

COMPANY **V1.0** **DRAFT** UPDATED 2026-09-28

Wellbian Labs Whitepaper — Weather Data Economy

DRAFT — the body text is being written in a separate document. The bullets under each chapter are the planned content.

0. Summary

- Wellbian Labs builds a three-layer infrastructure for weather data: **collect (DePIN)** → **refine (AI Infra)** → **monetize (Finance)**. Each layer's output is the next layer's input.
- Rewarding contributors at the collection layer is what sets this apart from conventional weather businesses. Indoor (IAQ) and outdoor (OAQ) sensor nodes collect data; verified contribution is paid in fixed quantities of Wellbian (WLBN).
- Three axes: DePIN (Wellbian, wellbian.io) → AI Infra (Wellbian AI, wellbianai.io) → Finance (Weather Market weathermarket.io · Weather Fi weatherfi.io).

1. Problem: unverified weather data

- A single observation point: "Seoul's official temperature" is one station in Jongno. It does not represent the city.
- Delay and gaps: over the last seven days roughly 20% of METAR reports were missing or more than an hour late. Too many holes for a settlement reference.
- Thesis: trust should rest on **verifiable facts**, not institutions. The question is not who supplied the number but whether anyone can check it.

2. The Weather Data Economy

- Three layers: collect (sensors and nodes) → refine (the AI factory: indexes, forecasts, agents) → economy (data sales, insurance, derivatives and prediction markets on verified indexes).
- The loop: collection rewards → denser measurement → more precise indexes → larger financial markets → more data demand → reward funding.
- Vertical integration with KWeather: a private weather company holding 30 years of observation and forecast data, integrated with device distribution, an AI data center and financial infrastructure through to web3.

3. DePIN — Wellbian

- IAQ/OAQ sensor network: indoor air quality (IAQ, Taxon 3026) and outdoor air quality (OAQ, Taxon 2026).
- Device: ARC-600DA (device partner KWeather).
- License NFT: XLS-20, representing the right to operate a device or point.
- Quality score: uptime 40 · outliers 25 · neighbour correlation 20 · calibration 15.
- Fixed-quantity rewards: 7 WLBN per point per day × $0.78^{(\text{phase} - 1)}$ × grade factor.
- Scale: Genesis 25,000 points → target 1,000,000 points.
- Detail: [DePIN technical specification v0.3](#)

4. AI Infra — Wellbian AI

- AI factory: B300 GPU inference infrastructure.
- Products: inference API, forecasting and agent products, AI Factory access pass NFT (pure utility, content payment only).
- B2C: 60-day hyper-local forecast agent.
- Use cases: energy (heating indexes, demand forecasts), construction (phase forecasts, localized heavy rain and wind), retail and public sector.

5. Finance ① Weather Market

- Consensus oracle: 11 feeds, median with MAD outlier rejection. 167 cities in 90 countries.

- Indexes: WDI (Weather Data Index) and TDI (Temperature Data Index) on fixed, versioned weights.
- Verdicts: met / not met / withheld. Withheld is nobody's loss.
- Payment: XRP and x402 (402 → pay → retry → 200). Anchored on Flare SnapshotAnchor.
- Three products; pricing 25 USD per 30 days, 200 USD per year, 0.04 USD per call.
- Expansion from indexes to the full API, forecasts included.
- Detail: [Weather Market protocol whitepaper v3](#)

6. Finance ② Weather Fi

- Five parametric covers: HEAT $\geq 33^{\circ}\text{C}$ · COLD $\leq -5^{\circ}\text{C}$ · RAIN $\geq 2\text{mm}$ · WIND $\geq 10\text{m/s}$ · HUMID $\geq 85\%$.
- Prediction markets: LMSR market maker, settled on determinations.
- SI development and supply, including private projects.
- Simulator disclaimer: virtual balances (sUSDT) with no monetary value.
- Licence principle: no data is supplied to an activity that requires a licence under the gambling laws of the Republic of Korea.
- Detail: [Weather Fi settlement rules and product design](#)

7. Token — Wellbian (WLBN)

- Total supply 10 billion. Allocation: node rewards phase 1 2.8B · phase 2 1.8B · LP 0.8B · team 0.6B · ecosystem 0.5B · strategic 0.5B · liquidity 0.5B.
- Burn 5 billion (2.5B scheduled + 2.465B bought back).
- Fixed-quantity principle: verified data contribution earns a set quantity. No price or return is promised anywhere.
- Milestone gates G0–G10 and the withdrawal policy.
- The [tokenomics policy page](#) is the source of record for every figure.

8. Technical architecture

- XRPL: license NFT (XLS-20), WLBN (IOU), AMM (XLS-30), x402 payment.
- Flare: snapshot anchor, determination registry, FDC proofs.
- Three off-chain layers (collect, verify, serve) and one on-chain layer (anchor, settle).
- Wallet role separation: Cold / Hot / Treasury.
- Five-stage de-identification and k-anonymity ($k \geq 25$).

9. Governance, legal structure, risks

- Wellbian Labs Pte. Ltd. (Singapore, UEN 202604584N) and KWeather: delegated operation, related companies.
- Utility-token principle: no equity, dividend, profit-sharing or repayment rights.
- Risks: regulation, personal data, key management, dependence on settlement assets such as RLUSD.

10. Roadmap

- Phase 1 MVP & pilot — done (XRPL mainnet, Aug 2026).
- Phase 2 reward enhancement — in progress (data marketplace = Weather Market beta, quality score).
- Phase 3 AI advancement — Wellbian AI (forecasts, risk indexes, industry packages).
- Phase 4 financialization — Weather Fi (simulator, insurance and index-settled products as SI).
- Gate conditions follow G0–G10 of the tokenomics policy.

Appendix

- Glossary: reuses the [glossary of the DePIN specification](#).
- References: [Weather Market whitepaper](#) · [Weather Fi settlement rules](#) · [Tokenomics](#)
- Change history: [changelog](#)

Legal notice

WLBN and license NFTs confer no equity, dividend, profit-sharing, or repayment rights. Rewards are a utility token distributed by the quality of verified data contribution; quantity, value, and liquidity are not guaranteed. Figures in this document are design and planning assumptions, not forecasts or promises of return.