

Press Release

India Clean Air Summit #ICAS2024 Bengaluru, 28 August 2024

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Heading 1. Breathe Easy, Work Better: The Impact of Air Quality on Workplace Productivity

The seriousness of poor indoor air quality is undeniable, as it can have detrimental effects on respiratory and mental health. Discussions on 'Health and productivity through clean air at home and the workplace' at the India Clean Air Summit (ICAS) 2024 highlighted some key perspectives on improving indoor air quality.

ICAS 2024 is being organised by the Center for Study of Science, Technology and Policy (CSTEP), in partnership with the <u>Clean Air</u> <u>Monitoring and Solutions Network (CAMS-Net</u>), from 26 to 30 August 2024 in Bengaluru.

Mr Guruprakash Sastry, Associate Vice President and Head of Climate Action, Infosys, emphasised a clear business angle for improving indoor air quality in workspaces, considering the total operating cost of a building, including the staff cost, energy cost, and rental costs. Companies like Infosys own most of the buildings they occupy. So, ensuring the good health of employees is very important to them to ensure staff productivity and good business.



Mr Guruprakash Sastry, Associate Vice President and Head of Climate Action, Infosys, speaking at ICAS+CAMS-Net 2024



Ronak Sutaria, Founder and CEO of Respirer Living Sciences Pvt Ltd, described the importance of reducing PM_{2.5} at workspaces and said, 'If somebody just put up a board saying "PM_{2.5} is 0", I will spend more time in that office building', while describing the unique case of working in a building where air quality sensors showed no presence of PM_{2.5}.

He further added that 'Fixing indoor air quality needs an understanding of the outdoor climate conditions. A building functions in the context of its outdoor climate. Understanding what is happening outside and in which months (temperature, CO₂ levels, and PM levels) will help substantially reduce the energy cost of your interventions. Real-time data combined with insights and actions are going to help us keep track of energy consumption and air quality. Integrated solutions and communicating air quality levels and standards are key interventions that can help manage the quality of the air we breathe.'



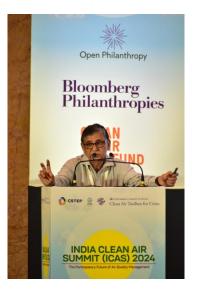
Mr Ronak Sutaria, Founder and CEO of Respirer Living Sciences Pvt Ltd, speaking at ICAS+CAMS-Net 2024



Heading 2. West Bengal invites research and collaboration in air quality management

The West Bengal Pollution Control Board aims to get 11 million households to adopt cleaner fuel. 'But reaching 11 million households is not easy; we are collaborating with the World Bank to go forward with this', Dr Kalyan Rudra, Chairman of West Bengal Pollution Control Board, said in his special address at the India Clean Air Summit (ICAS) 2024 organised by the Center for Study of Science, Technology and Policy (CSTEP).

A special address by Dr Kalyan Rudra, Chairman of West Bengal Pollution Control Board, at ICAS+CAMS-Net 2024



Dr Rudra attributed the nature of air pollution in Bengal to its unique geography. Bengal receives fresh air from the Himalayas but extremely



polluted air during the winter months owing to transboundary pollution. 'About 40%–50% of the pollution in Bengal comes from outside Bengal, and that is meteorologically governed...We can somehow manage in-situ sources of pollution, but we can do nothing in case of meteorological factors, which govern pollution', added Dr Rudra.

Referring to the intensive air quality network in West Bengal, he said, 'We made all data available to the public domain, and everyone can access it on their smartphone'.

Explaining the need for low-cost sensors, he said, 'In this 21st century, we are relying on manual monitoring stations, which our scientists will have to go to the place and remove the filter paper and come back, and there may be a lot of errors...But till date, we are still relying on this'.

The nature of pollutants and concerns across borders and rural-urban spaces differ, which is why Dr Rudra is inviting more people working on black carbon and secondary aerosols to collaborate and share their expertise for future endeavours.

Dr Rudra believes that our understanding of air quality management remains incomplete, and there is a long way to go.

Heading 3. Buildings to spur India's energy needs—from ACs to construction

'Electricity consumption by the AC segment in India is going to surpass the entire African continent', said Ronak Sutaria, Founder and CEO, Respirer Living Sciences, speaking at the India Clean Air Summit (ICAS) 2024 organised by the Center for Study of Science, Technology and Policy (CSTEP).

'Reaching net zero by 2070 requires focus on reducing the energy intensity of the buildings sector. Almost 40% of the total energy consumption globally goes to the construction and operation of buildings. Considering this energy intensity of buildings, any improvement we make to the buildings sector can have a serious positive consequence in our efforts to transition to a low-carbon economy,' he said.

Recently, CSTEP released a policy brief on decarbonising the buildings sector. The study found that in a business-as-usual (BAU) scenario, the direct and indirect emissions from the buildings sector alone will exceed India's remaining carbon budget by 2070. Click here to read the full document.



India's energy consumption is almost three times lower than the world average and four times lower than that of China's. As we transition from a developing to a developed country, our per capita consumption of energy is going to multiply.

'Most of this energy demand is going to come from buildings. The changing trends in temperature indicate that air conditioning and "thermal comfort" are becoming important components of our building needs,' said Dr Sameer Patel, Assistant Professor at the Indian Institute of Technology Gandhinagar.



In India, air conditioning is usually used for cooling, but now every big manufacturer has at least one model with a dual mode, which can be used for heating as well. As these models become popular, we need to consider energy demands from both cooling and heating.

'To reach net-zero carbon stock by 2050, efforts need to focus on making buildings more energy efficient and climate-friendly', he added. 'Our buildings sector emissions need to reduce, but what we are seeing is the other way around', he pointed out, saying that India is not just a leader in energy consumption but also in the construction of buildings.

'It is projected that by the end of 2040, in India, the per capita energy consumption related to buildings is going to be among the lowest. That means our growth is not yet done. We are just going to keep increasing our energy consumption', he added.



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About CSTEP: <u>CSTEP</u> is a not-for-profit research organisation with a mission to enrich policymaking with innovative approaches using science and technology for a sustainable, secure, and inclusive society. Our interdisciplinary research encompasses diverse fields such as energy, urban development, climate, and air pollution.

About CAMS-NET: The <u>Clean Air Monitoring and Solutions Network</u> (CAMS-Net) is a National Science Foundation-funded project aimed at creating an international 'network of networks' that will facilitate the exchange of knowledge, ideas, and data in order to improve the usage and application of low-cost sensor air quality data. Based at Columbia University, in collaboration with Carnegie Mellon University and Washington University at St Louis, CAMS-NET offers a unique platform for South–South–North collaboration on an equal footing.

About ICAS: Since its inception in 2019, the <u>India Clean Air Summit</u> (ICAS) has emerged as a platform for the community working on improving air quality in India, including government, academia, civil society organisations, and citizens, to collaborate and discuss important issues around air pollution.