



City-to-City Collaboration Program

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Contributing to address climate change through overseas development of environmental infrastructure



**Early and substantial
global GHG emission
reductions**

=

**Opportunities for superior
Japanese technology to
capture overseas markets**

(In particular, Asia's CO₂ emissions (energy origin) are approx. 60% of the world's total.)

**Creation of markets
where decarbonization
is valued**

**Expansion of
decarbonization
projects**

Contribute to GHG emission reductions and sustainable development in partner countries and around the world

City-to-City Collaboration Program



- Support **city-to-city collaboration between cities in Japan and abroad** to promote **sharing of knowledge and experience** for decarbonization in partnership with private solution providers.

Cooperation activities

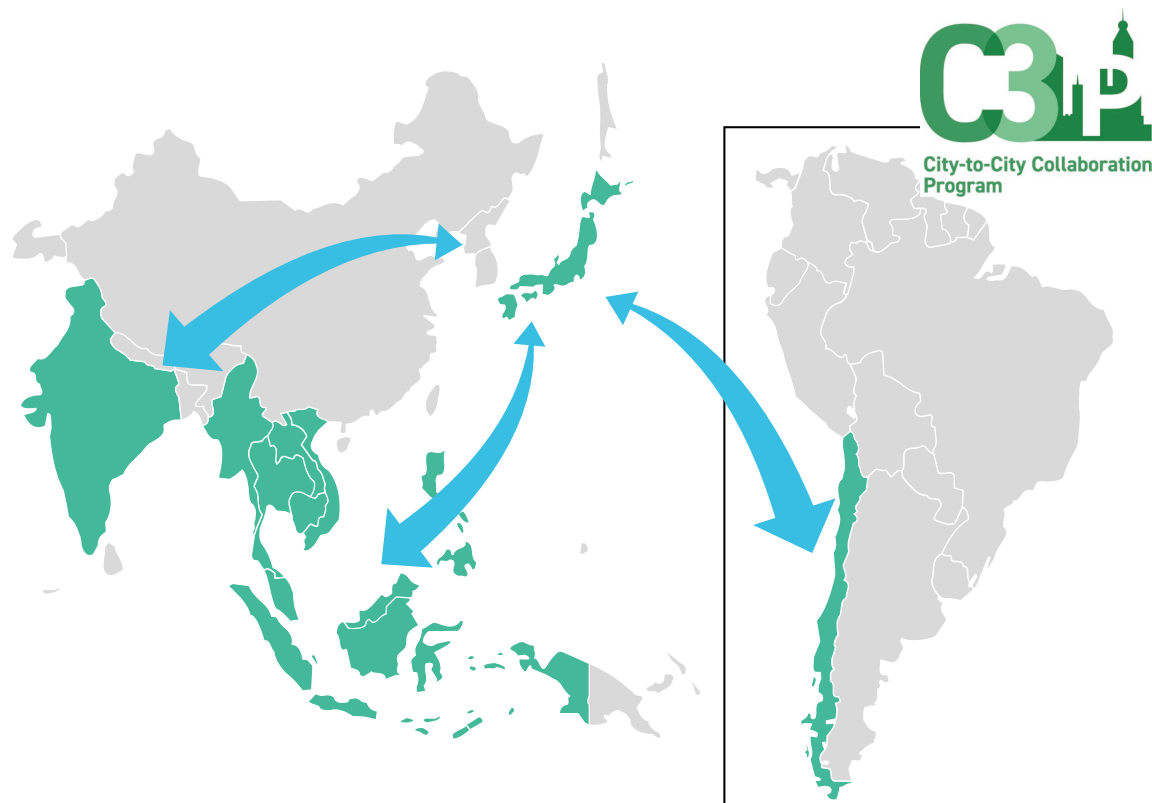
- Co-create low-carbon projects
- Support developing policies and plans to promote climate actions
- Build capacity for government staff
- Raise awareness of stakeholders



Expected outcomes

- Deliver net-zero commitment
- Deploy decarbonized technologies/infrastructure
- Develop action plans and regulations

Partnering **23** Japanese subnational gov'ts with **56** subnational gov'ts in **13** countries



City-to-City Collaboration Program(FY2013~2024)



Partnering **23** Japanese subnational governments with **56** subnational governments in **13** countries

Maldives

Malé City Toyama City

India

Bangalore City Yokohama City

Gov. of Telangana Kitakyushu City

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

Vieng chan City Kyoto City

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

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 Mangsahan Town Municipality Kitakyushu City

Cambodia

Phnom Penh Capital Administration Kitakyushu City

Siem Reap Province Kanagawa Prefecture

Vietnam

Hai Phong City Kitakyushu City

Da Nang City Yokohama City

Ho Chi Minh City • Thu Duc City Osaka City

Kiên 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 Sakai City

Ben Tre Province Ehime Prefecture

Dong Nai Province Kobe City

Hue City Shizuoka City

Da Nang City Sakai 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

West Java Province Kitakyushu City

Makassar City Maniwa City

Makassar City Yokohama City

Gianyar Regency Osaka town

* Joint project for Bali and Semarang

Philippines

Quezon City Osaka City

Davao City Kitakyushu City

Palau

Koror Province Kitakyushu City

Airai Province Urasoe City

Chile

Renca Municipality, Santiago City, Toyama City

Red: Ongoing projects in FY2024

Examples: City-to-City Collaboration Program



Ho Chi Minh City - Osaka City

- ◆ **The Team OSAKA network of private solution providers** and teamed up with **HCM local companies.**

- ◆ As a result, **10 JCM projects** formulated by 2024

Ex.) High Efficiency Equipment (Chiller / LED Lighting, Air-conditioning System to Hotel, etc.)



High Efficiency Chiller
(DAIKIN INDUSTRIES, LTD.)



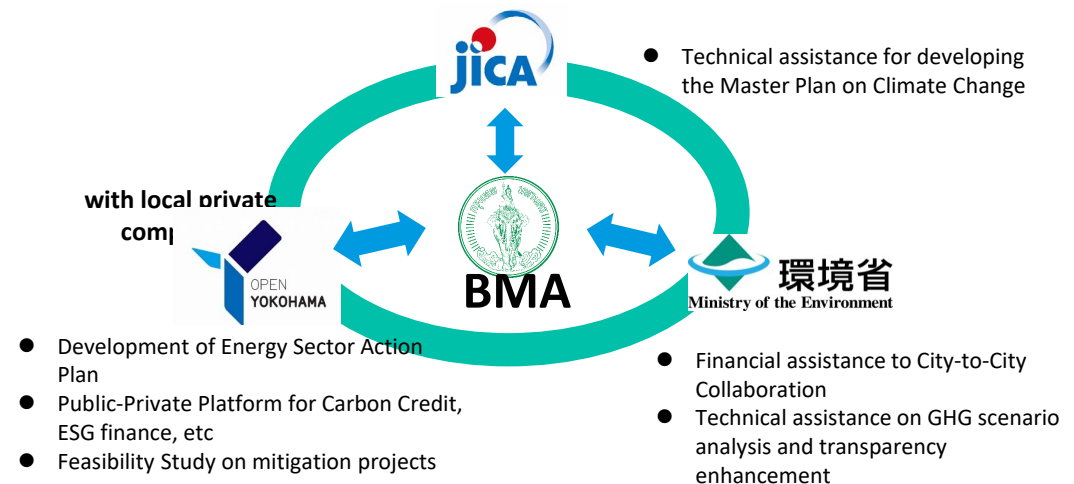
High Efficiency LED Lighting with Dimming and Tunable Function
(ENDO Lighting Corporation)

Bangkok Metropolitan Administration - Yokohama City

- ◆ JICA's cooperation with BMA that led to **development of the Master Plan on Climate Change.**

- ◆ Yokohama City and BMA continues their collaboration to **implement the masterplan** with support of MOEJ.

Comprehensive cooperation with BMA

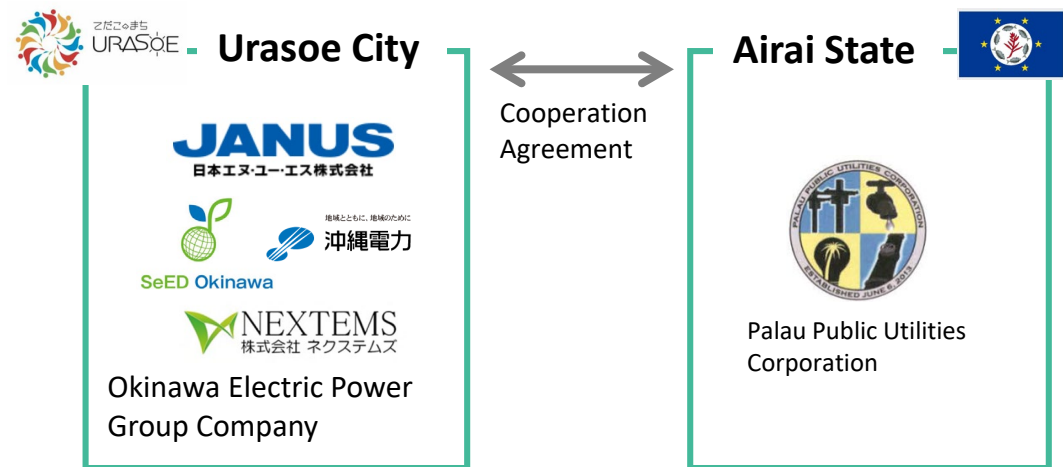


Airai State (Palau) - Urasoe City

Okinawa Electric Power's technologies and experience that **achieved 100% renewable energy in electricity supply for 10 consecutive days** in Hateruma Island. Based on this experience, the collaboration supports Palau's commitment for renewable energy.

【Project Summary】

- ◆ Model project of PVs, storage batteries, and an integrated management system for stabilized small-scale grids.
- ◆ Scaling up the model project
- ◆ Study on the introduction of tiltable wind turbines that are suitable for remote small islands.



Tiltable wind turbines(OEPG)

Benefits of City-to-City Collaboration Program (C3P)



01

Improved reliability through inter-municipal collaboration

- Easier for local surveys to be carried out smoothly

02

Efficient team-based studies

- Multi-stakeholder approach can be more efficient than a stand-alone study for overseas infrastructure development

03

Consultant support

- SMEs can easily participate with support from consulting firms with experience in international development

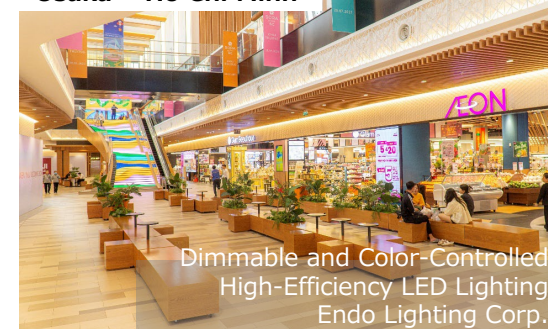


Make use of funding schemes by MOEJ, MOFA, etc.

Note: JCM projects formed from the C3P: approx. 30 projects

MOEJ: Ministry of the Environment, Japan; MOFA: Ministry of Foreign Affairs of Japan

Osaka – Ho Chi Minh



Osaka – Ho Chi Minh



Fukuoka Pref.
- Hanoi



Urasoe –
Airai State (Palau)



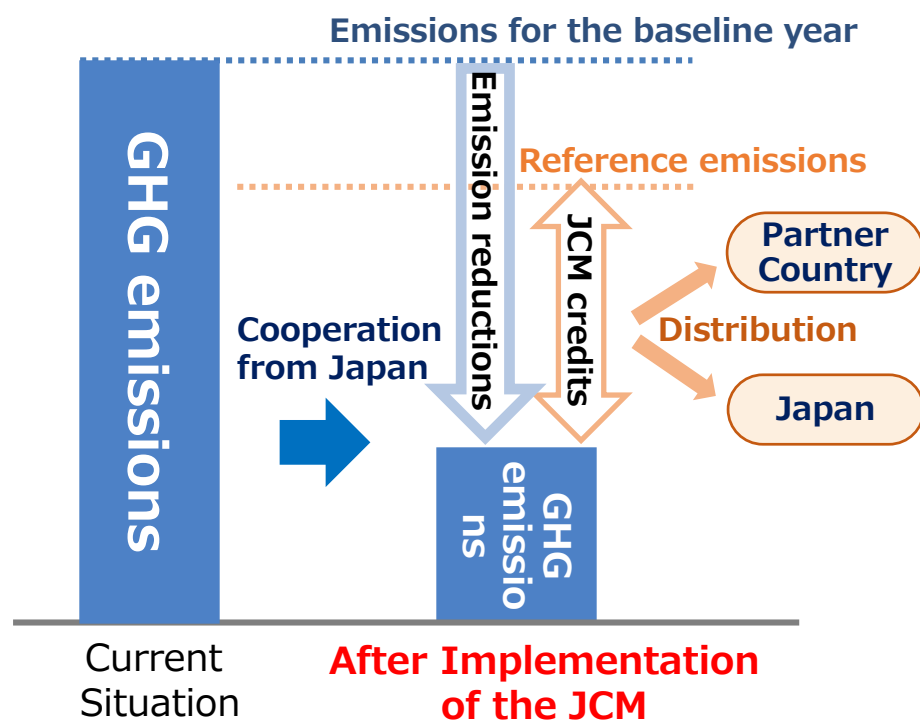
Joint Crediting Mechanism (JCM)






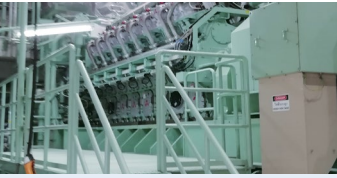


- In partner countries of the Global South, Japanese companies and the Japanese government collaborate on implementing mitigation measures in terms of technology and financial support. The achieved GHG emission reductions or removals will be shared as JCM credits between the partner countries and Japan.
- It contributes to the reduction targets of both Japan and partner countries, while invigorating the economies of both nations through corporate participation. Additionally, it addresses social challenges, contributing to the sustainable development of partner countries.
- Since the first signing with Mongolia in 2013, Japan has established the JCM with **29 countries*** and over **250 projects** are currently being implemented (as of July 2024)."

* Mongolia, Bangladesh, Ethiopia, Kenya, Maldives, Viet Nam, Lao PDR, Indonesia, Costa Rica, Palau, Cambodia, Mexico, Saudi Arabia, Chile, Myanmar, Thailand, Philippines, Senegal, Tunisia, Azerbaijan, Moldova, Georgia, Sri Lanka, Uzbekistan, Papua New Guinea, United Arab Emirates, Kyrgyz Republic, Kazakhstan, Ukraine

Basic Concept



JCM Projects

Renewable Energy		Energy efficiency	
 Floating Solar PV, TSB Co., Ltd., Thailand	 Binary Power Generation Project at Geothermal Power Plant, MHI, Ltd., Philippines	 Optimization in petroleum refining plant, Yokogawa Electric Corp. Indonesia	
Effective Use of Energy		Waste	Transport
 Gas Co-generation System and Absorption Chiller, Kansai Electric Power, Thailand	 Waste to Energy Plant, JFE engineering, Viet Nam	 CNG-Diesel Hybrid Public Bus, Hokusan Co., Ltd., Indonesia	

COP29 @Baku, Azerbaijan (13th November, 2024)

**Clean City Partnership Program (C2P2) Seminar:
Urban Agenda on Climate Change, Pollution and Biodiversity Loss**



MOEJ and JICA presented their initiatives, and then Japanese local governments and their partner cities shared collaboration projects between **Yokohama and Bangkok**, and between **Ehime and Gorontalo** as good practices of C2P2. **Mayor Hayato Shimizu of Saitama City** was also present.

IPCC Special Report on Climate Change and Cities

- ✓ Cities are hot spots of emissions and climate impacts and, at the same time, constitute the convergence of key actors in mitigation, innovation and resilience (Chow and Gupta 2024).
- ✓ The Intergovernmental Panel on Climate Change (IPCC) will publish a Special Report on Climate Change and Cities by 2027.
- ✓ Lead Authors for the special report were selected by the IPCC from across the world.
- ✓ The First Lead Author Meeting, to be held in Osaka, Japan, from 10 to 14 March, is an important meeting for the preparation of the report.



Members of the Scientific Steering Committee for the Report. The outline of the Special Report agreed by the Panel at the IPCC session on August 2024 (source : IISD website, 2024.)



Meeting venue: Osaka International Convention Center(Grand Cube Osaka)

Tentative schedule for City-to-City Collaboration Program in FY 2025

- **First Call for Proposal : February 2025**
- **Second Call for Proposal : April 2025**

About 20 projects are expected to be adopted.

*The implementation of the **third Call for Proposal will be decided based on the results up to the first and second Call for Proposal.**