

Topics for Conference at National Expo

Steel Sector Topics

- **Advanced Steelmaking Technologies**
 - Electric Arc Furnaces (EAF) vs. Blast Furnaces
 - Direct Reduced Iron (DRI) innovations
- **Sustainable Steel Production**
 - Low-carbon steelmaking processes
 - Hydrogen-based steel production
- **Smart Manufacturing & Industry 4.0**
 - Automation, robotics, and AI in manufacturing
 - Predictive maintenance using IoT
- **Materials & Applications**
 - High-strength, corrosion-resistant steels
 - Steel for infrastructure: bridges, railways, and smart cities
- **Circular Economy in Steel**
 - Scrap recycling and waste minimization
 - Life-cycle assessment of steel products

Power Sector Topics

- **Renewable Integration with Grid**
 - Solar, wind, and biomass in industrial clusters
 - Hybrid power systems for steel plants
- **Energy Efficiency in Heavy Industries**
 - Waste heat recovery from steel furnaces
 - Cogeneration and combined cycle plants
- **Smart Grids & Digitalization**
 - AI-driven demand forecasting
 - Cybersecurity in power infrastructure
- **Emerging Fuels & Technologies**
 - Hydrogen as a fuel for power generation
 - Compressed biogas (CBG) and its industrial applications
- **Policy & Regulation**
 - National energy efficiency programs
 - Carbon credit mechanisms for steel and power industries

Cross-Sector Themes

- **Decarbonization Roadmap for Steel & Power**
 - Aligning with India's net-zero 2070 target
- **MSME Participation in Steel & Power Supply Chains**
 - Opportunities for small manufacturers and service providers
- **Global Market Trends & India's Role**
 - Demand projections and export opportunities
- **Financing & Investment Models**
 - Public-private partnerships for industrial energy projects