

# **Addressing Air Pollution**

**Japan's Achievements and National Perspectives** 

NEACAP Second Policy Dialogue in Ulaanbaatar, Mongolia September 23<sup>rd</sup>, 2025

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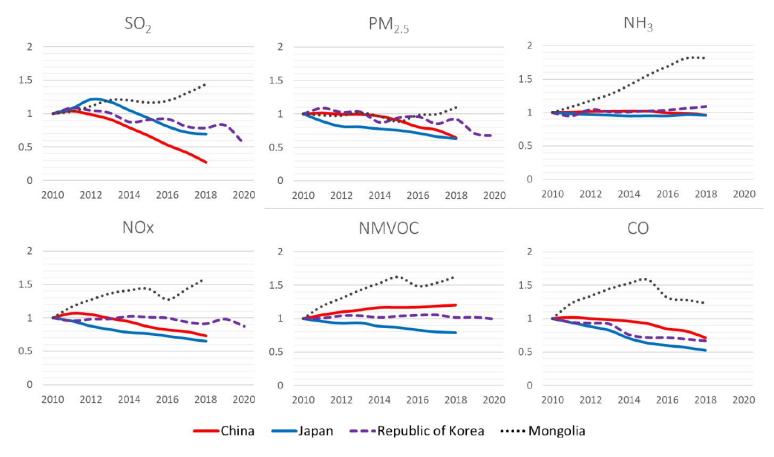


# **Observed last 10-year Air Quality in Japan**



### Steadily improved air quality:

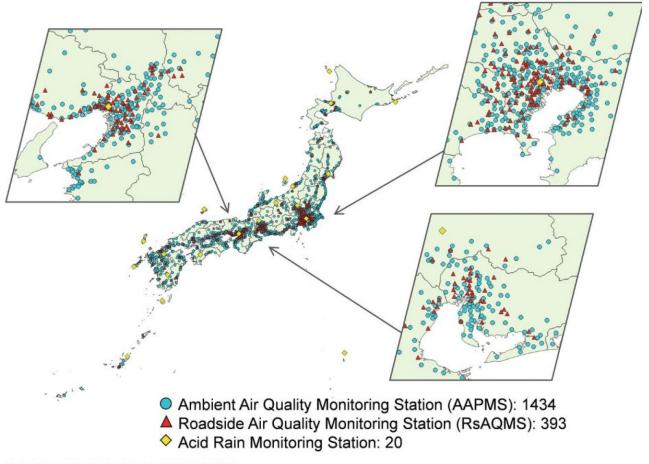
- Overall, the mean annual concentrations of key air pollutants have been declining
- Emissions of primary PM2.5, and NOx and SO2, precursors of secondary PM2.5, went down since 2010
- Ambient PM2.5 levels in Japan have been reduced further in the last decade by nearly 45%



# **Efforts for monitoring air pollutants**



- increase efforts to monitor key pollutants:
  - There are approximately 1,700 monitoring stations nationwide.

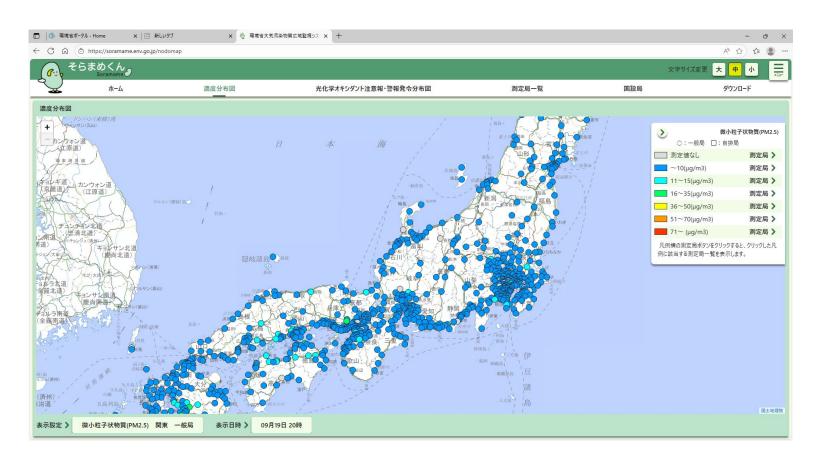


# **Efforts for monitoring air pollutants**



### increase efforts to monitor key pollutants:

• The real-time local air quality data of PM10, PM2.5, SO2, NOx, NO2, photochemical oxidants (Ox), CO, and non methane hydrocarbon (NMHC) is synchronized to the National Government data (AEROS: https://soramame.env.go.jp/<https://soramame.env.go.jp/)



# Clean Air Action to Achieving National Air Quality Standard in Japan



### **Environmental Quality Standard**

For the protection of human health and the conservation of the living environment



stationary sources (Air Pollution Control Act)

air quality monitoring

Target substances

soot and smoke Sox, NOx, Cd, Cl, As, Pb)

VOCs Mercury

dust and asbestos

**HAPs** 

regulations (emission standards, total emission standard)

regulations on facilities (structural standards. workload etc.)

emission standards and voluntary corporate efforts

mobile sources

(Air Pollution Control Act)

setting NOx emission standards for new vehicles

(Automobile NOx and PM Act)

setting stricter regulation in the metropolitan areas (Tokyo, Aich and Osaka)

Act on Regulations etc. of Non-road Special Motor Vehicles

Setting technical standards for specified engines, non-road special motor vehicles

**Act on Prevention of Marine** Pollution 1

Setting regulation to prevent of marine pollution

# **Achievement of Environmental Quality Standards in FY2022**



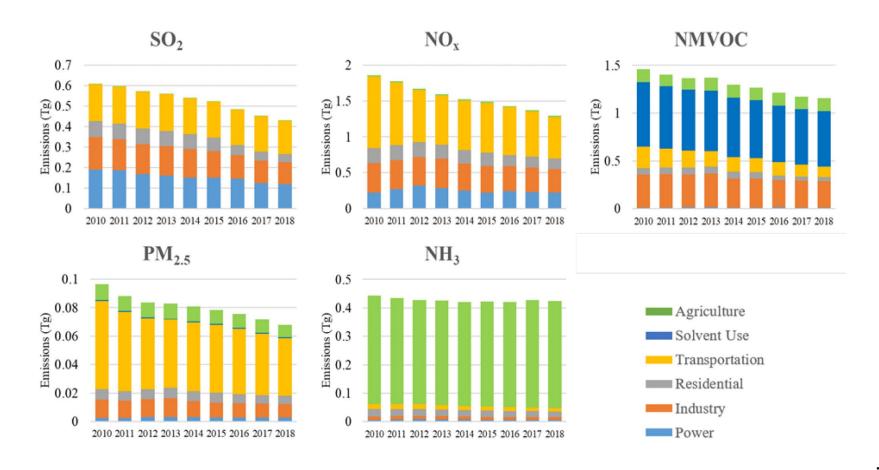
	Ambient Air Monitoring Stations <sup>**</sup>	Roadside Stations	Environmental Quality Standards
PM2.5	99.9%	100%	< 15ug/m³ (Annual average) and < 35µg/m³ (daily average)
Ox	0.1%	0%	< 0.06ppm (hourly values)
NO <sub>2</sub>	100%	100%	< 0.04ppm $\sim$ 0.06 ppm (daily average of hourly values)
SPM	100%	100%	< 0.10mg/m3 ppm (daily average of hourly values) and < 0.20mg/m3 (hourly values)
SO <sub>2</sub>	99.5%	100%	<0.04ppm (daily average of hourly values), and < 0.1ppm(hourly values)
СО	100%	100%	< 10ppm (daily average of hourly values), and < 20ppm (8-hour average of hourly values)

X Ambient Air Monitoring Stations; Residencial areas, Roadside Stations; Roadside areas

## **Develop a long-term emission inventory**



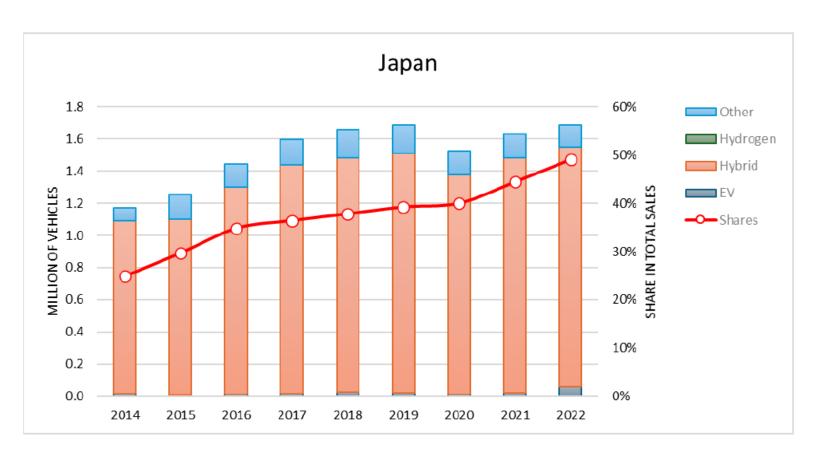
Develop a long-term emission inventory, which explicitly represent changes in precursor emissions caused by emission controls and variations in activities for past years from 2000 to 2019 in Japan:



# **Good practices**



- Local efforts to regulate emissions (ex: restrictions on diesel vehicles)
- Voluntary agreements
- Synergies from the energy strategy: a forward-looking approach to energy savings that has simultaneously helped lower emissions



# **Regional Cooperation**



◆ Resolution UNPE/EA.6/Res.10

"Promoting regional cooperation on air pollution to improve air quality globally"

- The Importance of Regional Cooperation:
- Sharing best practices:
- Harmonization of policies:



# Japan's Future Contribution for NE Asia



- Linkages between air quality, development,
   and climate policies:
- Regional collaborative efforts:
- Technical assistance and capacity building:

# Thank you