RESEARCH REPORT

DePIN: From Token Subsidies to Unit Economics — Mapping Real Infrastructure Revenue

Decentralized Physical Infrastructure Networks entered 2026 as one of the few crypto sectors billing real customers for real hardware. Market-cap estimates range from US$7 billion to nearly US$19 billion depending on who counts what, but the more durable signal is below the token price: roughly US$150 million in monthly on-chain revenue, US$1 billion of venture funding in 2025, and a forced pivot from emission-driven supply growth to usage-driven economics. Chainfir Research maps where the real money is.

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A US$10 billion sector that token prices do not define

DePIN — blockchains coordinating physical hardware such as GPUs, wireless hotspots, storage drives and sensors — has become impossible to ignore by mid-2026, even if headline numbers disagree. CoinGecko's classification puts the sector near US$6.9 billion in August 2026. Messari and Escape Velocity's State of DePIN 2025 sizes it at roughly US$10 billion. CoinMarketCap's broader category reached US$18.9 billion in May 2026. The spread is not an error; it is a taxonomy problem. Some trackers include general-purpose AI or layer-1 tokens with a DePIN angle; others count only protocols whose core business is coordinating hardware.

What matters more than the exact top line is the direction of the underlying line items. The sector now counts more than 650 live projects and 240–265 tracked tokens, with 8.8 million active devices on DePINScan and daily contributing devices reaching 13 million in early 2026, according to DePINscan and Orochi Network data. Those are not paper metrics; they are routers, GPUs, dashcams and hard drives that someone bought, installed and keeps running.

For a profit-first investor, the taxonomy debate is a feature, not a bug. It means the sector is still being sorted by what it does rather than how it is marketed. Our interest is not in the widest definition; it is in the narrow definition that already has paying customers, depreciating hardware and reproducible unit economics.

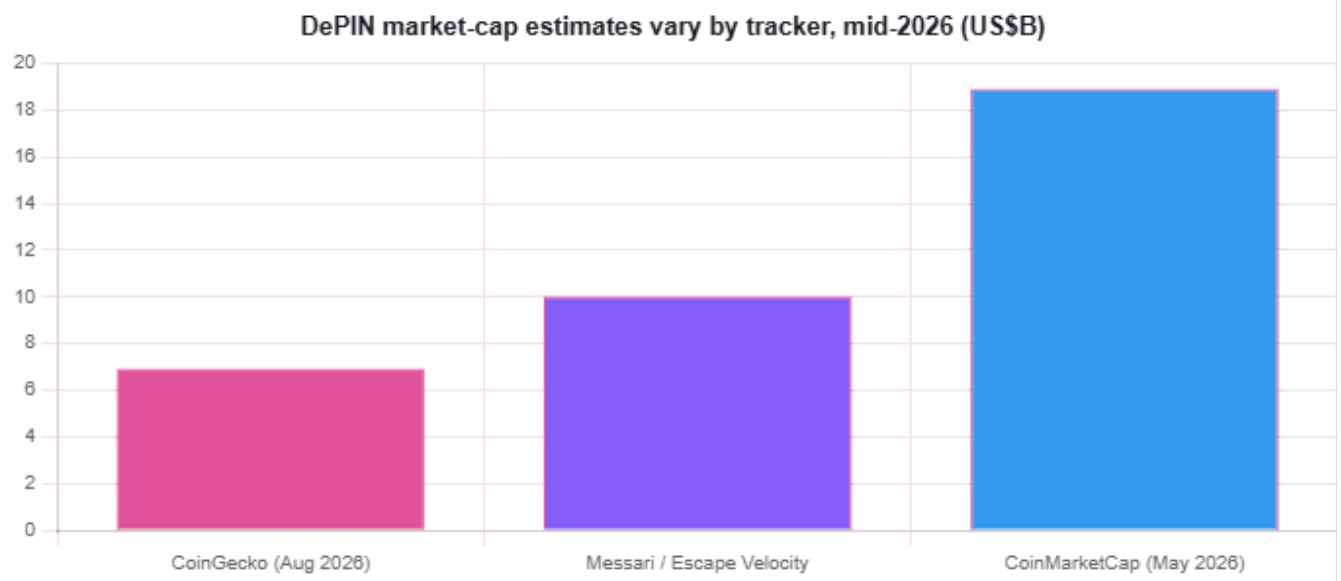


Chart 1: DePIN sector market-cap estimates diverge because trackers disagree on which tokens count as DePIN. CoinGecko uses a stricter classification; CoinMarketCap is broader. Source: CoinGecko; Messari & Escape Velocity, State of DePIN 2025; CoinMarketCap (compiled via Spoted Crypto and AInvest, August 2026).

What DePIN actually sells

The category is best understood by the physical resource it coordinates, not the blockchain it uses. Compute networks such as Render, Akash and Bittensor aggregate idle GPU and CPU capacity and sell it to AI inference, rendering and machine-learning workloads. Wireless networks such as Helium and XNET provide decentralized connectivity for IoT and mobile offload. Storage networks such as Filecoin and Arweave offer distributed data storage. Sensor and mapping networks such as Hivemapper and DIMO pay contributors to collect street-level imagery, vehicle data or environmental readings.

The business model is deliberately mechanical. Contributors buy compatible hardware, connect it to the network, and earn tokens for verified work. Customers pay for compute cycles, data credits, storage deals or API calls. The blockchain layer handles accounting and settlement; the heavy lifting happens off-chain. This division of labour is why DePIN is sometimes described as "Uber for infrastructure" — but with one critical difference: the asset on the network is a depreciating physical machine, not a car that drives itself home.

The revenue story — real, growing, and dangerously concentrated

After years of subsidizing supply with token emissions, the leading networks are now collecting demand-side revenue. In January 2026 alone, aggregate on-chain revenue across major DePIN protocols reached roughly US$150 million, according to CoinMarketCap and KuCoin sector analyses compiled by Block Editorial and Spoted Crypto. That is a long way from "future utility."

The concentration is extreme. Bittensor reported roughly US$43 million in Q1 2026 on-chain AI-service revenue, the highest verified protocol figure in the sector. Akash crossed US$5 million in Q1 2026 compute spend. Helium's monthly fee capture reached an all-time high of about US$1.7 million. Hivemapper's trailing-twelve-

month revenue was roughly US$644,000. A handful of networks account for the majority of real customer spend; everything else is still burning tokens to keep hardware plugged in.

This concentration is not a bug from our point of view. It is exactly what happens when a sector transitions from narrative to earnings: a few operators prove the unit economics, and the rest discover that "decentralized" does not exempt them from the laws of cash flow. The same Messari analysis notes that leading DePIN networks now trade at roughly 10–25x revenue multiples, down from over 1,000x in the 2021 cycle — a repricing that looks like sanity returning to infrastructure underwriting.

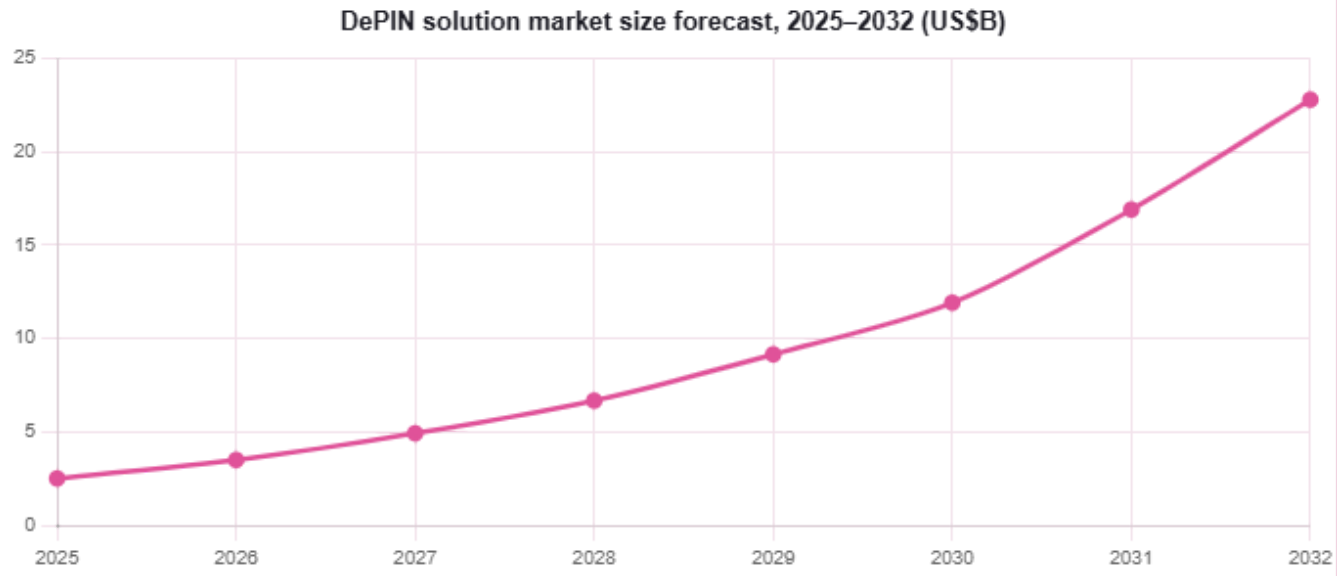


Chart 2: Projected DePIN solution market size at a 37.3% compound annual growth rate. Source: PW Consulting / pmarketresearch.com, Decentralized Physical Infrastructure Networks (DePIN) Solution Market, March 2026.

The funding curve and the InfraFi experiment

Private capital is voting with its wallet even while public tokens reprice. DePIN startups raised approximately US$1 billion in 2025, up from about US$698 million in 2024, according to Messari and Escape Velocity — an all-time high for the sector. The capital is moving earlier and more selectively, concentrating at seed and Series A on teams that can show paid utilization rather than node count.

A parallel financing experiment is also emerging. "InfraFi" — a DePIN/DeFi hybrid in which stablecoin holders finance real-world infrastructure and earn yield from asset cash flows — has begun to scale. USDai, Daylight and Dawn are early examples in compute, energy and bandwidth, with USDai accumulating roughly US$685 million in user deposits to fund GPU fleets, per Messari. The model is young and introduces credit, duration and regulatory risks, but it directly addresses DePIN's biggest structural problem: hardware requires capex, and token emissions are a poor substitute for a balance sheet.

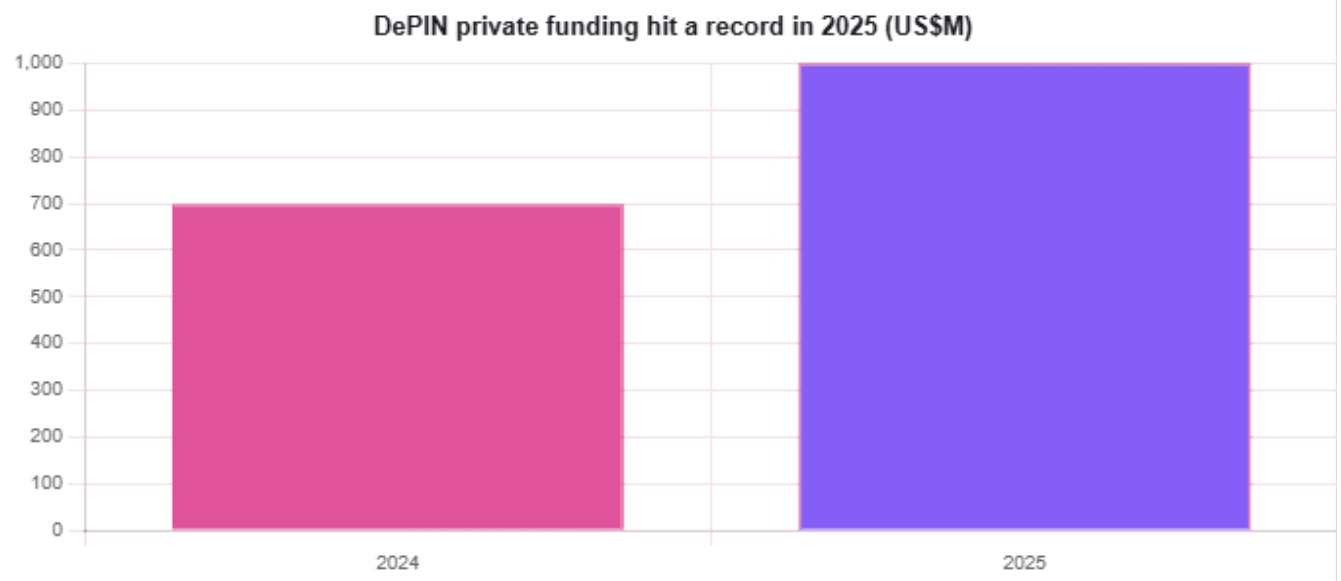


Chart 3: Venture funding raised by DePIN startups, calendar years 2024 and 2025. Source: Messari & Escape Velocity, State of DePIN 2025 (via FinWire, January 2026).

Asia Pacific is the operational proving ground

The region where DePIN must prove itself is also the region where Chainfir is most active. Asia Pacific accounts for roughly US$718 million of the 2025 DePIN solution market by revenue, second only to North America, per PW Consulting. More importantly, the region is where demand and supply are converging fastest.

AI infrastructure demand is the obvious driver. Nvidia has repeatedly stated that GPU demand will exceed supply for several quarters into fiscal 2026, and Flexera's 2025 State of the Cloud found that 84% of enterprises cite managing cloud spend as their top cloud challenge. That cost pressure pushes AI teams toward decentralized compute as a pragmatic second source, not an ideological choice.

At the same time, regional infrastructure build-out is accelerating. Solana Company — formed by Pantera Capital and Summer Capital with more than US$500 million in committed capital — announced its "Pacific Backbone" plan in February 2026 to build a high-speed, low-latency network linking Seoul, Tokyo, Singapore and Hong Kong directly to Solana staking and validation operations. Hong Kong and Singapore have both moved tokenized assets and stablecoin regimes from sandbox to live transactions. New Zealand, where Chainfir is headquartered, remains a testbed for regulated digital-asset infrastructure with strong rule-of-law and energy credentials.

The profit-first reading — buy the usage, not the emission schedule

Our filter for DePIN is the same one we apply to every sector. We are not buying a decentralization thesis; we are buying businesses that can bill more than they burn:

- **Revenue must come from customers, not emissions.** Subsidized node participation is a customer-acquisition cost, not product-market fit.

- **Hardware payback must be measured in months, not miracles.** Compute networks currently show the fastest operator payback; storage and wireless require longer lock-ups.
- **Demand-side contracts must be contracted, not hoped for.** Signed enterprise compute or wireless-offtake agreements matter more than node-count milestones.
- **Token unlock schedules are a liability until proven otherwise.** New supply mechanically pressures price unless real revenue absorbs it.
- **Jurisdiction and energy are moats.** Cheap, clean power and clear licensing compound over time; they cannot be forked.

> *"DePIN is not a new ideology. It is a new capital structure for infrastructure. We do not invest in networks that pay people to plug things in; we invest in networks where customers pay to keep those things plugged in. The moment the subsidy stops, the real business begins — and that is the only moment that matters to us." — Brian Tian, Founder & CEO, Chainfir Capital*

Our stance

Chainfir Capital is actively mapping profitable DePIN infrastructure companies across APAC for growth investment. Our model deploys capital, talent and resources as a single allocation, and in this sector the binding constraint is rarely money. It is operator quality, enterprise distribution, regulatory navigation and energy access — precisely the problems our 374-plus advisor network is designed to solve.

We believe the next 12 months will separate emission-dependent experiments from genuine infrastructure businesses. The capital has already voted: US$1 billion of private funding and US$150 million of monthly on-chain revenue say the sector is real. The question for investors is which networks can convert today's subsidies into tomorrow's take rates. We intend to back the ones that do.

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