

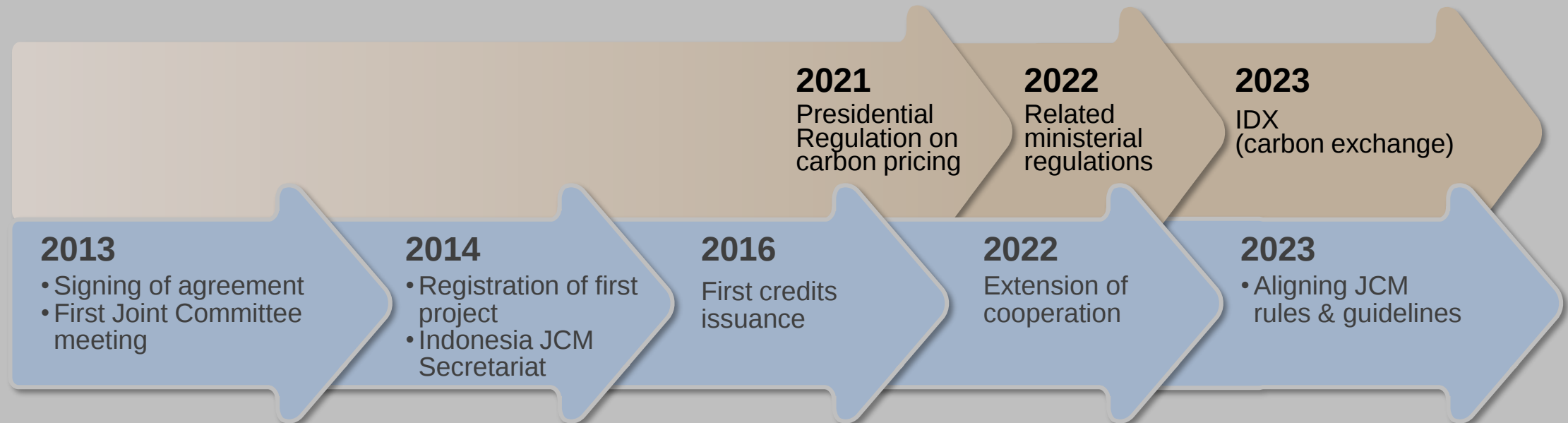
The implementation of Joint Crediting Mechanism in Indonesia



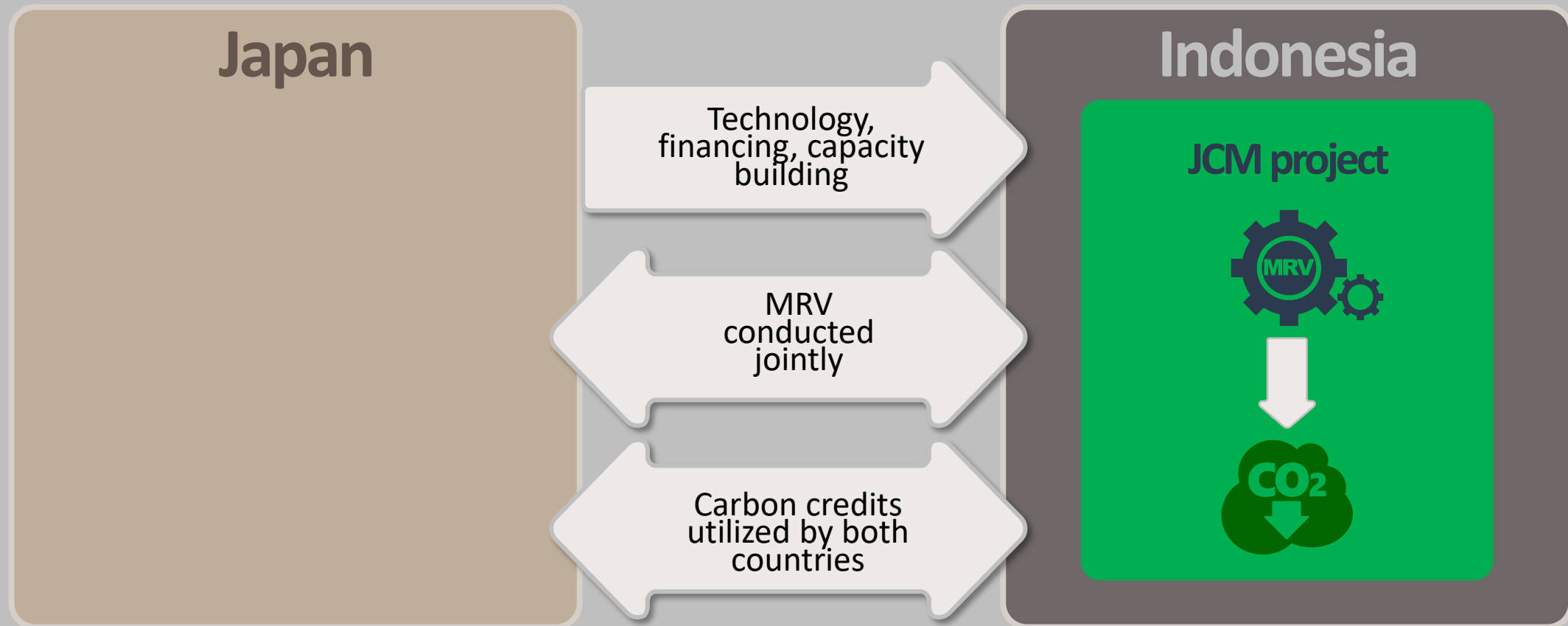
Coordinating Ministry
for Economic Affairs
Republic of Indonesia



Key timelines



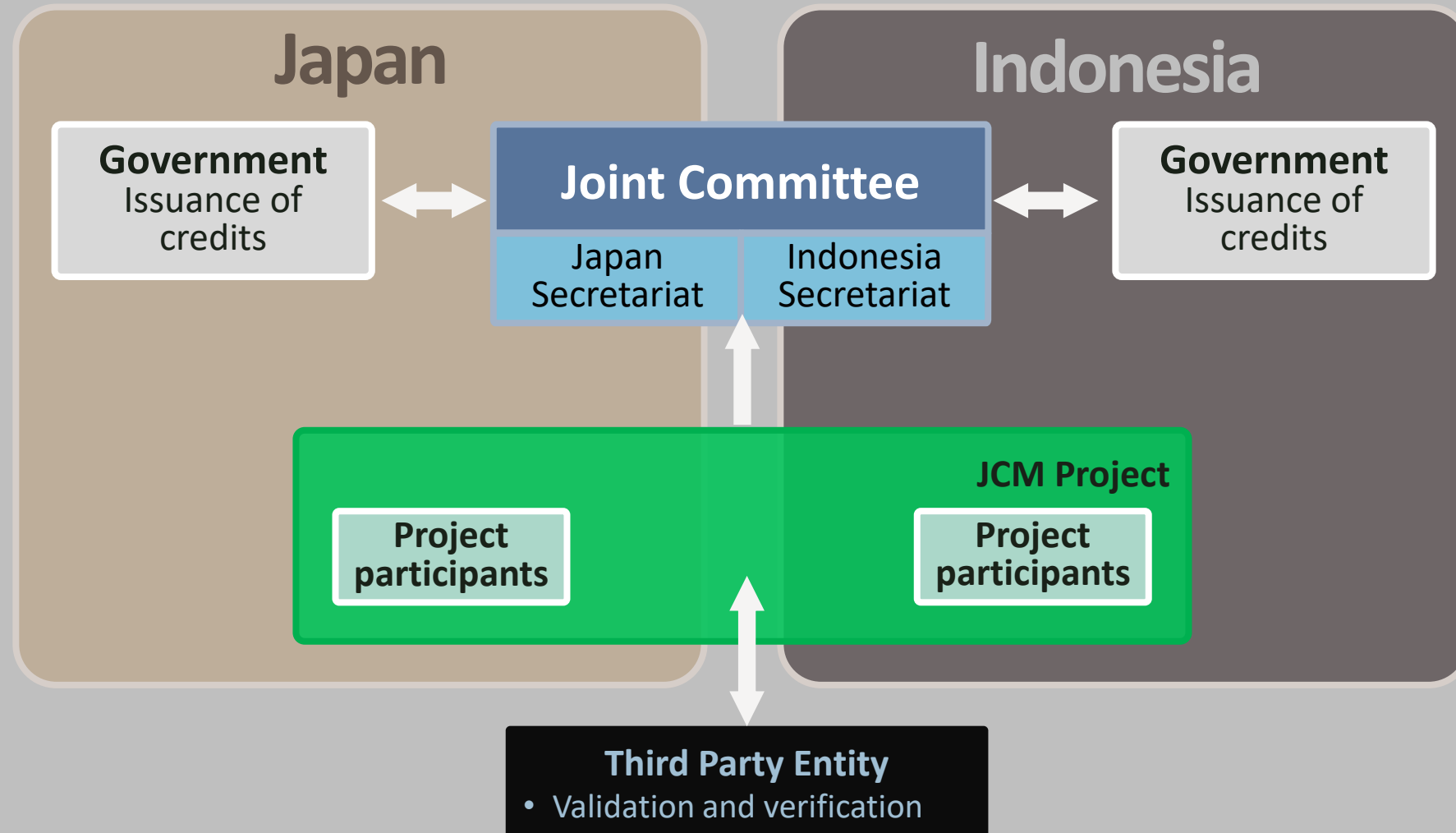
Basic concept



Key objectives:

- Facilitate diffusion of leading low carbon technologies, products, systems, services, and infrastructure
- Implementation of mitigation actions
- Contributing to sustainable development in developing countries

Operational structure



Infrastructure

Guidelines

1. Project Design Document
2. Proposed Methodology
3. Third Party Entity
4. Validation and Verification
5. Sustainable Development Implementation Plan and Report
6. Proposed methodology for CCS/CCUS

Rules

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

Procedure

Project Cycle Procedure

Methodologies

28 methodologies of energy efficiency and renewable energy

Registry system

ISO 14065 based

Project cycle

Measurement

Reporting

Verification



Methodology
submission

Methodology
approval

Development
of Project
Design
Document

Validation

Registration

Monitoring

Verification

Credits
issuance

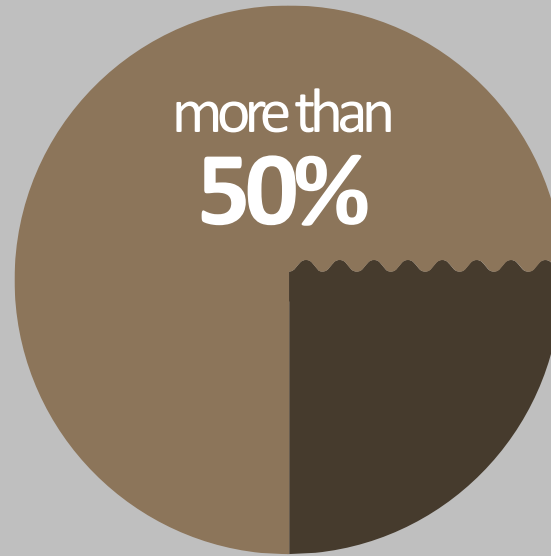
Financing scheme

Model project



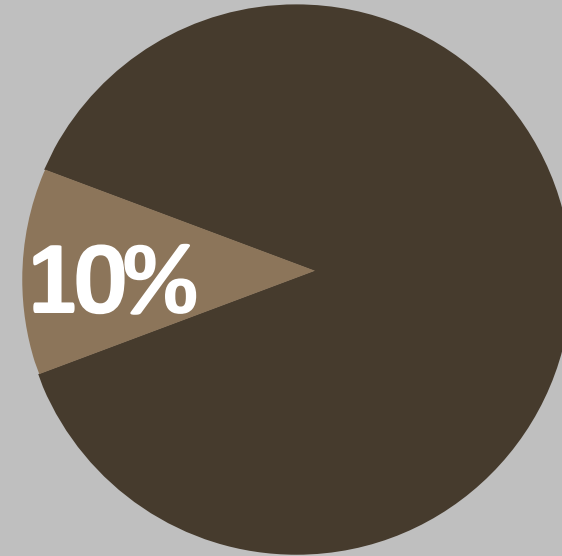
- Supported by MOEJ
- 54 projects

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

Sustainable development aspects



Environmental
impact assessment



Pollution control



Safety and health



Natural environment
and biodiversity



Economy

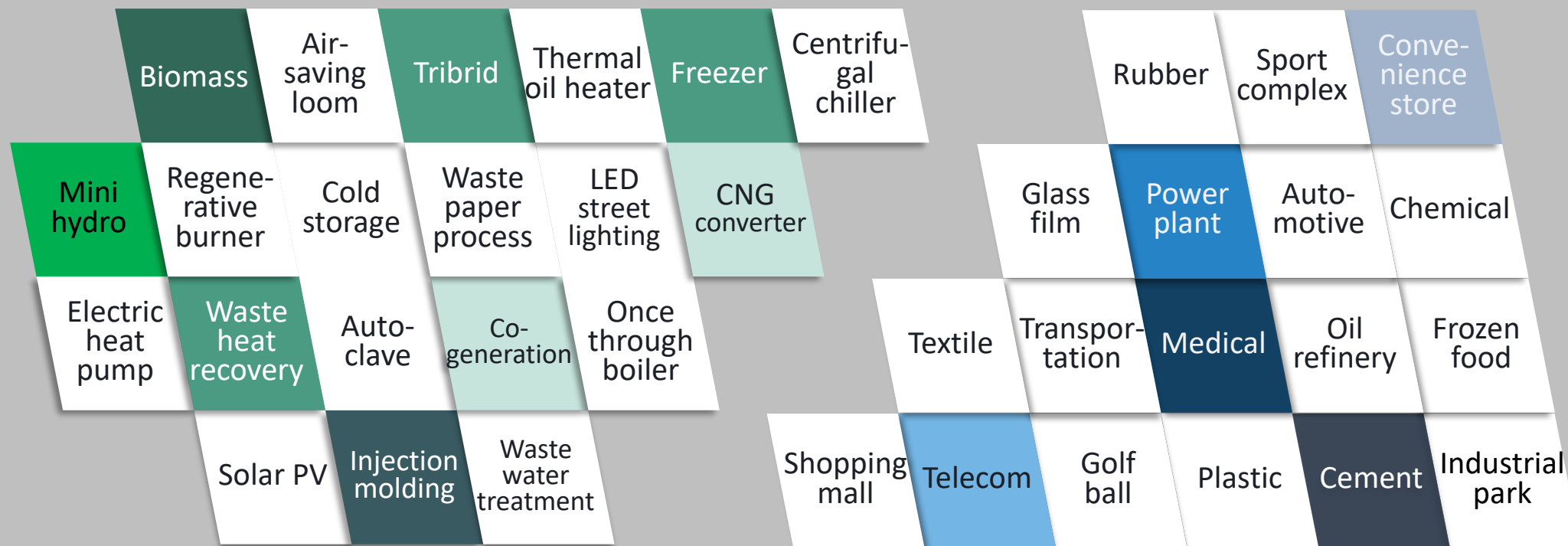


Social environment and
community participation



Technology

Project in numbers, applied technologies and sectors



58
projects

27
in the
pipeline

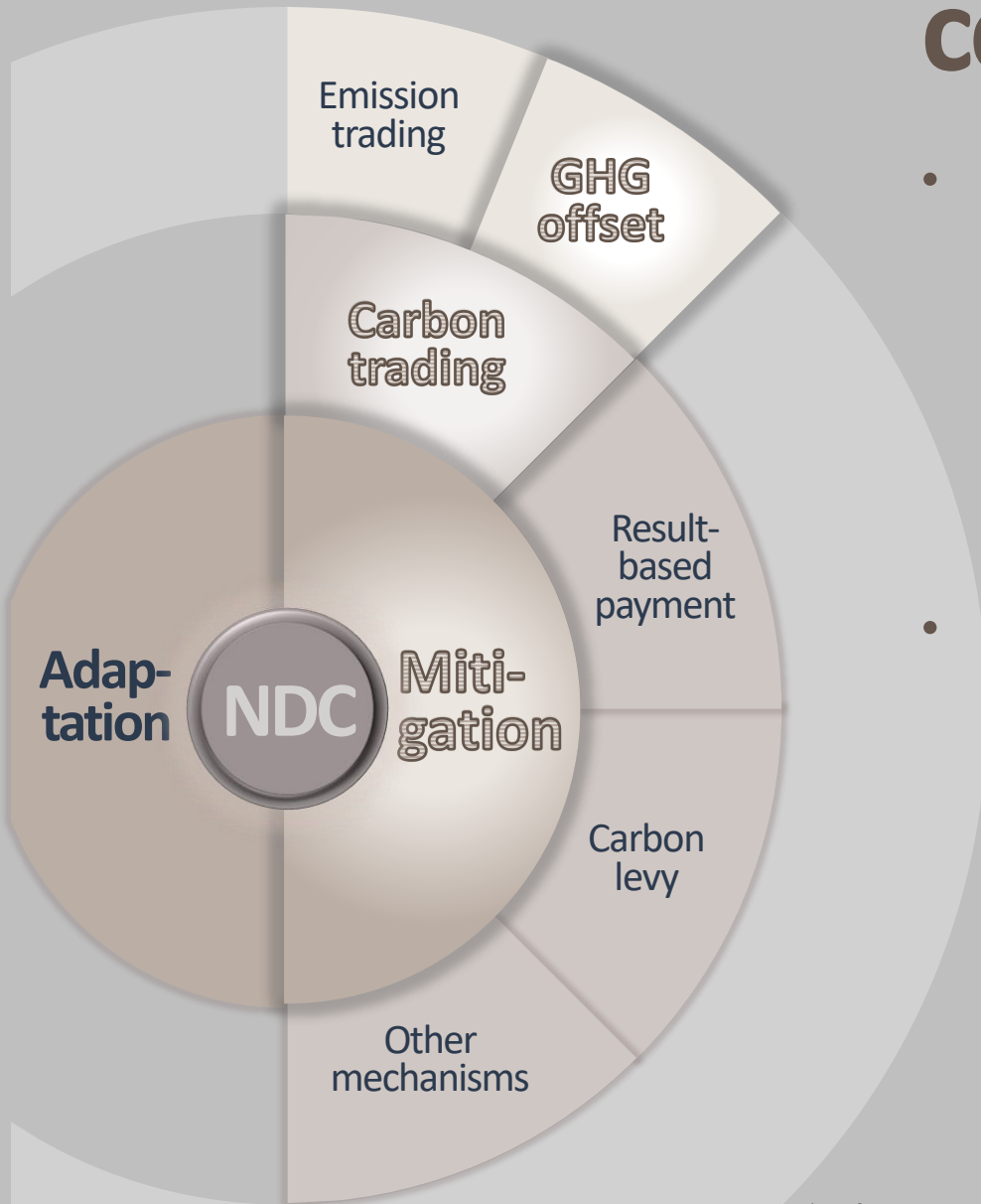
31
registered

13
issued
credits

29
methodologies

>120
feasibility
studies

Policy framework for cooperative approach



- Presidential regulation No. 98/2021, implementation of carbon pricing to achieve NDC
 - NDC achievement > mitigation > carbon trading > GHG offset
 - Mitigation activities can be implemented domestically and internationally
 - Any activity should be conducted through MRV, SRN (Indonesia National Registry System), and SPEI (Indonesia GHG Emission Reduction Certification)
- MOEF regulation No. 21/2022, more details rules, including carbon trading settings
 - All MRV processes should be recorded in the SRN
 - SPEI can be issued based on mitigation activities recorded in SRN
 - ITMO must be approved and authorized by MOE on the issued SPEI
 - Certificate issued by other certification agency may be declared equivalent to SPEI with a **mutual recognition** cooperation



REPUBLIK INDONESIA

MUTUAL RECOGNITION ARRANGEMENT

BETWEEN

THE MINISTRY OF ENVIRONMENT AND FORESTRY OF

THE REPUBLIC OF INDONESIA

AND

THE MINISTRY OF THE ENVIRONMENT OF JAPAN

ON

THE JOINT CREDITING MECHANISM BETWEEN JAPAN AND THE REPUBLIC
OF INDONESIA AND THE INDONESIAN GREENHOUSE GASES EMISSION
REDUCTION CERTIFICATION

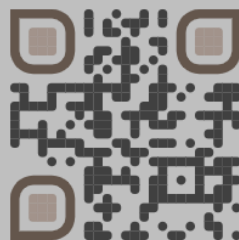
The Ministry of Environment and Forestry of the Republic of Indonesia (hereinafter referred to as "MoEF") and the Ministry of the Environment of Japan (hereinafter referred to as "MoE") (hereinafter referred to individually as a "Side" and collectively as "Both Sides");

DESIRING to voluntarily collaborate, consistent with Article 6, paragraph 2 of the Paris Agreement, on the transfer of internationally transferred mitigation outcomes towards achieving their nationally determined contributions while promoting sustainable development, environmental integrity and transparency;

PROMOTING high integrity carbon markets;

Mutual Recognition Arrangement on JCM and SPEI

- Each carbon credit registry, MRV, and certification system are operated and supervised consistent with the Paris Agreement
- Recognize existing mutual recognition between both accreditation bodies
- Authorization and corresponding adjustment for registering the carbon credits are implemented using SPEI

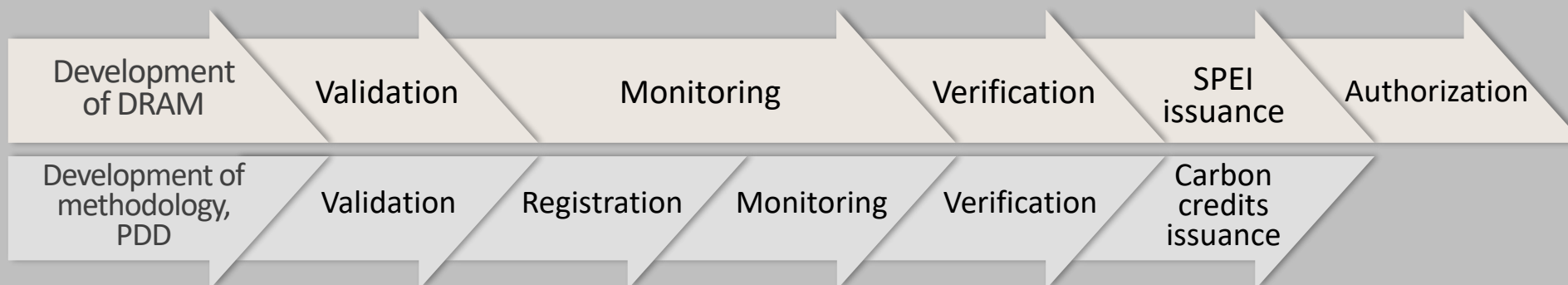


Mutual
recognition
arrangement
(pdf version)

Workflows

SRN & SPEI

JCM



- Registration in SRN is done at the beginning step along with the new account creation
- DRAM (Design Document of Climate Change Mitigation) contains almost the same information as PDD
- Methodology development in SRN is carried out with different procedures
- The steps and types of data required by both workflows are essentially the same with some specific requirements to notes

Specific Requirements

Methodology

Eligible methodology for issuing SPEI:

- Approved by UNFCCC
- Determined by international/national standard body
- Determined by DG for Climate Change

Validation & verification

- ISO 14064-3 as the reference
- VVB is accredited by KAN for specific works of DRAM validation and LCAM verification

Additionality and other issues

- Mitigation action has not been started or at most 5 years before validation is carried out
- All resources including financial supports and investments should be disclosed



Notes

- KAN is Indonesia accreditation body
- LCAM is mitigation action achievement report

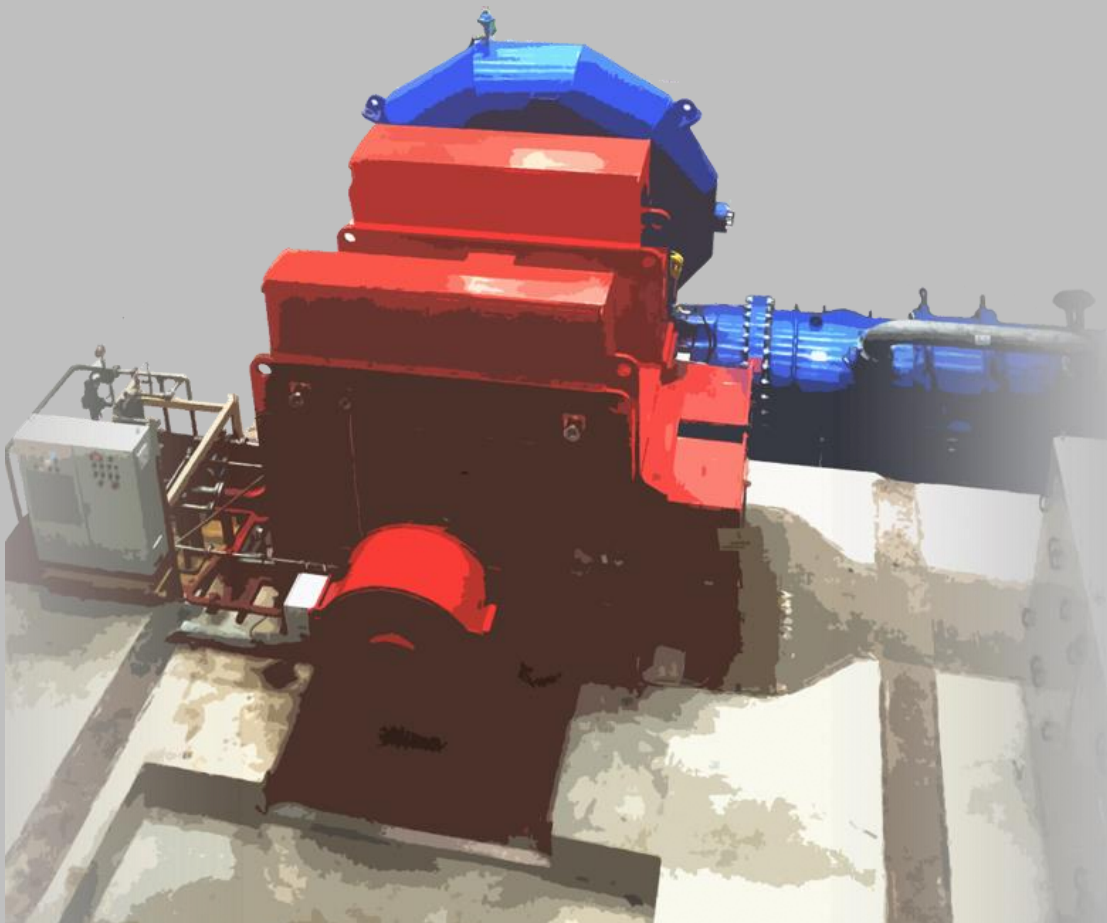
Opportunities

1. Abundant renewable resources (geothermal, solar, wind, ocean)
2. Indonesia's climate finance is still in its early stage
3. A number of national regulations have been and will be issued to stimulate international green investment flows
4. Carbon exchanges
5. CCS/CCUS

Challenges

1. Lack of understanding on mitigation outcomes
2. Both unbalanced pessimistic and overly optimistic views on new sources of funding are still exist
3. Electricity over capacity
4. Linking JCM with adaptation
5. Coordination among line ministries

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 tCO₂e/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

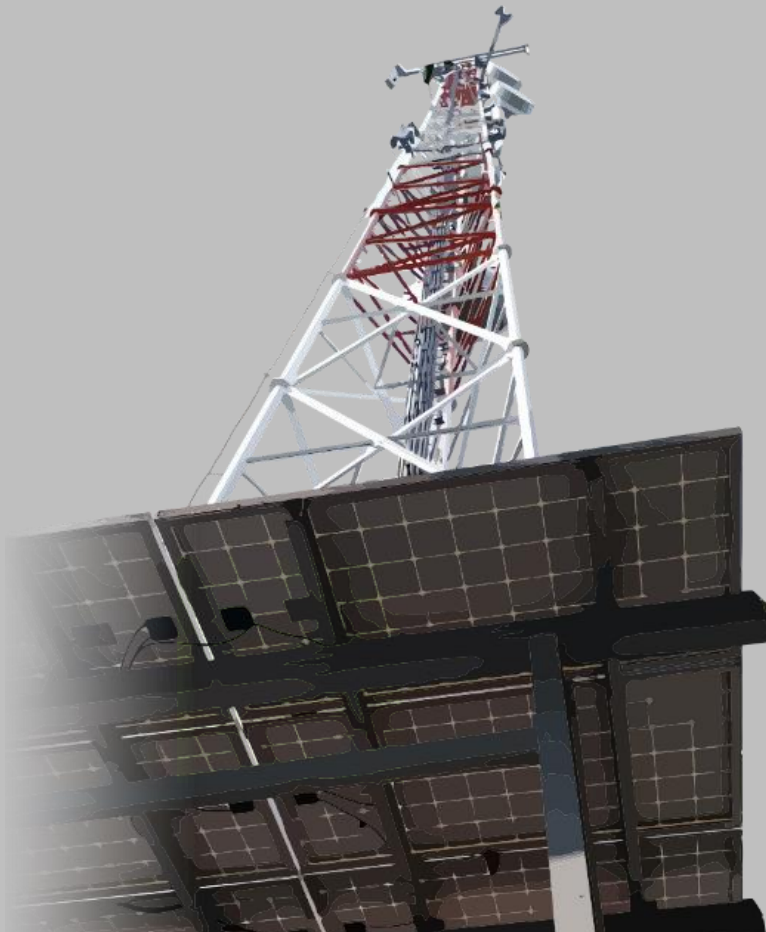
Estimated emission reduction

1,870 tCO₂/year

Based on the City to City cooperation 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 tCO₂

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 tCO₂

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 tCO₂

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.

Thank you

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Coordinating Ministry
for Economic Affairs
Republic of Indonesia

