

Integrated Approaches to Air Quality Management

JICA's Role and Opportunities for Collaboration

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Japan international Cooperation Agency (JICA) Headquarters

Japan International Cooperation Agency (JICA)



- An incorporated administrative agency in charge of Japan's ODA
- Vision: Leading the World with Trust
- President: Prof. Akihiko TANAKA
- Full-time Staff: 2,011 (as of November 2025)
- 15 domestic offices and 97 overseas offices
- JICA is cooperating with 145 developing countries and regions.

Air Quality Funding by Development Finance Institutions

Top 10 Donors of Total Air Quality Funding, 2019–2023



Ranking	2018-2022 ranking	Name	Type	Value (\$ billion)	Share of total (%)
1	2	Japan International Cooperation Agency	Bilateral DFI	20.7	17
2	1	Asian Development Bank	Multilateral DFI	20.5	17
3	3	World Bank Group	Multilateral DFI	5.0	4
4	4	Asian Infrastructure Investment Bank	Multilateral DFI	4.8	4
5	7	European Bank for Reconstruction and Development	Multilateral DFI	4.7	4
6	8	Agence Française de Développement / Proparco (France)	Bilateral DFI	4.7	4
7	10	KfW Group (Germany)	Bilateral DFI	3.8	3
8	6	Inter-American Development Bank Group	Multilateral DFI	2.5	2
9	12	Export-Import Bank of Korea (Korea Eximbank)	Export Credit Agency (ECA)	2.3	2
10	9	Green Climate Fund	Multilateral Climate Funds	2.2	2

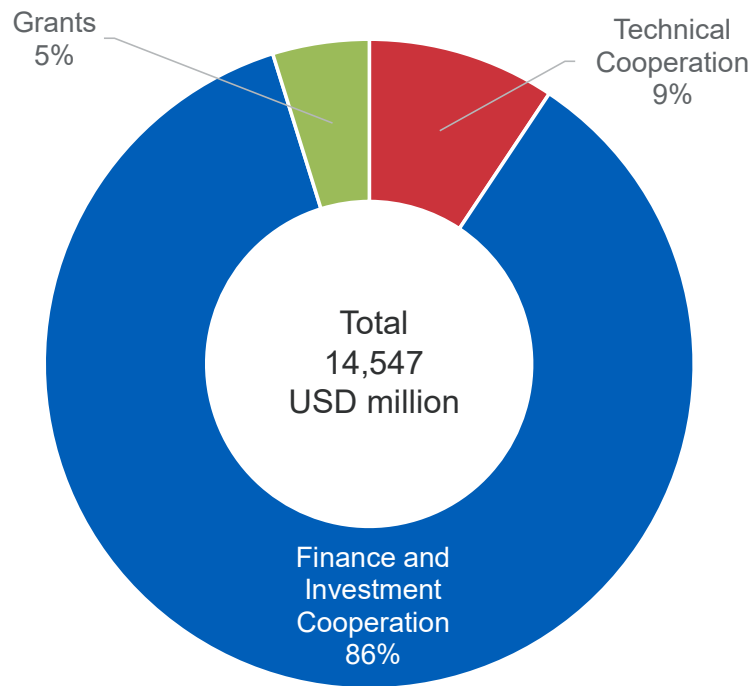
(Source) The State of Global Air Quality Funding 2025

Types of JICA's Cooperation

Technical Cooperation	People-to-people cooperation
Finance and Investment Cooperation	Lending or investing of funds under concessional terms to developing countries for their development
Grants	Core infrastructure development and equipment provision
Citizen Participation	A broader base of international cooperation
Emergency Disaster Relief	Response to natural and other disasters
Research	Co-creating practical knowledge for peace and development
Public-Private Partnerships	Supporting social and economic development through private sector business activities

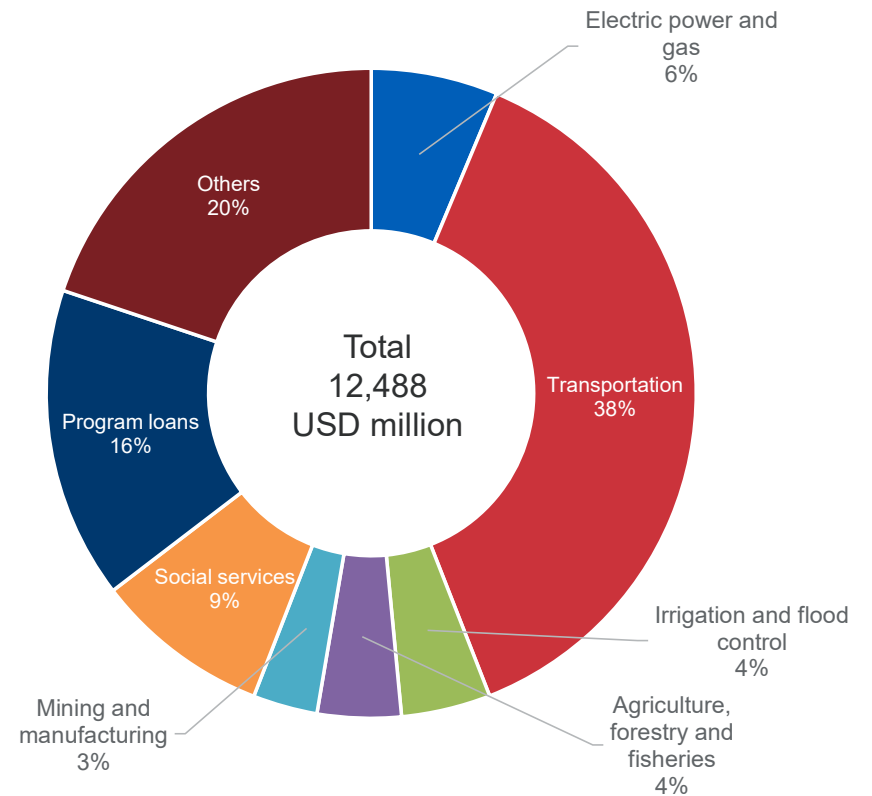
Overview of JICA Operations (FY2024)

Scale of Operations by Type



(Source) JICA Annual Report 2025

Cooperation by Sector
-Finance and Investment Cooperation-





Ho Chi Minh City Urban Railway Construction Project (Line 1)

- Country: Viet Nam
- Project Type: Finance and Investment Cooperation
- Signing of Loan Agreement (L/A): December 2023 (Ben Thanh – Suoi Tien Section)
- Loan Agreement Amount: 41.237 billion yen (= 275 USD million)
- Improvement in Air Quality (PM_{2.5})

	Annual Average Concentration (µg/m ³)	
	No urban railway	Urban railway available
PM _{2.5}	54.9	43.7

Technical Cooperation

Key Outcomes of JICA's Support for Air Quality Management

For partner countries, JICA contributes to:

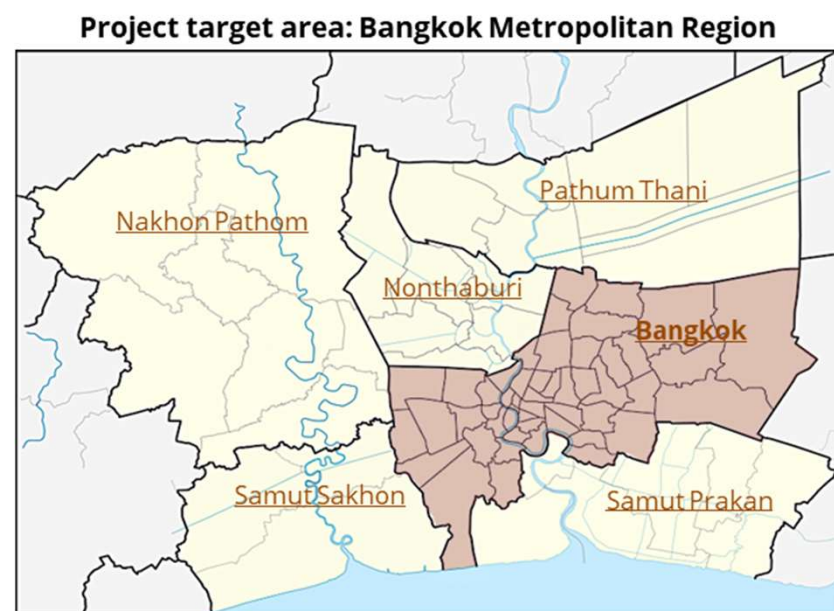
- Improved availability and reliability of air quality data
- Enhanced regulatory enforcement capacity
- Evidence-based policymaking for air pollution control
- Raised awareness among stakeholders
- Strengthened regional cooperation



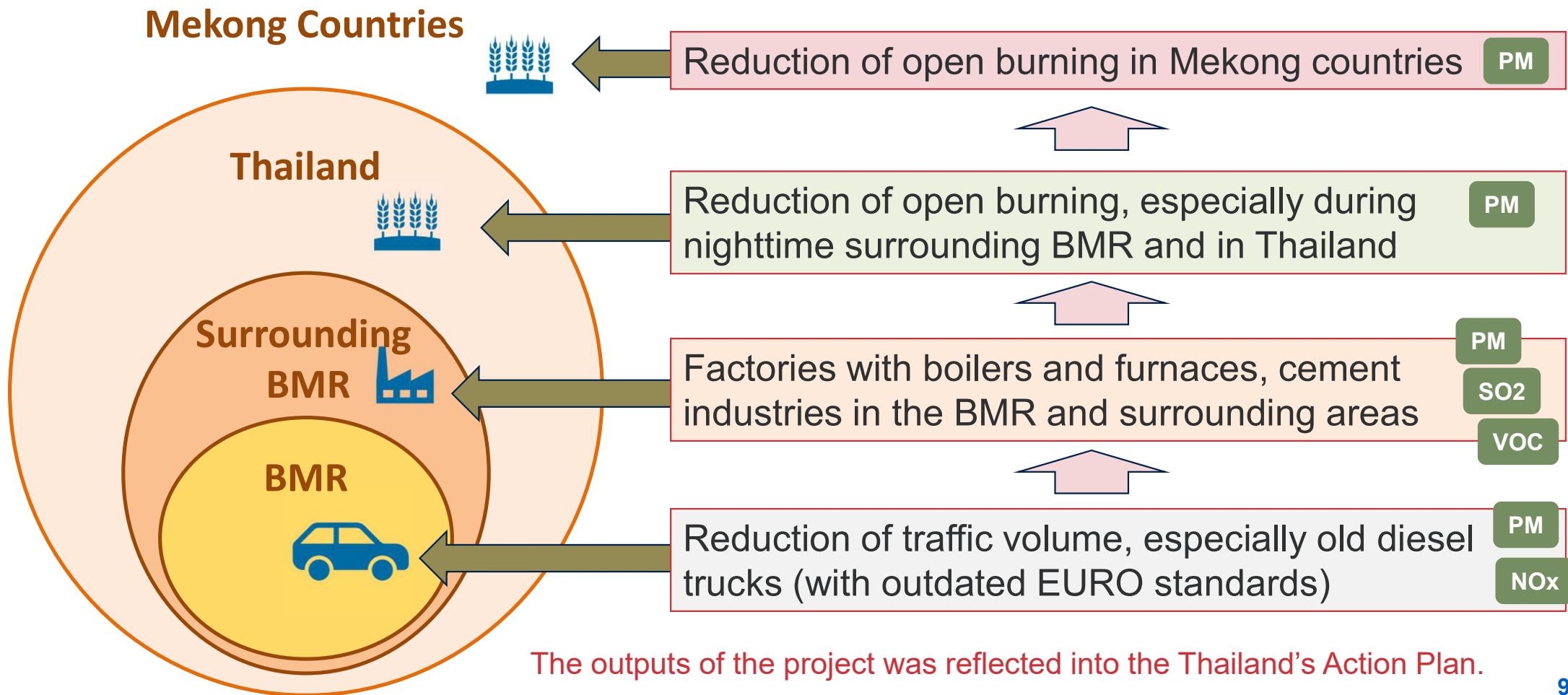
JICA Project for Sustainable Management of PM_{2.5} Prevention and Reduction Measures in Thailand



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)



Findings from the results of simulation model analysis



Thailand

Support for the Development of Basic Schemes for PRTR system

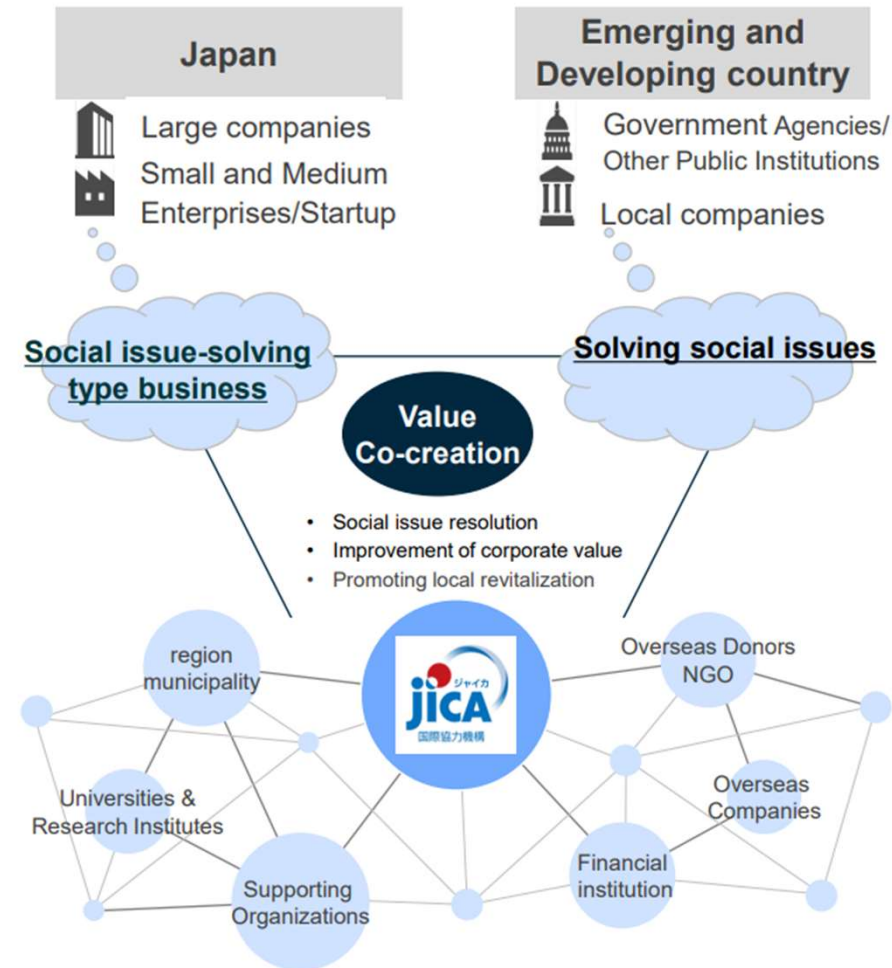
- From 2011 to 2016, JICA implemented a five-year technical cooperation project to support the Pollution Control Department (PCD) and the Department of Industrial Works (DIW) of the Government of Thailand in developing the foundational framework for a PRTR system.
- The key outputs of the project included:
 - **The basic design of Thailand's PRTR system** was formulated.
 - **An online emission reporting system for industries** was developed, and emission data was collected in the pilot area (Rayong Province).
 - **Emission estimation manuals** were prepared for major industrial sectors, enhancing the capacity to compile data on both point and non-point source emissions, as well as transfer amounts.
 - Awareness of the importance of **risk communication** was raised in the pilot area.
- Following the project's completion, continued cooperation efforts were undertaken, including the organization of seminars on data disclosure and the dispatch of PRTR experts.



(Photo) Risk Communication Workshop

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



Example of JICA Biz

Countermeasures on Air Pollution, Energy Efficiency and Global Warming by Utilizing Automobile Engine Oil Filter using Permanent Magnets



Company: Takabayashi-Sangyo Cp., Ltd. (Tottori, Japan) and TAGEN TECS Co., Ltd. (Tokyo, Japan)

Survey Duration: May 2022 until May 2023

Country/Area: Thailand/ Bangkok Metropolitan Area

Counterpart: Pollution Control Department, Ministry of Natural Resources and Environment (PCD/MONRE)

Overview: The survey examines the manufacturing and sales of the permanent-magnet oil filter, PECS (Power Up & Economic Clean System), helping reduce automobile-related air pollution and promote energy savings through improved fuel efficiency.

Thank you for your listening!

If you have any questions, please contact
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