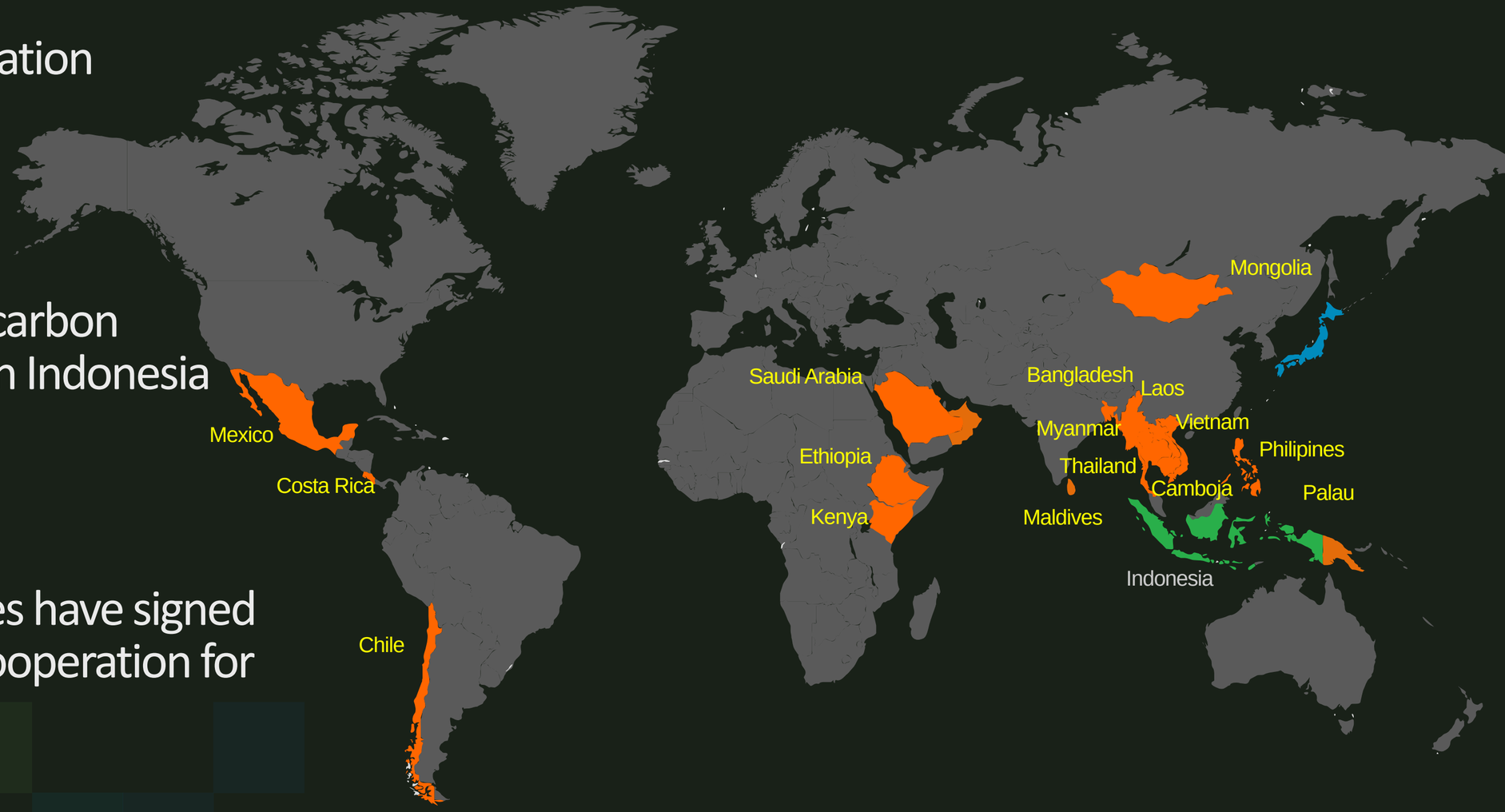
Joint Crediting Mechanism Implementation in Indonesia

Coordinating Ministry
for Economic Affairs
Republic of Indonesia

JCM
JOINT CREDITING MECHANISM
INDONESIA SECRETARIAT

Background

- JCM encourages cooperation between Japanese and Indonesian institutions to promote implementation of low carbon development activities in Indonesia
- The bilateral agreement has been signed on August 2013
- As per 2025, 30 countries have signed the Memorandum of Cooperation for establishing the JCM



JCM as a frontrunner for 6.2 Cooperative Approach

A6IP Center

Establishment of the Paris Agreement Article 6 Implementation Partnership Center (A6IP) in April 2023 by Japan, managed by The Institute for Global Environmental Strategies (IGES).

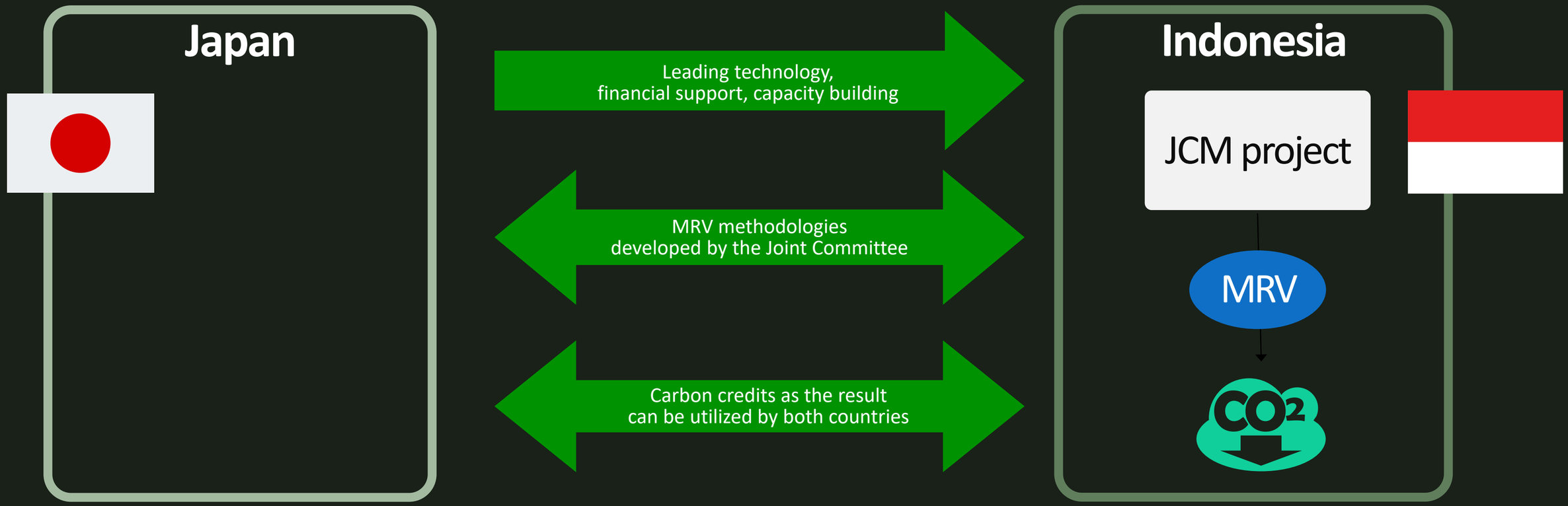
The partners include 66 countries and 32 institutions.

We are now entering the full implementation phase of Article 6.

Activities

- Development of capacity-building tools for authorization, reporting, and tracking
- Development of tailored support packages responding to country needs
- Collection and dissemination of information on capacity-building support

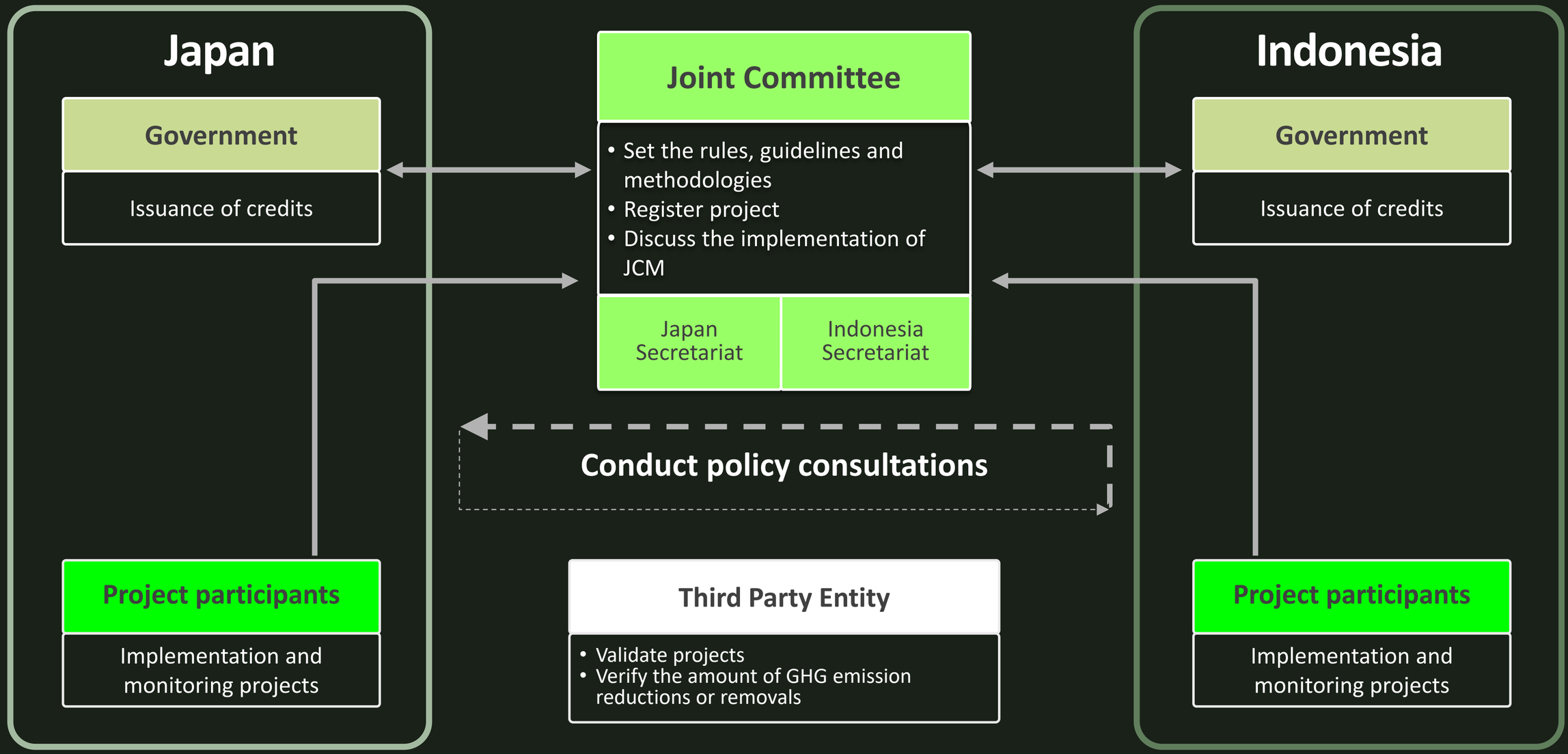
Basic concept



Key objectives of JCM implementation:

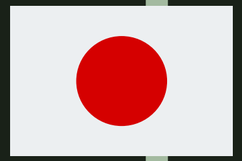
- A cooperation between Indonesia and Japan Government to implement low carbon technology since 2013. It has met the requirements of article 6.2 cooperation
- Facilitate diffusion of leading low carbon technologies, products, systems, services, and infrastructure
- Implementation of mitigation actions
- Contributing to sustainable development in developing countries.

Structure of cooperation



Joint Committee

Japan



- Mr. Hajime UEDA, Counsellor, Embassy of Japan in Indonesia
- Mr. Hiroki MATSUI, Director, Climate Change Division, International Cooperation Bureau, Ministry of Foreign Affairs
- Mr. Norihiro KIMURA, Senior Negotiator for Climate Change, Global Environmental Affairs Office, Industrial Science and Technology Policy and Environmental Bureau, Ministry of Economy, Trade and Industry
- Mr. Keitaro TSUJI, Director for International Negotiations, Office of Market Mechanisms, Global Environment Bureau, Ministry of the Environment
- Mr. Kiyotaka KOCHI, Director, International Forestry Cooperation Office, Forestry Agency
- Mr. Takayuki SHIGEMATSU, First Secretary/ Environment Attache, Embassy of Japan in Indonesia
- Mr. Yuji MIZUNO, Secretary-General, JCM Implementation Agency (JCMA)

Indonesia

- Mr. Ferry Ardiyanto, Assistant Deputy Minister for Multilateral Economic Cooperation, Coordinating Ministry for Economic Affairs
- Ms. Farah Heliantina, Assistant Deputy Minister for Energy Transition, Coordinating Ministry for Economic Affairs
- Mr. Ignatius Wahyu Marjaka, Director of Governance of Carbon Economic Value Implementation, Ministry of Environment
- Mr. Priyanto Rohmatullah, Director for the Environmental Affairs, Ministry of National Development Planning/National Development Planning Agency (Bappenas)
- Mr. Tri Purnajaya, Director for Development, Economic, and Environmental Affairs, Ministry of Foreign Affairs
- Mr. Andriah Feby Misna, Director of Various New Energy and Renewable Energy, Ministry of Energy and Mineral Resources
- Mr. Apit Pria Nugraha, Head of Centre for Green Industry, Ministry of Industry
- Mr. Boby Wahyu Hernawan, Head of Center for Climate Finance and Multilateral Policy, Ministry of Finance

Project in numbers, applied technologies and sectors

60 Projects

>120 Feasibility Studies

29 Methodologies

29 In the Pipelines

31 Registered

13 Issued credits

Biomass | Air-saving loom | Tribrid | Thermal oil heater | Freezer | Centrifugal chiller

Mini hydro | Regenerative burner | Cold storage | Waste paper process | LED street lighting | CNG converter

Electric heat pump | Waste heat recovery | Auto-clave | Co-generation | Once through boiler

CCS-CCUS | Solar PV | Injection molding | Waste water treatment

Rubber | Sport complex | Convenience store

Glass film | Power plant | Auto-motive | Chemical

Textile | Transportation | Medical | Oil refinery | Frozen food

Shopping mall | Telecom | Golf ball | Plastic | Cement | Industrial park

Infrastructure

Guidelines

1. Project Design Document
2. Proposed Methodology
3. Third Party Entity
4. Validation and Verification
5. Sustainable Development Implementation Plan and Report

Rules

1. Rules of Implementation
2. Rules of Procedure for Joint Committee

Procedure

Project Cycle Procedure

Methodologies

29 methodologies of energy efficiency and renewable energy

Registry system and SRN

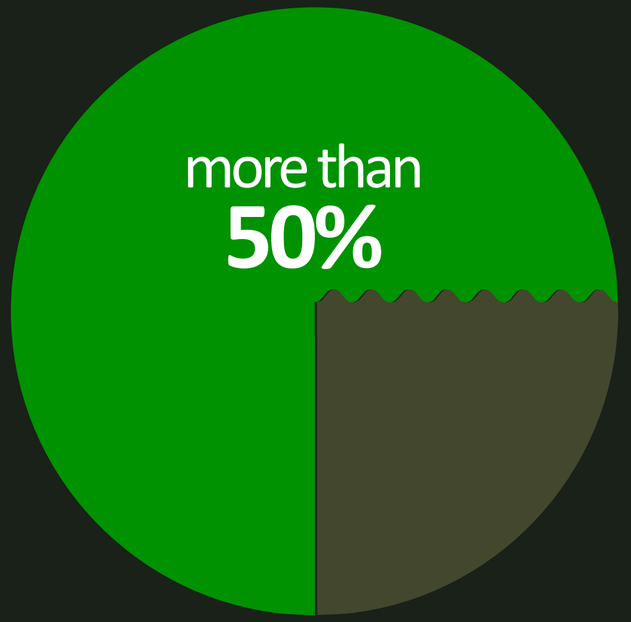
ISO 14065 based

Financial supports

Model project

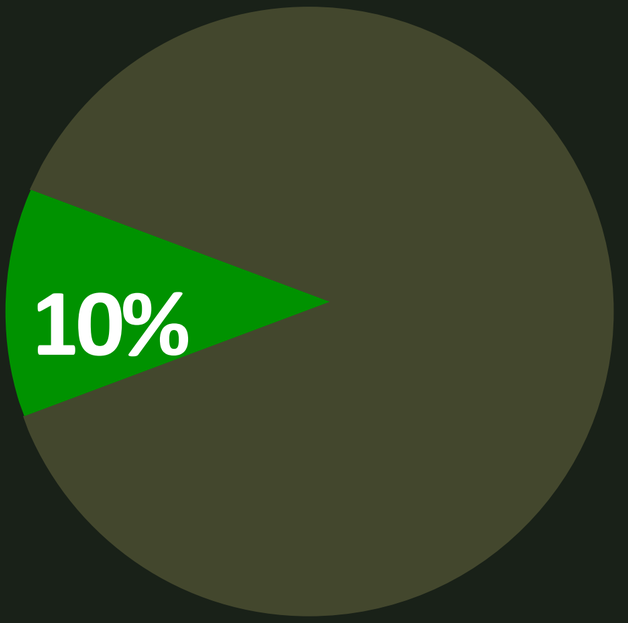
- Supported by MOEJ
- 56 projects

Demonstration project



- Supported by METI/NEDO
- 3 projects
- Implement new technology

Japan Fund for JCM

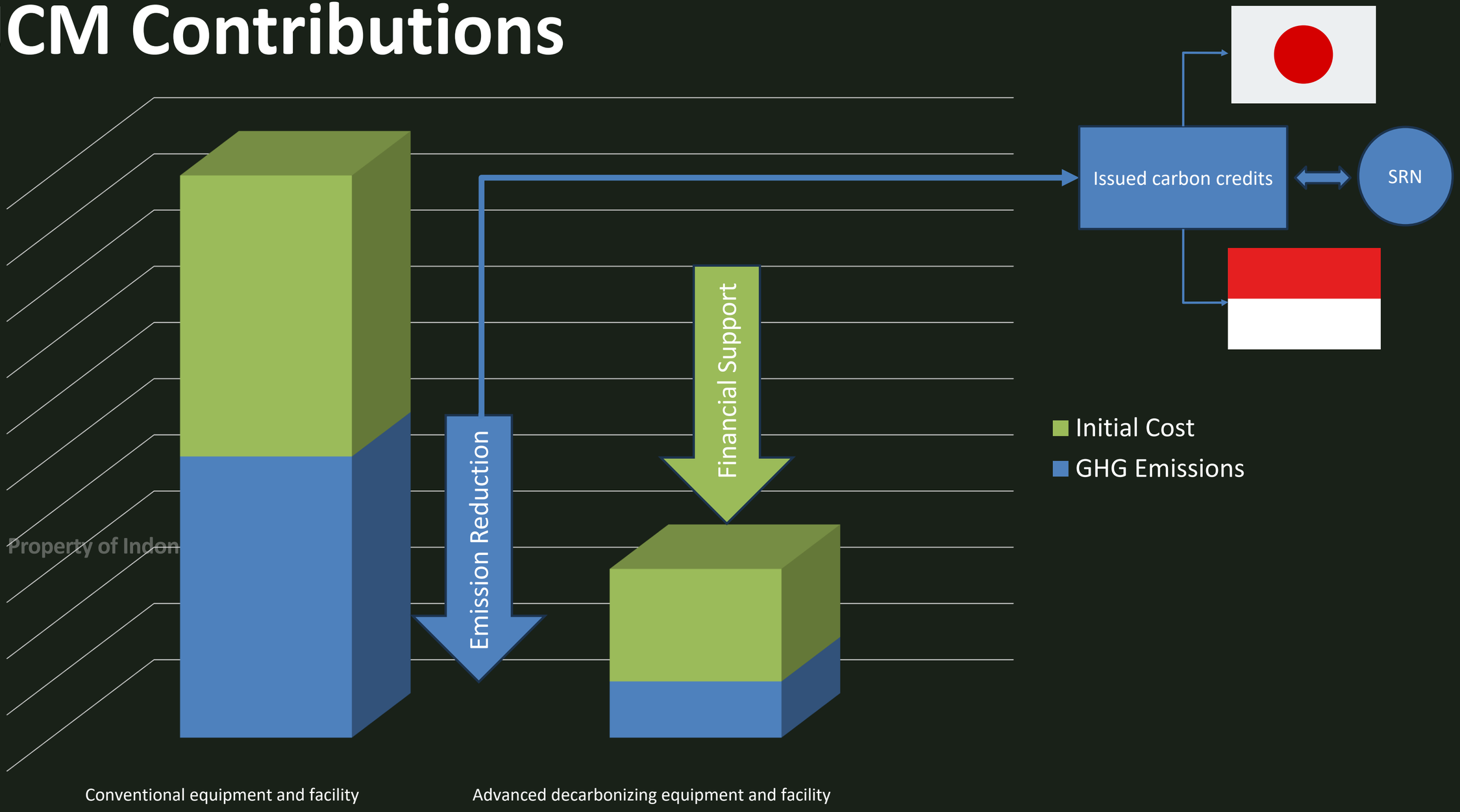


- Managed by ADB
- 1 project
- Sovereign: grant for incremental cost
- Non-sovereign: interest subsidy for ADB’s loan

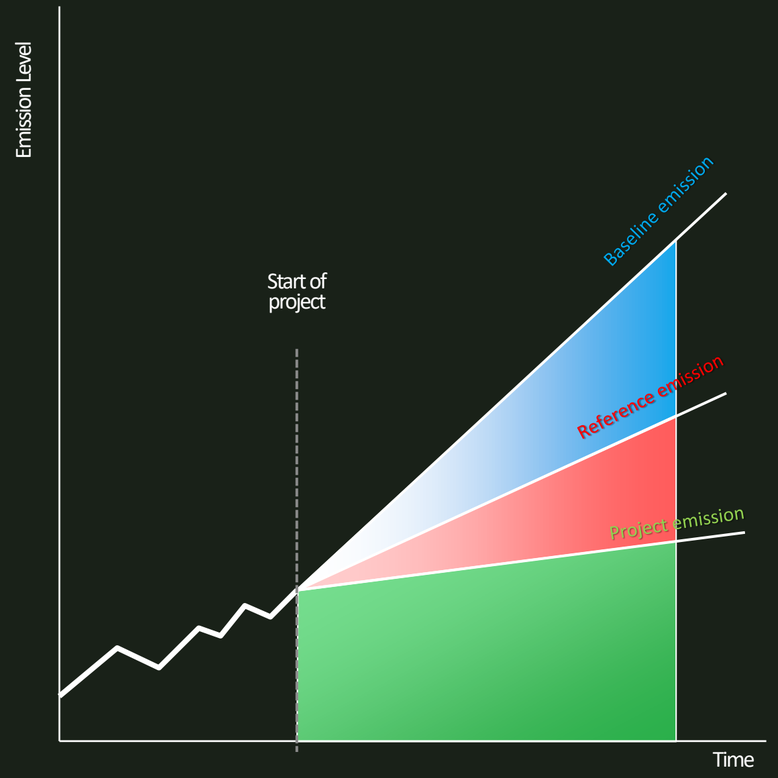
Private-sector JCM

- to further promote JCM
- mainly funded by the private sector, rather than being premised on government funding
- advance inquiry processes with the partner countries and the concept of credit allocation
- giving private companies a business foreseeability for an implementation
- have one proposal already for private-sector JCM in Indonesia

JCM Contributions



Carbon credits sharing



Net Emission Reduction
= Baseline emission – Reference emission

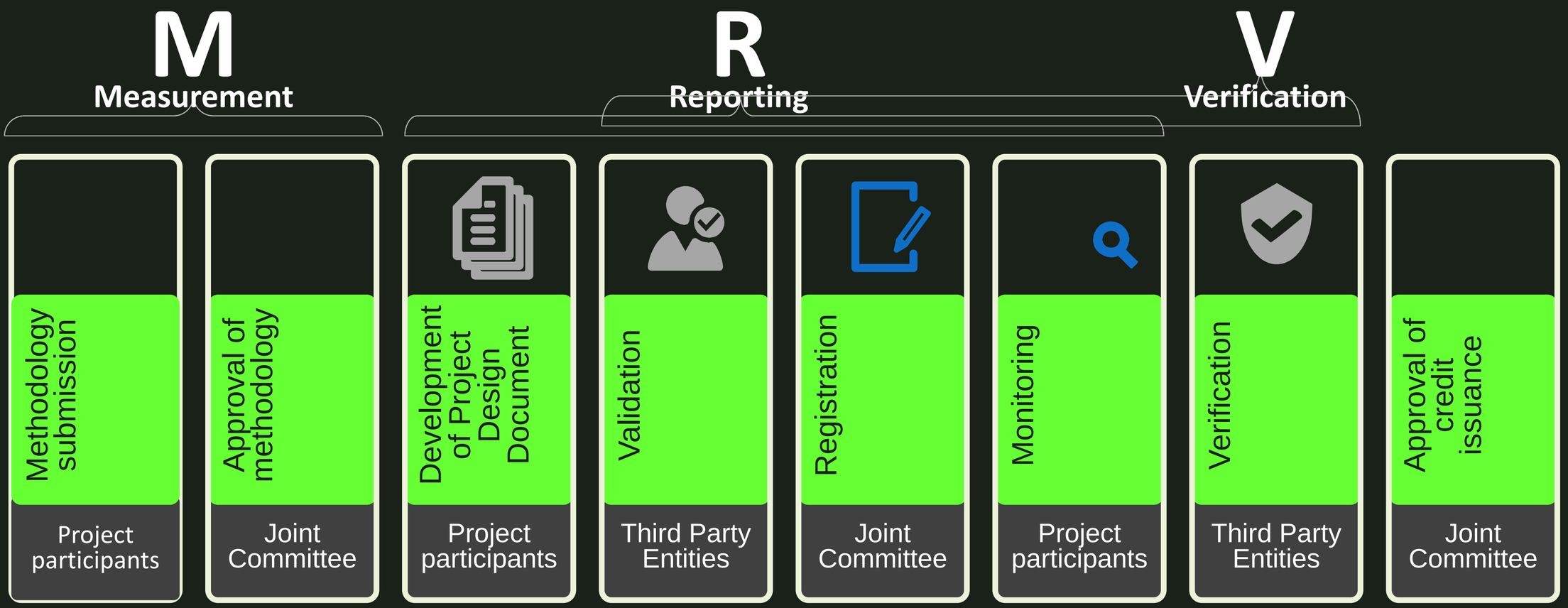
- Tidak dilaporkan sebagai penurunan emisi dari proyek JCM, dianggap sebagai co-benefit
- Seluruhnya menjadi hak Pemerintah Indonesia

Project Emission Reduction / JCM's credits
= Reference emission – Project emission

- Penurunan emisi dari proyek JCM
- Dibagi untuk 4 pihak:
  1. Pemerintah Indonesia
  2. Partisipan proyek Indonesia
  3. Pemerintah Jepang
  4. Partisipan proyek Jepang

Baseline emission : tingkat emisi ketika tidak dilakukan kegiatan penurunan emisi
Reference emission : tingkat emisi dari teknologi di pasaran
Project emission : tingkat emisi dari proyek JCM

Project cycles



Can be done simultaneously
Can be conducted by the same TPE

City to city cooperations FY2023

Bandung & Kawasaki
Building and Energy Management System (BEMS)
Air quality management linked with smart LED street lights
Traffic management and control systems

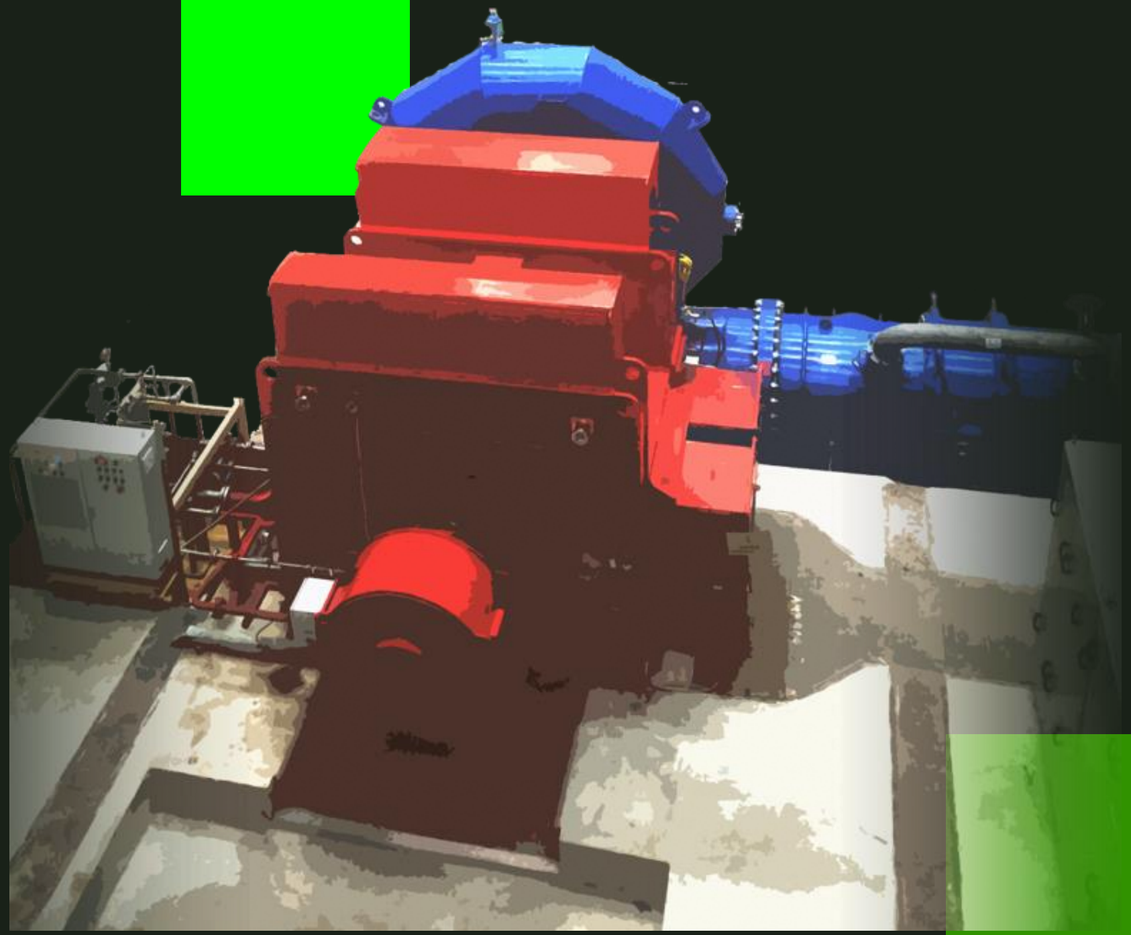
Gorontalo & Ehime
Energy savings and Renewable energy
Septic tanks and Waste
Forest management

Pekanbaru & Kawasaki
Decarbonization domino effect in Riau Province
Circular economy
EMS and Energy savings

Bali & Toyama
Hydrogen production and fuel cell
Fuel Cell Vehicle (FCV) and EV
Waste treatment

Jawa Barat & Kitakyushu
Waste heat recovery power generation
Waste handling and disposal / RDF
Renewable energy and energy saving

Project example 1



10MW Mini Hydro Power Plant Project in North Sumatra

Project participants
PT. Citra Multi Energi & Toyo Energy Farm Co., Ltd.

Location
Parlilitan, Humbang Hasundutan

Estimated emission reduction
42,711 tCO_2e/year

A run of river power plant constructed in North Sumatra with a capacity of 10MW (5MW x 2).
Generated electricity is to be supplied to the state power company (PLN) resulting in GHG emission reductions by replacing grid electricity.
This project is also expected to contribute to improving energy supply in the region.

Project example 2

Introduction of CNG-Diesel Hybrid Equipment to Public Bus

Project participants
BLU UPTD Semarang & Hokusan Co., Ltd.

Location
Semarang

Estimated emission reduction
1,870 tCO2/year

Based on the City to City cooperatian between Toyama City and Semarang City, this project aims to reduce GHG emissions through fuel switch from diesel to CNG.
72 diesel buses owned by Trans Semarang, including 25 large-sized buses and 47 mid-sized buses, are retrofitted from diesel engine to hybrid engine with CNG system available. These buses are considered more cost-effective through fuel switching.

Project example 3

Installation of Tribrid System to mobile communication’s Base Transceiver Stations

Project participants
PT. XL Axiata & KDDI Corp.

Location
20 locations in Sumatera, Java & Kalimantan

Amount of carbon credits issued in 2020
146 tCO_2

Tribrid System at mobile communication’s Base Transceiver Stations (BTS) are installed at 20 location in off-grid and poor-grid area in Republic of Indonesia.
Tribrid System is defined as a combined system of solar PV, batteries, and electric power control system.
Tribrid System controls charge-discharge of battery, and also improves the operational efficiency of diesel generators with its electric power control system. Therefore, it enables BTS to reduce CO2 emissions from electricity and fossil fuel.

Project example 4

Energy-Efficient Waste Paper Processing System

Project participants

PT. Fajar Surya Wisesa & Kanematsu Corp.

Location

PT. Fajar Surya Wisesa Factory, Bekasi

Amount of carbon credits issued in 2020

16,177 tCO_2

This project aims to achieve 10% electricity usage reduction per ton produced by introducing a high efficient system for the old corrugated carton (OCC) process, thereby contributing to CO2 reduction.

This OCC process is a process to prepare clean raw materials containing dissolved paper fibers by mixing used corrugated board into water for defiberization and removing foreign substances.

Since a large amount of material (water) is used in this process, the electricity is significantly consumed by the power motors.

Project example 5

Installation of Gas Co-generation System for Automobile Manufacturing Plant

Project participants
PT. Toyota Motor MI (TMMIN) & Toyota Tsusho

Location
TMMIN factory, Karawang

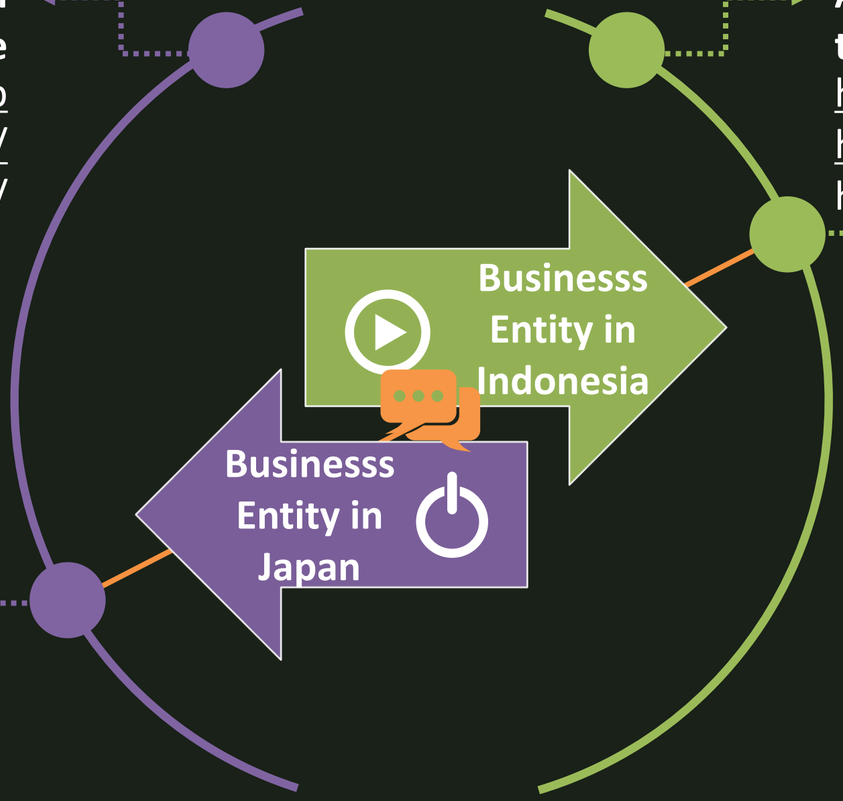
Verified emission reduction in 2020
28,737 tCO_2

The purpose of this project is to reduce energy consumption and CO2 emission by installing a gas co-generation system.
This system adopts a high efficiency gas-engine and heat recovery system to generate steam 7,8 MW and hot water.
This project contributes to the reduction of energy consumption at coal fired power generation prevailed in Indonesia, and to the reduction of GHG and air pollutant emissions.

How to access JCM information

Access the information through JCM Website
https://www.jcm.go.jp/id-jp
http://jcm.ekon.go.id/id/
http://gec.jp/jcm/

Discuss with Japan JCM Secretariat and Apply the Study Idea
email: jcm@gec.jp



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Discuss with Indonesia JCM Secretariat and Apply the Study Idea
Email: jcm-indonesia@ekon.go.id

PREPARING PROJECT IDEA NOTES and SUPPORTING MATERIALS

How to develop JCM projects

STEP 01
Develop business idea

- Secure finance other than JCM or
- Find another financial source for the rest of initial cost (JCM financing programs will not cover all cost, e.g. JCM Model Project covers less than half of the investment cost)

STEP 02
Find Indonesian partner and vice versa

- Through workshop & Secretariat
- JCM Global Match (a business matchmaking platform)

STEP 03
Develop consortium (Joint Venture, etc.)

Sample document of “Agreement on International Consortium (Example)”

FINAL
Apply JCM financing programme & develop methodology

Japanese entity submits application (in Japanese)

JCM Global Match

https://gec.jp/jcm/globalmatch/

JCM overview: http://gec.jp/jcm/about/
Call for proposals: http://gec.jp/jcm/kobo/

Guidelines for Submitting Proposals :
1st：At noon of Friday, 16th May 2025 (Japan Standard Time)
2nd：At noon of Friday, 25th July 2025
3rd：At noon of Tuesday 30th Sep 2025

Japan Fund for the JCM (Trust Fund of Asian Development Bank): https://www.adb.org/site/funds/funds/japan-fund-for-joint-crediting-mechanism

Project Idea Note

Project Idea Note for the JCM Model Project

Document release date	15/05/2017
Title of the proposed project (should be self-explanatory and clearly indicate the activity leading to emissions reduction)	JCM Model Project "Introduction of Gas Cogeneration System by absorption type refrigerating system and PV System in Large Shopping Mall in Indonesia"
Host country	Republic of Indonesia
The main contact for the project (for identification of the person in charge for the project in terms of communication)	Name of the contact entity (company, etc): AEON Mall co., Ltd. Address of the contact entity: XXXX Website of the contact entity: XXXX Name and position of the main contact person in the entity: XXXX E-mail of the main contact person: XXX Phone number of the main contact person: XXX
Japanese participant[s] for the project and their roles in the project *(if possible, please indicate the contact person of each entity involved in the project)*	Name of the entity (company, etc): AEON Mall co., Ltd. Roles of the entity in the project: Representative Company Address of the entity: XXXX Website of the entity: XXX Name and position of the contact person in the entity: XXX E-mail of the contact person: XXX Phone number of the contact person: XXX
Participant[s] of host country for the project and their roles in the project *(if possible, please indicate the contact person of each entity involved in the project)*	Name of the entity (company, etc): PT. AMSL DELTA MAS Roles of the entity in the project: Co Participant Address of the entity: Jl. XXXXX Website of the entity: XXX Name and position of the contact person in the entity: XXX E-mail of the contact person: XXX Phone number of the contact person: XXX

Detail project proponent info

Brief summary of the project Example: ➢ Objective of the project ➢ Location of the project ➢ Scale of investment including planned source of investment ➢ Technology[ies] to be adopted for the project, and brief description of the technology[ies] ➢ Project implementation scheme, and role of each participant ➢ Current status and progress of the project	➢ **Outline of the JCM Model Project** PT. AMSL DELTA MAS will open "AEON MALL DELTA MAS" in late 2019. This mall will be the third core mall for Aeon Mall in Indonesia. The theme of this JCM Model Project is Introduction of Gas Cogeneration System by absorption type refrigerating system and PV System for CO2 reduction. ➢ **Scale of investment including planned source of investment** - Total investment :JPY XXX (IDR XXX) - Investment with subsidy: JPY XXX (IDR XXX) ➢ **Location of the project** Jl. XXXXX ➢ **Technology[ies] to be adopted for the project, and brief description of the technology[ies]** Gas cogeneration system consists of Gas engine generator (3.8MW) and Absorption type refrigerating system (670RT). Absorption type refrigerating system use the waste heat from Gas engine generator in order to generate cool water for air conditioning in the mall. The capacity of PV system is 107.52kW and generates 138,118kWh/year. ➢ **Project implementation scheme, and role of each participant**
Rough estimation of expected GHG emission reductions (unit: tCO_2/year)	- Gas Cogeneration System by absorption type refrigerating system: 6,883.34tCO2/year - Solar Power Generation: 112.4 tCO2/year
Expected schedule up to the EPC completion and the registration under the JCM	2017 May: Submit proposal to JCM application 2017 Nov: Start engineering and manufacturing of facilities/machinery

Detail project information

Thank You

www.jcm.ekon.go.id

jcm-indonesia@ekon.go.id