GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

LOK SABHA
UNSTARRED QUESTION NO. 1740
TO BE ANSWERED ON 10.03.2025

Vehicular Emissions

1740. SHRI LAVU SRI KRISHNA DEVARAYALU:

Will the Minister of ENVIRONMENT, FOREST AND CLIMATE CHANGE be pleased to state:

(a) the share of vehicular emissions in contributing to PM 2.5 levels in major cities;
(b) the steps taken to update the National Ambient Air Quality Standards, 2009 to align with the latest health and climate findings;
(c) whether the Government has developed a roadmap to curb vehicular emissions in urban areas, if so, the details thereof; and
(d) the total expenditure incurred by the Government in tackling air pollution during the last three years and the results achieved?

ANSWER
MINISTER OF STATE IN THE MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE
(SHRI KIRTI VARDHAN SINGH)

(a) to (d) :

As per various Source Apportionment studies conducted in cities covered under National Clean Air Programme (NCAP), the contribution of transport sector to PM2.5 ranges from 6-49% in summer and 18-37% in winter. The city wise percentage source contribution to PM2.5 Concentration from transport sector is attached at **Annexure-1**.

This Ministry had notified the National Ambient Air Quality Standards (NAAQS) in 2009 for 12 parameters, namely, PM10, PM2.5, SO2, NO2, CO, NH3, Ozone, Lead, Benzene, Benzo-a Pyrene, Arsenic and Nickel with an adequate margin of safety to protect public health. Review of National Ambient Air Quality Standards has been initiated and study has been awarded to Indian Institute of technology (IIT) Kanpur.

To address vehicular emissions, the Government has taken several proactive measures such as introduction of BS-VI fuel norms for vehicles from 1st April 2018 in NCT of Delhi and from 1st April 2020 for the rest of the country, introduction of vehicle scrapping policy and promotion of Electric Vehicles and charging infrastructure through various Central Schemes. A total of 1,130 E-buses have been deployed across 13 cities and 163 E-charging stations have been set up in 16 cities through convergence under Smart City Mission.

Further, under PM-eBus Sewa scheme of MoHUA, an allocation of ₹13,778 crore out of the total ₹57,613 crore scheme outlay has been provided for enhancing urban transport through deployment of electric buses and charging stations. A total of 76 NCAP cities are eligible for

6,889 electric buses under PM-eBus Sewa Scheme. So far, 3,989 buses and 61 depots have been sanctioned in 46 NCAP cities.

Ministry of Road, Transport & Highways (MoRTH) has directed the State Govt./UT administrations to establish 64 Registered Vehicle Scrapping Facilities (RVSF) and 130 Automated Testing Stations (ATS) in NCAP cities. As of now, 22 RVSFs are operational, with 11 sanctioned, and 18 ATS are functional, with 42 more sanctioned.

This Ministry notified the Environment Protection (End-of-Life Vehicles) Rules, 2025 on 06.01.2025 for environmentally sound management of end-of-life vehicles.

Government has launched NCAP in 2019 as a national level strategy to reduce air pollution levels across the country. Central Pollution Control Board (CPCB) has identified 130 million plus and non-attainment cities (cities exceeding NAAQS, consecutively for five years). City Specific Clean Air Action Plans have been prepared and rolled out for implementation in these 130 non-attainment/million plus cities to improve the air quality.

These city specific clean air action plans target city specific air polluting sources like Soil & Road Dust, Vehicles, Domestic Fuel, MSW Burning, Construction Material and Industries with short-term priority action as well as those to be implemented in a medium to longer time frame along with the responsible agencies.

To curb vehicular emissions, the following actions have been included in annual action planning as per NCAP and are being implemented by Urban Local Bodies (ULBs)/ City Implementation Committees:

- Number of Pollution Under Control (PUC) Centres
- Number of registered vehicles with PUC certificates
- Linking of PUC centres with remote server and elimination of manual intervention in PUC testing.
- Vehicle labelling or sticker programme
- Use of off-peak passenger travel time to move freight and restrict entry of heavy vehicles into cities during the day
- Check overloading of trucks
- Clean Fuel & Fuel Quality
- Development of Multi-layer parking
- Assess and introduce a city bus system of appropriate fleet size of small buses and desirable bus type.
- Introduction of new electric buses (with proper infrastructure facilities such as charging stations) and CNG buses for public transport which will reduce plying of private vehicles on road and help to curb tail-pipe emissions.
- CNG infrastructure for auto gas supply in the city and transition of public transport vehicles to CNG mode
- Steps for promoting battery operated vehicles like E-rickshaw/E-cart
- Charging infrastructure for E-vehicles
- Synchronize traffic movements/Introduce intelligent traffic system (ITS) for lane-driving
- Prepare plan for improvement of infrastructure for decongestion of road
- Phase out old vehicles and vehicle scrappage policy
- Prepare and implement zonal plans to develop an NMT network

Under NCAP, an amount of Rs. 11,541.88 crore has been released till date to 130 cities for implementing the City Action Plans for taking measures to improve air quality. Out of 130 non-attainment and million plus cities, during FY 2023-24, decrease in PM10 concentration has been observed in 95 cities as compared to levels during FY 2017-18, wherein decrease in PM10 concentration has been observed above 40% in 22 cities, >20-40% in 30 cities, >10-20 % in 21 cities and 1-10 % in 22 cities. Also, out of 130 cities, there are 16 cities (Gulburga, Nalgonda, Damtal, Ongole, Chittur, Nellore, Kurnool, Dera Baba Nanak, Naya Nangal, Silchar, Parwanoo, Sunder Nagar, Sivasagar, Kadapa, Trichy, Tuticorin) that are meeting NAAQS of annual average PM10 concentration i.e. 60 µg/m3.

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Annexure-1

Percentage Source Contribution to PM2.5 Concentration from transport sector

S. No.	City	Season	% PM2.5 contribution
1	Surat	Summer	6
		Winter	23
2	Mumbai	Summer	16
3	Pune	Winter	18
4	Ghaziabad	Summer	22
5	Agra	Summer	14
		Winter	23
6	Delhi	Summer	20
		Winter	30
7	Bengaluru	Summer	49
		Monsoon	44
		Winter	37
8	Aurangabad	Summer	16
9	Amravati	Summer	25
10	Nashik	Winter	28
11	Navi-Mumbai	Winter	19
12	Kanpur	Summer	7
		Winter	30