

JICA's Support for Air Pollution Control

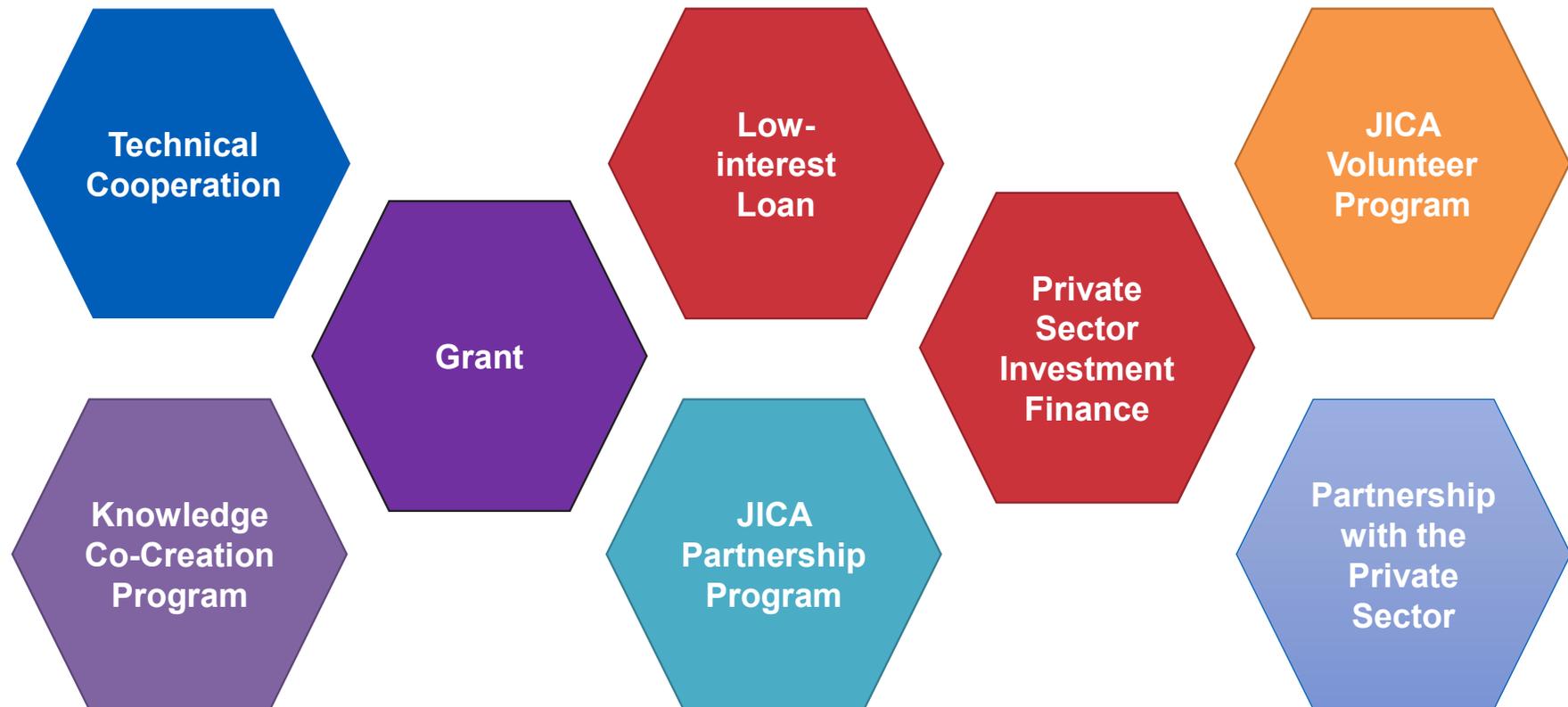
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JICA's Schemes for Supporting Developing Countries



JICA Project for Sustainable Management of PM_{2.5} Prevention and Reduction Measures in Thailand



Project type	Technical Cooperation Project
Period	36 months (July 2022 – July 2025)
Executing agency	Pollution Control Department, Ministry of Natural Resources and Environment (PCD/MONRE)
Target area	Bangkok Metropolitan Region (BMR)
Overall Goal	Sustainable management of PM _{2.5} is promoted through appropriate PM prevention and reduction measures in Thailand
Project Goal	Capacity of PCD and relevant agencies for PM _{2.5} prevention and reduction measures is strengthened.
Outputs	<ol style="list-style-type: none"> 1: Improvement of PM emission Inventory 2: Air quality simulation modeling 3: Assessment of pollution structures 4: PM policies and measures 5: Developing capacities of other provinces 6: Dissemination to Mekong countries
JICA Expert Team	Suuri-Keikaku, Nippon Koei, Japan Environmental Sanitation Center (JESC), Asia Center for Air Pollution Research (ACAP)

Project target area: Bangkok Metropolitan Region



Policy Scenario Setting



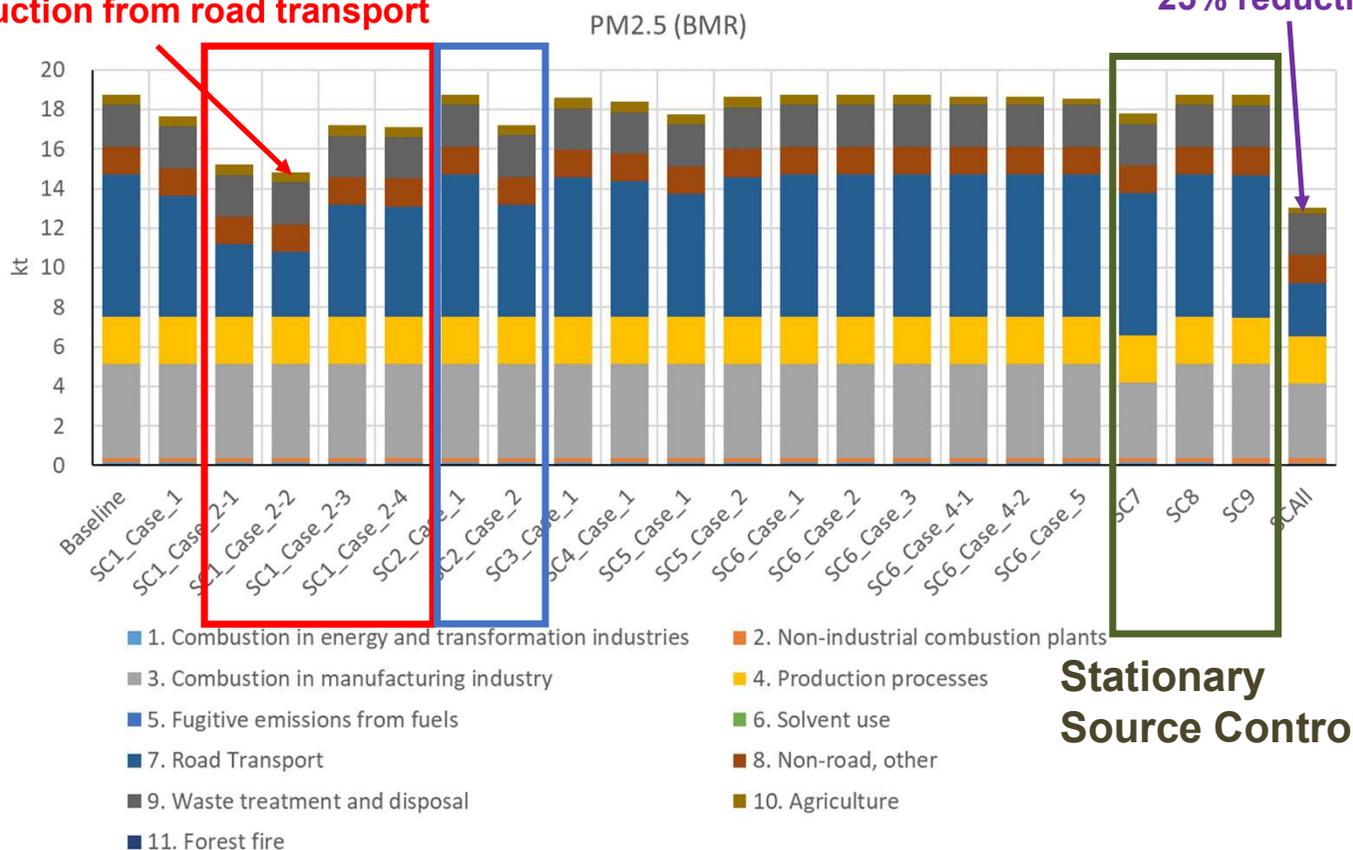
Category	No.	Case	Combination	
Mobile Source Control	SC 1	Case 1	Improvement of fuel standards (Low sulfur-fuel)	
		Case 2-1	Replacement of Diesel Vehicles under EURO4 into EURO5	
		Case 2-2	Replacement of Diesel Vehicles under EURO4 into EURO6	✓
		Case 2-3	Replacement of Diesel Vehicles under EURO2 to EURO5	
		Case 2-4	Replacement of Diesel Vehicles under EURO2 to EURO 6	
	SC 2	Case 1	Ban on driving HDV with EURO2 and under in BMA	
		Case 2	Ban on driving HDV with EURO2 and under in BMR	
	SC 3		Replacement of all buses in BMA with E-Buses.	✓
	SC 4		Application of DPF/DOC for HDT and Bus of EURO2/3	
	SC 5	Case 1	Reduction of traffic volume in BMR by 50% during 7-10 in the morning and 16-19 in the evening	✓
Case 2		Reduction of traffic volume in BMR (8%)		
Open Burning Control	SC 6	Case 1	No impact from neighboring countries' open burning	
		Case 2	No impact from outside of BMR	
		Case 3	Reduction of open burning in all Thailand (Ad-hoc Plan)	
		Case 4-1	Ban on open burning in Feb-April	
		Case 4-2	Ban on open burning in Dec.-May	
		Case 5	Ban on open burning at nighttime (after 17:00)	✓
Stationary Source Control	SC 7		Application of control technologies into prioritized industries (cement, factories with boilers/furnaces)	✓
	SC 8		Reduction of VOC emission from manufactures that use solvent and refinery.	✓
	SC 9		Countermeasures on thermal power plants	✓

Estimated PM_{2.5} Emission of Each Policy Scenario

Replacement of old diesel cars
54% reduction from road transport

Traffic restriction on HDV with EURO II and under

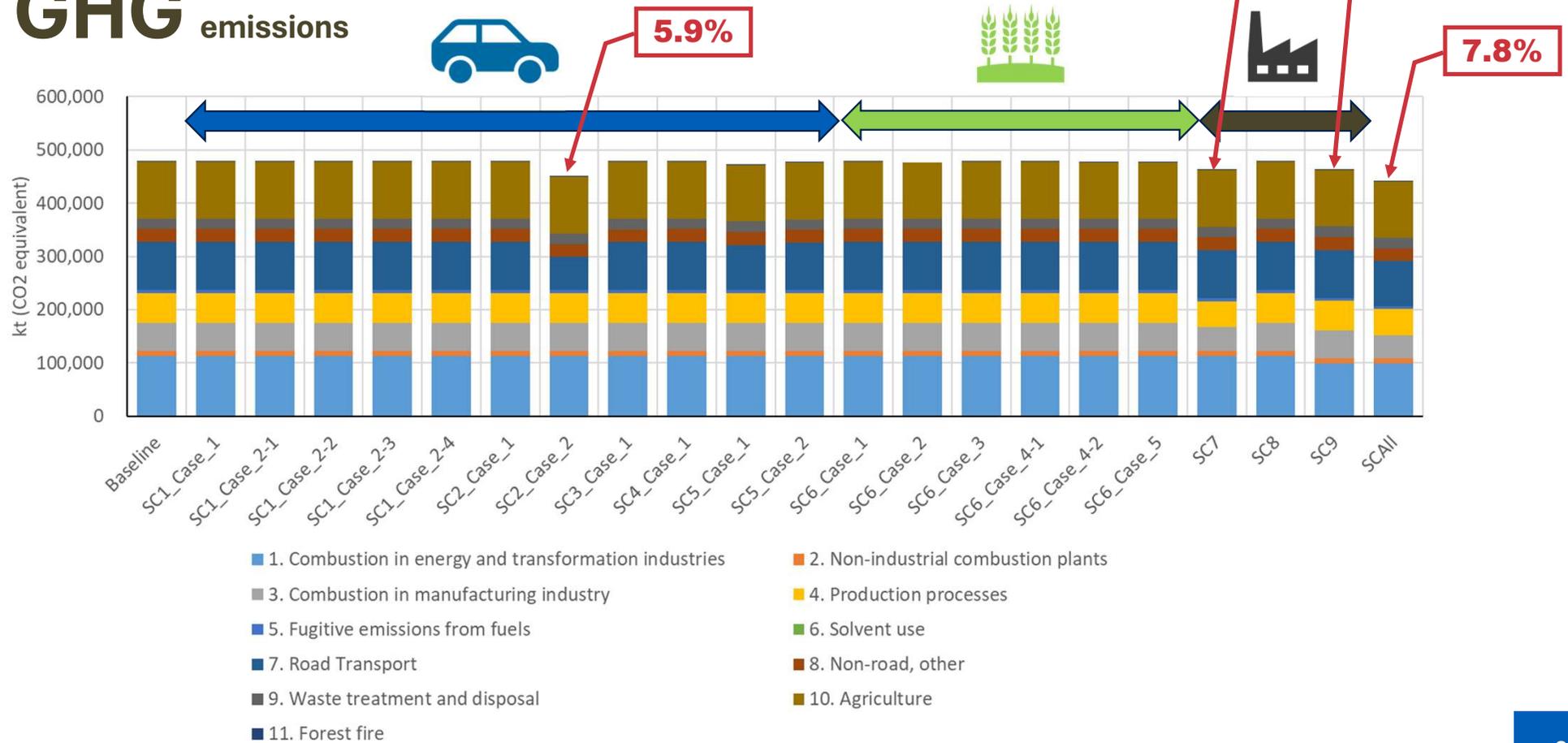
Combination measures
25% reduction

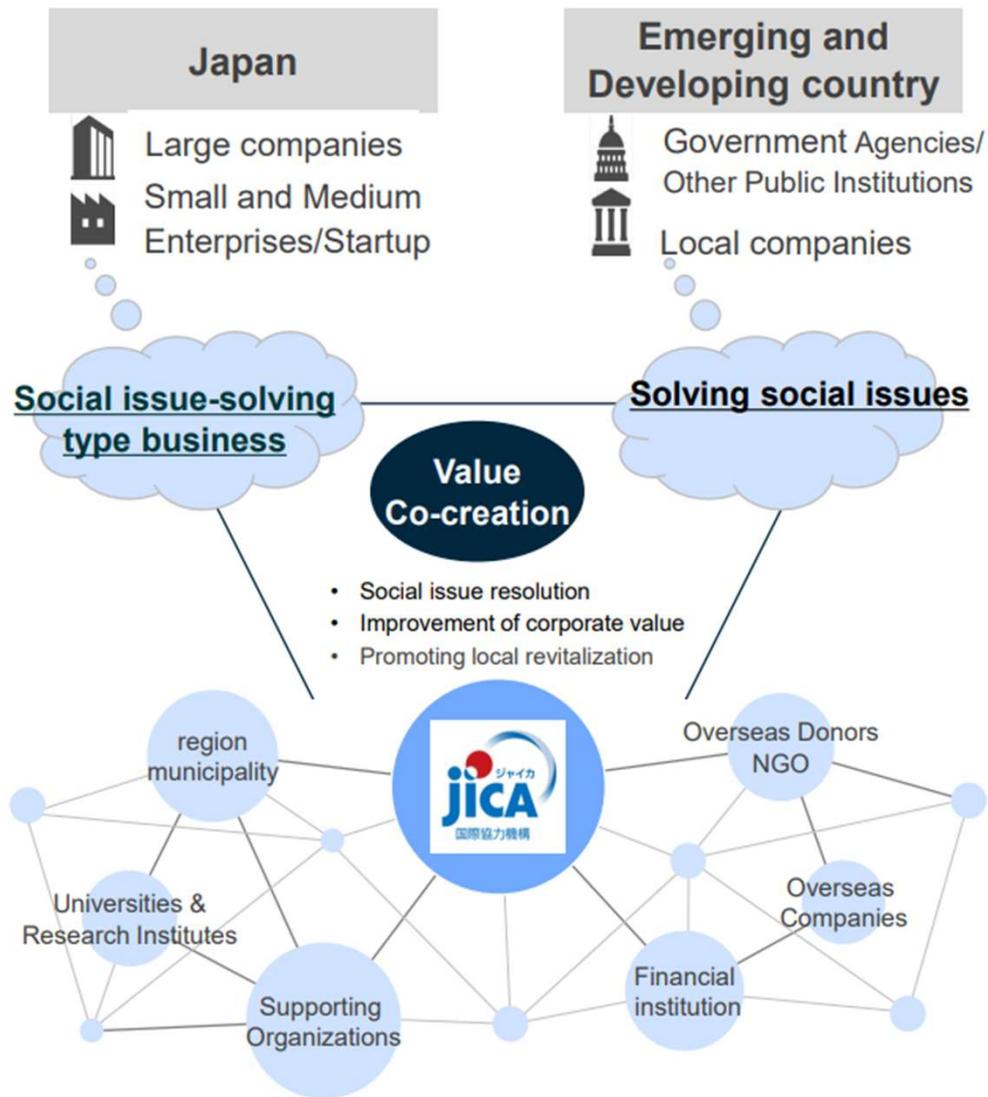


Contributions to GHG reduction



GHG emissions





SDGs Business Supporting Survey - JICA Biz -

- JICA supports Japanese companies in developing businesses that contribute to solving development challenges in partner countries.
- Two-Tiered Support Structure
 - SDGs Business Needs Confirmation Survey
 - SDGs Business Validation Survey

Installation of PM_{2.5} Automatic Component Analyzer and Air Quality Monitoring System



PM_{2.5} Automatic
Component Analyzer
(PX-375)

- Company: HORIBA, Ltd. (Kyoto, Japan)
- Survey Duration: March 2023 until January 2026
- Country/Area: Morocco / Rabat, Casablanca, Kenitra and Mohammedia
- Counterpart: Department of Sustainable Development under the Ministry of Energetic Transition and Sustainable Development, National Laboratory for Pollution Studies and Monitoring
- Overview: Conduct PM_{2.5} measurement and component analysis with the aim of increasing understanding of the importance of PM_{2.5} source information and incorporating the introduction of the analyzer into the action plan.