



Ministry of the Environment
Japan

Policy and Efforts to Address Transport related Air Pollution Issues in Japan

Rieko NISHIYAMA
Environmental Mobility Policy Division,
Environmental Management Bureau, MOEJ

December 10th, 2024

- 1. Environmental Quality Standards**
- 2. Automobile Emissions Regulations and Current Status**
- 3. Road Traffic Noise Standards and Vehicle Noise Regulations**
- 4. Efforts for Decarbonization of Automotive Sector**
- 5. Japan Platform for Redesign: Sustainable Infrastructure (JPRSI)**

Environmental Quality Standards (EQS)

Environmental quality standards...are recommended to be kept up, so as to protect human health and conserve the living environments (Article 16 of Basic Act on the Environment)

Basic Act on the Environment (1993) (Basic Act for Environmental Pollution Control (1967))

EQS for Noise (1971, 1998 Amendment)

EQS for Aircraft Noise (1973, 2007 Amendment)

EQS for Bullet Train and Railway Noise (1975)

Air Pollution Control Act (1968)

Automobile NOx and PM Act (1992)

Act on Regulation, Etc. of Emissions From Non-road Special Motor Vehicles (2005)

Noise Regulation Law (1968)

Automobile Emissions Regulations and Current Status

Structure of Vehicle Emissions Regulations

Structure of Vehicle Emissions Regulations

Expert Committee on
Motor Vehicle
Emissions

Report survey details, etc.

Central Environment Council
(Air Quality, Noise and Vibration
Committee)

Report to the Minister of the Environment

Air Pollution Control Act (Ministry of the Environment)

Exhaust emissions:
Permissible Limits on the vehicle emissions

Considerations to ensure the permissible limits formulated by the
Minister of the Environment

Road Transport Vehicle Act (Ministry of Land, Infrastructure, Transport and Tourism)

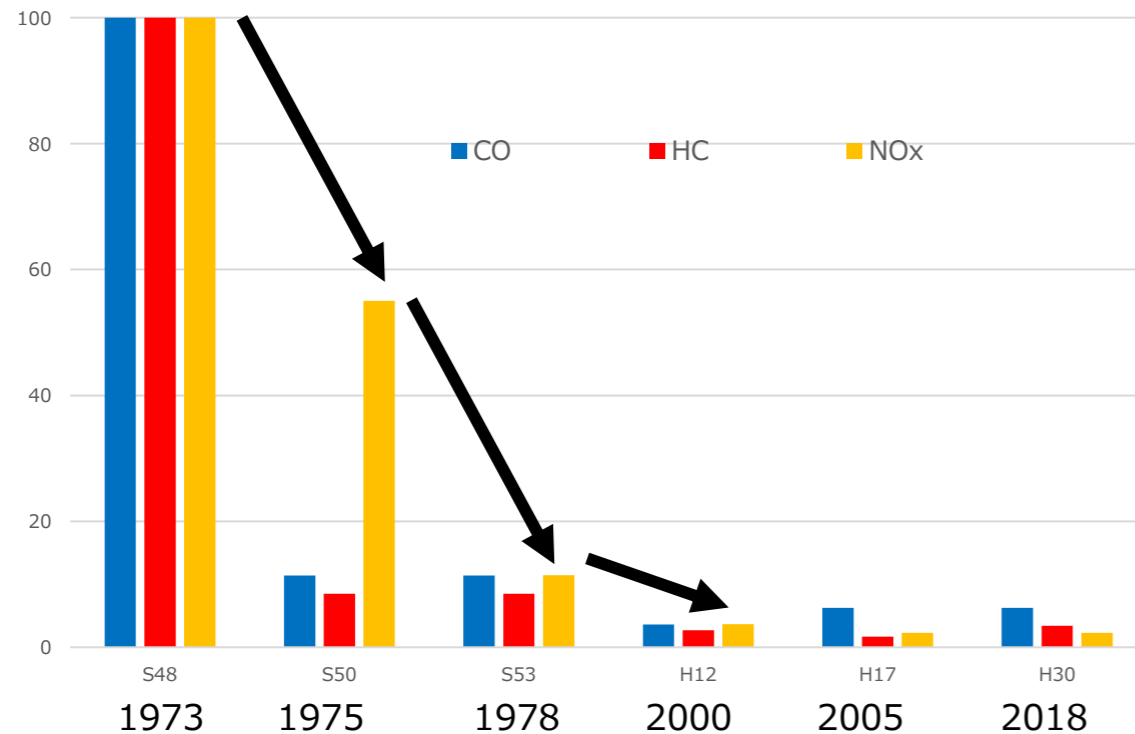
Safety regulations for road transport and vehicle
Safety and environmental regulations for vehicles
used on public roads

Current Status of Vehicle Emissions Regulations

- Automobile emission regulations have been tightened based on the achievement of Environmental Quality Standards(EQS), trends in technological development, and global regulations.
- EQS of the pollutants (PM2.5, NO2, SPM, SO2, and CO) at roadside stations have been achieved 100%.

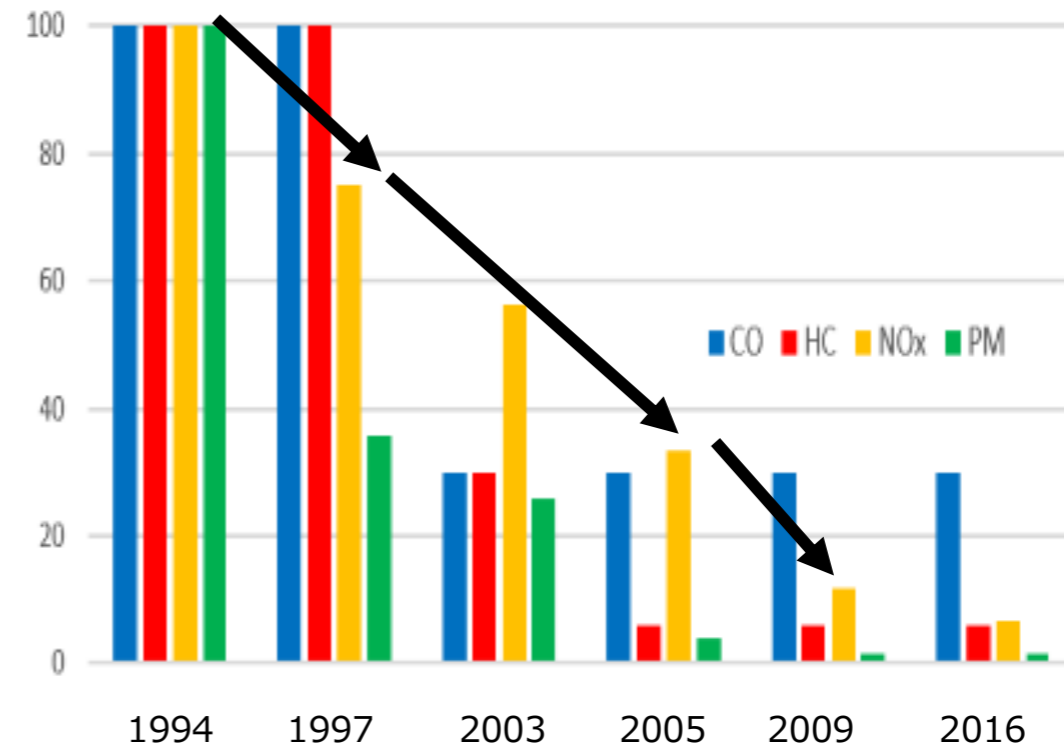
Emissions (Gasoline vehicles)

1973=100



Emissions (Diesel heavy-duty vehicles)

1994=100



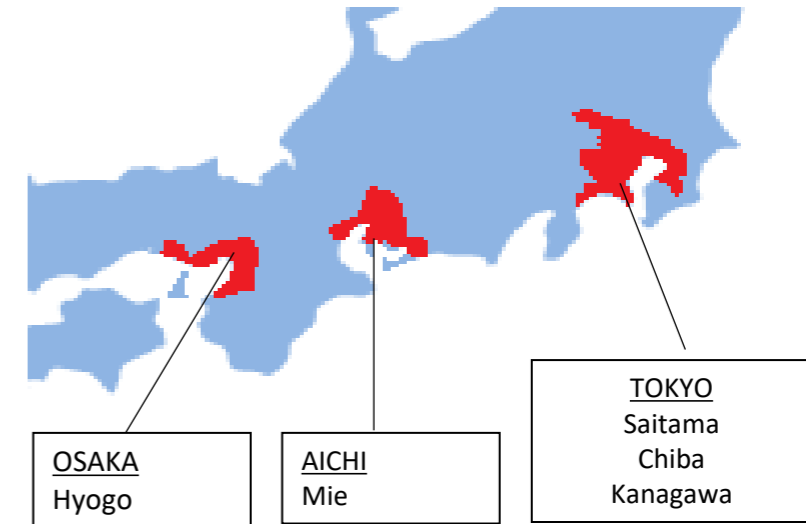
Stricter regulation on NOx and PM from vehicle in the metropolis areas (Tokyo, Aichi, Osaka)

■ Air pollution control measures for the metropolis areas

- Additional measures to reduce **NOx** and **PM** from vehicle in the metropolis areas (Tokyo, Aichi, Osaka)
- Control on **the total vehicle emission amounts** in the metropolis areas

✓ 1992: targeting NOx in Tokyo and Osaka by the Automobile NOx Act

✓ 2001: targeting NOx + PM in Tokyo, Osaka and Aichi by the Automobile NOx and PM Act



✓ Current target (2022) :

Achieve the Environmental Quality Standards of NO₂ and SPM by 2026

✓ Consultation report by the Central Environment Council on the current target (2022.4)



The target was mostly achieved

Road Traffic Noise Standards and Vehicle Noise Regulations

■ Environmental Quality Standards for noise - Areas facing roads

Area category	Standard value	
	Daytime	Nighttime
Area A facing roads with two or more lanes*	60dB or less	55dB or less
Area B facing roads with two or more lanes, and area C facing a road with one or more lanes	65dB or less	60dB or less

For spaces adjacent to a road carrying arterial traffic

Standard value	
Daytime	Nighttime
70dB or less	65dB or less

*Lane: a longitudinal strip of road with uniform width to enable a single line of cars to travel safely and without hindrance.

Notes: Standards for indoor noise transmitted from the outside (45 dB or less for daytime and 40 dB or less for nighttime) can be applied for the respective residences whose windows are judged as usually closed on the sides most affected by noise.

■ Road traffic noise monitoring implementation scheme

- Article 18 of Noise Regulation Law requires prefectures and cities to conduct monitoring of road traffic noise and report the results to the Ministry of the Environment of Japan.

■ Results of monitoring

- Each prefecture and city announces the status of road traffic noise.
- The Ministry of the Environment of Japan compiles and announces the nationwide status.

Structure of Vehicle Noise Regulations

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Expert Committee on
Vehicle Noise

Report survey details, etc.

Central Environment Council
(Air Quality, Noise and Vibration
Committee)

Report to the Minister of the Environment

Noise Regulation Law (Ministry of the Environment)

Noise generated by vehicles
Permissible limits for vehicle noise
(Environment Agency Notification No. 53 of 1975)

Considerations to ensure the permissible limits formulated by the
Minister of the Environment

Road Transport Vehicle Act (Ministry of Land, Infrastructure, Transport and Tourism)

Safety regulations for road transport and vehicle
Safety and environmental regulations for vehicles
used on public roads

Efforts for Decarbonization of Automotive Sector

Efforts for Decarbonization of Automotive Sector

- Japan aims to achieve carbon neutrality by 2050, and to achieve this target in automotive sector, it is important to pursue a range of pathways, not limiting ourselves to specific technologies.
- Ministry of the Environment (MOE) is working in cooperation with Ministry of Economy, Trade and Industry (METI) and Ministry of Land, Infrastructure, Transport and Tourism (MLIT), **with a particular focus on initiatives for commercial vehicles.**
- MOE is supporting the acceleration of introducing commercial electrified vehicles through technological development, demonstrations, and subsidy systems.

Social Implementation

Promotion for Electrification of Vehicles

Trucks

EV trucks



EV vans



FCV trucks



Taxis

EV taxis



PHEV taxis



FCV taxis



Buses

FCV buses



EV buses



Technological Development and Demonstration

Development and Demonstration of Swappable Battery EVs



Etc.

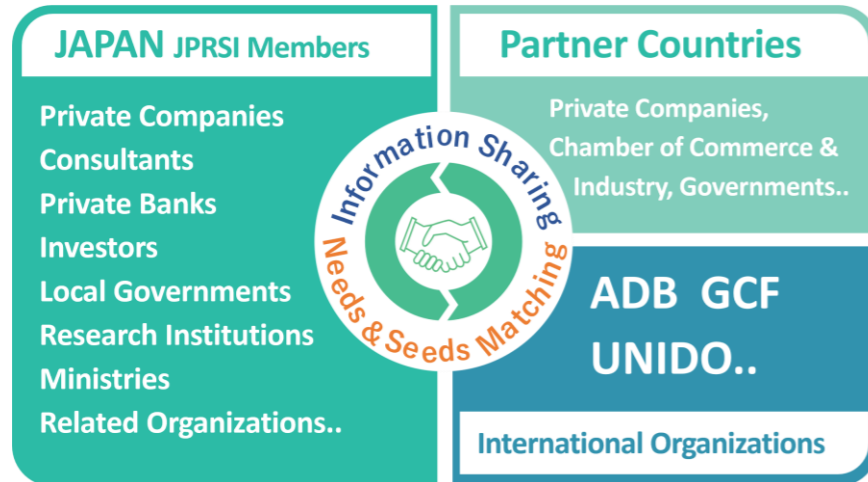
Japan Platform for Redesign: Sustainable Infrastructure (JPRSI)

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■ JPRSI is a public-private partnership platform established by Ministry of the Environment of Japan in September 2020 to comprehensively support partner countries' governments and corporations, etc. to improve the environment by introducing Japanese environmental infrastructure.

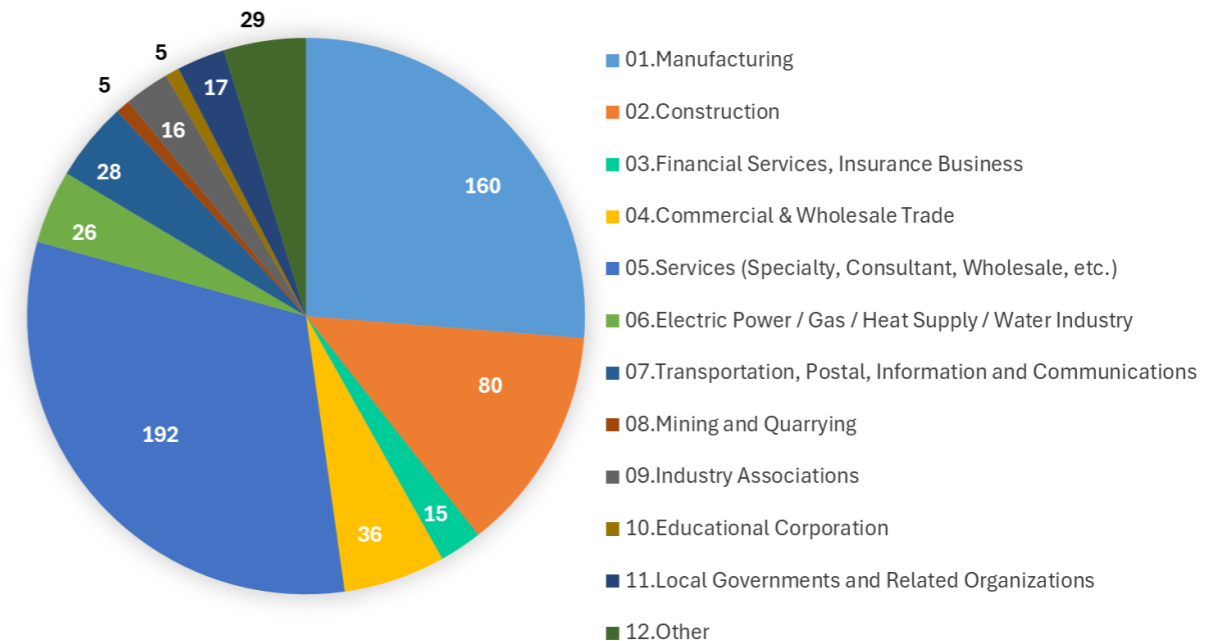
Overview



1. Dissemination of technical information provided by Japanese companies
(349 technologies, available in English)
2. Matching local needs with Japanese corporations' solutions

Number of Entities Joined

609 entities have joined the platform
(as of November 2024).



Contact us

Technology List (JPRSI)

Home > Environmental Solutions > Technology List (JPRSI) > Search form

JP EN

[Click here for an overview of technology classification](#)

Sector

Global Warming

- Renewable Energy
- Biomass Utilization
- Energy Saving Technology / Energy Effective Utilization Technology
- Eco-Building
- Eco-Mobility
- Carbon dioxide Capture, Utilization and Storage(CCUS)
- Adaptation Technology
- Ozone Layer Protection Technology
- Hydrogen Technology

Waste Treatment & Recycling

- 3R (Reduce, Reuse, and Recycling)
- Waste Treatment / Management

Water & Soil

- Water Quality Improvement / Water Management Technology
- Soil and Groundwater Contamination Countermeasures

Air Pollution

- Exhaust Gas Treatment

Technology / Service Summary

The Air Quality Monitoring System (AQMS) is a facility that continuously measures meteorological parameters, concentrations of air pollutants and particulate matter throughout the year.

Purpose

Real-time monitoring of air pollution status.

Feature

The AQMS can continuously measure meteorological parameters such as wind speed, wind direction, etc., concentrations of air pollutants such as NOx, SO2, CO, O3, THC, etc., and particulate matter.

The mobile AQMS can also be customized to monitor multiple sites with a single system. Air pollution conditions in each area can be monitored in real time at the central control room. The system can also be designed according to customer requirements to meet a variety of air pollution monitoring needs.



Technology / Service Summary

Green hybrid technology cuts emissions and fuel consumption by 50% compared to traditional diesel trains. Our products can help deliver a seamless, sustainable transport network.

Purpose

Today, half of all trains on Europe's railways still use diesel engines. Rail operators that want to decarbonise transportation are left with a challenge: How can they move their fleets away from diesel when the cost of electrification is too high? This is where our new battery train solutions is so effective.

Feature

- Zero Emissions: Operates without greenhouse gas emissions, promoting cleaner transportation.
- High Efficiency: Utilizes advanced battery technology for longer ranges and faster charging.
- Versatility: Suitable for use on non-electrified routes and sections, further enhancing operational flexibility.

Regional/ Intercity



Tram



Environmental Business Matching Seminar



The 2nd Philippines-Japan Environment Week



2025 JANUARY

13^{MON}, 14^{TUE}, 15^{WED}

@Dusit Thani Manila

Organized by

Ministry of the Environment, Japan
in cooperation with relevant organizations

ADMISSION
FREE



Programme

13th MONDAY

- SIDE EVENT: *Partnership to Strengthen Transparency for co-Innovation (PaSTI)*
- SIDE EVENT: *Workshop on Circular Design for Sustainable Packaging and Labelling for EPR law in the Philippines*

14th TUESDAY

- **OPENING SESSION / PLENARY SESSION**
- SESSION 1: *Finance*
- SESSION 2: *Air Quality Management*
- SESSION 3: *Improvement of Water Environment*

15th WEDNESDAY

- SESSION 4: *Waste Management*
- SESSION 5: *Climate Change Mitigation*
- SESSION 6: *Climate Change Adaptation*
- SESSION 7: *CEFIA Micro-grid Flagship*

Sign up for the seminars! <https://forms.office.com/r/BsLneirVYr>

