



## **Orientation Conclave**

### ***Air Quality Management: Building Strategies for Clean Air***

**Department of Forest and Environment and Odisha State Pollution Control Board, Government of Odisha**

**In collaboration with Centre for Science and Environment**

**Venue: The Crown, Odisha**

**June 4, 2019**

Urban air quality management is a complex challenge that requires multi-sectoral and coordinated action to address rising air pollution from multiple sources in our rapidly growing cities. Explosive motorisation, booming construction activities, massive waste generation that often lead to open burning for easy disposal, dispersed solid fuel use, and industrial units are cumulatively and continuously fouling up the air in our cities today. To this is added episodic pollution from biomass and crop residue burning. As a result, air quality is worsening not only in big cities but also in smaller cities and towns with serious public health consequences. In Odisha, six cities namely Bhubaneswar, Cuttack, Angul, Talcher, Balasore and Rourkela are experiencing rising pollution levels as well as winter smog episodes. Air quality in smaller towns is also affected. This demands effective mitigation strategies as well as preventive measures to avert public health crisis even as cities grow economically.

Urban air quality monitoring and management have already taken roots in Odisha. First generation action that include improvement in emissions standards for industry and vehicles, shifting of polluting industries, public transport reforms, are among some of the key measures that have already been initiated. But obstinate pollution curve demands bigger scale and greater stringency of action for effective and sustained reduction over time. Available data shows that the annual average level of particulate matter less than 10 micron size will have to be reduced by 39 per cent in Angul, 28 per cent in Balasore, 36 per cent in Bhubaneswar, 27 per cent in Cuttack, 41 per cent in Rourkela and 45 per cent in Talcher from the 2017 level able to meet the National Ambient Air Quality Standards. This also demands sector-wise reduction target to meet the overall air quality targets. To meet this challenge and to build momentum of second-generation reforms for clean air, the State Government has framed Comprehensive Clean Air Action Plan to enable time bound, integrated and multi-sectoral action. This has set the stage for next round of deliberation to focus on the key governing principles and comprehensive design details of the priority mitigation strategies for implementation.

To enable this, a collaborative platform has been created along with the Department of Forest and Environment, Government of Odisha and State Pollution Control Board to initiate a series of orientation workshops to bring together key implementing agencies, regulatory authorities and key stakeholders for knowledge sharing on critical strategies for urban air quality management in cities of Odisha. This platform will bring together key stakeholders, national and international experts for cross learning and to strengthen the roadmap for implementation.

This orientation conclave, the first in the series, will focus on what cities can do on a priority basis within the city limits. Inside the cities vehicles and waste –solid waste, construction and demolition waste and dust from construction, have emerged as the critical challenge for pollution control. This requires diverse and advanced strategies for emissions monitoring and reduction from on-road fleet of vehicles, scrappage of old vehicles, integrated public transport system, quicker transition to electric mobility for zero emissions and effective strategies for waste control from construction, solid waste and crop burning. The national experts who will convene for this orientation workshop will bring out the best practice approaches towards air quality management, advanced strategies for emissions control from on-road vehicles, deployment strategies for public transport, electric vehicles and link with urban planning, emission control techniques from industries, power plants and mining areas and waste management encompassing construction dust control, construction and demolition waste. This multi-sectoral discussion is designed for the implementing agencies including State Pollution Control Board, Transport Department, Municipal



Agencies, Urban Development Department, Bus Transport Corporations among other relevant implementing bodies.

### Programme

Registration: 10:00 am to 10:30 am		
<b>Inaugural session: Setting the agenda for urban air quality management in cities</b> Overview of the clean air action planning, emerging approaches to air quality management and monitoring, and setting of the agenda for discussion on key sectoral challenges and solutions within the city.		
Time	Session	Speakers/ Panelists
10:30 am to 10:35 am	Welcome Address	<b>Debidutta Biswal, Member Secretary, OSPB</b>
10:35 am to 10:40 am	Address by Guest of Honour	<b>K Murugesan, Director Env. cum Special Secretary to Govt. Forest &amp; Env Department, Guest of Honour</b>
10:40 am to 10:45 am	Address by Guest of Honour	<b>G. Mathi Vathanan, Principal Secretary, Housing &amp; Urban Development Department, Guest of Honour</b>
10:45 am to 10:50 am	Address by Guest of Honour	<b>Suresh Chandra Mohapatra, Addl.Chief Secretary, Forest &amp; Environment Department, Govt. of Odisha</b>
10:50 am to 10:55 am	Address by Guest of Honour	<b>Atul Bagai, United Nations Environment Programme</b>
10:55 am to 11:05 am	Address by Chief Speaker	<b>Anumita Roychowdhury, Executive Director – Research and Advocacy, CSE, Chief Speaker</b>
11:05 am to 11:15 am	Address by Chief Guest	<b>Aditya Prasad Padhi, Chief Secretary, Chief Guest</b>
11:15 am to 11:20 am	Vote of thanks	<b>N R Sahoo, Chief Environmental Engineer, OSPB</b>
Technical session 1: Understanding pollution sources and concept of emission inventory		
Time	Session	Speakers/Panelists
11:20 am to 11:45 am	<b>Key note address:</b> Source Apportionment and Emission Inventory	<b>Mukesh Sharma, Professor, Department of Civil Engineering, IIT, Kanpur</b>
11:45 am to 11:55 am	"Improved transparency, Cleaner Air" An Economist perspective	<b>Kenneth Lee, Executive Director, Energy Policy Institute at the University of Chicago</b>
Tea break: 11:55 am to 12:00 pm		
<b>Technical session 2: Advanced Strategies for Monitoring and for Reducing Emissions from On-road Vehicles</b>  <i>This session will focus on the advancement needed in monitoring of emissions from on-road vehicles and new approaches for effective emission control. This is particularly important for BSIV and upcoming BSVI vehicles that will now dominate the market. This will highlight the advancement and preparedness needed for on-road surveillance and fleet management to reduce real world emissions. This will also highlight the emerging unique challenge of scrappage policy and facilities needed in cities linked to phase-out of old</i>		

vehicles. This will also require urban planning strategies.

Time	Session	Speakers/ Panelists
12:00 pm to 12:15 pm	BS VI readiness and on-road emission management	<b>Anumita Roychowdhury</b> , Centre for Science and Environment
12:15 pm to 12:30 pm	Advancing emissions inspection: Advanced I/C centres; real-world emission testing; using on-board diagnostic system and policy for remote sensing to detect highly polluting vehicles	<b>Moqtik, Bawase</b> , Dy. General Manager, Environment Research Lab (ERL), Automotive Research Association of India, Pune
12:30 pm to 12:45 pm	Overview of mobility strategies for reducing air pollution	<b>Gaurav Dubey</b> , Programme Manager - Sustainable Mobility, CSE
12:45 pm to 1:00 pm	Moderated discussion	
Lunch: 1:00 pm to 2:00 pm		

### Technical session 3: Public transport and street design & management

*Public transport strategies and electric mobility will be critical approaches to clean up the air in Bhubaneswar and other cities. This session will highlight the key transportation and mobility strategies that have worked in other cities to reduce air pollution. This will capture global and national learning on electric mobility especially in the bus and para-transit sectors. This will also sensitise the linkage between urban planning and transportation and use of parking management for clean air.*

Time	Session	Speakers/ Panelists
2:00 pm to 2:15 pm	Parking Management Strategies	<b>Anumita Roychowdhury</b> , Centre for Science and Environment
2:15 pm to 2:30 pm	Street design and management for increasing cycling and \ walking in cities	<b>Mriganka Saxena</b> , Partner, Habitat Tectonics Architecture and Urbanism, Gurgaon
2:30 pm to 2:45 pm	Moderated discussion	

### Technical session 4: Emission control strategies from industries and power plants and Hyperlocal air quality assessment

*How do we control pollution emitted from industries and mining areas? This session will focus on stack emissions and area wide sources. It will highlight how technological advances can help power plants to meet the new norms by 2022.*

Time	Session	Speakers/ Panelists
2:45 pm to 3:00 pm	Power Plants	<b>Soundaram Ramanathan</b> , Deputy Programme Manager, Centre for Science and Environment
3:00 pm to 3:15 pm	Mining and fugitive emissions	<b>Sujit Kumar Singh</b> , Senior Programme Manager, Center for Science and Environment
3:15 pm to 3:30 pm	Real time Hyperlocal Air Quality Assessment at Granular Level	<b>Elango Kamalasekaran</b> , Advisor, Centre for Urbanisation and Environment, Buildings and Environment, IIT Madras
3:30 pm to 3:45 pm	Moderated discussion	

**Tea break: 3:45 pm to 4:00 pm**

### Technical session 5: Emission Control strategies from crop residue burning and C&D waste

*Improper management of waste is one of the major contributors to air pollution. How to reduce emissions from burning crop residue and fugitive dust from construction activities? How to manage storage and transportation of construction and demolition waste to minimize dust pollution and convert the waste into a resource for city's development? What are some of the best practices in cities in India?*

Time	Session	Speakers/ Panelists
4:00 pm to 4:15 pm	Construction and demolition waste – policy and strategies	<b>Avikal Somvanshi</b> , Programme Manager, Centre for Science and Environment
4:15 pm to 4:25 pm	Insight into emissions from crop burning	<b>Shambhavi Shukla</b> , Clean Air, Centre for Science and Environment
4:25 pm to 4:45 pm	Moderated discussion	
	Vote of Thanks	