in Indonesia

Market Based Mechanism in Indonesia

Bilateral





Clean **Development** Mechanism

Domestic

ICER Indonesia Certified **Emission Reduction**



SRN National Registry System

Voluntary



BPDLH Environment fund agency



Climate Security & Sustainable Development

CDM in Indonesia





- 147 registered CDM projects ٠ and 5 projects at validation
- 34.5 MtCO₂e issued CERs • from 47 projects

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VCS, Gold Standard and Plan Vivo in Indonesia



- 16 VCS projects
- 63 million verified credits from 11 projects



- 19 projects
- 7 projects issued 466,479 credits



 2 projects already issued 92.438 credits



Implemented technologies in JCM



Recognitions of JCM



ALLA SER LES POR LES CONTRACTOR

Indonesia Certified Emission Reduction JCM serves as role model for the establishment of the first voluntary carbon market in Indonesia which is initiated by MOEF





- o CMEA
- MOEF
- Min. of Energy
- Min. of Industry I
- o National
 - Planning Agency
- o MOF
- o MOFA

- MOFA & Japanese Embassy
- MOEJ
- o METI
- o Forestry Agency

City-to-city cooperation



- Surabaya & Kitakyushu
 - Energy management in buildings
 - Waste management

💿 Bandung & Kawasaki

- Energy management in buildings
- Waste management
- Street lamps

Batam & Yokohama

- Energy efficiency in airport
- Energy efficiency in waste water treatment
- Biomass energy

Semarang & Toyama

- Bus rapid transit
- Mini hydro
- Solar PV

🔰 Jakarta & Kawasaki

- Green building & green industry
- Solid waste
- Solar PV in remote areas

JCM project example #1

Power generation by waste heat recovery

- PT. Semen Indonesia & JFE Engineering Co.PT. Semen Indonesia, Tuban Factory
 - 14,799 tCO2/year
- The waste heat recovery (WHR) system utilizes unused waste heat currently emitted from 4 kiln plant at the cement factory.
- System will produce steam using the waste heat exhausted from the cement plant, and the steam is fed to the steam turbine generator to generate electricity.

JCM project example #2

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



PT. XL Axiata & KDDI Corp.

20 locations in Sumatera, Java & Kalimantan



- 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.
- Installed at 20 location in off-grid and poor-grid area in Republic of Indonesia.

JCM project example #3

Solar PV Power Plant Project in Jakabaring Sport City

- PDPDE Sumsel & Sharp Corp.
 Jakabaring Sport City, Palembang
 917 tCO2/year
- This project aims to reduce CO2 emissions by introducing a 2 MW solar power plant in the Jakabaring Sport City complex of South Sumatra Province. The solar power plant enables to supply electricity to the sport city and surplus power is provided to the grid as renewable energy.
- About 5,243 of these modules and peripheral systems installed on an expansive area of about 2.5 ha.

Survey of JCM impact





Indonesia First NDCs



- Indonesia has ratified Paris Agreement and submitted the first NDCs in 2016
- Emission reduction of 843 MtCO₂e (29%) under unconditional scenario (CM1) and 1081 MtCO₂e (41%) under conditional scenario (CM 2)
- The biggest contribution from forestry and followed by energy, waste, agriculture, and industrial processes and product use (IPPU)

Domestic initiatives to support market mechanism



Ministry of Environment and Forestry



Ministry of Finance



Coordinating Ministry for Economic Affairs

ICER	BPDLH	JCM
Indonesia Certified	Environment fund	Joint Crediting
Emission Reduction	agency	Mechanism
Prepared for carbon	Pool of funds for	Bilateral cooperation for
credits certification	supporting environment	carbon credits since
system	recovery	2013
SRN National Registry System Registry for domestic mitigation actions		PMR Partnership for Market Readiness

Thank you

