# GOVERNMENT OF INDIA MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

## LOK SABHA UN-STARRED QUESTION NO. 4093 TO BE ANSWERED ON 10.08.2018

#### Air Pollution caused by Vehicles

### 4093. SHRI PANKAJ CHAUDHARY: SHRIMATI NEELAM SONKER: SHRI RAKESH SINGH:

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

- (a) whether a large number of diesel/ petrol vehicles plying on roads are the major contributor of air pollution;
- (b) if so, the details thereof;
- (c) whether the Government has prepared any policy to reduce/ban the number of vehicles causing pollution or to promote electric vehicles as an alternate to diesel, petrol run vehicles in Delhi, Mumbai, Chennai and Kolkata; and
- (d) if so, the details thereof?

#### **ANSWER**

## MINISTER OF STATE IN THE MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE (DR. MAHESH SHARMA)

- (a) & (b) Major sources of air pollution include road dust, construction, garbage burning, vehicles, DG sets, industries, etc. Studies have been conducted to identify major air pollution sources and their contributions to ambient air pollution levels in the country. Results of source apportionment studies of six cities (Delhi, Mumbai, Chennai. Bengaluru, Pune, Kanpur) done by Central pollution Control Board (CPCB) and of Delhi carried out by IIT Kanpur are placed at Annexure. As per the IIT Kanpur study, in Delhi, the contribution of vehicles towards ambient PM10 is 19.7% during winters and 6.4% during summers and ambient PM2.5 is 25% during winters and 8.5% during summers.
- (c) & (d) All Vehicles sold in India after 01.04.2017 are compliant to BS-IV emission norms. Government has also notified for implementation of BS-VI emission standards with effect from 01.04.2020. Further, for promotion of electric vehicles, Government has notified for retro-fitment of hybrid electric system or electric kit to vehicles and also issued Statutory Order specifying the type approval procedure of electric hybrid vehicles.

NITI Aayog had constituted a Committee under the chairmanship of Secretary, Ministry of Road Transport & Highways (MoRTH) to suggest measures to promote electric mobility in India through non-fiscal incentivisation and to promote electric vehicles in public transport and last mile connectivity with zero emission vehicles. It is suggested that taxi aggregators and public transport operators should be mandated to have an incremental share of electric vehicles from 2020 onwards. Further, the report has also highlighted that system of permit free operation of electric auto could work as an active agent to provide the necessary thrust to promote electric mobility in India. Similarly, in the bus segment, issue of unhindered permits for operations of electric buses should be facilitated.

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ANNEXURE REFERRED IN REPLY TO THE LOK SABHA UNSTARRED QUESTION NO. 4093 DUE FOR ANSWER ON 10.08.2018 REGARDING "AIR POLLUTION CAUSED BY VEHICLES" RAISED BY SHRI PANKAJ CHAUDHARY, SHRIMATI NEELAM SONKER and SHRI RAKESH SINGH, HON'BLE MEMBERS OF PARLIAMENT

Source	Average for six monitoring locations						
	% contribution (PM <sub>10</sub> )		% contribution (PM <sub>2.5</sub> )				
	Winter	Summer	Winter	Summer			
Vehicles	19.7	6.4	25.1	8.5			
Secondary particulate	s 24.6	10.15	29.9	14.9			
Biomass burning	16.7	6.8	25.8	12.2			
ndustries	0.65	1.05	0.8	1.2			
Coal and Fly Ash	12.3	37.2	4.8	25.95			
Construction material	3.1	4.1	1.5	3.0			
Soil and road dust	14.4	26.5	4.3	27.1			
Solid Waste burning	8.75	7.75	7.75	7.2			

# **Results of Source Apportionment Studies for Delhi by IIT Kanpur**

**Results of Source Apportionment Studies for six cities by CPCB** 

City	Bangalore	Chennai	Delhi	Kanpur	Mumbai	Pune
Sources	1					
Roadside Dust	45 – 55	6 – 27	14 – 29	7 – 9	29 – 47	49 – 64
Vehicles	10 – 22	35 – 48	9 – 20	15 – 17	8 – 26	2 – 10
Industries	27	-	6 – 9	2 – 19	1 – 7	-
Construction	-	-	23	-	28 – 46	6 – 28
Secondary Particulates	2 – 11	-	-	16 – 19	10 – 21	-
Domestic	-	4 – 20	3 – 9	15 – 26	3 – 18	-
DG Sets	7 – 18	14 – 16	7 – 12	5 – 8	-	3 – 4