



# **AULT BLOCKCHAIN™**

Licensed Infrastructure for the Future of Finance & AI

**AULT™**  

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**BLOCKCHAIN**

# 1. Executive Summary

The Ault Blockchain is a Cosmos EVM Layer 1 that combines cross-chain interoperability (**IBC**) with Ethereum compatibility (**EVM**) to deliver a scalable foundation for financial markets, decentralized applications, and AI-driven analytics. It is purpose-built as a compliance-aligned foundation for institutions, combining financial-grade performance with governance safeguards that support long-term adoption. Its native asset, the AULT token, powers settlement, governance, and transaction fees. Distribution is tied to licensed network participation rather than speculative issuance, aligning incentives with long-term contributors.

### Economic Model:

- **Validators** secure the network under CometBFT and are compensated through the gas-fee market and priority tips, with a portion of fees allocated to the DAO Treasury. Validators stake AULT to qualify; no license is required. In the early phases, validator rewards are supported not only by transaction activity but also by delegation and Treasury-driven adoption programs, ensuring network security while usage scales.
- **Licensed Mining Nodes** perform verifiable off-chain services VRF randomness at launch, expanding to oracles, indexing, and AI services over time and participate in a predictable, multi-year emissions schedule defined by the protocol.

Ecosystem sustainability is additionally supported by external reinforcement mechanisms, described in Section 2

This separation of emissions (Licensed Mining Nodes) and gas fees (Validators) ensures incentive clarity while rewarding participants who operate in both roles.

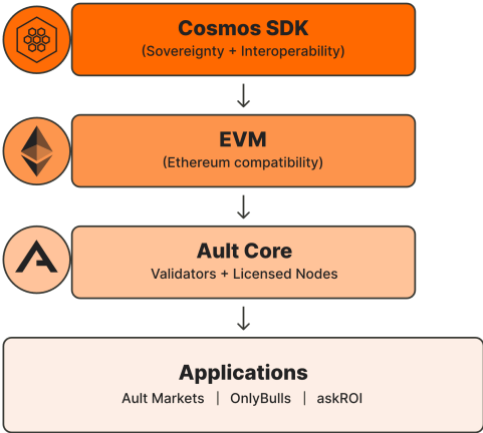


Figure 1: What is Ault Blockchain?

## Why Licenses Matter

Node Licenses are scarce digital infrastructure rights that provide:

- **Protocol Emissions:** Access to a pro-rata share of the scheduled daily token distribution defined in the protocol.
- **Governance:** One license = one DAO vote (with caps to prevent dominance).
- **Scarcity:** Fixed supply, \$2,500 per license, non-transferable for two years.
- **Future Roles:** Licensed nodes will expand beyond randomness to additional verifiable services such as oracles, data indexing, and AI workloads.

This structure anchors licenses as scarce participation rights essential to the network's operation and growth. Participants can also engage by securing the network as validators or delegators, building on the EVM stack, or connecting through IBC. In addition, non-operators may participate through delegation, ecosystem partnerships, or secondary markets, ensuring accessibility without the need for direct infrastructure operation.



Figure 2: Key Differentiators (Compliance, Security, Liquidity, AI)

### Governance:

Oversight of the blockchain and native token is exercised through the Ault DAO, composed of licensed, KYC-verified Miners. Governance is decentralized with capped voting power and on-chain transparency, while Ault DAO LLC retains a limited compliance veto to ensure legal and regulatory integrity.

### Ecosystem Roadmap:

At launch, the network will be anchored by licensed nodes, validators, and the DAO Treasury. Over time, core applications will expand utility, including:

- **Ault Markets:** tokenized real-world assets and derivatives,
- **OnlyBulls:** decentralized financial data feeds,
- **askROI:** distributed AI compute and analytics.

Treasury resources will be deployed toward grants, liquidity, and partnerships that accelerate this growth, and will also be used to attract more applications to the network, ensuring early adoption is actively supported. Alongside this, developer grants and integrations are planned to attract early applications, with the goal of establishing transaction demand as soon as possible after launch.

**Launch:**

Genesis is expected on January 1, 2026, marking the start of a compliant, performance-driven blockchain ecosystem that integrates structured Tokenomics, real-world reinforcement, and cross-chain interoperability to support the next generation of financial and AI applications.

## 2. Introduction

The rise of digital assets, decentralized finance, and AI has revealed enormous opportunity, but most existing blockchains remain unsuitable for institutions. They struggle with regulatory uncertainty, fragmented infrastructure, and economic models that rely on speculation rather than sustainable value. Performance limitations further prevent these networks from handling financial-grade workloads or AI-driven applications.

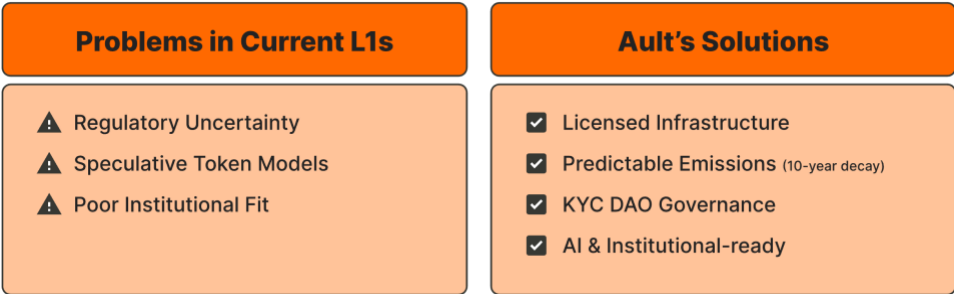


Figure 3: Problem vs Solution Split Diagram

The Ault Blockchain is designed to solve these challenges by fusing traditional finance, AI services, and DeFi into a sovereign, compliant Layer 1 network. Built on the Cosmos SDK with full EVM compatibility, Ault combines the sovereignty and modularity of Cosmos with the broad developer ecosystem of Ethereum, achieving 1–2 second block times, fast finality, and throughput engineered for financial and AI workloads.

**Licensed Participation Model**

Ault introduces a licensed infrastructure model to incentivize active participation. Up to one million Licensed Miners may operate within the ecosystem. These Miners are not consensus

validators, but service providers for the blockchain that perform verifiable tasks such as randomness generation, data indexing, oracle services, and in the future, distributed AI computation. This structure eliminates gossip overhead while enabling the network to scale participation broadly.

### **Compliance by Design**

Institutions require trust and legal certainty. Ault integrates compliance features at the protocol level: KYC-verified DAO membership, capped voting rights, and oversight and limited veto authority for a state-registered DAO LLC. Ault DAO LLC reviews DAO proposals to ensure they will not violate applicable laws, introduce malicious code, or threaten the structural integrity of the network. This safeguard ensures that while governance is decentralized, it cannot be hijacked in ways that would jeopardize institutional trust or compliance. These protections not only open the door for institutional adoption but also reinforce the scarcity and value of Node Licenses as rights to operate within a regulated environment. Moreover, using a state-registered DAO LLC enables the blockchain and network of nodes to more easily develop the project through traditional contractual means.

### **Financial Reinforcement**

Sustainability is strengthened by mechanisms that recycle real-world value into the ecosystem. Ault Lending LLC, a licensed lender operated by Ault Capital Group, deploys proceeds from license sales into short-term lending markets and other financial activities. A portion of outputs from these activities will be directed to ecosystem support such as Treasury contributions, liquidity initiatives, or service payments for providing service on the blockchain. These mechanisms are external to the protocol and serve as optional reinforcement, complementing the on-chain model. The protocol operates independently of Ault Lending; these contributions are supplementary and not required for network function. This flexible approach ensures resources are deployed where they have the greatest impact on long-term network stability and growth.

### **AI and Financial Expansion**

Over time, additional ecosystem modules will extend utility:

- **Ault Markets** – tokenized real-world assets, DEXs, and derivatives.
- **OnlyBulls** – decentralized financial data feeds.
- **askROI** – distributed AI compute and analytics.

Licensed nodes are expected to power elements of this roadmap, such as running decentralized AI workloads and verifying financial data oracles. This creates future layers of utility for license holders beyond emissions. These modules will be introduced in phases following Genesis, ensuring the ecosystem expands on a measured, sustainable timeline.

### 3. Technology Architecture

The Ault Blockchain is built on the Cosmos SDK with full EVM compatibility, combining the sovereignty and modularity of Cosmos with the Ethereum ecosystem's reach. This dual design enables cross-chain interoperability through IBC and seamless deployment of Ethereum-compatible contracts.

#### **Full EVM Compatibility & Precompiles**

The EVM execution environment supports the Ethereum Yellow Paper specification, ensuring Solidity/Vyper contracts run unmodified. Custom EVM precompiles expose Cosmos-native modules such as governance, staking, or future AI services directly to smart contracts, extending functionality beyond Ethereum's base environment.

#### **Consensus & Finality**

Ault uses CometBFT, the successor to Tendermint, as its consensus engine. Validators secure the chain by producing blocks, validating transactions, and finalizing consensus with **1–2 second** block times and fast finality. Validators are incentivized by gas fees and tips only; they do not receive emissions.

#### **Licensed Mining Nodes**

Licensed Mining Nodes are licensed participants providing off-chain work.

- **At genesis:** Their sole function is VRF randomness generation, powering the randomness beacon used in governance, oracle fairness, and contract-level entropy.
- **Future roadmap:** Oracle services, data indexing, sharded storage, and distributed AI workloads.
- **Scalability:** Because they work off-chain, the network can scale to 1 million nodes without consensus bottlenecks.

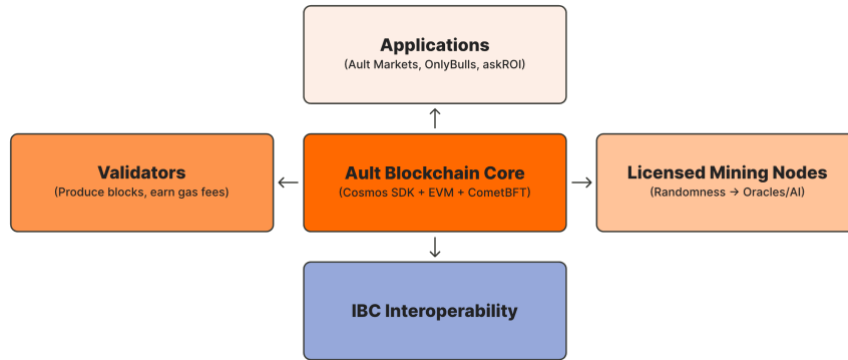


Figure 4: System Architecture Diagram

### Gas Fee Market (EIP-1559)

Ault employs an EIP-1559-style dynamic gas fee mechanism via the Cosmos EVM Feemarket module. Gas is paid in AULT, with a base fee adjusting each block and optional tips for prioritization. Unlike Ethereum, where base fees are burned, Ault redistributes them:

- 90% → Validators & Delegators
- 10% → DAO Treasury
- 0% burned

This ensures all transaction activity directly reinforces security and governance.

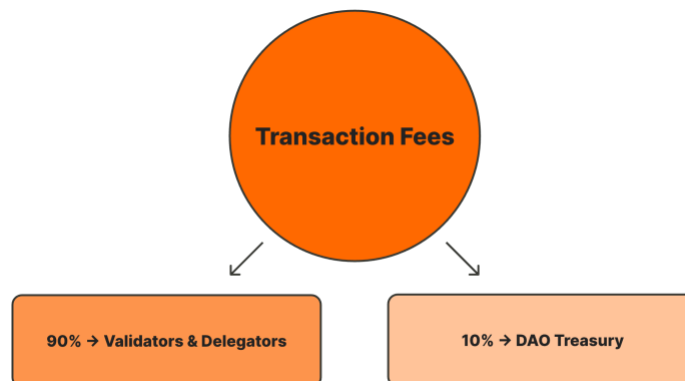


Figure 5: Gas Flow

### Cross-Chain Interoperability

Through IBC, Ault connects to other Cosmos-based chains and bridges to non-Cosmos ecosystems such as Ethereum, Solana, and EVM rollups, enabling asset flows and liquidity

sharing.

### MEV Mitigation

The protocol incorporates transparent fee markets and fair-ordering mechanisms to minimize Miner Extractable Value (MEV). As Cosmos EVM evolves, Ault will integrate additional protections to preserve fairness for institutional users.

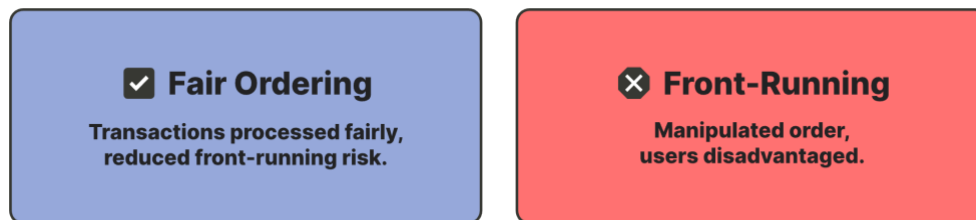


Figure 6: MEV Mitigation

### Planned Integrations

Future integrations are planned with:

- **Oracle networks** (e.g., Chainlink) for expanded data feeds.
- **Block explorers** (Etherscan-style) for transparency.
- **Custody and compliance providers** for institutional adoption.
- **Analytics and monitoring tools** for operators, developers, and governance participants.

### Why Cosmos + EVM?

This architecture gives Ault fine-grained control over its economy and governance (thanks to Cosmos sovereignty) while tapping into Ethereum's network effects. It ensures compatibility with familiar tools while enabling innovation through custom modules, precompiles, and compliance features.

## 4. Tokenomics

The AULT token is the native digital asset of the Ault Blockchain, used for transaction fees, validator staking, Licensed Mining Node emissions, and governance participation

### Supply & Emissions

- **Total Supply:** 100,000,000,000 AULT minted at genesis.

- **Emissions Vault:** 99,999,470,000 AULT (~99.9995%) allocated to Licensed Mining Node emissions.
- **Bootstrap Allocations:** 530,000 AULT (0.00053%) reserved at genesis:
- **Validator Seeding:** 30,000 AULT (0.00003%) to seed three genesis validators (10,000 each).
- **Feegrant Module:** 500,000 AULT (0.0005%) to allow Licensed Mining Nodes to transact immediately.

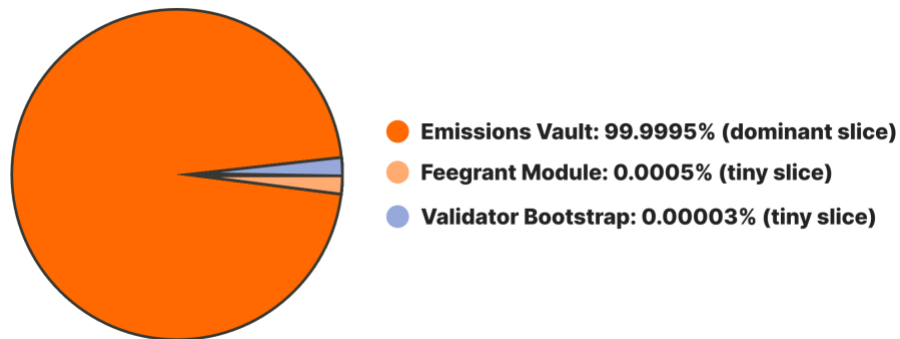


Figure 7: Token Distribution Pie Chart

- **Distribution Schedule:** Daily emissions taper over ten years, with ~9–10% annual decay.
  - Year 1: 15.0B (~41.1M/day)
  - Year 5: 10.1B (~27.6M/day)
  - Year 10: 6.2B (~16.9M/day)
- **Adjustment Note:** Year 10 may be fine-tuned slightly to ensure cumulative distribution = 100B.

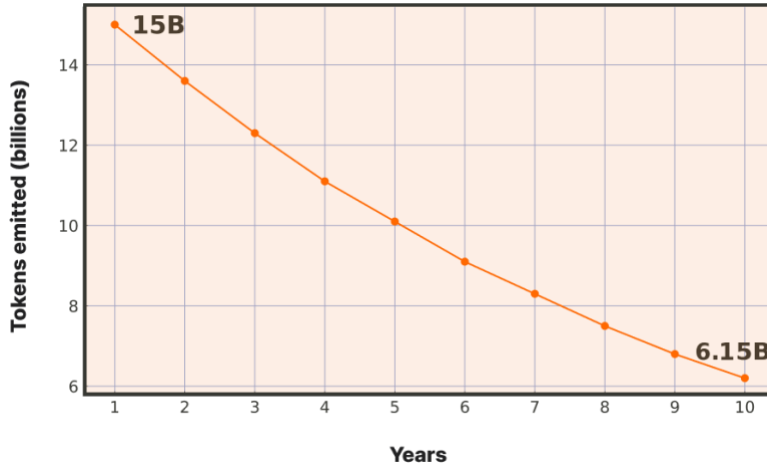


Figure 8: Emission Curve Line Graph

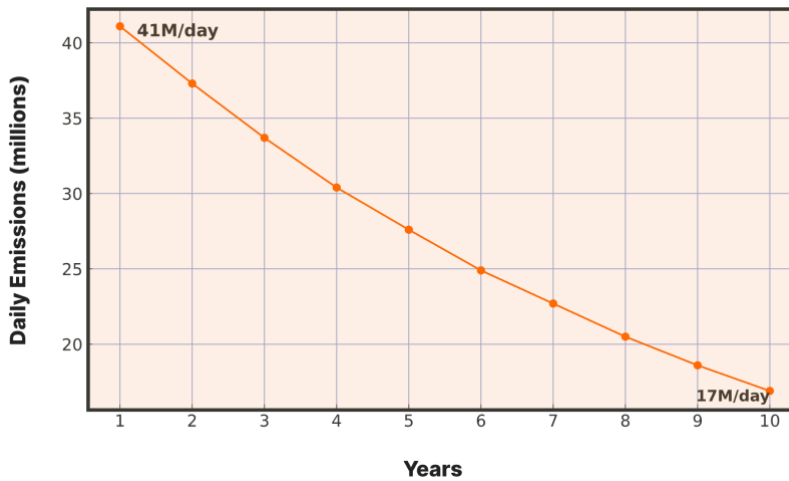


Figure 9: Daily Emissions Taper

### Roles & Incentives Summary

Role	License Required	Function	Rewards	Governance Rights
Validator	✗	Consensus, block production (CometBFT PoS)	90% of gas fees + 100% of tips	✗
Licensed Mining Node	✓	Off-chain verifiable work (VRF at launch; future: oracles, AI, indexing)	Daily emissions (~99.9995% of supply)	✓ (KYC DAO)

Role	License Required	Function	Rewards	Governance Rights
Delegator	✗	Stake AULT with validators	Share of validator rewards (minus commission)	✗

### Validator Incentives

- **Active Set:** Top 100 by stake weight.
- **Minimum Self-Bond:** 10,000 AULT.
- **Rewards:** 90% of gas fees + 100% of tips.
- **Delegators:** Share rewards net of validator commission.
- **Slashing:** Downtime, double-signing, and censorship penalized.

### Licensed Mining Node Incentives

- **License Model:** \$2,500 at issuance; non-transferable for 2 years.
- **Work Mechanism:** Each epoch (~10s), licensed nodes submit a VRF output gated by micro-PoW; winning outputs contribute to the randomness beacon and earn work credits
- **Distribution:** Daily emissions allocated pro-rata by work credits.
- **Equal Opportunity:** All licenses have equal selection chance; uptime and correctness matter, not hardware power.






	Validator	Licensed Node	Delegator
Validator	90% gas fees + 100% tips	Daily emissions (~99.9995% of supply)	Share of validator rewards
License Requirement			
Governance Rights		✓ (KYC DAO)	

Figure 10: Role Incentive Comparison

### Gas Fees & DAO Treasury

- **Fee Model:** EIP-1559 (Cosmos EVM).
- **Illustrative Costs** (at genesis BaseFee):
  - Transfer (~80k gas): ~0.01 AULT
  - Staking (100–120k gas): ~0.0125–0.015 AULT
  - DEX swap (150–250k gas): ~0.019–0.031 AULT
  - Smart contract call (200–500k gas): ~0.025–0.063 AULT
- **Fee Distribution:** 90% → Validators/Delegators; 10% → DAO Treasury; 0% burned.
- **Treasury Usage:** Community-governed; may fund grants, liquidity, buybacks, burns, etc.

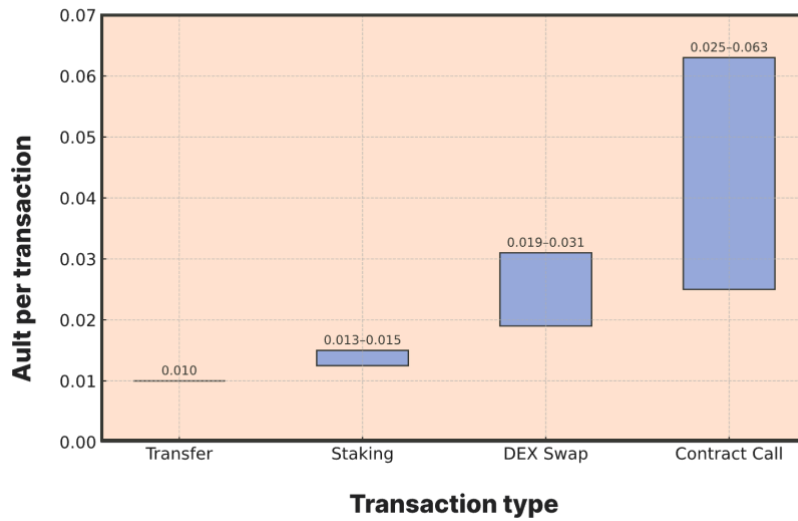


Figure 11: Transaction Cost Examples

### Token Metrics

Metric	Value / Policy
Token Name / Symbol	Ault Token / AULT
Total Supply	100,000,000,000
Emissions Allocation	99,999,470,000 (~99.9995%) to Licensed Mining Nodes (~9–10% annual decay)
Validator Bootstrap	30,000 (0.00003%)
Feegrant Module	500,000 (0.0005%)
Validator Rewards	90% of gas fees + 100% of tips
Delegator Rewards	Share of validator rewards (net commission)
DAO Treasury Funding	10% of gas fees
Minimum Validator Self-Bond	10,000 AULT
License Requirement	\$2,500/license; non-transferable 2 years

## 5. Governance

Governance of the Ault Blockchain is exercised through the Ault DAO, a Wyoming DAO LLC operating under a [formal Constitution](#). This design combines on-chain voting with real-world compliance protections, ensuring decentralization with institutional safeguards.

### Membership & Eligibility

- **Licensed Mining Node Ownership:** Only holders of valid Node Licenses may participate in governance.
- **KYC Verification:** Members must complete identity checks to comply with regulatory standards.
- **Constitution Adoption:** Members must formally acknowledge and adhere to the DAO Constitution.

This ensures governance authority is tied to active infrastructure participants rather than passive token holders.

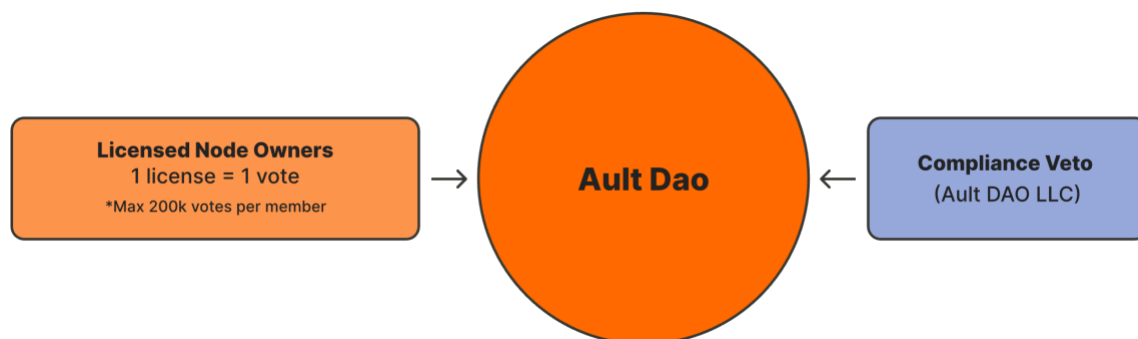


Figure 12: Governance Model Diagram

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### Voting Rights

- **One Node = One Vote:** Each licensed node confers one vote in governance.
  - **Voting Cap:** Maximum of 200,000 votes per member, regardless of total node holdings.
  - **Non-Transferable Period:** Node Licenses are non-transferable for the first two years, preventing vote-trading during the launch phase.
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## Proposal & Voting Process

- **Proposal Stake:** Minimum 500,000 AULT to submit a proposal.
- **Default Voting Window:** 10 days.
- **Quorum:** 20% of eligible votes.
- **Threshold:** Simple majority (>50%).
- **Transparency:** All votes and results are recorded on-chain.

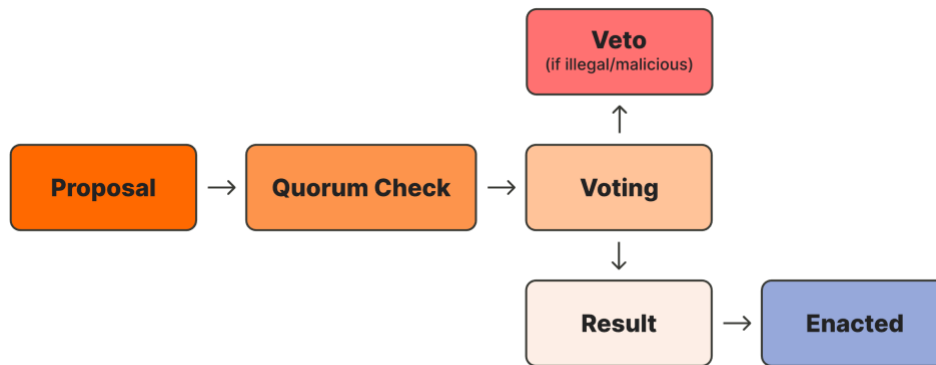


Figure 13: Voting Process Flow

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## DAO Treasury Oversight

- **Funding Source:** DAO Treasury receives 10% of all gas fees.
- **Spending Authority:** Allocations require successful DAO proposals.
- **Transparency:** Treasury publishes quarterly reports detailing inflows, outflows, and balances.
- **Use Cases:** Grants, liquidity programs, buybacks, burns, and ecosystem support initiatives.

## Compliance Safeguard (Limited Veto Authority)

Ault DAO LLC retains limited veto rights to block proposals that:

- Violate applicable laws or regulations.

- Introduce malicious code or system-breaking changes.
- Threaten the structural integrity of the network.

This veto is narrowly scoped and exists solely to ensure regulatory compliance and network safety. All economic and technical decisions related to the blockchain and AULT remain in the hands of the DAO.

### **Governance Philosophy**

The governance framework balances decentralization, compliance, and transparency:

- Licensed Mining Node operators, as the backbone of emissions and services, control protocol direction.
- Checks and caps prevent concentration of power.
- Compliance veto ensures long-term institutional trust without undermining DAO sovereignty.

## 6. Ecosystem Roadmap

Launching a blockchain is only the first step. The Ault Blockchain roadmap is designed as a phased rollout, balancing innovation, compliance, and ecosystem growth. Each phase builds on a secure and auditable foundation, with features introduced progressively to align with legal, technical, and regulatory readiness.

### **Genesis Launch – January 1, 2026**

- **Core Network:** Mainnet launch with CometBFT consensus, validator bootstrap (three initial validators seeded, including Ault Capital Group), and Licensed Mining Nodes providing VRF randomness.
- **Allocations:** 100B AULT minted, with ~99.9995% to the Emissions Vault, 30k AULT for validator seeding, and 500k AULT for fee grant to allow Licensed Mining Nodes to transact immediately.
- **Functionality:** Cosmos EVM stack live ERC-20/ERC-721 token deployment, smart contracts, and IBC connectivity operational from day one. Alongside this, developer grants and integrations are planned to attract early applications, with the goal of establishing transaction demand as soon as possible after launch
- **DAO Activation:** Ault DAO live from Block 1, enforcing governance rules (proposal stake, quorum, veto).

- **Safeguards:** Genesis allocations audited during the first 30 days; 4-day settlement lag applied to early emissions per the DAO Constitution.
- **Testing:** Public testnet and devnet in late 2025 to validate infrastructure before mainnet.

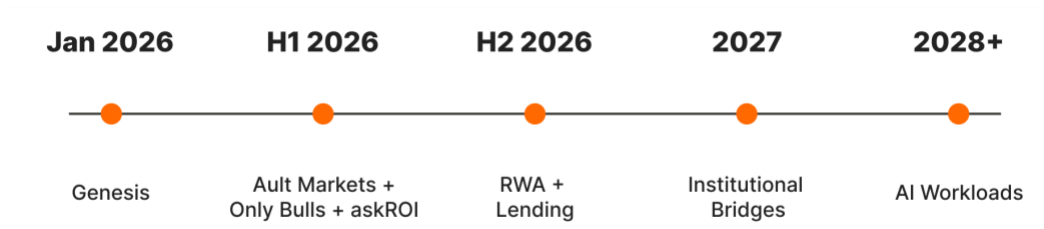


Figure 14: Roadmap Timeline

### Phase 1 – Core Modules & External Asset Integration (H1 2026)

- **Applications:** Initial versions of Ault Markets, OnlyBulls data feeds, and askROI (beta analytics) deployed.
- **DAO Governance:** First DAO proposals executed; early Treasury-funded developer grants launched.
- **Liquidity Access:** Following mainnet launch, AULT is expected to pursue initial DEX liquidity pools and begin the process of centralized exchange (CEX) engagement, subject to compliance and market conditions.
- **IBC Interoperability:** Native IBC support connects Ault with Cosmos Hub, Osmosis, Injective, and other IBC chains.
- **External Asset Bridges:** Integration with Ethereum to support USDC, USDT, and other leading stablecoins/DeFi tokens. These assets form liquidity pools and trading pairs on Ault Markets.
- **Infrastructure Integrations:** Block explorers, RPC providers, and monitoring tools deployed; Chainlink or equivalent oracle integration begins.

### Phase 2 – Ecosystem Expansion (H2 2026)

- **Ault Markets:** Expanded support for regulated real-world assets (tokenized equities, commodities, potentially real estate).
- **DEX Expansion:** More pairs and liquidity; PERPs platform launches with risk controls.
- **Ault Lending:** Initial lending pools (AULT ↔ stablecoins) deployed.

- **Custody/Compliance Partners:** Institutional custody integrations and compliance providers onboarded.
- **Ecosystem Fund:** DAO Treasury commits liquidity and developer incentives to accelerate dApp ecosystem growth.

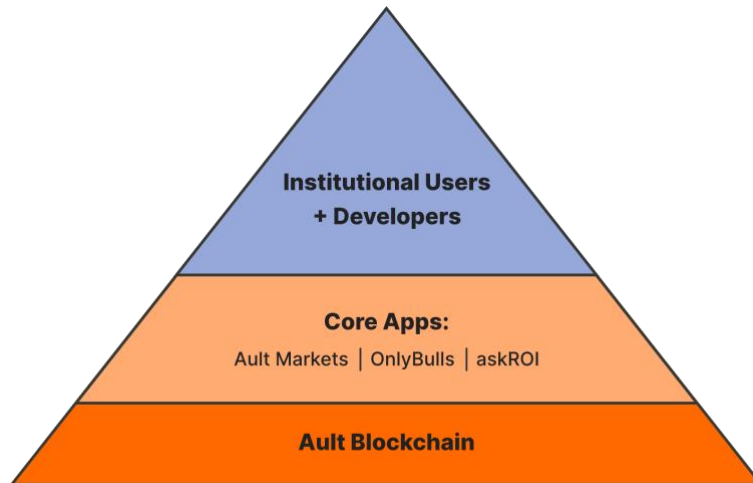


Figure 15: Ecosystem Stack

### Phase 3 – DeFi & Institutional Growth (2026–2027)

- **Ault Lending Protocol:** Full-featured on-chain borrowing/lending with AULT and tokenized assets as collateral.
- **Cross-Chain Expansion:** Bridges extended to Solana, Avalanche, and L2 ecosystems.
- **Institutional Adoption:** Partnerships with custodians, exchanges, and compliance firms deepen institutional integration.
- **DAO Reviews:** Beginning in this phase, the DAO periodically assesses token emissions, miner incentives, and governance parameters, with authority to adjust as needed.

### Phase 4 – AI Integration & Refinement (2027 and beyond)

- **askROI Expansion:** AI marketplace for third-party models launched; Licensed Mining Nodes take on AI workloads in addition to randomness.
- **Advanced Use Cases:** AI-driven portfolio managers, robo-advisors, and smart contracts leveraging on-chain analytics.

- **Licensed Mining Node Evolution:** Nodes expand into oracle services, indexing, and compliance/identity modules as ecosystem demands evolve.

### **Long-Term Vision (2028–2035)**

Ault aims to become a financial cloud: a compliance-aligned hub for financial settlement, data analytics, and AI services. Institutions may operate private whitelisted Ault chains or connect directly to the public chain for rapid settlement and AI analytics.

Governance may continue to decentralize as regulatory clarity improves, with DAO members adjusting KYC requirements over time. The end of the 10-year emissions schedule in 2035 will be anticipated well in advance; the DAO may vote on sustainability measures such as modest inflation or higher fee splits to ensure ongoing miner incentives.

**Guiding Principle:** At every stage, Ault prioritizes compliance and trust. New asset types, AI services, and dApps are introduced only after legal, custody, and ethical review, ensuring sustainable growth for real-world adoption.

## 7. Legal & Disclaimers

The Ault Blockchain and associated ecosystem are designed with compliance and transparency as core principles. However, as with all blockchain networks, participants should carefully review the following disclaimers before engaging.

### **Nature of Node Licenses**

- Ault Node Licenses are infrastructure rights that allow participants to operate Licensed Mining Nodes within the Ault Blockchain.
- Licenses are not investment contracts, securities, or shares in Ault Capital Group, Inc. or the DAO.
- License holders may earn protocol rewards for verifiable participation in network operations (e.g., randomness generation today, oracles and AI workloads in future phases).
- Licenses are granted by Ault DAO LLC (or its selling agent) pursuant to applicable Terms and Conditions.

### **Nature of the AULT Token**

- The AULT token is the native utility token of the Ault Blockchain.
- Tokens are not sold by the protocol; they are earned through:

- Licensed Mining Node emissions (protocol rewards).
  - Validator and delegator rewards (gas fees and tips).
- The token's primary uses are: payment of gas fees, participation in governance, staking, and serving as collateral in future DeFi modules.
- The token is not guaranteed to have monetary value, nor is it offered as an investment product.
- The DAO will govern the utility of the token, and can create new use cases in the future.
- Governance is set forth in the DAO Constitution, which may be amended from time to time by DAO members following the proposal protocol set forth therein.

### **Forward-Looking Statements**

- The roadmap, features, and milestones described in this whitepaper are forward-looking and subject to change.
- Market conditions, legal requirements, or technical challenges may alter the sequence or timing of planned deployments.
- No representation or warranty is given that all features described will be delivered on the stated timeline.

### **Regulatory Considerations**

- Participants are responsible for complying with all applicable laws in their jurisdictions, including those relating to digital assets, financial services, taxation, and data protection.
- Regulatory treatment of digital assets varies across jurisdictions and may change over time.
- The DAO Constitution requires KYC verification and acknowledgement of the Constitution for governance participation to meet compliance requirements.

### **Risk Factors**

Participation in the Ault Blockchain involves risk, including but not limited to:

- Governance risks including insufficient participation by node owners to develop and grow the protocol, defend against bad actors, or maintain the technology stack.
- Growth risks including a failure by the DAO to take over maintenance of the protocol.

- Business risks including a failure for the protocol to gain adoption due to a bad product/market fit, fierce competition, a bear market, or other factors.
- Market volatility and token price fluctuations. The digital asset market has historically had strong bull markets tempered by bear markets that can reach drawdowns as high as 70-90%.
- Technical risks such as software bugs, cyberattacks, or validator downtime.
- Regulatory actions that may impact the operation or legality of digital assets or node licenses.
- Legal risks including litigation. There is insufficient legal certainty in the U.S. or elsewhere to fully mitigate the risk of private or government litigation against the DAO, node owners, the blockchain, blockchain applications, or other participants in the protocol. Moreover, DAO members could take legal action against each other if, for example, they disagree on governance decisions for the protocol.
- Economic risks if emissions or fee structures do not generate sufficient rewards for participants.
- Additional risks set forth in the Node Terms and Conditions



**Node Licenses =  
Infrastructure Rights**  
(no securities)



**AULT = Utility Token**  
(earned not sold)



**Compliance by Design.**

Figure 18: Callout Icons

### No Guarantee of Rewards

- Neither Ault Capital Group, Inc. nor Ault DAO LLC make any promise of financial return, profit, or appreciation of token value. No node owner should rely on either entity to take any action for the purpose of creating profits for node owners.
- Emissions and validator rewards are mechanical outputs of protocol rules, not discretionary distributions.

- Rewards are earned only through active operation of nodes or validated staking participation.

## Appendices

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### Appendix A: Emissions Schedule (Exact)

The Ault Blockchain issues a fixed supply of 100,000,000,000 AULT at genesis. After bootstrap allocations (30,000 AULT for validators and 500,000 AULT for the feegrant module), the remaining 99,999,470,000 AULT (~99.9995%) is placed into the Emissions Vault.

Emissions are released daily over ten years using a constant geometric decay. The Year-1 emission is fixed at 15,000,000,000 AULT, and the decay factor ( $r$ ) is solved so the 10-year cumulative sum equals exactly 99,999,470,000 AULT.

#### Emission Formula

$$E_y = E_1 \cdot r^{(y-1)}$$

#### Series Sum Across 10 Years

$$\sum_{(y=1 \text{ to } 10)} E_y = [E_1 \cdot (1 - r^{10})] / (1 - r)$$

#### Constraint (Vault Balance)

$$[E_1 \cdot (1 - r^{10})] / (1 - r) = 99,999,470,000$$

#### Solved Decay Factor

$$r = 0.9057252807243518$$

#### Annual Decay (Reduction)

$$1 - r = 0.0942747192756482 \approx 9.427\%$$

#### Carryover (Retention)

$$r = 90.573\%$$

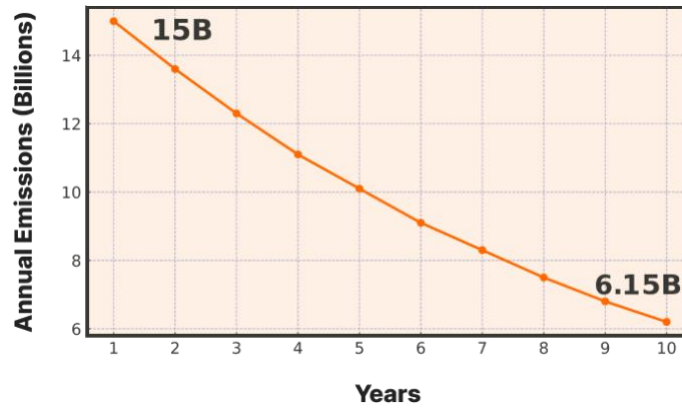


Figure 19: Emission Schedule Curve

### Exact Emissions Schedule

Year	Annual Emissions (B AULT)	Daily Emissions (M AULT)	Cumulative (B AULT)	Decay %	Carryover %
1	15.000000	41.095890	15.000000	—	100.000
2	13.585879	37.221587	28.585879	9.427	90.573
3	12.305074	33.712532	40.890953	9.427	90.573
4	11.145017	30.534293	52.035970	9.427	90.573
5	10.094324	27.655681	62.130294	9.427	90.573
6	9.142684	25.048449	71.272978	9.427	90.573
7	8.280760	22.687014	79.553738	9.427	90.573
8	7.500094	20.548202	87.053832	9.427	90.573
9	6.793024	18.611026	93.846856	9.427	90.573
10	6.152614	16.856477	99.999470	9.427	90.573

### Key Properties (Exact)

- Decay factor (r): 0.9057252807243518

- **Annual reduction:** 9.427%
- **Annual carryover:** 90.573%
- **Genesis bootstrap allocations:** 30,000 AULT for validator seeding and 500,000 AULT for the feegrant module (outside emissions)
- **Emissions Vault distributed:** 99,999.470000 B AULT (exact reconciliation)
- **Daily taper:** 41.095890 M/day (Year-1) → 16.856477 M/day (Year-10)
- **Deterministic schedule:** Rewards fixed by formula; no discretionary changes

## Appendix B: Gas Parameters (Genesis)

The Ault Blockchain employs an **EIP-1559-style fee market** via the Cosmos EVM Feemarket module. Gas fees remain predictable under normal load, rise sharply during congestion, and align validator incentives with network sustainability.

### Genesis Parameters

- **BaseFee (minimum gas price):** 0.125 uAULT per gas unit.
- **Block Gas Limit:** 120M gas per block.
- **Target Utilization:** 60M gas (50% of block limit).
- **Elasticity Multiplier:** 2 (block size can expand under congestion).
- **BaseFee Adjustment:** ±12.5% per block depending on utilization.
- **Priority Tips:** 100% go to the block proposer.

### Illustrative Transaction Costs (at genesis BaseFee)

- **Transfer (~80k gas):** ~0.01 AULT
- **Staking operation (100–120k gas):** ~0.0125–0.015 AULT
- **DEX swap (150–250k gas):** ~0.019–0.031 AULT
- **Smart contract call (200–500k gas):** ~0.025–0.063 AULT

### Fee Distribution

- **90% → Validators & Delegators** (pro-rata by stake).
- **10% → DAO Treasury** (community-controlled).

- 0% burned.

### Network Objectives

- Maintain ~50–70% block utilization under normal conditions.
- Recover BaseFee equilibrium within 20–60 seconds after congestion.
- Spike BaseFee aggressively during spam, protecting liveness.

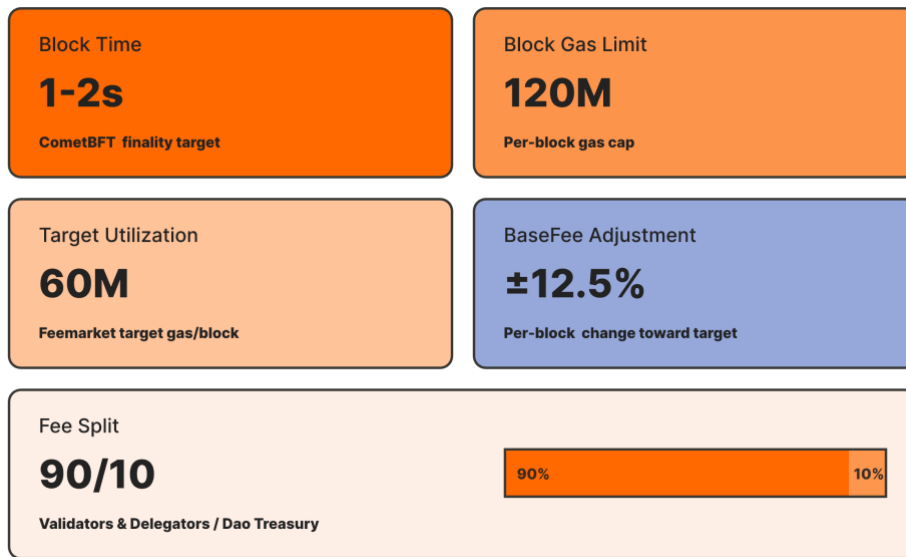


Figure 20: Gas Parameters Dashboard

## Appendix C: Genesis Allocations

At genesis, the Ault Blockchain must seed certain modules and validators to ensure functionality from Block 1. These allocations are operational necessities and represent just 0.00053% of supply.

Allocation	Amount (AULT)	% of Supply	Purpose
Emissions Vault	99,999,470,000	~99.9995%	10-year Licensed Mining Node emissions
Validator Bootstrap	30,000	~0.00003%	Seed three genesis validators (10k each) for block production

Allocation	Amount (AULT)	% of Supply	Purpose
Feegrant Module	500,000	~0.0005%	Allow Licensed Mining Nodes to transact before earning emissions
Total Supply	100,000,000,000	100%	Fixed genesis issuance

#### Notes

- Validators are thereafter incentivized only by gas fees and tips.
- Licensed Mining Nodes receive 100% of protocol emissions.
- Bootstrap allocations do not alter the emission model; they are strictly for launch operations.

## Appendix D: Glossary of Terms

- **AULT Token (AULT)**  
The native digital asset of the Ault Blockchain. Used for transaction fees, validator staking, Licensed Mining Node rewards, and DAO governance participation.
- **Ault DAO**  
A Wyoming DAO LLC governing the protocol. DAO membership requires holding a Licensed Mining Node, completing KYC, and adopting the Constitution. DAO proposals manage Treasury funds and protocol parameters, subject to a limited compliance veto.
- **BaseFee (EIP-1559)**  
The minimum gas price per unit of computation on the network, dynamically adjusted each block based on network utilization. Users may add “tips” to prioritize their transactions.
- **CometBFT**  
Consensus engine used by the Ault Blockchain. Successor to Tendermint, providing Byzantine Fault Tolerant (BFT) consensus with fast finality (~1–2 seconds).
- **Cosmos SDK**  
A modular framework for building custom blockchains. Provides sovereignty (independent governance, economics) and native interoperability through IBC.
- **Custom EVM Precompile**  
A mechanism that allows Ethereum smart contracts deployed on Ault to call Cosmos-

native modules (e.g., governance, staking, oracles, AI services) as if they were Ethereum opcodes.

- **Delegator**

An AULT token holder who stakes tokens with a validator to share in gas fee rewards, net of validator commission. Delegators do not require a license.

- **Emissions Vault**

The protocol-controlled vault that holds ~99.9995% of all AULT at genesis (~99,999,470,000 tokens). Emissions are released daily over ten years to Licensed Mining Nodes on a ~9–10% annual decay schedule.

- **Feegrant Module**

A Cosmos SDK module that allows specific accounts (e.g., Licensed Mining Nodes) to transact without holding tokens, funded by the protocol at genesis (500,000 AULT). Ensures miners can begin submitting VRF outputs before they accumulate emissions to cover gas.

- **Governance Veto (Compliance Veto)**

A limited authority held by Ault DAO LLC to block proposals that would violate laws, inject malicious code, or threaten network integrity. DAO otherwise governs emissions, Treasury, and protocol parameters as set forth in the Constitution.

- **IBC (Inter-Blockchain Communication)**

Cosmos-native protocol for cross-chain communication. Enables Ault to interoperate with other Cosmos chains (e.g., Osmosis, Cosmos Hub) at launch.

- **Licensed Mining Node**

A licensed participant that provides off-chain verifiable services to the protocol. At launch, nodes generate randomness through VRF; future roles may include oracles, indexing, AI workloads, or compliance services. Licensed Mining Nodes receive ~99.9995% of supply as emissions rewards.

- **Node License**

A \$2,500 license (non-transferable for two years) granting the right to operate a Licensed Mining Node and earn emissions rewards. Licenses also confer DAO governance rights (one license = one vote, capped at 200,000 per member).

- **Oracle**

A system that brings external data (e.g., stock prices, exchange rates) into the blockchain. On Ault, oracles will initially be handled by Chainlink or equivalent integrations and may later be operated by Licensed Mining Nodes.

- **Protocol Rewards**  
Tokens earned automatically through protocol-defined mechanics (e.g., validator gas fees, miner emissions). Rewards are not discretionary and are tied to active participation.
- **Randomness Beacon (VRF Beacon)**  
An on-chain entropy source produced by Licensed Mining Nodes. Each epoch (~10 seconds), nodes submit VRF outputs; winning outputs are aggregated into a bias-resistant random value used in governance, oracles, and applications.
- **Validator**  
A participant in consensus, producing blocks and validating transactions under CometBFT. Validators earn gas fees and tips, not emissions. Minimum self-bond = 10,000 AULT; active set capped at 100 validators.
- **Work Credit**  
A unit of verifiable participation by Licensed Mining Nodes. Earned by submitting valid VRF + micro-PoW outputs during epochs. Daily emissions are distributed pro-rata based on each node's work credits.