



Coordinating Ministry
for Economic Affairs
Republic of Indonesia

The JCM potential contribution for low-carbon development and climate change mitigation in Indonesia

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Indonesia INDC and Paris Agreement article 6

PARIS AGREEMENT (article 6 para 2-3)

2. Parties shall, where engaging on a voluntary basis in cooperative approaches that involve **the use of internationally transferred mitigation outcomes towards nationally determined contributions, promote sustainable development and ensure environmental integrity and transparency, including in governance, and shall apply robust accounting to ensure, inter alia, the avoidance of double counting**, consistent with guidance adopted by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement.
3. The use of internationally transferred mitigation outcomes to achieve nationally determined contributions under this Agreement **shall be voluntary and authorized by participating Parties**.

.... Indonesia's additional 12% of intended contribution by 2030 is subject to provision in the global agreement including through bilateral cooperation, covering technology/ deployment and transfer, capacity building, payment for performance mechanisms, technical cooperation and access to financial resources.

.... Indonesia will meet its unconditional commitments regardless of the existence of international market mechanisms. **Indonesia welcomes bilateral, regional and international market mechanisms** that **facilitate and expedite technology development and transfer, payment for performance, technical cooperation, and access to financial resources** to support Indonesia's climate mitigation and adaptation efforts toward a climate resilient future.

Current market mechanisms in Indonesia

CDM

- Giving very high expectation in the beginning, very difficult and complex to be implemented, and suddenly everything was stopped due to the lack of demands, now we have no new project in 2014.
- The credits are transferred to the buyer countries, while in Indonesia we receive co-benefits of the implementation.

VCS

- Relatively small compare to CDM, but still growing smoothly.
- Indonesia has the biggest REDD+ project under the VCS, there is until now the only land based project under Indonesia VCS development.
- Some of the CDM projects change to be VCS projects because of the lack of CER's demand from EU-ETS.

Domestic Scheme

- Still in the preliminary stage.
- Some of the methodologies had been tested, and so far receive positive responses from the business entities.
- It is expected to be one of the alternative for the market based mitigation actions.
- Any other types of market mechanism can be developed in Indonesia.

The JCM Scheme

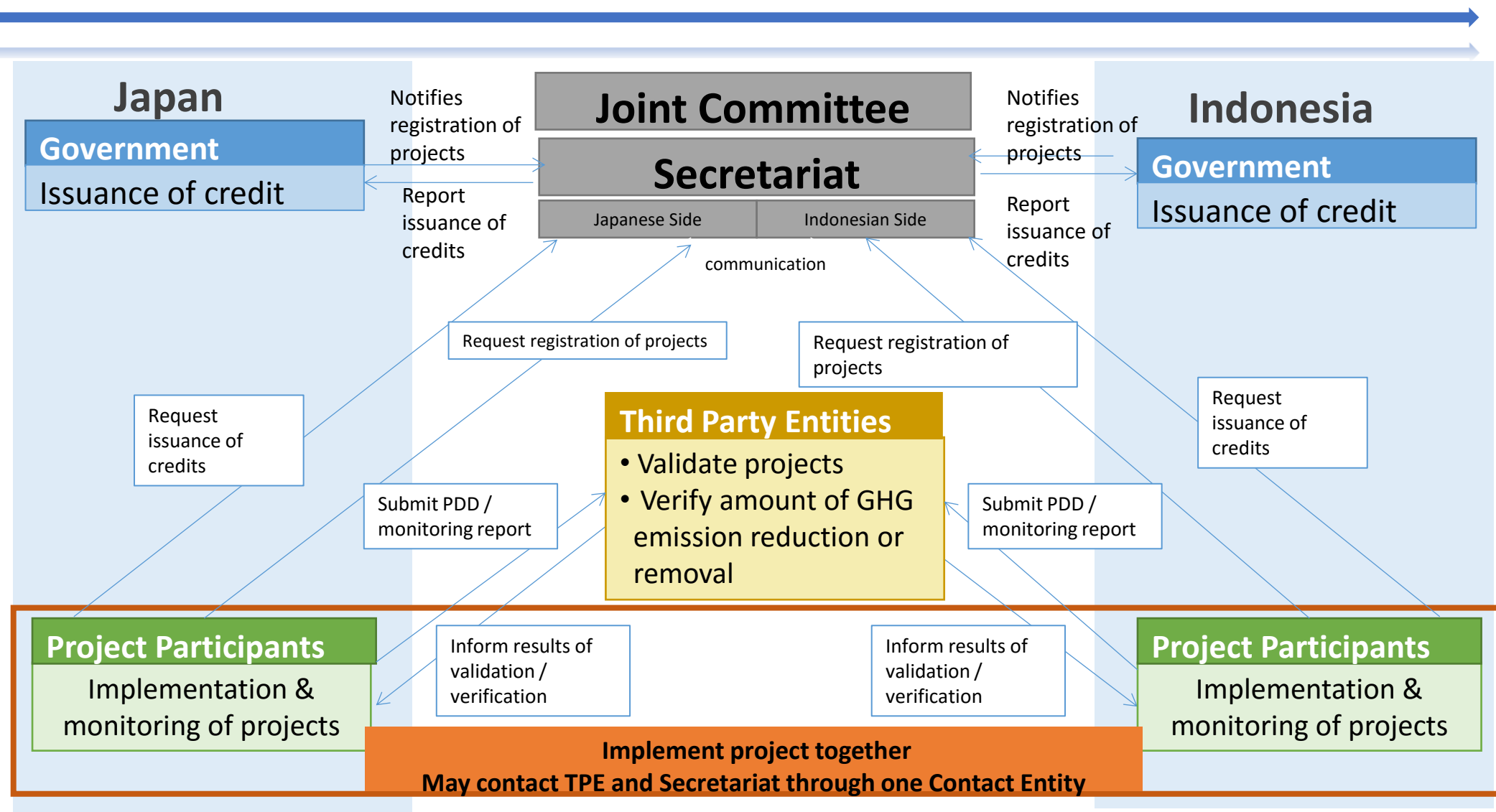
- It requires more than three years to develop the agreement, started from 2010 and it is finally signed on August 2013.
- The Joint Crediting Mechanism is currently the most progressive mechanism in Indonesia.
- It is not only about the bilateral carbon trading, but rather how to develop and implement the green investment as well as low emission development and technology transfer between the 2 countries.
- Japan and Indonesia have their own national target on emission reduction to be achieved, and it can be done through JCM.
- Both countries are required to increase their economic development as well as develop more opportunities for their private sectors to grow.

**Indonesia
INDC**

**Market and non
market approaches**

**JCM is the newest
mechanism to be
developed, but the fastest
growing.**

Joint Crediting Mechanism Scheme in Indonesia



JCM feasibility studies



The JCM FS scheme provides financing funded by the Ministry of Environment Japan (MoEJ) and Ministry of Economy, Trade and Industry Japan (METI)

JCM implemented project list (1)

No	Project	Entities	Annual Emission Reduction (tCO ₂)
1	<i>Remote Auto-Monitoring System for Thin-Film Solar Power Plant in Indonesia</i>	Sharp & PLN	1,433
2	<i>Energy Saving by Optimum Operation at Oil Refinery</i>	Yokogawa & Pertamina	3,400
3	<i>Utility Facility Operation Optimization Technology</i>	Azbil & Pertamina	58,000
4	<i>Power generation by waste heat recovery in cement industry</i>	JFE Engineering Corporation & PT Semen Indonesia Tbk	122,000
5	<i>Energy Savings at Convenience Stores</i>	Lawson & PT Midi Utama Indonesia, Tbk	33/store
6	<i>Energy saving through introduction of regenerative burners to the aluminum holding furnace of the automotive components manufacturer</i>	Toyotsu Machinery Corporation, PT Yamaha Motor Parts Manufacturing Indonesia, Hokuriku Techno Co. Ltd., PT Matahari Wasiso Utama	856
7	<i>Solar power hybrid System installation to existing base transceiver stations in off-grid area</i>	ITOCHU Corporation & PT Telekomunikasi Selular	2,786

JCM implemented project list (2)

No	Project	Entities	Annual Emission Reduction (tCO2)
8	<i>Energy saving for textile factory facility cooling by high efficiency centrifugal chiller</i>	Ebara Refrigeration Equipment & System Co., PT Nikawa Textile Industry, PT Ebara Indonesia	118
9	<i>Energy saving by double bundle-type heat pump</i>	Toyota Tsusho Corporation & PT TTL Indonesia	170
10	<i>Introduction of High efficient Old Corrugated Cartons Process at Paper Factory</i>	Kanematsu Corporation & PT Fajar Surya Wisesa Tbk	14,884
11	<i>Reducing GHG emission at textile factories by upgrading to air-saving loom</i>	Toray Industries, Inc, PT Indonesia Synthetic Textile Milles (ISTEM) / PT Easterntex / PT Century Textile Industry Tbk (CENTEX) / PT Toray Industries Indonesia (TIN)	566
12	<i>Energy saving for air-conditioning and process cooling at textile factory</i>	Ebara Refrigeration Equipment & Systems & PT Primatexco Indonesia	117
13	<i>Energy Saving for Shopping Mall with High Efficiency Centrifugal Chiller</i>	NTT Facilities, INC & PT. Pakuwon Jati Tbk	925
14	<i>Energy Saving for Industrial Park with Smart LED Street Lighting System</i>	NTT Facilities, INC dan PT. Maligi Permata Industri Estate, PT. Harapan Anang Bakri & Sons, PT. Karawang Tatabina Industrial Estate	900

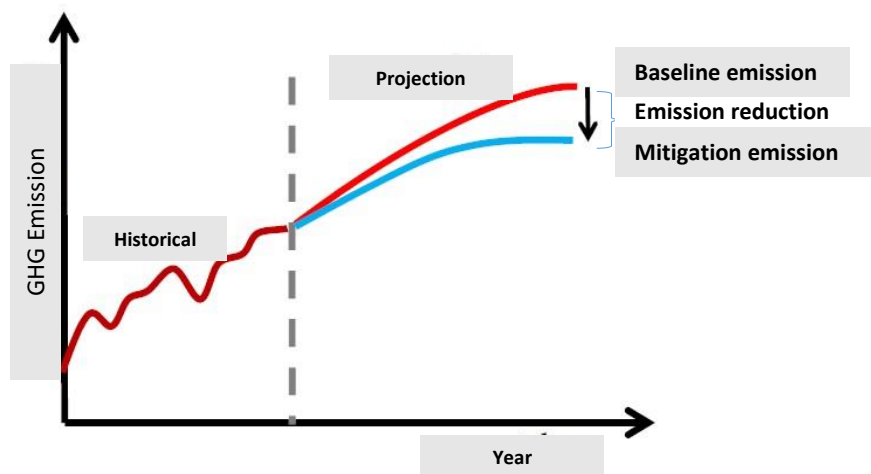
JCM implemented project list (3)

No1 2	Project	Entities	Annual Emission Reduction (tCO2)
15	<i>Energy saving by introduction of high efficiency once-through boiler system in a film factory</i>	Mitsubishi Plastics, INC & PT. MC Pet Film Indonesia	428,5
16	<i>REDD+ Model Project in Boalemo District</i>	Kanematsu Corporation & PT. Gobel Group DKM)	100,000
17	<i>Installation of Gas Co-Generation System for Automobile Manufacturing Plant</i>	Toyota Tsusho Corporation & PT Toyota Motor Manufacturing Indonesia	20,439
18	<i>Jakabaring Mega Solar Power Plant Project</i>	Sharp Corporation & Perusahaan Daerah Pertambangan dan Energi Sumatera Selatan	1,265
19	<i>Introduction of high efficiency once-through boiler and RO pure water system in golf ball factory</i>	Sumitomo Rubber Industries, Ltd, & PT Sumi Rubber Indonesia	380
20	<i>Energy saving for air-conditioning and process cooling by Introducing High-efficiency Centrifugal Chiller</i>	Ebara Refrigeration Equipment & Systems, Nippon Koei, dan PT Primatexco Indonesia	116
21	<i>Project of Introducing High Efficiency Refrigerators to a Food Industry Cold Storage in Indonesia</i>	Mayekawa Manufacturing Co., Ltd, PT Adib Global Food Supplies, PT Mayekawa Indonesia	120
22	<i>Project of Introducing High Efficiency Refrigerator to a Frozen Food Processing Plant in Indonesia</i>	Mayekawa Manufacturing Co., Ltd, PT Adib Global Food Supplies, PT Mayekawa Indonesia	21
		<i>Total Annual Emission Reduction</i>	329,320.5

Registered projects

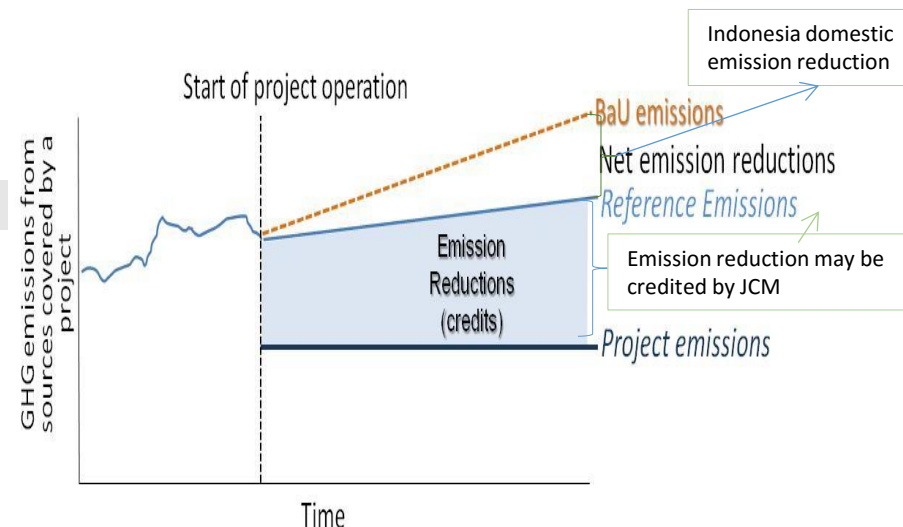
Comparison between JCM basic MRV with other schemes

Baseline emission based calculation



Other mitigation project

Reference emission based calculation

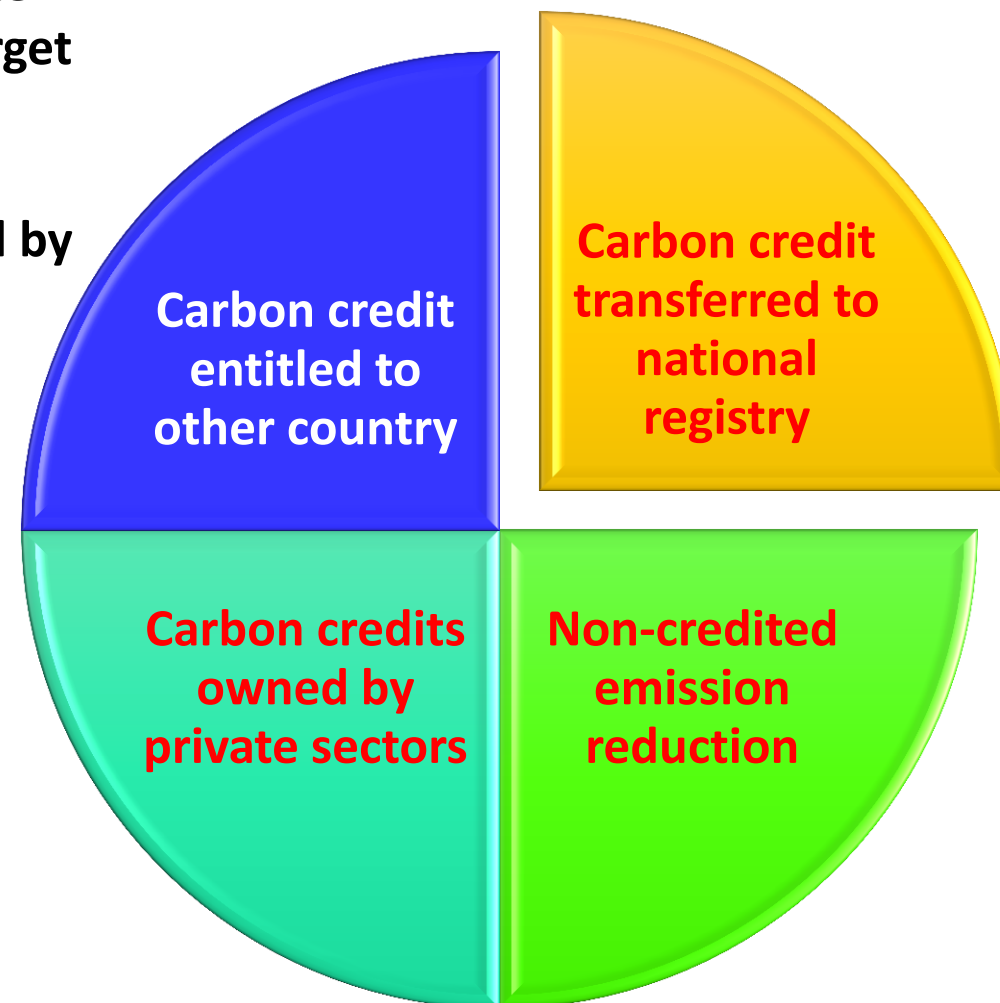
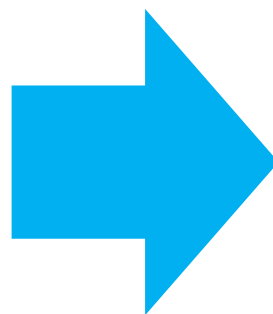
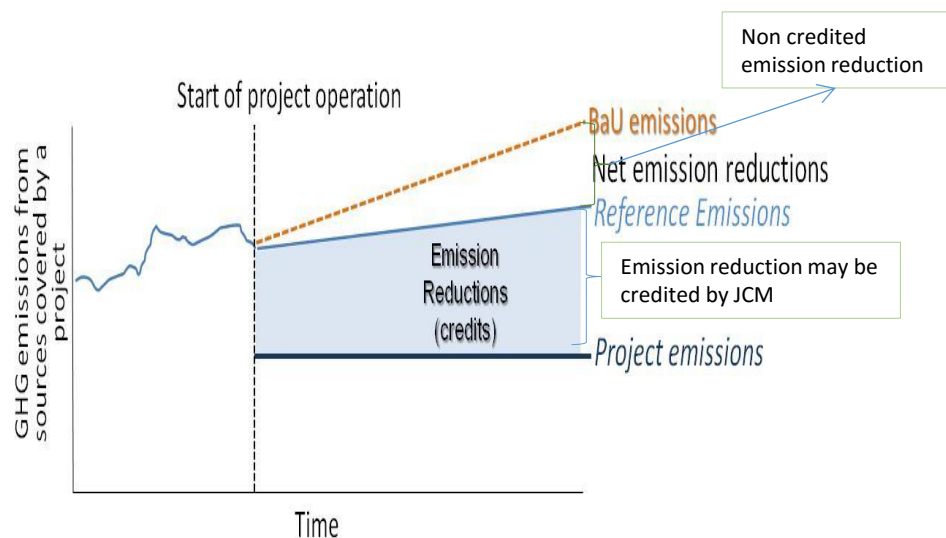


JCM project

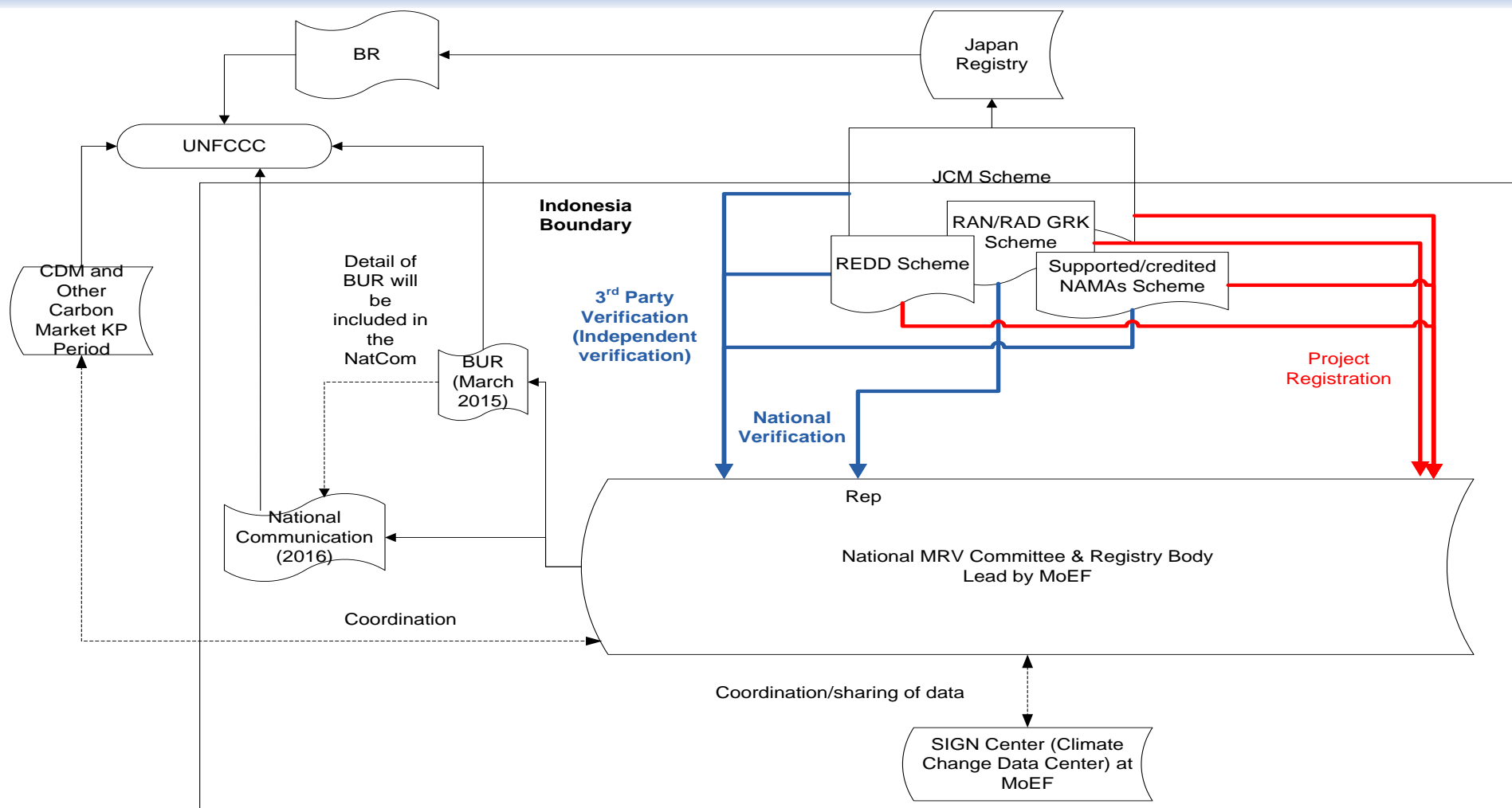
1. In JCM, *emission reductions* to be credited are defined as the difference between **reference emissions** and project emissions.
2. *Reference emissions* are calculated below business-as-usual (BaU) emissions which represent **plausible emissions** in providing the same outputs or service level of the proposed JCM project in host country.
3. JCM approach will ensure a net decrease and/or avoidance of GHG emissions.
4. *The value of Reference Emissions in JCM depends on the methodology. Therefore, the value can be equal or different with Baseline Emission.*

Emission reduction sharing

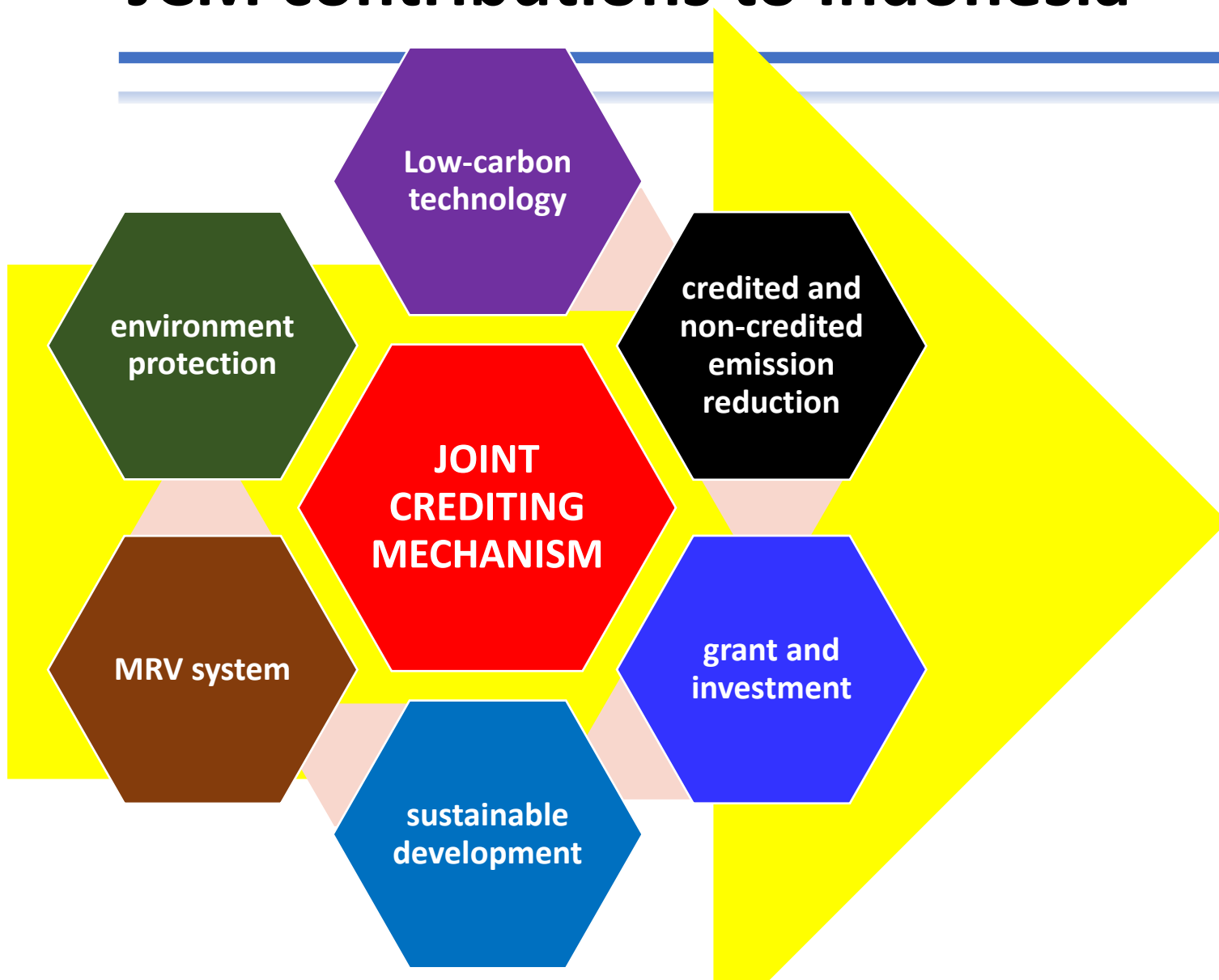
- The emission reduction can be used to achieve private and/or organizational, national, and international target
- The emission reduction could be counted as a global emission reductions achievement.
- Most importantly, the biggest benefit will be enjoyed by the surrounding communities and the ecosystems.



Potential linkages between emission reduction schemes in Indonesia based on the JICA-CMEA study



JCM contributions to Indonesia



**Indonesia's
target on
emission
reduction and
sustainable
development
implementation**

Communication and capacity building



Brochure



Business Forum

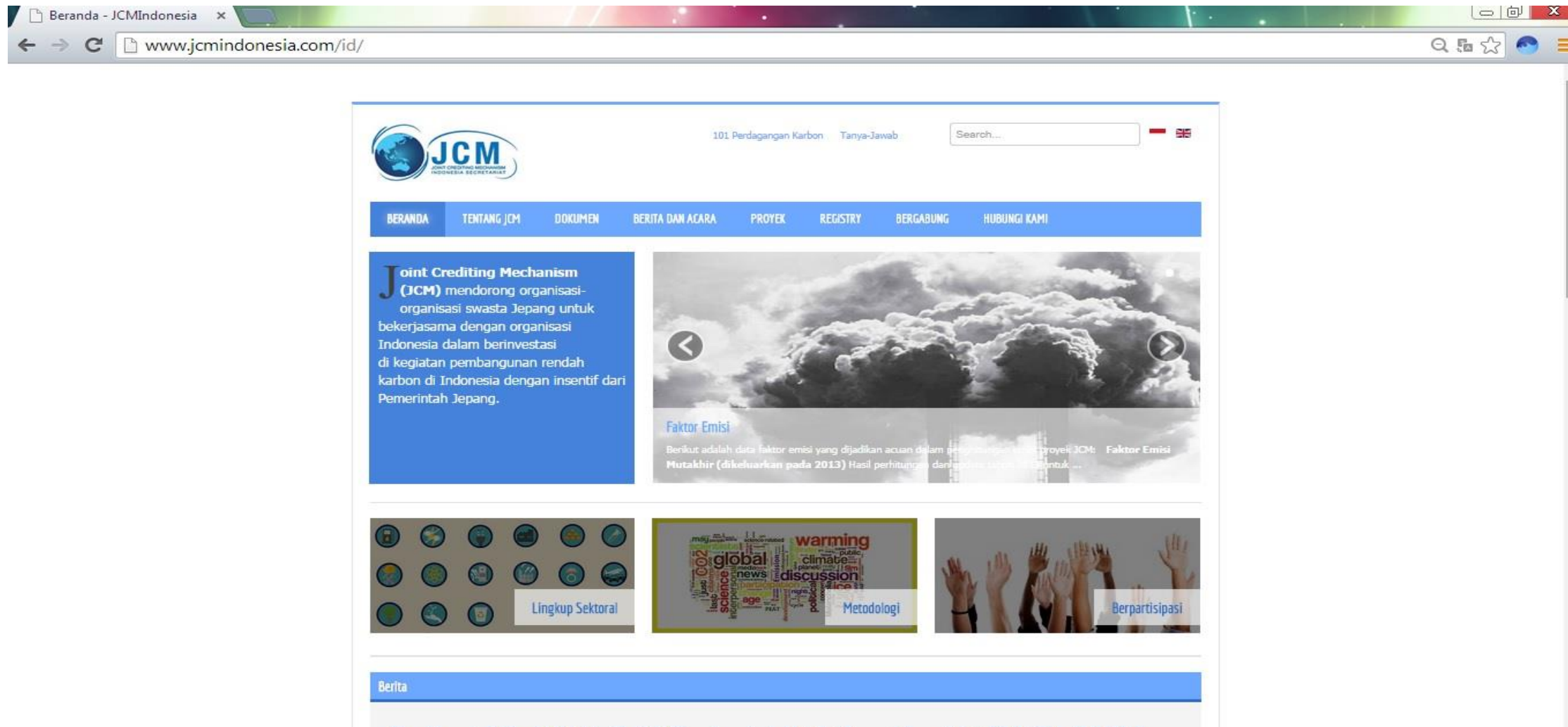


Booklet

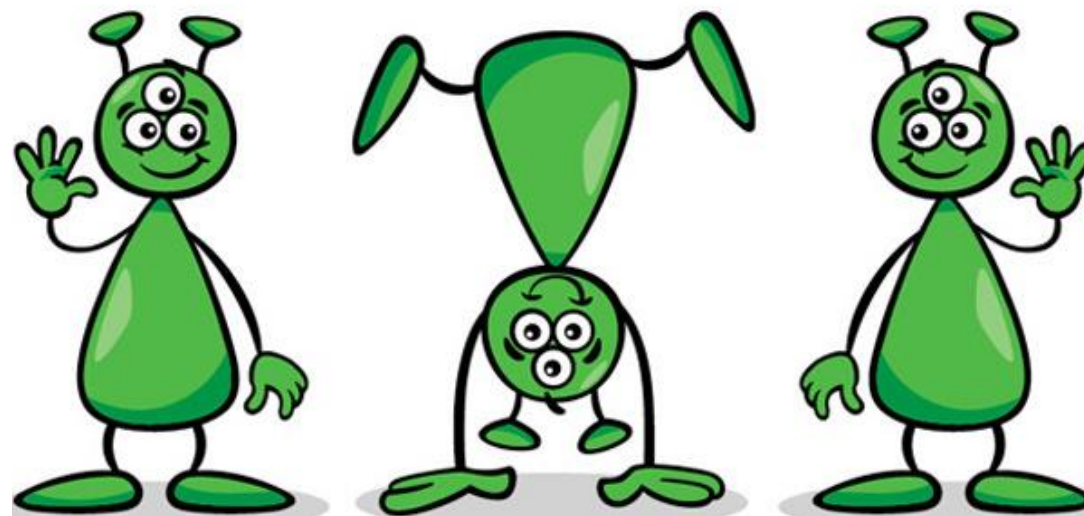


Indonesia JCM dissemination in COP 20 Lima and COP 21 Paris

Visit our website at jcm.ekon.go.id



Thank you!
Terima kasih!



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