

FGD-exempt coal power plants emit 81% of power sector-generated SO₂ within 300 km of Delhi-NCR

NEW DELHI, 13 July 2026 – A new analysis by the [Centre for Research on Energy and Clean Air \(CREA\)](#) finds that 81% of sulfur dioxide (SO₂) emissions from coal-fired power plants (CFPPs) within 300 km of Delhi-NCR come from plants that are exempted from installing flue gas desulphurisation (FGD) systems under the [July 2025 notification](#).

CREA analysed 25 of the 37 CFPP units located within a 300-kilometre radius of Delhi-NCR for which public data were available. Those 25 units emitted an estimated 154 kilotonnes of SO₂ in 2025. About 90% of that estimated SO₂ came from plants operating without FGD systems, and 81% of the emissions came from Category C plants, the group removed from mandatory SO₂ control by the July 2025 notification.

The findings are significant because SO₂ is a major precursor of fine particulate matter (PM_{2.5}), a pollutant strongly linked to respiratory illness, heart disease, stroke, and premature death. A recent peer-reviewed study estimated that the power sector contributes up to [16%](#) of particulate pollution in Delhi-NCR cities, highlighting CFPPs' role in regional air quality problems.

Current plant categorisation, largely based on whether a plant is within 10 km of a city, overlooks how far SO₂ travels. An IIT Delhi [report](#) highlights that emissions can travel hundreds of kilometres, contributing to regional and transboundary pollution. Exempting plants simply because they lie beyond a 10 km radius therefore leaves downwind communities unprotected.

The findings come at a time when coal generation is expected to rebound. Coal generation was relatively low in 2025 due to milder weather and weaker electricity demand, but 2026 has already seen record electricity use due to heatwaves and rising cooling needs. El Niño forecasts could keep temperatures and electricity demand high, increasing [coal generation](#) and SO₂ emissions accordingly. New plants, such as the Khurja Thermal Power Plant near the NCR, in addition to the roughly 130 GW of coal capacity in India's pipeline, could substantially contribute to India's air pollution unless equipped with effective controls.

Under the government's 2015 [emission standards](#), all CFPPs were required to install FGDs. The Ministry of Environment, Forest and Climate Change's revised notification in July 2025 changed that: 78% of India's CFPP units are now exempt from mandatory SO₂ controls, 11% are assessed on a case-by-case basis, and only 11% remain subject to a mandatory

FGD requirement. This change comes despite India being the [world's largest SO2 emitter](#) from the power sector, releasing over 6 million tonnes annually.

The CREA analysis highlights how FGDs can sharply reduce emissions. Mahatma Gandhi Thermal Power Plant Units 1 and 2, fitted with FGDs, generated roughly 3,400 to 4,000 million units of electricity each year but emitted an estimated 1,775 tonnes and 2,154 tonnes of SO2, respectively. By contrast, the Rajpura Thermal Power Plant Units 1 and 2 produced similar generation but, without effective SO2 controls, emitted an estimated 20,851 tonnes and 22,690 tonnes of SO2, making them the largest emitters in the assessed set.

Exempting 78% of CFPP units from FGD requirements is therefore a missed opportunity to reduce SO2 and PM2.5, particularly as coal capacity and generation rise again.

'As coal-based power generation increases in line with hotter temperatures and India's expanding coal capacity, so will air pollution unless emissions are effectively controlled. The government should reinstate mandatory FGD installation for all coal-fired power plants, make real-time Continuous Emission Monitoring Systems (CEMS) data publicly available, and regularly disclose the operational status of FGDs. These measures will reduce SO2 and PM2.5 pollution, strengthen compliance, and improve air quality and public health,' said Manoj Kumar, Analyst at CREA.

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About CREA

The Centre for Research on Energy and Clean Air (CREA) is an independent research organisation focused on revealing the trends, causes, and health impacts, as well as the solutions to air pollution. We use scientific data, research and evidence to support the efforts of governments, companies and campaigning organisations worldwide in their efforts to move towards clean energy and clean air. www.energyandcleanair.org.