What Is an Old GPU Worth?

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GPU useful lives and asset-backed financing depend on earning power after the first contract. Recent rental-price strength supports that earning power; earlier price declines and discounts across GPU generations show why renewal and residual-value assumptions still require scrutiny.

By **Tugay Dilikoğlu** · Follows From Megawatts to Equity Value (2 Oct) and Scoring the Stack (14 Oct)

−34%	+41%	28%	1,195bp
a year: H100 composite rental price, late 2023 to Oct 2025	rebound in one-year H100 contract prices, Oct 2025 to Apr 2026	illustrative break-even annual decline: six-year book life, three-year contract	CoreWeave five-year CDS, intraday high on 15 Oct, up from 452bp in June
DERIVED	DERIVED	MODEL	SECONDARY

Investment takeaways

- **The evidence points two ways.** H100 rental prices fell 21% a year on one-year contracts and about 34% a year on a composite index between 2023 and October 2025. On 28 October, cross-sectional prices implied annualized generation-age discounts of 33–45%; these are not observed annual declines for the same GPU. Yet one-year H100 contracts rose 41% from their trough to April 2026, and CoreWeave has contracted A100s, a 2020 chip, out to 2029 (derived from the sources in each exhibit).
- **Depreciation policies sit inside the observed range.** CoreWeave depreciates GPUs over six years, IREN and Nebius over five (Nebius extended from four on 1 January 2026). In the simplified three-year-contract illustration, residual cash flow covers book value only if market prices decline by less than about 28% (six years), 31% (five) or 37% (four) a year, in our illustrative model.
- **Our own CoreWeave base case is at the optimistic end.** It assumes a seven-year economic life with renewals at 90% of the original price, roughly a 2% annual decline. This is a favorable renewal assumption; our 30%-weighted Bear case combines weaker operating and financing outcomes.
- **The same decline now matters to lenders.** On our illustration, a loan at 65% of GPU cost, repaid over five years against three-year contracts, reaches about 95% of collateral value in year three if prices fall 35% a year. CoreWeave's equipment-backed debt is 38–53% of its total, depending on the treatment of OEM financing (derived from its 10-Q).
- **Q3 results are the first test.** Cipher reports on 2 November, IREN on 5 November and CoreWeave on 10 November. Re-contracting prices on older GPUs and any change in useful life are the numbers to watch.

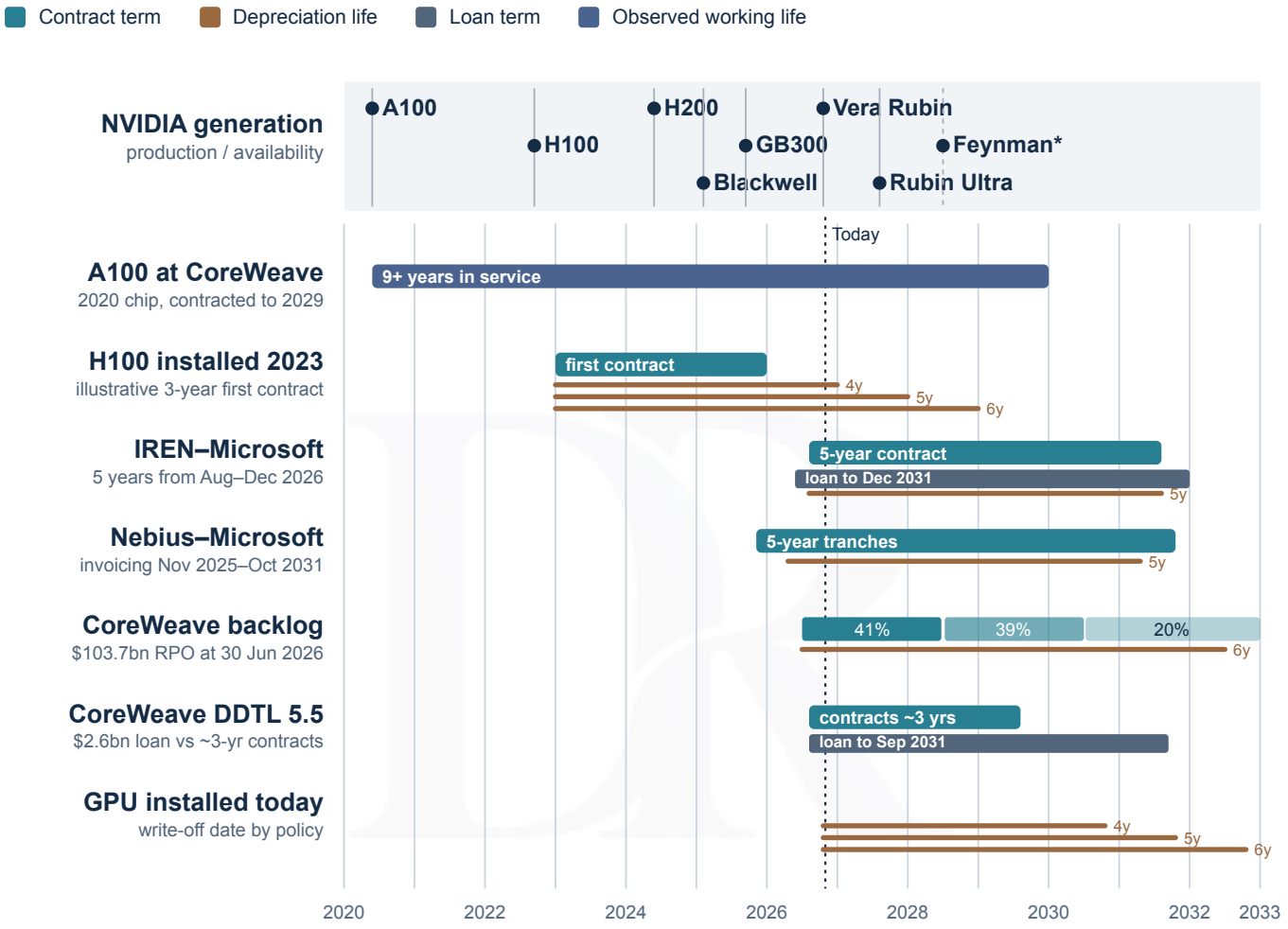
Why the question matters this month

October turned a depreciation debate into a credit debate. On 14 October Gartner said more than $3.5 trillion of AI infrastructure spending could face impairment by the end of 2030 and that over 80% of neoclouds will cease to operate independently by then.[34] CoreWeave's five-year credit default swaps hit an intraday record of 1,194.5bp on 15 October, and its 9% 2031 notes traded below 80 cents.[35] On 25 October Elon Musk wrote that the more than 200 neoclouds "are going to see guppy-level death and consolidation".[36] The Information reported that NVIDIA has more than $170bn on the line for neoclouds through lease guarantees, capacity purchase commitments and investments.[37]

Behind all of it is one number nobody discloses: what a GPU earns after its first contract ends. Accounting spreads a GPU's cost over a useful life the company chooses; lenders lend against it. When that life is longer than the first contract, the gap is a claim on future rental prices for hardware that will by then be one or two generations old.

NVIDIA now launches a data-center generation roughly every year. Vera Rubin began production shipments this autumn, Rubin Ultra is planned for 2027 and Feynman for 2028.[21,22] NVIDIA says Rubin cuts the cost of inference tokens by up to ten times versus Blackwell.[23] A GPU installed today and depreciated over six years will compete against at least three newer generations before it is written off.

EXHIBIT 1 A GPU's working life against NVIDIA's release cadence

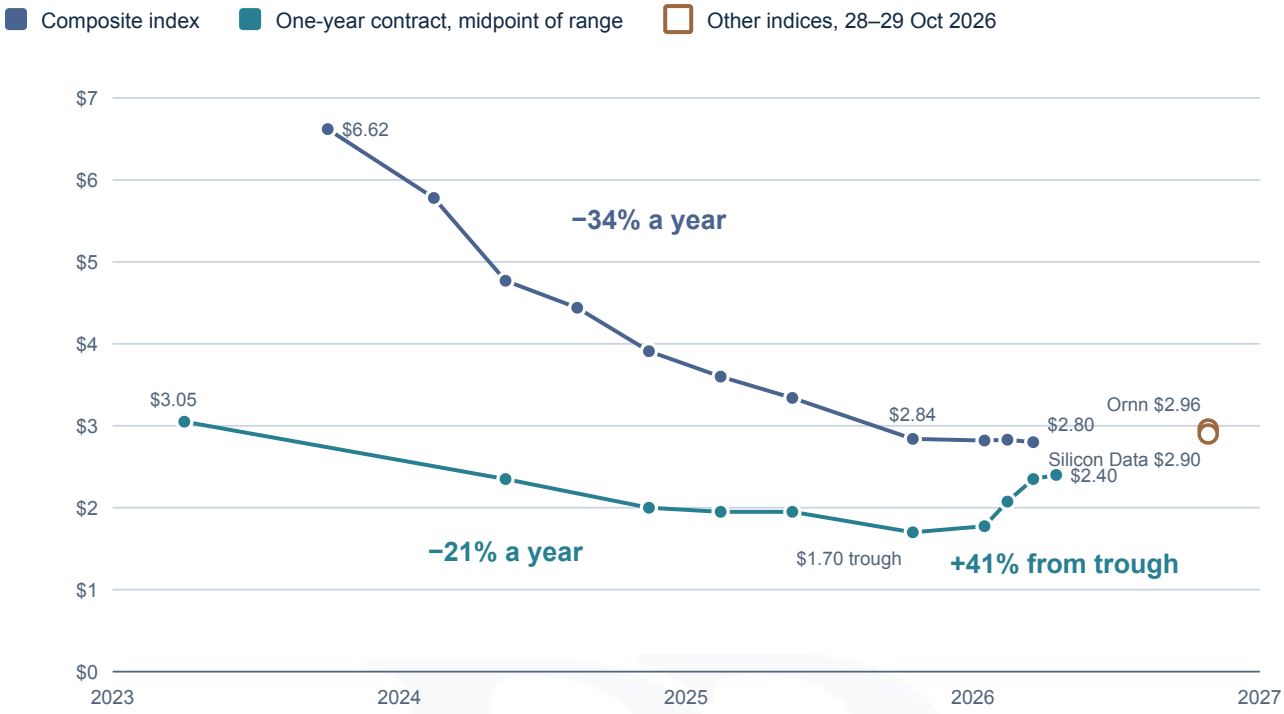


Sources: generation dates from NVIDIA releases (Feynman from secondary coverage);[18–22] A100 contracted to 2029, CoreWeave Q2 2026 call;[14] IREN–Microsoft five years from 2026 deliveries;[9,10] Nebius–Microsoft invoicing to October 2031;[6] CoreWeave RPO conversion buckets from the Q2 2026 10-Q;[4] DDTL 5.5 matures September 2031,[39] underlying contracts average about three years (secondary).[40] **H100 cohort:** illustrative, assuming installation in 2023 and a three-year first contract.

The record: prices fell, then rebounded

The H100 is the best test case. It has a public price history from 2023 and is now three generations old. Exhibit 2 shows two series from one provider, SemiAnalysis, on consistent bases: a composite index and the range of one-year contract prices.

EXHIBIT 2 H100 rental prices, US$ per GPU-hour

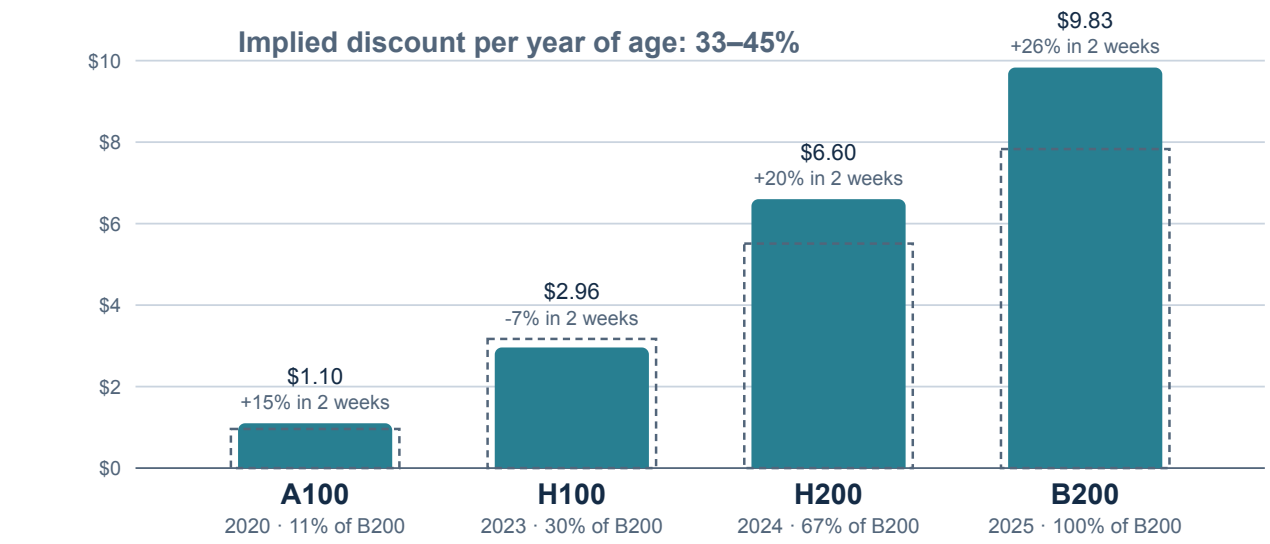


Sourced: SemiAnalysis GPU index, composite and one-year contract ranges (ranges plotted at midpoint; derived);[24,25] Silicon Data SDH100RT, 29 Oct 2026;[26] Ornn OCPI H100 SXM, 28 Oct 2026.[27] The historical observations reproduced here end in April 2026; this chart does not establish the current availability of the provider's data. Indices differ in method and are not interchangeable.

Between the second half of 2023 and October 2025 the composite fell from $6.62 to $2.84, a 35% annual decline. One-year contracts fell from about $3.05 to about $1.70, or 21% a year (both derived, compound annual rates). Part of the fall was list-price repricing: AWS cut H100 on-demand prices by 44% in June 2025.[17] Then the market turned. The composite held at about $2.80 through March 2026, while one-year contracts climbed back to about $2.40 by April, 41% above the trough, and on-demand H100 capacity was reported as sold out.[24,25] CoreWeave's chief executive said in August that the company had contracted "a 2020 vintage architecture all the way out to 2029 at full freight", and Nebius reported "more than 30% higher pricing on older-generation GPUs" in Q2 versus Q1.[15,7] In September CoreWeave said it was signing three- to six-month contracts at about $40m of annualised revenue per MW.[12] At the end of October the two daily indices put the H100 at $2.90–2.96, roughly where it was a year ago.

A second test is what different generations rent for on the same day. Exhibit 3 uses one index provider so the bases match, and shows how much each price moved between 13 and 28 October.

EXHIBIT 3 Same-day rental price by GPU generation, 28 October 2026



Sourced: Ornn OCPI indices, settled 13 and 28 Oct 2026.[27] **Derived:** discount per year of age = (older price ÷ B200 price)^(1 ÷ years between volume-availability years) − 1, using A100 2020, H100 2023, H200 2024 and B200 2025 (assumption on vintage years). The comparison includes performance differences between generations; a buyer pays for work done, so these cross-sectional differences do not isolate time-dependent rental-price decline. Silicon Data shows the same ordering at lower levels (H200 $3.48, B200 $6.47 on 29 Oct); its series and Ornn's should not be mixed.[26]

On 28 October the A100 rented at 11% of the B200's price and the H100 at 30%. That implies an annualized 33–45% generation-age discount, not a time-series depreciation rate. Performance, configuration and provider mix also differ. The cross-sectional discount widened from two weeks earlier because B200 prices rose 26% while the H100 slipped 7% (derived, Ornn). The newest chips are where the shortage is now most acute. Resale prices tell a milder story: a dealer-published index puts used H100s at 75–85% of their value after 24 months, though the publisher buys GPUs and is not neutral.[33]

How much decline can each policy absorb?

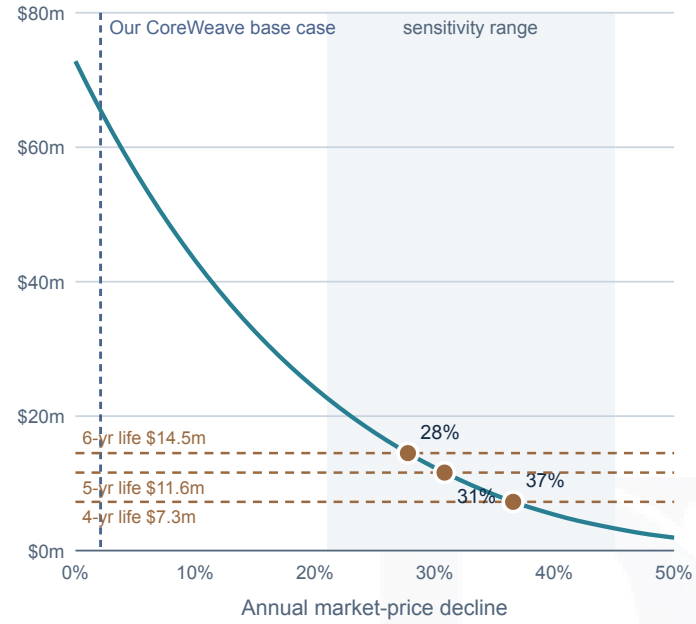
To connect prices to depreciation, we modelled one megawatt of GPU capacity. The GPU and networking equipment costs $29.0m per MW, the IREN–Dell figure used in Scoring the Stack. They are rented on a first contract, then re-rented at a market price that falls at a constant annual rate. We value the post-contract cash flows and compare them with the book value left at contract end under four-, five- and six-year lives. A value below book value signals residual-value risk under these assumptions. This simplified cash-flow comparison is not an accounting impairment test or a forecast of a write-down.

EXHIBIT 4 Post-contract value vs. remaining book value, per MW

Post-contract economic value · Book value at contract end, by depreciation life · Historical and cross-sectional sensitivities, 21–45% · Our CoreWeave base case, ~2%

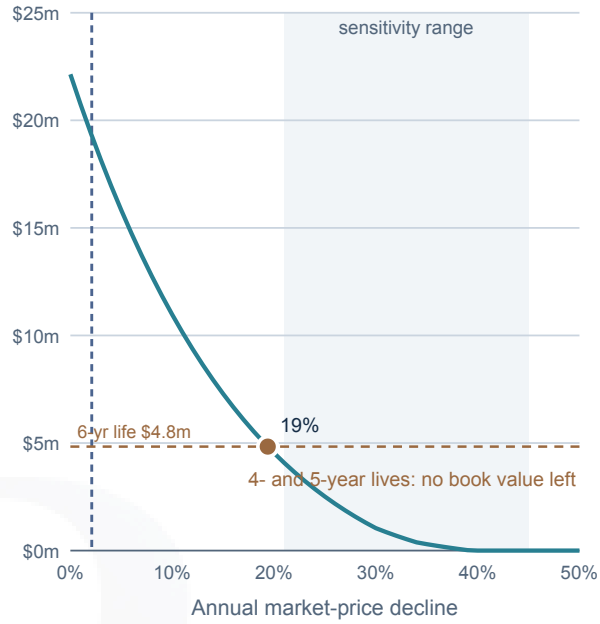
Three-year contract

$20m per MW-yr · Equipment $29.0m per MW



Five-year contract (IREN–Microsoft)

$9.7m per MW-yr · Equipment $29.0m per MW



INPUT	VALUE	TYPE	BASIS
GPU and network capex	$29.0m / MW	DERIVED	IREN: $5.8bn Dell GB300 order ÷ 200 MW critical IT.[9] Equipment only; our Nebius model's $50m/MW all-in system budget also includes the facility[49]
Three-year contract rate	$20.0m / MW-yr	REPORTED	IREN, "recent 3-year contracts >$20m revenue per MW (IT)";[10] Nebius ACV $20–25m per MW[7]
Five-year contract rate	$9.7m / MW-yr	DERIVED	IREN–Microsoft: $9.7bn ÷ 5 yrs ÷ 200 MW[9]
Post-contract rent in year t	rate × (1 − d)^(t−1)	ASSUMPTION	Market price of the generation starts at the contract rate and declines at d a year
Power cost	$0.80m / MW-yr	ASSUMPTION	PUE 1.3 × 8,760 MWh × $70/MWh
Physical life	8 yrs	ASSUMPTION	A100s still rented in year six;[15,28] a longer life raises every break-even
Discount rate	10%	ASSUMPTION	Illustrative cost of capital for used hardware

Formulas: economic value at contract end T = Σ from t = T+1 to 8 of max(rent$_t$ − 0.80, 0) ÷ 1.10^(t−T). Book value = 29.0 × max(0, 1 − T ÷ L). Break-even d solves economic value = book value. **CoreWeave base case:** renewal at 90% of the original price after a five-year contract ≈ 0.90^(1/5) − 1 = −2.1% a year (derived from our coverage page).[41] Excludes staff, maintenance, financing and end-of-life resale. The price path declines from installation; the initial contract remains fixed and renewal rent reflects the then-prevailing modeled market price. Excluded costs can reduce residual value. This is an illustrative sensitivity, not an accounting impairment test or a company forecast.

The left panel illustrates new business at the cited pricing: three-year contracts at about $20m per MW, the level IREN and Nebius now report. In this illustration, residual cash flow covers six-year book value only if market prices fall less than about 28% a year; a five-year life needs less than 31%; a four-year life less than 37%. The 21–45% sensitivity range straddles all three thresholds. It combines historical changes and cross-sectional generation discounts, which are different measures.

> Strong current rents do not settle the useful-life question. The relevant test is earning power after contracted revenue expires.

The right panel shows why long hyperscaler contracts are safer on this measure. On IREN's five-year Microsoft contract a five-year life leaves no book value at the end; even a six-year life is covered unless prices fall faster than about 19% a year.

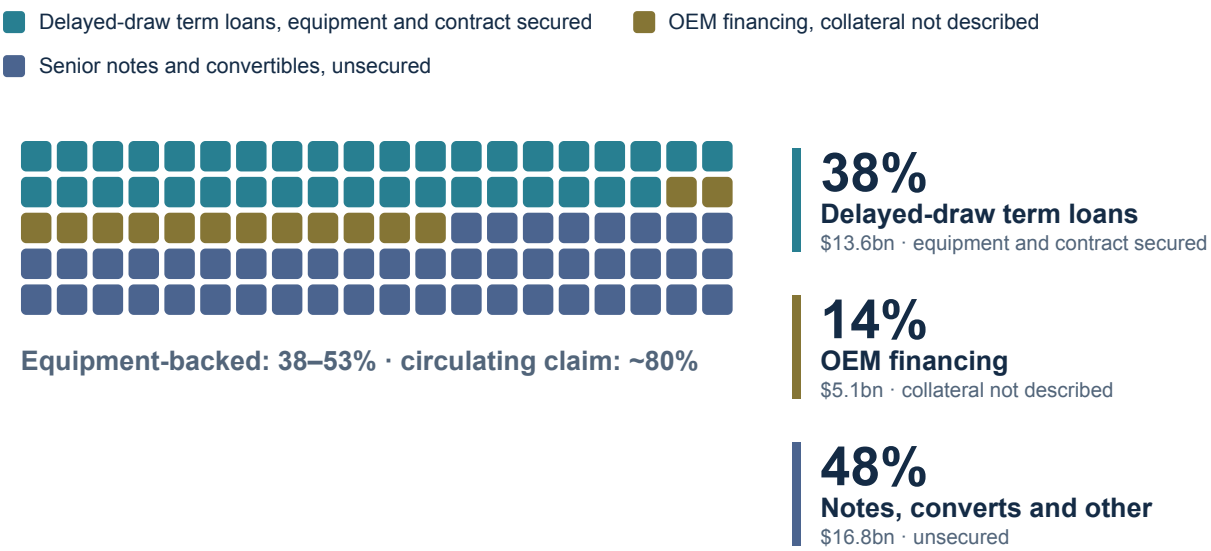
Our own CoreWeave model makes the same bet. Our base case assumes a seven-year economic life: a five-year first contract and two renewal years at 90% of the original price.[41] That is roughly a 2% annual decline, the shortage end of Exhibit 4 and well inside every break-even. CoreWeave's actual contracts run one to six years, with about 41% of its backlog converting within two years, but the RPO conversion schedule alone cannot identify the renewal exposure of individual equipment cohorts.[3,4] Our 30%-weighted Bear case produces zero equity value through a combination of adverse assumptions; rental-price decline alone does not determine that outcome. The 10 November results provide the next opportunity to assess renewal evidence.

When the GPU is the collateral

A falling rental price does not only hit earnings. Neoclouds borrow against their GPUs and the contracts the GPUs serve, so the same decline erodes lenders' cover. The figure circulating this month, that about 80% of CoreWeave's debt is GPU-backed, does not match its filings. At 30 June 2026, delayed-draw term loans secured on equipment and contracts were 38% of its $35.6bn of debt; including OEM equipment financing, whose collateral is not described, the share is 53% (Exhibit 5, derived).

EXHIBIT 5

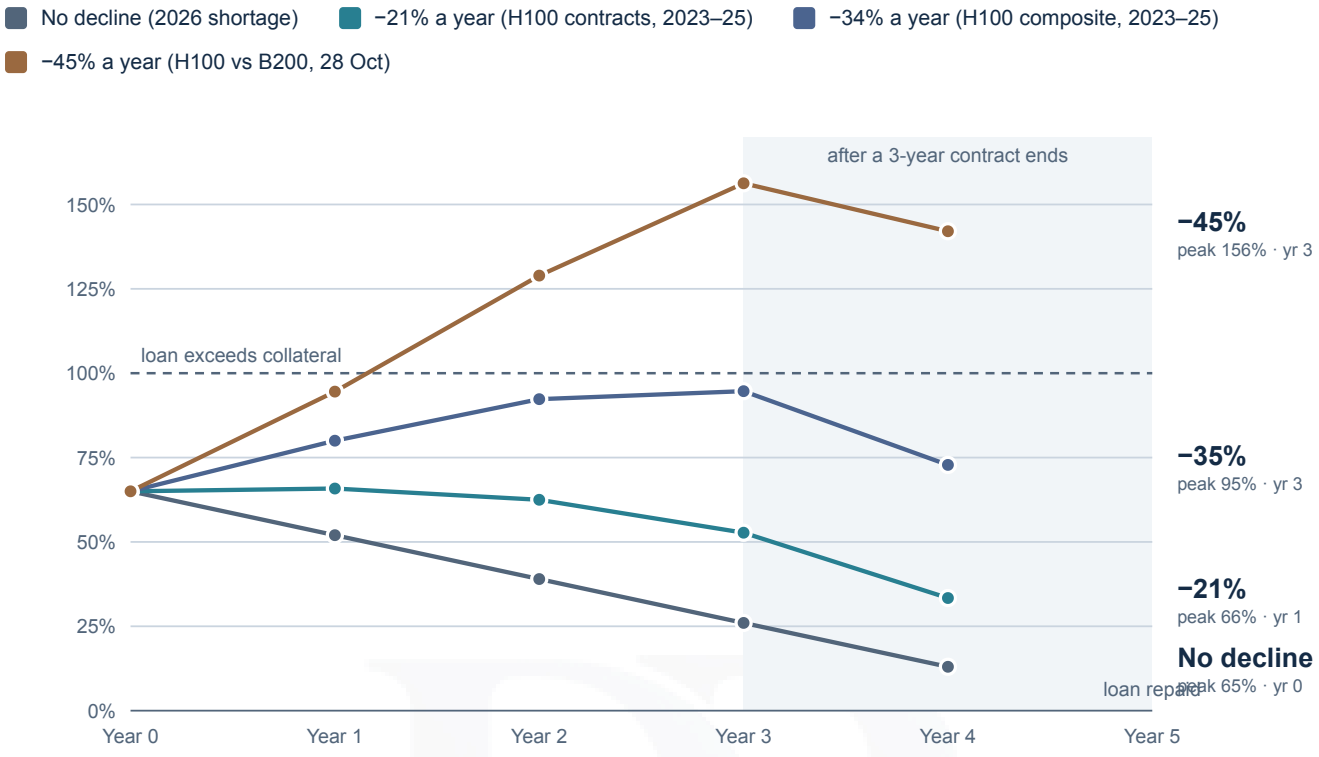
CoreWeave debt by type at 30 June 2026: each square is 1% of $35.6bn



Sourced: CoreWeave Q2 2026 10-Q, debt note: DDTL facilities $13.6bn, OEM financing $5.1bn, senior notes and convertibles $16.6bn, other $0.2bn, total principal $35.6bn.[38] **Derived:** shares of total principal, rounded; "other" is a $189m loan, shown with the unsecured block. The 80% figure was reported by secondary sources in October and is not supported by the filing.

The structures differ in how much residual-value risk lenders take. IREN's $3.65bn Microsoft financing sits in a separate subsidiary, matures with the contract at the end of 2031, carries debt-service tests and a 65% loan-to-cost trigger, and with Microsoft's prepayment covers about 96% of the GPU cost.[42,10] CoreWeave's investment-grade DDTL 4.0 is likewise sized against a customer contract.[38] Its August DDTL 5.5 is different: a roughly five-year, $2.6bn loan at SOFR plus 5.5% against customer contracts reported to average about three years.[39,40] For the last two years of such a loan, repayment depends on re-renting the GPUs. Exhibit 6 shows what that does to loan-to-value under the price declines in Exhibits 2 and 3.

EXHIBIT 6 Loan-to-value of a five-year GPU loan as the collateral ages



Derived, illustrative: loan = 65% of GPU cost at drawdown (IREN's filed loan-to-cost trigger used as a benchmark),[42] repaid in equal annual instalments over five years. Collateral value = cost × (1 − d)^t, assuming resale value tracks rental prices. LTV = loan balance ÷ collateral value. The shaded band marks years three to five, after a three-year contract has ended. Ignores contract cash flows, cash reserves and guarantees, which protect lenders while contracts run; this shows the exposure that remains once they end.

With no price decline, the loan de-risks every year. At the 2023–25 contract decline it stays below 66%. At an illustrative 35% decline, close to the historical composite rate, it climbs to about 95% in year three, exactly when a three-year contract ends; at the illustrative 45% decline scenario derived from the 28 October price ladder it exceeds 100% from year two (all derived). Matching debt maturity to contracted cash flows, as in the IREN Microsoft financing, reduces this mismatch but does not eliminate execution, customer-credit or collateral risk. CoreWeave's credit spreads reflect several risks; they cannot be attributed to residual GPU value alone.[35]

What it means for the companies we cover

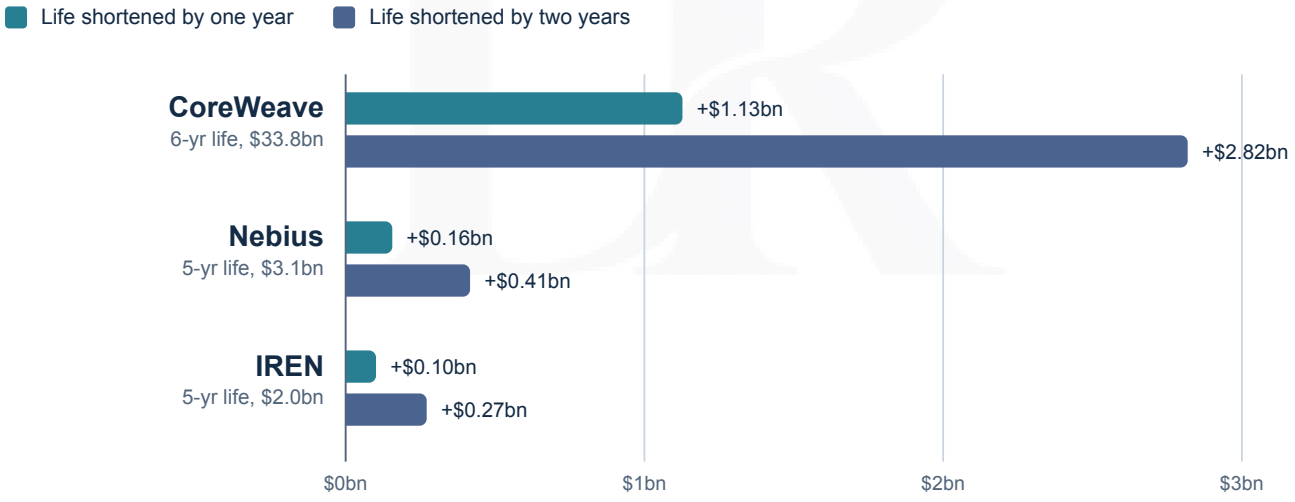
Exhibit 7 sets out each GPU owner's policy, contracts and financing. Exhibit 8 converts a shorter life into annual depreciation.

EXHIBIT 7 Depreciation policy, contract length and financing

COMPANY	GPU USEFUL LIFE	GPU / TECH EQUIPMENT, GROSS	CONTRACT LENGTH	GPU-LINKED FINANCING	RE-PRICING EVIDENCE
CoreWeave	6 years; 5 → 6 at start of 2023 (secondary)[3,30]	$33.8bn (30 Jun 26)[5]	1–6 years; RPO $103.7bn, ~41% within 24 months[4]	DDTLs $13.6bn of $35.6bn debt; DDTL 5.5 ~5-yr loan; ~3-yr contracts (secondary)[38,39]	A100 cluster contracted to 2029; older-generation prices "at or above" a year earlier[14,15]
Nebius	5 years; 4 → 5 from 1 Jan 2026[6,7]	$3.1bn plus $2.4bn not yet in use (31 Dec 25)[8]	Microsoft and Meta, 5 years; new deals multi-year[6]	$8.5bn debt at 30 Jun, mainly convertibles; secured GPU loans since July (secondary)[43,44]	Older-generation prices up more than 30% in Q2 vs Q1[7]
IREN	5 years ("HPC hardware")[1]	$2.0bn GPU hardware plus $3.7bn construction in progress (30 Jun 26)[2]	Generally 3–5 years; Microsoft 5 years[11,9]	$3.65bn Microsoft financing, matures with contract; 65% loan-to-cost trigger[42]	Recent 3-year contracts above $20m per MW; ~2-year payback[10]

Cipher Digital is excluded: it is a landlord and its tenants own the GPUs. IREN's FY26 impairment of $638.8m related mainly to bitcoin-mining hardware, not GPUs.[2] The cited company filings do not identify a GPU impairment at these three companies. This is a review of those disclosures, not a conclusion about all subsequent filings or the recoverability of each fleet.

EXHIBIT 8 Additional annual depreciation if GPU life is shortened, US$bn



Derived: gross balance ÷ (L − n) − gross balance ÷ L, using CoreWeave technology equipment $33.8bn (L = 6), Nebius server and network equipment $3.1bn (L = 5) and IREN GPU hardware $2.0bn (L = 5). Gross-balance sensitivity, not a forecast of the accounting charge from a prospective useful-life revision: it ignores construction in progress (which would raise the IREN and Nebius figures as it enters service) and the age profile of the fleet. CoreWeave's $1.13bn equals about 11% of annualised Q2 2026 revenue ($2.575bn × 4).[32]

Among the companies shown, CoreWeave has the longest stated useful life and largest reported technology-equipment balance. Its contract and financing terms also create material renewal exposure; public data do not permit a complete cohort-by-cohort comparison. Its management also has the strongest evidence so far that older chips keep earning. Nebius has the newest fleet but extended its life at the start of the year, raising reported earnings at the moment of highest pricing, and is now shifting from convertibles to secured debt. IREN's five-year life and its Microsoft financing both match its contract, so its exposure sits mainly in newer three-year contracts; Hopper-generation GPUs were under 10% of its units in September 2025 (secondary).[13]

This note does not change any rating or fair value.

What to watch in Q3 results

EXHIBIT 9 Reporting calendar and the questions each report can answer

2 NOV · MON

Cipher Digital

Rent starts on the AWS and Fluidstack leases; any tenant-credit changes behind its lease book.

CONFIRMED

5 NOV · THU

IREN

Price per MW on new contracts; Horizon 3–4 delivery to Microsoft; first quarter of Microsoft financing drawdowns.

CONFIRMED

10 NOV · TUE

CoreWeave

Renewal pricing on older GPUs; any useful-life change; DDTL 5.0 amortisation from November; new financing terms.

CONFIRMED

~10 NOV · EST.

Nebius

Older-generation pricing after the 30% Q2 rise; effect of the five-year life; secured-debt terms.

NOT CONFIRMED

Sources: company date announcements for Cipher, IREN and CoreWeave;[45,46,47] Nebius date estimated by MarketBeat from last year's schedule.[48]

What would change our view?

- **H100 renewals hold up through 2027.** The first large wave of H100 contracts expires in 2026–27. Renewals near original rates while Vera Rubin ramps would strengthen the case for durable demand and longer economic lives, without proving them. CoreWeave has said renewals came in at about 95% of original rates, but we could find this only in secondary reporting.[16]
- **Rubin supply arrives faster than demand.** If older-generation prices return to their 2023–25 trend once Rubin is in volume, three-year contracts on five- and six-year lives could weaken support for remaining book value and increase collateral or refinancing pressure on tenor-mismatched loans.

- **Policies move.** Amazon shortened part of its server fleet from six to five years in 2025, citing the pace of AI development.[31] A similar change at a neocloud would warrant reassessing replacement and renewal assumptions; a further extension would signal confidence in renewals.
- **Sensitivity to model assumptions.** A longer physical life, lower power costs or a lower discount rate all raise the break-even decline. Each break-even rate in Exhibit 4 depends most on the eight-year physical life, and the loan-to-value path in Exhibit 6 on resale values tracking rental prices.

Sources and evidence notes

Company statements are attributed disclosures, not independent verification. Sources marked "secondary" are trade press, aggregators or third-party summaries; bond and CDS levels come from secondary reports of Bloomberg and ICE data and are dated. Rental indices use different methods; we keep each series on one basis and use others only as cross-checks. Physical reliability is a separate risk from price: Meta's Llama 3 training run recorded GPU and HBM interruptions at a rate of roughly 9% of GPUs a year on new hardware (derived).[29]

1. IREN Ltd, FY26 Form 10-K, accounting policies (useful lives)
2. IREN Ltd, FY26 Form 10-K, property, plant and equipment and impairment note
3. CoreWeave, FY2025 Form 10-K, property and equipment useful lives and contract terms
4. CoreWeave, Q2 2026 Form 10-Q, remaining performance obligations
5. CoreWeave, Q2 2026 Form 10-Q, property and equipment
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9. IREN, “IREN Secures $9.7bn AI Cloud Contract with Microsoft”, 3 Nov 2025
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12. CoreWeave, “CoreWeave Continues to Contract New Compute Capacity at Higher Prices”, 17 Sep 2026
13. TipRanks / The Fly, IREN GPU fleet composition, 22 Sep 2025 (secondary)
14. LetsDataScience, CoreWeave A100 contract through 2029, Aug 2026 (secondary, citing call transcript)
15. 24/7 Wall St, CoreWeave CEO on booking 2020-era GPUs through 2029, 12 Aug 2026 (secondary)
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18. NVIDIA, “NVIDIA Hopper in Full Production”, 20 Sep 2022
19. NVIDIA, H200 announcement, 13 Nov 2023
20. NVIDIA, Blackwell Ultra announcement, 18 Mar 2025
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22. Jon Peddie Research, NVIDIA GTC 2026 keynote, 17 Mar 2026 (secondary)
23. NVIDIA, Rubin platform announcement, 5 Jan 2026

24. SemiAnalysis, GPU rental price index
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30. Motley Fool, CoreWeave useful-life history, 11 Nov 2025 (secondary)
31. Hudson Labs, Amazon server depreciation (secondary, from 10-K/10-Q)
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35. Edward Conard macro roundup, CoreWeave CDS and notes, 15 Oct 2026 (secondary, citing Bloomberg/ICE)
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38. CoreWeave, Q2 2026 Form 10-Q, debt note
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40. The Energy Mag, CoreWeave $2.6bn loan prices wider, 11 Aug 2026 (secondary, citing Bloomberg)
41. Dilikoglu Research, CoreWeave coverage page
42. IREN Ltd, FY26 Form 10-K, debt note
43. Nebius Group, Q2 2026 results release, 12 Aug 2026
44. TIKR, Nebius secures $3.5bn from Citi, Oct 2026 (secondary)
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