



The Trust Grid - A New Utility



# 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

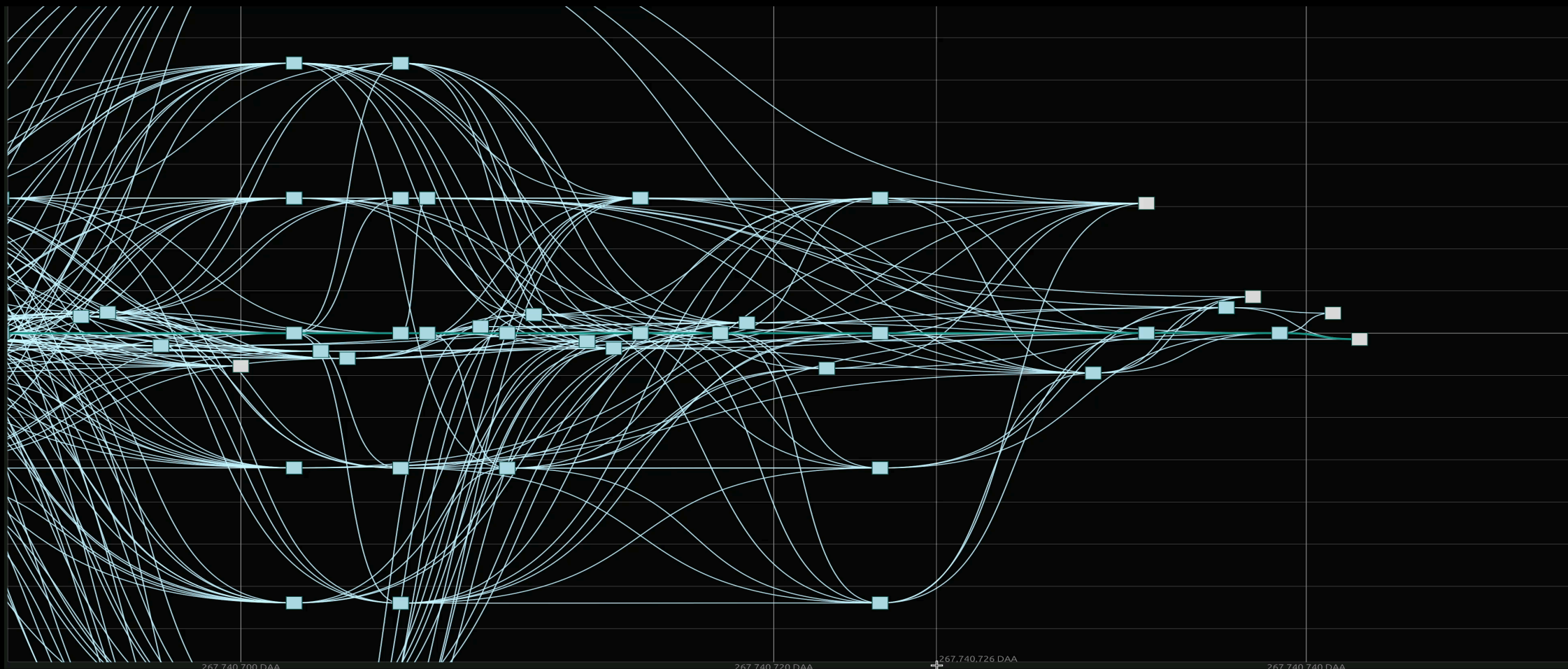
## Kaspa: Spontaneous Order

- 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.



## 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 Kaspas 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 Kaspas'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



## 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





# ZET-EX: Trading Screens & Workflow



Market

ME e-SAF Spot / GWC

Last Price: 2252.38 GWC

24h Change: 1.10%

24h High: 2280.00

24h Low: 2230.75

Market Cap: 4.00B GWC

Vol (E-SAF-ME-S): 4,101

Vol (GWC): 9,227,401

Asset Type: e-SAF

Verification: Certified (ISCC CORSIA)

Tags: Aviation Sustainable Fuel MENA Spot

Pair

Price

Change

UCC-S/AED85.501.8%

UCC-28/AED92.752.1%

UCC-27/AED98.501.9%

KSA-C-26 SAR78.000.9%

UAE-MGR-27/GWC65.253.5%

OMN-DAC-26/GWC480.001.5%

ADNOC-BNH3-26...650.00-1.2%

GCC CCS-S/GWC45.002.8%

eSAF ME-S/GWC2250.001.1%

EGY-WREC-26 USD3.10-0.5%

QAT-SREC-25/QAR55.300.8%

GCC-CH4-S/GWC22.502.0%

WSC-GCC-S/AED8.750.9%

IP-NEOM-25 USD350.001.8%

BC-AFR-S/GWC150.003.5%

★ Watchlist

Your watchlist is empty.

ZET-EX Green Insights

MARKET TREND

New Settlement Instrument: GigaWatt Coin (GWC)

ZET-EX has integrated the GigaWatt Stablecoin (GWC) as a primary settlement instrument. GWC is a stablecoin backed by a basket of assets including fiat currency, carbon instruments, and tokenized real-world assets, designed to provide stability and

ZET-EX Official

Impacts: UAE-MGR-27, OMN-DAC-26, GCC-CC...

10:41 AM

Generate New Insight

ME e-SAF Spot / GWC 2252.38 GWC

1H 4H 1D 1W 1M SMA

07:13 09:13 12:13 15:13 18:13 21:13 6 03:13 06:13

Buy

Sell

Limit Market Stop Limit Trailing Stop Oco

Amount (E-SAF-ME-S)0.00

Total (GWC)0.00

Available: 200000.00 GWC

Buy E-SAF-ME-S

Order Book

Price (QUOTE)

Amount (BASE)

Total (QUOTE)

2259.9457128,817

2255.63144324,811

85.90706,013

85.8521018,029

85.80907,722

85.7518015,435

85.701008,570

85.6520017,130

85.60806,848

85.5592,2547,892

2252.38

2247.56137,226308,424

2242.13158354,257

85.451008,545

85.4025021,350

85.35504,268

85.3030025,590

85.2515012,788

85.201008,520

85.1520017,030

85.10504,255

Trade History

Time

Price (QUOTE)

Amount (BASE)

10:44:18 AM2252.3843

10:44:14 AM2251.538

10:44:11 AM2250.945

10:44:07 AM2251.189

10:44:04 AM2250.4710

10:44:00 AM2250.9416

10:43:57 AM2250.1210

10:43:53 AM2248.901

Open Orders (2)

Balances

Trade History (3)

Pair

Type

Side

Price

Amount

Filled Status

UCC-26limitbuy92.00500 open

KSA-C-26limitsell79.00205 partially\_filled

My Portfolio Impact (Mock)

Total CO2e Offset

Renewable Energy Generated

Alignment with UN SDGs

Green Footprint Score

Market changed to ME e-SAF Spot / GWC

10:43:53 AM



# ZET-EX: Trading Screens & Workflow



Portfolio Overview

Pro Trading

TOTAL PORTFOLIO VALUE (USD EST.)

\$2,196,837.10

Quantum-Secured Digital Assets

KSP

QEC Certified

1,500,000

KSP

68.28%

\$1,500,000.00

GWC

QEC Certified

250,000

GWC

11.38%

\$250,000.00

IP-NEOM-25

QEC Certified

200

NEOM Iron Powder DEC25 / USD

3.19%

\$70,000.00

GCC-CH4-S

QEC Certified

2,000

GCC Methane Abatement Credit Sp...

2.05%

\$45,000.00

WSC-GCC-S

QEC Certified

10,000

GCC Water Cert (Agri) Spot / AED

1.09%

\$23,841.96

E-SAF-ME-S

QEC Certified

10

ME e-SAF Spot / GWC

1.02%

\$22,500.00

EGY-WREC-26

QEC Certified

5,000

Egypt Wind REC 2026MAR / USD

0.71%

\$15,500.00

ADNOC-BNH3-26

QEC Certified

20

ADNOC Blue Ammonia (CCS) 2026...

0.59%

\$13,000.00

UCC-S

QEC Certified

500

UAE Carbon Credit Spot / AED

0.53%

\$11,648.50

BC-AFR-S

QEC Certified

75

Africa Biochar Spot / GWC

0.51%

\$11,250.00

NEOMH2

QEC Certified

400

NEOM Green Hydrogen Project Token

0.46%

\$10,000.00

ZET

QEC Certified

10,000

ZET

0.46%

\$10,000.00

Exchange Fiat Balances

QAR

200,000.00

2.50%

\$54,945.05

USD

50,000.00

2.28%

\$50,000.00

EUR

30,000.00

1.47%

\$32,400.00

AED

100,000.00

1.24%

\$27,247.96

SAR

50,000.00

0.61%

\$13,333.33

BHD

10,000.00

0.17%

\$3,773.58

OMR

5,000.00

0.09%

\$1,923.08

KII QEC Certified

Powered by IBM Quantum™ Security (Mock)

Enterprise Controls

Audit Log

## ZET-EX Clean Energy Trading

### Smart Contracts Hub

Automate your trading and impact strategies. Select a template, configure it, and deploy it to

#### Template Library

##### Dollar-Cost Averaging (DCA)

Investing

Automatically invest a set amount of money in a chosen asset at regular intervals to average out purchase price over time.

##### "Buy the Dip" Trigger

Automation

Automatically purchase an asset if its price drops by a specified percentage within a 24-hour period.

##### Dynamic Impact Balancer

Portfolio

Automatically rebalance your portfolio to maximize environmental impact. This contract periodically sells a portion of your lowest ESG-rated assets to buy higher-rated ones, keeping your investments aligned with your green goals.

##### Yield-to-Offset Treasury

Impact

Put your idle assets to work for the planet. This contract stakes your yield-bearing tokens and uses the rewards to automatically purchase and retire carbon credits, making your portfolio self-offsetting.

##### Intelligent Arbitrage Swap

Automation

Be the market maker. This advanced contract capitalizes on temporary price inefficiencies between different classes of green assets, swapping between them when their price ratio



# ZET-EX: Trading Screens & Workflow



ZET-EX Clean Energy Trading

Home Spot Pro Tr

Browse Assets My Holdings (5) Staking P2P Market

## Browse Tokenised Energy Assets

### Featured Projects

**Noor Abu Dhabi Tokenized Solar Farm**  
Tokenized Infrastructure - Noor Abu Dhabi Solar...  
ESG: A  
**15.50 AED**  
APY: 4.5%

**44.01 Oman DAC Project Equity**  
Tokenized Infrastructure - 44.01 DAC Facility 1  
ESG: AA  
**42.00 GWC**  
APY: 5.2%

**ZET-EX GCC Compliance Carbon Index**  
Green Index - Basket of GCC Compliance Assets  
ESG: A  
**88.45 GWC**  
APY: 1.5%

**ZET-EX Global Removal Index**  
Green Index - Basket of Carbon Removal Credits  
ESG: A  
**185.90 GWC**  
APY: 2.2%

Filters: All All ESG: All Stakable Gov. Enabled

Impact Focus: All Renewable Energy Generation CO2 Reduction Clean Mobility

### 44.01 Oman DAC Project Equity

OMDAC - Tokenized Infrastructure  
New APY: 5.2% Rising

Own a piece of a cutting-edge Direct Air Capture project in Oman, sequestering C...

Price: **42.00 GWC**  
Available: **150,000 / 500,000**  
Impact: **CO2 Reduction**  
Chain: KII-Chain (Mock) ESG: AA

Details

Buy Tokens

### GCC O&G Methane Abatement Bond

Preview  
ME.TAC - Tokenized Infrastructure  
APY: 3.8%

A tokenized debt instrument funding methane capture and reduction projects in th...

Price: **1.05 USD**  
Available: **1,200,000 / 2,000,000**  
Impact: **Clean Mobility**  
Chain: KII-Chain (Mock) ESG: AA

Details

### ZET-EX GCC Compliance Carbon Index

ZETGCC - Green Index  
Index APY: 1.5%

Tracks the performance of a basket of compliance carbon instruments in the GCC r...

Value: **88.45 GWC**  
↑ 1.50%  
Available: **10,000,000 / 10,000,000**  
Impact: **CO2 Reduction**  
Chain: KII-Chain (Mock) ESG: A

Details

Buy Index

### ZET-EX Global Removal Index

ZETREM - Green Index  
Index Hot APY: 2.2% Hot

Tracks a basket of premier, technology-based carbon removal credits, including D...

Value: **185.90 GWC**  
↑ 2.10%  
Available: **2,000,000 / 2,000,000**  
Impact: **CO2 Reduction**  
Chain: KII-Chain (Mock) ESG: A

Details

## 44.01 Oman DAC Project Equity (OMDAC)



### 44.01 Oman DAC Project Equity

Type: Tokenized Infrastructure New  
Underlying: 44.01 DAC Facility 1  
Impact Focus: **CO2 Reduction**



Own a piece of a cutting-edge Direct Air Capture project in Oman, sequestering CO2 permanently.

Overview Impact



### Tokenomics

Price/Token: **42.00 GWC**  
Yield Type: **Appreciation**  
Est. Staking APY: **5.2% (ZET)**  
Supply (150,000 / 500,000 available):

### Mock Blockchain Information

Chain: KII-Chain (Mock)  
Standard: KRC-721  
Contract Address: **0x456...def**



# ZET-EX: Trading Screens & Workflow



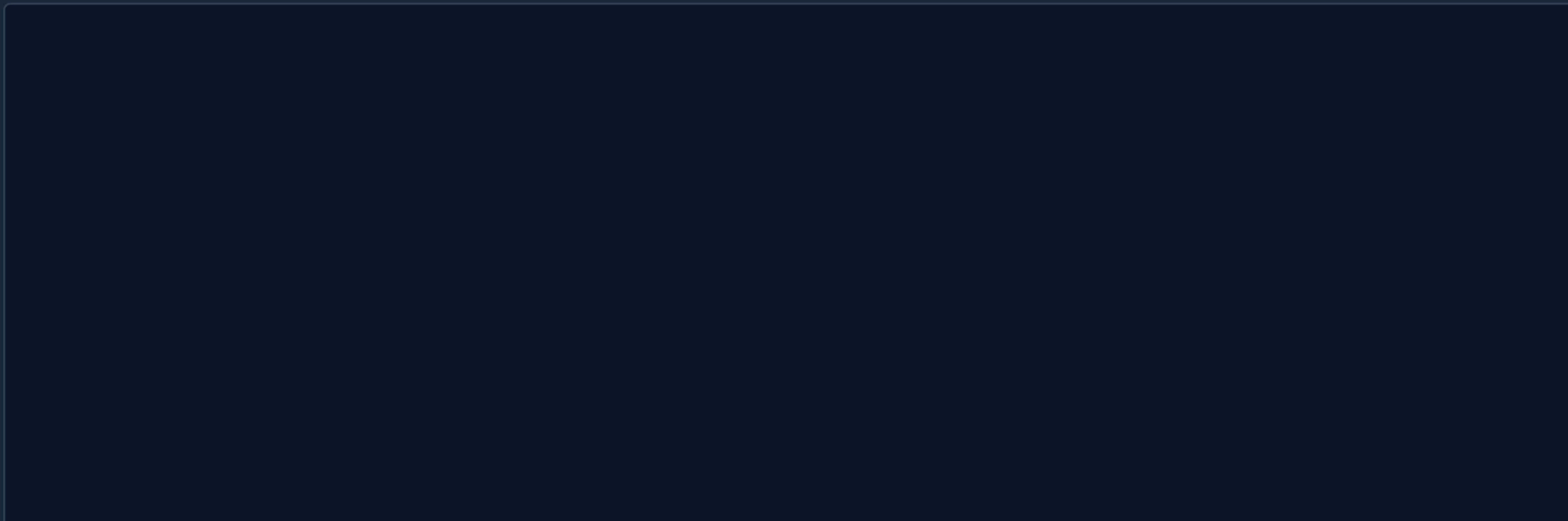
Realtime creation of  $\mu$ RECs from IoT sensors at 1Kwh level live on Kaspa BlockDAG

## 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 ( $\mu$ REC) 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**

Transaction time

**10second**

Full Confirmation time

**1000s+**

Transactions per second

**98.7%**

Cost reduction vs legacy

**100%**

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.



