Eden II Initiative

FINANCIAL ARCHITECTURE

Carbon-Backed On-Chain Liquidity & The Sister-Link Model
Eden II converts verified agricultural decarbonization into audit-ready digital assets, establishing continuous liquidity rails for both industrial agribusinesses and emerging farming communities:

- **Cryptographic dMRV (EcoCreditX):** In-ground LoRaWAN soil probes and reactor flowmeters hash real-time methane destruction, avoided diesel shipping, and displaced synthetic nitrogen directly to Hedera Hashgraph via SHA-256 telemetry blocks.
- **Carbon-Backed Stable Asset Creation:** Machine-verified avoidance and zero-runoff metrics programmatically mint fractional Voluntary Carbon Market (VCM) and Biodiversity Credits (1 EcoCredit = 1 kg CO_2e), creating an unalterable liquidity layer that amortizes physical hardware.
- **The 50 / 30 / 20 Smart Contract Dividend:** Automated settlement contracts execute a deterministic split upon every secondary credit sale or enterprise retirement:
  - **50% Enterprise Return:** Liquid yield deposited directly to the commercial node operator to monetize Scope 3 reductions and accelerate CapEx payback.
  - **30% Cooperative Subsidy:** Direct yield routed as spendable fiat or mobile money (e.g., M-Pesa, MTN) to the paired sister cooperative to fund localized seeds, tools, and irrigation infrastructure.
  - **20% Protocol Treasury:** Allocated to platform maintenance, catalyst R&D, and autonomous NexusLIMS OTA software updates.
- **The "Buy-One, Give-One" Sister-Link Flywheel:** Every commercial 40-ft container deployed by an enterprise producer cross-subsidizes an agile 20-ft sister unit for an under-resourced cooperative. Through the low-bandwidth NexusLIMS Sister-Link, commercial agronomists and smallholder growers exchange soil remediation profiles, mineral formulations, and harvest data peer-to-peer.

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CAPITAL FLOW & ALLOCATION

Stakeholder Vector	Allocation Share	Settlement Rail	Core Economic Utility
Enterprise Node Operator	**50%**	Corporate Treasury / Fiat Stablecoin (USDC)	Offsets initial hardware CapEx; monetizes upstream Scope 3 corporate compliance.
Humanitarian Sister Co-Op	**30%**	Local Mobile Money (M-Pesa, MTN) / Agronomic Vouchers	Delivers non-debt community operating capital; finances local seeds and water systems.
Protocol Maintenance & R&D	**20%**	Multi-Sig Protocol Treasury	Funds ongoing firmware releases, catalyst supply pipelines, and continuous remote diagnostics.

THE DE-RISKED VALUE LOOP

- **Real-World Asset (RWA) Backing:** Unlike speculative algorithmic tokens, every minted credit is mathematically tied to physical telemetry and over-collateralized by heavy industrial container hardware with tangible liquidation value.
- **Zero-Speculation Last-Mile Off-Ramp:** Rural smallholders never manage private keys, crypto gas fees, or volatile secondary exchange books; smart contracts settle credit retirements into spendable local currencies automatically.
- **Institutional Scope 3 Alignment:** Major enterprise off-takers purchase and retire high-integrity credits directly to fulfill European CSRD and global Net-Zero reporting requirements, securing predictable buy-side off-take volume.