

DePIN on Solana: Building the Future of Decentralized Infrastructure

What if your car's dashcam could earn you \$300 a month just for your daily commute?

What if your idle GPU made you money while you slept?

What if setting up a device in your backyard could earn you thousands a year, while helping build the next internet?

This isn't science fiction, it's happening right now through **DePIN**.

The Infrastructure Problem We've All Accepted

Traditional infrastructure is centralized and it's failing many.

Telecom giants charge exorbitant fees while undeserving rural areas.

Cloud computing is dominated by Amazon, Google, and Microsoft, creating chokepoints and high costs.

Mapping data is controlled by a few tech titans who monetize your location without sharing profits.

And this is the problem that **DePIN** is solving.

What is DePIN?

DePIN stands for Decentralized Physical Infrastructure Networks.

DePIN (Decentralized Physical Infrastructure Networks) leverages blockchain to incentivize the deployment and maintenance of real-world infrastructure like:

Telecom,

Energy,

Transportation, and

Computing via tokenized rewards.

By shifting ownership and operation from centralized entities to community participants, **DePIN** enables permissionless, transparent, and efficient infrastructure networks.

This results in more resilient systems with lower operational costs and greater scalability.

Just like Airbnb lets you monetize your spare room, **DePIN** lets you monetize your spare bandwidth, hardware, or sensors, building decentralized networks from the ground up.

Why Solana is Chosen for DePIN?

While other blockchains struggle with \$50+ transaction fees, **Solana** processes DePIN transactions for approximately \$0.00025, making micropayments not just viable, but profitable.

Here's why Solana leads in network infrastructure:

➤ **Lightning-Fast Performance:**

2,000+ transactions per second with 0.4-second finality, perfect for real-time infrastructure operations and instant reward distributions.

➤ **Microscopic Costs:** Essential for frequent, small-value rewards to contributors without eating into profits.

➤ **Scalability:** With features like parallel transaction processing, Solana scales efficiently as network demand grows, avoiding congestion.

➤ **Developer-Friendly:** Solana offers robust SDKs and tools built for seamless IoT integration and real-world hardware interaction.

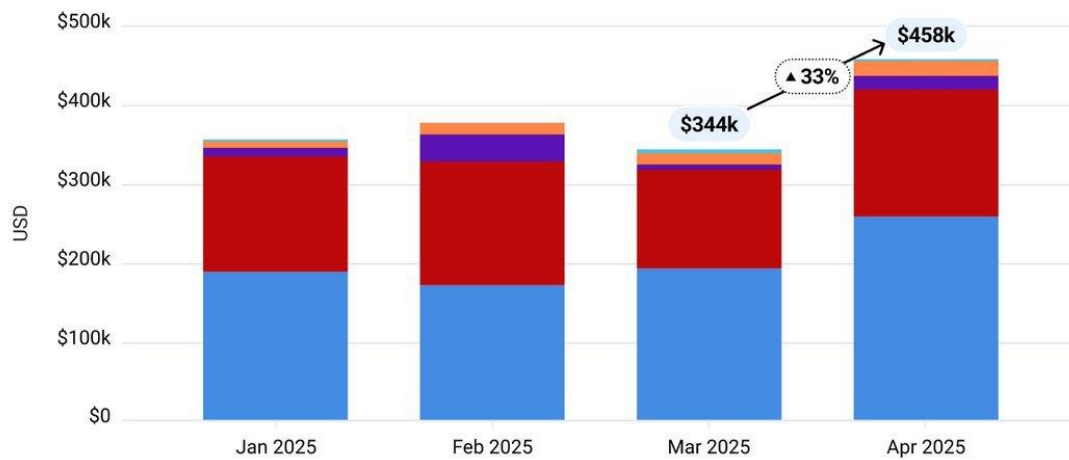
The numbers speak for themselves: **Solana DePIN** ecosystem generated \$458,000 in monthly revenue in April 2025, up 33% year-over-year, demonstrating real economic value creation

DePIN Revenue

By Month



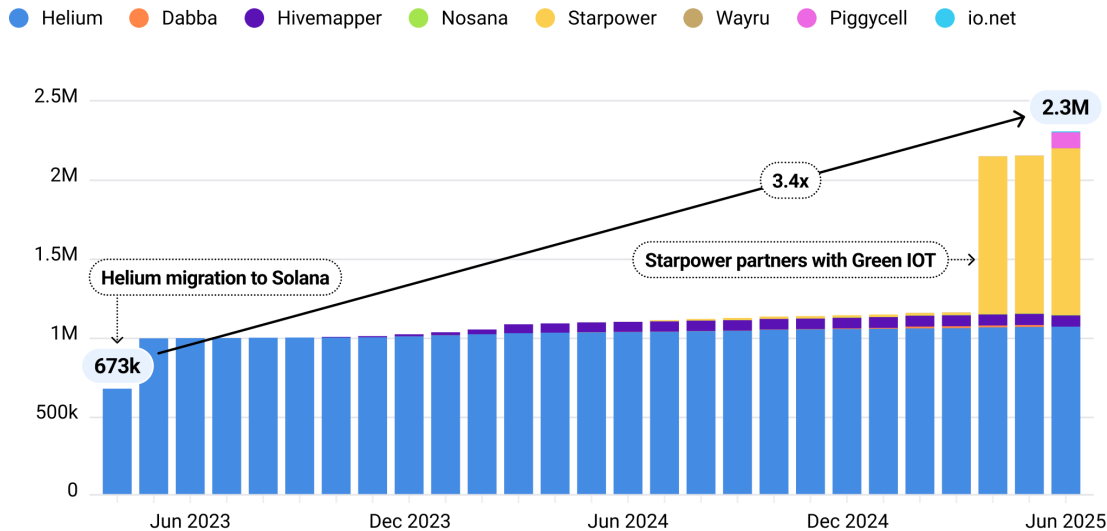
● Helium ● Render ● Hivemapper ● UpRock ● XNET



Note: DePIN revenue is calculated based on \$RENDER \$HONEY, \$UPT and \$XNET burned for Render, Hivemapper, UpRock and XNET and Data Credits burned for Helium. These are the only protocols we are able to track for this metric.

From early 2023 to June 2025, Solana DePIN more than tripled the number of connected devices amongst their networks, reaching a count of 2.3M.

Solana DePIN Devices By Month



Note: Protocols included were obtained from DePIN Scan and Coingecko. Mobile devices as nodes were filtered out. Protocols include io.net, Starpower, Piggycell, Helium, Hivemapper, Wayru, Nosana and Dabba.

Source: [Syndica](#)

Three Solana DePIN Giants Reshaping the Real World

Solana is home to several innovative **DePIN** projects across different sectors. Here are three leading examples:

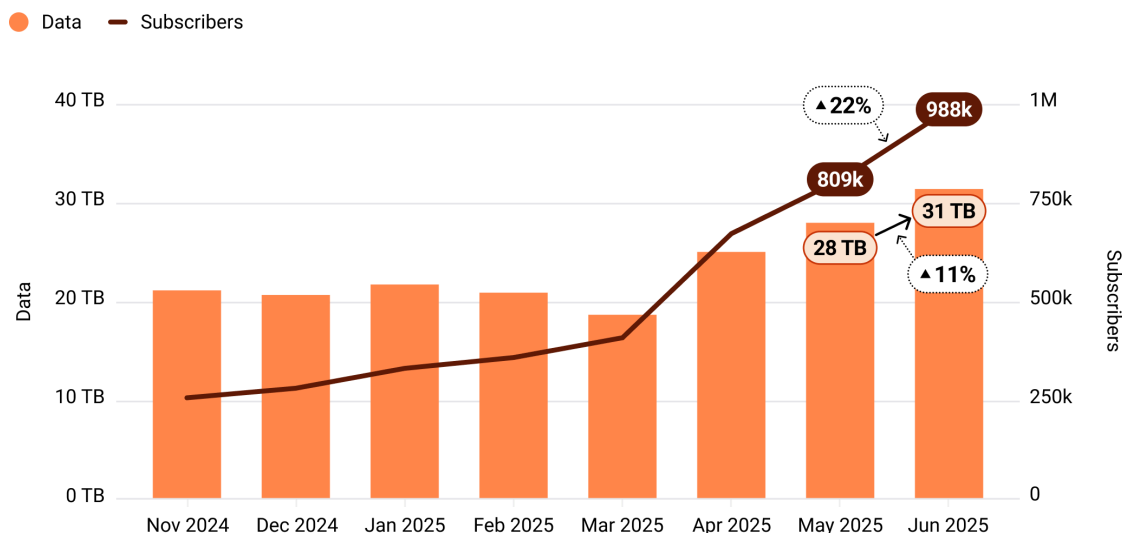
1. Helium: Dethroning Telecom Monopolies

Helium operates one of the world's largest decentralized wireless networks. As of June 2025, it has:

988,000 subscribers to Helium Mobile, a 22% increase from the previous month.

31 TB of carrier data offloaded, up 11% from May's 28 TB.

Helium Mobile Average Offload Metrics By Month



Users earn \$HNT tokens by providing IoT coverage, with T-Mobile partnership announced and 5G expansion underway.

Instead of Verizon charging \$80/month for limited coverage, Helium offers comprehensive IoT connectivity at a fraction of the cost while paying network contributors.

Tokens

Badges



NOTICE



We've migrated our rewards.
You're now earning HNT.



Manage tokens



SOL

0.016508511
\$2.76



HNT

321.02473093
\$1,036.91



MOBILE

0
\$0.00



PS: This is just for reference purpose. Price may change.

2. Hivemapper: Google Maps' Decentralized Challenger

Hivemapper has mapped millions of miles through community-driven dashcam data, with contributors earning \$HONEY tokens for every mile mapped.

Their Volkswagen partnership for autonomous vehicle mapping and planned Los Angeles expansion by 2025 shows enterprise adoption accelerating.



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Excited to announce that Volkswagen's autonomous vehicle subsidiary, Volkswagen ADMT, has selected Bee Maps (powered by Hivemapper) spatial intelligence services to support its autonomous vehicle testing operations.

Robotaxis + Hivemapper are a match made in heaven. Onwards 



Source: [Hivemapper X](#)

The revolution: Rather than Google owning and monetizing all mapping data, Hivemapper shares value with the community while maintaining fresher, more comprehensive coverage.

3. Render: Democratizing Cloud Computing

Render connects GPU owners with artists and AI companies needing rendering power, facilitating substantial compute transactions daily. With AI demand exploding, idle gaming rigs now generate passive income while providing affordable alternatives to AWS and Google Cloud.

The transformation: Instead of paying premium prices to cloud giants, companies access distributed computing power at significant cost savings while GPU owners monetize unused capacity.

POWER THE FUTURE OF DECENTRALIZED COMPUTE

We're currently expanding our recruitment of US-based Compute Network node operators based on customer needs. If you're interested in powering the future of decentralized compute



APPLY AT:

<https://waitlist.renderfoundation.com>

@rendernetwork

Join the waitlist: waitlist.renderfoundation.com

DePIN vs Web2: The Fundamental Shift

TRADITIONAL WEB2

CENTRALIZED
CONTROL BY
CORPORATIONS

HIGH
BARRIERS TO
ENTRY

OPAQUE
OPERATIONS

LIMITED
SCALABILITY

VALUE
EXTRACTION

DePIN ON SOLANA

COMMUNITY
OWNERSHIP AND
OPERATION

ANYONE CAN
PARTICIPATE
AND EARN

TRANSPARENT,
BLOCKCHAIN-
VERIFIED

EXPONENTIAL
GROWTH
POTENTIAL

VALUE SHARING
WITH
CONTRIBUTORS

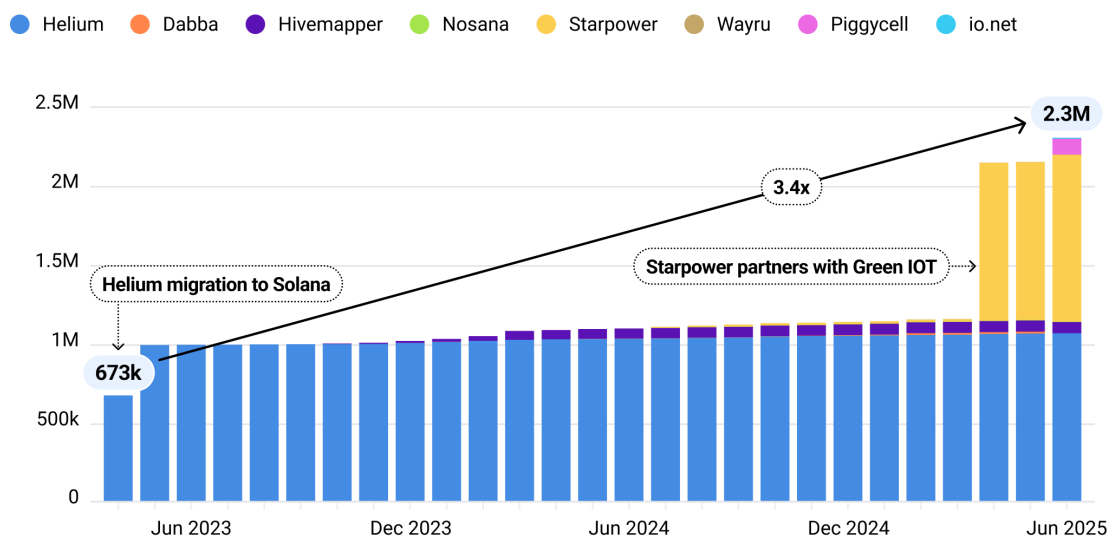
Solana's DePIN Surge

Solana DePIN is scaling fast, from 673K devices in mid-2023 to 2.3M by June 2025.

That's a 3.4x growth in just two years, led by Helium and boosted by newcomers like Starpower, Hivemapper, Nosana, and io.net.

Solana is now the go-to chain for real-world infrastructure.

Solana DePIN Devices By Month



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The Inevitable Future

Major corporations are taking notice. Samsung invested in Helium.

Volkswagen partnered with Hivemapper.

OTOY (Oscar-winning VFX company) powers Render.

DePIN represents more than technological advancement; it's an economic paradigm shift.

We're transitioning from infrastructure as corporate monopoly to infrastructure as community asset.

From passive consumers to active stakeholders. From centralized bottlenecks to distributed resilience.

The market signals are clear: Venture capital is flowing into DePIN, and governments are exploring it for critical infrastructure.

What's Next: Your Role in the Infrastructure Revolution

The DePIN economy is accelerating.

New sectors are emerging: decentralized storage, environmental monitoring networks, and distributed weather stations.

Each represents earning opportunities for early participants.

For developers: Solana's DePIN infrastructure is mature and waiting. Start with the Helium SDK or explore Render's compute protocols.

For entrepreneurs: Identify underserved infrastructure needs in your region. DePIN makes local solutions globally scalable.

For hardware owners: Your unused bandwidth, spare computing power, or strategic location could generate meaningful income while building tomorrow's decentralized internet.

For businesses: DePIN offers cost-effective alternatives to traditional cloud services while supporting a more resilient, distributed internet.

The question isn't whether DePIN will reshape infrastructure, with billions in market cap and millions of active devices, it already is.

The question is whether you'll be a participant in this infrastructure transition or watch from the sidelines.

Ready to explore DePIN opportunities? Visit Solana's DePIN ecosystem hub and discover how your resources can start earning today.

The infrastructure revolution is here, and it's more accessible than you think.