

SUSTAINABLE ●
▲ FUTURES
▲ COLLABORATIVE

From Foundations to Frontiers

Annual Report 2024-25

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FOREWORD

It gives us immense pleasure to be able to present our second Annual Report, for 2024-25. It has been two years since SFC was established as a not-for-profit, independent research organisation – we say this with a mix of wonder and incredulity! It has certainly been a steep climb, and the journey ahead is yet long, but we take this opportunity to look back with pride at all that we’ve achieved, while maintaining a keen eye on the path we chart ahead.

SFC was founded on the bold premise that meeting the challenges posed by environmental and social sustainability require fundamental shifts in our understanding of these policy issues, and the governance and institutional architectures within which stakeholders act. Our work over the past 12 months has held true to this premise with several new landmark studies advancing our understanding of heat adaptation, air pollution, climate finance, industrial policy, and the energy transition.

Our flagship report titled [‘Is India Ready for a Warming World?’](#) published in March 2025 examined for the first time the state of heat action implementation across India’s most heat-vulnerable cities. Advancing discourse around the pervasive impacts of air pollution, our [study on daily mortality from air pollution across 10 cities](#) published in *The Lancet Planetary Health* opened up new conversations in multiple languages across Bengaluru, Mumbai, Pune, Chennai, and Kolkata.

Landmark publications on [sectoral energy transition preparedness](#), and the need for [socio-economically sensitive net-zero transitions](#) established our thought leadership in these spaces. Our articles, issue briefs, op-eds, and podcast appearances received significant coverage across our expanding social media footprint. 2025 also marked the launch of [our blog](#) – a space to explore new ideas in a less constrained structure or format.

SFC’s public engagements expanded as we co-organised ‘India 2047: Building a Climate-Resilient Future’ with The Salata and Mittal Institutes at Harvard University, and the Ministry of Environment, Forests and Climate Change, and hosted key events on global climate finance negotiations and India’s carbon market. Our colleagues also continued to engage in cross-sectoral capacity building through teaching engagements at universities, and the training of government and civil society on key issues of climate, energy, and environment.

The translation of our work into policy continues through ongoing engagements with the National Disaster Management Authority, NITI Aayog, and CII, among other entities. Notably, we have also entered into collaborations supporting the state governments of Chhattisgarh and Himachal Pradesh, thereby expanding our reach and more firmly contributing to sub-national climate action.

To support this expanded portfolio of work, our team has also grown in size from 23 to 31, including 21 full-time researchers and 5 Visiting Fellows. Each new colleague has brought with them curiosity, dynamism, and a commitment to intellectual rigour and equity. Their professional development is also fundamental to SFC’s continued progress, and to this end we have created a training fund and plan to carry out internal workshops on research and writing.

The past 12 months have also seen SFC reach several institutional landmarks. In September 2024, we moved out of our makeshift coworking arrangement and into our very own office space, fashioning a workplace with an airy, open feel to it through collective decision-making. We have also filled key administrative capacity gaps through strategic hires.

SFC was created through a collective labour of love, and to recognise the importance of our younger colleagues in making SFC what it is today, we also expanded our institutional governance to include nominated researcher representatives in our Fellows’ Group meetings. This provides them an opportunity to be better represented in our decision-making, and supports their growth as they partake in institutional processes.

The evolving nature of climate, energy, and environmental policy continues to present new challenges with each passing year. The spirit of climate multilateralism is under threat, and global climate ambition risks being undermined. Climate impacts are hitting us with increasing momentum, from our mountains to our coasts. The nature of the energy transition is evolving, layering ever-increasing complexity. Air pollution continues to kill millions; an unseen, under-appreciated, constant threat.

We keep a sharp focus on these and other challenges – external and internal, strategic and procedural – and are well positioned to respond to them. In June 2025, we held a strategy retreat to take stock of our progress over the past year, consider shifts to the landscape, and deliberate upon how to pivot our work to both prepare for and respond to these shifts. While we revised our strategy, we also reiterated our commitment to our founding values and approach, our eyes firmly fixed on the horizon.

It takes a village to build an institution, and we are mindful of the ecosystem of support that has enabled our progress – from funders, board, advisory council, and several other well-wishers who have all helped us set up our processes, strategise and sharpen our research, and cement our identity with our key audiences. They have all helped us build something special, and we encourage you to take this opportunity to read about our work, learn about our team, and continue engaging with us as we chart SFC’s future together.

Warmly,
The Fellows Group | Sustainable Futures Collaborative

AT A GLANCE

RESEARCH THAT SHAPES DISCOURSE

RELEASED our flagship report *Is India Ready for a Warming World?* – the first multi-city assessment of how Heat Action Plans are being implemented across India’s most heat-vulnerable cities.

PUBLISHED groundbreaking studies on daily mortality from air pollution (*The Lancet Planetary Health*) and the combined impact of heat and air pollution (*Environment International*).

ADVANCED national and global conversations on energy transition readiness, net-zero pathways, and climate finance.

POLICY ENGAGEMENT

PARTNERED WITH HIMACHAL PRADESH (climate-focused Human Development Report) **AND CHHATTISGARH** (India’s first state-specific climate law).

COLLABORATED WITH NDMA and civil society on a National Framework for Heatwave Mitigation and Management.

PROVIDED INPUTS TO NITI AAYOG on India’s net-zero pathways and climate finance reforms.

EVENTS AND PLATFORMS

CO-ORGANISED INDIA 2047: BUILDING A CLIMATE-RESILIENT FUTURE with Harvard University and MoEFCC, convening experts across science, health, labour, business, and governance.

LAUNCHED THE SFC BLOG and expanded outreach with explainers, podcasts, reels, and translations into Hindi, Marathi, Kannada, Tamil, Bengali, and Malayalam.

OUR PEOPLE & INSTITUTION

GREW TO 31 STAFF, including 21 full-time researchers and 5 Visiting Fellows.

MOVED INTO OUR FIRST PERMANENT OFFICE space in New Delhi.

TEAM

(as of September 2025)

ADMINISTRATION



Tilak Angra
Senior Manager



Chayanika Sarmah
Manager



Bushra Mustufa
Administrative Assistant (Former)

ADAPTATION AND RESILIENCE



Aditya Valiathan Pillai
Visiting Fellow



Anna Agarwal
Visiting Fellow



Tamanna Dalal
Senior Research Associate



Escandita Tewari
Research Associate

CLIMATE POLICY



Aman Srivastava
Fellow and Coordinator



Navroz K Dubash
Visiting Senior Fellow



Isha Sharma
Research Lead



Kashmeera Patel
Research Associate



Simran Agarwal
Senior Research Associate (Former)



Ismail Siddiqui
Research Associate (Former)

ENERGY TRANSITIONS



Ashwini K Swain
Fellow



Sarada Prasanna Das
Associate Fellow



Shubhranshu Suman
Research Associate



Suravee Nayak
Associate Fellow (Former)

ENVIRONMENTAL GOVERNANCE AND POLICY



Bhargav Krishna
Convenor, SFC, and Coordinator



Shibani Ghosh
Visiting Fellow



Poonam Mangaraj
Research Lead



Nazneen
Senior Research Associate



Annanya Mahajan
Research Lead



Arunesh Karkun
Research Lead

COMMUNICATIONS



Sonali Verma
Lead



Karthika J
Associate



Sony R K
Associate Fellow



Ishan Kukreti
Programme Lead



Shreya Shekhar
Research Associate (Former)



Easwaran J Narassimhan
Visiting Fellow



Neha Miriam Kurian
Associate Fellow



Nikita Shukla
Research Associate



Soutrik Goswami
Research Associate



Rashi Agarwal
Senior Research Associate



Apoorva U Kumar
Research Associate



Catherine Ayallore
Senior Research Associate (Former)

BOARD MEMBERS

(as of September 2025)

Gopal Sankaranarayanan

Senior Advocate |
Supreme Court of India

Moutushi Sengupta

Senior Development Professional and
Co-Founder of Oneworld Colab Pte. Ltd

Aman Srivastava

Ashwini K Swain

Bhargav Krishna

ADVISORY COUNCIL

(as of September 2025)

Navroz K Dubash

Chair

Aparna Uppaluri

Founder and Principal Advisor |
Antara Advisory

Arati Kumar-Rao

Writer, photographer and
National Geographic Explorer

Harald Winkler

Professor | University of Cape Town

Mukund Rajan

Chairperson | ECube Investment Advisors

Nyrika Holkar

Executive Director |
Godrej and Boyce

Shantanu Dixit

Member | Prayas (Energy Group)

Sharachchandra Lele

Distinguished Fellow |
ATREE

Shloka Nath

CEO |
India Climate Collaborative

Soumya Swaminathan

Chairperson | MS Swaminathan
Research Foundation



OUR NEW OFFICE SPACE IN QUTAB INSTITUTIONAL AREA

In September 2024, we moved into our permanent home at A-16, Aruna Asaf Ali Marg, Qutab Institutional Area in New Delhi. Setting up the space was a true collaborative effort: our ‘office-finding committee’ explored dozens of options before settling on a place that could nurture both quiet reflection and spirited debate. The colour scheme and layout too were decided collectively – a glimpse of the space before and after is above.



REFORMING OUR INTERNAL GOVERNANCE STRUCTURE

In recognition of the important role our younger colleagues play in building SFC, we expanded our governance structure to include nominated researcher representatives (Arunesh Karkun and Tamanna Dalal) in Fellows’ Group meetings. The aim is for researchers to have a stronger voice in decision-making and for SFC to support their professional growth by involving them directly in institutional processes.



CREATING LEARNING AND DEVELOPMENT OPPORTUNITIES FOR THE TEAM

We set up a fund to support training and professional development of the team through online and offline courses, and organised internal workshops on writing and translating research into accessible outputs. We plan to continue building such initiatives with the team.

ADAPTATION & RESILIENCE

Building systems that allow India to adapt to multiple and increasingly severe climate impacts

India's path to a sustainable and equitable future depends on how well it adapts to intensifying climate risks. Over the past year, our work on Adaptation and Resilience has expanded from laying the foundations for heat preparedness to examining how policies are implemented in practice, and how multiple, overlapping risks – such as heat and air pollution – can be addressed together.

Strengthening India's heat resilience

Heatwaves are already harming public health and economic productivity in India, and are expected to increase in frequency and intensity. While progress has been made in defining short-term responses to heatwaves, building long-term resilience is fundamental to withstand future increases in heat.

Is India Ready for a Warming World?

How Heat Resilience Measures Are Being Implemented for 11% of India's Urban Population in Some of Its Most At-Risk Cities



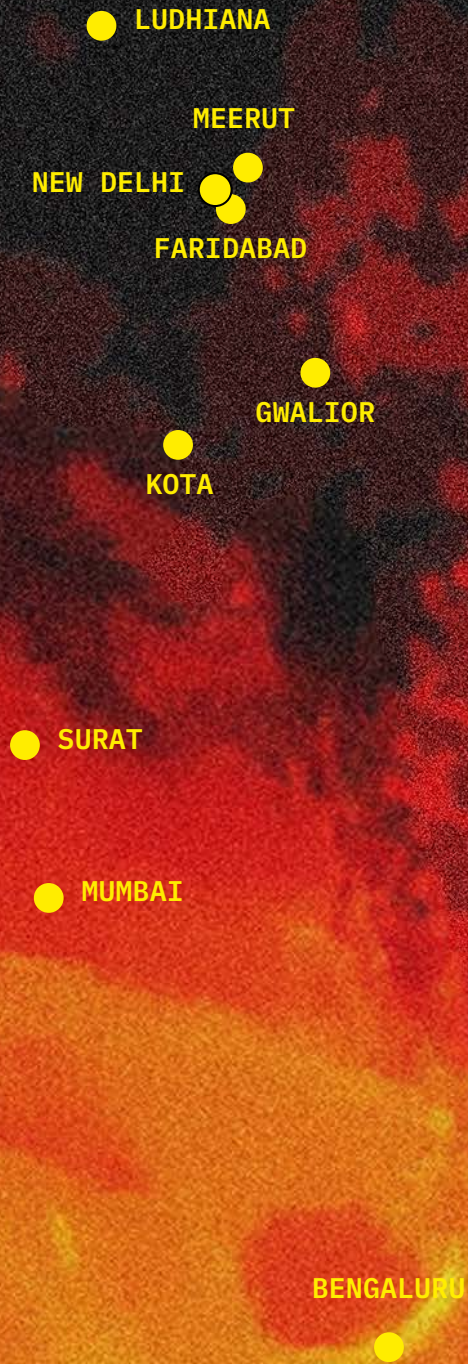
SCAN TO READ



This year, we undertook the first systematic, multi-city analysis of how Heat Action Plans (HAPs), India's primary policy response to heatwaves, are being implemented in practice across the country. Using climate model projections, we identified nine cities most at risk for future increases in heat index – together home to 11 per cent of India's urban population – and carried out fieldwork that included interviews with 88 officials across city, district, and state governments.

Our study found that cities overwhelmingly prioritise short-term, response-oriented measures to heatwaves over longer-term strategies to reduce exposure. Where long-term measures exist, they are inconsistently designed and weakly targeted. This suggests that, without course correction, India faces a risk of rising mortality from extreme heat in the coming years.

The report, co-authored with scholars from King's College London, Harvard University, University of California, Berkeley, and Princeton University, represents the most comprehensive assessment to date of India's heat action plan implementation. Its insights are informing national and subnational frameworks for heat resilience.



The study has also broadened public discourse on extreme heat – reaching audiences in tier-2 and tier-3 cities, and bringing attention to not just the development of Heat Action Plans but also their implementation and shortcomings. The findings received wide coverage across national, regional, and global media, including in Marathi, Hindi, Kannada, and Bengali, and featured in outlets such as *The Hindu*, *The Times of India (Mumbai)*, *Deccan Herald*, *Economic Times*, *Amar Ujala*, *Dainik Jagran*, *Mid-Day*, *NPR*, and the *BBC*.

We also continued our engagement with the National Disaster Management Authority (NDMA) and civil society partners to shape a National Framework for Heatwave Mitigation and Management. This framework enables states, districts, and cities to draw on 15th Finance Commission funds for heatwave preparedness. In addition, we co-developed guidelines for the disbursement of State and National Disaster Mitigation Funds for heat action, helping unlock local adaptation efforts that can strengthen resilience where it is most urgently needed.

Alongside this policy work, we have been building capacity within the government to strengthen the implementation of HAPs. Tamanna Dalal participated in state-level workshops organised by the NDMA in Lucknow and Jaipur, where she trained over 200 government officials across departments on practical approaches to heat preparedness, including how to leverage existing finance for resilience measures. Tamanna and Bhargav Krishna conducted training sessions for state nodal officers of the National Programme for Climate Change and Human Health organised by the National Institute for Disaster Management.



Tamanna Dalal at the NDMA workshop for government officials in Lucknow.

Expanding discourse on extreme heat

In March, we co-organised ‘India 2047: Building a Climate-Resilient Future’ with the Lakshmi Mittal and Family South Asia Institute and The Salata Institute at Harvard University, alongside the Ministry of Environment, Forest and Climate Change in March this year in New Delhi. The event convened leading voices from climate science, public health, medicine, labour, business, agriculture, and urban planning for a series of interdisciplinary dialogues on advancing resilience pathways for India’s future.

Aditya Valiathan Pillai presented findings from our report at the event, and also moderated discussions on adaptation frameworks, emphasising the importance of centering health and livelihoods in their design. Bhargav Krishna was a moderator and panelist in sessions discussing challenges of measuring heat-related mortality, particularly the lack of demographic and health data in accessible formats.



Aditya Valiathan Pillai presented findings from our report ‘Is India Ready for a Warming World? How Heat Resilience Measures Are Being Implemented for 11% of India’s Urban Population in Some of Its Most At-Risk Cities’ at the ‘India 2047: Building a Climate-Resilient Future’ event in New Delhi.



Bhargav Krishna was a moderator and panelist in sessions discussing challenges of measuring heat-related mortality.

Advancing evidence on heat-air pollution impacts in India

A central strand of our work focuses on building the scientific evidence base for how extreme heat interacts with other environmental threats, particularly air pollution. Despite the frequency of these overlapping exposures in India, their combined effects on mortality have until recently remained underexplored.

This year, we published the [first all-cause mortality estimates](#) attributable to extreme heat and its synergistic effect with air pollution across 10 Indian cities (Ahmedabad, Bangalore, Chennai, Delhi, Hyderabad, Kolkata, Mumbai, Pune, Shimla, and Varanasi). The study, co-authored by Bhargav Krishna in *Environment International*, found that heat-related deaths were 1.5x higher at high PM2.5 pollution levels. These findings confirm long-standing hypotheses about the combined impact of these exposures and strengthen the case for tackling these risks together through integrated policymaking.

In addition, Annanya Mahajan and Tamanna Dalal [co-authored an article](#) calling for unified action to address the combined threats of air pollution and heat, while Annanya also co-authored a book chapter in *Springer* titled ‘[Synergistic Impact of Air Pollution and Heat on Health and Economy in India](#)’. Together, this body of work underscores the need to treat heat and air pollution as intersecting public health crises. We are also collaborating with colleagues at the Harvard T.H. Chan School of Public Health and Dana Farber Cancer Institute to deepen understanding of how policymakers can set localised temperature thresholds for heatwaves, and to examine disparities in heat-related mortality within cities.

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Effective measures should provide the public with information on the level of exposure to heat and air pollution and their associated health impacts. For example, displaying temperature alongside AQI on LED screens could raise public awareness.

ANNANYA MAHAJAN AND TAMANNA DALAL IN MONGABAY

SCAN TO READ



CLIMATE POLICY

Embedding a development-centric climate-ready approach to policymaking

India's low-carbon transition is not only about setting ambitious targets – it requires clear pathways, robust economic modelling, financial systems, clear policy packages, and strong institutions that can support the shift. At SFC, we have been working to interpret and compare economy-wide models, examine fiscal and financial reforms, and identify how national and state institutions can better steer this transition. Our focus is on ensuring that low-carbon development is grounded in India's socio-economic realities while also mobilising the scale of finance and institutional capacity needed to make these pathways viable.

SCAN TO READ



Mapping and financing low-carbon development pathways for India

We have been working on multiple dimensions of India's low-carbon transition, with a central focus on how the country can pursue development pathways that generate economic and social benefits. Easwaran J Narassimhan [co-authored a study in *Climate Policy*](#) with Tufts University and Energy Innovation LLC, which analysed the opportunities and challenges of a net-zero transition, highlighting policy measures that can deliver gains in employment and GDP. In *Environmental Research Letters*, Aditya Valiathan Pillai [co-authored an article](#) examining India's net-zero pathways across three interlinked dimensions: national and sub-national perspectives, sectoral and technological transitions, and enabling conditions.

As part of [The Climate Futures Project](#), we [unpacked McKinsey's 2022 emissions-economy modelling study](#), 'Decarbonising India: Charting a Pathway for Sustainable Growth', which outlines two low-carbon pathways for India's economy and identifies key mitigation strategies across six sectors. Using our standardised framework, we assessed and interpreted the structures and implications of this modelling study, highlighting key merits as well as areas for improvement.

We have also worked closely with NITI Aayog to guide policy processes. Easwaran and Aman Srivastava are engaged in two of several working groups constituted by NITI Aayog to explore pathways to achieve India's 2070 net-zero goal. They are providing inputs on the financial and macroeconomic considerations of a low-carbon transition. Aman, Easwaran, and Navroz K Dubash also submitted a comparative analysis of low-carbon modelling studies to the net-zero working group to help inform technology and policy choices for aligning India's development trajectory with its net-zero goal. Ahead of India's 2035 Nationally Determined Contribution (NDC) update, Aman and Easwaran submitted an internal note to NITI Aayog, outlining the economic and financial benefits of enhanced climate ambition.

Our work on India's low-carbon transition has also been used to inform policy audiences internationally about India's unique challenges and needs. Aman attended the 'What Works Climate Solutions' conference in Berlin in June 2024, which brought together evidence-based syntheses for climate action in various countries. He presented on 'Addressing path dependence in emissions-economy models for emerging economies' and how developing countries can better explore possible low-carbon development pathways and align future policies with their needs. Easwaran and Aman also participated in an authors' workshop at Brown University for a forthcoming book chapter on India's green growth model, exploring links between domestic manufacturing, employment, productivity, and trade competitiveness.

Given the central role of finance in enabling the transition, we have also focused on mapping and analysing the governance of climate and energy finance at both national and international levels. Ahead of COP29 in Baku, we [organised a webinar on climate finance and the New Collective Quantified Goal \(NCQG\)](#) – the successor to the USD 100 billion commitment – featuring Joe Thwaites (National Resources Defense Council), Jonathan Beynon (Center for Global Development), and Avantika Goswami (Centre for Science and Environment). The discussion and its insights fed into an [issue brief](#) that laid out key questions to watch in the NCQG negotiations. At the national level, Aman [published a report with DIW Berlin](#) mapping the governance landscape of energy finance in India, based on a literature review and 13 expert interviews across renewable energy, rooftop solar, and energy efficiency. The report identifies institutional bottlenecks and opportunities to strengthen finance flows for India's energy transition.

SCAN TO READ



SFC is also working to translate this work into state-level roadmaps and policies. In partnership with the United Nations Development Programme, we are the lead technical anchor institute for the preparation of a climate-focused human development report for Himachal Pradesh. The report will outline mitigation and resilience strategies across key sectors – including health, agriculture, tourism, construction, water, and forestry – with a strong emphasis on finance and governance.

SFC conducted an orientation workshop in February for government officials from various departments in Himachal Pradesh, as part of the process of developing a climate-focused Human Development Report for the state.



Building the legal and institutional architecture for a low-carbon future

Implementing a low-carbon development pathway requires not only ambitious policies, but also robust legal and institutional frameworks at both national and subnational levels. Strong institutions are essential to mainstream climate considerations into governance, ensure accountability, and embed long-term, cross-sectoral planning that can withstand changes in political or economic priorities. Law can provide the architecture within which national ambitions can be linked to state-level implementation, ensuring that climate and development objectives move forward together.

SFC has entered into an agreement with the Chhattisgarh State Centre for Climate Change to integrate climate, energy, and environmental priorities into the state's governance apparatus. As part of this collaboration, SFC is supporting the Government of Chhattisgarh in developing India's first state-specific climate legislation. This law aims to mainstream climate action across sectors, embed principles of low-carbon and climate-resilient development, and create dedicated knowledge institutions to guide the state's transition. We are also working with the Hidayatullah National Law University in Raipur to provide the technical and institutional support needed for this effort.

Our work also has helped advance discourse on climate law and institutions. Navroz [published an article in a special issue of the *Economic and Political Weekly*](#) on the evolution of Indian climate politics and the need to domesticate climate change through stronger national institutions. [In *The India Forum*](#), Navroz K Dubash and Shibani Ghosh analysed the Supreme Court's recent recognition of a constitutional "right to be free from the adverse effects of climate change," noting that legislative and institutional reforms are urgently needed to give this right practical effect. Navroz also [co-authored a note](#) on strengthening international cooperation towards the 1.5°C goal, situating India's institutional reforms within the broader context of global climate ambition.

“

Indian climate legislation must provide guidance on how to balance across multiple environment, climate and development objectives, enable bottom-up anticipatory mitigation and adaptation action rather than seeking to regulate top-down, emphasise adaptation as much as mitigation, create deep institutional capacity, and work with the grain of Indian federalism.

NAVROZ K DUBASH AND
SHIBANI GHOSH
The India Forum



SFC has entered into an agreement with the Chhattisgarh State Centre for Climate Change to integrate climate, energy, and environmental priorities into the state's governance apparatus. As part of this collaboration, SFC is supporting the Government of Chhattisgarh in developing India's first state-specific climate legislation.

ENERGY TRANSITIONS

Rethinking the configuration of technology, politics, and institutions to build a 21st century energy system

India has positioned itself as a frontrunner in the global energy transition, setting ambitious targets and expanding renewable capacity. Yet significant challenges remain: centre-state gaps in ambition and implementation, limited attention to institutional capacity, and prioritisation of supply augmentation rather than structural changes. Addressing these will be essential to ensuring a durable and equitable transition.

SFC's work on energy transitions over the past year has examined the governance, institutional, and political dimensions that shape outcomes. We assess state-level readiness, highlight diverse priorities, and bring questions of equity and justice into the national discourse.

Workers install solar panels on the roof of a residential apartment in Kochi. Credit: AP



Informing state action for India's energy transition

States are pivotal to India's energy transition, given the multi-tiered governance of energy production and use. A successful transition will depend on bridging the gap between national ambitions and state-level implementation. Through the [Energy Transition Preparedness Initiative \(ETPI\)](#) – a collaboration with the World Resources Institute (WRI) India and Prayas (Energy Group) – we have been assessing states' preparedness for transition and drawing attention to their diverse priorities, capacities, and opportunities within the national policy discourse.

SCAN TO READ



THIS YEAR, WE ADVANCED OUR ETPI WORK THROUGH TWO STUDIES ACROSS 10 STATES, ASSESSING PROGRESS FOR FY 2020-21:

BIHAR • DELHI • GUJARAT • KARNATAKA • KERALA • MADHYA PRADESH
MAHARASHTRA • RAJASTHAN • TAMIL NADU • UTTAR PRADESH

etpi



1.

The first study focused on the [transport sector](#), the fastest-growing consumer of energy, where state-level choices are especially critical since road transport falls under the State List in India's Constitution.

etpi



2.

The second explored [cross-cutting themes](#) shaping state-level energy transitions.

OUR ANALYSIS & FINDINGS

While electric vehicle (EV) adoption is gaining momentum – with seven of the ten states having dedicated EV policies – other areas remain neglected. Bus systems and non-motorised transport (walking and cycling) lack consistent financial support, and comprehensive mobility plans are still missing in many states.

We also brought these findings back to the states, engaging policymakers to inform ongoing planning. [We engaged with multiple government departments in Kerala, Odisha, and Jharkhand on this project as well as broader energy transition issues. In February, we presented ETPI's framework and findings at the International Energy Festival of Kerala.](#)

We have since completed data collection and analysis for the second round of ETPI studies (FY 2023–24), covering the three focus sectors – electricity, buildings, and transport – in the same 10 states. The reports are being finalised and will be released in late 2025.



Ashwini K Swain presented ETPI findings at the International Energy Festival of Kerala in February 2025.

REGULATORY
CONSULTANCIESINDUSTRIES AND
ASSOCIATIONS

Reframing energy transitions discourse

India is establishing a national carbon market under the Energy Conservation (Amendment) Act, 2022 to reduce the emissions intensity of its economy and gradually decouple future growth from carbon emissions. The effectiveness of this market will hinge on several interlinked factors – clear rules, credible pricing, strong institutions, and transparent processes.

Recognising the complexity of these issues, Prayas (Energy Group) and SFC convened a closed-door roundtable under the Chatham House rules on 20 March 2025 in New Delhi, which brought together participants from across policy think tanks, regulatory consultancies, industries, industry associations, and civil society organisations. It served as a platform to exchange diverse perspectives on the institutional, regulatory, and market-related elements of the CCTS.

[Our issue brief](#) reflects the key insights that emerged from the discussion.

POLICY
THINK TANKSCIVIL SOCIETY
ORGANISATIONS

SCAN TO READ



We also took conversations around aspects of the energy transition to diverse fora, with the aim that the transitions questions are also seen as questions of governance, justice, and development, not merely technology or economics.

Sarada Prasanna Das highlighted pathways for greening development at an event hosted by the Madras Institute of Development Studies and the United Nations Development Programme in December, and argued for youth inclusion in coal region transitions at the Just Transition Research Centre, IIT Kanpur.

Ashwini and Navroz K Dubash spoke at IIT Delhi in January on catalysing transition pathways for development and sustainability. Ashwini extended these ideas further through teaching and public lectures: a course on energy transition and natural resource governance at the Tata Institute of Social Sciences, Hyderabad, a talk on decentralised governance and energy transitions at FSR Global in July 2024, and reflections on just transition in India at The Energy Resources Institute in July 2024.



“

We need a fair and inclusive process to involve youth in the just transition, integrating equity, participation, and empowerment principles. Identifying diversity and including it in policy and governance roles is crucial.

SARADA PRASANNA DAS
Associate Fellow

ENVIRONMENTAL GOVERNANCE AND POLICY

Limiting the threat of environmental pollution through health-focused, systemic transformations

Air pollution remains one of India's most severe environmental and public health challenges. While initiatives like the National Clean Air Programme have expanded monitoring and awareness, fragmented governance, weak institutional capacity, and a lack of health-informed planning continues to limit progress.

At SFC, we are working to re-envision air pollution policy through the lens of health, while also strengthening the regulatory and institutional frameworks needed to manage it. Our work this past year has combined new scientific evidence on mortality impacts with efforts to build future-ready governance systems to deal with air pollution holistically.

Generating policy-relevant evidence on the health impacts of air pollution

We view air pollution not only as an environmental challenge, but as a public health crisis. Our work underscores that reducing pollution is fundamentally about saving lives, and that health must be placed at the centre of environmental policymaking.

SCAN TO READ



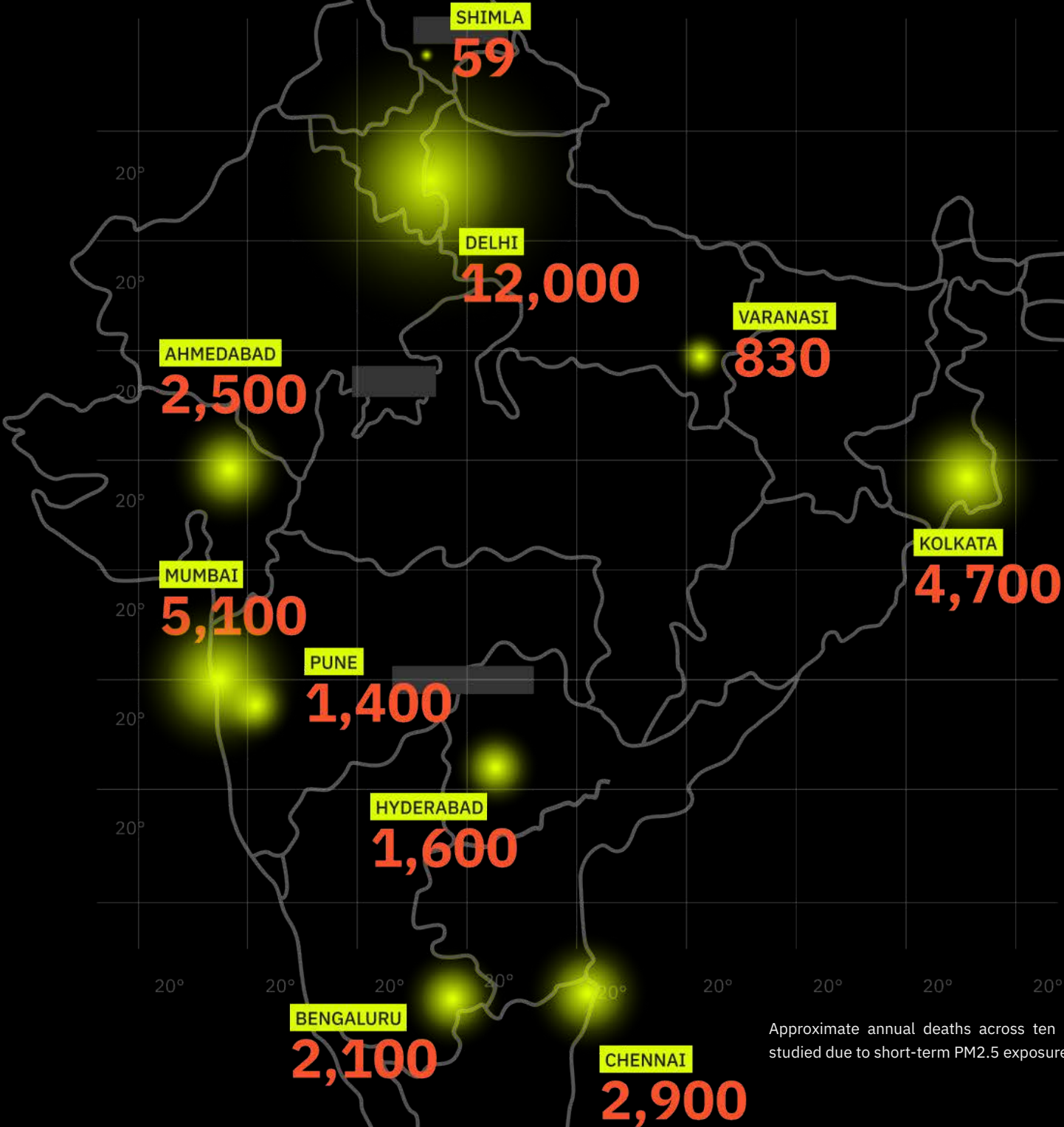
In July 2024, we published a [first-of-its-kind multi-city study in *The Lancet Planetary Health*](#) that analysed short-term air pollution exposure and daily mortality across 10 major Indian cities (Ahmedabad, Bengaluru, Chennai, Delhi, Hyderabad, Kolkata, Mumbai, Pune, Shimla and Varanasi), covering a range of geographic zones and pollution conditions.

We found that around 33,000 deaths every year in these cities are attributable to short-term changes in air pollution. Local sources such as transport, diesel generators, and waste burning were found to be far more harmful to health than previously recognised. Significant mortality impacts were observed even in cities not typically associated with high levels of pollution, including Mumbai, Bengaluru, Kolkata, and Chennai.

These results highlight the urgency of stricter national air quality standards, stronger regulatory action, and the need to align environmental governance with public health priorities.

We also focused on making this evidence accessible. The study received extensive national and international media coverage, and to broaden its reach, we made our work available in Hindi, Marathi, Bengali, Kannada, and Tamil, starting new conversations on air pollution well beyond policy circles in Delhi.

With this work, we aim to shift India's air pollution debate from monitoring ambient levels alone, to recognising and addressing the real human costs of dirty air. Shibani Ghosh and Bhargav also expanded on the impact of air quality and climate change on health at an event by the Centre for Science and Environment in February.



Approximate annual deaths across ten cities studied due to short-term PM2.5 exposure

Strengthening air quality regulation in India

Our work continues to focus on strengthening air quality governance, examining both institutional capacity and the regulatory frameworks that shape India's response to air pollution. In an [op-ed for the Hindustan Times](#), Shibani Ghosh and Bhargav Krishna laid out a framework for airshed-level air quality management, highlighting how the interconnected nature of the Indo-Gangetic Plain, one of India's most polluted regions, conflicts with the current approach of regulation bound by administrative jurisdictions. They argue that moving beyond this fragmentation will require new institutions and knowledge architectures – reforms that are both urgent and achievable under India's existing environmental laws.

Managing air quality: Answer is in airsheds

The NCR and large swathes of North India could benefit from the decision to operationalise air quality management of the Indo Gangetic Plain airshed

Plummeting air quality in most parts of North India and particularly the National Capital Region (NCR) has put pollution management in the spotlight yet again. In September, forests and ministry of environment, forests and climate change (MoEF&CC) ordered the constitution of a coordination committee to manage air quality in the Indo Gangetic Plain (IGP) airshed. The underlying premise for establishing this committee is significant. Its mandate recognises the complex, interconnected nature of the region — covering eight states and Union territories — through geography and meteorology. The IGP airshed has high baseline levels of air pollution, and the committee is expected to prepare and implement a regional air quality management plan. This approach is a welcome step towards reforming India's air quality governance that is largely city focused, regulated (mostly) by state governments and state pollution control boards (SPCBs), and pays little attention to peri-urban, regional, and transboundary sources of pollution. India's air quality management strategies have met with limited success over the years — across sources,

geographies, and sectors. One reason for this failure is the regulatory framework's focus on the sources of pollution and where they are situated, thereby giving the relevant state or city governments jurisdiction to regulate those sources. The framework ignores how people are exposed to the pollution — a factor agnostic to where the source is located. Further, source-apportionment studies across India indicate a significant contribution from transboundary sources.

Acknowledging the exposure side of the problem makes an airshed-level approach to air quality management a sound policy choice. But implementing such an approach is not easy, and several pieces of the puzzle must fall in place before it can be successfully done.

Expanding air quality management beyond strict administrative boundaries has started taking root in India in the past few years. The wide territorial jurisdiction of the Commission in NCR and Adjoining Management in NCR and Adjoining Areas (CAQM), set up in 2021, allows it to take a regional approach to air quality management. Recently, a handful of state governments have launched pilot programmes to operationalise regional air quality management but within their state boundaries. Bringing these efforts into a coherent framework will form part of the MoEF&CC committee's mandate, and we outline four additional issues

that need consideration when it kicks into gear.

First, development of robust knowledge and information systems. The current regulatory system sorely lacks scientific and technical capacity. Airshed management inventory plans for the entire region, monitoring form for the entire region, scales from micro to regional, accessible and reliable data sharing system, and model-based decision support tools (such as those for forecasts). Such tools will aid policymakers in implementing appropriate source-specific actions in the right geographic areas and initiating preventive measures in time. The data generated from these tools can help determine baseline levels of pollution in different parts of the region and establish differentiated benchmarks, allowing us to measure progress against predetermined targets.

Shibani Ghosh

Bhargav Krishna

Second, appropriate institutional structure. Whether set up by an executive order, as a statutory authority empowered under an existing statute (eg. the Environment (Protection) Act, 1986) or by a new Act of Parliament, the institution in-charge of an airshed must have a clear mandate to coordinate efforts while transcending administrative boundaries. It must be empowered to exercise its powers beyond the limited regulatory reach of the SPCBs, coordinate fragmented mitigation efforts, and streamline inconsistent regulatory practices between states. Further, the



Recent studies show even air pollution well below India's current levels can cause significant harm

composition must reflect the multifaceted nature of air pollution exposure and the significant political and economic ramifications of the pollution crisis. There must also be seats at the table for experts in air pollution, health sciences, and community outreach, as well as representatives of urban local bodies.

Third, clearly articulated powers and functions. While its primary function is coordination, the airshed authority would also be involved in rule-making, knowledge generation, setting regional goals, conflict resolution, and ensuring accountability for agreed-upon actions. The institution would be navigating a crowded regulatory landscape with rules and standards that have been around — albeit rather ineffectively — for more than four decades. It would need to overcome jurisdictional overlaps and assert its mandate, while at the same time perhaps leaving existing actors.

Fourth, accountability for default. Unless most actors in an airshed follow directions, airshed-level regulation will fail. However, if the authority is designed to be a focal point for coordination, planning and knowledge generation, "hard regulation" through enforcement actions is likely to be a true manifestation of the precautionary principle, a cornerstone of environmental policy.

ing state bureaucrats in decision-making and the strategic use of incentives for compliance may reduce default. Failing that, the institution could approach the National Green Tribunal for compliance.

Going beyond the IGP, the government must identify and delineate other airsheds across the country, which suffer from poor air quality. Recent studies show even air pollution well below India's current levels can cause significant harm. Maintaining a uniform air quality standard for a country of such diverse background and levels of air quality, meteorology, and source profiles does not effectively protect public health. Authorities regulating these airsheds, both in the IGP and elsewhere, will generate new knowledge, set context-specific standards, coordinate regional action, and ensure accountability with state governments and private actors.

India needs to transition to airshed-level air quality management urgently. Economic and public health gains would be enormous, and it would be a true manifestation of the precautionary principle, a cornerstone of environmental policy.

Shibani Ghosh is an environmental lawyer and visiting fellow at the Sustainable Futures Collaborative. Bhargav Krishna is co-chair at the Sustainable Futures Collaborative. The views expressed are personal.



High air pollution and haze envelops the high rises in the suburb of Kandivali East in October 2019.

Credit: iStock/ Balaji Srinivasan

Shibani also contributed to the special issue on environment of *Economic and Political Weekly*, with an article on [‘Pollution Regulation in India: Institutional and Legislative Conundrums’](#) which draws on an in-depth review of India's pollution control boards to examine why these front-line regulators have struggled to curb air and water pollution. She wrote that key regulatory amendments over the last decade have made it harder for institutions to effectively manage pollution across industrial sectors. In addition, she authored a [chapter on air quality regulation](#) in the *Oxford Handbook of Environmental and Natural Resources Law in India*, further shaping scholarly and policy discourse on how India can build pollution regulators that are both capable and future-ready.

We also engaged with the larger public on air quality management issues. [In a blog](#), Arunesh Karkun and Nazneen examined the persistent role of road dust and vehicular emissions in Delhi's poor air quality. At an event by the Asian Development Research Institute in Patna, Arunesh and Annanya Mahajan gave a presentation on cities as crucial centers for air quality action and strengthening our state pollution control boards for better air pollution management.

SCAN TO READ



“

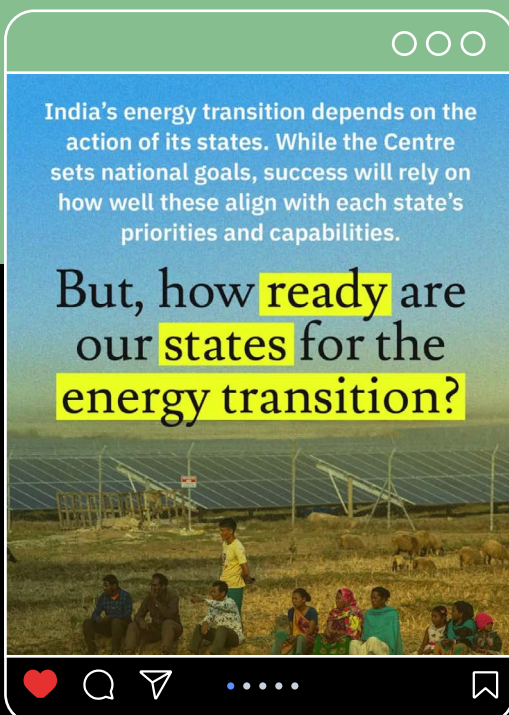
Stricter emission norms for power plants, better public transport in Delhi, greater political participation across classes, and stronger accountability for local authorities — these are key to tackling NCR's air pollution.

ANNANYA MAHAJAN
on BBC

Over the past year, our communications and outreach have focused on making SFC's research more accessible and impactful. Summaries of key publications – on heat action plan implementation and the impacts of short-term air pollution exposure in cities – were translated into regional languages including Hindi, Marathi, Kannada, Tamil, Bengali, and Malayalam. Combined with strategic partnerships for dissemination, this helped our research reach Tier-2 and 3 cities beyond Delhi and secured wide coverage across regional, national, and global media. These efforts have shaped public discourse on the importance of heat action, as well as the urgent need for sustained, year-round measures to address air pollution.

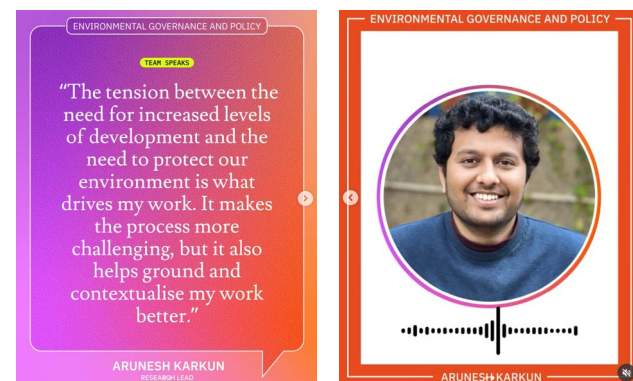


COMMUNICATIONS AND OUTREACH



We also expanded into new platforms and formats, launching Instagram, blogs, and experimenting with short videos and reels to connect with younger and more diverse audiences. We maintained our emphasis on clear, well-designed explainers that accompany research publications, and on accessibility through disability-friendly events and website features.

Our social media presence continued to grow steadily: **LINKEDIN FOLLOWERS CROSSED 10,000** within a year with engagement rates well above benchmarks; **INSTAGRAM VIEWS CROSSED 45,000**; and audiences on BlueSky and X continued to expand.



A core pillar of our strategy has been to strengthen SFC's identity – not only through rigorous work, but also by highlighting the people behind it. By showcasing the experience, diversity, and energy of our young, interdisciplinary team, we have sought to bring their voices and perspectives to the forefront of public conversations.

In June this year, we gathered in Alwar, Rajasthan, for a retreat to reflect on our journey so far, propose new ideas, and receive honest and critical feedback on our work from one another. We dove into some of the most pressing issues shaping the frontiers of climate, energy, and environment landscape in India and globally, exploring how we should engage with them, position ourselves within the ecosystem, and collaborate meaningfully with actors spanning grassroots organisations to governments. It was a space to connect the dots, challenge each other's assumptions, and think more deeply about the work we do and why it matters.

STRATEGY RETREAT AND FUTURE DIRECTIONS

ALWAR
RAJASTHAN



Some future objectives that emerged from our discussions:

- 1 Advance research on the independent and synergistic impacts of air quality and heat within and across cities
- 2 Build future-ready regulatory institutions with stronger expertise, adaptability, and technological integration
- 3 Assess the social and economic implications of energy transitions and the state capacity required
- 4 Prepare electricity regulators for an evolving energy system
- 5 Understand the intersection of heat, informal labour, social protection, cooling, and individual resilience
- 6 Advance green industrial policy as a means to further national goals and address global protectionism
- 7 Track frontier carbon-reduction technologies and international climate processes

PUBLICATIONS

Journal Articles

1.	Synergistic Associations of Ambient Air Pollution and Heat on Daily Mortality in India	ENVIRONMENT INTERNATIONAL, 199, MARCH 29, 2025: 109426 HTTPS://DOI.ORG/10.1016/J.ENVINT.2025.109426
	Bhargav Krishna was a member of the author group	
2.	Pollution Regulation in India: Institutional and Legislative Conundrums	ECONOMIC AND POLITICAL WEEKLY, 60, NO 2, JANUARY 11, 2025 HTTPS://DOI.ORG/10.71279/EPW.V60I2.42728
	Ghosh, Shibani	
3.	Domesticating Climate Change: The Evolution of Indian Climate Politics and Policy	DUBASH, NAVROZ K ECONOMIC AND POLITICAL WEEKLY, 60, NO 2, JANUARY 11, 2025 HTTPS://DOI.ORG/10.71279/EPW.V60I2.42726
	Dubash, Navroz K	
4.	Is net zero net positive? – Opportunities and challenges for pursuing a socio-economically sensitive net-zero transition for India	CLIMATE POLICY JOURNAL, 25, NO 7, 1029-1043, NOVEMBER 26, 2024 HTTPS://DOI.ORG/10.1080/14693062.2024.2432931
	Easwaran J Narassimhan was lead author	
5.	India’s Pathway to Net Zero by 2070: Status, Challenges, and Way Forward	ENVIRONMENTAL RESEARCH LETTERS, 19, NO 11, OCTOBER 22, 2024: 112501 HTTPS://DOI: 10.1088/1748-9326/AD7749
	Aditya Pillai Valiathan was a member of the author group	
6.	Climate Change: Policy, Institutional, and Legal Framework	THE OXFORD HANDBOOK OF ENVIRONMENTAL AND NATURAL RESOURCES LAW IN INDIA EDITED BY PHILIPPE CULLET, LOVLEEN BHULLAR, AND SUJITH KOONAN, 549-568. OXFORD UNIVERSITY PRESS, JULY 18, 2024 HTTPS://DOI.ORG/10.1093/ OXFORDHB/9780198884682.013.31
	Dubash, Navroz K, Aditya Valiathan Pillai, and Anirudh Sridhar	
7.	Ambient Air Pollution and Daily Mortality in Ten Cities of India: A Causal Modelling Study	THE LANCET PLANETARY HEALTH, 8, NO 7, JULY, 2024 HTTPS://DOI.ORG/10.1016/ S2542-5196(24)00114-1
	Bhargav Krishna was a joint lead author	
8.	Unpacking Climate Policy	SCIENCE, JUNE 6, 2024 HTTPS://DOI.ORG/10.1126/SCIENCE.ADQ0862
	Dubash, Navroz K	
9.	Synergistic Impact of Air Pollution and Heat on Health and Economy in India	SPRINGER, 19-50, MAY 1, 2024 HTTPS://DOI.ORG/10.1007/978-3-031-56564-9_2
	Sekar, Abinaya, Rajat Sharma, and Annanya Mahajan	

Book Chapters

1.	Air Quality Regulation	THE OXFORD HANDBOOK OF ENVIRONMENTAL AND NATURAL RESOURCES LAW IN INDIA EDITED BY PHILIPPE CULLET, LOVLEEN BHULLAR, AND SUJITH KOONAN, 529-548. OXFORD UNIVERSITY PRESS, JULY 18, 2024 HTTPS://DOI.ORG/10.1093/ OXFORDHB/9780198884682.013.30
	Ghosh, Shibani	
2.	Climate and Development: What Opportunities, What Threats?	DEVELOPMENT POLICY REVIEW, 42, NO 6, SEPTEMBER 20, 2024: E12810 HTTPS://DOI.ORG/10.1111/DPR.12810
	Navroz K Dubash was a member of the author group	
1.	Is India Ready for a Warming World? How Heat Resilience Measures Are Being Implemented for 11% of India’s Urban Population in Some of Its Most At-Risk Cities	SUSTAINABLE FUTURES COLLABORATIVE (SFC), NEW DELHI, MARCH 19, 2025 HTTPS://WWW.SUSTAINABLEFUTURES. ORG/WP-CONTENT/UPLOADS/2025/04/ IS-INDIA-READY-FOR-A-WARMING-WORLD- HOW-HEAT-RESILIENCE-MEASURES- ARE-BEING-IMPLEMENTED-FOR-11-OF- INDIAS-URBAN-POPULATION-IN-SOME- OF-ITS-MOST-AT-RISK-CITIES-2.PDF
	Pillai, Aditya Valiathan, Tamanna Dalal, Ishan Kukreti, Alexandra Kassinis, Lucas Vargas Zeppetello, Escandita Tewari, and Navroz K Dubash	
2.	Ratcheting Ambition in Climate Finance: Key Challenges and Goals for COP29	SUSTAINABLE FUTURES COLLABORATIVE (SFC), NOVEMBER 8, 2024 HTTPS://WWW.SUSTAINABLEFUTURES. ORG/PUBLICATION/RATCHETING- AMBITION-IN-CLIMATE-FINANCE-KEY- CHALLENGES-AND-GOALS-FOR-COP29/
	Shukla, Nikita, Aman Srivastava, and Easwaran Narassimhan	
3.	The Regulatory and Market Landscape for Climate Finance Into India’s Renewable Energy Sector	SUSTAINABLE FUTURES COLLABORATIVE (SFC) AND DIW BERLIN, OCTOBER 31, 2024 HTTPS://WWW.SUSTAINABLEFUTURES.ORG/ PUBLICATION/THE-REGULATORY-AND-MARKET- LANDSCAPE-FOR-CLIMATE-FINANCE-INTO- INDIAS-RENEWABLE-ENERGY-SECTOR/
	Srivastava, Aman, Srishti Jain, Sangeeth Raja Selvaraju, Heiner von Luepke, and Emil Huth	
4.	Mission 1.5: Enhancing International Cooperation, Enabling Meeting the Paris Climate Agreement Goals	IDDRI, MAY, 2024 HTTPS://WWW.IDDRI.ORG/EN/ PUBLICATIONS-AND-EVENTS/NOTE/ MISSION-15-ENHANCING-INTERNATIONAL- COOPERATION-ENABLING-MEETING-PARIS
	Navroz K Dubash was a member of the author group	
5.	Sustainable Solutions to Crop Residue Burning and Air Pollution Cycle in India and Pakistan	COUNCIL FOR STRATEGIC AND DEFENSE RESEARCH, 5-19, APRIL 22, 2024 HTTPS://CSDRONLINE.COM/WP-CONTENT/ UPLOADS/2024/04/AIRWESHARE_CSDR_IPCC_ONLINE-1.PDF
	Krishna, Bhargav, Babar Shahbaz, and Annanya Mahajan	

Op-eds & Blogs

1.	Heatwaves are Coming. Can India Handle It?	THE INDIAN EXPRESS, MARCH 24, 2025 https://www.indianexpress.com/article/opinion/columns/heatwaves-are-coming-can-india-handle-it-9903414/
	Pillai, Aditya Valiathan, Tamanna Dalal, and Ishan Kukreti	
2.	Why Action on Extreme Heat in Indian Cities is Falling Short	CARBON BRIEF, MARCH 19, 2025 https://www.carbonbrief.org/guest-post-why-action-on-extreme-heat-in-indian-cities-is-falling-short/
	Pillai, Aditya Valiathan, Tamanna Dalal, Ishan Kukreti, Alexandra Kassinis, Lucas Vargas Zeppetello, Escandita Tewari, and Navroz K Dubash	
3.	Thirty and Still Dirty: Why Do Delhi’s Roads Remain So Polluted?	SUSTAINABLE FUTURES COLLABORATIVE (SFC), NEW DELHI, FEBRUARY 20, 2025 https://www.sustainablefutures.org/blog/thirty-and-still-dirty-why-do-delhis-roads-remain-so-polluted/
	Karkun, Arunesh, and Nazneen	
4.	Microplastics: An Overlooked Contributor to India’s Air Pollution	SUSTAINABLE FUTURES COLLABORATIVE (SFC), NEW DELHI, JANUARY 28, 2025 https://www.sustainablefutures.org/blog/microplastics-an-overlooked-contributor-to-indias-air-pollution/
	Srivastava, Ishita	
5.	Now for a Green Bharat Abhiyaan	INDIA TODAY, JANUARY 7, 2025 https://www.sustainablefutures.org/wp-content/uploads/2025/01/13-year-ahead-2025-navroz-dubash-jan13.pdf
	Dubash, Navroz K	
6.	Unpacking COP29’s NCQG: What Happened, Why, and What Now?	SUSTAINABLE FUTURES COLLABORATIVE (SFC), NEW DELHI, DECEMBER 22, 2024 https://www.sustainablefutures.org/blog/unpacking-cop29s-ncqg-what-happened-why-and-what-now/
	Srivastava, Aman, and Nikita Shukla	
7.	Managing Air Quality: Answer is in Airsheds	HINDUSTAN TIMES, OCTOBER 28, 2024 https://www.sustainablefutures.org/wp-content/uploads/2024/10/managing-air-quality-answer-is-in-airsheds.png
	Ghosh, Shibani, and Bhargav Krishna	

8.	Towards Operationalising a New Climate Right for India	THE INDIA FORUM, SEPTEMBER 19, 2024 https://www.theindiaforum.in/climate-change/toward-operationalising-new-climate-right-india
	Dubash, Navroz K, and Shibani Ghosh	
9.	What is PM 2.5 and How Will It Affect Our Health?	ETV BHARAT, AUGUST 20, 2024 https://www.etvbharat.com/en/technology/what-is-pm-2-dot-5-and-how-will-it-affect-our-health-enn24081906423
	Nazneen	
10.	A Law Around Low-Carbon Climate Resilient Development	THE HINDU, JULY 8, 2024 https://www.sustainablefutures.org/wp-content/uploads/2024/07/epaper-international_08-07-2024_GC4D1CG09.1.png
	Dubash, Navroz K, Aditya Valiathan Pillai, and Shibani Ghosh	
11.	Court on Climate Right and How India Can Enforce It	THE HINDU, JULY 1, 2024 https://www.sustainablefutures.org/wp-content/uploads/2024/07/epaper-international_01-07-2024_G6UD0E5HV.1.png
	Dubash, Navroz K, Shibani Ghosh, and Aditya Valiathan Pillai	
12.	Extreme Heat in India Needs Funds to Fix	INDIA DEVELOPMENT REVIEW, JUNE 26, 2024 https://idronline.org/article/climate-emergency/extreme-heat-in-india-needs-funds-to-fix/
	Dalal, Tamanna	
13.	Unified Action Needed to Tackle Extreme Heat and Air Pollution	MONGABAY INDIA, JUNE 24, 2024 https://india.mongabay.com/2024/06/commentary-unified-action-needed-to-tackle-extreme-heat-and-air-pollution/
	Mahajan, Annanya, and Tamanna Dalal	
14.	Opinion: The Indian Election Issue that will Impact the World (and No One is Talking About)	CNN OPINION, NEW DELHI, INDIA, APRIL 20, 2024 https://edition.cnn.com/2024/04/19/opinions/indian-election-climate-change-pillai/index.html
	Pillai, Aditya Valiathan	

SPEAKING ENGAGEMENTS

ADITYA VALIATHAN PILLAI

3 JUNE 2024

‘Can We Survive and Thrive in Hotter Cities?’
Transitions Research

13 FEBRUARY 2025

‘Heat Action Plans- Indian Perspective’
National Disaster Management Authority’s (NDMA)
International Workshop on Heatwaves 2025

17 MARCH 2025

‘Global Heat And Cooling Forum’
World Bank, NDMA, Department of Science and
Technology, and National Resources Defense Council,
India

19-22 MARCH 2025

**Presented findings from SFC’s report on India’s
preparedness for a 1.5°C world; Moderated panel
discussions on ‘Adaptation frameworks’ and ‘centering
health and livelihoods while planning adaptation
frameworks’ and was part of the scientific advisory
committee of the event**
SFC, Lakshmi Mittal & Family South Asia Institute, The
Salata Institute of Climate & Sustainability, Harvard
University, and Ministry of Environment, Forest, and
Climate Change

AMAN SRIVASTAVA

11 JUNE 2024

**‘Addressing path dependence in emissions-economy
models for emerging economies’**
Technische Universität Berlin

AMAN SRIVASTAVA & EASWARAN J NARASSIMHAN

10 MAY 2024

‘Pathways to net-zero’
NITI Aayog

3-4 SEPTEMBER 2024

‘Greening growth models’
Brown University

19 MARCH 2025

**‘Climate change – Opportunities and
tradeoffs for India 2047 development goals’**
The Fletcher School, Tufts University

ANNANYA MAHAJAN & ARUNESH KARKUN

22-23 AUGUST 2024

‘Cities as foci for air quality action’

ASHWINI K SWAIN

15-16 JULY 2024

**‘Power sector reforms and implications
for state finances’**

National Institute of Public Finance and Policy, New Delhi

18 JULY 2024

**‘Is decentralised governance
essential to energy transition?’**
FSR Global

26 JULY 2024

‘Just transition in India: Thinking forward’
The Energy and Resources Institute (TERI)

9 FEBRUARY 2025

‘Energy Transition Preparedness Initiative (ETPI)’
International Energy Festival of
Kerala 2025, Thiruvananthapuram

BHARGAV KRISHNA

15 APRIL 2024

‘Sustainable solutions for crop residue burning’
Council for Strategic and Defense Research

4 JULY 2024

**‘Research at the intersection of
public health and climate change in cities’**
World Resources Institute, India

11-12 SEPTEMBER 2024

‘Bridging the gap: Data for cool cities’
World Resources Institute, India

28 OCTOBER 2024

‘Governance for climate and health’
Prasanna School of Public Health

25 NOVEMBER 2024

‘Climate, diplomacy and health’
Ashoka University

11 DECEMBER 2024

‘Towards sustainable solutions: strategies for clean air’
IIT Delhi

19-22 MARCH 2025

**‘Challenges of understanding heat-related mortality’,
‘Data and methods for population-level estimations’,
‘Temporal and spatial scales of climate models and
epidemiological data’, and ‘Beyond vector-borne
diseases: can we anticipate shifts in non-communicable
disease burden?’ and co-chaired the health track with
Soumya Swaminathan and Caroline Buckee**

SFC, Lakshmi Mittal & Family South Asia Institute,
The Salata Institute of Climate & Sustainability, Harvard
University, and Ministry of Environment, Forest, and
Climate Change

14 FEBRUARY 2025

‘Making health the focus of air pollution policy’
Centre for Science and Environment

EASWARAN J NARASSIMHAN

4 FEBRUARY 2025

‘Climate change - Local action in a global crisis’
India Today Environment Sustainability Conclave 2025

ISHAN KUKRETI

11 JANUARY 2025

‘Communicating climate change adaptation’
101 Reporters’ media training workshop

SARADA PRASANNA DAS

19 JUNE 2024

**‘Including youth of the coal region
in the just transition decision making’**
Just Transition Research Centre,
Indian Institute of Technology (IIT) Kanpur

29 AUGUST 2024

**‘Scaling residential rooftop solar to
strengthen the supply quality’**
NTPC School of Business, Noida

6 DECEMBER 2024

‘Energy transition and industrial development’
Madras Institute of Development Studies
and United Nations Development Programme

5 FEBRUARY 2025

**‘Renewable Energy - Growth, market,
policies, issues and challenges in India’**
Xavier University, Bhubaneswar

SHIBANI GHOSH

6 APRIL 2024

**‘Climate change litigation in the global
South - An Indian perspective’**
The National Law University, Odisha, and Law,
Environment and Development Centre at SOAS
University of London

23-24 MAY 2024

**‘Key constitutional challenge in India’s
approach to climate change’**
8th Melbourne Forum on Constitution Building in Asia
and the Pacific

9 JULY 2024

‘Mitigation and adaptation in concrete remedies’
UP College of Law, Philippines

9 AUGUST 2024

‘Climate law and institutions’
International Forum for Environment,
Sustainability & Technology

1 SEPTEMBER 2024

‘Transforming climate litigation’
Impact and Policy Research Institute

SURAVEE NAYAK

3 MAY 2024

‘Land, labour and extraction’
University of Chicago Center in Delhi

30 MAY 2024

‘Winds of change’
The Climate Group

TAMANNA DALAL

28 MAY 2024

‘How India governs heatwaves and how Bihar fares’
ASAR

18 JULY 2024

**‘Heat Action Plans- An overview’
and ‘Financing a Heat Action Plan’**
Heat Action Plan training workshop in Lucknow by the
NDMA and NRDC

23 OCTOBER 2024

‘Financing of Heat Action Plans’
NDMA and NRDC

25 OCTOBER 2024

‘Heat action plans’
Ashoka Trust for Research in Ecology,
and the Environment, Wipro,
and Azim Premji University, Bangalore

14 FEBRUARY 2025

‘Financing Heat Action Plans’
NDMA’s international workshop on Heatwaves

25 MARCH 2025

‘Funding sources for heat-health action plans’
National Institute of Disaster Management

ACADEMIC ENGAGEMENTS

Aman Srivastava

VISITING FACULTY

AUGUST 2023-PRESENT
‘Climate Change and Public Policy’ and ‘Climate Finance’ *at Kautilya School of Public Policy, Hyderabad*

Annanya Mahajan

GUEST LECTURER

SEPTEMBER 2024
‘Environmental Governance and Decentralisation’ *at CHRIST (Deemed to be) University, Ghaziabad*

Ashwini K Swain

TEACHER

MARCH-APRIL 2024
1-credit paper on ‘Coal policy in India’ *at NTPC School of Business, Bengaluru*

DESIGNER & TEACHER

2024-ONGOING
‘Energy transition and natural resource governance’ *at the Tata Institute of Social Sciences, Hyderabad*

Bhargav Krishna

EDITORIAL BOARD MEMBER

JULY 2024
Appointed to the editorial board of the **PLOS Global Public Health journal**

PANEL MEMBER

APRIL 2024
Advisory group on study to evaluate the National Clean Air Programme (NCAP), convened by the **Health Effects Institute**

Ishan Kukreti

GUEST LECTURER

OCTOBER 2024
‘Democracy in the forest: Co-creating knowledge with forest-adjacent communities for effective decentralised forest governance’ *at IIT Delhi*

Navroz K Dubash

CO-EDITOR IN CHIEF

2023-2027
Appointed Co-editor in Chief (January 2024-2027) of the **Climate Policy journal**

Sony R K

ADVISOR

JANUARY-JUNE 2025
Advisor to the Young Scholars Programme Impact Leaders for Tomorrow) *at Ashoka University*

Shibani Ghosh

GOVERNING BOARD MEMBER

2024
Former Governing Board Member *at Chandrakanta Kesavan Center for Energy Policy and Climate Solutions, IIT Kanpur*

GUEST LECTURE

APRIL 2024
‘The National Green Tribunal - An Overview’ *at the School of Planning and Architecture, Bhopal*

GUEST LECTURE

JANUARY 2025
‘Climate Change Litigation in India’ *at the National Law School of India University, Bengaluru*

Sony R K at Ashoka University



PARTNERSHIPS AND COLLABORATIONS

KING’S COLLEGE LONDON, HARVARD UNIVERSITY, UNIVERSITY OF CALIFORNIA, BERKELEY, AND PRINCETON UNIVERSITY

for research on the implementation of policies and actions aimed at reducing extreme heat risks in nine Indian cities

DIW BERLIN

on analysing challenges in the energy sector from a regulatory, institutional mandate, and market development angles, and exploring ways to address them

Easwaran J Narassimhan, moderator, and Aman Srivastava, panelist, at a discussion organised by The Fletcher School, Tufts University in March 2025.

THE FLETCHER SCHOOL AT TUFTS UNIVERSITY
for research on green industrial policies

ASHOKA UNIVERSITY, CENTRE FOR CHRONIC DISEASE CONTROL, KAROLINSKA INSTITUTET, BOSTON UNIVERSITY, AND HARVARD T.H. CHAN SCHOOL OF PUBLIC HEALTH

for research examining the association between short-term exposure to PM2.5 and daily mortality across ten Indian cities

PRAYAS (ENERGY GROUP) AND THE WORLD RESOURCES INSTITUTE INDIA

on the Energy Transition Preparedness Initiative which provides a state-level framework to assess plans, actions, and governance processes towards an energy transition

HARVARD T. H. CHAN SCHOOL OF PUBLIC HEALTH, DANA FARBER CANCER INSTITUTE, AND THE SALATA INSTITUTE AT HARVARD UNIVERSITY

for research examining the thresholds at which heat mortality occurs, and understanding spatial variations in mortality from heat and air pollution



POLICY ENGAGEMENTS

GOVERNMENT OF HIMACHAL PRADESH AND THE UNITED NATIONS DEVELOPMENT PROGRAMME	On developing a climate-focused human development report for Himachal Pradesh
GOVERNMENT OF CHHATTISGARH (CHHATTISGARH STATE CENTRE FOR CLIMATE CHANGE)	On integrating climate, energy, and environmental priorities into the state's governance apparatus, and developing climate legislation for the state
NATIONAL DISASTER MANAGEMENT AUTHORITY	Contributed to the preparation of ‘National Heatwaves Mitigation and Management Framework’, ‘Guidelines on the Utilisation of National/State Disaster Mitigation Funds for Heatwave Mitigation’, and was part of the technical advisory group for the framework
NITI AAYOG	Part of the net-zero interministerial working groups (macroeconomics and climate finance)
GOVERNMENT OF ODISHA, JHARKHAND AND KERALA	Engaged with senior government officials on various aspects of energy transition



SFC was at the NDMA's International Workshop on Heatwaves 2025.



Aditya Valiathan Pillai spoke on the state of heat action in India at the NDMA workshop.



SFC team facilitated a workshop for Himachal Pradesh government officials.

EVENTS

India 2047: Building a Climate-Resilient Future
Co-organised with Lakshmi Mittal & Family South Asia Institute, The Salata Institute of Climate & Sustainability, Harvard University, & Ministry of Environment, Forestry, and Climate Change in March 2025

India's Carbon Credit Trading Scheme
Co-hosted with Prayas (Energy Group), a roundtable discussion delving into the scheme's design, institutional framework, governance structures, target-setting strategies, and the dynamics of demand and supply and ensuring market stability in March 2025

Trump, Tariffs, and Transitions
Hosted Kelly Sims Gallagher, Dean and Professor of Energy and Environmental Policy at The Fletcher School at Tufts University and Director, Climate Policy Lab for a lunch conversation with the SFC team in March 2025

Climate Finance at COP 29: What New, Collective, Quantified Ambition?
Organised a webinar to summarise and contextualise the state of play on climate finance negotiations going into COP29, with a focus on the New Collective Quantified Goal, featuring Joe Thwaites, Senior Advocate, Natural Resources Defense Council, Jonathan Beynon, Senior Policy Associate, Center for Global Development, Avantika Goswami, Programme Manager, Centre for Science and Environment, and moderated by Aman Srivastava, Fellow, SFC in October 2024

Airshed-Level Air Quality Management in India
Co-organised an online closed-door roundtable with Asar Social Impact Advisors in May 2024 to answer some key questions about the conditions that need to be met to implement an airshed-level air quality management approach across different airsheds in India

IN THE MEDIA

DOWN TO EARTH HINDI

क्या बढ़ते तापमान और भीषण गर्मी का सामना करने के लिए तैयार हैं दिल्ली, फरीदाबाद, बंगलूरू जैसे शहर?

SFC 21 MAR 2025

DAINIK JAGRAN

‘Heatwave: गर्मियों में सबसे ज्यादा तपने वाले शहर ही बचाव के प्रति लापरवाह, SFC रिपोर्ट में देखें शहरों की लिस्ट’

SFC 20 MARCH 2025

AMAR UJALA

मौसम: गर्मी के खतरे वाले शहर ठोस के बजाय त्वरति समाधान पर दे रहे ध्यान, इन राज्यों में हालात बगिड़ने का अंदेशा

SFC 20 MARCH 2025

RAVISH KUMAR OFFICIAL

‘आज भी AQI 500 है, कहां भाग कर जाएं लोग, दूसरे शहर भी बेहाल’

Bhargav Krishna 19 NOV 2024

ETV BHARAT

भारत में वायु गुणवत्ता मानकों को संशोधित करने की आवश्यकता है: विशेषज्ञ

SFC 6 JULY 2024

ETV BHARAT TAMIL NADU

சென்னைக்கு காத்திருக்கும் ஆபத்து! காற்றுமாக குறித்து எச்சரிக்கும் ஆராய்ச்சி! கவனம் அவசியம்

SFC 7 JULY 2024

DAINIK JAGRAN

‘वायु प्रदूषण से दलिली में हर साल चली जाती है 12 हजार लोगों की जान, राजधानी के बाद यूपी का ये जिला दूसरे स्थान पर’

SFC 4 JULY 2024

AAJ TAK BANGLA

Air Pollution: কলকাতায় বছরে হাজার হাজার মৃত্যু শুধু বায়ুদূষণই, চাঞ্চল্যকর রিপোর্ট

SFC 4 JULY 2024

INDIAN EXPRESS

‘What is Lacking in India’s Heat Action Plans?’

SFC 24 MAR 2025

NEWS KARNATAKA

‘Indian Cities Unprepared for Deadly Heatwaves, Long-Term Fixes Missing: Study’

SFC 19 MARCH 2025

THE HINDU

‘Long-Term Actions Rare, Poorly Targeted to Deal with Heatwaves in Indian Cities: Report’

SFC19 MAR 2025

AP NEWS

‘Scientists Raise Concerns as the US Stops Sharing Air Quality Data from Embassies Worldwide’

Bhargav Krishna6 MAR 2025

THE ASSOCIATED PRESS

‘4 Policy Levers to Drive India’s Low Carbon Development’

Easwaran J Narassimhan4 MAR 2025

THE HINDU

‘Multi-Agency Collaboration Needed to Arrest Heatwave: Experts’

Aditya Valiathan Pillai14 FEB 2025

THE GUARDIAN

‘The Air is Killing Us: Why Delhi’s Pollution Problem Runs Deeper than Smog Season’

Bhargav Krishna22 NOV 2024

BBC WORLD

‘Possible Solutions to Rising Air Pollution in Delhi NCR’

Annanya Mahajan20 NOV 2024



BBC NEWS

‘Air Pollution Linked to 7% of Deaths in Indian Cities’

Bhargav Krishna8 JULY 2024

BLOOMBERG

‘No One Knows Exactly How Many People are Dying from Extreme Heat’

Bhargav Krishna8 JULY 2024

NDTV

Short-Term Exposure To Air Pollution Kills 33,000 Indians Annually: Report on ‘Left, Right and Centre’

Bhargav Krishna4 JULY 2024

MONGABAY INDIA

‘Surviving a Heat Stroke Against All Odds’

Aditya Valiathan Pillai1 JULY 2024

THE NEW YORK TIMES

‘Heat is Killing Thousands and Big Events Have Not Adjusted’

Aditya Valiathan Pillai25 JUNE 2024

DECCAN HERALD

‘India’s Climate Dilemma Will Hang Over Modi’s Next Five Years’

Ashwini K Swain9 JUNE 2024

NATURE

‘What’s the Best Way to Tackle Climate Change? An ‘Evidence Bank’ Could Help Scientists Find Answers’

Navroz K Dubash6 JUNE 2024



101 REPORTERS

‘The Right to Save Our Future’

Shibani Ghosh23 MAY 2024

THE MORNING CONTEXT

‘Far from Easing, India’s Coal Addiction Worsens’

Ashwini K Swain1 MAY 2024

INDIAN EXPRESS

‘How Supreme Court’s verdict on climate change can push climate litigation in India’

Bhargav Krishna22 APRIL 2024

THE ECONOMIC TIMES

‘A Bird, A Bureaucrat and A Big Judgement’

Shibani Ghosh16 APRIL 2024

TIME MAGAZINE

‘How Extreme Heat Will Impact India’s Election’

Aditya Valiathan Pillai10 APRIL 2024

FINANCIAL INFORMATION

SFC RESEARCH FOUNDATION
CIN U88900DL2023NPL419116
BALANCE SHEET AS AT 31.03.2025

PARTICULARS	NOTE NO.	Figures as at 31.03.2025		Figures as at 31.03.2024	
		(Fig. in Rs.)	(Fig. in '00)	(Fig. in Rs.)	(Fig. in '00)
1	2	3		4	
I. EQUITY AND LIABILITIES					
1 Shareholders' Funds					
(a) Share Capital	1	60,000.00	600.00	60,000.00	600.00
(b) Reserves and Surplus	2	16,533,482.23	165,334.82	22,555,711.52	225,557.12
(c) Money Received against share warrant		-	-	-	-
		16,593,482.23	165,934.82	22,615,711.52	226,157.12
2 Share Application Money Pending Allotment		-	-	-	-
3 Non- Current Liabilities					
(a) Long Term Borrowings	3	-	-	-	-
(b) Deferred Tax Liabilities (Net)	4	-	-	-	-
(c) Other Long Term liabilities		-	-	-	-
(d) Long-term provisions	5	1,671,607.00	16,716.07	173,698.00	1,736.98
		1,671,607.00	16,716.07	173,698.00	1,736.98
4 Current Liabilities					
(a) Short Term Borrowings	6	-	-	-	-
(b) Trade Payables		-	-	-	-
(c) Other Current Liabilities	7	434,875.00	4,348.75	202,369.96	2,023.70
(d) Short Term Provisions	8	-	-	-	-
		434,875.00	4,348.75	202,369.96	2,023.70
TOTAL		18,699,964.23	186,999.64	22,991,779.48	229,917.79
II. ASSETS					
1 Non Current Assets					
Property, Plant and Equipment & Intangible					
(a) Assets					
(i) Property, Plant and Equipment	9	9,398,017.85	93,980.18	868,489.00	8,684.89
(ii) Intangible Assets		-	-	-	-
(iii) Capital Work In Progress		-	-	-	-
(iv) Intangible Assets under Development		9,398,017.85	93,980.18	868,489.00	8,684.89
(b) Non Current Investments	10	-	-	-	-
(c) Deferred tax Assets (net)	11	-	-	-	-
(d) Long-term loans and advances	12	-	-	-	-
(e) Other non-current assets		9,398,017.85	93,980.18	868,489.00	8,684.89
2 Current Assets					
(a) Current Investments	13	-	-	-	-
(b) Inventories		-	-	-	-
(c) Trade Receivables		-	-	-	-
(d) Cash and Cash equivalents	14	7,617,610.38	76,176.10	21,588,042.48	215,880.42
(e) Short Term Loan and Advances	15	67,000.00	670.00	-	-
(f) Other Current Assets	16	1,617,336.00	16,173.36	535,248.00	5,352.48
		9,301,946.38	93,019.46	22,123,290.48	221,232.90
TOTAL		18,699,964.23	186,999.64	22,991,779.48	229,917.79

Significant Accounting Policies and Notes to Account 22

As per our report of even date attached
FOR MAYUR & CO.
CHARTERED ACCOUNTANTS
CA MAYUR GUPTA
(Prop.)(M.NO.503036)(FRN-021448N)
UDIN 25503036BIMIWDQ8054

PLACE : DELHI
DATE : 01/09/2025

FOR SFC RESEARCH FOUNDATION

ASHWINI KUMAR SWAIN
Director
DIN-07758939

KRISHNA BHARGAV
Director
DIN-10293824

SFC RESEARCH FOUNDATION
CIN U88900DL2023NPL419116
STATEMENT OF INCOME & EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31.03.2025

PARTICULARS	NOTE NO.	For the year ending on 31.03.2025		For the year ending on 31.03.2024	
		(Fig. in Rs.)	(Fig. in '00)	(Fig. in Rs.)	(Fig. in '00)
1	2	3		4	
I. INCOME:					
(a) Donation Received	17	40,500,000.00	405,000.00	39,500,000.00	395,000.00
(b) Other Income	18	2,460,026.00	24,600.26	86,371.00	863.71
Total Revenue		42,960,026.00	429,600.26	39,586,371.00	395,863.71
II. EXPENSES:					
(a) Utilization On Programmes And Activities	19	36,275,023.28	362,750.23	14,278,401.00	142,784.01
(b) Finance Cost	20	27,790.00	277.90	1,620.00	16.20
(c) Depreciation and Amortisation Expenses	9	1,497,909.00	14,979.09	173,698.00	1,736.98
(d) Other Expenses	21	11,181,533.01	111,815.33	2,576,940.48	25,769.40
Total Expenses		48,982,255.29	489,822.55	17,030,659.48	168,569.61
III. Surplus / (Deficit) Before exceptional and extraordinary items and Tax (I-II)		(6,022,229.29)	(60,222.29)	22,555,711.52	225,557.12
IV. Exceptional Items - Allocation to specific Fund		-	-	-	-
V. Surplus / (Deficit) Before extraordinary items and Tax (III-IV)		(6,022,229.29)	(60,222.29)	22,555,711.52	225,557.12
VI. Extraordinary Items		-	-	-	-
VII. Surplus / (Deficit) before tax (V-VI)		(6,022,229.29)	(60,222.29)	22,555,711.52	225,557.12
VIII. Tax Expenses		-	-	-	-
(1) Current Tax		-	-	-	-
(2) Deferred Tax		-	-	-	-
IX. Surplus (Deficit) for the period from continuing operations (VII-VIII)		(6,022,229.29)	(60,222.29)	22,555,711.52	225,557.12
X. Surplus/(Deficit) from discontinuing operations		-	-	-	-
XI. Tax expense of discontinuing operations		-	-	-	-
XII. Surplus/(Deficit) from Discontinuing operations (after tax) (X-XI)		-	-	-	-
XIII. Surplus (Deficit) for the period (IX + XII)		(6,022,229.29)	(60,222.29)	22,555,711.52	225,557.12
Earnings per equity share:					
(1) Basic		(1,003.70)	(1,003.70)	3,759.29	3,759.29
(2) Diluted		(1,003.70)	(1,003.70)	3,759.29	3,759.29

Significant Accounting Policies and Notes to Account 22

As per our report of even date attached
FOR MAYUR & CO.
CHARTERED ACCOUNTANTS
CA MAYUR GUPTA
(Prop.)(M.NO.503036)(FRN-021448N)
UDIN 25503036BIMIWDQ8054

FOR SFC RESEARCH FOUNDATION

ASHWINI KUMAR SWAIN
Director
DIN-07758939

KRISHNA BHARGAV
Director
DIN-10293824

PLACE : DELHI
DATE : 01/09/2025

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