

# Recent Developments and Progress for the Joint Crediting Mechanism (JCM)

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Concurrent: Office for the Joint Crediting Mechanism and International Carbon Market

**26<sup>th</sup> September 2025**



Ministry of the Environment

- Signing of the JCM MoC and 1st JCM joint committee between India and Japan
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- Crediting Process of the JCM
- Project Idea Note
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- JCMA and “JCM Global Match”
- The way forward

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# **Signing of the JCM MoC and 1<sup>st</sup> JCM joint committee between India and Japan**

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# Signing of the JCM MoC between India and Japan

- On August 7, 2025, in New Delhi, India, the Memorandum of Cooperation (MoC) on the Joint Crediting Mechanism (JCM) was signed (H.E. Mr. ONO, Ambassador Extraordinary and Plenipotentiary of Japan to the Republic of India and Mr. Tanmay, Secretary, Ministry of Environment, Forest and Climate Change).
- On August 29, 2025, a document exchange ceremony was held under the witness of Prime Minister Modi and Prime Minister Ishiba. The signing was also welcomed during the summit meeting.



Signing of the MoC (August 7, 2025)



Document exchange ceremony with the leaders of Japan and India (August 29, 2025) ©Cabinet Public Affairs Office, Cabinet Secretariat.

## **[Reference] Background of Negotiations for Establishing JCM with India**

Sep. 2021: Japan-India Ministerial Dialogue on Environmental Policy

**Mar. 2022: Japan-India Joint Statement Issued at Japan-India Summit Meeting** (Both leaders committed to continuing discussions toward establishing the JCM for the implementation of Article 6 of the Paris Agreement)

**Mar. 2023: Signing of the Memorandum of Understanding Confirming Intent to Establish the JCM** (Signed in New Delhi, India, between H.E. Mr. Hiroshi Suzuki, Ambassador Extraordinary and Plenipotentiary of Japan to India, and Mr. Naresh Pal Gangwal, Additional Secretary, Ministry of Environment, Forests and Climate Change, India)

Mar. 2025: Visit to India by Matsuzawa, Vice-Minister for Global Environmental Affairs, Ministry of the Environment, Japan: Discussions with India's Ministry of Environment, Forests and Climate Change, Ministry of Power, etc., regarding the JCM, and hosting of a decarbonization business matching seminar

Jun. 2025 Visit to India by the Office for the JCM, Ministry of the Environment, Japan: Discussions with India's Ministry of Environment, Forests and Climate Change, Ministry of Power, etc., regarding the JCM visit to India: Policy discussions with India's Ministry of Finance and Ministry of Environment, Forest and Climate Change

July 1, 2025 Cabinet decision within the Indian government regarding the MoC on the JCM



# First Joint Committee India and Japan

- On September 22, 2025, the first meeting of the Joint Committee (JC) for the Japan-India Joint Crediting Mechanism (JCM)\* was convened. During the meeting, both parties concurred on making final adjustments with a view to the early adoption of the Rule of Implementation (RoI), which will serve as the regulatory framework for the JCM in accordance with Article 6 of the Paris Agreement.
- Following the discussion at the Joint Committee, the JC decided to begin accepting submissions of the Project Information Sheet, prior to the finalization of the Rule of Implementation (RoI). Project participants wishing to apply the JCM to their projects are requested to complete the required information and contact JCMA, the designated JCM implementing agency.



First Joint Committee (September 22, 2025)

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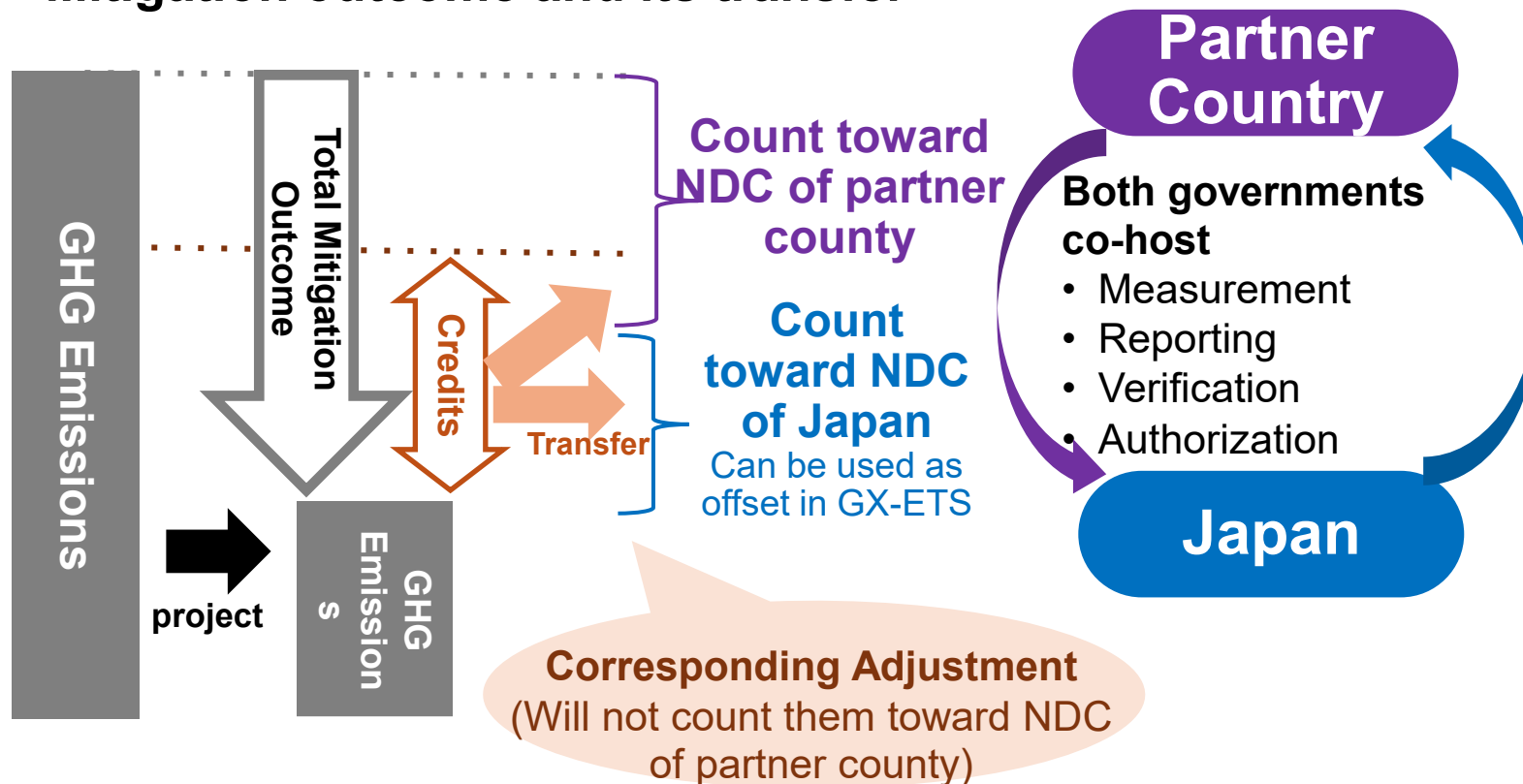
# Overview of JCM

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# Overview of Joint Crediting Mechanism (JCM)

- **JCM is a carbon market tool** where **Japanese companies and government cooperate with mitigation activities in partner countries** (30 as of Today).
- Among total mitigation outcomes, both governments **conservatively calculate, authorize and share JCM credits** between the companies/countries in proportion to their contributions, in line with **Article 6 of Paris Agreement**.
- **JCM incentivizes Japan's investment** in decarbonization projects bringing various benefits including achievement of NDC and sustainable development.

## Mitigation outcome and its transfer



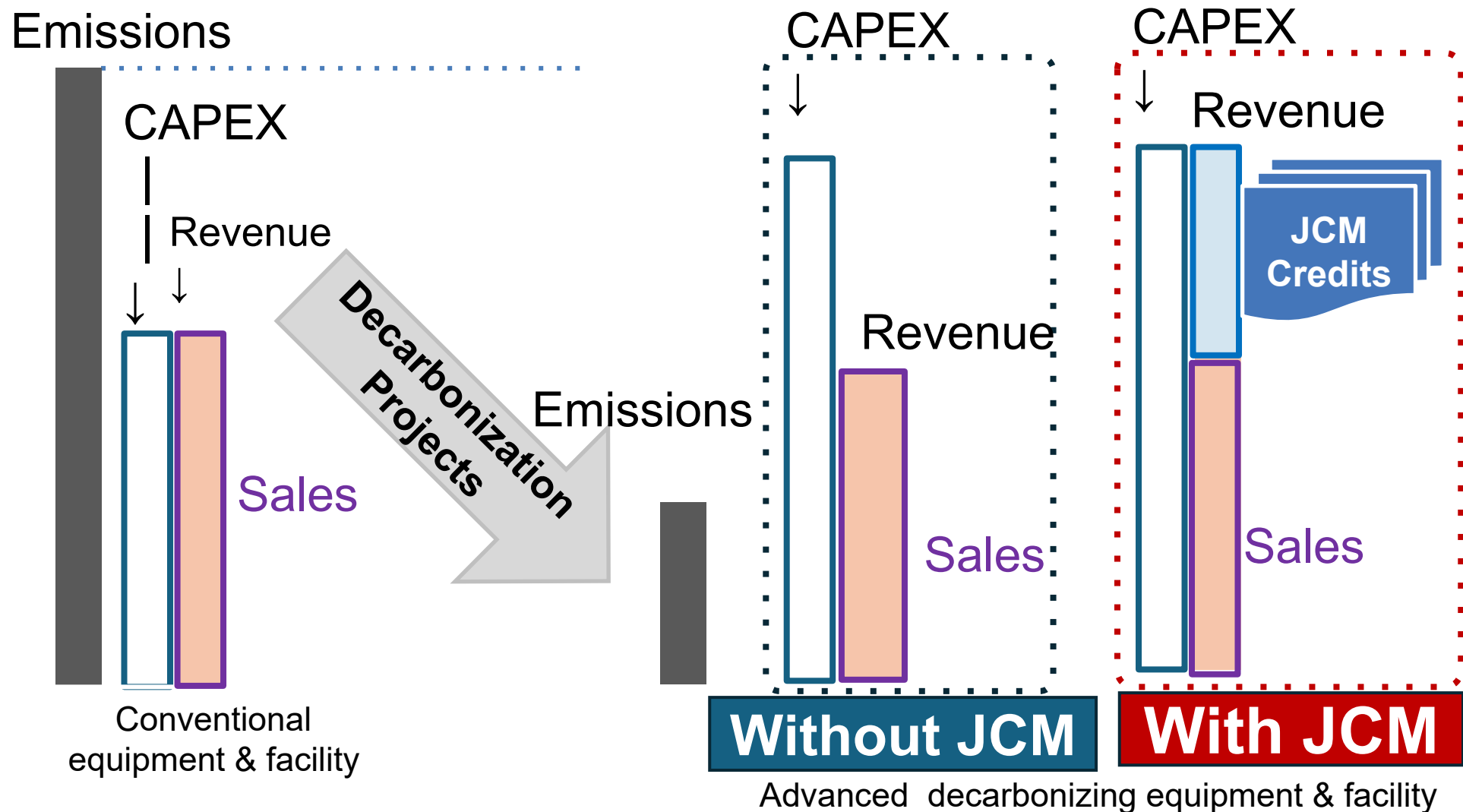
## Decarbonization projects invested by Japan



※ under development phase

# JCM credits revenue can improve profitability of projects

- JCM incentivizes Japan's investment in decarbonization projects as JCM credits revenue can improve profitability of projects

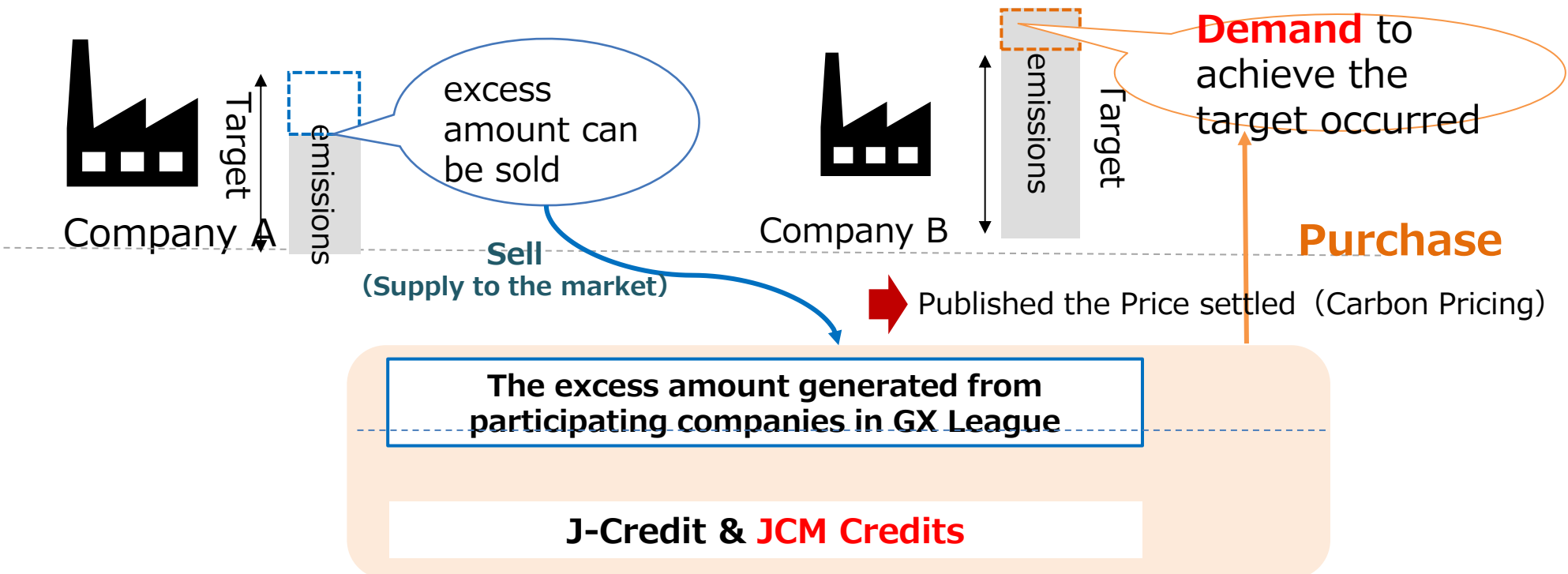




# JCM Credits acquired by Japan is used for achievement of emission reduction target

- JCM credits acquired by Japan can be
  - counted toward achievement of NDCs.
  - used for the achievement of companies' compliance targets under GX-ETS (will start in 2026)

## GX-ETS and Carbon Credit Market



- Japan aims to achieve a cumulative reduction and removal of greenhouse gas emissions amounting to **100 million tons by fiscal year 2030, and 200 million tons by fiscal year 2040,** through the utilization of the Joint Crediting Mechanism (JCM).

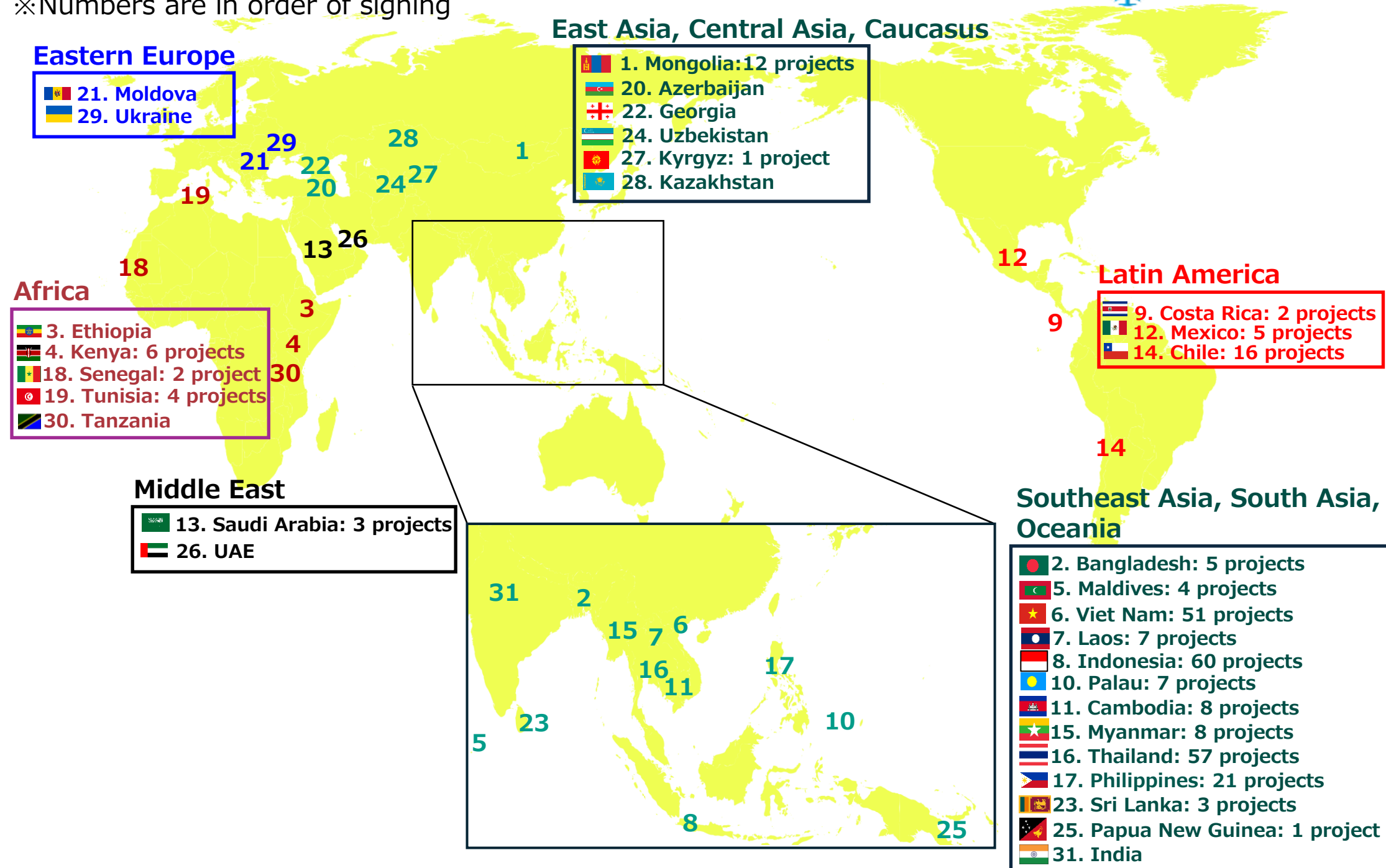
**Japan's Nationally Determined Contribution (NDC) 18<sup>th</sup> February 2025**

**(g) The intention to use voluntary cooperation under Article 6 of the Paris Agreement**

Japan will establish and implement the Joint Crediting Mechanism (JCM) in order to quantitatively evaluate the contributions of Japan to greenhouse gas emission reductions and removals which are achieved through the diffusion of, among others, decarbonizing technologies, products, systems, services, and infrastructures as well as through the implementation of measures in global south countries and others, and to use such contributions to achieve Japan's NDC. With these efforts, through public-private collaborations, Japan aims to secure accumulated emission reductions and removals at the level of approximately 100 million t-CO<sub>2</sub> by FY 2030 and approximately 200 million t-CO<sub>2</sub> by FY 2040. Japan will appropriately count the acquired credits to achieve its NDC.

# List of JCM 31 partner countries as of August 2025

※Numbers are in order of signing



# Sectors of JCM projects

- So far, there have been **257 technology adoptions**.
- 56% of these are related to renewable energy, followed by 34% for energy efficiency, making up the majority.

## Waste 2%

- Waste to Energy
- Power Generation with Methane Gas

## Transport 1%

- Digital Tachographs
- Modal Shift
- CNG-Diesel Hybrid

## REDD+ 1%

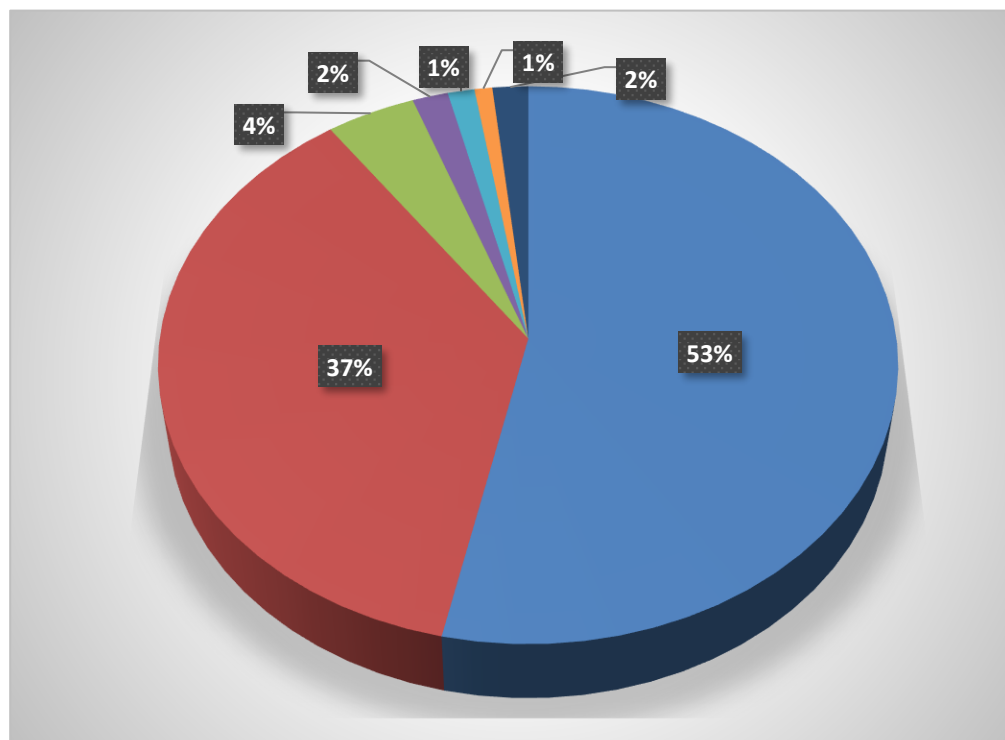
- Controlling slush and burn

## Effective Use of Energy 4%

- Waste Heat Recovery
- Gas Co-generation

## Energy efficiency 37%

- Boiler
- Air Conditioning
- Refrigerating/Chiller
- Looms
- Transformer
- LED Lighting



## F-gas 2%

- Recovery & Destruction

## Renewable energy 53%

- Solar(&Storage battery)
- Micro hydro
- Wind
- Biomass
- Geothermal



# (reference) More than 270 JCM projects with over 3 billion USD of investment

## Renewable Energy



Solar power, FARMLAND Co., Ltd., Chile



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



Hydro Power Plant, Toyo Energy Farm Co., Ltd., Indonesia



Biogas Power Generation, ITOCHU Corporation, Philippines



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

## Energy efficiency [Consumer sector]



Energy saving at convenience stores, Panasonic, Indonesia



High-efficiency refrigerator, Mayekawa MFG, Indonesia

## Energy efficiency [Industrial sector]



Optimization in petroleum refining plant, Yokogawa Electric Corp. Indonesia



Energy-saving of mobile communications base transceiver stations, KDDI Corp. Indonesia

## Effective Use of Energy



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

## Energy efficiency [Urban sector]



LED street lighting system with wireless network control, MinebeaMitsumi, Cambodia

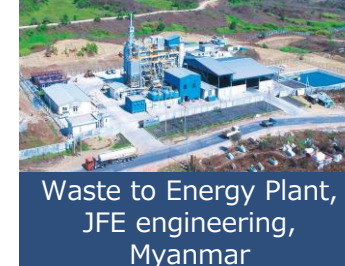


Amorphous transformers in power distribution, Yuko-Keiso, Vietnam

## Waste



Power Generation with Methane Gas Recovery System, NTTDATA, Mexico



Waste to Energy Plant, JFE engineering, Myanmar

## Transport



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

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# **Eligible Activities of JCM in India**

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# Eligible activities under Art 6.2 in India has already been defined by MOEFCC in June, 2024

Activities finalised to be considered for trading of carbon credits under Article 6.2 mechanism to facilitate transfer of emerging technologies and mobilise international finance in India

## **I . GHG Mitigation Activities:**

1. Renewable energy with storage (only stored component)
2. Solar thermal power
3. Off- shore wind
4. Green Hydrogen
5. Compressed bio-gas
6. Emerging mobility solutions like fuel cells
7. High end technology for energy efficiency
8. Sustainable Aviation Fuel
9. Best available technologies for process improvement in hard to abate sectors
10. Tidal energy, Ocean Thermal Energy, Ocean Salt Gradient Energy, Ocean Wave Energy and Ocean Current Energy
11. High Voltage Direct Current Transmission in conjunction with the renewal energy projects

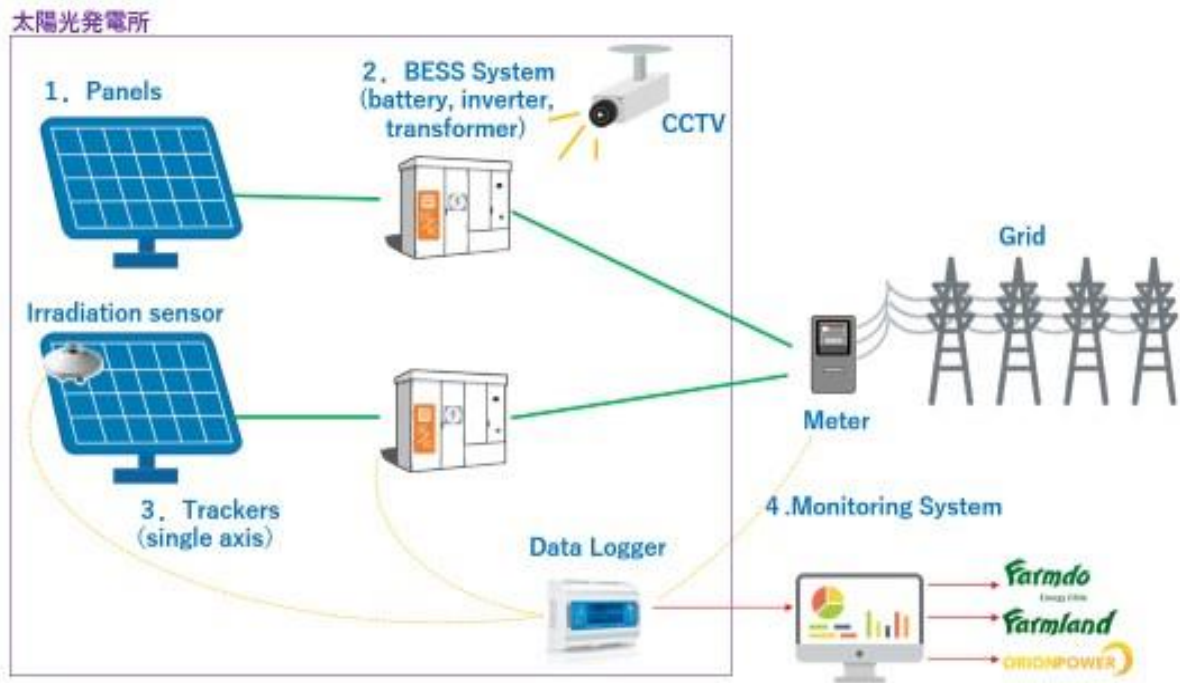
**II . Alternate Materials:** 12. Green Ammonia

**III . Removal Activities:** 13. Carbon Capture Utilization and Storage

# 26.3MW Solar Power and 48MWh Storage Battery Project Utilizing Farmland in the Metropolitan Area and O'Higgins Region

PP (Japan): Farmland Co., Ltd.,  
PP (Chile): Farmdo Energy Chile SpA, Orion Power S.p.A.

Chile



- 26.3MW solar power facility with single-axis trackers and a 48MWh battery on leased 3 farmlands in the metropolitan area and in the O'Higgins Region.
- By participating in the Pequeños Medios de Generacion Distribuida (PMGD) established by the Chilean government and selling electricity to power distribution companies, the project aims to reduce greenhouse gas (GHG) emissions and supply sustainable clean electricity.

Expected  
Reductions

20,197  
tCO<sub>2</sub> /year

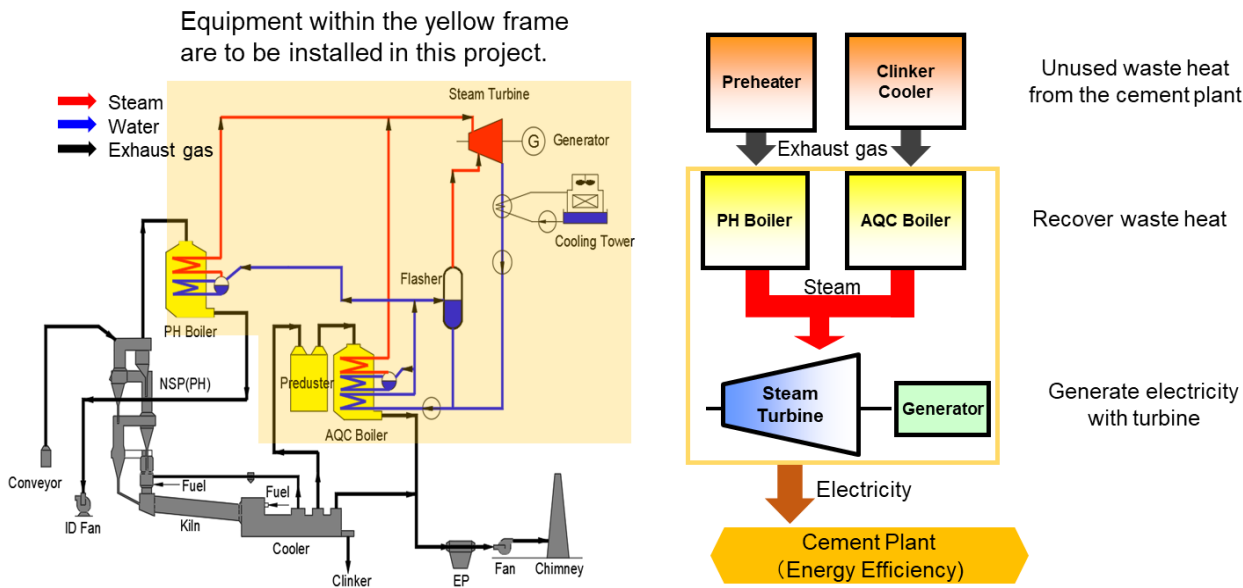
- **Reference CO<sub>2</sub> emissions**  
= (Quantity of the electricity generated by the project) [MWh/year]  
× Emission factor [tCO<sub>2</sub>/MWh]
- **Project CO<sub>2</sub> emissions = 0 [tCO<sub>2</sub>/year]**



# Introduction of 6MW Power Generation System by Waste Heat Recovery for Cement Plant

PP (Japan): GLOBAL ENGINEERING Co., Ltd.  
PP (Philippines): REPUBLIC CEMENT & BUILDING MATERIALS

**Philippines**



- 6MW waste heat recovery power generation system in the existing cement manufacturing plant in Bulacan in the Central Luzon region.
- The system makes use of the unused waste heat, which is released during the calcining process of cement production, to generate electricity and effectively reduces electricity from fossil fuel, resulting in the reduction of greenhouse gas (GHG) emissions.

**Expected  
Reductions**

**21,244  
tCO<sub>2</sub> /year**

## Reference CO<sub>2</sub> emissions

= (Quantity of the electricity generated by the project) [MWh/year]  
× Emission factor [tCO<sub>2</sub>/MWh]

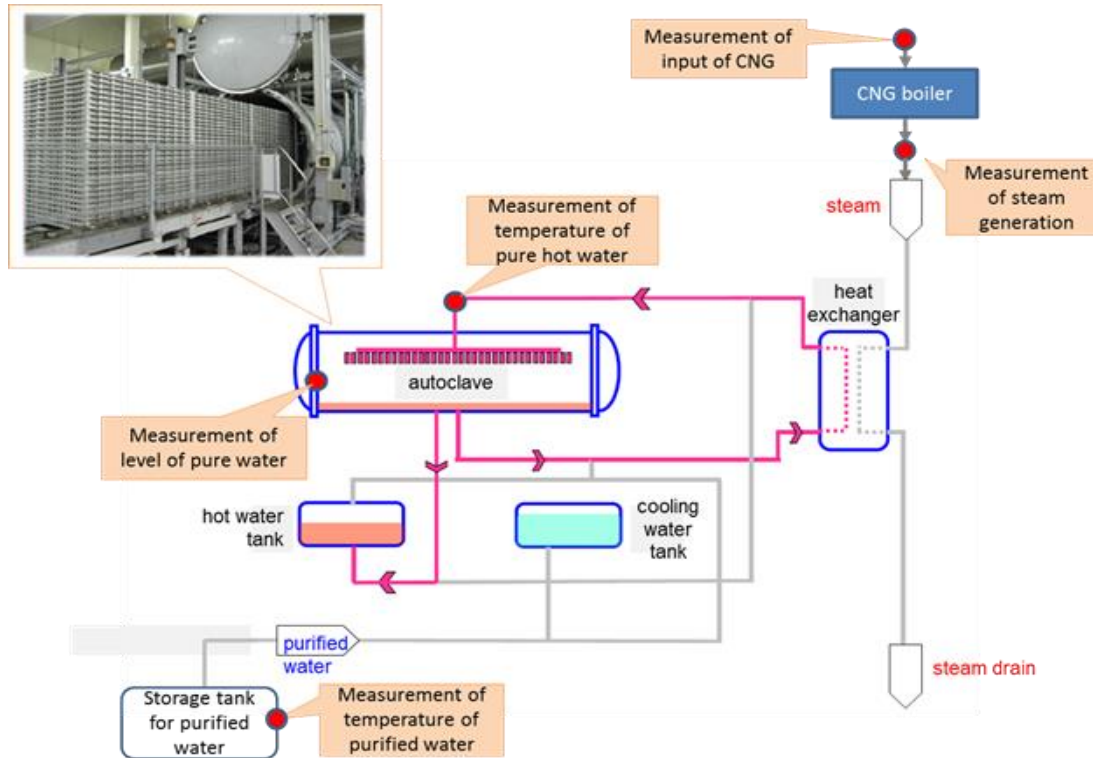
• Project CO<sub>2</sub> emissions  
= 0 [tCO<sub>2</sub>/year]

# Energy Saving by Introducing High Efficiency Autoclave to Infusion Manufacturing Factory 2

**Indonesia**

PP (Japan): Otsuka Pharmaceutical Factory, Inc.

PP (Indonesia): PT. Otsuka Indonesia



**Expected  
Reductions**

**8,806  
tCO<sub>2</sub>/year**

**Expected Reductions**

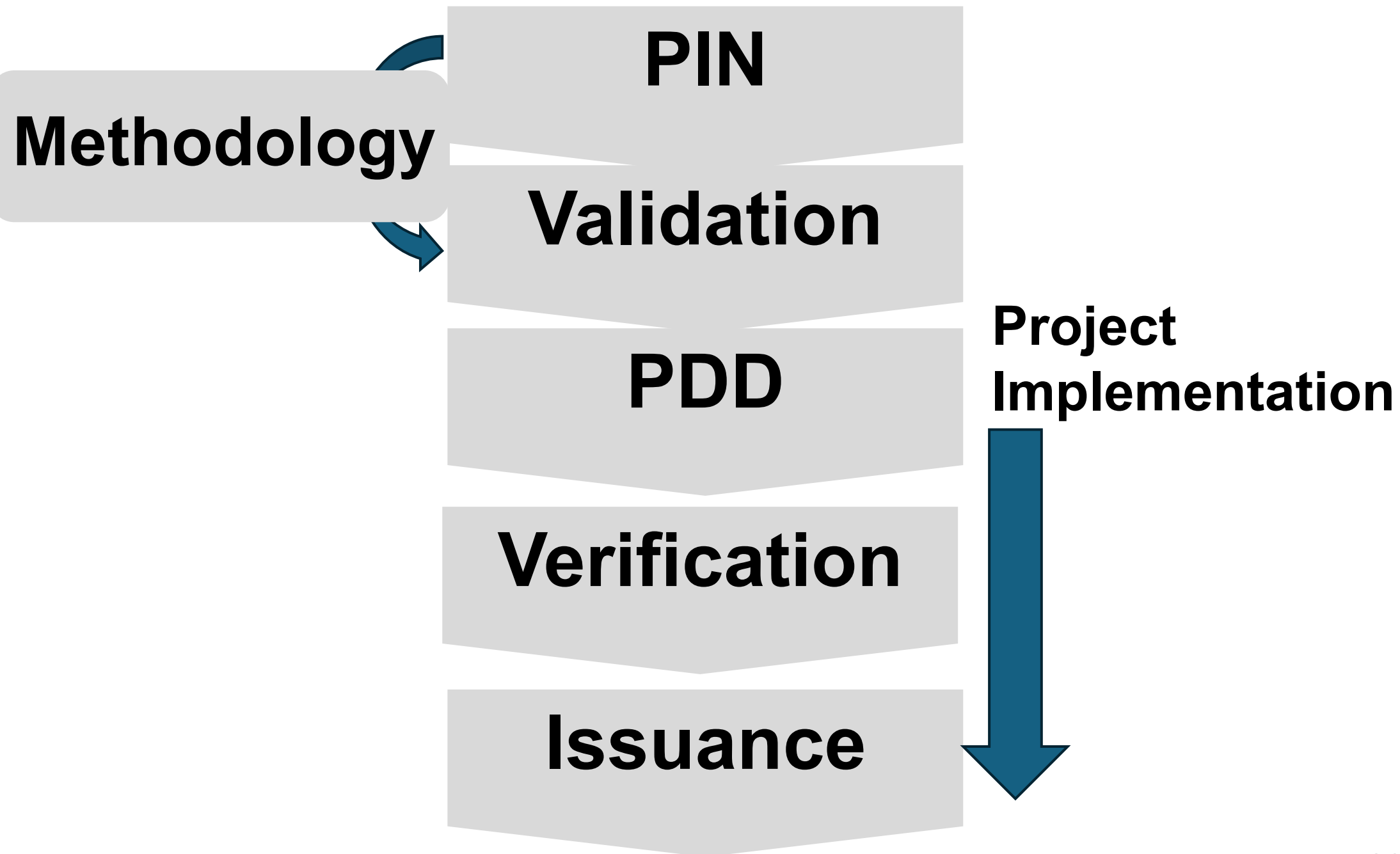
= (Reference CNG consumption volume  
– project CNG consumption volume) X Emission factor of CNG.

- At a new infusion manufacturing factory, a new type of high efficiency autoclave, which fulfills the Good Manufacturing Practice (GMP) and realizes energy and resource saving, is introduced.
- Since the hot water to be injected into the autoclave is maintained at a high temperature, both the amount of steam charged in a batch unit and consumption of natural gas (CNG) required for steam generation are reduced. In addition, pure water used in the sterilization process is reused.

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# **Crediting Process of the JCM**

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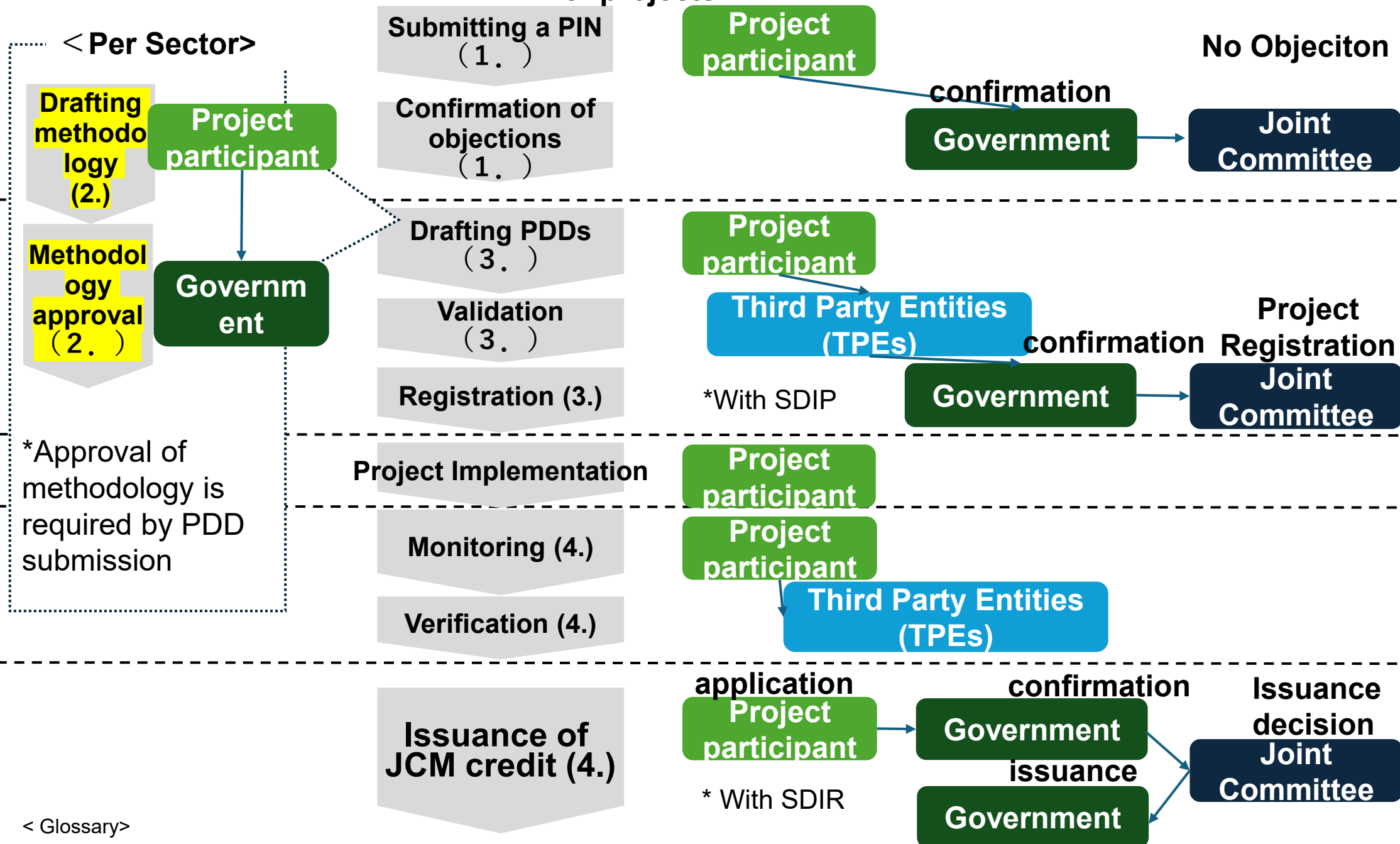




# JCM Project Cycle[Detail]

< Per projects >

< Per Sector >

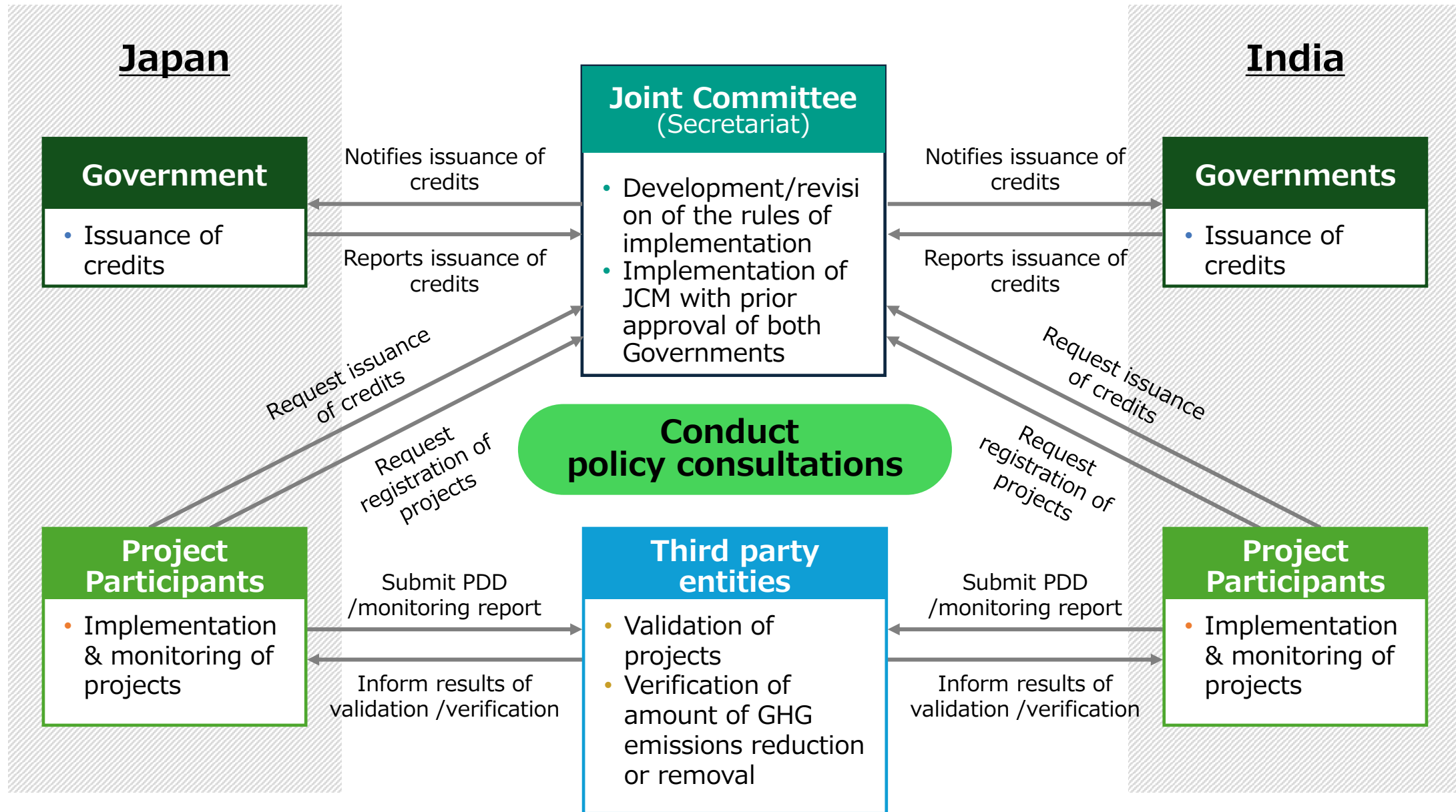


< Glossary >

PIN (Project Idea Note): A document that explains the outline of the project to the other country and confirms whether there are any objections.

PDD (Project Design Document): A project design document that includes monitoring methods and estimated emission reductions for emission reductions. Required for project registration.

# Roles of actors in the JCM

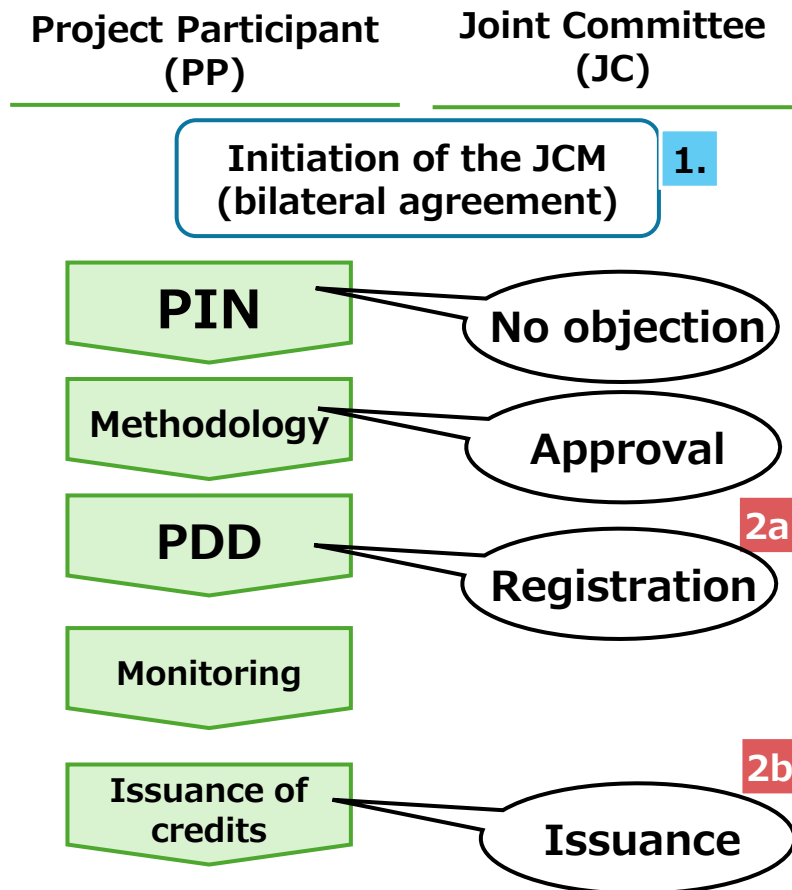


# Article 6 implementation

- **JCM is to be implemented in consistent with Article 6** which prescribes for the use of mitigation outcomes realized overseas towards national emissions reduction targets.
- Such prescriptions include **authorization and corresponding adjustment** to avoid double counting.
- Each government **authorizes the JCM credits to be transferred as ITMOs** for the use toward the achievement of Japan's NDC and/or for the use of other international mitigation purpose, consistent with the guidance on cooperative approaches, referred to in Article 6, paragraph 2 of the Paris Agreement (hereinafter referred to as "the guidance").
- Such **authorization** described in the preceding paragraph is **made at the time of issuance of the JCM credits.**
- **The Government of India applies corresponding adjustments to the JCM credits issued in the JCM registry of Japan as well as the JCM credits issued in the registry of India that are authorized for the use toward other international mitigation purposes, consistent with the guidance.**
- Each government checks the status of the issuance and use of JCM credits and makes sure that **double counting is avoided.**

# Authorization of JCM credits can be simple

- “Authorization” is an act by Parties of authorizing the use of ITMOs from a cooperative approach as stipulated in Paris Agreement.
- Japan proposes efficient authorization arrangements to enhance foreseeability for private companies as JCM cycle covers careful examination enough for A6 authorization



## 1. Authorization of JCM as a cooperative approach

What	Authorization of JCM, incl authorization process
When	At the time of signing of MoC
Report	Copy of authorization attached to an initial report

## 2a. Authorization of Entity of each project

What	Entities of project participants
When	At the time of project registration
Report	Attachment to the 1. authorization

※Right after registration, the **Government of India issues a Letter of Intent for credit issuance**

## 2b. Authorization of final quantity of ITMOs

What	Final quantity of ITMOs and period
When	At the time of issuance of JCM credits
Report	Attachment to the 1. authorization

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# **Project Idea Note**

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- Project Idea Note describes an overview of a planned JCM project of project participants, explain the planned project's alignment with the list of activities approved by the Government of India under Article 6.2 of Paris Agreement and alignment with the provision outlined in the MoC.
- The Joint Committee, subsequent to the in-principle approval from the Government of India, decides, with prior approval by both governments, whether to object or not to object, and upon no objection of the Joint Committee, the project participants may proceed to the request for registration of the project as JCM project.

## PIN Contents (Draft)

1. Description of the project, including how the project reduces GHG emissions
2. Reasons and rationale for implementing the project under the JCM
3. Location of the project
4. Expected Schedule of the project
5. Type and duration of crediting period
6. Expected scale of investment and financial sources
7. Applicable JCM methodology(ies)
8. Expected Mitigation Outcome (GHG emission reductions/removals)
9. Contacts

- Projects should demonstrate the reasons and rationale why the project participants propose to implement the project under the JCM, instead of a purely commercial project.
- Also, describe how the proposed project provides any benefits to the partner country, given that the partner country should apply corresponding adjustments for JCM credits acquired by Japan.

## Examples of Reasons and rationale for the project under the JCM

### 1. Features and Benefits

- Advantages of the technology and/or solution
- Superior quality of energy or materials produced
- Efficient production processes
- Participation of local companies, contributing to industrial development through capacity building and technology transfer

### 2. Need for Credit Incentives

- The project requires credit revenue (including subsidies) .
- Technical barriers, lack of precedents, or low awareness
- Challenges in maintenance and institutional setup
- Potential for scaling up and expanding within the country

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# Calculation and Sharing of JCM Credits

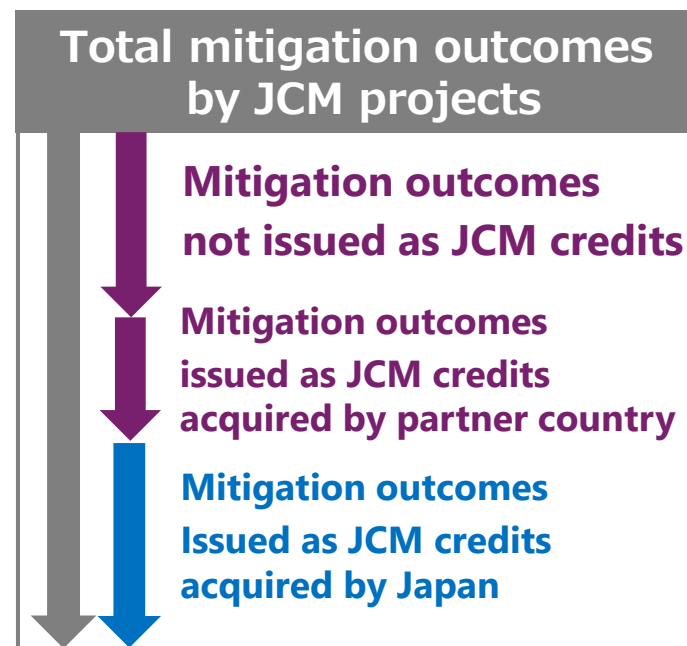
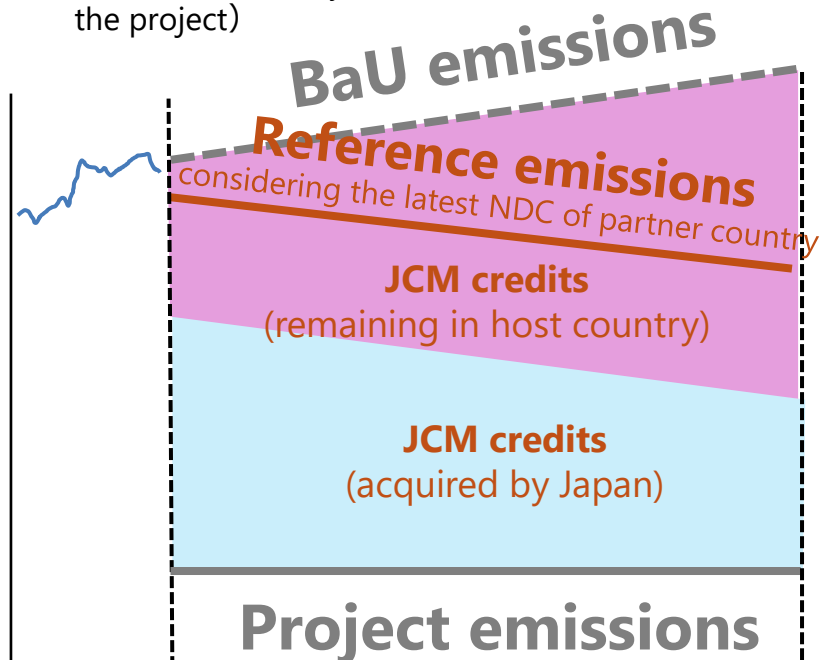
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# Overview of calculation and sharing of JCM Credits

1. Mitigation outcomes issued as **JCM credits** are the difference between **project emissions** and **reference emissions** that are established considering the **latest NDC of partner country**.
2. **Total mitigation outcomes by JCM projects**, the difference between business-as-usual (BaU) and project emissions, **consist of mitigation outcomes that is NOT issued as JCM credits, mitigation outcomes issued as JCM credits acquired by partner countries and Japan**. All of them **contribute to achieving their NDCs**.
3. **Allocation of total mitigation outcomes for each government and participant** will be consulted bilaterally, taking into consideration their **respective contributions to the JCM project**. Such contribution includes **private and public financial contributions, in-kind contributions, such as technical and operational contributions**.

## Emission amount

(from sources covered by the project)



**India's contribution**

Reflected in partner country's inventory and contributes to achieving its NDC

**Japan's contribution**

Used for Japan's NDC, etc

Start of project

End of crediting period

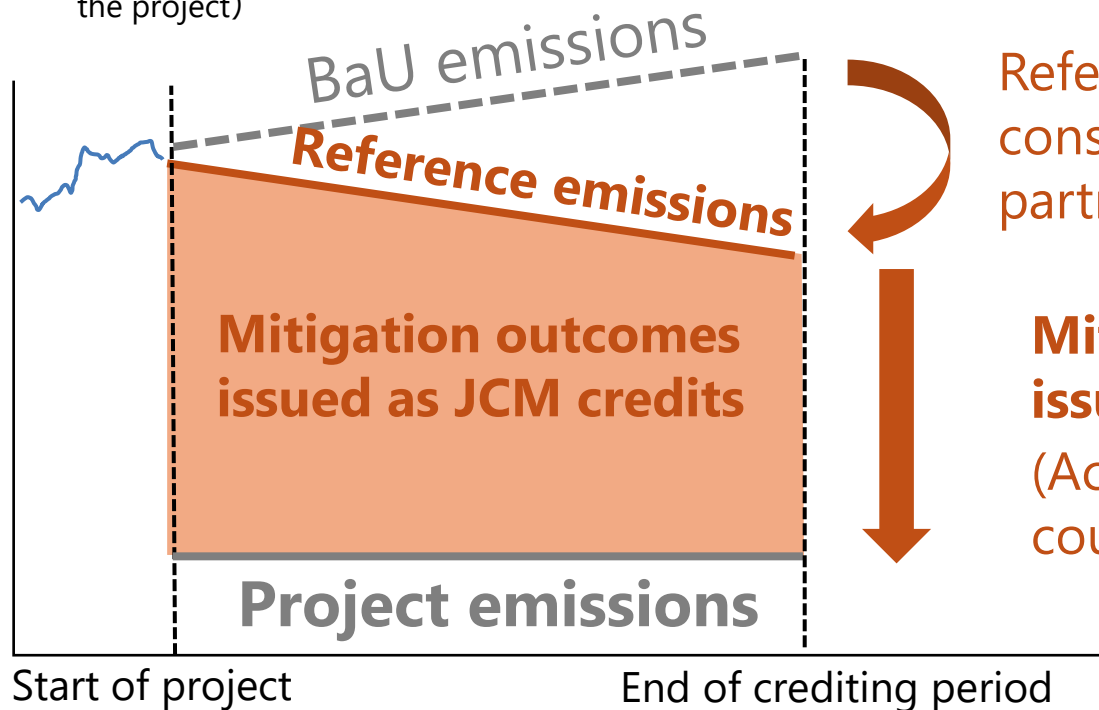
**Time**

# Calculation of JCM Credits

- Mitigation outcomes issued as **JCM credits** are the difference between reference emissions and project emissions.
- The reference emissions are established by JCM methodologies with a conservative buffer to be **below business-as-usual (BaU) emissions** which represent plausible emissions in providing the same outputs or service level of a proposed JCM project in India, in a manner that the proposed project **contributes to the achievement of the NDC** of both countries.
- This **conservative way** of evaluation of mitigation outcomes is **consistent with Article 6** and relevant guidelines.

## Emission amount

(from sources covered by the project)

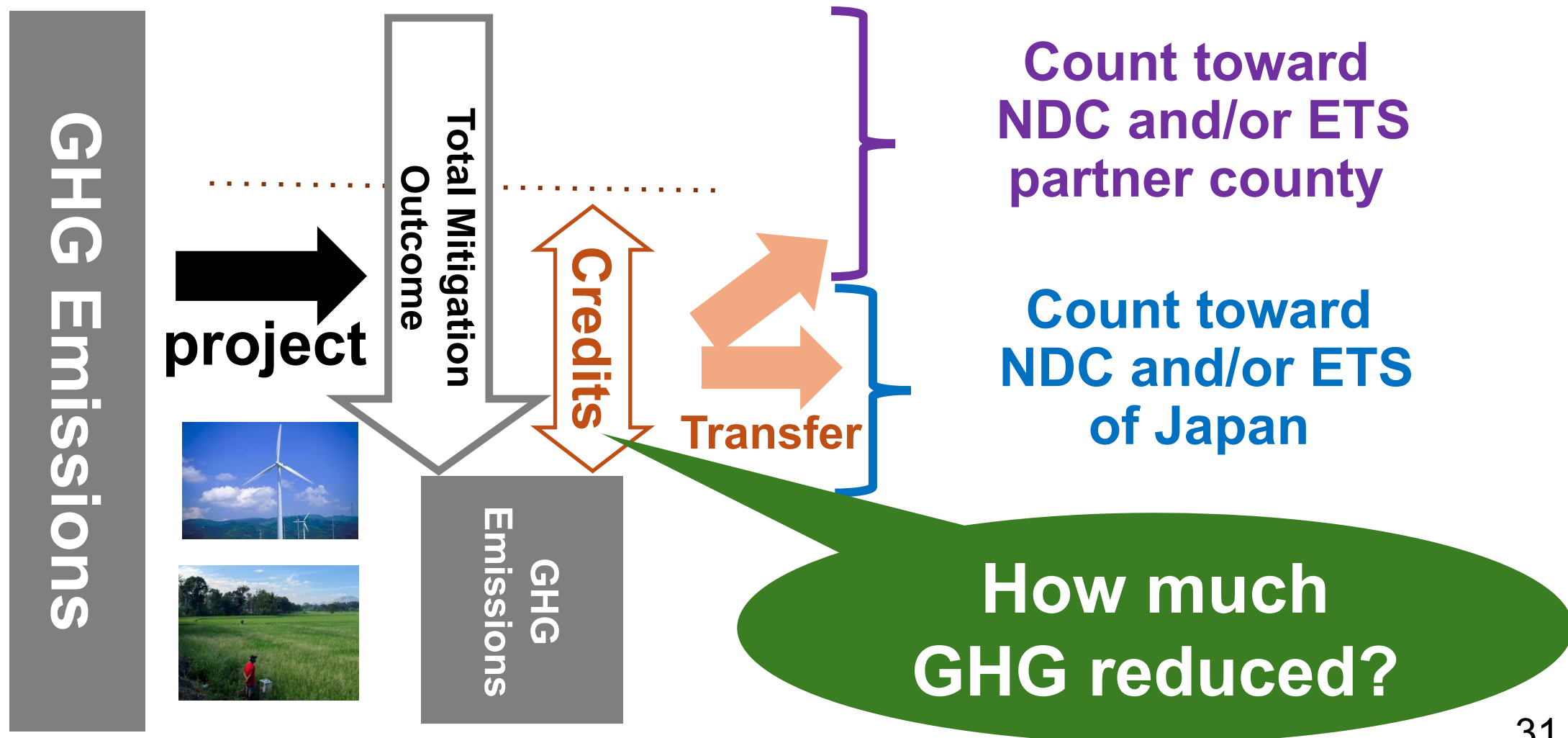


Reference emissions are established considering the latest NDC of a partner country.

**Mitigation outcomes issued as JCM credits**  
(Acquired by both partner country and Japan)

Methodology is a key document that

- Specifies scope and eligibility of the JCM project
- Explains methods to quantify the amount of mitigation outcome
- Provides estimation of how much JCM credits to be issued





- The sharing of JCM credits is decided by the Joint Committee with prior approval of the Government of India and Government of Japan **based on the assessment of following elements**

## Elements to be assessed for credit sharing

- Extent of each side's respective contributions to mitigation outcomes including private and public financial contributions, such as, subsidies provided by each government wherever applicable, in-kind contributions, such as technical and operational contributions and the terms of finance.
- Extent in which the expected carbon credit revenue could lead to improvement in the unit economics of the project.

# Extent of each side's respective contribution JCM THE JOINT CREDITING MECHANISM

- **Financial contribution**: How much money was invested by the company or government of which country was invested in the project.
- **Technology provision**: If the Japan side provides highly efficient technology and know-how and contributes to the promotion of related industries in India, it can be evaluated as a separate contribution from the financial aspect.
- **Project initiative**: Effort invested in planning, designing, and implementing the project (e.g., man-hours).

## Financial contributions

- CAPEX (capital investment, construction costs, land acquisition) for project initiation
- OPEX (implementation of O&M services, system support) for project operation
- MRV cost
- Risk-taking at the initial stage (upfront investment, investment in pilot projects)
- Initial survey costs such as FS (feasibility study) and environmental impact assessment (EIA)
- Activities for technology transfer related to the project
- Human resource development/capacity building (training costs for local staff)
- Discounts (EPC costs, insurance premiums)
- Waiver of preferential loans (low interest rates, interest subsidies, subordinated loans) and preferential treatment or rights in business participation (waiver of shareholder benefits, waiver of voting rights)
- Commitment to offtake credit (when it is recognized that committing to offtake credit after project implementation plays an important role at the same level as CAPEX financing for a business where the profit from the sale of credits is the pillar of revenue and cannot be established without the application of JCM) etc

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# **JCMA and “JCM Global Match”**

## **business matching platform**

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- Japan has legalized the JCM for steady implementation and launched **“JCMA”new agency covering ALL the operation of JCM** in April 2025

- One stop focal point for the JCM on behalf of Japanese government
- Implementation and facilitation of the JCM, including promoting JCM projects
- In charge for ensuring environmental integrity and transparency of the JCM

# 1. What is “JCM Global Match”?

- ◆ JCM Global Match is an entirely **free** of charge platform which facilitates match making between potential JCM project implementers.
- ◆ Around 1,000 active users have been registered from over 60 countries.

<https://gec.force.com/JCMGlobalMatch>



The screenshot shows the homepage of the JCM Global Match platform. At the top is a navigation bar with links: Home, What is JCM, How to Use, Good Practice, MDBs, and FAQ. The main header features a large image of hands stacked together, with the text "JCM Global Match" and "A FREE matching platform for decarbonizing businesses!". Below this, a paragraph states: "This business matching platform is dedicated to support formation of any kind of JCM projects to accelerate diffusion of advanced decarbonizing technologies. You can **SEARCH** for **COMMUNICATE** with other users and **ADVERTISE** your business freely in this site."

**\*Major features** of the “JCM Global Match”

Below the features section, there are three numbered icons: 1. FIND (Potential partner), 2. ADVERTISE (Your company to other users), and 3. DISCUSS (your business plan). A small video player shows an "Introduction of JCM Global Match" video.

To the right, a diagram titled "Consortium for JCM" shows a central handshake icon. On the left is a "Japanese Enterprise" with a Japanese flag. On the right is a "Partner Country Enterprise" with a globe icon. Below the handshake are icons for "Consultants, Public sectors" and "Financers".



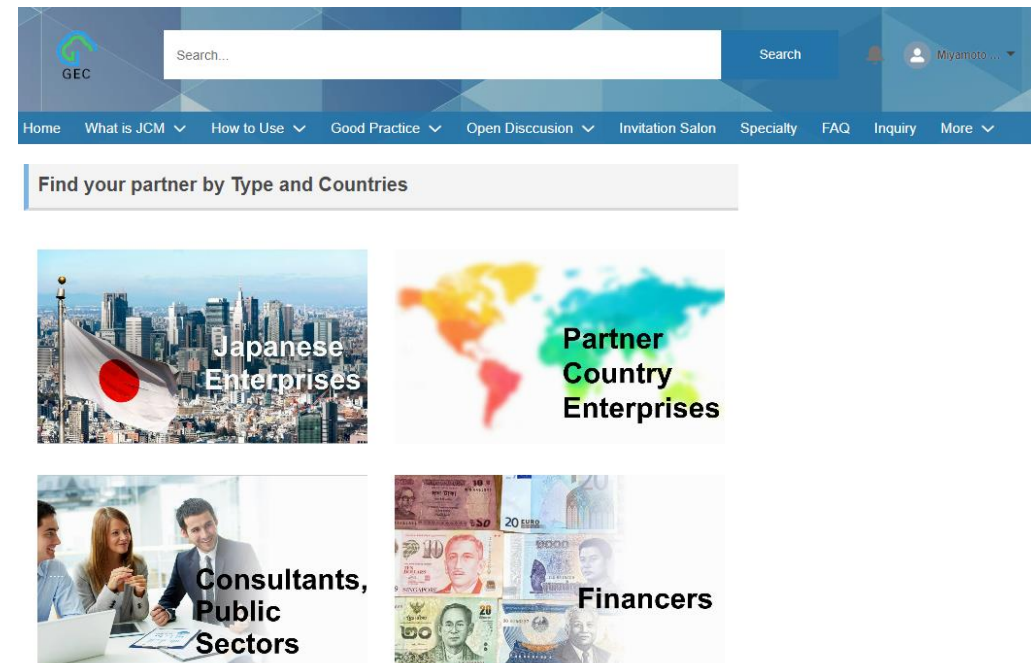
# Feature 1: Find your business partner

## 1 FIND Potential partner

① Search your potential partner by technology, country, or company name.



② Obtain company lists




# Feature 2: Advertise your company to other users

## 2 ADVERTISE

Your company to  
other users

① Update your profile page

② “Open Discussion” is also the place you can advertise your products and services freely.



**Kojina Yuri**  
Global Environment Centre Foundation (GEC)

**Company Name** **INDUSTRY**

Global Environment Centre Foundation (GEC)

**WEBSITE URL** **INDUSTRY (Other)**

<https://gec.jp/>

**DEPARTMENT**

Financing Programme Group 2

**COUNTRY**

Japan

[Edit](#)

**Among the Four Categories**

Consultant/Public Sector

**Mission Statement①**

contributing to the conservation of the environment around the world and undertaking activities to promote international cooperation to protect the global environment

**PLEASE SPECIFY HERE**

introducing low-carbon technology into developing countries using the JCM, operating JCM Global Match platform

### Open Discussion



# Feature 3: Discuss your business plan

## 3 DISCUSS

Your business plan

### ① Use “Invitation salon” for closed communications

[Home](#) [What is JCM](#) [How to Use](#) [Good Practice](#) [Open Discussion](#) [Invitation Salon](#) [Specialty](#) [FAQ](#) [Inquiry](#)



## JCM Global Match

A FREE matching platform for decarbonizing businesses!

### Invitation Salon

Invitation Salon is a closed chat room where you can communicate with other users keeping confidentiality.

You can create your own Invitation Salon and invite other users you'd like to speak with, and have a discussion with them in a closed set-up.

You don't have to send a matching request. Just send your invitation.

An invitee can leave a chat room after receiving an invitation but it's not of his/her interest.

Create a new Invitation Salon

Create an Invitation Salon

\*Name

Description

Information

Salesforce Sans

12

B

I

U

S

Confirm

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# **The way forward**

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# Project Information Sheet

Until the finalization of the Rule of Implementation (RoI), MOEJ (Ministry of Environment, Japan) and MOEFCC (Ministry of Environment, Forestry and Climate Change, India) will start information sharing between project participants and both governments using a Project Information Sheet.

You can find  
Project Information Sheet  
Format here

[https://www.env.go.jp/en/press/press\\_00448.html](https://www.env.go.jp/en/press/press_00448.html)





1<sup>st</sup> Article 6 partner for India

31<sup>st</sup> Article 6 partner for Japan

This is a Cooperative Approach between

- India and Japan
- Government and Private
- Business and Investment
- All of us



**JCM** THE JOINT CREDITING  
MECHANISM

# Thank you for listening!!!



## **IINO Satoru (Mr.)**

Director,  
Office of Fluorocarbons Control Policy,  
Concurrent: Office for the Joint Crediting  
Mechanism and International Carbon Market,  
Global Environment Bureau,  
Ministry of the Environment, Japan

## **Linkedin**

<https://www.linkedin.com/in/satoru-iino-718a2825/>

**Your feedback will  
be of great help to us**

**Please answer the  
survey**



<https://forms.gle/pL1gdChiyfqjJMo27>

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**Memorandum of Cooperation on the Joint Crediting  
Mechanism between the Government of Japan and  
the Government of the Republic of India**

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# Memorandum of Cooperation

## Memorandum of Cooperation on the Joint Crediting Mechanism between the Government of Japan and the Government of the Republic of India

1. The Government of Japan and the Government of the Republic of India (hereinafter referred to individually as a “government” and collectively as “both governments”), in pursuit of the objectives of the Paris Agreement including holding the increase in the global average temperature to well below 2 °C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5 °C above pre-industrial levels as stipulated in its Article 2, paragraph 1, sub-paragraph (a), and in order to enhance bilateral cooperation in addressing climate change, establish a Joint Crediting Mechanism (hereinafter referred to as “the JCM”).
2. **The JCM aims to facilitate diffusion of, among others, leading low-carbon technologies, equipment, machinery, products, systems, and infrastructure as well as implementation of mitigation actions, thereby contributing to greenhouse gas emissions reductions or removals and sustainable development in the Republic of India, and the achievement of nationally determined contributions of Japan and the Republic of India.**
3. Both governments implement the JCM in accordance with the relevant domestic laws and regulations in force in their respective countries.
4. Both governments establish the Joint Committee consisting of representatives from each government to implement the JCM.
5. The Joint Committee develops rules and guidelines necessary for the implementation of the JCM, relating to project cycle procedures, methodologies, project design documents, monitoring, designation of third-party entities, validation and verification and other related matters of the JCM.
6. **Decisions by the Joint Committee on the registration of a project, crediting period, sharing of credits, issuance of credits and other related matters on the JCM** are made with prior confirmation of the Government of Japan and the Government of India, unless otherwise specified.



# Memorandum of Cooperation

7. Both governments mutually recognize that part of JCM credits issued from emission reductions and removals may be used towards the achievement of Japan's nationally determined contribution and the rest of the said JCM credits may contribute to the achievement of the Republic of India's nationally determined contribution, while ensuring that double counting is avoided on the basis of corresponding adjustments, consistent with the guidance on cooperative approaches, referred to in Article 6, paragraph 2 of the Paris Agreement (hereinafter referred to as "the guidance").
8. **Each government authorizes the JCM credits issued in the JCM registry of Japan for use towards the achievement of Japan's nationally determined contribution as internationally transferred mitigation outcomes,** consistent with the guidance.
9. Each government recognizes that the JCM credits issued in the JCM registry of India contribute towards the achievement of the Republic of India's nationally determined contribution.
10. Each government may authorize part of JCM credits for use for other international mitigation purposes, as appropriate, consistent with the guidance.
11. The Government of Japan and the Government of India confirm registration of a JCM project prior to a decision by the Joint Committee.
12. The Government of Japan and the Government of India confirm the percentage of JCM credit allocation prior to a decision by the Joint Committee.
13. The Government of Japan and the Government of India confirm the issuance of JCM credits prior to a decision by the Joint Committee.
14. Both governments ensure **the transparency and environmental integrity of the JCM and maintain it simple and practical, to promote concrete actions for global greenhouse gas emission reductions and removals.**

# Memorandum of Cooperation

15. Both governments work in close cooperation for the implementation of the JCM. The Government of Japan will facilitate the transfer of technologies, finance and capacity building in respect of new technologies for the JCM as well as setting up of operational infrastructure for making the JCM functional, on the basis of mutual understanding, for the administration of the JCM by the Government of the Republic of India.
16. Both governments aim for contributions to assist adaptation efforts of India.
17. Either government may terminate this Memorandum of Cooperation (hereinafter referred to as “this MoC”) by giving at least six (6) months’ prior notice to the other government through the diplomatic channel. Such termination will not affect existing projects or activities under this MoC.
18. Any content of this MoC may be modified and supplemented by mutual written consent between both governments.
19. Any differences arising out of the interpretation, application and implementation of this MoC are resolved amicably through consultations between both governments.
20. Both governments recognize that this MoC is not legally binding and does not create any legal rights or obligations. Contents of this MoC will not affect any of rights and obligations of both governments arising from other applicable international agreements.

Signed in Delhi on 7th August 2025, in two originals in the English language.  
ONO Keiichi, Ambassador Extraordinary and Plenipotentiary of Japan to the Republic of India  
Tanmay Kumar, Secretary, Ministry of Environment, Forest and Climate Change

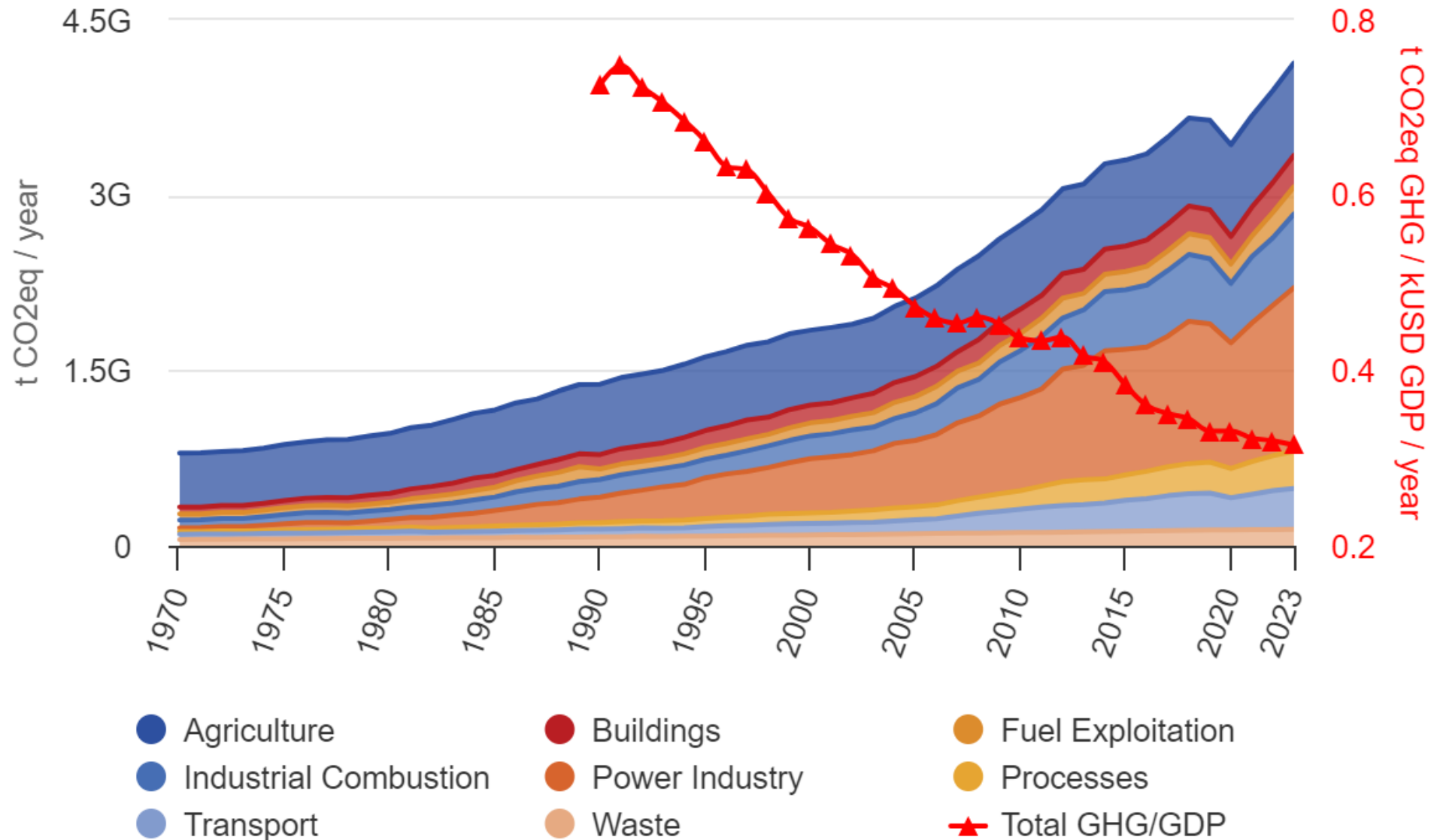
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# **Carbon Market Progress and JCM Feasibility Study in India**

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# Trends in India's greenhouse gas emissions (excluding LULUCF)

## GHG emissions by Sector



(出所) European Commission, Joint Research Centre, Crippa, M., Guizzardi, D., Pagani, F., Banja, M., Muntean, M., Schaaf, E., Monforti-Ferrario, F., Becker, W.E., Quadrelli, R., Risquez Martin, A., Taghavi-Moharamli, P., Köykkä, J., Grassi, G., Rossi, S., Melo, J., Oom, D., Branco, A., San-Miguel, J., Manca, G., Pisoni, E., Vignati, E. and Pekar, F., GHG emissions of all world countries, Publications Office of the European Union, Luxembourg, 2024, [doi:10.2760/4002897](https://doi.org/10.2760/4002897), JRC138862 ([https://edgar.jrc.ec.europa.eu/country\\_profile/IND](https://edgar.jrc.ec.europa.eu/country_profile/IND), 2025年6月5日アクセス)



# Overview of India's Climate Change Mitigation Measures

## Nationally Determined Contribution(NDC)

target year	Baseline	sectors	Goal
2030	Compared to 2005	per GDP	45% less emissions

(出所) "India's Updated First Nationally Determined Contribution Under Paris Agreement" (26/8/2022)

## Emission Reduction Potential (based on NDC baseline emissions)

473 tCO<sub>2</sub>e/USD

(Greenhouse gas emissions per unit of GDP in 2005)

(出所) European Commission, Joint Research Centre, Crippa, M., Guizzardi, D., Pagani, F., Banja, M., Muntean, M., Schaaf, E., Monforti-Ferrario, F., Becker, W.E., Quadrelli, R., Risquez Martin, A., Taghavi-Moharamli, P., Köykkä, J., Grassi, G., Rossi, S., Melo, J., Oom, D., Branco, A., San-Miguel, J., Manca, G., Pisoni, E., Vignati, E. and Pekar, F., GHG emissions of all world countries, Publications Office of the European Union, Luxembourg, 2024, doi:10.2760/4002897, JRC138862 ([https://edgar.jrc.ec.europa.eu/country\\_profile/IND](https://edgar.jrc.ec.europa.eu/country_profile/IND), access on 5/6/2025)

## Sector-wise greenhouse gas emission reductions, policies, and measures

Sector	Goal	policies, and measures
electric power	50% non-fossil fuel sources	the goal should be raised to approximately 50% of installed electric power generated by non-fossil fuel sources
Carbon Sink Creation	2.5–3 billion tonnes of CO <sub>2</sub> equivalent	to plant and maintain in forests and other vegetated areas

(出所) "India's Updated First Nationally Determined Contribution Under Paris Agreement" (26/8/2022)

### ■ NDC 2023 Update - to include greater targets

- The development of **climate-resilient infrastructure** is emphasized as a means of mitigating and adapting to the effects of climate change.
- **Sustainable Lifestyles**: The Lifestyle for Environment (LiFE) initiative aims to promote sustainable patterns of production and consumption.
- **India's 2070 goal**, as outlined in its climate policy and NDCs, refers to its long-term commitment to achieving carbon neutrality by the year 2070. This goal is part of India's broader climate strategy and was notably highlighted in the country's commitments during the UN Climate Change Conference (COP26) held in Glasgow in November 2021.

- Following the amendment of the Energy Conservation Act in 2022, India's Ministry of Power launched the Carbon Credit Trading Scheme (CCTS 2023) on June 28, 2023.
- Following the December amendment, an Offset Mechanism was introduced alongside the existing Compliance Mechanism for obligated entities. Under this enhanced framework, Carbon Credit Certificates (CCC) are now traded within the Indian Carbon Market (ICM).
- The initiative will initially target sectors covered under the PAT scheme, with plans to gradually expand its scope. By integrating the existing PAT framework with Renewable Energy Certificates (REC), the goal is to build a comprehensive carbon pricing system that promotes cost-effective emissions reductions.



## Compliance Mechanism

- the Ministry of Environment, Forest and Climate Change (MOEFCC) will notify designated entities of their GHG emission intensity targets. **Entities receiving such notifications are required to comply annually with the assigned emission intensity targets.**
- Entities that achieve emissions below their target levels, based on the assigned intensity benchmarks, **may issue and obtain Carbon Credit Certificates (CCC) for the difference between actual and target emissions.**
- Entities that fail to meet their targets must purchase CCCs equivalent to the shortfall.
- **CCCs will be tradable through an exchange platform.**
- **The scheme is scheduled to launch within 2025.**

## Offset Mechanism

- A mechanism has been established under which **entities without compliance obligations can implement projects to reduce or remove greenhouse gas (GHG) emissions and issue Carbon Credit Certificates (CCC).**
- In accordance with the procedures outlined in the “Detailed Procedure for Offset Mechanism under CCTS,” issued in March 2025, **CCCs are granted to projects that meet the eligibility criteria.**
- On September 20, 2024, the central government approved the sectors eligible under the offset mechanism, which were publicly announced on October 15. Additionally, **eight methodologies were approved in March 2025.**
- Projects initiated on or after January 1, 2025, are eligible under this mechanism.

- High-emitting entities such as those in the power generation, steel, and cement sectors are required to set reduction targets for greenhouse gas emissions per unit of production (emission intensity), and to conduct monitoring, reporting, and verification (MRV) of their emissions to ensure compliance.
- Any surplus reductions beyond the target can be traded as credits, while entities that fall short of their targets may use these credits to meet their obligations.

## ■ Applicable Sectors

**Power generation, steel, cement, aluminum, chemical, oil refining, pulp and paper, textile, and other high-emission industries**

※These sectors have traditionally been covered under the PAT scheme (Perform, Achieve and Trade) and are now gradually transitioning from that framework.

## ■ Compliance Obligations

1. Compliance with Emission Intensity (Emission Factor) Targets
2. Monitoring, Reporting, and Verification of Emissions(MRV)
3. Acquisition and Submission of Credits
4. Fulfillment of Compliance Obligations