



# Legislators Engagement Program

Cleaning Up India's Air: Bringing Innovation into Policy Action

Roundtable Meeting · Jan 21, 2022

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# Background

Environmental constraints pose a fundamental obstacle to poverty alleviation in India. These constraints arise from both long-term and global forces and more immediate and local factors, i.e. air pollution. Energy Policy Institute at the University of Chicago's (EPIC) research shows that if air pollution met World Health Organization guidelines in India, people would live 5.9 years longer on average. Beyond shortening lives, poor air quality may reduce crop yields, lower industrial labor productivity, and impair cognitive skills and educational outcomes. India cannot afford to ignore these environmental costs and hope to grow simultaneously.

EPIC India recognizes the vital role of India's political leadership in successfully advocating for and realizing policies that provide lasting environmental benefits and organizing public action, and driving awareness among citizens. Therefore, there is a strong need to continuously build the capacity of Indian parliamentarians in India's energy and environment policy. EPIC India instituted its capacity building initiative "The Legislators Program" in 2017 to provide one such platform for international and domestic knowledge exchange to our political leaders. The program constitutes a flagship training program held annually at the University of Chicago and several local events to facilitate dialogue on India's important energy and environment issues.

As a part of the 2022 Legislators Program, EPIC India, on Jan 21, 2022, brought together several Indian parliamentarians, who are at the helm of public policy in India, for a roundtable on 'Cleaning Up India's Air: Bringing Innovation into Policy Action.' The event's primary goal was to discuss actions that foster conditions amenable to policies and balance economic growth with clean air, and the role parliamentarians can play in catalyzing action for better environmental policies. The roundtable saw participation from five Indian Members of Parliament – Dr. Amar Patnaik (Member, Rajya Sabha), Gaurav Gogoi (Member, Lok Sabha), Priyanka Chaturvedi (Member, Rajya Sabha), Ram Mohan Naidu (Member, Lok Sabha), and Vandana Chavan (Member, Rajya Sabha); and Prof. Michael Greenstone, Milton Friedman Professor of Economics and Director, EPIC and an accomplished environmental economist. Chetan Bhattacharji, NDTV 24x7's Senior Managing Editor, moderated the event, who has extensively written on India's climate change policies and actions to engage more citizens in the discourse.






# Introductory Remarks

Sidhartha Vermani, Executive Director, EPIC India, welcomed the audience and speakers by noting that India's two decades of strong economic growth have seen dangerously rising air pollution levels. Highlighting EPIC India's commitment to addressing the country's pollution challenge and the importance of policy forums such as "the Legislators Program", Mr. Vermani noted the difference significant political commitment could make in reducing pollution and its impacts.

Dr. Leni Chaudhari, Executive Director of the UChicago Center in Delhi, continued the welcome address, describing "The University of Chicago Center in Delhi as a platform for the UChicago faculty to bring their intellectual expertise and global collaboration to work on key development challenges in India."

Veena Reddy, USAID's Mission Director for India, gave a special address, stressing that air pollution is an environmental health risk globally, putting the most vulnerable, especially at risk. She urged our public policy experts to keep the vulnerable segment of the society at the centre of any pollution mitigation strategies. She wrapped up her address by highlighting the necessity to "seek solutions for air pollution by working with the local and national government, private sector and civil societies."



# The Roundtable Discussion

Chetan Bhattacharjee opened the panel discussion and asked Prof. Michael Greenstone about the need to speak about clean air and the motivation for developing the Air Quality Life Index (AQLI)<sup>1</sup>. Prof. Greenstone asked the audience to imagine a scenario where invisible “Martians” invaded the earth and started making humans sick, leading to a total outrage. He then said that in case of the air pollution problem, “we, the humans are the Martians, and our activities and the inability of our public policy to regulate air pollution effectively is making us all sick.” Addressing the need for reframing air pollution as a public health crisis, Greenstone said that air pollution is not an engineering problem of “how to install the right piece of equipment”, instead, it is about “how to protect the human health”. He remarked that he created AQLI to provide a concrete measure of the benefits of air pollution mitigation policies to countries around the world, including India. Addressing the same issue as a parliamentarian, Mr. Gogoi shared that India is an under-resourced economy fighting multiple battles, and funds for air pollution are in competition with other important factors such as malnutrition, floods and education.


Agreeing with Mr. Gogoi, Dr. Patnaik further highlighted the need to build an understanding of air pollution at the national and state level and the vital role that people like himself can play in spreading awareness in their constituencies. He also emphasized the importance of coordination between national, state and local governments, highlighting platforms such as this roundtable allowing parliamentarians to come together to bridge this gap. He also highlighted informal institutions’ role in a grassroots-level change, saying that “policy innovations should not rely solely on disincentives but also on realigning incentives to create awareness.”

Ms. Chavan also underscored the need to localize the pollution problems at the level of local government bodies to create an amenable environment for policy innovations. She said that massive capacity building of municipal corporations and gram panchayats is needed. Mr. Naidu brought forward a pertinent point about designing context-specific public communication efforts to build support for air pollution at the grassroots. He further highlighted that data can play a crucial role in establishing the implications of air pollution in front of the citizens.

Highlighting the work being undertaken by the Maharashtra Government, Priyanka Chaturvedi talked about the urgent need for policy innovation in the country while urging the government to increase the corpus available for air pollution mitigation at the centre. When asked about the importance of public awareness and politicizing the issue of air pollution, Ms. Chaturvedi noted that a powerful mechanism to instil the severity of air pollution in people’s minds involves “talking about fear while filling people with hope in our collective move towards a greener transition.”

The panel discussed the importance of close coordination among states to mitigate cross-boundary pollution in India’s transition to a green economy, a thought frequently associated with high costs and social injustice. Mr. Gogoi emphasized that the transition to a greener India need not be painful for its citizens, and this is exactly where parliamentarians like himself can play an important role. India’s air pollution policy implementation predominantly occurs in individual states, with minor economic implications across state boundaries. Since parliamentarians closely interact with the community, he added that continuous dialogue between parliamentarians could ensure that cross-boundary pollution mitigation strategies do not come at the cost of livelihood. Dr. Patnaik also highlighted that if one prevents air pollution, it will only add to the country’s economic growth. He said, “It is not about how much you will lose but how much you will get. When communicating, framing the issue this way will ensure that policies are also framed around it.”

<sup>1</sup>The AQLI translates complex pollution data into its impact of on an individual’s life expectancy



Concerning costly green transitions and the trade-off when talking about rapid economic growth and environmental quality, Prof. Greenstone suggested choosing market-friendly methods that create a win-win situation for all stakeholders. Highlighting India's relatively high enforcement cost of environmental regulation, he urged establishing a national cap-and-trade emissions market for large power plants. He added that "rather than mandating industries to use particular technologies, cap-and-trade can unleash their innovative capacities to find the cheapest way to reduce pollution." For example, he quoted EPIC's pilot emissions trading scheme for particulate matter in Surat (ETS-PM). In this pilot, EPIC affiliates and partner organizations worked with the Gujarat Pollution Control Board to set up a cap and trade scheme for particulate matter. The pilot reduced compliance costs of the industry and the regulator and additionally demonstrated pollution reduction of ~24% among the ETS participating firms. He mentioned that the markets would help industries get out of the trap of being mandated to use expensive technology. "Liberate plants to find inexpensive ways to do this", he concluded.

Mr. Bhattacharjee marked the event's conclusion, highlighting the need for air pollution awareness at the grassroots, and the significant role of simplified data in politicizing air pollution, thereby enabling top-down action. The discussion was followed by a Q&A session with the audience members and touched upon various important themes, including (a) replicating the tremendous coordinated effort between governments that we saw in COVID and implementing that onto the air pollution problem; (b) the relative ranking of environmental problems in the parliament; and (c) making cities accountable for their NCAP goals.

## Concluding Session

Describing the event as a forerunner for a longer and more involved interaction between the Members of Parliament and researchers at the University of Chicago, Dr. Anant Sudarshan, South Asia Director of EPIC summarized the key takeaways from the roundtable discussion during his address. Dr. Sudarshan addressed two pertinent questions;

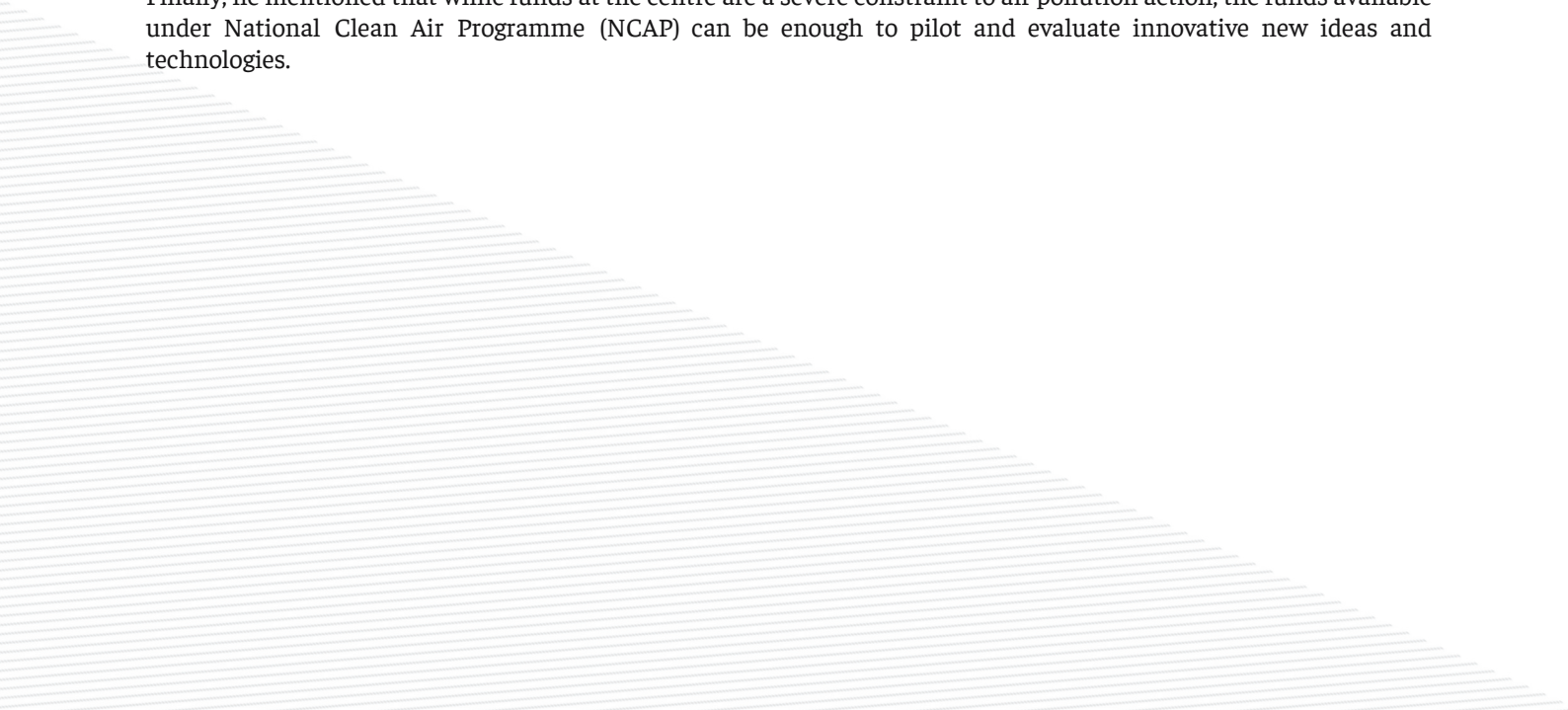
**1) How do we communicate about air pollution and get people involved?**

Here, he highlighted the challenge of using technical terms devoid of the original motivation of solving the air pollution crisis, our health.

**2) How can politicians start talking about pollution accessible to people and, at the same time, closer to science?**

Reiterating that we care about pollution not because of the artificial cut-offs that regulators have set being met but rather because of the health consequences. He said that the pandemic had done a good job of teaching us to link actions to motivations that make sense to the masses, and we should borrow from our learnings from the pandemic in our fight against air pollution.

Finally, he mentioned that while funds at the centre are a severe constraint to air pollution action, the funds available under National Clean Air Programme (NCAP) can be enough to pilot and evaluate innovative new ideas and technologies.



# Takeaways

## Dr. Amar Patnaik

- There is an urgent need to incorporate informal institutions and non-state actors in raising awareness at the grassroots level.
- There is a need for community-based localization of the air pollution problem.
- There is a need to establish causal relationships by running impact evaluations and then communicating that to the people in an accessible manner.
- Policy actions should not rely solely on disincentives but on realigning incentives to create awareness at the cultural and cognitive levels.
- Keeping in mind that livelihoods are at stake, there is a need to make the transition relatively smoother by conveying to people that *“if you prevent air pollution, it will add to your economic growth”* (in terms of reduced out-of-pocket expenditure on health)

## Gaurav Gogoi

- Parliamentarians have to act as an outreach mechanism to other sectors; for example, the private sector has a considerable role in emission standards.
- We need to make sure that the transition to a greener, clean India is not painful and that livelihood are taken care of and transitioned gently.
- If we go after coal plants, MPs should be concerned about the livelihoods of the workers, too; they need to stand up for the workers’ and farmers’ rights.
- As MP’s, we need to bring innovation in day to day work, be guided on how to engage with local municipal corporations and when we conduct reviews, we need to know where to look.
- There is a need for a robust top-down approach (in addition to a bottom-up approach) to emissions from industries, construction, vehicles, power, and coal.

## Priyanka Chaturvedi

- The environment needs to become a political issue; otherwise, people do not take it seriously.
- Talk more and more about air pollution, fill people with fear about its impact, and then provide hope using the solutions we are trying to develop.
- Communicate to people that the most significant impact will be on themselves when their health is affected, or they are forced to migrate.

## Ram Mohan Naidu

- To raise awareness about the air pollution crisis, we need to communicate in shared and familiar contexts.
- Awareness is needed in the common societal sense, which acknowledges that although air pollution may not seem a problem currently, it will be a problem down the road.
- There is a need to bring a holistic approach and bridge the gap of incoordination between national, state, and local levels.

## Vandana Chavan

- Policies that we come up with will be away from the norms, so we need to raise the level of acceptability amongst people by raising awareness.
- There is a need to connect the air pollution crisis with the health crisis.
- Need massive capacity building at all levels: MLAs, MLCs, municipal corporations, and gram panchayats.
- Include a chapter on climate change in the Environment Status Report and actively talk about this with the public in a manner that is accessible to them.
- Used to have an environment curriculum in schools and colleges; we need to bring that back. Parliamentarians can play a crucial role in decisions like this.

## Prof. Michael Greenstone

- We need to treat air pollution not as a technical problem but rather as severely affecting public health.
- AQLI tool was created to help provide a concrete measure of benefits to countries worldwide, including India, in instituting policies that would reduce air pollution.
- India can achieve both high economic growth and, at the same time, improve environmental quality. This win-win scenario can be achieved by creating a national-level cap and trade pollution market for large power plants in India.
- The pollution markets will help the plants get out of the trap of being mandated to use expensive technology and, in the process, liberate them to find inexpensive ways to reduce air pollution.
- Gujarat's Emission Trading Scheme has led to a 24 percent reduction in pollution.

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# Participants



## Dr. Amar Patnaik

A former career bureaucrat, Dr. Amar Patnaik is a Member of Parliament in the Rajya Sabha from Odisha. With a PhD in institutional economics, he often writes on issues relating to economics, finance, technology, and the environment. Dr. Patnaik has also authored a book, “Institutional Change and Power Asymmetry in the Context of Rural India”.



## Gaurav Gogoi

Gaurav Gogoi is a Member of Parliament in the 17th Lok Sabha from Kaliabor (Lok Sabha constituency), Assam. Mr. Gogoi has been a vocal advocate for clean air in India. In 2019, he also submitted a private member’s bill proposing amendments to the Air (Prevention and Control of Pollution) Act, 1981, to make it relevant for today’s air pollution context.



## Priyanka Chaturvedi

Priyanka Chaturvedi is a Member of Parliament in the Rajya Sabha from Maharashtra. In the 12 years of her journey as a politician, she has played an essential part in shaping the media campaign for several state elections. Ms. Chaturvedi recently submitted a private member’s bill on the topic of a Climate Change Council in the winter parliamentary session.



## Ram Mohan Naidu

Ram Mohan Naidu Kinjarapu is a Member of Parliament in the 17th Lok Sabha from Srikakulam (Lok Sabha constituency), Andhra Pradesh. He is also the youngest parliamentarian to be honored with the Sansad Ratna Award. During his two terms as a Member of Parliament, Mr. Naidu has been vocal about various issues, including farmer rights, gender rights, and inequality resulting from climate change.

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## Vandana Chavan



Vandana Chavan is a Member of Parliament in the Rajya Sabha from Maharashtra. She has also served as the city's Mayor from 1997-98. While serving as the Mayor of Pune, Ms Chavan spearheaded several women empowerment and sustainable development initiatives. One of her initiatives, ALERT, is a network to create awareness on climate change among citizens and elected representatives.

## Prof. Michael Greenstone



Prof. Michael Greenstone is the Milton Friedman Distinguished Service Professor in Economics and the Director of EPIC. He previously co-led the development of the United States Government's social cost of carbon as the Chief Economist in President Obama's Council of Economic Advisors. Prof. Greenstone's research, which has influenced policy globally, is primarily focused on uncovering the benefits and costs of environmental quality and society's energy choices.

## Moderator

### Chetan Bhattacharji



Chetan Bhattacharji is currently the Senior Managing Editor at NDTV 24x7, where he drives content and programming on air pollution and climate change, among other things. Mr. Bhattacharji has been with NDTV since January 1995. He has worked on several regular and special shows like the elections, particularly the NDTV 24x7's flagship, award-winning news bulletin India Decides@9. Mr Bhattacharji also sits on the Governing Board at Care For Air.

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# Speakers



## Veena Reddy

Veena Reddy is the Mission Director for USAID in India. She leads USAID's operations in India and Bhutan in her current role. Born in Andhra Pradesh, she is the first Indian-American to lead USAID in India and Bhutan. Ms Reddy has also served at USAID missions in Haiti, Pakistan and regional roles in Central Asia and Central America.



## Dr. Anant Sudarshan

Dr. Anant Sudarshan is the South Asia Director of EPIC. Before working at EPIC, Dr. Sudarshan was the Giorgio Ruffolo Post-doctoral Fellow in the Sustainability Science Program at Harvard University's Kennedy School of Government. Dr. Sudarshan works at the intersection of environmental economics and engineering, with ongoing research on various areas, including environmental regulation, air pollution, climate change, energy efficiency, electricity, and renewable energy.



## Dr. Leni Chaudhuri

Dr. Leni Chaudhuri is the Executive Director at the University of Chicago Center in India. She provides strategic, technical, and administrative oversight to the pan-India engagements of the University of Chicago. Dr. Chaudhuri has extensive research and policy engagement experience on various developmental issues, including energy and environment, health, education and governance.



## Sidhartha Vermani

Mr. Sidhartha Vermani is the Executive Director of EPIC India. In his previous stint, he was the founding member of Smart Power India, a Rockefeller Foundation subsidiary, where he instituted private-sector engagements and investments in the Indian solar microgrid market. His ongoing research in energy access studies the interplay between consumer behavior and public policy in the diffusion of energy technologies.



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