

GOVERNMENT OF INDIA  
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

**RAJYA SABHA**  
**UNSTARRED QUESTION NO. 1978**  
TO BE ANSWERED ON 12.12.2024

**Air Quality**

1978 DR. ASHOK KUMAR MITTAL:

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

- (a) the reasons for long term failure to maintain the good air quality of the Northern States;
- (b) the steps taken by Government to improve the India's position in the Air Quality Index since last year;
- (c) the reasons for delay in implementing the clean energy initiatives in vulnerable areas that would help improve the quality index and reduce pollution; and
- (d) whether Government has conducted any survey to list the health crisis caused by poor, very poor or hazardous air quality, if so, the details thereof, if not, the reasons therefore?

**ANSWER**

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

**(a) & (b) :** National Clean Air Programme (NCAP) launched by Ministry of Environment, Forest and Climate Change (MoEF&CC) in January 2019 with an aim to improve air quality in 130 cities (non-attainment cities and Million Plus Cities) in 24 States/UTs by engaging all stakeholders. NCAP envisages reduction by 20-30% in PM10 concentration over baseline in year 2017 by 2024-25. Target has been revised to achieve reduction in PM10 level up to 40% or achievement of national standards (60 microgram/cubic meter) by 2025-26. The programme covers 41 cities and 8 States/UTs of North India as part of Indo-Gangetic Plain. Indo-Gangetic plain, on account of typical geography and meteorology, have high base line levels of PM10 concentrations which may contribute to higher levels of Air Quality Index

All cities under NCAP have prepared city action plans to take measures to improve air quality as per the objectives of NCAP. Further, 24 State/UTs have prepared action plan under NCAP. Resources are mobilized through the convergence of Central Government schemes (e.g., Swachh Bharat Mission, Smart City Mission, PM e-bus Sewa, AMRUT, SATAT, and Nagar Van Yojana), state schemes, and city's own resources. Further, Ministry constituted a coordination committee for air quality management in Indo-Gangetic Plain (IGP) airshed on 5<sup>th</sup> September 2024.

Based on the on account of several measures taken by these cities over last few years, 24 cities have shown reduction of 20 % and above in PM10 concentrations in FY 2023-24 as compared to the levels of FY 2017-18.

**(c) :** As part of India's its first Nationally Determined Contribution (NDC) under United Nations Framework Convention on Climate Change (UNFCCC) and its Paris Agreement, India has achieved target of about 40 percent cumulative electric power installed capacity from non-fossil fuel-based energy resources well ahead of the time, i.e. in 2023 against the timeline of 2030.

India has reached a significant milestone in its renewable energy journey, with the country's total renewable energy capacity crossing the 200 GW (gigawatt) mark as of October 10, 2024. According to the Central Electricity Authority, the total renewable energy-based electricity generation capacity now stands at 201.45 GW. This achievement underscores India's growing commitment to clean energy and its progress in building a greener future.

Further, details of clean energy initiatives under various schemes and programmes of Government of India are as below:

(i) Sustainable Alternative Towards Affordable Transportation (SATAT) of Ministry of Petroleum and Natural Gas to setup 5000 Compressed Biogas plants for use in automotive fuels. 34 CBG plants have been setup so far in 24 targeted cities under NCAP. Additionally, 3,213 CNG stations have been established and 97,89,820 domestic PNG connections have been provided.

(ii) Pradhan Mantri Ujjwala Yojana of Ministry of Petroleum and Natural Gas to provide access to clean cooking fuel LPG to such poor households, shift from traditional cooking methods that involves burning solid fuels like wood, dung and crop residues. Target of providing 10.33 crore LPG connections has been achieved under the Scheme.

(iii) Ministry of Non-Renewable Energy (MNRE) has launched the National Bioenergy Programme with a budget of ₹ 1,715 crore, resulted in 97.7 MW of waste-to-energy capacity across 6 plants, and 14.3 MW equivalent of composting/bio-gas projects spanning 15 projects.

(iv) Sustainable Agrarian Mission on use of Agri-Residue in Thermal Power Plants (SAMARTH) under National Biomass Mission of Ministry of Power (MoP) encourages the use of biomass in thermal power plants. So far, 6.04 lakh tonnes of biomass with coal in FY 2024-25 has been co-fired in 11 Thermal Power Plants (TPPs) in NCR.

**(d):** National Air Quality Index (AQI) has been launched by the government to categorize the air quality levels based on health considerations. AQI values provide information about air quality status along with likely health impacts. There are six AQI categories, namely Good, Satisfactory, Moderate, Poor, Very Poor, and Severe. Daily AQI bulletin is published for 289 cities on Central Pollution Control Board's website. Details of the AQI values and corresponding ambient concentrations (health breakpoints) for the identified eight pollutants and associated health impacts are enclosed as **Annexure I**.



## Annexure-I

AQI Category, Pollutants and Health Breakpoints									
AQI Category (Range)	PM10 24-hr	PM2.5 24-hr	NO2 24-hr	O3 8-hr	CO 8-hr(mg/m)	SO2 24-hr	NH3 24-hr	Pb 24-hr	Associate Health Impacts
<b>Good (0-50)</b>	<b>0-50</b>	<b>0-30</b>	<b>0-40</b>	<b>0-50</b>	<b>0-1.0</b>	<b>0-40</b>	<b>0-200</b>	<b>0-0.5</b>	<b>Minimal impact</b>
<b>Satisfactory (51-100)</b>	<b>51-100</b>	<b>31-60</b>	<b>41-80</b>	<b>51-100</b>	<b>1.1-2.0</b>	<b>41-80</b>	<b>201-400</b>	<b>0.5 –1.0</b>	<b>Minor breathing discomfort to sensitive people</b>
<b>Moderately polluted (101-200)</b>	<b>101-250</b>	<b>61-90</b>	<b>81-180</b>	<b>101-168</b>	<b>2.1- 10</b>	<b>81-380</b>	<b>401-800</b>	<b>1.1-2.0</b>	<b>Breathing discomfort to people with lung, hearth disease, children and older adults</b>
<b>Poor (201-300)</b>	<b>251-350</b>	<b>91-120</b>	<b>181-280</b>	<b>169-208</b>	<b>10-17</b>	<b>381-800</b>	<b>801-1200</b>	<b>2.1-3.0</b>	<b>Breathing discomfort to people on prolonged exposure</b>
<b>Very poor (301-400)</b>	<b>351-430</b>	<b>121-250</b>	<b>281-400</b>	<b>209-748*</b>	<b>17-34</b>	<b>801-1600</b>	<b>1200-1800</b>	<b>3.1-3.5</b>	<b>Respiratory illness to people on prolonged exposure</b>
<b>Severe (401-500)</b>	<b>430 +</b>	<b>250+</b>	<b>400+</b>	<b>748+*</b>	<b>34+</b>	<b>1600+</b>	<b>1800+</b>	<b>3.5+</b>	<b>Respiratory effects even on healthy</b>