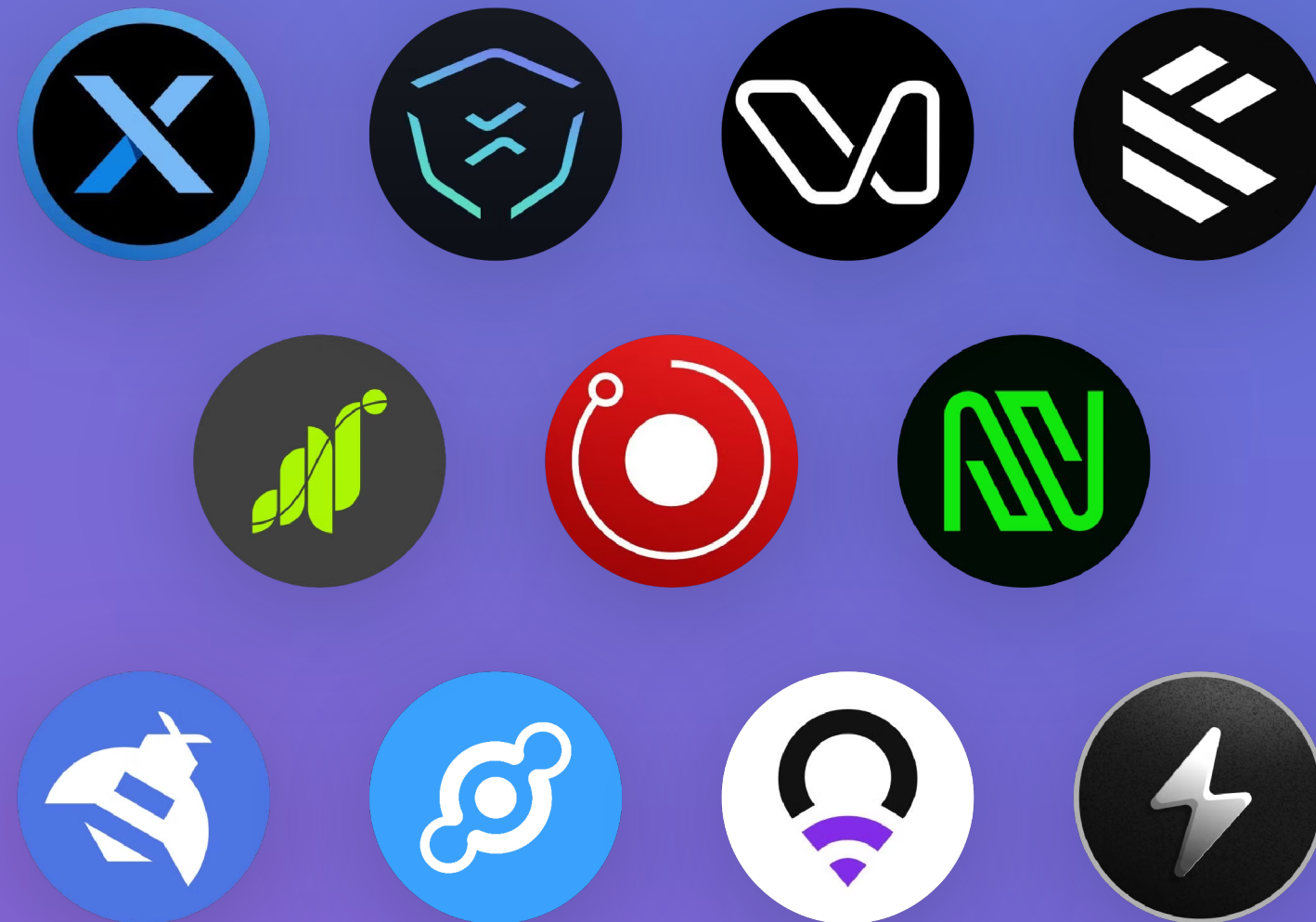


 Syndica

Deep Dive:

Solana DePIN

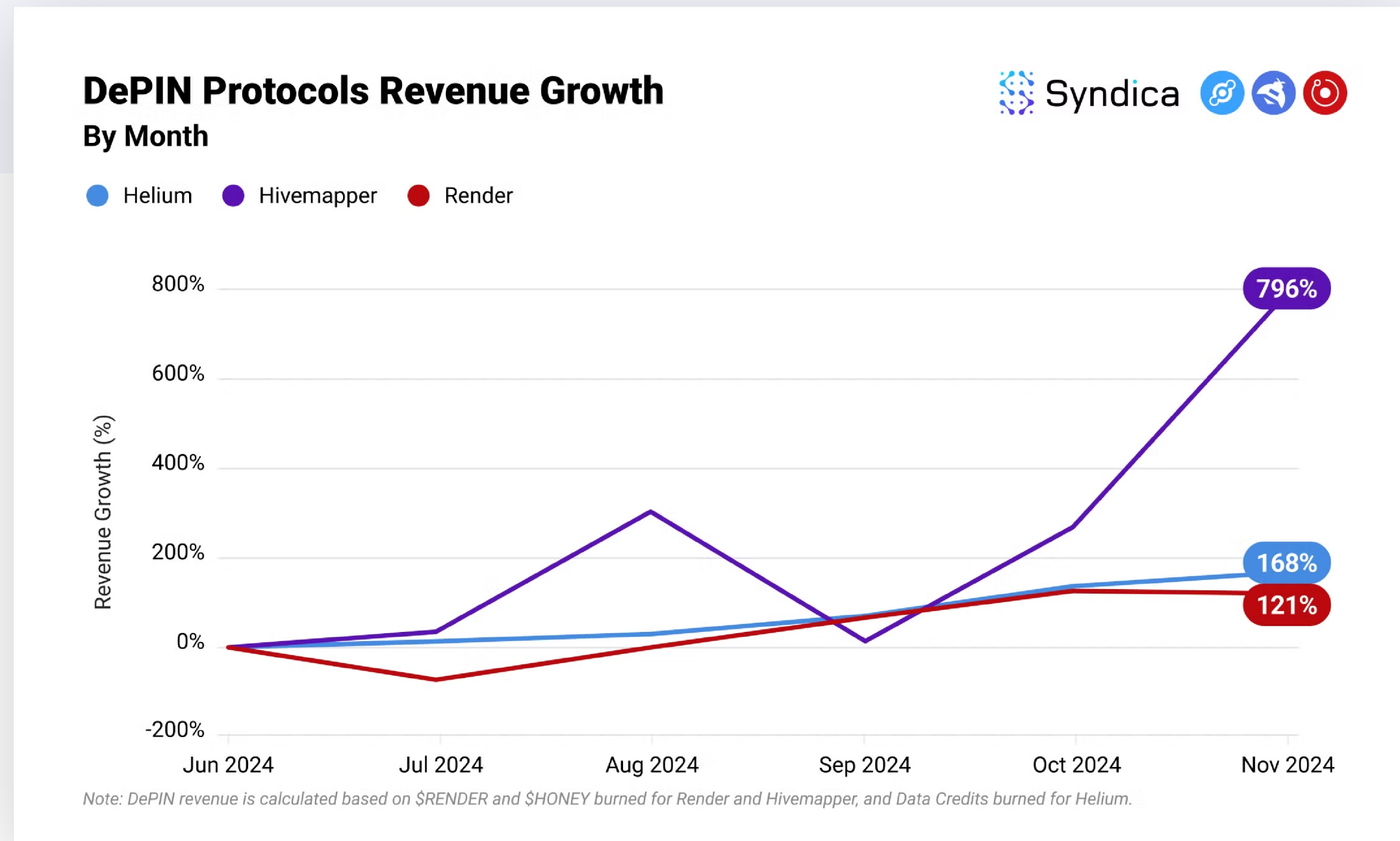
// November 2024



Note: DePIN revenue is calculated based on \$RENDER and \$HONEY burned for Render and Hivemapper, and Data Credits burned for Helium.

Hivemapper revenues have skyrocketed since June.

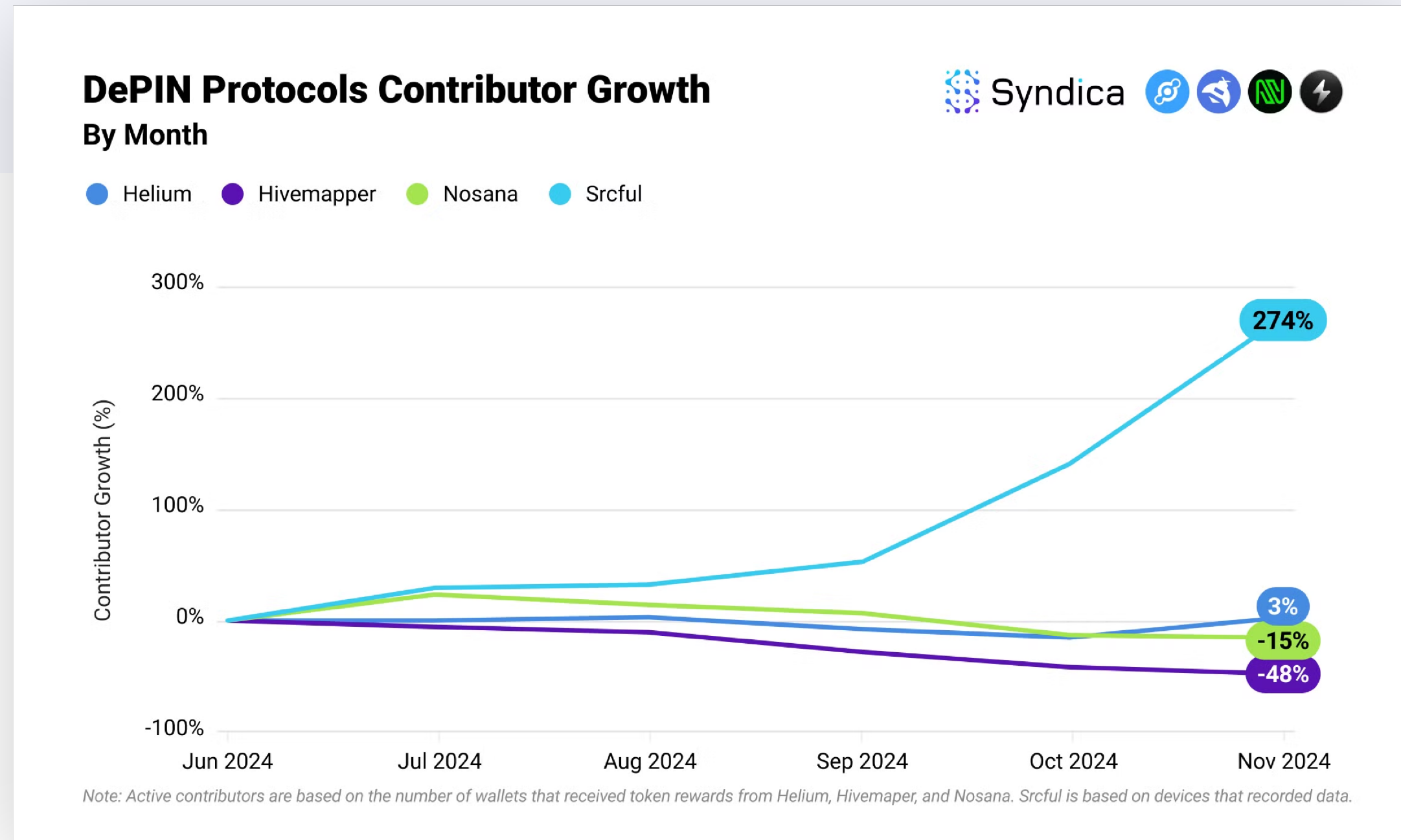
The protocol achieved 796% revenue growth, with Helium and Render also posting impressive growth figures.



Note: Active contributors are based on the number of wallets that received token rewards from Helium, Hivemapper, and Nosana. Srcful is based on devices that recorded data.

Srcful has seen massive contributor growth since June.

While most DePIN protocols cooled in active contributors, Srcful saw an impressive 274% increase.

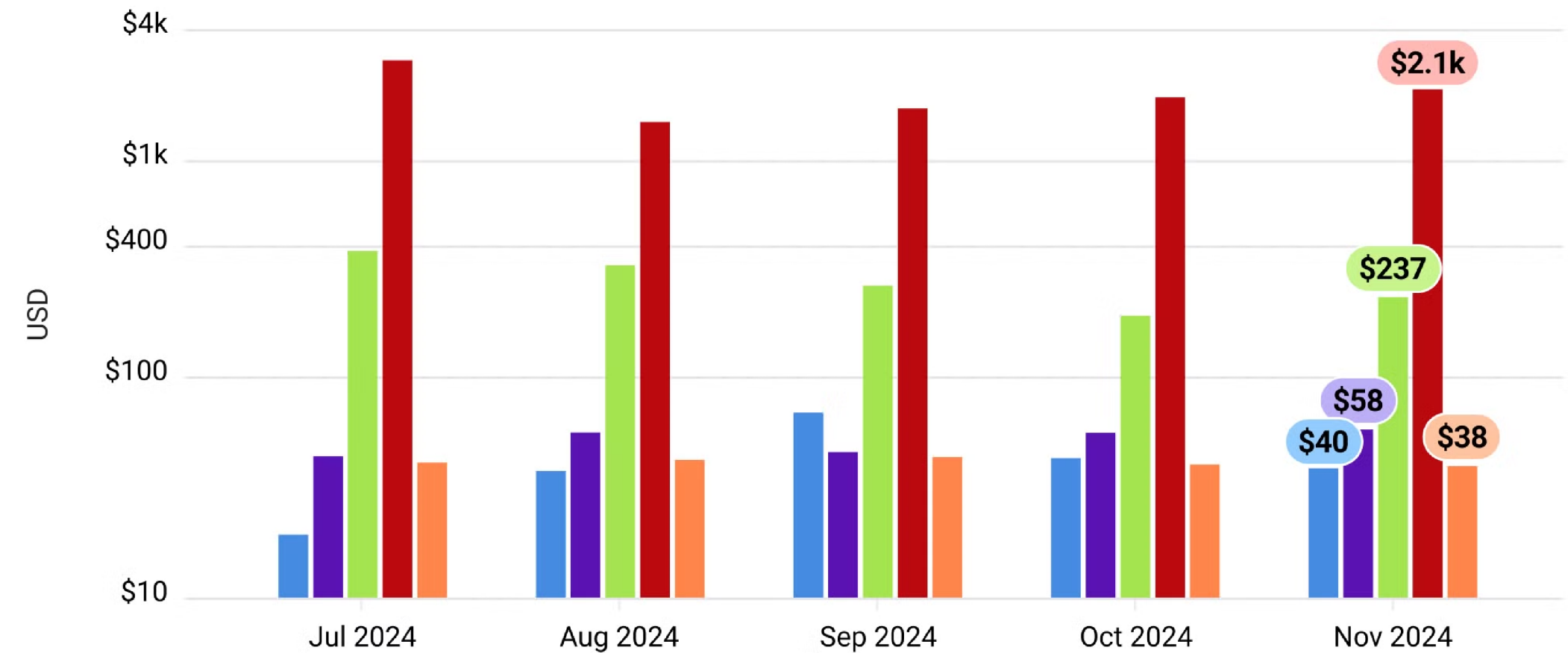


Render contributors received hefty payouts.

Render contributors earn about \$2k on average, significantly surpassing the sub-\$300 average rewards of most protocols.

DePIN Protocols Average Reward per Contributor By Month

● Helium ● Hivemapper ● Nosana ● Render ● NATIX





Part I
Mapping

// November 2024

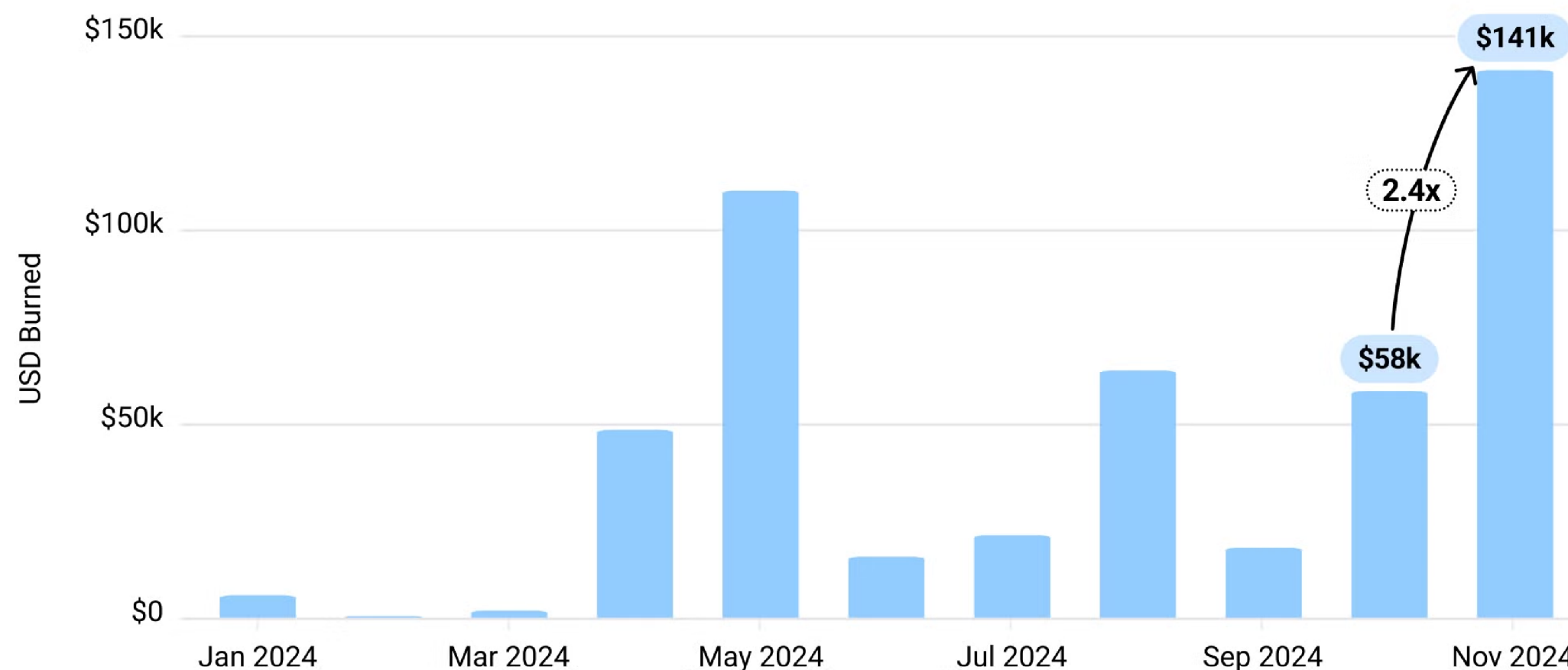


Hivemapper demand reached an ATH.

USD burned through \$HONEY tokens surged 2.4x in November, reaching \$141k.

On November 26th, a Map Improvement Proposal was introduced to increase the price of map credits by 50%, which is expected to result in more \$HONEY being burned per kilometer of map data.

Hivemapper USD Burned
By Month



The NATIX incentive mechanism is working.

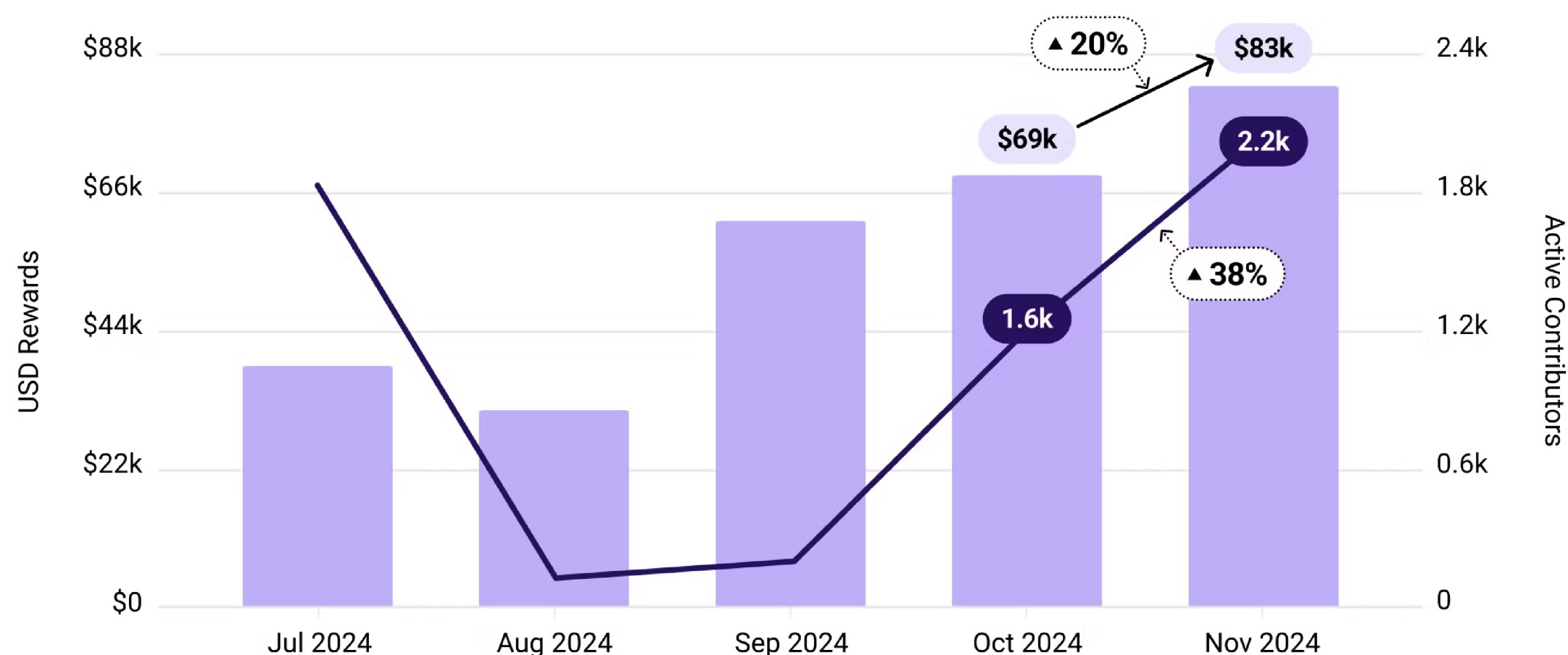
The network gave 20% more USD in rewards to 38% more contributors.

The team recently launched VX360, a device that allows Tesla drivers to access and monetize their camera data, adding a new product line and valuable dataset to the network.

NATIX Rewards and Contributors

By Month

● USD Rewards — Active Contributors



Note: We are using NATIX contributors that choose to withdraw rewards to their wallets as a proxy for the rewards metrics.

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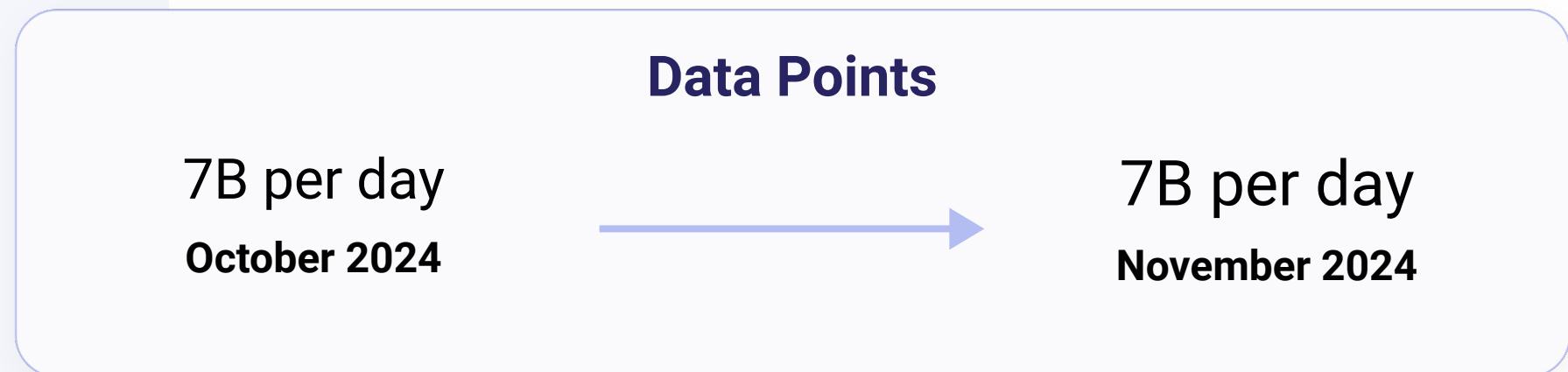
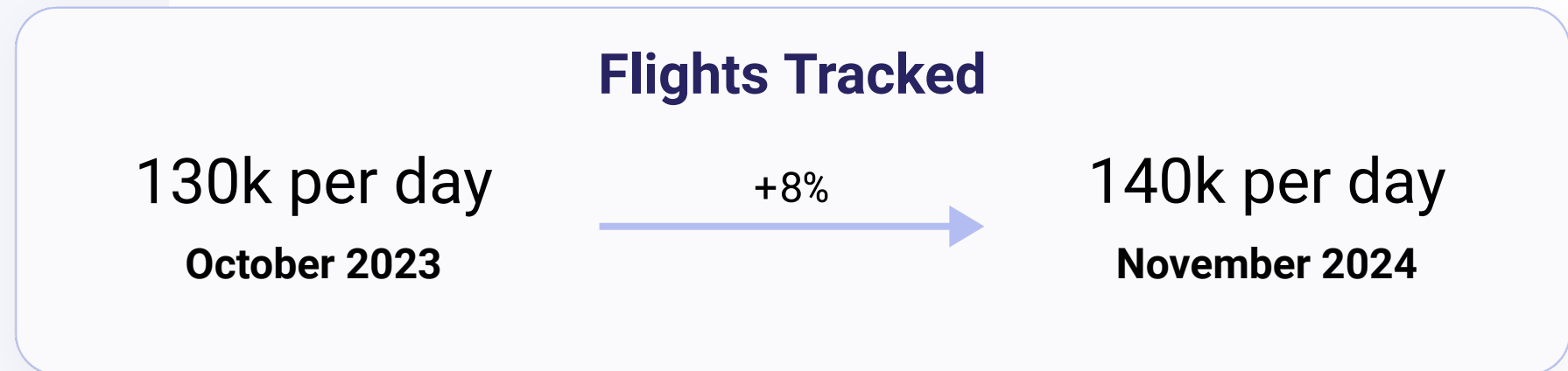
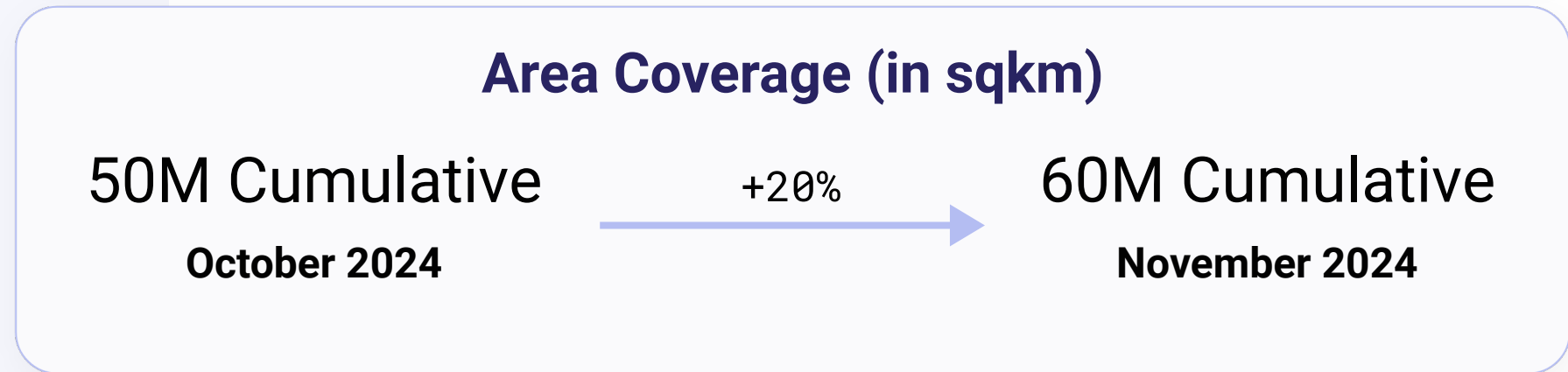
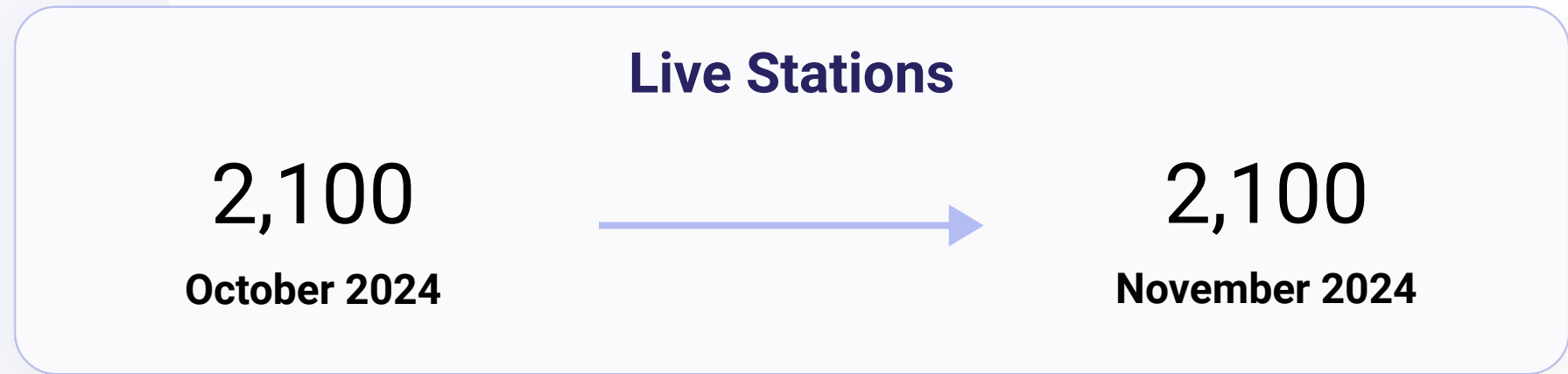
//Deep Dive: Mapping //November 2024



Wingbits' flight network database is scaling up.

In just one month, the network expanded coverage by 20% and is tracking 8% more flights per day.

Live stations are expected to double with the upcoming delivery of hardware sold during October presales.



Note: This data has been obtained from the Wingbits team.

//Deep Dive: Mapping //November 2024



Part II
Wireless

// November 2024



Helium Mobile demand extended a 6th-month uptrend.

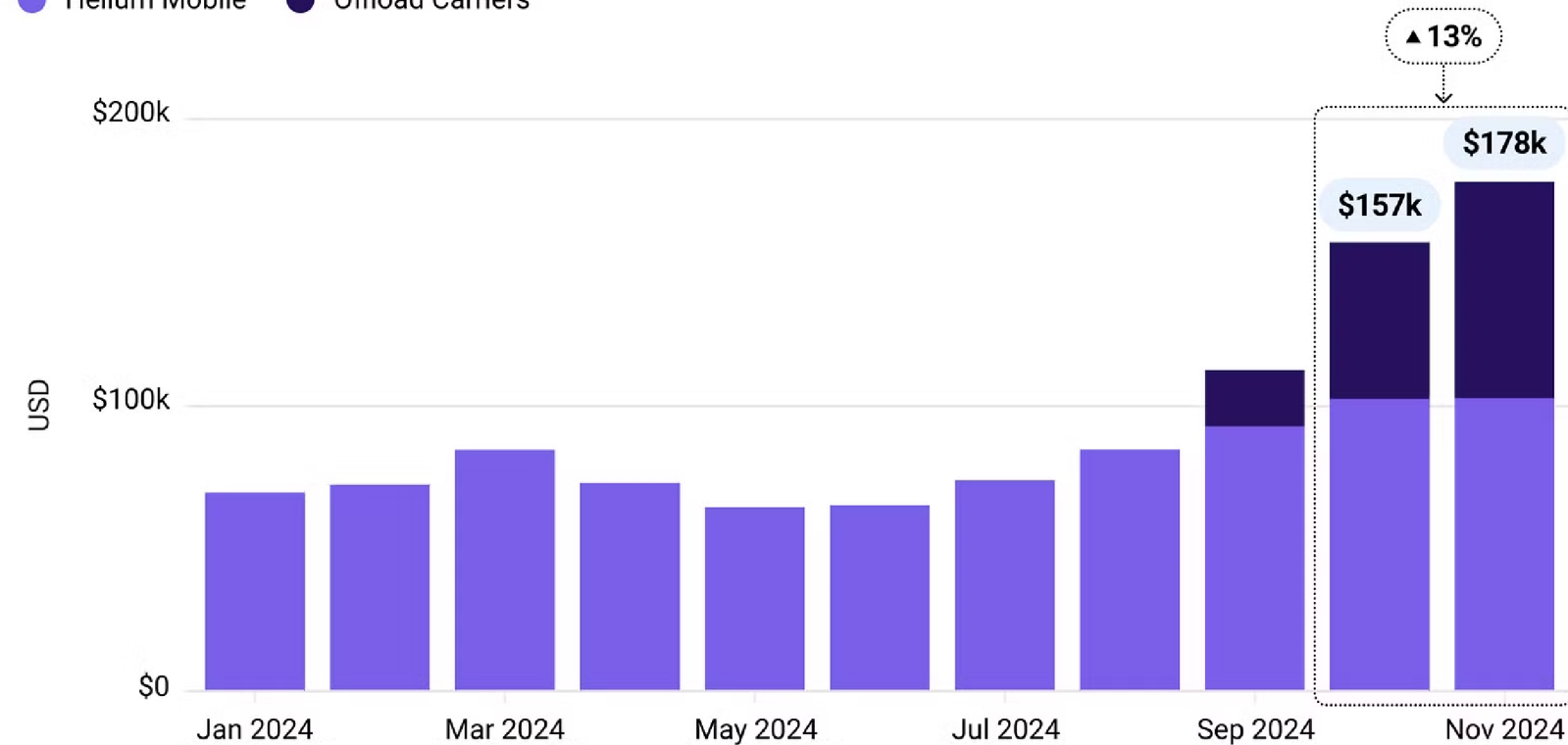
Data credits burned and data transferred hit new ATHs in November, rising 13% due to strong offload carrier demand and increased network usage.

Data credits directly reflect the amount of data transferred, creating a mirrored relationship between the two.

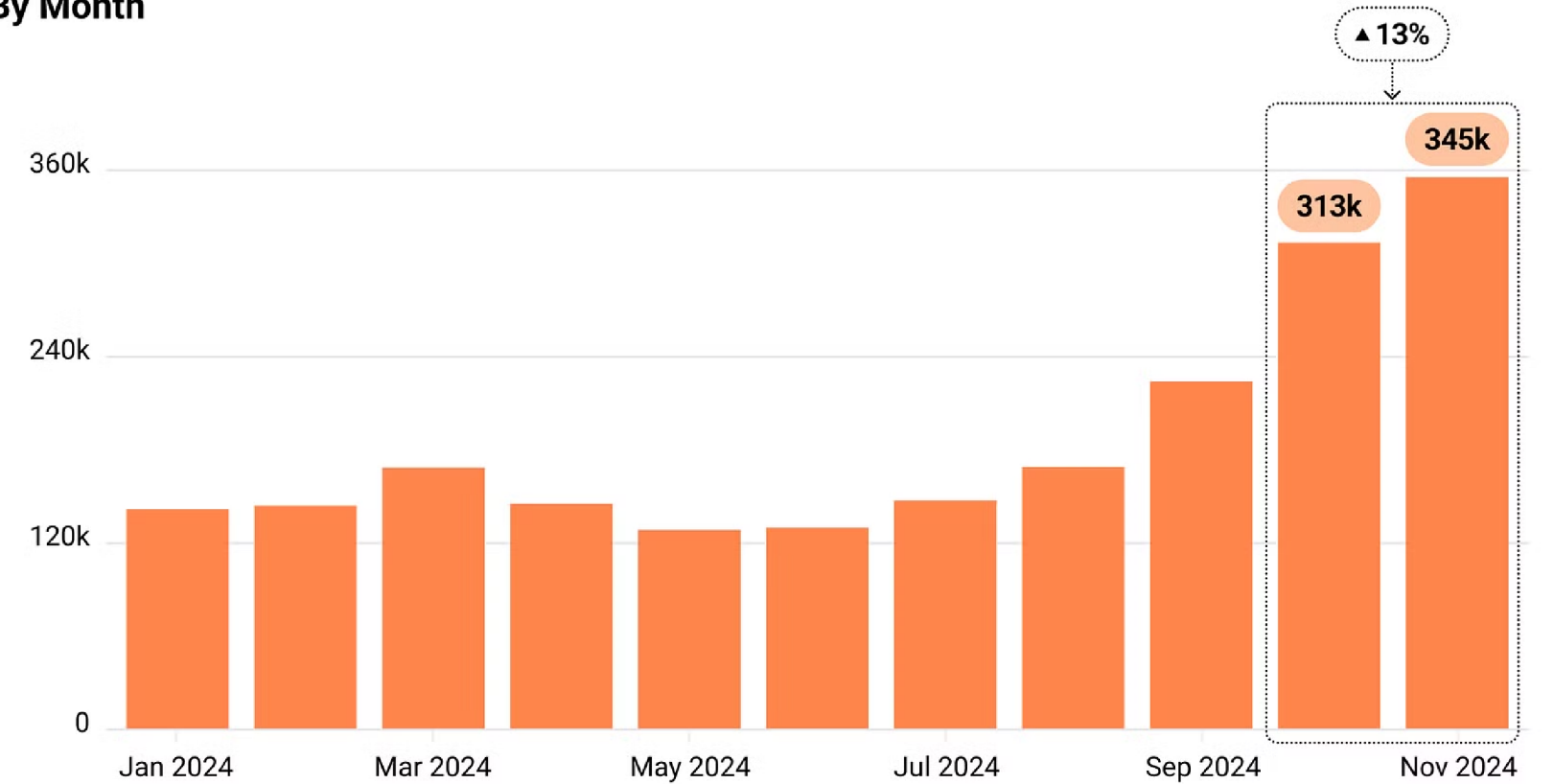
Helium Mobile Data Credits Burned
By Month



● Helium Mobile ● Offload Carriers



Helium Mobile Data Transferred (TB)
By Month



Note: Data has been sourced from Helium Mobile's website.

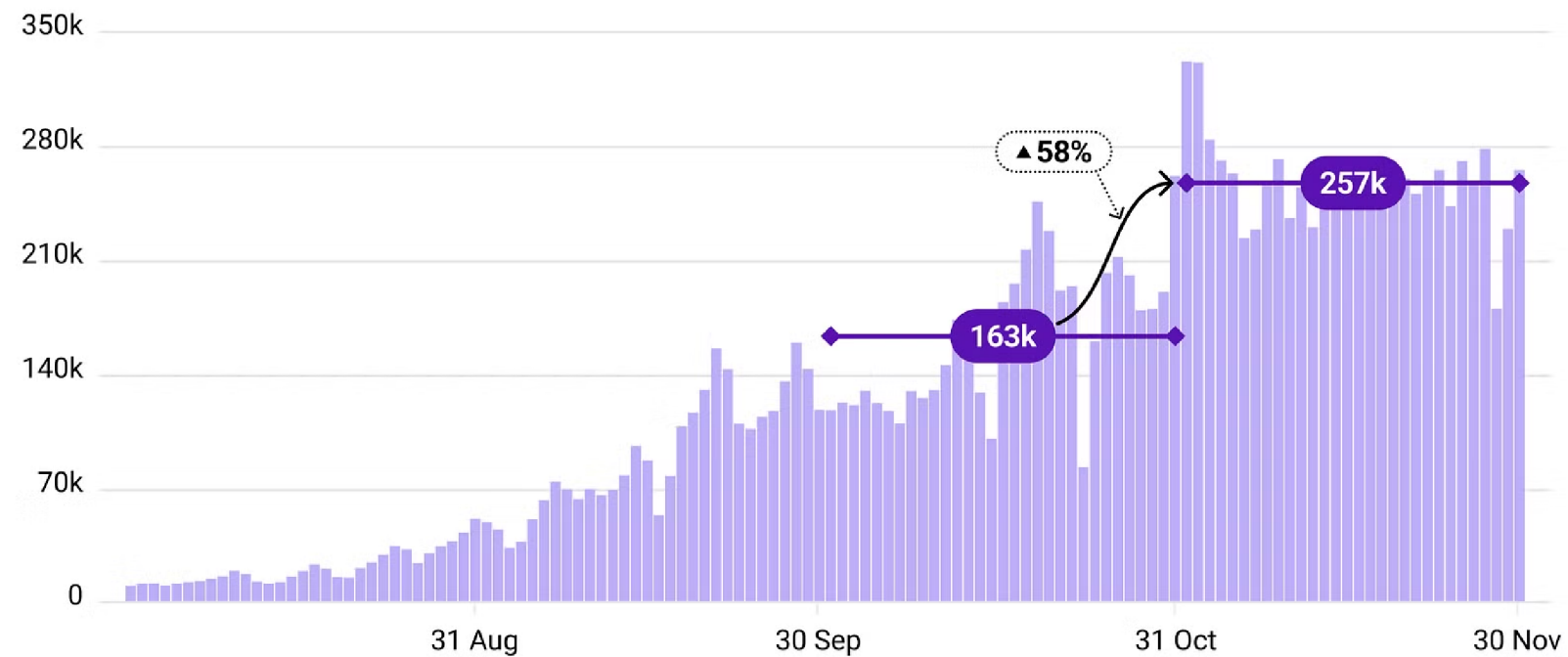
Helium Mobile's carrier offload initiative continues to scale rapidly.

Average offload subscriber count and offload data hit new ATHs, surpassing 200k daily subscribers and 5TB of data.

Helium Mobile Offload Subscribers By Day



● Offload Subscribers — Average Offload Subscribers

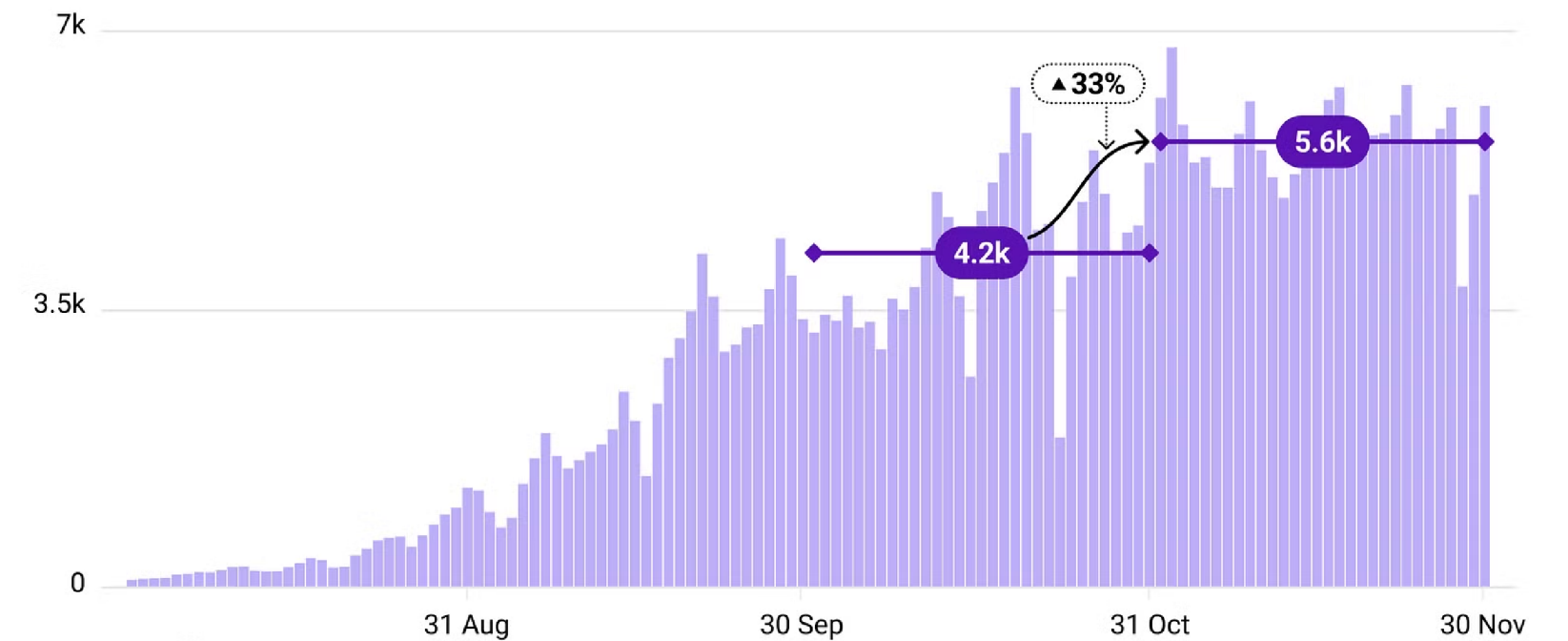


Note: Data has been sourced from Helium Mobile's website.

Helium Mobile Offload Data in GB By Day



● Offload Data — Average Offload Data



Note: Data has been sourced from Helium Mobile's website.

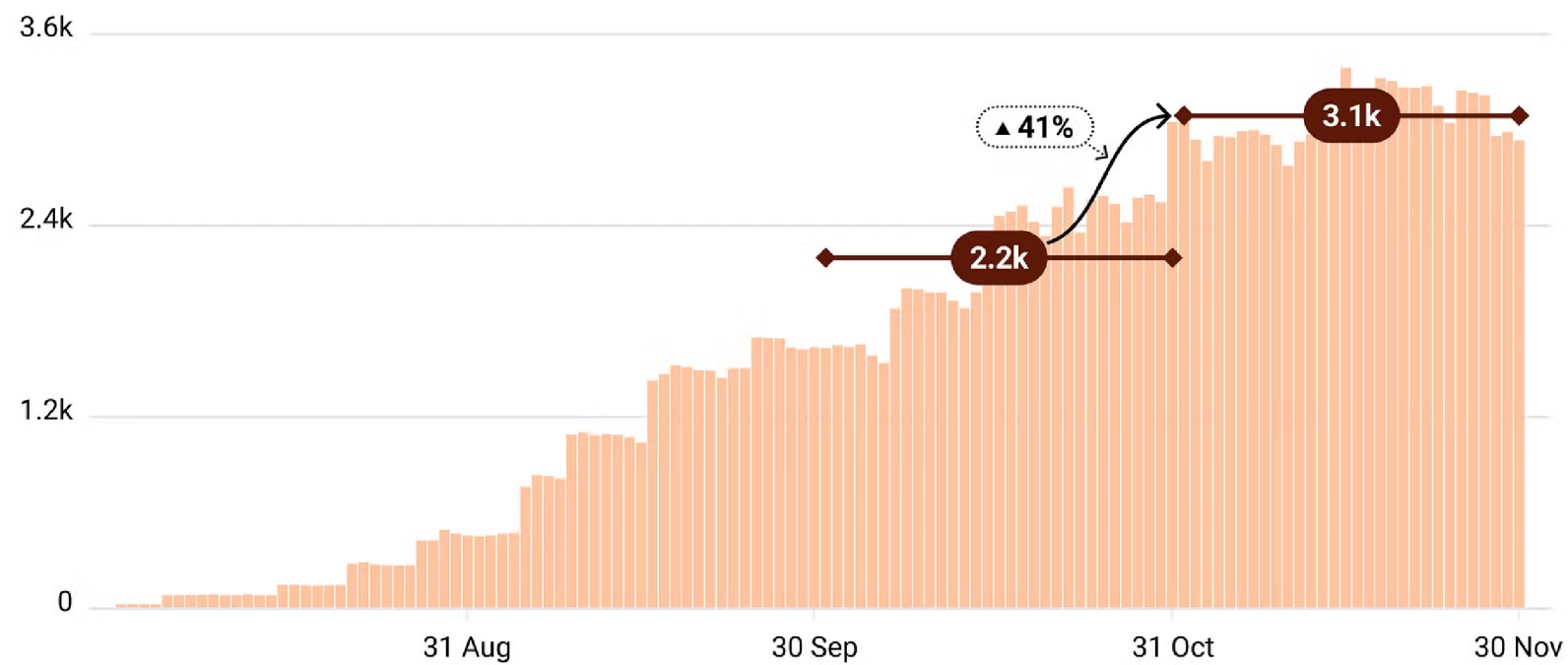
Helium Mobile offload subscribers outpaced hotspot growth.

Despite the increasing number of hotspots, the number of subscribers per hotspot increased by 14%.

Helium Mobile Offload Data Hotspots By Day



Offload Data Hotspots Average Offload Data Hotspots

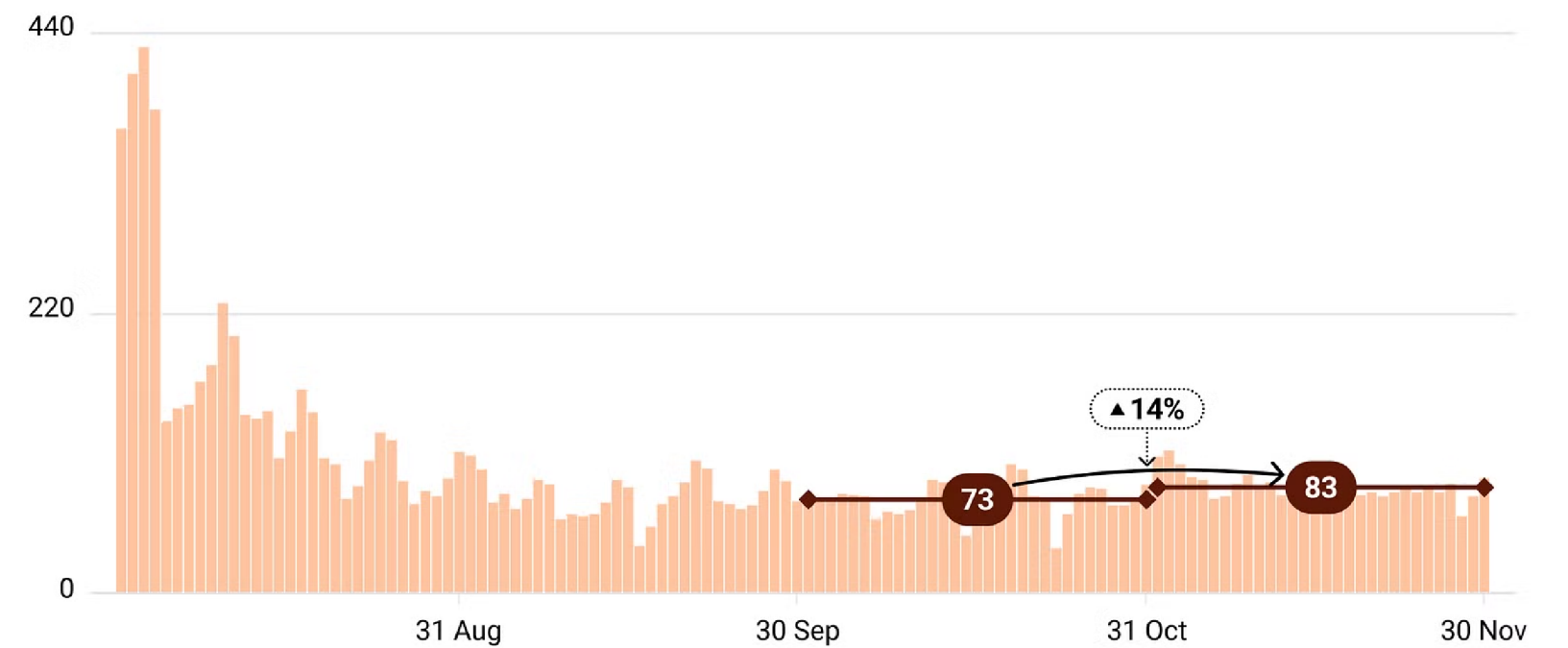


Note: Data has been sourced from Helium Mobile's website.

Helium Mobile Offload Subscribers Per Hotspot By Day



Subscribers Per Hotspot Average Subscribers Per Hotspot

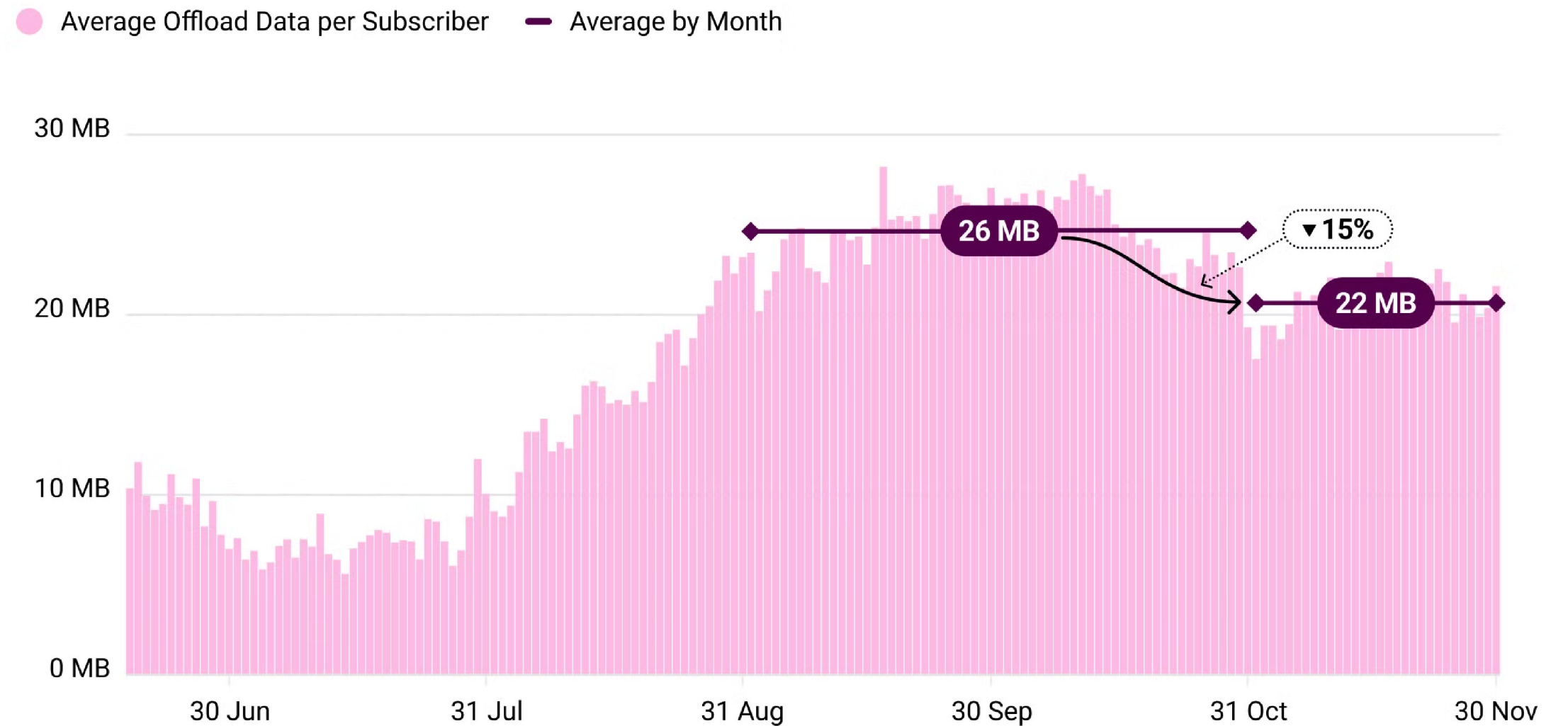


Note: Data has been sourced from Helium Mobile's website.

Offload carrier dependency on Helium Mobile stabilized.

Offload carrier dependency is the amount of data routed through Helium Mobile, on average, by an offload subscriber. After four months of steady growth, dependency on Helium Mobile dropped by 15% in November.

Helium Mobile Average Offload Data per Subscriber By Day



Note: Data has been sourced from Helium Mobile's website.

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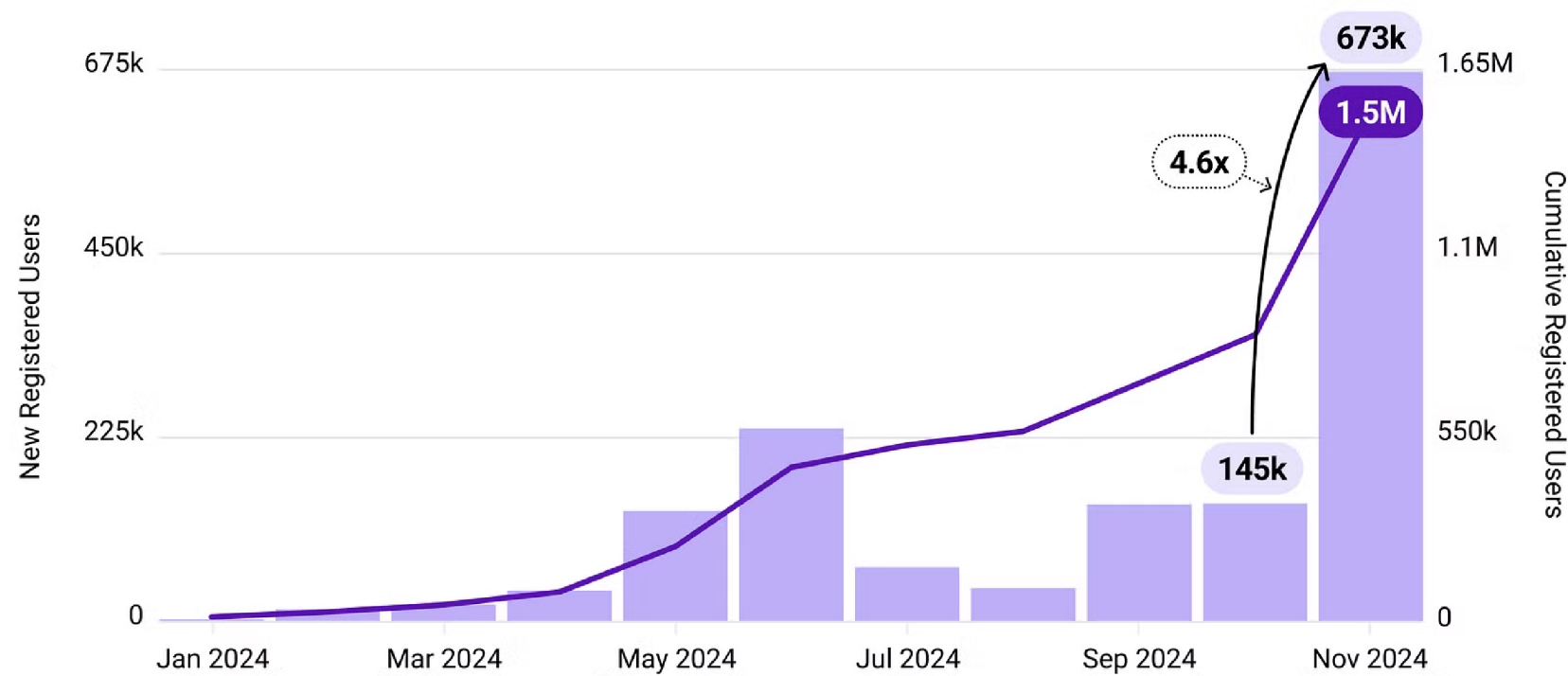
Roam user count surged 4.6x in November.

Cumulative user count now tops 1.5M. New WiFi setups stabilized at the 100k range. Roam provides free eSIM data through daily app check-ins, with competitive pricing and free data incentives, likely attracting new users.

Roam Registered Users By Month



● New Registered Users — Cumulative Registered Users

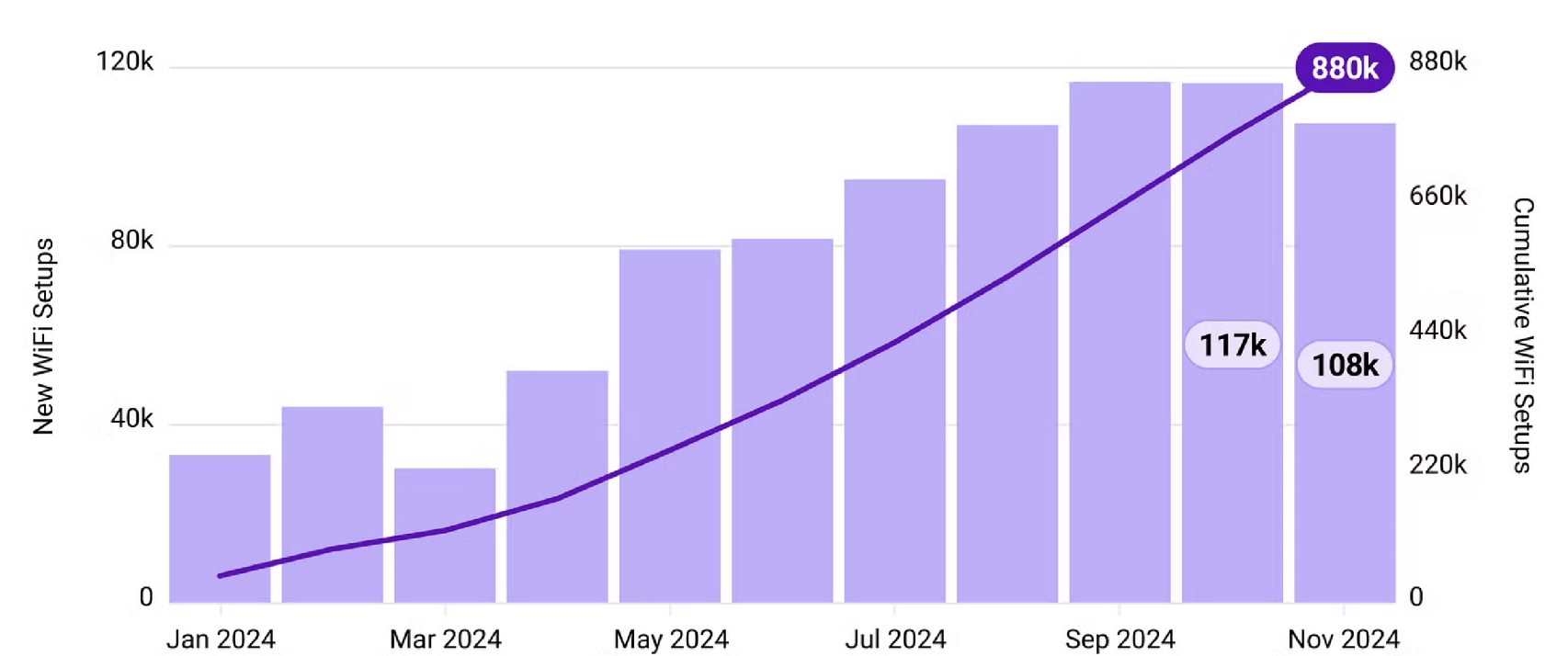


Note: Data has been sourced from Roam's website.

Roam WiFi Setups By Month



● New WiFi Setups — Cumulative WiFi Setups



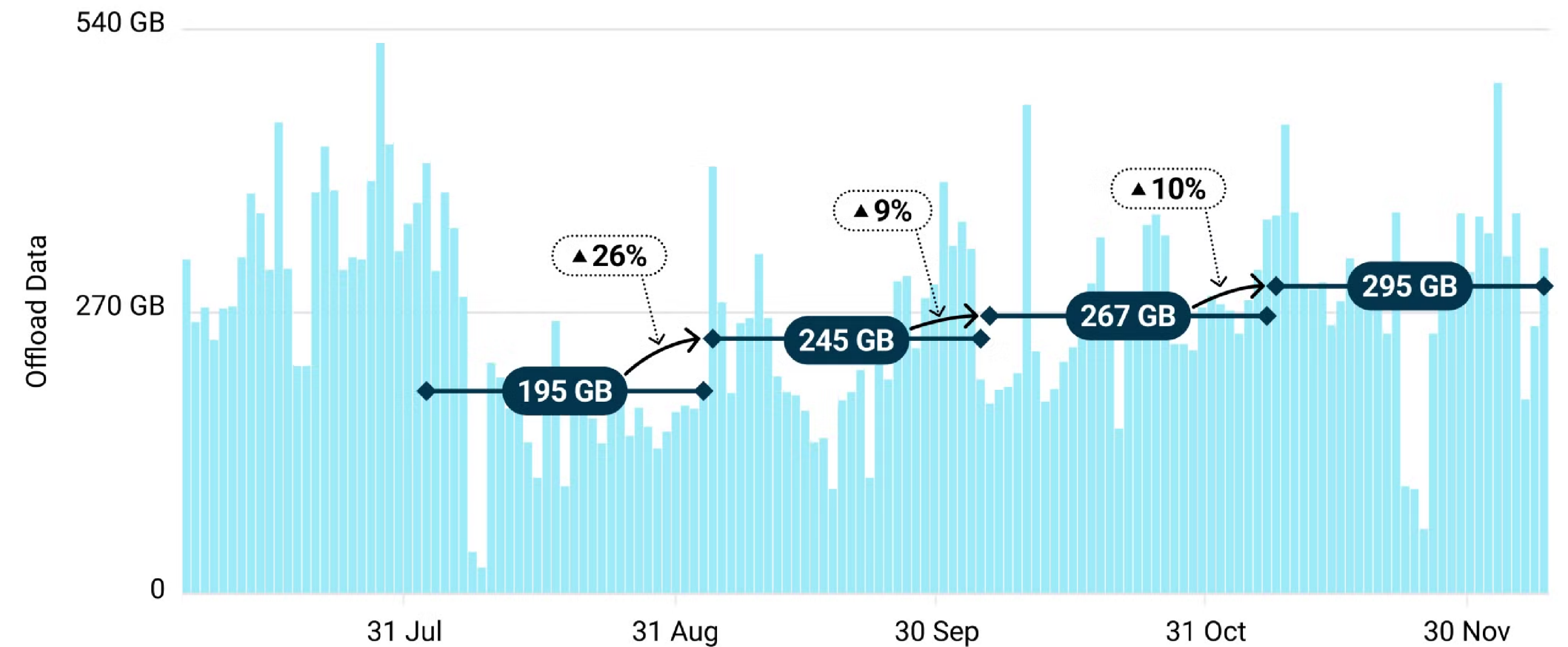
Note: Data has been sourced from Roam's website.

XNET offload data continued a three-month growth streak.

The rise in offload data indicates growing usage by onboarded cellular providers.

XNET Offload Data By Day

● Offload Data — Average Offload Data



Note: This data has been obtained from XNET's Dune dataset.

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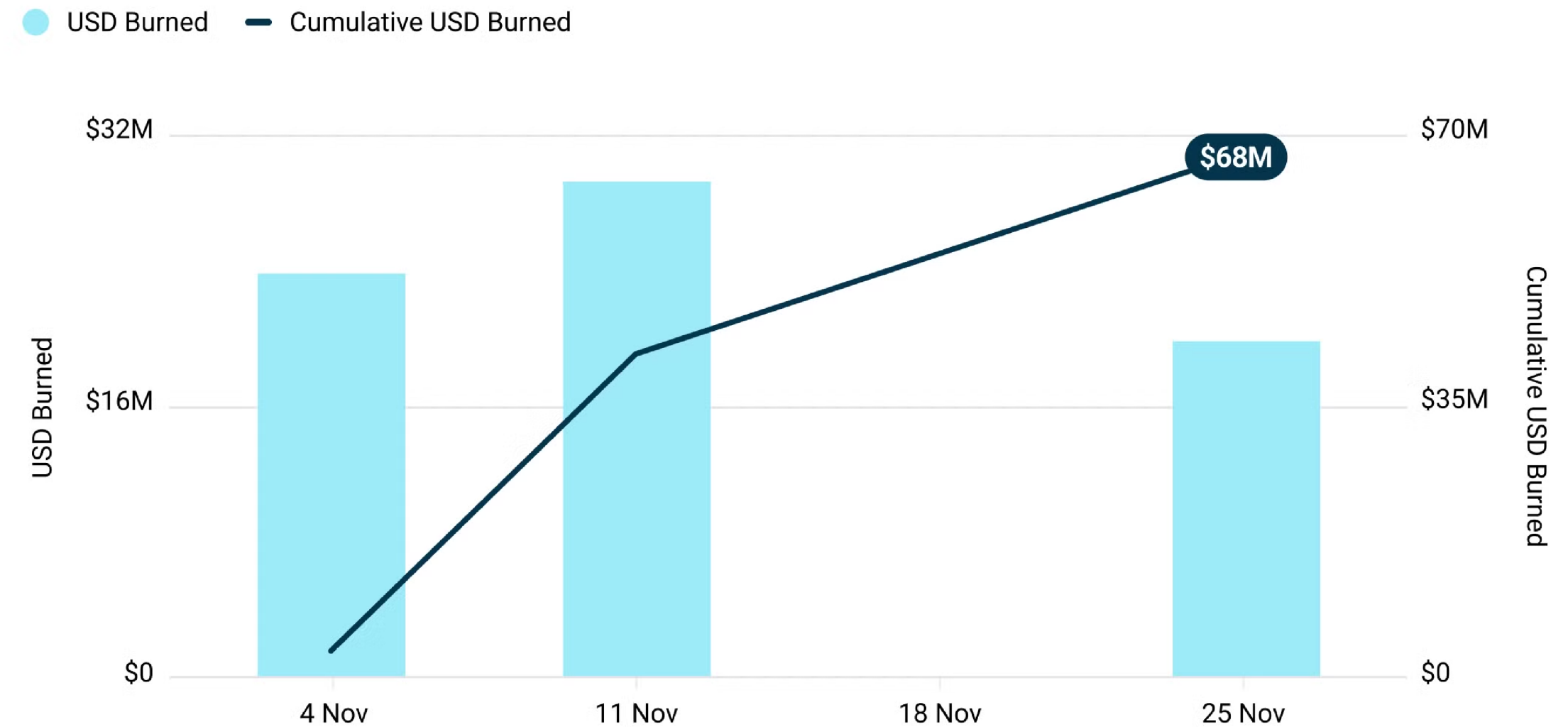
//Deep Dive: Wireless //November 2024

XNET has burned \$68M worth of tokens.

The XNET Foundation allocates a significant portion of revenue from Network Operators to reduce \$XNET supply.

This brings value back to token holders due to the deflationary mechanism.

\$XNET Burn By Week

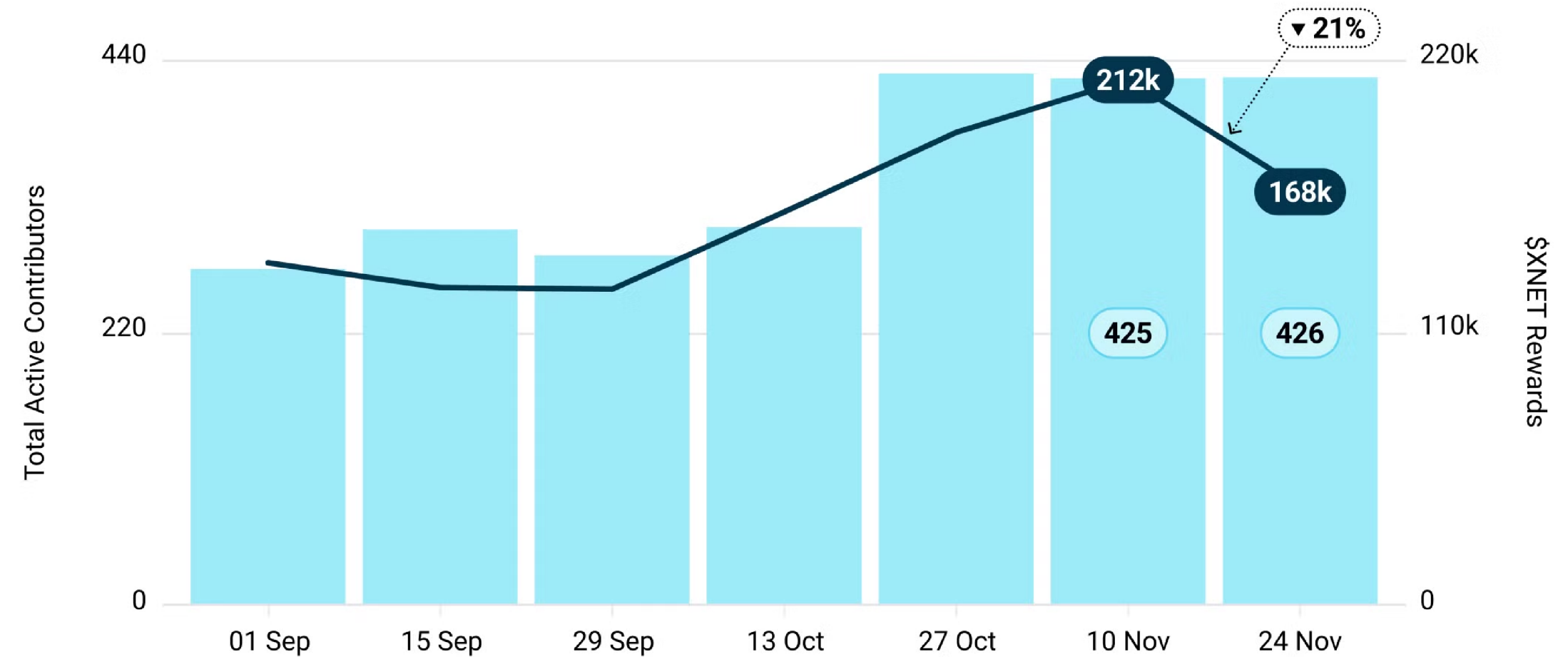


XNET contributors have remained consistent.

However, \$XNET rewards paid out dropped by 21%.

XNET Contributors By Epoch

● Total Active Contributors — \$XNET Rewards



Note: This data has been obtained from XNET's Dune dataset.

Note: This data has been obtained from XNET's Dune dataset.

//Deep Dive: Wireless //November 2024



Part III

Compute, AI, & Data

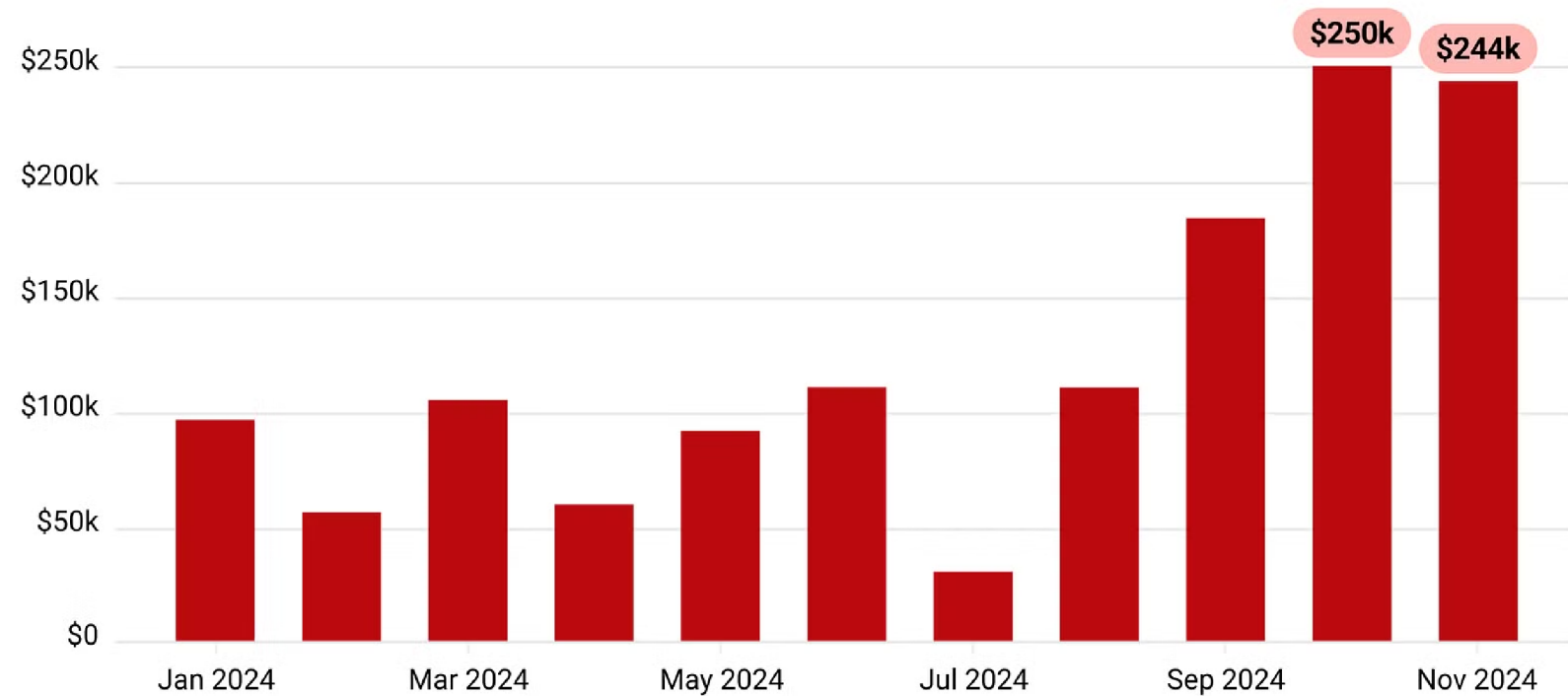
// November 2024



Render's revenue has exceeded \$200k for two consecutive months.

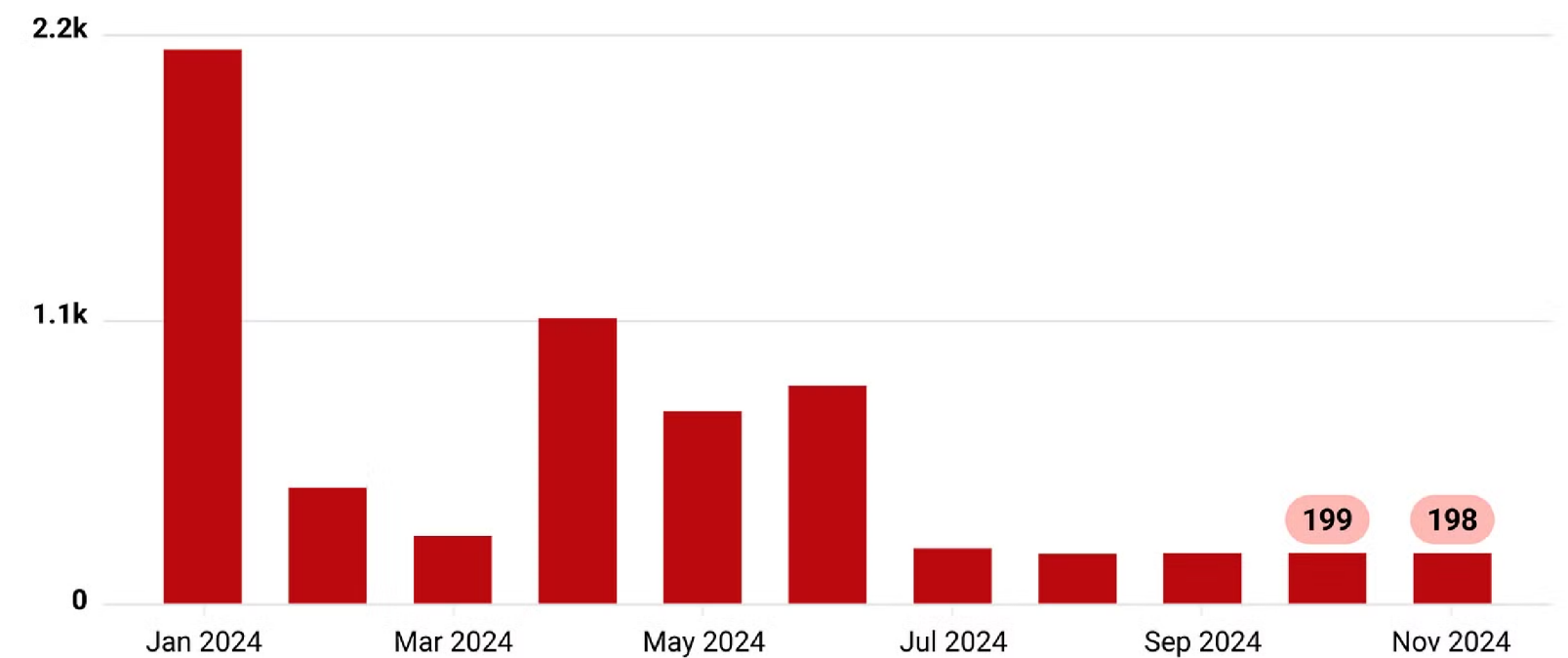
Despite recent revenue growth, the number of active Render node operators has remained stable.

Render USD Revenue
By Month



Note: Revenue is based on \$RENDER tokens used for compute work.

Render Active Node Operators
By Month



Note: Revenue is based on \$RENDER tokens used for compute work.

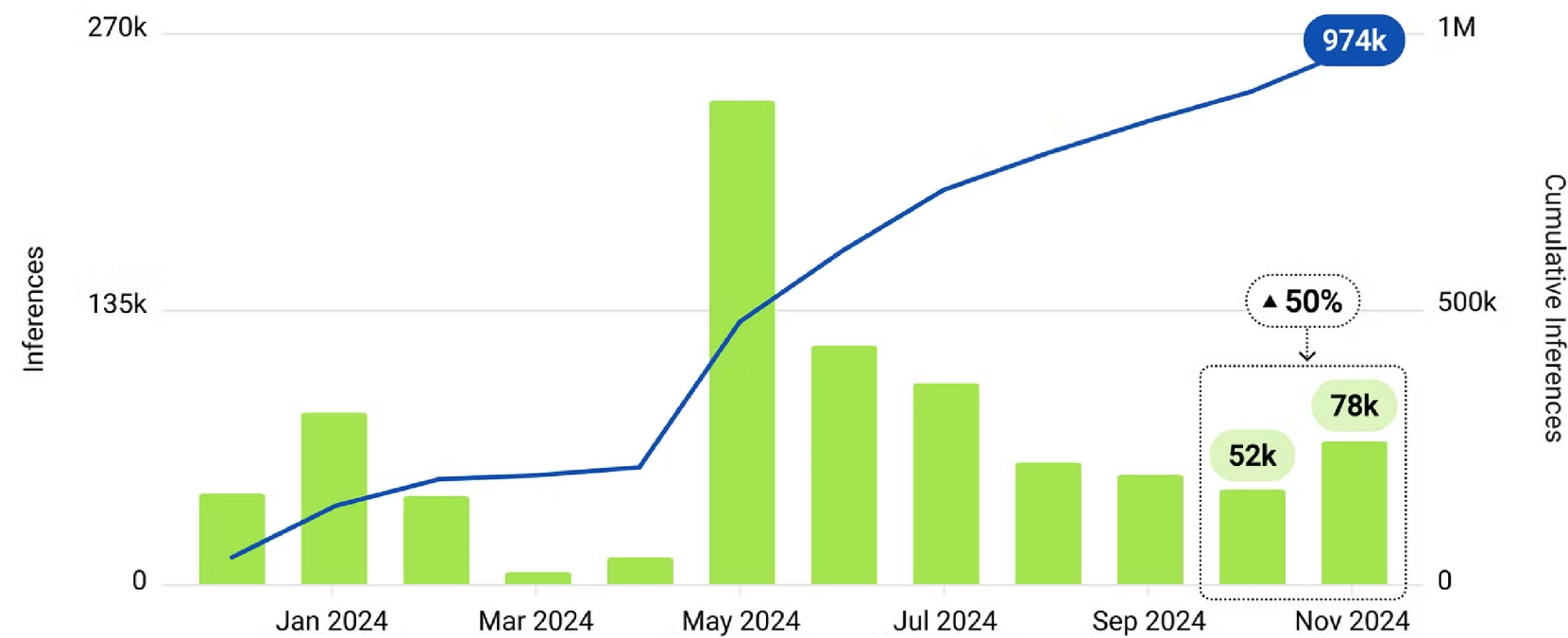
Nosana inferences reversed a five-month downtrend.

Monthly inferences grew by 50% despite active GPU operators and \$NOS rewards declining slightly.

Nosana Inferences By Month



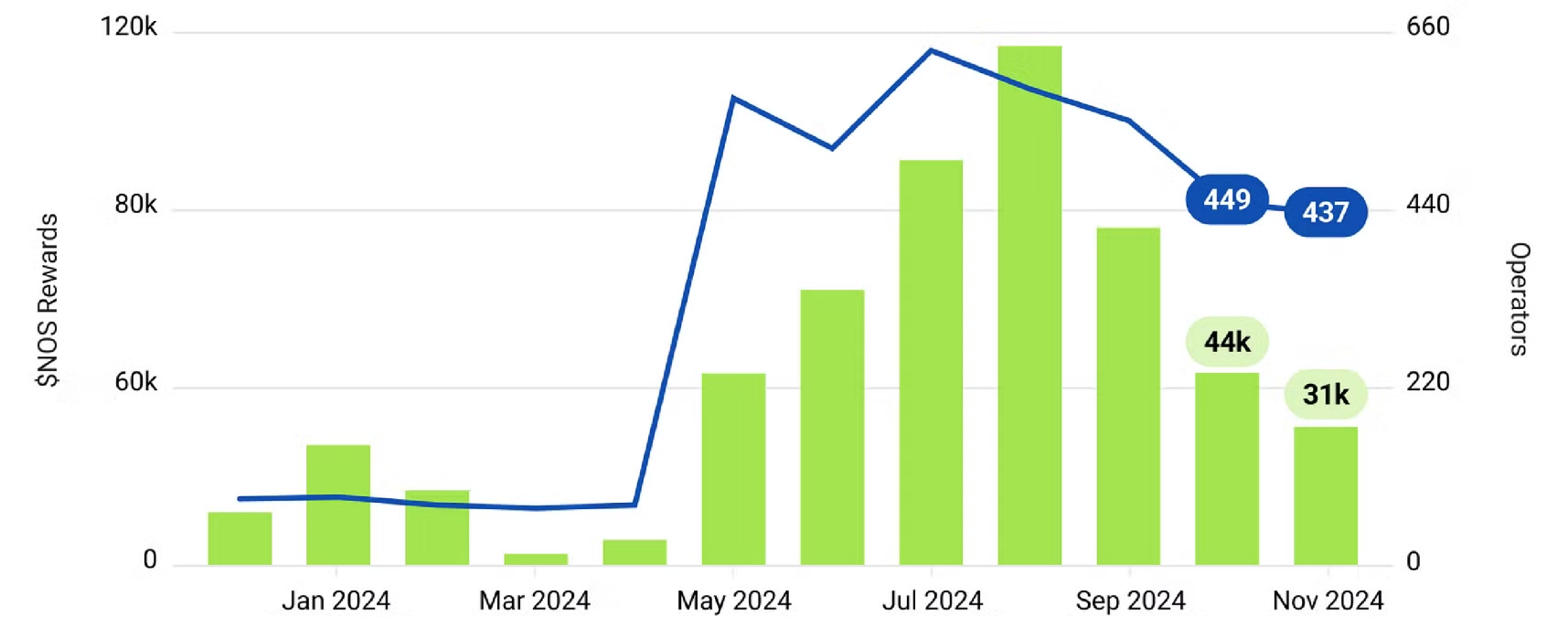
● Inferences — Cumulative Inferences



Nosana Rewards and GPU Operators By Month

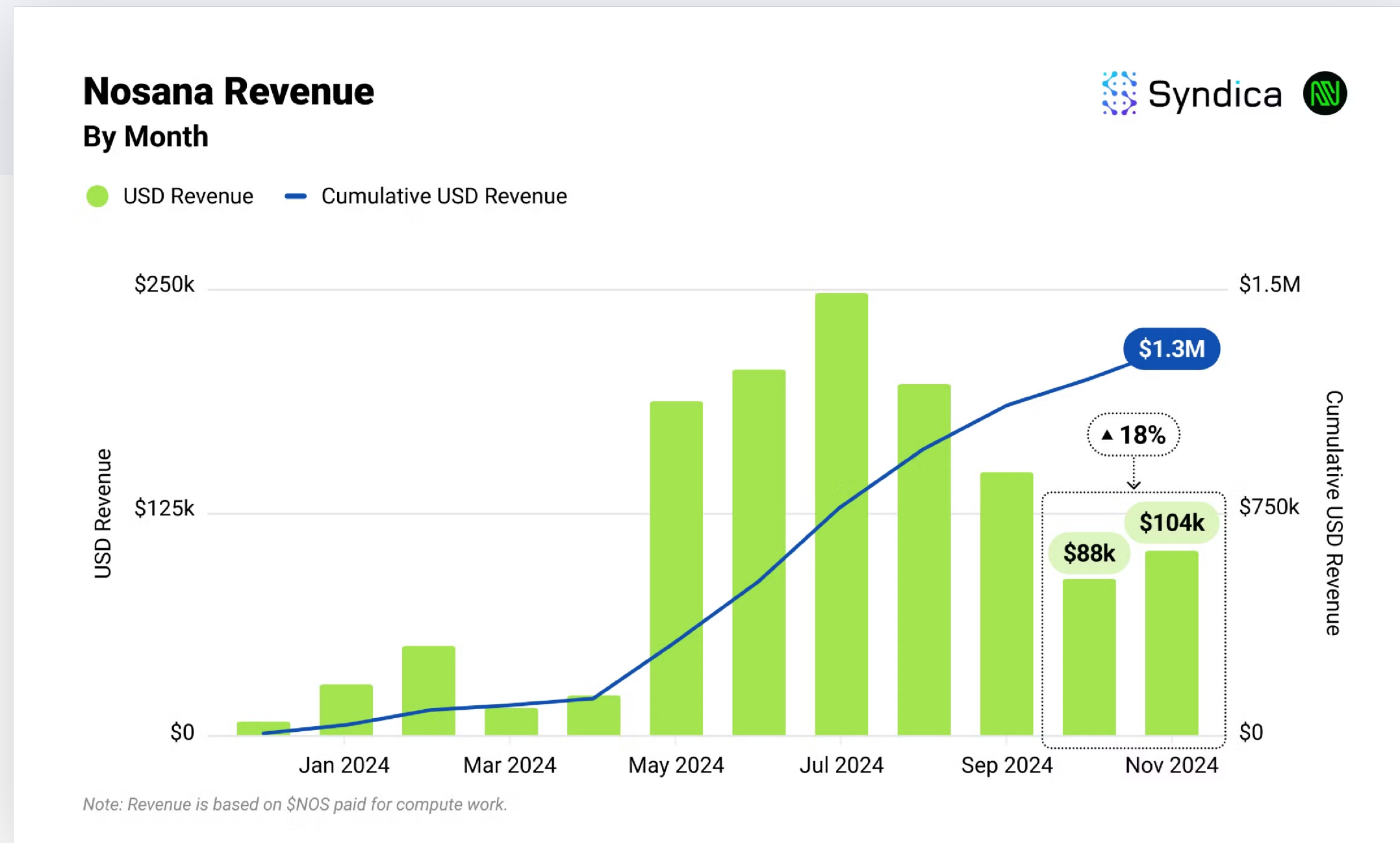


● \$NOS Rewards — Operators



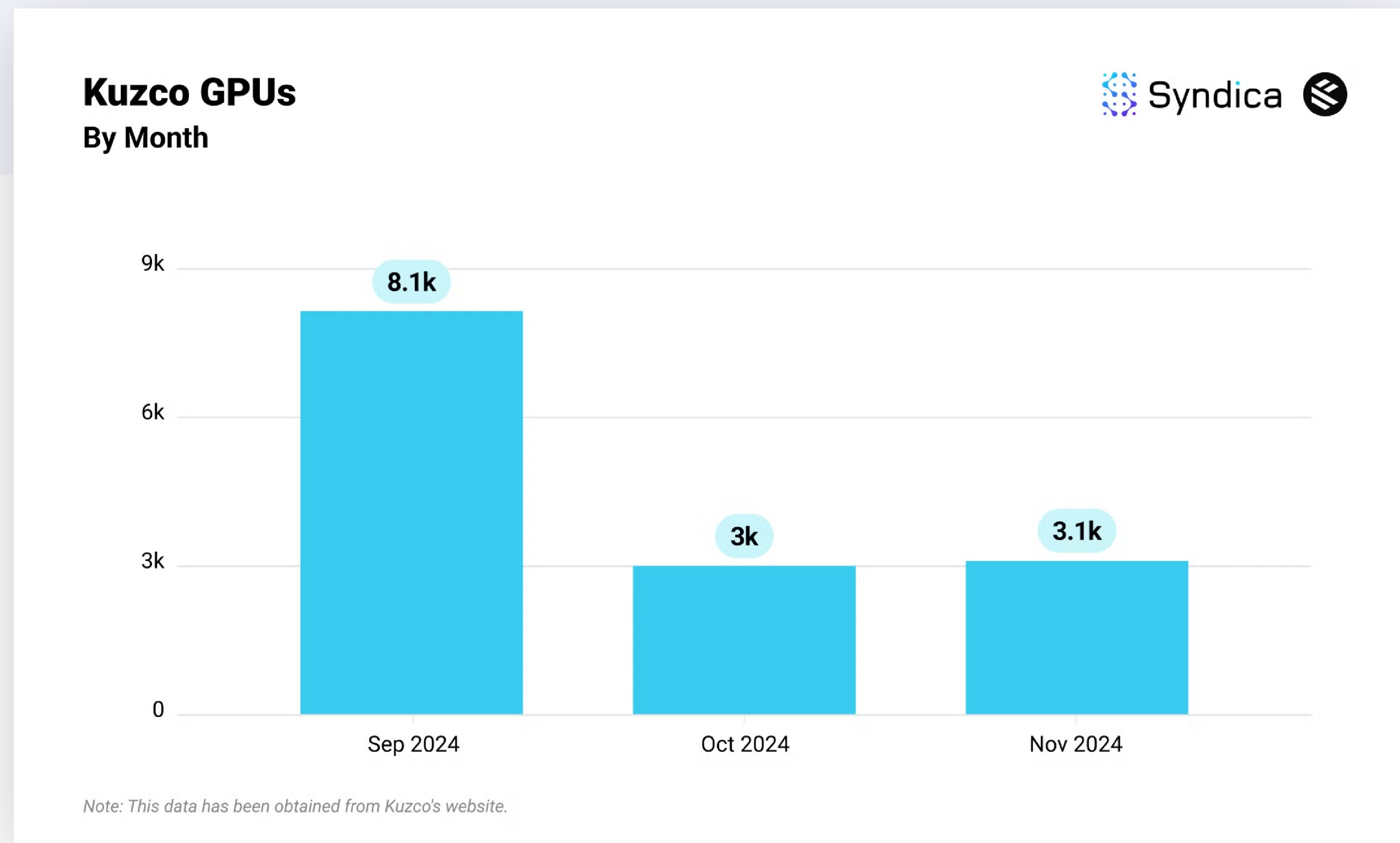
Nosana revenue is back on the rise.

The increase in inferences pushed Nosana's revenue up 18%.



Kuzco's GPU supply has stabilized.

Kuzco's epoch one concluded on November 18, and the network remained paused for the remainder of the month.



Grass demonstrated impressive growth in data collection.

Grass is now collecting 131TB of data per day, highlighting its robust data collection capabilities.

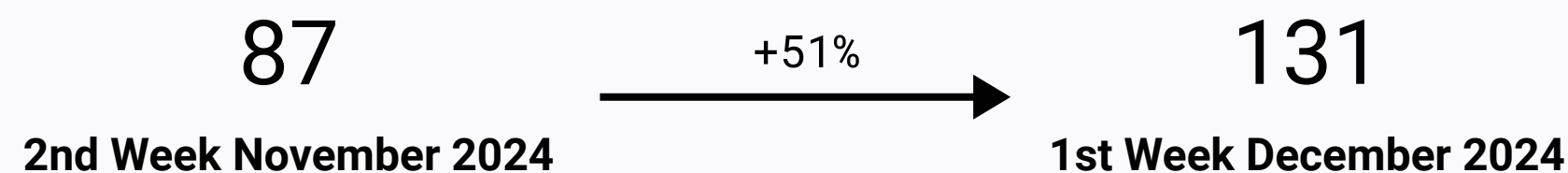
The network's scale continues to grow, as reflected in its progress from November to December.

Note: This data has been obtained from Grass Foundation's website and includes December data.

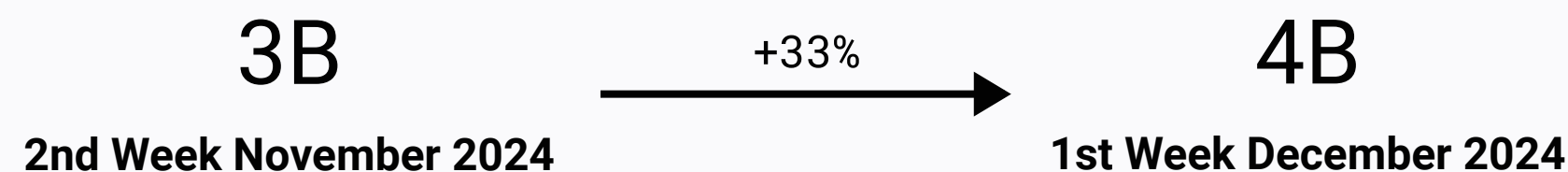
//Deep Dive: Compute, Data & AI //November 2024



Daily Data Collected (TB)



Number of URLs Indexed



Grass released the first video-audio interleaved dataset called **VALID**.

The dataset is designed to handle multiple modalities (audio, visual and textual) simultaneously.

This is crucial for training machine learning models in tasks such as multimodal learning.



7M

Number of Rows

15M

Number of Images

30M

Number of Audios

Note: This data has been obtained from Grass' Twitter.



Part IV
Energy

// November 2024



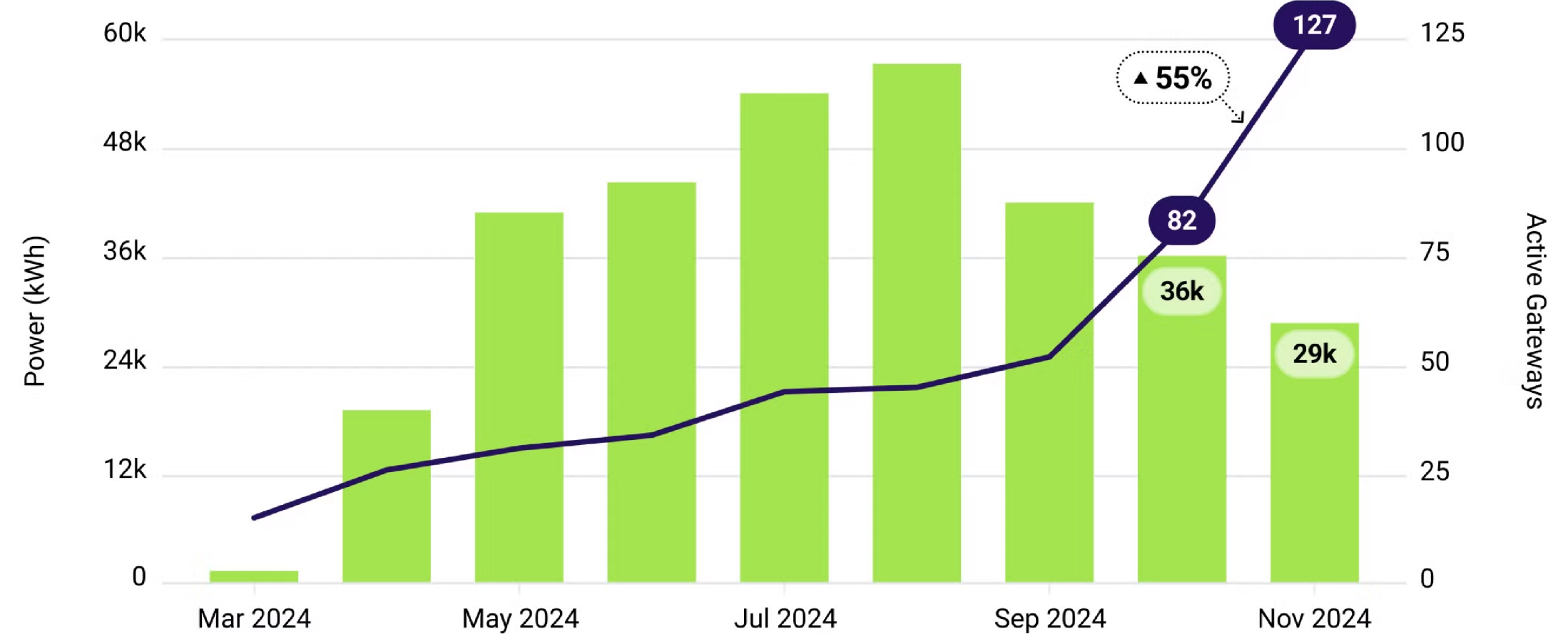
Srcful gateways continue to proliferate.

Installed gateways increased by 55% in November.

Despite the increase in devices, power production continued to decline, reflecting seasonality.

Srcful Power Production and Gateways By Month

● Power (kWh) — Active Gateways



Note: This data has been obtained from the Srcful API.

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