

GOVERNMENT OF INDIA  
MINISTRY OF SCIENCE AND TECHNOLOGY  
DEPARTMENT OF SCIENCE & TECHNOLOGY  
**RAJYA SABHA**  
**UNSTARRED QUESTION NO. 922**  
ANSWERED ON 27/07/2023

**EXPLORING POTENTIAL OF BRMAPS**

922. SHRI MOHAMMED NADIMUL HAQUE:  
SHRI SURENDRA SINGH NAGAR:

Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

- (a) whether Government is exploring the potential of Bus Roof Mounted Air Purification Systems (BRMAPS) to capture Particulate Matter in the highly polluted cities;
- (b) if so, the details thereof and if not, the reasons therefor;
- (c) whether Government has taken any steps to explore and leverage the potential of other frontier technologies to address air pollution issues; and
- (d) if so, the details thereof and if not, the reasons therefor?

**ANSWER**

MINISTER OF STATE (INDEPENDENT CHARGE)  
FOR THE MINISTRY OF SCIENCE AND TECHNOLOGY  
(DR. JITENDRA SINGH)

(a) & (b): Yes sir. The Central Pollution Control Board (CPCB), a Statutory Body under the Ministry of Environment, Forest and Climate Change (MoEFCC) has installed Pariyayantra Filtration units on top of 30 buses to filter dust in Delhi-NCR.

(c) & (d): Yes sir. CPCB conducted pilot trials of various new technologies for management and improvement of air quality in Delhi-NCR through premier institutions. A pilot study was conducted on the deployment and evaluation of Wind Augmentation and Purifying (WAYU) units for traffic junction pollution abatement in Delhi. Under this study, 54 units were installed which operated at five traffic intersections in Delhi i.e. ITO, Anand Vihar, Shadipur, Wazirpur Chowk and Bhikaji Cama Place for reduction in air pollution. A pilot study was conducted on control of dust emissions using dust suppressants. Under this, application of dust suppressant (salts of calcium/magnesium and bio additives) was done at 03 sites: Sarai kale khan road, DDA construction site at Narela and Dilshad garden flyover to Shaheed nagar metro station to check the control on dust emissions. Installed a negative ion generator at IIT Delhi, Sonipat campus for accessing the impact of generated Negative Air ions (NAIs) on ambient air quality. Further, two experimental pilot projects of smog towers, one at Anand vihar by Central Government and another at Connaught place by Delhi Government has been commissioned to reduce particulate air pollution.

Department of Science and Technology (DST) has supported Research & Development (R&D) project for development of indigenous photonic system for real time remote monitoring of air quality parameters.

Council of Scientific and Industrial Research - Central Electrochemical Research Institute (CSIR-CECRI), Karaikudi and CSIR-National Environmental Engineering Research Institute (CSIR-NEERI), Nagpur are engaged in the R&D activities to address air pollution issues in six cities i.e. Chennai, Delhi, Hyderabad, Kolkata, Mumbai.

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