

Japan's Experience and International Cooperation on Environmental Management through JCCI

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b) Systematic Development since Rio Summit (1992)

c) Recent Development to Address Global Agenda

Japan's **Experience in Env.** Management and **Development of International** Cooperation

i. Initial Stage of Japan's International Environmental Cooperation

Toward Overcoming Serious Pollution in Developing Countries

JICA's Schemes



Programs & Projects

- Training (Env. Policy Development, Water Quality & Air Quality Management)
- Advisors/Experts
- Development Plan
- Project-typed Technical Cooperation

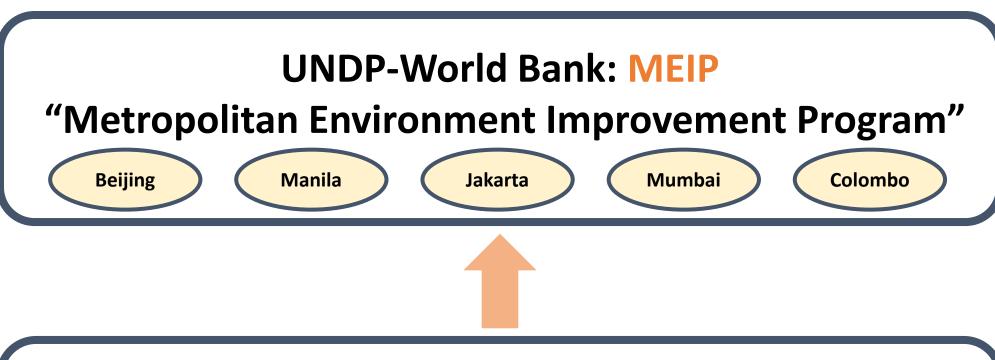




- Capacity Building
- Policy Development
- Master Plan Development
- Training Centers (Thailand, Indonesia, China and Mexico)
- Training Module Development

Malaysia, 1987

ii. The World Bank "Japan's Experience in Urban Environmental Management"



Special Study on "Japan's Experience in Urban Environmental Management"

Steering Com. Chaired by Prof. Hashimoto

Case Studies

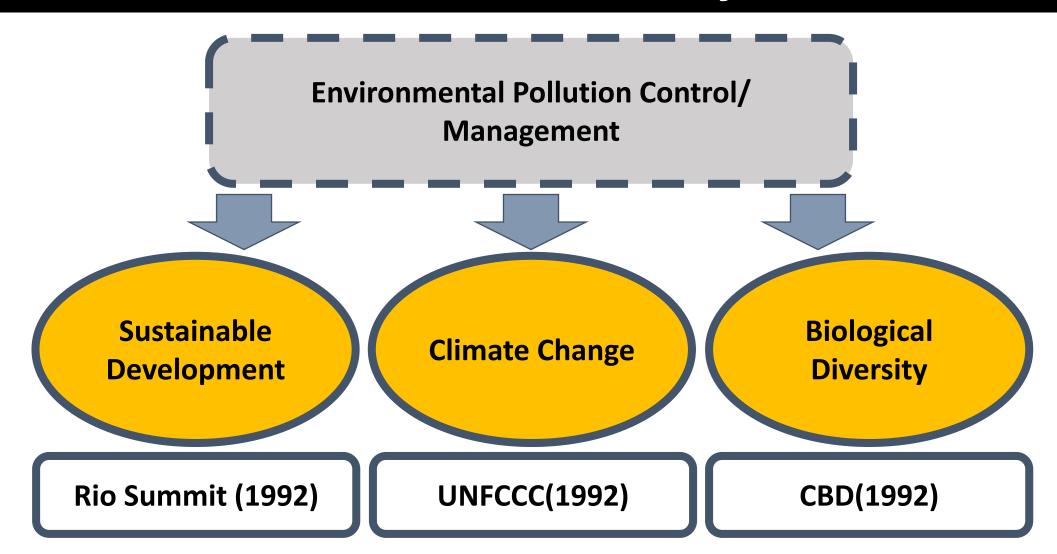
Yokohama

Osaka

Kitakyushu



iii. New Era for Global Environment & Sustainability



a) Initial Stage (late 1980s through early 1990s)

b) Systematic Development since Rio Summit (1992)

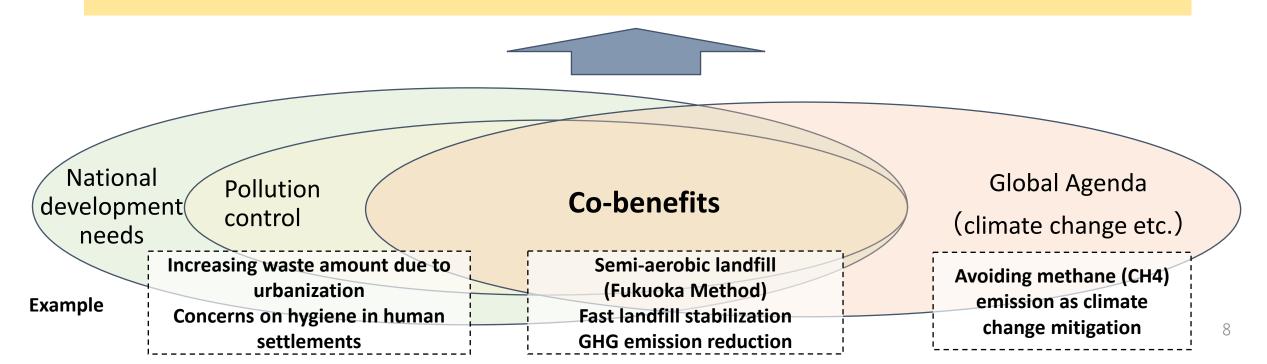
c) Recent Development to Address Global Agenda

Japan's **Experience in Env.** Management and **Development of International** Cooperation

i. Co-benefit Approach to Env. Cooperation

Global agenda (climate change, biodiversity etc.) was integrated into conventional pollution control approach (air, water & wastes)

Sustainable Development & Human Security



ii. Cool Earth Partnership as the Initiative by the Government of Japan

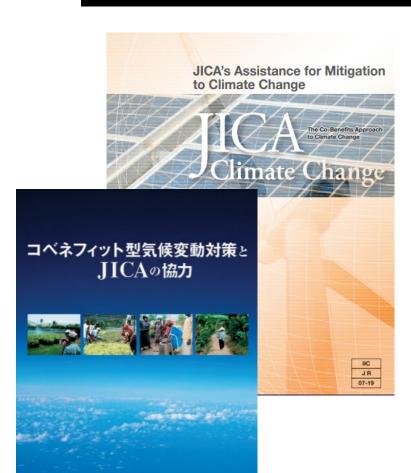
"Cool Earth Partnership" to support both GHG emissions reduction and economic development (2008).

- Co-benefit approach to the Clean Development Mechanism (CDM) under the Kyoto Protocol
- Nationally Appropriate Mitigation Actions (NAMAs) in developing countries, to enhance their voluntary efforts

Japan has played a key role in assisting developing countries' efforts



iii. JICA's Leadership through Co-benefit Approach





Study on "JICA's Assistance for Mitigation to Climate Change" (2007)





Case Study: Delhi Metro System Development (ODA Loan)

Addressing

- Traffic congestion
- Air pollution
- GHG emission reduction (by modal shift)

Extra efforts

Introduced regenerative brake technology by the CDM

a) Initial Stage (late 1980s through early 1990s)

b) Systematic Development since Rio Summit (1992)

c) Recent Development to Address Global Agenda

Japan's **Experience in Env.** Management and **Development of International** Cooperation

i. SDGs, Paris Agreement and Environmental Infrastructure

Global Norms (2015)

- Sustainable Development Goals (SDGs)
- Paris Agreement (PA)

Overseas Promotion Strategy on Infrastructure for 2025

- National Strategy on Overseas Environmental Infrastructure Promotion (2017)
- Japan Platform for Redesign: Sustainable Infrastructure (JPRSI)

































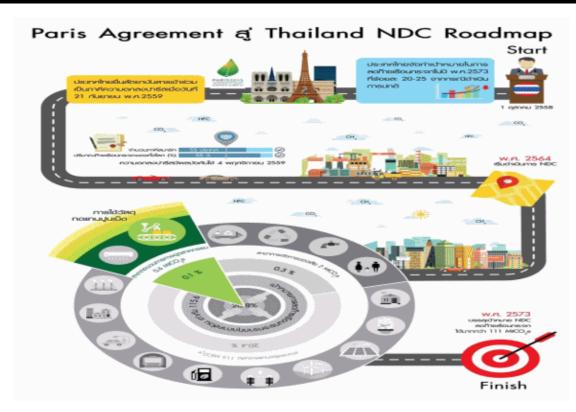








ii. Nationally Determined Contributions (NDCs) under the Paris Agreement



ONEP, Thailand (2016)

Grand design for a future society consistent with their development policy

iii. Climate Risks as a Concern for SDGs



Flood Thailand in 2011

Adaptation x
Disaster Risk Reduction

iv. Unpreceded Challenges and Co-innovations

Covid-19 as extra challenges on developing world

- Response by Green Recovery, building back better
- Dynamic approach to digital transformation and innovative life-style
- Accommodating risks (climate, disaster and pandemic) in development programs

Co-innovation and Co-creation based on Partnership

Multiple Stakeholders

Institutional Development

Public and Private Finance

Scaling up
Success cases

a) From Policy Development through Project Implementation on the Ground

b) From 3R Initiative to Circular Economy

c) Co-innovation for Carbon Neutrality and Net-zero Emission

2.IncreasingOwnership forLocal and GlobalAgenda

i. Case Study (1): Waste management planning and infrastructure investment (PPP)

Legok Nangka Waste to Energy Project as the 1st PPP Waste-to-Energy project

- JICA provided preparatory survey on PPP
- JICA provided Transaction Advisory Services in support of procurement procedures
- Collaboration with the Ministry of the Environment, Japan (MOEJ) and International Finance Corporation (IFC) enabled through support to the Indonesian side.

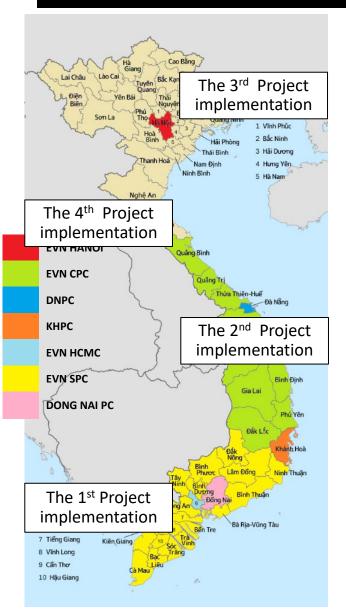


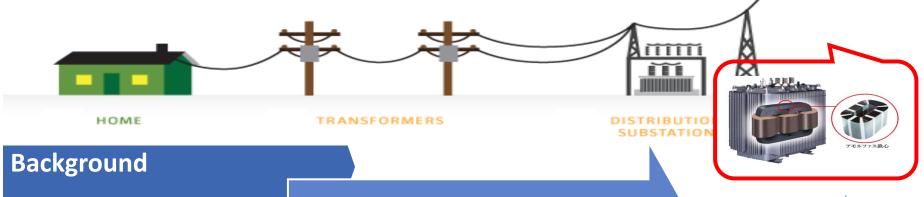
Landfill site in West Java, Indonesia

Will address

- Plastic litter scattering
- Safety
- Ground water pollution
- Hygiene and odor
- GHG emission reduction
- Referable energy to household

ii. Case Study (2): Innovative support by the JCM to realize policy target (power loss reduction)





- Strong policy push by the 7th Power Development Plan (PDP7+) in Vietnam
- Power companies' need for increasing EE in power transmission system
- Meeting needs for fundamental infrastructure of the power sector

- Reduction of power loss
- Increased stability of power supply

Co-benefits

- Improved economic activity
- Reduced malfunction

Emerging outcomes

- Penetration of the technology/adoption of higher standard
- Enhanced procurement policy by Power Companies
- Self sustained business by local manufacturers

iii. Japan Platform for Redesign: Sustainable Infrastructure (JPRSI)



JAPAN PLATFORM for REDESIGN: SUSTAINABLE INFRASTRUCTURE

Ministries

Companies

Local gov'ts

Other agencies

Banks & investors



Communications at policy level

Areas of cooperation

Air Pollution

Water Pollution

Waste & 3 R

Climate Change Mitigation

Adaptation & DRR

EST and other areas

Technical cooperation, investment and other type of collaboration

Partner countries

Ministries

Companies

Local gov'ts

Other agencies

Banks & investors

a) From Policy Development through Project Implementation on the Ground

b) From 3R Initiative to Circular Economy

c) Co-innovation for Carbon Neutrality and Net-zero Emission

2.
Increasing
Ownership for
Local and Global
Agenda

i. G8 3R Initiative

1. G8 Sea-Island Summit in 2004

- National Policy Development on 3R
- Reduction of Obstacles for International Trade
- Cooperation with Developing Countries
- Multi-Stakeholders' Involvement
- R & D on 3Rs

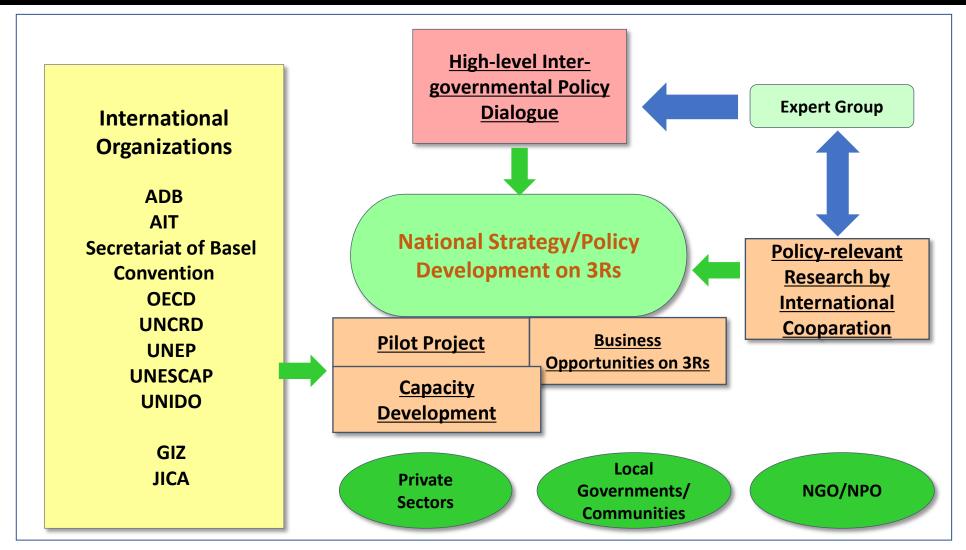
2. G8 Ministerial Conference in 2005



- Asia-Pacific 3R Forum
- Sustainable Consumption & Production
- Resource Efficiency and
- Circular Economy Forum



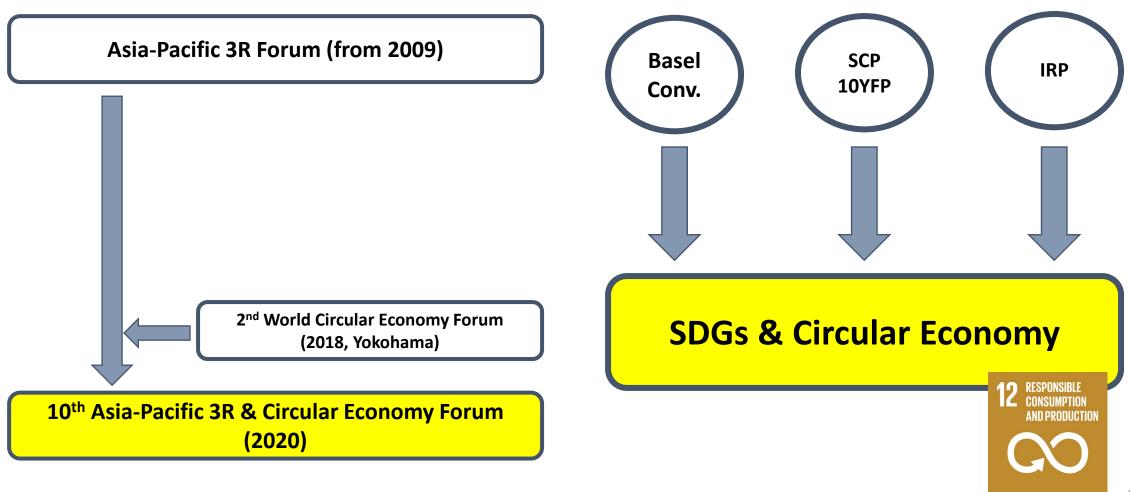
ii. Asia-Pacific 3R Forum



Source: Materials by MOEJ (2012)

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iii. 3R, SCP, Resource Efficiency and SDGs

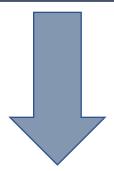




iv. G20 Osaka Summit (June, 2019)

Osaka Blue Ocean Vision

To reduce additional pollution by marine plastic litter to zero by 2050 through a comprehensive life-cycle approach.



MARINE Initiative



a) From Policy Development through Project Implementation on the Ground

b) From 3R Initiative to Circular Economy

c) Co-innovation for Carbon Neutrality and Net-zero Emission

2.IncreasingOwnership forLocal and GlobalAgenda

. Updated pledges by countries at COP26

Countries/Region		2030 Goals	Long-term Goal
	Japan	-46%	Net Zero in 2050
	Brazil	-50 % (2030)	Carbon Neutral in 2050
	India	-33-35 % per GDP 50% Renewable Energy by 2030	Net Zero 2070
	Indonesia	-29% with international support	Net Zero in 2060
	South Africa	420 CO2-eq and 350 CO2-eq	Net Zero in 2050
	Thailand	-40% with international support	Carbon Neutral in 2050 Net Zero in 2065
*	Viet Nam	-27% with international support	Carbon Neutral in 2050 ₂₅

ii. Cooperation in layered actions

Policy development

Appropriate responses to be selected via dialogue between partner countries and Japan

Response to international decisions

Domestic rules and regulation

Implementation measures

Investment

Capacity development and stakeholders engagement

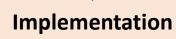
Response strategy to COP decisions

Legislation support for environment

Policy measures/schemes

Public and private finance/technologies

TA, training, knowledge management support



iii. Japan's Decarbonization Initiative

- 100 million CO₂ reduction under public-private partnership through the Joint Crediting Mechanism
- Mobilizing approx. 1 trillion JPY (8.5 billion USD) finance (public/private blended)
- Priority Areas:
 - 1. Renewable energy: Solar, wind, hydro, geothermal, biomass, green hydrogen
 - 2. Green logistics (including cold chain) non-fluorocarbons refrigerators, modal shift, air and seaport
 - 3. Waste infrastructure Waste to Energy, recycling facilities, landfills



Types of JICA Schemes a)

- Technical Cooperation and Policy **Adviser**
- ODA Loans and Private Sector **Investment Finance**
- Human Resource Development by **Training Courses**

b) **Case in Vietnam**

Mobilizing JICA's Schemes and **Programs**

JICA Clean City Initiative (JCCI)

i. Technical Cooperation and dispatching policy advisors

• Technical Cooperation scheme has provided careful support to partner countries dedicated to their needs.

 A grand design of policy development have been strengthened with support of planning

 Policy advisors play a key role for tailor made cooperation and provide a bridge to further knowledge resources from Japan.





JICA SPI-NAMA: Low Carbon Technology Assessment to 29 facilitate NDC implementation in Viet Nam

ii. ODA Loan as a driving force for environmental infrastructure development / Innovative Private Sector Investment Finance

JICA's ODA Loan scheme

- Supported environmental infrastructure development such waste and wastewater, transport, energy etc.
- Enable high quality infrastructure development, combined with technical cooperation.

Private Sector Investment Finance

 Innovative way to mobilize private sector finance, with JICA's support

Tsogttsetsii Wind Farm Project in Mongolia (right above)

Lumut Balai Geothermal Power Plant Project in Indonesia (right below)





iii. Training courses harnessing ties between partner countries and Japan

 Robust training schemes established for developing countries government officials

 Facilitated knowledge sharing and management between Japan and partner countries, as well as among participants.

• Useful opportunity to see not only theory but also real application in Japan

Hands on training for project development



a) Types of JICA Schemes

- Technical Cooperation and Policy Adviser
- ODA Loans and Private Sector Investment Finance
- Human Resource Development by Training Courses

b) Case in Vietnam

Mobilizing JICA's
Schemes and
Programs

c) JICA Clean City Initiative (JCCI)

i. High-level Mission for Policy Dialogue for Bilateral Environmental Cooperation between Vietnam and Japan in July, 2004

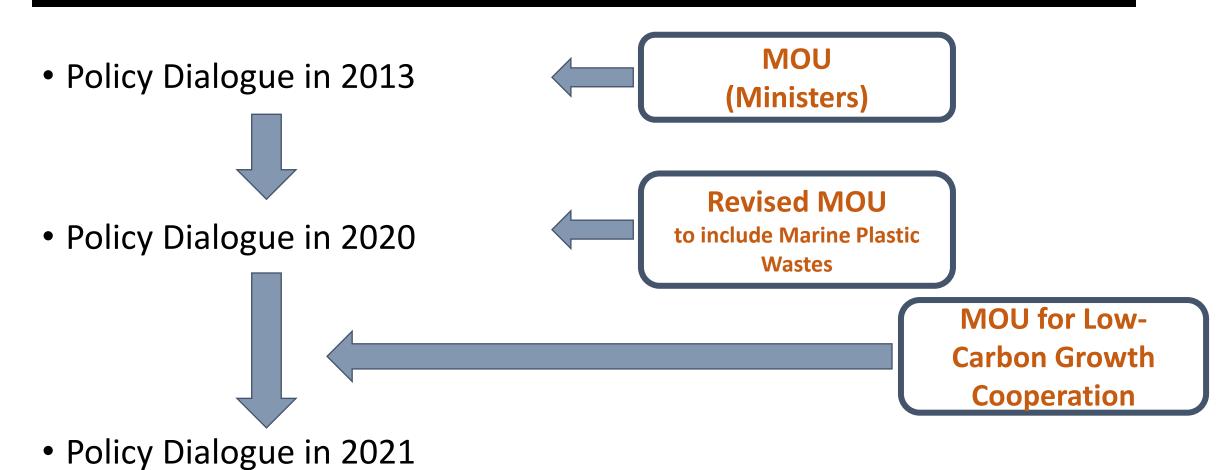
- 1. Based on the Summit Meeting of two countries, the high-level mission, led by Amb. Kawakami, Former JICA President, visited Vietnam for its policy dialogue.
- 2. The mission agenda: Plenary Meetings in Hanoi followed by Field Visits in Danang and Ho Chi Minh for its recommendations to kick off the bilateral cooperation for environment management



- Comprehensive Revision of Environmental Protection Law
- Stepping-up of NDC
- Commitment to 2050 Carbon Neutrality



ii. Recent Development of Policy Dialogue for Env. Cooperation



Joint Cooperation Plan on Climate Change toward

Carbon Neutrality

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iii. Joint Cooperation Plan on Climate Change toward Carbon Neutrality by 2050 (JCP)

Mitigation

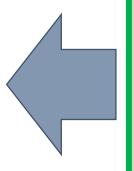
- Long-Term Strategy by AIM model
- City-to-City Cooperation (Hai Phong-Kitakyushu)
- JCM
- Waste to Energy

Institutional Development

- PaSTI
- F-gases Life Cycle Management
- Inventories
- Methodology for Carbon Pricing
- Training

Private Sector Involvement

- Private Sector Mobilization
- Japan Week
 - Seminar
 - Exhibition
 - Business Matching



Joint Working Meeting

iv. Comprehensive Cooperation in Urban Environment



a) Types of JICA Schemes

- Technical Cooperation and Policy Adviser
- ODA Loans and Private Sector Investment Finance
- Human Resource Development by Training Courses

b) Case in Vietnam

3.
Mobilizing JICA's
Schemes and
Programs

c) JICA Clean City Initiative (JCCI)

JICA Clean City Initiative (JCCI)

Local and Global Agenda

- Human Security & Sustainable Development
- Global Environment (Climate Change, Biodiversity & Marine Pollution)
- Contribution to International Policies (FOIP, TICAD & Quality Infrastructure)

Japan's Experience in Env. Pollution

- Experience & Expertise by Local Gov.
- Technologies & Service by Private Sectors





Needs in Developing Countries

- Co-innovation along with individual circumstances
- Leap Frog approach
- Innovative tech. & DX

JCCI

- Waste Management
- **Air Pollution Control**
- Water Pollution Control
- 3R & Circular Economy

Produced from JICA Resource

Summary

- Japan has contributed to realizing a sustainable society in developing countries
 through its overseas environmental cooperation, based on its rich experience in coping
 with serious environmental pollution such as air & water pollution and wastes. In this
 regard, JICA has supported developing countries by extending a variety of its
 environmental projects and programs, which is highly welcomed by the international
 community.
- 2. Developing countries are getting committed to addressing not only local agenda but global one with their ownership, which creates a new landscape of the environmental cooperation. Joint efforts are mainstreamed into and aligned with their national and local development policies by co-innovation with equal footing of both developed and developing partner countries.
- 3. JICA has launched its new initiative as "JICA Clean City Initiative" (JCCI) to further extended its comprehensive programs to work together with its partner countries for their sustainable and de-carbonized future in an integrated manner.



Thank You!