



DePIN DAO

WHITEPAPER

The Biggest Big Data Center Based on



What does DePIN stand for?

DePIN stands for Decentralized Physical Infrastructure Networks. It's a new way to build and maintain infrastructure in the physical world. This "infrastructure" can be anything from WiFi hotspots in wireless networks to solar-powered home batteries in energy networks. DePINs are built out in a decentralized way, by individuals and companies all over the world, for anyone to use. In return, these contributors receive financial compensation and an ownership stake in the network they're building and the services they're providing (via token incentives). DePINs are made possible through widespread Internet connectivity and technological advancements in blockchain infrastructure and cryptography.

What happens when crypto and blockchain meet the physical world?

The advent of blockchain technology has had a large, innovative impact on many industries, ranging from finance (DeFi) to gaming (play to earn) to art (generative NFTs and trustless authentication). However, one area that has remained largely unchanged is physical infrastructure.

Traditionally, the deployment and management of physical infrastructure like wireless networks, cloud services, mobility networks and power grids has been dominated by large corporations due to the high capital requirements and logistical challenges associated with projects of this size. As a result, these centralized entities have had a near-monopoly on pricing and services offered to end-users, leading to a lack of competition and innovation. This results in an experience for consumers that is often subpar. Just take a look at the NPS (net promoter score, a measure of customer satisfaction) for the oligopoly that is the telecommunications industry in the United States (hint, it's incredibly low).

DePIN as the evolution of the Sharing Economy

Companies like Uber and Airbnb have unlocked massive amounts of value utilizing this "Sharing Economy" model. The "Sharing Economy" describes how Uber, Airbnb, and others leverage contributors (and their assets) to provide valuable goods and services. The diagram below shows how the "Sharing Economy" typically works.

Why DePINs are the future

DePIN has several benefits over traditional physical infrastructure networks:

1. **Collective ownership:** Through the use of token rewards, contributors are encouraged to deploy and maintain infrastructure. DePIN's bottom-up approach means that the network is collectively owned by its participants, rather than a small group of shareholders.
2. **Distributed Infrastructure Cost:** A decentralized physical infrastructure network reduces overhead and expenses by leveraging the collective resources of a network's participants.
3. **Decentralization:** A decentralized network offers a more resilient and secure infrastructure compared to traditional, centralized infrastructure networks. Building a network in a decentralized manner means that the network is less susceptible to corruption, hijacking and hacks, and other negative externalities associated with centralized control.
4. **Open Competition and Innovation:** DePIN enables new levels of innovation across various sectors. By removing the barriers to entry associated with traditional infrastructure networks, DePIN encourages new entrants to compete in markets that were previously dominated by a few established players.

DePIN within the context of crypto as a whole

While DePIN is a smaller, emerging sector of crypto today, its potential for growth is massive as this model is used to build better networks across industries as diverse and as large as telecom, energy, mobility, and storage.

While the real world economy is easily valued in the hundreds of trillions of dollars, Messari recently wrote that the DePIN sector's total addressable market is currently ~\$2.2T and could reach ~\$3.5T by 2028. This is ~3x the market cap of all of crypto today. The FDV (fully diluted value) of all decentralized physical infrastructure projects is currently only ~\$5B. DePIN projects are looking to solve some of the world's most fundamental problems by leveraging blockchain technology, token incentives, and the power of the Internet.

DePINs are built on four fundamental components that allow for innovation far beyond what centralized networks can provide:

1. **Physical infrastructure:** DePINs require physical infrastructure to be built out and maintained in the physical world.
2. **Offchain compute infrastructure:** DePIN relies on middleware that allows real-world data to be ingested, analyzed, and then used to calculate user contributions and actual demand.
3. **Blockchain architecture:** Blockchains function as tamperproof ledgers, device registries, and the home of token economies.
4. **Token incentives:** Tokens are used both as an incentive to build out the supply-side of a network (e.g. motivate contributors) and also often as the currency that demand for the network's services is priced in (e.g. purchasing broadband access).

These components are powerful new tools in the toolkits of DePIN builders, but this power comes at a cost. Building any kind of physical infrastructure in the real world is difficult. Correctly setting up and then implementing functional, decentralized middleware that records real-world activity on a blockchain, which is then stored immutably and used to trigger token incentives within a purpose-built token economy is even more difficult. However, DePIN networks have a secret superpower that helps them overcome these difficulties.

What is DePIN DAO

DePIN DAO is a big data center based on the solana chain.

Through DePIN DAO, ordinary users can upload their own eating, driving, and hotel information, and obtain DePIN tokens after passing the authentication. DePIN DAO integrates the data of different users, analyzes the user's behavior habits and consumption maps after big data processing and provides it to web2 and web3 application service provider.

The data center can share its own data such as weather data, environmental data, and traffic data. DePIN DAO is integrated into the solana chain through the data pot and opens the oracle service. Individual developers and large application development companies can make data requests through paid APIs.

The Problems We're Solving

- **Expensive for businesses** - While some data are generally free for consumers, organizations pay to integrate consumption data into their products. With so few choices for reliable data, monopoly pricing makes it difficult for organizations and independent developers to afford data.
- **Uneven coverage and freshness** - Typical methods of collecting people or environment data are very expensive, so it is difficult for even the best-funded companies to reach global scale.
- **Data without remuneration** - Modern business relies on large amounts of user-generated data. Many App development company collect consumption data and environment data from users without compensating them. In some cases, users are not transparent about how user data is commercialized.

The design of the DePIN DAO helps to address all three problems.

\$DePIN Tokenomics

Total supply: 100,000,000



75% to contributors as rewards for their participation in building the DePIN DAO.

20% to investors for providing the startup capital required to launch the DePIN DAO.

5% to the DePIN DAO Treasury, which facilitates the ongoing management and success of the DePIN DAO.

DePIN Token

It is used as a reward for users or data centers to provide data. At the same time, 80% of the revenue of DePIN DAO will be used to buy back DePIN and burn it.

Using the Solana blockchain, Depin DAO has built an incentivized, crowdsourced big data center by promptly and securely rewarding a worldwide community of individual contributors with DePIN tokens. Our approach challenges traditional database systems, underscoring the potential for decentralized networks to unlock value and introduce groundbreaking efficiencies to major industries.



Empowering Community & Customers

Rather than depend on a few major companies to get user data, DePIN DAO allows anyone to contribute to a dynamic global big database.

DePIN DAO fairly compensates contributors for their efforts, cultivating community and collective action. This reduces costs and challenges the resource-intensive nature of traditional big data provider. The network's decentralization also enhances the database's resilience against censorship and manipulation.

DePIN DAO's tokenized reward system maintains a consistent flow of fresh data and regular environment data updates. For sectors like application developer platform, this means access to a rich source of relevant user data, supporting actionable insights and improved decision-making.

Community and Governance

Community is key to the success of the DePIN DAO.

Philosophy

Billions of people may rely on the user and environment data generated by the DePIN DAO. These outputs should be public goods, owned and operated by its contributors. Although decentralized, an organized body with a clear mandate is required to govern and facilitate the DAO operations. By transferring many of the key governance responsibilities to a foundation and making the technology open source, the DePIN DAO can serve far more people across the globe and endure for a long time.

Token Restrictions

There are token restrictions in place for DePIN DAO investors and team members.

Investors

DePIN DAO has raised equity funding from some of the most prominent Venture Capital ("VC") firms in the world, including Unicorn-Verse and more.

Tokens allocated to investors are restricted for a two-year period, with transfer restrictions released from tokens in 12 equal tranches at the end of the 13th month until the end of the 24th month anniversary of the Initial Token Distribution Date, the day at which the token launches on Solana mainnet.

Employees

Tokens allocated to employees of DePIN DAO Inc. are restricted for a three-year period, with transfer restrictions released from tokens in 24 equal tranches at the end of the 13th month to the end of the 36th month anniversary of the Initial Token Distribution Date, the day at which the token launches on Solana mainnet.

Team



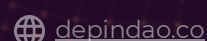
Marina Karanova

CEO

Education

- MBA in Business Administration, Harvard Business School
- B.Sc. in Computer Science, Stanford University

Professional Experience



1. Senior Manager, Big Data Solutions at EnergyCorp

- Led initiatives for integrating big data analytics in energy management solutions.
- Managed cross-functional teams to innovate data-driven energy efficiency programs.

2. Director of Strategic Initiatives, Web3 Innovations Ltd.

- Spearheaded projects focusing on the integration of Web3 technologies in renewable energy sectors.
- Developed partnerships and strategies for leveraging blockchain in energy distribution.

3. CEO at FutureEnergy Inc.

- Established a start-up focusing on renewable energy and sustainable technologies.
- Successfully raised funding and managed high-profile collaborations in the energy and crypto sectors.



Jake Nguyen

CTO

Education

- M.Sc. in Computer Science, MIT
- B.Eng. in Electrical Engineering, National University of Singapore

Professional Experience

1. Lead Software Engineer, CryptoSolutions

- Developed secure and scalable crypto exchange platforms.
- Led software development teams, focusing on blockchain technology and cybersecurity.

2. Chief Technology Officer, BigDataTech

- Oversaw the development of big data analytics tools for energy sector clients.
- Implemented AI and ML algorithms to optimize energy consumption patterns.

3. CTO at SmartGrid Innovations

- Pioneered the development of smart grid solutions using Web3 and blockchain technologies.
- Drove the adoption of innovative energy management systems in the utility sector.