



ENERGY DIALOGUES

Clean. Viable. Inclusive.



FOREWORD

In a world confronting climate urgency and rising energy demands, the transition to clean, viable, and inclusive energy systems is essential. CSIR-NEERI is advancing this mission through focused work in waste management, bioenergy, circular bioeconomy, and decarbonization. Pioneering innovations in microbial electrochemical systems, biorefineries, and waste valorization are being brought to life through pilot-scale projects. **“Energy Dialogues: Clean. Viable. Inclusive.”** serves as a dynamic forum for collaboration across government, academia, industry, and civil society, addressing themes like biomass energy, AI-driven monitoring, carbon finance, and green skilling. These efforts aim to foster impactful policies and a future where sustainability, equity, and innovation coexist.



Dr. S. Venkata Mohan
Director, CSIR-NEERI



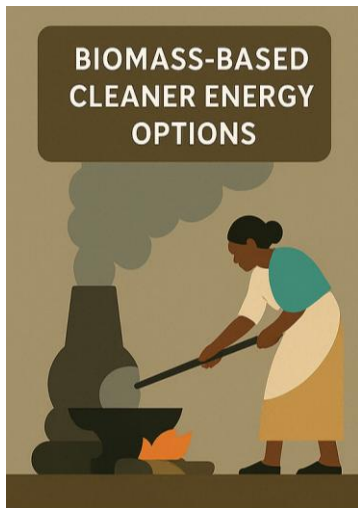
The **Energy Dialogues** platform brings timely focus to the energy-development-climate nexus, encouraging bold thinking around cleaner mobility solutions, cleaner production, and renewable energy generation. By exploring catalytic emission control, clean coal combustion, CCUS, and low-emission hybrid energy systems, this initiative supports India's transition to a net-zero and sustainable future. Climate change mitigation demands inclusive, interdisciplinary approaches, and this gathering unites policymakers, technologists, and emerging innovators to co-create resilient strategies. Through shared learning and scientific collaboration, the dialogues aim to accelerate transformative action, laying the foundation for a cleaner, smarter, and more equitable energy ecosystem.

Dr. Nitin Labhasetwar
Chief Scientist and Chair, ERPM, CSIR-NEERI

KEY THEMES

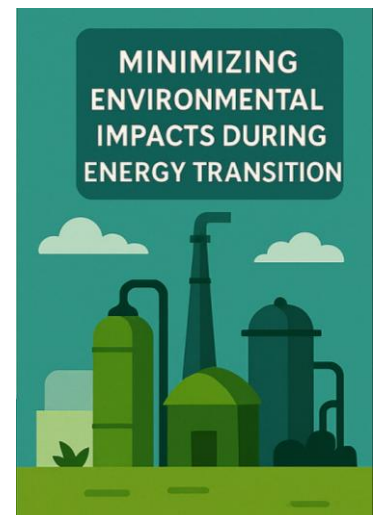


The upcoming brainstorming workshop, **"Energy Dialogues: Clean. Viable. Inclusive."**, aims to engage experts, policymakers, and stakeholders to deliberate on innovative solutions that align energy generation with environmental sustainability and social equity.



Biomass presents a viable alternative to fossil fuels, offering a renewable source of energy. Advanced thermochemical conversion technologies, such as pyrolysis and gasification, can transform biomass into cleaner fuels, reducing reliance on conventional energy sources. However, in informal sectors, challenges persist regarding the efficiency of biomass-burning devices and associated emissions. Addressing these issues is crucial for improving air quality, climate change & health impacts in vulnerable communities. Furthermore, integrating carbon finance mechanisms, including carbon credit generation and robust MRV frameworks, can incentivize sustainable biomass projects and ensure their environmental integrity.

The shift to sustainable energy must be just and inclusive. Decommissioning fossil fuel-based assets requires strategic planning to mitigate environmental risks and economic disruptions. Simultaneously, green skilling initiatives are essential to equip the workforce for emerging opportunities in the renewable energy sector. Balancing the reduction of GHG emissions with other pollutants necessitates comprehensive emission control strategies both at energy generation and energy use sectors. Emerging technologies like green hydrogen and cleaner mobility offer promising avenues for decarbonizing various industries. Additionally, CCUS technologies, coupled with innovative waste management solutions, can play a pivotal role in achieving cleaner production and net-zero emissions.



WHY ATTEND



- ❖ **Learn from Experts Across Sectors:** Gain insights from leading voices in energy policy, biomass technology, environmental monitoring, and sustainable development.
- ❖ **Explore Practical Solutions:** Discover innovative approaches in clean energy transitions—from thermochemical biomass valorization to carbon capture and green hydrogen.
- ❖ **Understand Policy and Impact:** Get updated on regulatory trends, carbon finance mechanisms, and environmental strategies driving India’s energy future.
- ❖ **Network and Collaborate:** Connect with researchers, policymakers, NGOs, and industry leaders to build partnerships and shape actionable solutions.

ORGANISING TEAM



CHAIR

Dr. S. Venkata Mohan
Director, CSIR-NEERI

CO-CHAIR

Dr. Nitin Labhasetwar
Chief Scientist & Chair, ERP&M, NEERI

ORGANISING SECRETARY

Dr. Avneesh Anshul
Principal Scientist, NEERI

CONVENORS

Dr. Ankit Gupta
Principal Scientist, NEERI

Dr. Piyush Kokate
Principal Scientist, NEERI

Er. Roshan Wathore
Senior Scientist, NEERI

WORKSHOP MANAGEMENT AND ADVISORY COMMITTEE

Dr. M P Patil
Chief Scientist & Chair, WM, NEERI

Dr. K V George
Chief Scientist & Co-Chair, ERP&M, NEERI

Dr. S K Goyal
Chief Scientist & Chair, DZC, NEERI

Dr. R B Biniwale
Chief Scientist & Co-Chair, SEP, NEERI

Dr. Amit Bansiwal
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Dr. Ashutosh Kumar
Sr. Technical Officer II, NEERI

Mr. Prasad Ghorpade
Sr. Technical Officer I, NEERI

Mr. Prateek Dhar Dwivedi
Technical Officer III, NEERI

THEMATIC AGENDA

MAY 27, 2025 | CSIR-NEERI, NAGPUR



INDIAN STANDARD TIME (HRS)

0900– 1000	REGISTRATION* AND ASSEMBLY	
1000 - 1115	INAUGURAL SESSION AND PLENARY TALKS	<ul style="list-style-type: none">• Welcome Address• Program Overview/Setting the Context• Plenary Talks by Chief Guest and Guest of Honour• Vote of Thanks and National Anthem
1115 - 1145	HIGH TEA BREAK AND GROUP PHOTO	
1145-1330	PANEL DISCUSSION -1 BIOMASS BASED CLEANER ENERGY OPTIONS	<ul style="list-style-type: none">• Advanced Biomass Valorization Pathways - Novel thermochemical conversion technologies• Biomass Energy in Informal Sector: Challenges of Efficient Devices and Emissions• Carbon Finance and Market Mechanisms - Carbon credit generation from biomass projects and Monitoring, reporting, and verification (MRV) frameworks, ICM
1330 - 1415	NETWORKING LUNCH	
1415 – 1600	PANEL DISCUSSION -2 MINIMIZING ENVIRONMENTAL IMPACTS DURING ENERGY TRANSITION	<ul style="list-style-type: none">• Energy Transition including Just Transition: Decommissioning of Assets; Green Skilling• Emission Control: Balancing Priorities for GHG and other Emissions• Green Hydrogen, and other potential options for cleaner energy generations• CCUS and Waste Management Opportunities.
1600 – 1630	TEA/COFEE BREAK	
1630 – 1800	SUMMARY & VALIDICTORY SESSION	<ul style="list-style-type: none">• Summary of the Proceedings and Next Steps• Felicitation Ceremony• Vote of Thanks and End of Proceedings
1830 onwards	WORKSHOP DINNER	

*By invitation only



**CSIR-National
Environmental
Engineering Research
Institute (CSIR-NEERI)**



CSIR-NEERI is one of CSIR's premier Laboratories focusing on the environment. CSIR-NEERI plays important role in Environmental Science and Engineering for Sustainable Development and has a nationwide presence through its five Zonal Centers located at Delhi, Mumbai, Chennai, Kolkata and Hyderabad with its Headquarters at Nagpur. CSIR-NEERI significantly contributes to policy making, environmental regulations, and implementation through active participation in various National and State level expert committees constituted by Ministries and Regulatory agencies. CSIR-NEERI offers expertise in the domain of Environmental Resource Planning and Management, Sustainable Environmental Process, Waste Management, Strategic Urban Environmental Management, Water and Wastewater Management, Hazardous & Solid Waste Management, Air Pollution, Cleaner Technology & Energy Resource Management, Advanced Materials, Biotechnology and Genomics and Environmental Impact and Sustainability etc.

**Organized by
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