



ENHANCING VALUE

SUSTAINABILITY REPORT 2015-16











Recognition motivates us to 'Enhance Value' even further in all our endeavours to make Hindustan Zinc a Sustainable and Responsible Corporate.



Zinc Enhancing Value

'Hindustan Zinc' - a corporate giant operating in rural Rajasthan, is known for enriching lives and delivering value in its journey of 50 years. 'Zinc: Enhancing Value' is the theme of this Report and metaphorically refers to Hindustan Zinc's continual efforts to augment value in all its spheres of influence.

Similar to the nature of the element 'Zinc', which enhances the longevity of metal bodies, Hindustan Zinc renders a lasting impact on all components of the value chain. The intent behind all this is the culture of inclusive growth that is deeply ingrained in its business philosophy. Adopting sustainability best practices, Hindustan Zinc remains steadfast in its commitment to add the extra 'ZINC VALUE' for long-term success.

Presented to you here, are the countless small and big steps that Hindustan Zinc has taken to be an exemplar of responsible business and to be the best partner in progress for all its stakeholders. And, while doing so, it stays undivided in its resolution to touch their lives positively and keep 'Enhancing Value'.



As we continue to grow, we are committed to the triple bottom line of People, Planet and Prosperity to create a sustainable future in a zero harm environment for our communities.

We actively foster a culture of mutual trust in our interactions with our stakeholders and encourage an open dialogue which ensures mutual respect.







VISION

Be the world's largest and most admired Zinc-Lead & Silver Company

MISSION

Enhance stakeholders' value through exploration, innovation, operational excellence and sustainability

Be a globally lowest cost producer

Maintain market leadership and customer delight



Our people are our most important assets. We actively encourage their development and support them in pursuing their goals.



We place utmost importance to engaging ethically and transparently with all our stakeholders, taking accountability of our actions to maintain the highest standards of professionalism and complying with international policies and procedures.





Our primary focus is delivering value of the highest standard to our stakeholders. We are constantly motivated on improving our costs and improving our quality of production in each of our businesses through a culture of best practice benchmarking. We embrace a conducive environment for encouraging innovation that leads to a Zero harm environment and exemplifying optimal utilization of natural resources, improved efficiencies and recoveries of by-products.

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Pioneering Report

This report Zinc: Enhancing Value represents our first step in our exclusive sustainability reporting journey. Until now, our sustainability performance was part of our annual report. Our sustainability progress was also included in the sustainability report of our group company, Vedanta Resources Plc.

Being a responsible company we also felt the need to disclose our sustainability endeavours as an individual entity and communicate our progress across the triple bottom line to our stakeholders. This is also an initiative to increase transparency around the sustainability scenario at our company.

Scope and Boundary

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The scope of the report extends to all operations of Hindustan Zinc Limited. These include six mining locations, three smelters, and two refineries.

The boundary for the identified material aspects are primarily limited to the operations of the company. It extends to encompass the entire value chain for certain material aspects based upon its relevance to the sustainability strategy of Hindustan Zinc and the relevance to stakeholder interests.

Report Content

This report discloses sustainability information from 1st April 2015- 31st March 2016. This year's report has been prepared as per GRI G4 guidelines "in accordance"- Core criteria, including the technical protocols of the Mining and Metals Sector Supplement.

The data has been reviewed for completeness and accuracy at the operations level. Unless otherwise stated, we have reported the data using the metric system and the currency has been reported as Indian Rupees. The GRI Index on pages 111-116 provides a list of GRI Indicators and Disclosures (as per GRI G4 guidelines) and their locations within this report. Assurance of this report was carried out in accordance with the International Standard on Assurance Engagements 3000 (ISAE -3000) by M/s Ernst & Young LLP.

For further details

Please visit http://www.hzlindia.com/

Or

email us at v.jayaraman@vedanta.co.in

Mines

Rampura Agucha Mine Sindesar Khurd Mine Kayad Mine

Rajpura Dariba Mine Maton Mine

Zawar Mining Complex

Smelters & Refineries

Chanderiya Smelting Complex

Dariba Smelting Complex

Debari Zinc Smelter

Pantnagar Metal Plant

Haridwar Zinc Plant

Ancient Zine Mining



Zinc mining is not new in India. Among the old workings for zinc in India, the Zawar complex of Rajasthan in Western India is the most famous, though old workings are seen in Rampura Agucha as well as Rajpura Dariba. Impressively abundant traces of old workings extend all over the 25 km mining belt and go down to a depth of 90 m below surface.

The Zawarmala mine at Zawar is an ancient mine which as per radio carbon dating is over 2500 years old. The ancient retorts can still be seen while going towards Zawar mines. As a tribute to this natural history of Zinc mining at Zawar, Hindustan Zinc decided to showcase its history through an exhibition and built a site called "Ancient Mining and Smelting Heritage" which was inaugurated by Mr. Tom Albanese, CEO of the Vedanta Group.

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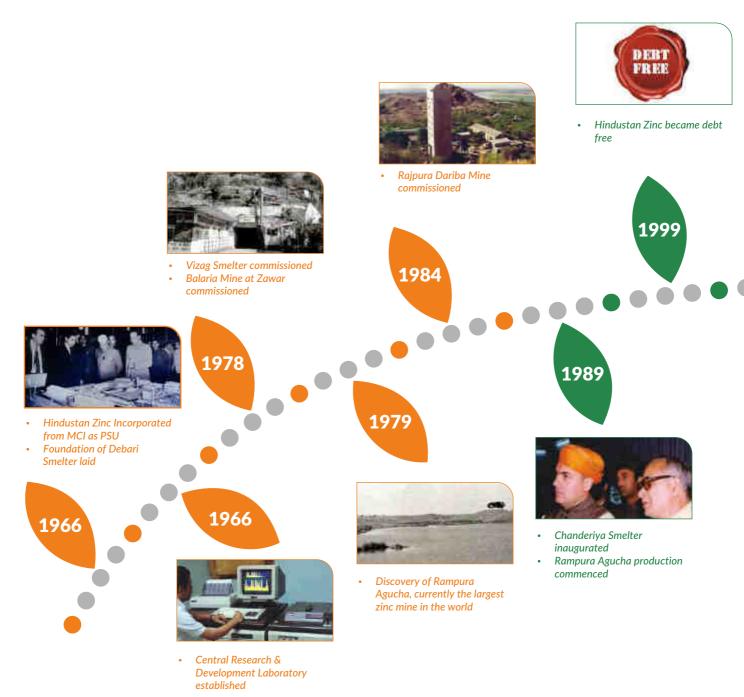
Though the zinc mining in India dates back to over 2500 years old, and the retorts of ancient mining can still be seen at Zawar, about 45 km from Udaipur; the zinc as a metal has not been much known or utilized in India. We are still exploring the new areas where zinc could add value to consumers and also add to the GDP of the country.

Sunil Duggal

CEO and Whole-time Director



Hindustan Zinc's Footprint over Time



Sustainability:



The Essence of Existence...



Hindustan Zinc at a Glance

Hindustan Zinc Limited (HZL) is an integrated mining and resources producer of zinc, lead and silver. Headquartered at Udaipur, Rajasthan (India), we operate with 17,100 employees and deliver consistent, high quality products and services to customers all over India, Asia, Europe, US, Africa and the Middle East. Our business entails mines, smelters, refineries and power. We are renowned globally for the high purity refined metals that we supply. Marketed under various brand names, our product line includes, LME registered Zinc and Lead and high quality Silver.

We are the second largest zinc producer in the world and also one of the lowest cost zinc producers in the world. We have a long mine life of over 25 years, which when combined with our strong financials, executional excellence, and strategic business management capabilities, ensures the long term sustainability of our business.

World's largest zinc mine – Rampura Agucha Mine

India's largest and world's second largest zinc miner

World's fourth largest zinc metal producer

World's one of the lowest cost zinc producers

Fully integrated operations with mine life of over 25 years

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G4-3

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Product Profile

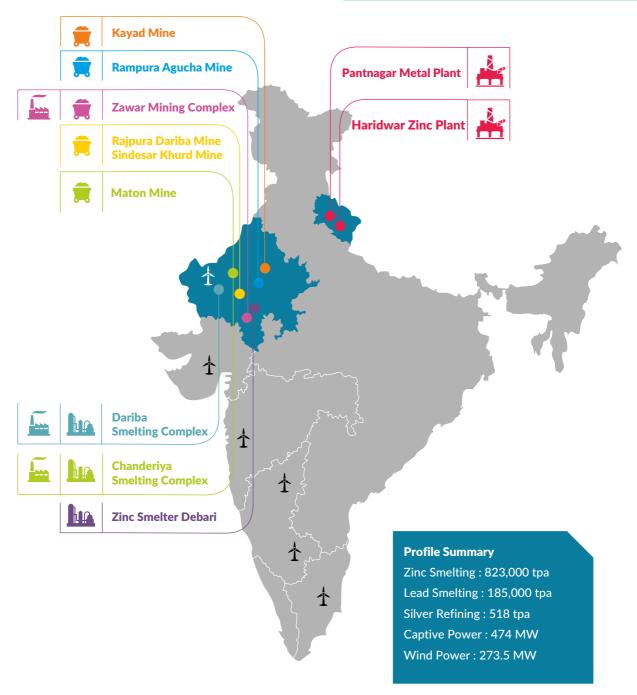


- LME registered Zino
- Special High Grade (SHG): 99.995%
- Continuous Galvanizing Grade (CGC
- High Grade (HG): 99 95%
- AL SK
- LME registered Lead
- 99.99%



High Quality Silve

• 99.9



Mine Smelter Refinery Captive Power Plant Wind Power Plant

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G4-6

G4-9

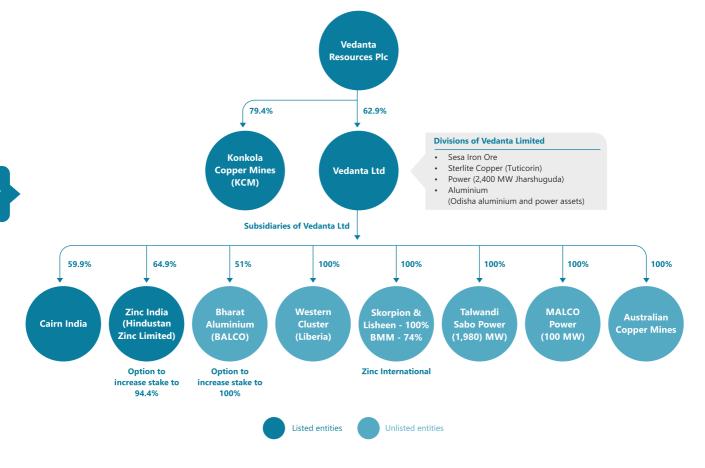
Vedanta Group Holding

We are a public limited company and a subsidiary of Vedanta Limited - a diversified natural resources company whose business primarily involves producing oil & gas, zinc, lead, silver, copper, iron ore, aluminium, and commercial power. The company has a presence across India, South Africa, Namibia, Australia, Ireland, and Liberia.

Vedanta Limited is the Indian subsidiary of Vedanta Resources Plc., a London-listed company. Governance and Sustainable Development are at the core of Vedanta's strategy. They focus strongly on health, safety, and environment and on enhancing the lives of local communities.

The company has been honoured with the Confederation of Indian Industry (CII) 'Sustainable Plus Platinum label'. Ranking among the top 10 most sustainable companies in India, Vedanta Limited is listed on the Bombay Stock Exchange and the National Stock Exchange in India and has ADRs listed on the New York Stock Exchange.

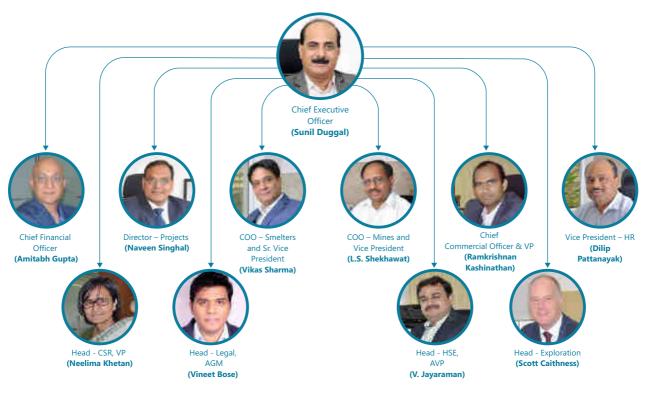
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Board of Directors



Hindustan Zinc's Management Structure



Memberships and Industry Associations









Sustainability Highlights - 2015-16



Driving Sustainable Value into Business Message from our Chairman

We are pleased to release Hindustan Zinc's first Sustainability Report, detailing our ongoing commitment to sustainable business practices. We see this as a positive step towards communicating our sustainability endeavours to our stakeholders. Sustainability, actually, is a journey of proactively seeking opportunities to work together and bring a positive impact on the lives of people around us. We have always believed in working together and creating value beyond business.

The natural resource sector can truly accelerate our Nation's development agenda of economic growth. Looking ahead, the future of industry looks positive with reforms all around focusing on ease of doing the business which can drive investments. This can aid the sector, boost manufacturing, build infrastructure in remote geographies, generate large-scale employment and can yield significant revenue to our Country.

In line with the Vedanta Sustainable Development Framework, we seek to conduct our business by assuming responsible stewardship of nature's resources, connecting with all stakeholders to ensure mutually successful outcomes and embedding a culture of Zero Harm in all our operations.

Enhancing Value for All

Zinc enables galvanisation which, in turn, ensures an 'enhanced life' of structures from car bodies to railway tracks. At Hindustan Zinc, we intend our operations to deliver 'Enhanced Value' for all our stakeholders in a continual way. As a leading Corporate of India, we acknowledge our increasing responsibility to provide sustainable employment and to invest in community development. In the challenging market scenario, with ongoing fluctuations in commodity pricing, we recorded a net profit of Rs.8,167 Crores and maintained our significant contribution to the GDP of the State of Rajasthan. We also provided employment opportunities to 17,100 people and invested Rs.63 crores towards community development activities in the rural areas of Rajasthan during FY 2015-16.

Enhancing Safety

Ensuring a safe working environment is a mandate at Hindustan Zinc. Therefore, one of our key priorities is to bring about a transformational change in behaviour towards workplace safety from being 'Reactive' to 'Independent'. Despite all our efforts, we witnessed unpardonable 4 fatalities during 2015-16. These incidents, which result in loss of lives, significantly impact employee and management morale. But we have to learn from these incidents and build our systems to be more effective. We have further strengthened our safety armours to meet our target of Zero Harm to our people. Being a responsible company, we always focused on the health & hygiene of our employees at work place and various initiatives driven by us focus on Zero Harm.



Enhancing People

Creating future leaders is another key priority. We envisage a company led by people with incredible leadership skills and deep insight into the mining sector. Along with enhancing the potential of Hindustan Zinc's workforce, with all our initiatives, we aspire to create a human resource asset for the country as well.

Building an empowered community is what we envision. In the 50 years of our existence, we have continuously contributed towards various infrastructure asset creation for the local areas around our operations in Rajasthan. We now want to concentrate our focus to empower the local populace with livelihood skills for them to be independent and have a secured source of income, even beyond the life of mining operations.

Enhancing Environment

Being a natural resource company, we are concerned about the scarcity of natural resources—an issue that will intensify down the generations. Being a resource intensive Company, we are committed to continually reduce our consumptions of non–renewable resources.

During the reporting year we continued the efforts towards reducing our environmental footprint and have invested Rs. 42.5 crores. We are now venturing into partnerships with the government and local bodies to bring about transformation by integrating both the sustainability components–environment and society.

Recognized with a CII ITC Sustainability Award for our corporate excellence in 2015-16, we are determined to continue our mining and smelting operations responsibly and keep enhancing value for all our stakeholders. Firstly, with continuous exploration, we hope to create a resource base for the next 25 years. With our mine expansions ramping up owing to world class infrastructure and best-in-class technology we are confidently heading towards complete underground mining. Advancing further, we are all geared up to meet our production target of 1.2 mtpa.

Lastly, as we progress towards creating industry benchmarks in India as well as globally, we remain committed to 'Enhancing Value' in the lives of all our stakeholders by embedding sustainability into all facets of our business. I would like to take this opportunity to thank all our valued stakeholders, for their undeterred support in this journey of excellence and look forward to scaling new heights and reaping enhanced value.

Warm regards,

Agnivesh Agarwal Chairman

We remain committed to

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in the lives of all our stakeholders by embedding sustainability into all facets of our business.

Driving Sustainable Value into BusinessMessage from our CEO

In our 50th year of operations we have embarked on the Sustainability reporting journey. Our first report 'Zinc: Enhancing Value' captures our endeavours in embedding sustainability as our core value. The concept of 'Sustainability' motivates us to think deep into every aspect of our business and create potential for 'Enhancing Value' in all facets of our relationship with our stakeholders. This report is to tell our partners in our sustainability journey, about the constructive way we took to create success stories and also to inform them about our learnings from the failures we confronted during the year. We have developed this report as per the Global Reporting Initiative's fourth generation guidelines for communicating our progress in 2015-16.

Our Performance in 2015-16

Our Growth

As we celebrate the completion of 50 years of Hindustan Zinc, the Board of Directors declared a special Golden Jubilee dividend of 1200% to our shareholders, the highest by any private company in India. This noteworthy financial performance was a consequence of record annual production of integrated Zinc, Lead and Silver which were up by 5%, 33% and 58% respectively. The Company's transition to underground operations is progressing well and share of underground mined metal production increased from 28% in 2014-15 to 40% in 2015-16. On the exploration front, we are committed to increase our reserve & resource base by continuous exploration and adding more than we deplete, to maintain the mine-life of 25+ years.

Zero Harm to People

Safety of our people is of utmost importance to us. To achieve this we have adopted a shared responsibility approach, with increased engagements at all levels of workforce and strengthening the safety culture at Hindustan Zinc. With the help of external consultant DuPont, we initiated a unique programme - 'Aarohan' a couple of years back. Under this programme, significant strides have been made in our safety endeavours during 2015-16, which helped us achieve a 41% reduction of LTIFR over the previous year. However, we are deeply saddened that we encountered four fatalities in the reporting year. This has further strengthened our resolve to ensure 'Zero Harm' and to make workplaces safer than ever before.

In addition to an accident free environment, we believe that it is essential to have a healthy and hygienic workplace. This is possible only by a collective and conscious effort of all the employees. Complying to WASH pledge, we have already taken the first step to spread the message of clean and healthy workplaces through interesting activities.

Employee Well-being

Our business success is a direct outcome of the hard work and passion of our people at Hindustan Zinc. We are committed to develop our talented workforce even further by investing in their learning and development and we imparted 0.44 million man-hours of employee trainings during the reporting year. Also, we have in place, extensive Leadership programs – Leaders Connect, ACT UP, Stars of Business, enormous scope for innovation with Kaizens, and most recently, Zinc – the innovators. With all these constant efforts, we continue to foster harmonious employee relations and are committed to being an 'Employer of Choice'.



SUNIL DUGGAL CEO

Reducing Impact on Environment

Acknowledging the environmental impact of our operations, we continued to strengthen our environmental performance and management practices in 2015-16 entailing an investment of Rs. 42. 5 Crores. Good progress has been made on the energy and water fronts, we have reduced specific water consumption by 16% and maintained our specific energy consumption around 21 GJ/MT from 2011 to 2016. We continue to maintain zero discharge status for our wastewater. We have also ventured into renewable energy projects and we generate 273.5 MW of wind power which is supplied to the grid. We also generate 35.4 MW through waste heat recovery from roasters and steam turbo generators, which is used in our operations. The UNFCCC registered projects have a potential of reducing carbon emissions by 583,685 tCO₂e per annum while our unregistered projects have the potential of reducing carbon emissions by 116,992 tCO₂e per annum. During the reporting period, we accrued about 407,567 CERs from our registered projects.

Conserving the natural biodiversity is our another thrust area. Currently, all our sites have biodiversity management plans (BMP) in place. We are a signatory of the IBBI (Indian Biodiversity Business Initiative), which is supported by CII and the German Cooperation (GIZ). Through this association, we want to explore a new vertical for environment by proceeding with the Natural Capital Action Plan. We have also initiated several environment protection initiatives. Amongst them, the most notable one is the project on eco-restoration of the lakes of Udaipur, where we have ventured into commissioning of 20 MLD STP at Udaipur in a PPP model. The treated wastewater from the STP is utilised in our operations and thereby reducing our freshwater demand. In our commitment to environment preservation, we are committed to working towards eliminating negative impacts on environment, wherever possible, and carefully managing them so as to minimize the associated risks.

Community Support

The well-being of the communities in which we operate is fundamental to our success. Accordingly, we have undertaken several initiatives in this direction, which strengthen our communities, whilst simultaneously meeting the CSR mandate laid out in the Companies Act 2013. Our CSR expenditure during the reporting period was Rs. 63 crores and we see this increasing in the coming years. We have an exclusive CSR policy that guides us in addressing the needs of society around Education, Livelihoods, Women's Empowerment, Health, Culture, Environment and overall Community Development. We have also partnered with several NGOs and the government to strengthen and sustain these programs. In future, we plan to focus even more on some of these community-centred initiatives, especially around Khushi Anganwadi program, Shiksha Sambal program, SAKHI Women's Empowerment and Agriculture/Livestock.

Moving forward, we will continue to improve our performance and learn from our experiences. We will continue to keep our stakeholders informed of our growth through various disclosures and other strategic communications. As we climb the ladder of progress, we affirm to take small steps to 'Enhance Value' and create a lasting legacy of sustainability for future generations.

Warm regards,

Sunil Duggal CEO

We affirm to take small steps to

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and create a lasting legacy of sustainability for future generations.

A Blueprint of Sustainability

Enhancing Value Throughout Mining Lifecycle



Human Resources

Skills and Expertise of 17100 Employees

Natural Resource Capital

Minerals, Land, Water, Energy, Air, Biodiversity

Exploration

Prospective metal deposit targets are identified and exploration is undertaken. We focus on replacing every tonne of ore mined through brownfield exploration as well as undertaking greenfield discoveries. Worthwhile discoveries undergo intensive evaluation.

A total of about 185,120 metres of total drilling was carried out across all mine sites during the year to sustain and increase the R&R base of the Company. The current R&R supports an overall mine life of +25 years.

Project Development

We build upon our exploration activities by developing those deposits that offer sufficient economic returns, acceptable levels of risk and the opportunity for us to add value. Activities include modelling of opportunities and the design and construction of mine infrastructure.

Leading international consultants have been engaged for geotechnical modelling and optimization to endorse mining projects' technical feasibility and mine stability, while we are transforming to completely underground mining at Rampura Agucha. Renowned global contractors for shaft sinking, paste fill plant and mine development

Production

Record annual production of integrated zinc (5% up), lead (33% up) and silver (58% up)

Economic Value

Net profit of Rs. 8,167crores and special Golden Jubilee dividend of 1200% to shareholders

Finances and Legalities

Equity and Regulatory Permits and Compliances

Community License

Consent and Support of Local Community

Business Partners

Established relationships with Suppliers, Contractors and Vendors

Ore Extraction and Beneficiation

Lead and Zinc ore is mined at our six captive mines which include both open cast and underground mines. The ore is treated at the onsite concentrators and beneficiation plant located at each mine to individually separate out the lead and zinc concentrates.

The transition to underground mining is going well with 40% of mined metal production in FY-'16 coming from underground mines compared to 28% in FY-'15 as we remain on track for achieving 1.2 mtpa mined metal capacity in the next 3-years. During the year, two of our mines – Sindesar Khurd and Kayad -- ramped up ahead of schedule to reach production capacity of 3 mtpa and 1 mtpa respectively.

Smelting and Refining

We have world class smelters across three locations with a cumulative capacity of over 1 million MT per annum, which is one of the largest in the world. Zinc and Lead concentrates are converted into lead ingots. Silver is produced as a byproduct of Lead Smelting and refined into silver ingots. Sulphuric acid is also produced as a by-product.

During FY 2016, we achieved highest ever production of integrated zinc, lead and silver metals. We are India's largest manufacturer of sulphuric acid, which is a by-product of our smelting operations.

Finished Products

Zinc and Lead ingots, along with other by-products are sold to our customers in India and the export market

Our zinc and lead are registered brands on the London Metal Exchange (LME). We also have Quality Management Systems in place for all our products which complies with the requirements of ISO 9001:2008 standards.

People Value

0.44 million man-hours of training 41% reduction in LTIFR from last year

Community Well-Being

Rs.63 Crores spent for Community Development works Flagship Programmes: 'Sakhi' & 'Khushi'

Environmental Footprint

Rs. 42.5 Crores invested in environmental initiatives Reduced specific water consumption by 16% from 2011 to 2016 Company has invested in projects having potential to reduce Carbon emissions by 700,677 tCO₂e/year.

Sustainability Scorecard

Goals and Targets 2015-16	Performance 2015-16	Status		
Health and Safety				
Achieve Zero Fatal incidents	4 fatalities (2 Employees and 2 Contract employees)	7"		
Achieve Zero Occupational Illness cases	No Occupational Illness cases recorded.	.6		
Reduce lost time injury frequency rate (LTIFR) to 0.77 or less	LTIFR reduced to 0.50	•		
Reduce Total recordable injury frequency rate (TRIFR) to 1.30 or less	TRIFR reduced to 1.11	•		
All sites to review their Emergency response plan	Emergency response plan review completed for major units, and ongoing for remaining sites			
Roll out of ten High Risk Activities Safety Standards	Eight high risk safety standards rolled out for implementation across units, work in progress for two more to be rolled out	16		
	Human Resource Management			
Enhance Technical Skills	A total of 849 employees participated in the Technical ACT UP initiative driven by the group. From Hindustan Zinc the participation was 267 which was highest amongst other group entities, 28 stars were identified	•		
Develop Leadership Skills	198 eligible employees were invited in the General Act UP Process, out of which 10 stars were identified	.6		
Focus on Gender Diversity	14% freshers inducted in Hindustan Zinc comprise of women	.6		
Increase Employee Engagements	Individual Town Halls were held at each respective unit chaired by unit heads and Hindustan Zinc wide Town H chaired by CEO-Hindustan Zinc	.6		

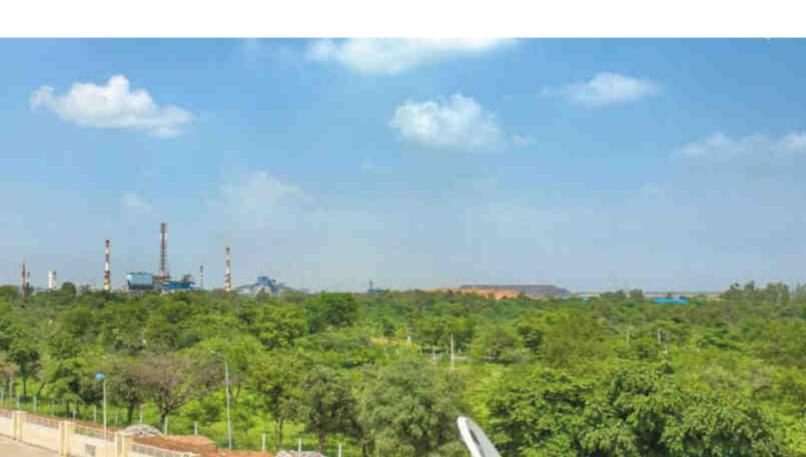


Goals and Targets 2015-16	Performance 2015-16	Status
	Environment	
Achieve Water Savings - 0.47 MCM	Savings were less owing to delay in implementation of projects.	7"
Achieve Energy Savings - 0.06 Million GJ	Savings were less owing to delay in implementation of projects.	7"
Achieve GHG Emission reduction	Reduction of 3.6% GHG emissions intensity was achieved since base year - FY 2011.	.4
Continue to monitor new projects and site closure as per the sustainability framework	All projects of Hindustan Zinc - expansion of SK Mine, Rampura Agucha & Zawar mine are being managed as per Vedanta Sustainability Framework guidelines.	
Biodiversity Management Plan across all sites	Biodiversity Management Plan developed	.4
Exploring opportunities and areas to increase the Non- Hazardous waste utilisation	Generated fly ash from power plants has been sold to cement industries. Apart from this around 88% of ISF slag also sold to cement industries.	
	Community	
Setting up rigorous governance and oversight systems for CSR programs	Rigorous governance and oversight systems for CSR programs set up	•
Develop impactful, flagship community programs – based on experience, studies & community feedback	Taken up some of the CSR initiatives as flagship programmes like Shiksha Sambal, Khushi Anganwadi, Sakhi etc. based on social audit study conducted in 2014-15	
Streamline & Revise the Standard Operating Processes (SOP) for undertaking community programs	SOPs relooked and modified.	









Sustainability: A Strategy for Enhanced Value

Sustainability is vital to steer operational excellence and ensure business growth. Hence, we have embedded sustainability as a strategic tool in our business model to ensure our consistent progress in the ever-changing world of business. We adhere to the Vedanta Sustainable Development Framework that helps us integrate sustainability throughout our business management and operational drivers of governance, safety, and social responsibility. All our policies, procedures and best practices are aligned to this approach, which is why our employees have a clear understanding of their role in driving business success and ensuring consistency. With this approach, we predict a sustainable future of our business operations by meeting our growth targets, and creating long-term value for all our stakeholders.

Infusing Sustainability

We constantly strive to achieve our sustainability vision and mission by operating inline with the Vedanta Sustainability Development Framework. Our Sustainability framework emphasizes on stakeholder inclusivity and consideration of environmental and social aspects in every segment of our business. Further, it also encourages alignment to international standards and industry best practices for ethical and responsible business conduct.

The framework is strengthened by four guiding pillars for achieving sustainability:

- Responsible Stewardship
 - It is our responsibility to respect natural and human resources at all stages of our operations.
- Building Strong Relationships
 - Connecting with stakeholders helps us build a business fit for the future.
- Adding and Sharing Value
 - We have a purpose beyond profit and make an important contribution to socio-economic development.
- Strategic Communications
 - We are committed to complete transparency and emphasize principles of community dialogue and mutual respect including free, prior informed consent to access natural resources.

Sustainability Vision:

To excel in operations upholding world-class standards of governance to achieve zero harm, zero discharge while being socially responsible

Sustainability Mission:

Our Mission is to become a global leader and create value by conducting our business in socially responsible and ethical manner by:

- Improving Health, Safety and Well-being at workplace
- Eliminating any potential damage of our activities on the environment and by reducing environmental footprint with adoption of sustainable practices and preservation of natural resources
- Enhancing Livelihood and benefitting the communities where we operate
- Communicating our sustainability efforts and performance to our stakeholders with transparency, authenticity and integrity



Vedanta Sustainability Framework

Sustainability Governance

We operate through a three tier governance structure driving down from the Vedanta Board to the units of operation at site level. These committees at Group Level, Company Level and Unit Level regularly keep track of our sustainability performance throughout the year. Using our internal sustainability risk management tool - Vedanta Sustainability Assurance Programme (VSAP), we continue our business by setting key sustainability targets and regularly review our progress through compliance assessment and audits. VSAP helps to assess the compliance of all units, and provides identification of gaps and necessary corrective/preventive actions to address them.

We also have eight Sustainability policies, namely, HSE Principles & Policy, Human Rights Policy, Energy and Climate Change Management Policy, CSR Policy, Supplier & Contractor Sustainability Management Policy, Water Management Policy, Biodiversity Policy and HIV-AIDS Policy, that influence every decision we take, giving us the confidence to perform in a safe, ethical, and transparent manner. Through a dedicated sustainability workforce, that includes officials from various functions, namely, SafetyEnvironment and Occupational Health, we are able to drive sustainability throughout our company.

Sustainability Policies

1	HSE Principles & Policy
2	Human Rights Policy
3	Energy and Climate Change Management Policy
4	CSR Policy
5	Supplier & Contractor Sustainability Management Policy
6	Water Management Policy
7	Biodiversity Policy

Managing Business Risks

Managing significant risks is crucial to conducting our business sustainably, and meeting our business strategy to drive growth. We identify and analyse risks across all phases of the asset life-cycle. Our comprehensive risk management policy, Code of Business Conduct & Ethics, Sustainable Development Framework, Management Systems, Organizational Structures, Processes, and people play a pivotal role as internal control systems, and determine the way we conduct business.

The Company has a robust risk management framework to identify and mitigate risks arising out of internal as well as external factors. Risk Management is embedded in our critical business activities, functions and processes. Materiality and tolerance of risk are key considerations in our decision making. There is a formal monitoring process at unit and company level, wherein new risks are identified, categorised as per impact & likelihood, mapped to key responsibilities of select managers and managed with an appropriate mitigation plan. Formal discussion on risk management happens in unit level review meetings on a quarterly basis. The respective units review the risks, change in nature and quantum of major risks since the last assessment, control measures established for mitigation and further action plans. To ensure transparency and critical assessment, we have a Group Management Assurance System that coordinates the risk management system. The risk management framework is reviewed annually by the Audit Committee on behalf of the Board which in turn is supported by a Board level Risk Management Committee comprising of CEO, CFO and Chairman of the Audit Committee.

In addition to this, our comprehensive risk management policy is reviewed by the Audit Committee at periodic intervals and the suggestions given by the Committee are immediately implemented. We also maintain risk registers at all our sites, which are periodically reviewed. The major risks recorded in these registers are further reviewed by the Chief Executive Officer and mitigation measures are adopted accordingly.

Board Level	Audit Committee	
Company Level	Risk Management Committee	
Company Level	Review by CEO and CFO	
Unit Level	Unit Heads/Functional Heads	

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Identifying Material Issues

Materiality Assessment is the new tool for strategizing "Sustainability of Businesses". It is the process of defining the aspects that are of highest importance to the stakeholders and the management of a company. The materiality assessment process requires engagement with various stakeholders to get an understanding of the aspects that they think are important to them and can impact them. At the same time, it is also important to have the perspective of the management on aspects relevant to sustainability.

Approach to Materiality

The Materiality Assessment Process at Hindustan Zinc was a part of the preparation of the Sustainability Report 2015-16. We engaged with an external consultant to conduct the Materiality Assessment Process. Our approach involved a 7-step sequential materiality process that helped us to identify and prioritize key sustainability issues for the reporting period. The criteria applied when selecting material issues included the relevance of the issue to the relevance to the stakeholders. The finalization of the materiality matrix was drawn on several internal sources and external sources.

Objectives of the Materiality Assessment

Identify key environmental, social and governance risks and opportunities for HZL

Inform wider business strategy

Identify the most important topics to be covered in the sustainability report

Engage with internal and external stakeholders

Identify future trends that could impact HZL



Materiality Process Details

STEP 7

Materiality Matrix 2015-16

The materiality

matrix was created by

STEP 6

Determining Management **Priorities**

Aspects

potential list of material aspects, were The material categorized by Hindustan Zinc's senior management as low, medium, or high priority. This categorization was based on business in terms of executing strategy, current and future risks, and market

STEP 5

aspects were ranked based on their importance to the stakeholders. The list of aspects for each stakeholder was sorted from highest to lowest to obtain the ranking of the topics. Finally, the material aspects with top 2-3 scorings were

considered.

Prioritizing Stakeholder

plotting the material topics relevant to stakeholders In the materiality and material workshop, the topics relevant identified to management on an axis classified into three areas i.e. of low. medium, and high priority. The location of each material topic in the matrix was finalized by considering the how critical each qualitative topic was for the inputs obtained from our interaction with the stakeholders and management. opportunities.

STEP 4 Assessing **Impacts**

Each material

aspect was

STEP 3

Categorization

STEP 2

Identification of Stakeholder **Groups and** Material **Aspects**

Material topics relevant to mining, smelting and refining operations of Hindustan Zinc were discussed. For certain topics where found relevant the downstream and upstream activities have also been included.

STEP 1

Defining Scope

and Boundary

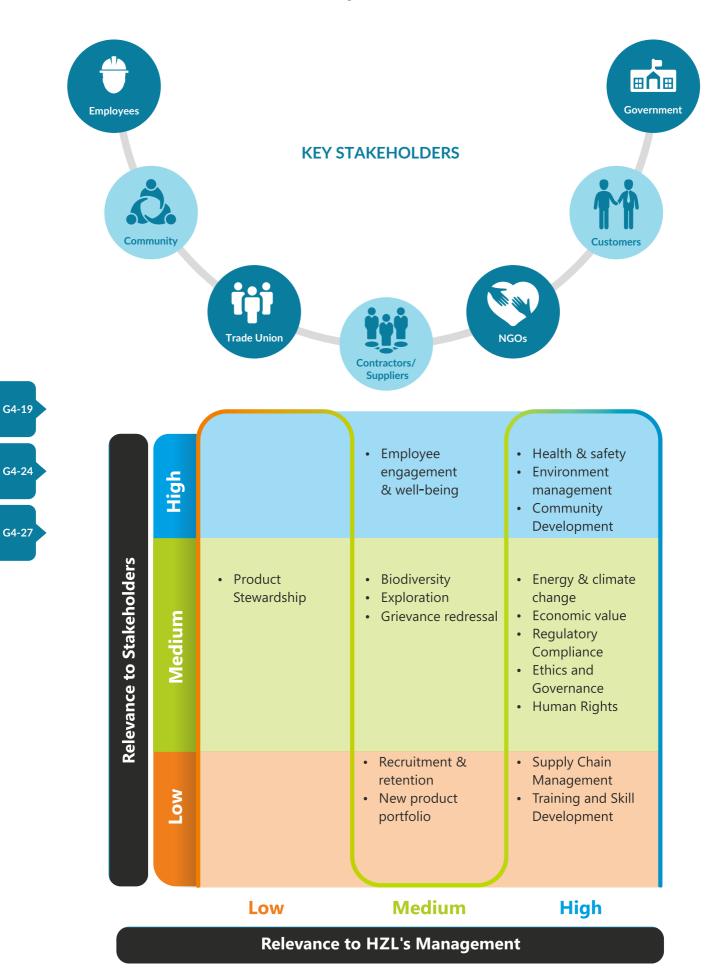
The long-list of potential material aspects was refined by clustering them into ESG (Environmental, Social and Governance) categories.

identification of stakeholder groups and material aspects began with a tentative list formulated based on last year's materiality exercise and by referring to material issues relevant to the mining and metals industry. In an exclusive materiality workshop, the senior management of HZL identified the important stakeholder groups for the company and arrived at the material aspects relevant to the

management.

assessed to understand its relevance to the business and stakeholders. To do so, we considered the relevant stakeholders for each aspect and assessed the importance of each aspect to them.

Stakeholders and Materiality Matrix 2015-16



Risk Analysis

Sustainability Risks	Impacts	Mitigation Measures
	Safety, Health and Environm	ent risks
Risks during operation Accidents Explosions Emissions and wastes	 Loss of human life or property damage Adverse impact on surrounding communities and impact on brand image Adverse impact on environment Litigation and disruption to operations Penalties 	 Safety Culture Transformation with unique program – 'Aarohan' Emphasis on Safety Behavior and Leading Indicator Reporting: Near Miss, Unsafe Act, Unsafe Conditions In-process innovations and adoption of best practices for Environment friendly operations Efficient water use and zero discharg Waste Management practices
	Community Relations Ris	ks
Risks to Community Relations Inability to provide inclusive growth Disruption to their living styles due to the Company's operations	 Discontent amongst Community Loss of Social license to operate 	 Need Assessments conducted every three years to understand the needs community Programs undertaken for Education, Women's Empowerment and Community Development Agriculture & Livestock development programs for sustainable alternative livelihoods.
	Natural Resource Risk	KS .
Lack of availability of natural resources like water, energy and land	Negative impact on operations and affect future projects	 Treated wastewater from a 20 MLD STP reused in our smelting operation for reducing freshwater demand Adoption of best practices and proce innovations for saving on energy needs Efficient Waste Management to avoil land degradation
	Human Resource Risk	S.S.
Talent Retention and Lack of Underground Mining Skills	Adverse impact on Productivity	 Talent pool creation and Leadership Development through unique programs: Leaders connect and Act u (Technical and Behavioral Stars) Underground Mining Academy established

G4-2

G4-14

Reporting the Sustainability Indicators

In this report, we are highlighting our sustainability progress for FY 2015-16 by mapping our performance against four pillars of the Vedanta Sustainability Framework. These pillars are depicted in the various sections of the report. The report sections highlight the relevant material aspect prioritised and our progress/failures in FY 2015-16 whilst illustrating our conformity to the Vedanta Sustainability Framework. The report henceforth has been compiled in four sections, namely:



ZINC AS CUSTODIAN

Depicts the 'Responsible Stewardship' role played by Hindustan Zinc in achieving enhanced Production; good Governance; Safety Culture; and Zero Harm to Environment

- Business Ethics and Governance
- · Zero Harm Culture
- · Growth and Expansion
- · Environment Connexion



ZINC AS COMPANION

Depicts the various ways that we at Hindustan Zinc adopt towards 'Building Strong Relationships' with our Stakeholders

- Engaging Effectively with Stakeholders
- Strengthening Supplier Relationships
- Building Better Customer Relations



ZINC FOR ADDED VALUE

Depicts the pivotal role played by Hindustan Zinc for 'Adding and Sharing Value' with the Employees and the Community

- · Valuing Human Resource Asset
- Empowering Communities



COMMUNIQUE

Depicts Hindustan Zinc 'Strategic Communications' revealing the Sustainability progress at Hindustan Zinc

- Key Performance Indicators
- Material Aspect Boundary Index
- Sustainability Road Map
- UNGC Principles
- FIMI Principles
- GRI G4 Index
- Assurance Statement
- Awards & Accolades

ZINC AS

CUSTODIAN



Impacting Material Aspects



Biodiversity



Management



Governance



Exploration



Health and



Energy and Climate Change



Fronomic Value



Regulatory Compliances



Human Rights

Our focus



Business Ethics and Governance



Zero Harm Culture



Growth and Expansion



Environment Connexion

Business Ethics and Governance

GG_

We have always believed in a holistic business view with sustainability as an integrated aspect of our corporate governance. Continuing with the same tradition, we will strive to maintain good governance on the pillars of equity, transparency and accountability.

Chief Financial Officer

Amitabh Gupta

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Responsible Governance

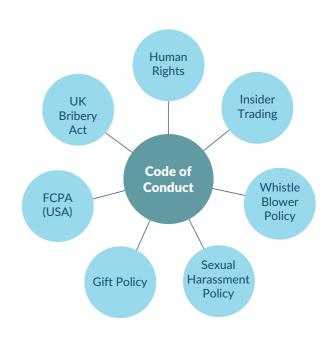
At Hindustan Zinc, we have a robust corporate governance framework by which our Board of Directors seek to ensure accountability, fairness, and transparency in the company's relationship with all its stakeholders. As a responsible corporate, we strive to have a high level of corporate governance through a three tier governance structure driven by the Board of Directors of Hindustan Zinc. The board is supported by five committees that help to implement the strategic decisions across our units and demonstrate good corporate citizenship through environmental awareness, ethical behaviour and sound corporate governance practices.

Committees of the Board	Strategic Supervision	
Audit Committee	Board of Directors	Lay down strategic goals, major expansion projects, capital expenditure and business plan approvals
Stakeholder Relationship Committee	Operation Management and Control	
CSR Committee	Functional heads, Plant heads, steered by the CEO, CFO and COOs	Handles management and coordination of the business to seek continuous improvements in the working of the company
Risk Management Committee		
	Plant/ Unit Executive Management	
Nomination and Remuneration Committee	Comprises of several strategic SBU's	Responsible for overall execution and empowerment through decentralized decision making

Promoting Ethical Business

We believe that an organisation benefits from practicing and promoting ethical behaviour. Honesty and integrity foster a positive work environment that strengthens the confidence of all our stakeholders in us. Our Business Ethics & Code of Conduct addresses ethical conduct in our work environment, business practices and relationships with external stakeholders.

Our values and principles are enshrined in our Business Ethics and Code of Conduct. This applies to all executives of the company. All Board members and all executives annually affirm compliance with the Code. All executives were imparted classroom training during the year in addition to 100% of new joinees. Our Ethics Committee has reviewed cases on violation of the Code of Conduct & Business Ethics and necessary actions have been taken after investigation. Also as a progressive entity the findings are communicated as an awareness alert, without divulging the name of the concerned involved.



G4-56

As a corporate with a strong adherence to ethical

Nations Global Compact, we abide by the UNGC

bribery. Our code of conduct acts as a resource,

providing guidelines for ethical behaviour for our

principle 10 which states that business should work

principles, we realise that bribery and corruption are serious concerns which could potentially undermine the

integrity of our company. As a signatory to the United

against corruption in all its forms including extortion and

stakeholders. To address the specific issue of bribery and

corruption, our code covers topics such as the Securities

Act (USA). All employees are communicated on the same

Dealing Code (Insider Trading Regulations), Gift Policy,

The UK Bribery Act and the Foreign Corrupt Practices

as a part of our code of conduct training. The same is

also dealt with in our supplier code of conduct and

We believe that human rights are a key aspect of

sustainable development. As a model employer in the

rights. We have a comprehensive human rights policy,

which is in line with the International Declaration of

Human Rights. 100% of our security personnel were

provided training on the same for the reporting year.

Human rights clauses are a part of all our agreements

to the United Nations Global Compact (UNGC) we communicate the progress on the human rights front in

accordance with principle 1 and 2 in our UNGC

reporting year, there have been no stakeholder

complaints related to human rights.

with our suppliers and contractors and we discourage the

practice of child labour and forced labour. As a signatory

Communication on Progress report every year. For the

country, we support and respect the protection of human

Protecting Human Rights

communicated with them prior to contract approval.

G4-57

G4-58

G4 -HR2

G4 -HR3

G4 -HR7

G4 -HR12

G4 -SO3

G4 -SO4

G4 -SO5

Encouraging Fair Practices

A whistle-blower mechanism is in place at Hindustan Zinc so as to provide an opportunity for employees and other business partners to report any unethical practice within the company. We have a Whistle-blower policy that ensures that the identity of the whistle-blower is kept confidential. Complaints can be reported pertaining to the following areas such as:

- Fraud against investors, securities fraud, mail or wire fraud, bank fraud, or fraudulent statements.
- Violations of any rules and regulations applicable to the company and related to accounting and auditing matters.
- Intentional error or fraud in the preparation, review or audit of any financial statement of the company.
- Any violations to the Company's ethical business practices as specified in the Company's Code of Conduct policy.

Any complaints under this policy are reported to the Group Head-Management Assurance who is independent of operating management and business. Complaints can also be sent to the designated E-mail ID:

hzlwhistle.blower@vedanta.co.in

Dedicated hotline number (000-800-100-1681) as well as web based reporting platform

http://www.vedanta.ethicspoint.com

for complaints under whistle blower policy of the Company have also been created.

The Head-Management Assurance will ensure investigation of complaints and submits regular reports on any complaints received to the Company's Audit Committee for review.



Zero Harm Culture

GG_

Safety is the value and philosophy around which we do our business. Our Safety initiative Aarohan is designed for cultural transformation with a message that we care for all our Stakeholders. We are currently engrossed in redesigning our 'Safety Culture' to ensure 'Safe Life' for all. As we progress towards creating incident free workplace, we have taken the pledge to enthuse this philosophy into the lives of our employees. With this we are aiming towards making our Company the safest place to work.

Vikas Sharma

COO - Smelters

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Sustainable Development Goals

HZL's ACTIONS

Safety Standards for key high risk activities

Life Saving Rules





Embedding Zero Harm Culture

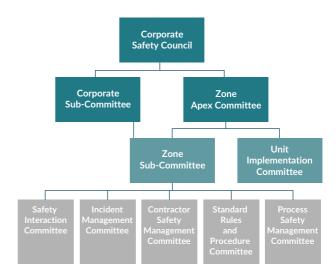
We care for the Safety of our people, business associates and communities. For us Safety is non-negotiable and an integral part of our business. In order to create a positive "Safety Culture" at Hindustan Zinc, our major focus areas are:

- Making our operations accident free
- Providing adequate safety training
- Demonstrating safe workplace practices
- Encouraging hazard identification and incident reporting
- Positive safety culture reinforcement on-site and offsite

Our approach to health and workplace safety is guided by our Health, Safety and Environment Policy. All our major units are driven by ISO 14001:2004 and OHSAS 18001:2007 to fulfil our commitment to employee safety and well-being. Employee well-being is incorporated in every aspect of our business, right from our strategic and business planning to our Mining and Smelting operations. All our major units are also certified by QCFI for 5S Workplace Management. This gives our workforce a systematic and safe workplace, making us more productive. Furthermore, to maintain global standards at work; we are also aligned to the sustainability framework and standards of the International Finance Corporation (IFC), International Council on Mining and Metals (ICMM), and the United Nations Global Compact (UNGC) principles.

Safety Governance

At Hindustan Zinc, we have an established Integrated Safety Organisation Structure driven by the Corporate Safety Council; Chaired by the CEO and the Corporate Head - EOHS is the Member Secretary of this council. The Council operates through five Corporate Sub Committees and six zone apex committees which are primarily responsible for establishing the safety culture at the unit level through various prioritized work streams, namely, Safety Interactions; Incident Management; Contractor Safety Management; Standard Rules and Procedures; and Process Safety Management.



We also have a formal joint management–worker health and safety committee that helps to monitor and advise on occupational health and safety programs. The safety committees meet regularly and see adequate representation from both the management and the workers, including contract workers. Minutes of meetings are prepared and progress on them are monitored.

Safety Culture Transformation

We are committed to provide safe working conditions and have effective management systems in place to ensure the well-being of all our employees. For transforming and enhancing the safety culture that exists at Hindustan Zinc, we initiated a new programme – 'Aarohan' with an external consultant DuPont. Aarohan implies step- up or step change.

Hindustan Zinc's safety mascot and the slogan 'My Safety My Responsibility' launched, is being used throughout the company for all safety promotional activities and stakeholder communications. During 2015-16, safety impact was enhanced by driving 'Safety Theme' for each quarter, and simultaneously worked on focusing on creating awareness and taking specific initiatives based on these themes.



The Aarohan programme took off by identifying five prioritized work streams to bring about safety cultural transformation by involving the line managers and shop floor workers, the prioritized work streams were executed under the active guidance of the five subcommittees. The roles and responsibility of these subcommittees are as follows:

Safety Interaction Sub-committee

- To ensure that all unit employees have adequate standards and procedures to define and implement a process to improve behavioural safety using safety interaction system
- To implement and deploy and continually review safety interaction processes at zone for achieving world-class safety performance

Incident Management Sub-committee

 To develop, deploy and continually improve Incident reporting and investigation process uniformly across all businesses of Hindustan Zinc

Contractor Safety Management Sub-committee

- To implement and continually improve Contractor Safety Management (CSM) system in Units
- To standardise contractor management cycle to foster contractor awareness, involvement and improvement

Process Safety Management Sub-committee

 To implement and maintain risk management systems and processes in order to eliminate process safety incidents and injuries

Standards, Rules and Procedures Sub-committee

 To implement a process to identify, develop, train and implement the high risk standards and procedure

Safety Themes







Safety Excellence Journey- Aarohan

In 2013, Hindustan Zinc associated with DuPont to enhance safety culture and inculcate a behavior of safety amongst our workforce. We had two main goals

- a) Zero harm through the transformation of safety culture
- b) Achieving excellence in safety standards

We named the initiative 'Aarohan' – the journey of stepping up towards safety excellence. Our employees and contractors were also partners in this initiative, since we believe that safety is every individual's responsibility. Our operations can achieve the vision of zero harm only when our employees take responsibility for their own safety and safety of those working with/around them.

This initiative helped us to re-organize our safety architecture and frame our Safety Management Design based on Safety Management Evaluation and Safety Perception Survey.

The journey of Aarohan has succeeded in demonstrating 'Visible Felt Leadership' with the Line Management proactively taking accountability and responsibility for safety and developing a belief that all injuries are preventable. Through this Aarohan Journey, we've noticed significant improvement in the following areas:

- · Reporting of leading indicators
- · Reduction in incident rate
- Improvement in quality of incident investigation
- Increased active employee participation in safety-related activities and campaigns
- Enhancement in standardisation of systems and skill development, etc.

All this has successfully inculcated a positive safety behaviour as employees have made identification of risks an integral part of their work activities. We attribute this positive move to the conscious efforts we've made towards safety through 'Aarohan'.

Contractor Safety Management

Contractors play a key role in our business and we're focused on fostering contractor awareness on safety. They're actively involved in aligning to the safety behaviour and implementing improvements to ensure safe working places right from contractor selection till job completion. Our contractors are obliged to work in accordance to our safety standards and systems, for which they are provided the necessary safety induction and refresher trainings from the moment they associate with us. We've made their participation in all our safety campaigns and awareness drives mandatory. Additionally, we have prepared comprehensive e-learning modules for contractors. A contractor score card system has also been introduced, which is tracked on a regular basis to evaluate their safety performance. Contractor Field Safety Audits are also conducted periodically to improve their safety standards.



- Forklift Basics
- Slips, Trips and Fall: Taking the Right Steps
- Chemical Handling Safety
- Electrical Safety
- Personal Fall Protection
- LOTO
- Scaffold Safety

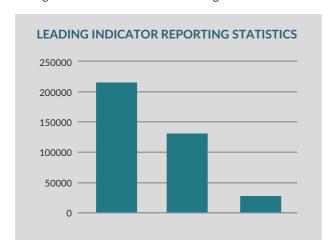
- Confined Space Entry
- Machine Guarding
- PPEs
- Hand Safety
- · Fire Safety
- Defensive Driving
- Contractor Safety



Safety Performance

During FY 2015-16, we achieved a significant reduction (41%) of the lost time injury frequency rate (LTIFR) as compared to the previous year, with six units recording zero LTIFR and the total LTIFR drastically reducing to 0.5.

However, the year was not without its misfortunes. Irrespective of all the measures that we took, we witnessed 4 fatal incidents and the deceased included two permanent employees and two contractual employees. Post each of these incidents; we investigated the cause of its occurrence. It was discovered that the fatalities were caused by Fall of Ground, fall from height, improper cage movement, and improper traffic management. We have immediately responded by making appropriate changes at our sites to avoid similar incidents in the future. Learnings from these incidents have also been communicated to each of the units. All types of incidents are captured, reported and closed through an online system. It also provides the status of implementation of various recommendations which emerged from these incidents' investigation.



Safety Training

Along with all the informal ways of infusing positive safety ethos in Hindustan Zinc's work culture, we also invested in formal trainings on safety. Several training courses and workshops were conducted which were tailored to the needs of employees and addressing personal safety, systematic failures and risk management. These trainings that were carried out either in-house or through an external agency included employees from new recruits to senior managers and as well as contractors. Trainings were offered to employees and contractors on subjects including behavioural safety; process safety; emergency preparedness; use of self-contained breathing apparatus; emergency management; emergency kit handling; fire safety and prevention; material handling; first-aid training; working at heights; critical job analysis; permit to work; 'Lockout-Tagout'; electrical safety workshops, and legal safety training etc. During 2016, 283,071 hours of safety training were delivered to employees and contractors.





Revamped Parking Yard for Improved Safety - Learnings from Fatality

Parking yards are generally less focused from the perspective of man and machine interfaces, which are frequent. For enhancing traffic management and to avoid the possibility of any incidents relating to man and machine interface, we made modifications at our Rampura Agucha parking yard.

- · Changing the entry and exit points for the dumpers to prevent crossing the parking yard
- Extension of parking yard towards south end by 25 meters to accommodate all dumpers
- Construction of a dedicated pedestrian walkway around the periphery of the parking yard for safe movement of personnel
- Construction of a bund/parapet to protect the walkway from any HEMM collision
- · Audio and visual alarm bell before movement of any dumper at the parking yard
- Improved illumination by the installation of High Mast light
- Development of a SOP as per the revised parking layout and communication of the same to the vehicle operators through an animated film



Life Saving Rules

We launched the 'Life Saving Rules' (LSR) for promoting 'Zero Harm' culture. All our employees, contractors and contract workforce are expected to adhere to the LSR with zero tolerance. Any non-compliance would lead to detailed investigation and may also result in disciplinary action.

Following its launch, we provided training on LSR to the workforce including 100% of our employees and contractors. LSR Champions explained the relevance, implication, and the consequence of LSR management. Launched on 21stAugust 2015, LSR has received significant enthusiasm, support, and commitment from our employees, including the Workers' Federation.



CASE STUDY

All Prepared for Emergencies

With a futuristic approach for tackling emergencies at mining operations, we have developed an exclusive Mine Rescue Team at all our sites. These comprise of experts who are trained to deal with rescue activities related to height and confined space.

We have progressed in establishing a Rescue Room and Rescue Recovery Refresher Training Centre at Rajpura Dariba Mines. The Rescue Centre has facilities like rescue apparatus storage, testing and repairing room; training room for rescue training in hot and humid, irrespirable and poorly visible atmosphere, and training gallery with mine roadway structure.

For handling emergency situation in underground mines, we already have 4 refuge chambers. Each chamber has a capacity of providing refuge to 20 persons and with a provision to provide life support system upto 36 hours. In addition we have also installed four 'refuge chambers' in our Rampura Agucha underground mine with capacity to provide refuge to 6 persons. A Refuge Chamber provides a safe haven to employees during emergency situations like fire, rock fall, and blockage of escape routes. Each air conditioned refuge chamber also has basic facilities like water, food and toilets for a comfortable stay. It also has communication facilities to connect to the surface. For power, it is connected to the electrical mine power supply and alternatively backed with an automatic electrical battery backup system.







Refuge Chamber with life support back up of 36 hrs. For six persons installed at underground mines at Rampura Agucha.





Mikhail Sonam, Geotechnical Engineer, Rampura Agucha, Underground Mines, shares his experience

'Risk' in mining is usually viewed through the lens of 'likelihood' and the 'consequence' of a hazard. Dealing with hazards is a reactive approach in the mining environment. However, identifying old & new potential hazards, assessing their likelihoods and consequences, and finally rectifying the same to eliminate the risk, is a new and proactive approach.

And it is this approach which we are implementing at the Rampura Agucha Underground Mine. From immediate near miss & incident investigations, systematic root cause analyses, all the way to effective implementation of systems & procedures are ensured here. Reporting of unsafe works and conditions are appreciated just as much as doing work safely. One can observe here the attitude to strive towards understanding issues and improving standards. And all these factors make RA-UG a safer place to work.

Nowadays the first question asked in every meeting is "How safe was our previous day of operations?" rather than "How much development/production did we achieve on the previous day?". We know now that the senior leadership cares about the safety of each and every worker working with us. Clearly the management believes in 'Safety before all else'.



Employee Engagements on Safety

Safety Stand-down

This is a leadership driven initiative, where the senior management chooses a designated time at the sites to have an informal meeting with the employees to discuss the reported incidents. These meetings, usually held as gatherings, are attended by all employees, including non-executives, contract employees, vehicle drivers, and security guards. The site leaders brief the frontline workers on hazard incidents and at the same time communicate the precautions essential for ensuring safety and also ask suggestions for improvement. Such interactions initiated proactively by the leadership have a lasting impact on the workforce, and serves to strengthen the bond between the management and the employees.

Safety Celebrations

Safety celebrations are yet another informal way of infusing safety behavior. Various Safety weeks such as Road safety week, Fire safety week and 2 year completion of Aarohan journey were celebrated during the year with great enthusiasm and these programmes witness wide participation of employees at all levels. Road Safety Week was marked by several events, like a signature campaign on safe driving; road safety oath, ROKO TOKO abhiyaan, nukkad natak, super bikes rally, and poster, essay and quiz competitions was a great success with active participation from all employees including the senior management.



A 60 min Town Hall on Safety, chaired by the Senior Management of HZL, including CEO Mr. Duggal, was attended by ~2700 employees. The interactive session was a success with several takeaways on enhancing safety from the experience of the employees at various units.



Safety Gallery

This is an artistic piece of work that displays the safety provisions at Hindustan Zinc and establishes what is expected of a Hindustan Zinc employee. This unique gallery showcases a miniature layout of the plant, including hazardous storage area, mannequins with PPEs, and safety instructions displayed throughout the plant. The exhibit also includes an elaborate display of various job specific and mandatory PPEs, working model on LOTO implementation, various fire equipments, display of requirements of confined space entry, working at height and LOTO standards. We believe this beautiful depiction of Safety at Hindustan Zinc will spread the thought of safety and remind employees to adopt safe work practices.







Occupational Health Management

Health and well-being is every individual's right. As a responsible corporate, concern for the health of our employees is high on our list of priorities. Operations free from health risks have the potential to improve productivity. Knowing this, we have processes in place to manage and monitor health risks of employees.

Health Services

Health services commence with a pre-employment medical check-up followed by periodical medical check-ups and other on-site tests to keep track of the occupational exposure limits of the employees. Specific examinations like blood lead level, audiometric, spirometry, ophthalmic, and chest x-rays and blood profiling for toxic elements, such as, arsenic, cadmium, mercury, cobalt, lead, and chromium are the usual health parameters recorded for our employees. During the reporting period, 18,487 employees, including contract employees, underwent initial and periodical medical examinations. No occupational disease case was reported in FY 2015-16.

Health Centres

We have well-equipped occupational health centres, which are established in all major mines and smelters and supported by Occupational Health experts. The operations of these health centres are managed using Panacea software that coordinates all aspects of patient care, from pre-registration and admission to patient care and discharge.

Healthy Work Environments

In our pursuit to have an ambient work environment, we emphasize on:

• Source Control of Pollution: Fugitive emission control is one of our priorities and we have made improvements in our processes to make the environment conducive for workers. Special measures taken include, installing bag filters at emission sources; providing covering facility for

the conveyor belts; installing water sprinkling systems at raw material handling and storage areas and carrying out periodic maintenance services for arresting leakage of dust and fumes.

- Use of Personal Protective Equipments (PPEs): We provide all our employees and contractors, with good quality PPEs and ensure that they are not negligent in using them.
- Workplace Hygiene: All our operations are equipped with adequate washhouse facilities. Besides, to comply with WASH pledge for safe access to Water, Sanitation and Hygiene (WASH), we engage in several awareness programmes on health and hygiene at workplace.
- Monitoring Exposure to Hazardous Substances: We have invested in technologically advanced processes that reduce possible exposure levels, including pollution control equipments, effluent treatment, sewage treatment, and the proper storage of hazardous chemicals.
- Lifestyle Management: Despite having utmost faith in a measures that we have carried out, we believe there is need to disseminate the right knowledge for good health. In keeping with that, we've started training employees and their families on stress management, bone density tests, hypertension, ergonomics etc. Special sessions are organized for female staff. Our other unique initiative includes 'Stepathlon'.

Health Management at Hindustan Zinc



Health Centres & Health Check ups



Workplace Hygiene



Protection Equipments



Training and Awareness on Health





"Stepathlon taught me to stay fit. It motivated me to walk more by doing little things: taking stairs instead of escalators; travelling on foot to cover short distances rather than using a car or a bike."

Digambar Patil, Pantnagar Metal Plant

'A physically and mentally healthy workforce is key to run a profitable business, and thus we believe in investing in the well-being of one of our most important assets - human capital. Towards this endeavour, we invested in Stepathlon, a virtual platform that urges participants to walk 10,000 steps a day- active or even incidental for 100 days.

This is based around the advice of global health authorities who recommend a minimum of 10,000 steps a day. This 100-day virtual race with a target of 10,000 steps per day was launched by the Company for our employees and their spouses. Each of them received a step kit that included a pedometer, to be worn through the waking hours so that steps taken by the individual could be counted. In 2015-16 a total of 425 employees and their spouses participated across locations. It saw an increase in energy levels, weight loss, sound sleep, higher engagement levels and an overall feeling of a happier and healthier Hindustan Zinc family.



We Pledge to be CLEAN!

As a first step in accelerating action on workplace hygiene, we pledged universal access to safe Water, Sanitation and Hygiene (WASH), an initiative of the World Business Council for Sustainable Development (WBCSD), which brings businesses together to create a sustainable future. We as a Company are committed to implementing access to safe water, sanitation and hygiene at the workplace at an appropriate level of standard for all employees in all premises under direct control within three years.

WASH Implementation

- · Conducted awareness-cum-training session
- Display boards and signage
- Signature campaign for employees and their families
- Safety Chaupal: WASH pledge for contract employees
- Ensuring safe water supply and workplace hygiene and sanitation
- Easy access to drinking water, toilets, hand dryer, hand-washing facilities etc.
- Improvement in housekeeping across all locations



Acrophobia Testing

One of our safety programs involves testing workers for acrophobia (fear of height). An acrophobia testing facility was created to check whether a worker is fit to work at height.

The testing facility has a walking bay of 300 mm width, 7 meter length and 5 meter height, the same is accessed through staircases. a person is asked to walk with fall protection on this walking bay. The test is performed in presence of a medical practitioner who interviews each worker to check whether he has any complaints of fear, giddiness, vomiting or other issues, while ascending, descending or working at height.

Workers who are confident are asked to walk on the structure which is provided with a fall protection arrangement. The workers are monitored before and after walking on the structure for pulse rate and blood pressure. Workers who clear the test are allowed to work at height while those who fail to clear it or have hypertension are given work at the ground level.



Growth and Expansion

GC

Our future depends on the status of our reserves and resources. Hence, we focus on our exploration endeavours for discovering mineral deposits that offer future security and the opportunity for us to yield enhanced value. We design our mining projects to excel and propel Sustainable results.

Maveen Singhal

Director - Projects





Our Growth Journey

The rich mining heritage of Hindustan Zinc Limited justifies our status of being a 'World Leader' in Zinc production. Ancient zinc mining, which dates back to 2500 years, has its traces evident in our Zawar mines, Rajpura Dariba mines and Rampura Agucha mines. Zawar is also renowned globally for being the first place to begin the zinc smelting process. Our mining journey, that began 50 years ago at Zawar, has expanded to five more mining locations with Kayad Mine being the latest addition. Until 1989 we were operating completely underground, when the first production from an opencast mine commenced at our Rampura Agucha Mines. The production from this open-cast mine touched heights and today it owns the fame of being the largest zinc producer globally. Cutting the journey short is the finite life of the Rampura Agucha Mines. Realizing that we would soon be reaching the ultimate depth of the open pit, we took the decision to transition to a completely underground operation, few years back. For sustaining our business and overall growth, we commenced smooth transition of our operations with a robust mine plan. With the help of best execution partners and world-class infrastructure we are continuing with our efforts to establish the sustainable underground mining operation. During this phase of transition, we still stay focused to achieve our target production.

Economic Value

Financial Performance

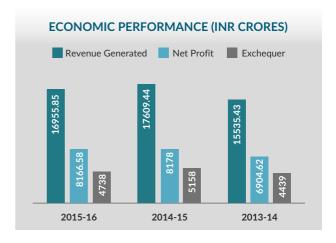
During FY 2015-16, the total revenue earned was Rs.16,956 Crores. There was a decrease of 3.7% compared to the previous year.

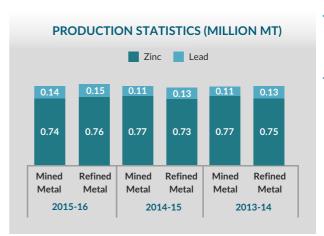
The decrease was primarily on account of 16% and 13% lower zinc and lead LME respectively. The silver prices were also reduced by 16% but this was largely offset by higher volumes of production. Depreciation of the Indian Rupee by 7% also contributed to the overall decrease in the net revenues. The net profit for the reporting period stands at Rs. 8,167 Crores, flat from the previous year. We also contributed Rs. 4,738 Crores, in terms of royalties, taxes and duties to the exchequer on cash basis. A Special Golden Jubilee dividend of 1200% i.e. Rs. 24/- per share on share of Rs. 2 each was also announced by our Board of Directors.

Production Performance

FY 2015-16 witnessed an increase in our overall production quantities. A marginal increase over last year, the mined metal statistics touched 0.88 Million MT - the highest production ever recorded. The production trends of refined metals also showed an increasing trend for refined zinc and saleable lead, with an increase of 5% and 33% respectively. The production of integrated saleable silver saw a substantial increase by 58%. This was a consequence of high volume production (422 MT) from Sindesar Khurd mine as well as enhanced recovery. Refined metal production was higher than mined metal production due to conversion of existing mined metal inventory and enhanced smelter efficiencies.

Underground infrastructure development for Rampura Agucha is in full swing with the shaft sinking project reaching a depth of 860m, with commencement of off shaft developmental works. The mine also achieved its highest ever decline development in the month of March, 2016. During the reporting year, the production from underground mining has escalated by 40% of the previous year's record increase of 28%.







G4-9

G4-17

Mine Expansion

GG

We are focused towards complete transition to underground operations and we are striving hard to create a pool of underground mining talent. For smooth transition we have a robust mine plan with world-class infrastructure and the best in class execution partners. The Journey is on....

L. S. Shekhawat

COO - Mines

HZL's ACTIONS



- Robust Mine Plan for Trasistion
- World-Class Infrastructure
- **Underground Mining Academy**



Simultaneous Underground and Opencast Mining for maintaining Production Performance

Exploration of new Reserves and Resources







Expansion and Closures

Sustaining in the mining sector for 50 long years, we have realized that a long life of mine and low cost operations are vital to gain an edge over any unidentified risk. But to remain a leader, we need to enhance value at every stage of the business. Our business model embarks on safe and eco-friendly mining leveraging advanced technology with focus on value addition in each component of our enterprise. Whilst doing so, we constantly keep track of our resources and reserves by our world-class exploration efforts. Simultaneously, we also explore the possibilities of diversifying our business as a safeguard measure beyond the life of mine.

With a successful history of exploration, we focus on brown field exploration for new reserves at extended depths of the existing mining locations and on new discoveries through green field discoveries. During the reporting year, 185,120 metres of brownfield drilling successfully added 25.3 million MT R&R base. The current R&R asset supports an overall mine life of 25+ years at current level of production.

During the year, Sindesar Khurd and Kayad outperformed the plan and ramped up ahead of schedule to reach production capacity of 3 mtpa and 1 mtpa respectively. Environment clearance of 3.75 mtpa capacity for Sindesar Khurd Mine was received during the year where main shaft sinking has been completed up to the ultimate depth of 1,052 meter even as off shaft development continues to be ahead of schedule.

Work on new mill at Sindesar Khurd and de-bottlenecking of existing Zawar commenced during the year.

New Projects

Currently, we are undergoing three major expansion projects. For every new project, we ensure the Vedanta Sustainability Framework throughout all the stages from exploration to development to operation and closure. We also conduct an environmental and socio-economic impact assessment through a systematic process comprising of stakeholder engagement at every stage. The details of the expansion projects are as follows:

- Expansion of Rampura Agucha Mine underground is going on in full swing to yield an ore production of 3.75 million MT by 2019-20. The unit received the environment clearance in 2012 for which all the necessary Environment and Social impact studies had been undertaken earlier.
- Expansion of Sindesar Khurd Mine, that has an existing annual ore production capacity of 2.0 million MT, is undergoing to increase production capacity to 3.75 million MT per annum by 2018-19. The Environmental Impact Assessment involving social impacts assessment has been completed and the public hearing for the same was conducted in July 2015. The Environment Clearance for this project has also been obtained in January 2016.



FY 2016 was witness to the highest ever integrated metal production. Noteworthy, is the minimal influence of transition phase on production.

 Expansion of Zawar Group of mines, with an annual ore production capacity of 1.2 million MT, is being carried out for increasing the ore production capacity to 4 million MT per annum. The project has already got approval on the Terms of Reference from the Government and the Environment and Social Impact Study is planned to be conducted by 2016-17 Q3.

Mine Closure

Closure planning is a key consideration in the planning and development of our projects and operations. We are committed to minimising and mitigating the legacy impacts on the environment and related communities throughout the life cycle of our operations. In line with Vedanta Sustainability Framework and regulatory requirement, all our mining units are having progressive mine closure plan. These closure plans set out closure criteria, outline closure activities, establish roles and responsibilities, time frames and resource requirements. It also covers the details of rehabilitation activities for disturbed land, water quality management, air quality management, waste management, tailing dam management, disposal of mining machinery, benefit to retrenched employees as per the statutory provision, and end uses for land and infrastructure.

Health, safety, social, environmental, legal, governance and human resource considerations are addressed throughout the mine closure plan. Currently, none of our mines are approaching closure. However, as part of a regular process, we are regularly tracking and monitoring the progress on progressive mine closure plan.

Business Continuity

As we walk through our Golden Jubilee year, we are all set to invest nearly Rs. 6,650 Crores in the coming 3-5 years on expansions of our mines and smelting operations. We target to take our current ore production levels of 9.36 MTPA to 14.00 MTPA and finished metal production levels from 0.85 MTPA to 1.10 MTPA. We are also looking to set-up a new Fertilizer Plant with a capacity to manufacture 0.5 MTPA of Di-Ammonium Phosphate in Debari with an estimated investment of Rs. 1,350 Crores.

Even as we are tuned to meet the target of 1.1 MTPA mined metal capacity in the next three years, we are still continuing to explore new reserves for future security.

G4-13

MM10

ENHANCING UNDERGROUND TALENT POOL

As we transit from open cast mining to underground mining, one of the key challenges that we face is the lack of skilled personnel with underground mining skills. To address this issue, we have set up an Underground Mining Academy. The academy offers full-time residential training to unemployed youth on various skills required for underground mining operations. So far, we have run three batches, in collaboration with the 'Indian Institute of Skill Development' and our NGO partner 'PDI'. For this initiative, we selected people from the local community who have either a diploma or are trained in the ITI's. A six month rigorous training program is conducted at the two centres which we have set up at Bhilwara and Rajasmand, in Rajasthan. After the successful completion of the training period, they have been placed in the workforce of our contractors, as operators of our jumbo drill operations or underground mining equipments. The training has also enhanced their employability and till date, 46 successful candidates have got employment with different companies.





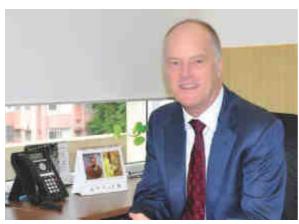
Exploration Excellence: Adding more than we deplete

We at Hindustan Zinc, since inception, have championed the cause of exploration as being integral to our mining operations and as a result high quality projects have been added to our portfolio at regular intervals. The glaring example is Rampura Agucha- the largest and lowest cost lead-zinc mines in the world. The finite life of this massive reserve is continuously extended by successful exploration programmes undertaken by our extremely motivated Exploration team. The team adopts innovative drilling technologies and state-of-the-art software packages for revealing the story of the depths.

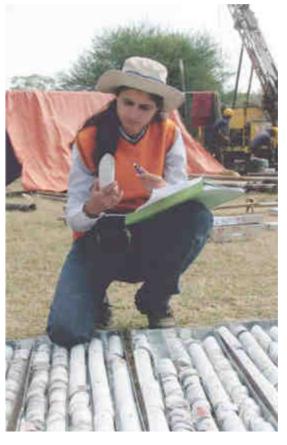
The first major drilling innovation dates back to 2005 when modern wire line diamond drill rigs were introduced. These rigs had faster drilling speeds than the conventional types commonly used in India at that time. Usage of these drill rigs enhanced daily productivity by 5-7 times per rig facilitating rapid evaluation of the deposit. The second major drilling innovation was the use of motorised directional drilling (MDD). This method has the advantage of accessing ore bodies at different vertical depths from the same parent hole. As a consequence, this saves the cost of re-drilling a long length and enables a fan of holes to intersect the ore body at different points.

To further enhance the exploration innovations, the latest softwares are used for precision in resource estimation. This improves the efficiency of modelling of the data obtained from the drilling programmes. Datamine- a mining specialist software, has enabled the Company to improve interpretations and streamline the process of quantitative prediction of resource availability. These softwares are also a great aid to geologists enabling them to identify gaps in drilling data and uncorrelated ore grade intersections.

In a nutshell, with these modern exploration methods, it has been possible for Hindustan Zinc to add much more to our resource inventory than we have depleted.







Environment Connexion

Energy and Climate Change

HZL's ACTIONS

Captured renewable energy from:

- Wind Power Plants
- Waste Heat Recovery Power Plants
- Roof top Solar Power Plants

Modified several operational processes for saving energy



Maintained stability in specific energy consumption since last three years



Obtained a scoring of 95 and awarded with India Climate Disclosure Leadership Index (CDLI) 2015

Waste

HZL's ACTIONS



Sustainable

- Pastefill technology for backfilling and tailings management
- Jarofix- the iron waste from the smelters can be a replacement for gypsum in cement manufacturing
- Use of fly ash and ISF slag in cement manufacturing
- Fumer Technology for eliminating generation of Jarosite
- Exploration of new Reserves and Resources

Water

Development Goals

Sustainable

HZL's ACTIONS

Received 'Global Water Award 2015' (UK) for commissioning STP at Udaipur

- 16% reduction in Specific Water Consumption
- Water recycling more than 30% since last three years



Partnered for commissioning of First STP in Udaipur City under PPP model

ENVIRONMENTAL PROTECTION EXPENDITURES AND INVESTMENTS (INR CRORES)



Biodiversity

HZL's ACTIONS



~1.4 million green belt Biodiversity protection through conservation of endangered flora and fauna, creating habitat for peacocks, birds and butterflies, nursery for medicinal plants



Partnered with IBBI for Natural Capital Action Plan implementation at RAM as the site for pilot

Development Goals Sustainable

Development Goals Sustainable

We envisage our company to create a progressive legacy for our only silent stakeholder – Environment. Our endeavours for this reporting period revolved around creating a culture of care for nature's assets and necessary technological interventions to go green & sustain. The way forward is predicted by our strategic decisions towards a positive footprint aligned with our investments for various environmental initiatives. In fact the progress is indicated by reduction in Water footprint by 16% & Carbon intensity by 3.56% from year 2011. The journey of protecting and sustaining the environment is continuous.....

V. Tayaraman

Head - EOHS





Mining with an Environmental Connect

By its very nature, our business of mining and smelting depletes natural resources and releases substances that are detrimental to the environment. Hence, we consider it our responsibility to continue our operations adopting global environment friendly technologies and maintaining zero discharge. We are committed to reduce our footprint on environment by judicious use of natural resources like water and energy and exploring alternate use of various wastes. Guided by three basic principles: Responsibility towards our Resources; Sensitivity towards Environmental footprint and Zero harm to the Environment, we pave the road to sustainable operations. These principles dictate the mantra for Green Hindustan Zinc and align us to practice the '4-R Policy"-Reduce, Recycle, Reuse and Reclaim in our operations.



- Responsibility towards our Resources
- Sensitivity towards Environmental Footprint
- Zero Harm to the Environment

Environmental Governance

Our endeavours for environment friendly production begins with the Environment and Social Impact Assessments (ESIA's) for any new project. This process helps us to prepare mitigation plan to address the potential impact of our projects on biodiversity and associated environment. As an outcome of these studies we choose the right technology at the design stage itself to ensure minimal impact on environment and communities around us. For the existing projects, we have set up Environmental Management Systems (EMS) and compliance to same is regularly assessed internally through Vedanta Sustainability Assurance Programme (VSAP). We keep track of our environmental incidents and all the reported incidents undergo a stringent investigation process. For ensuring the effectiveness of the EMS and compliance with environmental norms and standards, all our major units are certified for ISO 9001, ISO 14001:2004 and OHSAS 18001:2007. Guided by the Vedanta Sustainability Framework, our Health Safety Environment team (HSE) is responsible for executing all Environment Management plans that are formulated. Underwired by our Energy and Climate Change management policy, Water Policy and Biodiversity Policy, HSE team is committed to achieve inclusive green growth. Through various awareness activities, campaigns, posters and publications, our HSE team spreads awareness about the need to protect the environment; valuing resources and adopting state of the art technologies for sustainability of the business.

During the reporting year 2015-16, there have been no significant monetary or non-monetary fines for non-compliance with environmental laws and regulations. Similarly, there were no significant environmental incidents of high potential during the reporting period.



Environmental Performance

Our performance in the environmental front can be depicted across five environmental verticals: Energy and Climate Change, Water, Waste, Biodiversity and Emissions. This section of the report walks you through our initiatives to apply the Green Hindustan Zinc mantra across these verticals.

Optimizing Energy Needs

It is no secret that globally, energy resources are depleting rapidly. A revolution has started worldwide, demanding accountability for the use of these resources. As a corporate, we honour our commitment to the UNGC and have modified our processes to save on energy resources that we consume. At Hindustan Zinc, we're constantly trying to modify our mining and smelting processes to use energy optimally. Our Energy and Carbon management programme is in harmony with our vision, mission, and the Vedanta Sustainability Framework and forms the core of our sustainable development agenda. We've also created an exclusive Energy and Climate Change Management Policy that helps us to achieve a balanced Energy-Carbon cycle at Hindustan Zinc. We periodically monitor progress in energy and climate change management and guides implementation of best practices to maximize our offsets.

At Hindustan Zinc, our direct source of energy is fuel and the indirect source of energy is grid electricity. During the reporting period, our total energy consumption was 44.28 million GJ. Zinc and Lead production being energy intensive operations, we are constantly looking towards in-process innovations and best practices to help us reduce our demand for energy. We're also trying to enhance machine productivity to target reduction in specific energy consumption. Inspite of increasing the depth and moving towards underground mining we were successful in maintaining our specific energy consumption at around 21 GJ/MT for past three years.



Energy Conservation Initiatives (FY 2015-16)

- P LPG heaters replaced by electrical burners at Pantnagar Metal Plant to reduce LPG consumption during Jumbo casting
- Installation of vacuum fluorescent display (VFD) in sinter crusher ID fan at Chanderiya Lead Zinc Smelter (CLZS)
- Replacement of existing street and plant lights with LED at CLZS.
- Use of Roaster Air Blower for providing secondary air by stopping circulating air fan at CL7S
- Installation of VFD in pump motors of lead gas cleaning plant at Dariba.
- Replacement of High Pressure Sodium Vapour street lights with LED at Debari.
- Roof top solar plant installed at CLZS (100 KW) and Head office at Udaipur (100KW).
- Solar water heater installed at CLZS guest house (Capacity 1,000 LPD).
- VFD installed to thickener underflow pump at Rampura Agucha Mine (RAM) milling unit.

G4 -EN3

G4 -EN5

G4 -EN6



-EN16

Neutralizing our Impacts on Climate Change

Minimizing our GHG emissions is an important criteria for reducing the impacts on climate change. Our emissions of carbon are attributed to the high usage of various energy resources, such as, Coke, Diesel, Petrol, LPG, Coal, Propane, Grid Power etc. The total carbon emissions during 2015-16 was 4.7 million tCO_2e (includes direct and indirect emissions).

In order to offset our carbon demand, we have strengthened our 'Green Energy' portfolio by investing in renewable resources of energy, like Wind Power, Power from Waste Heat, and, most recently, Solar Power. We have established 273.5 MW wind farms in the following five states of India: Gujarat (88.8 MW), Karnataka (49.4 MW), Rajasthan (88.8 MW), Maharashtra (25.5 MW) and Tamil Nadu (21MW). These projects are registered under the Clean Development Mechanism (CDM) program by the United Nations Framework Convention on Climate Change (UNFCCC). We also have 35.4 MW of power generation capacity through waste heat recovery from roasters and Steam Turbo Generator (STG) out of which 9.4 MW WHRB project registered under CDM along with 21 TPH LCV boilers for steam generation. We commissioned two solar roof top projects (100 kW each) at our Head office in Udaipur and the Hydro Smelters in Chanderiya and one solar water heater (1,000 LPD) during 2015-16. Apart from this, we have also introduced solar and energy efficient lights, wherever possible.

The UNFCCC registered projects have a potential of reducing carbon emissions by $583,685~\text{tCO}_2\text{e}$ per annum while our unregistered projects have the potential of reducing carbon emissions by $116,992~\text{tCO}_2\text{e}$ per annum. During the reporting period, we accrued about 407,567~CERs from our registered projects. As a responsible corporate and to enhance transparency, we have also taken proactive steps to participate voluntarily in the Carbon Disclosure Project programme since 2011. We are regularly improving our performance by achieving the set targets, taking new energy saving projects and improving our disclosure standards. This year we have scored 95 (last year 77) and we have also been awarded with India Climate Disclosure Leadership Index (CDLI) 2015.



Hindustan Zinc has been awarded with India Climate Disclosure Leadership Index (CDLI), 2015



We strive to maintain ambient air quality around our operations. This is a very important aspect of our EMS that emphasises on reduction of emissions (from point sources, mobile sources and other fugitive emissions).

As part of our regular environmental monitoring, we record the stack emission parameters, including, particulate matter (PM), SOx and NOx. During the reporting year the emission from all these sources amounted to 0.043 million MT. We make all efforts to keep our emissions in control by improving our operational processes and by increasing efforts on awareness drives. As a best practice management, we have installed an online effluent and emission monitoring system connected directly to the servers of Pollution Control Board.

Dust is another pertinent problem that we deal with in our mining areas and we take all appropriate measures to minimize the emissions. Concentrates transported to smelters in trucks are covered with tarpaulin cover that eliminates release of dust while transportation. We also take appropriate measures to extract dust settled on roads by daily sweeping using mechanical sweepers. If the problem still persists, we try to suppress the dust by sprinkling water. We also have mechanised sprinklers installed at ore loading points and throughout the ore transportation channel from the mines to the mills. We are also applying chemical dust suppressant along with water spray on haul roads to reduce dust generation and water consumption.





Installation of Online Particulate Matter emission monitoring and online water monitoring systems at Hindustan Zinc.

> G4 -EN21

G4 -EN30



Attempting Water Positivity

In the global scenario of water scarcity, we acknowledge the way we value, manage and use water. At Hindustan Zinc, our exclusive water management policy aims at achieving a 'Lean Water Footprint' and developing 'Sustainable Water Resources'. The policy also lays down the target action plan that prioritizes the following:

- a) Water conservation at source
- b) Zero discharge from operations
- c) Efficient water use by the community
- d) Rainwater harvesting and water accounting

We drive these action plans in all our operations and keep track of the progress regularly. Operating in Rajasthan - a region that faces acute water shortage - we consider it our responsibility to optimize our processes so that they consume the least amount of water possible and have a positive water footprint. For our mining and smelting activities, we depend on surface water, rainwater, municipal water supplies, other water utilities and ground water (refineries). During 2015-16, we obtained 26.54 million m³ of water from these sources. Our efforts have resulted in significant reduction in fresh water consumption and if we compare our specific water consumption over the years there is a decrease of 16% between 2011 to 2016.

Objectives

Lean Water Footprint

HZL's Water Policy

Develop Sustainable Water Resources

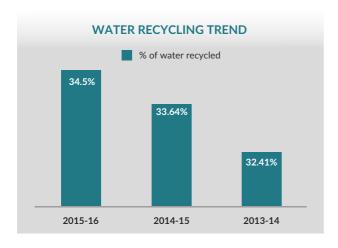
Targets

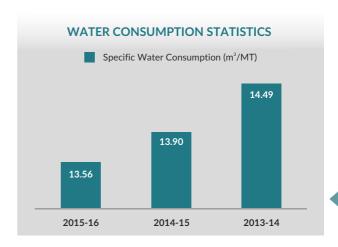
- Conserving water by source reduction and utilizing it efficiently through the adoption of best available technology
- Maintaining zero discharge operations through reduction, reuse, recycling and reprocessing of rejected water
- Promoting efficient use of water by community through capacity and awareness building
- Rainwater harvesting
- Measuring, monitoring and accounting for water uses



In coherence with our Water Management Policy, all our sites are maintaining zero discharge. Generated waste water is treated and recycled for cooling and other applications. Additionally, integrated effluent and sewage treatment plants are installed at many of our sites, so that more water can be treated and reused in our operations. During the reporting period, we recycled 34.5% of the total volume of water used in our operations.







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G4 -EN10

G4 -EN22

-EN26



Zero Discharge: No more a myth

The reverse osmosis plant at our Chanderiya Lead Zinc Smelter (CLZS) used to generate high TDS RO reject at the rate of 1100- $1200 \, \text{m}^3$ /day. Natural evaporation at RO reject pond and borrow pit after spraying on SLF was the natural course for this RO discharge. In our quest to retain the zero discharge status and make useful utilization of such a huge quantity of water that was being evaporated, we decided to recover water from this reject.

We installed and commissioned a Sea Membrane RO in September 2015. This RO plant, which had a capacity of 1250 m³/day was fed with the RO reject and it had a recovery efficiency of 56%. This led to huge water saving and significant reduction of overall fresh water requirement at CLZS. While this project has been successful for better management of RO reject, it has also strengthened our integrated water & wastewater management plans.





PPP MODEL FOR UDAIPUR STP: HINDUSTAN ZINC'S CATALYSING ROLE

Water has no boundaries; neither do our efforts to achieve water positivity. We went beyond Hindustan Zinc's operations to protect the beautiful and well-known lakes of Udaipur. We entered into an agreement with the Udaipur Municipal Corporation (UMC) and the Urban Improvement Trust to commission the first Sewage Treatment Plant (STP) of Rajasthan under a Public Private Partnership model. With a capacity of 20 MLD, the STP treats nearly 30% of the sewage generated by the city. The treated water from the STP is reused in our Rajpura Dariba Mining & Smelting Complex.

In summers, 15% of the treated water is released into the river to maintain the water table in the area. The sludge generated is also sourced as manure to the local bodies by the Udaipur Municipal Corporation. Due to the success of this project, we have entered into an agreement with the State Government of Rajasthan to expand the capacity of the STP by another 20 MLD in Phase II. This win-win arrangement between Hindustan Zinc and Udaipur Municipal Corporation (UMC) and the Urban Improvement Trust is an exemplary initiative showcasing a corporate's contribution to the sustainable use of water and ecological restoration of lakes in Udaipur.



Conserving Biodiversity

We have an exclusive policy on Biodiversity that focuses on conserving species of high biodiversity value and mitigating risk to high priority conservation areas in the vicinity of our operations. Geared with our commitment to protect the environment and biodiversity, we have reviewed all our operations to identify their proximity to International Union for Conservation of Nature (IUCN) areas, important bird areas, and key biodiversity hot spots. We conducted a preliminary analysis of the risks to the existent biodiversity in the vicinity of our operations. We used the Integrated Biodiversity Assessment Tool (IBAT) mapping tool for the screening process and categorised our operations as high/ medium/ low according to the risk category they fell in. The study confirmed that most of our operations did not pose any threat to their associated biodiversity. We have prioritised the biodiversity management processes based on this initial risk screening to develop a unique and exclusive BMP for all our operations. Currently, all our sites have Biodiversity Management Plans (BMP) in place.

We are also a signatory of the IBBI (Indian Biodiversity Business Initiative), which is supported by CII and the German Cooperation (GIZ). Through this association, we plan to streamline sustainable businesses with components of biodiversity. We have finalised with IBBI to move ahead on the Natural Capital Action Plan. This will be implemented as a pilot project over the next three years in one of our major operating sites (Rampura Agucha mine).

Greening our operations

In our attempt to create natural reserves, we have implemented extensive green belt development projects. have over 1.4 million of green cover around our operations. Attempt has also been made to revive the endangered and threatened floral species of Rajasthan. Nurseries housing various endemic and medicinal (Ayurvedic) plants have been set up at our Head office, Rampura Agucha and Kayad Mine. The plants that we grow in our nurseries are distributed to nearby communities around our operations for beneficial use. Till date, 5,000 saplings of various endemic and medicinal species have been distributed.

To further our holistic green belt development efforts, we have also taken steps to preserve the topsoil of our excavated mines. We have preserved 9,000 cm of topsoil at our Kayad mine site, which was used to develop lawns in the mining area.

Proactively caring for nature

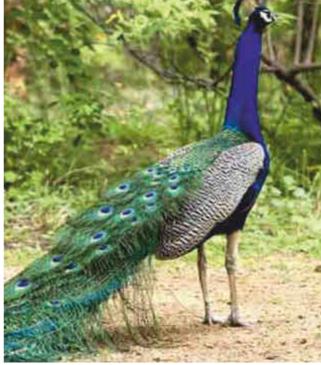
Extending our responsibility to the natural biodiversity, we have also attempted to conserve the national bird found in the semi-arid region of Rajasthan. We have tried to preserve the national bird Pavocristatus (Indian Peafowl), at our Kayad mines by a well-designed conservation plan. This included creation of an exclusive restricted area zone for the birds by appropriate boundary fencing. The birds were well protected from outside influence and were provided with all necessities within the enclosed area, such as, water tanks, appropriate plant species for breeding, fire protection, and protection from poaching and restricted entry of local people.

Another major endeavour from our end has been to develop parks for butterflies. These insect species play a significant role in maintaining the local ecosystem as they are responsible for the pollination of 3% of world's plant population. We created our first butterfly park at our Pantnagar Metal Plant (PMP) after an initial study of biodiversity and density of the various butterfly species at PMP.



Apart from benefits like carbon sequestration, preservation of soil fertility, and air purification, the green coverage is aesthetically pleasing, lending a positive and stimulating vibe to the surroundings. We





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-EN12

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MM2

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Nurturing our floral kinsfolk

Natural resources are finite, as is biodiversity. Increasing demand for natural resources endangers local plant species. Unless we make special efforts, we will lose several floral species that cater to our various needs, such as fodder, fruits, fuel-wood, herbs, medicines, etc.

In 2013, we established a nursery Hindustan Zinc at Rampura Agucha mines. Done to help retain the vast pool of floral species, the nursery was inaugurated on World Environment Day. Subsequently, we have launched more projects at various locations, such as:

- A floral nursery at Kayad Mine site
- · A herbal nursery at Debari Zinc Smelter colony
- A seasonal nursery at Head Office, Udaipur
- · A unique 'Rashi van' at Head Office

The nursery at Rampura Agucha mine nurtures various endemic and medicinal plant species including Gugal, Dhaak, Arjun, Mopane, Moringa; while the nursery at Kayad Mine site houses Anogeissussericea (Family-Combretaceae), Butea monosperma var. lutea and Commiphorawightiisyn: C. mukul (Hook. Ex Stocks). These nurseries also grow plant species which are preferred by peacocks, such as Ziziphus mauritiana, Aeglemarmalos, Sygygiumcumini and Tamarindus indica. Our herbal nursery at Debari Zinc Smelter Colony area conserves around 1,000 medicinal plants of 22 various species and the seasonal nursery at Head office, Udaipur, grows 10-12 types of seasonal flower plants. 'Rashi van' is a unique park developed for the conservation of medicinal plants where the plants are arranged according to the zodiac signs. Plants representing the 12 zodiac signs have been selected and they are being nurtured in this nursery along with 18 more varieties of plants with medicinal value.

Creating the Butterfly Niche

Butterflies: the insect species are the agents of pollination and that's how they play a vital role in balancing the natural ecosystem. Enthused by this ecological fact, we envisioned to create a habitat for preserving butterfly species that are taking the extinction route.

We began by enumerating the species present in the vicinity of our Pantnagar Metal Plant. A total of 117 butterfly species were recorded and some of them were very few in numbers. This gave us the necessary impetus to concentrate our efforts and build a natural habitat for them. We enclosed a 225 sqm area near the admin block and planted 660 different varieties of seasonal and permanent flower species to attract butterflies. To attract birds and maintain a natural habitat, we created an oasis (water pond) for birds inside the park premises. Whilst the park would be a favoured resort for butterflies, it would simultaneously help to increase awareness amongst the community about these beautiful nature's creation that aid in pollination and balancing the ecosystem.

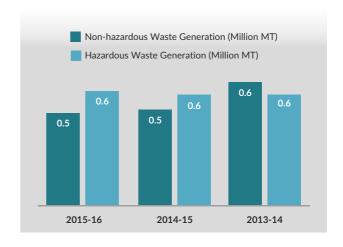


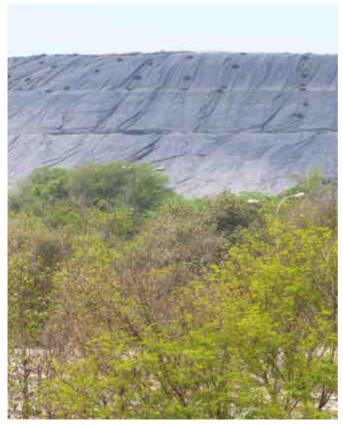
Managing Our Waste

Waste generation is an integral aspect of our mining process, since only ~3% of the lead-zinc mineral ore that we extract contributes to the refined metal. At Hindustan Zinc, we have a well-defined waste route aided by a well-established step by step monitoring process that ensures appropriate management of the waste. Waste efficiency at Hindustan Zinc is achieved by two major objectives - minimizing the quantum of waste generated and maximising recycling and reuse of wastes. In case of disposal of waste, we adopt the suitable scientific method of disposal after extensive analysis of the waste type and its impacts.

Reducing Waste Generation

Our major focus has been to minimize waste generation. In FY 2015-16, we generated 1.06 million MT of waste including hazardous waste and non-hazardous waste. During the past three years we have observed a nearly constant trend in our waste generation pattern. Apart from industrial waste, we are also cautious about the domestic solid waste we generate. Our approach, like always, has been to maximize the use of any waste generated. We have created nursery infrastructure with the solid waste generated at our locations, which includes wood, metals, FRP, plastics, teacups, and water bottles. Now, we have a beautiful nursery to grow saplings and plants built from recyclable solid wastes. We have also set up an organic waste treatment plant to make compost of the organic wastes generated. The compost is then used in gardening, landscaping etc.







Tailings Management

Tailings contribute to a significant amount of the total waste generated by our operations. Managing them is integral to our environmental responsibility and, for this, we have adopted the new "Pastefill" technology. Pastefill integrates two important processes in our underground mining activities – backfilling and tailings management.

Transforming waste into resource

At Hindustan Zinc, we are constantly analysing all our processes and implementing changes based on our observations to have a positive environmental impact. Fly ash and ISF slag are two major wastes that are generated at our smelting and power units. These are channelized to the cement industries where they serve as raw material. This not only reduces our waste inventory, but it is also being used by the cement industry as a replacement for virgin material, facilitating resource conservation.

Having decided to switch over to the new alternative of 'Fumer Technology', we are also exploring alternative ways and means of utilizing 'Jarosite' - the process waste generated through the hydrometallurgical route. We are engaging with the Central Road Research Institute (CRRI) and the National Environmental Engineering Research Institute (NEERI) to conduct a thorough study to identify the potential of using Jarofix as a resource material for embankment and road construction. The study confirmed that Jarofix had better strength and stability than soil. Taking it further, we are proposing Jarosite as a viable replacement for gypsum (by 3-5%) in cement manufacturing. The proposal is based on the work done by the National Council for Cement and Building Materials (NCB), Ballabgarh. The project has been recommended by the technical committee of the Bureau of Indian Standards (BIS).



ММ3

G4 -EN24





FUMING SOLUTIONS FOR IRON WASTES: FUTURE TECHNOLOGY

Iron is a common metal associated with zinc concentrates. During the refining process, iron is removed from the metal aggregate using the Jarosite process to obtain zinc. 'Jarosite' — a hazardous substance released during the process - is combined with lime and cement to form an inert substance called 'Jarofix', which is then disposed. This conventional process requires huge land area for disposal, making it an unsustainable option in the long run.To eliminate the generation of this hazardous waste, we have identified a new technology solution known 'Fumer Technology' which will be implemented in near future.

Patented by Xmetech, South Korea, this process involves fuming the zinc ferrite (zinc-iron metal aggregate) in a furnace to obtain residual metals captured as fume oxide and the iron waste generated as clean slag. This iron-rich slag can be used as a raw material for the manufacturing of cement and other construction products.

This environmental friendly technology has several advantages over the conventional Jarosite process.

- Along with enhanced recovery of the metals (zinc, lead, silver, and copper) this technology promises complete elimination of land requirement for disposal of Jarofix.
- The fume gases released in the process have the potential to generate green energy by the waste heat recovery process.
- The need for cement and lime as raw materials to convert reactive Jarosite to inert Jarofix is also completely eliminated.
- The fumer slag contains about 7.6% lime which would later translate to a reduction of lime consumption in the cement industry where this by-product of the fumer technology can be used as a raw material.

In view of all the above advantages, we plan to implement this technology at our Chanderiya Lead Zinc Smelter (CLZS). The project will generate 21 MWH of green power, of which 12 MWH would be consumed in the Fumer process itself. We are progressing steadily to establish this energy independent technology, which is likely to reduce our environmental liabilities significantly.

FUTURE TECHNOLOGY

FORTIFYING THE ZINC-LEAD RETREAT PLAN

Managing the tailings generated at the mining operations demands constructive and channelized efforts. The post excavation activities are majorly concentrated around dealing with the tailings that cannot be recovered completely but has to be discarded scientifically to avoid any damage to the surrounding environment. The conventional trend of surface disposal of these tailings in lined pits requires huge land areas in the vicinity of the mines area.

Mining operations involve filling of stopes/voids to ensure stability and control subsidence. Mine back fill is conventionally done through hydraulic filling with cement. One of the contemporary alternative to this is the 'Pastefill' technology which combines the backfilling process with the tailings management. The tailings are modified into a semisolid paste which is used to fill the empty underground voids after completion of metal ore excavation. The paste filling process ensures fast filling of the voids with practically no bleeding. It also has other advantages of minimum water requirement and drainage; minimum fill and wall dilution in stopes, better recovery of intervening pillars; better regional stability and surface integrity. The process utilizes almost all the tailings minimizing the surface disposal.

With the successful commissioning of Paste fill Plant at our Sindesar Khurd Mine and Rampura Agucha Mine, we are glad to have started a unique trend in mining in India. With both backfilling and tailings management happening simultaneously, the technology proves better than the previous low density hydraulic fill and also conserves water. Internationally we are one of those few miners who utilized tailings and operate on paste fill technology.



ZINC AS

COMPANION



Impacting Material Aspects



Product Stewardship





Community Engagement



Supplier Chain Management

Our focus



Engaging Effectively with Stakeholders



Strengthening Supplier Relationships



Addressing Customer Requirements

Engaging Effectively with Stakeholders

GG

We believe in a culture of transparent dialogue with all our stakeholders to amicably resolve their issues and build strong relationships. This would lay the foundation for getting our social licence to operate for our business.

Head - Safety & Sustainability

VP Joshi

55

Sustainable Development Goals



HZL's ACTIONS

8 DECENT WORK AND ECONOMIC GROWTH

Recognising Employee Associations Grievance Redressal Mechanism for Stakeholders



Town Hall Meetings with Employees CSR Co-ordinators Engaging with Communities



Engaging Effectively with Stakeholders

Stakeholders play an important role in creating and maintaining business value. Hence, maintaining a healthy stakeholder relations is of paramount importance. With evolution of stakeholder influence parallel to the growth of the business, there emerges a need to take strategic and structured approach to retain good relationship with stakeholders. Through various modes of engagements spread across various engagement cycles, we try to build and sustain constructive relationships with our stakeholders over time and create shared value by engaging early and often. Our overall approach involves proactively addressing concerns of stakeholders by implementing Stakeholder Engagement Plans and providing apt solutions to the issues raised by them through Grievance Redressal Mechanisms (GRM).

Engaging with Employees

At Hindustan Zinc, employee engagement is key for creating an inclusive work culture. Using formal and informal meetings, we get our senior management to engage with their team. These meetings give employees an opportunity to interact closely with the top brass. At the same time, the management uses this opportunity to share the company's progress, goals to achieve and establish transparency in communication.

Employees are kept abreast of latest developments and key initiatives through several open forums, such as, Town Hall meetings, monthly newsletters, corporate intranet, and other online portals. Other formal interactions happen during the ACT UP process and during performance linked appraisal system. We also engage with contract workers in several safety committee meetings and in Safety Chaupal to understand their issues and concerns. In the coming year, we are also planning to introduce a schedule for interaction with Stars, Young Leaders, and Women executives.

Informal interactions are encouraged on Hindustan Zinc Foundation Day Celebration, family get-togethers, sporting events, Women's Day celebrations, outdoor excursions, and other programs that are organized regularly as part of employee welfare activities. We have launched a programme called 'Coffee with Hubby' where the wives of our employees are invited to visit plants and get a feel of the workplace of their husbands.

Open forums for interactions of Senior **Employee Engagements** Management with Employees

Safety committee meetings with contract workers

- Suraksha Chaupal for Contract Workers
- **ACT UP process**
- Performance linked appraisal system
- Coffee with Spouse
- Executive & Imperial Club
- Celebrations of various Environment and Safety

Frequency of Engagement

Senior management interacts with employees by rotation on a monthly basis

- Act Up Process yearly once
- Performance linked appraisal system- yearly twice
- Safety Committee- Monthly/ Quarterly
- Suraksha Chaupal- Regularly

Recognizing Employee Associations

Our non-executive employees are part of unions affiliated to the Indian National Trade Union Congress (INTUC), which is recognized by the management across various locations. At the corporate level, Hindustan Zinc Workers' Federation (HZWF) represents all the Unions working in various units. They deal with matters pertaining to service conditions, wages and benefits, and strategic policies with respect to workmen. Over 99% of non-executives covered under collective bargaining agreements. On issues pertaining to production/ productivity, health and safety, we interact with the union in a Joint Consultative Committee and seek their suggestions for effective implementation. Moving forward, we want to continue fostering harmonious industrial relations, and work towards achieving win-win outcomes in all our dealings with the union. During the reporting period, there were no strikes or lockouts.

Management and Union in the Bipartite Forum like Joint Consultative Committee

Based on requirement

G4-25

G4-26

G4 -LA4

MM4



When you take a leisurely stroll in the premises of Hindustan Zinc, you can sense something unique underlying the excellent corporate atmosphere. The dynamic people of Hindustan Zinc, schooled well to execute their responsibilities, emanate positivity in the way they do things. Thinking a little deep to reach the root of this, one would realise that they are all happily tied together with an invisible band which connects them to the sole institution of 'Hindustan Zinc'.

Exalted they share the value the company has added to their identity and to their lives. The fifty years of Zinc Excellence has transformed everything- from the way they do things to the way they live. Their individual identity is somewhere lost amidst the Zinc branding. Experiencing the positive value, they reveal:

"Employment at Hindustan Zinc has changed our lives and we are glad to have our new identity."

Augmenting it further, they all exclaim:

We are proud that we are Hind Zinc ke Pariwar!



Employee Grievance Redressal

We have a well-established mechanism to address the grievances of our executives and contractual workers. It handles grievances related to job specific issues, disciplinary actions, leaves, allowances and reimbursements, service of the contractors, payroll issues, admin issues, and other amenities and welfare facilities (Colony and Plant).

We have programmes like Aap Ki Aawaz, Safety Chaupal and Safety Nukkad where employees can voice their concerns.



Employees raise grievance with HRBP of Unit

Matter escalated to

HR Head and location Head Matter finally resolved at Grievance Redressal

Committee

CASE STUDY

Aap Ki Aawaz

The Voice of Contract Employees at Pantnagar Metal Plant (PMP)

A two way communication between contract employees and Management is essential to ensure workplace safety and the related management consequences. To give this a formal touch, a new engagement programme has been launched at Pantnagar Metal Plant, where the contract employees get an exclusive opportunity to interact with the Management team.

Conducted monthly in an Open Discussion forum, the programme is targeted to encourage the shop floor contract employees to interact with the department and functional heads without any hesitation. Chaired by Unit head, the management team tries to understand the issues faced by the contract employees while at work, especially the safety aspects, and try to gather their opinion in resolving the same. The concerns raised by them on safety improvements, improvement in hygiene & housekeeping at site, productivity improvement, etc. are all recorded formally in MoM and actions are being taken and the status of the same is updated in the subsequent meeting. The programme also encourages suggestions from the shop floor work force and best safety workers are rewarded

Aap ki Awaaz'- has seen increased awareness on safety and hygienic environment amongst shop floor employees; increased reporting of unsafe act/condition; and most importantly building a culture of trust for the Hindustan Zinc management.



Engaging with Community & NGOs

Community Engagement is key to the success of our CSR programmes. We involve the community right from the inception stage of projects to imbibe a feeling of ownership in them. Through intensive exercise, communities are mapped at micro & macro level from which emerges a business oriented engagement plan with the stakeholders. These engagements are followed by a robust continuous feedback and feed forward system for programme improvement. During this time, we also engage with our NGO partners who help in the implementation of our various initiatives.

During our engagements, we also provide our community members with the opportunity to voice their grievances. In order to address their complaints in a systematic manner, a grievance officer is appointed at each unit and committees have been set up. Complaint boxes have also been installed at our operational locations.

For the reporting year, 67 community issues were recorded and 49 issues have been resolved. Of these, the formal grievance mechanism was invoked in 34 instances and the disputes have been resolved. Apart from this, one public hearing was also conducted.

Community and NGO Engagements

- Base line survey
- Interaction by CSR field teams
- Public Hearing
- One-to-one and Group Meetings
- Engagement with national and local NGOs
- Membership of international organisations

Frequency of Engagement

- · Baseline survey once every three years
- Regular weekly, monthly and annual interactions of CSR team throughout the year depending upon the need of the project

Engaging with other Stakeholders

Our other stakeholders comprise of Customers; Vendors/ Suppliers/ Contractors; Investors; Media and Government. Throughout the year, by mode of formal and informal engagements, we interact with our stakeholders and attempt to enhance the relationship of trust that we share with them. Further to this, we achieve compliances to regulatory norms; meet the satisfaction criteria of all our stakeholders establishing cordial relationships and maintaining our social license to operate.

· Customers & Vendors:

- Online customer complaint tracking system
- Customer satisfaction survey (CSS)
- Vendor Meet
- Pre-bid Meeting
- Site Audit

Investors:

- · Annual General Meet
- Annual report
- Investor meet
 - Site visit
- Media
- One-to-one meetings
- Group meetings

Government:

- Engagement with statutory authorities
- Participation in government consultation programmes
- Liasoning with regulatory bodies

Frequency of

- CSS once every two years
- Regular meetings with vendors
- Annual General Body Meeting with Investors
- Regular meetings with Media
 - Regular meetings with Government and Regulatory authorities





Strengthening Supplier Relationships

We aim to drive excellence and sustainable long-term value throughout our supply chain by emphasising on green initiatives and developing the green acumen in our suppliers.

Damakrishnan Lasinathan

Head - Commercial

HZL's ACTIONS

Sustainable Development Goals

Association with Suppliers complying with Sustainability **Parameters**





Excelling with our Business Partners

At Hindustan Zinc, we consider our suppliers/vendors/contractors as our most valued affiliates. Our focus is on making our relationship with them mutually beneficial and that's why we treat them as business partners. We actively seek out opportunities for collaboration and innovation to deliver greater value for both businesses.

We engage with world-class partners who provide us with services, equipment and materials to run our smelting and mining operations. Besides, we strategically source commodities & equipment from national and international suppliers with highly efficient supply chain as per the business requirements. The logistics operations and inventory management has been given utmost focus to improve the bottom line of the Company by reducing waste throughout the supply chain. In the same context, our conscious decision to shift from road transport to eco-friendly rail mode has reduced the lead time and pilferages. We are investing in right technologies to evolve to best in class procurement processes with implementation of latest IT systems like SAP (System Application & Product), SRM (Supplier Relationship Management), ITMS (Internal Transportation Management System), MDM (Master Data Management), BIBO (Business Intelligence Business Objects), etc. This has paved the way for real time decision enablement resulting in resource optimisation and shorter turnaround time of Procure to Pay cycle.

Besides, we have benchmarked and adopted best practices of international corporations and have successfully implemented transparent procurement principles, contractor management policies, standardisation of contractual terms & conditions and vendor performance evaluation. We have a robust pre-qualification process for selection and on-boarding of vendors. The Vendor performance is then evaluated through Performance Score Card.

Managing the Supply Chain

We have a Procurement Policy, Supplier and Contractor Sustainability Management Policy and Supplier Code of Conduct that meticulously govern our relationship with our partners. The policies enable the supplier screening process and help evaluating them on the basis of social and environmental parameters. Encompassing Environmental Issues (such as pollution, energy, GHG emissions, water, and waste); Child labor; Forced labor; Non-discrimination; Right to freedom of association/collective bargaining; Working hours; Living wages; Health and safety; Corruption and bribery; the policy stipulates code of conduct for the association with Hindustan Zinc.

We have joint meetings with our technical team and suppliers during techno-commercial negotiations to clarify our specifications and also validate the supplier capabilities in areas such as safety management and sustainability. For the year 2015-16, 100% of our suppliers and contractors were covered through our code of conduct. In case of non-compliance with the code, we either terminate the contract; or take corrective action including training, depending on the seriousness of the violation.

Employment of child, forced or compulsory labour by contractors is an unpardonable offense at Hindustan Zinc. We carry out periodic inspections at all our locations and require proof of age for all contract workers. Our Suppliers' Code of Conduct ensures that every supplier of ours also commits to the same norms. Our significant suppliers and contractors generally include well-reputed and well-governed organisations, who have their own systems and practices which are comparable to our own.

We ensure that we associate with reputed suppliers who have a proven record in terms of sustainability. There has been a paradigm shift in the procurement policy from the lowest cost price procurement (L1) to lowest Total Cost of Ownership (TCO). Of late, the function has been further migrating from TCO to Full Impact Value (FIV) in accordance with the best practices of leading mining and metal corporations across the globe. This approach has enabled our access to suppliers with high quality service.

G4-12

G4 -LA14

G4 -HR5

G4 -HR6

G4 -HR10

G4 -SO9



Enhancing Supplier Relationship

Our relationship with our suppliers is scrutinized at every step and we have taken measures to ensure that we associate with the right partners. Through a set of five defined objectives and action plan aligned to achieve them, we work towards enhancing the Supply Chain. These goals include aspects of safety, ethics and transparency, human rights, capacity building and overall well-being of the supplier commune. Our Suppliers' audit begins with the vendor registration that includes selection of supplier/contractor through techno-commercial evaluation. On a continual basis, there are monthly audits and monthly score card which covers health, safety and other sustainability aspects. 20% weightage in monthly performance score card is given to safe working practices & environment management. Comprehensive risk assessments are also conducted for all contractors before contract approval and throughout the period of the contract.

Supply Chain Objective 1

Safety of Suppliers/ Vendors/ Contractors

Action Plan

- Ensuring use of PPEs
- · Replacement of worn out PPEs
- Ensuring correct usage of PPEs
- Monitoring through Safety Scorecard

Supply Chain Objective 2

Sustainability in Supply Chain

Action Plan

- Online Vendor Registration inclusive of Sustainability Aspects
- Sustainability considered for Techno-commercial Evaluation
- Compliance of the Company to contractor worker compensation & welfare management
- Monitoring of Supply Chain

upply Chain Objective 3 Considering Human Rights and Contractor Employee Heath and Well-Being

Action Plan

- Human Rights compliance as a clause in Code of Conduct
- PMEs and regular medical check ups
- · Accommodation (depending on availability)
- Water, Sanitation & Hygiene Facilities Ensured

upply Chain Objective 4

Developing competency, training, and awareness

Action Plan

- Induction and Refresher training
- Gate Passes issued after completion of training

Supply Chain Objective 5

Inspection and monitoring

Action Plan

- Review Meetings
- Performance Score Cards
- Data maintained in SAP MM Module
- Contractor Field safety audit



Green Zinc: Enhancing Supply Chain

In the wake of current sustainability trend we realize our role in promoting sustainability down the supply chain. Hence, through various environmental and social initiatives, we compel our suppliers to go by the sustainable mode. Specific suppliers dealing with used oils and other hazardous substances need to ensure proper collection, handling, transportation, storage and their disposal. Periodically, training is imparted to the contractors for implementing the best practices for environment protection, such as, reducing resource consumption (water & energy conservation); zero discharge of wastes and effluents; responsible waste management etc.

Promoting to be Eco-friendly

Over the years, the mode used for the transportation of materials has gradually shifted from road to rail, which is more eco-friendly. This has also helped reduced the lead time and pilferage. On the inventory management front, our suppliers are encouraged to follow a vendor managed inventory system. Hindustan Zinc has also taken initiatives towards "clean and green" tomorrow by shifting from conventional plastic packaging to bulk movement of raw materials like cement, lime etc. We have been able to achieve reduction in our carbon footprint through the adoption of automation and IT (Information

Technology) interventions like paperless transactions, e-payment, and e-procurement, among others. The commercial function at Hindustan Zinc has set right the road towards achieving strong governance, transparency and ethics when it comes to procurement of goods and services.

Valuing Social Priorities

In the social context, we ensure that our contractors do not employ illegal labour practices. Safety being our topmost priority, we do not compromise on this aspect for our contractual workforce as well. We ensure they are adequately trained on safety and regularly monitor their performance as part of the Contractor Safety Management. We ensure that we pay our contractor workers much above the local minimum wages and provide them with all the statutory benefits. We provide the basic amenities and ensure water, hygiene and sanitation as a part of our WBCSD, WASH pledge. Besides, we also take care to provide additional facilities, such as, sheds/shelters, canteen facilities, subsidized food etc. within the premises of our operations.



Building Better Customer Relations

We are confident that we will continue to retain our brand image of being the Zinc leader, as we are tuned to be the agents of change for a better product whilst we are cognisant of our customer needs.

HZL's ACTIONS

Product Stewardship Product Safety

Vijay Murthy Head - Marketing

Sustainable Development Goals





Creating Brand Value

Hindustan Zinc Limited is the most respected and accepted brand in India with close to 79% of market share in Zinc and 56% in Lead. The Dedicated Marketing team takes care of the customers' requirement and ensures timely and customized solutions to the customers. To ensure closeness to the customer, the Domestic market is divided into four regions, with the marketing office headquartered in Mumbai.





Developing Markets

The dedicated Market Intelligence & Business Analysis Team at Hindustan Zinc helps to track and analyses the day-to-day happenings, trends and upcoming product segments of the market. Their inputs form the basis for formulating the strategy at a business level and provides levers for increasing the domestic market share.

For a sustainable business, our Market Development team works towards promoting and establishing new applications of zinc in the market. Hindustan Zinc Ltd, jointly with International Zinc Association (IZA) organizes awareness programs and brain-storming sessions with first users and the ultimate end users to emphasise the need for protecting steel from corrosion and building a sustainable future. The industry experts across the globe are brought to India to establish the successful best practices followed across the world. Hindustan Zinc is determined to reduce the cost leakage and build long lasting infrastructure. IZA's key programs like "Galvanized Rebars for Construction" and "Galvanizing in Automobiles" aid us in our endeavour to create awareness on various steel products and the benefits achieved through galvanizing. Hindustan Zinc also works very closely with IZA on the zinc nutrition initiative. Zinc is an essential micronutrient that is crucial for growth and brain development and helps fight dangerous infections, especially in children. Zinc deficiency can lead to a weakened immune system that is unable to fight infection.

Children with zinc deficiency are particularly susceptible to diarrhoea, which is often deadly in the developing world. In 2014, nearly 760,000 children died from diarrhoea – a preventable illness. That's more children who die from diarrhoea-related illnesses associated with zinc deficiency than from malaria, HIV/AIDS and measles combined.



Delivering Quality Product

At Hindustan Zinc, we are committed to delivering high quality products to our customers at mutually agreeable terms and conditions. The service is directed towards exceeding the expectations of customers and making a feel-good, delight factor. This dual approach of quality and service has helped us grow our overall customer loyalty.

The quality of our product is our brand ambassador in the global markets. In our commitment to meet worldclass standards, the Zinc and Lead produced at our factories are approved by London Metal Exchange (LME) - the governing body of metal, an accreditation given for the best in class process and quality. Hindustan Zinc has 4 registered brands of zinc and one registered lead brand which are traded freely internationally. The unmatched quality of our products coupled with the diligent services that we offer to our customers reflects in our consistent business performance. We have retained standards in product quality by implementing Quality Management Systems for all our products that comply with the requirements of ISO 9001:2008. Our Special High Grade Zinc ingots are attached with Material Safety Data Sheet (MSDS) that contains detailed information related to the product like Product Identifier, Relevant Uses, Composition, Hazard Identification, Supplier Details including Emergency Contact Details, etc.

Besides, we also consider the environmental impacts of our products at every step of product development. The jumbo shaped zinc owing to enhanced safety at customer operations also helps in lesser zinc wastage; avoids theft and eases handling. The zinc jumbos favour less ash production during galvanization and their smaller surface area to weight ratio leads to significant reduction of turbulence. The Continuous Galvanizing Grade (CGG) zinc alloy and Prime Western zinc are a boon to the customers because of the various advantages that they offer. The CGG zinc alloy avoids alloy process at the customer end thereby saving energy & cost whilst conforming to enhanced efficiency. The Prime Western Zinc being a pre-alloyed Zinc-Lead combination avoids exposure of lead at the customer end.

As part of our responsibility towards all our stakeholders, we ensure that we maintain fair and transparent dealings at all times. To ensure transparency and fairness in our pricing, we have adopted the LME price based pricing policy. We keep customers informed on the various global and domestic market updates through our monthly Customer Newsletter.

Customer Relations

At Hindustan Zinc, we engage with customers at different levels. Our sales managers ensure that they meet every customer at least once every quarter. The marketing team, along with the technical wing, goes to the customers' premises and conducts seminars on best practices. They also take feedback on the performance of our product and other service related issues.

Alternatively, we invite our customers to visit our mines and smelters, too. We host them for a one-day mine and smelter visit followed by a technical discussion with our location heads. This provides our customers with insights on how we operate at Hindustan Zinc. We also sponsor and organize conferences and workshops for our customers. Another option is to gather a pool of customers at one location and conduct group seminars. Our top management ensures that it reaches out to a few customers selected randomly to check the health of Hindustan Zinc services and offerings. Our business analysis cell ensures that major market updates and a monthly newsletter are shared with our customers.

Every two years, we undertake a customer satisfaction survey to get an understanding of our position in the market. The last survey was conducted by CSMM. We employ several other methods for listening to customers, like market mapping, visits and telephonic conversations, online feedback, and customer complaints.



A Testimony of our Service

Being the Zinc leader in India, we assess our customer relationship, a critical aspect in determining the fate of our business. We recently engaged CSMM to conduct a countrywide survey to capture the views of our customers alongside our product delivery and service.

The study was conducted with a sample size of 138 customer organizations throughout India selected from the database provided by Hindustan Zinc. These customers were interviewed in 13 different locations spread across four zones, through Face to Face interviews and Preferred Competitor Benchmarking. A Customer Satisfaction Index (CSI) was calculated by averaging the Loyalty Index and the Experience Index.

The results of this assessment indicated areas of customer delight such as quality of the product and delivery, among others. A detailed analysis of the study emerged that the customers were happier with their overall experience with Hindustan Zinc and would prefer to continue their business with Hindustan Zinc, while we received a better CSI score than in previous survey. Hence, we are continuously working towards making our team more responsive to customer needs & learning from industry best practices.





ZINC FOR

ADDED VALUE



Impacting Material Aspects







Our focus



Valuing Human Resource Asset



Empowering Communities

Valuing Human Resource Asset

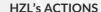
HR vision

To create and communicate the most admired employer brand where every employee feels engaged and developed in a high performance talent environment and is our best brand ambassador.

Thinking ahead of the time, we are working towards retaining talent by engaging them passionately and by enhancing their leadership capabilities while simultaneously creating avenues for their career growth. We want our talented workforce to tap the enormous opportunities available at Hindustan Zinc and consider their long-term association with us.

Dilip Pattanayak







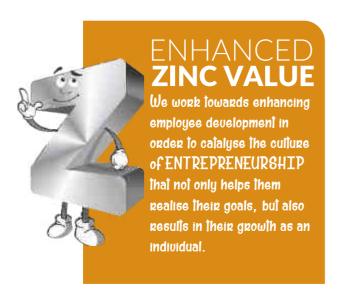
Attempting to maintain a consistent women workforce by setting hiring targets



'Innovators of Zinc' initiative launched Kaizens for innovative small improvements Technical ACT UP initiated



Equal Opportunity Employer



Enhancing People Value

At Hindustan Zinc, we aim to create an empowering work environment by building a technically proficient talent pool and creating an inclusive work culture. In doing so, we would like to retain the status of being the 'Preferred Employer'. Through a well-planned action plan and a range of initiatives, such as, ACT UP, Kaizens and most recently, Innovators of Zinc; we attempt to identify and groom our talent.

Retaining Talent

Our HR approach begins with seeking out high calibre talent and continues through the employment lifecycle with a strong emphasis on retention of our key talent. Besides, our emphasis is to streamline the succession planning route by developing the internal high potential talent ito take up leadership roles. Through our unique 'Stars of Business' initiative, we identified 10 'STARs' and through our Technical ACT UP programme, we identified 28 Technical 'STARS' during 2015-16. This young talent is being groomed and developed through their Individual Development Plan to fill up leadership positions in Hindustan Zinc's management hierarchy.

As of March 31, 2016, the company had a total workforce of 17,100, which comprised of 4,690 permanent employees and 12,410 contractual employees. During the reporting year; we hired a total of 157 new employees. The total employee turnover, including executives and non-executives at Hindustan Zinc, was 685 employees. We invest significantly in developing and retaining key talent to drive innovation and efficiency within the business.

Brand Ambassador for Talent Attraction

- Defining and communicating the brand promise inside and outside the organisation aligned with EVP
- Strengthen framework on the brand journey to make Hindustan Zinc a magnet for attracting best talent

HR Capability Enhancement

 High quality HR professionals to participate and contribute in strategic business decision making

Leadership Development

Action Plan FY 2015-16

- Building pipeline and providing HiPos opportunities to excel
- Succession of internal talent to key leadership roles
- · Robust build v/s buy capability

Leveraging Technology

- Simplification and digitization of HR processes
- Betterment of employee life through technology by 24*7 availability of HR services to employees





Succession Planning Program - Nurturing Internal Young Talent

Hindustan Zinc's impetus on profit and production in the last decade is not a secret. However, with this unparalleled financial growth, there has been an underlying cultural change in the organization which, although not explicitly visible to the outside world, has been the force behind all these achievements. Retaining and nurturing internal talent has gained tremendous importance over the years. There is a specific focus on enhancing leadership skills, involving the youth in decision making, enhancing gender diversity, and emphasising on women's empowerment.

One of the most impressive and out-of-the-box initiatives recently undertaken by the HR team has been identification of high potential executives through a unique programme - Accelerated Competency Tracking & Up-gradation Program (ACT-UP). In this programme, an assessment is done based on the Vedanta Competency Framework to identify the "Stars of Business" and "Technical Stars". For every "Star" identified, an individual development plan (IDP) is prepared and they are provided with enhanced roles and responsibilities and are empowered to move far beyond their current role. This helps unlock their confidence and allows them to contribute as the most successful "Business Leaders of Tomorrow."

The ACT-UP programme is aimed at developing a talent pool of people with managerial as well as technical abilities. For this reason, we have two separate programmes - Business Act-UP (for executives in the Management cadre) and Technical ACT-UP (for executives in the Technical cadre). During the reporting period, 198 employees participated in the Business Act-UP Process and 10 stars were identified. For the Technical Act-up, we had a participation of 267 employees - the highest ever recorded amongst the Vedanta Group of Companies and 28 Technical Stars were identified through the process.

Employee Speak - The Successful Stars Share their Experience



RAHUL SACHDEVA Associate Manager, Projects Commercial (Business Star)

"Last year presented me with the opportunity of participating in the company's ACTUP process which facilitates identification of one's competencies and provides a roadmap for their accelerated development. This gave me a peek into the functioning of various other departments of a company and also the dynamics and synergies created while working in larger, diverse teams. Developing a more strategic and organization-oriented approach widened my thinking horizons. On a personal front, the process helped me identify the areas where I needed further improvement, thereby enabling me to align my efforts in the right direction to improve my overall managerial effectiveness."



ROHIT AGARWAL Location Finance Head (Business Star)

"Since I was one of the beneficiaries of this whole process, I can say with a lot of pride that this has been a turning point of my life and has given me tremendous confidence and motivation to showcase my capabilities."



PRABHANSHU KHARE E & I Section In-Charge-ISF (Technical Star)

"Today when I look back, I find myself standing on a very solid Financial, Profession and Social base which were given by Hindustan Zinc. I am overwhelmed with the love, Support and guidance of great Leaders, Friends and Colleagues which I am receiving here and I know that together we will climb many and any mountain coming ahead."

Encouraging Workforce Diversity

The Chairman of Vedanta has a vision to have more and more representation of women in key roles at the leadership level. In keeping with that vision, the company is making strong efforts to create a balanced business ecosystem where women take frontline roles, create value, and contribute to the growth of our company. During 2015-16, 14% of the new hires at Hindustan Zinc were women. In the coming year, we plan to continue with our focus on diversity by maintaining the fresher women's hiring rate at 20%.

We are an equal opportunity employer and do not believe in having a remuneration policy that discriminates on the basis of gender, religion, caste, or any other attribute of diversity. To enable women to work with dignity and without fear, a sexual harassment prohibition policy and sexual harassment committee is in place. To our credit, there have been no reported incidents of discrimination on the basis of race, colour, sex, religion, political opinion, or social origin involving internal or external stakeholders during the reporting year.

Ensuring Abundant Benefits

The compensation policies for our workmen are among the best in the country. Provident fund, gratuity, canteen facilities, and maternity leave are the statutory benefits we provide to our employees. They can also avail of additional benefits, such as, life insurance, health care, disability/invalidity coverage, parental leave, and retirement provisions. Some categories of employees are even offered stockownership. Apart from this, we also provide a range of non-statutory benefits, like mediclaim, housing, leave travel allowance, and paternity leave. During 2015-16, 76 male and 16 female employees were granted parental leave. We also ensure that the ratios of entry level wages meet or exceed the legal requirements.



Fostering Competence



Our HR strategy is focused on putting together a workforce with diverse talent. We aim to build organisational capability at all levels so that employees are able to do justice to their respective roles. At this juncture, when we are transitioning into a completely underground mining operation, we realized the need for developing the skilled workforce required to achieve our goal. Therefore, we invested our efforts in establishing an 'Underground Mining Academy' to counteract this shortage of skilled manpower.

Besides, at Hindustan Zinc we offer extensive learning and training modules on a regular basis for enhancing competence. Employees have the option of enrolling for different kinds of training programmes - internal trainings (including behavioural, general management, technical program, safety trainings, and leadership programs); external trainings (including site visits to international mines and smelters); and sabbaticals - 6-month PGD certification course on Safety. During the reporting year, training worth 1,51,306 man-hours was imparted to our permanent workforce. Our contract workforce, on the other hand, benefited from 2,86,710 man-hours of training.



G4 -EC3

G4 -EC5

G4 -LA2

G4 -LA3

G4 -LA9

G4 -LA10

G4 -LA13





Hindustan Zinc provides ample opportunities for female employees to grow and flourish in the organization. One such example is Gunjan Agnihotri who is one of our "Stars of Business", currently heading Human Resources at the Sindesar Khurd Mine. Having joined the company in May 2011 as a fresher, she was initially absorbed into the Talent Acquisition team at Hindustan Zinc's corporate office. This gave her the opportunity to work closely with senior business leaders. Hiring top notch talent for the business and working with world-class consultants have been enriching experiences in shaping her professional life.

Gunjan got the opportunity to participate in the company's ACT UP process and she was identified as a 'Star of Business' in July, 2015. A significant milestone in her journey at Hindustan Zinc occurred in September, 2015 when she was selected in the Chairman's workshop as one of the 10 Young HR Leaders at Vedanta. She was appointed Unit Head-HR for the Sindesar Khurd Mine and became the youngest female HR Head for a Unit at Hindustan Zinc.

Earlier, it was difficult to imagine a female HR Head managing a business unit in the male-dominant mining sector independently and efficiently dealing with contractors and the local manpower. Today, Gunjan, along with her team, manages a unit with more than 1700 contract workers and 250 executives.

In her own words:

"I am proud to be a part of an organization that is committed to create better opportunities, gender parity and varied avenues for female employees."



Powering Excellence

Employee excellence is the focal point for growth of our employees as well as the company. Annual performance appraisals for entire executive workforce and the launch of the unique Act Up programme have proven to be methods that deliver great results. We also rolled out another unique initiative Kaizen - to motivate employees for innovations at workplace. Another exceptional program is the Chanakya, a business simulation game in its 2nd year that provided a platform for over 85 teams to unleash their business skills. A few of them also got the opportunity to represent Hindustan Zinc at the regional and national level.

During the reporting year, we launched a new initiative "The Innovators of Zinc" to further strengthen internal communication. This initiative captures one successful innovation that contributed immensely to the growth of the organization. Such success stories reflect the scope for innovations in improving efficiencies; enhancing production volumes; impacting cost of production, and creating benchmarks across mining and metal sector. This initiative is meant to be an eye-opener, bringing to the forefront the immense scope for innovation at work. Needless to say, these success stories greatly motivate employees and encourage them to excel at what they do.





Incremental Improvements, Significant Appreciation! Kuldeep Ameta's Testimonial



The work atmosphere at Hindustan Zinc has always been motivational. Starting Kaizen competitions was a great initiative. In the 2nd quarter of Year 2015-2016, we solved the problem dealing with the failure of a discharge valve. We presented it in the Kaizen competition.

The discharge valve of the cooling tower and pump got damaged. As a result, it was difficult to check NRV of the pump and we had to undertake a shutdown to replace the valve with zero current of cell house on 7 July 2015. It was damaged as the NRV was hitting it. We increased the distance between NRV and valve by providing a spool piece in between. Not only did it avoid hitting the NRV with the valve, we

also prevented damage to the discharge valve. We saved 2 lakh rupees. Unwanted power zero shut down was also avoided.

This Kaizen got selected in category 'A'. Two team members got a reward of 7500 rupees each. We were also appreciated greatly in the reward ceremony. This improved my confidence and motivated me to do more improvement projects. Similarly, in the 4th quarter we saved more than 10 lakh rupees by developing new vendors supplying original spare parts. The team is now going to initiate more such projects that can increase efficiency and reduce costs.



Empowering Communities

HZL's ACTIONS

1 NO POVERTY

Farm-based and Non-farm based Sustainable Livelihood Programmes



Interventions in early childhood care and development Project Khushi Vedanta Balchetna Aanganwadi project



Sustainable Development Goals

Hospitals, Health Camps and Mobile Medical

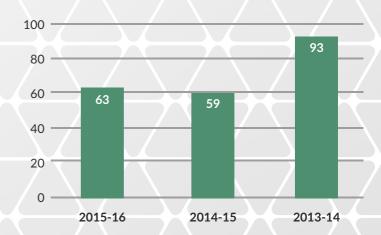


Educational support to schools Project: Shiksha Sambal & Utkarsh



Self help group with income generation model initiated - Project Sakhi

CSR INVESTMENT (INR CRORES)



HZL's ACTIONS



Support to Project Swachh Bharat Abhiyaan Water Pipelines, RO systems, Toilet Construction in Schools and Community



Rural Infrastructure Projects



CSR Outreach of HZL



Partnerships with NGOs



Sustainable Development Goals

CSR Vision

"To enhance the quality of life and economic well-being of the communities around our operations."

CSR Philosophy

Hindustan Zinc Limited is committed to the principles of harmonious and sustainable development; protecting human life, health and environment, ensuring social well-being and adding value to the communities. We respect human dignity and believe in inclusive and equitable growth and improvement in quality of life and that lies at the core of our business philosophy and business operations.

GG

At Hindustan Zinc, we believe that CSR is about building long-term relations with our neighbourhood communities and stakeholders. Our efforts are directed towards improving well-being of people (especially women and children), in close collaboration with communities.

Neelima Chetan

Head - CSR



Reaching Out to Communities

Motivated by the Sustainability Pillars of Vedanta Sustainability Framework - Building Strong Relationship and Adding and Sharing Value - we work towards our strategic aim of overall local development and well-being of the communities of Rajasthan. Our CSR endeavours are targeted towards facilitating social and economic development of the localities in the vicinity of our operations. We hope to achieve this through engaging effectively with the community, understanding their needs and priorities, and adopting a culture of allinclusive growth. This way, we secure our license to operate and continue adding value to the local populace.

CSR Governance

We have a multi-tiered Governance Mechanism driven by the CSR Sub-committee of the Hindustan Zinc Board. The CSR Sub-committee ensures execution of CSR activities in accordance with the CSR Policy. It meets twice a year to approve the annual CSR plans and review the progress of the implemented projects. Project implementation is the responsibility of our internal Implementation Monitoring Committee that meets every month to streamline processes for project execution, gauge the progress of the projects as also to approve new projects. This committee is backed with the efforts of a dedicated CSR team, which regularly interacts with the local community to assess their needs and track the progress of the CSR programmes.

G4 -EC8

G4

-SO1

CSR Board Sub-Committee

- Meet twice a year
- Approve the annual CSR plan/budget
- Ensure CSR activities being undertaken are as per the **Board** policy
 - Review the progress of the projects

Executive Committee (ExCo)

- Approve annual CSR plans & budget
- Review the progress of the programs once every quarter



Implementation Monitoring Committee

- Monitor audit reports and their compliances Review CSR programme process and outcomes

CSR Assessment and Community Development

Our CSR programmes begin by reaching out and understanding the needs and priorities of community. Using a well-planned and structured Community Development Methodology, we implement our CSR projects. Our approach is to do most projects in partnership with local stakeholders (civil society, PRIs), so that the long-term ownership and sustainability of the projects is factored in from the very beginning. Besides, our CSR policy mandates to conduct a baseline assessment and impact assessment once every three years. This helps us to update the community status and prioritize the focus areas of work.

The recent baseline and impact assessment study was conducted during 2014-15, by an external consultant -Total Synergy Consulting Pvt. Ltd., New Delhi. The survey was completed involving nearly 18,000 households in various locations. The salient outcome of the study indicated the need for high impact programmes like child care and education whilst underscoring infrastructure investments. We are currently in the process of aligning our CSR programmes to these findings.



CSR Ventures

Our CSR ventures for FY 2015-16 focused on seven areas: Education, Sustainable Livelihoods, Women's Empowerment, Health, Water & Sanitation, Sports & Culture, Environment and Community Development including community assets creation. This period saw several new projects being initiated, but many others were continued from the past as well.





Environment

Healt

Health, Water & Sanitation



Sports & Culture



CSR Ventures



Education

Women's Empowerment



Community Development



Sustainable Livelihoods

Education

At Hindustan Zinc, we recognise that education is one of the most critical building blocks of any nation. Our CSR activities in the same context have focused on extending learning support to children in the rural areas of Rajasthan. Through our unique programme 'Shiksha Sambal', we provide education support (especially in science, maths and English) to students appearing for Secondary & Senior Secondary Board exams. Project Utkarsh, a new initiative jointly undertaken with the Udaipur District administration during FY 2015-16, offers a quiz-based learning system for students.

Another flagship and unique project is the Vedanta Bal Chetna Anganwadi project, where Hindustan Zinc has signed an MoU with the Government of Rajasthan to strengthen 3,055 ICDS Anganwadis running across 5 Districts. The potential coverage through this program is likely to be over 50,000 children below 6 years of age.

Shiksha Sambal

- Providing additional teaching support to students of classes X and XII
- The project reached out to over 8,000 students across 60 government schools

Coaching Support

 Coaching support to students appearing for various government competitive exams (teachers, patwaris, police constables, etc.); about 400 students attended classes held across four locations

Scholarships

Support to students from economically weaker sections (through College for Technology and Agriculture)
 Engineering, Sumedha, Vedanta PG Girls College

Project Utkarsh

Rolled out in 316 schools reaching out to 30,000 students

Support to Schools

- Supporting educational institutions working for specially abled students (Viklang Kalyan Samiti, Badhir Bal Kalyan Vikas Samiti)
- Providing infrastructure support to government schools (construction of additional classrooms, play areas, boundary walls, furniture, etc.)

Early Childhood Care

• Nutrition and learning support to 3,055 Anganwadis in 5 districts of Rajasthan



'Khushi' - the magic wand for happiness

Awareness is the essence of education. Knowing that India houses the largest number of malnourished children in the world and also accounts for maximum child-deaths, it was felt important to spread awareness towards the care for the deprived children and encourage people to take individual steps towards the cause. As a caring company, Hindustan Zinc also decided to adopt Anganwadi from the Government to provide nutrition, health and education to deprived children.

Taking forward the vision of our Chairman, Mr. Anil Agarwal - making India a child-malnourished free nation, the adoption of Anganwadis began in 2006-07. To spread awareness across India on care for the deprived children, Project "Khushi" was launched in 2012. "Khushi" was launched on social media platform and started organizing online discussions and debates on nutrition to children, health issues, girl child, education in government schools, primary schooling in rural areas, child beggary, child labour, school dropouts, sanitation, change of behaviour towards the deprived children, to name a few.

"Khushi" has strong followers of about 130,000 on Facebook from across the world. Programs like "Our Girls Our Pride", "Khushi Teachers Awards", "Khushi Walk for Awareness" and "Khushi Workshops with Deprived Children" have been very successful in bringing the issue to forefront.

"Khushi" film 'Hum Ko Mann Ke Shakti Dena' has already reached about 1.50 crore people with over 4 million views, over 100,000 comments and equal number of shares.

"Khushi" itself has about 75 child care centres across India and 18 centres in Rajasthan. Under

Khushi project, we have recently partnered with Government of Rajasthan to strengthen the functioning of 3,055 Anganwadi centres. The role involves supplementing the existing ICDS (Integrated Child Development Services) programme through pre-school learning & child health interventions, enhancing community engagement as well as providing some supplies (utensils, soap, toys, etc). This project will touch the lives of rural and tribal children below 6 years of age, across 5 districts of Rajasthan.

"Khushi" today stands as a flag-ship child care campaign for the Group, a non-funding or donation campaign that is promoting the cause of child care – their health, nutrition, and education.

"One such story is that of Sandhya Giri, the daughter of Ratni Giri.

When Sandhya first came to the Khushi centre in Gusai Kheda village, about 2 years ago, she was not only extremely shy, but also severely malnourished, weighing only around 7 kg. After enrolling at the Khushi centre, Sandhya responded surprisingly well. Within a short span of time, she has gained weight and is now at a healthy 11.3 kg. She has lost her listlessness and begun playing with other children. Today, she is a different child, and can be seen happily reciting poems, counting numbers, and writing the alphabet."

The Khushi centres being run by Hindustan Zinc are designed for children like Sandhya. They are now given three meals daily, a uniform, access to clean drinking water, books, utensils, toys and colourful posters so that they can enjoy education through a play-way method, in a caring and secure environment.



"KHUSHI" is a project and information campaign with a focus to sensitize people towards care for the underprivileged and deprived children – their Nutrition – Primary Education – Health and overall development."

Pavan Kaushik, Head - Corporate Communication



Sustainable Livelihood

We have ventured into both farm-based and non-farm based programmes for sustainable livelihood. Farm-based livelihood initiatives are focused on agriculture and livestock development. We empower farmers with the latest technical knowhow. We provide various doorstep services for the livestock, such as, artificial insemination, timely veterinary services, and vaccination camps. In addition to this, we have also ventured into providing vocational training to the local youth.

Agriculture Practices Impacted 3000 families by training the farmers on agricultural practices

Livestock Improvement

- Provided doorstep services of artificial insemination, timely veterinary and vaccination camps
- Impacted 12000 families and benefitted 1.8 lakh cattle through livestock interventions

Vocational Training 37 persons trained for Jumbo Drill Operator's (JDO) training programme, of which 32 are presently working with average income of Rs.20,000/- p.m.





Women's Empowerment

We believe that empowering a rural woman means energizing the entire community. Adding value to the lives of these women reflects on the future of their families and the development of their villages. With this belief, we started creating self-help-groups (SHGs) to give social and economic stability to rural and tribal women residing near our business locations.

Some of these SHGs have also been trained in different skills and linked with the banks to start their own micro enterprises, either individually or in a group, depending on the viability. Today, all these women are known as "Sakhis" and their self-help-groups are known as "Sakhi" self-help-groups.

'SAKHI' Self Help Groups

- Working with close to 200 women's Self Help Groups (SHG), reaching more than 2500 women
- Trainings provided in tailoring, candle making, masala, papad making, etc.
- Models in a much acclaimed fashion show held in Jaipur, walked the ramp wearing clothes made through the SHGs



A resident of Sakroda Panchayat, Lachchu Kunwar was a Rajput housewife confined to her family, until she came across the unique livestock development project launched by Hindustan Zinc. Aware of her family's meagre income and with no other alternative for extra earning, Lachchu decided to join the Rela SHG and get trained on the Gottery project. What interested her most was that this project would provide all the initial support, including financial help, and she had to repay only half the loan amount she would take to initiate the project. She started on this journey by buying 5 female goats and 1 male goat of the Sirohi breed. The uniqueness of this breed is that they give birth in two cycles a year and produce twins. They needed minimal maintenance and had to be vacciniated at intervals. Today, Lachchu has a herd of 32 goats and makes a yearly income of Rs.30,000 by selling them. The milk requirement of her entire family is also fulfilled from this. Most importantly, this project has played a transformational role in developing her enterprising abilities.

A happy and confident Lachchu expresses:

"This Gottery business project of Hindustan Zinc has brought happiness in our lives and homes and I will always be grateful to them."







SAKHI

Building entrepreneurs out of rural and tribal women of Rajasthan

Hindustan Zinc has been working for the empowerment of women in rural Rajasthan through its Self Help Groups (SHG) since 2006. The formation of SHGs and the access to credit facilities for its members along with education and training support has been instrumental in enhancing women's self-confidence and incomes in rural Rajasthan.

The rural system has its own customs, traditions and social implications and thus formation of self-help-groups was never an easy task. It was never easy to convince these rural women to spare 4-5 hours daily and spend time with women of different temperaments. The support of family members was also imperative. With initial hiccups the formation of self-help-groups started. These women were first engaged in thrift savings and then linked with banks. Once they were through with the process, these women were encouraged to get training in their areas of interest.

Most of the women wanted to learn stitching and tailoring and the company organized the same. With

the time and growing demand Hindustan Zinc has been engaging with these women towards formation of different product clusters. Today, all these over 2,500 rural and tribal women are known as "Sakhis" and their self-help-groups are known as "Sakhi" self-help-groups.

Training to these women is not just a regular training. During the training, the trainers are required to get the products developed by them. Most of the products produced by these "Sakhis" are on pre-order basis so that they bring instant finances in the "Sakhi" Group.

The "Sakhi" self-help-groups located in Udaipur, Bhilwara, Chittorgarh, Rajasmand, Ajmer and Ringus in Rajasthan are now being trained in different products. The company formed clusters of spices, papad, paper crafts, pickle, home furnishing, candle making, school uniform and fashion garments.

"When you empower a rural & tribal woman, you in-turn make a complete family socially and economically independent, thereby energizing the whole village and ultimately contributing towards the progress of a Nation. "SAKHI" is a project bringing economic empowerment and recognizing the success of these rural & tribal women in Rajasthan."

Pavan Kaushik, Head of Corporate Communication

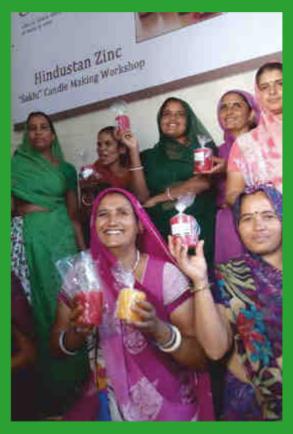


Two such shining examples are Tulsi and Parvin Bano.

Rural women of Rajasthan have always fascinated the people around the world with their creative skills and traditional art. Their ability to learn new skills and grasping power has always surprised the traditional art lovers. These women have understood the importance of utilization of their free time for gainful employment. One such woman is Tulsi. Tulsi lives in a small village called Kaladwas, about 15 kilometres from the main Udaipur city. When Hindustan Zinc approached Tulsi for her interest in vocational training she readily agreed. With the given infrastructure it was decided to conduct Perfumed Candle Making training program and during the training about 2,000 candles were made which were sold instantly. Tulsi agreed and also promised to get more women to learn and execute this project.

Within 2-days everything was organized by **Tulsi** and Hindustan Zinc. It is said, when you have interest and focus is clear, the learning becomes higher. Finally the "Sakhi" Project started in Kaladwas village with about 18 rural women making 2,000 candles. Soon all the perfumed candles were made and sold out instantly. It was a moment of emotions when the honorarium was given to these women.





Parvin Bano, a resident of Udaipur, was a housewife until she met a Hindustan Zinc co-ordinator who informed her of opportunities under the Sakhi program of Hindustan Zinc. Inspired, Parvin decided to enrol herself into a 6-month training programme for stitching and embroidery. At the end of the training, Parvin used her skills to contribute to the family's income. She also learned how to stitch uniforms in the Sakhi workshop. Soon, she became one of those ladies who were involved in making 5,000 uniforms for Anganwadi children. As her experience grew, so did Parvin's earnings. Today, she manages to save Rs.2,500-3,000 per month.

'Project Sakhi' is a hope for all rural women who have dreams and determination to make it happen.







As part of our women's empowerment initiative Project "Sakhi", in October 2015, Hindustan Zinc for the very first time organized "Sakhi" Fashion Show, a show that presented 60 garments made by rural women of Kayad and Gagwana in Ajmer District. The garments were showcased on the ramp by Delhi and Mumbai professional models and watched by none other than the Home Minister, Women and Child Development Minister and a large gathering of top designers of the country and fashion students besides many dignitaries. The show also presented school uniforms for "Khushi" centre children made by Sakhis.

From the Rajasthan Government, Home Minister Shri Gulab Chand Kataria, Women and Child Development Minister Smt. Anita Bhadel, and Director Women Empowerment Smt. Richa Khoda had specially come to see the collection made by the rural women. Rajasthan MLA from Sawai Madhopur and the brand ambassador for 'Beti Bachao' campaign Smt. Diya Kumari also attended the show.

Renowned fashion designer Jatin Kochhar, Rajdeep Ranawat, Gaurav Gupta and Anand Bhushan who attended the show were mesmerized to see the garments made by the "Sakhi" rural women. Miss India 2014, Koyal Rana enthralled the audience as the show stopper for the evening.

Hindustan Zinc used the opportunity to also showcase a sequence of 12 school uniforms, which were also made by "Sakhi" women. Twelve children from Anganwadis in Ajmer were selected to present the uniform collection at the event. It was amazing to see the children walking the ramp to the cheers and encouragement of over 500 people.

Quotes by Ministers

Gulab Chand Kataria, Home Minister, Government of Rajasthan

"I would like to congratulate and thank Hindustan Zinc for empowering the rural women of Rajasthan. Through the "Sakhi" programme Hindustan Zinc has taken an amazing initiative to make women financially independent by assuring them market. The government too has been working towards the upliftment of rural women but the results have been comparatively slow. However, this innovative concept has captured the essence of what the government has envisioned doing since a long time and has achieved results at a much rapid pace by developing product based cluster approach. I would further congratulate the entire "Sakhi" team for this innovative approach."

Anita Bhadel, Women and Child Development Minister, Government of Rajasthan

"I am grateful to Hindustan Zinc for undertaking such a wonderful initiative. This concept and the entire programme is a great confidence booster for the women of our villages. There are many Self Help Groups and NGO's that are working towards the empowerment of women, but a concept like "Sakhi" is really unique in its idea and execution that recognises the women's talents and more importantly gives them a market to showcase their creativity and their products. "

Diya Kumari, MLA, Sawai Madhopur

"Hindustan Zinc is doing some great work with the Self Help Groups in the five districts of the state. I would be delighted and strongly recommend if this programme also comes to Sawai Madhopur as there are many women in the district and its villages that can be benefitted through "Sakhi" association."







Health, Water and Sanitation

Our portfolio for good health encompasses curative, and rehabilitative medical services and aims to make them accessible to the community. For 2015-16, we conducted 700 health and awareness camps and the Vedanta Zinc Heart Hospital is serving the community by treating ~350 patients per month.

Access to safe drinking water is a basic need; therefore, we support the provisioning of potable water to the community. As part of the Prime Minister's mission, and to promote healthy sanitation habits and discourage the practice of open defecation, we signed an MoU with the District administration for construction of school toilets and household toilets.

Health and Awareness Camps 700 camps conducted impacting 90000 people

Water Supply

Collaborated with the local
 PHED department to lay water pipelines in 14 villages

Hospital

 Vedanta Zinc Heart Hospital, Udaipur, treats an average of 350 patients every month, especially from economically weaker ones

Sanitation

• Constructed 318 toilets in 264 schools

Constructed 1142 household toilets





Sports & Culture

Hindustan Zinc has been supporting sports and culture in Rajasthan for several years. We are renowned amidst the local communities for sponsoring various sports tournaments throughout the year. We were also the lead sponsors for the Udaipur World Music Festival held on 13th and 14th February 2016. Apart from this, we have also been supporting other musical events such as Maharana Kumbha Sangeet Sammelan, Pandit Chatur Lal Memorial Concert, and some others.

Sports Tournament Various tournaments organised that benefitted over 5,000 people

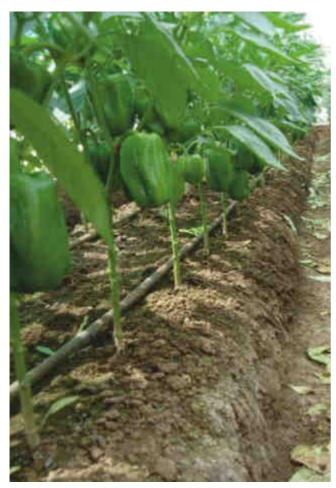
Music

Sponsored Udaipur World
 Music Festival graced by 100
 musicians from 15 countries

 Provided sponsorships for

 Provided sponsorships for various music events





Environment

Apart from the regular environmental activities, we also sponsor events related to environment which involves the local community. During the reporting year, along with afforestation drives we also sponsored a flower show and ornamental tree plantation in Udaipur City.

Flower Show

 Project 'Gulshan'- Organised flower show in Udaipur, in collaboration with Urban Improvement Trust

Plantation

 Plantation of 3,500 plants at different locations in the operational areas



Community Development

The all-round socio-economic development of any village depends on growth in infrastructure; that too, in a sustainable manner. Hindustan Zinc has undertaken initiatives for the development of village infrastructure through need-based interventions such as roads, electricity, drainage, etc. During the reporting year, a drive for illuminating remote villages through installation of solar lights was started. 311 solar lights were installed in 49 villages as a part of this initiative.

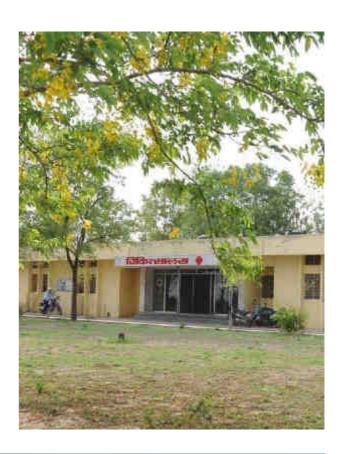
Rural Infrastructure Repair and renovation of schools, construction of GLR tanks, overhead tanks, digging of bore wells

Repair and Maintenance

 Construction of community centres, culverts, drains, roads etc.

Solar Lights

• 311 solar lights installed in 49 villages









ZINC COMMUNIQUE



Our focus

- Key Performance Indicators
- Material Aspect Boundary Index
- Sustainability Road Map
- UNGC Principles
- FIMI Principles
- GRI G4 Index
- Assurance Statement
- Awards & Accolades

Key Performance Indicators-2016

FINANCIAL INDICATORS					
	Units Of Measure	2016			
Total Revenues (including Other Income)	INR Crores	16,956			
Profit before depreciation, interest and tax	INR Crores	9,340			
Less: Interest	INR Crores	17			
Less: Depreciation and amortization expense	INR Crores	713			
Profit before tax	INR Crores	8,610			
Net tax expense/(benefit)	INR Crores	444			
Profit for the year	INR Crores	8,167			
Earnings per equity share	INR	19.33			

	PRODUCTION INDICATO	PRODUCTION INDICATORS			
	Units Of Measure	Mined Metal	Refined Metal		
Zinc	Million MT	0.74	0.76		
Lead	Million MT	0.14	0.15		
Silver	MT		459		

HUMAN RESOURCE INDICATORS					
	Units Of Measure	Male/ 20-30yrs*	Female/ 20-30yrs*	Total/ Above 50 yrs*	
WORKFORCE					
Full-time Employees	Number	4365	325	4690	
Contract Employees	Number	-	-	12410	
Full-time Employees by Age	Number	1518	1778	1394	
EMPLOYEE TRAININGS					
Full-time Employees	Man-hours	144908*	6398	151306	
Contract Employees	Man-hours			286710	

*Including non-executives

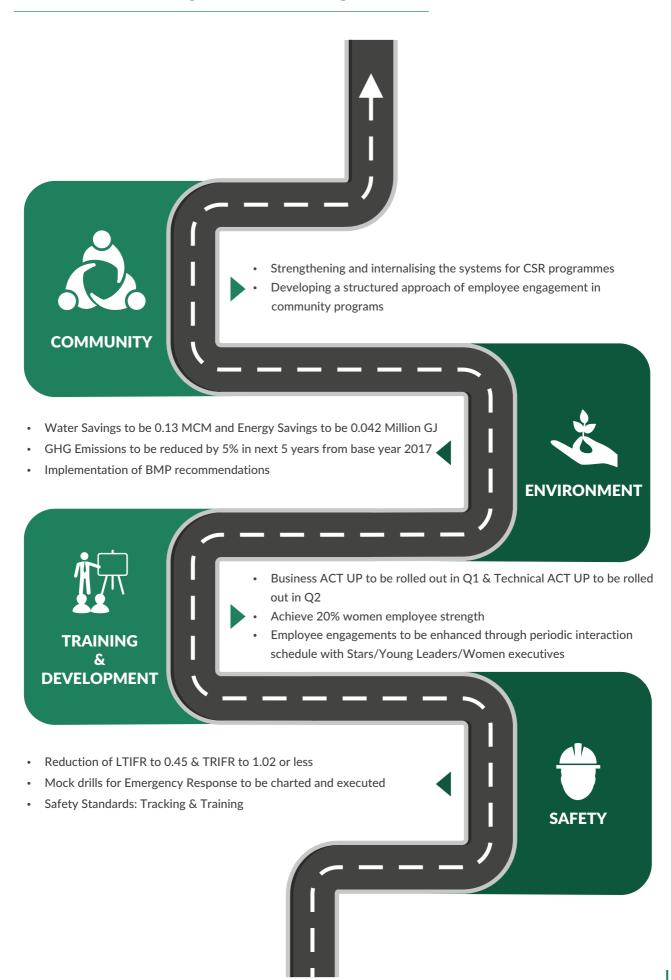
HEALTH AND SAFETY INDICATORS					
	Units Of Measure	Male	Female	Total	
Fatalities	Number	4	0	4	
Lost Time Injury Frequency Rate	Number per Million Hours Worked			0.50	
Occupational Diseases	Number	0	0	0	

	ENVIRONMENTAL INDICATORS			
	Units Of Measure	Mines	Smelters	Total
MATERIALS USED	-	-	-	-
Raw Material	Million MT	11.04	0	11.04
Semi-manufactured goods or parts	Million MT	0	1.63	1.63
Associated Process Materials	Million MT	0.12	0.45	0.57
Packing Material	MT	0	663.93	663.93
ENERGY CONSUMPTION	-	-	-	-
Direct Energy	Million GJ	9.36	33.97	43.3
Indirect Energy	Million GJ	0.22	0.74	0.96
WATER CONSUMPTION	-	-	-	-
Ground water	Million m ³	3.73	0.13	3.86
Surface water	Million m ³	4.58	12.62	17.20
Rainwater	Million m ³	0.04	0	0.04
Utility	Million m ³	0.08	5.36	5.44
Water Recycled	Million m ³	7.16	5.78	12.94
CARBON EMISSIONS	-	-	-	-
Scope I Emission	Co₂e mt	-	-	4.47
Scope II Emission	Co₂e mt	-	-	0.22
AIR EMISSIONS	-		-	-
PM Emission from stacks	MT	-	-	1083
SOx Emission from stacks	MT	-	-	32328
NOx Emission from stacks	MT	-	-	8075
WASTE GENERATION	-	-		-
Hazardous Waste	Million MT	0.001	0.58	0.58
Non-hazardous Waste	Million MT	0.06	0.42	0.47
Overburden/Waste rocks	Million MT	64.71	-	64.71
Tailings	Million MT	7.88	-	7.88

Material Aspect Boundary Index

MATERIAL ASPECTS	MATERIAL WITHIN ORGANISATION	MATERIAL OUTSIDE ORGANISATION	RELEVANCE OUTSIDE ORGANISATION
Health and Safety	YES	YES	Health and safety standards adopted by our business partners are important for us and hence our supplier screening and supplier code of conduct tries to ensure that we engage with reputable partners.
Environment Management	YES	YES	Mining and smelting operations are hazardous to the environment by nature. Unless the associated risks are managed efficiently they can have a negative impact on the communities surrounding our operations.
Community Development	YES	YES	We believe we have a responsibility to engage with the communities in which we operate and foster their social and economic development to create and sustain a mutually beneficial relationship.
Energy and Climate Change	YES	YES	Initiatives such as adoption of clean energy sources of energy such as wind energy, solar energy, has helped in reducing our GHG emissions and has contributed to the mitigation of the effects of climate change which is a global issue.
Economic Value	YES	YES	The creation of sustainable economic value for the company is critical so that we can continue to serve our customers and maintain continued relationships with our suppliers and the communities in which we operate.
Regulatory Compliance	YES	NO	Not applicable
Ethics and Governance	YES	YES	Ethical issues can crop up in our dealings with our business partners and in our interactions with the community.
Human Rights	YES	YES	Human rights issues are well addressed during the selection of our suppliers.
Supply Chain Management	YES	YES	Sustainability aspects are well addressed through our supply chain management.
Training and Skill Development	YES	YES	Suppliers and contractors are provided safety and other training wherever required to ensure they are at par with our standards.
Employee Engagement and Well-being	YES	NO	Not applicable
Biodiversity	YES	YES	The impact of our activities on the biodiversity of the surrounding environment is an area of concern, which we are taking care of through Biodiversity conservation initiatives.
Exploration	YES	YES	Exploration is a critical activity for our long term business continuity and hence is essential to our continued relationship with our customers, suppliers and the community.
Land and Resettlement	YES	YES	Acquisition of new land for our operations can lead to the displacement of existing communities and it becomes our responsibility to ensure adequate compensation and re-settlement.
Grievance Redressal	YES	YES	Grievances are voiced from our suppliers, customers and communities and we attempt to redress the same for smooth operations.
Recruitment and Retention	YES	NO	Not applicable
New Product Portfolio	NO	YES	New products can help us create new markets for our business. Hence, we try to explore the possibilities of launching products based on the industry requirement.
Product Stewardship	YES	YES	Improvements made in our product help us in delivering higher value for customers by meeting and exceeding their needs.

Sustainability Road Map



UNGC Principles

Principles	Statement	Page No.
	Human Rights	
Principle 1	Businesses should support and respect the protection of internationally proclaimed human rights	32
Principle 2	Make sure that they are not complicit in human rights abuses	32
	Labour	
Principle 3	Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining	70
Principle 4	The elimination of all forms of forced and compulsory labour	32
Principle 5	The effective abolition of child labour	32
Principle 6	The elimination of discrimination in respect of employment and occupation	86
	Environment	
Principle 7	Businesses should support a precautionary approach to environmental challenges	
Principle 8	Undertake initiatives to promote greater environmental Responsibility	52-67
Principle 9	Encourage the development and diffusion of environmentally friendly technologies	
	Anti-Corruption Anti-Corruption	
Principle 10	Businesses should work against corruption in all its forms, including extortion and bribery	32

FIMI Principles

Principles	Statement	Page No.
Principle 1	Integrate sustainable development considerations within the corporate decision making process	22
Principle 2	Conduct business with ethical practices and sound systems of corporate governance	31-32
Principle 3	Implement risk management strategies based on valid data and sound science	23
Principle 4	Seek continual improvement in health and safety performance	33-45
Principle 5	Seek continual improvement of our environment performance based on a precautionary approach	52-67
Principle 6	Uphold fundamental human rights and respect cultures, customs and values in dealings with employees and others who are affected by our activities	32
Principle 7	Contribution to conservation of biodiversity and integrated approaches to land use planning and management	62-63
Principle 8	Facilitate and encourage responsible use, reuse and recovery of mined materials including associated natural resources	65
Principle 9	Contribute to the social, economic and institutional development of the communities in which we operate	90-104
Principle 10	Implement effective and transparent engagement, communication and verifiable reporting arrangements with our stakeholders	68-73, 105

GRI G4 Index 'In accordance' Core Criteria

General Standard Disclosures

Disclosure	Description	Page No.			
STRATEGY AN	STRATEGY AND ANALYSIS				
G4-1	Statement from the Senior-most decision-maker	14			
G4-2	Description of key impacts, risks, and opportunities	27			
ORGANIZATIO	NAL PROFILE				
G4-3	Name of the organization	1, 8			
G4-4	Primary brands, products, and services	9			
G4-5	Location of the organization's headquarters	8			
G4-6	Countries of operation	9			
G4-7	Report the nature of ownership and legal form	10			
G4-8	Markets served	8			
G4-9	Scale of the organization: Workforce; Operations; Revenues; Production	9,18,47			
G4-10	Workforce by Type; Gender; Region	106			
G4-11	Percentage of total employees covered by collective bargaining agreements	70			
G4-12	Describe the organization's supply chain	75			
G4-13	Significant changes of reporting period	49			
G4-14	Report whether and how the precautionary approach or principle is addressed by the organization	27			
G4-15	Sustainability charters	110			
G4-16	List memberships of associations	12			
IDENTIFIED M.	ATERIAL ASPECTS AND BOUNDARIES				
G4-17	Organization's consolidated financial statements	47			
G4-18	Definition of report content and Aspect Boundaries	4			
G4-19	Material aspects	26			
G4-20	Aspect Boundaries of Material Aspects Inside Organization	108			
G4-21	Aspect Boundaries of Material Aspects Outside Organization	108			
G4-22	Restatements of Previous Reported Data	NA since First Report			
G4-23	Significant changes from previous reporting period	NA since First Report			
STAKEHOLDE	R ENGAGEMENT				
G4-24	List of stakeholder groups	26			
G4-25	Basis of Engagement with Stakeholder Groups	70-73			
G4-26	Stakeholder engagement (mode, frequencies)	70-73			
G4-27	Key Concerns of Stakeholders	26			

Disclosure	Description	Page No.		
REPORT PROFI	ILE			
G4-28	Reporting period	4		
G4-29	Date of most recent previous report (if any)	NA since First Report		
G4-30	Reporting cycle (such as annual, biennial)	4		
G4-31	Contact point	4		
G4-32	GRI index	111		
G4-33	External assurance	118-119		
GOVERNANCE				
G4-34	Governance structure	11		
G4-35	Sustainability strategy	22		
G4-36	Sustainability framework	22-23		
G4-37	Sustainability engagements	23		
G4-38	Corporate governance	31		
G4-45	Sustainability governance	23		
G4-46	Risk management framework	23		
G4-47	Frequency of Risk Review	23		
G4-49	Communicating critical concerns to highest governance body	23		
ETHICS AND IN	ETHICS AND INTEGRITY			
G4-56	Organization's values, principles, codes of conduct and codes of ethics	31-32		
G4-57	Grievance redressal	32		
G4-58	Whistleblowing mechanisms or hotlines	32		

Specific Standard Disclosures

Specific Standard Disclosure	Description	Page No.
CATEGORY: E	CONOMIC	
ASPECT: ECO	NOMIC PERFORMANCE	
G4-EC1	Direct economic value generated and distributed	106
G4-EC2	Financial risks and opportunities due to climate change	56
G4-EC3	Coverage of the organization's defined benefit plan obligations	86
ASPECT: MAR	KET PRESENCE	
G4-EC5	Ratios of standard entry level wage by gender	86
G4-EC7	Development and impact of infrastructure investments and services supported	104
G4-EC8	Significant indirect economic impacts, including the extent of impacts	90-104

Specific Standard Disclosure	Description	Page No.			
CATEGORY: E	CATEGORY: ENVIRONMENT				
ASPECT: MAT	TERIALS				
G4-EN1	Materials used by weight or volume	107			
ASPECT: ENE	ERGY				
G4-DMA	Disclosure on Management Approach	55			
G4-EN3	Energy consumption within the organization	55			
G4-EN5	Energy intensity	55			
G4-EN6	Reduction of energy consumption	55			
ASPECT: WAT	TER TERMINATION OF THE PROPERTY OF THE PROPERT				
G4-DMA	Disclosure on Management Approach	58			
G4-EN8	Total water withdrawal by source	58-59			
G4-EN10	Percentage and total volume of water recycled and reused	59			
ASPECT: BIO	DIVERSITY				
G4-DMA	Disclosure on Management Approach	62			
G4-EN11	Operational sites owned, leased, managed near areas of high biodiversity value	62			
G4-EN12	Significant impacts on biodiversity	62			
MM1	Amount of land (owned or leased, and managed for production activities or extractive use) disturbed or rehabilitated	62			
G4-EN13	Habitats protected or restored	62			
MM2	The number and percentage of total sites identified for biodiversity management plans	62			
ASPECT: EMI	SSIONS				
G4-DMA	Disclosure on Management Approach	56			
G4-EN15	Direct greenhouse gas (GHG) emissions (Scope 1)	56			
G4-EN16	Energy indirect greenhouse gas (GHG) emissions (Scope 2)	56			
G4-EN19	Reduction of greenhouse gas (GHG) emissions	56			
G4-EN21	NOX, SOX, and other significant air emissions	57			
ASPECT: EFF	LUENTS AND WASTE				
G4-DMA	Disclosure on Management Approach	59			
G4-EN22	Total water discharge by quality and destination	59			
G4-EN23	Total weight of waste by type and disposal method	64			
ммз	Total amounts of overburden, rock, tailings, and sludges and their associated risks	65			
G4-EN24	Total number and volume of significant spills	65			
G4-EN26	Water bodies and related habitats significantly affected by the organization's discharges of water and runoff	59			
ASPECT: PRODUCTS AND SERVICES					
G4-DMA	Disclosure on Management Approach	66-67			
G4-EN27	Mitigation of environmental impacts of products and services	66-67			

Specific Standard Disclosure	Description	Page No.		
ASPECT: COMPLIANCE				
G4-DMA	Disclosure on Management Approach	54		
G4-EN29	Environmental Fines	54		
ASPECT: TRAN	ISPORT			
G4-DMA	Disclosure on Management Approach	57		
G4-EN30	Significant environmental impacts of transportation	57		
ASPECT: OVER	RALL			
G4-DMA	Disclosure on Management Approach	54		
G4-EN31	Total environmental protection expenditures by investments type	52		
ASPECT: SUPF	PLIER ENVIRONMENTAL ASSESSMENT			
G4-DMA	Disclosure on Management Approach	54		
G4-EN34	Environmental Grievances and their Redressal	54		
Specific Standard Disclosure	Description	Page No.		
CATEGORY: SO	DCIAL			
SUB CATEGOR	Y: LABOUR PRACTICES & DECENT WORK			
ASPECT: EMPL	OYMENT			
G4-DMA	Disclosure on Management Approach	83-84		
G4-LA1	Employee hires and turnover rates by age, gender and region (Rates by Age and Region will be provided in future)	84		
G4-LA2	Benefits provided to full-time employees	86		
G4-LA3	Return to work and retention rates after parental leave, by gender	86		
ASPECT: LABO	DUR/MANAGEMENT RELATIONS			
G4-DMA	Disclosure on Management Approach	70		
G4-LA4	Minimum notice periods regarding operational changes	70		
MM4	Number of strikes and lock-outs exceeding one week's duration by country	70		
ASPECT: OCCU	JPATIONAL HEALTH & SAFETY			
G4-DMA	Disclosure on Management Approach	37, 42		
G4-LA6	Type of injury & rates of injury, occupational diseases, lost days and absenteeism, and total number of work-related fatalities, by region and by gender	37		
G4-LA7	Workers with high incidence of high risk of occupational diseases	42		
G4-LA8	Health & safety topics in formal agreements with trade unions	34		
ASPECT: TRAIL	ASPECT: TRAINING AND EDUCATION			
G4-DMA	Disclosure on Management Approach	86		
G4-LA9	Average hours of training per year per employee by gender & type	86		
G4-LA10	Programs for skills management and lifelong learning	85-87		
G4-LA11	Percentage of employees receiving regular performance and career development reviews, by gender and by employee category	88		

Specific Standard Disclosure	Description	Page No.		
ASPECT: EQUA	AL REMUNERATION FOR WOMEN AND MEN			
G4-DMA	Disclosure on Management Approach	86		
G4-LA13	Ratio of basic salary and remuneration of women to men	86		
ASPECT: SUPP	LIER ASSESSMENT FOR LABOUR PRACTICES			
G4-DMA	Disclosure on Management Approach	75		
G4-LA14	Percentage of new suppliers screened using labour practices	75		
ASPECT: LABO	OUR PRACTICES GRIEVANCE MECHANISMS			
G4-DMA	Disclosure on Management Approach	73		
G4-LA16	Number of grievances about labour practices filed, addressed and resolved through formal grievance mechanisms	None		
Specific Standard Disclosure	Description	Page No.		
CATEGORY: SO	DCIAL			
SUB CATEGOR	Y: HUMAN RIGHTS			
ASPECT: INVES	STMENT			
G4-DMA	Disclosure on Management Approach	32		
G4-HR2	Total hours of employee training on human rights policies	32		
ASPECT: NON-	DISCRIMINATION			
G4-DMA	Disclosure on Management Approach	32		
G4-HR3	Total number of incidents of discrimination and corrective actions	32		
ASPECT: CHILI				
G4-DMA	Disclosure on Management Approach	75		
G4-HR5	Operations and suppliers identified as having significant risk for incidents of child labour, and measures taken	75		
ASPECT: FORCE	CED OR COMPULSORY LABOUR			
G4-DMA	Disclosure on Management Approach	75		
G4-HR6	Operations and suppliers identified as having significant risk for incidents of forced or compulsory labour, and measures taken	75		
ASPECT: SECU	IRITY PRACTICES			
G4-DMA	Disclosure on Management Approach	32		
G4-HR7	Percentage of security personnel trained in the organisation's human rights policies or prodedures that are relevant to operations	32		
ASPECT: SUPP	LIER HUMAN RIGHTS ASSESSMENT			
G4-DMA	Disclosure on Management Approach	75		
G4-HR10	Percentage of new suppliers screened using human rights criteria	75		
ASPECT: HUMA	ASPECT: HUMAN RIGHTS GRIEVANCE MECHANISMS			
G4-DMA	Disclosure on Management Approach	32		
G4-HR12	Number of grievances about human rights impacts filed, addressed and resolved through formal grievance mechanisms	32		

Specific Standard Disclosure	Description	Page No.
SUB CATEGOR	Y: SOCIETY	
ASPECT: LOCA	L COMMUNITIES	
G4-DMA	Disclosure on Management Approach	90-92
G4-S01	Percentage of operations with implemented local community engagement, impact assessments, and development programs	90-104
G4-SO2	Operations with significant actual or potential negative impacts on local communities	None
MM7	Grievance mechanisms used to resolve disputes	73
ASPECT: ANTI-	CORRUPTION	
G4-DMA	Disclosure on Management Approach	32
G4-SO3	Total number and percentage of operations assessed for risks related to corruption and the significant risks identified	32
G4-SO4	Communication and training on anti-corruption policies and procedures	32
G4-SO5	Confirmed incidents of corruption and action taken	32
ASPECT: ANTI-	COMPETITIVE BEHAVIOUR	
G4-DMA	Disclosure on Management Approach	
G4-S07	Total number of legal actions for anti-competitive behaviour, anti-trust, and monopoly practices and their outcomes	None
ASPECT: COM	PLIANCE	
G4-SO8	Significant fines for non-compliance with laws and regulations	None
ASPECT: CLOS	URE PLANNING	
G4-DMA	Disclosure on Management Approach	49
MM10	Number and percentage of operations with closure plans	49
G4-SO9	Percentage of new suppliers screened for impacts on society	75
ASPECT: GRIE	VANCE MECHANISMS FOR IMPACTS ON SOCIETY	
G4-DMA	Disclosure on Management Approach	76
G4-SO11	Number of grievances about impacts on society filed, addressed and resolved through formal grievance mechanisms	73
Specific Standard Disclosure	Description	Page No.
CATEGORY: SO	OCIAL	
SUB CATEGOR	Y: PRODUCT RESPONSIBILITY	
ASPECT: CUST	OMER HEALTH & SAFETY	
G4-DMA	Disclosure on Management Approach	80
G4-PR1	Percentage of significant product and service categories for which health and safety impacts are assessed for improvement	80
ASPECT: PROD	DUCT AND SERVICE LABELING	
G4-DMA	Disclosure on Management Approach	80
G4-PR3	Type of product and service information required by the organisation's procedures for product and service information and labeling, and percentage of significant product and service categories subject to such information requirements	80
G4-PR5	Results of surveys measuring customer satisfaction	81

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The Management and Board of Directors Hindustan Zinc Limited Yashad Bhawan, Udaipur-313004, India

INDEPENDENT ASSURANCE STATEMENT

Ernst & Young LLP (EY) has been engaged by Hindustan Zinc Limited (HZL) (the 'Company') to provide independent assurance on its Sustainable Development Report 2015-16 (the 'Report') covering the Company's sustainability performance during the period 1st April 2015 to 31st March 2016.

The development of the Report, based on G4 Sustainability Reporting Guidelines (GRI-G4) of the Global Reporting Initiative, its content, and presentation is the sole responsibility of the management of the Company. EY's responsibility, as agreed with the management of the Company, is to provide independent assurance on the Report's content as described in the scope of assurance. Our responsibility in performing our assurance activities is to the management of the Company only and in accordance with the terms of reference agreed with the Company. We do not therefore accept or assume any responsibility for any other purpose or to any other person or organization. Any dependence that any such third party may place on the Report is entirely at its own risk. The assurance report should not be taken as a basis for interpreting the Company's overall performance, except for the aspects mentioned in the scope below.

Assurance Standard

Our assurance is in accordance with International Federation of Accountants' International Standard for Assurance Engagements Other than Audits or Reviews of Historical Financial Information (ISAE 3000), and our conclusions are for 'limited' assurance as set out in ISAE 3000.

Scope of Assurance and Methodology

The scope of our work for this assurance engagement was limited to review of information pertaining to environmental and social performance for the period 1st April 2015 to 31st March 2016. We conducted review and verification of data collection/measurement methodology and general review of the logic of inclusion/omission of necessary relevant information/data and this was limited to:

- Review of consistency of data/information within the Report as well as between the report and source;
- Review the level of adherence to GRI G4 Guidelines, the reporting framework followed by the Company in preparing the Sustainability Report, alignment with United Nations Global Compact (UNGC), International Council on Mining and Metals (ICMM) and Sustainable Development Goal frameworks for the Company;
- Verification of the sample data and information reported at the following units/ locations:
 - 1 Sindesar Khurd Mine (Rajasthan)
- 4 Rajpura Dariba Mine (Rajasthan)
- 2 Chanderiya Lead Zinc Smelter (Rajasthan)
- 5 Dariba Smelting Complex (Rajasthan)
- 3 Rampura Agucha Mine (Rajasthan)
- 6 Corporate Office at Udaipur (Rajasthan)
- Review and execution of audit trail of selected claims and data streams to determine the level of accuracy in collection, transcription and aggregation processes;
- Review of Company's plans, policies and practices, pertaining to their social, environment and sustainable development, so as to be able to make comments on the completeness of the reporting and degree to which EY believes the Report provides a fair and honest representation of the Company's activities.

Limitations of our engagement

The assurance scope excludes:

- Data and information outside the defined reporting period (1st April 2015 to 31st March 2016);
- Review of the 'economic performance indicators' included in the Report which, we have been informed by the Company, are derived from the Company's audited financial records;
- The Company's statements that describe expression of opinion, belief, inference, aspiration, expectation, aim or future intention:
- Data, statements and claims already available in the public domain through Annual Report, Corporate Social Responsibility reports, or other sources available in the public domain;





Our Assurance Team and Independence

Our assurance team, comprising of multidisciplinary professionals, was drawn from our Climate Change and Sustainability network, and undertakes similar engagements with various Indian and international companies. As an assurance provider, EY is required to comply with the independence requirements set out in International Federation of Accountants (IFAC) Code of Ethics for Professional Accountants. EY's independence policies and procedures ensure compliance with the Code.

What we did to form our conclusions

In order to form our conclusions, we undertook the following key steps:

- Interviews with select key personnel and the core team responsible for the preparation of the Report to understand the Company's sustainability vision, mechanism for management of sustainability issues and engagement with key stakeholders;
- Interactions with the key personnel at the Company's head office and units/locations in order to understand and review the current processes in place for capturing the relevant data disclosed in the Report;
- Verification of the reported data, on a sample basis, at the Company's corporate office and units/locations as mentioned in the 'Scope of Assurance and Methodology' above;
- Review of relevant documents and systems for gathering, analyzing and aggregating sustainability performance data in the reporting period;
- · Review of selected qualitative statements and sample case studies in various sections of the Report.

Observations and opportunities for improvement

During the review process, we observed that:

- The Company has compiled the Report as per the 'in accordance' core criteria of GRI G4 Sustainability Reporting Guidelines. The Report presents a fair description of the Company's materiality assessment and includes performance disclosures under the aspects identified as material;
- The Company may improve on the practices for data capturing, monitoring and mapping of water data for the Rajpura Dariba Complex.
- The Company may improve on strengthening practices for HR data management and archiving.

Conclusion

On the basis of our procedures for this limited assurance, nothing has come to our attention that causes us not to believe that the Company has reported on sustainability issues materially significant to its business and its stakeholders.

Ernst & Young LLP

Sudipta Das Partner

Date: 20th July, 2016 Place: Gurgaon, India



Recognition for Industry Excellence

Platts Industry Leadership for **Base Metals** Award 2015 (London), for operational and financial excellence

Dun & Bradstreet Best Corporate Award 2015 in non-ferrous category

ICONIC IDC Insight Award for demonstrating Innovations, Transformation. Customer Experience, Supply Chain Management, and Employee Engagement

Government of Rajasthan's Export **Excellence Award** in the metal category

Institution of Engineers India's Industry **Excellence Award** 2015

Recognition for Sustainable Practices

CII-ITC Sustainability Award 2015 for Corporate Excellence-Outstanding Accomplishment

World CSR Congress 'Sustainable Business of the Year Award 2015' to Chanderiya Lead Zinc Smelter

Greentech CSR Gold Award 2015

Best Performing

Wind Farm for

Zone-4 (Gujarat)

by the Indian

Wind Power

Association

Frost & Sullivan -Green Manufacturing **Excellence Award 2015** in mega large business and Certificate of Merit for Safety Excellence to Chanderiya Lead Zinc Smelting Complex

ABP News Global **CSR Excellence &** Leadership **Awards**

Global Water Award 2015 (UK) for Sewage Treatment Plant at Udaipur

International Research Institute for Manufacturing's India Green Manufacturing Challenge 2014 Gold Award and Runner up trophy to Dariba Smelter Complex

Bureau of Energy Efficiency, Ministry of Power & Government of India's National Energy Conservation Award 2015 Second Prize, for Thermal Power **Stations Sector** (Coal fired plants < 100 MW capacity) to Zawar mine captive power plant

NGOBOX's CSR **Impact Awards** 2015 under WASH (Water, Sanitation & Hygiene) category

CII's Sustainable **Platinum Plus** Label

India Climate Disclosure Leadership Index (CDLI) 2015

Contributors of the Report





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