

# Enviro Monitor

January 2017

## Trending topics

### Air quality



- Pollution control body rolls out action plan to improve air quality in Delhi-NCR
- Delhi tops list of India's most polluted cities
- UK experts launch project to tackle Delhi air pollution risks
- 55 more stations to monitor pollution in Delhi
- Bengaluru, Tumakuru most polluted cities in Karnataka

### Water stress



- Study throws light on groundwater, rainfall link
- Water scarcity hits farming activities in Kerala
- Water scarcity in Tamil Nadu
- Rajasthan inks pact with Cairn India for water conservation project

### Waste management



- E-waste rising dangerously in Asia
- Five colonies of Central Delhi to turn zero-waste by 2018
- Government hospitals to display rules for biomedical waste management

### Climate change



- Cabinet gives go ahead for ratification of Kyoto
- Climate change plan to get new missions
- Bombay Natural History Society launches climate change programme in Central Himalayas
- Infosys announces internal carbon pricing, to aid in reducing emissions



**Pollution control body rolls out action plan to improve air quality in Delhi-NCR.** The Supreme Court-mandated Environment Pollution (Prevention and Control) Authority has rolled out its Graded Response Action Plan for Delhi and the surrounding National Capital Region. Under the initiative, different categories of pollution will invite different responses, including stopping the use of diesel generator sets and hikes in parking fee for cars.

**Delhi tops list of India's most polluted cities.** Delhi tops the list of most polluted cities in India, according to a report released by Greenpeace India recently. The Capital, with an annual average of PM 10 levels at 268 micrograms per cubic metre ( $\mu\text{g}/\text{m}^3$ ), was closely followed by Ghaziabad with 258  $\mu\text{g}/\text{m}^3$  and Faridabad with 250  $\mu\text{g}/\text{m}^3$ . Greenpeace India collated data through online reports and Right to Information applications from State Pollution Control Boards. The report titled **Airpocalypse** assessed air quality in 168 cities across 24 states and union territories and pinpoints fossil fuels as one of the main culprits for the deteriorating air quality across the country. The report said none of the Indian cities meet World Health Organisation-prescribed annual PM 10 standard of 20  $\mu\text{g}/\text{m}^3$ , and very few meet the Central Pollution Control Board annual standard of 60  $\mu\text{g}/\text{m}^3$ .

1.2 million → Deaths every year due to outdoor air pollution

3% → GDP lost due to air pollution

**UK experts launch project to tackle Delhi air pollution risks.** Indian and British experts are joining hands on a project to help tackle health problems associated with air pollution in Delhi, which affect some 46 million people in and around the country's capital city. With air pollution levels at times up to 30 times greater than those found in the UK, Delhi was rated the most polluted city in the world for ambient air pollution by World Health Organisation (WHO) in 2014. [ASAP-Delhi: An Integrated Study of Air Pollutant Sources in the Delhi National Capital Region](#) is supported by a 1.4 million pound grant from the Natural Environment Research Council and the Medical Research Council Air Pollution and Human Health programme. Led by the University of Birmingham, the team involves experts from the Indian Institute of Technology Delhi, National Physical Laboratory and the University of Surrey.

**55 more stations to monitor pollution in Delhi.** 55 more monitoring stations will be set up in the NCR region in the coming year. According to the graded response plan notified by the Union environment ministry recently, specific actions will be taken to control air pollution in any region based on the existing air quality. In the 46,208 square kilometre area that forms the Delhi-NCR, at present, there are 51 air quality monitoring stations.

**Bengaluru, Tumakuru most polluted cities in Karnataka.** Bengaluru and Tumakuru are the two most polluted cities in Karnataka, closely followed by Davangere, according to the Greenpeace India study. Among 20 Karnataka cities whose air pollution data were compared, Bengaluru, Tumakuru and Davangere have emerged as the worst sufferers of air pollution. Raichur, Kalaburagi, Hubballi and Dharwad, too,

exceed the national average. However, compared to the northern cities, the ambient air in southern India is far cleaner, says the report that compared data of 168 cities in 24 states. The report compares the PM-10 (dust particles of 10 micron diameter) level in 2015 using data obtained from the Central and state pollution control boards.

A source contribution study for Bengaluru found emergence of diesel generator sets as a major source of pollution contributing to 13% of PM-10 and 25% of PM-2.5 load. The study was commissioned by the Central Pollution Control Board and carried out by TERI in 2010. The share of transportation increases from 19% in PM-10 to 50% in PM-2.5 depicting dominance of finer particles in the vehicular exhaust. Contribution of industries to the particulate matter is low in Bengaluru, primarily due to the absence of any large-scale air pollution unit. However, their contribution in the Peenya industrial zone is high.

[Indian Express](#), 12 January 2017 | [Deccan Herald](#), 12 January 2017 | [Scroll](#), 21 January 2017 | [Indian Express](#), 23 January 2017 | [Indian Express](#), 30 January 2017



**Study throws light on groundwater, rainfall link.** The groundwater level in north India has been declining at a rate of 2 cm per year during the period 2002-2013, while in north-central and south India, it has increased by 1-2 cm per year during the same period, according to a [study](#) carried out by researchers from the Indian Institute of Technology Gandhinagar. While changes in monsoon rainfall pattern during the period of study can largely explain the total variability of groundwater storage in north-central and

south India, the usage of groundwater for irrigation purposes accounts for groundwater variability in northwest India. The increased usage of groundwater for irrigation in northwest India is, in turn, linked to changes in monsoon rainfall pattern. The results were published in the journal *Nature Geoscience*.

**Water scarcity hits farming activities in Kerala.** Agricultural activities in Kerala's traditional granary Palakkad are heading towards a complete halt with authorities deciding not to release water stored in over a dozen reservoirs in the district for irrigation purposes. The decision was taken against the backdrop of alarming depletion in the storage level of dams besides acute water scarcity in the district. With reservoirs such as Malampuzha dam stopping release of water to irrigation canals, a number of wells which are dependent on the canal system will also dry up. Except for the Mangalam dam, all the reservoirs in the district are showing high depletion in water storage level.



**Water scarcity in Tamil Nadu.** Depletion of groundwater and consequent poor irrigation facility have forced sugarcane farmers to give up cultivation in several parts of the district of Tiruchirapalli. Against 6349 hectares brought under sugar cane cultivation during 2015-16, the farmers have raised the crop on just 5788 hectares, leaving a shortfall by about 561 hectares.

Bereft of any livelihood and afflicted by poverty, women in the Irular hamlet of Achikarai in Masinagudi collect and sell dried cow dung to make ends meet. The tribal hamlet, where around 43 Irular families reside, has not been able to practice agriculture for more than five years due to water scarcity and lack of money during the sowing season.

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The Centre has deputed a 10-member team, headed by National Co-operative Development Corporation Managing Director Vasudha Mishra, to assess the drought situation in Tamil Nadu.

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**Rajasthan inks pact with Cairn India for water conservation project.** Rajasthan government has signed an MoU worth Rs 1.20 crore with Cairn India for second phase of water conservation project in Barmer, under Jal Swavlamban Yojna. The company will do 56 water conservation works in Barmer.

[The Hindu](#), 10 January 2017 | [The Hindu](#), 11 January 2017 | [Money Control](#), 20 January 2017 | [India.com](#), 23 January 2017



**E-waste rising dangerously in Asia.** Electronic waste is rising sharply across East and South-East Asia as higher incomes allow hundreds of millions of people to buy smartphones and other gadgets, with serious consequences for human health and the environment, according to a [UN study](#) released recently. E-waste in East and South-East Asia has jumped 63 per cent in five years, the report by the United Nations University said, as it warned of a need for most nations across the region to improve recycling and disposal methods.

Asia has rapidly emerged as a major source of electronic waste, due to increasingly affluent consumers buying items such as phones, tablets, refrigerators, personal computers and televisions. China more than doubled its own generation of e-waste between 2010 and 2015, the period of the study, according to the report. Per capita the worst-offending economy in the region was Hong Kong, with each person in the Chinese territory generating an average of 21.7 kilograms (47.8 pounds) of e-waste in 2015. Singapore and Taiwan were also big e-waste dumpers, with just over 19 kilograms per person generated in 2015, according to the study.

**Five colonies of Central Delhi to turn zero-waste by 2018.** Five NDMC localities — Jor Bagh, Pandara Park, Bapa Nagar, Kaka Nagar and Golf Links — will be made zero waste colonies. This will be done in collaboration with local resident welfare associations. The stress will be on segregation of waste at source, composting of organic waste and recycling so that minimum possible garbage reaches landfill sites. In a zero waste colony, garbage is segregated into wet waste, dry waste and e-waste. Wet waste is then put in compost pits and e-waste sent to a recycle centre. The rag pickers will collect all the recyclable items from dry waste and the rest will go to the landfill site. This kind of waste segregation reduces the burden on landfill sites.

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In some corners of the city — in places like Dwarka, Defence Colony, Sarita Vihar, Preet Vihar and Dilshad Garden — residents have already taken up composting in their community parks and have been segregating their domestic waste.

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**Government hospitals to display rules for biomedical waste management.** All Delhi government hospitals, dispensaries and other healthcare centres have been directed to display the statutory rules for biomedical waste management on their websites and notice boards, as per directions issued by the Directorate General of Health Services. Biomedical waste comprises human and animal anatomical waste, treatment apparatus including needles, syringes and other material used in healthcare facilities. This waste is generated during diagnosis, treatment or immunisation in hospitals, nursing homes, pathological laboratories, blood banks, among others.

[Hindustan Times](#), 14 January 2017 | [Mint](#), 15 January 2017 | [The Hindu](#), 29 January 2017



**Cabinet gives go ahead for ratification of Kyoto Protocol.** India will soon ratify the second commitment period (2013-2020) of the 1997 Kyoto Protocol on containing emission of greenhouse gases. The Union Cabinet has given its approval for the ratification. Under the Kyoto Protocol which had become operational in 2005, only developed countries are mandatorily required to undertake mitigation (emission cuts) targets and provide financial resources and transfer of technology to the developing nations. The first commitment

period of the Protocol ended in 2012. Though amendment to its second commitment period (2013-2020) was adopted in 2012, only 75 countries have, so far, ratified it. A total of 144 countries are required to ratify the amendment for bringing it into force.

**Climate change plan to get new missions.** India's eight-point plan to fight climate change will soon become a 11-point plan with new missions to address the impact of climate change on health, coastal zones and waste-to-energy on the anvil.

National Action Plan on Climate Change	
▪ National Solar Mission	▪ National Mission for Sustaining the Himalayan Ecosystem
▪ National Mission for Enhanced Energy Efficiency	▪ National Mission for a Green India
▪ National Mission on Sustainable Habitat	▪ National Mission for Sustainable Agriculture
▪ National Water Mission	▪ National Mission on Strategic Knowledge for Climate Change

**Indian model to predict impact of climate change.** Scientists at the Indian Institute of Tropical Meteorology (IITM), Pune, are likely to unveil in December a computerised model that can forecast the impact of climate change on the Indian monsoon until 2100. This model is significant because it is the first time India will be submitting a home-grown assessment to the Intergovernmental Panel on Climate Change (IPCC). So far, IITM scientists have customised significant parts of a model, called CFS 2 (Climate Forecast System version 2) and used it to give three month forecasts of the Indian monsoon, to project how the it will be altered by climate change over the next century. To be viable, the model has to first reasonably simulate land and ocean temperatures that existed in the 1850s, or before the carbon dioxide-spewing Industrial Revolution, and also capture droughts and floods in the years up to the present.

**Bombay Natural History Society launches climate change programme in Central Himalayas.** The Bombay Natural History Society has launched climate change programme under which the first study funded by Oracle and facilitated by CAF-India, will assess the status, distribution and conservation of pheasants and finches in the Central Himalayas. The Himalayas hold a rich natural heritage with diverse flora and fauna enhancing the beauty of the region. The study will focus on their conservation in the context of climate change with the help of community participation.

**Infosys announces internal carbon pricing, to aid in reducing emissions.** Indian multinational company Infosys has announced its internal carbon price at \$10.5 per ton of carbon dioxide equivalent (CO<sub>2</sub>e) emission. This price, which will be valid for two years from the date of announcement, is essentially the cost of decarbonising the emissions of CO<sub>2</sub>e. A press release issued by the company said that this price has been estimated by weighing the average of the prices of carbon under various categories. Infosys is a member of Carbon Pricing Leadership Coalition, an organization that is working towards increasing awareness around the idea of carbon pricing.

[Indian Express](#), 16 January 2017 | [The Hindu](#), 23 January 2017 | [The Times of India](#), 25 January 2017 | [The Hindu](#), 25 January 2017 | [The Times of India](#), 29 January 2017