vedanta transforming for good | HINDUSTAN ZINC Zinc & Silver of India

Accelerating Momentum Embracing Opportunities...

...With Metals That Matter

COMPANY OVERVIEW

Hindustan Zinc Limited was established in India on January 10, 1966. The company operates in the exploration, extraction, and processing of minerals and the manufacturing of metals and alloys. HZL is publicly listed on both the National Stock Exchange (NSE) and the Bombay Stock Exchange (BSE).
The primary ownership of HZL rests with Vedanta Limited (the immediate holding company), which held a 63.42% stake as of March 31, 2025. The Government of India maintains a substantial minority holding, providing a critical level of external governance oversight. This ownership structure means HZL is part of the larger Vedanta Group, which influences its strategic and financial decision-making, particularly concerning capital distribution and related-party transactions.

The Pivotal Disinvestment and Modernization (2002–2003):
The most significant transformation in HZL's history occurred in the early 2000s as part of the Government of India’s (GOI) disinvestment program for loss-making PSUs.
2002 Acquisition: In April 2002, the GOI sold a 26% stake, including management control, to Sterlite Opportunities and Ventures Limited (SOVL), part of the Vedanta Group. SOVL subsequently acquired an additional 20% stake from the public through an open offer, increasing its holding to 46%.

COMPANY OVERVIEW

2003 Consolidation: In August 2003, SOVL exercised a call option to acquire a further 18.92% stake from the GOI, boosting the Vedanta Group's total ownership to 64.92%. The GOI's stake was reduced to 29.54%. This acquisition, recognized as one of India's most successful disinvestments, injected crucial capital, advanced technology, and global expertise into HZL, initiating a period of rapid expansion and modernization. Post-privatization, the company reported an impressive 113% growth in profits within a year without any retrenchment.

This strategic shift led by the new management transformed HZL from a government entity with modest output into the world's largest integrated zinc producer. The company drastically boosted its silver recovery through targeted investments in refining technologies, resulting in silver production growing 15-fold over time and shifting silver from a co-product into a key revenue driver. Today, HZL operates in the exploration, extraction, and processing of minerals and the manufacturing of metals and alloys. It is publicly listed on both the National Stock Exchange (NSE) and the Bombay Stock Exchange (BSE). The primary ownership rests with Vedanta Limited (the immediate holding company), which held a 63.42% stake as of March 31, 2025. The Government of India maintains a substantial minority holding.

Market Cap: ₹ 2,02,393 Cr.
Stock P/E: 19.9
ROCE: 60.7 %
Mar Cap: ₹ 2,02,393 Cr.
Low price: ₹ 378
Face value: ₹ 2.00
PAT Qtr: ₹ 2,204 Cr.
Return on assets: 30.2 %
Debt: ₹ 10,964 Cr.

Current Price: ₹ 479
Book Value: ₹ 31.4
ROE: 72.4 %
Current Price: ₹ 479
ROCE: 60.7 %
Sales: ₹ 33,562 Cr.
Price to Earning: 19.9
Debt to equity: 0.82
Promoter holding: 61.8 %

Business Model

- HZL’s business model is fundamentally designed around vertical integration, encompassing the entire lifecycle from mineral exploration to refined product sales. This integrated structure grants HZL a significant cost advantage by streamlining supply chain management, minimizing logistical expenses, and ensuring a stable, captive supply of raw materials and power.
- The company's operations are divided into several synergistic phases:
- Exploration and Mining: HZL currently manages five primary zinc-lead mines located in Rajasthan, including Rampura Agucha, which hosts the world’s largest underground zinc mining operation.[1, 1] Strategic importance is placed on continually enhancing Ore Reserves and Mineral Resources (R&R). By FY 2025, the total metal R&R had successfully crossed 13 Mnt, reflecting a three-fold growth over FY 2020 levels, securing a long-term mine life exceeding 25 years at current production rates.
- Beneficiation, Smelting, and Refining: Raw ore is processed across three major smelting locations—Chanderiya, Dariba, and Debari—all strategically located near the mines in Rajasthan.[1, 1] The capacity summary details 913,000 TPA for zinc smelting, 210,000 TPA for lead smelting, and an 800 TPA capacity for silver refining. These facilities employ both hydrometallurgical and pyrometallurgical techniques to optimize extraction and processing efficiency.
- Captive Power Generation: Operational stability is reinforced by the company's energy self-sufficiency. HZL utilizes 536 MW of captive thermal power, complemented by a substantial renewable energy portfolio including 273.5 MW of wind power, 40.7 MW of solar power, and Waste Heat Recovery Boilers (WHRB).
- The high degree of operational integration and massive scale acts as a structural defense mechanism against the inherent cyclicality of the mining industry. This model ensures that HZL’s operating costs remain substantially lower than those of non-integrated global peers, thereby insulating its cash flows and enabling it to maintain profitability even during periods of LME commodity price weakness.

Product Portfolio

- Major Products and Applications
- HZL produces a diversified portfolio of refined metals and high-value co-products :
- Refined Zinc Metal: This is the flagship product, essential for infrastructure. It is primarily used for galvanizing steel applied in roadways, bridges, construction, and the automotive sector. Zinc is also increasingly strategic for enabling clean energy infrastructure, such as solar panels and wind turbines, by preventing corrosion.[1, 1]
- Refined Lead Metal: Used heavily in the battery segment, particularly for lead-acid batteries, as well as in construction and defense applications.
- Refined Silver: Positioned not just as a precious metal but as a critical strategic "green metal" due to its unparalleled conductivity, making it vital for photovoltaic cells in the solar energy industry and various high-tech electronic systems.[1, 1] HZL is globally recognized as one of the top five silver producers.
- Value-Added Products (VAPs): These include Continuous Galvanizing Grade (CGG) zinc alloys and die-cast alloys. Critically, the company launched EcoZen, Asia's first low-carbon zinc, which boasts a carbon footprint approximately 75% lower than the global industry average.

Product/Segment	Revenue (₹ Crore)	% of Total
Refined Zinc Metal	24,180	71%
Refined Lead Metal	4,388	13%
Refined Silver	3,913	11%
Other/By-products	1,617	5%
Total Revenue	34,098	100%

Future Expansion

- HZL's strategic trajectory is defined by a formidable growth commitment backed by a massive capital expenditure program and focused diversification beyond its core zinc business.
- *Strategic Vision: 2x Capacity Growth*
- The company has explicitly committed to achieving a 2x capacity growth to capitalize on the robust domestic demand outlook, particularly driven by India’s projected doubling of steel production capacity to 300 Mtpa by 2030. The Board has approved a first phase of this expansion with an overall project cost of approximately
- ₹12,000 crores over a planned 36-month timeline.
- This capital injection will target core operational expansion:
- Refined Metal Capacity: Proposed expansion by 250 kt, increasing total capacity from 1,129 kt to 1,379 kt.
- Mined Metal Capacity: Proposed expansion by 330 kt, increasing total capacity from 1,180 kt to 1,510 kt across all mines.
- To support value-chain integration, HZL has ongoing projects, including the commissioning of a 160 Ktpa Roaster at Debari (mid-2Q FY 2026 expected) and the Hot Acid Leaching Plant (4Q FY 2026 expected) aimed at recovering 27 MTPA silver and 6 ktpa lead from smelting waste. Downstream diversification is marked by the construction of the 510 Ktpa Fertilizer Plant (DAP), targeted for commissioning by 1Q FY 2027 under Hindustan Zinc Fertilisers Private Limited.
- *Multi-Metal Future and Critical Minerals*
- The company is actively transforming into a multi-metal enterprise, aligned with India's critical mineral security vision. Through its subsidiary, Hindmetal Exploration Services Private Limited (HESPL), HZL successfully secured three critical mineral blocks in FY 2025: Tungsten in Andhra Pradesh, Potash in Rajasthan, and Rare Earth Elements (REEs) in Uttar Pradesh.
- This foray into strategic minerals is significant as it diversifies revenue sources away from cyclical base metals and positions HZL in high-potential future industries such as Electric Vehicles (EVs) and clean technologies, securing long-term strategic relevance.

ESG Goals

- HZL has integrated ambitious ESG targets into its growth strategy, recognizing that sustainability efforts are increasingly critical for market access and cost control.
- Climate Change and Energy: The goal is to achieve Net Zero emissions by 2050 or sooner. The company is implementing strategies like the shift toward a 530 MW Renewable Energy Round the Clock (RTC) delivery agreement. This structural shift not only contributes to the goal of 0.5 mn tCO_2e GHG emission savings by 2025 but, as established earlier, also functions as a powerful tool for cost insulation against volatile fossil fuels. The launch of EcoZen low-carbon zinc enhances HZL's ability to demand a "green premium" in global markets.
- Water and Circularity: HZL aims to become 5x water positive and achieve a 25% reduction in freshwater usage by 2025. Currently certified as 2.41x water positive , investments continue in Zero Liquid Discharge (ZLD) plants and transitioning from wet tailing to dry tailing disposal. The company also targets a
- 3x increase in gainful utilization of smelting waste by 2025 , having reached 605 kt of waste utilization in FY 2025. Projects like the Hot Acid Leaching Plant demonstrate an effort to recover valuable silver and lead from waste, turning environmental liabilities into profitable by-products.

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FUNDAMENTAL ANALYSIS

Report Date	Mar-21	Mar-22	Mar-23	Mar-24	Mar-25
Sales	22629	29440	34098	28934	33969
Raw Material Cost					
Change in Inventory	-239	278	143	156	62
Power and Fuel	1732	2452	3711	2843	2696
Other Mfr. Exp	4766	5793	6825	6838	7373
Employee Cost	761	718	845	828	880
Selling and admin	3122	4114	4815	4416	5175
Other Expenses	337	415	524	484	568
Other Income	1819	1082	1373	1083	870
Depreciation	2531	2917	3264	3466	3634
Interest	386	290	333	955	1111
Profit before tax	10574	14101	15297	10343	13464
Tax	2594	4471	4777	2556	3185
Net profit	7980	9630	10520	7787	10279
Dividend Amount	8999.25	7605	31898.75	5492.5	12252.5
Effective Tax Rate	25%	32%	31%	25%	24%
EBITDA	13,491.00	17,308.00	18,894.00	14,764.00	18,209.00

- **Hindustan Zinc has demonstrated consistent growth in absolute profitability metrics, albeit with revenue volatility inherent to the global commodity sector. The performance trend shows a marked dependence on LME price cycles, particularly reflected in the dip in Revenue and EBITDA in FY 2024, followed by a strong recovery in FY 2025 as metal prices improved.**
- **Revenue Performance and Cyclicality: Revenue demonstrates a clear cyclical dependence on LME metal prices, punctuated by growth due to increased production volumes. Revenue peaked in FY 2023 at ₹34,098 Crore , driven by high commodity prices. The subsequent drop in FY 2024 to ₹28,932 Crore reflects a downturn in global metal markets, despite sustained high production**

FUNDAMENTAL ANALYSIS

- The recovery in FY 2025 to ₹34,083 Crore indicates favorable price action returning to the metal markets.
- Expense Management and Cost Volatility:
- Power and Fuel: This is a major area of volatility. Costs rose dramatically from ₹2,452 Crore in FY 2022 to a peak of ₹3,711 Crore in FY 2023 , driven by global energy inflation (especially coal and diesel prices). However, in FY 2025, HZL successfully contained this cost back down to ₹2,702 Crore , largely attributable to increasing reliance on captive and renewable power, reinforcing the company's cost leadership position.
- Mining Royalty: Royalty payments are directly proportional to production volume and metal prices, showing a continuous increase from FY 2022 (₹3,667 Crore) to FY 2025 (₹4,103 Crore), reflecting high realized prices and consistent output growth.
- Depreciation and Amortization (D&A): The D&A expense has steadily increased (from ₹2,531 Crore in FY 2021 to ₹3,640 Crore in FY 2025), mirroring the significant internal capital expenditure directed towards expanding underground mining capacity and modernizing smelting complexes.

- Financial Leverage Cost (Finance Costs): Finance costs exhibited high stability from FY 2021 to FY 2023, staying below ₹400 Crore. However, this line item saw a massive surge, more than doubling to ₹955 Crore in FY 2024 and further increasing to ₹1,095 Crore in FY 2025. This escalating trend directly results from the aggressive, debt-funded capital structure decisions discussed in Section 5.1 and 8.2, reflecting the need to fund both expansion and substantial dividend payouts through external borrowings.
- 4. Profitability Trend (PBT and PAT): PBT and PAT track the volatility of EBITDA, highlighting HZL's high operational leverage. Despite the challenges in FY 2024, the PBT margin remained structurally high (₹10,307 Crore PBT on ₹30,006 Crore Total Income) , confirming the underlying operational resilience. The sharp 32.5% recovery in PBT in FY 2025 (to ₹13,553 Crore) underscores the management's effectiveness in controlling variable costs (like power) and leveraging higher metal prices, resulting in a robust net profit of ₹10,353 Crore for FY 2025.

FUNDAMENTAL ANALYSIS

The engine of HZL's growth is its unwavering commitment to increasing production volumes and improving cost efficiency. Mined metal production has grown consistently, reaching a record 1,095 kt in FY 2025, complementing the increase in refined metal production to 1,052 kt. Silver production has also seen steady gains, reaching approximately 800 MT in FY 2025.

The Zinc Cost of Production (COP) excluding royalty achieved $1,052 per metric tonne in FY 2025, marking the lowest level in four years and securing HZL's position in the first decile of the global zinc cost curve. This achievement is particularly notable considering that in FY 2023, COP peaked at $1,257/MT due to global commodity inflation, specifically high coal and diesel prices.
The subsequent success in driving down costs to the FY 2025 level is attributed to active cost insulation strategies, primarily through the increasing utilization of renewable energy (RE) and structural digitalization initiatives. By increasing the adoption of RE, including the agreement for 530 MW of round-the-clock power, HZL is building a structural hedge against external power cost volatility, making its low cost of production more resilient and predictable for the long term. Furthermore, the high production rate of silver, recovered as a profitable by-product, acts as a significant co-product credit, further lowering the effective cost base of the core zinc business.

Operational Metric	FY 2022	FY 2023	FY 2024	FY 2025
Mined Metal Prod. (kt)	1,017	1,062	1,079	1,095
Refined Metal Prod. (kt)	967	1,032	1,033	1,052
Silver Production (MT)	647	714	746	c. 800 (Est.)
Zinc COP (US$/MT, ex-royalty)	1,122	1,257	1,117	1,052

RATIO ANALYSIS

The ratio analysis confirms HZL's high margins and high returns but also flags a distinct shift in capital structure reflecting recent financial management decisions.
HZL Key Financial Ratios: 5-Year Trend (Consolidated)

Ratio	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Current Ratio (x)	3.12	3.94	0.97	1.56	1.38
Debt/Equity (x)	0.22	0.09	0.94	0.58	0.84
ROCE (%)	23%	35%	46%	42%	58%
ROE (%)	22%	29%	45%	55%	72%
EBITDA Margin (%)	59.60%	59.20%	55.40%	50.90%	53.90%

- **Liquidity and Solvency Analysis**
- **The liquidity profile remains healthy, but pressures are evident. The Current Ratio declined slightly from 1.56x in FY 2024 to 1.38x in FY 2025. This change is primarily a consequence of increased current liabilities and new borrowings during the year. Despite this contraction, the ratio remains above the standard 1.0 threshold, indicating adequate short-term liquidity.**
- **The most profound shift is observed in the Debt-to-Equity Ratio, which reached 0.84x (consolidated) in FY 2025. This represents a material and deliberate re-leveraging of the balance sheet, contrasting sharply with the near-zero debt position just a few years prior (0.09x in FY 2022). This increase is a direct result of two factors: new debt intake and the systematic erosion of shareholder equity due to aggressive dividend payouts. While leveraging increases financial risk, the company's strong Debt Service Coverage Ratio (DSCR) of 4.58x in FY 2025 confirms that its immense operating cash generation capacity allows it to comfortably meet its scheduled debt service obligations, mitigating immediate solvency concerns.**

RATIO ANALYSIS

Profitability and Efficiency Metrics

- HZL's Return on Equity (ROE) has soared to an extremely high 72% in FY 2025, up from 55% in FY 2024. Similarly, Return on Capital Employed (ROCE) also jumped substantially to 58%.
- These extraordinary figures demand careful interpretation. Management confirms that the spike in ROE is directly attributable to the "increase in profit after tax and lower shareholder’s equity". The mechanism at play involves significant dividend payments, which reduce retained earnings and consequently shrink the net worth (the denominator in the ROE formula). With Net Worth standing at only ₹13,326 Crore as of March 31, 2025, even stable net profits are mathematically amplified, leading to a much higher percentage return.
- Therefore, the exceptionally high ROE/ROCE figures are a reflection of capital structure management designed to extract cash efficiently (a financial engineering outcome) rather than a metric of further enhanced operational capability (which is already measured by the stable, high EBITDA margin). Investors should acknowledge the superior operational foundation underpinning the EBIT, but also recognize that the highly leveraged structure supporting these returns increases the overall volatility and balance sheet fragility.
- Working capital efficiency notably improved, as evidenced by the Trade Receivable Turnover Ratio, which increased sharply to 248.86x in FY 2025 due to rapid collections and reduction in outstanding receivables. This highly effective working capital management is crucial as it maximizes operational cash release, which is immediately utilized to fulfill the dividend commitments.

- The Net Profit Margin (NPM), reflecting post-tax, core profitability, demonstrated sensitivity to macro factors, contracting from 31% in FY 2023 to 27% in FY 2024. This downward pressure was explicitly linked by management to lower global zinc LME prices and increased finance costs, underscoring the interconnected risks between commodity cyclicality and rising debt load.
- Operational efficiency, independent of metal prices, is further indicated by asset utilization metrics. The Inventory Turnover Ratio (ITR) remained stable, operating at 9x in FY 2023 and slightly decreasing to 8x in FY 2024. This consistency shows effective management of physical inventory and cost of goods sold relative to average inventory, ensuring minimal capital blockage in non-cash assets.

SWOT Analysis

Strengths

- Global Cost Leadership: First decile position in zinc mining cost ($1,052/MT in FY25) supported by integrated operations and superior captive power mix, ensuring resilient margins.
- Irreplaceable Asset Base: World-class R&R supporting a guaranteed mine life of 25+ years, providing perpetual raw material security and scale
- Strategic Diversification: Pioneer status in low-carbon zinc ('EcoZen') and early mover advantage in critical mineral exploration (Potash, REEs, Tungsten), future-proofing revenue.

Weaknesses

- Governance and Capital Allocation: High risk due to promoter control (Vedanta), resulting in excessive, unsustainable dividend payouts (143% 5Y avg.) that compromise HZL's financial independence.
- Highly Leveraged Returns: Artificially amplified ROE (72%) and ROCE (58%) due to equity erosion from high dividend payouts, increasing the v
- Capex Funding Strain: Planned ₹12,000 Crore capex for 2x growth may rely heavily on fresh borrowings given the consistent FCF outflow, increasing debt burden.

SWOT Analysis

Opportunities

- **Domestic Infrastructure Boom: India's sustained focus on infrastructure, construction, and electric vehicles drives long-term demand for galvanized steel and specialized metal products (zinc, lead, silver).**
- **Green Transition Premium: Opportunity to monetize 'EcoZen' and other low-carbon products with premium pricing in environmentally conscious international markets.**
- **Portfolio Expansion: Deepening integration into high-margin VAPs and adjacent sectors (fertilizers) offers strong structural diversification beyond core metals**

Threats

- **Commodity Price Cyclicality: Earnings remain inherently tied to LME zinc and LBMA silver prices, introducing unavoidable macro volatility**
- **. Regulatory/ESG Risks: The mining and smelting industry faces continuous environmental scrutiny, particularly regarding tailings management, waste utilization, and emission compliance.**
- **Currency Fluctuation: Exposure to global metal pricing (USD benchmarks) coupled with local operating costs (INR) introduces currency exchange rate volatility risk.**

SWOT Analysis

Final Recommendation: HOLD

The analysis concludes that HZL is an operationally superior asset with an irreplaceable resource base and a globally competitive cost structure. The projected 2x capacity expansion and diversification into critical minerals underpin a strong fundamental growth narrative, warranting a premium valuation.

However, the persistent and systematic risk introduced by aggressive capital extraction and governance uncertainty cannot be ignored. The requirement to consistently pay out cash via dividends, even at the expense of internal funding flexibility and balance sheet strength, mandates a significant discount to the company's intrinsic operational value. The dramatic rise in the Debt/Equity ratio over recent years, driven by the combination of high dividends and the need to finance growth, shifts the risk profile from ultra-conservative to moderately leveraged.

The stock price is currently viewed as fairly reflecting the tension between excellent operational performance and compromised financial independence. Therefore, a HOLD recommendation is warranted. Investors are advised to monitor changes in the commodity price environment or observe any sustained policy shift by the parent company toward more judicious capital retention that explicitly supports the internal funding of the substantial multi-year capex plan.