

Why There's a Need to Look at Air Pollution Through the Climate Lens

By Merlin Francis, Communication Manager (Content)

At least 9 million people die annually from air pollution-related complications, according to a recent [study](#) by The Lancet Commission on pollution and health. Meanwhile, the alarming increase in carbon dioxide and other greenhouse gas emissions, due to human activities, is escalating the climate crisis. Putting a number on deaths attributable to climate change is complex, but there's no denying this: we are at crisis point and it is likely to get worse before (and if) it gets better.

Air pollution and climate change are two of the biggest threats to lives and livelihoods. However, so far, both scientists and policymakers have looked at these separately, despite the commonalities and linkages. With the crises escalating, it is now time to highlight the intersections and linkages in the hope that our interventions can be effective and fast.

What are the similarities between air pollution and climate change?

How it begins

Climate change refers to the long-term variation in the Earth's climate due to natural and human activities. The emission of greenhouse gases such as carbon dioxide, methane, and nitrous oxide accelerates it (anthropogenic climate change). On the other hand, the presence of harmful substances or particles that are a danger to human health, flora, and fauna lead to air pollution. These pollutants include sulphur oxides, nitrogen oxides, benzo pyrene, and particulate matter. Burning fossil fuels and emissions from transport are two main contributors to air pollution and climate change.

In mega-cities and urban centres, transport-related emissions account for a large amount of particulate matter, nitrogen, and ozone. According to the International Energy Agency, the sector relies heavily on fossil fuel and accounts for [37% of carbon dioxide emissions](#) from end-use sectors.

Thus, there is potential for synergising policies and interventions to address two birds with one stone.

Who it affects

Both crises have negative impacts on our health, social wellbeing, and economy. Air pollution is linked to a number of illnesses affecting the heart and lungs and also contributes to increased risk for diabetes amongst the vulnerable. New research indicates that air pollution may also be linked to autism and other neurological issues.

An increasing number of researchers are now looking at the health implications of climate change. The [2020 report of The Lancet Countdown on Health and Climate Change](#) points to a 53% increase in mortality in the last twenty years, due to heat, affecting those aged 65 and above, killing at least 2,96,000 people as of 2018. Death or diseases (mental and physical) can be caused due to extreme events attributed to climate change; there is a growing risk of infectious disease and their transmission because of climate change related changes in our environment; not to mention the issues such as food insecurity, rising sea levels, and acidification of oceans.

In both cases (air pollution and climate change) it is the most vulnerable populations that are likely to be hit first and hardest.

Leveraging possibilities, identifying risks

Solutions addressed at one challenge can also have co-benefits for the other. For instance, reducing emissions from fossil fuels and fixing the energy model are important solutions to reduce pollution and check global warming. In urban centres, tackling air pollution from the transport sector can act as an ally for efforts to address climate change.

Public transport and active mobility, clean-energy powered electric mobility, and shifting to renewable sources are some [solutions](#) that can benefit both air pollution and the climate crisis.

Air pollution and climate change are often referred to as two sides of the same coin, but there are numerous unanswered questions that need to be explored.

What are the synergies and trade-offs — lessons from scientific studies in the respective fields? What are the new perspectives we will encounter as we break out of these silos? Can we learn from each other? How can we link policies to maximise the benefits of lowering air pollution and mitigating climate change? How do we build robust health facilities that will be needed to treat the health impacts of both pollution and climate change? How do climate change and air pollution affect productivity, labour hours, food security, and our economy? How do we stop the unnecessary loss of lives?

Facilitating this discussion: The India Clean Air Summit 2022

Considering the urgency of finding answers to these questions, we chose 'Looking at Air Pollution through the Climate Lens' as the theme of our flagship event — [The India Clean Air Summit 2022](#).

Since its inception, ICAS has adopted an interdisciplinary approach to finding solutions for air pollution by bringing together scientists, policymakers, activists, advocates, health practitioners, and technologists working across the spectrum of air pollution science and policy. By adding climate change to this mix during the four-day event, we are taking one more step towards understanding the bigger picture, identifying patterns in the chaos, and finding solutions that work.

If you are an academician, policymaker, policy analyst, technologist, part of an affected community, a student, or just someone curious — we invite you to participate in the discussions. Details of the topics being discussed at ICAS2022 are available [here](#).

Date: 23 -26 Aug, 2022

Register here: <https://icas2022.caps.cstep.in/>

For more details: <https://cstep.in/event-details.php?id=2042>