



Eco-Efficient Design

Eco-Efficient AI Infrastructure

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Where we most see heat, we see harmony. Our AI infrastructure runs in energy-optimized data centers powered by solar, wind, and hydro integration—wrapped in an eco-efficient blueprint that minimizes environmental impact.

Each node operates within:



AI-First
Technology



Ethical AI



GPU Farms



Shankar AI



Blockchain +
Biomedical



Education

Solar-powered GPU Racks

What is it: These are high-performance graphics processing units (GPUs) directly powered by solar energy through integrated photovoltaic systems.

How we achieve it: By installing large-scale solar panel arrays across our 21-acre infrastructure and connecting them to dedicated battery storage and power management systems.

Advantage: This not only drastically reduces electricity costs but also ensures 100% clean energy operation, validated by REC certifications.

Biodegradable Modular Hardware

What is it: Hardware built using recyclable, biodegradable, and modular components to ensure minimal e-waste.

How we achieve it: We partner with sustainable material providers to design chipboards, cables, and outer shells from biodegradable compounds and adopt modular assembly for easy upgrades and repairs.

Advantage: 90% of our hardware components can be reused or recycled, adhering to our repair-over-replace philosophy, lowering operational waste and cost.

Smart Cooling & Airflow Zoning Systems

What is it: Intelligent systems that manage airflow and cooling dynamically, based on real-time thermal data from server environments.

How we achieve it: Using AI-powered IoT sensors and smart zoning mechanisms, airflow and cooling systems are activated only where and when needed.

Advantage: Reduces power consumption by 35–45% compared to traditional cooling methods, contributing directly to our low carbon footprint.

Certified under global green computing standards and powered by 100% renewable energy, our eco-efficient design delivers sustainability without compromising performance.

AI with a conscience. Innovation with a footprint so small, it's barely there.

Signed,
Aleiman Shankar Rao
Founder & CEO, System Base Labs



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System Base Labs

A Carbon-Neutral Company 

SBL

Today's AI Startup. Engineering the Intelligence of Tomorrow



AI-First
Technology



Ethical AI



GPU Farms



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Biomedical



Education