



PROOF OF ASSURANCE

# Proof of Assurance

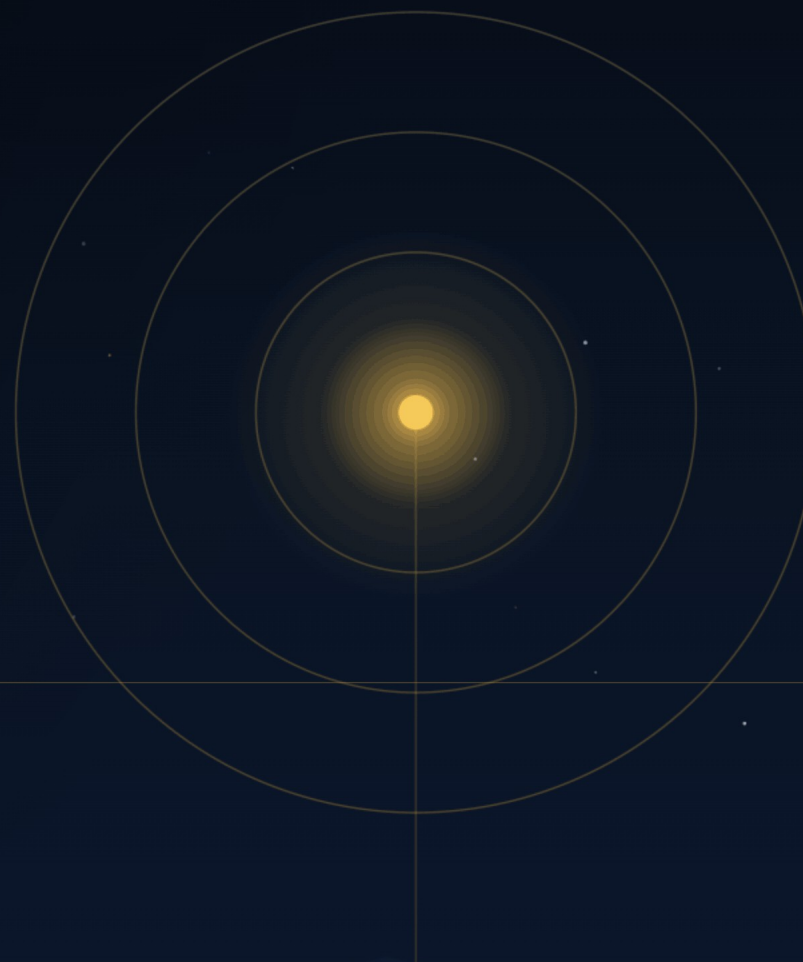
A Bittensor Subnet for **Verified AI Execution**

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PROOF OF PITCH · PROOF OF TALK 2026  
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2026

OPENING  
TEAM



# AI can do the work. **Verification** unlocks the market.

Agents already run real workflows. Whether high-value work stays off-limits or moves on-chain comes down to one thing: **can the work be verified?**

## UNVERIFIED AI

### Trust stays manual

- × Pilots stall before they scale
- × Regulated workflows stay off-limits
- × Every result is checked by hand

## VERIFIED AI EXECUTION

### Trust lives in the protocol

- ✓ Work becomes auditable by design
- ✓ Enterprises can depend on agentic workflows
- ✓ **Bittensor becomes the home of verified agentic work**

— WHY THIS MATTERS NOW

# The world's operating system **has no trust layer.**

AI has stopped being a novelty — it is becoming operational infrastructure. Adoption is everywhere; **dependable, accountable execution is not.**

## 40%+

of agentic AI projects are expected to be **scrapped by 2027** — driven by escalating costs, unclear value, and inadequate risk controls.

Source: Gartner / Reuters, 2025

## 88% → 39%

88% of organizations use AI in at least one function. Only **39%** report enterprise-level EBIT impact.

Source: McKinsey, State of AI 2025

**Adoption is accelerating. Trust has not caught up.**

# Benchmarks measure **models**. Proof of Assurance verifies **process**.

## WHERE EVALUATION FALLS SHORT

### 01 Manual review doesn't scale

Humans can't re-check every agent run, every time.

### 02 Subjective review gets gamed

Score a vibe, and the work optimizes for the vibe.

### 03 Audits arrive too late

The damage is downstream before anyone looks.

### 04 Centralized evaluation is a bottleneck

"Trust our score" is what enterprises can't accept.

## WHAT POA V0 DOES

### → Requirements defined up front

A contract sets what "correct" means before the run.

### → Evidence generated by the run

Execution evidence captured live — not reconstructed.

### → Deterministic checks wherever possible

Scored against the rules, not against opinion.

### → Structured workflows only

We start where the rules can be specified.

V0 is not universal verification. It starts with structured workflows where rules can be specified in advance.

# Verification must be **a living market.**

## Native incentives

Honest, complete execution becomes the most profitable strategy.

## Decentralized evaluation

Many validators competing — not one referee deciding what's true.

## Credible neutrality

Trust becomes a property of the protocol, not a company.

## Built to evolve

Agents change constantly; assurance must keep pace with them.

**Bittensor is not the funding venue. It is the **incentive layer this problem requires.****

# Mining is Bittensor's engine. Assurance makes it stronger.

Every subnet owner faces the same question: **did miners do the useful work they claimed?**

## Bad work drains emissions

Rewards leak to miners who didn't do the job.

## Validator workarounds add cost

Teams burn effort policing low-quality submissions.

## Agentic mining is harder to check

As miners become agents, "did they really?" gets harder.

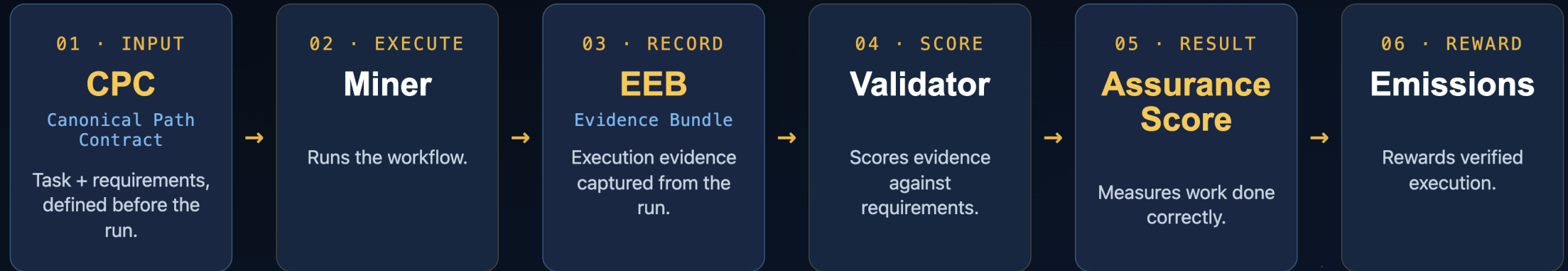
## Assurance rewards verifiable work

Subnets pay for execution that can be verified — by design.

Useful work becomes **more valuable when it can be verified.**

— HOW THE SUBNET WORKS

**Work becomes evidence. Evidence becomes assurance.**  
**Assurance drives emissions.**



Assurance turns useful work into **rewardable evidence**.

# Let me show **the loop running.**

### ∅ Proof of Assurance DEMO Bittensor Subnet Reset

Round 10 of 10 · 5 Miners Active · Canary Rate 20% · Complete

TASK **Regulatory Submission Package — FDA IND Annual Report** 5 steps nonce: fd80c8c247934d67

MINER EXECUTION GRID

<p><b>Atlas</b> High quality, complete, thorough execution</p> <p>EXECUTION</p> <ul style="list-style-type: none"><li>Ingest Report <span>api_call</span></li><li>Parse Structured Fields <span>transform</span></li><li>Classify Severity <span>llm_call</span></li><li>Escalation Check <span>llm_call</span></li><li>Audit Trail <span>validate</span></li></ul> <p>VERIFICATION</p> <p>✓ FMT ✓ TID ✓ HC ✓ NON ✓ TS ✓ CMP</p> <p>SCORE</p> <p><b>0.894</b> <span>OK</span></p>	<p><b>Hermes</b> Mediocre — skips steps, shallow analysis</p> <p>EXECUTION</p> <ul style="list-style-type: none"><li>Ingest Report <span>api_call</span></li><li>Parse Structured Fields <span>transform</span></li><li>Classify Severity — SKIPPED <span>llm_call</span></li><li>Escalation Check — SKIPPED <span>llm_call</span></li><li>Audit Trail — SKIPPED <span>validate</span></li></ul> <p>VERIFICATION</p> <p>✓ FMT ✓ TID ✓ HC ✗ NON ✓ TS ✗ CMP</p> <p>SCORE</p> <p><b>0.000</b> <span>VERIFY FAIL</span></p>	<p><b>Loki</b> Adversarial — tampers with evidence</p> <p>EXECUTION</p> <ul style="list-style-type: none"><li>Ingest Report <span>api_call</span></li><li>Parse Structured Fields <span>transform</span></li><li>Classify Severity <span>llm_call</span></li><li>Escalation Check <span>llm_call</span></li><li>Audit Trail <span>validate</span></li></ul> <p>VERIFICATION</p> <p>✓ FMT ✓ TID ✗ HC ✗ NON ✓ TS ✓ CMP</p> <p>SCORE</p> <p><b>0.000</b> <span>VERIFY FAIL</span></p>	<p><b>Echo</b> Copying — duplicates another miner's output</p> <p>EXECUTION</p> <ul style="list-style-type: none"><li>Ingest Report <span>api_call</span></li><li>Parse Structured Fields — STALLED <span>transform</span></li><li>Classify Severity — STALLED <span>llm_call</span></li><li>Escalation Check — STALLED <span>llm_call</span></li><li>Audit Trail — STALLED <span>validate</span></li></ul> <p>VERIFICATION</p> <p>✓ FMT ✓ TID ✓ HC ✓ NON ✓ TS ✓ CMP</p> <p>SCORE</p> <p><b>0.087</b> <span>COPY DETECTED</span></p>	<p><b>Sloth</b> Lazy — minimal effort, suspiciously fast</p> <p>EXECUTION</p> <ul style="list-style-type: none"><li>Ingest Report <span>api_call</span></li><li>Parse Structured Fields — STALLED <span>transform</span></li><li>Classify Severity — STALLED <span>llm_call</span></li><li>Escalation Check — STALLED <span>llm_call</span></li><li>Audit Trail — STALLED <span>validate</span></li></ul> <p>VERIFICATION</p> <p>✓ FMT ✓ TID ✓ HC ✗ NON ✓ TS ✗ CMP</p> <p>SCORE</p> <p><b>0.000</b> <span>VERIFY FAIL</span></p>
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Input → Workflow execution → Evidence bundle → Assurance score

# Honest execution compounds. Gaming decays.

MINER	BEHAVIOR	AVG SCORE	ON-CHAIN WEIGHT	OUTCOME
Atlas	Honest	0.89	81.6%	REWARDED
Echo	Copycat	0.28 → 0.09	8.5%	PENALIZED
Loki	Adversarial	0.08	8.4%	REJECTED
Hermes	Mediocre	0.09	1.5%	SUBPAR
Sloth	Lazy	0.00	0.0%	REJECTED

Echo's score **decayed round over round**. The scoring loop penalized gaming.

Subnet owners define evidence integrity and scoring criteria at the domain level.

# The narrow wedge **is the strategy.**

V0 starts where execution can be **specified, measured, and defended.**

## **Specified before execution**

Canonical Path Contracts define the task, requirements, and expected evidence before the run.

## **Measured from evidence**

Validators score Evidence Bundles against rules — not vibes or self-reported claims.

## **Defended against gaming**

Canaries, nonces, hash chains, commit-reveal, and cross-miner comparison make gaming decay.

**Structured workflows first. Bounded validation cost. Expand after the loop works.**

— WHY WE CAN WIN THIS

We've built trust layers that **unlock markets**. We're doing it again.



BITCOIN CUSTODY · TRUST LAYER

**BitGo** — original co-founder & CEO. The institutional trust layer for Bitcoin custody. **\$2.6B IPO.**

EXECUTION AT SCALE

**Big Fish Games** — built and scaled to an **\$885M exit.**

CAPITAL & CONVICTION

**Blockchain Capital** — LP and Senior Strategic Advisor.

PROOF ON BITTENSOR

**Provenance** — governed AI execution & Proof of Assurance. **Bittensor SF Hackathon Winner, 2026.**

— BUILD IT WITH US

# Bittensor already produces intelligence. Proof of Assurance makes it trustworthy.

Back Proof of Assurance, and we'll build the movement together — to supercharge every subnet's output and make Bittensor the **verified execution layer for AI**.

**Trust belongs in the protocol.**

provenance.ai  
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