City to City Collaboration for Zero-Carbon Society in FY2024

番号	Main Proposer	City in Japan	Area/City	Country	Project Name	Field	Project Description
1	Nippon Koei Co., Ltd.	Kobe City	Dong Nai Province	Vietnam	Green – Smart Industrial Park Development Project by City-to-City Collaboration between Kobe City and Dong Nai Province, Vietnam	*Energy Saving *Renewable Energy *Waste Management *Institutional Building Support *DX *Smart City Development *Others (Industrial Park)	Cooperating with the economic patnership scheme of the METI KANSAI and Dong Nai Province, we will newly build and promote City-to-City Collaboration Programme between Kobe City and Dong Nai Province. And we will carried out a green smart industrial park (IP) formation project for existing and new IP invested by Kobe-related companies, Sojitz and Shinko Environmental Solutions. We will embody the urban vision "Green Growth Strategy" in which IP development, living, and environmental infrastructure coexist, and support to formulate the "Eco-industrial Park Promotion Policy". We aim to introduce technology with three themes: "Energy and gas," "Sewage treatment," and "Waste treatment and power generation." Dong Nai Province will sign a MOC during thier visit to Japan in the summer in 2024.
2	EX Research Institute Ltd.	City of Kitakyushu	Hyderabad City, etc.	India	Promotion of Decarboni s ed and Recycling Oriented Eco Towns in India	•Energy Saving •Renewable Energy •Waste Management •Institutional Building Support •DX	The City of Kitakyushu and Kitakyushu based companies will conduct feasibility studies in Hyderabad City and Visakhapatnam City in collaboration with Ramky Group, which has signed MOU for collaboration with the City of Kitakyushu and operates waste treatment businesses throughout India, with the aim of developing decarbonized and recycling-oriented Eco-Towns in India. The specific activities are as follows. (1)Survey on the possibility of using solid waste and liquid waste (2) Investigation of the possibility of introducing high-efficiency treatment equipment for medical waste (3) Investigation of the possibility of introducing coke dry fire extinguishing equipment
3	JAPAN NUS CO., LTD.	Ehime Prefecture	Ben Tre Province	Vietnam	City-to-City Collaboration for realizing a decarbonized and circular society by Ehime Prefecture and Ben Tre Province	•Energy Saving •Renewable Energy •Waste Management •Institutional Building Support	This fiscal year's project focuses on: 1. Decarbonizing Industrial Parks: Studying to assess the feasibility of introducing CNG supply systems and boilers. Implementing a solar power generation system with storage batteries and EMS. 2. Addressing Waste Disposal: Surveying in Ben Tre Province to explore the introduction of RPF for businesses using waste as fuel. 3. Promoting Environmentally Friendly Aquaculture: Conducting a survey on sludge treatment in aquaculture to propose solutions, including fuel conversion and adopting relevant technologies. Additionally, Ehime Prefecture will collaborate by sharing its decarbonization expertise with the Ben Tre Government, offering policy recommendations to enhance the success of these sustainability initiatives.
4	Institute for Global Environmental Strategies (IGES)	City of Kitakyushu	Cilegon City, West Java Province	Indonesia	Feasibility Study on the Decarbonisation of the Cement Industry in Indonesia	•Energy Saving •Waste Management •Institutional Building Support	This project will investigate the feasibility of decarbonising the cement industry through city—to—city collaboration and private sector partnerships across two provinces in Indonesia, Banten and West Java, through CO2 emission reductions with a view to the entire supply chain. Specifically, it aims to provide various co—benefits to the target cities by: (1) converting industrial waste into alternative material and fuel for cement plants, (2) converting general waste into alternative fuel, (3) improving waste management through city—to—city collaboration, (4) introducing energy—saving technologies to cement plants, and (5) supporting institutional development for promoting the use of alternative material and fuel for cement plants.
5	Overseas Environmental Cooperation Center, Japan (OECC)	City of Yokohama	Bangkok	Thailand	Project for accelerating GHG net zero emission under the Bangkok Master Plan on Climate Change	*Energy Saving *Renewable Energy *Waste Management *Transportation *Institutional Building Support *Others (Fluorocarbons Recovery and Destruction)	Bangkok, capital of Thailand, will play a significant role towards realizing carbon neutrality by 2050 in Thailand. Bangkok is working on climate change with a long-term vision to reach net zero by 2050. This project will promote implementation of the Bangkok Climate Change Master Plan through support at policy level and enhancement of public-private collaboration with active participation of private sector based on collaborative relation between City of Yokohama and Bangkok Metropolitan Administration (BMA). Main activities of the project consist of (1) Formulatiing and organizing public-private partnership platform. (2) Implementing Energy Action Plan, and (3) Developing mitigation project including JCM project.

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6	KANSO TECHNOS CO., LTD.	Shiga Prefecture	Quang Ninh Province/Hai Phong City	Vietnam	City-to-City Collaboration between Quang Ninh Province, Hai Phong City and Shiga Prefecture to Support the Realization of an Environmentally Conscious Society	*Energy Saving *Renewable Energy *Waste Management *Institutional Building Support *Others (Carbonization burial (sludge))	This project will provide support to Quang Ninh Province and Hai Phong City to realize an environmentally friendly society (decarbonization and water environment conservation). The decarbonization project will be implemented in key locations in Quang Ninh Province and Hai Phong City's growth industries of industry and tourism. In urban areas, FS studies will be conducted for the introduction of solar power generation, waste heat chillers, and high-efficiency boilers in industrial parks and hotels. In non-urban areas, FS studies will be conducted for the introduction of johkasos, EV waste collection ships, and sludge gas power generation, as well as the application of biochar to agricultural lands. In addition, Shiga Prefecture will support the establishment of systems in Quang Ninh Province and Hai Phong City by introducing Shiga Prefecture's decarbonization measures and exchanging opinions.
7	Nippon Koei Co., Ltd	Sakai City	Ba Ria-Vung Tau province	Vietnam	Promotion of Zero-Carbon Smart City through City-to-City Collaboration between Ba Ria- Vung Tau Province and Sakai City	•Energy Saving •Renewable Energy •Waste Management •Institutional Building Support •Hydrogen Technology •Smart City Development	The project promotes the development of a sustainable urban environment and smart city in Ba Ria-Vung Tau(BRVT) Province. Basic study and workshop will be conducted in the three main areas: decarbonization, circular economy, and smart city (including smart industrial parks), where there are needs in BRVTProvince and where Sakai City has strengths. In addition to sharing knowledge in these fields, conducting related surveys and supporting for institutional building, the project considers developing JCM model projects in a wide range of sectors, such as renewable energy/energy saving, waste-to-energy, low/zero-carbon combustion(including hydrogen combustion) technologies and biomass energy utilization, and promotes comprehensive decarbonization of the urban environment in BRVTProvince.
8	JAPAN NUS CO., LTD.	Urasoe City	Airai State	Palau	Support Project for Developing a Sustainable Eco-friendly City: An Intercity Collaboration between Urasoe City and Airai State	*Energy Saving *Renewable Energy *Waste Management *Institutional Building Support	The spread of renewable energy is essential to achieving the Palau government's NDC goals, but its introduction has reached a plateau due to the fragility of the power system and lack of control technology. In this project, we will build a model project targeting independent grids, promote it as a good practice of optimal control of renewable energy, and aim to popularize the model. In addition, in order to diversify renewable energy, we will conduct a feasibility study for the introduction of tiltable wind power generation technology. Furthermore, we will build a model project regarding energy conservation. In addition, we will provide optimization technical support using integrated control technology to comprehensively manage and operate renewable energy.
9	JAPAN NUS CO., LTD.	Ehime Prefecture	Gorontalo Province	Indonesia	Support project for the achievement of SDGs and developing a sustainable decarbonized society: City-to-City Collaboration between Ehime Prefecture and Gorontalo Province	•Energy Saving •Renewable Energy •Waste Management •Institutional Building Support •DX •Smart City Development	Gorontalo province has requested Ehime Prefecture's support in deriving solutions to the environmental and social challenges, based on the formulation of a decarbonization policy. In this city to city collaboration project, Ehime Prefecture, local companies with decarbonization technologies and Ehime University will cooperate to support the formulation of a decarbonization policy and plan for Gorontalo Province, as well as to make policy proposals on FS for the dissemination of methane fermentation facilities, comprehensive infrastructure development for the Green Hospital Plan, and the introduction of septic tanks for C2P2 promotion. In addition, propose and develop policies and systems to facilitate the selection of JCM candidate projects and project implementation.
10	Nippon Koei Co., Ltd.	Fukuoka Prefecture	Hanoi City	Vietnam	Promotion of introducing environmental infrastructure through City-to-City collaboration in Hanoi City	•Energy Saving •Renewable Energy •Waste Management •Institutional Building Support •Hydrogen Technology •DX	This City-to-City collaboration project aims to improve the environment and decarbonization in Hanoi City by introducing the advanced environmental technologies(including DX/hydrogen) from Japanese companies. 1) Support for Hanoi's climate change countermeasures and planning, provision of technical information on waste separation and proper disposal. 2) Conducting a field survey to formulate JCM model projects, support including business plans for each technology, trial calculation of GHG emission reductions, etc. 3) Planning and implementation of technical workshop and individual consultations for participant companies if necessary. 4) Institution building support in Climate change/waste management sectors. 5) Support for human resource development such as lectures and technical support.

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11	Nippon Koei Co.,Ltd.	Toyama City	Renca, Santiago	Chile	Project to Promote Decarbonization and SDGs Dominoes through Participation in the Race to Zero by Renca, Santiago	•Energy Saving •Renewable Energy •Waste Management •Transportation •Institutional Building Support •Hydrogen Technology •DX •Others (CCU)	To support achievement of Race to Zero in Renca, the Project will develop a Race to Zero contribution plan and increase GHG reduction activities by expanding the adopted JCM model project as well as conduct a FS and demonstration of advanced initiatives related to biogas, hydrogen and other superior decarbonization technologies. To implement these activities, the Project will cooperate with other countries that support Renca to conduct effective activities without duplication. Also, specific actions will be implemented utilizing Toyama City's knowledge and experiences in decarbonization and SDGs initiatives, and the SDGs assessment tool, TSUMUGI@ by Nippon Koei's DX technologies. Then, with Renca's leadership, this project will promote the decarbonization dominoes and SDGs in Chile.
12	ATGREEN CO., LTD.	City of Kitakyushu	Koror State	Palau	City to City collaboration project for the promotion of decarbonised cities and realisation of co-benefits in Koror State, Republic of Palau	•Energy Saving •Renewable Energy •Waste Management •Transportation •Institutional Building Support •DX	This survey project will be implemented on the basis of ongoing inter-city cooperation with the State of Koror. The project will include: 1) a survey on the use of biomass heat supply using prunings and other materials generated at resort hotels and public institutions as fuel (abundance, amount available, heat demand, biomass feedstock collection model); 2) a study on the feasibility of introducing renewable energy and energy conservation at public facilities in Koror; and 3) a follow-up to obtain buddget for the introduction of EV vehicles(buses and waste collection and transportation), which were the subject of a survey conducted in previous years. Based on the results, the project will study and develop emission reduction targets and plans for decarbonization in Koror State.
13	Institute for Global Environmental Strategies (IGES)	Tokyo Metropolitan Government, Saitama City	Kuala Lumpur City	Malaysia	Developing Institutional Framework Towards Kuala Lumpur Zero Carbon City and Neighbourhood in Collaboration with Tokyo Metropolitan Government and Saitama City	•Energy Saving •Renewable Energy •Institutional Building Support •Smart City Development	Project proponents, together with experts from local research institutions, will conduct field surveys, information sharing, and studies on the possibility of developing Japanese-style wooden, highly insulated, airtight housing in Malaysia and ASEAN, . The project hopes to contribute to the development of a technical and legislative foundation for the introduction of this technology in KL City. In addition, the High-level Seminar, which is becoming a regular event, will be held in KL City or Japan again to create opportunities for exchange among top executives of the three municipalities, and promoting exchanges between government officials and private-sector business of national and city-levels.
14	Nippon Koei Co.,Ltd.	Kawasaki City	Pekanbaru City	Indonesia	Project to Promote 2050 Zero Carbon City in Riau Province Region through Cooperation with Pekanbaru City	•Energy Saving •Renewable Energy •Waste Management •Transportation •Institutional Building Support	This project aims to realize decarbonization dominos in the Riau Province region, with the formation of 2050 Zero Carbon City in Pucanbaru city, under City-to-City collabolation between Kawasaki city and Pekanbaru city. To achieve the goal, we will support Pekanbaru City in developing a 2050 Zero Carbon City Roadmap and hold WS for other municipalities in Riau aiming for realization of decarbonization dominos in the region. We conduct FSs, including field surveys, for the formation of JCM projects using waste derived from the palm oil industry, a core industry in the region, in cooperation with companies that are environmentally and human rights oriented. Also, targeting industrial estates in Riau, we will propose the installation of PV + EMS and LEDs.
15	JAPAN NUS CO., Ltd.	Toyama City	Bali	Indonesia	City-to-city collaboration project for realize decarbonization society by Toyama City and Bali province	•Renewable Energy •Waste Management •Transportation •Institutional Building Support •Hydrogen Technology	In this C2C project, we will cooperate with Toyama City and companies in the city that has renewable energy and hydrogen utilization technology and experience. Conduct FS are ①Grid stabilaization by Hydrogen technologies, ②FCV and EV mobility utilization. Regarding ①, target sites for private and public facilities have been identified and will move on to detailed design prosess. Among②, regarding EVs, a business model has been constructed that utilizes small hydroelectric power generation facilities which Toyama City provided support for introduced by JICA scheme. To ensure the smooth implementation of these projects, Toyama City will continue to propose and support the development of policies that are essential for project implementation.

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16	Oriental Consultants Co Ltd.	Osaka City	Quezon City	The Philippines	Zero Carbon Development in Quezon City for the Realization of Carbon Neutral Society	•Energy Saving •Renewable Energy	This project will contribute to realizing the C40 city of Quezon's goal of becoming carbon neutral by 2050, based on Quezon City's Enhanced Local Climate Change Action Plan 2021–2050 and the Climate Action Implementation Plan. Through the formulation of JCM projects by Japanese companies in the Quezon area to promote renewable energy and EMS to the building sector, which is a major source of GHG emissions, the roadmap to JCM project implementation will be demonstrated. A model JCM subsidy project will be formulated to introduce renewable energy and energy—saving infrastructure to an industrial park owned by PEZA and mayoral-level policy dialogue and site visits will be organized with the goal of promoting the adoption of eco-friendly infrastructure.
17	Nippon Koei Co.,Ltd.	Osaka City	Eastern Economic Corridor (EEC)	Thailand	Support for Designing Decarbonization Society with BCG Economy in EEC, Thailand	•Energy Saving •Renewable Energy •Waste Management •Transportation •Institutional Building Support •DX •Smart City Development	Based on the MoU signed between Osaka City and EEC in February 2022, this City-to-City collaboration project will provide institutional framework support and JCM Project Formation support to help realize the BCG (Bio, Circular and Green) economy and Net Zero as set forth by EEC. This year, the third year of Phase 2, the project aims to decarbonize the industrial sector mainly in EEC, utilizing the Japan-Thailand business network, including the Osaka Chamber of Commerce and Industry and the Thai Chamber of Commerce and Industry. Specifically, the project will examine the introduction of high-efficiency equipment based on energy efficiency assessments of factories and waste to energy projects, and provide suppport for JCM project formation and carbon credit generation.
18	Nippon Koei Co.,Ltd.	Osaka City	Ho Chi Minh City	Vietnam	Promotion of Carbon Neutrality based on Climate Change Policies in Ho Chi Minh City and Thu Duc City	•Energy Saving •Renewable Energy •Waste Management •Institutional Building Support •DX •Smart City Development	This project will promote carbon neutrality in HCMC and Thu Duc City based on the "MOU on the formulation of zero/low-carbon City in HCMC" between Osaka City and HCMC. Based on the MOU, Osaka City will strengthen the support for policy formulation and efforts to implement the "HCMC Climate Change Action Plan (CCAP)" through policy dialogue and workshops. In addition, based on the achievements of the "JCM Model Projects and Eco Leasing Scheme" formed through past activities, this project will promote the decarbonization dominos in neighboring cities by the expansion of the energy-saving and renewable energy technologies of Japanese companies. Furthermore, feasibility study will be continued in waste management and DX to identify projects and study new business models.