

Canton Network Payment Flow Analysis

Executive Summary

Canton Network operates as a privacy-enabled institutional blockchain processing reported \$6 trillion in tokenized assets and \$280 billion in daily repo volume according to industry sources. The network employs a distinct economic model featuring zero pre-allocation and a burn-and-mint equilibrium mechanism. This analysis examines Canton's payment flows, token distribution, and economic sustainability relative to traditional L1 networks analyzed in our broader research.

Network Overview

Reported Metrics (2025)

Note: Figures sourced from third-party reports and news coverage, not independently verified

- **Total Value Secured:** \$6 trillion in tokenized RWA (per industry reports)
- **Daily Transaction Volume:** \$280 billion in repos (reported)
- **Network Participants:** 400+ institutions (claimed)
- **Validator Count:** 500+ validators, 30+ super validators (reported)
- **Daily Transactions:** 3 million ledger events (confirmed by Canton blog)
- **Token Supply:** ~28.48B Canton Coin (CC) in circulation
- **Network Launch:** July 2024 (Global Synchronizer MainNet)

Institutional Participants

- **Major Banks:** Goldman Sachs, JPMorgan, Bank of America, Deutsche Bank, BNP Paribas, HSBC, Barclays, Citi
- **Infrastructure Providers:** Microsoft, Chainlink, Coin Metrics, Kiln, P2P.org
- **Trading Firms:** DRW Trading, Tradeweb
- **Other:** Circle, BitSafe, Zerohash

Economic Model

Canton Coin (CC) Tokenomics

No Pre-Allocation Structure

- **Zero pre-mine:** No tokens created before network launch
- **No VC allocations:** Absence of traditional investor token allocations

- **No founder tokens:** No team or foundation pre-allocation
- **Distribution Method:** Tokens distributed solely through network participation

Supply Dynamics

- **Current Supply:** ~28.48 billion CC (February 2025)
- **10-Year Target:** ~100 billion CC maximum supply
- **Annual Issuance Post-10 Years:** 2.5 billion CC constant rate
- **Burn-and-Mint Equilibrium:** ~2.5 billion CC burned and minted annually

Fee Structure

Transaction Fees

- **Fee Denomination:** All fees denominated in USD (not CC)
- **Token Price:** CC price floats based on market value
- **Fee Burning:** Usage fees are burned, reducing supply
- **Transparency:** Fee distributions published despite transaction privacy

Payment Flow Distribution

When Users Pay \$1 in Canton Network Fees:

Direct Fee Recipients

- **Network Burn:** \$1.00 (100% of fees burned)
- **New Minting:** Distributed based on participation metrics

Canton Coin Reward Distribution

Current Phase (2025)

- **Super Validators:** 35% of rewards (~875M CC annually)
- **Application Providers:** 50% of rewards (~1.25B CC annually)
- **Users/Participants:** 15% of rewards (~375M CC annually)

Evolution Timeline

- **Initial Phase (July-Dec 2024):** Heavy infrastructure emphasis
- **Current Phase (2025):** Balanced distribution
- **Year 5 Target:** 62% to applications, 20% to super validators, 18% to users

Validator Economics

Regular Validators

- **Count:** 500+ validators
- **Rewards:** Canton Coin for liveness and participation
- **Requirements:** Maintain continuous node operation
- **Growth:** 40% month-on-month validator growth in 2025

Super Validators

- **Count:** 30+ super validators (invitation only)
- **Enhanced Role:** Combined validator + synchronizer functions
- **Responsibilities:**
 - Validate all Canton Coin transfers
 - Provide Name Service
 - Support ecosystem applications
 - Maintain Global Synchronizer infrastructure

Notable Super Validators (2025)

- **Chainlink:** Joined September 2025, providing oracle services
- **Coin Metrics:** Data and analytics infrastructure
- **Kiln:** Institutional staking infrastructure
- **P2P.org:** Validator services for institutional clients

Revenue Analysis

Network Revenue Streams

Transaction-Based Revenue (Estimated)

- **Reported Daily Repo Volume:** \$280 billion
- **Hypothetical Daily Fees:** \$2.8-5.6 million (if charging 1-2 bps)
- **Theoretical Annual Revenue:** \$1-2 billion (unverified projection)

Token Economics Value

- **Canton Coin Market Cap:** ~\$1.4 billion (at \$0.05/CC)
- **Annual Reward Distribution:** 2.5 billion CC (~\$125 million value)

Institutional Value Capture

Super Validator Revenue

- **Annual CC Rewards:** ~875 million CC (35% of 2.5B)
- **USD Value:** ~\$43.75 million (at \$0.05/CC)
- **Per Super Validator:** ~\$1.46 million annually (30 validators)

Application Provider Revenue

- **Annual CC Rewards:** ~1.25 billion CC (50% of 2.5B)
- **USD Value:** ~\$62.5 million
- **Primary Recipients:** DeFi protocols, tokenization platforms, trading systems

Sustainability Analysis

Revenue vs. Costs Ratio

Unlike traditional L1s analyzed in our research, Canton Network demonstrates:

Structural Differences

- **Consensus Mechanism:** No Proof-of-Work mining costs
- **Fee Mechanics:** 100% fee burning creates deflationary pressure
- **Capital Raise:** \$135M funding round reported (June 2025)
- **Volume Claims:** \$280B daily transaction volume (unverified)

Economic Model Analysis

- **Theoretical Annual Revenue:** \$1-2 billion (assuming standard institutional fees)
- **Token Distribution Value:** \$125 million (at \$0.05/CC price assumption)
- **Hypothetical Ratio:** 8-16x revenue to distribution costs
- **Comparative Analysis:** 0.06-0.125x subsidy ratio vs. 158x Bitcoin, 254x Solana

Competitive Analysis

Canton vs. Traditional L1s

Metric	Canton*	Ethereum	Bitcoin	Solana
Annual Fees	\$1-2B (est.)	\$65M	\$115M	\$55M
Annual Subsidies	\$125M (token value)	\$8B	\$18.2B	\$14-19B
Subsidy Ratio	0.06-0.125x**	123x	158x	254-345x
Pre-mine	0%	Yes	0%	Yes
Institutional Claims	400+	Minimal	Minimal	Minimal

*Canton figures based on reported metrics and estimates **Assuming fee estimates are accurate

Structural Differences from Traditional L1s

1. **Privacy Architecture:** Transactions private while fee distributions remain public
2. **Token Distribution:** Absence of pre-allocation changes incentive structure
3. **Fee Denomination:** USD-based fees separate from token price volatility
4. **Reported Scale:** Claims of \$6T in assets (unverified)

Future Projections

Projected Scenarios (Speculative)

Potential Network Growth

- **Claimed Targets:** \$10 trillion TVL by 2030 (unsubstantiated)
- **Volume Projections:** Theoretical growth to \$500B+ daily
- **Validator Expansion:** Possible growth to 1,000+ nodes
- **Super Validator Scale:** Could reach 50-75 participants

Token Supply Trajectory

- **Mathematical Cap:** 100B CC by 2034 based on issuance schedule

- **Distribution Evolution:** Planned shift to 62% application rewards by year 5

Hypothetical Revenue Scenarios

- **2025:** \$1-2B if current volume claims accurate
- **2027:** \$3-5B assuming linear growth
- **2030:** \$8-12B in optimistic scenario

Risk Assessment

Observable Factors

- **Institutional Presence:** Named participants include major banks
- **Volume Claims:** Reported transaction volumes suggest active usage
- **Economic Structure:** No traditional token unlock schedule
- **Capital Formation:** \$135M funding round reported

Uncertainties and Risks

- **Verification Gap:** Limited independent verification of key metrics
- **Fee Transparency:** Actual fee rates not publicly disclosed
- **Competitive Landscape:** Multiple institutional blockchain initiatives
- **Regulatory Dependencies:** Subject to evolving financial regulations
- **Technology Scalability:** Privacy-preserving architecture at scale untested
- **Concentration Risk:** Invitation-only super validator model

Conclusion

Canton Network's economic model differs structurally from traditional L1 networks through its zero pre-allocation approach and burn-mint mechanism. If the reported \$280 billion daily transaction volume generates fees at standard institutional rates (1-2 bps), the network could theoretically achieve \$1-2 billion in annual revenue against \$125 million in token distribution costs.

This would result in a 0.06-0.125x subsidy ratio, contrasting with the 158x ratio observed in Bitcoin and 254-345x in Solana. However, these calculations rely on unverified transaction volumes and assumed fee rates. The reported \$6 trillion in tokenized assets, if accurate, would represent significant institutional adoption, though independent verification remains limited.

Critical Observations

1. **Economic Structure:** No pre-allocation eliminates traditional token unlock pressure
2. **Fee Mechanism:** USD-denominated fees with 100% burn differs from gas token models
3. **Distribution Model:** Rewards based on participation metrics rather than stake

4. **Verification Challenges:** Key metrics sourced from news reports rather than on-chain data
5. **Comparative Position:** If metrics are accurate, represents lower subsidy dependency than analyzed L1s

Data Limitations

- Transaction volumes and asset values not independently verifiable
- Fee revenue calculations based on assumptions rather than disclosed rates
- Limited transparency on actual network economics
- Institutional participation claims difficult to verify independently

Analysis Date: October 2025 Data Sources: Third-party news reports, Canton blog posts, industry coverage Disclaimer: Key metrics including \$6T TVL and \$280B daily volume sourced from news reports and not independently verified. Revenue calculations based on assumptions about institutional fee structures (1-2 bps) rather than disclosed rates.