

Power demand surge could raise India's emissions in 2026

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Hyderabad, 18 February

Despite reducing coal-based power generation in 2025 for the first time in 53 years, alleviating the discharge of emissions, pollution levels may accelerate this year in line with stronger economic activity and power demand, according to industry data and interviews with officials.

Global fossil-fuel carbon emissions are projected to rise by 1.1 per cent in 2025 to a record high, according to the Global Carbon Project. India's emissions, however, are estimated to have grown by a slower 1.4 per cent year-on-year (Y-o-Y) in 2025, compared with over 4 per cent in 2024. Both India and China reduced coal-fired generation in 2025 for the first time in 53 years, said the Centre for Research on Energy and Clean Air, a Finnish energy think tank, based on new research.

"The moderation in emissions seen in 2025 reflects a temporary slowdown rather than a lasting decline," said Navin Mathur, chief operating officer at Asvata, a carbon credit company of the RPG group. "India's carbon emissions are likely to rise modestly in 2026, even if renewable capacity addi-

tions remain strong."

The 2025 moderation was driven by lower power demand growth, a favourable monsoon, reduced coal use, and higher renewable generation, rather than a structural shift away from fossil fuels, he said.

"The rebound in overall electricity demand, especially as economic activity strengthens, also means total emissions could rise if fossil generation increases to meet peak or non-renewable periods faster than renewables can displace them in the generation mix," said Vineet Mittal, chairman, Avaada Group, a leading renewables company.

There are no details available as yet, but higher coal-based generation and transport fuel use typically push up carbon dioxide levels.

India is the biggest contributor to global oil demand growth, and despite lower thermal emissions last year, cities led by Delhi witnessed record air pollution, with particulate matter levels surging by 80 times World Health Organization standards.

Meanwhile, China's emissions may have declined by 0.3 per cent in 2025, extending a "flat or falling trend" that began in March 2024, said Lauri Myllyvirta,



lead analyst and co-founder at CREA.

Global climate forecasters expect China's emissions from burning fossil fuels to continue to decline, as electric vehicles (EVs) make up over half of new vehicle sales, reducing reliance on transport fuels, while China added more renewable capacity last year than the rest of the world combined.

India, however, is growing faster than most major emerging economies. While India will add significant renewable capacity in 2026, it will not be enough to meet rising electricity demand, Mathur said.

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"The moderation in electricity demand growth in FY26 was largely due to weather patterns, including early and extended monsoons," said Ankit Jain, vice-president and co-group head (corporate ratings) at Icra, a US Moody's affiliate.

"However, going forward, expected healthy economic growth, normalised weather and rising demand from EVs, data centres, and green hydrogen are likely to result in demand growth of 5-5.5 per cent in FY27."

Asvata expects electricity demand to grow 4-6 per cent Y-o-Y in 2026, while

Avaada predicts 5-7 per cent growth. According to the Grid Controller of India, peak demand in 2025 reached 242 gigawatts (Gw) on June 12, down 3 per cent Y-o-Y.

Within the thermal segment, coal power generation fell by 3 per cent Y-o-Y to 1,283 billion kilowatt hours, the sharpest decline among major power sources, CREA said. It's a significant reversal from the positive growth observed in previous years — 5 per cent in CY24, 15 per cent in CY23.

China slowdown

In China, renewable additions are more than sufficient to meet incremental demand, with a surge in wind and solar capacity in late 2025, reflecting increased generation in 2026, Myllyvirta wrote in a post on UK's Carbon Brief.

Mittal said renewables would cover a large share of new incremental electricity demand in India this year and could even exceed incremental load when storage and flexible integration improve, but thermal power (coal/gas) will still be needed as a balancing and firming source, especially during peak and low-wind/low-sun periods.

The International Energy Agency has said India is on track to meet roughly 95 per cent of additional electricity demand growth between 2025 and 2027 through renewables.

"As electricity demand rebounds in 2026, coal will continue to anchor the power system, with renewables absorbing part of the increase," Mathur said.

In 2025, coal-based capacity additions rose sharply to 9 Gw from 4 Gw in 2024, CREA said.

"I really don't think we can move around thermal," said Sanchit Makhija, a partner at Kearney in an interview at IEW. "Thermal will still form the base load." Thermal needs to be ramped up now because solar and wind can only do so much, he added.

Mittal of Avaada said the clean energy transition gives India a strong chance to keep emissions growth low or even flat in 2026. "But a firm decline in absolute emissions will depend on how much fossil generation is still used to balance increased demand. Continued build-out of storage, grid flexibility, and renewable integration will be key to this outcome," he added.