

Record-Low Hashprice and the Reshaping of Bitcoin Mining Economics in 2026

As profitability pressure persists, power assets are being allocated along two paths: bitcoin mining and AI compute.

Conflict of Interest Disclosure The publisher of this report is a listed company that holds bitcoin as a treasury asset and operates businesses in digital assets and AI/data-center infrastructure. Topic selection and interpretation may therefore be subject to conflicts of interest. In particular, readers should note that this report's interpretation of the expanding use of power assets for AI/HPC is aligned with the publisher's own business direction.

EXECUTIVE SUMMARY

Key conclusion: structural profitability pressure persists despite the August rebound

WHAT HAPPENED

Hashprice is the standard measure of bitcoin mining profitability. All three of the lowest monthly averages on record fell in 2026: \$30.37 in June, \$31.21 in July and \$31.27 in March^[1]. The mandatory signaling period for BIP-110 that began on August 8 opened with miner support of 2.53% and closed its first period at 0.00%, so the proposal was not activated^{[2][3][4]}. At the August 22 adjustment, difficulty fell a further 1.31%^{[5][6]}.

WHY IT MATTERS

Network hashrate (7-day moving average) briefly exceeded 1 ZH/s in early June and has since eased, but remains high in the 900 EH/s range^{[7][8]}. Difficulty adjustments in 2026, however, have been skewed to the downside, with 10 decreases against 7 increases^[5]. Network competition remains intense while lower-margin machines cycle between shutdown and restart.

Listed miners are responding in different ways. MARA and CleanSpark sold most of the bitcoin they mined^{[9][10]}, and announced AI/HPC contracts across listed miners exceed \$70 billion on CoinShares' first-quarter count^[11]. At the same time, some operators are sustaining mining competitiveness on the strength of low-cost power^[12].

WHAT TO WATCH

The indicators to watch are the direction and size of the next difficulty adjustment (scheduled for September 5, estimated at +0.67%^[13]), the gap between forward hashprice and spot, and the HPC revenue share in listed

miners' third-quarter results. As of August 31, the forward market priced the average hashprice over the next six months at \$37.59^[13]. If monthly average hashprice holds above the 2025 floor of \$37.89 for two months or more and difficulty keeps rising, we will revisit the judgment that profitability pressure is structural.

\$30.37

Lowest monthly average hashprice on record (USD per PH/s per day, June 2026)

^[1]

-15.1%

Network difficulty vs. start of year (148.25T to 125.81T, as of August 22, 2026)

^[5]

\$70B+

Cumulative announced AI/HPC contracts (listed miners, CoinShares Q1 2026 report)

^[11]

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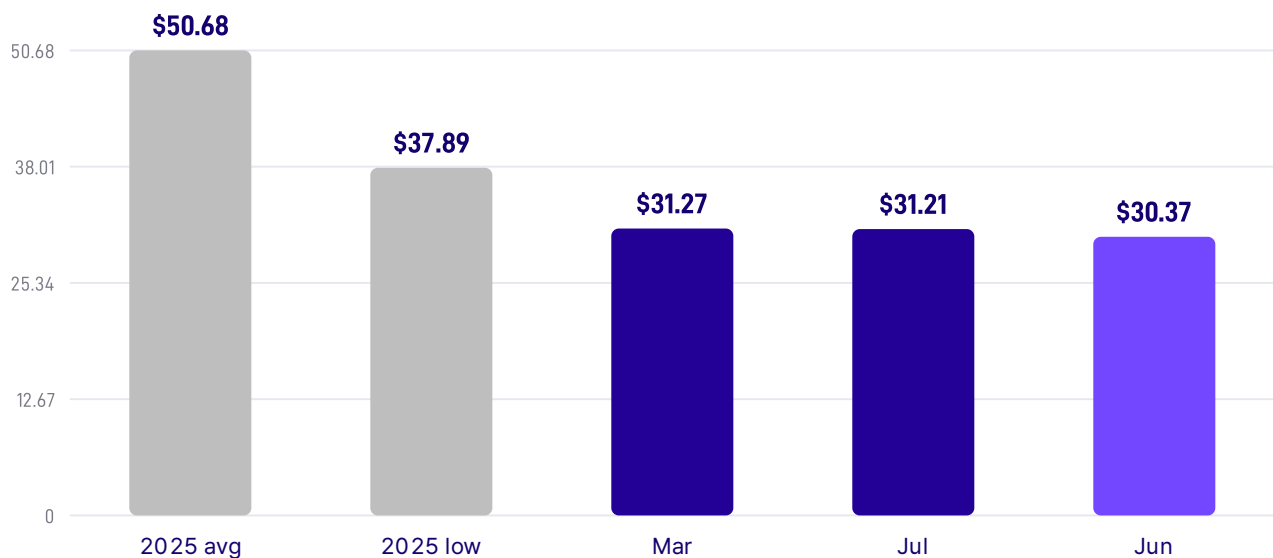
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The three lowest monthly hashprice readings on record all fell in 2026

Hashprice measures the expected daily mining revenue from 1 PH/s of computing power and is the standard profitability gauge for the industry. All three of the lowest monthly averages on record were set in 2026: \$30.37 in June, \$31.21 in July and \$31.27 in March^[1]. In 2025, monthly averages ranged from \$37.89 to \$59.38, with a mean of \$50.68^[1]. The 2026 low is roughly 20% below last year's low (our estimate).

2026 trough about 20% below the 2025 low

Monthly average hashprice, USD per PH/s per day; as of July 2026



2026 low about 20% below the 2025 low · Source: Luxor Hashrate Index^[1]

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Through August, Hashrate Index has repeatedly noted that at roughly \$32 per PH/s per day, a large share of miners sit at or below breakeven depending on operating costs and machine generation^{[8][14]}^[15]. That is an industry-wide assessment; actual cost structures vary by company.

In its second-quarter shareholder letter, MARA reported a daily cost of \$27.7 per PH/s^[12]. The letter does not specify which items that figure includes. The same document puts purchased energy cost at company-owned sites at \$38,690 per bitcoin, about 54% of the \$71,325 average bitcoin price at the time of production in the quarter (our estimate)^[12]. MARA also posted a net loss of \$611.3 million for the quarter^[10], but that figure includes non-cash items such as a \$343 million unrealized loss on

bitcoin holdings, so it is not directly comparable with operating results^[12]. These numbers alone are therefore not sufficient to pin down MARA's breakeven.

02 UNIT ECONOMICS

At a \$30 hashprice, power price and fleet efficiency decide who stays profitable

An industry-average breakeven says little about any individual operator. At the same hashprice, actual margins diverge widely with fleet efficiency and power price.

Hashrate Index publishes an energy hashprice by fleet efficiency, which measures the revenue earned from 1 MWh of electricity devoted to mining^[8]. At a hashprice of \$31.89 on August 17, fleets below 14 J/TH earned \$107 per MWh, 14–19 J/TH fleets \$79, 19–25 J/TH fleets \$59 and older 25–38 J/TH fleets \$41^[8].

Scaling those figures proportionally to hashprice scenarios of \$30, \$40 and \$50, and applying power prices of 4, 6 and 8 cents per kWh, gives a cash margin net of power cost (our estimate, Appendix 2). Hosting, labor and depreciation are excluded, so actual profitability is lower than shown.

Fleet efficiency	Hashprice \$30 (power 4 / 6 / 8 cents)	\$40 (4 / 6 / 8 cents)	\$50 (4 / 6 / 8 cents)	Breakeven power price at \$30
Below 14 J/TH (latest)	+61 / +41 / +21	+94 / +74 / +54	+128 / +108 / +88	10.1 cents
14–19 J/TH (current mainstream)	+34 / +14 / -6	+59 / +39 / +19	+84 / +64 / +44	7.4 cents
19–25 J/TH (mid-generation)	+16 / -4 / -24	+34 / +14 / -6	+53 / +33 / +13	5.6 cents
25–38 J/TH (older)	-1 / -21 / -41	+11 / -9 / -29	+24 / +4 / -16	3.9 cents

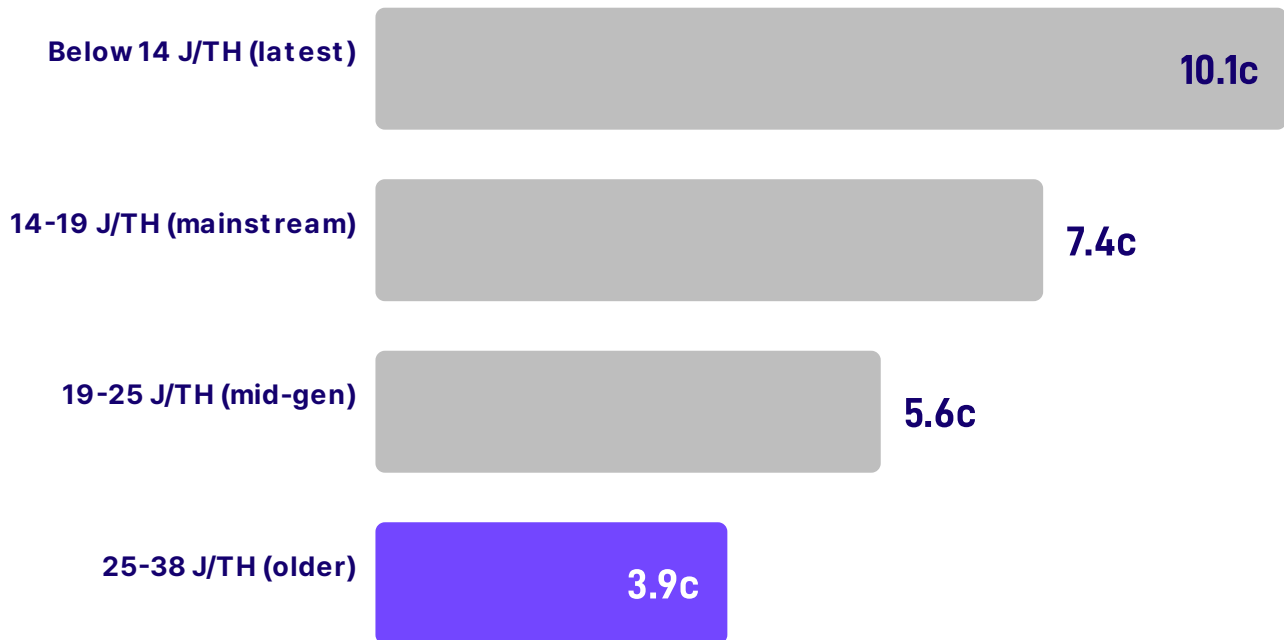
Units are USD per MWh; cash margin net of power cost only (our estimates, based on ^[8]).

At a \$30 hashprice, the gap by fleet efficiency widens sharply. Older 25–38 J/TH machines lose almost all cash margin even at 4 cents per kWh. The breakeven power price is about 5.6 cents for 19–25 J/TH fleets and about 7.4 cents for 14–19 J/TH fleets.

If hashprice rises to \$40, older machines can still keep about \$11 per MWh at 4-cent power, but fall back into deficit from 6 cents. The heaviest pressure at this trough therefore falls on low-efficiency older fleets and on operators paying high power prices. That is broadly consistent with CoinShares' estimate that 15–20% of older rigs are running at a loss^[11].

Older fleets lose money even on 4-cent power at a \$30 hashprice

Cents per kWh, power cost only; our estimates from Aug 17 published values



Breakeven power price by fleet at a \$30 hashprice · Source: Hashrate Index^[8]

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MARA's reported operating metrics make the picture more concrete. The company cites a power price of \$0.04 per kWh at its own sites and a daily cost of \$27.7 per PH/s^[12]. Assuming fleet efficiency of 17.5 J/TH, running 1 PH/s for a day consumes about 0.42 MWh, so at 4 cents the daily power bill comes to roughly \$16.8 per PH/s.

Subtracting power from \$27.7 leaves about \$11. Because the composition of the \$27.7 figure is not disclosed, that residual cannot be attributed entirely to non-power operating costs. Comparing the full \$27.7 with the \$31.89 hashprice at the time leaves about \$4.2 per PH/s per day.

Even a large operator with low-cost power had little margin to spare at this trough. The higher the power price or the lower the fleet efficiency, the greater the likelihood of a cash loss.

INTERPRETATION

At a \$30 hashprice, efficient fleets and cheap power are what matter

Operators with efficient fleets and low-cost power can keep mining at a hashprice near \$30. Older, less efficient machines and high-cost sites struggle to generate meaningful cash margin even if hashprice recovers to \$40. For those facilities and sites, the incentive to repurpose toward AI/HPC or other uses grows. The average hashprice alone is therefore not the relevant question; what matters is the combination of fleet efficiency and power price at which mining economics break down.

03

MINING REVENUE

July mining revenue rebounded, but recovered only 16% of the June decline

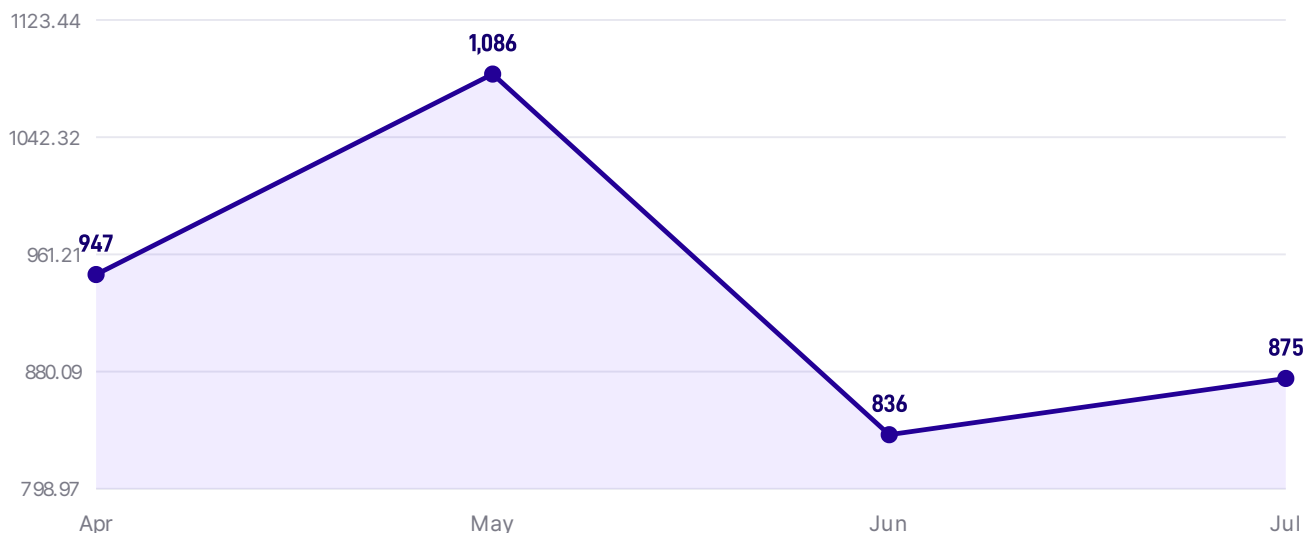
According to Newhedge.io, monthly mining revenue rose from \$947.26 million in April to \$1.086 billion in May^[16]. It then dropped 23% month on month to \$836.41 million in June before edging back to \$875.35 million in July^[16]. The July increase of \$38.94 million recovered only about 16% of the \$249.59 million June decline (our estimate). Most of the June loss remained unrecovered.

In June, with hashprice at record lows, shutdowns concentrated among lower-margin machines and difficulty fell 10.09%^[1].

Transaction fees accounted for just 0.69–0.77% of block rewards on a weekly basis in August^{[8][14][15]}, far too small to offset the deterioration in mining margins. Because the bulk of mining revenue comes from the block subsidy, the newly issued bitcoin, it remains highly sensitive to the bitcoin price.

July recovery limited to about 16% of the June decline

Monthly mining revenue, USD million; Newhedge.io, Apr-Jul 2026



July recovered just 16% of the June decline · Source: Newhedge.io[15]

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04 DIFFICULTY

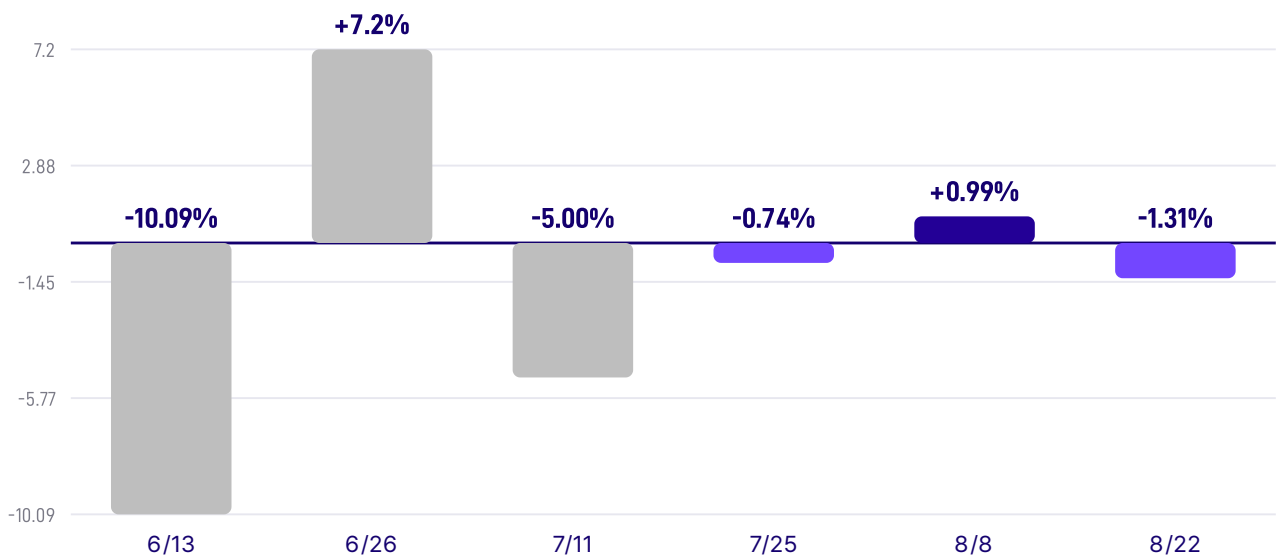
Ten of 17 difficulty adjustments in 2026 have been decreases

Difficulty adjusts roughly every two weeks (2,016 blocks) to track changes in network hashrate. A decrease shows that less hashrate was deployed on the network during the period. Whether that reflects deteriorating mining economics or power-market factors such as summer curtailment cannot be determined from the difficulty change alone^[1].

Through the August 22 adjustment, 2026 has seen 17 adjustments, 10 of them decreases and 7 increases^[5]. Difficulty has fallen from around 148.25T at the start of the year to 125.81T, about 15.1% below its level before the first adjustment^[5]. On June 13 it dropped 10.09% to a year low of 124.93T, then rebounded 7.2% to 133.87T on June 26 (our estimate)^{[1][5]}. It has since moved -5.00% (127.17T) on July 11^[1], -0.74% (126.23T) on July 25^[15], +0.99% (127.48T) on August 8^[14] and -1.31% (125.81T) on August 22^[5]. As of August 22, difficulty sits 0.7% above the June 13 low^[5].

Six adjustments since June 13, reversing the post-low rebound

Difficulty adjustment, %; Jun 13 to Aug 22, 2026; 10 down vs 7 up YTD



4 of 6 adjustments since Jun 13 were decreases · Source: Luxor[1], Bitcoin.com[5]

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Weakening mining economics do not explain the difficulty decline on their own. According to the index provider, the June drop reflected both economic shutdowns at record-low hashprice and seasonal curtailment, while the July 11 decline was driven largely by curtailment in response to peak demand on the Texas grid (ERCOT)^[1]. Margin pressure was confirmed as one cause of the hashrate decline, but it does not account for all of it.

05

BIP-110

BIP-110 failed to activate with miner support of just 2.53%

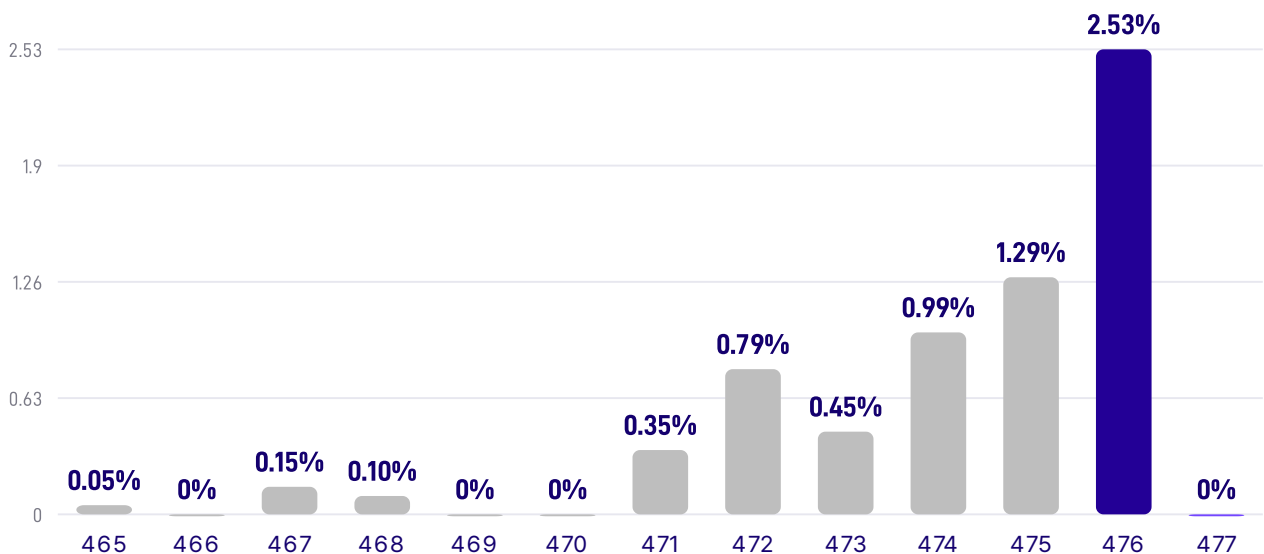
BIP-110 is a soft-fork proposal to limit non-financial data on the bitcoin blockchain. Among other provisions, it would cap output scripts at 34 bytes and OP_RETURN outputs at 83 bytes for about a year^[2]. Mandatory signaling began at block 961,632 on August 8, 2026^[3].

In the 2,016 blocks immediately before mandatory signaling, 51 blocks, or 2.53%, signaled support. That was far short of the 55% required for early activation, and no major mining pool publicly backed the proposal^{[2][3]}. Some nodes enforcing BIP-110 formed a separate chain, which quickly fell behind the main chain^[2].

The first mandatory-signaling period, difficulty period 477, closed with zero signaling blocks out of 2,016, a rate of 0.00%, and the proposal was not activated^[4]. The peak support rate during the earlier voluntary signaling window, periods 465 to 476, was likewise 2.53%^[4].

Signaling closed at 0% without approaching the 55% threshold

Signaling blocks as % of period, periods 465-477; final values



BIP-110 first mandatory period closed at 0% · Source: bip110monitor.com[4]

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On the main chain tracked by the dashboard, BIP-110 signaling produced no discernible change. The separate BIP-110 chain falls outside the dashboard's coverage, however, so this data alone cannot establish whether any hashpower moved (Appendix 1).

INTERPRETATION

BIP-110 had limited impact on mining profitability

With transaction fees below 1% of block rewards^[8], a proposal to restrict non-financial data had only limited scope to affect overall mining revenue.

06

HPC CONTRACTS

MARA and CleanSpark disposed of mined BTC while announced AI/HPC contracts passed \$70 billion

As margin pressure has intensified, listed miners have responded in more varied ways. Disposals of mined bitcoin and the expansion of AI and high-performance computing (HPC) contracts are occurring at the same time.

Bitcoin disposals. MARA mined 2,422 BTC in the second quarter and sold 2,213 BTC at an average price of \$73,078, about 91% of production (our estimate)^[10]. Quarterly revenue fell 27% year on year

to \$174.9 million, and bitcoin holdings declined 29% to 35,577 BTC^[10].

CleanSpark disposed of 579 of the 586 BTC it mined in July at an average price of \$66,133, about 99% of production (our estimate)^[9]. Of that amount, 350 BTC was delivered against exercised call options; discretionary spot sales were 229 BTC, about 39% of monthly production (our estimate)^[9].

Both companies retained little of the bitcoin they mined in the period, but the nature of the disposals differed. MARA's were predominantly spot sales, whereas more than half of CleanSpark's were call-option deliveries. The two cases should not be read as the same kind of liquidation.

AI/HPC contract expansion. In July, CleanSpark signed a 20-year triple-net lease covering 175 MW at its Sandersville campus in Georgia. By the company's own figures, contracted revenue is about \$6.6 billion, rising to as much as \$11.6 billion if extension options are exercised^[9].

Across listed miners, announced AI/HPC contracts exceeded \$70 billion in aggregate on CoinShares' first-quarter 2026 count^[11]. That total covers all contracts announced up to that point, including 2025 announcements, rather than deals signed in the first quarter alone. The same report estimates build-out costs at \$0.7–1.0 million per MW for mining versus \$8–15 million per MW for AI^[11], implying that an AI/HPC conversion requires far more upfront capital than mining.

Large contracts have continued since. On August 10, Riot Platforms disclosed a 20-year lease for 191 MW. The company identified the tenant only as a "leading frontier AI lab"; base contracted revenue is about \$9.1 billion, rising to \$16.1 billion if extension options are exercised^[17]. Reports identifying the tenant as Anthropic rest on subsequent press coverage, not on the company's disclosure^[18].

Miners with HPC contracts trade at 12.3x EV/NTM sales, more than double the 5.9x of pure-play miners (as of the fourth quarter of 2025)^[11]. That gap cannot be read directly as a difference in operating profitability; it may reflect market expectations for AI/HPC contracts priced into enterprise value. CoinShares itself notes that these valuations depend on actual contract execution^[11].

EV/NTM sales multiple more than doubled between the two groups

EV to next-twelve-month sales; CoinShares, Q4 2025 basis

Miners with HPC contracts

12.3x

Pure-play miners

5.9x

HPC-contract miners at 2x pure-play EV/NTM sales · Source: CoinShares^[11]

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CoinShares characterizes the shift as an economic choice: hashprice has stayed low and squeezed mining margins, while AI infrastructure offers relatively higher and more stable returns^[11]. Because most contracts assume new data-center construction, the report also expects some existing mining facilities to be scaled back or closed^[11].

Coverage of the CoinShares report describes heavy borrowing and bitcoin sales as sources of funding for the AI/HPC transition^[19]. On that reading, bitcoin disposals and contract expansion can be seen as parts of the same transition. Where individual companies actually deployed the proceeds of their bitcoin sales, however, is not confirmed by disclosure (Appendix 1).

Not every large miner is concentrating solely on AI/HPC. MARA has laid out a strategy of maintaining mining competitiveness on low-cost power while carrying the same cost advantage into any megawatts it converts to other uses^[12]. That amounts to allocating power assets between mining and AI according to which use offers the better economics. A high disposal ratio is therefore not, by itself, evidence that a company is winding down mining or converting to AI/HPC.

INTERPRETATION

Same power assets, diverging economics for mining and HPC

The publisher, Bitplanet, is a listed company pursuing AI and data-center infrastructure businesses and may have an interest in how this topic is interpreted. With that caveat, the current shift can be viewed as a re-evaluation of whether a given site and power supply is better used for mining or for HPC.

Staying in mining captures the upside of a bitcoin rally directly but leaves the operator fully exposed to hashprice swings. Converting to HPC offers steadier cash flow under long-term contracts but brings heavy investment and borrowing, along with construction and customer risk. Whether AI/HPC conversion actually improves profitability has yet to be demonstrated (Appendix 1).

07

PRICE REBOUND

The late-August rebound is too early to call a change in trend

Bitcoin rose 19.6% in three days, from \$64,135 on August 18 to \$76,712 on August 21 (each as of the time of retrieval; our estimate)^{[20][21]}. It stood at \$78,532 on August 31^[13], narrowing the drawdown from the October 2025 all-time high to 38.8%^[5].

Hashprice rebounded alongside it. Hashrate Index data show hashprice climbing 20.41% in four days, from \$31.80 on August 18 to \$38.29 on August 22, its highest since May^[6]. It stood at \$39.36 on

August 31, while the 30-day average for August was \$34.63, below the 2025 floor of \$37.89^[13]. The bitcoin and hashprice comparison windows differ by one day because the sources report on different dates.

Monthly mining revenue also rebounded. On Newhedge.io's count, August revenue reached \$1.008 billion, about 15% above July's \$875.35 million (our estimate)^[22]. Transaction fees contributed just \$7.19 million, or 0.7% of the total^[22].

One could argue on the basis of this rebound that it is premature to call the profitability decline structural. Hashprice has fallen to breakeven levels and recovered before. This year, too, mining revenue recovered in April and May after the March low^{[1][16]}, but the recovery lasted less than two months before hashprice fell back to record lows in June^{[1][16]}.

CoinShares expects any hashprice recovery to depend heavily on the bitcoin price, and estimates that 15–20% of older rigs are loss-making at a hashprice around \$30^[1]. That implies a substantial share of the fleet can keep operating even at that level.

As of August 31, the forward market priced the average hashprice over the next six months at \$37.59, up sharply from \$30.67 on August 17, before the rebound^{[8][13]}. That is close to the 2025 floor of \$37.89. The rebound itself is still only about two weeks old. It is therefore too early to conclude that the structural pressure on mining profitability has lifted.

C CONCLUSION

Conclusion: structural pressure on mining profitability and a divergence in business models

Bitplanet Research Lab views the deterioration in mining profitability in 2026 as closer to structural pressure than to a temporary fluctuation. All three of the lowest monthly hashprice averages on record fell this year^[1], and 10 of the 17 difficulty adjustments through August 22 were decreases^[5]. MARA and CleanSpark disposed of large volumes of mined bitcoin^{[9][10]}.

Against that, bitcoin and hashprice rebounded sharply in late August^{[6][21][23]}, and CoinShares estimates that, excluding the 15–20% of older machines, most of the fleet can keep operating at a hashprice around \$30^[1]. These signals point the other way. But the rebound has not yet lasted long enough to change the monthly-average picture, and the recovery after this year's March low reversed within two months, so we see no basis to change our judgment at this stage^{[1][16]}.

INTERPRETATION**A divergence in business models rather than a shrinking industry**

What is unfolding looks less like an industry-wide contraction than a divergence in strategy driven by each operator's economics. Even at MARA's own sites, purchased energy accounts for more than half of the bitcoin price at production^[12]. Mining infrastructure costs \$0.7–1.0 million per MW, while AI infrastructure costs \$8–15 million per MW and requires far more capital^[11]. Yet miners with HPC contracts trade at 12.3x EV/NTM sales, more than double the 5.9x of pure-play miners^[11]. AI/HPC conversion demands more capital, but capital markets are assigning higher value to operators that have secured such contracts.

Mining competitiveness now hinges on power cost and fleet efficiency. Operators with low-cost power and efficient machines can keep mining at a low hashprice, while less-advantaged facilities feel the margin squeeze more acutely and face a growing incentive to repurpose their sites and power toward AI/HPC. A strategy like MARA's, sustaining mining on low-cost power while converting a portion of power assets, is also viable^[12].

The current shift is therefore better understood as a comparison of mining and AI/HPC economics for the same power assets than as the end of mining. Whether AI/HPC conversion actually improves profitability remains unproven (Appendix 1), and this analysis contains no forecast of the bitcoin price.

Two conditions would prompt us to revisit this judgment. First, an actual easing of structural profitability pressure: if monthly average hashprice holds above the 2025 floor of \$37.89 for two months or more and difficulty keeps rising, we will revisit the judgment that the pressure is structural.

We use \$37.89 as the threshold because 2025 was the first full year after the halving, and monthly averages below that level have appeared only in 2026^[1]. If hashprice holds above it for two months while difficulty rises, that would signal a return of mining profitability to 2025 levels rather than a short-lived bounce.

Second, we will revisit the divergence judgment if cancellations or commissioning delays accumulate across AI/HPC contracts, or if hashprice recovers to 2025 levels and mining profitability improves markedly on its own.

If hashprice stays at current lows, miners with high power costs or inefficient fleets are likely to face the greatest pressure, while operators with low-cost power or long-term HPC contracts retain more options. With transaction fees below 1% of revenue^[8], the variables operators can directly control are power cost, fleet efficiency and how they deploy their power assets.

Key Conclusion

The deterioration in mining profitability in 2026 is closer to structural pressure than to a temporary fluctuation. Bitcoin and hashprice rebounded in late August, but it is too early to conclude that the trend has changed. We will revisit this judgment if monthly average hashprice holds above the 2025 floor of \$37.89 for two months or more and difficulty keeps rising.

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A APPENDIX

Data limitations and basis of estimates

1. Limitations of analysis and data

- ◆ **Differences across data providers:** Monthly revenue figures are from Newhedge.io^[16] and may differ from other aggregators.
- ◆ **Scope of verification:** The composition of MARA's \$27.7 daily cost per PH/s^[12] is not defined in the filing, so its coverage could not be verified.
- ◆ **Timing of aggregation:** The \$70 billion in cumulative AI/HPC contracts is CoinShares' first-quarter count^[11]; contracts signed since (for example Riot^[18]) are not included.
- ◆ **Nature of the source:** Figures cited from bip110monitor.com are final values as of the end of its operation (last updated 2026-08-23 00:49 UTC)^[4]. The chain run by enforcing nodes is separate from the chain the dashboard tracked (mempool.space basis), and the figures refer to the latter.
- ◆ **Reference dates:** The latest hashprice and forward hashprice values are as of August 31^[13]. Because the index provider's official monthly figure is not yet available, the August monthly average uses the 30-day average as of August 31^[13].
- ◆ **Comparison windows:** The hashprice rebound (August 18–22) and the bitcoin price move (August 18–21) differ by one day because no weekend price was published^{[20][21][6]}.
- ◆ **Attribution of difficulty declines:** Difficulty decreases mix economic shutdowns with power-market factors such as summer peak curtailment^[1]. This report does not separate the two quantitatively.
- ◆ **Sensitivity-analysis assumptions:** The cash margins in Section 2 reflect power cost only and exclude hosting, labor and depreciation. Energy hashprice by fleet efficiency uses published

values as of August 17^[8]. Hashprice scenarios assume linear scaling. The MARA cross-check assumes fleet efficiency of 17.5 J/TH.

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- ◆ **Sample limits:** The discussion of bitcoin disposals rests on two cases, MARA and CleanSpark, and is not generalized to listed miners as a whole.
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- ◆ **Scope of verification for conversion profitability:** Whether AI/HPC conversion has actually improved profitability could not be confirmed from the cited sources. The divergence judgment in the conclusion rests on verified cost, valuation and contract figures and does not assume the conversions will succeed.
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- ◆ **Nature of the funding link:** The link between sales, borrowing and transition funding is attributed to press coverage of the CoinShares report^[19]. How individual companies used sale proceeds is not specified in disclosures.
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2. Formulas for Our Own Estimates

Formulas and bases are given for every figure marked "our estimate" in the text. Where calculation methods differ across sources or a specific formula could not be confirmed, that limitation is noted.

Metric	Formula (numerator / denominator)	Reference date	Source
2026 low about 20% below the 2025 low	$(37.89 - 30.37) / 37.89$	Monthly averages, 2025 low vs. June 2026	[1]
July revenue recovery ratio about 16%	$38.94\text{M} / 249.59\text{M}$ (June decline = $1,086.0\text{M} - 836.41\text{M}$)	Monthly, June–July 2026	[16]
MARA sale ratio about 91%	$2,213 \text{ BTC} / 2,422 \text{ BTC}$	Q2 2026	[10]
CleanSpark disposal ratio about 99%	$(229 + 350) \text{ BTC} / 586 \text{ BTC}$	July 2026	[9]
MARA energy cost as share of BTC price at production about 54%	$\$38,690 / \$71,325$ (purchased energy cost/average price at production)	Q2 2026	[12]
CleanSpark discretionary sale ratio about 39%	$229 \text{ BTC} / 586 \text{ BTC}$ (excluding call-option deliveries)	July 2026	[9]
August revenue growth about 15%	$1,008.4\text{M} / 875.35\text{M} - 1$	Monthly, July–August 2026	[22] [16]
June 26 difficulty adjustment about +7.2%	$133.87\text{T} / 124.93\text{T} - 1$	2026-06-26	[1] [5]
Bitcoin price gain about 19.6%	$76,712 / 64,135 - 1$	2026-08-18 to 21	[20] [21]
Energy hashprice by scenario (USD per MWh)	Published values $(107 / 79 / 59 / 41) \times$ (scenario hashprice/ 31.89)	Published values as of 2026-08-17	[8]
Cash margin (USD per MWh)	Scenario energy hashprice - power price $(40 / 60 / 80)$	Same	[8]
Breakeven power price (at \$30)	Energy hashprice scaled to $\$30 / 10$ (cents per kWh)	Same	[8]
MARA daily power cost about \$16.8 per PH	$17.5 \text{ J/TH} \times 24\text{h} = 0.42 \text{ MWh} \times \40	Q2 2026 power price	[12]
MARA non-power operating cost about \$11	$27.7 - 16.8$	Q2 2026	[12]

Metric	Formula (numerator / denominator)	Reference date	Source
per PH			

3. Methodology

- ◆ **Source priority:** Official company and regulator materials, then raw data and aggregator databases, then specialist media, then syndicated media, then community sources, in that order.
- ◆ **Source classification:** A source is classified as primary only when the original document was reviewed directly. Where the original was not obtained, the citation is marked as secondary and the gap is disclosed.
- ◆ **Reference and retrieval dates:** Values fixed at a point in time carry a reference date; dashboard values that change in real time carry a retrieval date.
- ◆ **Conflicting figures:** Where sources disagree, both figures are presented. When one must be chosen as the reference, transparency of scope, clarity of retrieval timing and separability of line items take precedence over the prominence of the outlet, and the basis for the choice is stated in the text.
- ◆ **Our estimates:** Each of our own estimates is listed in Appendix 2 with its formula, reference date and limitations.
- ◆ **Legal and regulatory interpretation:** Regulator materials are cited only to describe general structural classifications and applicability, not as official classification or approval of any specific product. Descriptions of product structure and regulatory interpretation are kept in separate paragraphs.
- ◆ **Conflict of interest disclosure:** The same disclosure appears in a fixed position at the top of every report.

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