



Background Note

Rapid economic growth has brought many benefits to India, but at a cost to human health and the environment. For instance, growth in industrial production, urbanization, and transportation have led to poor air quality in almost all states in the country. The health and economic effects of chronic exposure to high concentrations of air pollution have been documented globally. The World Health Organization (WHO) recently estimated that ambient air pollution contributes to 3.2 million premature deaths and 76.2 million disability adjusted life years annually, largely due to the impacts of cardiovascular disease.

Of this staggering total, two-thirds of the burden falls in Asia, where PM_{2.5} concentrations are highest. Estimates suggest that 92% of the world's population lives in places where the mean annual air quality levels are above WHO ambient air quality guidelines for fine particulate matter (PM_{2.5}). Improvement of air quality and health are covered under the UN SDG's - Health (3), Energy (7) and Cities (11).

The predominant sources of air pollution in India are emissions from industry, transport, power plants, brick kilns, refuse burning, road dust and construction. At the city-level, studies have been undertaken to identify the prominent sources of air pollution, and therefore prioritize mitigation action.

In January 2019, India launched its National Clean Air Programme (NCAP) for more than 122 cities across the country. The NCAP provides a roadmap to prevent, control, and reduce air pollution with specific targets. It calls upon states and cities to take urgent and lasting action to reduce the quantum of emissions that contribute to air pollution and builds upon India's international commitments for climate change.

Under the NCAP, India's cities have created city-level action plans. These plans address various planned mitigation measures aimed at the reduction of ambient particulate matter concentrations by 20-30% by 2024. These city-level plans aim to work in close consultation with broader national interventions that have crucial implications for the sources of emissions in cities. For instance, Delhi has combined localized action on conversion of fossil-fuel-fired industrial boilers to cleaner Piped Natural Gas (PNG) fueled sources, along with national action on transport – leapfrogging from BS IV to BS VI

fuel and improvement in vehicular emission standards. Similarly, the city of Ahmedabad, along with at least 10 other Tier I Indian cities, has augmented its city bus fleet with 50 electric buses and will induct 300 more this year. Telangana and 16 other India states already have state level electric vehicle policies in the pipeline, which look at reducing localized urban emissions from the transport sector

TERI and NRDC are organizing a 'Sustainable Action Dialogue on Air Pollution' on 13th November, 2019 to discuss ways in which national-, state-, and city-level mitigation actions can be further strengthened and to identify institutional mechanisms to enhance cooperation. The dialogue will bring together individuals from key organizations, including government officials, academics and civil society to discuss actions taken to fight air pollution, recognize gaps, identify opportunities, and prioritize actions to enable more comprehensive solutions to aid India's ongoing efforts to improve its air quality.

Some questions to guide the discussions:

- How can India scale up the development and implementation of mechanisms to build resilience against the health effects of exposure to high air pollution through city and regional policy measures? (Forecast and early warning systems, targeted action for vulnerable populations, etc.)
- How can India meet its current and projected energy requirements, including substituting domestic solid fuel usage in millions of households, without the massive local (non-GHG) emissions that have accompanied large-scale energy expansion efforts in the past? (Power plant norms, finance and funding, etc.)
- Industrial emissions in India are currently regulated through a centralised command and control approach. What are some lessons from other countries in this sector that encourage transparency, accountability, and localisation of decision making? (Monitoring & evaluation, informal sector mitigation and equity, market driven approaches, etc.)
- Emissions from the transport sector currently are one of the largest localised sources of urban air pollution. How can cities move to a cleaner, shared urban mobility model without repeating the personal mobility habits of the developed world, which have already caused massive congestion on India's streets? (Public transport, vehicular technology, electrification, urban design, land-use prioritisation, etc.)
- What efforts can be made to augment the capacity of India's institutions and regulators, both at the city- and state-level to plan, implement, and monitor air pollution interventions? Can regional cooperation be facilitated to tackle air pollution? (Governance and monitoring, decentralisation of decision making, transparency and accountability, etc.)