



---

# Tackling the Environmental Crises

---

## City-to-City Collaboration Program and Synergies

February 2025

SUGA Yoshinori  
Director for Sustainable Infrastructure  
Global Environmental Bureau, Ministry of the Environment of Japan



# Contribution to Solving the Global Environmental Crises



- The international community accelerates its efforts to address the "three environmental crises" of climate change, biodiversity loss and pollution.
- Ministry of the Environment of Japan supports expansion of decarbonization technologies and environmental infrastructure that we have built up in Japan, contributing to the resolution of the global environmental crisis and new growth.

## Global emission reduction

- Collaboration with MDBs and Other Institutions
- Strengthening JCM implementation structure
- Simultaneously solving economic and social problems and environmental crises (synergies)
- Dissemination of the principles of high integrity carbon markets

### JCM projects



WtE (Bac Ninh Province, Vietnam)

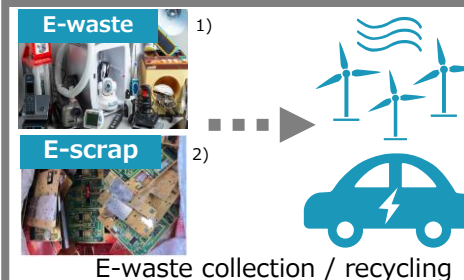


Geothermal (Balayan, the Philippines)

## Transforming for sustainability

- Environmentally sound recycling of e-waste and recycling of critical minerals
- City-to-City Collaboration Program (C3P)
- Promoting Early Warning System (EWS)

### Circular economy



### City collaboration



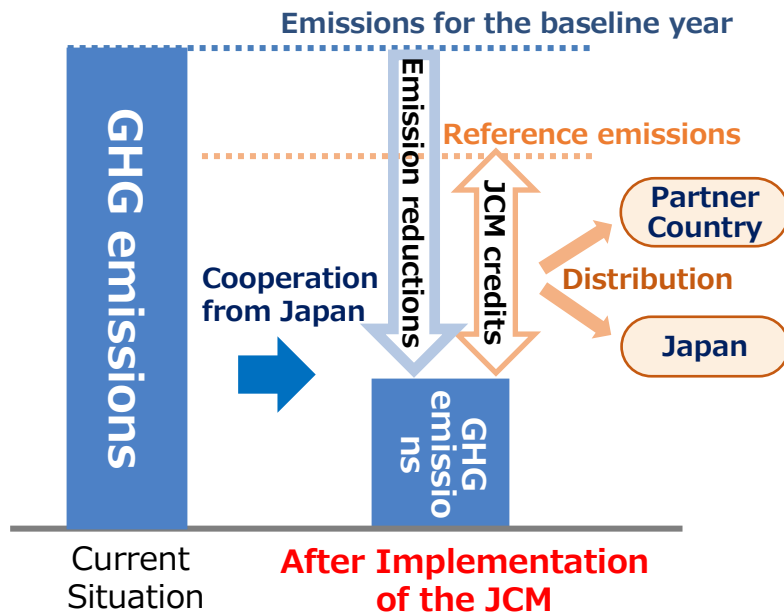
MoU between cities

<sup>1)</sup> UNU and UNITAR

<sup>2)</sup> All Right Consultant & Development Co., Ltd.

# Joint Crediting Mechanism (JCM)

## Basic Concept



## JCM Projects

### Renewable Energy



Floating Solar PV, TSB Co., Ltd., Thailand



Binary Power Generation Project at Geothermal Power Plant, MHI, Ltd., Philippines

### Energy efficiency



Optimization in petroleum refining plant, Yokogawa Electric Corp. Indonesia

### Effective Use of Energy



Gas Co-generation System and Absorption Chiller, Kansai Electric Power, Thailand

### Waste



Waste to Energy Plant, JFE engineering, Viet Nam

### Transport



CNG-Diesel Hybrid Public Bus, Hokusan Co., Ltd., Indonesia

# JCM Partner Countries (29 countries)

4



Mongolia  
Jan. 8, 2013 (Ulaanbaatar)



Bangladesh  
Mar. 19, 2013 (Dhaka)



Ethiopia  
May. 27, 2013 (Addis Ababa)



Kenya  
Jun. 12, 2013 (Nairobi)



Maldives  
Jun. 29, 2013 (Okinawa)



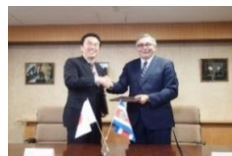
Viet Nam  
Jul. 2, 2013 (Hanoi)



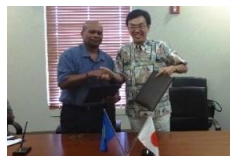
Lao PDR  
Aug. 7, 2013 (Vientiane)



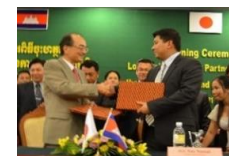
Indonesia  
Aug. 26, 2013 (Jakarta)



Costa Rica  
Dec. 9, 2013 (Tokyo)



Palau  
Jan. 13, 2014 (Ngerulmud)



Cambodia  
Apr. 11, 2014 (Phnom Penh)



Mexico  
Jul. 25, 2014 (Mexico City)



Saudi Arabia  
May. 13, 2015



Chile  
May. 26, 2015 (Santiago)



Myanmar  
Sep. 16, 2015 (Nay Pyi Taw)



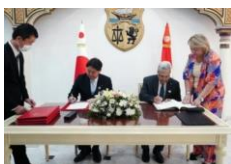
Thailand  
Nov. 19, 2015 (Tokyo)



Philippines  
Jan. 12, 2017 (Manila)



Senegal  
Aug. 25, 2022 (Dakar)



Tunisia  
Aug. 26, 2022 (Tunis)



Azerbaijan  
Sept. 5, 2022 (Baku)



Moldova  
Sept. 6, 2022 (Chisinau)



Georgia  
Sept. 13, 2022 (Tbilisi)



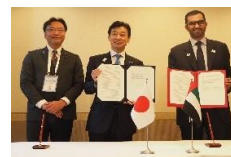
Sri Lanka  
Oct. 10, 2022 (Colombo)



Uzbekistan  
Oct. 25, 2022 (Tashkent)



Papua New Guinea  
Nov. 18, 2022 (Sharm-el-Sheikh)



United Arab Emirates  
April. 16, 2023 (Sapporo)



Kyrgyz Republic  
July. 6, 2023 (Bishkek)



Kazakhstan  
Oct. 30, 2023 (Astana)



Ukraine  
Feb. 19, 2024 (Tokyo)

# List of JCM partner countries and projects supported by MOEJ (FY2013-2024) as of December 6, 2024

5

## Total 255 projects (29 partner countries)

(Model Project: 238 projects(including Eco Lease: 7projects), ADB: 8 projects, UNIDO: 1 project, REDD+: 2 projects, F-gas: 4 projects, New Technology : 2project)

### Eastern Europe

-  20. Azerbaijan
-  21. Moldova
-  22. Georgia
-  29. Ukraine

### Asia Pacific

-  1. Mongolia: 11 projects
-  2. Bangladesh: 5 projects
-  5. Maldives: 4 projects
-  6. Viet Nam: 50 projects
-  7. Laos: 6 projects
-  8. Indonesia: 52 projects
-  10. Palau: 7 projects
-  11. Cambodia: 5 projects
-  15. Myanmar: 8 projects
-  16. Thailand: 51 projects
-  17. Philippines: 20 projects
-  23. Sri Lanka: 3 projects
-  24. Uzbekistan
-  25. Papua New Guinea
-  27. Kyrgyz Republic
-  28. Kazakhstan

### Latin America

-  9. Costa Rica: 2 projects
-  12. Mexico: 5 projects
-  14. Chile: 16 projects

### Africa

-  3. Ethiopia
-  4. Kenya: 5 projects
-  18. Senegal
-  19. Tunisia: 2 projects

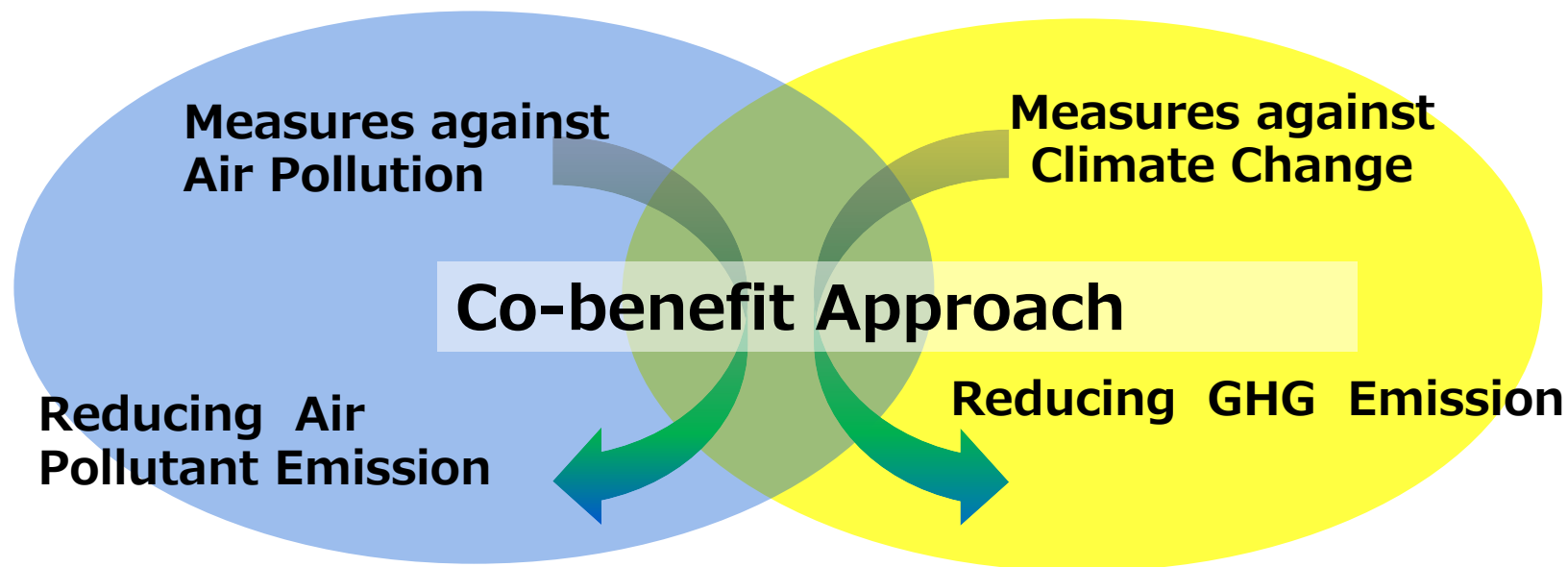
### Middle East

-  13. Saudi Arabia: 3 projects
-  26. UAE



# Multi-Benefits (Case of Waste-to-Energy)





# City-to-City Collaboration Program(C3P)



- 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

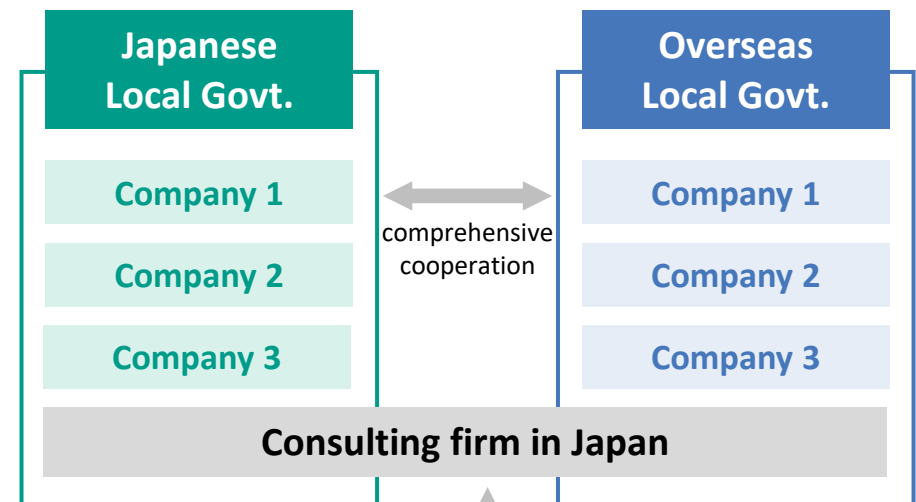
- Co-create low-carbon projects
- Support developing policies and plans to promote climate actions
- Build capacity for government staff
- Raise awareness of stakeholders



## Expected outcomes

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

## Examples of structures for C3P





# 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

Viang 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

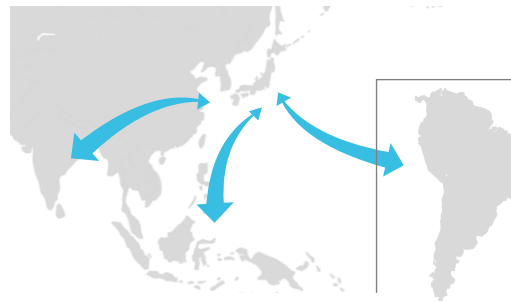
## Palau

Koror Province Kitakyushu City

Airai Province Urasoe City

## Chile

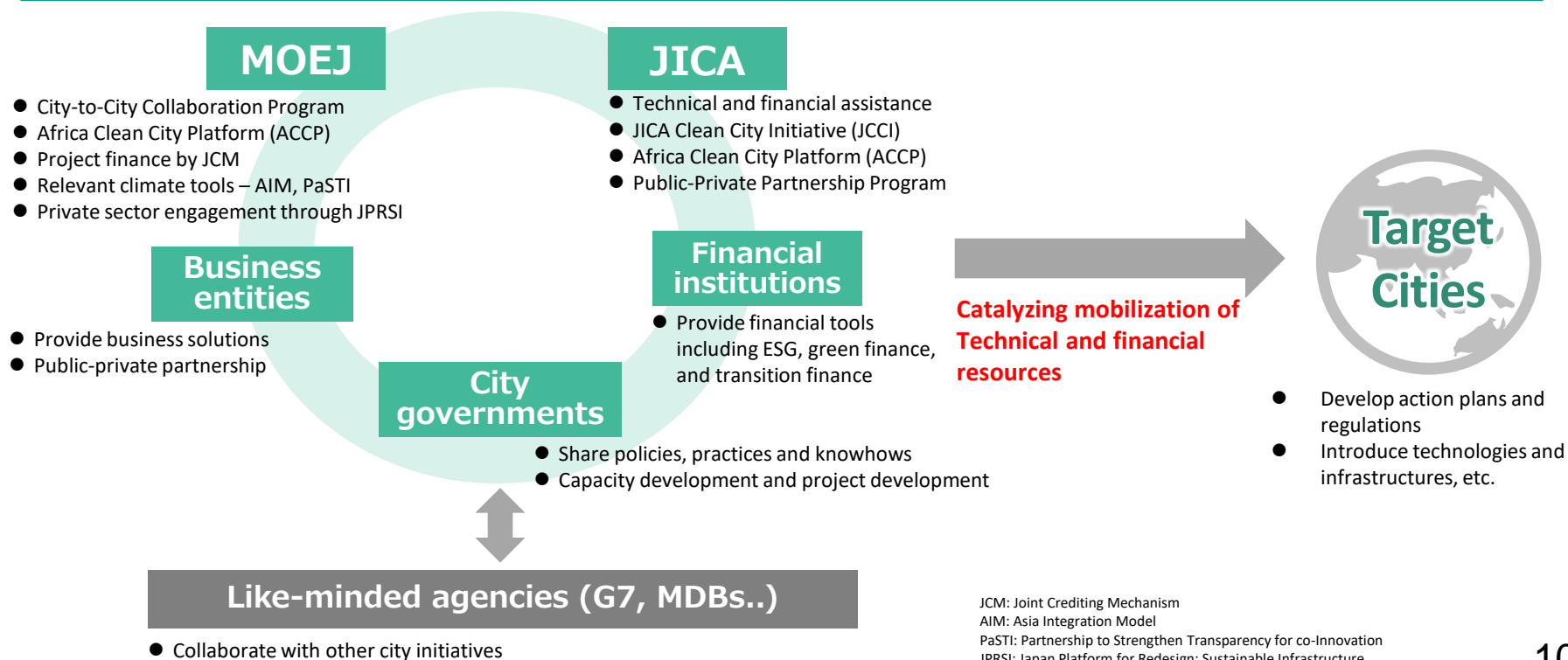
Renca Municipality,  
Santiago City, Toyama City



Red: Ongoing projects in FY2024

# Clean City Partnership Program (C2P2)

- MOEJ and JICA, in partnership with other key stakeholders, roll out a Clean Cities Partnership Program (C2P2), which:
- Mobilize engagement of multi-stakeholders on target cities.
- Provide a comprehensive and synergetic support to urban agenda including climate change, environmental pollution and circular economy.
- Collaborate with ongoing and new city initiatives by G7 members and MDBs.



## 1. Purpose

- Since 2015, the Ministry of the Environment of Japan has been holding training and workshops in cooperation with IRENA, as support for development of human resources and project development and the further horizontal deployment of renewable energy projects in SIDS, utilizing Japan's knowledge, experience, and technology.
- In March 2024, it will be held as a decarbonization forum for SIDS.

## 2. SIDS Decarbonization Forum in FY2024

- With the participation of remote islands and companies in Japan that are taking the lead in decarbonization, the Forum will share initiatives, technologies, and challenges toward the decarbonization of SIDS.

Date: February 20 and 21, 2025

Organizer: Ministry of the Environment

Co-organizer: IRENA Cooperation: JICA, SPREP

Venue: L Stay & Grow Harumi Hotel and online

Participating countries (tbc): (in-person) PNG, Palau, Maldives, Fiji, Tuvalu, Tonga, Kiribati, Micronesia, the Cook Islands, and the Solomon Islands. Some will join online.