KASPA

15th Dii Desert Energy - Leadership Summit

Dubai - November 2025

Kaspa & Kii

A New 21st Century Utility

Real-time trust and settlement for markets, assets, and machines.

Global, permissionless, scalable, secure, decentralised sequencing — fast and affordable.

POWERED BY KASPA

Larry Fink: The Future Is Tokenised

Video

"Every currency, ETF, and asset will soon be digitised and tokenised, connected through a **single global settlement layer.** We're not talking about it enough. Most countries aren't ready for what's coming."

Larry Fink, CEO, BlackRock

This is the settlement layer only Kaspas BlockDAG can provide globally at the scale required.

Kaspa: A Global Sequencing Network

What it is

- BlockDAG consensus (GHOSTDAG) enables parallel blocks
- Proof-of-Work (kHeavyHash) — simple, secure, optical-mining ready
- Fair-launched, open source; no premine/ICO; not backed by any company or authority
- A True Digital Commodity

Why it matters

- 12+ years of research; among the most-cited researchers in the field
- Purpose-built to be a neutral, public, censorship-resistant settlement layer
- Optimised path toward optical processors and hardware acceleration

Hayekian Principles: Spontaneous Order

F.A. Hayek, Nobel Prize in Economics (1974)

"The marvel of markets isn't their efficiency—it's that they coordinate millions of individual decisions without central control."

Bitcoin: Central Planning

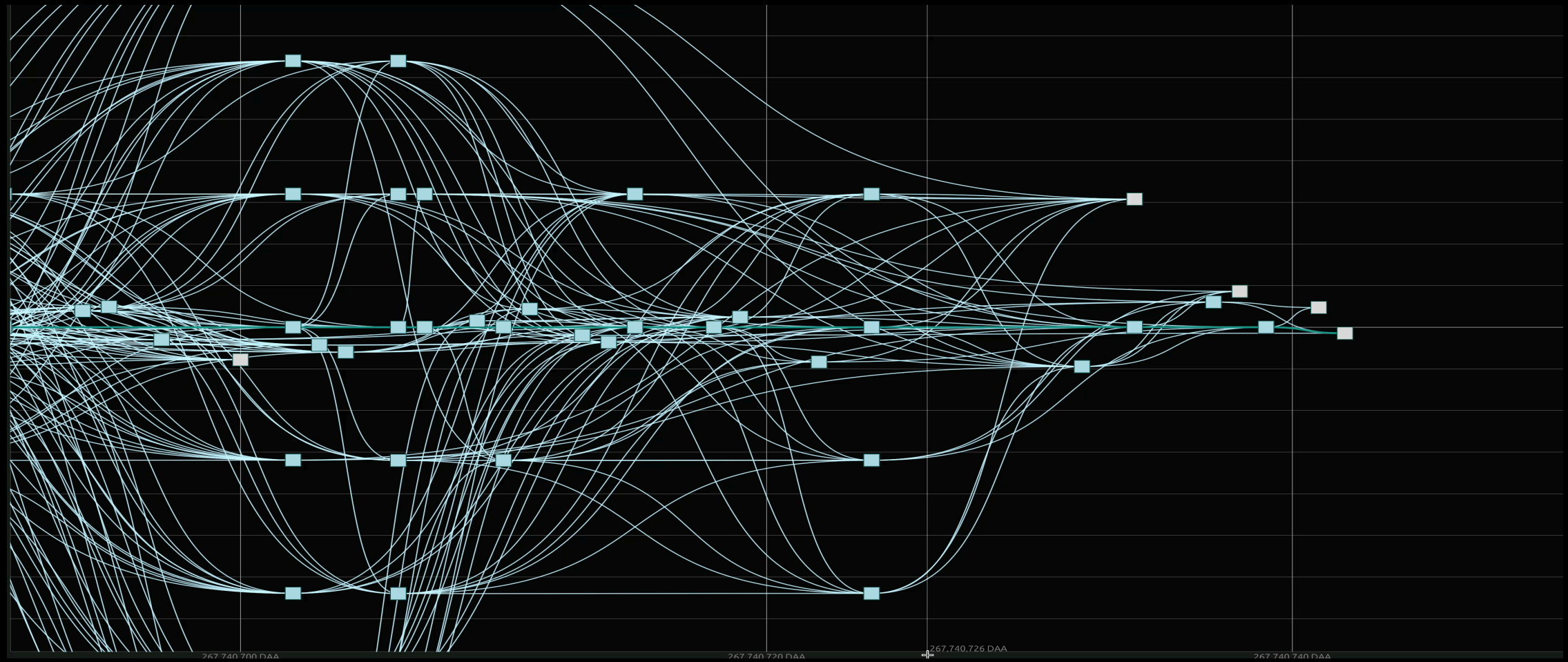
- Single transaction queue, artificial bottlenecks
- Only 157M base layer transactions per year
- Layered dependency — institutional gatekeepers required

Kaspa: Spontaneous Order

- Parallel processing, natural emergence of order
- Unlimited throughput potential without gatekeepers
- Layered choice — optional tools, not mandatory dependencies

Kaspa doesn't just store value—it coordinates it through spontaneous sequencing rather than coercion

BlockDAG at 10 Blocks Per Second



- Multiple blocks created and validated in parallel
- No artificial queues → low latency
- Natural ordering emerges via GHOSTDAG

The Trilemma, Solved

Traditional systems force trade-offs. Kaspa does not.

- ✓ Scalability — parallel block creation (thousands TPS; sub-second confirmations)
- ✓ Total Decentralization — wide miner participation; predictable rewards (864k blocks/day)
- ✓ Security — Bitcoin-grade PoW with rapid convergence (DAGKnight advances)

Leapfrogged the field — capacity, reliability, and resilience without compromise.

Energy Is Real-Time. Settlement Isn't.

The problem

- Electrons move in seconds; cash settles in days
- Reconciliation friction slows market velocity
- Liquidity stranded in cycles, higher risk profiles

The impact

- Missed real-time pricing opportunities
- Limited flexibility in energy markets
- Capital inefficiency across the system

Legacy rails. Opaque registries. Fragmented carbon. These are the brakes.

KASPA INDUSTRIAL INITIATIVE

Market Enabler for a New Class of Utility

Kii uses the Dii model to promote and enable a new class of utility

- Enterprise adoption programs and pilots
- Regulatory dialogue and standards alignment
- Partner convening: utilities, OEMs, exchanges, verifiers
- Market enabling tools, build on Kaspa to compliment activities such as ZETA & other initiatives

Role: Translate protocol strengths into sector outcomes for energy and industry

WarpCore: Seamless TradFi Integration

- ISO 20022 and other ISO market standards adapters
- Translate legacy TradFi↔ blockchain with minimal disruption
- MVP operational as a middleware with test transactions ongoing
- Connect trading, settlement, and audit to Kaspa's public rail of all digital assets to traditional financial institution
- Institutional grade settlement rails with KYC/AML
- Allows traditional Institutions transact tokenised assets.

Let existing systems keep running — while gaining real-time settlement.

AssetMint + DANet: Proof at Source

DANet (Distributed Assaying Network)

- Independent verifiers attest grade, composition, and method at origin
- Cryptographic proofs follow assets across markets
- Decentralised valuation of pretokenised assets via Oracles

AssetMint

- Tokenize energy, carbon credits, RECs, and adjacent commodities / environmental derivatives and Real World Assets (RWA)
- Programmable tokens carry provenance metadata
- Source to Sink with Auto-retirement

You can't fake energy — physical reality anchors digital truth.

GWU: Energy's Native Settlement Instrument

GIGAWATT COIN

What it is

Clean-power-backed settlement unit (fractional in kWh)

Collateralized by a basket of assets including Carbon

Programmable: carbon intensity thresholds, ESG logic

Carbon-neutral to carbon-negative collateral strategy

Why it matters

Purpose-built for energy markets

Institutional-grade auditability and compliance

Enables real-time settlement of energy assets

Global Digital Asset (with modifications for regional markets compliance)

Why Not Fiat-Backed Stablecoins?

Compare On	Stablecoins	Gigawatt Stablecoin Unit
Purpose	General-purpose payment instrument, not optimised for energy markets	Purpose-built for energy market settlement and trading
Energy-First	Traditional financial model	Energy-native settlement
Collateral	Fiat IOUs held in traditional banking system	Tokenised energy contracts, RECs, clean energy baskets, select fiats. Variations for some regional markets USA, BRICS, EU
Programmability	Limited to transfer and basic conditions	Carbon intensity thresholds, ESG conditions, automated compliance
Market Fit	Energy markets as afterthought, requires extensive adaptation	Native alignment with energy market dynamics and requirements

Stablecoins are hammers. Energy markets need precision instruments.

ZET-EX: Exchange Introduction

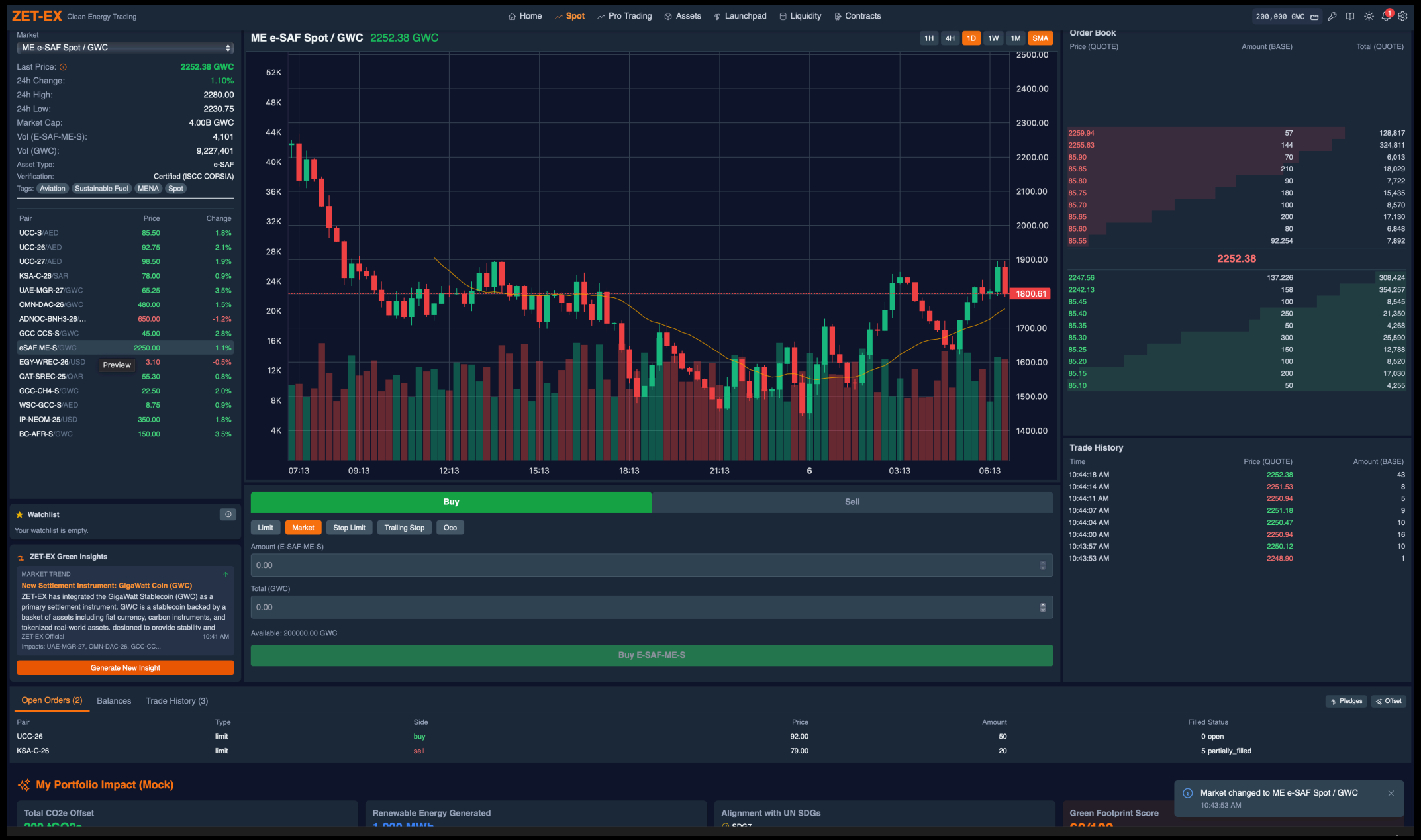
Powered by Kaspa — built as a proof of concept for friends at ZETA

Live Demonstration

- Tokenisation of energy assets and environmental attributes
- Trading pairs with real-time, final settlement on Kaspa
- Secure digital wallet integration with automated compliance
- Complete cryptographically verifiable audit trail export

POWERED BY KASPA

ZET-EX: Trading Screens & Workflow



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KASPA INDUSTRIAL INITIATIVE

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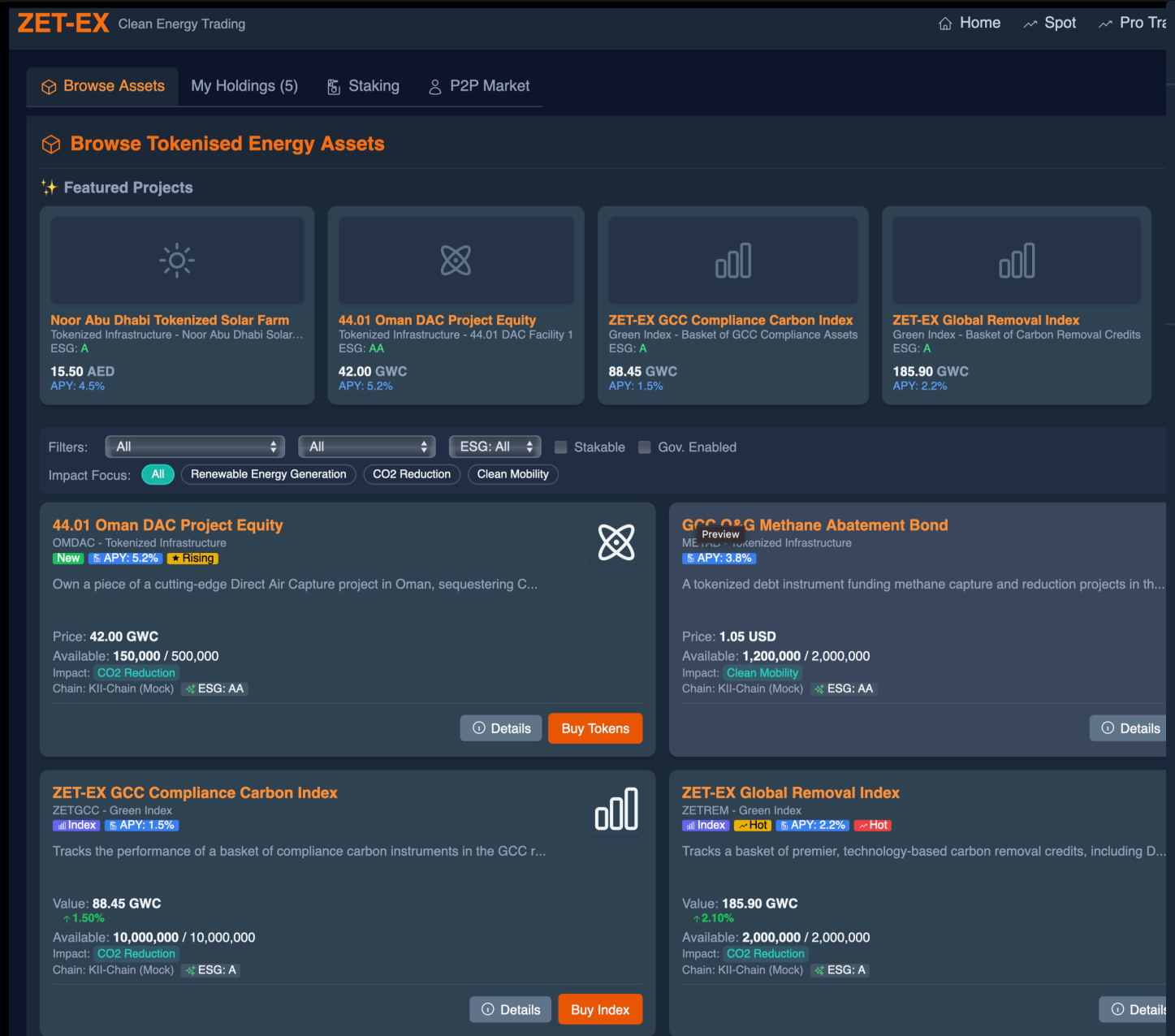

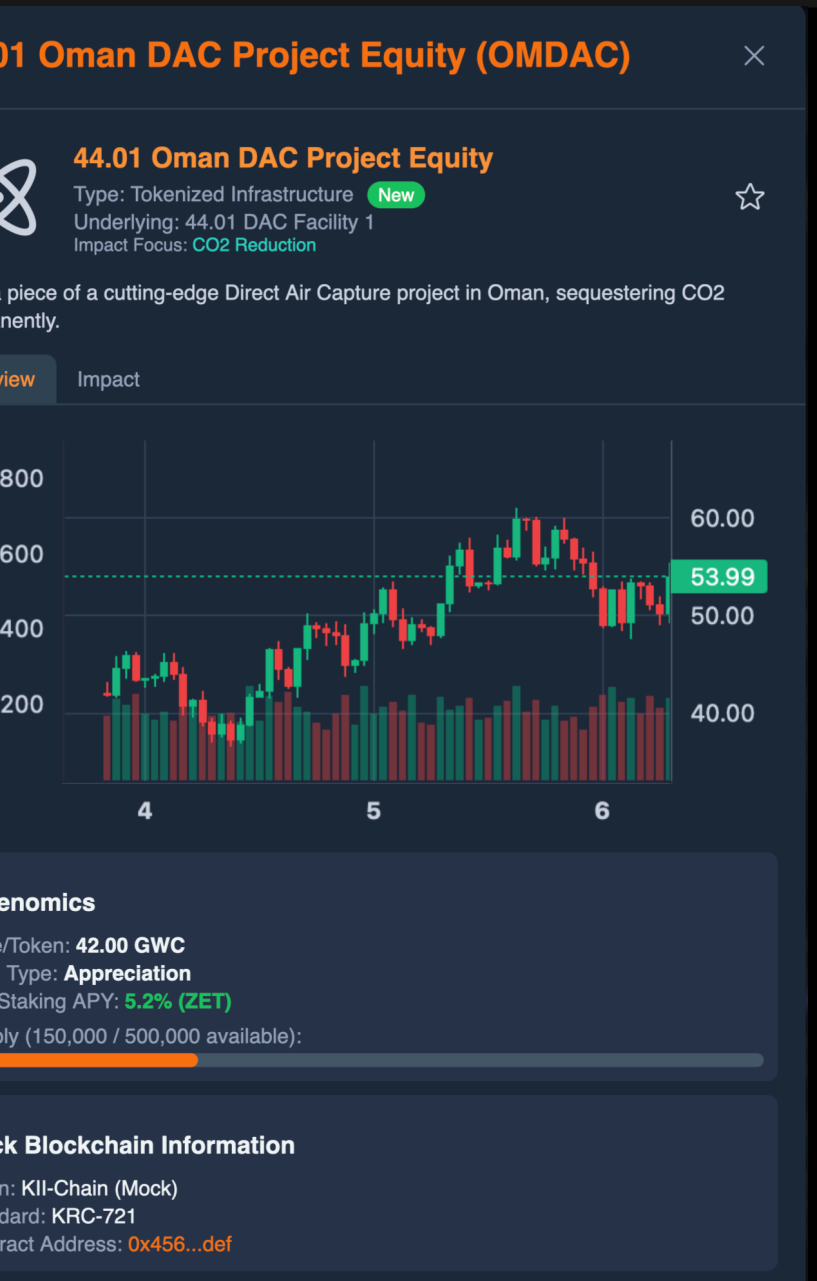

ZET-EX: Trading Screens & Workflow

KASPA INDUSTRIAL INITIATIVE

Realtime creation of µRECs from IoT sensors at 1Kwh level live on Kaspa BlockDAG

HFT Simulation: Real-Time REC Minting via Kaspa

This demonstrates how high-frequency data from a solar farm can be settled on Kaspa to create micro-Renewable Energy Certificates (µREC) in real-time. Each "SUCCESS" message represents a near-instant, verifiable transaction on the blockDAG.

Start Stream Stop Stream

Why Kaspa Succeeds (and What's Next)

158 million

Transactions in a single day

with average fee of $0.00003 — no slowdowns, no bottlenecks

Measured Outcomes

Sub second	10second	1000s+	98.7%	100%
Transaction time	Full Confirmation time	Transactions per second	Cost reduction vs legacy	Network uptime

R&D Edge

DAGKnight + vProgs path close the loop on speed and interoperability

kHeavyHash: efficient today, optimized for optical processors tomorrow

Decentralisation Signal

- **Satellite node pilot: testing platform in space**
- Proof of no single point of failure - true geographic distribution, true decentralisation

Today is Kaspa's 4th birthday
4 years of live network operation.