

GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

RAJYA SABHA
UNSTARRED QUESTION No. 1649
TO BE ANSWERED ON 03.08.2023

Air pollution abatement measures

1649. SHRI SURENDRA SINGH NAGAR:
SHRI MOHAMMED NADIMUL HAQUE:
SMT. KANTA KARDAM: SHRI KUMAR KETKAR:

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

- (a) whether Government has developed air pollution abatement measures specific to the transportation sector and industries;
- (b) if so, the details thereof and if not, the reasons therefor;
- (c) whether Government could provide an update on the progress made in implementing these measures and achieving targets set for each sector;
- (d) if so, the details thereof and if not, the reasons therefor;
- (e) whether Government has ensured that these measures are sustainable and in tandem with the various environmental laws and regulations; and
- (f) if so, the details thereof and if not, the reasons therefor?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE
(SHRI ASHWINI KUMAR CHOUBEY)

(a) to (f)

Government has developed air pollution abatement measures through policy initiatives targeting various polluting sectors including transportation and industries. The measures *inter-alia* include; leapfrogging from BS-IV to BS-VI norms for fuel and vehicles since April, 2020, pollution under control certification (PUCC), RFID points, use of cleaner/alternate fuels like CNG, LPG, ethanol blending in petrol, notifying E20 fuel as automotive fuel and issuing mass emission standards, notifying standards for retro-fitment or conversion of vehicles of various categories to EV technology, Faster Adoption and Manufacturing of Electric Vehicles (FAME) -2 scheme, exemption of permit requirement for electric vehicles, expansion of network of Metro rails for public transport, promotion of public transport such as high-capacity buses, introduction of alternative green mobility solutions like ropeway, cable car, funicular rail, etc.

Abatement measures for industries include notification of stringent emission norms for industries, ban on pet coke and furnace oil as fuel in Delhi and NCR States, phasing out coal

based power plants, shifting of industrial units to PNG, shifting of brick kilns to zig-zag technology for reduction of pollution, etc.

Government has launched National Clean Air Programme (NCAP), a comprehensive time bound action plan in 2019 as a national level strategy with an objective to improve air quality in 131 targeted cities. Taking into account the available international experiences and national studies, the tentative national level target under NCAP is 20%–30% reduction of particulate matter concentration by 2024. Under NCAP, city specific clean air action plans have been rolled out for implementation in these 131 non-attainment/million plus cities to improve the air quality. NCAP focuses on multi-sectoral sources of pollution including vehicles and industries. The clean air action plans target city specific air polluting sources including transportation 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. The details of actions being implemented to control transport and Industrial sector emission are annexed at Annexure-I.

Out of 131 identified cities, decrease in PM10 concentration has been observed in 88 cities during FY 2022-23 as compared to levels during FY 2017-18 and 15 cities are meeting National Ambient Air Quality Standards (NAAQS) of annual average PM10 concentration i.e. 60 µg/m³. The details are annexed as Annexure-II.

Government launched Mission LiFE on October 20, 2022, recognizing the importance of transitioning to sustainable lifestyles and consumption patterns in efforts to address various issues of environment, including pollution.

Other schemes and policies such as Swachh Bharat mission, Smart Cities, Pradhan Mantri Ujjwala Yojana, Green Hydrogen Mission, GOBARDHAN (Galvanising Organic Bio-Agro Resources Dhan Scheme), and more, are all contributing towards achieving Sustainable Development Goals.

Actions under NCAP to control transport and Industrial sector emission

Transportation Sector:

- Stringent implementation of BS VI norms all over India by April 2020.
- Stringent implementation of National Biofuel Policy with respect to ethanol and biodiesel blending target of 20% and 5%, respectively by 2030.
- Stringent implementation of PUC certificate through regular inspection and monitoring.
- Fleet modernization and retro-fitment programmes with control devices.
- Scaling up of R&D on use of Hydrogen as transport fuel.
- Formulation of a national, state, and city-specific action plan for e-mobility.
- Central government offices fleets older than 15 years to be shifted to electric vehicles.
- Gradual transition to e-mobility in the 2-wheeler sector etc.

Industrial Sector:

- Introduction of gaseous fuels and enforcement of new and stringent SO₂/NO_x/PM_{2.5} standards for industries using solid fuels.
- Stricter enforcement of standards in large industries through continuous monitoring.
- Full enforcement of zig-zag brick technology in brick kilns.
- Elimination of DG set usage by provision of 24x7 electricity.
- Control by innovative end of pipe control technologies.
- Evolve standards and norms for in-use DG sets below 800 KW category etc.

Annexure-II

Decrease in annual avg. of PM10 conc. for 88 cities in 2022-23

States	Sl. No.	Cities	2017-2018	2022-2023
			Average concentration (F.Y.) of PM ₁₀ (µg/m ³)	Average concentration (F.Y.) of PM ₁₀ (µg/m ³)
Andhra Pradesh	1)	Ananthpur	78	57
	2)	Chittur	70	52
	3)	Ongole	52	51
	4)	Eluru	72	66
	5)	Guntur	66	60
	6)	Kadapa	75	57
	7)	Kurnool	79	64
	8)	Nellore	64	56
	9)	Rajamahendray	85	68
	10)	Vijayawada	91	90
Assam	11)	Sivasagar	73	42
Chhattisgarh	12)	Durg Bhilai Nagar	86	70
Delhi	13)	Delhi	241	209
Gujarat	14)	Ahmedabad	164	91
	15)	Rajkot	150	92
	16)	Surat	130	118
	17)	Vadodara	133	104
Himachal Pradesh	18)	Baddi	174	145
	19)	Kala Amb	118	93
	20)	Nalagarh	146	78
	21)	Parwanoo	66	47
	22)	Sunder Nagar	78	46
Jharkhand	23)	Dhanbad	315	203
	24)	Jamshedpur	135	126
	25)	Ranchi	141	107
Karnataka	26)	Bengaluru	92	68
	27)	Devanagere	74	61
	28)	Hubli-Dharwad	79	76
Maharashtra	29)	Akola	111	62
	30)	Amravati	102	68
	31)	Badlapur	160	146
	32)	Greater Mumbai	161	116
	33)	Jalgaon	70	66

	34)	Jalna	99	93
	35)	Kolhapur	89	80
	36)	Latur	82	53
	37)	Nagpur	100	97
	38)	Nashik	82	62
	39)	Pune	102	96
	40)	Sangli	87	69
	41)	Solapur	81	76
	42)	Thane	138	115
	43)	Ulhasnagar	153	128
Meghalaya	44)	Byrnihat	175	131
Nagaland	45)	Dimapur	142	91
	46)	Kohima	127	72
Odisha	47)	Balasore	84	82
	48)	Kalinga Nagar	109	104
	49)	Talcher	113	93
Punjab	50)	Amritsar	189	120
	51)	Dera Baba Nanak	79	58
	52)	Jalandhar	178	126
	53)	Khanna	142	103
	54)	Ludhiana	168	163
	55)	MandiGobindgarh	148	131
	56)	NayaNangal	87	63
	57)	Patiala	106	103
Rajasthan	58)	Jaipur	172	143
	59)	Alwar	152	116
	60)	Jodhpur	189	146
	61)	Kota	139	128
Tamil Nadu	62)	Madurai	72	68
	63)	Trichy	88	47
	64)	Tuticorin	123	54
Telangana	65)	Hyderabad	110	83
	66)	Nalgonda	59	55
Uttar Pradesh	67)	Agra	202	118
	68)	Allahabad	169	125
	69)	Ghaziabad	285	198
	70)	Kanpur	227	143
	71)	Lucknow	253	149
	72)	Varanasi	230	94
	73)	Anpara	175	166

	74)	Bareilly	207	110
	75)	Firozabad	247	106
	76)	Gajraula	204	194
	77)	Gorakhpur	150	102
	78)	Khurja	195	150
	79)	Moradabad	222	116
	80)	Noida	229	202
	81)	Raebareli	145	102
Uttarakhand	82)	Dehradun	250	117
	83)	Rishikesh	129	103
West Bengal	84)	Barrackpore	86	84
	85)	Durgapur	150	139
	86)	Haldia	92	91
	87)	Howrah	139	125
	88)	Kolkata	147	97