

Enviro Monitor

November 2019

Climate change



- India on track to meeting greenhouse gas emissions target
- Western Ghats carbon footprint caused floods in Karnataka and Kerala in last two years
- Climate impacts 'to cost world \$7.9 trillion' by 2050

Smart cities



- National Housing Bank and French Development Agency AFD expand competitive funding to green housing projects
- Rajasthan government amends bylaws to promote green building
- New digital library features sustainable buildings around the world

Water resources



- 22% of India's groundwater dried up or in critical state
- Tap water in Mumbai safe for drinking. Delhi, Chennai, Kolkata fail all tests
- Project to rejuvenate Krishna, Cauvery rivers

Air quality



- Punjab to pay Rs 100 per quintal incentive to paddy farmers
- Air pollution claimed over 5 lakh lives in India, of which 97K died due to coal burning
- Deadly air pollution may cut 17 years from a Delhiite's life

Waste management



- CPCB guidelines for use of treated waste in agriculture
- Odisha to follow Tamil Nadu's model for composting, management of wet waste
- KMC asks citizens to deposit e-waste at 12 centres



India on track to meeting greenhouse gas emissions target. Global emissions of greenhouse gases, which are responsible for global warming, are growing rather than declining as they should. According to the [Emissions Gap Report, 2019](#), even if all countries meet the unconditional commitments they made at the Paris conference in 2015, GHG emissions will be way more than what they should be. India is among the few countries that are on track to meeting their Paris targets ('Nationally Determined Contributions' or NDCs).

Western Ghats carbon footprint caused floods in Karnataka and Kerala in last two years. Large-scale forest degradation and improper carbon sequestration is one of the causes of the recent flooding witnessed in most parts of Karnataka and Kerala over the last two years. Carbon sequestration is a natural/artificial process by which carbon dioxide is removed from the atmosphere and held in solid or liquid form. Researchers at the Indian Institute of Science, in their latest study report on [Carbon Sequestration Potential of the Forest Ecosystems in the Western Ghats: a Global Biodiversity Hotspot](#), have found large-scale land cover shaved off, leading to deforestation with degradation, causing 20–25% of anthropogenic (human-related) carbon emissions, resulting in regional impact on climate patterns. The loss of forest cover has also modified the local rainfall pattern.

Climate impacts 'to cost world \$7.9 trillion' by 2050. Climate change could directly cost the world economy \$7.9 trillion by mid-century as increased drought, flooding and crop failures hamper growth and threaten infrastructure. The Economist Intelligence Unit's [Climate Change Resilience Index](#) measured the preparedness of the world's 82 largest economies and found that based on current trends the fallout of warming temperatures would shave off three per cent of global GDP by 2050.

Global economy will be 3 per cent smaller by 2050 due to lack of climate resilience.

[The Economic Times](#), 21 November 2019 | [The New Indian Express](#), 21 November 2019 | [The Hindu Business Line](#), 26 November 2019



National Housing Bank and French Development Agency AFD expand competitive funding to green and affordable housing projects. Under the SUNREF India Housing Programme, housing finance companies, banks and home buyers will have access to competitive funding opportunities to finance green and affordable housing projects. The programme will also provide stakeholders with training opportunities on various technical aspects (norms, planning and project design regarding green and affordable components). According to Mr Bruno

Bosle, Country Director for AFD India, the 100 million euro credit line will support NHB's refinancing operations to housing finance companies, banks or home buyers carrying eligible green building projects certified by local labels (IGBC and GRIHA).

Rajasthan government amends bylaws to promote green building. To promote green buildings in the state, the Urban Development And Housing Department has prepared a draft of the amended model building bylaws. After receiving the Indian Green Building Council nod, department had initiated an

exercise to prepare a draft to provide relaxation in bylaws. Till last year, the state had 83 Indian Green Building Council (IGBC) registered projects with a footprint of 103 million sq ft of green buildings. The move will motivate more developers to construct green buildings. Once the bylaws are implemented, several measures will be introduced including additional floor-area ratio (FAR) for projects under Jaipur Development Authority for green buildings.

New digital library features sustainable buildings around the world. The World Green Building Council (WorldGBC) launched a [digital Case Study Library](#) showcasing examples of the world's most cutting-edge sustainable buildings. Each case study demonstrates enhanced performance in relation to health benefits or achieve net zero operational carbon, as verified by established certification programs, rating tools, or other third-party verification. WorldGBC has launched the case study library in recognition of growing market demand to highlight the 'best in class' buildings that excel in key areas of sustainability, and the role of certification schemes to provide third party assurance of performance.

Over time, the case study library will be developed to respond to the changing nature of sustainability and the impact of the WorldGBC global network of almost 70 Green Building Councils, closely linked to the UN's Global Goals.

[The Times of India](#), 10 November 2019 | [The Week](#), 16 November 2019 | [Facility Executive](#), 19 November 2019



22% of India's groundwater dried up or in critical state. Almost 22% of groundwater (assessed un- its) in the country has either dried up or is in the 'critical' and 'over-exploited' categories. The Minister for Jal Shakti (water resources) emphasized the need to focus on efficient use of water resources and noted that 10% of water saving in the agriculture sector now would make it available for all users for the next 50 years. The [Dynamic Ground Water Resources of India](#) report of the Central Ground Water Board showed that 1499 out of 6881 assessed units (blocks/mandals/taluks) in 2017 came under 'over-exploited' (1186 units) and 'critical' (313 units) categories. The report sought immediate change in extraction pattern of groundwater and surface water.

Tap water in Mumbai safe for drinking. Delhi, Chennai, Kolkata fail all tests. A study by the Minister for Consumer Affairs, Food & Public Distribution, Government of India has found samples of tap water collected from Mumbai compliant with the Indian standards for drinking water, according to a report. However, other metro cities of Delhi, Kolkata and Chennai failed in almost 10 out of 11 quality parameters tested by the Bureau of Indian Standards which is under the aegis of the Ministry. Similarly, samples drawn from 17 other state capitals were not as per the specification 'Indian Standard - 10500:2012' for drinking water. The solution to this problem is to make compliance of quality standards for piped water mandatory across the country. The Delhi Jal Board has said that it will start collecting 1400 water samples for testing from across the city.

Project to rejuvenate Krishna, Cauvery rivers. A forestry intervention project to rejuvenate some major rivers, including the Krishna and the Cauvery, is in the offing to increase flow and water quality. The

Indian Council of Forestry Research and Education (ICFRE) is preparing a detailed project report for forestry intervention in 13 major river basins of the country. The ICFRE will work on the main tributaries of the Krishna across Maharashtra, Karnataka, Telangana, and ending with the Bay of Bengal. The Institute of Forest Genetics and Tree Breeding, Coimbatore, is working on the regeneration of the Cauvery. The preliminary stages for both the rivers have begun. As the forests of India are facing problems owing to adverse climate change, global warming, and land degradation, projects focused on bamboo, sandalwood, tree improvement, forest fires, forest ecosystem services, and other emerging areas are being implemented.

[India Today](#), 16 November 2019 | [The Hindu](#), 20 November 2019 | [The Hindu](#), 20 November 2019 | [The Times of India](#), 25 November 2019



Punjab to pay Rs 100 per quintal incentive to paddy farmers. The Punjab Government has initiated the process to pay small and marginal farmers an amount of Rs 100 per quintal for non-basmati produce of rice in case they commit that they would not burn the crop residue as per the direction of the Supreme Court.

Air pollution claimed over 5 lakh lives in India, of which 97K died due to coal burning. More than five lakh people died prematurely in India in 2016 due to dangerous levels of outdoor air pollution and over 97,000 of them died after being exposed to pollutants from coal burning, a new report revealed. The [Lancet Countdown 2019 on Health and Climate Change](#) cautioned that the impact of air pollution in India will worsen if the country does not shift from coal-based energy. The study has emphasized on rapidly decreasing coal use to zero, saying it was crucial to meeting the commitments of the Paris Agreement. Total energy supply from coal increased by 11 per cent in India from 2016 to 2018 and out of over 5.29 lakh premature deaths in 2016 due to dangerous levels of outdoor fine particulate air pollution (PM2.5), over 97,400 deaths were from coal.

The 2019 Lancet report presents an annual update of 41 indicators across five key domains: climate change impacts, exposures, and vulnerability; adaptation, planning, and resilience for health; mitigation actions and health co-benefits; economics and finance; and public and political engagement.

Deadly air pollution may cut 17 years from a Delhiite's life. Longer life expectancy is a sign of healthy society. But cities like Delhi which get enveloped in "emergency" levels of smog every year may face the threat of lower life expectancy. In fact, air pollution, mainly the concentration of the most dangerous pollutant known as PM2.5, may cut short the life expectancy of Delhiites by 17 years. At present, residents of Delhi are breathing about 25 times more toxic air (as on November 19) than the permissible limit according to World Health Organization guidelines. Globally, air pollution reduces life expectancy on an average by one year and eight months - a loss that ranks just below those related to smoking but above unsafe drinking water and lung cancer.

[The Tribune](#), 9 November 2019 | [The Economic Times](#), 15 November 2019 | [India Today](#), 21 November 2019



CPCB guidelines for use of treated waste in agriculture. The Central Pollution Control Board (CPCB) has cautioned the industry against diverting treated effluents for agricultural purpose saying that it can contain harmful toxins and damage the health of the humans as well as soil quality. CPCB has now come out with [Guidelines for Utilisation of Treated Effluent in Irrigation](#) to ensure safe usage of treated sewage and effluents from industries in agriculture. According to agriculturists, using industrial wastewater for agricultural irrigation involve changes to physicochemical and microbiological properties of soils that impact crop growth and water retention capacity of the soil, which in turn could be harmful to health.

Odisha to follow Tamil Nadu's model for composting, management of wet waste. The Urban Development Department of Odisha government has decided to replicate Tamil Nadu's model of Micro Composting Centre (MCC) for proper segregation and management of wet waste. Since the innovative model of the MCC is a proven technology, cost effective, community-driven and user-friendly, the civic bodies there have adopted it in their respective areas. Odisha government has already issued a standard operating procedure on solid waste management and asked all ULBs to engage Swachha Sathi in their respective wards.

KMC asks citizens to deposit e-waste at 12 centres. The Kolhapur Municipal Corporation (KMC) in Maharashtra has appealed citizens to hand-over the electronic waste to the e-waste centres located at 12 places in the city. The central government mandates the civic body to set-up an independent system to collect, segregate and dispose of the e-waste. The disposal has to be carried out in a scientific way to avoid any environmental damage as the e-waste comes under the hazardous waste category.

[The Times of India](#), 20 November 2019 | [India Today](#), 26 November 2019 | [The Pioneer](#), 29 November 2019