



Meet the Top 25 of Carbon Zero Challenge 5.0

Team Name	Proposed Idea
Acala Design and Tech Pvt Ltd	A modular construction solution using retractable frames and AI-driven design to enable rapid deployment, energy efficiency, and adaptable building configurations.
Agriveer	An innovative model that convert the banana waste into ecofriendly biofertilizers and other commercial valuable products to promote sustainable and organic farming.
Aldrogen Energy	A hybrid green hydrogen-powered generator that can provide sustainable, efficient, and zero-emission electric power solutions for mobile and stationary applications.
AmpCycle	An innovative electro extraction process that efficiently recovers lithium, cobalt, and nickel from spent batteries, reducing waste and addressing gaps in lithium-ion battery recycling.
Birdscale	A location-agnostic AI-powered remote sensing GIS portal to deliver accurate, location-independent insights for improved farm management.



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Blue Tharak Solutions	A nature-based riverine plastics collection system using a bubble curtain to capture debris before it enters the ocean, without disrupting aquatic life or boat movement.
CaloriX	A next-generation solid state cooling technology that leverages magnetocaloric materials to achieve fluorocarbon-free, energy-efficient cooling by cyclically applying and removing a magnetic field.
ChromaSight	A dynamic window solution leveraging organic-based electrochromic technology that seamlessly adjusts its tint and colour, optimising energy efficiency, enhancing occupant comfort, and reducing glare in smart buildings.
Ecorenowa	A solar panel recycling system using an onsite delamination machine and centralized chemical-based processes to efficiently recover materials.
EDS Wagon Tech Pvt Ltd	A system that generates on-demand hydrogen gas, injected into the engine via the air filter to clean carbon deposits and reduce vehicle emissions without dismantling engine parts.



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Emitrix	An AI-powered platform that enables businesses to monitor, decarbonize, and report Scope 3 emissions with automated data collection and regulatory compliance integration.
G-One Saver	An automated industrial air pollution control device that not only controls pollution, but converts it into breathable oxygen.
GyanData	An AI-powered solution using drones and RFID to detect installation issues in utility-scale solar plants, reducing losses before commissioning.
Hypersonic Technologies Pvt Ltd	A clean and efficient plasma pyrolysis technology that converts biogas, natural gas, or methane into low-carbon hydrogen and carbon black, offering a scalable, eco-friendly solution for on-demand hydrogen production.
IGNIT Technical Solutions Pvt Ltd	A thermal management system using hollow fibre membranes to cool EV batteries, improving performance and reducing energy consumption and carbon footprint.



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InfinityCell	A fire-safe, ultra-low-cost solid-state sodium-ion battery that matches lithium performance using 100% locally sourced, non-toxic materials, offering a scalable solution for BESS, 2W, 4W, ships, and submarines.
IonEco	A sustainable ion propulsion system for satellites that uses ionospheric energy to adjust trajectories, reducing carbon emissions and space debris while ensuring long-term stability without chemical propellants.
Karotimam	A sustainable alternative to conventional PCBs, this innovation uses coarse wool fabric and organic binders to create FR4-grade biodegradable electronic substrates, significantly reducing e-waste.
Mirage Energy	A sustainable, net-zero innovation that enables smart indoor seaweed farming, optimising resource use and offering a scalable solution for climate-resilient cultivation.
NoFoodWaste	An end-to-end scalable solution for food rescue, combining a data-powered approach with hunger spot mapping, automated fleet and volunteer coordination, and carbon footprint tracking.



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Passive Cooling Tower	A novel passive cooling system designed for sustainable and efficient temperature control in buildings and data centers without energy consumption or water waste.
SENVIRA Engineering Pvt Ltd	A low-cost, low-carbon construction system combining Cold-Formed Steel with sustainable, thermally insulated bricks made from agricultural and industrial waste, offering scalable, affordable housing solutions.
SmartNet	A comprehensive water management software solution.
Urban-Hyphae Bioscience Pvt Ltd	A biodegradable, cruelty-free leather alternative made from fungal mycelium, this innovation transforms agricultural waste into sustainable materials for fashion, automotive, and packaging industries.
3D-ReHEAT by CERG	A circular economy and sustainable approach of 3D printed SiSiC heat exchanger incorporating recycled silicon carbide and carbon-sequestered microalgae.

MEET THE CZC winners

On Day 3 of the CZC 5.0 Grand Finale, the programme concluded with the Award Ceremony, recognizing startups that demonstrated outstanding innovation, scalability, and real-world climate impact. Following a rigorous multi-stage evaluation and jury deliberation, the winning teams were announced across multiple award categories.

The awards honoured startups working on clean energy, sustainable mobility, green materials, climate-resilient agriculture, and inclusive climate solutions, reflecting the core objective of CZC 5.0—to translate climate ambition into actionable and scalable implementation.

Award Winners - ₹10 Lakhs Award



EDS Wagon Tech

On-demand hydrogen injection system to reduce vehicular emissions

Aldrogen Energy

Hybrid green hydrogen generators enabling zero-emission power



Karotimam Innovations Pvt. Ltd.

Biodegradable FR4-grade PCBs developed using coarse wool fabric



MEET THE CZC winners

Award Winners - ₹5 Lakhs Award

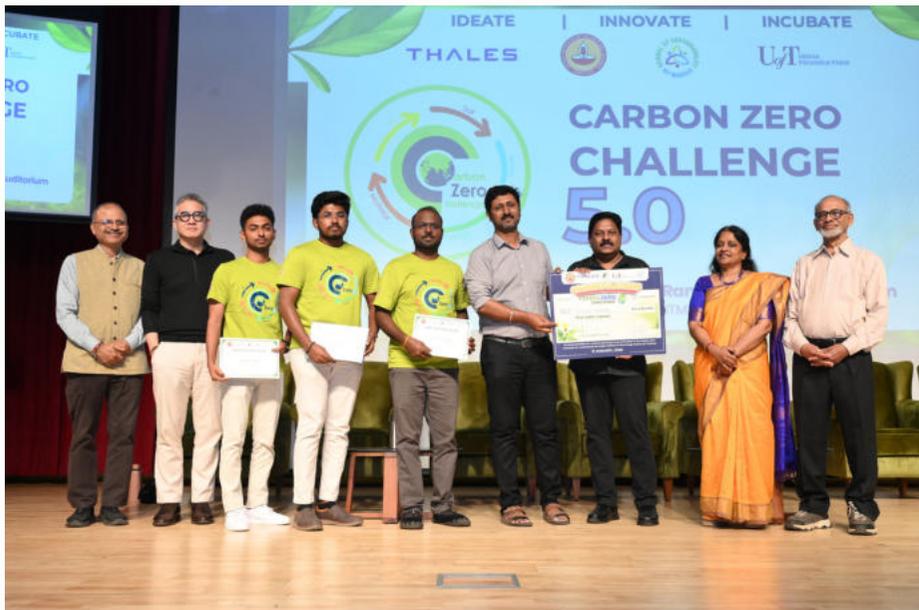


Acala Design & Tech Pvt. Ltd.
AI-driven, rapidly deployable modular building solutions

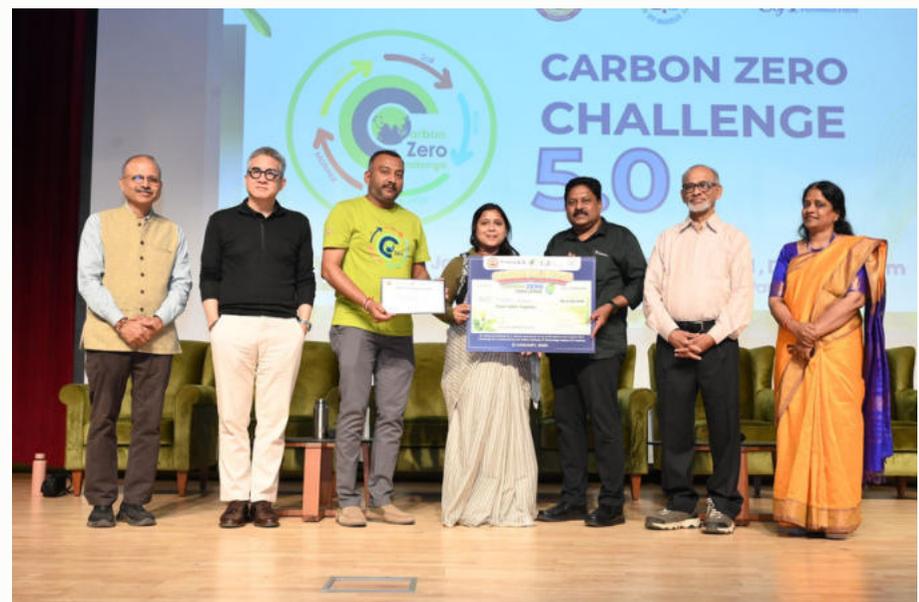


Agriveer
Banana waste-based biofertilizers promoting sustainable farming

Inclusive Innovation Award | ₹5 Lakhs



Passive Cooling Tower
Energy-free cooling solutions for buildings and data centers



Mirage Energy
Net-zero indoor smart seaweed farming solution

MEET THE CZC winners

Special Mention



Ecorenewa

Onsite solar panel recycling and advanced material recovery solutions

The award ceremony was presided over by an eminent jury panel comprising Dr. Rajan Srikanth, Dr. Lakshmi Vaideeswaran Vaideeshwaran, Dr. Pradip Radhakrishnan Subramaniam, and Dr. Indumathi M. Nambi (PhD, Fellow INAE).

The Carbon Zero Challenge 5.0 was powered by the Indian Institute of Technology Madras, Thales, University of Toronto India Foundation and School of Sustainability, IIT Madras, with the Grand Finale serving as a culmination of months of innovation, mentorship, and evaluation.