

PLUSS Advanced Technologies and Ecodome Logistics to build India's greenest cold chain for pharma distribution

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PLUSS Advanced Technologies has announced a strategic partnership with next-generation cold-chain specialist Ecodome Logistics to deploy validated, IoT-enabled Reusable PCM boxes for temperature-sensitive medicines & Biologicals nationwide.

The collaboration delivers three compelling benefits up front: it is expected to cut vaccine and biologics wastage by as much as a quarter, reduce carbon emissions linked to single-use Styrofoam by up to eighty per cent, and provide end-to-end shipment visibility that meets the most demanding regulatory standards.

Inefficient cold-chain handling currently leads to vaccine spoilage rates of roughly twenty to twenty-five per cent across India, largely because traditional ice- and Styrofoam-based containers allow temperatures to dip below the safe 2°C threshold.

Each tonne of discarded Styrofoam also carries a heavy carbon penalty, with even limited recycling releasing thousands of kilograms of CO₂. By contrast, PLUS's reusable PCM boxes maintain a rock-steady 2°C–8°C range, can be redeployed multiple times a month, and generate less than a tenth of the emissions over their lifespan.

Under the agreement, Gurugram-based PLUSS will supply certified PCM-based thermal boxes that form the thermal backbone of Ecodome's rental fleet. Integrated sensors relay real-time temperature and location data to Ecodome's cloud dashboard, allowing manufacturers and regulators to intervene instantly if excursions occur. The pay-per-use model eliminates the capital outlay normally required to scale a passive container fleet, making reliable cold-chain access both affordable and sustainable for large and small pharma companies alike.

The partners will begin rollout in major pharmaceutical hubs—Hyderabad, Mumbai, Ahmedabad, Pune and the National Capital Region—before expanding to secondary manufacturing clusters. Both companies anticipate that the combined platform will accelerate adoption of PCM technology, strengthen vaccine security, and help India meet its climate commitments in healthcare logistics.

Image caption- (L) Samit Jain, Managing Director of PLUSS Advanced Technologies & (R) - Nihar Parida, Co-Founder of Ecodome Logistics