



# Atlas 10-Phase Unpacking Plan — Hardware, Costs, and Team Requirements

## Phase 1: Concept Validation & Founding Lab Setup

**Goal:** Establish the **Atlas Forge™ Lab**, the founding nucleus for the Proof-of-Entropy (POE) system and constitutional AI framework.

### Hardware:

- 1 × High-end **Atlas Forge Workstation™** (AMD 7900 XTX / RTX 4090 + 64 GB RAM)
- 2–3 × Developer laptops (M-series MacBook Pro or ThinkPad Z-series)
- Cloud compute (AWS / GCP / Azure free tiers)

**Estimated Cost:** \$25 000 – \$40 000 CAD

**Key Professionals:** System architect, blockchain engineer, AI developer, project manager.

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## Phase 2: Minimum Viable App — Atlas Hive MVP™

**Goal:** Develop the first Atlas Hive™ mobile application to record entropy proxies (e.g., motion, steps, attention balance).

### Hardware:

- 10 × Smartphones (Android + iPhone)
- **Atlas Test Node™** cloud cluster (8–16 vCPUs)

**Estimated Cost:** \$50 000 – \$80 000 CAD

**Key Professionals:** Mobile dev (Android / iOS), UX designer, data scientist, QA engineer.

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### **Phase 3: Proof-of-Entropy Engine™**

**Goal:** Design the core entropy calculation and proof-generation stack on-device and on-chain.

**Hardware:**

- **Atlas Entropy Core Dev Kit™** (Raspberry Pi 5, ESP32, Arduino Nano 33 BLE)
- **Entropy Test Rig™** for sensor and randomness validation.

**Estimated Cost:** \$60 000 – \$90 000 CAD

**Key Professionals:** Embedded systems engineer, blockchain cryptographer, data security expert, information theorist.

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### **Phase 4: Dedicated Device Prototype — Atlas Hive Device v1™**

**Goal:** Create the first **Atlas Hive Device™**, a wearable entropy collector with bio-sensor inputs.

**Hardware:**

- 3D printing / CNC service for **Hive Shell™** housing
- MEMS sensors (IMU, barometer, microphone, thermistor, light)
- BLE modules for phone sync

**Estimated Cost:** \$100 000 – \$150 000 CAD

**Key Professionals:** Hardware engineer, industrial designer, firmware developer, biosignal specialist.

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## Phase 5: Atlas Mind Server AI™

**Goal:** Deploy the central validation and AI ethics layer — the **Atlas Mind™** governance intelligence core.

**Hardware:**

- 2–3 × **Mind Core Server™** units (A100 / H100 GPUs)
- 100 TB encrypted SSD array (**AtlasVault™**)

**Estimated Cost:** \$250 000 – \$400 000 CAD

**Key Professionals:** AI research lead, DevOps engineer, ML ops specialist, data ethicist.

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## Phase 6: Network & Governance Layer

**Goal:** Launch the **Atlas Node Network™** and **Constitution Governance Layer™** for fractal coordination and proof auditing.

**Hardware:**

- 20 × Node servers (community / university partners)
- **Atlas Key Vault Modules™** for secure cryptographic signing

**Estimated Cost:** \$80 000 – \$120 000 CAD

**Key Professionals:** Blockchain ops engineer, security auditor, policy analyst, community liaison.

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## Phase 7: Hardware Manufacturing Partnerships

**Goal:** Mass-produce the Atlas Hive™ device line and **Atlas Peripheral Suite™**.

**Hardware:**

- Prototype tooling, PCB design for **Hive Board™**
- Industrial certification samples

**Estimated Cost:** \$300 000 – \$500 000 CAD

**Key Professionals:** Supply-chain manager, manufacturing engineer, legal counsel (IP & export compliance).

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## **Phase 8: Atlas Ecosystem Integration**

**Goal:** Develop the **Atlas Developer SDK™** for third-party integration with Hive and Mind.

**Hardware:** Standard servers + testing phones.

**Estimated Cost:** \$100 000 CAD

**Key Professionals:** API developer, technical writer, partner relations manager.

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## **Phase 9: City-Scale Pilot**

**Goal:** Run a pilot of the **Atlas UBI Pilot Node™** across one city (~10 000 users).

**Hardware:** Server cluster expansion (10× nodes); IoT entropy sensors.

**Estimated Cost:** \$1 – 2 million CAD

**Key Professionals:** Operations director, government liaison, sociologist, public health analyst, QA teams.

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## **Phase 10: Global Deployment & Fractal Replication**

**Goal:** Scale to the **Atlas Global Fractal Network™** — a planetary layer of Hives and Minds operating as one.

**Hardware:** > 1000 nodes; hybrid cloud / edge architecture.

**Estimated Cost:** \$10 – 15 million CAD (over 5 years).

**Key Professionals:** Global governance lead, compliance officer, international partnerships director, economist, marketing lead.

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## Aggregate Totals

- **Total Hardware & Ops Cost:**  $\approx$  \$12 – 18 million CAD (over 5 years)
  - **Core Team Growth:** 6 founders  $\rightarrow$   $\sim$ 120 specialists worldwide.
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## Summary

Each phase builds upon the previous one: software  $\rightarrow$  device  $\rightarrow$  infrastructure  $\rightarrow$  planetary ecosystem.

Together, the Atlas Hive™, Atlas Mind™, and Atlas Forge™ form a triad of creation, computation, and coordination — a new industrial organism born from ethics, entropy, and energy.