

# Della Townships partners with IIT-Madras to pioneer Microalgae-powered Carbon Sequestration

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Chennai, Mar 19 (UNI) Della Townships, India's fastest-growing luxury real estate platform with Gross Development Value (GDV) of Rs 45,830 crores (USD 5.07 billion), has entered into a strategic partnership with IIT-Madras to pioneer microalgae-powered carbon sequestration technologies.

The collaboration marks a transformative step toward climate-responsive urban development. Led by Design Futurist Jimmy Mistry, Founder and CMD, the partnership seeks to rethink sustainability in the real estate sector and to disrupt conventional approaches by integrating salutogenic principles directly into built environments.

The programme will follow an open and collaborative model: the innovations developed will be open-sourced rather than IP-protected, enabling broader adoption and global benefit, a release from Della said today.

Rooted in Della's philosophy of Salutogenic Living, designing environments that actively promote health, wellbeing, and longevity, the townships will incorporate an integrated ecosystem of sustainability innovations, including Microalgae-powered carbon capture systems: Liquid Trees (photobioreactor installations using algae technology to absorb CO<sub>2</sub> and release oxygen);

Vertical algae hydroponic installations: Packaged microalgae units integrated within fresh air ducts of air-conditioning systems, enhancing oxygen circulation while actively reducing indoor carbon load; Algae-based bio-ponds and regenerative water bodies: Advanced Living Façade Systems (next-generation green façades for thermal efficiency and carbon mitigation) and comprehensive biophilic design frameworks: Together, these interventions aim to create self-sustaining, oxygen-enriched, carbon-responsive environments within large-scale integrated luxury developments.

"This collaboration will adopt an open and collaborative approach, with the innovation being open-sourced rather than IP-protected, enabling wider adoption and allowing the global community to benefit. By making these systems openly available, we are removing barriers to scale, accelerate research and deployment, and invite academia, industry and local communities to co-develop practical, place-based solutions," Jimmy Mistry said.

The strategic collaboration with IIT Madras will focus on research, scalability, and real-world implementation of these microalgae-based systems, positioning Della Townships at the forefront of regenerative real estate innovation in India. This vision was globally articulated by Jimmy Mistry at COP30 (Amazonia, 2025), where he outlined a roadmap for moving the industry from compliance to active ecological restoration through salutogenic design.