



Press Release

**IIT Bhubaneswar Hosts Workshop on Mainstreaming Low-Carbon Building Materials for a Sustainable Built Environment in Odisha**

**Bhubaneswar, 31<sup>st</sup> October 2025:** Indian Institute of Technology Bhubaneswar, in collaboration with Development Alternatives, successfully organised a one-day workshop on “Mainstreaming Low-Carbon Building Materials to Transform the Built Environment in Odisha” at as the state moves rapidly toward urban expansion and sustainable infrastructure goals. The initiative was also supported by the Indian Metal and Ferro Alloys (IMFA).

Addressing the inaugural session, Smt. Usha Padhee, IAS, Principal Secretary, Housing & Urban Development Department, Government of Odisha, highlighted the responsibility of engineers and policymakers in making growth environmentally sound. She said: “Whatever we do in construction must consciously contribute to a healthier environment. We can only progress if we believe we can — and ensure our development is greener and eco-friendly.” She further stressed the government’s commitment to supporting regulations, capacity building, and entrepreneurship to mainstream sustainable materials such as C&D (Construction and Demolition ) waste products.

Sharing the institutional vision, Prof. Shreepad Karmalkar, Director, IIT Bhubaneswar, emphasized the growing urgency for academia-industry-government synergy: “There is a growing need for stronger connectivity between industry, academia and government so that the knowledge created in higher educational institutions can rapidly translate into tangible societal impact. Materials are a critical area of national development, and with the scale of infrastructure growth in Odisha, appropriate building materials are essential to manage emissions. IIT Bhubaneswar is committed to contributing meaningfully to this collaboration and emerging as a national hub in materials-oriented innovation.”

In his special address, Prof. Manu Santhanam, IIT Madras, underlined India’s dependence on finite building resources and the need for stronger policy push: “We must extend the life of natural resources and harness by-products and recycled materials effectively. The scientific evidence is here — now is the time for bold steps to utilize alternative materials and make a difference on the ground.” He noted that Odisha, with both natural resources and industrial by-products, is well-positioned to lead this transition.

In the inaugural session, Prof. Dinakar Pasla, Dean (Sponsored Research and Industrial Consultancy), IIT Bhubaneswar delivered the welcome address and noted : “As Odisha grows rapidly, we must ensure our infrastructure growth is aligned with sustainability goals. Academia and industry collaboration can accelerate the adoption of climate-resilient materials.”

Ms. Devapriya De Munshi, Development Alternatives, emphasized behavioural and policy shifts.

A technical report providing Greenhouse Gas (GHG) emission projections for Odisha's built environment and actionable recommendations titled 'Pathways for Decarbonization in the Built Environment of India' was also unveiled during the event.

Dr. Umesh Chandra Sahoo, Associate Professor, School of Infrastructure, IIT Bhubaneswar proposed a vote of thanks.

The workshop featured sessions on Decarbonizing Odisha's Built Environment; Innovations in low-carbon materials including LC3 cement, sintered aggregates, biomass-based concrete, and unfired bricks; C&D waste valorization and circular economy practices; Sustainable Road infrastructure solutions; Technical viability, standards, and market adoption challenges. Experts from IIT Bhubaneswar, IIT Madras, KIIT Bhubaneswar, industry partners including IMFA, and waste-processing organisations from Hyderabad and Thane contributed to the technical deliberations. A panel discussion in the final session produced actionable insights for enabling policies, industry collaboration, and research-to-practice linkages.

Concluding the workshop, participants collectively agreed that enabling policies, research-to-practice efforts, and green entrepreneurship will be key to accelerating adoption of low-carbon building materials across Odisha.

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