The Centre for Excellence for Research on Clean Air Indian Institute of Technology Delhi

Outcomes from the Workshop on

"The Path to Clean Air—Reducing Fine PM Concentrations"

On 25 June, the Centre for Excellence for Research on Clean Air (CERCA) organized an Air quality workshop entitled "The Path to Clean Air-Reducing Fine PM Concentrations." The event drew together leading experts in the field of air pollution and air pollution mitigation, as well as government officials, power plant operators, and the public. The workshop identified key messages related to air pollution and initial policy recommendations.

Key Messages

- **Source apportionment** and chemical speciation data are key to making policy, assessing the impact of policies, and encouraging engagement from industry, the public, and governments.
- Reducing *carbon emissions* and reducing *particulate matter emissions*, though related, *are different challenges*. Independent of policy decisions about energy sources and access, pathways to clean air and reductions in PM2.5 concentrations can be achieved.
- The *technology exists* to bring particulate matter emissions from coal-fired thermal power plants, diesel engines, and industries to levels will allow air quality standards and guidelines to be achieved.
- Advanced control, which can reduce PM emissions, must be *nationally implemented and repeatedly checked* to ensure that they are functioning effectively.
- The *economic benefits* of reducing air pollution *far outweigh the cost* of installing particulate matter control measures.
- **Public engagement** is fundamental to encouraging behavioral change related to some key air pollution sources such as waste burning and agricultural burning.

Potential Areas for Action

- Establish a *regional speciation networks*, in addition to city level source apportionment, to assess ambient air pollution levels in India's airsheds.
- Create an Independent Air Quality Advisory Council to help advise the Ministry of Environment and the Prime Minister's Air Quality Task Force.

- Provide cleaner energy to industrial clusters of small and medium enterprises which lack access
 to technologies to reduce particulate emissions, either through gas lines or wider use of electric
 power.
- Address *old or polluting vehicles* to ensure the leaps to Bharat Standard IV and then Bharat Standard VI accomplish their intended outcome.

Key Participants

- Prof James Schauer, US Science Envoy, Department of Civil and Environmental Engineering, University of Wisconsin Madison and Director for Air quality at the Wisconsin State Laboratory of Hygiene
- 2. Dan Greenbaum, President, Health Effects Institute, USA
- 3. Tony Facchiano, Senior Program Manager Environmental Controls, EPRI, USA
- 4. Prof Sagnik Dey, Centre of Atmospheric sciences, IIT Delhi
- 5. Dr Satyendra Kumar, MoEF&CC, GOI
- 6. Dr Sudheer Chintlapati, MoEF&CC, GOI
- 7. Dr M P George, Delhi Pollution Control Committee, Govt of Delhi
- 8. Prof Mayank Kumar, IIT Delhi
- 9. Ritesh Bhatia, India Paryavaran Sahayak Foundation
- 10. Bharti Singhla, Chakr Innovations