Environmental Cooperation Between Japan and Vietnam

January 2022

- I. History, Frame, Policy Dialogue
- II. Cooperation in each area
- III. Private Sector Cooperation

Key Messages...



Long history and comprehensive Environmental cooperation framework enable concrete actions

Supporting across different policy areas (climate change, waste management, water, air), from upsteam policy development to implementation/financial support, through bilateral/multilateral approach.













Promoting multi stakeholder engagement (Logal government/Private Sector)



JAPAN PLATFORM for REDESIGN : SUSTAINABLE INFRASTRUCTURE



I. History, Frame, Policy Dialogue

Timeline



Env. Policy Advisor

 2004-2008
 2008-2010
 2010-2012
 2012-2014
 2014-2016
 2016-2019
 (New) 2022~

 Dr Maeda
 Mr. Matsuzawa
 Mr. Tsujihara
 Mr. Tomisaka
 Mr. Nakamura
 Mr. Yamasaki
 Env. Management Advisor

Climate change Experts 2013-2015 2011-2013 2015-2018 Mr. Mori Mr. Kawano Mr. Nakagawa 2012-2014 2010-2012 2015-2018 2018-2020 Mr. Fukuda Mr. Ichihara Ms. Ono Mr. Tamai Mr Tamai Ms. Matsuo

2021-Mr. Fukuda Ms. Teshima

②Cooperation MOC extension (2016)

① Cooperation MOC (2013)

3Cooperation MOC 2nd extension (2020)

Joint Cooperation Plan toward CN2050 (2021)

 1^{st} Policy Dialogue (PD1) (2014)

PD2 (2015)

PD6 (2020)

PD3 (2016)

PD7 (2021)

PD4 (2018)

PD5 (2019)

JCM MOC (2013)

1st JCM extension (2017)

2nd JCM extension (2021) ~Until 2030

MOC on Environmental Cooperation



Latest Extension: 2020 Aug, Marine Litter was included as a new area of cooperation

MEMORANDUM OF COOPERATION BETWEEN THE MINISTRY OF THE ENVIRONMENT OFJAPAN AND

THE MINISTRY OF NATURAL RESOURCES AND ENVIRONMENT OF
THE SOCIALIST REPUBLIC OF VIET NAM
ON ENVIRONMENTAL COOPERATION

The Ministry of the Environment of Japan and the Ministry of Natural Resources and Environment of the Socialist Republic of Viet Nam (hereinafter referred to individually as "side" and collectively as "both sides"),

DESIRING to strengthen the existing friendly relations between both sides;

CONSIDERING their common interest in promoting cooperation for sustainable development;

NOTING the importance of conservation and improvement of the environment for present and future generations;

RECOGNIZING that the effective protection of the environment requires global cooperation and coordination, efforts, and those activities to protect the environment should be carried out at the regional, national and local levels; and

PURSUANT to the laws and regulations in their respective countries,

HAVE reached the following recognitions:

PARAGRAPH I OBJECTIVE

The purpose of this Memorandum of Cooperation (hereinafter referred to as "this MOC") is to strengthen, facilitate and develop mutual cooperation in the field of environment, reaffirming the importance of the actions towards the swift and successful implementation of the Paris Agreement, and the Sustainable Development Goals (SDGs).

PARAGRAPH II AREAS OF COOPERATION

Cooperative activity may be decided from mutually confirmed areas pertaining to environmental protection and climate change responses as listed below:

- 1. Mitigation and Adaptation on Climate Change;
- 2. Waste Management and Marine Litter;
- 3. Environmentally Sustainable Cities;
- 4. Water Pollution;
- 5. Air Pollution:
- 6. Environmental Protection for Chemical Activity:
- 7. Environmental Technology;
- 8. MRV:
- Low Carbon Technology:
- 10. Biodiversity Conservation; and
- 11. Other areas of environmental protection and improvement as may be confirmed by both sides.

PARAGRAPH III FORMS OF COOPERATION

Both sides will encourage and facilitate cooperation through appropriate forms, to the extent of resources prepared by both sides, including:

- 1. Holding policy dialogue on a regular basis;
- 2. Exchanging information and expertise including training;
- 3. Policy analysis;
- 4. Carrying out feasibility studies; and
- 5. Other forms to be mutually decided upon.

←New! Marine Litter!



Results of 7th Japan – Viet Nam Environment Policy Dialogue



■ Date and time: Wednesday, November 24, 2021 13:30-14:30

■ Place: Tokyo

■ Attendees:

<MOEJ> Dr. Yamaguchi, Minister for the Environment; Mr. Ono, Director General, Global Environment Bureau, others.

<MONRE> Mr. Tran Hong Ha, Minister of Natural Resource and Environment; Mr. Hoang Van Thuc, Deputy Director General, Viet Nam Environment Agency, others.

■ Outline

Ministers...

- Signed the "Joint Cooperation Plan (JCP) on Climate Change toward Carbon Neutrality by 2050", to achieve 2050CN in Vietnam.
- Exchanged the JCP during document exchange ceremony in the presence of Vietnamese Prime Minister Chinh and Japanese Prime Minister Kishida, later on the same day.
- Discussed the cooperation on climate change and marine plastic litter, based on the Joint Cooperation Plan.





- Summary of Joint Cooperation Plan
- ·Areas of enhanced cooperation:
- (a) Development of LTS;
- (b) City-level LTS and decarbonizing projects through City-to-City cooperation;
- (c) Partnership to Strengthen Transparency for co-Innovation (PaSTI);
- (d) Joint Crediting Mechanism (JCM);
- (e) Transfer of leading decarbonizing technologies under the JCM, including hydrogen and CCUS;

- (f) Carbon pricing;
- (g) GHG Inventories;
- (h) Mobilization and support of the private sector in mitigation projects;
- (i) Waste-to-Energy (WtE); and
- (j) management of fluorocarbons.
- •Other themes: marine plastic litter; Holding the 2nd Viet Nam Japan Environment Week in December 2021;

1st Joint Working Group for the JCP towards CN2050



- As part of 2nd Env Week, 1st Joint Working Group for the JCP towards CN2050 was convened, chaird by Senior Officials (DG level) from both ministeries.
- To acheve 2050 CN, both sides discussed direction of cooperation on each field including long term stratetgy, city-to-city cooperation, transparency, JCM, Fluorocarbons, Waste to energy, Marine plastic litter.
 - Date: Dec 17th 2021 16:00-19:00 (JST)
 - Online
 - Host : MOEJ, MONRE
 - Co-Chairs: Mr. ONO Hiroshi Director General Global Environment Bureau MOEJ
 - Dr. Tang The Cuong Director General, Department of Climate Change MONRE
 - Participants: MOEJ, MONRE, Embassy of Japan in Vietnam, JICA Vietnam, JICA Experts

Area of discussion on JCP

- 1 Long term strategy: City to city cooperation
- 2 PaSTI (transparency), JICA TA for NDC implementation
- JCM. New technology including Hydrogen and CCUS, Carbon Pricing, Inventory, Reduction certificate
- 4 Fluorocarbons management
- 5 WTE, Marine Plastic litters

II. Cooperation in each area

Achievement of Environment Policy Advisors



- Long cooperation with MONRE (Since 2004) and building block of bilateral coopertation.
- Dispatch Environmental policy experts from MOEJ (since 2008)
- New experts on Environment Magagement from 2022

Key Achievement of JICA Experts

Env. Policy Advisor

- Circular/Guideline development
- Support on Revised Law on Environmental Protection (2020)

SPRCC Experts

- Comprehensive capacity budiling in MONRE
- Building coordination capacity of MONRE in Climate Change policy through the Project Coordination Unit

SPC NAMA, SPI NDC

- Support on Climate Change chapter of Revised Law on Environmental Protection (2020)
- Inputs on circular on Climate change

Climate Change: Long term strategy and Transparency



Scenario Development by AIM

- Vietnam's new ambitious target carbon neutrality in 2050
- Provide technical support for formulation of Vietnam's long-term climate strategy through developing and analyzing emission scenario by Asia-Pacific Integrated Model
- Cooperation agreed in 2020 at Policy Dialogue 6th





Enhancing Transparency

- Vietnam is to develop GHG reporting system
- PaSTI: Promoting an enabling environment for private sector including mobilizing ESG investment

Workshops and Training

Survey in the IPPU sector

Report on potential of ESG investment

Partnership for Market Readiness (PMR) by World Bank



Overview

- Partnership for Market Readiness (PMR) is a technical assistance program established by the World Bank for countries to prepare to implement carbon pricing policy instruments, such as an emissions trading scheme and carbon tax, in support of climate action.
- 13 Contributing partners, including Japan, funded the partnership, 6 countries and subnational jurisdictions engaged with the PMR as Technical Partners, and 23 Implementing Country Participants received funding and technical support.
- Program period: 2011 2021



Objectives

- Build countries' capacity to develop and implement carbon pricing instruments
- Create a knowledge base on carbon pricing instruments and facilitate information exchange
- Assist countries to identify and implement best practice approaches

Implementing Country Participants (23 countries including 4 technical partners, in alphabetical order)

Argentina, Brazil, Chile, China, Colombia, Costa Rica, Cote d'Ivoire, India, Indonesia, Jordan, Kazakhstan, Mexico, Morocco, Panama, Peru, Philippines, South Africa, Sri Lanka, Thailand, Tunisia, Turkey, Ukraine, **Vietnam**

Achievements

- 16 countries have completed road maps for carbon pricing readiness
- 19 <u>Technical Notes</u>, 55 <u>Technical Workshops</u> and other knowledge exchanges

Note

■ The World Bank started a successor program in 2021, called **the Partnership for Market Implementation (PMI).** Participating countries are not yet announced (as of Jan 2022).

Climate Change: Fluorocarbons



Cooperation under IFL

- Initiative on Fluorobarbons Life Cycle
 Management
- Inputs on TCVN

Formulation of regulations

Capacity Development

JCM





JCM Projects on F-gas destruction

 MOEJ provided financial support to develop a JCM Project for HFCs destruction.



Climate Change



Joint Crediting Mechanism (JCM)

- Development of decarbonization projects and promotion of transferring leading dearomatizing technologies.
- Since 2013. Extenion of MOC in 2021, until 2030.
- 40 projects in total in Vietnam, including 8 model projects and 1 F-gas project newly selected in FY2021



Solar Power /Kanematsu KGK Corp.



Amorphous Transformers /Yuko Keiso Co., Ltd



Project Title	Sector
Waste to Energy Project in Bac Ninh Province	Waste handling and disposal
Introduction of 9MW Rooftop Solar Power System to Factories	Renewable Energy
Introduction of High Efficiency LED Lighting with Dimming and Tunable Function to Office Building in Ho Chi Minh City	Energy Efficiency Improvement
Introduction of 12MW Rooftop Solar Power System to Commercial	Renewable Energy
Introduction of 9.8MW Rooftop Solar Power System in Industrial Park	Renewable Energy
Introduction of 5.8MW Rooftop Solar Power System to Beverage Factory	Renewable Energy
Introduction of 2.5MW Rooftop Solar Power System to Food Factory and Garment Factory	Renewable Energy
Introduction of High Efficiency Chiller and High Efficiency LED Lighting with Dimming Function to Shopping Center	Energy Efficiency Improvement
Development of Fluorocarbons collection scheme and installation of mixed combustion decomposition facility in Vietnam	F-gas Recovery and Destruction

City to City collaboration



■ 5 city-to-city collaboration projects are ongoing between Vietnam and Japan.

Hanoi City - Fukuoka Pref.

Promotion of Zero-Carbon Technologies

- Energy saving
- Renewable energy
- Institutional support

Ho Chi Minh City - Osaka City

Promotion of Zero-Emission Technologies

in Industrial and Public Sectors

- Energy saving
- Renewable energy
- Institutional support

Hai Phong City – Kitakyushu City

Promotion of Eco-Industrial Parks

- Energy efficiency
- Renewable Energy
- Waste Handling and Disposal
- Policy support
- Development of Climate Change Long Term Strategy

Da Nang City - Yokohama City

Development of "Local Climate Change Action Plan (LCCAP)" and promotion of low carbon technologies

- Renewable energy
- Energy saving

Soc Trang Province – Hiroshima Pref.

Formation of an Autonomous Decarbonized Society

- Energy saving
- Renewable energy
- Waste disposal
- System development

Waste Management



【Joint Committee on Waste Management 】

The Joint Committee on Waste Management is being held annually since 2019. Discussed institutional design for waste management, intensive municipalities support, etc., to improve waste management practices. The 4th Joint Committee meeting was held on December 14th

Inputs in policy and standard design

- National Technical Regulation on Domestic waste incinerator
- Other decrees and circulars (Seprate collection, waste treatment standards, landfill site closure standard)

Support for local governments

Identified priority provinces: Bac Ninh and Binh Duong

Draft collection and transportation system plans in 2021

Training program in Japan since 2014

Water Quality



Policy: WEPA (since 2004)

- improvement of water environment governance
- sharing knowledge and experience as well as developing capacity

Group workshops

Bilateral Dialogues

Action Program

Web-database

WEPA Outlook

Annual Meetings



Technology: Model Project

- For Improvement of Water Environment in Asia
- Disseminating appropriate water treatment and related technologies by Japanese private sectors





Technology: Johkasou

- In total 1,325 sets have been installed including about 1,100 in public hospital, as of the end of 2020.
- No regional application yet.







Air Quality



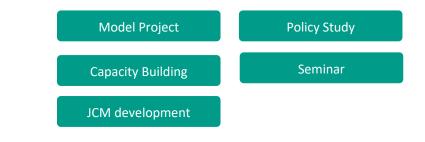
EANET

 Expanding scope to address wider atmospheric environment-related issues



Co-benefit Technology Project

- Tool to address air pollution and climate change mitigation simultaneously.
- Disseminate co-benefit technologies by using JCM





Marine Litter



Cooperation in Monitoring

 Signed a basic agreement on cooperation in the field of marine litter In 2020

Joint Pilot Monitoring Project

Capacity Building Training

Development of Monitoring Manual

Sharing monitoring data

Grant Assistance

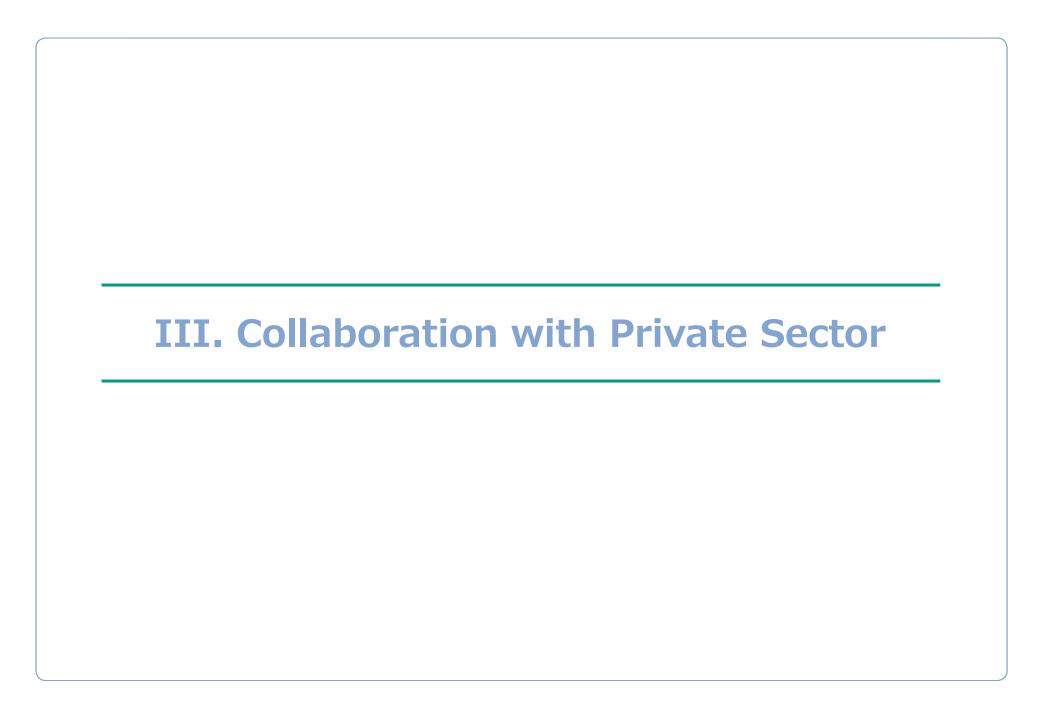
- To provide necessary equipment for survey/monitoring
- Signed E/N in 2021 April









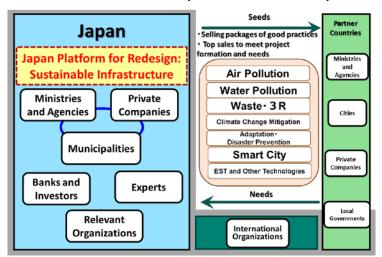


Japan Platform for Redesign: Sustainable Infrastructure(JPRSI)

■ JPRSI aims to provide a total solution to overall environmental infrastructures using a PPP (Public-Private-Partnership) platform.

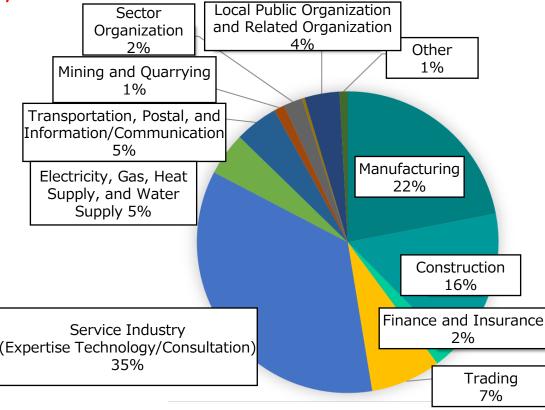
Overview

- > Established : September 8, 2020
- Relevant Organizations: JICA, JOIN, JASCA, J-CODE, JAIDA, JBIC, JETRO, and NEXI
- ➤ Purpose: Build a network involving joined companies and organizations, and create a self-driven project, which is operated by private companies to meet with cross-sectional needs of a partner country.



Number of Entities Joined

415entities have joined the platform (as of August 2021).



Japan Environment Week



- MOEJ has co-hosted JEW since 2018 with its partners in ASEAN region.
- Latest events organized virtually reaching out to a larger audience base despite constraints under global pandemic.

2018: Myanmar-Japan Env. Week

- C/P: Ministry of Natural Resources and Environment (MONREC)
- Japan-Myanmar Env. Policy Dialogue organized
- Seminar attracted 190 participants



2019: Vietnam-Japan Env. Week

- C/P: Ministry of Natural Resources and Environment (MONRE)
- Policy Dialogue organized with the presence of Vice-Ministers
- Seminar attracted approx. 350 participants.
- Environment technologies introduced and business matchings.



2020: Thailand-Japan Env. Week

- C/P: Ministry of Natural Resources and Environment (MONRE)
- Seminar attracted approx. 300 participants.
- 27 companies participated exhibition.
- Five Joint Seminars organized on (1)Marine Plastics, (2)Waste Management, (3)Climate Change Adaptation, (4)Circular Economy and Innovation, (5)Air Pollution.



2021: Indonesia-Japan Env. Week

Policy Dialogue

- Indonesia-Japan Env. Policy Dialogue was held online between Min. Siti Nurbaya (KLHK) and Min. Koizumi Shinjiro (MoEJ).
- Both discussed measures on climate change mitigation, marine plastics and mercury.
- Mercury Youth event organized where students from both countries reported on their activities on mercury.

Environment Online Seminar

- Discussed on business development and Indonesia-Japan cooperation on areas including WtE, decarbonization technologies and future needs.
- Topic-specific seminar focused on topics including management of marine plastic waste, waste, mercury, and water quality, attracting more than 800 audience in 2 days.

Exhibition and Business-match

 Online exhibition and business-matching attracted approx. 2,000 participants, promoting public-private partnership between the two countries





2nd Japan Vietnam Environment Week



Opening Session Dec 16th 2021

♦Opening Ceremony

- Opening remarks by MOEJ Vice Minister Ooka, MONRE Vice Minister Nhan
- **♦**Launch Ceremony of WTE project in Bac Ninh
- Hosted by JFE Enginnering (Japan), Thuan Thanh (Vietnam)
- Participants: MOEJ Vice Minister Ooka, MONRE Vice Minister Nhan, Ambassador Yamada, Bac Ninh Vice Chairman Khai, IFC country manager
- Supported by JCM. The two companies met at 1st JV Env. week
- **◆Towards 2050 CN** (Key Note Speech and Panel Discussion)





Online Seminars Dec 15th -17th

Plenary Seminar: Marine Plastics and Private Sector Cooperation

Seminar1: Waste management for Circular Economy

Seminar2: Water Env. Improvement

Seminar3: GHG reporting system

Seminar4: Climate Change adaptation

Semianr5: JCM implementation

Seminar6: Refrigients management standards

Results



- More than 1,500 participants in online seminar
- 34 companies joined the online booth.

Online Seminar Participants

DAY1 (15th Dec)			DAY 2 (16 th Dec)			DAY3 (17th DEC)					
S	eminar 1	Seminar 2	Seminar 3	Ceremony	Opening	Company Presentation	Plenary	Seminar 4	Seminar 5	Company Presentation	Seminar 6
,	209	114	119	108	152	115	170	100	286	87	106

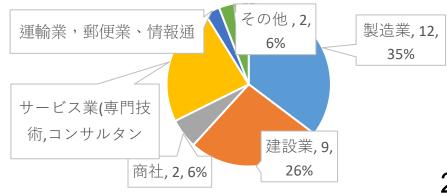
Total 1,566

Virtual Booth

Number of companies by areas

CC Mitigation	6	Smart City	5
CC Adaptation	6	Mercury	2
Waste	17	Marine Plastics	6
Air Pollution	9	Hydrogen	2
Water	8	ESG Investment	2
Johkaso	4	COVID19 related	2
Recycle	9	Others	3
Clean Energy	9		

■ 業種別 出展社数(業種,社数,%)



The 1st Japan - Viet Nam Environmental Week was held in January 2019 in Viet Nam





Environmental Infrastructure Technology Seminar





Business Matching in Exhibition Booth





WTE Project launch ceremony



Selected for MOEJ's "Financing Programme for Joint Crediting Mechanism (JCM) Model Projects in FY2021"

Waste treatment capacity: 500 tons/day

Power generation amount: 11.6MW

Schedule: Construction started in January 2022. Commercial operation to start at the end of 2023



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Supporting across different policy areas (climate change, waste management, water, air), from upsteam policy development to implementation/financial support, through bilateral/multilateral approach.













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