

GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

LOK SABHA
UNSTARRED QUESTION No. 1324
TO BE ANSWERED ON 25.07.2022

Non-Attainment Cities

1324. SHRIMATI SUNITA DUGGAL:
SHRI PRADYUT BORDOLOI:

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

- (a) the details of Non-Attainment Cities where Source Apportionment Studies have been conducted and completed, State-wise;
- (b) the details of the number of National Clean Air Programme (NCAP) cities that have submitted City Clean Air Action Plans and Micro-Action Plans, and the number of these plans that have been made publicly available;
- (c) if not, the reasons for non-submission of said plans;
- (d) the details of Non-Attainment Cities under NCAP that have reported an improvement in AQI between 2019 and 2022, including the change in the AQI; and
- (e) whether the Government has any specific strategy to improve the Air Quality in the Non-Attainment Cities that have not shown any improvement in AQI levels despite the implementation of NCAP and if so, details thereof?

ANSWER

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

(a)
In India, 37 cities have conducted Source Apportionment Studies. State-wise details of cities are enclosed at **Annexure I**.

(b)& (c)

Under NCAP, all 132 cities have submitted City Air Action Plans and Micro Action Plans. All 132 City Air Action Plans and 63 Micro Action Plans have been made publicly available at PRANA online portal (Portal for Regulation of Air Pollution in Non-Attainment Cities, <https://prana.cpcb.gov.in>). Details of cities that have submitted these plans are provided at **Annexure II (a) & (b)**.

(d)& (e)

Under National Clean Air Program (NCAP), out of 61 cities which have AQI, 41 non-attainment cities have shown improvement in Air Quality Index between 2019 and 2022. Details of Air Quality Index of cities are enclosed at **Annexure III**. There has been an overall improvement in Particulate Matter₁₀ (PM₁₀) concentration in 95 cities including 20

cities conforming to the National Ambient Air Quality Standards in the year 2021-22 compared to 2017. Government has taken several measures to control and minimize air pollution from various sources in the country. The details are at **Annexure IV**.

Annexure-I

Status of Source Apportionment (SA) Studies in Non-Attainment cities of India

SA/EI completed
Himachal Pradesh (Baddi, Damtal, Kala-Amb, Nalagarh, Paonta Sahib, Parwanoo, Sunder Nagar)-7
Maharashtra (Mumbai, Pune, Solapur, Nashik, Navi Mumbai, Amravati, Aurangabad, Kolhapur)-08
Bihar (Gaya, Patna, Muzaffarpur)-3
Gujarat (Ahmedabad, Surat)-2
Karnataka (Bangalore)-1
Delhi -1
Punjab (Mandi-Gobindgarh, Khanna, Patiala, DeraBassi, NayaNangal, Dera Baba Nanak, Ludhiana & Jalandhar)-8
Jharkhand (Dhanbad)-1
Rajasthan (Jaipur)-1
Uttar Pradesh (Kanpur, Agra & Ghaziabad)-3
West Bengal (Kolkata & Howrah)-2
37 cities in 11 states

Annexure II (a)

S. No.	State	City
1.	Andhra Pradesh (13)	Anantapur
2.		Chitoor
3.		Eluru
4.		Guntur
5.		Kadapa
6.		Kurnool
7.		Nellore
8.		Ongole
9.		Rajahmundry
10.		Srikakulam
11.		Vijaywada
12.		Vishakhapatnam
13.		Vizianagaram
14.	Assam (5)	Guwahati
15.		Nagaon
16.		Nalbari
17.		Sibsagar
18.		Silcher
19.	Bihar (3)	Gaya
20.		Muzzaffarpur
21.		Patna
22.	Chandigarh (1)	Chandigarh
23.	Chhattisgarh (3)	DurgBhillainagar
24.		Korba
25.		Raipur
26.	Delhi (1)	Delhi
27.	Gujarat (4)	Ahmedabad
28.		Surat
29.		Vadodara
30.		Rajkot
31.	Himachal Pradesh (7)	Baddi
32.		Damtal
33.		Kala Amb
34.		Nalagarh
35.		Paonta Sahib
36.		Parwanoo

S. No.	State	City
37.		Sunder Nagar
38.	Jammu & Kashmir (2)	Jammu
39.		Srinagar
40.	Jharkhand (3)	Dhanbad
41.		Jamshedpur
42.		Ranchi
43.	Karnataka (4)	Bangalore
44.		Devangere
45.		Gulburga
46.		Hubli-Dharwad
47.	Madhya Pradesh (7)	Bhopal
48.		Dewas
49.		Gwalior
50.		Indore
51.		Jabalpur
52.		Sagar
53.		Ujjain
54.	Maharashtra (19)	Akola
55.		Amravati
56.		Aurangabad
57.		Badlapur
58.		Chandrapur
59.		Jalgaon
60.		Jalna
61.		Kolhapur
62.		Latur
63.		Mumbai
64.		Nagpur
65.		Nashik
66.		Navi Mumbai
67.		Pune
68.		Sangli
69.		Solapur
70.		Thane
71.		Vasai Virar
72.		Ulhasnagar

S. No.	State	City
73.	Meghalaya (1)	Byrnihat
74.	Nagaland (2)	Dimapur
75.		Kohima
76.	Orissa (7)	Angul
77.		Balasore
78.		Bhubneshwar
79.		Cuttack
80.		Kalinga Nagar
81.		Rourkela
82.		Talcher
83.	Punjab (9)	Amritsar
84.		Dera Baba Nanak
85.		DeraBassi
86.		Gobindgarh
87.		Jalandhar
88.		Khanna
89.		Ludhiana
90.		NayaNangal
91.		Patiala
92.	Rajasthan (5)	Alwar
93.		Jaipur
94.		Jodhpur
95.		Kota
96.		Udaipur
97.	Tamil Nadu (4)	Trichy
98.		Tuticorin
99.		Chennai
100.		Madhurai
101.	Telangana (4)	Hyderabad
102.		Nalgonda

S. No.	State	City
103.		Patencheru
104.		Sangareddy
105.	Uttar Pradesh (17)	Agra
106.		Allahabad
107.		Anpara
108.		Bareilly
109.		Firozabad
110.		Gajraula
111.		Ghaziabad
112.		Gorakhpur
113.		Jhansi
114.		Kanpur
115.		Khurja
116.		Lucknow
117.		Moradabad
118.		Noida
119.		Raebareli
120.		Varanasi
121.		Meerut
122.	Uttarakhand (3)	Dehradun
123.		Kashipur
124.		Rishikesh
125.	West Bengal (7)	Asansol
126.		Barrackpore
127.		Durgapur
128.		Haldia
129.		Howrah
130.		Kolkata
131.		Raniganj
132.	Haryana (1)	Faridabad

Annexure II (b)

Status of Submission of Action Plan in PRANA

S.No.	State	S.No.	City
1	Andhra Pradesh	1	Eluru
		2	Anantapur
		3	Vizianagaram
		4	Rajahmundry
		5	Kadapa
2	Bihar	6	Patna
		7	Gaya
		8	Muzaffarpur
3	Gujarat	9	Ahmedabad
		10	Vadodara
		11	Rajkot
		12	Surat
4	Himachal Pradesh	13	Paonta Sahib
		14	Kala Amb
5	Madhya Pradesh	15	Dewas
		16	Gwalior
		17	Sagar
		18	Indore
		19	Bhopal
		20	Jabalpur
		21	Ujjain
6	Maharashtra	22	Nashik
		23	Badlapur
		24	Latur
		25	Amravati
		26	Akola
		27	Navi Mumbai
		28	Thane
		29	Kolhapur
		30	Jalna
		31	Pune
		32	Solapur

S.No.	State	S.No.	City
		33	Nagpur
		34	Aurangabad
		35	Vasai-Virar
		36	Mumbai
		37	Chandrapur
		38	Sangli
39	Jalgaon		
7	Punjab	40	Gobindgarh
8	Rajasthan	41	Jodhpur
		42	Jaipur
		43	Kota
		44	Udaipur
		45	Alwar
9	Telangana	46	Hyderabad
10	Uttar Pradesh	47	Khurja
		48	Raebareli
		49	Gorakhpur
		50	Jhansi
		51	Meerut
		52	Firozabad
		53	Kanpur
		54	Allahabad
		55	Varanasi
		56	Moradabad
		57	Noida
		58	Anpara
		59	Ghaziabad
		60	Lucknow
		61	Bareilly
		62	Agra
		63	Gajraula

Annexure- III

Details of Air Quality Index (AQI) of cities of the country during 2019 to 2021

State/UTs	City	2019		2020		2021	
		GOOD DAYS (AQI: 0-200)	BAD DAYS (Poor/ Very-Poor/Severe) (AQI: >200)	GOOD DAYS (AQI: 0-200)	BAD DAYS (Poor/ Very-Poor/Severe) (AQI: >200)	GOOD DAYS (AQI: 0-200)	BAD DAYS (Poor/ Very-Poor/Severe) (AQI: >200)
Andhra Pradesh	Amaravati	278	21	347	11	350	8
	Rajamahendravaram	308	20	334	15	342	9
	Tirupati	343	0	357	1	337	2
	Vijayawada	181	0	NA	NA	NA	NA
	Visakhapatnam	189	25	309	23	321	21
Arunachal Pradesh	Naharlagun	NA	NA	NA	NA	102	2
Assam	Guwahati	250	46	273	86	273	91
Bihar	Araria	NA	NA	NA	NA	3	11
	Arrah	NA	NA	NA	NA	3	12
	Bettiah	NA	NA	NA	NA	26	28
	Bhagalpur	NA	NA	NA	NA	3	36
	Bihar Sharif	NA	NA	NA	NA	13	28

State/UTs	City	2019		2020		2021	
		GOOD DAYS (AQI: 0-200)	BAD DAYS (Poor/ Very-Poor/Severe) (AQI: >200)	GOOD DAYS (AQI: 0-200)	BAD DAYS (Poor/ Very-Poor/Severe) (AQI: >200)	GOOD DAYS (AQI: 0-200)	BAD DAYS (Poor/ Very-Poor/Severe) (AQI: >200)
Bihar	Buxar	NA	NA	NA	NA	2	17
	Chhapra	NA	NA	NA	NA	2	30
	Darbhanga	NA	NA	NA	NA	22	44
	Gaya	232	94	308	37	325	35
	Hajipur	NA	NA	226	19	219	99
	Katihar	NA	NA	NA	NA	3	33
	Kishanganj	NA	NA	NA	NA	6	30
	Manguraha	NA	NA	NA	NA	0	0
	Motihari	NA	NA	NA	NA	22	37
	Munger	NA	NA	NA	NA	5	31
	Muzaffarpur	107	120	226	122	222	132
	Patna	168	157	271	95	224	140
	Purnia	NA	NA	NA	NA	2	31
Rajgir	NA	NA	NA	NA	5	16	

State/UTs	City	2019		2020		2021	
		GOOD DAYS (AQI: 0-200)	BAD DAYS (Poor/ Very-Poor/Severe) (AQI: >200)	GOOD DAYS (AQI: 0-200)	BAD DAYS (Poor/ Very-Poor/Severe) (AQI: >200)	GOOD DAYS (AQI: 0-200)	BAD DAYS (Poor/ Very-Poor/Severe) (AQI: >200)
Bihar	Saharsa	NA	NA	NA	NA	2	27
	Sasaram	NA	NA	NA	NA	10	35
	Siwan	NA	NA	NA	NA	1	30
Chandigarh	Chandigarh	80	23	361	3	348	13
Chhattisgarh	Bhilai	NA	NA	NA	NA	28	0
	Bilaspur	NA	NA	NA	NA	96	0
Delhi	Delhi	182	183	227	139	197	168
Gujarat	Ahmedabad	277	58	331	15	323	38
	Ankleshwar	261	25	273	23	189	102
	Gandhinagar	285	1	323	0	341	1
	Nandesari	NA	NA	181	29	201	17
	Vapi	240	51	204	87	282	44
	Vatva	257	31	306	37	263	86
Haryana	Ambala	271	65	264	74	279	68

State/UTs	City	2019		2020		2021	
		GOOD DAYS (AQI: 0-200)	BAD DAYS (Poor/ Very-Poor/Severe) (AQI: >200)	GOOD DAYS (AQI: 0-200)	BAD DAYS (Poor/ Very-Poor/Severe) (AQI: >200)	GOOD DAYS (AQI: 0-200)	BAD DAYS (Poor/ Very-Poor/Severe) (AQI: >200)
Haryana	Bahadurgarh	241	108	233	82	198	146
	Ballabgarh	145	142	230	100	214	124
	Bhiwani	261	81	258	48	268	60
	CharkhiDadri	NA	NA	80	63	235	93
	Dharuhera	218	93	220	92	180	126
	Faridabad	186	128	219	139	186	177
	Fatehabad	250	71	213	71	250	86
	Gurugram	211	138	259	107	215	150
	Hisar	213	118	253	104	195	146
	Jind	224	101	228	102	207	130
	Kaithal	264	50	312	45	269	69
	Karnal	207	116	262	65	266	69
	Kurukshetra	273	77	267	89	244	102
	Mandikhera	216	50	309	43	288	34

State/UTs	City	2019		2020		2021	
		GOOD DAYS (AQI: 0-200)	BAD DAYS (Poor/ Very-Poor/Severe) (AQI: >200)	GOOD DAYS (AQI: 0-200)	BAD DAYS (Poor/ Very-Poor/Severe) (AQI: >200)	GOOD DAYS (AQI: 0-200)	BAD DAYS (Poor/ Very-Poor/Severe) (AQI: >200)
Haryana	Manesar	217	124	263	80	163	144
	Narnaul	248	45	243	53	205	104
	Palwal	203	126	254	48	289	27
	Panchkula	350	11	312	26	312	23
	Panipat	223	103	223	110	224	84
	Rohtak	253	100	267	86	223	118
	Sirsa	250	83	293	39	292	53
	Sonipat	228	89	268	61	212	113
	Yamunanagar	36	22	242	94	218	122
Jammu and Kashmir	Srinagar	NA	NA	NA	NA	292	7
Jharkhand	Jorapokhar	239	42	225	20	88	2
Karnataka	Bagalkot	NA	NA	234	2	317	0
	Bengaluru	365	0	366	0	365	0
	Bidar	NA	NA	NA	NA	175	2

State/UTs	City	2019		2020		2021	
		GOOD DAYS (AQI: 0-200)	BAD DAYS (Poor/ Very-Poor/Severe) (AQI: >200)	GOOD DAYS (AQI: 0-200)	BAD DAYS (Poor/ Very-Poor/Severe) (AQI: >200)	GOOD DAYS (AQI: 0-200)	BAD DAYS (Poor/ Very-Poor/Severe) (AQI: >200)
Karnataka	Chamarajanagar	NA	NA	18	0	302	0
	Chikkaballapur	308	1	323	0	335	0
	Chikkamagaluru	NA	NA	273	0	316	0
	Davanagere	NA	NA	NA	NA	226	0
	Gadag	NA	NA	NA	NA	194	1
	Hassan	NA	NA	NA	NA	237	0
	Hubballi	186	2	281	1	329	6
	Kalaburagi	282	12	194	8	231	9
	Kolar	NA	NA	NA	NA	209	0
	Koppal	NA	NA	12	0	317	0
	Mangalore	NA	NA	NA	NA	238	0
	Madikeri	NA	NA	52	0	336	0
	Mysuru	102	1	264	0	305	0
	Raichur	NA	NA	13	0	285	3

State/UTs	City	2019		2020		2021	
		GOOD DAYS (AQI: 0-200)	BAD DAYS (Poor/ Very-Poor/Severe) (AQI: >200)	GOOD DAYS (AQI: 0-200)	BAD DAYS (Poor/ Very-Poor/Severe) (AQI: >200)	GOOD DAYS (AQI: 0-200)	BAD DAYS (Poor/ Very-Poor/Severe) (AQI: >200)
Karnataka	Ramanagara	77	0	319	0	277	2
	Shivamogga	NA	NA	48	0	305	1
	Udupi	NA	NA	NA	NA	131	24
	Vijayapura	NA	NA	232	0	275	0
	Yadgir	201	32	184	0	333	1
Kerala	Eloor	208	0	341	0	294	0
	Ernakulam	NA	NA	258	0	293	0
	Kannur	NA	NA	292	1	326	1
	Kochi	NA	NA	271	2	256	2
	Kollam	NA	NA	161	6	333	2
	Kozhikode	NA	NA	297	0	334	2
	Thiruvananthapuram	324	0	364	0	361	1
	Thrissur	NA	NA	78	0	264	0
Madhya Pradesh	Bhopal	65	33	324	19	316	44

State/UTs	City	2019		2020		2021	
		GOOD DAYS (AQI: 0-200)	BAD DAYS (Poor/ Very-Poor/Severe) (AQI: >200)	GOOD DAYS (AQI: 0-200)	BAD DAYS (Poor/ Very-Poor/Severe) (AQI: >200)	GOOD DAYS (AQI: 0-200)	BAD DAYS (Poor/ Very-Poor/Severe) (AQI: >200)
Madhya Pradesh	Damoh	230	18	314	11	274	23
	Dewas	341	11	347	8	318	19
	Gwalior	NA	NA	252	78	289	71
	Indore	89	10	341	17	311	45
	Jabalpur	62	35	328	28	302	53
	Katni	42	58	285	72	251	109
	Maihar	282	0	329	0	153	4
	Mandideep	293	64	340	19	312	19
	Pithampur	343	20	352	10	340	23
	Ratlam	266	9	291	10	306	9
	Sagar	NA	NA	287	8	322	9
	Satna	316	11	337	0	336	0
	Singrauli	132	144	226	116	194	153
Ujjain	326	28	316	41	316	41	

State/UTs	City	2019		2020		2021	
		GOOD DAYS (AQI: 0-200)	BAD DAYS (Poor/ Very-Poor/Severe) (AQI: >200)	GOOD DAYS (AQI: 0-200)	BAD DAYS (Poor/ Very-Poor/Severe) (AQI: >200)	GOOD DAYS (AQI: 0-200)	BAD DAYS (Poor/ Very-Poor/Severe) (AQI: >200)
Maharashtra	Aurangabad	297	4	300	0	236	2
	Chandrapur	326	5	361	1	347	16
	Kalyan	161	5	246	44	204	79
	Mumbai	336	26	346	20	326	39
	Nagpur	258	18	250	0	183	1
	Nashik	313	7	327	3	312	6
	Navi Mumbai	326	22	309	33	286	71
	Pune	314	25	309	7	359	6
	Solapur	316	3	257	0	167	1
Thane	274	17	286	21	183	97	
Meghalaya	Shillong	39	0	261	0	172	0
Mizoram	Aizawl	NA	NA	190	0	315	1
Nagaland	Kohima	NA	NA	109	0	310	7
Odisha	Brajrajnagar	212	52	203	25	228	10

State/UTs	City	2019		2020		2021	
		GOOD DAYS (AQI: 0-200)	BAD DAYS (Poor/ Very-Poor/Severe) (AQI: >200)	GOOD DAYS (AQI: 0-200)	BAD DAYS (Poor/ Very-Poor/Severe) (AQI: >200)	GOOD DAYS (AQI: 0-200)	BAD DAYS (Poor/ Very-Poor/Severe) (AQI: >200)
Odisha	Talcher	151	82	262	35	328	9
Puducherry	Puducherry	NA	NA	NA	NA	335	0
Punjab	Amritsar	313	29	306	32	311	32
	Bathinda	308	22	281	27	254	24
	Jalandhar	327	30	335	28	315	42
	Khanna	318	22	332	25	332	25
	Ludhiana	289	35	326	32	306	44
	MandiGobindgarh	265	60	258	68	270	57
	Patiala	319	29	338	25	317	39
Rupnagar	305	24	256	27	264	28	
Rajasthan	Ajmer	350	6	341	8	341	7
	Alwar	335	7	350	3	357	5
	Bhiwadi	138	192	192	154	142	213
	Jaipur	346	19	353	12	330	34

State/UTs	City	2019		2020		2021	
		GOOD DAYS (AQI: 0-200)	BAD DAYS (Poor/ Very-Poor/Severe) (AQI: >200)	GOOD DAYS (AQI: 0-200)	BAD DAYS (Poor/ Very-Poor/Severe) (AQI: >200)	GOOD DAYS (AQI: 0-200)	BAD DAYS (Poor/ Very-Poor/Severe) (AQI: >200)
Rajasthan	Jodhpur	257	97	291	61	275	84
	Kota	336	24	341	15	299	57
	Pali	335	16	356	4	337	23
	Udaipur	332	17	351	4	331	24
Tamil Nadu	Chennai	352	12	365	0	365	0
	Coimbatore	124	0	229	0	70	0
	Gummidipoondi	NA	NA	NA	NA	193	5
	Thoothukudi	NA	NA	46	0	324	0
Telangana	Hyderabad	365	0	366	0	365	0
Tripura	Agartala	0	0	42	8	284	44
Uttar Pradesh	Agra	271	69	238	108	218	124
	Baghpat	173	176	100	89	169	170
	Bulandshahr	149	137	195	156	190	169
	Firozabad	0	0	0	0	102	57

State/UTs	City	2019		2020		2021	
		GOOD DAYS (AQI: 0-200)	BAD DAYS (Poor/ Very-Poor/Severe) (AQI: >200)	GOOD DAYS (AQI: 0-200)	BAD DAYS (Poor/ Very-Poor/Severe) (AQI: >200)	GOOD DAYS (AQI: 0-200)	BAD DAYS (Poor/ Very-Poor/Severe) (AQI: >200)
Uttar Pradesh	Ghaziabad	147	216	204	161	163	202
	Gorakhpur	NA	NA	NA	NA	145	28
	Greater Noida	149	184	209	129	184	180
	Hapur	110	128	309	49	243	84
	Kanpur	220	103	243	116	270	95
	Loni_Dehat	100	83	NA	NA	NA	NA
	Lucknow	211	153	237	129	240	124
	Meerut	28	68	227	136	191	174
	Moradabad	135	132	89	91	160	141
	Muzaffarnagar	163	133	223	96	203	122
	Noida	179	186	225	140	204	159
	Prayagraj	NA	NA	NA	NA	160	49
	Varanasi	130	197	232	106	243	114
Vrindavan	NA	NA	NA	NA	94	52	

State/UTs	City	2019		2020		2021	
		GOOD DAYS (AQI: 0-200)	BAD DAYS (Poor/ Very-Poor/Severe) (AQI: >200)	GOOD DAYS (AQI: 0-200)	BAD DAYS (Poor/ Very-Poor/Severe) (AQI: >200)	GOOD DAYS (AQI: 0-200)	BAD DAYS (Poor/ Very-Poor/Severe) (AQI: >200)
West Bengal	Asansol	266	87	173	62	267	61
	Durgapur	115	0	6	9	177	116
	Haldia	247	1	31	1	300	22
	Howrah	258	107	273	92	266	98
	Kolkata	264	99	292	74	282	83
	Siliguri	280	58	215	64	258	75

* NA: Data not available.

* Good days: Good (AQI: 0-50)/ Satisfactory (AQI: 51-100) /Moderate (AQI: 101-200)

* Poor: AQI: 201-300

* Very-Poor: AQI: 301-400

*Severe: AQI: >400

Annexure IV

Other Steps taken by Government to control and minimize air pollution

Government has taken several steps to control and minimize air pollution from various sources in the country, which inter alia include:

Vehicular Emission

- Leapfrogging from BS-IV to BS-VI fuel standards since 1st April, 2018 in NCT of Delhi and from 1st April, 2020 for the rest of the country.
- Introduction of BS VI compliant vehicles across the country since April, 2020.
- Development of Expressways and Highways to reduce fuel consumption and pollution.
- Eastern Peripheral Expressway & Western Peripheral Expressway have been operationalized to divert non destined traffic from Delhi.
- Environment Protection Charges (EPC) have been imposed on diesel vehicles with engine capacity of 2000cc and above in Delhi NCR.
- Introduction of cleaner/alternate fuels like CNG, LPG, ethanol blending in petrol.
- Promotion of public transport and improvements in roads and building of more bridges to ease congestion on roads.
- Network of metro rails for public transport are enhanced and more cities are covered.
- Ban on 10-year-old diesel vehicles and 15-year-old vehicles in Delhi NCR.
- Faster Adoption and Manufacturing of Electric Vehicles (FAME) -2 schemes has been rolled out.
- Permit requirement for electric vehicles has been exempted.
- Promotion of public transport and improvements in roads and building of more bridges to ease congestion on roads.

Industrial Emission

- Ban on use of pet coke and furnace oil in NCR, use of pet coke in processes in cement plants, lime kilns and calcium carbide manufacturing units.

- Stringent emission norms for Coal based Thermal Power Plants (TPPs).
- Shifting of industrial units to PNG/cleaner fuel in Delhi
- Installation of online continuous emission monitoring devices in highly polluting industries.
- Shifting of brick kilns in Delhi-NCR to zigzag technology for reduction of pollution

Air Pollution due to Dust and Burning of Waste

- Notifications of 6 waste management rules covering solid waste, plastic waste, e-waste, bio-medical waste, C&D waste and hazardous waste.
- Setting up infrastructure such as waste processing plants.
- Extended Producer Responsibility (EPR) for plastic and e-waste management.
- Ban on burning of biomass/garbage.

Monitoring of Ambient Air Quality

- Expansion of air quality monitoring network of manual as well as continuous monitoring stations under programmes such as National Air Monitoring Programme (NAMP).
- Initiation of pilot projects to assess alternate ambient monitoring technologies such as low-cost sensors and satellite-based monitoring.

Monitoring the Implementation of NCAP

- Government has launched NCAP as a national level as a national-level strategy outlining the actions for reducing the levels of air pollution at city and regional scales in India. City specific air action plans have been rolled out for implementation in 132 NACs and MPCs
- Rs. 472.06 crore have been sanctioned to 82 non-attainment cities under NCAP to provide support for critical gap funding. The funds are disbursed based upon the performance of the cities as per the NCAP operational guidelines.

- Further, 15th Finance Commission (XV-FC) has provided a special grant of Rs 4,400 crore to 42 million plus cities/urban agglomerations which covers 50 Non-Attainment Cities for FY 2020-21.
- The performance based incentive grant of Rs.12,139 crore for FY 2020-21 to 2025-26 have been allocated for improvement in air quality of 42 million plus cities/urban agglomerations under Million-Plus Cities Challenge Fund (MPCCF). MoEF&CC is the nodal agency for monitoring ambient air quality and recommending DoE for disbursing grants to 42 Million –plus cities.
- For FY 2021-22 for 42 MPCs, Rs 2025 Cr have been released by DoE to 42 cities/UAs on the basis of their performance assessment made by MoEF&CC.
- City specific action plans are regularly monitored by committees at Central; Apex, Steering, Monitoring and implementation committee; at State; Steering, implementation committee and at City level Implementation and Monitoring Committee.
- Implementation of Air Quality Early Warning System for Delhi, Kanpur and Lucknow. The system provides alerts for taking timely actions.
- Public Complaints regarding air pollution issues in Delhi NCR are taken through 'Sameer App', 'Emails' (Aircomplaints.cpcb@gov.in) and 'Social Media Networks' (Facebook and Twitter).
- PRANA a portal for monitoring implementation of NCAP has been launched.