vedanta
transforming for good

HINDUSTAN ZINC
Zinc & Silver of India

Accelerating Momentum Embracing Opportunities...

...With Metals That Matter

Hindustan Zinc Limited

Annual Deck FY2024-25

Index

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Corporate Overview

From Minerals to Momentum

Hindustan Zinc is driving the transition in energy, technology and critical minerals and empowering India's critical mineral self-reliance by harnessing a large, irreplaceable asset base of metals of the future

A Global Leader in the Critical Minerals and Energy Transition Space

HINDUSTAN ZINC
Zinc & Silver of India

Zinc and Silver are metals of the future, critical to powering a low-carbon, high-technology economy

Zinc

- Supports green technologies - shields solar panels and wind turbines from rust
- Zinc batteries are future of energy storage batteries -efficient, cost effective and non-toxic
- Core to steel galvanisation

Silver

- Growing application in solar energy and electronics industry
- High conductivity and reflectivity make it effective for low-carbon, high-tech sectors

A Global Leader in the Critical Minerals and Energy Transition Space

HINDUSTAN ZINC
Zinc & Silver of India

Hindustan Zinc, a Vedanta Group company, is positioned to make global energy transition possible with one of the largest and most diversified portfolios and support India's mineral self-reliance as a leader

World's largest
Integrated zinc producer

Among top 5
silver producers globally

India's only
listed & **integrated silver** company

~77%
market share in India's primary zinc market

Ranked 1st*
in the S&P Global Corporate Sustainability Assessment; 2nd consecutive year

Among lowest cost producers globally
first decile of the global zinc mines cost curve

World's largest
underground zinc mining operations at Rampura Agucha

Among the Top 5 silver-producing mines
at Sindesar Khurd

India's largest and only integrated
zinc, zinc alloy, lead and silver producer with mining & smelting facilities in Rajasthan

2nd largest zinc R&R globally
Overall R&R of 453.2 Mnt, with 25+ years of mine life

Consistently AAA rated by CRISIL Ratings Limited

First Indian Company
to join the prestigious International Council of Mining & Metals (ICMM)

*in metals and mining sector

R&R: Resource & Reserves

World-class Operating Assets: Scalable, Efficient and Sustainable

HINDUSTAN ZINC
Zinc & Silver of India

Mines

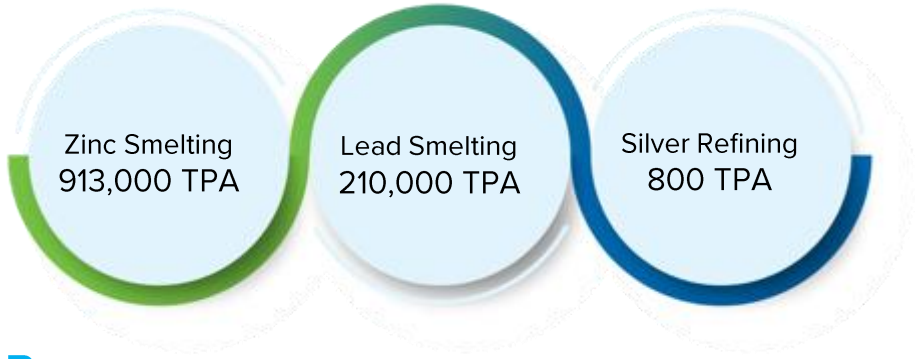
Mines	Reserve (Mnt)	Resource (Mnt)	Reserve Grade Zinc (%)	Reserve Grade Lead (%)	Silver (g/t)
Rampura Agucha Mine	46.8	20.8	10.7	1.1	37
Sindesar Khurd Mine	36.8	61.4	3.1	1.9	92
Rajpura Dariba Mine	51.3	39.0	5.3	1.8	62
Bamnia Kalan	1.5	39.6	3.6	0.5	32
Kayad Mine	1.3	6.8	5.2	0.8	13
Zawar Mines	51.5	96.4	2.6	1.2	21

Smelters

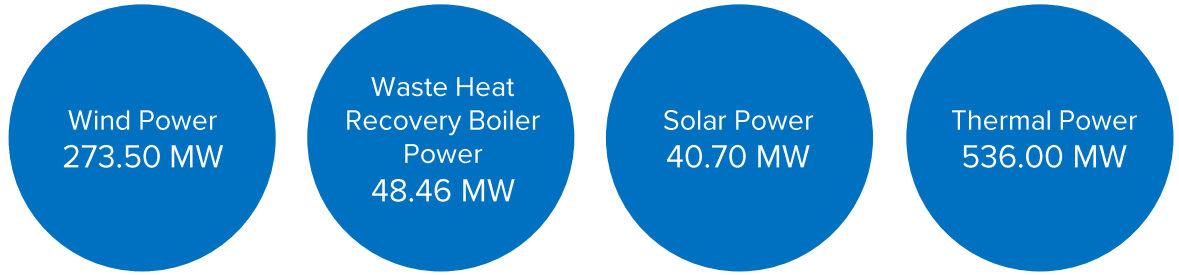
Smelter	Pyrometallurgical Zinc Smelter (TPA)	Pyrometallurgical Lead Smelter (TPA)	Hydrometallurgical Zinc Smelter (TPA)	Lead Smelter (TPA)
Chanderiya Lead-Zinc Smelter	105,000	90,000	480,000	-
Dariba Smelting Complex	-	-	240,000	120,000
Debari Zinc Smelter	-	-	88,000	-

R&R Summary

Category	Tonnage (Mnt)	Zinc (%)	Lead (%)	Silver (g/t)
Reserve	189.1	5.5	1.5	50
Mineral Resource – Measured and Indicated	128.5	4.6	1.7	56
Mineral Resource – Inferred	135.6	4.1	2.1	63

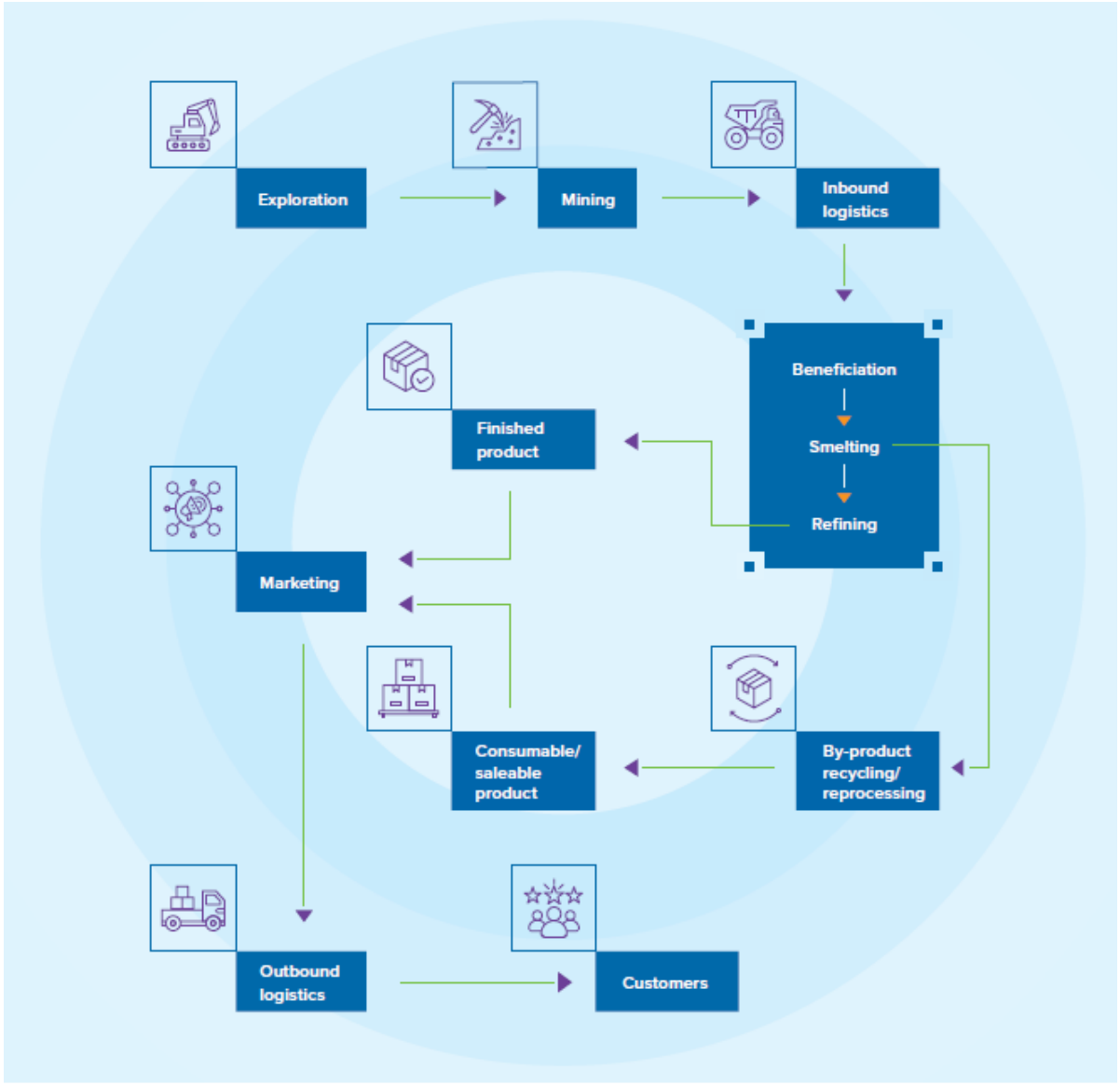


Power summary



Note: Operation of pyrometallurgical smelter in zinc-lead mode is considered for smelting capacities. Actual production may vary based on the mode of pyro operations

Value Chain Activities Driving Excellence



End-to-end presence
Synergistic integration, right from mining to marketing of products and deliveries to customers.

Efficiency I Scalability I High-quality I Value Addition I Operational Efficiencies I Innovation

Operational excellence
Ongoing investments in advanced technologies, safety and sustainability practices and capacity expansion.

Our Group Structure

61.84%
Vedanta Limited

27.92%
Government of India

10.24%
Public

SHAREHOLDING

HINDUSTAN ZINC LIMITED

SUBSIDIARIES

- HZAPL
- VZF
- ZIF
- HZFPL
- HESPL

Note: Shareholding as on 30th September 2025
Vedanta Limited and Hindustan Zinc Limited are listed entities

Investment Case

Our impact extends beyond business scale and performance to being one of the most sustainable and responsible companies. With substantial investments in transitioning to green energy, water stewardship, biodiversity conservation, and circularity, we are committed to building a more sustainable planet.

Resilient Foundation for Sustainable Growth

HINDUSTAN ZINC
Zinc & Silver of India

#1 Large scale, low cost, irreplaceable asset base with mine life of 25+ years

- World's largest integrated zinc and among top 5 silver producers; presence in 40+ countries
- 13 Mnt+ of metal reserves and 25+ years mine life; ongoing tech-led exploration
- Premiumisation (~22% VAP share) with global cost leadership (1st decile in zinc mining cost curve)

US$ 1,052 per MT
Zinc CoP

29.6 Mnt
Total Metal R&R

#2 Invested in metals relevant for energy transition

- Zinc and silver critical for green economy and supporting future technologies
- Exploring high-potential minerals: copper, lithium, nickel, cobalt, gold, critical for EVs, semiconductors, and clean technologies
- Won blocks for tungsten, potash and Rare Earth Elements

#3 Ideally positioned to capitalise on India's growth

- Domestic zinc and silver to grow significantly, with infrastructure, manufacturing and energy transition push in a vibrant economy
- Hindustan Zinc to benefit from market leadership position

~77%
Domestic primary zinc market share

250 ktpa
New integrated refined metal capacity expansion (~₹ 12,000 crore capex, including mining)

REE: Rare earth elements (REE); CoP: Cost of Production; EVs: electric vehicles; VAP: Value Added Products; R&R: Resource & Reserves

Resilient Foundation for Sustainable Growth

HINDUSTAN ZINC
Zinc & Silver of India

#4 Robust financial profile and strong balance sheet

- Consistent performance across all financial parameters, with industry-leading ~50% EBITDA margin and resilience across cycles
- AAA credit rating by CRISIL with strong cash flows and stable net debt
- Strong cash position supporting consistent dividend payouts as well as organic and inorganic growth

₹ 13,326 crore
Net worth

₹ 1,169 crore
Net Debt

₹ 10,926 crore
5-year average pre-growth capex FCF from operations

50%
3-year average EBITDA margin

#5 Investments in high IRR Projects driving strong shareholder returns

- Strategic capex in high IRR and scalable projects (fertiliser, roaster, zinc alloy and hot acid leaching plants) leveraging India's low-cost advantage
- Ensuring efficient capital allocation, process rationalisation, strong project execution and operational and cost optimisation strategies
- Sustainable shareholder returns through consistent growth

~68%
Total Shareholder Returns (Top 10 in the Nifty 200 index)

73%
RoE

58%
RoCE

#6 ESG excellence, investing in sustainable future

- ESG integrated into strategy; set ambitious ESG goals 2030 with pioneering initiatives to achieve them
- Carbon footprint reduction: expanding RE and adoption of energy-efficient & low-carbon vehicles
- Focus on circular economy, gainful waste utilisation and metal recovery
- Foraying into zinc-based batteries

2.3 million
CSR beneficiaries across 2,362 villages

~13%
Share of RE

REE: Rare earth elements (REE); CoP: Cost of Production; EVs: electric vehicles; VAP: Value Added Products; R&R: Resource & Reserves

Value Creation In FY2025

Best-ever operational, second-best financial results, and cost leadership, with disciplined capital allocation and a strong balance sheet

Nurturing Market Leadership and Accelerating Momentum

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Record production

1,095 kt
Mined metal
⬆1%

1,052 kt
Refined metal
⬆2%

687 tonnes
Silver
⬆20x in two decades

~22%
VAP share (highest-ever)

Highest reserves

>13 Mnt metal reserves
First time since UG transition
⬆1%

29.6 Mnt
Overall metal reserves and resources

2nd best financial performance

₹ 34,083 crore
Revenue
⬆18%

₹ 10,353 crore
Profit after tax
⬆ 33%

₹ 17,465 crore
EBITDA
⬆ 28%

4-year lowest zinc cost of production
US$ 1,052 per tonne
⬇6%

Sustained Acceleration in Precious Metal Performance

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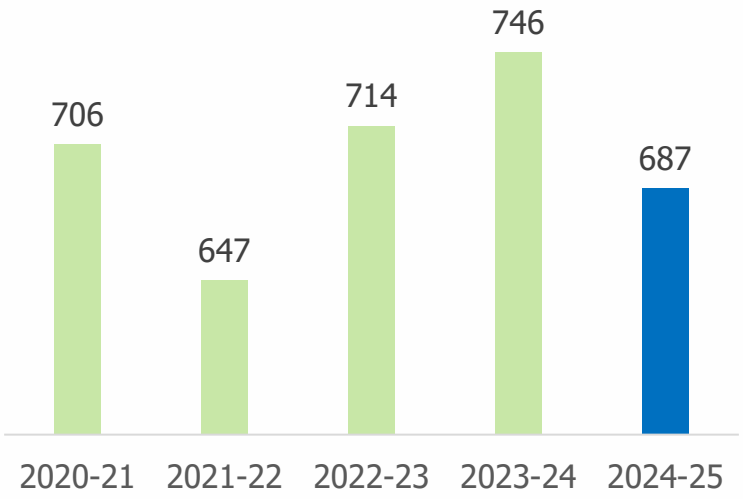
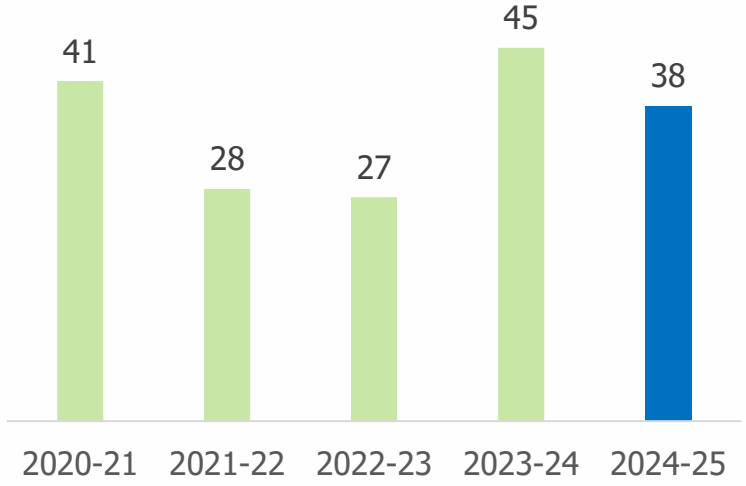
Zinc & Silver of India

Hindustan Zinc grew its silver portfolio by 20x from 35 tonnes to 687 tonnes in FY2025 to emerge as one of the top 5 silver producers globally

Refined Silver* (tonnes)



Contribution of Precious Metal in EBIT (%)



*Excludes captive consumption

Delivering 2nd Best-ever Financial Performance Consolidated Business Performance

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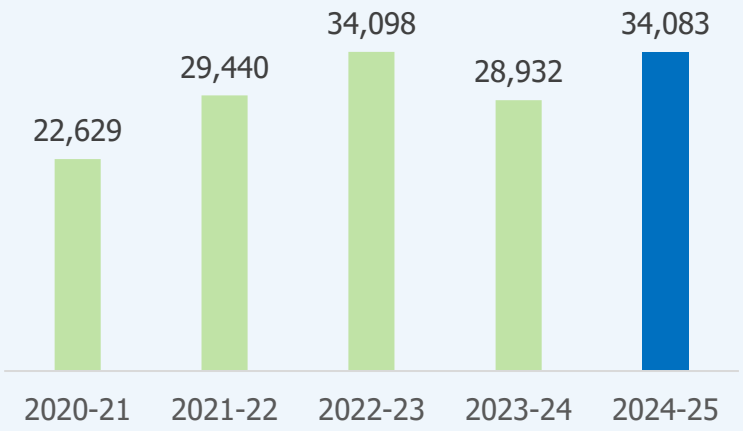
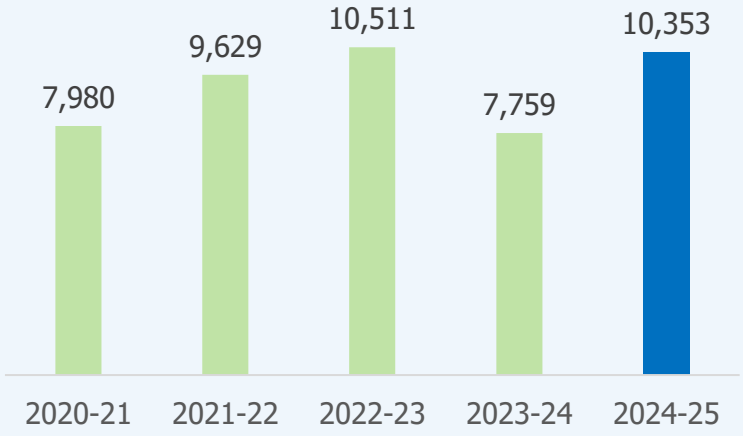
Zinc & Silver of India

Revenue from Operations (₹ crore)

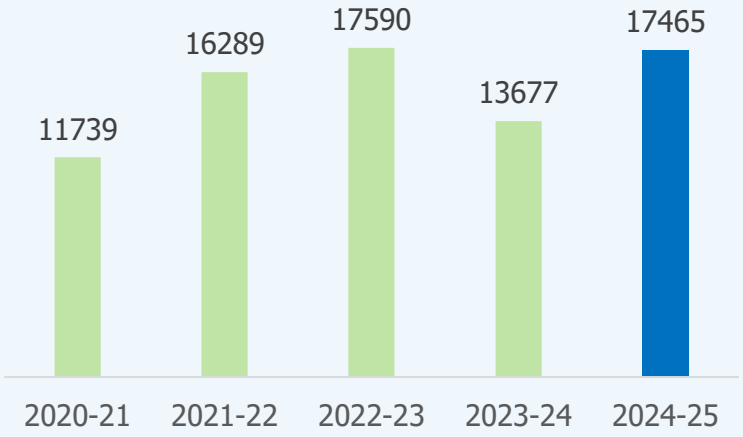


(including other operating income)

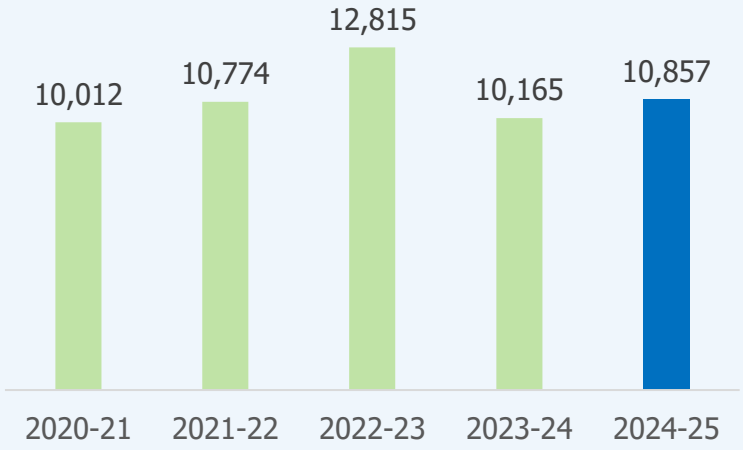
PAT (₹ crore)



EBITDA (₹ crore)



Free Cash Flow from Operations (₹ crore)



Key Performance Indicators

	FY2024	FY2025
EBITDA margin (%)	47	51
Net profit margin (%)	27	31
Return on net funds for business operations (%)	58	74
Return on net worth (%)	55	73
Return on capital employed (%)	42	58
FCF/EBITDA ratio	74	62

- Total revenue increased by 18% to ₹ 34,083 crore, driven by strong demand and firm prices of commodities, higher production volumes, and strong dollar, further supported by higher by-product sales and hedging gains
- EBITDA grew 28% and PAT grew 33% driven by tight cost control, and operating leverage
- Free cash flow stood at a robust ₹ 10,857 crore, allowing internally funded growth capex, debt reduction, and distribution of returns to shareholders

A Consistent Wealth Creator for Shareholders

Ranking among the Top 10 wealth creators in Nifty 200 (in FY2025)

₹ 1.95 lakh crore*
Market capitalisation

₹ 198.60
Total shareholder returns (per share)

~68%
Total shareholder returns

₹ 12,253 crore
Total dividend distribution

₹ 29
Dividend per share

5.6%
Dividend yield

73%
Return on Equity

58%
Return on Capital Employed

Inclusion
In the NSE's Futures & Options (F&O) segment

Inclusion
In the Nifty 100 and Nifty Next 50 Indices^

**as on March 31, 2025*
^w.e.f. September 30, 2025

A Consistent Wealth Creator for Shareholders

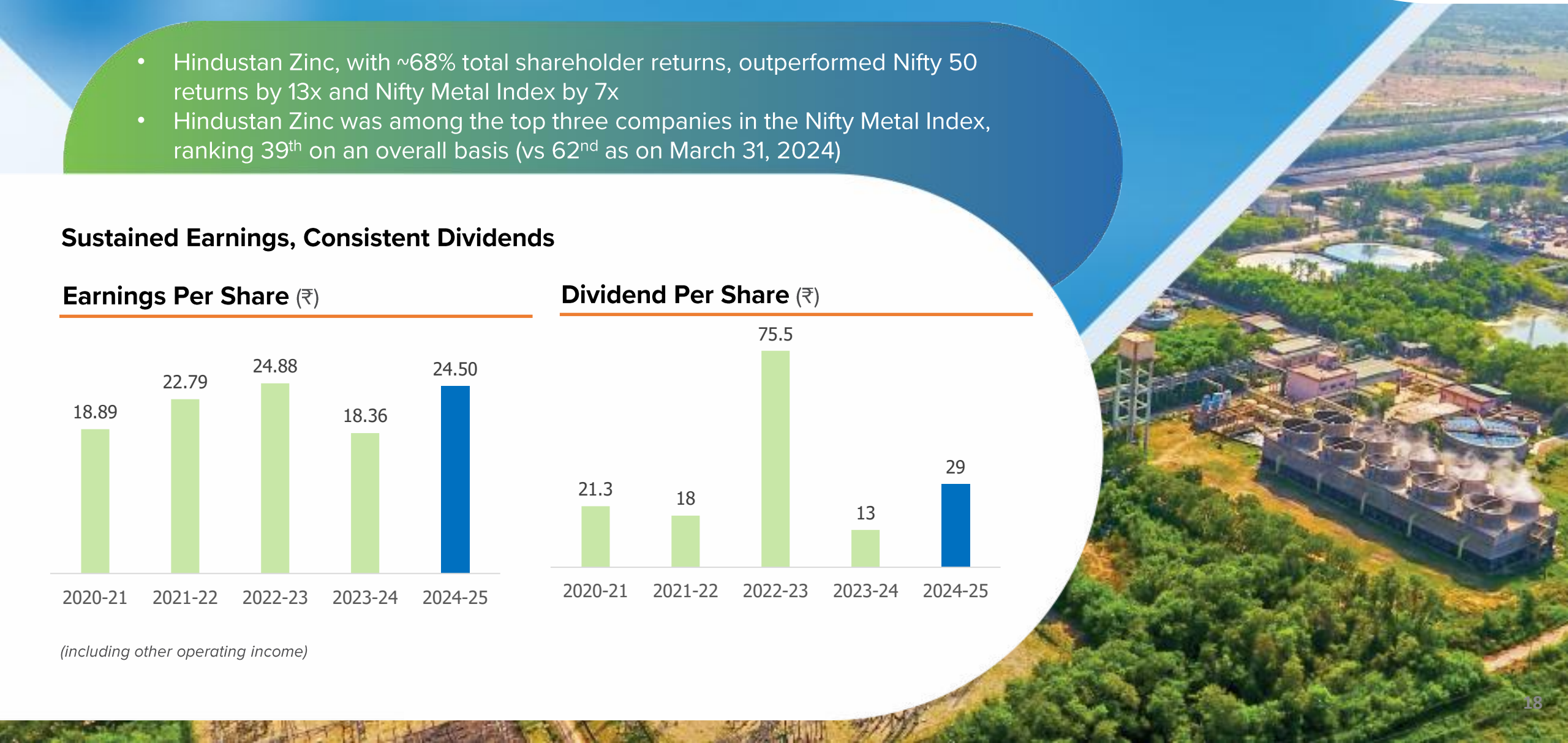
- Hindustan Zinc, with ~68% total shareholder returns, outperformed Nifty 50 returns by 13x and Nifty Metal Index by 7x
- Hindustan Zinc was among the top three companies in the Nifty Metal Index, ranking 39th on an overall basis (vs 62nd as on March 31, 2024)

Sustained Earnings, Consistent Dividends

Earnings Per Share (₹)

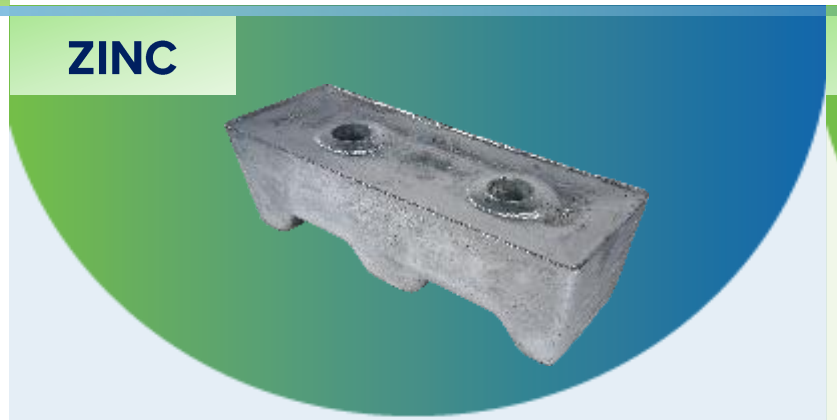
(including other operating income)

Dividend Per Share (₹)



Scaling Market-leading Position Across Portfolio

ZINC



827 kt
production volume

₹ 21,887 crore
revenue

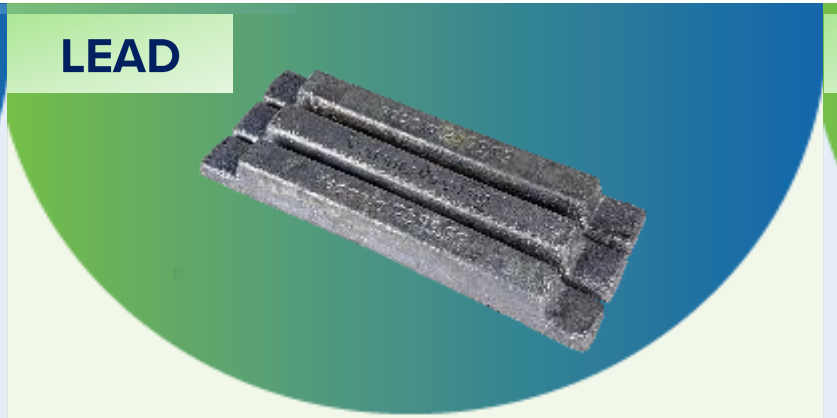
77%
Domestic primary zinc market share

179 kt
VAP sales (highest-ever)

FY2025 Business Performance

- Highest-ever domestic zinc sales of 603 kt
- Exported 224 kt to South-East Asia, the Middle East, and the RoW
- Launched green zinc, EcoZen, opening potential for green premium

LEAD



225 kt
production volume

₹ 4,227 crore
revenue

74%
Domestic primary zinc market share

FY2025 Business Performance

- 1,000 basis points increase in domestic primary market share
- Sales: 166 kt domestic & 59 kt exports

SILVER

687 MT
production volume

₹ 6,130 crore
revenue

~100%
Domestic sales

~38%
EBIT contribution

FY2025 Business Performance

- Nearly 100% domestic sales
- Plan to increase production volume by 50-60 TPA through the fumer and a lead-silver recovery plant using hot acid leaching technology

VAP: Value-Added Products; TPA: Tonne Per Annum

Strategic Actions for Sustainable Impact

STRATEGIC & GLOBAL LEADERSHIP HIGHLIGHTS

- Launched EcoZen, Asia's 1st low-carbon* 'green' zinc
- Hindmetal accredited as Category-A Exploration Agency under the QCI-NABET Scheme for the Mineral Sector
- MoU with VEXL Environ Projects to set up a pilot plant for recovering saleable products from smelter waste
- Partnered with AEsir Technologies to supply zinc for nickel-zinc battery innovation

SCALING HEALTH AND SAFETY PERFORMANCE

- 55% reduction in TRIFR vs FY2020
- Trained India's 2nd All Women Underground Mine Rescue Team at RAM
- Set up 30-member All Women Surface Rescue Safety Teams, fully equipped and trained
- Hindustan Zinc rescue teams saved 15 trapped individuals and contained a 900 kg chlorine toner leak in two critical missions

*75% lower carbon footprint versus global average

Hindmetal: Hindmetal Exploration Services Pvt Ltd; QCI: Quality Control of India; NABET: National Accreditation Board for Education and Training; MoU: Memorandum of Understanding; RAM: Rampura Agucha Mine; TRIFR: Total Recordable Injury Frequency Rate

Strategic Actions for Sustainable Impact

SUSTAINABILITY HIGHLIGHTS

- Entered RE-RTC PDA with Serentica; taking the total RE capacity to 530 MW (~70% of total power requirement) by FY2028
- Published India's 1st Climate Action Report* aligned with IFRS S2 Framework
- Launched India's 1st AI-based Digital Integrated Report with Gen-AI chatbot "Zincky", hosted on a RE powered server
- Commissioned a 4,000 KLD water treatment plant at RAM
- Rajpura Dariba certified Water Positive (Scope-1) as per the NITI Aayog framework

COMMUNITY DEVELOPMENT HIGHLIGHTS

- Spent ₹ 273.45 crore in FY2025; more than the mandated 2%
- Benefited ~2.3 million lives across 2,362 villages with ~50 projects spanning education, sustainable livelihood, community asset creation, environment and safety, health, water and sanitation, sports and culture, women empowerment and others
- Completed 1,969 Nand Ghars in Rajasthan (group total crossed 8,000)
- Benefited 132 villages with 4.74 lakh people through community assets upgradation

*in metals and mining sector

IFRS: International Financial Reporting Standards; RE-RTC PDA: Renewable Energy round-the-clock power delivery agreement; RAM: Rampura Agucha Mine; Gen AI: Generative Artificial Intelligence; KLD: Kilo Litre per Day

Awards & Recognitions Across Domains

HINDUSTAN ZINC
Zinc & Silver of India

SUSTAINABILITY

- TIME's Top 500 Sustainable Companies 2024
- KPMG India ESG Excellence Award 2024
- ICC Sustainability Excellence Award[3]

SPORTS & COMMUNITY

- Zinc Football Academy: "Sports Academy of the Year" (Sports India Awards 2024) & 3-star rating (AIFF 2024-25)
- CSR Impact Awards 2024 for Water, Sanitation, and Sports promotion

Global & national recognitions

- #1 in S&P Global CSA 2024[1] and featured in Top 1% of S&P Global Sustainability Yearbook 2025
- Hindustan Zinc IAR & Sustainability reports for 2023-24 ranked 1st globally in LACP Vision Awards[2]; IAR also won Most Creative Report Worldwide
- India's 1st Gen AI for Annual Reports "Zincky" bagged Platinum at AVA Digital Awards 2025

PEOPLE & SAFETY

- Employees' Choice Workplace at W.E. Matter Global Awards 2024
- India's 1st All-Women Mine Rescue Team secured 2nd place at 13th International Mine Rescue Competition (Colombia)

GOVERNANCE

- Best Finance Team & Working Capital Plan of the Year – 12th Future of Finance Summit & Awards 2024 (UBS Forums)
- Great Indian Audit and Risk Team[4] at the 4th Great Indian Audit Leaders' Summit & Awards 2025
- 'Best Risk Practice'[5] and 'Masters of Risk in ESG'[5], at the India Risk Management Awards by CNBC TV18

[1]*Metals & Mining sector*
[2]Materials category
[3]*Manufacturing sector*
[4]*Manufacturing & industrial sector*
[5]*Large cap category*

CSA – Corporate Sustainability Assessment; IAR – Integrated Annual Report; LACP – League of American Communications Professionals; Gen AI – Generative Artificial Intelligence; AVA – Association of Visual Arts; ESG – Environmental, Social and Governance; ICC – Indian Chamber of Commerce; TQM – Total Quality Management; OHS – Occupational Health and Safety; CPP – Captive Power Plant; AIFF – All India Football Federation; CSR – Corporate Social Responsibility

Foundation of Long-term Value

Why to invest in HZL

Leveraging competitive strengths and strategic business enablers built over the years to deliver resilient performance and scale value creation.

Strategy to Build Momentum for Tomorrow

HINDUSTAN ZINC
Zinc & Silver of India

BOLD STEP TOWARDS VISION 2030

~₹16,000 crore
Phase-1 capex approved

Key projects

- 250 ktpa smelter at Debari with leaching & purification plant, cell house, and 160 ktpa roaster
- Concentrator expansions and debottlenecking to strengthen mining & milling
- India's first zinc tailing reprocessing plant with feed capacity of 10 Mtpa and an investment of ₹3,823 crore

Post-expansion capacity

- 1,379 ktpa refined metal (↑250 ktpa)
- 1,510 ktpa mined metal (↑330 ktpa)

STRATEGY 1

Maintaining a Portfolio of Mines with Long Life

FY2025 Progress

- Enhanced total ore reserves to 189.1 Mnt (175.1 Mnt in FY2024) & metal reserves to over 13.1 Mnt (1.7 Mnt addition net of production)
- Combined R&R at 453.2 Mnt with 25+ years mine life
- Won three mineral blocks (Tungsten, Potash and Rare Earth Elements)

Way Forward

FY2026
Add 10 Mnt mineral resource, upgrade 20 Mnt resource to ore reserves, participate in new block auctions and diversify to new critical minerals, and deploy AI/ML to enhance exploration

FY2027
Increase R&R to 500+ Mnt with ~35 Mnt metal

FY2030
Attain R&R metal of ~40 Mnt

Mnt – Million tonnes; R&R – Resources & Reserves; AI/ML – Artificial Intelligence / Machine Learning; UG – Underground; ktpa – Kilo tonnes per annum; Mtpa – Million tonnes per annum; MT – Metric tonnes; CoP – Cost of Production; RE – Renewable Energy

Strategy to Build Momentum for Tomorrow

HINDUSTAN ZINC
Zinc & Silver of India

STRATEGY 2

Expansion of Capacities

FY2025 Progress

- Highest-ever mined and refined metal production
- Projects ongoing to expand mines output
- Conceptualised 2x growth strategy, studies underway for expansion in zinc, lead and silver, and tailings recycling

Way Forward

FY2026

Ramp UG mines to 1.2 Mtpa and smelting capacity to 1.129 Mtpa; commission Roaster at Debari and debottlenecking at smelters; Initiate Phase 1 of 2x growth strategy

FY2027

UG mines to 1.25 Mtpa; commission 510 ktpa fertiliser plant at Chanderiya

FY2030

UG mines and smelting to 2 Mtpa and silver to 1,500 MT; commission 10 Mtpa tailings reprocessing plant

STRATEGY 3

Strengthening Cost Leadership

FY2025 Progress

- ~US$ 65/MT cost savings through increased RE share to 13%, increased domestic coal usage, improved recoveries, alternative fuel innovations, and digital improvements
- 4-year lowest zinc CoP of US$ 1,052/MT

Way Forward

FY2026

Maintain Zinc CoP at US$ 1,025-1,050/MT by enhancing RE share to 30% and Indian coal blending to >40%, enhancing volumes and driving productivity gains through digitalisation and automation

FY2027

RE share at 55% and zinc CoP of US$ 1,000/MT

FY2030

RE share at 70% and zinc CoP below US$ 1,000/MT

Mnt – Million tonnes; R&R – Resources & Reserves; AI/ML – Artificial Intelligence / Machine Learning; UG – Underground; ktpa – Kilo tonnes per annum; Mtpa – Million tonnes per annum; MT – Metric tonnes; CoP – Cost of Production; RE – Renewable Energy

Strategy to Build Momentum for Tomorrow

HINDUSTAN ZINC
Zinc & Silver of India

STRATEGY 4

Building a Diversified Product Portfolio

FY2025 Progress

- Launched Asia's first low-carbon green zinc, EcoZen with carbon footprint of < 1 tCO_2e per tonne zinc produced (about 75% lower versus global average)
- Highest-ever annual VAP sale of 179 kt; VAP share at 22%
- Conducted Zinc Aluminium Magnesium Alloy (ZAM) trials and partnered with AEsir Technologies for Nickel Zinc battery innovation

Way Forward

FY2026

Fully ramp 30 ktpa alloy plant and commission zinc dust plant, raise VAP share to 27%, and develop new products like ZAM, toning alloys, and special CGG products

FY2027

Increase VAP to 35%, and commission DAP/NPK Fertiliser plant, ZAM line, and new CGG and Jumbo SHG lines

FY2030

Raise VAP to 50% and set up a zinc-based battery gigafactory

STRATEGY 5

Progressing towards a sustainable future

FY2025 Progress

- 39 kt jarosite reduction via Fumer plant; 445 kt jarosite and jarofix reused in cement, roads and rail infrastructure
- 15.5 kt biomass used for green power generation
- Deployed 180 LNG trucks and installed three EV charging stations for inter-unit logistics
- 4,000 KLD water treatment plant at Rampura Agucha
- Finalised biodiversity management plan with IUCN

Way Forward

FY2026

Commission TGT plant at Chanderiya, expand ETP/ZLD capacity, cap jarofix yard permanently

FY2027

Additional TGT plants at Chanderiya and Debari and transition to dry tailings disposal at RAM

FY2030

Reduce emissions (Scope 1 & 2 by 50% and Scope 3 by 25%), commission 10 Mtpa tailings reprocessing plant, and achieve Sustainability Goals 2030

tCO_2e: tonnes of carbon dioxide equivalent; kt: kilo tonnes; VAP: value-added products; ktpa: kilo tonnes per annum; DAP/NPK: diammonium phosphate/nitro-phosphate; LNG: liquefied natural gas; EV: electric vehicle; KLD: kilo litre per day; IUCN: International Union for Conservation of Nature; TGT: tail gas treatment; ETP: effluent treatment plant; ZLD: zero liquid discharge; RAM: Rampura Agucha Mine

Empowered by Integrated & Future-ready Operations

Exploration

453.2 Mnt
Total R&R

(Mineral resources and ore reserves)

- Technology and innovation edge
- 25+ years of mine life
- Focus on continuous delineation and upgradation to enhance R&R base to 500 Mnt and reserves to 200 Mnt

Building Momentum with Smarter, Scalable Exploration

Scaling exploration outcomes and long-term growth

Dedicated leadership – HESPL

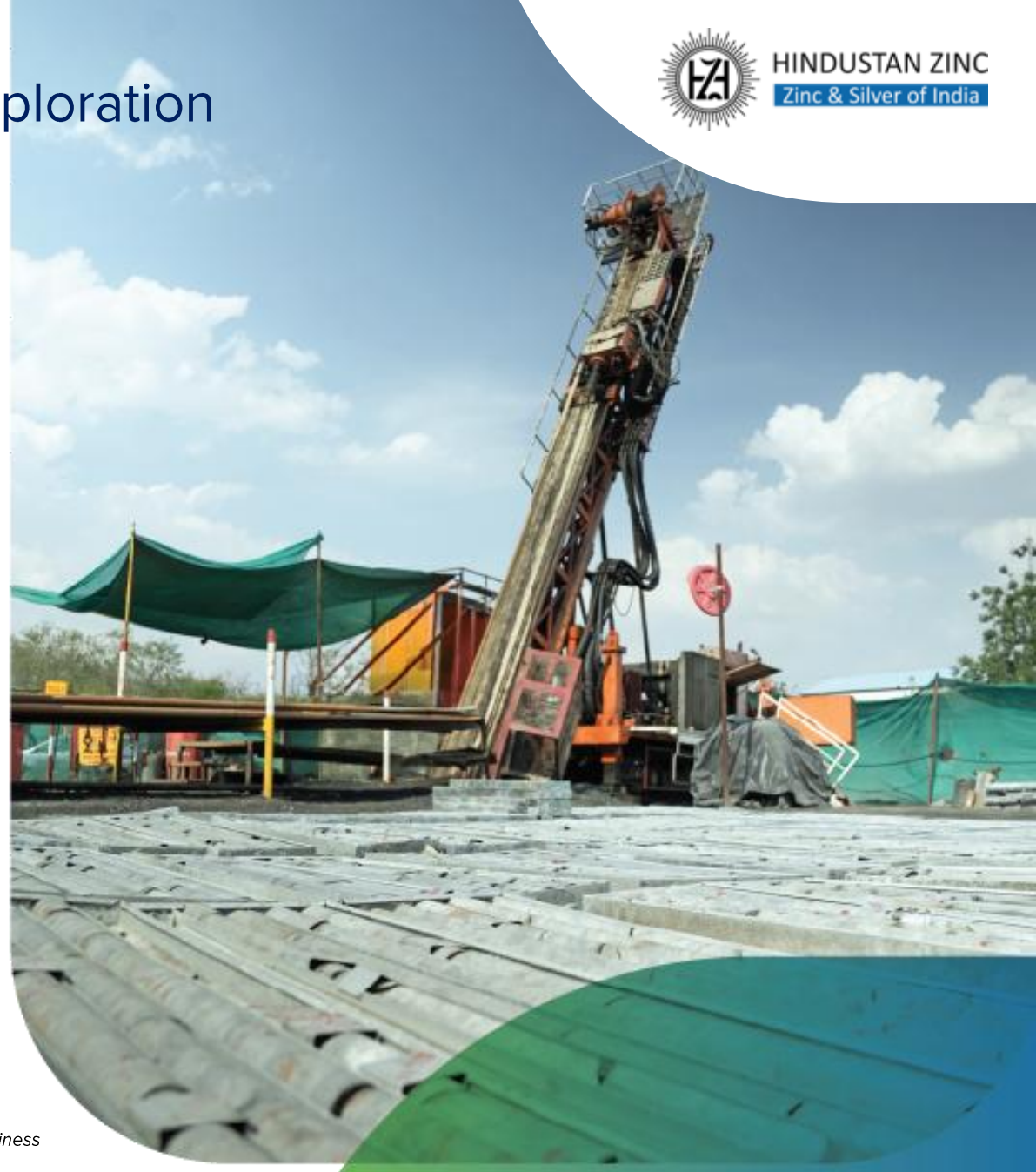
- GoI-recognised Category-A Exploration Agency and QCI-NABET accreditation
- Aligned with India's minerals exploration program

Skilled and dynamic teams

- Team of geologists, geophysicists & data analysts
- Expertise in program design & field execution
- Multi-commodity focus

Next-gen technologies exploration edge

- Drone surveys with LiDAR, hyperspectral imaging and remote sensing
- AI/ML targeting, cloud-based GIS & 3D modelling
- Next-gen drilling using high-speed rigs, BHEM, ATV/OTV logging
- Real-time BI dashboards & QA/QC assurance



GoI: Government of India; QCI–NABET: Quality Council of India – National Accreditation Board for Education and Training; LiDAR: Light Detection and Ranging; AI/ML: Artificial Intelligence / Machine Learning; GIS: Geographic Information System; BHEM: Borehole Electromagnetic; ATV: Acoustic Televiewer; OTV: Optical Televiewer; BI: Business Intelligence; QA/QC: Quality Assurance / Quality Control

Building Momentum with Smarter, Scalable Exploration

Dedicated leadership – HESPL

- Shallow-angle (<45°) drilling at Zawar
- Ex-veteran-led upskilling, focused on deepening understanding of structural controls and better target identification
- Developed exploration roadmap; prospect identification and strategic hole drilling
- Completed reconnaissance traverses; pinpointing emerging targets and enhancing structural understanding
- Advanced software: Datamine, Leapfrog, QA/QC workflows

471.7 km
Total drilling (FY2025)

83.1%
Brownfield success rate

13.1 Mnt
Metal reserves milestone

453.2 Mnt
Total R&R
(189.1 Mnt Ore Reserves &
264.1 Mnt Mineral Resources)

QA/QC: Quality Assurance / Quality Control

Building Momentum with Smarter, Scalable Exploration

HINDUSTAN ZINC
Zinc & Silver of India

Ore Reserves and Mineral Resources (R&R), as of March 31, 2025

(based on Annual R&R audit by SRK (UK))

Our Assets	Total Reserves					Measured & Indicated Resources					Inferred Resources				
	Tonnage (Mnt)	Zn%	Pb%	Ag (g/t)	Metal (Mnt)	Tonnage (Mnt)	Zn%	Pb%	Ag (g/t)	Metal (Mnt)	Tonnage (Mnt)	Zn%	Pb%	Ag (g/t)	Metal (Mnt)
Rampura Agucha	46.8	10.7	1.1	37	5.5	10.7	14.2	2.3	66	1.8	10.1	0.1	5.5	147	0.6
Sindesar Khurd	36.8	3.1	1.9	92	1.8	53.4	3.6	1.7	80	2.8	8.1	3.1	1.4	55	0.4
Rajpura Dariba	51.3	5.3	1.8	62	3.6	3.9	6.4	1.8	67	0.3	35.0	6.3	1.8	94	2.8
Zawar	51.5	2.6	1.2	21	1.9	36.8	3.3	1.8	29	1.9	59.6	3.9	2.1	39	3.6
Kayad	1.3	5.2	0.8	13	0.1	4.2	7.6	1.0	18	0.4	2.6	5.2	0.3	9	0.1
Bamnia Kalan	1.5	3.6	0.5	32	0.1	19.4	3.2	1.1	40	0.8	20.1	3.5	1.4	46	1.0
Total	**189.1**	**5.5**	**1.5**	**50**	**13.1**	**128.5**	**4.6**	**1.7**	**56**	**8.0**	**135.6**	**4.1**	**2.1**	**63**	**8.5**

Note: Mineral resources reported exclusive of ore reserves, reported at variable cut-off grade per mineral asset

R&R: Resources & Reserves; SRK – Steenkamp, Ross and Kingston; UK – United Kingdom; Zn: Zinc; Pb: Lead; Ag: Silver

Empowered by Integrated & Future-ready Operations

Mines

16.33 Mnt
Ore Production

(Zinc & Lead)

- Eight strategically located mines in Rajasthan (Rampura Agucha, Sindesar Khurd, Rajpura Dariba, Zawar Group of Mines, and Kayad)
- World-class operations with high safety standards, operational and cost efficiencies and sustainable practices

Excellence in Mining Performance

HINDUSTAN ZINC
Zinc & Silver of India

8
UG mines across five locations

16.33 Mnt
Total ore production across mines

ISO 9001, ISO 14001, OHSAS 18001 & SA-8000
Certifications

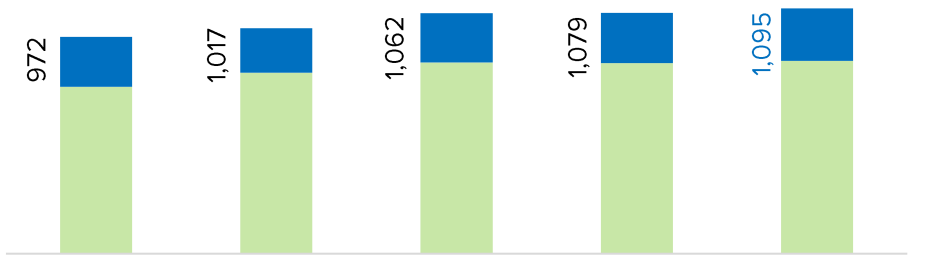
Advanced methods/ technologies deployed

- Long hole open stoping
- Tailings to backfill stope voids
- Bottom-up extraction sequence
- Tele-remote drilling
- Geotechnical engineering teams & seismic monitoring at sites

FY2025 Mine Performance Snapshot

Mines	Ore Mined		Zinc Mined Metal				Lead Mined Metal			
	FY2024	FY2025	FY2024		FY2025		FY2024		FY2025	
	('000 tonnes)	('000 tonnes)	('000 tonnes)	Grade (%)	('000 tonnes)	Grade (%)	('000 tonnes)	Grade (%)	('000 tonnes)	Grade (%)
Rampura Agucha Mine (RAM)	4,931	4,790	514	11.47	515	11.74	52	1.64	52	1.69
Sindesar Khurd Mine (SKM)	5,650	5,476	146	2.83	134	2.73	96	1.90	88	1.83
Rajpura Dariba Mine (RDM)	1,344	1,168	46	4.13	49	4.41	9	1.04	10	1.13
Zawar Mine*	4,032	4,203	115	3.11	132	3.36	64	1.75	78	2.01
Kayad Mine (KM)	564	694	33	6.13	32	5.07	4	0.82	4	0.74
Total	**16,521**	**16,331**	**855**	**5.69**	**863**	**5.76**	**224**	**1.68**	**232**	**1.74**

Mined Metal (kt)



	2020-21	2021-22	2022-23	2023-24	2024-25
Zinc (tonnes)	7,55,849	8,01,035	8,39,051	8,55,001	8,62,978
Lead (tonnes)	2,16,127	2,16,023	2,23,038	2,24,052	2,31,553

UG: Underground; Mnt – Million tonnes; ISO – International Organization for Standardization; OHSAS: Occupational Health and Safety Assessment Series; SA: Social Accountability

Excellence in Mining Performance

HINDUSTAN ZINC
Zinc & Silver of India

RAMPURA AGUCHA MINE

World's largest UG zinc producing mine located in Bhilwara in Rajasthan and having the richest zinc-lead deposit in India

UG – Underground; TPD – Tonnes Per Day; MIBC – Methyl Isobutyl Carbinol; KLD – Kilo Litres per Day; HEMM – Heavy Earth Moving Machinery; LNG – Liquefied Natural Gas

Operational and Strategic Developments

- Shaft hoisting capacity upgraded (8,000 to 10,000 tpd) through debottlenecking and digitalisation initiatives
- Capex: New dewatering stations, waste pass silo for faster mine development and phase-1 UG HEMM workshop
- Safer operations: replaced MIBC with Flotonal and completed shaft utilisation

Safety & Environmental Developments

- Commissioned 4,000 KLD water treatment plant
- Lowered carbon footprint - 50%+ concentrate transportation via LNG vehicles, reduced specific power consumption and transition from diesel to electric pumping

FY2025 Operational Milestone

4.79 Mnt
Ore Production

13.43%
Grade

568 kt
Mined Metal Production

25.0 km
Mine Development

Excellence in Mining Performance

HINDUSTAN ZINC
Zinc & Silver of India

RAJPURA DARIBA MINE

One of Hindustan Zinc's earliest ventures, operating underground via a decline, main shaft, and auxiliary shaft

Mtpa – Million tonnes per annum; NA – North Area; MVA – Mega Volt Ampere; LPDT – Low Profile Dump Truck; LMV – Light Motor Vehicle; LHD – Load Haul Dumper; OSI PI – Operational System Interface Plant Information; SCADA – Supervisory Control and Data Acquisition; AI – Artificial Intelligence

Operational and Strategic Developments

- Capex: 2.7 Mtpa dry tailing plant with pipe conveyor for safer tailing handling, paste fill plant (NA & M6 block) with communication network, and 8 MVA substation and six ventilation raises
- Enhanced fleet (LPDTs, drill rigs, LMVs, and LHD)
- Established OSI PI and SCADA connectivity for real-time plant dashboards

Safety & Environmental Developments

- Installed Sensor-based traffic management lights, AI-based safety cameras, and video remote system (for safe crown pillar stope operations)
- Audio-visual alarm sensor at crusher for vibration failure alerts
- Live blasting monitoring accessible from control room

FY2025 Operational Milestone

1.17 Mnt
Ore Production

5.55%
Grade

59 kt
Mined Metal Production

8.1 km
Mine Development

Excellence in Mining Performance

SINDESAR KHURD MINE

Operationalised in 2006 with 0.3 Mtpa, it has consistently grown, increasing capacity to 6.0 Mtpa, to become one of India's largest UG mines and the world's fourth-largest silver-producing mine

FY2025 Operational Milestone

5.48 Mnt
Ore Production

4.56%
Grade

222 kt
Mined Metal Production

23.6 km
Mine Development

Operational and Strategic Developments

- Highest-ever shaft hoisting of 3.7 Mnt and improvement in smoke hour drilling
- Installed rammer RETROKIT in LHDs, improving availability and productivity
- Ventilation upgraded to 1,950 cum/sec (+600 cum/sec)
- India's first tele-remote raise bore piloting
- Installed Mill-1 secondary crushed, zinc press filters and commissioned auxiliary ramp connection

Safety & Environmental Developments

- AI/ML-based DETECT system to detect safety violation
- Installed auto fire suppression in auxiliary fan starter panels
- Commissioned booster pump house at tailing dam

Mnt – Maintenance; cum/sec – cubic metres per second; AI/ML-based – Artificial Intelligence / Machine Learning based

Excellence in Mining Performance

HINDUSTAN ZINC
Zinc & Silver of India

KAYAD MINES

An underground mine in Ajmer, Rajasthan, commissioned in 2011, with ore production starting in FY2013

Operational and Strategic Developments

- Mined 10 kt additional metal from the mined pillars with geotechnical challenges
- Adopted innovative mining practices for a complex ore body, achieving 95% stope recovery

FY2025 Operational Milestone

0.69 Mnt
Ore Production

5.80%
Grade

35 kt
Mined Metal Production

6.1 km
Mine Development

Safety & Environmental Developments

- Deployed 24x7 women-operated UG mine control room and an all-women first aid team
- Deployed electric road sweeper; expected to cut ~6,000 $kgCO_2e$ emissions annually

Kt – Kilo tonnes; UG – Underground; kgCO2e – kilograms of carbon dioxide equivalent

Excellence in Mining Performance

ZAWAR GROUP OF MINES

Operating since the pre-digitalisation era, this group of four mines (Mochia, Balaria, Zawarmala and Baroi) has consistently set new benchmarks in innovation, operational excellence and efficiencies

FY2025 Operational Milestone

4.2 Mnt
Ore Production

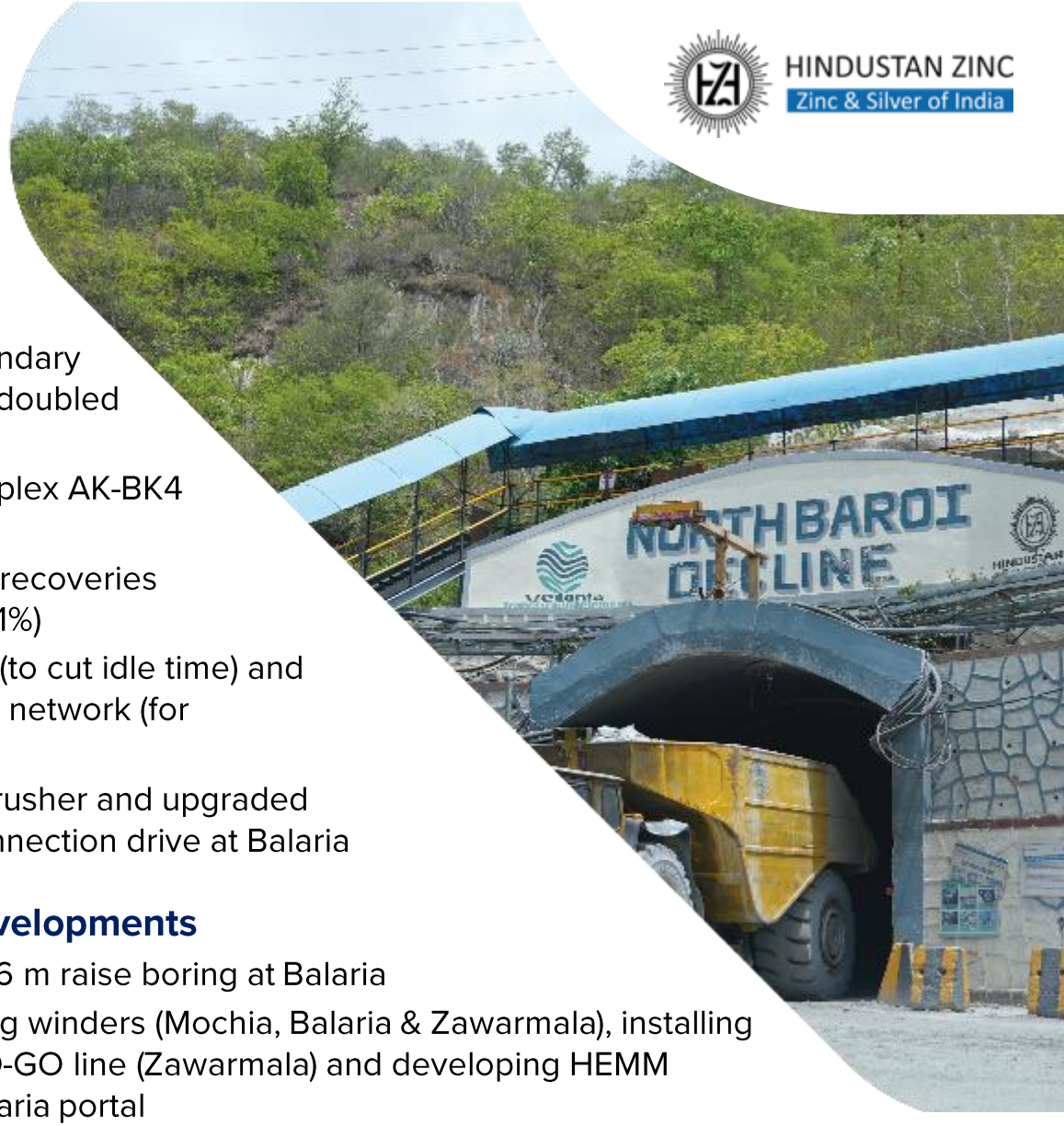
5.37%
Grade

210 kt
Mined Metal Production

33.2 km
Mine Development

Operational and Strategic Developments

- Commenced crown and secondary stopes mining at Mochia and doubled ore production at Zawarmala
- 500 kt ore production at complex AK-BK4 lens at Baroi Mine
- Record pull per blast and mill recoveries (Zinc 93%, Lead 92%, Silver 81%)
- Digital equipment monitoring (to cut idle time) and installed 18.5 km leaky feeder network (for communication) at ZM
- Installed advanced Sandvik crusher and upgraded hauling capacity with new connection drive at Balaria



Safety & Environmental Developments

- Improved ventilation with 576 m raise boring at Balaria
- Improved safety by upgrading winders (Mochia, Balaria & Zawarmala), installing skip interlock switch with NO-GO line (Zawarmala) and developing HEMM parking zones at Mochia-Balaria portal
- Reduced dust and spillage via enclosed chute and skit plate replacement at Mill 1
- Installed blind-spot cameras on Development Drill Jumbo

Kt – Kilo tonnes; ZM – Zawar Mines; HEMM – Heavy Earth Moving Machinery

Empowered by Integrated & Future-ready Operations

Smelters & Refineries

1.123 Mnt

Refined Metal Capacity

(Hydrometallurgical Zinc Smelters, Lead Smelter, Pyrometallurgical Zinc-Lead Smelter)

- Three smelters in Rajasthan (Chanderiya, Dariba and Debari)
- One Zinc-Lead-Silver metal refinery in Pantnagar, Uttarakhand
- Fully integrated with captive power plants
- Focus on continuous bottlenecking of smelters, VAP expansion and circular economy focus

Empowered by Integrated & Future-ready Operations

Captive Power Plants (CPPs)

625.16 MW

Total Captive Capacity

(Thermal, Solar, and Waste Heat Recovery Power Plants)

- Low-cost and reliable power
- Renewable energy PDA of 530 MW (i.e. 70% of total power requirement), ensuring climate resilience and insulation from commodity price fluctuation

Sustained Excellence at Smelters & CPP

HINDUSTAN ZINC
Zinc & Silver of India

FY2025 Smelter Performance

827 kt
Zinc (⬆ 1% YoY)

225 kt
Lead (⬆ 4% YoY)

687 MT
Silver (⬇ 8% YoY)

FY2025 Gross CPP Power generation

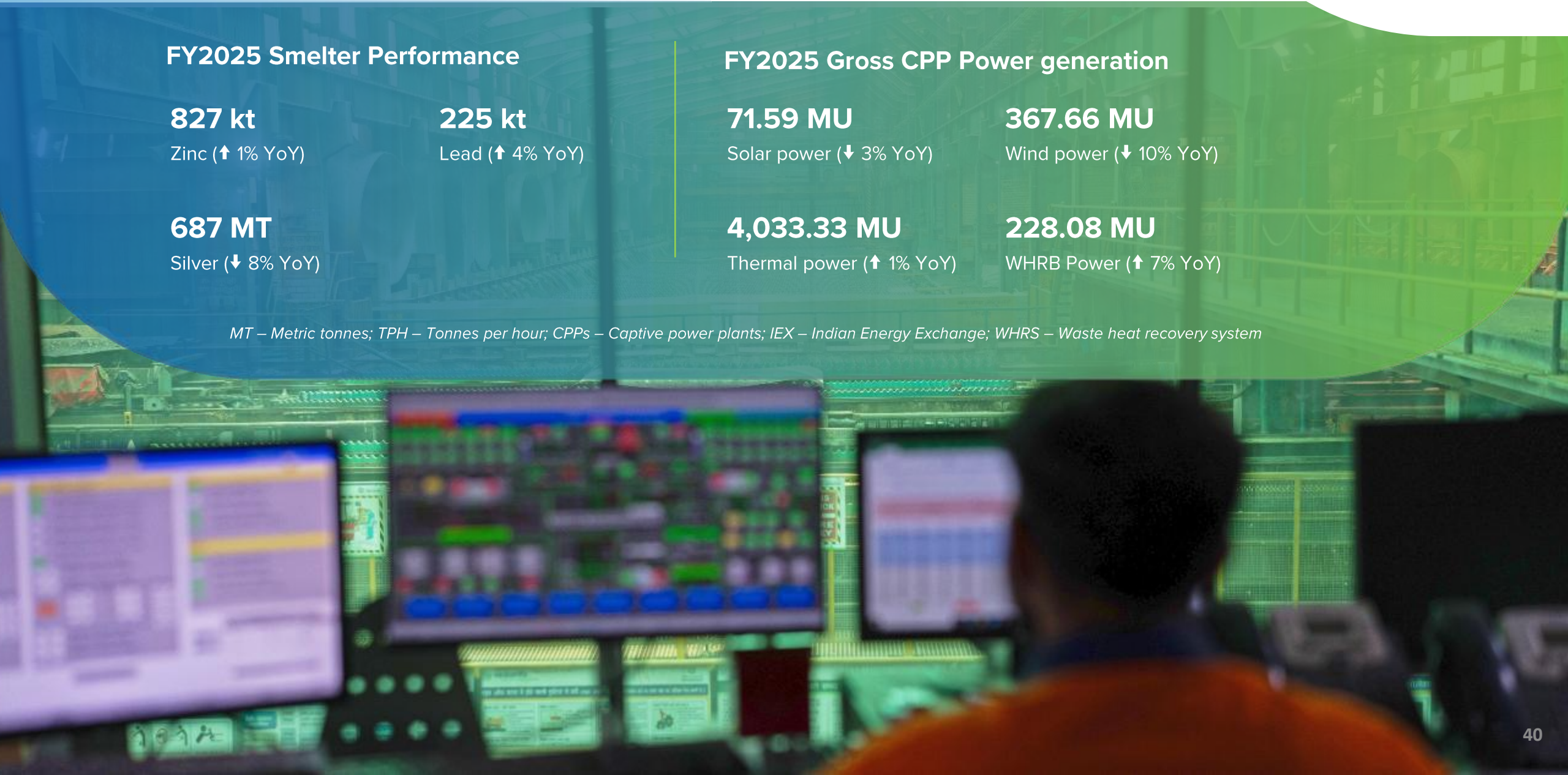
71.59 MU
Solar power (⬇ 3% YoY)

367.66 MU
Wind power (⬇ 10% YoY)

4,033.33 MU
Thermal power (⬆ 1% YoY)

228.08 MU
WHRB Power (⬆ 7% YoY)

MT – Metric tonnes; TPH – Tonnes per hour; CPPs – Captive power plants; IEX – Indian Energy Exchange; WHRS – Waste heat recovery system



Sustained Excellence at Smelters & CPP

Scaling Operational Excellence

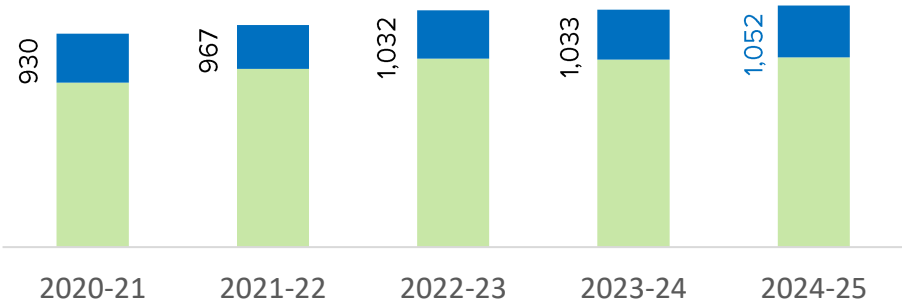
- **Jarosite to metal leveraging fumer:** Additional production → 3 kt metal & 6 MT silver
- **Improved feed & optimised maintenance shutdown at Dariba lead plant:** Production increased 180 MT/day → 210 MT/day
- **SKS furnace overhauling:** Throughput increased 27.5 TPH → 29.5 TPH
- **Roaster Oxygen enrichment:** 40 TPH targeted throughput
- **Maintained process parameters at Dariba Zinc Plant:** Enhanced current efficiency (91.5% → 92.0%) and production (709 MT/day → 715 MT/day)

Cost Optimisation

- Minimised shutdown costs
- Achieved higher sales realisations for acid, scrap and residue
- Optimised consumables costs by reducing consumption through closed-loop feeding
- Reduced generation costs in CPPs (44% indigenous coal consumption) and power sale on IEX

US$ 65 per tonne
CoP improvement

Total Refined Metal* (kt)



	2020-21	2021-22	2022-23	2023-24	2024-25
Zinc (tonnes)	7,15,445	7,75,808	8,20,898	8,17,059	8,26,812
Lead (tonnes)	2,14,399	1,91,185	2,10,690	2,15,984	2,25,470

*Excludes captive consumption

Sustained Excellence at Smelters & CPP

Strengthening zero harm practices

- AI camera-based human movement detection to stop the crane at DSC
- Hygiene bag filter at Roaster 5 for dust/gas control
- Beacon and danger light interlocking with the engine in forklifts for real-time alerts at ZSD
- Gantry crane for panel shifting
- Chlorine tonner interlock at ZSD

Aligning smelters with climate goals

ZLD, ETP, RO, MEE, and MVR technologies integrated for water conservation

31,300 KLD
Water saving capacity

- 180 LNG and 10 EVs for inter-unit and finished goods movement
- Increased RE with power supply from Serentica

1,066 tCO_2e
GHG emission savings

809 MU
RE for smelting operations

Fumer to process jarosite residues in the Hydrometallurgy plant

~39,700 MT
Jarosite reduced

Sustained Excellence at Smelters & CPP

Tech-powered transformation

AI-driven predictive Sinter Machine Health Monitoring

15%
increase in output

AI-based thermal imaging for hot/cold spot detection

Increased
Energy efficiency

1,175 IoT sensors & AI/ML-powered closed-loop systems for consumables

₹ 20 crore
Cost savings

Computer vision to monitor ladle operations and EOT interlocking

Zero
Safety incidents

100% auto-booking in SAP

Improved
Governance & operational discipline

AI-powered FG Surface Quality Monitoring system

Consistency, safety & efficiency

Environmental, Social and Governance Practices

Achieving ambitious 2030 ESG goals and ranked as the world's most sustainable metals & mining company in the S&P Global CSA 2024 for the second consecutive year

Elevating Sustainability Ambitions to the Next Level

HINDUSTAN ZINC
Zinc & Silver of India

Climate Change

FY2025 GOAL
0.5 mn tCO_2e operational GHG emission savings (2017 base year)

Status
0.67 mn tCO_2e savings

FY2030 GOAL
Emission reduction - 50% in Scope 1 & 2, 25% in Scope 3, net zero by 2050

Water Stewardship

FY2025 GOAL
5x water positive & 25% reduction in freshwater consumption (2020 base year)

Status
3.32x water positivity and 6% reduction in freshwater consumption

FY2030 GOAL
50% freshwater consumption reduction, securing 100% low-quality water for smelting operations, extending to the supply chain

Circular Economy

FY2025 GOAL
3x increase in gainful utilisation of smelting process waste (2020 base year)

Status
2x achieved (>6 lakhs MT)

FY2030 GOAL
Near to zero waste to landfill

Biodiversity Conservation

FY2025 GOAL
Protect and enhance biodiversity throughout the life cycle

Status
0.74 mn trees planted additionally(from 2020); Biodiversity Management Plans supported by IUCN

FY2030 GOAL
Halting and reversing biodiversity loss and ensuring no net loss at all mine sites

GHG: Greenhouse Gas;
IUCN: International Union for Conservation of Nature

Elevating Sustainability Ambitions to the Next Level

HINDUSTAN ZINC
Zinc & Silver of India

Zero Harm

FY2025 GOAL
Zero fatalities and 50% reduction in TRIFR (2020 base year)

Status
4* fatalities & 55% TRIFR reduction

FY2030 GOAL
Zero fatality & 100% elimination of high-consequence injuries

Social Impact

FY2025 GOAL
Positively impact one million lives through CSR initiatives

Status
2,362 villages and 2.3 mn people impacted

FY2030 GOAL
Complete Social and Human Rights Impact Assessment at all major sites, impact 0.5 mn lives through economic enhancement and make 30,000 individuals employable

Diversity in Workforce

FY2025 GOAL
30% workforce diversity

Status
25.5% diversity ratio

FY2030 GOAL
30% workforce diversity with focus on decision-making roles

Responsible Sourcing

FY2025 GOAL
100% responsible sourcing in the supply chain

Status
95% critical suppliers assessed on ESG & risk management

FY2030 GOAL
100% active suppliers' evaluation on ESG & risk management, 25% procurement spend from local partners, transition to greener fuels

**Including 1 at our subsidiary, Vedanta Zinc Football & Sports Foundation*

TRIFR: Total Recordable Injury Frequency Rate

Advancing to a Greener, Climate-resilient Tomorrow

HINDUSTAN ZINC
Zinc & Silver of India

CLIMATE CHANGE

Embracing clean energy

- 530 MW RE-RTC PDA with Serentica ➔ 70% RE share by FY2028; 3.5 $MtCO_2e$ reduction
- 100% green power at Pantnagar Plant ➔ 28,800 tCO_2e saved in FY2025
- Biomass as alternative fuel ➔ 19,200 tCO_2e saved

Green mobility push

- LNG trucks, EV trucks, and BEVs ➔ Scope 3 emission cuts

WATER STEWARDSHIP

- Alignment with UNGC Water Action Platform & ICMM Water Stewardship Framework
- 4,000 KLD WTP at RAM
- Dry tailing & paste-fill plant at RDC ➔ 8,100 KLD avg. recycled water & NITI Aayog "Water Positive Aspiring" certification
- ZLD upheld across all sites supported by 31,300 KLD internal recycling system via ETP, RO, MEE & MVR
- Water Risk Assessments with WRI Aqueduct, WBCSD India Water Tool & GEMI

CIRCULAR ECONOMY

- 39,682 MT jarosite reduction via fumer operation
- Waste utilisation ➔ 445,013 MT jarosite/jarofix & 2x increase in smelting waste gainful utilisaition
- Amplifying R&D in residue recovery; breakthroughs include iron recovery from jarosite and conversion to Fe_2O_3, zinc metal losses recovery and ETP solid waste reduction
- Set up Integrated Minor Metals Complex in partnership with Runaya for recovering valuable metals; 3 new plants commissioned and 33,064 MT smelter waste processed

RE-RTC PDA: Renewable Energy - Round the Clock Power Delivery Agreement; LNG: Liquefied Natural Gas; EV: Electric Vehicle; BEVs: Battery Electric Vehicles; UNGC: United Nations Global Compact; ICMM: International Council on Mining and Metals; WTP: Water Treatment Plant; RAM: Rampura Agucha Mine; RDC: Rajpura Dariba Complex; ZLD: Zero Liquid Discharge; ETP: Effluent Treatment Plant; RO: Reverse Osmosis; MEE: Multiple Effect Evaporator; MVR: Mechanical Vapour Recompression; WRI: World Resources Institute; WBCSD: World Business Council for Sustainable Development; GEMI: Global Environmental Management Initiative; R&D: Research and Development

Advancing to a Greener, Climate-resilient Tomorrow

BIODIVERSITY CONSERVATION

- Collaborations – IUCN (biodiversity policy and management plans), TERI (used Mycorrhiza technology to restore 6.25 hectares with 11,000 trees)
- TNFD alignment for transparent biodiversity risk disclosures
- Established responsible closure plans for all mines; aligned with ICMM & IFC norms
- Conducted Life Cycle Assessment Study (cradle-to-gate approach) across products to evaluate potential for reducing environmental footprint

TAILINGS STORAGE MANAGEMENT

- Dry tailing plant commissioned at Zawar & Dariba; Rampura Agucha underway
- Established Tailings Management Plan and a dedicated Community of Practice to ensure GISTM compliance
- Deployed cutting-edge geotechnical monitoring tools and techniques; prism stations, piezometers, inclinometers, and cameras for real-time dam safety monitoring

IUCN – International Union for Conservation of Nature; TERI – The Energy and Resources Institute; TNFD – Taskforce on Nature-related Financial Disclosures; ICMM – International Council on Mining and Metals; IFC – International Finance Corporation; GISTM – Global Industry Standard on Tailings Management

Fueling Growth through People

DIVERSITY, EQUITY & INCLUSION (DEI)

- Equal opportunity employer; hiring across women, LGBTQIA+, ex-veterans, expats
- Achieved milestone of 25% diversity in 2025 under ‘25 in 25’ initiative
- Launched India’s first women UG mine managers and rescue teams across mines under #WomenInZinc
- Leadership Development Programme with Gallup; 40 women leaders empowered
- 22+ transgender employees integrated; launched policy to support their higher education

59%
local employment (organisation /senior management level)

25.5%
women in executive workforce

27.3%
women representation in EXCO

23,810
person-days of training delivered to executives

14.5%
attrition among executives

LGBTQIA+: Lesbian, Gay, Bisexual, Transgender, Queer/Questioning, Intersex, Asexual, and others; UG: Underground

Fueling Growth through People

EXCELLENCE IN TALENT & LEADERSHIP DEVELOPMENT

Flagship programs:

- Ambavgarh Dialogue → groom next leaders
- Leaders Unplugged → leadership skill building
- ACT-UP → identify & nurture HiPos
- SHIKHAR → elevate HiPos to high-impact roles
- Guru Chakra → mentor-mentee based development
- ACCELERATORS → build analytical mindset for decision-making
- SAKSHAM → skills & knowledge building to thrive in a VUCA world

EMPLOYEE WELL-BEING & ENGAGEMENT

- Mental well-being: counselling services, resilience building workshops, stress & well-being assessments
- Physical well-being: workplace gyms, sports tournaments, wellness sessions
- Leadership connect: CEO townhalls, forums for open dialogue, and mentorship platforms
- Human rights policy, aligned with the UNGP on Business and Human Rights; zero tolerance for harassment, abuse, or discrimination

EXCO: Executive Committee; HiPos: High Potential employees;
VUCA: Volatility, Uncertainty, Complexity and Ambiguity;
CEO: Chief Executive Officer; UNGP – United Nations Guiding Principles

Responsible Journey Towards Zero Harm

Safety excellence programmes – path to zero harm

Aarohan
Safety excellence journey – leadership engagement and stronger safety systems to achieve zero harm

Vihaan
critical risk management

Suraksha Kavach
Proactive safety stewardship for routine & non-routine tasks

Safety pause
Temporarily halting work for discussions and articulation of best practices

Infrastructure Inframatrix
Framework for managing infrastructure-related risks

Responsible Journey Towards Zero Harm

HINDUSTAN ZINC
Zinc & Silver of India

Scaling safety with digitalisation

AI-driven surveillance & processing image for real-time identification of unsafe act and proactive mitigation

AI-based man–machine interaction safety systems with sensors and camera

Digital key management and motion-sensor traffic lights for fleet/machine safety

Pumphouse automation for rapid emergency response

Scaling safety efforts in FY2025

8,24,256
Critical Checks

31,008
KAVACH Checks

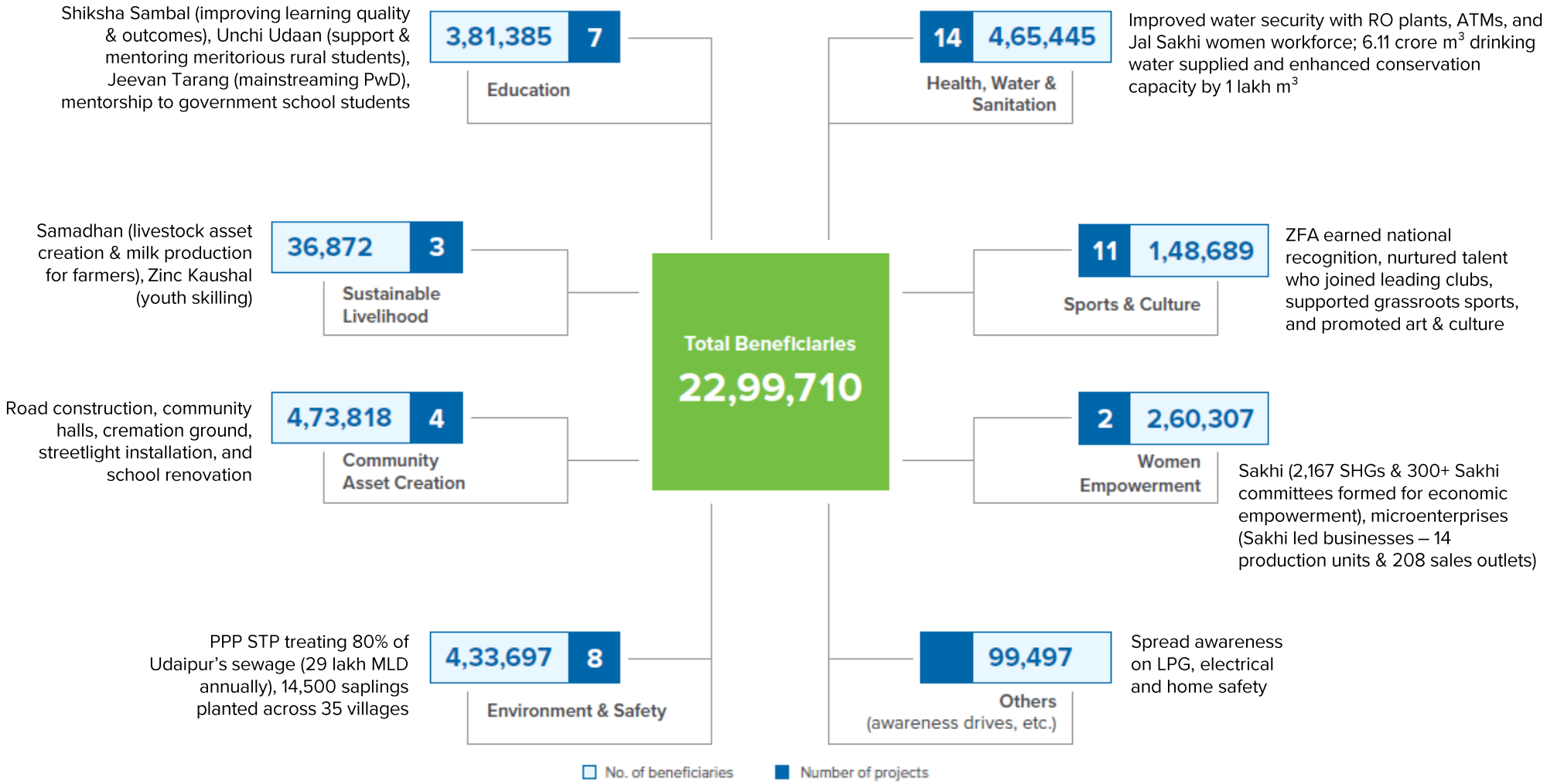
30,139
Medical examinations

2,453.36 MT
Asset integrity/ structural stability works carried out

89%
Infrastructure compliance

41,381
Inspections

Shared Value Creation Through Social Responsibility



PwD: People with Disabilities; PPP: Public Private Partnership; STP: Sewage Treatment Plant;
RO: Reverse Osmosis; ZFA: Zinc Football Academy; MLD: Million litres per day; SHGs: Self-Help Groups

Business Excellence Drivers

Through investments in embracing new opportunities, advanced technologies, and sustainability, we are ensuring a resilient route for long-term growth

Accelerating Tech-driven Growth Scaling digital excellence in FY2025

HINDUSTAN ZINC
Zinc & Silver of India

Harnessing break-through technologies

Tele-remote automation

In drilling and loader operations for safety and productivity

Sensors

For micro-seismic activity monitoring

IoT-enabled sensors & AI-driven analytics

For PdM, CbM and RHI

Drones

For inspecting structural integrity & remote stack monitoring, and stope scanning in UG mines for dilution control

Computer vision

For monitoring unsafe acts in restricted UG mine zones

IoT: Internet of Things; PdM: predictive maintenance; CbM: condition monitoring; RHI: reliability health index; UG – Underground; AI – Artificial Intelligence

Accelerating Tech-driven Growth Scaling digital excellence in FY2025

HINDUSTAN ZINC
Zinc & Silver of India

Advancing automation

Closed loop system for consumables addition: Fully automated dosing of non-fuel consumables by integrating LIMS data with process control systems

Centralising data collection

Established Collaboration Centre: For centralised data hosting for use in data engineering to develop advanced solutions and user-friendly dashboards with actionable insights

Strengthening analytical capabilities with AI/ML

Roaster Sulphide-Sulphur Prediction Model: For accurate sulphide/sulphur ratio predictions using ML and real-time data

Intelligent operations with IoT applications

Predictive maintenance of critical assets: IoT sensors and AI for anomaly detection, auto fault diagnostics, and reduced downtime

IoT sensors in HEMM: Telemetry analytics with IoT sensors to reduce LPDTs and LHD machines idle time

LPDT: Low-Profile Dump Trucks; LHD: Load, Haul & Dump; LIMS – Laboratory Information Management System; AI/ML – Artificial Intelligence / Machine Learning

Pioneering the Next Level of Excellence

Optimising Asset Performance

Recovery Improvement at RDM Mill
Zinc to 90.7% and lead to 70.5% through grinding media optimisation, water balancing, and reagent dosage fine-tuning

Portfolio Optimisation
Enhanced VAP capacity by 13 kt by reducing the Jumbo mould changeover and cooling time

Working Capital Optimisation
Reduced WIP and maximised output of silver through optimisation and treatment of electrolyte in ElectroMetals Electrowinning

Optimised SKS Furnace
Reduced annual shutdown time from 22.5 to 16.8 days by streamlining and benchmarking relining activities

Pioneering the Next Level of Excellence

Advancing emerging portfolios and driving innovation

Zinc Batteries
Partnered with IIT Madras and JNCASR for technology development

Zinc Alloys
Augmented capabilities in zinc alloys development for portfolio diversification and sustainability

Product and Process Innovation
- Developed novel flotation reagents and upgraded hydro and pyrometallurgical circuits to enhance concentrate grade and metal purity
- Waste/dross recycling initiatives like optimising metal recovery, utilising secondary materials, and cutting Waelz kiln carbon footprint
- Enhanced R&D infrastructure with advanced mineralogy and metallurgical equipment

IIT: Institute of Technology; JNCASR: Jawaharlal Nehru Centre for Advanced Scientific Research; RDM: Rajpura Dariba Mill; VAP: Value added products; Li-ion: lithium-ion; IP: Intellectual Property; WIP: Work in Progress

Quality outcomes

4%
reduction in controllable customer complaints

12%
Improvement in suppliers' performance driven by RM quality assurance

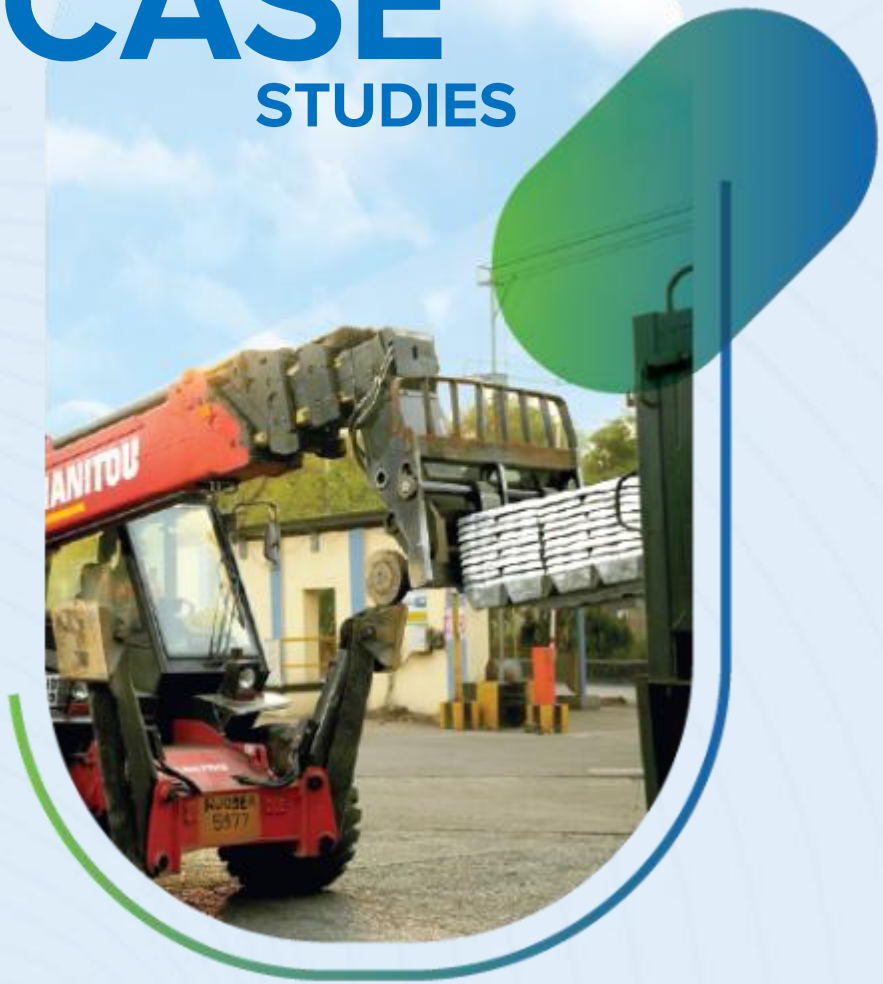
Innovation highlights

4 IPs
Filed for different fields of smelting and mineral processing

Indian Patents
for silver recovery improvement and waste utilisation technologies

Global Recognition
In-house innovations and process excellence showcased at global conferences & publications

CASE STUDIES



DIGITALLY TRANSFORMING ZINC SALES & LOGISTICS AT HINDUSTAN ZINC

Problem Statement

In the traditionally structured metal industry, sales of zinc and silver were often managed through manual, opaque processes that limited real-time price discovery and created barriers for smaller or remote buyers. This affected customer participation and restricted the company's ability to dynamically link premiums to market rates. On the logistics front, coordination with fleet owners was fragmented, with limited digital integration, leading to inefficiencies, higher costs, and reduced accessibility for MSMEs. As customer expectations evolved and the metals market became increasingly competitive, there was a clear need for a digitally-enabled ecosystem that could streamline sales, ensure price transparency, and modernise freight management to deliver a more responsive and scalable solution.

Our Approach

Hindustan Zinc undertook a dual-pronged digital strategy to overhaul its sales and logistics operations

1 Digital Auctions for Zinc & Silver Sales

- Launched a robust e-auction platform in FY2025 to digitise the metal buying process
- Created a level playing field for buyers across India, allowing real-time participation
- Pegged product premiums to live market rates, ensuring dynamic and fair pricing
- Focused on enhancing customer experience with transparency and ease of access

2 Digitally-Enabled Zinc Freight Bazaar

- Introduced a tech-enabled freight marketplace for optimising logistics
- Brought together fleet owners and transporters, enhancing route efficiency and cost competitiveness
- Enabled end-to-end digital tracking, from auction to delivery
- Promoted collaborative logistics for smaller buyers through shared transport models

Key Outcomes

- 100% of silver and 70% of zinc now sold via digital auction platforms
- Improved pricing transparency and market-linked premiums, enhancing customer satisfaction
- Significant operational efficiency gains in freight booking and delivery management
- Enhanced accessibility for MSMEs and remote buyers, democratising metal procurement
- Strengthened trust and brand equity, positioning Hindustan Zinc as a digital-first metals company

CASE STUDIES

EXPANDING DOWNSTREAM PRODUCT PORTFOLIO THROUGH ALLOYS

Problem Statement

As a commodity-based company, Hindustan Zinc's topline is majorly linked to the LME and LBMA price cycles. So, it is imperative that we should transition from a commodity-based company to a product-based company by enhancing our downstream product portfolio. Currently, India is importing zinc alloys to cater to the domestic automotive sector demand, presenting an opportunity for us to venture into zinc alloy segment. This will not only enable the domestic auto original equipment manufacturers (OEMs) and component manufacturers to reduce imports from other countries and build a resilient value chain of high-quality products within the country, but also fetch higher premiums through an expanded customer-centric portfolio.

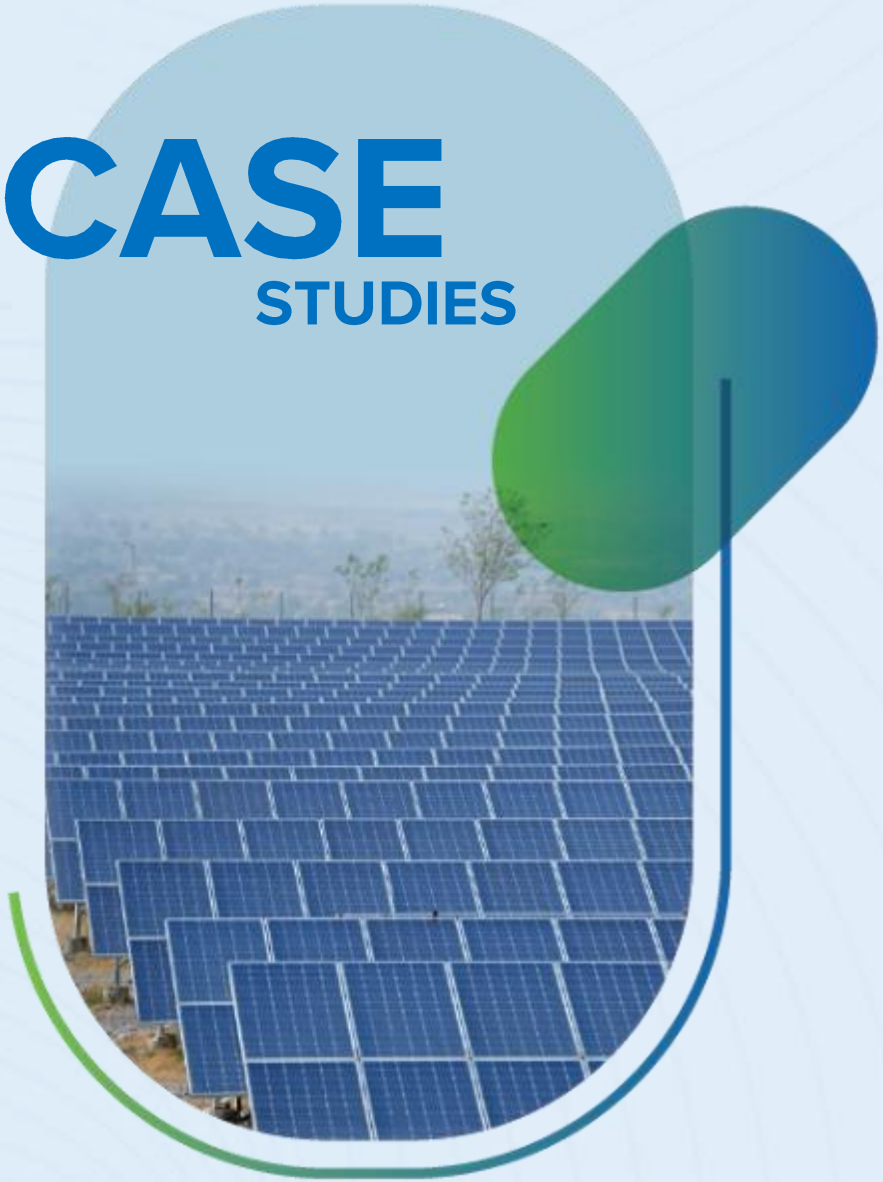
Our Approach

- Commissioned a new state-of-the-art 30 ktpa zinc alloy plant in FY2024 under a wholly-owned subsidiary, Hindustan Zinc Alloys Private Limited (HZAPL). This plant allows us to foray into a promising opportunity of alloys, majority of which are currently being imported into India with a presence of a very few domestic players
- Successful trials are undertaken for establishment of our new product, Zinc-Aluminium-Magnesium (ZAM) alloy, in the market
- Our zinc die casting alloys, specially developed for the hot chamber die casting process, are engineered to cater to the evolving needs of the automotive sector, offering exceptional castability, long-term dimensional stability, fast machining, and superior finishing for plating, painting, and chromate treatments

Key Outcomes

- Offers the automotive sector with significant fuel and emission savings by providing a high degree of corrosion resistance to lightweight steel bodies (BIW or Body-In-White), ensuring durable, long-lasting vehicles with longer anti-perforation warranty against corrosion
- HZDA 3 & HZDA 5 alloys provide higher strength, electrical conductivity, corrosion resistance, and dimensional tolerance to automobiles
- Achieved highest-ever sales of value-added products, increasing the share of value-added portfolio to ~22% in FY2025, including 10 kt of alloys produced in the 30 ktpa alloy plant. Also, started supply of toning alloys to the customers
- Hindustan Zinc Alloy Pvt Ltd has recorded an EBITDA of ₹ 93 crore, against the overall investment of ₹ 190 crore, delivering a payback of less than 2 years
- The alloys produced have fetched better realisations than traditional special high grade (SHG) ingots, and aided in increasing our domestic zinc market share

CASE STUDIES



BALANCING ESG WITH FISCAL PRUDENCE THROUGH RENEWABLE ENERGY

Problem Statement

As the focus of the world is shifting towards green energy, it becomes imperative for a global sustainability leader like Hindustan Zinc to lead the sector by becoming early-adopter of utilisation of renewable energy for metal production, significantly decreasing the global footprint of one of the world's largest metal portfolios.

Our Approach

- Signed three round-the-clock renewable energy power delivery agreements with Serentica Renewables India Private Limited, totalling to 530 MW, catering to 70% of the overall power requirement by FY2028
- Cheaper sourcing of renewable energy at a fixed rate for 25 years under this partnership, insulated from inflation and exchange rate fluctuations, enhancing visibility on the power cost
- Received certification for our low carbon zinc by a globally renowned sustainability consulting firm through a detailed life cycle assessment

Key Outcomes

- Cheaper green power sourcing from the partnership, aiding in cost reduction on a sustainable basis every year
- **Launched Asia's first low carbon zinc, EcoZen**, with an impressive carbon footprint of under 1 tCO_2e, which is 75% lower than the global average. This not only provides a cleaner alternative to the customers enabling a reduction in their Scope 3 emissions, but also drives the global transition to low-carbon, responsible sourcing
- Low carbon product portfolio fetches higher premiums as compared to traditional metals, as it also enables the customers to easily comply with carbon policies of other countries like Carbon Border Adjustment Mechanism (CBAM), etc. With the recent announcement by the London Metal Exchange on introducing a green premium for sustainable metals, EcoZen is well-positioned for a stronger value realisation

CASE STUDIES

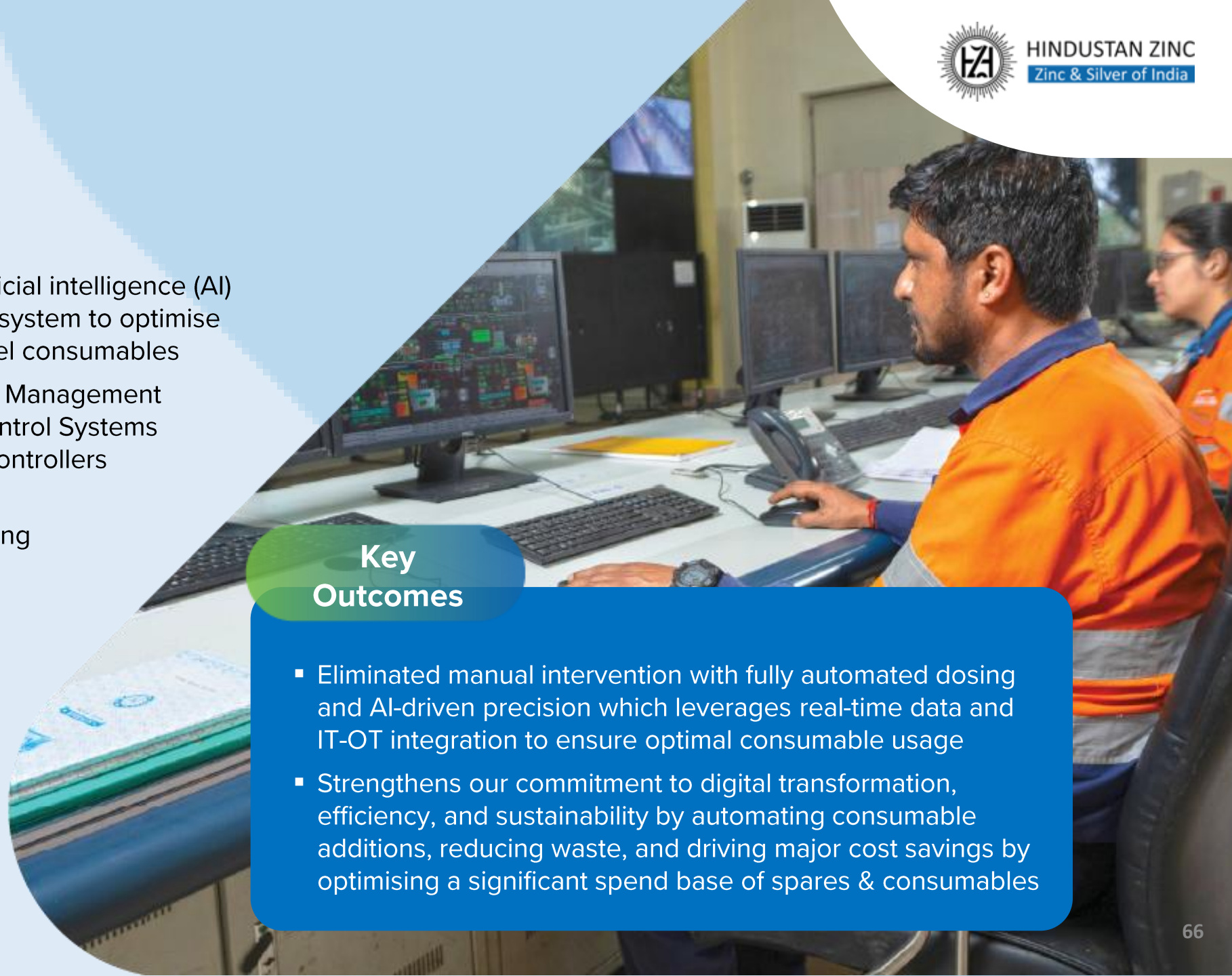
OPTIMISING SMELTER CONSUMABLES THROUGH DIGITAL TECHNOLOGY

Problem Statement

Our smelters utilise various consumables such as zinc dust, sodium sulphate, polymeric aluminium trihydrate (PAT), lime, and soda ash, etc., which are vital for maintaining chemical reactions, controlling processes, and ensuring the smooth operation of our smelting activities. It is crucial to optimise the utilisation of such consumables, which constitute a significant portion of our overall smelting spend base.

Our Approach

- Successfully implemented an artificial intelligence (AI) and machine learning (ML) based system to optimise the use of such high-value non-fuel consumables
- Integrated Laboratory Information Management System (LIMS) with Distributed Control Systems (DCS) and Programmable Logic Controllers (PLCs) for better process control
- Integrated the solution with smelting operations at Chanderiya, Dariba, and Debari



Key Outcomes

- Eliminated manual intervention with fully automated dosing and AI-driven precision which leverages real-time data and IT-OT integration to ensure optimal consumable usage
- Strengthens our commitment to digital transformation, efficiency, and sustainability by automating consumable additions, reducing waste, and driving major cost savings by optimising a significant spend base of spares & consumables

Executive Leadership Team

HINDUSTAN ZINC
Zinc & Silver of India

c.57%	c.14%	< 50 Years	c.29%
Homegrown leaders	Laterally hired leadership	Avg. age of top 60 leaders	Expats in leadership

Arun Misra
Chief Executive Officer
Ex-Chairman of International Zinc Association (IZA) and Ex-Chairman of Confederation of Indian industry (CII), Rajasthan

Kishore S
Chief Operating Officer
Over 26 years of experience in mining industry with expertise in mine operations, mine management & strategic planning

Sandeep Modi
Chief Financial Officer
Financial expert with 20+ years of vast experience in metals, mining and power industry

Munish Vasudeva
Chief Human Resource Officer
Subject matter expert with diversified experience in large multinationals

Leeladhar Patidar
Chief Executive Officer, IBU - Smelting
21+ years of proven track record in operational excellence, ESG stewardship, and large-scale project execution

Pradeep Singh
Chief HSE Officer
24+ years of experience in Occupational Health & Safety, Environment and Sustainability Management across sectors

Kavita Bhardwaj
Deputy CEO – HESPL
Multicommodity Mineral industry experience in Greenfield, Brownfield exploration, overseas projects and fertilizer

Mubarik Khan
Chief Commercial Officer
Techno-commercial leader with c.30 years of industry experience in the cement and metal sectors, holding multiple roles at Vedanta

Ankur Maroo
Chief Marketing Officer*
15+ years of diverse experience within Group, spanning multi-metal operations, cross-functional leadership & multi-locational roles

Anupam Nidhi
Head CSR – HZL
Diverse experience in the CSR and sustainability

Russell Evans
Director Exploration
Over 30 years of experience in managing mineral exploration from discovery to resource calculation

David Finn
Technical Advisor - Geotech
Subject matter expert with 30+ yrs experience in Geotech

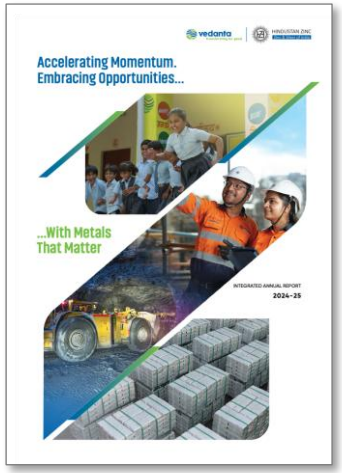
Peter Jenner
Head – Tailing Management
30+ years in metals & mining with expertise in tailings management, geotechnical governance, and GISTM implementation

Adelson Dias De Souza
Project Consultant - Smelters
Comes with 30+ years of expertise in technology & innovation within metallurgy and non-ferrous mining

* Interim

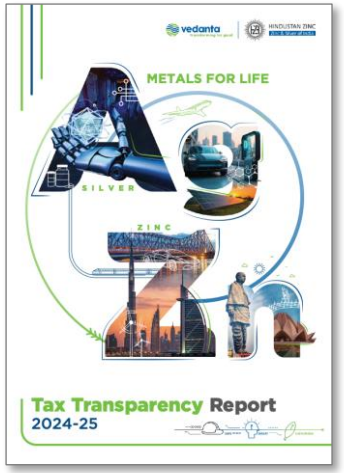
Ethical Governance in Action

Our Reporting Suite

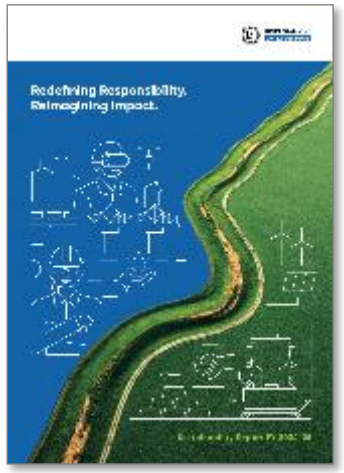


Integrated Annual Report

Digital Integrated Annual Report

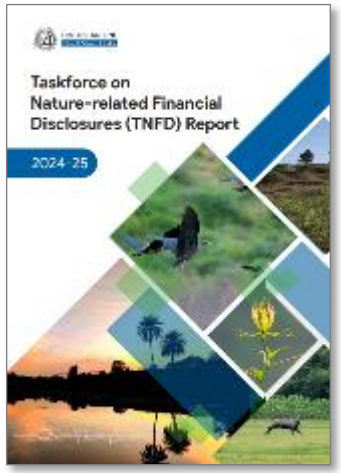


Tax Transparency Report



Sustainability Report

Climate Action Report



Taskforce on Nature-related Financial Disclosures (TNFD) Report

We are on social media

Hindustan Zinc

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Hindustan Zinc Limited

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THANK YOU

vedanta
transforming for good

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Zinc & Silver of India

Ask Zincky Sonic

Scan the QR code to access the GenAI on your mobile phone

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