

CERCA Weekly Newsletter

January 11, 2019

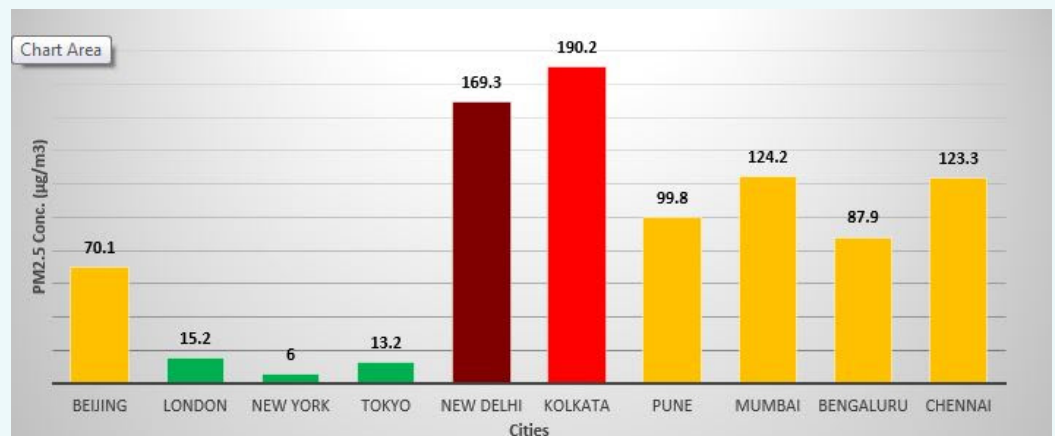
Center of Excellence for Research on Clean Air



Indian Institute of Technology, Delhi



Air Quality in different cities

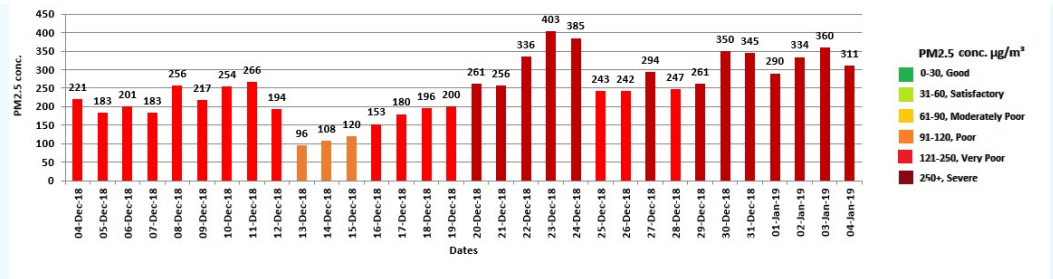


Kolkata air quality is Severe whereas Beijing is Moderately Polluted

January 10, 2019, 10:00-11:00 IST (Hourly Average)

Data Source: Berkeley Earth

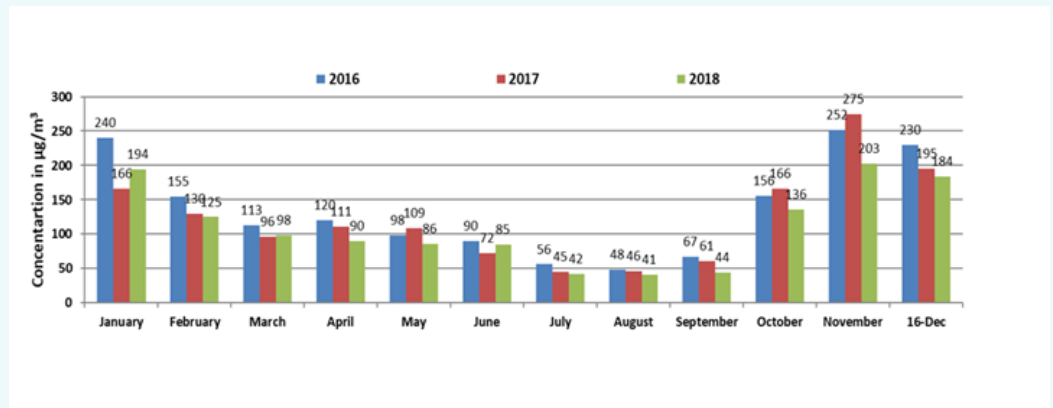
Delhi air quality for last 30 days



Average PM2.5 Air Quality for 10 stations in Delhi.

Data Source: CPCB

Delhi long term air quality trend



About 18 % decrease in PM2.5 levels in October, about 26 % in November and about 6 % in December 2018 in comparison to corresponding months in 2017 have been observed.

Thought Leader

[Transport overhaul to control air pollution in Delhi](#)

In comparison to Mumbai's 110 vehicle registration per 1000, Delhi has 420 which add load to the roads with toxic gases. Even public transport is less used in Delhi compared to Mumbai, so a thought about increasing the road tax on all new ICE Vehicle could help to control vehicular pollution.

<https://www.cnbctv18.com/views/why-only-a-transport-overhaul-will-resolve-delhis-pollution-troubles-1889731.htm>

Source: CNBCTV18

New Measures and Initiatives

[Delhi pollution control – Foreign Universities taking steps to control air pollution in Delhi](#)

Delhi government signed MOU with Washington University for real-time source apportionment with analysis of elemental and organic carbon. Initial duration for this study is 18 months.

<https://www.indiatoday.in/education-today/news/story/foreign-university-delhi-govt-tackle-air-pollution-divd-1426100-2019-01-08>

Source: India Today

New guidelines for parking space sharing for EV in Delhi

Housing and Urban development ministry issued new guidelines for residential and commercial complexes where they have to allot 20% of their parking space for electric vehicle charging.

<https://energy.economictimes.indiatimes.com/news/power/buildings-will-have-to-allot-20-parking-space-for-ev-charging-govt/67416812>

Source: Economics Times

Health Impact

Air Pollution hampering work force productivity

A study showed prolonged exposure to air pollution can also reduce employee's productivity. In addition, it could also affect your mood or disposition to work. However, a definite drop in output was witnessed when measured for more prolonged exposures of up to 30 days. Researchers found that an increase in PM2.5, by 10 micrograms per cubic metre sustained over 25 days, reduces daily output by one percent.

<https://economictimes.indiatimes.com/magazines/panache/listen-up-bosses-air-pollution-is-hampering-productivity-of-your-employees/articleshow/67435544.cms>

Source: Economics Times

Our children future at risk due to toxic fumes

Burning fossil fuels are the world's most significant threat to children health. We are putting them in risk even before they are born. A continuous exposure to toxic fumes while they are on road is dangerous for their heart, lungs, brain and even impacting on cognition power.

<https://www.theguardian.com/commentisfree/2019/jan/09/toxic-fumes-children-health-air-pollution-emissions>

Source: The Guardian

International Developments

Abu Dhabi Future Energy Company launches region's first a fully electric passenger bus

With one step towards clean energy target (27% by 2021) by UAE government; a green energy company (Masdar) launched the region's first fully electric passenger bus with seating capacity of 30 with 150 Kilometer per battery charge.

<https://energy.economictimes.indiatimes.com/news/power/abu-dhabis-green-energy-firm-launches-regions-first-all-electric-bus/67436615>

Source: Economics Times

[A Social Media movement; mems spreads air pollution awareness](#)

A collective social media movement started by Beijing people grabbed China's government attention along with International media. This started a completely new cultural change with alternative source of information coming from ground.

<https://www.cjr.org/innovations/memes-pollution-censorship-china-beijing.php>

Source: *Columbia Journalism Review*

New Research (study) or Policy

[University of Surrey – Plant hedges to curb road side pollution](#)

According to research published in *Atmospheric Environment*, researched studied how road side green infrastructure helps reduce the concentration level of air pollution. They collected the data from six roadsides location to validate their point.

<https://www.sciencedaily.com/releases/2019/01/190104103948.htm>

Source: *Science Daily*

[Existing urban greenway to control concentration of PM2.5, PM10, CO2 – Is it enough?](#)

A study from Poland in 2017 published, where they selected 40 points in city Silesia Park to measure the air quality and reported that existing greenway is not enough to curb the air pollution, so they recommended to close internal park roads and tree should be at constant density or increase them to maintain optimal microclimate.

<https://www.sciencedirect.com/science/article/pii/S1309104218302496>

Source: *Science Direct*

New Technology

[Air purifier for entire city using radio waves](#)

Dry deposition is the basic principal to use by "Devic Earth" start-up. According to the company, this can improve air quality index by 33% with reducing pollutant like PM2.5, PM10, NOx and SO2.

<https://economictimes.indiatimes.com/small-biz/entrepreneurship/air-purifier-for-an-entire-city-devic-earth-breathes-new-life-into-fight-against-pollution/articleshow/67432127.cms>

Source: *Economics Times*

["Smart Poles" A new way for air quality monitoring](#)

Smart poles are the new weapon for air quality monitoring with measuring PM10, PM2.5, NO2, SO2, CO, temperature and humidity in real time data push to NDMC apps. This data shows the severity of poor air quality in Delhi.

<https://weather.com/en-IN/india/pollution/news/2019-01-08-sensors-show-delhi-air-is-more-polluted-than-you-think>

Source: Weather

For more details, visit our website <http://cerca.iitd.ac.in>

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