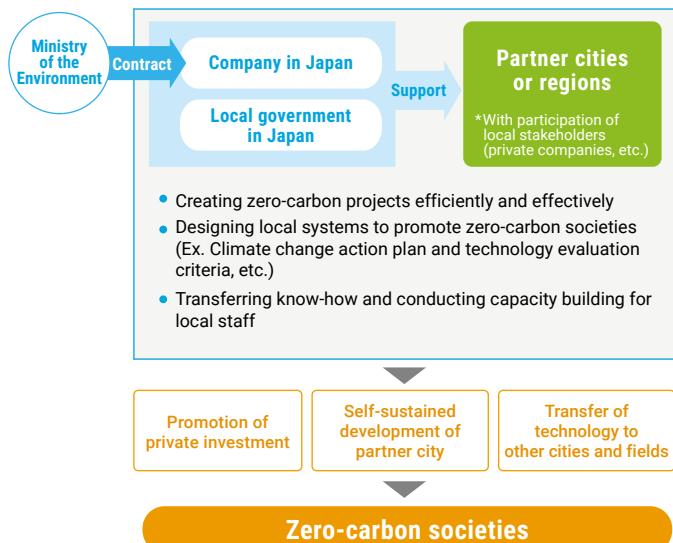
The City-to-City Collaboration Program for Zero Carbon Society (C3P) provides comprehensive support to local governments in Japan working in partnership with research organisations, private companies and other Japanese entities to identify low-/zero-carbon projects, conduct feasibility studies, develop institutions, and train human resources in partner cities overseas, in order to realise decarbonization.

C3P has inspired carbon neutral declarations and the establishment of related systems in partner cities overseas, as well as the implementation of more than 30 environmental infrastructure projects through the JCM (BOX 1 and 2). The program's scope has expanded

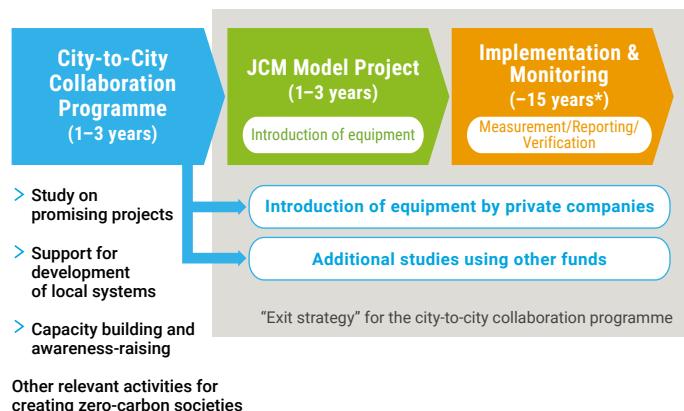
to encompass new areas of cooperation for the introduction of new technologies, such as hydrogen. Furthermore, this program is positioned as a core component of the Clean City Partnership Program (C2P2, BOX 3) launched jointly with JICA in February 2023, which provides comprehensive and synergistic support to partner cities in collaboration with international development finance institutions and other funders.

The program inspires local actors to implement policies to decarbonize their cities, creating a ripple effect that will drive decarbonization efforts around the world (also known as the decarbonization domino effect).

Program outline



Program exit strategies



Program Support

Eligible activities:

Multi-stakeholder projects by Japanese local governments and partner cities overseas working together with private companies and academic institutions in Japan to promote decarbonization at the local level in developing countries

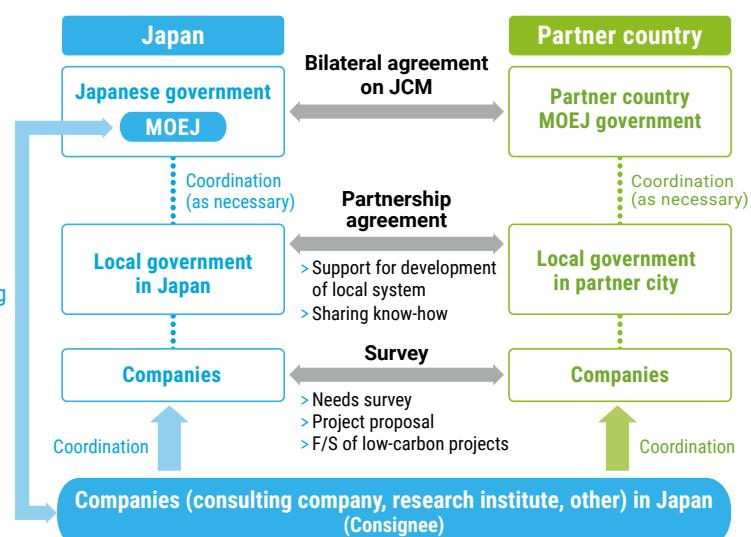
Eligible countries:

Developing countries, with priority given to JCM partner countries

Target areas:

Diverse range of sectors in which decarbonization technologies such as energy saving, renewable energy, and hydrogen can be applied (i.e., projects that help reduce energy-related carbon dioxide emissions and promote the formation of a decarbonized society), including support for the establishment of systems to promote the introduction of facilities in each sector

Example of C3P project implementation system



Benefits of Participating in the Program

Benefits for cities

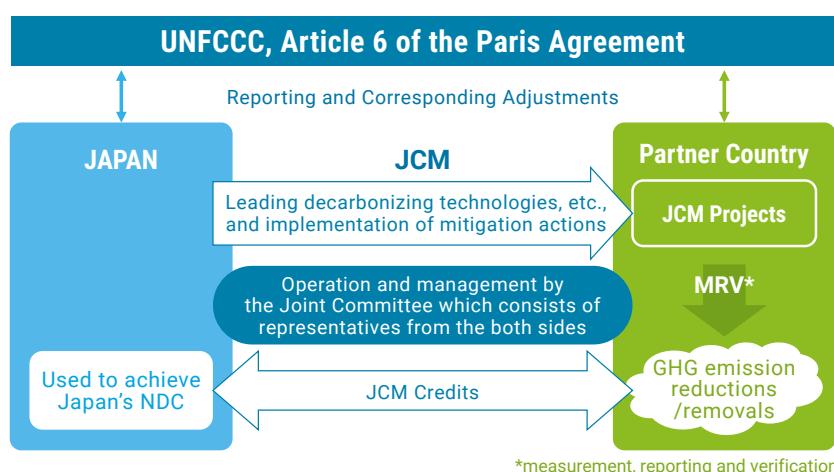
- > Opportunity to establish a foundation for a zero-carbon society to lead to zero-carbon development at an earlier stage
- > Realisation of co-benefits, such as improvements of the urban environment, and contributions to domestic policies and international agendas
- > Creation of business opportunities by encouraging the participation of local companies
- > Improved and enhanced urban environment to increase the appeal of the city and promote the development of industrial clusters and investment
- > Opportunities to foster civic pride in residents as they learn about the efforts and actions of local governments and companies

Benefits for companies

- > Use of the JCM to enable the introduction of superior zero-carbon technologies at low costs, and as a result, lower electric power and running costs. Companies will also be able to gain management know-how for the technologies introduced
- > Improved corporate brand power as a result of being viewed as a company that is proactive on environmental measures
- > Potential to acquire new sales channels

BOX 1: What is the Joint Crediting Mechanism (JCM)?

The JCM was established to quantitatively evaluate the extent of contributions by Japan and partner countries to the achievement of greenhouse gas emission reductions and removals in developing countries through the diffusion of advanced decarbonization technologies and implementation of mitigation actions in the form of JCM Model Projects and others. Credits acquired through these projects can be used to achieve the nationally determined contributions (NDC) for both countries under the Paris Agreement. To date, Japan has established partnerships with 31 countries under this mechanism*.



BOX 2: What are JCM Model Projects?

JCM Model Projects are financed by the Japanese government through subsidies that cover a portion of the installation costs of facilities and equipment to reduce energy-related CO₂ emissions. To date, approximately 290 projects have been selected, of which 30 were developed through city-to-city collaboration.

BOX 3: What is the Clean City Partnership Program (C2P2)?

Launched in February 2023 by the MOEJ together with Japan International Cooperation Agency (JICA), this program aims to address challenges faced by cities around the world from multiple perspectives. With the participation of Japanese local governments, private companies, financial institutions, and in collaboration with international development finance institutions (MDBs), the program aims to provide comprehensive and synergistic support to partner cities overseas to address urban challenges including climate change, environmental pollution, circular economy, and ending and reversing nature loss.

FY2025 C3P Projects

<p>Ulaanbaatar City (Mongolia)—Sapporo City</p> <p>01 Zero Carbon Society Development through the Introduction of Environmental Infrastructure Suitable for Cold Climates in Ulaanbaatar City</p> <p>Main Proposer: Oriental Consultants Co., Ltd.</p>	<p>Pattaya City & Rayong City (Thailand)—Osaka City</p> <p>09 Support for Designing a Decarbonized Society in Pattaya City and Rayong City in FY2025</p> <p>Main Proposer: Nippon Koei Co., Ltd.</p>
<p>Bangkok Metropolitan Administration (Thailand)—Yokohama City</p> <p>02 Project for Accelerating GHG Net Zero Emissions in Bangkok</p> <p>Main Proposer: Overseas Environmental Cooperation Center, Japan (OECC)</p>	<p>Maharashtra State (India) — Osaka City</p> <p>10 Maharashtra State—Osaka City Collaboration Project to Promote the Introduction of Decarbonization Technologies towards Achieving Carbon Neutrality</p> <p>Main Proposer: Global Environment Centre Foundation (GEC)</p>
<p>Makassar City (Indonesia)—Yokohama City</p> <p>03 Zero Carbon City Project with a Focus on Transportation and Energy through City-to-City Collaboration between Makassar City and the City of Yokohama</p> <p>Main Proposer: Nippon Koei Co., Ltd.</p>	<p>Ba Ria—Vung Tau Province & Southern Vietnam (Vietnam)—Sakai City & Osaka City</p> <p>11 Regional Collaboration Project to Promote Carbon Neutrality in Southern Vietnam</p> <p>Main Proposer: Nippon Koei Co., Ltd.</p>
<p>Metro Cebu Area (Philippines)—Yokohama City</p> <p>04 Project for Promoting Decarbonized City Development and Disaster Resilience Enhancement in Metro Cebu</p> <p>Main Proposer: Nippon Koei Co., Ltd.</p>	<p>Da Nang City (Vietnam)—Sakai City</p> <p>12 Zero Carbon Development in Da Nang City for the Realization of a Carbon Neutral Society</p> <p>Main Proposer: Oriental Consultants Co., Ltd.</p>
<p>Renca Municipality, Santiago City (Chile)—Toyama City</p> <p>05 Project to Promote Decarbonization and SDG Domino Effects through Participation in the Race to Zero by Renca, Santiago</p> <p>Main Proposer: Nippon Koei Co., Ltd.</p>	<p>Dong Nai Province (Vietnam)—Kobe City</p> <p>13 Green-Smart Industrial Park Development Project through City-to-City Collaboration between Kobe City and Dong Nai Province, Vietnam</p> <p>Main Proposer: Nippon Koei Co., Ltd.</p>
<p>Badung Regency (Indonesia)—Toyama City</p> <p>06 City-to-City Collaboration Project between Toyama City and Badung Regency for Developing a Decarbonized and Circular Society</p> <p>Main Proposer: JAPAN NUS Co., Ltd.</p>	<p>Hai Phong City (Vietnam) —Kobe City</p> <p>14 Zero Carbon Development in Hai Phong City for the Realization of a Carbon Neutral Society</p> <p>Main Proposer: Oriental Consultants Co., Ltd.</p>
<p>Thuan Hoa District, Hue City (Vietnam)—Shizuoka City</p> <p>07 City-to-City Collaboration Project for the Realization of a Decarbonized Society in the Hue Area, Vietnam</p> <p>Main Proposer: Nippon Koei Co., Ltd.</p>	<p>Pohnpei State (Micronesia) — Ama Town</p> <p>15 Public-Private Partnership Model Development Project towards the Realization of a Decarbonized Society in Ama Town and Pohnpei State</p> <p>Main Proposer: JAPAN NUS Co., Ltd.</p>
<p>Bandung Regency (Indonesia)—Kameoka City</p> <p>08 City-to-City Collaboration between Kameoka City and Bandung Regency to Promote a Decarbonized and Circular Society</p> <p>Main Proposer: JAPAN NUS Co., Ltd.</p>	<p>Makassar City (Indonesia) —Maniwa City</p> <p>16 City-to-City Collaboration Project toward a Decarbonized Society between Makassar City and Maniwa City</p> <p>Main Proposer: Yachiyo Engineering Co., Ltd.</p>

Gorontalo Province (Indonesia)—Ehime Prefecture

17 Support Project for the Achievement of the SDGs and Development of a Sustainable Decarbonized Society

Main Proposer: JAPAN NUS Co., Ltd.

Tamil Nadu State (India) — Ehime Prefecture

18 City-to-City Collaboration Project to Create Environmental Businesses in Tamil Nadu in Partnership with Ehime Prefecture

Main Proposer: JAPAN NUS Co., Ltd.

Hanoi City (Vietnam)—Fukuoka Prefecture

19 Promotion of Environmental Infrastructure Introduction through City-to-City Collaboration in Hanoi City

Main Proposer: Nippon Koei Co., Ltd.

Koror State (Palau)—Kitakyushu City

20 City-to-City Collaboration Project for Promoting Decarbonized Cities and Achieving Co-benefits in Koror State, Republic of Palau

Main Proposer: ATGREEN Co., Ltd.

Banten Province & West Java Province (Indonesia)—Kitakyushu City

21 Feasibility Study for Decarbonizing the Cement Industry in Indonesia

Main Proposer: Institute for Global Environmental Strategies (IGES)

Ubon Ratchathani Province, Warin Chamrap Town Municipality & Pibun Mangsahan Town Municipality (Thailand) — Kitakyushu City

22 JCM Project Development Study for the Realization of Carbon Neutrality in Ubon Ratchathani Province, Thailand

Main Proposer: EX Research Institute Limited

Telangana State, Visakapatnam City, Andhra Pradesh State (India)—Kitakyushu City

23 Promotion of Decarbonized, Recycling-Oriented Eco-Towns in India

Main Proposer: EX Research Institute Limited

Gianyar Regency (Indonesia)—Osaki Town

24 Project to Promote the Establishment of a Decarbonized, Recycling-Oriented Society through the Osaki System in Gianyar, Bali Province, Indonesia

Main Proposer: Soo Recycle Center Co., Ltd.

Airai State (Palau)—Urasoe City

25 Support Project for Building a Sustainable and Environmentally Friendly City through City-to-City Collaboration between Urasoe City and Airai State

Main Proposer: JAPAN NUS Co., Ltd.

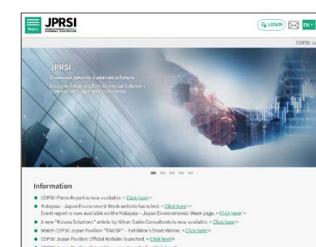
Connections



Web Portal for City-to-City Collaboration for Zero Carbon Society

Latest developments in city-to-city collaboration projects and related event information

www.env.go.jp/earth/coop/lowcarbon-asia/english



JAPAN PLATFORM for REDESIGN: SUSTAINABLE INFRASTRUCTURE

A comprehensive public-private partnership platform to encourage Japanese companies to develop environmental infrastructure overseas

jprsi.go.jp/en



JCM – The Joint Crediting Mechanism

Case studies of JCM Model Projects and information on the open application process

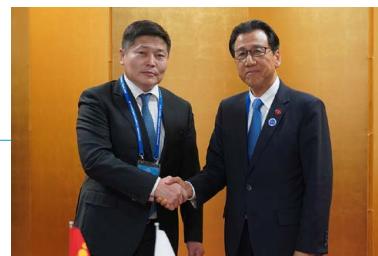
gec.jp/jcm



01 Ulaanbaatar City (Mongolia)–Sapporo City

Main Proposer: Oriental Consultants Co., Ltd.

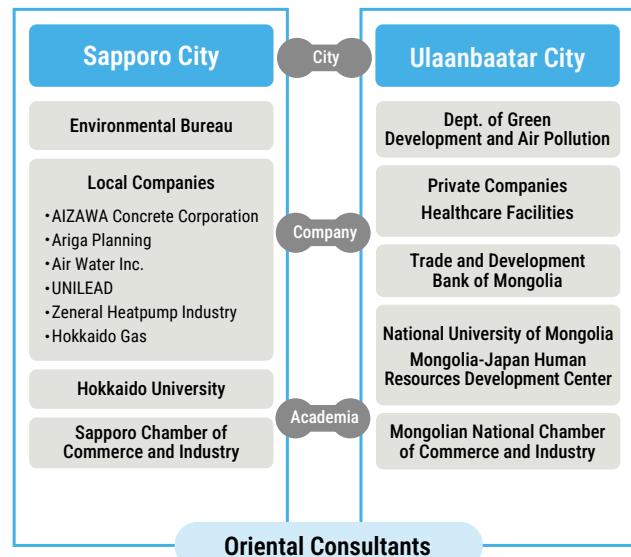
Zero Carbon Society Development through the Introduction of Environmental Infrastructure Suitable for Cold Climates in Ulaanbaatar City



Sapporo City and Ulaanbaatar City have been collaborating on challenges unique to cold regions through platforms such as the “World Winter Cities Association for Mayors.” This project supports the development of environmental infrastructure in Ulaanbaatar, leveraging Sapporo’s experience in reducing coal dependence and introducing decarbonization technologies suited for cold climates.

Specifically, the project explores energy transitions in heat supply systems, including the introduction of geothermal heat pumps, through partnerships between private companies in Hokkaido and Ulaanbaatar. It also considers low-carbon housing and facilities incorporating solar power and energy-efficient solutions.

These efforts aim to reduce environmental burdens while addressing electricity shortages and energy supply issues in Ulaanbaatar’s harsh winter conditions, and to lay the groundwork for future JCM projects.



02 Bangkok Metropolitan Administration (Thailand)–Yokohama City

Main Proposer: Overseas Environmental Cooperation Center, Japan (OECC)

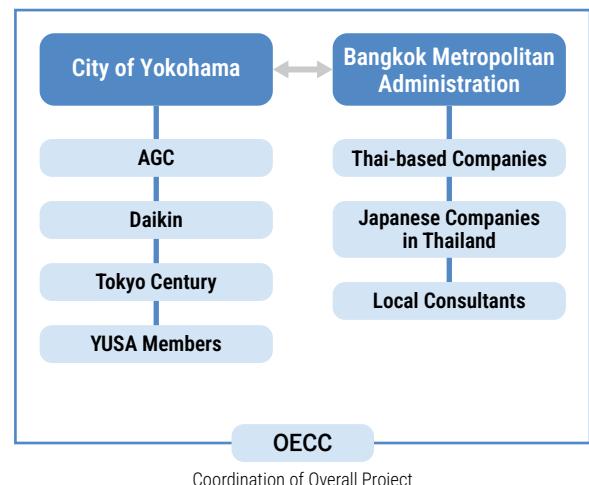


Project for Accelerating GHG Net Zero Emissions in Bangkok

Thailand aims to achieve carbon neutrality by 2050, and the capital city of Bangkok is expected to play a key role in realizing this goal. The Bangkok Metropolitan Administration (BMA) has set a long-term target of “net-zero emissions by 2050” and is actively working on climate change measures.

This project builds on the existing cooperation between the City of Yokohama and the BMA, aiming to promote the implementation of Bangkok’s Climate Change Master Plan. In addition to providing policy support, the project strengthens public-private partnerships by leveraging collaboration with the private sector.

Key activities include the establishment and operation of a public-private partnership platform to enhance collaboration with businesses, the implementation of an Energy Action Plan designed to accelerate the execution of the Master Plan, and the development of greenhouse gas (GHG) reduction projects utilizing the JCM.



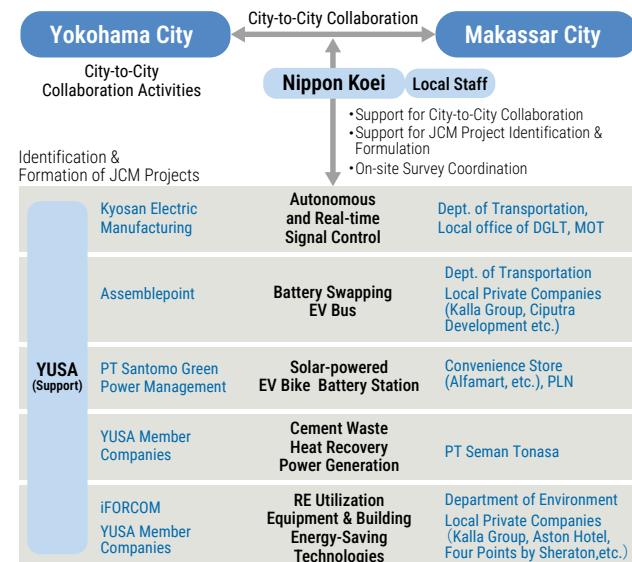
03 Makassar City (Indonesia)–Yokohama City

Main Proposer: Nippon Koei Co., Ltd.

Zero Carbon City Project with a Focus on Transportation and Energy through City-to-City Collaboration between Makassar City and the City of Yokohama

This project promotes the development of a zero-carbon city through City-to-City Collaboration between Yokohama and Makassar, focusing on the transportation and energy sectors. Yokohama shares its experience as a leading decarbonization area, including knowledge of its Green Building (GB) certification system, to support policy and institutional development in Makassar.

As part of a JCM feasibility study, the project explores models for decentralized, autonomous traffic signal control, conducts a preliminary study on battery-swapping electric buses, and prepares a proposal for installing solar power at battery-swapping stations for electric motorcycles. It also supports project development for waste heat recovery at cement plants and the adoption of renewable energy and energy-saving technologies in buildings.



04 Metro Cebu Area (Philippines)–Yokohama City

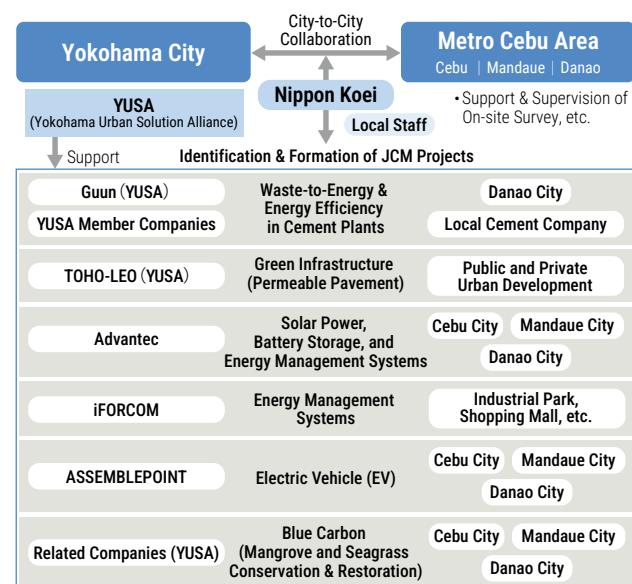
Main Proposer: Nippon Koei Co., Ltd.

Project for Promoting Decarbonized City Development and Disaster Resilience Enhancement in Metro Cebu

Metro Cebu faces the challenge of balancing disaster risk reduction with climate change measures, as typhoons frequently cause severe damage in the region. Since signing an MoU with Cebu City in 2012, the City of Yokohama has provided ongoing technical cooperation for sustainable urban development.

This project introduces renewable energy and energy-saving technologies to public and private facilities serving as evacuation centers, enhancing disaster resilience and exploring climate-resilient infrastructure. Yokohama also shares its expertise in local disaster management and may support climate action planning in Metro Cebu.

In addition, a feasibility study is underway for potential JCM projects, including waste-to-energy from disaster debris, waste heat recovery at cement plants, and alternative raw material use.



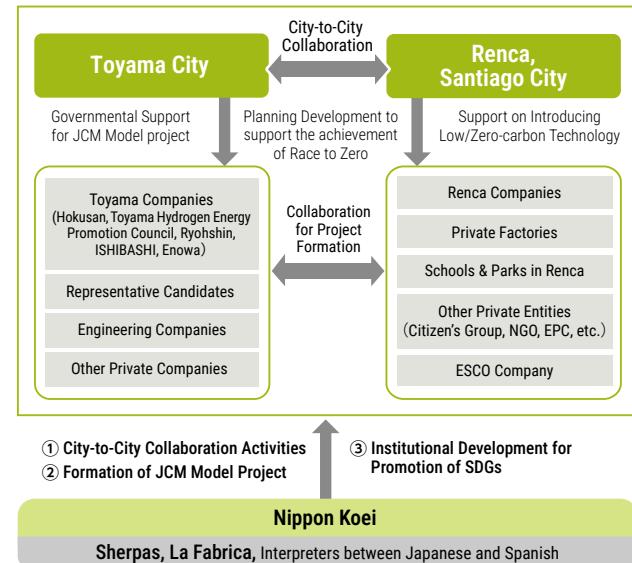
05 Renca Municipality, Santiago City (Chile)–Toyama City

Main Proposer: Nippon Koei Co., Ltd.

Project to Promote Decarbonization and SDG Domino Effects through Participation in the Race to Zero by Renca, Santiago

This project supports Renca Municipality's efforts to achieve the Race to Zero goals, with a focus this year on developing JCM projects related to waste management technologies from Toyama-based companies and electrification of logistics.

Educational activities are also being carried out, including the creation of a local version of Toyama's "Stop Global Warming" board game for elementary schools and the promotion of the SDG assessment tool TSUMUGI@. As the only city-to-city collaboration in Latin America, both mayors are expected to share outcomes of the project at COP30 in Brazil. These efforts aim to spread decarbonization and SDG action throughout Chile and beyond.



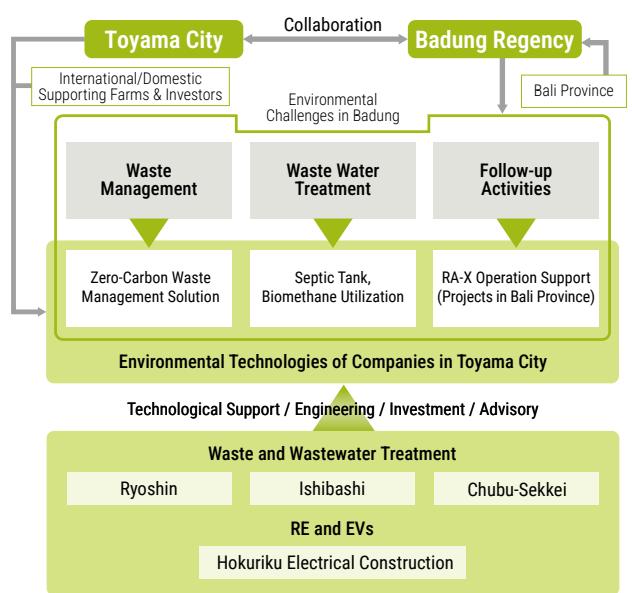
06 Badung Regency (Indonesia)–Toyama City

Main Proposer: JAPAN NUS Co., Ltd.

City-to-City Collaboration Project between Toyama City and Badung Regency for Developing a Decarbonized and Circular Society

Badung Regency faces serious challenges in waste and wastewater management due to the increasing number of tourists. Building on its ongoing City-to-City Collaboration with Bali Province since 2019, Toyama City has launched a new partnership with Badung.

This project explores the introduction of decarbonized waste treatment technologies through engineering approaches that assume optimal facility installation. Target technologies include waste separation, composting of organic waste, and converting plastic waste into oil, with the aim of reducing incineration. The project also supports the development of decarbonization plans and institutional frameworks. By focusing on municipal responsibilities such as waste management, the project aims to enhance the feasibility of Badung issuing a "decarbonization declaration." It also seeks to respond to the needs of surrounding municipalities and foster momentum toward decarbonization and a circular economy across Bali Province.



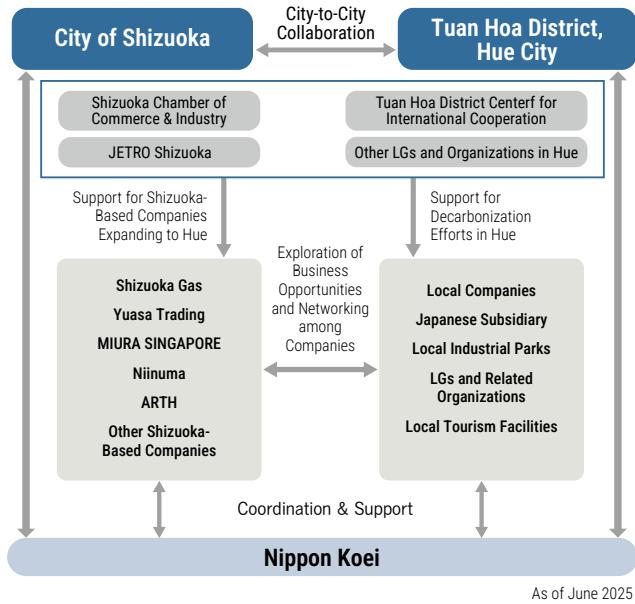
07 Thuan Hoa District, Hue City (Vietnam)–Shizuoka City

Main Proposer: Nippon Koei Co., Ltd.



City-to-City Collaboration Project for the Realization of a Decarbonized Society in the Hue Area, Vietnam

This project supports the Hue region in its efforts to develop as both a tourist destination and a green city by sharing Shizuoka City's expertise and know-how in local decarbonization policies. In particular, it focuses on specific support for promoting the region's Climate Action Plan, targeting Thuan Hoa District, which continues the international outreach of former Hue City, as well as the newly established centrally administered City of Hue. The project also works to identify and develop candidate projects for JCM equipment subsidy programs, particularly in the field of energy efficiency, while seeking new opportunities. In addition, efforts are underway to introduce unique decarbonization technologies, such as carbon capture and utilization (CCU) held by local companies in Shizuoka, and to explore fuel switching to natural gas. These activities aim to develop decarbonization initiatives tailored to the characteristics of the Hue region.



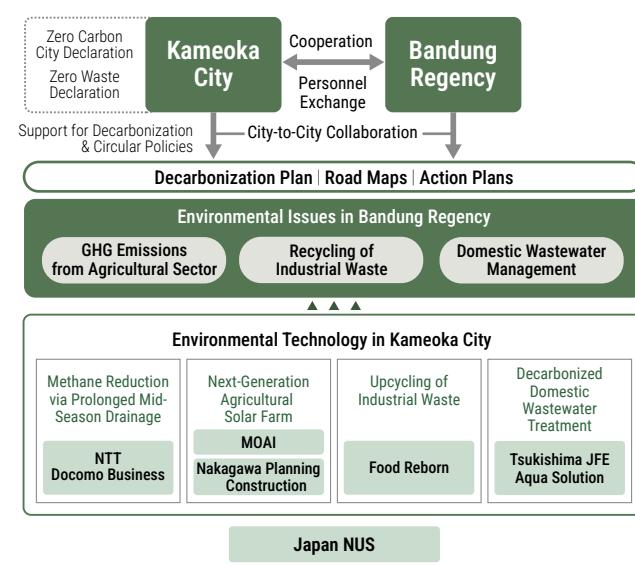
08 Bandung Regency (Indonesia)–Kameoka City

Main Proposer: JAPAN NUS Co., Ltd.



City-to-City Collaboration between Kameoka City and Bandung Regency to Promote a Decarbonized and Circular Society

This project promotes greenhouse gas reduction and resource circulation in Bandung Regency's key sectors, agriculture and textiles, through collaboration with companies actively engaged in environmental initiatives in Kameoka City. In the agricultural sector, efforts include reducing methane emissions from rice paddies and introducing next-generation solar farms. The project also explores upcycling business waste and supports the installation of low-carbon wastewater treatment systems in response to worsening water pollution in the Citarum River. In addition, the project facilitates policy dialogue and knowledge sharing based on Kameoka's environmental initiatives, aiming to build a flexible framework for implementing decarbonization technologies.



Project management / Support for Project Formation

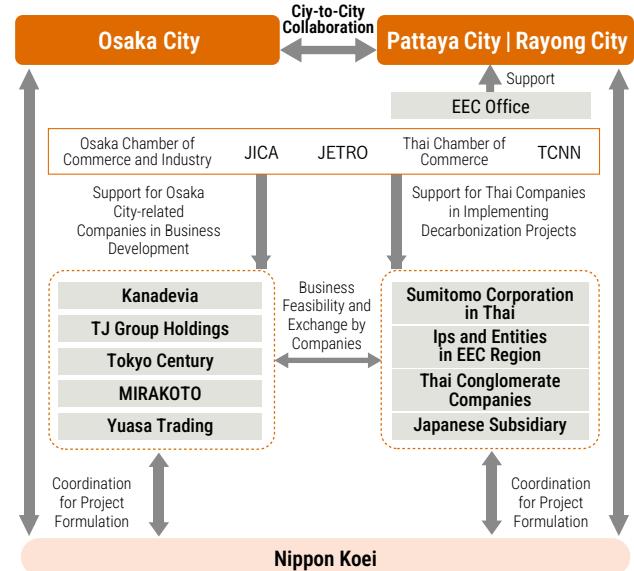
09 Pattaya City & Rayong City (Thailand) – Osaka City

Main Proposer: Nippon Koei Co., Ltd.



Support for Designing a Decarbonized Society in Pattaya City and Rayong City in FY2025

This project supports the realization of decarbonized societies in the cities of Pattaya and Rayong through city-to-city collaboration with Osaka City. Drawing on the experience of Osaka as one of Japan's leading tourism and industrial hubs, the project facilitates knowledge sharing and the replication of decarbonization initiatives, including those from Japan's decarbonization leading areas, tailored to the distinct characteristics of Pattaya as a tourism city and Rayong as an industrial hub. It also promotes the development of JCM projects through the introduction of technologies such as energy-saving systems (e.g., heat pumps and high-efficiency air conditioning), renewable energy (e.g., perovskite solar panels and waste-to-energy), and biomass solutions (e.g., biomass power generation and biochar).



10 Maharashtra State (India) – Osaka City

Main Proposer: Global Environment Centre Foundation (GEC)



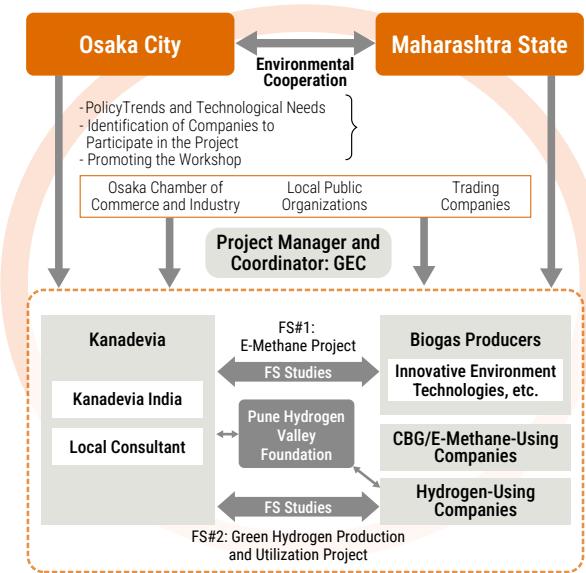
Maharashtra State – Osaka City Collaboration Project to Promote the Introduction of Decarbonization Technologies towards Achieving Carbon Neutrality

In 2020, Osaka City signed a Memorandum of Understanding on environmental cooperation with the Maharashtra Pollution Control Board and has since continued to engage in policy dialogues and seminars.

In 2024, Osaka visited the Maharashtra Energy Development Agency to further strengthen collaboration in the energy sector, including hydrogen.

This project supports the adoption of decarbonization technologies, such as green hydrogen production and methanation, by Indian companies, leveraging expertise from Osaka-based businesses. Specifically, feasibility studies (FS) on the production and use of e-methane and green hydrogen are being conducted. In addition, the project facilitates policy dialogue with relevant agencies and hosts workshops with local companies to build a foundation for future technology deployment.

Through these efforts, the project aims to contribute to the realization of a decarbonized society in Maharashtra.



11 Ba Ria-Vung Tau Province & Southern Vietnam (Vietnam) – Sakai City & Osaka City

Main Proposer: Nippon Koei Co., Ltd.



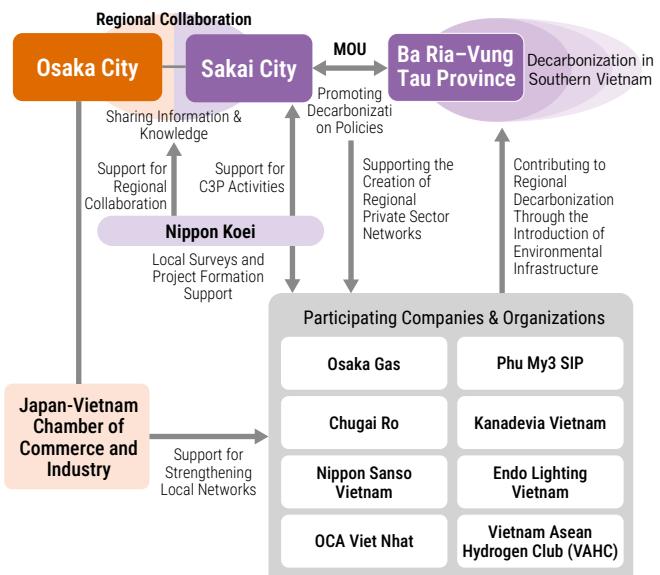
Regional Collaboration Project to Promote Carbon Neutrality in Southern Vietnam

This project is based on city-to-city collaboration between Sakai City and Ba Ria-Vung Tau Province (currently Ho Chi Minh City) and aims to promote carbon neutrality in southern Vietnam through a regional partnership approach involving both Sakai and Osaka cities.

In response to local needs, the project focuses on key areas such as decarbonization, the circular economy, environmental education, and smart cities, where Sakai and Osaka have strong expertise.

Activities include baseline studies, workshops, knowledge sharing, and institutional development support.

The project also explores a wide range of initiatives, including the introduction of renewable energy, installation of energy efficiency facilities, and utilization of hydrogen and biomass, with a view to developing JCM projects that can benefit from facility subsidies.



12 Da Nang City (Vietnam) – Sakai City

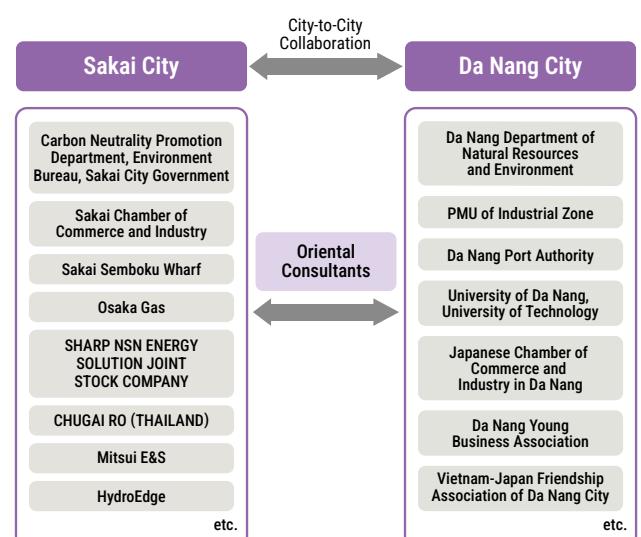
Main Proposer: Oriental Consultants Co., Ltd.



Zero Carbon Development in Da Nang City for the Realization of a Carbon Neutral Society

Da Nang City, the economic and tourism hub of Central Vietnam, is one of the country's leading regional centers. This project aims to support the city's efforts toward a decarbonized society by focusing on two key areas: its major infrastructure, particularly the port, and its industrial parks, where energy efficiency and renewable energy are being actively promoted.

In FY2025, the second year of this three-year project, activities will focus on identifying decarbonization technologies and products suitable for use in ports, factories, and warehouses, with a view to future JCM project development. It will also feature seminars and business matching activities for local companies, including members of the Da Nang Japan Chamber of Commerce and Industry. In addition, support will be provided for institutional development and planning, including sharing knowledge from Sakai City's environmental policies and assisting in the creation of a port decarbonization roadmap.



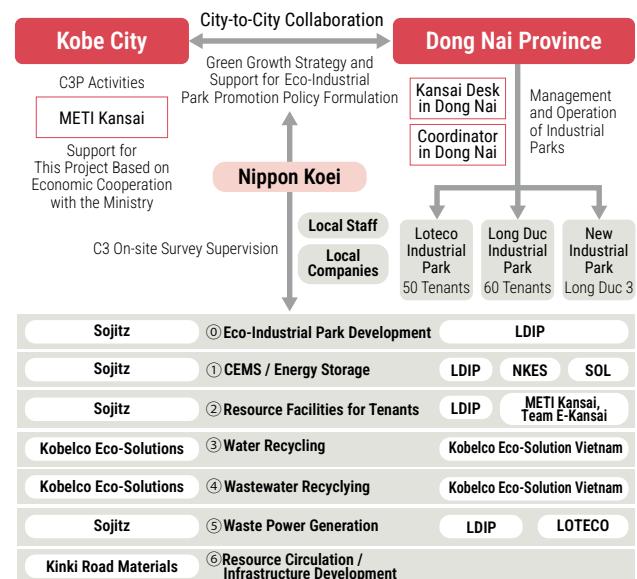
13 Dong Nai Province (Vietnam)–Kobe City

Main Proposer: Nippon Koei Co., Ltd.

Green-Smart Industrial Park Development Project through City-to-City Collaboration between Kobe City and Dong Nai Province, Vietnam

Kobe City is advancing a city-to-city collaboration with Dong Nai Province, in coordination with the Kinki Bureau of Economy and the province's existing economic cooperation framework. The project supports the development of sustainable industrial parks that balance industry and the environment, focusing on both an existing park and a new site jointly developed by Kobe-based companies Sojitz and Shinko Environment Solutions.

In FY2025, a seminar on eco-industrial parks will be held to deepen understanding. At the same time, efforts are underway to establish a system for introducing energy-saving equipment in factories to support provincial certification. The project also includes studies on introducing technologies in six areas: solar power and batteries, CEMS, equipment upgrades by tenant companies, waste-to-energy, wastewater treatment and recycling, and recycling of construction materials.



14 Hai Phong City (Vietnam) –Kobe City

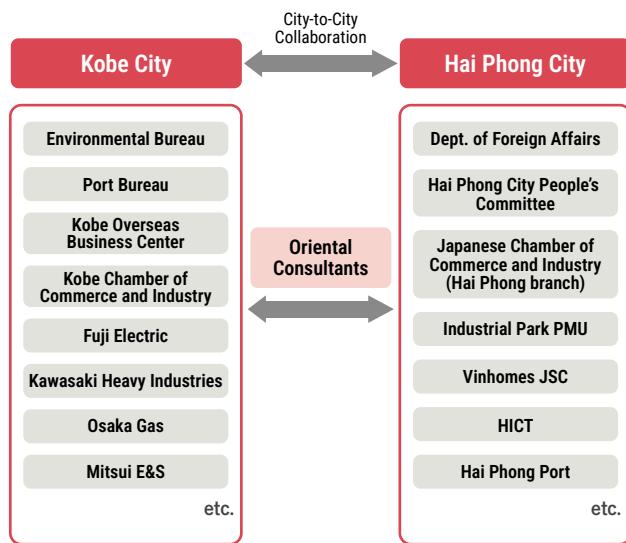
Main Proposer: Oriental Consultants Co., Ltd.

Zero Carbon Development in Hai Phong City for the Realization of a Carbon Neutral Society

This project supports decarbonization efforts in Hai Phong City, located in northern Vietnam, where energy efficiency and the introduction of renewable energy are already underway. The project focuses on industrial parks, large residential areas, and major port infrastructure within the city. In particular, it aims to contribute to the realization of a zero-carbon city by promoting the adoption of energy-efficient technologies and renewable energy in industrial parks with high greenhouse gas emissions.

In the first year of this three-year initiative, activities include energy-use surveys in the target areas, and knowledge-sharing sessions on environmental policies and next-generation energy utilization based on the experience of Kobe City.

Collaboration with other support programs is also being considered to ensure more effective and impactful implementation.



15 Pohnpei State (Micronesia) – Ama Town

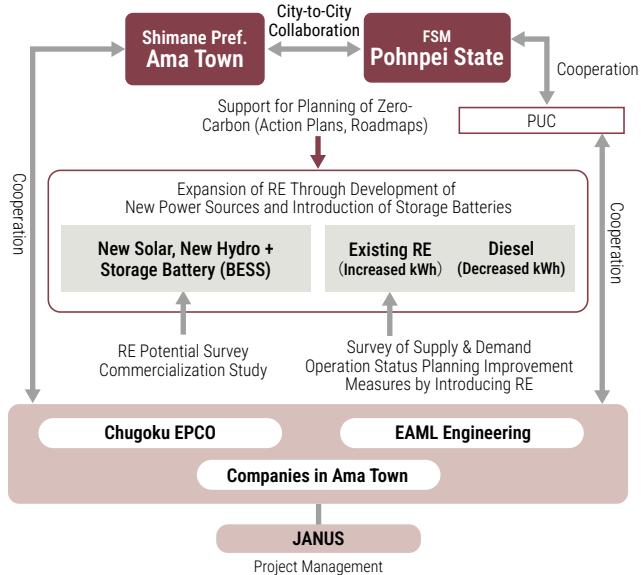
Main Proposer: JAPAN NUS Co., Ltd.



Public-Private Partnership Model Development Project towards the Realization of a Decarbonized Society in Ama Town and Pohnpei State

While the Federated States of Micronesia (FSM) has received support from a number of donors for the introduction of renewable energy, a significant portion of electricity generation still relies on diesel fuel. As such, there remains substantial room for improvement toward decarbonization. This project involves conducting on-site surveys for the installation of existing and new hydropower and solar power plants, as well as battery storage systems. It also explores improvement measures aimed at increasing the share of renewable energy and reducing diesel generation in areas where renewable systems have already been installed. These measures include the use of Energy Management Systems (EMS) and grid-forming inverters (GFM).

Through these efforts, the project aims to contribute to the broader promotion and expansion of renewable energy and energy efficiency throughout the FSM.



16 Makassar City (Indonesia) – Maniwa City

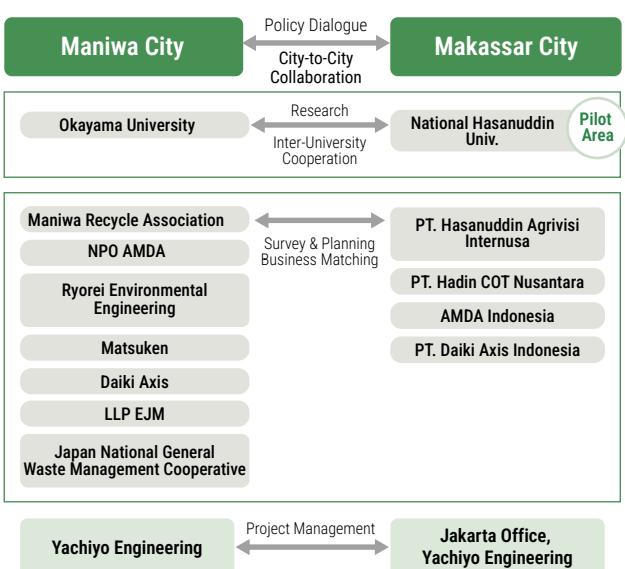
Main Proposer: Yachiyo Engineering Co., Ltd.



City-to-City Collaboration Project toward a Decarbonized Society between Makassar City and Maniwa City

Maniwa City in Okayama Prefecture formulated the "Biomass Town Maniwa Concept" in the early 2000s, and has since been a pioneer in the use of renewable energy, particularly woody biomass. Today, the city is working toward the realization of its "Zero Carbon City Maniwa Declaration" through initiatives such as biomass power generation and the recycling of organic waste resources.

Building on this experience, the project applies the "Maniwa Model" to Makassar City in Indonesia, supporting the development of a low-carbon society. In FY2025, planned activities include the examination of a circular system in Makassar, partial demonstration of organic waste treatment methods, and support for formulating a "Biomass Circulation Plan."



SAPPORO

YOKOHAMA | TOYAMA | SUZUKA | KAMEOKA

OSAKA | SAKAI | KOBE | AMA

MANIWA | EHIME | KITAKYUSHU | FUKUOKA

URASOE | OSAKI | Page 13

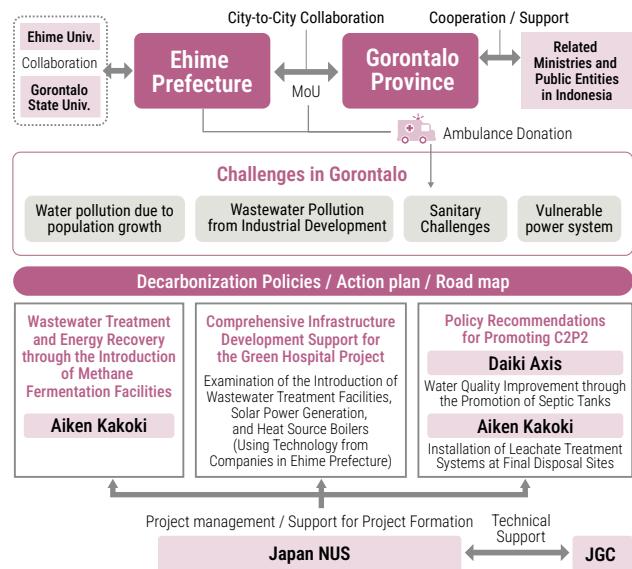
17 Gorontalo Province (Indonesia) – Ehime Prefecture

Main Proposer: JAPAN NUS Co., Ltd.

Support Project for the Achievement of the SDGs and Development of a Sustainable Decarbonized Society

Gorontalo Province is facing urgent needs to improve urban infrastructure due to rapid development in recent years. In 2023, the province signed an MoU on environmental cooperation with Ehime Prefecture, building on a long-standing partnership that began through academic exchange and has expanded into industry-government-academia collaboration.

This project promotes various decarbonization efforts and local infrastructure improvements, including a study on the potential introduction of methane fermentation systems for industrial wastewater, infrastructure development for hospitals with green initiatives, installation of septic tanks for domestic wastewater, and leachate treatment systems for final disposal sites. It also involves preparing proposals for Japanese government subsidies such as the JCM scheme, along with policy and institutional support to facilitate smooth implementation.

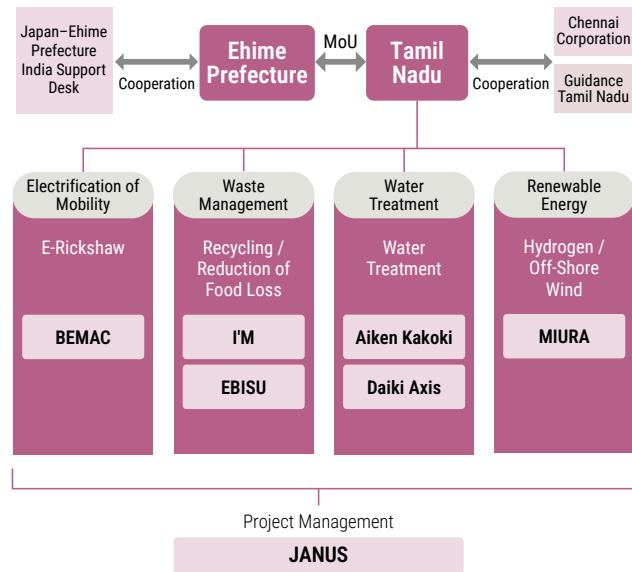


18 Tamil Nadu State (India) – Ehime Prefecture

Main Proposer: JAPAN NUS Co., Ltd.

City-to-City Collaboration Project to Create Environmental Businesses in Tamil Nadu in Partnership with Ehime Prefecture

In January 2024, Ehime Prefecture and the Government of Tamil Nadu signed an MoU on economic cooperation. Since then, they have been working to match environmental technologies from Ehime with local needs through business missions and surveys. Building on these efforts, this project aims to support decarbonization and address environmental issues in Tamil Nadu, including water pollution and waste management. Key activities include promoting electric auto-rickshaws, resource recovery from municipal waste, and treatment and reuse of industrial wastewater. The project also involves technical proposals, preliminary designs, stakeholder engagement, and policy support to facilitate implementation.



19 Hanoi City (Vietnam)–Fukuoka Prefecture

Main Proposer: Nippon Koei Co., Ltd.

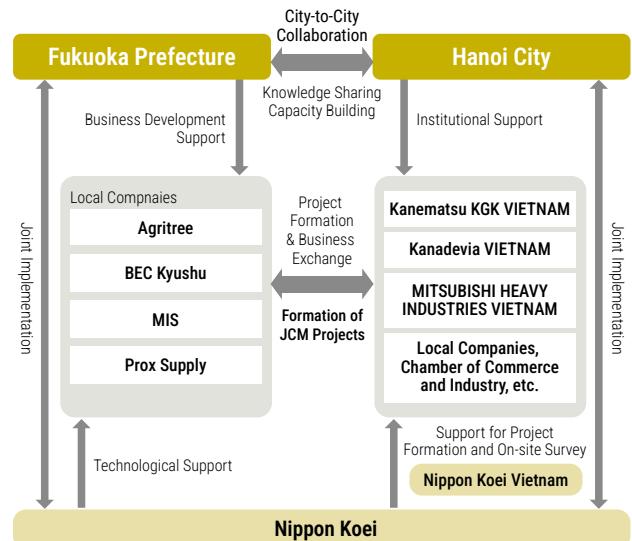


Promotion of Environmental Infrastructure Introduction through City-to-City Collaboration in Hanoi City

This project supports institutional development and project formulation to address energy and environmental challenges in Hanoi City. It explores the introduction of new environmental infrastructure, such as waste heat recovery technologies with high GHG reduction potential, as well as energy-saving and waste management solutions that are of particular interest to Hanoi.

Key activities include on-site surveys for introducing energy-efficient equipment and renewable energy, technical proposals for public facilities and factories, and support for developing waste segregation systems.

The project also promotes JCM-related project development through workshops, including business matching between participating companies and local partners, and participation in technology exhibitions hosted by Hanoi City.



20 Koror State (Palau)–Kitakyushu City

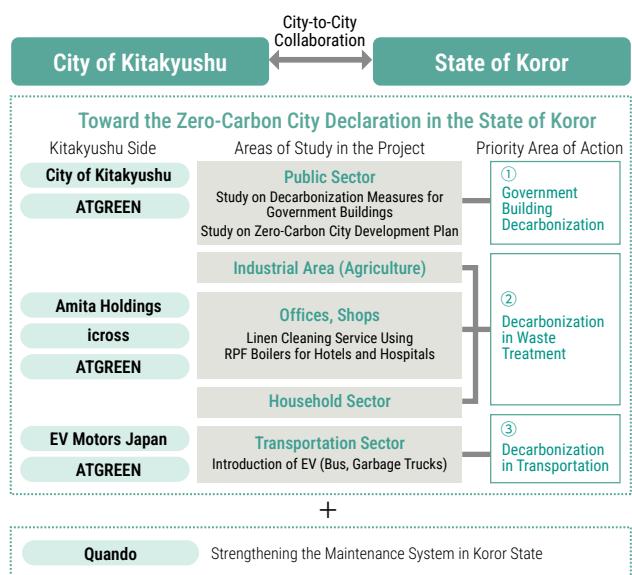
Main Proposer: ATGREEN Co., Ltd.



City-to-City Collaboration Project for Promoting Decarbonized Cities and Achieving Co-benefits in Koror State, Republic of Palau

This project, based on ongoing city-to-city collaboration between Kitakyushu City and the State of Koror, aims to develop a linen cleaning business model using RPF fuel produced from unused biomass, such as pruned branches, and plastic containers. Alongside assessing business feasibility and the decarbonization impact of this model, the project also explores the potential for circular energy use within the state.

In parallel, it continues support from the previous year for introducing renewable energy to public facilities, implementing energy-saving measures, and securing funding for EV buses and garbage trucks. The project also works with the state to propose emission reduction targets and concrete action plans, particularly in government-related sectors, to support its decarbonization efforts.



21 Banten Province & West Java Province (Indonesia) – Kitakyushu City

Main Proposer: Institute for Global Environmental Strategies (IGES)



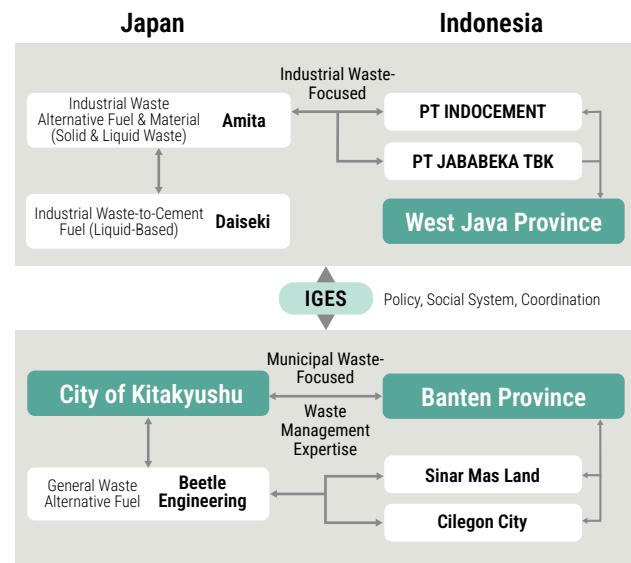
Waste Composition Survey at a Final Disposal Site

Feasibility Study for Decarbonizing the Cement Industry in Indonesia

The cement industry is said to be the third-largest consumer of energy and the second-largest emitter of CO₂ globally.

This project explores decarbonization opportunities in the cement sector in Banten and West Java Provinces by examining CO₂ reduction across the entire supply chain.

Key activities include converting industrial and municipal waste into alternative fuels and raw materials for cement production, improving waste management through city-to-city collaboration, and introducing energy-saving technologies at cement plants. The project aims to deliver multiple co-benefits to the target cities through these efforts.



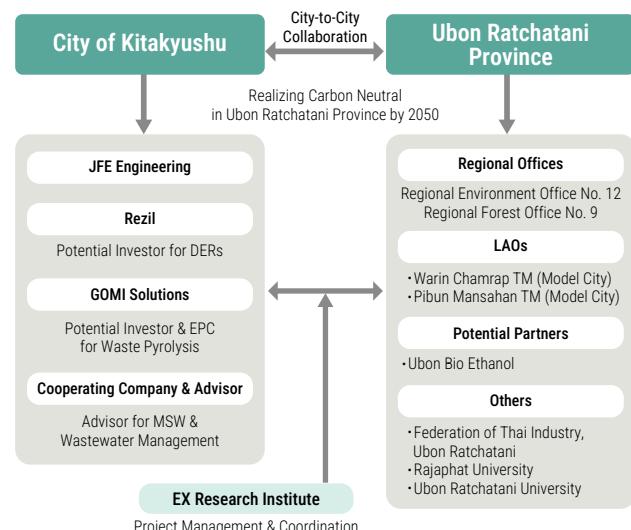
22 Ubon Ratchathani Province, Warin Chamrap Town Municipality & Pibun Mangsahan Town Municipality (Thailand) – Kitakyushu City

Main Proposer: EX Research Institute Limited



JCM Project Development Study for the Realization of Carbon Neutrality in Ubon Ratchathani Province, Thailand

This project focuses primarily on Ubon Ratchathani Province and Pibun Mangsahan Town Municipality in Thailand, supporting the formulation of decarbonization plans tailored to regional characteristics. Through the implementation of decarbonization projects outlined in these plans, the initiative aims to help the province and the municipality achieve carbon neutrality by 2050. Specific activities include promoting the commercialization of waste-to-energy incineration projects and renewable energy generation projects within the province's municipal waste management zones. Additionally, by expanding these decarbonization models to other cities and regions within the province, the project aims to create a "decarbonization domino effect" throughout Ubon Ratchathani Province.



23 Telangana State, Visakapatnam City, Andhra Pradesh State (India)—Kitakyushu City

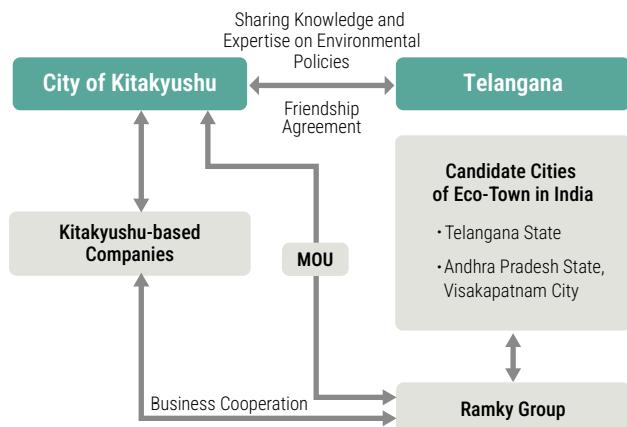
Main Proposer: EX Research Institute Limited



Promotion of Decarbonized, Recycling-Oriented Eco-Towns in India

In September 2023, the City of Kitakyushu signed a cooperation agreement with the Ramky Group, a company engaged in waste management projects across India, to promote international environmental business collaboration.

This project conducts a feasibility study for the development of a decarbonized and circular Eco-Town in Telangana State and Visakhapatnam City in Andhra Pradesh, both identified as candidate sites for such initiatives in India. The study leverages technologies from Kitakyushu-based companies and the city's expertise in public environmental awareness to promote waste-to-resource solutions, the use of renewable energy, and the introduction of energy-efficient facilities. In fiscal year 2025, the project focuses on assessing the use of solid and liquid waste, as well as the potential introduction of a thermal and power supply system using municipal waste as feedstock.



24 Gianyar Regency (Indonesia)—Osaki Town

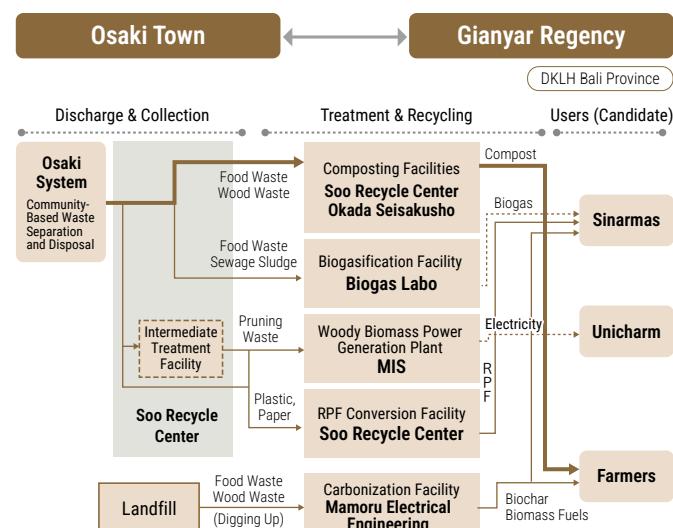
Main Proposer: Soo Recycle Center Co., Ltd.



Project to Promote the Establishment of a Decarbonized, Recycling-Oriented Society through the Osaki System in Gianyar, Bali Province, Indonesia

Osaki Town has made efforts to build a resource-circulating waste management system that does not rely on incinerators by promoting waste recycling. The town's recycling rate exceeds 80%, and more recently, in pursuit of achieving its "Zero Carbon Promotion Declaration," new initiatives are being considered, including wood biomass power generation, biogas production, and the conversion of waste into RPF (refuse-derived fuel), in addition to the recycling of organic waste.

This project aims to expand the "Osaki System," developed in Osaki Town, to Gianyar Regency in Bali Province, Indonesia, with the goal of improving waste management and reducing GHG emissions in the regency. Specifically, the project includes surveys on the potential use of organic waste, inorganic waste, and sewage sludge, as well as studies to realize resource circulation projects utilizing these materials.



Other Japanese Partners: Kanseiren, National Institute for Environmental Studies Japan, Mitsubishi Research & Consulting

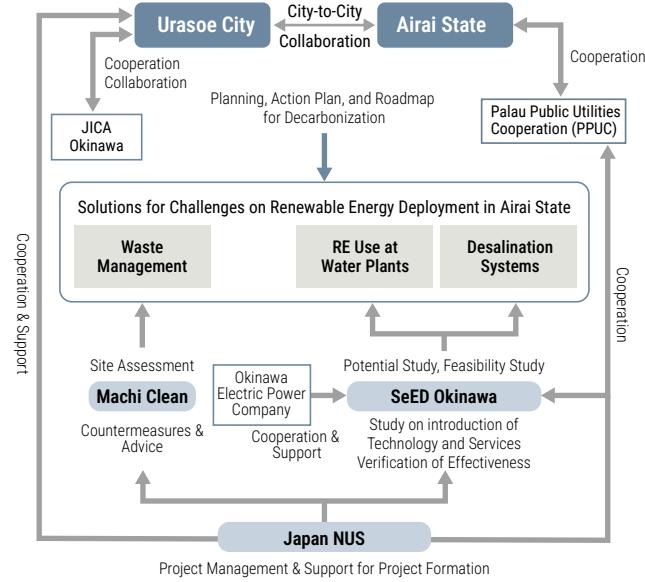
25 Airai State (Palau)–Urasoe City

Main Proposer: JAPAN NUS Co., Ltd.



Support Project for Building a Sustainable and Environmentally Friendly City through City-to-City Collaboration between Urasoe City and Airai State

In Palau, the promotion of renewable energy has become a pressing issue in achieving the national greenhouse gas reduction targets. However, challenges such as grid instability and limited control technologies have slowed progress. This project conducts preliminary studies on the introduction of renewable energy technologies for water infrastructure, including water purification plants and seawater desalination systems, with the aim of also reducing water utility costs. In addition, based on the memorandum of understanding signed between Urasoe City and Airai State, the project implements a pilot initiative to strengthen recycling systems for waste management. It also follows up on the Phase 1 efforts to introduce solar power through a third-party ownership (TPO) model, aiming to establish a successful example that can be expanded not only in Airai State but across Palau.



C3P cities FY2013–2025

Maldives	
Malé City	Toyama City
India	
Bangalore City	Yokohama City
Telangana State	Kitakyushu City *
Maharashtra State	Osaka City *
Tamil Nadu State	Ehime Prefecture *
Myanmar	
Yangon Region	Kitakyushu City
Yangon City	Kawasaki City
Ayeyarwady Region	Fukushima City
Sagaing Region	Fukushima City
Mandalay City	Kitakyushu City
Yangon City	Fukuoka City
Mongolia	
Ulaanbaatar City	Sapporo City/ Hokkaido Government
Ulaanbaatar City/ Tuv aimag Prefecture	Sapporo City
Ulaanbaatar City	Sapporo City *
Lao PDR	
Vientiane City	Kyoto City
Palau	
Koror State	Kitakyushu City *
Airai State	Urasoe City *

Vietnam	
Hai Phong City	Kitakyushu City
Da Nang City	Yokohama City
Ho Chi Minh City/ Thu Duc City	Osaka City
Kien Giang Province	Kobe City
Can Tho City	Hiroshima Prefecture
Soc Trang Province	Hiroshima Prefecture
Hanoi City	Fukuoka Prefecture *
Quang Ninh Province	Shiga Prefecture
Ba Ria-Vung Tau Province/ Southern Vietnam Area	Sakai City/ Osaka City *
Ben Tre Province	Ehime Prefecture
Dong Nai Province	Kobe City *
Thuan Hoa District/ Hue City	Shizuoka City *
Da Nang City	Sakai City *
Hai Phong City	Kobe City *
Micronesia	
Pohnpei State	Ama Town *



Partnering 25 Japanese subnational governments with 67 subnational governments in 14 countries

Thailand	
Bangkok Metropolitan Administration	Yokohama City *
Rayong Prefecture	Kitakyushu City
Chiang Mai Prefecture	Kitakyushu City
Eastern Economic Corridor (EEC)	Osaka City
Ubon Ratchathani Province/Warin Chamrap Town Municipality/ Pibun Mangshana Town Municipality	Kitakyushu City *
Pattaya City*Rayong City	Osaka City *
Cambodia	
Phnom Penh Capital Administration	Kitakyushu City
Siem Reap Province	Kanagawa Prefecture
Malaysia	
Iskandar Development Area	Kitakyushu City
Iskandar Development Area · Kota Kinabalu City	Toyama City
Penang State	Kawasaki City
Kuala Lumpur City	Tokyo/ Saitama City
Iskandar Development Area	Toyama City

Indonesia	
Denpasar City	Clean Authority of Tokyo
Surabaya City	Kitakyushu City
Batam City	Yokohama City
Semarang City**	Toyama City
Bandung City	Kawasaki City
Special Capital Territory of Jakarta	Kawasaki City
Bali Province**	Toyama City
Rokan Hulu Prefecture, Riau Province / Pekanbaru City	Kawasaki City
Gorontalo Province	Ehime Prefecture *
Banten Province/ West Java Province	Kitakyushu City *
Makassar City	Maniwa City *
Makassar City	Yokohama City *
Gianyar Regency	Osaki Town *
Badung Regency	Toyama City *
Bandung Regency	Kameoka City *

**Joint project for Bali and Semarang

Philippines	
Quezon City	Osaka City
Davao City	Kitakyushu City
Metro Cebu Area (Cebu City, Mandaue City, Danao City)	Yokohama City *
Renca Municipality, Santiago City	Toyama City *

*Ongoing projects in FY2025

Dissemination of Local Decarbonization Initiatives and Policies to the World

COP30 Japan Pavilion Seminar

12 November 2025

Clean City Partnership Program (C2P2) Seminar

Organiser: Ministry of the Environment, Government of Japan (MOEJ);
Co-Organisers: Japan International Cooperation Agency (JICA),
Institute for Global Environmental Strategies (IGES)

In February 2023, MOEJ together with JICA, launched the Clean Cities Partnership Program (C2P2) to address today's challenges faced by cities around the world from multiple perspectives. In this seminar, MOEJ and JICA presented their initiatives, and then Japanese local governments, their partner cities and private companies shared the collaboration project between Toyama and Renca (Chile) as well as the one between Osaka and Maharashtra (India) as good practices of C2P2.



▲ Seminar speakers



▲ Claudio Castro Mayor of Renca, Chile



▲ FUJII Hirohisa Mayor of Toyama, Japan



▲ YOKOYAMA Hideyuki
Mayor of Osaka, Japan
◀ KUWAHARA Michi
President and CEO,
Kanadevia Corporation

Seminar on City-to-City Collaboration for Zero Carbon Society 2025 – Contributing to Local Decarbonisation through Technology & International Solidarity –

23–24 January 2025

Organiser: Ministry of the Environment, Government of Japan (MOEJ)
Co-Organiser: Institute for Global Environmental Strategies (IGES)

The MOEJ is holding the seminar to bring together stakeholders in the city-to-city collaboration program and others working on regional decarbonization both domestically and internationally. It aims to heighten momentum for regional decarbonization and trigger a domino effect of decarbonization spreading across Japan and the world.

This time, the seminar focused on collaborative projects involving local authorities from the Kansai region, with exemplary practices being shared by local authorities and private companies both domestically and internationally.



▲ Public seminar



▲ Participants engaging in peer learning



Participants of the FY2024 City-to-City
Collaboration Program

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