HINDUSTAN ZINC LIMITED

Annual Report 2016-2017

INNOVATION
TAKING US FORWARD

vedanta

transforming elements


think big
teamwork
new
imagination
risk
inspiring
creative
business
communication
solution
performance
planning
works
key
innovate
ideas
concept
brand
brainstorm
plan
strategy
success
process
global
excellence
out of the box
reward
leadership
efficiency
workflow
information
marketing
best
organization
network
social
research
analysis
green
advertising
positive
vision
refresh
ads
development
goals

STRENGTHENING THE NATION...

₹17,760

Crore contributed to Government treasury*

THE ONLY COMPANY IN THE COUNTRY WITH THREE MINES RATED AS 'FIVE STAR' BY INDIAN BUREAU OF MINES

* cash during FY 2016-17, including royalties, taxes and dividends

VISION

To be the world's largest and most admired Zinc, Lead and Silver Company.

MISSION

Enhance stakeholder value through exploration, innovation, operational excellence, safety and sustainability. Be the lowest cost producer. Maintain market leadership and enhance customer delight.

VALUES

Entrepreneurship

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

Excellence

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.

Trust

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

Innovation

We embrace a conducive environment for encouraging innovation that leads to a zero harm environment and exemplifying optimal utilisation of natural resources, improved efficiencies and recoveries of by-products.

Integrity

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.

Respect

We lay consistent emphasis on Human Rights, respect the principle of free, prior, informed consent, while our engagements with stakeholders give local communities the opportunity to voice their opinions and concerns.

Care

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.

CONTENTS

Forward-looking statements

In this Annual Report, we have disclosed forward-looking information to enable investors to comprehend our prospects and take investment decisions. This report and other statements - written and oral – that we periodically make, contain forward-looking statements that set out anticipated results based on the management's plans and assumptions. We have tried wherever possible to identify such statements by using words such as 'anticipate', 'estimate', 'expects', 'projects', 'intends', 'plans', 'believes', and words of similar substance in connection with any discussion of future performance. We cannot guarantee that these forward-looking statements will be realised, although we believe we have been prudent in assumptions. The achievements of results are subject to risks, uncertainties and even inaccurate assumptions. Should known or unknown risks or uncertainties materialise, or should underlying assumptions prove inaccurate, actual results could vary materially from those anticipated, estimated, or projected. Readers should keep this in mind. We undertake no obligation to publicly update any forward-looking statements, whether as a result of new information, future events or otherwise.

CORPORATE OVERVIEW

INNOVATION
Taking Us Forward

As mankind progressed on the path of evolution, it broke barriers, went beyond horizons and set new benchmarks. One philosophy stood by it and evolved with mankind itself - Innovation. In the corporate world, innovation is crucial to the success of any organization and can be defined simply as a "new idea, device or method". Innovation is often also viewed as the application of better solutions to fulfil new requirements and unarticulated or existing needs of the market. The use of scientific knowledge for practical purposes, whether in industry or in everyday lives, defines the modern world as we know it.

Hindustan Zinc, one of the frontrunners amongst Zinc-Lead & Silver businesses across the world, is a focussed and responsible mining & metal Company. It embraces measures that improve its productivity, efficiency, safety and conservation of precious natural resources, through technology & innovation.

From invention of the wheel to latest in digital technology, innovation continues to be the answer to almost everything.

The above fact stands true for mining & metal industry as well. Today, we have gained access to mineral treasures deep beneath the earth's surface only through innovative advancements. That is not all, new and emerging technologies are set to change the way miners would operate over the next decade. The paradigm is shifting from 'profit at all costs' to ensuring that operations become 'efficient and environmentally sustainable'. Hindustan Zinc, one of the frontrunners amongst Zinc-Lead and Silver business across the world, is a focussed and responsible mining & metal Company. It embraces measures that improve productivity, efficiency, safety of the work force and conservation of precious natural resources.

As we present the Annual Report 2016-17, we dedicate this year's theme to innovation that will spearhead our future journey and continue to keep us ahead of the curve.

INNOVATION
Opening Avenues For New Age Mining & Metallurgy

Besides improved productivity, cost savings and safety advancements, technology is being developed to reduce environmental footprint caused by mining & smelting. While some technologies will directly impact our operations, others will play a supportive role.

The internet has opened doors to lightning speed communications and is ensuring that no matter how remotely a mine is located, it stays connected and has access to necessary touch points. With 'Cloud' integration gaining strength, data storage has achieved a new level of accessibility. Computer based collection and analysis is helping in processing large volumes of data to generate meaningful reports that will enable efficient utilisation of resources and pro-active decision making.

Automation enhances efficiency and safety. With automation taking charge of several activities, risk to health is reduced accuracy & standardisation gets strengthened. The modern machines being developed for mining are becoming all the more robust, energy efficient and durable.

Mining and metallurgical industry are energy intensive. Being in remote locations, grid-power is a rare luxury. Diesel generators have their own set of limitations. The objective for industry's investment in captive power plants and renewable energy technologies is not only to improve self-sufficiency, but also to reduce the carbon footprint.

Mining has always been applying metallurgical science to get the best from material technology. Be it for the purpose of increasing yield or to find innovative usage of by-products, research and development in this field continues to offer solutions to the industry.

Exploration

Modern mineral exploration is improving with new technologies. Latest software and 3D modeling have enhanced visualisation and interpretation of the data.

Mining

While open cast mining was fairly easy and had its own set of advantages, underground mining technology has brought about a new era in the industry.

Processing

Various technologies are being developed to generate wealth from waste and higher efficiency & productivity.

Responsible Operations

Technology has offered solutions to reduce carbon footprint and improve safety of the workforce.

INNOVATION
Leading The Way

TECHNOLOGICAL INITIATIVES INTRODUCED IN INDIA BY **HINDUSTAN ZINC**

Cavity Monitoring System

Stope Scanning identifies and minimizes deviation.

1500 kW Ventilation Fan

First of its kind in the Country, provides best underground working environment.

Mobile Carrier Rig

Eases mobility of exploration drills.

V30 Slot Machine

Enables long slot raising.

Refuge Chamber

First of its kind in the Country, provides a safe refuge during underground emergency conditions.

INNOVATION
Doing It Differently

"There is a way to do it better - find it"

- Thomas Edison

01. Enable surface control of man, machine and materials

02. Central logistic control tower to deliver reduction in turnaround time, fuel consumption and driver safety

03. Facilitates statutory compliances, training needs identification and MIS dashboards

01 Digital Mining giving us the edge

Sindesar Khurd Mine, our most automated mine, is the first in the country to receive five star rating from Indian Bureau of Mines. We are now embarking towards a new era of digital mining wherein high speed Wi-fi networks and high bandwidth optical fibre will form the backbone of digitizing the underground mines. Use of Voice over Internet Protocol enables real time monitoring of equipment health and integration with other IP based devices. This will enable surface control of man, machine and materials at each level and stope enhancing productivity, underground traffic management and safety.

02 Better monitoring with Integrated Transport Management System (ITMS)

Implementation of ITMS to automate end to end logistics with a web based portal where all drivers & vehicles are registered and logistics planning & vehicle allocation is done online. All vehicles are equipped with RFID & GPS devices for authentication, tracking is done on real time basis and entry is permitted only through sensor based boom-barriers. Processes like sequencing, route defining, geo-fencing, weighing and billing are automated. Central logistic control tower delivers reduction in turnaround time, fuel consumption and driver safety.

03 Contractor Workforce Management System (CWMS) improving our performance

Almost three quarters of our total workforce is on our contractor's payroll & control. In order to ensure deployment of the right skills and to protect their interests, we implemented CWMS system covering all our locations. System has been completely linked to turnstile and biometrics to support contractors in ensuring punctuality, attendance and site discipline. CWMS also facilitates contractors for maintaining statutory compliances, training needs identification and generating MIS dashboards. System has improved quality of workforce, eradicated manual activities and restricted unauthorized entries.

04. Paperless payment system and enhanced vendor satisfaction

05. Freeing up precious land requirements

06. Reduced stoping cycle time from 15-17 days to 1 day

07. Increased productive working hours by 15% and allows ore extraction from inaccessible and unsafe areas

04 Integrated Vendor Portal adding to the ease-of-doing business with Hindustan Zinc

A fully integrated portal for online vendor payments is being implemented. All manual activities including dispatch of material by vendor, submission of invoice, certification and payment have now been completely automated. This system will fast track the accounts payable process providing transparency to vendors with self-service options like invoice status display, statutory forms, account statements and help-desk. This will result in paperless payment system and enhanced vendor satisfaction.

05 Setting a benchmark in waste management with 'Paste Fill' technology

Paste fill plants commissioned at the underground operations of Rampura Agucha Mine and Sindesar Khurd Mine have ensured fast filling of voids with practically no bleeding. It has offered other advantages like minimum water consumption and drainage with lesser fill and wall dilution in stopes, better recovery of intervening pillars along with better regional stability and surface integrity. The process utilizes tailings, a waste of our milling operations, thus freeing up precious land requirements for long term tailing storage.

06 Single Shot Stope blasting helping us break barriers

Underground conditions at Rampura Agucha Mine are under high stress environment which poses challenge for safe and economical extraction of shear hosted high grade reserve of zinc and lead. The drill design was changed for improved ore yield by inducting solo drill rigs and emulsion charging for executing single shot stope blast versus time consuming conventional slot blasting in long hole open stopes. Single shot stope blasting ensured enhanced production rates in shear hosted mineralisation with a void ratio as low as 11% and resource recovery over 95% in single choked stope blast. This eliminated rework and ground squeezing issues that are encountered after blasting and reduced cycle time from 15-17 days to just 1 day.

07 A new level of automation with Remote Operation Of Loaders

We have implemented remote operation of underground loaders using wi-fi networks to operate the loader from a safe distance. This technology has increased productive working hours by 15% and allows ore extraction from inaccessible and unsafe areas. The model includes laser barriers, laser scanners, cameras, operating station, wi-fi network etc. and also offers auto-tramming in which loading and unloading operations become automated and man-less. This is one of the global best practices introduced for higher productivity and safety.

08 Zinc Fumer Process making the smelting process sustainable

Our hydrometallurgical zinc smelting process generates hazardous wastes which are then neutralized and stored in secured landfills, which requires 4 acres of land per smelter per year. Zinc fuming technology is integrated with the existing leaching process eliminating this land requirement and converting hazardous wastes into commercially usable slag. Also it will improve recovery of zinc and start recovering metals like lead, silver and copper from hydro route which were earlier going with waste into secured landfills.

09 Enhancing energy efficiency in the Jumbo Casting process

In an effort to optimise energy consumption, the LPG burners at Pantnagar Plant are being replaced with electric top heaters, which is adding to the energy efficiency of Jumbo Casting process. With four burners modified as yet, the specific consumption has dropped from 10 kg/MT to 6 Kg/MT. The conventional electrical LPG vaporisers have been replaced with heater-less vaporisers, thus eliminating the usage of electricity for the purpose. Also, a direct pipeline connection between GAIL depot to Chanderiya plant is being installed to reduce the cost of procurement and also to lessen the environmental footprint.

10 Research and Development improving our yield

To improve silver recovery from ore, experiments related to kinetic study were conducted for Kayad ore which necessitated change in dosing pattern of chemicals for improving silver recovery. After successful laboratory and plant scale trials, silver recovery improved from 44% to 51%, while consumption of hazardous chemicals was reduced by one third.

11 Exploration Techniques taking us deeper

Early adoption of global exploration technologies and software have significantly improved efficiencies, lowered costs and enhanced productivity. Technologies like motorised directional drilling to ensure that deep holes of more than 1km below surface hit the targeted mineralised zones and down hole electrical geophysical techniques to locate potential off-hole ore zones are now being used. We have implemented new software such as Leapfrog to provide high quality 3D visualization of integrated geological, geochemical and geophysical exploration data and AcQuire to manage its drilling geochemical database. All these have resulted in enhanced reserve and resource at lower cost.

08. Eliminating land requirements, converting hazardous wastes into commercially usable slag and improving metal recovery

09. LPG specific consumption reduced from 10 kg/MT to 6 Kg/MT

10. Silver recovery improvment from 44% to 51%

11. Enhanced reserve and resource at lower cost

“Vision, passion, hard work and integrity are pillars to success”

Anil Agarwal, Founder & Chairman Vedanta Resources Plc

“Technology is a consequence of intuitive mind. At Hindustan Zinc we are proud to have many such minds working constantly to set global benchmarks”

Sunil Duggal, CEO & WTD Hindustan Zinc Ltd.

RECOGNITIONS Distinguishing Our Mantle

Industry Excellence

- **'5 Star Rating' by Ministry of Mines, Government of India**
  to Rampura Agucha, Sindesar Khurd and Kayad mines for best in class underground operations
- **SAP ACE Award 2016**
  Company received the award for demonstrating spirit of innovation using SAP and delivering MII Project
- **IPPAI Power Award 2016**
  Rajpura Dariba Complex received it under category of 'best innovation in power sector'
- **Dun & Bradstreet (Award name) Award 2016 in Non-Ferrous & Precious Metals category**
  Company received it for 8th consecutive year in 'Non-Ferrous & Precious Metals' Ctegory
- **IEI Industry Excellence Award 2016**
  Company was recognised in Category A of Engineering, Manufacturing & Processing industry
- **5-S Par Excellence Award 2016**
  to CRDL for showing quality and excellence in workplace management
- **India Today - Visionary of Rajasthan Award**
  Company received the award for valuable contribution through projects 'Sakhi' and 'Khushi'

Sustainability

- **CII - Sustainable Plus Platinum Label**
  Company received award for showing excellence in field of Environment, Social and Governance
- **CII - IGBC declared Hindustan Zinc Corporate Office as Platinum Green Building**
- **CII – ITC Sustainability Award**
  Hindustan Zinc recognised for comprehensive effort made in excelling at sustainable business
- **CII - National Award for Excellence in Water Management 2016**
  Dariba smelter Complex was recognised as 'Noteworthy Water Efficient Unit, Within the Fence'
- **National Energy Conservation Award 2016**
  Rampura Agucha Mill Strea-3 won the award for reducing specific energy consumption
- **Corporate Governance & Sustainability Vision Awards 2017**
  Dariba Smelter Complex was awarded by The Indian Chamber of Commerce (ICC)

Corporate Social Responsibility

- **FIMI - NMDC Social Awareness Award 2016**
  Sindesar Khurd Mine was awarded for contribution to socio-economic development of the community
- **Government of Rajasthan - CSR Excellence Award 2017**
  Company was honored for commendable work under CSR
- **FICCI honored Hindustan Zinc Limited**
  Company was recognised for commendable work in Education under CSR
- **Global CSR Excellence and Leadership Award**
  Rajpura Dariba Complex was awarded for Best CSR Practices by ABP News

'President of India' honoured Mr Laxman Shekhawat, COO mines by National Geoscience Award 2016 for his contribution in the field of mining.

OUR PROFILE
Standing Tall

We are...

... the only Company in the country with three mines rated as **'Five Star'** by Indian Bureau of Mines

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

... operating the world's **second largest** zinc mine – Rampura Agucha Mine

... **fourth largest** zinc metal producer in the world

... one of the **lowest cost zinc producers** in the world

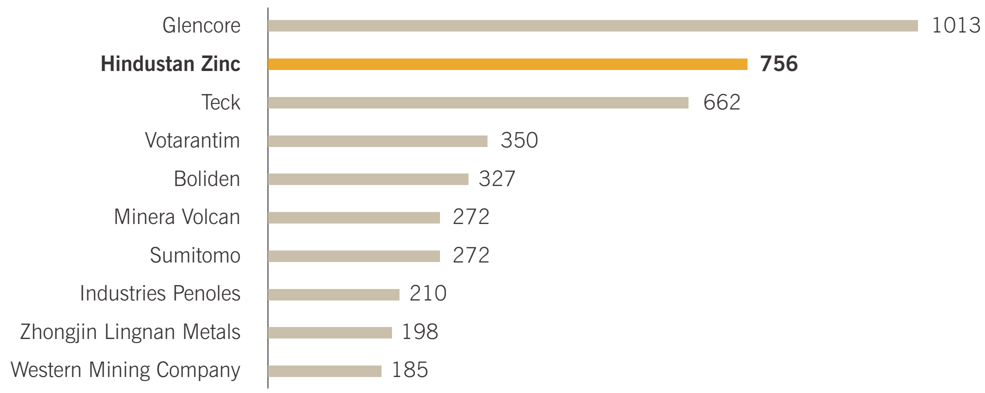
... in **top 18** silver producers of the world**

... unique, with **fully integrated operations** and mine life of **over 25 years**

*** Source : Thomson Reuters*

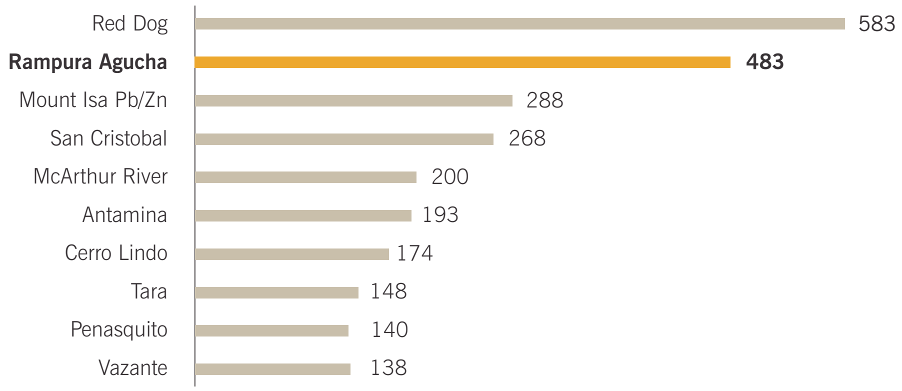
Global top ten Zinc Miners - 2016 & 2017 forecast

unit - 'kt'



Global top ten Zinc Mines - 2016 & 2017 forecast

unit - 'kt'



Global Top Ten Zinc Smelting Companies - 2016 & 2017 Forecast

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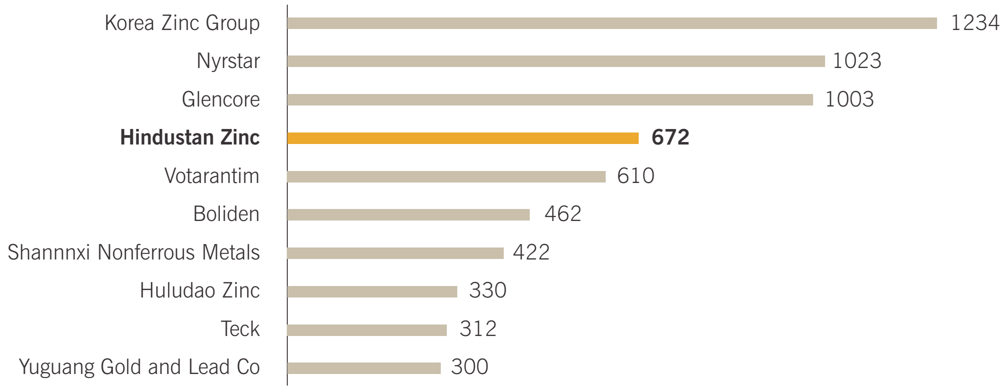

Global Top Ten Zinc Smelters - 2016 & 2017 Forecast

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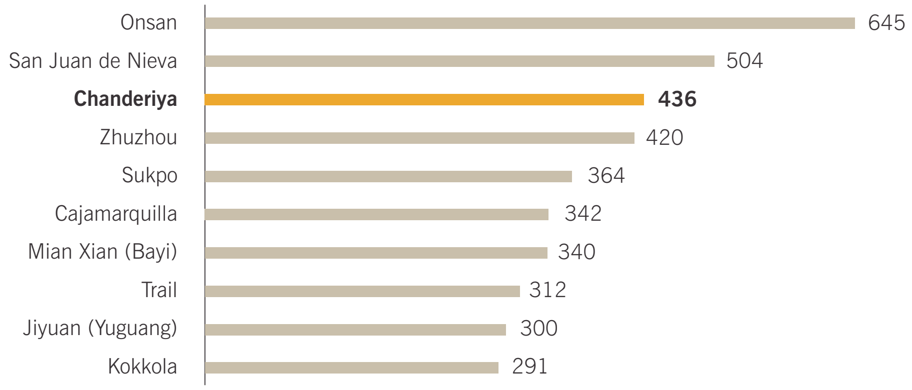
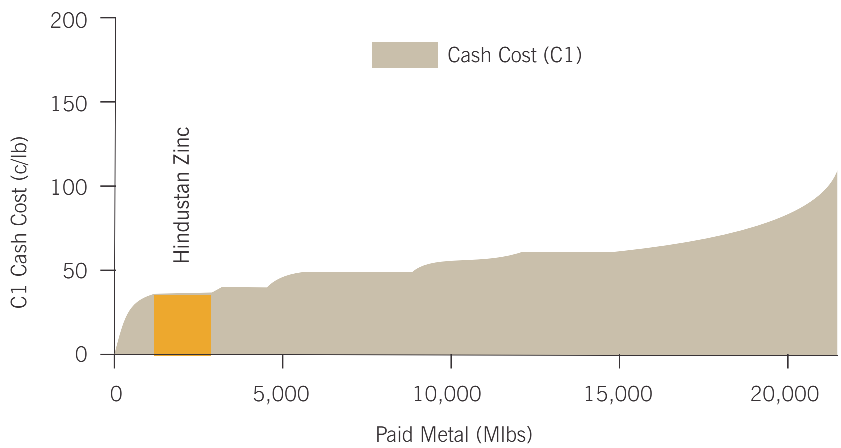


Source: (1) Wood Mackenzie, Long Term Outlook Q1 2017, March 2017 (2) For HZL related data, actuals for FY 16-17

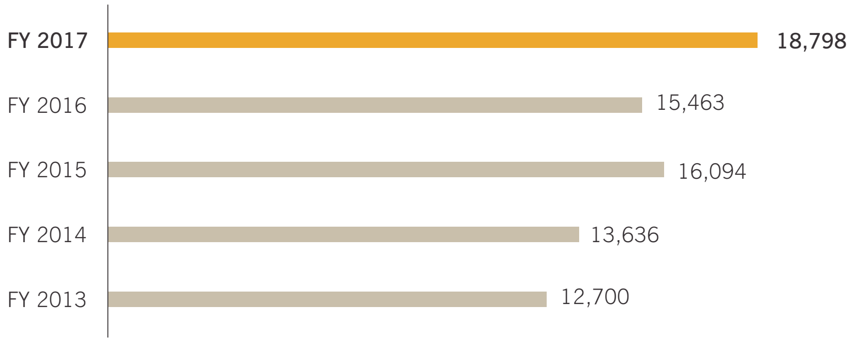
2017 Zinc Mine Composite, C1 Cash Cost grouped by company and ranked by Cash Cost (C1)

Source: Wood Mackenzie Ltd. Dataset 2017 Q1

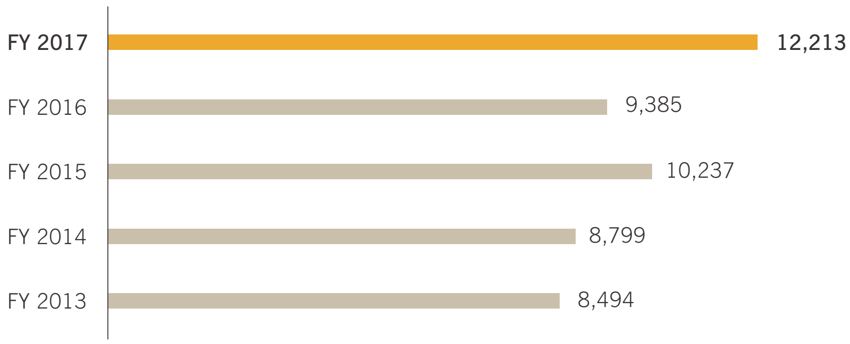


OUR FINANCIALS
Delivering Value To Stakeholders

Net Revenue
(₹ in Crore)

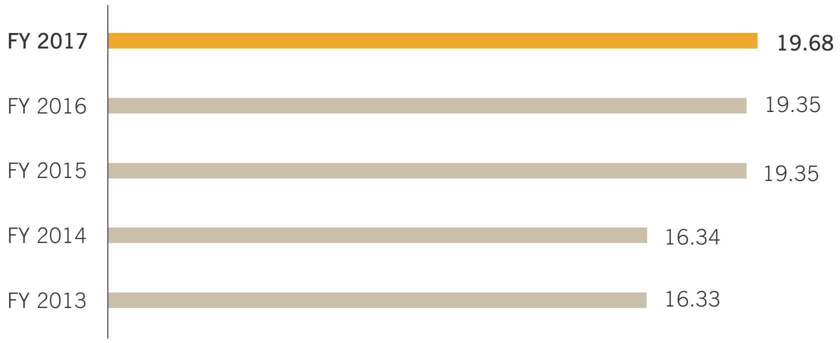


PBDIT* (Profit before Depreciation, Interest & Tax)
(₹ in Crore)



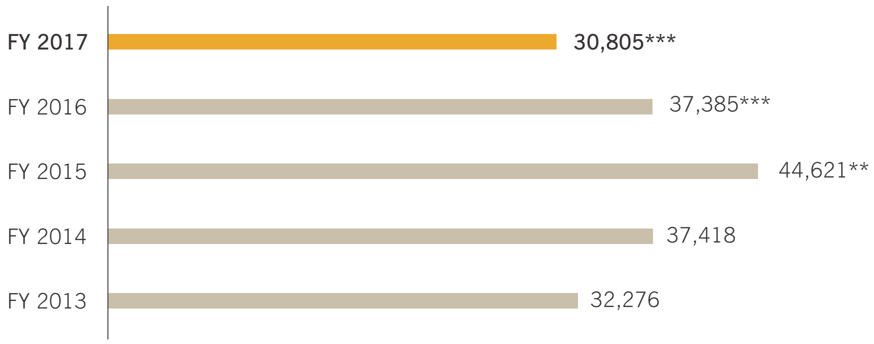
PAT
(₹ in Crore)

EPS (Earning per Share)



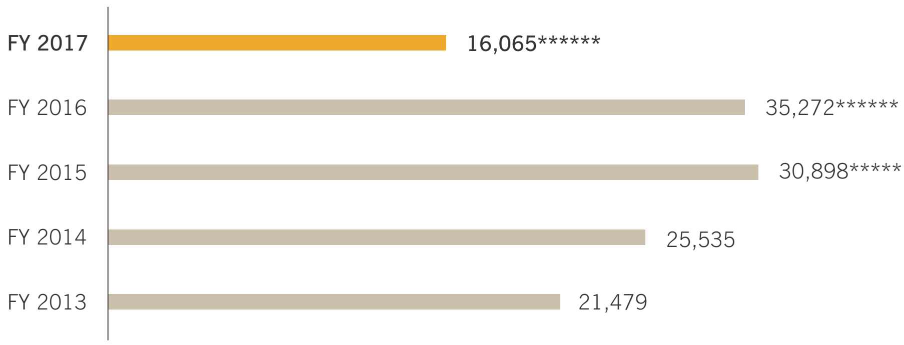
Net Worth

(₹ in Crore)



Cash & Equivalents****

(₹ in Crore)



Notes:

- Excise duty is now included in 'Revenue' and reported as 'Gross Revenue'; accordingly, FY 2015 & 2016 revenue has been changed.
- FY 2015 onwards numbers have been revised in accordance with Ind AS accounting standard.

* Includes Other Income and Extraordinary Income
** Includes proposed final dividend of Mar-15
*** Net of special dividends
**** Includes Cash & Cash Equivalents and Current Investments
***** Includes accrued Interest on Investment
****** Net of dividend account balance and temporary borrowing

PRODUCTION
Firmly Grounded

Mined Metal MT

	FY 2013	FY 2014	FY 2015	FY 2016	FY2017
Total	870,200	879,718	887,082	888,924	**906,984**
Zinc	764,671	769,897	774,330	744,271	**755,964**
Lead	105,529	109,821	112,752	144,653	**151,020**

Total Refined Metal* MT

	FY 2013	FY 2014	FY 2015	FY 2016	FY2017
Zinc	676,921	749,167	733,803	758,938	**671,988**
Lead	124,816	129,858	134,898	151,576	**144,294**
Silver	408	388	368	459	**480**

*Includes captive consumption

906,984 MT
Ever Highest Mined Metal Production in FY 2017

480 MT
Ever Highest Silver Production in FY 2017

BUSINESS MODEL
Anchored Strategies

Our strategy is to maintain a portfolio of mines with predominantly long life and low cost that can remain viable through various stages of the demand supply cycle. Forward integration with smelting and refining adds further value. Our capital allocation aims to maximise shareholders' return and therefore prioritises mining followed by smelting and then followed by low cost & reliable captive power.

'Zero harm' target for Safety drives our behaviour and actions. We have come a long way in our journey of safety excellence by imbibing safety as a habit in everything we do. **Respect for the environment** and **caring for the communities** around us is of paramount importance.

We have a strong history of exploration success and we add more than we deplete, **maintaining long mine life through brownfield exploration** in our existing mining leases. While this low risk strategy has paid us handsomely for long, the next phase of our growth will come from new tenements and greenfield exploration, which will happen through a mix of auctions, advocacy and litigation.

Cost is our core operating value. Leveraging our expertise in mining & metallurgy, our **smelters** have improved consistently and are **regarded as global benchmarks.** Incorporating **best-in-class mining equipment and practices** has facilitated our smooth transition to underground mining operation in recent years without any significant impact to our cost structure. Higher metal recoveries from our smelters and wealth creation from waste have allowed us to keep our cost in control despite increasing complexity.

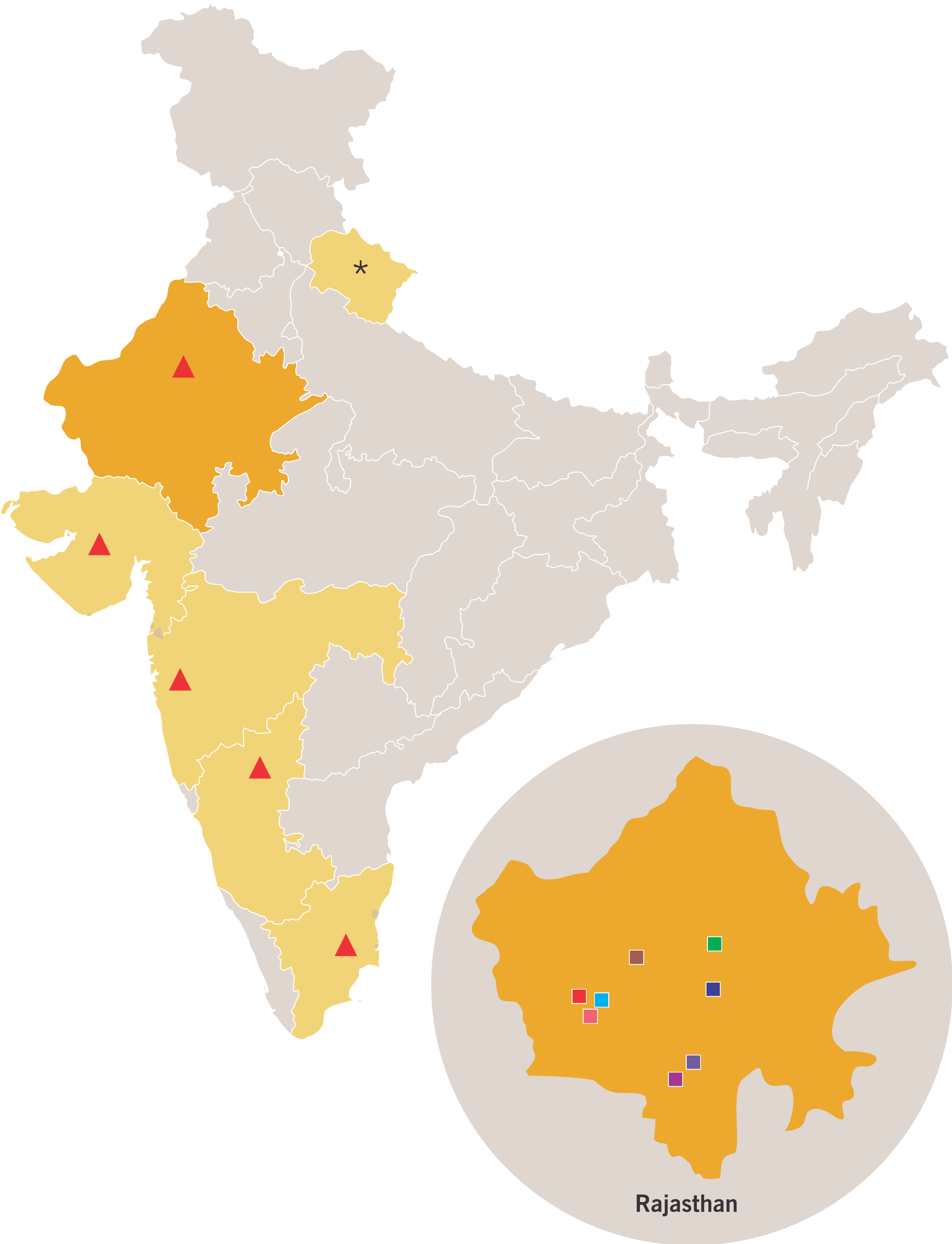
We aim to be self-sufficient and increasingly green in fulfilling our energy requirement. While reliable and low cost captive thermal power is integral to our operations, our **portfolio of over 325 MW of renewable energy** generation is testimony to our philosophy of growing responsibly. After the recent commissioning of 16 MW solar power within our premises, we are looking at further opportunities in this space.

We have a **strong governance framework** which is marked with high standards of ethics and responsible behaviour. We are fully compliant with all the laws and statutory requirements applicable to our operations and in many cases we far exceed the legal norms. For us 'means' is as important as the 'end'.

The Rampura Agucha open cast mine is expected to reach end-of-life by Q1 2018-19. The vacuum of production created by this planned ramp down has been successfully filled by the Company's **underground mines** which **have demonstrated a 39% CAGR in the last 5 years.** The planned commissioning of Rampura Agucha and Sindesar Khurd shafts in 2018-19 will facilitate our journey to 1.2 million MT mined metal capacity by 2019-20 with further improvement in our cost structure. We are debottlenecking our smelters continuously and hope to match the mining capacity without addition of a new smelter and remain a fully integrated mining & metal Company.

The wheels of strategy and planning for the next phase of mine expansion beyond 1.2 million MT have already been put in motion, underpinned by innovation and exploration.

OPERATIONAL ASSETS
Best In Class Portfolio



(mtpa = million MT per annum)

Rampura Agucha Mine

Reserve	: 49.7million MT
Resource	: 50.3 million MT
Reserve Grade Zn	: 13.9 %
Reserve Grade Pb	: 1.9 %
Ore Production Capacity	: 6.15 mtpa

Sindesar Khurd Mine

Reserve	: 35.6 million MT
Resource	: 87.2 million MT
Reserve Grade Zn	: 4.2 %
Reserve Grade Pb	: 2.9 %
Ore Production Capacity	: 4.5 mtpa

Zawar Mining Complex

Reserve	: 9.5 million MT
Resource	: 85.7 million MT
Reserve Grade Zn	: 3.3 %
Reserve Grade Pb	: 1.8 %
Ore Production Capacity	: 4.0 mtpa
Captive Power Plant	: 80 MW

Rajpura Dariba Mine

Reserve	: 9.0 million MT
Resource	: 50.3 million MT
Reserve Grade Zn	: 6.3 %
Reserve Grade Pb	: 1.5 %
Ore Production Capacity	: 0.9 mtpa

Kayad Mine

Reserve	: 5.4million MT
Resource	: 1.7 million MT
Reserve Grade Zn	: 7.8 %
Reserve Grade Pb	: 1.1 %
Ore Production Capacity	: 1.0 mtpa

R&R Summary

	Tonnage	Grade		
	million MT	Zn (%)	Pb (%)	(Ag) (g/t)
Reserve	109.1	8.9	2.1	93
Resource	295.3	5.9	2.2	74

(tpa = MT per annum)

Chanderiya Lead-Zinc Smelter

Pyro-metallurgical Lead Zinc Smelter	: 105,000 tpa Zinc : 85,000 tpa Lead
Hydro-metallurgical Zinc Smelter	: 420,000 tpa
Captive Power Plant	: 234 MW

Dariba Smelting Complex

Hydrometallurgical Zinc Smelter	: 220,000 tpa
Lead Smelter	: 100,000 tpa
Captive Power Plant	: 160 MW

Zinc Smelter Debari

Hydrometallurgical Zinc Smelter	: 88,000 tpa

Wind Power Plants by State (MW)

Rajasthan	: 88.8
Gujarat	: 88.8
Maharashtra	: 25.5
Karnataka	: 49.4
Tamil Nadu	: 21.0

Smelting and Power Summary

Zinc Smelting	: 833,000 tpa
Lead Smelting	: 185,000 tpa
Silver Refining	: 518 tpa
Captive Power	: 474 MW
Wind Power	: 274 MW
Solar Power	: 16.2 MW
WHRB Power	: 35.4 MW

Notes:

(1) We also have a Rock-Phosphate mine at Maton near Udaipur in Rajasthan having capacity to produce 0.18 million MT and Reserve & Resource (R&R) of 8.5 million MT.

(2) Additional facilities in the state of Uttarakhand for processing and refining of zinc, lead and silver (*). These do not add to our overall smelting capacity

CHAIRMAN'S MESSAGE

We are proud to be associated with the Government's 'Make in India' program. India is a country blessed with natural resources that are waiting to be discovered. I believe that the natural resource sector can be catapulted to become the largest contributor to the country's GDP with the right policies and focus.

Dear Shareholders,

The year 2016-17 has been record breaking in many ways for your Company. Despite a cyclical weaker first half, the Company delivered highest ever production of ore, mined metal & silver, EBITDA and net income. With a relentless discipline on efficiency and productivity across all our operations, the strong earnings buoyed by strong metal prices enabled us to create shareholder value and declare record dividends.

We achieved all time high mined metal and silver production while successfully limiting our operating costs in a high commodity price scenario through significant efficiency improvements. Our cost optimisation initiatives across the board helped us protect cash flows and maintained our position in the first quartile of the cost curves, which has been our strength over the years. We are taking further steps in the coming years, leveraging the adoption of new technologies and encouraging a culture of innovation among our people.

We are proud to be associated with the Government's 'Make in India' program. India is a country blessed with natural resources that are waiting to be discovered. I believe that the natural resource sector can be catapulted to become the largest contributor to the country's GDP with the right policies and focus. To reduce the shortage of skills in hard rock underground mining in the country, Hindustan Zinc has established a mining academy in partnership with National Skill Development Corporation of India. I am proud to share that we are the only Company in the country with three mines recognised with Five Star ratings by Indian Bureau of Mines, Government of India for their efforts and initiatives taken for implementation of the Sustainable Development Framework and for exemplary compliance & best practices. Inclusive of dividend, FY 2016-17 recorded our highest ever payout of ₹ 17,760 Crore to the government treasury, our small contribution in nation building.

During the year, we spent ₹ 49.4 Crore in our CSR programs across our business locations, partnering with almost 25 NGOs, local governments, hospitals and academic institutions on socio-economic development projects that touch the lives of around five lakh people. In addition, we donated ₹ 50 Crore to a group CSR foundation for construction of 'Nandghars', an initiative to create better education facilities and infrastructure for young children in their formative years.

The health and safety of our employees continues to be at the top of our agenda we have improved our safety culture and reduced LTIFR substantially in the last few years. However, despite our best efforts to achieve a zero-harm culture, we had an incident of a rare crane collapse resulting in four fatalities of employees of our contractor at a project site during the year. Our teams are working towards ushering in global best practices as safety culture of our contractors as well to ensure a safe working environment.

The five year CAGR of 39 percent in our underground mined metal production, while maintaining a stable dollar COP (excluding royalty), is a testimony to the Company's smooth transition from open cast mining to underground mining.

Reducing carbon footprint and utilizing water judiciously is the biggest challenge of our generation. Our dedication to environmental sustainability continues to drive our behaviour in our operations. This year, we installed 16 MW solar plant on our wastelands at Debari and Dariba utilizing Nature's sunshine to energise our operations; this is in addition to over 300 MW of existing renewable power. CII-Indian Green Building Council (IGBC) awarded Platinum rating to our Corporate Office at Udaipur, the first such building in Rajasthan and among only fourteen in the country, setting a benchmark through policy of reduce, recycle, reuse, and reclaim. Dariba power plant is the first and only running power plant in Rajasthan to run completely on sewage treated water, eliminating fresh water usage. Our aim is to utilize resources provided by Mother Earth in best possible manner to meet growing demands from the same reserves. This year we commenced construction of 'zinc fumer' project for our Chanderiya Hydrometallurgical Smelter to improve the recoveries of major & minor metals and to reduce hazardous waste generation and the recurring land required for their long term storage.

When the mining expansion projects were announced in early 2013, share of mined metal from underground mines was 15%, which increased to 52% in FY 2017 and is expected to reach 80% in FY 2018 before becoming 100% in FY 2019. The five year CAGR of 39 percent in our underground mined metal production, while maintaining a stable dollar COP (excluding royalty), is a testimony to the Company's smooth transition from open cast mining to underground mining. The mining projects should complete in FY 2020 when the full capacity of 1.2 million MT of mined metal is expected to be in place. Both, the Rampura Agucha and Sindesar Khurd shafts are on track for completion in FY 2019.

The record performance of the Company, supported by strong zinc prices, has helped Hindustan Zinc generate unparalled value for its stakeholders during the year as it returned ₹ 27,157 Crore (including dividend distribution tax) to shareholders in the 12 months ending March 31, 2017, which is a record in Indian corporate history. Even as we continue to navigate our journey of 1.2 million MT of mined metal, we are evaluating the next phase of our capacity expansion.

Sincerely,

Agnivesh Agarwal
Chairman

BOARD OF DIRECTORS

Mr. Agnivesh Agarwal
Chairman

Mr. Agarwal was appointed on the Board with effect from November 15, 2005. He is an eminent industrialist with rich knowledge of business operations and extensive experience in efficiently managing large projects, business restructuring and strategic planning. Over the years, he has successfully developed excellent commercial acumen.

Mr Agarwal is also the Director of Sterlite Iron and Steel Company Ltd., Twinstar Overseas Ltd., Twinstar Infrastructure Ltd., Twinstar Investment Ltd., Primex Healthcare & Research Ltd. and Caitlyn India Pvt. Ltd.

Mr. Agarwal is a graduate in commerce from Sydhenam College, University of Mumbai.

Mr. Navin Agarwal
Director

Mr Navin Agarwal is the Executive Chairman of Vedanta Ltd., Chairman of Cairn India Ltd. and Executive Vice Chairman of Vedanta Resources Plc. He has been with the Vedanta group since its founding and has extensive experience in the natural resources industry.

Mr Agarwal plays a key role in the strategic and governance framework of the Vedanta Group and provides leadership for its long-term planning, business development and capital planning. He has been instrumental in the growth of the group through global organic projects as well as acquisitions. He is passionate about developing leadership talent for the group by identifying and nurturing future leaders.

Mr. Sunil Duggal
CEO & Whole-time Director

Mr. Sunil Duggal was appointed as CEO & Whole-time Director on October 1, 2015.

Mr. Duggal is a result oriented professional with over 33 years of experience of leading high performance teams and more than 19 years in leadership positions. He is known for his passion for excellence in operations and focus on safety.

He has an electrical engineering degree from Thapar Institute of Engineering & Technology, Patiala.

Mr. Duggal has been honoured with Rajiv Gandhi Award for Environment Excellence. He is also the Vice Chairman of International Zinc Association; President of India Lead Zinc Development Association; Chairman of Skill Council for Mining sector; Chairman FIMI Non Ferrous Metals Committee and Co-Chair of FICCI Non Ferrous Metals Committee 2017.

Mr. A. R. Narayanaswamy
Director

Mr Narayanswamy was appointed on the Board in March 2009. He is a member of the Institute of Chartered Accountants of India and has an extensive industry experience. He is also on the Board of, Sterlite Technology Limited, IBIS Softec Solutions (P) Limited, IBIS Systems & Solutions (P) Limited, Sterlite Grid 1 Ltd., Bharat Aluminium Company Ltd., MALCO Energy Ltd., Sesa resources Ltd., Sesa Mining Corporation Ltd., Vizag General Cargo Berth (P) Ltd, Sterlite Grid 2 Ltd., and Sterlite Power Grid Ventures Limited,

Ms. Reena Sinha Puri
Director

Ms. Reena Sinha Puri was appointed on the Board with effect from December 29, 2016. She is an officer of the Indian Revenue Service. Currently, she is Joint Secretary and Financial Advisor in the Ministry of Mines and has held various positions in the Income Tax Department and was seconded to the Tax Department of Government of Botswana. She completed her Bachelor and Masters in Political Science from Punjab University, Bachelor of Law from Delhi University and Masters in Public Policy from National University of Singapore.

She is also on the Board of Bharat Aluminium Company Ltd.

Ms. Farida M Naik
Director

Ms. Farida M Naik was appointed on the Board on March 14, 2017. She is currently a Director in Ministry of Mines, Government of India. She has held various positions in different ministries and departments of Central Government, which includes her last stint as Joint Director of National Book Trust.

She is an alumnus of Sophia College, Mumbai from where she graduated in Psychology.

Mr. Arun L. Todarwal
Director

Mr. Todarwal was appointed on the Board in March 2015. He is a member of the Institute of Chartered Accountants of India and has extensive experience in Taxation, Statutory Audits, Due Diligences, Arbitrations and Joint Ventures. He is also on the Board of Sterlite Technologies Ltd., Anuh Pharma Ltd., SREI Mutual Fund Trust Pvt. Ltd., Welspun India Ltd., Welspun Global Brands Ltd., Sterlite Grid 1 Ltd., Sterlite Grid 2 Ltd. Lakecity Ventures(P) Ltd., Malco Energy Limited, and Sterlite Power Transmission Limited.

Mr. Sudhir Kumar
Director

Mr. Sudhir Kumar was appointed on the Board in November 2015. He has held senior managerial position in different ministries and departments of the Central Government, which inludes his last stint as Secretary, Department of Food and Public Distribution in Ministry of Consumer Affairs, Food and Public Distribution. He holds Masters of Science with specialisation in Physics and Bachelor of Science with specialisation in Physics, Chemistry and Maths.

EXECUTIVE COMMITTEE

Mr. Sunil Duggal
Chief Executive Officer

With Hindustan Zinc from:
August 16, 2010

Industry Experience:
33 years

Previous Companies:
Ambuja Cement and Cement Corporation of India

Mr. Amitabh Gupta
Chief Financial Officer

With Hindustan Zinc from:
November 23, 2011

Industry Experience:
30 years

Previous Companies:
Ranbaxy Lab, Cargill India, TeleTech India (Bharti Group) and Moser Bear Solar

Mr. Naveen Singhal
Director Projects

With Hindustan Zinc from:
January 6, 2003

Industry Experience:
31 years

Previous Companies:
Swaraj Mazda, Duncan Goenka Group and Shriram Group

Mr. Laxman Singh Shekhawat
Chief Operating Officer - Mines

With Hindustan Zinc from:
October 20, 1990

Industry Experience:
27 years

Previous Companies:
NA

Mr. Pankaj Kumar
Chief Operating Officer - Smelters

With Hindustan Zinc from:
March 1, 2017

Industry Experience:
25 years

Previous Companies:
Tata Steel, Mittal Steel, Sterlite Copper and Adani Ports

Mrs. Sonal Shrivastava
Dy. Chief Financial Officer

With Hindustan Zinc from:
March 1, 2017

Industry Experience:
23 years

Previous Companies:
Infrastructure Leasing & Financial Services and Lafarge India

Mr. Ramakrishnan Kasinath
Chief Commercial Officer

With Hindustan Zinc from:
September 23, 2015

Industry Experience:
25 years

Previous Companies:
SKF India Ltd., J&J, South India Corporation and Best & Crompton Engg. Ltd.

Mr. Dilip Pattanayak
Head HR

With Hindustan Zinc from:
October 20, 2015

Industry Experience:
21 years

Previous Companies:
Reliance Industries Ltd., Vedanta Aluminium, Sesa Goa, BALCO, L&T, IPCL and Siemens

Mr. V Jayaraman
Head HSE

With Hindustan Zinc from:
April 7, 2006

Industry Experience:
18 years

Previous Companies:
MALCO, BALCO

Mr. R P Dashora
Site President – Agucha IBU

With Hindustan Zinc from:
April 17, 1988

Industry Experience:
29 years

Previous Companies:
AGRC (2002-2004), Arcellor Mittal (2010-2011), JSW (2011-2012)

Mr. K C Meena
Site President – Dariba IBU

With Hindustan Zinc from:
October 5, 1990

Industry Experience:
26 years

Previous Companies:
Konkola copper mines (2009-2013)

Mr. P S Jaitawat
Site President – Zawar IBU

With Hindustan Zinc from:
December 7, 1988

Industry Experience:
29 years

Previous Companies:
Coal India Ltd.

Mr. Rajesh Kundu
Site President – Chanderia IBU

With Hindustan Zinc from:
January 18, 2007

Industry Experience:
26 years

Previous Companies:
Usha Martin and Dunlop India Ltd.

BUSINESS REVIEW

INDUSTRY
Momentum Persists

ZINC

Zinc has been amongst the best performing metals during the year, particularly in the second half. The surge in LME is attributed mainly to dwindling global mine supply with end user demand remaining firm.

The current year is expected to be extremely interesting for the zinc market. The fundamentals remain poised towards a seller's market as mine supply contracted by 6.3% in 2016 on a combination of depleted reserves at some legacy mines, the continued shutdown of capacity and lack of investment in new mine supply.

Mine Demand-Supply

	2016		2017	
	Volume kt	Growth %	Volume kt	Growth %
Mine Production	12,378	-6.3	13,275	7.3
Smelter Requirement for Zinc	13,107	1.4	13,375	2.04
Mine Supply Implied Surplus/Deficit	-729		-100	

Source: Wood Mackenzie Short Term Outlook, May 2017

Metal Demand-Supply

	2016		2017	
	Volume kt	Growth %	Volume kt	Growth %
Refined Zinc Production	13,561	-1.1	13,902	2.5
Consumption	14,256	2.5	14,538	2.0
Refined Implied Surplus/Deficit	-695		-636	

Source: Wood Mackenzie Short Term Outlook, May 2017

The year 2016 saw a sharp surge with zinc LME prices reaching a nine-year high level of $2900/t, a year on year increase of almost 65% or $1000. This rally was fuelled by zinc's improving fundamentals which also fuelled investor interest. Weaker dollar for most part of the year coupled with critically low mined metal inventory propelled the zinc rally and made it the most sought after metal in the base metals complex. Despite the sluggishness in Chinese economy and a general slowdown in the global commodity market, zinc LME showed no signs of being under pressure.

Tighter fundamentals are set to persist in zinc market in 2017.

Production

The tightness in mine supply has resulted in lower mined metal stock piles, thus impacting the smelter capacity utilisation - a trend that is expected to sustain in 2017.

Production cuts and mine closures in the previous two years reduced the mine supply by over 800 kt in 2016, the largest contribution coming from an Industry Leading Player strategic output curtailments of 500 kt. This has resulted in critically low levels of mined metal inventory to 30 days of smelter requirement, which is constraining the smelter's ability to respond to the high LME.

Further, multi-year low spot treatment charges of $25-40/t in the winter restricted many smelters, mainly in China, from procuring zinc mined metal. Current spot TCs remain 80%-90% lower than the benchmark TC figures, reflecting continued tightness of mine supply. Bringing any new deposits to commercial production takes several years, therefore mine supply could remain tight in the near term, although some suspended capacities could be restarted.

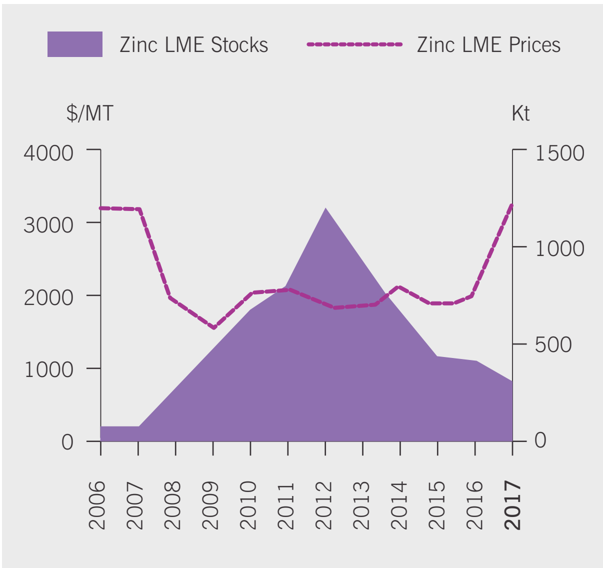
Demand

According to Wood Mackenzie, the global refined zinc demand grew by 2.5% in 2016 to 14.3 million tonnes, the growth primarily coming from China and India, majorly due to the respective Government's efforts to boost investment in real estate and infrastructure. There is also a newfound optimism in the market due to the expectations that US might cut taxes and increase infrastructure spending to reinvigorate the US economy. Global zinc demand is forecast to grow at a steady 2% in 2017.

China, which accounts for 47% of the global demand, remains an important factor in zinc consumption. The recovery in real estate sector and subsequent pick-up in manufacturing activity has given growth a boost. This has also helped a robust growth in galvanised sheet production. China's zinc demand is forecast to grow at around 3.5% in 2017 as per Wood Mackenzie.

Indian Zinc Market Outlook

The Indian zinc demand is based on growth of the domestic steel market as 70% of Indian zinc consumption is in the galvanizing sector. The Indian Government's efforts to combat a slew of cheap imports continued this year as well with Minimum Import Price being imposed on certain products, in addition to safeguard duty and anti-dumping duty on some steel products. Supported by these efforts, India's steel imports plummeted 7.4 million tonnes in the FY 2017 period, down by 36.6% over the last fiscal. Exports, on the other hand, picked up to 8.2 million tonnes registering a substantial increase of 102% over FY 2017, giving an impetus to the Government's 'Make in India' program. Other Government initiatives like the smart cities initiative, digital India campaign, high speed rail network, construction of highways and modernization of railways will also boost the infrastructure industry which uses zinc for sustainable and long lasting structures. This will pave the way for India to lead the zinc consumption growth globally. Zinc demand in India is expected to grow by 5-6% in 2017.



Source: Wood Mackenzie, Zinc Long Term Outlook Q1 2017

LEAD

Increasing vehicle production, e-bikes, infrastructure development and new telecoms networks will continue to support lead demand growth.

Mine Demand-Supply

	2016		2017	
	Volume kt	Growth %	Volume kt	Growth %
Mine Production	5,327	-0.5	5,322	-0.1
Smelter Requirement for Lead	5,400	1%	5,388	-0.22%
Mine Supply Implied Surplus/Deficit	-73		-66	

Source: Wood Mackenzie, Lead Short Term Outlook, May 2017

Metal Demand-Supply

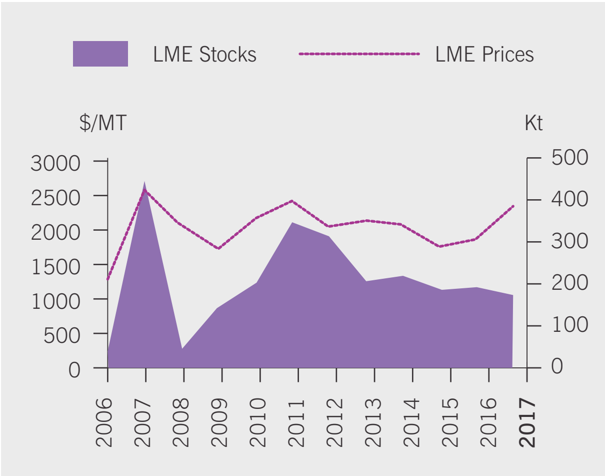
	2016		2017	
	Volume kt	Growth %	Volume kt	Growth %
Refined Production (including Secondary)	11,840	3.4	12,228	3.3
Consumption	11,840	2.2	12,252	3.5
Refined Implied Surplus/Deficit	0		-24	

Source: Wood Mackenzie, Lead Short Term Outlook, May 2017

Lead, like its sister metal, was in a rally mode for most part of 2016, especially in November when it reached its five-year peak at $2466/t. This was fueled by the growing evidence of mine supply tightness owing to mine production cuts in 2015 and 2016. Despite the price corrections seen during the year-end, it is expected that the lead rally may continue well into 2017 and beyond on the back of strong fundamentals. Lead consumption is forecast to grow at 2-3% in 2017.

Mine output curtailments in the last two years have reduced the lead mine supply by almost 229 kt in 2016. The acute shortage is well depicted by the continuous fall in spot treatment charges of lead, which fell to $35-55/t. This is 65% down from the January 2016 level. According to Wood Mackenzie, between 2016 and 2035, 18 new mines will enter production adding almost 0.3 MTPA lead at peak output. However, at the same time, 124 existing mines are forecast to close by 2035 due to mine depletion, taking away the mine production capacity by 1.4% on an average every year during this period resulting in an estimated decline in output by 1.6 million MT in 2035.

The revival of Chinese economy and election of the new US President has boosted the market sentiments to some extent and is expected to translate into robust demand for metals in 2017 as well. In two of the largest lead consumption markets, Europe and China, the strong performance of automotive sector has also contributed to favourable demand sentiments. Strong vehicle production, coupled with high penetration of telecom towers, makes lead demand positive in near term. Developing economies are poised to be the driving force for the medium term growth of 4.1%. Rapid increase in vehicle production, e-bikes,



Source: Wood Mackenzie, Lead Long Term Outlook Q1 2017 infrastructure development, impetus on renewable energy and new telecom networks are projected to support the overall lead demand.

India is Asia's largest lead consuming market after China where growth is largely being driven by demand from the automotive sector and inverter batteries for standby power. India's growing telecom industry and ongoing infrastructure development has boosted the industrial battery demand, as is the case with an expanding photovoltaic market which is planned to reach 246GW by 2030. India has the second largest number of mobile subscribers in the world after China, and is currently ranked sixth in global vehicle production. Also, with the Government's focus on curbing the pollution levels in major cities, the electric car and thus the industrial battery segment holds growth promise.

SILVER

Silver's industrial use expected to drive prices in 2017 while it is set up for further supply deficits going forward.

World Scenario	2013(MT)	2014 (MT)	2015 (MT)	2016 (MT)
Mine Production	25,621	27,016	27,708	27,551
Supply	30,726	32,679	32,339	31,325
Physical Demand	35,016	34,783	35,816	31,968
Physical surplus (+) / Deficit (-)	-4,290	-2,104	-3,477	-643

Source: The silver Institute, Thomson Reuters Market Report, November 2016. (MT = Metric Ton)

Silver mine supply declined 0.7% in 2016 and is expected to trend lower in the foreseeable future after it peaked in 2015. This decline has majorly come from Russia, Australia and Mexico, which overpowered the marginally increased production in China and Peru. The declining total supply is therefore expected to be a key driver of annual deficits in the silver market going forward.

Global demand also registered a marginal de-growth owing to decline in physical bar and coin demand. Jewellery segment also showed weak demand in Non-Asian markets due to a looming stock overhang. Electronics applications and other industrial application segment demand also declined with respect to their respective levels in 2015. However, the outlier in silver demand applications was solar segment, which is also expected to drive demand in years to come, especially in emerging economies. While silver has broad market fundamentals, industrial demand makes up more than half of the overall market, with most of the other demand coming from jewellery, bullion coins and exchange-traded funds.

Silver has been one of the best assets in the precious-metals space in 2016. Looking ahead, it could be silver's industrial component that drives the market, especially as U.S. President-elect pushes his fiscal policies, proposing to spend $1 trillion over 10 years. Silver could continue to see strong gains in 2017 from a pick-up in industrial demand as the U.S. and global economies improve.

Indian Silver market is majorly dependent on investment interest and export of silver jewellery. The demonetization action by the Government in November last year halted silver market for a period of one and half months. The new policy which made PAN Card mandatory for purchases of over ₹ 2 lakh, levy of 1% excise duty on jewellery, income declaration scheme and ban on cash transaction over ₹ 3 lakh affected the investment sector majorly and slowed down silver demand for rest of the year. The introduction of GST is also causing nervousness amongst Indian investors.

The Indian market has seen huge imports over the period of 2012 to 2015 resulting in down-trending prices. However, a significant 36% decline in imports was witnessed in 2016 supporting silver prices. Industrial demand in the country is expected to pick especially from segments of silver chemical, salt & pharmaceutical and nano silver; however industrial demand in India forms a very small proportion of the total consumption. With a favourable demand supply scenario and current ETF buying trend, price outlook looks promising.

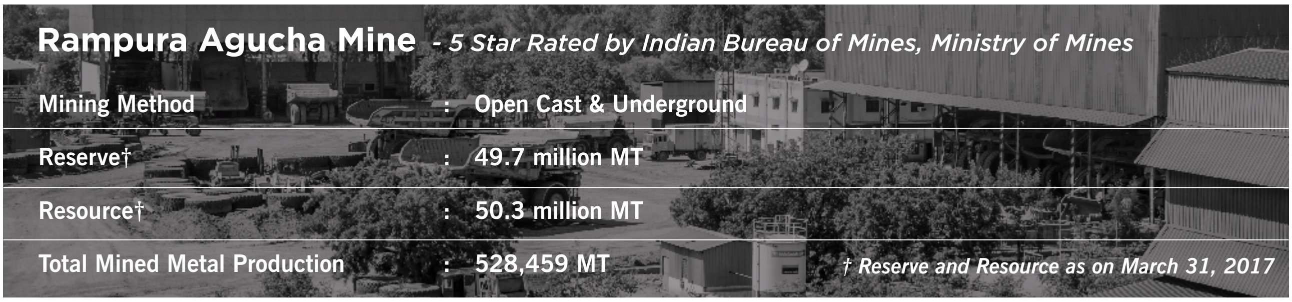
OPERATIONS
Augmenting Our Capabilities

MINES

We are pleased to inform that three of our mines Rampura Agucha, Sindesar Khurd and Kayad mines were awarded 'Five Star' rating by Indian Bureau of Mines, Ministry of Mines for the initiatives taken for implementation of the Sustainable Development Framework and for exemplary compliances & best practices. Your Company is the only Company in the country with three 'Five Star' rated mines, which demonstrates the Company's mining prowess.

Performance in FY 2017

		Rampura Agucha	Sindesar Khurd	Rajpura Dariba	Zawar	Kayad	Total
Ore Mined ('000 MT)		4,696	3,665	746	1,770	1,000	11,877
FY 2016		4,705	2,970	669	1,350	760	10,453
Zinc	Feed Grade %	12.2	3.8	5.1	2.7	10	7.6
	FY 2016	11.5	3.9	5.1	2.8	8.9	7.9
	Mined Metal ('000 MT)	483	117	32	39	85	756
	FY 2016	510	91	32	33	78	744
Lead	Feed Grade %	1.7	2	1.2	2.1	1.4	1.8
	FY 2016	1.9	2.2	1.2	2.1	1.1	1.8
	Mined Metal ('000 MT)	45	60	6	30	9	151
	FY 2016	55	49	7	25	8	145



Rampura Agucha Mine *- 5 Star Rated by Indian Bureau of Mines, Ministry of Mines*

Mining Method	:	Open Cast & Underground
Reserve†	:	49.7 million MT
Resource†	:	50.3 million MT
Total Mined Metal Production	:	528,459 MT

† Reserve and Resource as on March 31, 2017

Rampura Agucha Mine (RAM) is the world's second largest zinc-lead mine, with high zinc-lead reserve grades averaging 15.8%. During the year, Rampura Agucha Mine produced 4.70 million MT of ore, similar to last year. With depleting reserves from open pit, ore production from underground mining is being ramped up at an accelerated rate. At present, the mine is being operated through both open cast and underground routes and will maintain the total ore production from Rampura Agucha Mine at 4 million MT in the current year. The mine is noted for its safety initiatives, including segregation of men and machine movement, dedicated pathways, restricted equipment movement, carefully planned parking etc. The open cast mine is expected to reach end of life by end of this financial year or early next financial year, thereafter Rampura Agucha Mine will become fully underground.

The ongoing underground (UG) mine project includes a production shaft of 955 m depth, two declines from surface, two ventilation shafts and a paste fill plant. Decline development and other lateral development rates have been significantly increased to gain access to multiple production blocks and the mine is well positioned to sustain development rate of more than 1.5 km per month. In FY 2017, the project achieved over 17 km of mine development while achieving 5,309 m during the last quarter after continuously crossing the 4,000 m benchmark for four quarters in a row. During the year, paste fill reticulation which comprises of drilling large diameter holes from surface to underground and paste conveying pipe lines in underground, got completed. The stope voids are being filled with paste, which in-turn provides greater stability to the ground and facilitates quick turnaround of the stoping cycle.

The sinking of main production shaft of 955 m depth has been completed and shaft furnishing work is progressing well, although almost a year behind original schedule. Further, off shaft lateral development will provide access to planned crusher and deeper levels that will serve as additional working areas in enhancing production at Rampura Agucha Mine UG. Of the two vertical ventilation shafts, north ventilation shaft sinking was completed last year while the south ventilation shaft sinking has been completed during the year, significantly enhancing the ventilation in the mine. Two additional raises were also sunk catering to upfront ventilation to the underground workings. Cold commissioning of both production and service winders has also been completed. The main production shaft is expected to commence commercial production in FY 2019.

Sindesar Khurd Mine *- 5 Star Rated by Indian Bureau of Mines, Ministry of Mines*

Mining Method	:	**Underground**
Reserve†	:	**35.6 million MT**
Resource†	:	**87.2 million MT**
Total Mined Metal Production	:	**177,147 MT**

† Reserve and Resource as on March 31, 2017

Sindesar Khurd Mine (SKM) started operations in 2006 and has seen several phases of expansions from 0.3 million MT to its current capacity of 4 million MT, making it the largest underground mine in India. In a very short span of time, Sindesar Khurd Mine earned its place as a world-class silver rich zinc-lead mine with state-of-the-art infrastructure facilities. The mine has emerged as the most mechanised underground base metal mine in the country.

The mine consists of multiple standalone deposits or auxiliary lenses, which provides three standalone production centres at present. Production from the main lode is functioning at 2.5 million MT per annum capacity and the two auxiliary lenses, SKA2 and SKA6, are functioning at 1.5 million MT per annum capacity. Further addition of SKA14 lens is planned in FY 2018.

As a result of on-going volume ramp-up and higher recoveries, the mine achieved a production of 3.66 million MT of ore during FY 2017 as compared to 2.97 million MT in FY 2016. The average silver grade during the year was 113 parts per million.

The sinking of production shaft was completed to the planned 1,050 m depth in FY 2016 and off-shaft development work has also been completed during the year. The new beneficiation plant of 1.5 million MT per annum capacity has been commissioned during the year in record 14 months after the existing beneficiation plant was debottlenecked to enhance its capacity from 2.0 million MT per annum to 2.75 million MT per annum last year. The winder foundation work for the shaft was completed during the quarter and head gear erection is nearing completion. The mine is set to reach the enhanced targeted capacity of 4.5 million MT ahead of schedule in the current financial year. Environment clearance and approval of mining plan for 4.5 million MT ore production and beneficiation is already in place.

Sindesar Khurd Mine has been instrumental in implementing the highest capacity low profile dump trucks (63MT) in the country during FY 2017. Raise-boring of ventilation raises upto 575 m length was done from underground while ventilation fan of 1500 KW rating was commissioned; both are first in India.

Sindesar Khurd Mine's expansion continues to be ahead of schedule as it successfully positions itself to significantly contribute to the Company's integrated lead and silver production while also becoming the prime mine to replace lost capacity from Rampura Agucha Mine open cast. Being rich in silver, the mine also enables our silver production to grow higher than proportionately.

Rajpura Dariba Mine

Mining Method	:	Underground
Reserve†	:	9 million MT
Resource†	:	50.2 million MT
Total Mined Metal Production	:	37,882 MT

† Reserve and Resource as on March 31, 2017

Rajpura Dariba Mine (RDM) achieved highest ore production of 0.75 million MT as compared to 0.67 million MT last year. Ore production capacity at Rajpura Dariba Mine is planned to progressively increase from the current 0.90 million MT per annum to 1.20 million MT per annum by FY 2019.

Rajpura Dariba Mine is one of our oldest mine with manual operations and has been slowly upgraded over time, achieving new levels of mechanization & automation and has migrated from 'Track' to 'Trackless' mining during the year. Some of the other infrastructure and technological advancements undertaken during the year are as below:

- new block in lower level has been developed for production
- de-watering circuit of underground mine has been strengthened by commissioning of new sump in North Lode
- high capacity ventilation fan has been commissioned to augment ventilation capacity of mine and new raises are being developed using raise bore
- addition of new service equipment including grader, diesel browser, personal carriers and scissor-lifts
- Fuel Management System has been introduced

Kayad Mine - *5 Star Rated by Indian Bureau of Mines, Ministry of Mines*

Mining Method	:	**Underground**
Reserve†	:	**5.4 million MT**
Resource†	:	**1.7 million MT**
Total Mined Metal Production	:	**93,939 MT**

† Reserve and Resource as on March 31, 2017

Kayad mine is the youngest mine of Hindustan Zinc and has accomplished the fastest ramp up by any mine globally. It began commercial production in the third quarter of the FY 2015 and reached its maximum production capacity of 1 million MT of ore in FY 2017. We continue to explore in and around the mine to augment R&R base and extend mine life.

Zawar Mine

Mining Method	:	**Underground**
Reserve†	:	**9.5 million MT**
Resource†	:	**85.7 million MT**
Total Mined Metal Production	:	**68,753 MT**

† Reserve and Resource as on March 31, 2017

Zawar group of mines (ZM) is a heritage mine where R&R is still being added. During the year, the mine produced 1.8 million MT of ore as compared to 1.3 million MT in FY 2016.

Ore production capacity at Zawar Mine is planned to progressively increase to 4 million MT per annum by FY 2020. Environmental clearance of 4 million MT ore production and beneficiation was received during the year. After being put on hold last year in light of falling LMEs, the expansion project was re-started comprising of several components including debottlenecking of the existing mill along with civil infrastructure works and power augmentation to support the increased production. The mine expansion includes three declines from the surface, infrastructure development at surface as well as underground and a changeover from conventional to mechanised operations. The mine achieved 19 km of mine development during FY 2017, crossing 2,200 m benchmark in March. During the year, two declines were connected making the operations more efficient. The infrastructure development at existing mines and mill as well as new area i.e., North Baroi, Mochia-Balaria portal progressed in-line with long-term plan. Zawar mill expansion to 2.5 million MT per annum and associated power up-gradation projects are at advanced stages with completion planned in Q2 FY 2018.

On completion of Zawar expansion, this group of mines will become a significant contributor to the Company's output. we are evaluating making Zawar a mega mining complex, encourage by the growth in its R&R potential.

SMELTERS

We have one of the largest zinc-lead smelting operations in the world with a capacity of over 1 million MT. We are also India's largest manufacturer of sulphuric acid, a by-product of smelting operations.

The combination of mining and smelting offers advantages in terms of optimisation of cost and smelting processes while at the same time, close proximity of mines and smelters provides logistical ease. Our portfolio comprises of world class smelters at three locations viz. Chanderiya, Dariba and Debari.

Performance in FY 2017

	Chanderiya Lead-Zinc Smelter	Dariba Smelting Complex	Zinc Smelter Debari	Total
Refined Zinc (MT)	**4,35,666**	**1,89,882**	**46,442**	**6,71,990**
FY 2016	4,88,470	2,03,704	66,764	7,58,938
Refined Lead (MT)*	**51,759**	**92,535**	**-**	**1,44,294**
FY 2016	51,219	1,00,357	-	1,51,576
Sulphuric Acid	**5,44,065**	**4,46,997**	**1,91,636**	**11,82,698**
FY 2016	6,18,426	4,99,222	2,24,675	13,42,323

**includes captive consumption of 5,285 MT lead in FY 2017 (6,657 MT in FY 2016)*

Chanderiya Lead-Zinc Smelting Complex

Hydro-metallurgical Zinc Smelter	:	**4,20,000 tpa Zinc**
Pyro-metallurgical Lead-Zinc Smelter	:	**1,05,000 tpa Zinc and 35,000 tpa Lead**
Ausmelt™ Plant	:	**50,000 tpa Lead**
Captive Power Plants	:	**234 MW**

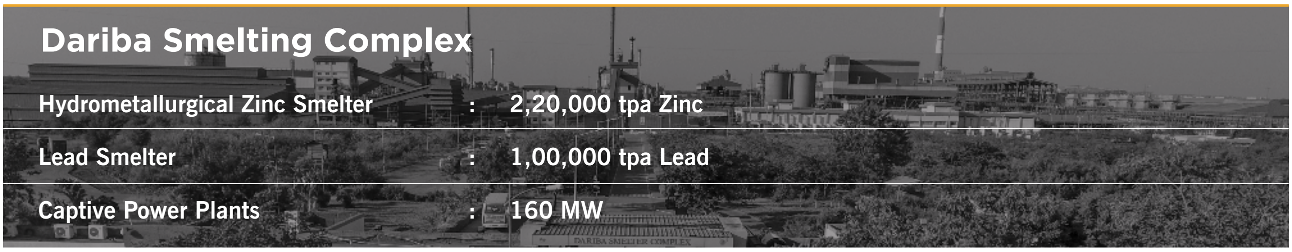
Chanderiya Lead-Zinc Smelter (CLZS) enjoys the reputation of being one of the largest smelting complexes in the world with a capacity of 6,10,000 MT per annum. It operates two hydro-metallurgical zinc smelters, one pyro-metallurgical lead-zinc smelter including Ausmelt plant and captive power plants. Lead refining also generates silver rich residues which are sent to Pantnagar refinery for recovering the silver. During the year Chanderiya Lead-Zinc Smelter produced 4,35,666 MT of zinc and 51,759 MT of lead as compared to 4,88,470 MT of zinc and 51,219 MT of lead last year, in-line with the reduced availability of mined metal in first half of the year.

In the year gone by, steps were taken to increase recoveries from waste and improve the performance of the smelters. One of the key initiatives taken this year is commencement of 1,60,000 million MT per annum Zinc Residue Fuming Project with scheduled commissioning in mid FY 2019. Zinc fuming is a process that recovers valuable metals from zinc residue and will help in higher recovery of zinc, lead and silver. The process takes us closer to achieving our goal of zero solid waste and is also one of the key sustainability initiatives which will favourably impact Company's land and waste footprint.

Further, at the Hydro plant, the Hydro-2 cell house was upgraded from 192 kA to 200 kA enhancing zinc output. Several cost initiatives were put in place this year. The usage of limestone in place of hydrated lime saves approximately ₹ 4 Crore per annum. The implementation of copper circuit in Hydro-1 for removal of copper is also resulting in added revenue. ISF bath burners were switched from HSD to furnace oil.

In October 2016, a new zinc alloy value added product, 'HZDA' or Hindustan Zinc Die-cast Alloy, was added to the Company's portfolio from Chanderiya Lead-Zinc Smelter.

Several safety and environment related activities were undertaken during the year, which includes online monitoring of air quality to ensure safe breathing environment, conducting Nukkad Nataks, themed Safety Chaupals and awareness camps at various nearly villages with a focus to inculcate safety culture etc.



Dariba Smelting Complex

Hydrometallurgical Zinc Smelter	:	2,20,000 tpa Zinc
Lead Smelter	:	1,00,000 tpa Lead
Captive Power Plants	:	160 MW

Dariba Smelting Complex (DSC) includes hydro-metallurgical zinc smelter, lead smelter and captive power plants and is located in the Dariba complex which includes Sindesar Khurd and Rajpura Dariba mines. Also the residue from the lead smelter is sent to Pantanagar for recovery of silver. In FY 2017, Dariba Smelting Complex achieved a production of 1,89,882 MT of refined zinc metal and 92,535 MT of refined lead metal as compared to 2,03,704 MT of zinc and 1,00,357 MT of lead last year.

Improved operational efficiency and reduction in production costs were achieved due to implementation of KAIZEN. The smelter recorded a major cost reduction in lead production with record zinc oxide production through fuming furnace (2.5 MT/h against design of 2.1 MT/h) and improved recoveries of by-products and residues.

There was marked improvement in furnace availability as well as in blast furnace campaign life. The Dariba Smelting Complex lead plant steam was utilised in Dariba Smelting Complex Captive Power Plant (CPP) for reducing the auxiliary steam consumption. At the lead smelting furnace, highest ever feed rate of 16 MT per hour (mined metal) was achieved in January 2017 against the designed 14.64 MT per hour (mined metal) feed rate. The lead plant is now a global benchmark smelter.

Other Facilities

Hindustan Zinc also operates an 88,000 MT per annum Zinc Smelter at Debari (ZSD). During the year, Zinc Smelter Debari produced 46,442 MT of refined zinc metal as compared to 66,764 MT last year, in-line with reduced availability of mined metal. The facility also supplies surplus zinc oxide, an intermediate product, to our other zinc smelters. The cell house at Zinc Smelter Debari is being upgraded to increase safety, productivity and efficiency.

The Company also has a facility at Pantnagar, in the State of Uttarakhand for processing and refining of zinc, lead and silver as well as for nationwide distribution of finished products making it a centralised finished goods centre for our customers. This facility does not add to the overall smelting capacity. Zinc refinery at Haridwar in Uttarakhand, was temporarily closed during the year.

During the year, we produced 453 MT of integrated refined saleable silver against 422 MT last year. Sulphuric acid production was 11,82,698 MT in FY 2017 as compared 13,42,323 MT last year.

POWER

In order to ensure reliable low-cost power for our operations and with the aim to achieve self-sufficiency of our energy needs, we have installed thermal captive power plants (CPPs) to cater to the power requirements of our smelters and mines.

Six CPPs at Chanderiya, Dariba and Zawar having a total power generation capacity of 474 MW generated 3,345 units of power in FY 2017, compared to 3,468 million units in previous financial year.

A large part of coal for the CPPs is high GCV imported coal. The price of coal during the year increased significantly and as a counter measure, utilization of off-spec coal in blending was done to achieve the optimised efficiency at reduced overall coal cost. Utilising excess steam of Dariba Smelting Complex lead plant in Dariba Smelting Complex CPP Unit-2 has resulted in decreased specific steam consumption from 3.94 kg/Kwh in FY 2016 to 3.82 kg/Kwh and annual savings of around ₹ 1.8 Crore, this in-house modification also resulted in reduction of 33,000 tonnes of CO_2 on yearly basis. Existing seals were replaced with brush seal in BP gland inner casing at four of our six CPPs, resulting in coal savings of around ₹ 6.7 Crore per annum. Additionally, utilization of carbon black as an alternate fuel is being explored for significant cost saving potential.

We have entered into a partnership with BHEL for performance enhancement of our CPPs. The boiler duct design was modified to reduce power consumption of induced draft fan by 80 kwh per unit and duct erosion across our units. Turbine cooling time has been reduced by 20 hours by adopting the advanced cooling down procedure, a potential saving of ₹ 3 Crore during annual shutdowns. New spring with low spring constant was designed and implemented in all units to overcome turbine tripping during islanding on low trip oil pressure.

Various other improvements were made at the CPP plants across locations. Dariba CPP became the first and only power plant in Rajasthan to run completely on sewage treated water. Further, continuous re-utilisation of bottom ash water with the help of in-house modification is saving water consumption.

FY 2017 highlights

- Dariba Smelting Complex recorded lowest station APC and uninterrupted running of CPP Unit-1 for 146 days
- Zawar recorded lowest ever APC of 7.97% and highest PLF of 104.32%
- Chanderiya Lead-Zinc Smelter achieved highest ever continuous running of station for 148 days and recorded a PLF of 104.2%
- Chanderiya Lead-Zinc Smelter recorded lowest ever APC for Unit 2 & 3 at 7.92% & 7.53% respectively

Renewable energy

Wind Energy

We are a significant wind power producer in India with a capacity of 273.5 MW across five states. During FY 2017, the Company produced 448 million units of wind power as compared to 415 million units last year, all of which was sold to state power distribution companies. The Company's wind power capacity is registered under the United Nations Framework Convention on Climate Change (UNFCCC) for Clean Development Mechanism (CDM) and has Certified Emission Reduction potential of 5,83,685 per annum of CO_2.

Solar Power

After successfully installing a modest 200 KW in two solar roof top projects at Head Office in Udaipur and Chanderiya Lead-Zinc Smelter, this year we have further increased the green power portfolio by adding 16 MW solar power projects. We commissioned 12 MW & 4 MW solar power projects respectively at Debari and Dariba Complex. This ₹ 82 Crore capex will help us partly meet our renewable power obligation while also utilising the waste lands like jarosite pond at Debari and tailing dam at Dariba.

Platinum Green Building

Confederation of Indian Industry (CII)-Indian Green Building Council (IGBC) awarded the highest rating, 'Platinum', to the Company's head office building in Udaipur in January 2017. It is one of only 14 CII-IGBC Platinum rated buildings in India and the first in Rajasthan.

Waste Heat Recovery Power Plants

Adjunct to our CPPs, we have 35.4 MW of installed capacity for recovery of waste heat, registered under Rajasthan Renewable Energy Corporation as a source of renewable energy. We also have 21 TPH low calorific value boilers for steam generation projects registered as CDM under the Kyoto protocol for Sustainable Development.

EXPLORATION

Ore Reserve and Mineral Resource (R&R) as on March 31, 2017

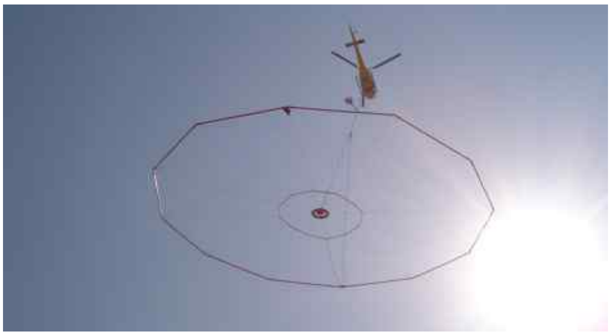
(The R&R position has been independently reviewed and certified as per the JoRC standard)

	Ore Reserve				Mineral Resource								Total R&R
	Proved and Probable				Measured and Indicated				Inferred				
	Million Mt	Grade % Zinc	Grade % Lead	g/t Silver	Million Mt	Grade % Zinc	Grade % Lead	g/t Silver	Million Mt	Grade % Zinc	Grade % Lead	g/t Silver	Million Mt
Rampura Agucha	49.7	13.9	1.9	62	13.4	15.8	2.1	67	36.9	10.1	2.5	72	100.0
Rajpura Dariba	9.0	6.3	1.5	63	22.5	6.8	2.4	66	27.7	6.6	1.8	87	59.2
Sindesar Khurd	35.6	4.2	2.9	169	17.4	4.5	3.1	162	69.8	3.7	1.9	86	122.8
Bamnia Kalan*					5.4	4.5	1.6	67	14.7	3.7	1.8	56	20.1
Zawar	9.5	3.3	1.8	34	23.9	4.6	1.9	43	61.8	4.7	2.5	55	95.2
Kayad	5.4	7.8	1.1	31	1.3	13.8	1.9	42	0.4	7.3	1.2	17	7.1
Total	**109.2**	**8.9**	**2.1**	**93**	**83.9**	**7.1**	**2.3**	**79**	**211.3**	**5.5**	**2.2**	**72**	**404.4**

**Part of the Bamnia Kalan mining lease holding is under litigation*

Our commitment to exploration has underpinned the Company's growth, in line with our goal to add more ore than we extract. Sustained exploration success has seen our R&R position and its contained metal increase significantly over the last 10 years despite over 100 million tonnes of ore production.

In line with global industry best practice, we modified our R&R reporting procedure this year to be on a '9+3' cycle where Resource models are compiled and depleted in December and handed over to mine planning for developing the life of mine plan and estimation of reserve. Thus reserves are depleted on actual production of 9 months and for balance 3 months projected forecast is taken into account. The consequence of this change is that the FY 2017 Resource estimate is based on only nine months of R&R data to December 31, 2016 rather than 12 months which was the case in previous years.



This year a total of approximately 74,800 m of surface drilling was completed across all mine sites. This drilling added gross R&R of 26.4 million MT, which enhanced the Company's R&R position to 404.4 million MT, having grade of 6.7% zinc, 2.2% lead and 79 g/t silver after depletion of 11.9 million MT. The total R&R metal content is 27.30 million MT of zinc metal, 8.80 million MT of lead metal and 32 kT silver metal. The current R&R continues to support a mining life of 25+ years.

In FY 2017 Drilling at Kayad achieved a record daily meterage of 107 m

HUMAN RESOURCES
Unleashing Potential

Our vision is to be the most admired employer, by providing employees with limitless opportunities to learn & deliver, grow under healthy competition and best quality of life. We ensure that every employee is engaged & developed as a high performer to be our 'Brand Ambassador'. To achieve this, we invest in identifying and nurturing talent through focussed interventions.

At Hindustan Zinc, success is attributed to the combined efforts of 4,421 on-roll employees and over 13,155 associates deployed through our business partners.

Enriching the talent pipeline

Our philosophy is to identify high potential talent from within and groom them to take up leadership roles thereby creating a robust talent pipeline. This is ensured through our flagship programs –

- Internal Growth Workshops
- ACT UP (Accelerated Competency Tracking & upgradation program)
- Cross functional and business unit movement through Internal Job Posting
- Technical Star

Digital practices in HR

We have put in place a robust HR-IT architecture which lays the foundation of digitization tools leveraged to enable effective, efficient and transparent delivery of HR processes to achieve 'Hire to Retire' lifecycle record. After having implemented HCM module of SAP some years ago, we are now implementing 'Success Factors', moving towards paperless HR with improved process efficiency and more focus on data driven decisions and analytics.

Hindustan Zinc was conferred 'Best Use of Technology in HR' title by World HRD Congress in February 2017.

Employee Engagement & Development

We encourage employees to realise their full potential through effective engagement programs like coaching & mentoring, leaders connect and live business projects.

V Connect is our flagship program wherein high potential talents have been assigned senior leaders as anchors. These anchors share their experiences and insights with talents for upgrading their core and soft skills thus enabling them to deliver higher performance. To drive this program digitally, we have created a V-Connect app which supports in scheduling connects, taking feedbacks, etc.

CERTIFIED AS GREAT PLACE TO WORK, 2017-18

Great Place to Work® Certification Program is the first step for an organization in its journey to build a High-Trust, High-Performance Culture™ and our organization has successfully accomplished this milestone.

All India Mohan Kumar Manglam (MKM) Hind Zinc Football Tournament 2017

The Company's Zawar Mine location organises 'All India MKM Hind Zinc Football Tournament' in the memory of Central minister of Steel and Mines Late Mr Mohan Kumar Mangalam. Mr Mohan Kumar Manglam once visited Zawar Group of Mines and during his visit he left irrevocable memory on Zawar mine employees. After his sudden demise in an accident on May 30, 1973, Zawar employees decided to start the Mohan Kumar Manglam Football tournament. To conduct the event Zawar Mines workmen donate half day of salary and the spirit to play football is the dream of each citizen here.

This year 39th All India MKM Hind Zinc Football Tournament was organised at Zawar Stadium between January 22, 2017 to January 30, 2017. Total 16 teams from all over India participated in the tournament; more than 15,000 spectators came & enjoyed the tournament. 39th All India MKM Hind Zinc Tournament trophy was lifted by Kerala Police. Event was graced by presence of Mr. Swaroop Das, National and International football player and Mr. U Shariff Ali, Ex- football player of Indian Football team as Chief Guest.

Company's CEO Mr. Sunil Duggal, COO Mines Mr. Laxman Shekhawat, COO Smelters Mr. Vikas Sharma, Head project Mr Naveen Singhal participated in the final day of event. Site President Zawar Mr. P. S. Jaitawat, General Secretary Mr. Lalu Ram Meena, location HR Head Mr. SSVKS Sai Ram and location Finance Head Mr. Kamal Godha and other Union representatives welcomed the guests & teams and provided winner and runner trophy to the team in the closing ceremony.

BUSINESS EXCELLENCE
Facilitating Continual Improvement

Business Excellence (BE) is a common platform for Hindustan Zinc which integrates excellence into all its operations. The BE cell anchors key initiatives such as benchmarking, asset optimisation and innovation across the manufacturing processes.

The BE cell is piloting an Integrated Transport Management System using GPS and RFID tags which automates the entire vehicle movement within the premises without manual intervention. This enables real time tracking of materials across the supply chain. Other key projects being spearheaded by the BE cell are the 'Digital Mine' at Sindesar Khurd Mine, Acid Plant Integrity Assessment, capacity enhancement of zinc plant and introduction of new product 'HZDA' under 'Make in India' initiative. These have significantly improved the Company's safety, environment and operational performance. The BE cell is the hub of innovation and automation across the organisation and is involved in all capital expenditure projects.

Central Inventory Control Cell (CICC)

CICC was formed in the year 2013 for inventory management of stores and spares which is our single largest category after commodities. The CICC performance scorecard has brought about significant reduction in non-moving and slow moving inventories and unlocked working capital.

Asset Optimisation

The Asset Optimisation is a group wide change management programme which has developed and nurtured various improvement initiatives under Focused Improvement Projects. Substantial improvement was visible in mining equipment performance, mill recovery, specific energy consumption, product quality etc. Few FIPs have resulted in significant savings including galena recovery, decreasing copper sulphate consumption and increasing haul rate.

Community of Practices

With the objective of standardising, sharing and learning the best practices among units, total 14 Community of Practices have been launched across the organisation which are all being facilitated by BE cell. Series of workshops were conducted and the outcomes are being reviewed along with monitoring of business KPIs. Significant progress in sharing the best practices is seen among respective fields.

Technical Services

Many customer centric initiatives have been undertaken to cater the demands from auto ancillary and galvanizing industries. Such initiatives include value added alloys like HZDA and Continuous Galvanizing Grade. Technical services team is also actively involved in spreading awareness about the benefits of galvanizing in user sectors, visit customer sites for consultation as well as invite them to visit our plant. The team has introduced environment friendly dry-ice blasting for mould cleaning, resulting in enhanced product quality and customer satisfaction.

Process Excellence and Fumer Project

Under the 'Waste to Wealth' initiative, various projects are being implemented to recover useable intermediate materials from anode mud and ISF slag. A state of the art 'Pyro Fumer' technology has been introduced for Hydro plant to enhance recoveries and eliminate generation of hazardous jarosite waste. Discarded slag from this will be used in cement industry.

Zinc recovery at Dariba lead plant and Debari plant has improved by introducing innovative changes in the process. In a major debottlenecking project, all hydro plants are being upgraded to operate at 200 KA and further ugradations are under evaluation to de-bottleneck smelters. The Company has helped establish an ancillary industry in its premises for treatment of residues by converting them into value added products for in-house usage.

SUSTAINABILITY
Creating Value Beyond Business

Through our sustainability initiatives, we are making an effort to strengthen the Nation. We believe that it is our responsibility to pass on a sustainable legacy which will benefit future generations, thus we are committed to leave this planet better than we had found it.

As a responsible corporate, we focus on judicious consumption of natural resources. Our aim is to achieve 'Zero Harm' and 'Zero Discharge'. All our efforts are focussed on creating a positive impact on the lives of people around us by ensuring high level of health, safety and environmental consciousness.

We believe that it is our responsibility to pass on a sustainable legacy which will benefit future generations, thus we are committed to leave this planet better than we had found it.

HIGHLIGHTS OF THE YEAR

0.30

Reduced Lost Time Injury Frequency Rate (LTIFR)

100%

Periodic medical examinations for all applicable employees

6,40,000

Manhours of Safety training accomplished

100%

Assurance of all sites by our internal sustainability audit programme

126 Crore

Invested for environmental management

Commissioned 16 MW solar power plant

ZERO

High potential environmental incidents

SUSTAINABILITY VISION

To excel in operations upholding world-class standards of Governance to achieve 'Zero harm' and 'Zero Discharge' while being socially responsible

SUSTAINABILITY MISSION

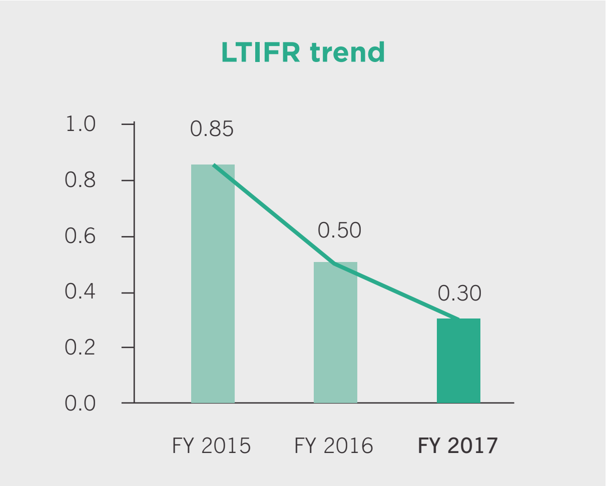
Our mission is to become a global leader and create value by conducting our business in a socially responsible and ethical manner by:

- 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

Occupational Health & Safety... Core to our Sustainable Strategy

Safety and wellbeing of our employees is non-negotiable. Our aim is to create and maintain a 'Zero Harm' culture and we remain committed to an injury-free, illness-free and healthy workplace. We have a comprehensive HSE policy in place which encourages us to embed safety as a value in our day to day work.

Continuity of positive safety culture depends on its percolation across all levels of the organisation. We continue to enthuse, educate and encourage our employees to embrace safety wholeheartedly. Safety & Occupational Health is a mandatory module in our induction and refresher training programme. Periodic trainings on high risk activities are delivered to enhance safety awareness and knowledge among employees and contractors. This year, we accomplished **0.64 million man-hours** of safety trainings to our employees and contract employees.



During the reporting period, we have seen a reduction in our LTIFR from 0.50 in FY 2016 to 0.30 in FY 2017. We are continuously strengthening our safety culture by introducing innovative and effective initiatives and training for our employees.

Despite our efforts, in an unfortunate work related accident, the Company lost four valuable lives of our contract employees in a rare crane-collapse, at the Sindesar Khurd mill expansion project site. The root cause analysis was conducted by an expert team, consequence management was done and the learnings are being implemented at all sites to avoid reoccurrence.

In terms of safety trainings, we have made steady progress over the last three years with 'Aarohan' journey and we are committed to improve our performance in our major risk areas.

Strengthening 'Zero Harm' Safety Culture through Innovations

IT Intervention in Safety

During the year various IT enabled safety initiatives were taken to create safety awareness among employees.

Safety Whistle Blower

We have launched the Safety Whistle Blower to foster safety across our operations. A portal designed for this purpose was created to enable employees to escalate any safety issue without disclosing their identity.

Safety Perception Survey

We conducted a Second Employee Safety Perception Survey in January 2017 for assessing employee perception towards safety, on completion of three years of Aarohan journey and to measure its effectiveness. 99.9% employees participated in the survey and the results reflect significant improvement in safety culture, yet highlighting avenues of improvement.

Online Safety Awareness Test

In order to increase awareness of employees relating to high risks during work operations, we have started undertaking monthly safety online tests. These tests are conducted on various high risk activities including Work at Height, Confined Space, Vehicle & Driving, Electrical, Permit to Work, Lockout & Tag Out and Scaffolding & Rigging Safety. These tests are mandatory for all executives across our operations.

Safety Videos

Seven in-house safety videos were created to spread awareness on Safety Interaction Process, Life Saving Rules, Lockout Tag out, Permit to Work, Safety Interaction in Underground Mines, Work at Height and Confined Space Entry. These videos are now part of the induction and refresher trainings.

Safety Kiosk

For drivers' safety induction, we have installed a kiosk system at the drivers' lobby near material gate in Chanderiya Smelting Complex. Touch screen interfaces have been created to make the training user friendly. With this, we are able to conduct safety induction of truck drivers in minutes. The system is being replicated at other units also.

Safety Engagements

Safety cannot be achieved by enforcement alone. It requires widespread education.

Safety Town-Hall

In order to reinforce our safety culture and help everyone understand why safety is paramount, the senior management team of the Company engages, on quarterly basis, with the workforce from all locations including contractual employees through the Safety Town-Hall. The emphasis is upon on-site and off-site safety and upon creating awareness on criticality of safety for each individual and for the Company as a whole. These sessions give employees a platform to get their queries addressed and also to provide suggestions for improving the safety of our operations.

Safety Stalls

Aarohan Journey has competed three years and on this occasion a Safety Exhibition was organised at Head Office-Udaipur. All the 12 units of Hindustan Zinc represented one stall each on safety. Photo booth and gaming zones were special attractions of the exhibition. The safety exhibition was open to family members of the employees as well.

Safety Park

With the purpose of showcasing best practices, sharing learnings and increasing safety knowledge of employees, Safety Park is developed at Rajpura Dariba Complex, demonstrating models on PPE, Standard Scaffolding, Model Conveyor, Confined Space – Vertical Entry & Horizontal Entry, Reactor with Agitator System, Crusher, Job Specific PPE models, Double Earthing, LOTOTO, Bonding (providing continuity) and Test before Touch. The objective is to impart practical safety induction of real plant equipment before entering our premises. Safety alerts are also displayed in park for learnings and sharing.

Safety Celebration

Various safety awareness celebrations were conducted across the Company to engage with employees and their family members and nearby communities. These initiatives included National Safety Week celebration, Fire Service week, Road Safety week etc. Various trainings, campaigns, and competitions like poster making, poem, quiz etc. were conducted for employees, contract employees and their family members. Awareness rallies, safety walks were also arranged in association with the District Administration.

Rescue operations for a major fire incident in a chemical factory

On January 23, 2017 at 15:40 hrs, the Debari plant team received information about a major fire in a chemical factory located in Sukher industrial area, Udaipur. The firefighting team promptly acquired the details of stored material and its MSDS to decide the kind of fire extinguishing material to be used. There was a huge stock of inflammable substance stored in the factory. Explosions at regular intervals inside the factory were resulting into spread of fire from one storage area to another. The team used foam extinguishers and with persistent efforts it doused the fire completely by about 20:00 hrs. The timely action by team Hindustan Zinc was lauded by the District Collector, the Deputy Chief Inspector of Factories & Boilers, the SP and other officials.

Occupational Health

We have established occupational health centres at our mines and smelters, which are manned with experts to conduct regular health examination of our work force. Our policy related to occupational health-related matters is supported by structured processes, controls and technology. Our operations ensure that issues related to occupational health are addressed adequately. Recently, Rampura Agucha Mine conducted a 'Quality Risk assessment study' through Industrial Hygiene Services, Vadodara for setting Occupation Exposure Limits and tracing high occupational health risk areas. As a result, frequency of special tests like audiometry and spirometry has been changed every year from every 3 years and 5 years respectively.

During the year, over 17,678 persons underwent periodic and initial medical examinations. No occupational illness related cases were reported. At our Udaipur office, 23 employees participated in a two-days certified training session on First-Aid conducted by Red Cross Society. Practical demonstration was conducted on CPR, basic First Aid, types of Bandages etc.

We also focus on community health impact. Periodic monitoring of blood lead and cadmium analysis is conducted to monitor toxicity level. This year we have initiated monthly tracking of community health management.

Creating Positive Environment Footprint

In line with our HSE policy, we are committed to responsible stewardship of natural resources. We recognise that, our business involves critical activities which have the potential to cause environmental impact. Therefore, we evaluate the associated risks, and implement control measures at all stages of our activities i.e. from exploration to development, operation, and closure of sites. We are committed to reduce our footprint on the environment by bringing about a judicious use of natural resources and exploring alternate use of various wastes.

We set yearly goals for efficient use of water and energy and strive to meet these goals through necessary technological interventions. We also acknowledge the need to care for the ecosystems and biodiversity in areas we operate. We are aware that sustainable growth requires an effective response to climate change and we are taking initiatives to reduce the GHG emission from our operations.

Environmental Management

Our endeavours for environment friendly production begin with the Environment and Social Impact Assessments (ESIAs) for any new project. This process helps us to prepare mitigation plan to address the potential impact of our projects on environment and social boundaries. For the existing operations, we have set up Environmental Management Systems (EMS) and the compliance to the same is 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. All our major units are certified for ISO 14001:2004. Additionally, our Sindesar Khurd Mine is certified for ISO 50001 Energy Management System.

We are committed to measuring, controlling and reducing air emissions at each of our site and are implementing systems & procedures to address the concerns of local communities as well as to comply with the environmental license conditions. Through advanced mitigation, measurement and management strategies, we continue to identify, reduce and wherever possible, eliminate any potential impacts to air quality caused by our operational activities. We have installed online monitoring systems for emissions and effluents to transmit data directly to servers of central and state pollution control authorities.

The Company has undertaken several water conservation and harvesting initiatives for reduction in fresh water intake. These include continual improvement in specific water consumption, adoption of best practices to achieve 'Zero Discharge' in the Company's operating units and the establishment of rainwater harvesting structures both within the Company's premises and in the catchment areas of its operations. These initiatives not only lower fresh water consumption but also maximise groundwater recharge. We have been able to bring down our overall specific water consumption by 5% from last financial year on per tonne of metal in concentrate.

Our Dariba Smelter Complex has been recognised as a 'Noteworthy Water Efficient Unit - Within the Fence' category in 'National Award for Excellence in Water Management 2016' by Confederation of Indian Industry. Same effort was also recognised by The Indian Chamber of Commerce (ICC) and awarded Dariba Smelter Complex the Corporate Governance & Sustainability Vision Awards 2017.

Green Building Certification of Yashad Bhawan

Hindustan Zinc becomes Rajasthan's first Platinum Green Building by setting a benchmark through policy of Reduce, Recycle, Reuse and Reclaim.

CII-Indian Green Building Council (IGBC) awarded Platinum rating to 'Yashad Bhawan', Hindustan Zinc's Head Office (Udaipur), in a ceremony on January 10, 2017. The award has been constituted by CII-IGBC and the Platinum rating is the highest rating. The 'Yashad Bhavan' is one of the few CII-IGBC Platinum rated buildings in India and the first in Rajasthan.

The Plaque and Certificates for Platinum rating were handed over to Mr. Sunil Duggal – CEO, Hindustan Zinc by Mr. K. S. Venkatagiri - Executive Director, CII Sohrabji Godrej Green Business Centre, Hyderabad.

Conserving Climate

Minimizing our contribution in global Climate Change is an important aspect of our sustainability program.

Our Energy and Carbon management program is in harmony with our vision, mission, and the Vedanta Sustainability Framework. We have an exclusive Energy and Climate Change Management Policy that helps us maintain a balanced Energy-Carbon cycle at Hindustan Zinc.

The Company operates **274 MW wind farms**, in Gujarat, Karnataka, Rajasthan, Maharashtra and Tamil Nadu which are registered under Clean Development Mechanism (CDM) program by United Nations Framework Convention on Climate Change (UNFCCC).

We also have **35.4 MW of power capacity through Waste Heat Recovery Boiler (WHRB)** from roasters and Steam Turbo Generators (STG), out of which 9.4 MW WHRB project is registered under CDM along with 21 TPH LCV boilers for steam generation project. Our 10 UNFCCC registered projects reduce our carbon footprint by 5,83,685 tonnes CO_2 emission per annum while our unregistered projects reduce our carbon footprints by 1,16,992 tones CO_2 emissions per annum.

This year, we **commissioned two solar power projects with a total installation capacity of 16 MW at Dariba mine and Debari Zinc Smelter** for captive use of green energy. These solar power projects are commissioned on the land already available in these locations thus enabling utilization of wasteland. We are also trying to register these projects under Clean Development Mechanism program of UNFCCC. These projects will further reduce our carbon footprints by 30,000 tCO_2 emission per annum. Hindustan Zinc Limited has been voluntarily participating in Carbon Disclosure Project program since 2011. The Company has targeted to reduce its footprint by 5% as compared to that in the FY 2016. We are regularly improving our performance by achieving the set targets, taking new energy saving projects and improving our disclosure standards.

RAM Mill Stream-3 received National Energy Conservation Award – 2016 for successful implementation of various power saving projects reducing the specific energy consumption by 4.81 Kwh/MT of ore treatment.

Responsible Waste Management

Generation of waste is inevitable in any mining process. The only way to deal with this scenario is to have a well-defined waste route to facilitate efficient handling of wastes. Waste efficiency at Hindustan Zinc is achieved by two major objectives - minimizing the quantum of waste generated and maximising recycling and reuse of wastes.

Our Resource Use and Waste Management Technical Standards and the supporting guidance notes help us to mitigate the environmental impacts of our products and process. All wastes are being stored at earmarked locations

and are disposed timely through approved registered recyclers as per the Hazardous Waste Rule. The Company has laid down comprehensive guidelines on waste management for all its units, which cover hazardous as well as non-hazardous wastes and monitoring of performance for each unit. The Company implements minimization of waste, segregation at source and recycling.

We have extended our focus on utilization of wastes and on identifying them as raw material for other companies. This has created potential for expanding our spheres of influence by opening new streams in our value chain.

The Company has adopted Fumer technology to reduce jarosite generation, which is known to be successful in few Chinese and Korean Zinc Plants.

Chanderiya Smelting Complex has been recognised for its gainful waste utilization with the 'Fly Ash Utilization Award-2016' conferred by Mission Energy Foundation.

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), a mapping tool for the screening process and have categorised our operations in high, medium & low risk levels. 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 unique Biodiversity Management Plans (BMP) for all our operations. Currently, all our sites have BMPs in place.

Most of our operational sites being located in Rajasthan make it prudent for the Company to address biodiversity issues in the State. Extensive plantation is being carried out every year across all the operating sites and so far more than 1.4 million plants have been planted. Mass plantation was carried out in 75 Ha forest area (23,500 plants) through 'Van Suraksha Evam Prabandh Samiti'. 800 saplings have been planted along the road side of Tidi Zawar Mines road with tree guards. 10,000 saplings have been distributed in nearby villages for plantation.

Apart from the plantation, various biodiversity conservation and awareness projects have resulted in upliftment of regional biodiversity index (both flora and fauna) and are also improving life of the local people.

Stakeholder Engagement

Establishing and maintaining strong and lasting relationships with stakeholders are essential to make our business sustainable. We have a structured stakeholder identification and engagement process for all business locations, allowing us to build deep and long-lasting partnerships with the stakeholders. Our teams work with identified key stakeholders like employees, contract employees, local communities, governments and regulators to establish relationships based on trust and mutual benefit.

During the project phase, public hearing is the key component for stakeholder engagement; we conduct regular meetings and public hearings to understand and prioritise the issues while sharing the major project plans and its foreseeable impacts. This year, MoEF granted Environment Clearance for expansion of Zawar Mines ore production and beneficiation from 1.5 Mtpa to 4 Mtpa on January 5, 2017, based on a successful Public Hearing wherein more than 250 stakeholders participated. The outcomes of these meetings are evaluated and a time bound action plan is prepared and implemented.

To communicate more transparently on sustainability performance with our stakeholders, the Company decided to publish standalone Sustainability Report on annual basis. Our first 'Sustainability Report' was released on August 12, 2016.

CORPORATE SOCIAL RESPONSIBILITY
Doing Our Bit

The Company believes that its larger purpose is to contribute in building of stronger communities. Presently we directed our philanthropic efforts in the areas of education, sustainable livelihoods, women empowerment, health, water & sanitation, sports & culture, environment and community development and community assets creation. The programmes are aligned to community needs, National priorities and the United Nation's Sustainable Development Goals.

Hindustan Zinc is a signatory to the United Nations Global Compact (UNGC), a member of the National Population Stabilization Fund and The Energy and Resources Institute - Business Council for Sustainable Development (TERI-BCSD).

During the year, we spent ₹ 49.4 Crore on our Corporate Social Responsibility (CSR) programs, additionally we contributed ₹ 50 Crore to Vedanta Foundation for setting-up of 350 Nandghars. Also, the Company has provided ₹ 543 Crore as a contribution to District Mineral Foundation which will be utilized for the people and areas affected by mining operations. This direct spend does not include the contributions made by communities and government. We have initiated a structured process for encouraging participation of our employees and their families in our CSR programs.

Policy

During the year, the Company reviewed its CSR policy to strengthen and streamline governance process. The revised document was approved by the Company's Board in April 2016 *(refer the Company's website http://www.hzlindia.com/social_policy.aspx)*.

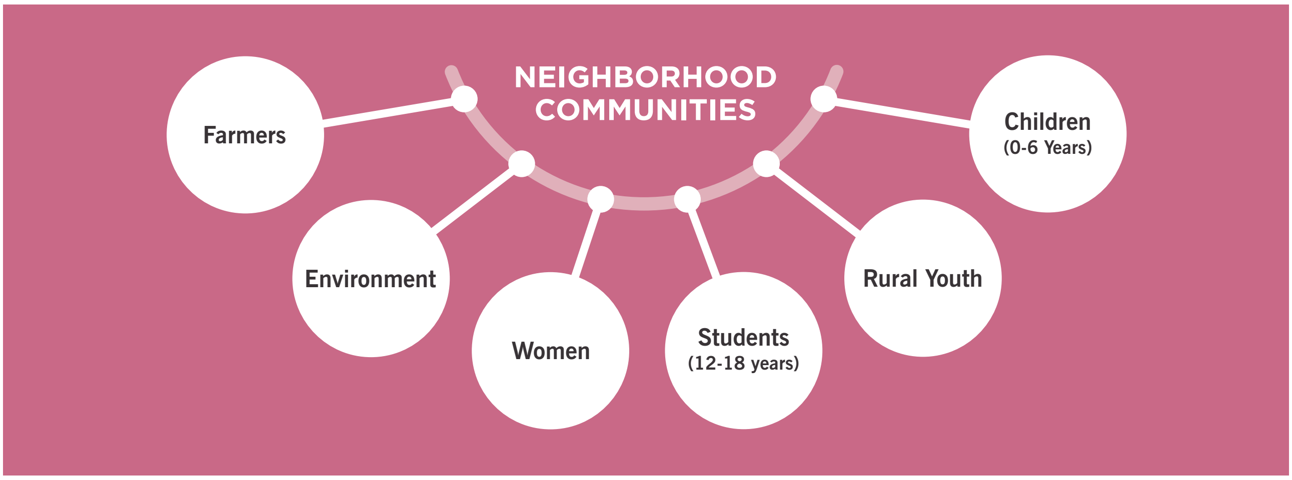
Governance

The Company has a multi-tiered Governance System which is led by its CSR Board Committee. The Committee ensures that execution of CSR activities is in accordance with its CSR Policy, and meets the quality parameters. This year the Committee met on April 18, 2016 and January 19 2017.	**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
The second level of oversight is provided by the Company's Executive Committee which reviews the CSR plans & programs every quarter.	**Executive Committee** • Approve the annual CSR plan & budget • Review the progress of the programs once every quarter
Project implementation is looked after by the Implementation Monitoring Committee (IMC) that meets every month to approve projects/partners and review progress. The IMC has appointed an internal auditor specifically for CSR programs and takes note of the audit findings every quarter.	**Implementation Monitoring Committee** • Monthly Meeting • Approve specific projects, partners and budgets • Monitor audit reports and their compliances • Review CSR programme process and outcomes

We have appointed Project Steering Committees and Projects Advisory Committees for each CSR project. The Project Steering Committee, comprising major of NGO partners and CSR team members, conducts monthly reviews to ensure project implementation. The Project Advisory Committee, comprising of concerned Government officials, NGO partners, CSR project leaders from Hindustan Zinc and subject matter experts, meets once every quarter to review the progress and design the way forward.

CSR Stakeholders and Initiatives

Our CSR interventions are focused on 184 communities around our operational areas, covering 66 Gram Panchayats in 12 Tehsils across Udaipur, Rajsamand, Chittorgarh, Bhilwara and Ajmer districts of Rajasthan. We also strive to undertake programs of national importance by partnering in state and central Government initiatives.



01 EDUCATION

Khushi Anganwadi Program

Khushi is a unique tri-partite Public–Private–People initiative aiming to reach 3055 Anganwadi centres (AWC) in select Blocks of Ajmer, Bhilwara, Chittorgarh, Rajsamand and Udaipur districts. The goal is to strengthen the efficacy of Government's Integrated Child Development Services (ICDS) Scheme to improve health and well-being of children below 6 years of age. This year, the program was re-launched in 2295 (out of 3055) Anganwadi Centers in association with reputed NGO partners like CARE India, 'Gramin Evam Samajik Vikas Sanstha', 'Seva Mandir' and 'Jatan Sansthan'. Through this program **we are reaching out to about 36,000 children in the 3 to 6 years age group, and another 63,000 children below 3 years of age.** The intervention has resulted in an increase in attendance of children at the centers and in the level of preschool education at the centers.

Nand Ghars

Vedanta has signed an MoU with the Ministry of Women and Child Development to construct 4,000 new age Anganwadis called Nand Ghars across India. The Company is contributing to this landmark initiative by **funding** ₹ 50 Crore to **Vedanta Foundation** for **setting-up 350 Nandghars in the next 24 months.** This model reimagines existing Anganwadis into Nandghars equipped with state-of-the art infrastructure including access to nutritious food, e-learning, clean water, skill development, sanitation and perennial solar power supply. We have also undertaken the renovation of 4 existing run-down AWCs and are upgrading them to Nand Ghars.

Shiksha Sambal

A vast majority of our young people in government schools fail in class X which often becomes the end of their educational journey. The Shiksha Sambal project aims to bring about a change by strengthening the learning of core subjects like English, Science and Mathematics subjects in Government senior schools. This year, the project has been

implemented in 57 schools across 5 districts, impacting the lives of 6194 children from classes 9th to 12th. The project is being implemented in partnership with Vidya Bhawan Society.

Unchi Udaan

Building on the base of Shiksha Sambal, we have introduced a new program this year, called Unchi Udaan. The goal is to prepare selected young students from the Shiksha Sambal pool, for entry into IITs and other streams of higher education, for which we are collaborating with Resonance and Vidya Bhawan. A two-stage selection process was held with 2327 students appearing for level-one and 575 for level two. The final batch of **28 students which includes 10 girls, will begin this exclusive 2-year residential program from April, 2017.**

College of Technology & Agricultural Engineering (CTAE) Scholarships

To encourage excellence in higher technical education, Hindustan Zinc has been awarding the Yashad Scholarships to toppers of different engineering branches at CTAE. The scholarship began in 2016, and this year eight meritorious students won this scholarship (of ₹ 50,000 each). The felicitation ceremony was held on March 26, 2017 at the CTAE's Annual Cultural Fest.

Coaching Classes for Govt. Competitive Exams

Unemployment and underemployment are major challenges in rural areas across India and the situation in our neighbouring communities is no different. Given how important jobs are for the youth, Hindustan Zinc has launched coaching classes in its neighbouring communities, to prepare youth for entrance examinations for government jobs like LDC , Gram Sevak, Police Constable, REET, Grade Second Teachers and Staff Selection Commission. In 2016, **342 youth received coaching** under this project. The project runs in partnership with Anushka Academy, Udaipur.

Yashad Sumedha Scholarships

Education is critical for the upliftment of any family or community. At Hindustan Zinc we recognize that many young people are not able to continue their education despite the potential they demonstrate because of their economic background. Our 'Yashad Sumedha Scholarship' program sponsors engineering students enrolled in government engineering colleges in Rajasthan having a family income of less than ₹ 1 lakh per annum. This year **50 students including 12 girls received the scholarship.** The project runs in partnership with Sumedha Foundation an NGO of Rajasthan.

Jeevan Tarang 'ZINC KE SANG'

This initiative was launched this year, with the objective of **mainstreaming people with disabilities** and sensitizing society around them. We have identified schools for deaf-mute, visually impaired and for children with learning disabilities near our Kayad Mine, Rampura Agucha Mine, Chanderiya Zinc Smelter and Udaipur. We have also reached out to experts to develop a long-term vision and roadmap for these institutes from 2017-18 onwards.

The Company's 51st Foundation Day (January 10, 2017) was the day when "Jeevan Tarang, Zinc Ke Sang" was formally launched, with children from multiple kinds of disabilities giving an emotionally charged performance before two-hundred employees of the Company.

'Disability Awareness Workshop for Corporates' – A 'Disability Awareness Workshop' was organized on February 27, 2017, where the leading industry representatives of Udaipur and the Company's Exco members took part. The keynote speakers were Ms. Shanti Raghavan, Founder of Enable India and Dr. Homiyar, Country Head for Benetech. The theme was to understand the potential of differently abled people and their unique abilities, and the need to bring a paradigm shift in our perception about them.

02 SUSTAINABLE LIVELIHOODS

Samadhan - an integrated agriculture & livestock development program

Agriculture is the backbone of the economy in most of our neighbouring communities. Given this pre-eminence of agriculture, Samadhan project was launched to ensure sustainable livelihoods through integrated farming systems and livestock development. This year, the **agriculture interventions reached 1,100 families** through capacity building of farmers on improved methods of agriculture, supporting them with quality inputs, technical know-how and also formation of farmers' interest groups. The livestock development program reached 2600 families with doorstep services of artificial insemination, consultations with subject matter experts, timely veterinary & vaccination camps. This year, National Farmers' Day (December 23, 2016) was celebrated with great enthusiasm at all our locations wherein more than 790 farmers participated. The Samadhan program is being run in partnership with BAIF Institute of Sustainable Livelihood Development.

Hindustan Zinc Mining Academy - Skilling for the Mining Sector

We have partnered with Government of India for its flagship program 'Skill India' with a view to upgrade skills in underground mining operations in the country and as part of our CSR initiatives. We have setup a Mining Academy in collaboration with the Skill Council for Mining Sector (a non- profit entity under the National Skill Development Corporation). Indian Institute of Skill Development is the technical training partner for this program. First batch of critical skill Jumbo Drill Operators (JDO) consisting of 37 trainees passed out in March 2015 and are all placed. In its second batch, 120 youths from Rajasthan are undergoing 18 months residential training in JDO and a third batch has also commenced. This initiative will improve the employability of the local youths through skill upgradation and enhance the country's limited resource pool in underground mining.

03 WOMEN'S EMPOWERMENT

Sakhi – 'by the women, for the women'

Women's empowerment is the key to ensure the overall development of not just families but also communities. Under our Sakhi initiative, we are working with the goal of promoting sustainable women-run grassroots institutions like Self Help Groups (SHGs) and their Federations. The program aims to set up 2,000 SHGs over the next 5 years, across 174 villages. This year, **505 SHGs have been formed with the association of more than 6,600 women.** A few production centers have also been set up to manufacture garments, papads, spices, etc. The high point of the program was the International Women's Day celebration, in which over 7,000 village women participated. The day became a platform which brought together not just these village women, but also women

employees of Hindustan Zinc, the spouses of employees, senior women officials and elected women representatives.

04 HEALTH & SANITATION

Vedanta Heart Hospital

About 16 years ago, Hindustan Zinc had helped the Udaipur District Hospital set up a specialized Heart Hospital, which brought state-of-art heart care services to the reach of the needy.

Sanitation

As part of an ongoing MoU with the District Administration, Hindustan Zinc constructed 1,116 individual household toilets in Chittorgarh District and 3 community toilet complexes in villages of Zawar, Kayad and Agucha.

Health Camps

We hold health and awareness camps in our neighborhood communities, both as taking curative services to the doorsteps of people as also conveying preventive care messages. This year, we conducted 140 such camps, covering approximately 22,400 people.

Company Run Hospitals

We have 6 Company run hospitals for our employees as well as the local population. During the year, these hospitals catered to around 1,03,000 external patients.

05 SPORTS & CULTURE

Promotion of culture

Hindustan Zinc believes that arts and culture brings communities closer.

For the last 2 years, we have been the lead sponsor for the **Udaipur World Music Festival.** The festival, a first of its kind brings together musicians from different countries and the festival is open to public at large. This year, the festival brought together about **150 musicians of diverse genres from 15 countries. More than 40,000 people attended these concerts over the 3 days.**

Rajasthan Diwas – this year, we supported the showcasing of Rajasthan's culture on the occasion of Rajasthan Diwas in Jaipur. There was an overwhelming response of people to this unique program, grand in scale.

Sports

The Company promoes various forms of sport. This year, the support benefitted over 10,000 people.

06 ENVIRONMENT

Project Gulshan

As part of a tripartite MoU signed between the Udaipur Urban Improvement Trust (UIT), Udaipur Nagar Nigam & Hindustan Zinc Limited, we are collaborating in the city's efforts towards greenery and beautification. This year we undertook regeneration of 2 hills in the city viz. Ratnagiri & Kali Pahadi. Plantation has been completed at Ratnagiri and that for Kali Pahadi is scheduled to be done in FY 2018.

Safety In Communities

We uphold safety as the utmost priority not only within the company but also across the supply chain. This year, we

extended this focus to our stakeholders and to our neighbourhood communities, through collaborative efforts by EOHS and CSR departments of Hindustan Zinc. Programs on Fire Safety, LPG Awareness, Road Safety and First Aid were organized for school children, rural women and neighbouhood communities. During the year, these safety initiatives reached out to more than 7900 people.

07 COMMUNITY ASSETS CREATION

The Chief Minister of Rajasthan initiated a special campaign this year – called the **'Mukhyamantri Jal Swavlamban Yojana'.** The objective is to enable water conservation in the state of Rajasthan. The Company became a proud partner in this campaign, undertaking various water conservation measures like building anicuts, contour trenches, deepening of ponds, water harvesting structures, etc.

Employee Volunteering

Trekk Ability

As a part of our Initiative to mainstream people with disability through Jeevan Taran Program; a trek was organized on March 5. 2017 for blind students of Vidhya Chakshu senior secondary school. Several employees of the Company volunteered to take these 10 blind students for Trekking. Each volunteer was paired with one visually-challenged student for the 8 km long trek to Badi and the forests & fields around. The Trek was sponsored by the Hindustan Zinc Exco members. The Trek gave a lot of confidence and happiness to the blind students and was certainly a life-changing day for the volunteers themselves.

Khushi Batiye Initiative

We celebrated 'Joy of Giving week' by spreading happiness to children that are part of the Company's Anganwadi Program. Through this initiative, 16 employees of Hindustan Zinc donated funds for purchase of toys, uniforms, shoes, sweaters and for refurbishing & painting of centers. These donations reached to total 25 AWCs and 500 children.

Mentorship

Under Shiksa Sambal Program, employees and their spouses have volunteered to mentor children in high schools, working on both academic and non-academic

(theatre, music, yoga, craft, self-defense, etc) aspects. In several locations, the senior managers have actively encouraged their team members to take out time for this noble cause.

Participation in International Women's day

We celebrated International Women's Day at all of our locations. The Company's female employees, spouses of male employees and other women participated in games, competitions and various cultural events organized during the celebration.

BEING SAFE

A step towards attaining ‘No Unsafe Act’

With more than 10,000 contract employees working day and night on various sites in Hindustan Zinc, imbibing safety as responsibility is imperative. Where compliances in safety play a decisive role, the informal interaction with these employees, knowing about the well-being of their families, do generate a sense of value for ‘Being Safe’. Since almost all of these employees come from rural joint families and are sole earning member, their safety and well-being becomes more meaningful. The entire family is dependent on them for the education, shelter and livelihood.

This project involves live interaction with employees, screening of specially crafted emotional films and silent meditation sessions. Post the screening of films, the employees express their views in the given circumstances. The 90-minute interaction also involves narration of case studies and incidents. During the sessions many employees realise the liberty they have been taking by compromising safety, beyond office premises, and pledge not to avoid henceforth.

‘Being Safe’ is a scientifically designed interactive project to reduce the mind stress of these employees and to bring in a sense of realization of ‘Being Safe’ for their own-self and for their families.

The realisation and learning is that incidents and accidents do not come with prior notice, they happen only because we fail to take notice of the causes of such unsafe acts. While most of the acts are avoidable, we also have to learn from the mistakes of others.

Conceptualised as part of communication project, ‘Being Safe’ has so far touched the lives of about 1600 contract employees, school children and families through 12 on-ground interactions. The ultimate objective of ‘Being Safe’ is to attain a status of ‘No Unsafe Act’ in any operation.

ASK FOR ZINC

Building Zinc Communicators in Hindustan Zinc

Every employee is an ambassador of the organization. Being in Hindustan Zinc, it is imperative that every employee knows about the usages of Zinc, Lead and Silver. Taking this purpose forward, as part of building Zinc Communicators, the communication campaign “Ask for Zinc” was launched. “Ask for Zinc” identifies various usages of Zinc & Silver and the role played by them in our daily lives.

Zinc is the fourth most utilized metal in the world. Its usage in medicines, toothpastes, cosmetics, plastics, batteries, electrical equipment along with its ability to bring strength to infrastructure makes Zinc a unique daily life metal. New areas like automobiles, railways, construction of bridges, solar panels, electricity generation & distribution system also identifies the wider role of Zinc and Silver.

The dissemination of this information amongst our internal and external stakeholders is what brings awareness about usages of Zinc and Silver and justifies the statement “We all have Zinc in our lives”.

So far over 30 research based information have been circulated to employees and each story carries a unique usage about Zinc and Silver.

RISK MANAGEMENT FRAMEWORK

We are exposed to a variety of risks inherent to global mining & resource organization and other common business risks. Our philosophy of risk management encompasses strategy & operations and seeks to pro-actively identify, address and mitigate existing and emerging risks.

The Company continuously identifies, assesses and mitigates risks arising out of internal as well as external factors under its robust Risk Management Framework. Risk Management is embedded in our critical business activities, functions and processes. Materiality and tolerance of risk is 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 appropriate mitigation plan. Formal discussion on risk management happens in unit level review meetings on 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. The control measures stated in the risk register are periodically reviewed to verify their effectiveness.

To ensure transparency and critical assessment, we have a Group Management Assurance System that co- ordinates the risk management framework, which is reviewed annually by the Audit Committee on behalf of the Board. This in turn is supported by a Board Level Risk Management Committee comprising of CEO, CFO and Chairman of the Audit Committee. Head of Group Management Assurance along with COO Mines and COO Smelters are permanent invitees.

Our principal risks, which have been assessed based on impact and likelihood, are described below. The order in which these risks appear does not necessarily reflect the likelihood of their occurrence or the potential magnitude of their impact on our business. While our Risk Management Framework is designed to help the organisation meet its objective, there can be no guarantee that our risk management activities will mitigate or prevent these or other risks from occurring.

01 Project Risk on Mining Projects

The Company's current and future mining projects may be significantly delayed by failures to receive timely regulatory approvals or their renewals, technical difficulties, natural disasters, human resource, technological and other resource constraints, resulting in significant cost overruns and delays. Timely execution of underground mining projects is critical to sustain output in future, considering the planned tapering of Rampura Agucha open cast mine and transition from predominantly open cast operations to fully under-ground operations in next year.

The Company continues to invest in ensuring the best-in-class human resources to complete large projects on time and within budgeted cost. Leading international consultants have been engaged for geotechnical modelling and optimization to endorse mining projects' technical feasibility and mine stability, considering the simultaneous operation of underground & open-cast mines at Rampura Agucha in the current year. Recognizing the importance of stability of the open-cast mine, geo-tech issues are a recent area of focus at Rampura Agucha. Renowned global contractors for shaft sinking, paste fill plant and mine development have been engaged for timely execution of the projects.

The project progress is closely monitored both at individual mine level and Company level. During the year we received clearances for the expansion of Sindesar Khurd and Zawar mines, both of which are going through a phase of rapid expansion. Our underground mines have ramped up at a CAGR of approximately 40% in the last five years and we are well positioned to fill the vacuum created by Rampura Agucha opencast mine.

02 Operational Risk

Disruptions in mining and production due to natural calamities, equipment failures, unexpected interruptions, non-availability of input materials at appropriate price & quality and industrial unrest will negatively impact business operations.

The Company's operational profitability is dependent upon the ability to produce metals at a low cost. Any disruption in the operations will impact production and costs. For this, the Company proactively undertakes process improvements programs, benchmarks with best-in-class peers, increases automation to reduce manual-interface and focuses on asset optimization & utilization. We are also pursuing savings and synergy initiatives in commercial activities, in order to further reduce costs and improve overall financial performance of our operations. These initiatives include aspects such as optimising supplier portfolio, consolidating purchases, combining logistics activities and developing closer relationships with key vendors to get benchmark performance and reduce costs.

The Company maintains cordial relations with employee unions and has comprehensive insurance programs to reduce risks.

03 People Risk

The Company's inability to recruit and retain skilled manpower will hamper operations and projects.

Our highly skilled workforce and experienced management team is critical in maintaining our current operations, implementing our development projects and achieving long-term growth. We continue to invest in initiatives to widen our talent pool. Looking at our multi-fold increase in underground operations, there could be a potential shortage of underground mining professionals. The Company is proactively engaging international contractors and recruiting expatriates & experts and is also supporting local skill development through a mining academy in Rajasthan under the aegis of National Skill Development Council. There are robust processes and systems in place for leadership development - to nurture and promote talent from within the Company. Succession plan is in place for most key positions. Besides, the Company follows best practices to retain employees including several employee engagement initiatives, reward & retention schemes and fast track growth for high-potential employees.

04 Reserve & Resource (R&R) and Discovery Risk.

The Company's longevity depends on its ability to access mineral resources that have desired geological characteristics enabling mining at competitive costs.

Our strategic priority is to extend the life of our resources at a faster rate than we deplete them, through continuous focus on drilling and exploration programs within our mine leases. In order to achieve this, we have a strong exploration organisation, latest tools & technologies and right fit contractors. The Company has more than doubled its R&R in last one decade and maintained overall mine life of over twenty-five years. The Company also engages the services of independent global experts annually to ascertain and verify the quantum and grade of R&R.

Additionally, the Company has an active portfolio of tenements where it has preferential rights under MMDRA Act 2015 at different stages of approval. Company is also looking at participating in mineral auctions opened up by the Government recently.

05 Health, Safety and Environment Risks (HSE)

The resource sector has inherent hazards and is therefore subject to extensive health, safety and environmental laws, regulations and standards. Any accident can result in property damages, injuries and potential fatalities as also adversely impact surrounding communities and environment. Such incidents may result in litigation, disruption of operations, penalties and loss of Company image & goodwill.

Our focus on HSE goes well beyond complying with international & local regulations and standards. Our key priorities are to protect our people, communities & the environment from harm and our business operations from interruptions.

The Company has implemented a set of standards that align our sustainability framework to globally accepted international practices like IFC, ICMM and OECD standards. We are now in our third year of a four-year planned journey named 'Aarohan' with DuPont to enhance our safety culture. The Company regularly monitors occupational health; hazard identification & analysis has been incorporated in all critical operations. We focus on capturing leading indicators to eliminate accidents while continuing to invest in training our employees and contractors, remaining focused on creating a zero-harm culture across the organization. All safety and environmental incidents are thoroughly investigated for root cause analysis and to eliminate recurrence. Tailing dam management has been a recent area of focus.

The Company has undertaken several initiatives to control air, water and sound pollution including dust suppression by water sprinklers and tankers, delayed blasting for minimal vibrations & dust, regular effluent monitoring and waste & tailing dam management to achieve our goal of zero discharge.

06 Community Relations Risk

Inability to provide inclusive growth to the communities and any disruption to their lives due to the Company's operations will cause discontent and can have negative impact on the Company's reputation and social license to operate.

Establishing and maintaining close links with stakeholders is an essential part of our sustainability journey. The Company regularly engages with local bodies and communities to help them identify their priorities through need assessment and articulate programs around assessed needs. We also seek to identify & minimise potential negative impact caused by our operations and act transparently and ethically. We promote dialogue with communities and have developed grievance mechanisms at each of our locations. Further details of CSR activities and environment management are included in the CSR & sustainability sections respectively and also covered in our Sustainability Report.

07 Currency and Price Risk

Price and demand of the Company's finished products are inherently volatile and remain strongly influenced by global economic conditions. Any fluctuation in finished product prices or currency has direct impact on the Company's revenue and profits.

The Company considers exposure to commodity price fluctuations to be an integral part of our business and its usual policy is to sell its products at prevailing market prices. The Company has a well-defined policy framework wherein no speculative positions are taken and limited commodity hedging is done with an endeavor to achieve month-average rates both in currency and metal prices. The Company follows the policy of taking forward cover for net foreign currency exposure, if the net is payable in foreign currency. Company takes very limited exposures in non USD currencies.

Company also takes forward cover for next twelve months for projects on a rolling basis. All policies are periodically reviewed basis local and international economic environment.

08 Financial Risk

Like any large and complex business, the Company's operations are also prone to interest rate volatility on treasury funds, counter party risk and insurance risk. If the financial policies are not designed well or not implemented rigorously, it could lead to control breakdown and impact the Company's cash reserves, profitability, growth and image.

The Company follows a conservative treasury policy revolving around capital protection and yield maximisation, in that order. Treasury operations are managed in an overall framework encompassing segregation of duties, third party confirmations and supplementary management assurance audits. The Company policy restricts trading or speculative calls or dealing in exotic structured products.

Furthermore, the Company has defined policies to mitigate counter party risks by making substantially all its sales on a secured basis while its investments are only in highly rated debt instruments with defined counter party limits. The Company's investment portfolio is periodically reviewed by an external agency certifying 'highest' credit quality basis evaluation of underlying portfolio and exposures. The Company runs a well- structured insurance program balancing risks and costs and encompassing loss of profits and project risks, in addition to traditional asset risks.

09 Water, Energy and Land

Natural resource companies such as ours are highly dependent on availability of water, energy and land. Lack of availability of these resources will hamper Company's operations and impact future projects.

The Company endeavours to minimise its environment footprint and has several structured programs to reduce energy and water consumption and maximise utilisation of solid waste.

Supporting water conservation efforts of the Government is our stated priority and the Company maintains several water sources in conjunction with the Government. A Sewage Treatment Plant (STP) was also set up in Udaipur which not only reduces inflow of sewage into local lakes but also provides a sustainable water source to its operations. Company is also considering the city's request for second phase of STP.

The Company is self-sufficient in power through coal-based captive power generation for which it sources high calorific value coal from the global market in addition to established linkages from indigenous sources. The Company has also invested in wind energy. Fly ash generated in power plants is sold to cement industry while our major waste from zinc smelters is neutralised in an environment friendly manner for which trials are ongoing for usage in construction and infrastructure industry.

10 Political, Legal and Regulatory Risks

Non-compliance with applicable laws & regulations as well as changes in the Government policies, such as changes in royalty mechanism or rates, reduction in export incentives, changes in tax structure, cancellation or non-renewal of mining leases & permits and reduction or curtailment of duty & tax benefits available may adversely impact operations and hamper growth.

The Company has a strong team of professionally qualified experts to manage compliance with laws and has built-in adequate checks and balances to monitor compliance through technology. The Company's well thought out tax planning strategies may sometimes get challenged resulting in long disputes which may not always go in Company's favour. Similarly, changes in royalty or additional levies or change in regulations could impact the Company’s profitability and operations.

The Company proactively communicates with all Government functionaries to ensure that its suggestions and views are heard before policy making which may impact the industry and the Company's business. The Company believes in responsible policy advocacy.

The Company does not contribute funds to any political party.

11 Fraud and Cyber Security

With ever increasing reliance on information technology, there is enhanced risk of security breaches resulting in misappropriation of funds or assets. Such breaches could bring the operations to a standstill or worse.

The Company has an IT security framework in place and same is periodically reviewed. Several safeguards and policies have been put in place to protect its network from cyber security attack. They are firewalls, intrusion detection & prevention systems, incident management system, content filtering, anti-spamming system, anti-virus and anti-spywares, password policy, encryption, backup, failover systems, disaster-recovery policy etc.

Company carries out periodic penetration testing and vulnerability assessment.

There is a strong Code of Conduct and the Company encourages reporting of irregularities through its strong and well communicated whistle- blower mechanism and is governed by an Ethics Committee.

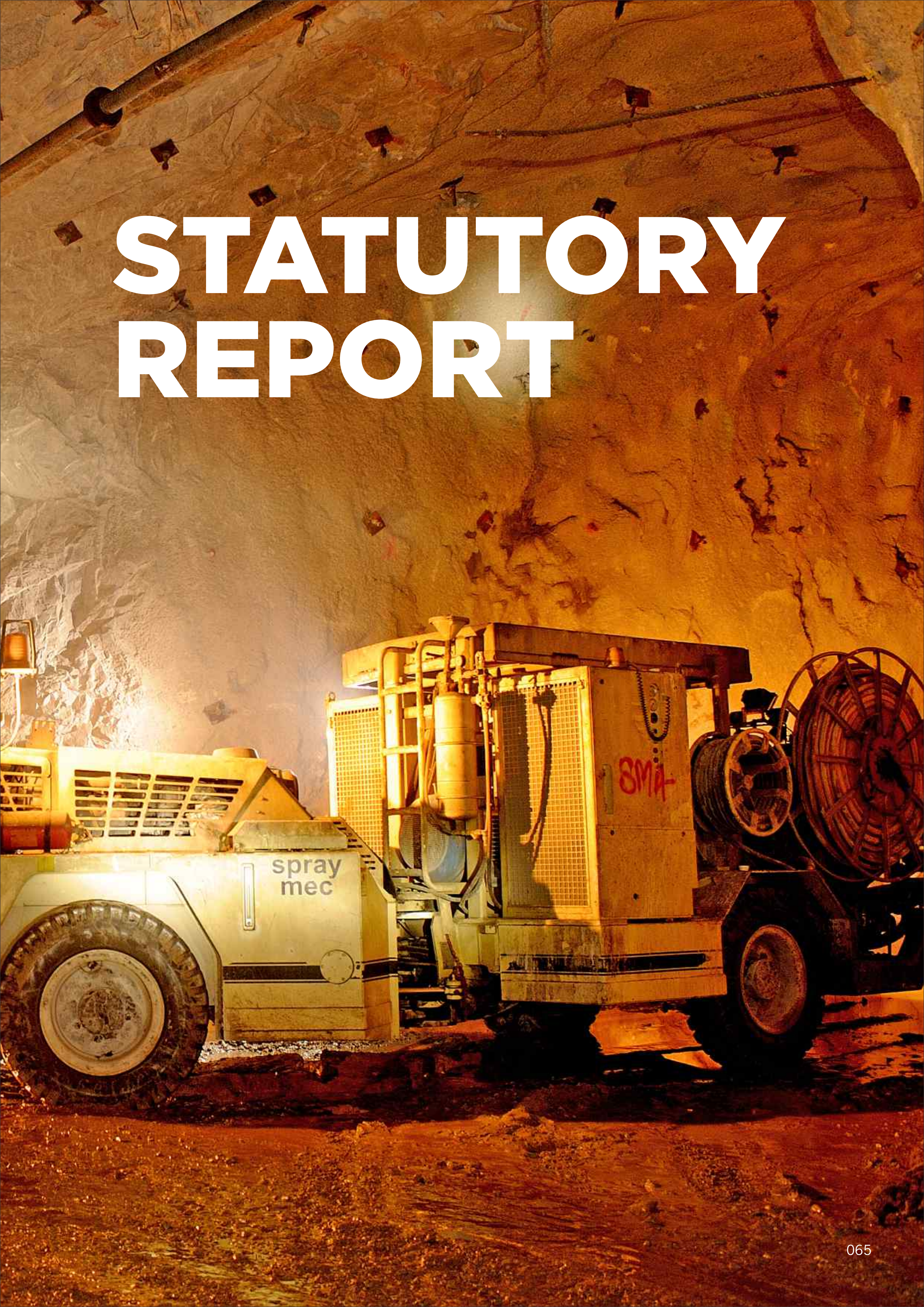
The weakest link in the security chain is the human element and we are further automating our processes and internal controls to minimise human intervention in all our operations.

Internal Controls

We have effective and adequate internal audit and control systems, commensurate with our business size. Regular audits of our operations are undertaken to ensure that high standards of internal controls are maintained at each level.

These consist of comprehensive internal and statutory audits, which are conducted by internationally reputed audit firms. Independence of the audit and compliance function is ensured by the auditors reporting directly to the Audit Committee.

STATUTORY REPORT



DIRECTORS' REPORT

Dear Members,

The Directors are pleased to inform that Hindustan Zinc achieved new operational performance benchmarks, highest ever profits and declared the highest ever dividend during the year.

I. FINANCIAL PERFORMANCE

We share with you our 51st Annual Report, together with the statement of Audited Financial Statements for the year ended March 31, 2017. The Company's performance, grouped in accordance with the new accounting standards Ind-AS, is summarized below:

Financial Information

(₹ in Crore)

	FY 2017	FY 2016
Total Gross Revenues (excluding Other Income)	18,798	15,463
Profit before depreciation, interest and tax	12,213	9,385
Less: Interest	202	17
Less: Depreciation and amortization expense	1,811	745
Profit before tax	10,200	8,623
Net tax expense/(benefit)	-1,884	-448
Profit for the year	8,316	8,175
Earnings per equity share, ₹	19.68	19.35

Total Revenue Including Other Income

The Company reported total gross revenue excluding other income of ₹ 18,798 Crore, an increase of 21.6% compared to FY 2016. The increase was primarily on account of strong zinc, lead & silver prices and higher production, partly offset by lower zinc volumes, due to lower mined metal availability in first half.

The 'Other income' was ₹ 2,474 Crore during the year, down 9.3% as compared to the previous year, on account of smaller investment corpus subsequent to Golden Jubilee dividend payout during the year, partly offset by higher rate of return.

Production Cost

Net zinc metal cost, without royalty, during the year, was higher by 5.8% in INR and 3.2% in USD terms, at ₹ 55,679 ($ 830), compared with the previous year. The increase was on account of lower integrated production, higher coal & input commodity prices, lower average grades due to change in mining mix and lower by-product credit.

Operating margin

The above revenue and production cost resulted in profit before depreciation, interest and tax (PBDIT) of ₹ 12,213 Crore in FY 2017, up 30.7%.

Net Profit

The Company reported record net profit of ₹ 8,316 Crore for the year, marginally higher than previous year. The impact of higher PBDIT was partly offset by higher tax, higher depreciation and lower other income during the year.

Earnings Per Share (EPS)

The EPS for the year was ₹ 19.68 per share as compared to ₹ 19.35 per share in financial year 2015-16.

Dividend

On March 22, 2017, the Board of Directors declared a Special Interim dividend of 1375% i.e. ₹ 27.50 per share on every share of ₹ 2 each. This dividend entails an outflow of ₹ 13,985 Crore, including dividend distribution tax (DDT). The Special dividend was in addition to the first interim dividend paid (₹ 1.90 per share or 95%) in October 2016 of ₹ 966 Crore, including DDT. The total dividend outflow including DDT for FY 2017 was ₹ 14,951 Crore (₹ 29.40 per share of ₹ 2 or 1470%), against FY 2016 dividend of ₹ 14,137 Crore (₹ 27.80 per share or 1390%). In view of the Special dividend paid in March 2017, no final dividend was recommended.

Credit Rating and Liquidity

CRISIL has reaffirmed the Company's long-term rating of AAA/Stable and short-term rating of A1+. The Company's strong financial risk profile is driven by its sustained strong liquidity and conservative capital structure as well as its integrated operations, highly competitive cost position and high-grade reserves.

The Company follows a conservative investment policy and invests in high quality debt instruments. As on March 31, 2017, net cash and cash equivalents were ₹ 16,065 Crore, which excludes ₹ 7,908 Crore of short term commercial paper raised to meet the special interim dividend fund requirement to avoid tax inefficiencies. The gross investments were ₹ 23,972 Crore in high quality debt instruments including ₹ 19,336 Crore in mutual funds and ₹ 4,446 Crore in bonds.

Cash Flows

(₹ in Crore)

Particulars	FY 2017	FY 2016
Opening Cash*	35,272	30,898
Add: EBITDA**	9,734	6,667
Add: Net Interest Income	2,166	2,699
Less: Income Tax & Dividend	-21,310	-5,025
Less: Capital Account Payments	-2,008	-1,550
(Increase) / Decrease in Working Capital & Others	118	1,583
Closing Cash Balance	23,972	35,272

(*) Includes Cash & Equivalents (refer Note 11 of the Audited Financial Statements) and Current Investments (refer Note 9 of the Audited Financial Statements)

(**) Earnings before Interest, Tax, Depreciation and Amortization expenses and Income on investments

Gross Working Capital

Gross working capital represented by inventory, sundry debtors and loans & advances increased from ₹ 1,639 Crore to ₹ 2,486 Crore as at March 31, 2017 primarily due to accretion of ore and mined-metal inventory. The working capital cycle was 52 days in FY 2017 as compared to 40 days in FY 2016, calculated based on new Ind AS guidelines.

Gross Block

The gross block during the year increased from ₹ 18,952 Crore to ₹ 20,975 Crore. This was largely due to the on-going mining projects and other sustaining capex.

Capital Employed

The total capital employed as at March 31, 2017 was ₹ 14,740 Crore, as compared to ₹ 2,114 Crore at the end of previous fiscal year. The increase is mainly due to higher dividend liability last year and lower surplus cash this year

Contribution to the Exchequer

Your Company has contributed ₹ 11,095 Crore during FY 2017, in terms of royalties, taxes and duties to the exchequer on cash basis.

II. OPERATIONAL PERFORMANCE

Production

Mined metal production was 9,06,984 MT, up 2% from a year ago and the highest ever. The underground mines ramped up significantly during the year to achieve a substantial 44% y-o-y increase in ore production and 32% y-o-y increase in mined metal production.

Integrated refined zinc and saleable lead production this year were a record 6,70,078 MT and 1,39,009 MT, down 12% and 1% respectively. The total refined zinc was 6,71,988 MT, down 11% from a year ago, while total saleable lead production was 1,39,009 MT, which is lower by 4% compared to FY 2016. The decrease was on account of low availability of mined metal in first half due to the cyclical pattern of the Rampura Agucha open cast mine and as per plan.

During the year, production of integrated saleable silver increased by 7% to an all-time high of 453 MT on account of higher volume and grades from Sindesar Khurd mine.

Our total power generation in FY 2017 was 3,345 million units, down 3.5% from last year. Our wind power generation was up 8% at 448 million units.

> We delivered highest ever mined metal production in FY 2017

Sales

The refined zinc metal sales in the domestic market during the year was 4,72,824 MT (inclusive of imported Zinc metal of 24,072 MT), while export sales accounted for 2,23,176 MT. The aggregate sales were lower by 8.5% than previous year. Lead metal sales in the domestic market were 1,17,313 MT, while export sales were 20,940 MT lower by 4.9% compared to previous year. This reduction was due to lower cyclical mine production in first half of the year resulting in lower metal volumes.

Silver sales were 449 MT in FY 2017, all in the domestic market and 5.4% higher than previous year.

III. RESERVE & RESOURCE (R&R)

Our exploration activity has consistently added to our reserve and resource base over the last several years. We have added 26.40 million MT to our R&R this year, prior to a depletion of 11.90 million MT during the period. Total R&R on March 31, 2017 were 404.40 million MT containing 36.09 million MT of zinc-lead metal and approximately 32 kT of silver.

> Our active exploration has led to over 25+ years of mine life

IV. PROJECTS

The Company remains on track for achieving 1.2 mtpa mined metal capacity by FY 2020.

The transition to underground mining is progressing well as share of underground mined metal production increased from 40% in FY 2016 to 52% in FY 2017. Our ore production from underground mines increased by 44% compared to last year. Further, total mine development reached 66,545 meters during the year which is higher by 15% from a year ago.

During the year, Rampura Agucha underground mine produced 1.4 million MT of ore as compared with 0.2 million MT a year ago. The south ventilation shaft sinking was completed towards the end of the year, while the main shaft sinking reached its ultimate depth of 955 metres. Further, cold commissioning of both production & service winders was completed during the quarter as shaft equipping work continues to progress satisfactorily.

Sindesar Khurd mine achieved record ore production of 3.7 million MT of ore in this year against 2.97 million MT in the previous year. The winder foundation work for the shaft was completed while head gear erection is nearing completion. The new mill of 1.5 mtpa capacity was completed in record 14 months and is running smoothly. We plan to reach our targeted capacity of 4.5 million MT this year, ahead of schedule.

Zawar mine achieved record ore production of 1.8 million MT during the year. Environmental clearance of 4 mtpa ore production & beneficiation, along with other statutory permissions were received towards the end of the year. Zawar mill expansion and associated power up-gradation project are at advanced stages with completion planned in Q2 of FY 2018.

The recent fumer project, which has been undertaken to further improve profitability and metal recoveries from the Company's hydro metallurgical plant, is progressing with scheduled completion by mid FY 2019.

The Company successfully commissioned 16 MW of captive solar farms in March 2017. This project will help the Company partly meet its renewable power obligation and has been set up on waste lands.

V. OUTLOOK

Projects: The Company's transition to underground mining is progressing well and we expect the share of mined metal to increase from 52% in FY 2017 to 80% in FY 2018. Both, Rampura Agucha and Sindesar Khurd shafts are on track for completion in FY 2019. The capex on the on-going mine expansion projects, fumer and smelter de-bottlenecking will be around $350-360 million in FY 2018.

Operations: In FY 2018, mined metal production is expected to be higher than FY 2017. Refined zinc-lead metal production will be around 950 kt, which will be evenly spread through the year. Silver production will be over 500 MT.

Financial: Dollar COP (excluding royalty) is expected to be marginally higher based on current levels of coal & input commodity prices. Treasury income is expected to be lower due to reduction in investment corpus and current softening in rates while tax rate for FY 2018 is expected to be slightly higher than MAT.

VI. HEALTH, SAFETY AND ENVIRONMENT (HSE)

The Company's efforts towards reinforcing a positive safety culture have resulted in reduction of total Lost Time Injuries from 23 last year to 15 this year, while the Lost Time Injury Frequency Rate reduced to 0.30 from 0.50 a year ago. However, the Company is deeply anguished to report an unfortunate accident at the project site post mill commissioning, where a rare crane collapse caused four fatalities of contractor employees. The accident was fully investigated and corrective action was taken at all our sites.

HSE initiatives have been discussed in detail from page 45 to 51 in 'Business Review', which forms a part of this Annual Report.

VII. CORPORATE SOCIAL RESPONSIBILITY (CSR)

Company's CSR policy focuses on Education, Sustainable Livelihoods, Women's Empowerment, Health, Water & Sanitation, Sports & Culture, Environment, and Community Development. Detailed policy is available on our website http://hzlindia.com/social_policy.aspx

During the year, we spent ₹ 49.40 Crore on our CSR programs and also contributed ₹ 50 Crore to Vedanta Foundation for setting-up Nandghars under our Bal Aanganwadi program. In addition, the Company has also provided ₹ 543 Crore as contribution to District Mineral Foundation which will be utilized for the interest and benefit of the persons and areas affected by mining related operations, which is also quasi CSR. Details of the same are provided in Annexure 5.

For details on existing CSR projects, please refer to page 52 to 57 of 'Business Review', which forms a part of this Annual Report.

VIII. DIRECTORS

During the year under review, following changes took place in the Board of Directors of your Company. Ms. Reena Sinha Puri, Ms. Farida M Naik and Mr. Nikunja Bihari Dhal were appointed as Directors on the Board, while Mr. Akhilesh Joshi, Ms. Sujata Prasad, Mr. Sudhaker Shukla and Mr. Nikunja Bihari Dhal ceased to be directors during the year.

IX. MANAGEMENT DISCUSSION AND ANALYSIS

The Business Review section of this Annual Report gives a detailed account of your Company's operations and the market in which it operates, including its initiatives in areas such as human resources, sustainability and risk management.

X. CORPORATE GOVERNANCE AND BUSINESS RESPONSIBILITY REPORT

As a listed company, necessary measures are taken to comply with the listing agreements of the Stock exchanges. A report on Corporate Governance, along with a certificate of compliance from the statutory auditors, forms part of this report. Further, Business Responsibility Report, describing the initiatives taken by your Company from an Environmental, Social and Governance perspective, also forms a part of this report. Various disclosures as required under section 134 and 135 of the Companies Act 2013 are annexed to this report or covered in the Corporate Governance Report, such as Related Party Transactions; Information and details on conservation of energy, technology absorption, foreign exchange earnings and outgo; extract of annual return; constitution of various Board level committees; Annual Report on CSR.

XI. DIRECTORS' RESPONSIBILITY STATEMENT

As required under Section 134(5) of the Companies Act, 2013, the Directors hereby confirm that:

i In the preparation of the annual accounts, the applicable accounting standards read with requirements set out under Schedule 3 to the act, have been followed and there are no material departures in the same.

ii. The Directors have selected such accounting policies, applied them consistently and made judgements & estimates that are reasonable and prudent so as to give a true and fair view of the state of affairs of the Company at the end of the financial year and of the profits of the Company for that period.

iii. The Directors have taken proper and sufficient care for the maintenance of adequate accounting records in accordance with the provisions of this Act, for safeguarding the assets of the Company and for preventing and detecting fraud and other irregularities.

iv. The Directors have prepared the annual accounts on a 'Going Concern' basis.

v. The Directors have laid down internal financial controls to be followed by the Company and that such internal financial controls are adequate and were operating effectively, and

vi. The Directors have devised proper systems to ensure compliance with the provisions of all applicable laws and that such systems are adequate and operating effectively

XII. AUDITORS

The Company had appointed M/s. SR Batliboi & Co. LLP, Chartered Accountants, as Statutory Auditors of the Company to conduct audit of Financial Statements for the year ended March 31, 2017. The Notes to financial statement referred to in the Auditors' Report are self-explanatory and do not call for any further comments. The Auditors' Report does not contain any qualification or reservation. The only adverse remark is for not fulfilling the criteria of adequate number of Independent Directors which is expected to be complied soon and not having a Woman Director for part of the year.

Pursuant to the orders issued by the Central Government under section 148 of The Companies Act, 2013, the Board has appointed M/s K G Goyal & Co. Cost Accountants for conducting the audit of the cost accounting records maintained by the Company for all its products and M/s V M & Associates, Company Secretaries as the Secretarial Auditors for conducting the Secretarial audit of the Company.

As per provisions of Section 136 of the Companies Act, 2013, the Annual Report including the Audited Accounts for the year will be sent to all the Shareholders.

XIII. PARTICULARS OF EMPLOYEES

Disclosures pertaining to remuneration and other details as required under Section 197(12) of the Act, read with Rule 5(1) of the Companies (Appointment and Remuneration of Managerial Personnel) Rules, 2014 are attached to this report.

In terms of the provisions of Section 197(12) of the Companies Act, 2013 read with Rules 5(2) of the Companies

(Appointment and Remuneration of Managerial Personnel) Rules, 2014, a statement showing the names and other particulars of employees drawing remuneration in excess of the limits set out in the said Rules forms part of the Report.However, having regard to the provisions of the first proviso to Section 136(1) of the Companies Act, 2013, the Annual Report excluding the aforesaid information is being sent to the Members of the Company. The said information is available for inspection at Registered Office of the Company during working hours. Any member interested in obtaining such information may write to the Company Secretary at the registered office and the same will be furnished on request. Further the details are also available on the Company's website: www.hzlindia.com.

XIV. ACKNOWLEDGEMENTS

The Board of Directors places on record its sincere appreciation of the contribution made by the employees and the employees' unions in the success of the Company. The Directors also sincerely thank the Central Government and the State Governments of Rajasthan, Andhra Pradesh, Gujarat, Karnataka, Tamil Nadu, Maharashtra, Jharkhand and Uttarakhand; and the bankers, auditors, vendors, customers and the shareholders of the Company for their continued support.

For and on behalf of the Board of Directors

Sunil Duggal	**A R Narayanaswamy**
CEO & Whole-time Director	Director

Place: Mumbai
Date: April 20, 2017

ANNEXURE 1

Particulars of technology absorption and foreign exchange earnings and outgo, as per Section 134(3)(m) of the Companies Act, 2013 and the rules made therein and forming part of the Directors' Report for the year ended March 31, 2017.

A) Conservation of Energy

1. Dariba CPP is the first and only running power plant in Rajasthan to run completely on Sewage Treated water.

2. 16 MW solar power plants have been installed in our premises utilizing tailing dam and secured land fill land which was otherwise wasted.

3. Dariba CPP is utilizing excess steam generated in lead plant process for power generation purpose thus saving water, heat energy and power. This project was recognized with certificate of merit under Process Innovation category by Frost and Sullivan.

4. All the ducts in power plants have been analyzed through computational fluid dynamics software and modifications have been carried out to reduce pressure drop and save energy.

5. Continuous re-utilization of bottom ash water in all CPPs to save fresh water through in-house modification and utilizing the coal settling pond.

B) Technology Absorption

a. Specific areas in which R&D has been carried out by the Company in FY 2017

1. Pilot plant was commissioned for the treatment of slag generated at Pantnagar Metal Plant to recover copper sulphate suitable for consumption in mines.

2. To reduce manganese levels in cell house, manganese reduction campaign was commenced in Dariba.

3. Use of Zinc Cadmium alloy dust as partial replacement of SHG zinc dust was successfully implemented at Chanderiya.

4. Fly-ash as partial replacement of cement in paste fill plants has been explored and results were found encouraging.

5. Plant scale trials for Rampura Agucha tails flotation were conducted and 100 MT bulk concentrate of total metal content 40% was produced. Further trials for 1000 MT batch are planned.

6. Experiments were done to consume different variety of cements and additives in shotcrete process in mining and successfully implemented.

7. A process route for recovering sodium sulphate crystals from RO reject streams was explored in lab scale with > 98% crystal purity and >40% recovery. An alternative route for higher crystal recovery is being explored.

8. Testing of PW zinc dust instead of HG zinc was done. No adverse impact of impurities was found on the purification system.

9. An alternative route for rejection of iron from hydrometallurgical streams has been explored and a detailed flowsheet has been tested in lab scale, which resulted in an appreciable grade of 40-45% iron in goethite residue. Further testing of flowsheet is under progress.

10. Circuit survey and process improvement studies to improve recoveries from beneficiation plant at Zawar mines were carried during the year.

b. Benefits derived as result of above R&D

1. Focusing on wealth out of waste, processes developed for recovery of silver, antimony, copper and bismuth from secondaries.

2. Enabling in-house production of reagents like copper sulphate and sodium sulfate used in smelters

3. Established alternate cost effective graphite depressant and reagents to reduce commodities reagent consumption.

4. Stepping towards zero waste zinc hydrometallurgical smelting by generating value added products from Jarosite.

5. Process improvement of grinding circuit through modeling and simulation.

c. Future Projects for R&D in FY 2018

1. Validation of Copper Bismuth slag leaching flowsheet.
2. Usages of waste materials in road paver blocks.
3. Process for recovery of Nickle & Cobalt from purification cake.
4. Finding alternative reagents for silver flotation and graphite, pyrite depressant.

C) Foreign Exchange Earnings and Outgo

During the year, foreign exchange outgo was ₹ 1,586 Crore (which includes import of capital goods, stores & spares, coal, consumables, consultancy, travelling etc.), while foreign exchange earned was ₹ 4,173 Crore.

FORM 'A'

FORM FOR DISCLOSURE OF PARTICULARS WITH RESPECT TO CONSERVATION OF ENERGY

	Particulars	Unit	Year ended March 31, 2017	Year ended March 31, 2016
A	**Electricity, Power Generation & Fuel consumption**			
	Purchase Units	Million Kwh	264	261
	Total Amount	₹ Cr	210.48	139.31
	Average rate of purchasing	₹/kwh	7.98	5.34
	CPP - Units generated from fuel oil			
	Own Generation Units (from Fuel Oil)	Million Kwh	1	3
	Quantity Consumed			
	LSHS/FO	MT	0	274
	HSD	KL	453	797
	Total Amount	₹ Cr	2.33	5.07
	Average cost of fuel per Kg	₹/kg	60.01	54.64
	Average cost of generation	₹/kwh	22.5	16.43
	Unit generated per unit of fuel (LSHS/FO/HSD)	kwh/kg	2.79	3.32
	CPP - Units generated from Coal			
	Own Generation Units (from Coal)	Million Kwh	3,241	3,348
	Quantity Consumed			
	Coal	MT	15,87,724	16,32,488
	LDO	KL	240	397
	Total Amount	₹ Cr	1,026.26	965.98
	Average cost per Kg (Coal)	₹/kg	6.46	5.92
	Average cost per Kg (LDO)	₹/kg	54.45	58.54
	Average cost of generation	₹/kwh	3.56	3.49
	Unit generated per unit of fuel (Coal)	kwh/kg	2.24	2.25
B	**Fuel consumption for Metal Production**			
	(a) L.P.G./Propane			
	Quantity	Million Kg	8.21	5.39
	Total Amount	₹Cr	29.29	20.27
	Average cost per Kg	₹/Kg	35.68	37.60
	(b) L.D.O./LSHS/FO			
	Quantity	KL	18,091	11,602
	Total Amount	₹ Cr	52.34	26.79
	Average cost per Ltr	₹/Ltr	28.93	23.09
	(c) Coal for Steam & Others			
	Quantity	MT	28,522	30,888
	Total Amount	₹Cr	17.2	18.82
	Average cost per MT	₹/MT	6,025	6,092
	(d) Met Coke & Coke breeze			
	Quantity	MT	1,31,478	1,27,018
	Total Amount	₹Cr	255.56	205.55
	Average cost per MT	₹/MT	19,437	16,183

Certificate of Compliance with the Code of Conduct Policy

As provided under clause 17 (5) (a) of the SEBI (LODR) Regulation 2015, all Board Members and the Senior Management personnel have confirmed compliance with the Business Ethics and Code of Conduct for the year ended on March 31, 2017.

For **Hindustan Zinc Limited**

Sunil Duggal
CEO & Whole-time Director

Place: Mumbai
Date- April 20, 2017

Form No. MR-3

Secretarial Audit Report

For The Financial Year Ended 31st March, 2017

(Pursuant to section 204(1) of the Companies Act, 2013 and Rule No. 9 of the Companies (Appointment and Remuneration of Managerial Personnel) Rules, 2014)

To,
The Members,
Hindustan Zinc Limited
Yashad Bhavan,
Udaipur – 313 004 (Rajasthan)

We have conducted the Secretarial Audit of the compliance of applicable statutory provisions and the adherence to good corporate practices by **Hindustan Zinc Limited** (hereinafter called **"the Company"**). Secretarial Audit was conducted in a manner that provided us a reasonable basis for evaluating the corporate conducts/statutory compliances and expressing our opinion thereon.

Based on our verification of the Company's books, papers, minute books, forms and returns filed and other records maintained by the Company and also the information provided by the Company, its officers, agents and authorized representatives during the conduct of Secretarial Audit, we hereby report that in our opinion, the Company has, during the audit period covering the financial year ended on March 31, 2017 ('Audit Period') complied with the statutory provisions listed hereunder and also that the Company has proper Board-processes and compliance-mechanisms in place to the extent, in the manner and subject to the reporting made hereinafter:

We have examined the books, papers, minute books, forms and returns filed and other records maintained by the Company for the financial year ended on March 31, 2017 according to the provisions of:

(i) The Companies Act, 2013 (the Act) and the Rules made thereunder;

(ii) The Securities Contracts (Regulation) Act, 1956 ('SCRA') and the Rules made thereunder;

(iii) The Depositories Act, 1996 and the Regulations and Bye-laws framed thereunder;

(iv) Foreign Exchange Management Act, 1999 and the Rules and Regulations made thereunder to the extent of Foreign Direct Investment, Overseas Direct Investment and External Commercial Borrowings; (Not applicable to the Company during the Audit Period)

(v) The following Regulations and Guidelines prescribed under the Securities and Exchange Board of India Act, 1992 ('SEBI Act'):

(a) The Securities and Exchange Board of India (Substantial Acquisition of Shares and Takeovers) Regulations, 2011;

(b) The Securities and Exchange Board of India (Prohibition of Insider Trading) Regulations, 2015;

(c) The Securities and Exchange Board of India (Issue of Capital and Disclosure Requirements) Regulations, 2009; (Not applicable to the Company during the Audit Period)

(d) The Securities and Exchange Board of India (Share Based Employee Benefits) Regulations, 2014; (Not applicable to the Company during the Audit Period)

(e) The Securities and Exchange Board of India (Issue and Listing of Debt Securities) Regulations, 2008; (Not applicable to the Company during the Audit Period)

(f) The Securities and Exchange Board of India (Registrars to an Issue and Share Transfer Agents) Regulations, 1993 regarding the Companies Act and dealing with client;

(g) The Securities and Exchange Board of

India (Delisting of Equity Shares) Regulations, 2009; (Not applicable to the Company during the Audit Period)

(h) The Securities and Exchange Board of India (Buyback of Securities) Regulations, 1998; (Not applicable to the Company during the Audit Period) and

(i) The Securities and Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations, 2015

(vi) As confirmed, following other laws are specifically applicable to the Company for which the Management has confirmed that the Company has devised proper systems to ensure compliance with the provisions of all applicable laws and that such systems are adequate and operating effectively:

(a) The Mines Act, 1952 and Rules made thereunder; and

(b) The Mines and Minerals (Development and Regulation) Act, 1957 and the Rules made thereunder.

We have also examined compliance with the applicable clauses of the following:

i. Secretarial Standards issued by The Institute of Company Secretaries of India;

ii. The Listing Agreements entered into by the Company with BSE Limited and National Stock Exchange of India Limited.

During the period under review the Company has complied with the provisions of the Act, rules, regulations, guidelines, standards, etc. as mentioned above.

We further report that

The Board of Directors of the Company is duly constituted with proper balance of Executive Directors, Non-Executive Directors except that with regard to the requirement of having at least one half of the Board of Directors comprising of Independent Directors in terms of Regulation 17 of the Securities and Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations, 2015, the Company falls short by one Independent Director and a Woman Director for part of the year. The changes in the composition of the Board of Directors that took place during the period under review were carried out in compliance with the provisions of the Act.

Adequate notice is given to all Directors to schedule the Board Meetings, Agenda and detailed notes on Agenda were sent at least seven days in advance, and a system exists for seeking and obtaining further information and clarifications on the Agenda items before the meeting and for meaningful participation at the meeting.

Majority decision is carried through while the dissenting members' views, if any, are captured and recorded as part of the minutes.

We further report that there are adequate systems and processes in the Company commensurate with the size and operations of the Company to monitor and ensure compliance with applicable laws, rules, regulations and guidelines.

We further report that during the audit period the Company has not undertaken any event/action having a major bearing on the Company's affairs in pursuance of the above referred laws, rules, regulations, guidelines, standards, etc.

Place: Jaipur
Date: April 20, 2017

For **V. M. & Associates**
Company Secretaries
(ICSI Unique Code P1984RJ039200)

CS Manoj Maheshwari
Partner
FCS 3355
C P No.: 1971

Note: This report is to be read with our letter of even date which is annexed as Annexure A and forms an integral part of this report.

ANNEXURE A

To,
The Members,
Hindustan Zinc Limited
Yashad Bhavan,
Udaipur – 313 004 (Rajasthan)

Our report of even date is to be read along with this letter.

1. Maintenance of Secretarial records is the responsibility of the management of the Company. Our responsibility is to express an opinion on these Secretarial records based on our audit.

2. We have followed the audit practices and processes as were appropriate to obtain reasonable assurance about the correctness of the contents of the Secretarial records. The verification was done on test basis to ensure that correct facts are reflected in Secretarial records. We believe that the processes and practices we followed, provide a reasonable basis for our opinion.

3. We have not verified the correctness and appropriateness of financial records and Books of Accounts of the Company.

4. Where ever required, we have obtained the Management representation about the compliance of laws, rules and regulations and happening of events etc.

5. The compliance of the provisions of Corporate and other applicable laws, rules, regulations, standards is the responsibility of management. Our examination was limited to the verification of procedures on test basis.

6. The Secretarial Audit report is neither an assurance as to the future viability of the Company, nor of the efficacy or effectiveness with which the management has conducted the affairs of the Company

Place: Jaipur
Date: April 20, 2017

For **V. M. & Associates**
Company Secretaries
(ICSI Unique Code P1984RJ039200)

CS Manoj Maheshwari
Partner
FCS 3355
C P No. : 1971

ANNEXURE 2

Particulars of contract or arrangements with related parties

Form No. AOC-2

Form for disclosure of particulars of contracts/arrangements entered into by the Company with related parties referred to in sub-section (1) of section 188 of the Companies Act, 2013 including certain arm's length transactions under third proviso thereto

1. **Details of contracts or arrangements or transactions not at arm's length basis : NIL**
   - (a) Name(s) of the related party and nature of relationship
   - (b) Nature of the contracts / arrangements / transactions
   - (c) Duration of the contracts / arrangements / transactions
   - (d) Salient terms of the contracts or arrangements or transactions including the value, If any
   - (e) Justification for entering into such contracts or arrangements or transactions
   - (f) Date(s) of approval by the Board
   - (g) Amount paid as advances, if any:
   - (h) Date on which the special resolution was passed in general meeting as required under first proviso to section 188

2. **Details of the material contracts or arrangements or transactions at arm's length basis: NIL**
   - (a) Name(s) of the related party and nature of relationship
   - (b) Nature of contracts / arrangements / transactions
   - (c) Duration of the contracts / arrangements / transactions
   - (d) Salient terms of the contracts or arrangements or transactions including the value, If any
   - (e) Date(s) of approval by the Board
   - (f) Amount paid as advances, if any:

For and on behalf of the Board of Directors

Sunil Duggal	**A.R. Narayanaswamy**
CEO & Whole-time Director	Director

Date: April 20, 2017
Place: Mumbai

Note: In item 2, material is defined as greater than 10% of the turnover

ANNEXURE 3

Form No. MGT-9

EXTRACT OF ANNUAL RETURN

as on the financial year ended on 31.03.2017

[Pursuant to section 92(3) of the Companies Act, 2013 and rule 12(1) of the Companies (Management and Administration) Rules, 2014]

I. REGISTRATION AND OTHER DETAILS:

i)	CIN	: **L27204RJ1966PLC001208**
ii)	Registration Date	: **January 10, 1966**
iii)	Name of the Company	: **Hindustan Zinc Limited**
iv)	Category / Sub-Category of the Company	: **Public Limited Company**
v)	Address of the Registered office and contact details	: **Yashad Bhawan, Udaipur - 313004 (Rajasthan)** **Email id: - hzl.cosecy@vedanta.co.in** **Phone No: - 0294-6604000**
vi)	Whether listed company Yes / No	: **Yes**
vii)	Name, Address and Contact details of Registrar and Transfer Agent, if any	: **Karvy Computershare Private Limited** **'Karvy House'** **46, Avenue 4, Street No. 1, Banjara Hills** **Hyderabad – 500 034.** **Phone – 040-23312454/44677312**

II. PRINCIPAL BUSINESS ACTIVITIES OF THE COMPANY

- Mining and Smelting of Non-Ferrous metals (Zinc, Lead, Silver).
- Wind energy

All the business activities contributing 10% or more of the total turnover of the Company shall be stated:-

Sr. No.	Name and Description of main products / Services	NIC Code of the Product/ service	% to total turnover of the company
1	Zinc	27204	74.5%*
2	Lead	27209	12.6%

* Including Mined Metal sale

III. PARTICULARS OF HOLDING, SUBSIDIARY AND ASSOCIATE COMPANIES

Sr. No.	Name and address of Company	CIN/GLN	Holding/ Subsidiary / Associate	% of shares held	Applicable Section
1	Vedanta Limited	L13209GA1965PLC00044	HOLDING	64.92%	2 (46)

IV. SHARE HOLDING PATTERN (Equity Share Capital Breakup as percentage of Total Equity)

(i) Category-wise Share Holding

Category of Shareholders	No. of Shares held at the beginning of the year				No. of Shares held at the end of the year				% Change during the year
	Demat	Physical	Total	% of Total Shares	Demat	Physical	Total	% of Total Shares	
A. Promoters									
(1) Indian									
a) Individual/HUF	-	-	-	-	-	-	-	-	-
b) Central Govt	-	-	-	-	-	-	-	-	-
c) State Govt (s)	-	-	-	-	-	-	-	-	-
d) Bodies Corp.-Vedanta Ltd	2743154310	0	2743154310	64.92	2743154310	0	2743154310	64.92	0
e) Banks / FI	-	-	-	-	-	-	-	-	-
f) Any Other	-	-	-	-	-	-	-	-	-
Sub-total (A) (1):	**2743154310**	**0**	**2743154310**	**64.92**	**2743154310**	**0**	**2743154310**	**64.92**	**0**
(2) Foreign									
a) NRIs - Individuals	-	-	-	-	-	-	-	-	-
b) Other Individuals	-	-	-	-	-	-	-	-	-
c) Bodies Corp.	-	-	-	-	-	-	-	-	-
d) Banks / FI	-	-	-	-	-	-	-	-	
e) Any Other	-	-	-	-	-	-	-	-	
Sub-total (A)(2):	-	-	-	-	-	-	-	-	-
Total shareholding of Promoter (A)= (A)(1)+(A)(2)	**2743154310**	**0**	**2743154310**	**64.92**	**2743154310**	**0**	**2743154310**	**64.92**	**0**
B. Public shareholding									
1. Institutions									
(a) Mutual Funds/ UTI	52019445	267000	52286445	1.24	26395673	265000	26660673	0.63	(-) 0.61
(b) Financial Institutions/Banks	758729	45000	803729	0.02	980960	45000	1025960	0.02	-
(c) Central Government/ State Government(s)	1247950590	0	1247950590	29.54	1247950590	0	1247950590	29.54	0

IV. SHARE HOLDING PATTERN (Equity Share Capital Breakup as percentage of Total Equity)

(i) Category-wise Share Holding

Category of Shareholders	No. of Shares held at the beginning of the year				No. of Shares held at the end of the year				% Change during the year
	Demat	Physical	Total	% of Total Shares	Demat	Physical	Total	% of Total Shares	
(d) Venture Capital Funds	-	-	-	-	-	-	-	-	-
(e) Insurance Companies	20573084	0	20573084	0.49	17884037	0	17884037	0.42	(-) 0.07
(f) Foreign Institutional Investors	63586278	0	63586278	1.51	12584632	111000	12695632	0.3	(-) 1.21
(g) Foreign Venture Capital Investors	-	-	-	-	-	-	-	-	-
(h) Any Other (specify)									
(h-i) Central Government	-	-	-	-	2384402	-	2384402	0.06	0.06
(h-ii) Clearing Member	-	-	-	-	1421191	-	1421191	0.03	0.03
(h-iii) NBFC	-	-	-	-	31118	-	31118	-	-
(h-iv) HUF	-	-	-	-	1651228	-	1651228	0.04	0.04
Sub-Total (B)(1)	**1384888126**	**312000**	**1385200126**	**32.78**	**1311283831**	**421000**	**1311704831**	**31.04**	**(-) 1.74**
2. Non-Institutions									
(a) Bodies Corporate	20397007	135000	20532007	0.49	24140419	135000	24275419	0.57	0.08
(b) Individuals									
i) Individual shareholders holding nominal share capital up to ₹ 2 lakh	31990564	1745251	33735815	0.8	42583516	1665601	44249117	1.05	0.25
ii) Individual shareholders holding nominal share capital in excess of ₹ 2 lakh.	2124887	-	2124887	0.05	851151	-	851151	0.02	(-) 0.03
(c) Any Other (specify) Trust	-	-	-	-	56082	-	56082	0	0
(c-i) NRI	1062109	0	1062109	0.03	1502346	690000	2192346	0.05	0.02
(c-ii) NRI-COMPANY	0	801000	801000	0.02	-	-	-	-	(-) 0.02

IV. SHARE HOLDING PATTERN (Equity Share Capital Breakup as percentage of Total Equity)

(i) Category-wise Share Holding

Category of Shareholders	No. of Shares held at the beginning of the year				No. of Shares held at the end of the year				% Change during the year
	Demat	Physical	Total	% of Total Shares	Demat	Physical	Total	% of Total Shares	
(c-iii) foreign individual	1250	0	1250	0	1250	0	1250	-	-
(c-iv) foreign corporate Bodies	38707496	0	38707496	0.92	98834494	0	98834494	2.34	1.42
Sub-Total (B) (2)	**94283313**	**2681251**	**96964564**	**2.3**	**167969258**	**2490601**	**170459859**	**4.03**	**1.72**
Total Public Shareholding (B)= (B)(1)+(B)(2)	**1479171439**	**2993251**	**1482164690**	**35.08**	**1479253089**	**2911601**	**1482164690**	**35.08**	**0**
C. Shares held by Custodians and against which Depository Receipts have been issued	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
GRAND TOTAL (A)+(B)+(C)	**4222325749**	**2993251**	**4225319000**	**100**	**4222407399**	**2911601**	**4225319000**	**100**	**0**

(ii) Shareholding of Promoters

Sr. No	Shareholder's Name	Shareholding at the beginning of the year			Shareholding at the end of the year			
		No. of Shares	% of total Shares of the company	% of Shares Pledge/ encumbered to total shares	No. of Shares	% of total Shares of the company	% of Shares Pledge/ encumbered to total shares	% change in shareholding during the year
1	Vedanta Limited	2743154310	64.92	0	2743154310	64.92	0	0
	Total	**2743154310**	**64.92**	**0**	**2743154310**	**64.92**	**0**	**0**

(iii) Change in Promoters' Shareholding (please specify, if there is no change)

Sr. No		Shareholding at the beginning of the year		Cumulative Shareholding during the year	
		No. of shares	% of total shares of the company	No. of shares	% of total shares of the company
1	At the beginning of the year	2743154310	64.92	2743154310	64.92
2	Date wise Increase/Decrease in Promoters Shareholding during the year specifying the reasons for increase/ decrease (e.g. allotment/ transfer/bonus/sweat equity etc.)	-No Change-	-No Change-	-No Change-	-No Change-
3	At the end of the year	2743154310	64.92	2743154310	64.92

(iv) Shareholding Pattern of top ten Shareholders (other than Directors, Promoters and Holders of GDRs and ADRs):

Sr. No.		Shareholding at the beginning of the year	
	For Each of the Top 10 Shareholder's	No. of shares	% of total shares of the company
	At the beginning of the year (01.04.2016)		
1	PRESIDENT OF INDIA	1247950590	29.54
2	ICICI PRUDENTIAL DYNAMIC PLAN	10272542	0.24
3	LIFE INSURANCE CORPORATION OF INDIA	9412724	0.22
4	JANUS OVERSEAS FUND	8859368	0.21
5	GENERAL INSURANCE CORPORATION OF INDIA	8700000	0.21
6	HDFC STANDARD LIFE INSURANCE COMPANY LIMITED	7293717	0.17
7	ICICI PRUDENTIAL FOCUSED BLUECHIP EQUITY FUND	6592826	0.16
8	HSBC BANK (MAURITIUS) LIMITED	5443337	0.13
9	EASTSPRING INVESTMENTS INDIA EQUITY OPEN LIMITED	5114351	0.12
10	INDIA CAPITAL FUND LIMITED	4970000	0.12
	Net Increase/Decrease in shareholding during the year specifying the reasons for increase /decrease (e.g. allotment/ transfer/bonus/sweat equity etc.) (31.03.2017)		
1	ICICI PRUDENTIAL DYNAMIC PLAN	(-) 10272542	(-) 0.24
2	LIFE INSURANCE CORPORATION OF INDIA	(-) 500000	(-) 0.01
3	JANUS OVERSEAS FUND	(-) 709883	(-) 0.01
4	GENERAL INSURANCE CORPORATION OF INDIA	(-) 1300000	(-) 0.04
5	HDFC STANDARD LIFE INSURANCE COMPANY LIMITED	(-) 39168	(-) 0.00
6	ICICI PRUDENTIAL FOCUSED BLUECHIP EQUITY FUND	(-) 6592826	(-) 0.16
7	HSBC BANK (MARITIUS) LIMITED	(-) 5443337	(-) 0.14
8	EASTSPRING INVESTMENTS INDIA EQUITY OPEN LIMITED	3593671	0.09
9	INDIA CAPITAL FUND LIMITED	1300000	0.03
10	GOLDMAN SACHS INDIA LIMITED	5717222	0.14

Sr. No.	For Each of the Top 10 Shareholder's	Shareholding at the beginning of the year	
		No. of shares	% of total shares of the company
11	GOLDMAN SACHS FUNDS –GOLDMAN SACHS GROWTH & EMERG	4324192	0.10
12	FIDELITY INVESTMENT TRUST-FIDELITY EMERGING MARKET	4292323	0.10
13	VANGUARD EMERGING MARKETS STOCK INDEX FUND, ASERIE (Op. Balance 3742648)	489913	0.01
14	SWISS FINANCE CORPORATION (MAURITIUS) LIMITED (Op. Balance 2372128) Change in holding is due to purchase/sale of shares.	1803332	0.04
	At the end of the year (or on the date of separation, if separated during the year) (31.03.2017)		
1	PRESIDENT OF INDIA	1247950590	29.54
2	LIFE INSURANCE CORPORATION OF INDIA	8912724	0.21
3	JANUS OVERSEAS FUND	8149485	0.19
4	GENERAL INSURANCE CORPORATION OF INDIA	7400000	0.18
5	HDFC STANDARD LIFE INSURANCE COMPANY LIMITED	7254549	0.17
6	GOLDMAN SACHS INDIA LIMITED	5717222	0.14
7	GOLDMAN SACHS FUNDS-GOLDMAN SACHS GROWTH & EMERGING	4324192	0.10
8	FIDELITY INVESTMENT TRUST-FIDELITY EMERGING MARKET	4292323	0.10
9	VANGUARD EMERGING MARKETS STOCK INDEX FUND, ASERIE	4232561	0.10
10	SWISS FINANCE CORPORATION (MAURITIUS) LIMITED	4175460	0.10

(v) Shareholding of Directors and Key Managerial Personnel (KMP):

Sr. No	For Each of the Directors' and KMP	Shareholding at the beginning of the year		Cumulative Shareholding during the year	
		No. of shares	% of total shares of the company	No. of shares	% of total shares of the company
	At the beginning of the year (01.04.2016) - Mr. Arun L. Todarwal, Director*	0	0	1000	0.0000
	At the beginning of the year (01.04.2016) - Rajendra Pandwal, Company Secretary	101000	0.0024	101000	0.0024
	Date wise Increase/Decrease in Shareholding during the year specifying the reasons for increase /decrease (e.g. allotment/ transfer/bonus/ sweat equity etc.	No change	No change	No change	No change
	At the end of the year (31.03.2017)	101000	0.0024	102000	0.0024

* Purchase from open market

V. INDEBTEDNESS

Indebtedness of the Company including interest outstanding/accrued but not due for payment

(₹ in Crore)

	Secured Loans excluding deposits	Unsecured Loans	Deposits	Total Indebtedness
Indebtedness at the beginning of the financial year (01.04.2016) i) Principal Amount ii) Interest due but not paid iii) Interest accrued but not due				
Total (i+ii+iii)	0	0	0	0
Change in Indebtedness during the financial year • Addition • Reduction		16045 8045		16045 8045
Net Change	0	8000	0	8000
Indebtedness at the end of the financial year (31.03.2017) i) Principal Amount ii) Interest due but not paid iii) Interest accrued but not due		8000		8000
Total (i+ii+iii)	0	8000	0	8000

Note: 1. Interest is paid upfront on CP, so interest due but not paid and interest accrued but not due.
2. Principal amount of CP is shown and not the CP issue proceeds

VI. REMUNERATION OF DIRECTORS AND KEY MANAGERIAL PERSONNEL

A. Remuneration to Managing Director, Whole-time Directors and/or Manager:

Sr. No.	Particulars of Remuneration	Name of MD/WTD/ Manager		Total Amount (₹)
		Mr. Akhilesh Joshi*	**Mr. Sunil Duggal**	
1	Gross salary (a) Salary as per provisions contained in section 17(1) of the Income-tax Act, 1961 (b) Value of perquisites u/s 17(2) Income-tax Act, 1961 (c) Profits in lieu of salary under section 17(3) Income-tax Act, 1961	3,22,45,718	3,71,40,099	6,93,85,817
2	Stock Option			-
3	Sweat Equity			-
4	Commission - as % of profit - Others, specify			-
5	Others, please specify (ESOP of ultimate Holding Co.)	55,76,279	27,31,045	83,07,324
	Total (A)	3,78,21,997	3,98,71,144	7,76,93,141
	Ceiling as per the Act	10% of Profit after tax i.e. 832 crore		

* Up to 30.09.2016.

B. Remuneration to other directors:

Sr. No.	Particulars of Remuneration	Name of Directors			Total Amount (₹)
1	Independent Directors	**Mr. A. R. Narayanaswamy**	**Mr. Arun L Todarwal**	**Mr. Sudhir Kumar**	
	• Fee for attending board/ committee meetings	5,50,000	5,00,000	2,50,000	13,00,000
	• Commission	10,00,000	10,00,000	10,00,000	30,00,000
	• Others, please specify	-	-	-	-
	Total (1)	15,50,000	15,00,000	12,50,0000	43,00,000
2	Other Non-Executive Directors	**Mr. Navin Agarwal**	**Mr. Agnivesh Agarwal**		
	• Fee for attending board/ committee meetings	2,50,000	50,000		3,00,000
	• Commission	10,00,000	20,00,000		30,00,000
	• Others, please specify	-	-		
	Total (2)	12,50,000	20,50,000		33,00,000
	Total (B)=(1+2)	28,00,000	35,50,000	12,50,000	76,00,000
	Overall Ceiling as per the Act	1% of Profit after tax i.e. ₹ 83.2 Crore			

C. REMUNERATION TO KEY MANAGERIAL PERSONNEL OTHER THAN MD/MANAGER/WTD

(₹)

Sr. No.	Particulars of Remuneration	KEY MANAGERIAL PERSONNEL		
		Company Secretary Mr. R Pandwal	Chief Financial Officer Mr. Amitabh Gupta	Total
1	Gross salary			
	(a) Salary as per provisions contained in section 17(1) of the Income-tax Act, 1961	81,33,210	2,78,77,143	3,60,10,353
	(b) Value of perquisites u/s 17(2) of the Income-tax Act, 1961			
	(c) Profits in lieu of salary under section 17(3) of the Income-tax Act, 1961	-	-	-
2	Stock Option	-	-	-
3	Sweat Equity	-	-	-
4	Commission - as % of profit - Others, specify…	 - -	 - -	 - -
5	Others, please specify (ESOP of ultimate Holding Co)	5,77,010	32,10,858	37,87,868
	Total	**87,10,220**	**3,10,88,001**	**3,97,98,221**

VII. PENALTIES / PUNISHMENT/ COMPOUNDING OF OFFENCES:

Type	Section of The Companies Act	Brief Description	Details of Penalty / Punishment/ Compounding fees imposed	Authority [RD / NCLT / COURT]	Appeal made, if any (give details)
A. COMPANY					
Penalty					
Punishment					
Compounding					
B. DIRECTORS					
Penalty					
Punishment			NIL		
Compounding					
C. OTHER OFFICERS IN DEFAULT					
Penalty					
Punishment					
Compounding					

ANNEXURE 4

I) Disclosure on the Remuneration of the Managerial Personnel.

i) The ratio of the remuneration of each Director to the median remuneration of the employees of the Company for the financial year:

Name of Director	Mr. Sunil Duggal
Mean	1:32
Median	1:49

ii) The percentage increase in remuneration of each Director, Chief Financial Officer, Chief Executive Officer, Company Secretary or Manager, if any, in the financial year:

Name	Annual Increment (%)
Mr. Sunil Duggal	24
Mr. Amitabh Gupta	14
Mr. R Pandwal	16

iii) The percentage increase in the median remuneration of employees in the financial year: Mean 16.8%, Median 21.9%

iv) The number of permanent employees on the rolls of Company: 4,421 (including 23 expats & retainers)

v) The explanation on the relationship between average increase in remuneration and Company performance:- During the year the Company's profit after tax has marginally increased.

vi) Comparison of the remuneration of the Key Managerial Personnel against the performance of the Company: Remuneration of the KMPs as % of the PAT for 2016-17 is 0.14%. The Company's PAT during the year has marginally increased.

vii) Variation in the market capitalisation of the Company, price earnings ratio as at the closing date of the current financial year and previous financial year and percentage increase over decrease in the market quotations of the shares of the Company in comparison to the rate at which the Company came out with the last public offer in case of listed companies and in case of unlisted companies the variations in the net worth of the Company as at the close of the current financial year and previous financial year:

Date	Market Price in ₹	EPS (₹)	P/E ratio	Market Capitalisation, ₹ Crore	% Change
March 31, 2016	183.50	19.35	9.49	77,534	
March 31, 2017	288.85	19.68	6.81	1,22,048	57.41

Percentage increase over the last public offer price is not relevant as there has never been any public offer by the Company.

(viii) Average percentile increase already made in the salaries of employees other than the managerial personnel in the last financial year and its comparison with the percentile increase in the managerial remuneration and justification thereof and point out if there are any exceptional circumstances for increase in the managerial remuneration;

- Average increase in the remuneration of all employees excluding KMPs: 17%
- Average increase in the remuneration of KMPs: 19%
- Justification: KMP salary increases are decided based on the Company's performance, individual performance, inflation, prevailing industry trends and benchmarks.

(ix) Comparison of remuneration of each of the Key Managerial Personnel against the performance of the Company;

Each KMP is granted salary based on his qualification, experience, nature of job, industry benchmark, earlier salary and many other factors, comparison of one against the other is not feasible. Performance of the Company has been quite satisfactory this year.

(x) The key parameters for any variable component of remuneration availed by the Directors: Only Whole-time Directors are given variable component, which is benchmarked.

(xi) The ratio of the remuneration of the highest paid Director to that of the employees who are not Directors but receive remuneration in excess of the highest paid Director during the year: and - Nil

(xii) Affirmation that the remuneration is as per the remuneration policy of the Company: Yes

Note: For Director, only CEO & WTD has been considered. All remuneration figures are for Executives only.

II) Information as per rule 5(2) of chapter XIII, the Companies (Appointment and remuneration of managerial personnel) Rules, 2014. Top 10 employees in terms of remuneration drawn during the year.

Name	Designation	Remuneration Received ₹	Nature of employment (whether contractual or otherwise)	Qualification and experience	Date of commencement of employment in Company	Age	Last employment held by the employee
Sunil Duggal	Chief Executive Officer	3,98,71,144	Regular	BE - Electrical, 33 Years	16-Aug-10	55.0	Ambuja Cement
Amitabh Gupta	Chief Financial Officer	3,10,88,001	Regular	B Com, ICWA, CA, 30 Years	23-Nov-11	55.4	Moser Baer Solar
Naveen Singhal	Director-Projects	2,52,12,272	Regular	BE(MECH), PGDIE, 31 Years	6-Jan-03	53.7	Swaraj Mazda
Vikas Sharma	COO - Smelters	2,00,51,419	Regular	BE - Mechanical, MBA-HR & Marketing, 28 Years	2-Aug-12	53.1	JSW Steel Ltd.
L. S. Shekhawat	COO - Mines	1,62,62,424	Regular	BE(MIN.),Ist MM Cert., 27 Years	20-Oct-90	49.6	NA
Akhilesh Shukla	Vice President-R&D	1,40,00,508	Regular	B.Tech. (Chemical), 34 Years	9-Apr-07	56.3	Rubamin Ltd.
Ramakrishnan Kasinathan	Chief Commercial Officer	1,32,03,759	Regular	BE - Civil; MBA - Finance, 25 Years	23-Sep-15	49.9	SKF India Ltd
Mahesh Kumar Todkar	Vice President - Smelting	1,29,10,414	Regular	BE - Mechanical, Dip in Mechanical Engg, PGDBM - Finance, 26 Years	6-Jul-13	47.3	Vedanta Ltd. Jharsuguda
Praveen Kumar Jain	Vice President - Mining	1,20,60,036	Regular	BE (Mining), Ist Class MM Cert., 30 Years	27-Apr-88	54.7	NA
Rajendra Prasad Dashora	Vice President - Mining	1,12,08,025	Regular	BE - Mining, 1st CLASS MM CERT., 29 Years	16-Jun-12	54.4	Jindal Saw Ltd

ANNEXURE 5

Annual Report on the CSR activities pursuant to the Companies (Corporate Social Responsibility Policy) Rules 2014.

A brief outline of the Company's CSR policy, including overview of projects or programmes proposed to be undertaken and a reference to the web-link to the CSR policy and projects or programmes	Company's Vision on CSR is to enhance the quality of life and the economic wellbeing of communities around our operations. Our Mission is to facilitate collaborative development for improving the quality of life of people at large, particularly in the neighbourhood and State for achieving business goals and reputation management. For detailed Policy, please refer our website www.hzlindia.com. For projects please refer to section on CSR under Sustainability (Business Overview section)
The composition of the CSR committee	Mr. A R Narayanaswamy - Chairman Mr. Sudhir Kumar Mr. Sunil Duggal
Average net profit of the Company for last three financial years	₹ 8,767 Crore (PBT, as prescribed)
Prescribed CSR Expenditure (two percent of the amount as in item 3 above)	₹ 175.35 Crore
Details of CSR spent during the financial year	
a) Total amount to be spent for the financial year	₹ 175.35 Crore (approx. ₹ 114.68 Crore on CSR + ₹ 60.67 Crore tax foregone)
b) Amount Spent	₹ 49.40 Crore, including ₹ 4.60 Crore on depreciation on CSR assets
c) Amount unspent, if any	₹ 65.28 Crore
d) Manner in which the amount spent during the financial year is detailed below	Refer next page
In case the Company has failed to spend the two percent of the average net profit of the last three financial years or any part thereof, the company shall provide the reason for not spending the amount in its Board report	We spent ₹ 49.40 Crore as CSR this year. In addition, we also contributed ₹ 50 crore towards building Nandghars/Anganwadis, though the same has not been included under CSR. Further, several new projects were launched this year, which are gradually ramping up. In addition to the above, the Company has also provided ₹ 543 Crore as contribution to District Mineral Foundation which will be utilised by the Government for the interest and benefit of persons and areas affected by mining related operations, which is also quasi CSR.
A responsibility statement of the CSR Committee that the implementation and monitoring of CSR Policy, is in compliance of CSR Objectives and Policy of the Company	Yes. The CSR committee of the Company hereby confirms that the implementation and monitoring of CSR policy, is in compliance with CSR Objectives and Policy of the Company.

Sunil Duggal
CEO & Whole-time Director

A R Narayanaswamy
Director & Chairman of CSR Committee

Place: Mumbai
Date: April 20, 2017

Sr. No.	CSR Project or Activity Identified	Sector in which the project is covered	Project or Programme 1. Local area or otherwise 2. Specify the district		Amount Outlay ₹ in lakhs (budget)	Amount Spent (₹ in lakhs)			Cumulative Spend, till reporting period (₹ in lakhs)	Amount Spent, Direct or implementing agency	Name of implementing Agency
			Area	Name of District		Direct	Overheads	Total			
1	Vedanta Bal Chetna Anganwadi & Child care Project (KHUSHI Project)	Education	Local area	Udaipur, Rajsamand, Chittorgarh, Bhilwara & Ajmer	1400	841	0	841	1,807	Implementing Agency	Seva mandir, Jatan Sansthan, CARE India, GSVS
2	Shiksha Sambal Project	Education	Local area	Udaipur, Rajsamand, Chittorgarh, Bhilwara and Ajmer	300	248	0	248	248	Implementing Agency	Vidya Bhawan
3	Rural education Program & Company run School	Education	Local area	Udaipur, Rajsamand, Chittorgarh, Bhilwara and Ajmer	652	641	0	641	4,807	Direct/ Implementing Agency	HZL,Viklang Kalyan Samiti, Badhir bal kalyan samiti, SUMEDHA, CTAE..etc
4	Health, Water & Sanitation including company run hospitals	Health, Water & Sanitation	Local area	Udaipur, Rajsamand, Chittorgarh, Bhilwara and Ajmer	879	617	0	617	4,275	Direct/ Implementing Agency	Unnati sansthan, Jan chetna gramin vikas sansthan.etc
5	Hospital Upgradation	Health, Water & Sanitation	Local area	Udaipur	100	0	0	0	608	Direct	HZL
6	Vocational Training for youth (YUVANTARAN Project)	Sustainable Livelihood	Local area	Udaipur, Rajsamand, Chittorgarh, Bhilwara and Ajmer	320	121	0	121	437	Implementing Agency	SCMS & IISD
7	Agriculture Project (SAMADHAN Project)	Sustainable Livelihood	Local area	Udaipur, Rajsamand, Chittorgarh, Bhilwara and Ajmer	500	63	0	63	341	Implementing Agency	BAIF Institute of Sustainable Livelihood Development
8	Animal Husbandary project	Sustainable Livelihood	Local area	Udaipur, Rajsamand, Chittorgarh, Bhilwara	67	37	0	37	284	Direct/ Implementing Agency	BAIF, Govt. Animal Husbandary deptt.
9	Women Empowerment (SAKHI Project)	Women Empowerment	Local area	Udaipur, Rajsamand, Chittorgarh, Bhilwara	350	152	0	152	398	Implementing Agency	Saheli Samiti & Manjari Foundation
10	Rural Infrastructure	Infrastructure Projects	Local/ Otherwise	Udaipur, Rajsamand, Chittorgarh, Bhilwara and Ajmer	1235	452	0	452	5,627	Direct/ Implementing Agency	HZL
11	Sports & Culture	Sports & Culture	Local/ Otherwise	Udaipur, Rajsamand, Chittorgarh, Bhilwara and Ajmer	468	492	0	492	1,297	Direct/ Implementing Agency	HZL/ Societies/Trusts
12	Social Forestry/ Environment	Environment	Local area	Udaipur, Rajsamand, Chittorgarh, Bhilwara and Ajmer	116	76	0	76	362	Direct	HZL

Sr. No.	CSR Project or Activity Identified	Sector in which the project is covered	Project or Programme 1. Local area or otherwise 2. Specify the district		Amount Outlay ₹ in lakhs (budget)	Amount Spent (₹ in lakhs)			Cumulative Spend, till reporting period (₹ in lakhs)	Amount Spent, Direct or implementing agency	Name of implementing Agency
			Area	Name of District		Direct	Overheads	Total			
13	Miscellneous initiatives		Local area	Udaipur	1941	84	0	84	1,276	Direct	HZL
14	Social Audit, Evaluation, CSR Communications, etc	Programme evaluation	Local area	Udaipur, Rajsamand, Chittorgarh, Bhilwara, Ajmer and Uttrakhand	300	0	0	0	54		
15	STP - Maintenance and depreciation	Health, Water & Sanitation	Local area	Udaipur	700	785	0	785	1,915	Direct	HZL
16	Program Management	Programme & Admin	Local area	Udaipur, Rajsamand, Chittorgarh, Bhilwara and Ajmer	411	0	331	331	1,113	Direct	HZL
	Total CSR				**9,739**	**4,609**	**331**	**4,940**	**24,848**		

CORPORATE GOVERNANCE

CODE OF GOVERNANCE

The Company's philosophy of Corporate Governance is to adopt best practices for efficient conduct of its business, continued compliances of law and adherence to highest ethical standards. Adopting high standards with transparency gives comfort to all existing and potential stakeholders including government & regulatory authorities, customers, suppliers, bankers, employees and shareholders. The Company remains resolute in its commitment to conduct business in accordance with the highest ethical standards and sound Corporate Governance practices, to enhance Company's brand and image. This approach to value creation emanates in our belief that sound governance system, based on relationship and trust, is integral to creating enduring value for all. Company's Business Ethics & Code of Conduct provides the overarching philosophy of its Corporate Governance practices. All Directors and employees are bound by Code of Conduct that sets out the fundamental standards to be followed in all actions carried out on behalf of the Company.

In India, Corporate Governance standards for listed companies are regulated by the Securities and Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations, 2015 (SEBI, (LODR)). The Company has adopted best practices mandated in SEBI (LODR). This chapter, along with those in the Business Review Section and Additional Shareholder Information, reports the Company's compliance with SEBI (LODR).

BOARD OF DIRECTORS

The Board of Directors (Board) has a fiduciary responsibility to act as a trustee to protect the interest of the shareholders through strategic supervision of the Company.

As trustees, the Board has a fiduciary responsibility towards all the shareholders and ensures that the Company has clear goals aligned to shareholder value and its growth. The Board sets strategic goals and seeks accountability for their fulfilment. The Board also provides direction and exercises appropriate control to ensure that the Company is managed in a manner that fulfils all stakeholders' aspirations and societal expectations.

i) Composition of the Board

The composition of Board is an appropriate combination of Executive and Non-Executive Directors with right element of independence. As on March 31, 2017, the Company's Board comprised of eight Directors, two of whom are nominee Directors from Government of India including two women Directors, one executive Director and two promoter Directors. In addition, there are three Independent Directors on the Board. In terms of clause 17(1)(b) of SEBI (LODR), the Company is required to have one half of total Directors as Independent Directors; however, at the year end the Company is having one Independent Director short. The Non-Executive Directors are appointed or re-appointed based on the recommendation of the Nomination & Remuneration Committee, which considers their overall experience, expertise and industry knowledge. One third of the non-executive Directors of the Company other than Independent Directors, are liable to retire by rotation every year and are eligible for reappointment, subject to approval by the shareholders at the Annual general meeting.

ii) Number of Board Meetings

The Board of Directors met five times during the financial year, on April 21, July 20, October 19 in 2016 and on February 10 and March 22 in 2017. The maximum time gap between any two meetings was less than 120 days and at least one meeting was held in each calendar quarter. The agenda for each meeting is prepared well in advance, along with explanatory notes and distributed to all Directors.

iii) Attendance and Directorships Held

As mandated by the SEBI (LODR), none of the Directors are members of more than ten board-level committees nor are they chairman of more than five committees in which they are members. Further all the Directors have confirmed that they do not serve as an Independent Director in more than seven listed companies or where they are Whole-time Directors in any listed company, then they do not serve as Independent Director in more than three listed companies.

The names and categories of the Directors on the Board, their attendance at Board meeting during the year and at last Annual General Meeting, as also the number of Directorships and Committee memberships held by them in other Companies are shown in Table 1

Table 1: Composition of the Board of Directors

Name of Director	Relationship with Other Directors	Category	No. of Meetings held	No. of Meetings Attended	Whether Attended Last AGM	No. of Outside Directorships of Public Companies	No. of Outside Committee Memberships#	No. of Outside Committee Chairmanships#
Mr. Agnivesh Agarwal, Chairman	Relative of Mr. Navin Agarwal	NED	5	1	No	1@	-	-
Mr. Navin Agarwal	Relative of Mr. Agnivesh Agarwal	NED	5	5	No	3@	-	-
Mr. Akhilesh Joshi*	None	ED	2	2	Yes	1	-	-
Mr. A.R. Narayanaswamy	None	ID& NED	5	4	No	7	6	1
Ms. Sujata Prasad$**	None	NED	2	-	No	4	1	1
Mr. Sudhaker Shukla$***	None	NED	4	4	No	1	-	-
Mr. Arun L. Todarwal^	None	ID & NED	5	5	Yes	8	4	5
Mr. Sunil Duggal	None	ED	5	5	Yes	1	-	-
Mr. Sudhir Kumar	None	ID & NED	5	4	Yes	-	-	-
Mr. Nikunja Bihari Dhal$****	None	NED	1	-	No	2	-	-
Ms. Reena Sinha Puri$*****	None	NED	2	2	No	1	-	-
Ms. Farida M. Naik$******	None	NED	1	-	No	1	-	-

Notes:

*	Ceased to be Director on 30.09.2016
**	Ceased to be Director on 09.08.2016
***	Ceased to be Director on 14.03.2017
****	Appointed as Director w.e.f. 09.08.2016 and ceased to be Director on 29.12.2016
*****	Appointed as Director w.e.f. 29.12.2016
******	Appointed as Director w.e.f. 14.03.2017
$	Nominees of Government of India
#	Only Audit Committee and Stakeholder Relationship Committee considered
@	Excludes foreign companies: Mr. Agnivesh Agarwal – 3, Mr. Navin Agarwal – 2
ID	Independent Director, NED: Non-Executive Director, ED: Executive Director
^	Holds 1000 shares in his name and 700 shares through Ms. Mala Todarwal

iv) Information Supplied to the Board

The Board has complete access to all information of the Company and has been regularly provided advanced detailed information as a part of the agenda papers or is tabled therein. In addition, detailed quarterly performance report by the CEO is presented in the quarterly Board meeting, encompassing all facets of the Company's operations during the quarter, including update of key projects, outlook and matters relating to environment, health & safety, corporate social responsibility etc. The following information is provided to the Board as a part of the agenda papers:

- Annual and Quarterly financial statements for the Company and the Accounting Policy
- Minutes of the meetings of the Audit Committee and other Committees of the Board
- Annual business plan
- Information on recruitment and remuneration of senior officers just below the level of Board, including the appointment or removal of Chief Financial Officer and Company Secretary, whenever required

- Expansion projects and its status monitoring
- Materially important notices of show cause, demand, prosecution and penalty, if any
- Fatal or serious accidents, injuries or any material environmental problems, if any
- Any material default in financial obligations to and by the Company, or substantial non-payment for goods sold by the Company, if any
- Any issue involving possible public or product liability claims of substantial nature, including any judgement or order which may have passed strictures on the conduct of the Company or taken an adverse view regarding another enterprise that can have negative implications on the Company
- Details of any joint venture or significant collaboration agreement
- Transactions that involve substantial payment towards goodwill, brand equity or intellectual property, if any
- Significant labour problems and their proposed solutions, whenever necessary
- Any significant development in human resources / industrial relations including long-term wage agreement, major voluntary retirement scheme, etc.
- Sale of material nature like equity investments and fixed assets, which is not in the normal course of business, if any
- Quarterly details of foreign exchange exposures and the steps taken by the management to limit the risks of adverse exchange rate movement, if material
- Quarterly disclosure of all the investments made
- Material non-compliance of any regulatory, statutory nature or listing requirements and shareholders service, such as non-payment of dividend, delay in share transfer and others, if any
- Quarterly review of compliance status under various laws applicable to the Company

- Corporate Social Responsibility activities
- Substantial non-payment of goods sold by Company except disputes
- Related Party Transactions, if they are not at arm's length or not in the ordinary course of business
- Near term outlook
- All other matters required to be placed before the Board for its review or information or approval under the statutes

v) Remuneration to Directors

Non-Executive Directors except Government Directors in the employment of the Government are paid a remuneration in the form of commission and a fixed sitting fee for each meeting, as approved by the Board and within statutory limits. The remuneration paid to Mr Sunil Duggal, CEO & Whole-time Director and Mr Akhilesh Joshi, Former Whole-time Director is as per the approval granted by the Board and the shareholders. For FY 2016-17, the total remuneration is as shown in Table 2A and Table 2B. Payment of commission to Non-Executive Directors and Independent Directors has been approved by the shareholders up to the limit specified under the Companies Act, subject to the annual amount approved by the Board.

Table 2 A: Sitting fee and Commission of Non-Executive Directors for FY 2016-17 (In ₹)

Name of Director	Category	Sitting fees	Commission
Mr. Agnivesh Agarwal, Chairman	Non-Executive	50,000	20,00,000
Mr. Navin Agarwal	Non-Executive	2,50,000	10,00,000
Mr. A.R. Narayanaswamy	Independent	5,50,000	10,00,000
Mr. Arun L. Todarwal	Independent	5,00,000	10,00,000
Mr. Sudhir Kumar	Independent	2,50,000	10,00,000

Table 2 B: Remuneration paid to Executive Directors for FY 2016-17 (In ₹)

Name of Director	Category	Salary perquisites & other allowances	Stock option of ultimate holding Company	Total
Mr Sunil Duggal	CEO & Whole-time Director	3,71,40,099	27,31,045	3,98,71,144
Mr Akhilesh Joshi	Whole-time Director	3,22,45,718	55,76,279	3,78,21,997

Non-Executive Directors, other than Mr. Arun L. Todarwal, do not hold any shares and convertible instruments of the Company and they have no pecuniary relationships or transactions vis-à-vis the Company, except as mentioned above. The Company has not granted any stock options to any of its Directors.

During FY 2016-17, the Company did not advance any loan to any of its Directors.

As per the requirement of SEBI (LODR), a separate meeting of the Independent Directors was held on March 22, 2017.

vi) Familiarisation programme for Directors

The Board members are provided with necessary documents, reports, internal policies and site visits to enable them to familiarise themselves with the Company's operations, its procedures and practices. Periodic presentations are made at the Board and Board Committee Meetings, on business and performance updates of the Company, global business environment, business strategy and business risks. Details of the familiarisation programme are available on http://hzlindia.com/common/images/Familiarisation-program-for-ind-directors-2016-17.pdf

vii) Director retiring by rotation

As per law, two-third of Non-Executive and Non-Independent Directors should retire by rotation. One-third of these Directors are required to retire every year and if eligible, offer themselves for re-appointment. Mr. Navin Agarwal would retire in upcoming AGM and being eligible, has offered himself for re-appointment. A brief profile of Mr. Navin Agarwal is as follows.

Mr. Navin Agarwal

Director

Mr. Navin Agarwal is the Executive Chairman of Vedanta Ltd. and Chairman of Cairn India Ltd. and Executive Vice Chairman of Vedanta Resources plc. He has been with the Vedanta Group since its founding, and has extensive experience in the natural resources industry. Mr. Agarwal plays a key role in the strategic and governance framework of the Vedanta Group and provides leadership for its long-term planning, business development and capital planning. He has been instrumental organic and in-organic growth of the Group. Mr. Agarwal is passionate about developing leadership talent for the Group by identifying and nurturing future leaders.

viii) Committees of the Board

The Company has five Board-level committees -Audit Committee, Stakeholders Relationship Committee, Corporate Social Responsibility Committee, Nomination & Remuneration Committee and Risk Management Committee.

All decisions pertaining to the constitution of Committees, appointment of members and fixing of terms of service for Committee members are taken by the Board of Directors. Details on the role and composition of these Committees, including the number of meetings held during the financial year and the related attendance, are provided below:

a) Audit Committee

The Audit Committee of the Board, inter-alia, provides reassurance to the Board on the existence of an effective internal control environment that ensures:

- efficiency and effectiveness of operations;
- safeguarding of assets and adequacy of provisions for all liabilities;
- reliability of financial and other management information and adequacy of disclosures;
- compliance with all relevant statutes.

Mr A.R. Narayanaswamy is the Chairman of the Audit Committee. Details of meeting held and attendance record is given in Table 3.

The time gap between any two meetings was less than 120 days and at least one meeting was held in each calendar quarter. The Committee met four times in the financial year under review on April 21, July 20 and October 19 in 2016 and on February 10, 2017. The details of the Audit Committee are given in Table 3.

Table 3: Attendance record of Audit Committee Meetings

Name of the Member	Position	Status	No. of Meetings held	No. of Meetings Attended	Sitting fees (₹)
Mr. A.R. Narayanaswamy	Chairman	ID & NED	4	4	1,00,000
Ms. Sujata Prasad*	Member	NED	2	-	-
Mr. Arun L. Todarwal	Member	ID & NED	4	4	1,00,000
Mr. Sudhaker Shukla**	Member	NED	1	1	-

* Ceased to be member of Committee on August 9, 2016.

** Appointed as member w.e.f. October 19, 2016 and ceased to be a member of Committee on March 14, 2017.

The Chief Financial Officer, the representative of the Statutory Auditors (S.R. Batliboi & Co. LLP), Internal Auditors (KPMG) and Head of Management Assurance Cell are invitees to the Audit Committee meetings. The Company Secretary is the Secretary to the Committee.

Mr. A.R. Narayanaswamy is a Chartered Accountant and Chairman of the Audit Committee and all the members of the Audit Committee are well versed with financial management. The quorum for the meeting of the Audit Committee is two members. The Chairman of the Audit Committee could not attend the 50th Annual General Meeting (AGM) held on June 28, 2016 because of some unavoidable circumstances and delegated his powers for this meeting as chairman of Audit Committee to Mr. Arun L. Todarwal. The Audit Committee functions in accordance with its constitution and charter, framed in compliance with SEBI (LODR).

The Role and functions of the Audit Committee include the following:

- Oversight of the Company's financial reporting process and the disclosure of its financial information to ensure that the financial statements are correct, sufficient and credible
- Recommending to the Board, the appointment, re-appointment and if required, the replacement or removal of the Statutory Auditor and the fixation of audit fees
- Approval of payment to Statutory Auditors for any other services rendered by them
- Reviewing with the management, the annual financial statements before submission to the Board for approval, with particular reference to:
  - matters required to be included in the Director's Responsibility Statement to be included in the Board's report in terms of section 134 of the Companies Act, 2013
  - changes, if any, in accounting policies and practices and reasons for the same
  - major accounting entries involving estimates based on the exercise of judgement by management
  - significant adjustments made in the financial statements arising out of audit findings, if any
  - compliance with listing and other legal requirements relating to financial statements
  - approval of related party transactions and their subsequent modifications, if any
  - scrutiny of inter corporate loans and advances
  - qualifications if any in the draft Statutory Auditor report
- Reviewing with the management, the quarterly financial statements before submission to the Board for approval
- Reviewing with the management, performance of Statutory and Internal Auditors, their independence, effectiveness of audit process and adequacy of the internal financial control systems
- Reviewing the adequacy of internal audit plan
- Discussion with Internal Auditors on any significant findings and follow up thereof

- Reviewing the findings of any internal investigations by the Internal Auditors into matters where there is suspected fraud or irregularity or a failure of internal control system of a material nature and reporting the matter to the Board
- Discussion with Statutory Auditors before the audit commences, about the nature and scope of audit as well as post-audit discussion to ascertain any area of concern
- To look into the reasons for substantial defaults in the payment to the shareholders (in case of non-payment of declared dividends) and creditors, if any
- Reviewing the functioning of the vigil and whistle blower mechanism
- Appointment of the Chief Financial Officer of the Company, as and when required
- Carrying out any other function, as is mentioned in the terms of reference of the Audit Committee
- Valuation of undertaking of the assets of the Company, wherever necessary

The Audit Committee is empowered pursuant to its terms of reference to:

- Investigate any activity within its terms of reference and to seek any information it requires from any employee
- Obtain legal or other Independent professional advice and to secure the attendance of outsiders with relevant experience and expertise, when considered necessary

The Company has systems and procedures in place to ensure that the Audit Committee mandatorily reviews:

- Business overview including results of its operations and financial condition
- All related party transactions
- Management letters and letters of internal control weaknesses issued by the Statutory Auditors
- Internal audit reports relating to internal control weaknesses and review of processes
- The appointment, removal and terms of remuneration of the Auditors.

During the year, all related party transactions were pre-approved by the Audit Committee and were at arm's length and in the ordinary course of business. There was no significant material transaction with any of the related parties of the Company for the year.

b) Stakeholders Relationship Committee

Mr A.R. Narayanaswamy is the Chairman of the Stakeholders Relationship Committee. The Committee met once during the financial year under review on October 19, 2016.

The primary function of the Committee is to address investor and stakeholders' complaints pertaining to transfers/transmission of shares, non-receipt of dividend and any other related matters as prescribed under section 178 of the Companies Act, 2013. The minutes of each of the Committee meetings are reviewed by the Board. The attendance details are mentioned in Table 4.

Table 4: Attendance Record of Stakeholder Relationship Committee Meetings

Name of the Member	Position	Status	No. of Meetings held	No. of Meetings Attended	Sitting fees (₹)
Mr A.R. Narayanaswamy	Chairman	ID & NED	1	1	25,000
Mr. Sunil Duggal	Member	ED	1	1	-
Mr. Sudhaker Shukla*	Member	NED	1	-	-

* Ceased to be the member of Committee on March 14,2017

The matters, if any, requiring Board's attention are informed to the Board by the Committee Chairman. Mr. R. Pandwal, Company secretary is the compliance officer of the Company.

Details of queries and grievances received and addressed by the Company during FY 2016-17 is given in Table 5.

Table 5: Nature of complaints received and attended to during FY 2016-17

Number of Complaints	Number
Number of complaints received from the investors comprising non-receipt of dividend warrants, non-receipt of securities sent for transfer and transmission, complaints received from SEBI/Registrar of Companies/Bombay Stock Exchange/National Stock Exchange / SCORE and so on	29
Number of complaints resolved	29
Number of complaints not resolved to the satisfaction of the investors as on March 31, 2017	NIL
Complaints pending as on March 31, 2017	NIL
Number of Share transfers pending for approval, as on March 31, 2017	NIL

The Board has delegated the power of approving physical transfer and transmission of shares to the Share Transfer Committee consisting of CEO & WTD, CFO and Company Secretary.

c) Corporate Social Responsibility (CSR) Committee

The Corporate Social Responsibility Committee as on March 31, 2017 consisted of three members. The Committee met twice during the financial year under review on April 18, 2016 and on January 19, 2017. Mr. A.R. Narayanaswamy is the Chairman of the Committee, while Mr. Sunil Duggal and Mr. Sudhir Kumar are the members.

The primary function of the Committee is to monitor the CSR function of the Company in furtherance to Company's CSR Vision & Mission. The Committee is responsible for framing the CSR policy of Company and tracks implementation of key CSR projects approved by it during the financial year. In this financial year, the Company has spent ₹ 49.40 Crore on CSR activities.

d) Nomination & Remuneration Committee

The Nomination & Remuneration Committee as on March 31, 2017 consisted of three members. The Committee met five times during the financial year under review on April 18, 2016, July 20, 2016, October 19, 2016, February 4, 2017 and March 18, 2017. The primary function of the Committee is to recommend to the Board the appointment or reappointment of Directors, remuneration of Directors and Key Managerial Personnel (KMPs), formulate criteria for evaluation of Independent Directors, Board diversity, identification and selection of persons who could be appointed as Independent Directors etc.

Table 6: Attendance Record of Nomination and Remuneration Committee Meetings

Name of the Member	Position	Status	No. of Meetings held	No. of Meetings Attended	Sitting fees (₹)
Mr Arun L. Todarwal	Chairman	ID & NED	5	5	1,25,000
Mr A R Narayanaswamy	Member	ID & NED	5	5	1,25,000
Mr. Agnivesh Agarwal	Member	NED	-	-	-

As per the requirement of Companies Act, 2013 and SEBI (LODR), the Nomination & Remuneration Committee has carried out a performance review of the individual Directors on the following parameters:

- The size and composition (executive, non-executive, independent members and their background in terms of knowledge, skills and experience) of the Board is appropriate
- The Board conducts itself in such a manner that it is seen to be sensitive to the interests of all stakeholders (including minority shareholders) and it has adequate mechanism to communicate with them
- The Board is active in addressing matters of strategic concerns in its review of the Board agenda with the executive management
- The Board makes well-informed high quality decisions on the basis of full information and clear insight into Company's business
- The Board is effective in establishing a corporate environment that promotes timely and effective disclosure, fiscal accountability, high ethical standards and compliance with applicable laws and regulations
- The Board meets frequently enough and for sufficient duration to enhance its effectiveness
- The Board meeting time is appropriately allocated between management presentation and Board discussion
- The Board has a good understanding of the Company's key drivers of performance and associated risks, threats and opportunities
- The Board devotes considerable amount of time in developing the business strategy and annual business plan
- The Board has clearly defined the mandates of its various Committees and effectively oversees their functioning
- The Board is effective in formulating and monitoring various financial and non-financial policies and plans
- The Board is effective in developing a corporate governance structure that allows and encourages the Board to fulfil its responsibilities
- The Board pays considerable attention to the quality of financial reporting process and internal financial controls and effectively oversees them
- The Board regularly follows up on its decisions to ensure that action is taken on all its decisions
- The Board gives effective advice and assistance for achieving the Company's mission and vision.

The Committee expressed its overall satisfaction on the performance of the individual Board members and the overall Board.

e) Risk Management Committee

The Risk Management Committee as on March 31, 2017 consisted of two members. The Committee met once during the financial year under review on January 20, 2017. Mr. A.R. Narayanaswamy is the Chairman of the Committee while Mr. Sunil Duggal, Mr. Amitabh Gupta, Mr. Vikas Sharma, Mr. L.S Shekhawat and Mr. Dilip Golani were the members of the Committee. The primary function of the Committee is to review the major risks identified by the Management, along with its mitigation plan, monitoring and reviewing the Company's risk management plan and to apprise the Board on risk assessment and minimization procedures. Details of the key risks, its mitigation plan etc. is given on page 60 to 63 of this annual report.

SHAREHOLDERS MATTERS

i) Dividend

During the year, the Company has paid an interim dividend of 95% declared on October 28, 2016 and special interim dividend of 1375% declared on March 22, 2017, aggregating 1470% or ₹ 29.40 per share of face value of ₹ 2 each. Inclusive of the dividend distribution tax, the total payout was ₹ 14,951 Crore. This was in addition to the special golden jubilee dividend, also paid in the current financial year.

ii) Listing

At present, the equity shares of the Company are listed on BSE Limited (BSE) and National Stock Exchange of India Limited (NSE). The annual listing fees for FY 2016-17 to BSE and NSE have been paid. The addresses of stock exchanges are as under:

BSE Limited 25th Floor, P.J. Towers, Dalal Street, Fort, Mumbai - 400 001	National Stock Exchange of India Limited "Exchange Plaza", Bandra-Kurla Complex Bandra (East), Mumbai - 400 051

Table 7: Stock Exchange Codes

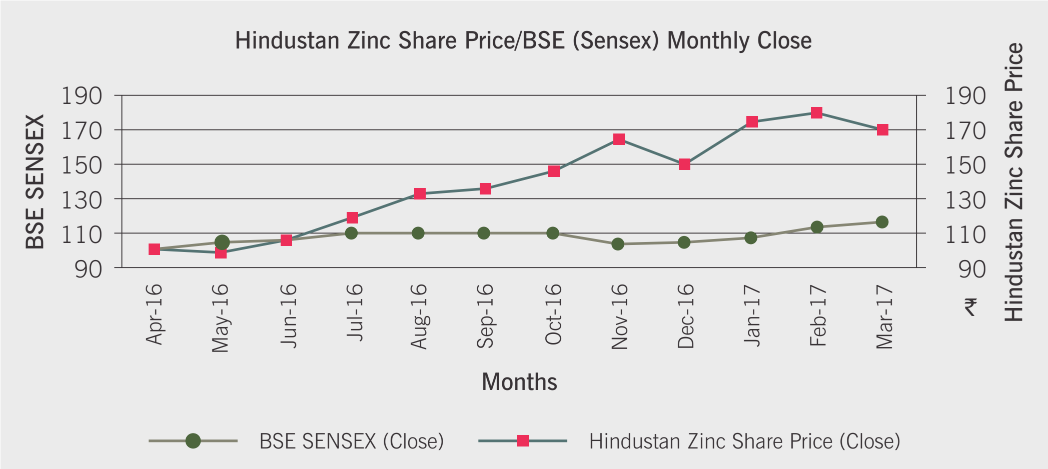
Name of the Stock Exchange	Stock Code	ISIN Code
National Stock Exchange of India Limited	HINDZINC	INE 267A01025
BSE Limited	500188	

iii) Stock Market Data

Table 8: High, Lows and Volumes of the Company's Shares for FY 2016-17

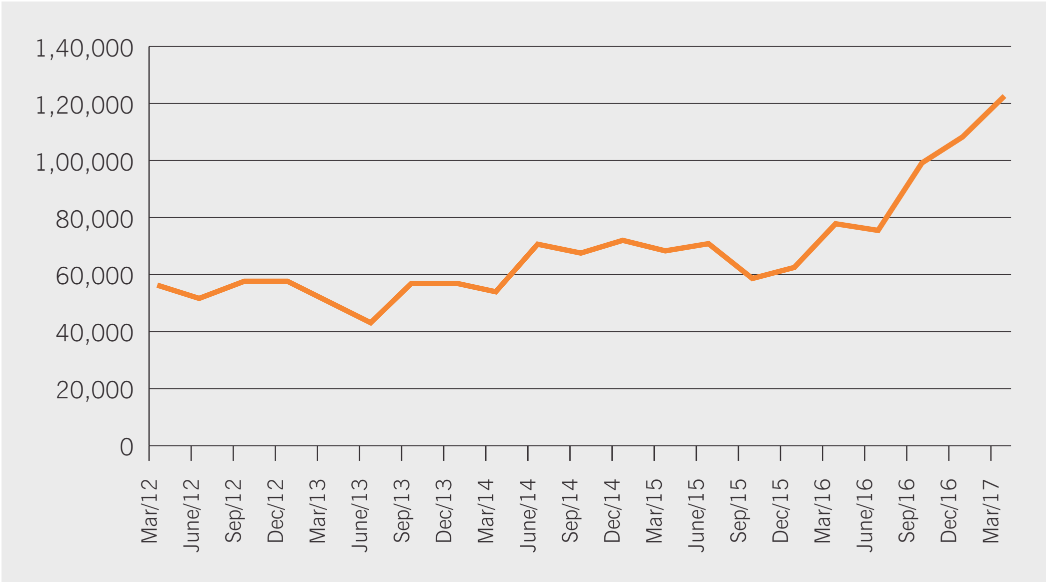
Month	BSE			NSE		
	High (₹)	Low (₹)	Volume (No. of Shares)	High (₹)	Low (₹)	Volume (No. of Shares)
Apr-16	189.65	158.20	48,85,173	189.80	158.20	4,92,14,522
May-16	176.45	161.00	11,67,067	177.00	160.85	2,72,75,815
Jun-16	181.20	165.90	22,78,319	181.50	165.50	2,12,15,840
Jul-16	210.80	176.00	58,69,933	210.80	176.10	4,48,66,548
Aug-16	232.50	203.80	41,86,969	232.65	204.05	4,11,81,176
Sep-16	235.80	210.30	18,96,667	236.40	210.00	3,05,19,142
Oct-16	262.80	231.00	63,08,172	262.50	234.05	5,08,94,479
Nov-16	286.95	233.00	58,34,578	287.95	221.00	5,80,73,680
Dec-16	289.85	247.10	23,60,322	290.00	247.05	3,22,45,453
Jan-17	307.80	250.10	36,17,283	307.50	250.20	3,82,50,088
Feb-17	333.40	291.10	35,17,848	333.20	290.95	5,40,69,331
Mar-17	328.00	275.00	96,63,035	327.50	282.50	9,85,84,667

Chart: Share Performance versus BSE Sensex



Note: BSE and Hindustan Zinc Share price indexed to 100

Market Capitalisation Performance from March 31, 2012 to March 31, 2017 (₹ In Crore)



iv) Distribution of Shareholding

Table 9 and 10 list the distribution of the shareholding of the equity shares of the Company by size and by ownership class, as on March 31, 2017.

Table 9: Shareholding Pattern by Size on March 31, 2017

DISTRIBUTION SCHEDULE AS ON March 31, 2017					
Sr. No.	No. of Shares	No. of Shareholders	% of Shareholders	No. of Shares	% of Shareholding
1	1 - 5000	88,686	95.58	2,17,52,097	0.51
2	5001 - 10000	2,072	2.23	79,49,165	0.19
3	10001 - 20000	945	1.02	73,82,216	0.17
4	20001 - 30000	301	0.32	38,04,788	0.09
5	30001 - 40000	192	0.21	34,72,713	0.08
6	40001 - 50000	75	0.08	17,17,345	0.04
7	50001 - 100000	181	0.20	64,31,898	0.15
8	100001 & ABOVE	338	0.36	4,17,28,08,778	98.76
	Total	**92,790**	**100.00**	**4,22,53,19,000**	**100.00**

Table 10: Shareholding Pattern by Ownership as on March 31, 2017

		Category	No. of Shares Held	% of Share Holding
A		**PROMOTER'S HOLDING**		
	1	**PROMOTERS**		
		- INDIAN PROMOTORS VEDANTA LIMITED	2,743,154,310	64.92
		- FOREIGN PROMOTORS	0	
		Sub Total (A) (1)	**2,743,154,310**	**64.92**
B		**PUBLIC SHARE HOLDING**		
	1	**Institutions**		
		(a) Mutual Funds	26,660,673	0.63
		(b) Venture Capital Funds	0	0.00
		(c) Alternate Investment Funds	0	0.00
		(d) Foreign Venture Capital Investors	0	0.00
		(e) Foreign Portfolio Investors	111,530,126	2.64
		(f) Financial Institutions/Banks	1,025,060	0.02
		(g) Insurance Companies	17,884,037	0.42
		(h) Provident Funds/Pension Funds	0	0.00
		(i) Any other	0	0.00
		Foreign National	1,250	0.00
		Sub Total (B) (1)	**157,101,146**	**3.71**
	2	**Central Governments/State Governments**	**2,384,402**	**0.06**
		Sub Total (B) (2)	**2,384,402**	**0.06**
	3	**Non-Institutions**		
		(a) Individual Shareholders holding nominal share capital up to ₹ 2 lakhs	44,249,117	1.05
		Individual Shareholders holding nominal share capital in excess of ₹ 2 lakhs	851,151	0.02
		(b) NBFC's Registered with RBI	31,118	0.00
		(c) Employee Trusts	0	0.00
		(d) Overseas Depositories (Holding DRs)	0	0.00
		(e) Any other		
		President of India	1,247,950,590	29.54
		Non Resident Indian Repatriable	180,224	0.00
		Trusts	56,082	0.00
		Non Resident Indian	1,606,503	0.04
		Clearing Members	1,421,191	0.03
		Other Schedule Banks	900	0.00
		Non Resident Indian Non Repatriable	405,619	0.01
		Bodies Corporate	24,275,419	0.57
		HUF	1,651,228	0.04
		Sub Total (B) (3)	**1,322,679,142**	**31.30**
		Total Public Shareholding (B)=(B)(1)+(B)(2)+(B)(3)	**1,482,164,690**	**35.08**
		GRAND TOTAL	**4,225,319,000**	**100.00**

v) Dematerialisation of Shares

The shares of the Company are compulsory traded in dematerialised form only. The Company's shares are available for trading in the depository system of both NSDL and CDSL. As at the financial year-end 4,22,24,07,399 equity shares forming 99.93% of the share capital of the Company, stand dematerialised.

The Company's share is actively traded on both the stock exchanges, namely BSE and NSE. Any shareholder desiring to transfer his shares either in physical form or to get the physical shares converted into electronic form, may contact the Company Secretary or the RTA for necessary advice and the procedure.

vi) Outstanding GDRs / ADRs / Warrants/ Options

The Company has not issued any Global Depository Receipts / American Depository Receipts / Warrants / Options.

vii) Details of Public Funding Obtained in the Last Three Years

No public funding has been obtained in the last three years.

viii) Communication with Shareholders and others

The Company published its quarterly, half yearly and yearly results in the form as prescribed under SEBI (LODR) within the prescribed time. The results were sent to stock exchanges where shares are listed and the same were published in The Economic Times, Business Standard and Rajasthan Patrika/Dainik Bhaskar.

The financial results and official news releases are also displayed on the website of the Company (www.hzlindia.com). Annual Report containing inter-alia Audited Annual Financial Statements, Board's Report, Auditors Report and other important and statutory information are circulated to all members and to others entitled thereto. The Business Review along with CEO and CFO certificate, forms a part of the Annual Report.

Table 11: Details of the Announcement of the Financial Results for FY 2016-17

Description	Date
Unaudited Financial Results for the quarter ended on June 30, 2016	July 20, 2016
Unaudited Financial Results for the quarter and half year ended on September 30, 2016	October 19, 2016
Unaudited Financial Results for the quarter and nine months ended on December 31, 2016	February 10, 2017
Audited Financial Results for the quarter and year ended on March 31, 2017	April 20, 2017

In addition to this, if there is any other announcement affecting the shareholders or public, it is duly informed to the stock exchanges and published in newspapers for the benefit of shareholders and public at large. The same are also placed on the website of the Company for information of all.

ix) General Body Meetings

Table 12: Details of the last three General Body Meetings

Date	AGM	Location	Time
June 24, 2014	48th AGM	Yashad Bhawan, Udaipur, Rajasthan	2.30 P.M.
June 15, 2015	49th AGM	Yashad Bhawan, Udaipur, Rajasthan	2.30 P.M.
June 28, 2016	50th AGM	Yashad Bhawan, Udaipur, Rajasthan	2.30 P.M.

In the last three Annual General Meetings, special resolution was passed only for the reappointment of Statutory Auditors.

Annual General Meeting

Date: August 18, 2017

Time: 2.30 pm

Venue: Yashad Bhawan, Udaipur

Financial Calendar

The Company follows the financial year i.e. April to March for accounting purposes.

For the year ending March 31, 2018, financial results will be announced in the month following the end of the quarter.

Book Closure

The dates of book closure are from August 14, 2017 to August 17, 2017, both days inclusive.

x) Postal Ballot

During the current year, no approval of shareholders was taken through Postal Ballot.

xi) Registrar and Transfer Agent

M/s. Karvy Computersshare Private Limited
'Karvy House' 46, Avenue 4, Street No. 1,
Banjara Hills, Hyderabad - 500 034.
Ph. no. : 040-23312454
Fax no. : 040-23311968
E-mail : einward.ris@karvy.com

GOVERNANCE & COMPLIANCE

1. Code of Conduct

Our values and principles are enshrined in the Business Ethics & Code of Conduct ('Code') applies to all executives of the Company. All Board members and all executives annually affirm compliance with the Code. This Code also ensures compliance with the provisions of the SEBI (LODR). All executives were imparted classroom training during the year in addition to 100% of new joinees.

These cover:

- Guidelines on Corporate Communication
- Securities Dealing Code (Insider Trading Regulations)
- Whistle Blower Policy
- Gift Policy
- The UK Bribery Act
- Foreign Corrupt Practices Act (USA)
- Fraud
- Human Rights
- Antitrust Compliance for Restricting Anti-Competitive Practices
- Health, Safety & Environment
- Political Contribution
- Sexual Harassment

The Code also covers Whistle Blower policy and Vigil Mechanism, which is available on the website of the Company, http://www.hzlindia.com/common/images/HZL-WHISTLE-BLOWER-POLICY-19.10.2015.pdf. The annual declaration of its compliance by senior management personnel of the Company is given by the CEO & Whole-time Director, the same is annexed. During the year no personnel was denied access to the Audit Committee.

We adhere to section 184 of the Companies Act, 2013 which requires that every Director of a Company who is in any way concerned or interested in a contract or arrangement, is required to disclose the nature of his concern or interest annually at a meeting of the Board of Directors.

2. Internal Control System

On the recommendation of the Audit Committee, the Company appointed M/s KPMG, Chartered Accountants as the Internal Auditors of the Company for the financial year 2016-17. Documents, policies and authorisation guidelines comply with the level of responsibility and standard operating procedures specific to the respective businesses. Observations made in internal audit reports on business processes, systems, procedures and internal controls and implementation status of recommended remedial measures by M/s KPMG - Internal Auditors, are presented quarterly to the Audit Committee of the Board. The Company has a well-established internal control system and procedures and the same has been working effectively throughout the year.

3. Risk Management

The Company operates in conditions where economic, environment and social risk are inherent to its businesses. To overcome this and as per requirement of SEBI (LODR), Board has formed a Risk Management Committee to oversee the mitigation plan for the key risks faced by the Company.

The Company has developed a very comprehensive risk management policy under which all key risks and mitigation plans are compiled into a Risk Matrix. The same is reviewed quarterly by senior management and periodically also by the Risk Management Committee of the Board. The Risk Matrix contains the Company's assessment of impact and probability of each significant risk and mitigation steps taken or planned. The Company has unit-wise Risk Matrix which is reviewed quarterly by Unit and Location Management.

For a detailed discussion, please refer to section on Risk Management Framework.

4. Compliance

Our compliance systems cover a multitude of statutory obligations and ensures adherence to all applicable laws and regulations. During FY 2016-17, no material and uncontested financial or non-monetary sanctions were imposed upon the Company except as disclosed in the Financial Statements. Some of the key compliance aspects are dealt with below:

a) Disclosure of Related Party Transactions

There have been no materially significant related party transactions with the Company's Promoters, Directors, Management or their relatives which have a potential conflict with the interests of the Company. Members may refer to disclosures made in Note No. 40 to Financial Statements in compliance of Regulation 23 of SEBI (LODR) and Ind-AS 24. All the related party transactions are at arm's length price and in the ordinary course of business and with the prior approval of the Audit Committee. As per section 177 and 188 of the Companies Act 2013, Related Party Transaction policy is also available on the company website http://www.hzlindia.com/common/images/Related_Party_Transaction_Policy.pdf

b) Disclosure of Accounting Treatment in Preparation of Financial Statements

The Company follows the guidelines of Accounting Standards referred to in section 133 of the Companies Act, 2013 read with Rule 7 of the Companies (Accounts) Rules, 2014 together with Ind-AS issued by the Institute of Chartered Accountants of India.

c) Compliance with Capital market regulations

The Company has complied with all the requirements of regulatory authorities and no penalties or strictures were imposed on the Company by stock exchanges or SEBI or any other statutory authority on any matter related to capital market during the last three years.

In compliance with SEBI's regulation on prevention of insider trading, the Company has instituted a comprehensive insider trading code for its management and designated executives, which advises them on procedures to be followed and disclosures to be made while dealing with shares of the Company and cautioning them of the consequences of violations. No violations have been reported during the year.

d) Vigil Mechanism

The Company has formatted a Vigil Mechanism for Directors and employees to report genuine concerns. The Vigil Mechanism provides adequate safeguards against victimisation of any person who avail the mechanism and also provides for direct access to the Chairperson of the Audit Committee. The designated email id for lodging the complaints under Vigil Mechanism or Whistle Blower is hzl.whistleblower@vedanta.co.in and has also provided dedicated phone number. The same is also available on the website of the Company.

e) CEO and CFO Certification

The CEO and CFO certification of the Financial Statements for FY 2016-17 is enclosed at the end of this report.

f) The Company has complied with all mandatory requirements of SEBI (LODR) Regulations, 2015 including discretionary requirements. The ones not yet adopted are as follows:

- Maintenance of Chairman's office: Currently Chairman is a Non-Executive Chairman.
- Communication of half yearly results to each household of members: Results are placed on the Company's website and published in leading newspapers.

g) Additional Shareholder Information

Registered Office: Hindustan Zinc Limited, Yashad Bhawan, Udaipur - 313004, Rajasthan.

Plant Locations

Mining Units (all in Rajasthan)

Rampura Agucha Mine	:	Bhilwara District
Sindesar Khurd Mine	:	Rajsamand District
Zawar Mines	:	Udaipur District
Rajpura Dariba Mine	:	Rajsamand District
Kayad Mine	:	Ajmer District
Maton Mine	:	Udaipur District

Smelting Units (all in Rajasthan)

Chanderiya Lead Zinc Smelter	:	Chittorgarh District
Dariba Smelting Complex	:	Rajsamand District
Debari Zinc Smelter	:	Udaipur District

Captive Power Plants (all in Rajasthan)

Chanderiya Lead Zinc Smelter	:	Chittorgarh District
Dariba Smelting Complex	:	Rajsamand District
Zawar	:	Udaipur District

Processing & Refining Units

Haridwar Zinc Plant	:	Haridwar District, (Uttarakhand)
Pantnagar Metal Plant	:	Rudrapur District (Uttarakhand)

Discontinued Units

Vizag Zinc Smelter	:	Visakhapatnam District (Andhra Pradesh)
Tundoo Lead Smelter	:	Dhanbad District (Jharkhand)

Wind Power Farms

Samana	:	Jamnagar District (Gujarat)
Gadag	:	Gadag District (Karnataka)
Gopalpura	:	Hassan District (Karnataka)
Mokal	:	Jaisalmer District Rajasthan)
Osiyan	:	Jodhpur District (Rajasthan)
Chakala	:	Nandurbar District (Maharashtra)
Muthiyampatti	:	Tirpur District (Tamil Nadu)

Address for Correspondence

Mr. R. Pandwal, Company Secretary
Hindustan Zinc Limited, Yashad Bhawan,
Udaipur - 313004, Rajasthan

Compliance Certificate under Regulation 17(8) of SEBI (Listing Obligations & Disclosure Requirements) Regulation, 2015

A. We, Sunil Duggal, CEO & Whole-time Director and Amitabh Gupta, Chief Financial Officer of Hindustan Zinc Limited, have reviewed the financial statements and the cash flow statement for the year and that to the best of our knowledge and belief:

1) these statements do not contain any materially untrue statement or omit any material fact or contain statements that might be misleading;

2) these statements together present a true and fair view of the listed entity's affairs and are in compliance with existing accounting standards, applicable laws and regulations.

B. There are, to the best of our knowledge and belief, no transactions entered into by the Company during the year which are fraudulent, illegal or violate the Company's code of conduct.

C. We accept responsibility for establishing and maintaining internal controls for financial reporting and that we have evaluated the effectiveness of internal control systems of the Company pertaining to financial reporting and we have disclosed to the Auditors and the Audit Committee, deficiencies in the design or operation of such internal controls if any, of which we are aware and the steps we have taken or propose to take to rectify these deficiencies.

D. We have indicated to the Auditors and the Audit Committee

1) Significant changes in internal control over financial reporting during the year;

2) Significant changes in accounting policies during the year and that the same have been disclosed in the Notes to the financial statements; and

3) Instances of significant fraud of which we have become aware and the involvement therein if any, of the management or an employee having a significant role in the listed entity's internal control system over financial reporting.

Amitabh Gupta
Chief Financial officer

Sunil Duggal
CEO & Whole-time Director

Date: April 20, 2017

Auditor's Report on compliance with the conditions of Corporate Governance as per provisions of Chapter IV of Securities and Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations, 2015

The Members
Hindustan Zinc Limited
Yashad Bhawan,
Udaipur - 313004
Rajasthan

1. The accompanying Corporate Governance Report prepared by Hindustan Zinc Limited (hereinafter the 'Company'), contains details as required by the provisions of Chapter IV of Securities and Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations, 2015, as amended ('the Listing Regulations') ('Applicable criteria') with respect to Corporate Governance for the year ended March 31, 2017.

Management's Responsibility

2. The preparation of the Corporate Governance Report is the responsibility of the Management of the Company including the preparation and maintenance of all relevant supporting records and documents. This responsibility also includes the design, implementation and maintenance of internal control relevant to the preparation and presentation of the Corporate Governance Report.

3. The Management along with the Board of Directors are also responsible for ensuring that the Company complies with the conditions of Corporate Governance as stipulated in the Listing Regulations, issued by the Securities and Exchange Board of India.

Auditors' Responsibility

4. Pursuant to the requirements of the Listing Regulations, our responsibility is to express a reasonable assurance in the form of an opinion whether the Company has complied with the specific requirements of the Listing Regulations referred to in paragraph 1 above.

5. We conducted our examination of the Corporate Governance Report in accordance with the Guidance Note on Reports or Certificates for Special Purposes and the Guidance Note on Certification of Corporate Governance, both issued by the Institute of Chartered Accountants of India ('ICAI'). The Guidance Note on Reports or Certificates for Special Purposes requires that we comply with the ethical requirements of the Code of Ethics issued by the Institute of Chartered Accountants of India.

6. We have complied with the relevant applicable requirements of the Standard on Quality Control (SQC) 1, Quality Control for Firms that perform Audits and Reviews of Historical Financial Information, and other Assurance and Related Services Engagements.

7. The procedures selected depend on the Auditor's judgement, including the assessment of the risks associated in compliance of the Corporate Governance Report with the applicable criteria. Summary of key procedures performed include:

   i. Reading and understanding of the information prepared by the Company and included in its Corporate Governance Report

   ii. Obtained and verified that the composition of the Board of Directors w.r.t executive and Non-Executive Directors has been met throughout the reporting period

   iii. Obtained and read the Directors register as on March 31, 2017 and verified that at-least one women director was on the Board during the year

   iv. Obtained and read the minutes of the following committee meetings held from April 1, 2016 to March 31, 2017:

      (a) Board of Directors meeting;

      (b) Audit committee;

      (c) Nomination and remuneration committee;

(d) Stakeholders Relationship Committee; and

(e) Risk management committee

v. Obtained necessary representations and declarations from Directors of the Company including the Independent Directors ; and

vi. Performed necessary inquiries with the management and also obtained necessary specific representations from management.

The above-mentioned procedures include examining evidence supporting the particulars in the Corporate Governance Report on a test basis. Further, our scope of work under this report did not involve us performing audit tests for the purposes of expressing an opinion on the fairness or accuracy of any of the financial information or the financial statements of the Company taken as a whole.

Basis for Qualified Opinion

8. The requirement of having at-least one woman Director on the Board of the Company in terms of Regulation 17(1) (a) of the Listing Regulations, has not been complied with by the Company from November 9, 2016 till December 28, 2016.

9. We further report that the Board of Directors of the Company is duly constituted with proper balance of Executive Directors, Non-Executive Directors except that with regard to the requirement of having minimum number of Independent Directors in terms of Regulation 17(1) (b) of the Listing Regulations, the Company has not met the said requirement with one Independent Director being short throughout the year.

Qualified Opinion

10. Based on the procedures performed by us as referred in paragraph 7 above, and according to the information and explanations given to us, except for matter stated in paragraphs 8 and 9 above, we are of the opinion that the Company has complied with the conditions of Corporate Governance as stipulated in the Listing Regulations, as applicable as at March 31, 2017, referred to in paragraph 1 above.

Other Matters and Restriction on Use

11. This report is neither an assurance as to the future viability of the Company nor the efficiency or effectiveness with which the management has conducted the affairs of the Company.

12. This report is addressed to and provided to the members of the Company solely for the purpose of enabling it to comply with its obligations under the Listing Regulations with reference to Corporate Governance Report accompanied with by a report thereon from the Statutory Auditors and should not be used by any other person or for any other purpose. Accordingly, we do not accept or assume any liability or any duty of care or for any other purpose or to any other party to whom it is shown or into whose hands it may come without our prior consent in writing. We have no responsibility to update this report for events and circumstances occurring after the date of this report.

For S.R. Batliboi & Co. LLP
Chartered Accountants
ICAI Firm Registration Number: 301003E/E300005

per Raj Agrawal
Partner
Membership Number: 82028

Place: Mumbai
Date: April 20, 2017

BUSINESS RESPONSIBILITY REPORT

SECTION A: GENERAL INFORMATION

1. Corporate Identity Number (CIN) of the Company	L27204RJ1966PLC001208
2. Name of the Company	Hindustan Zinc Limited
3. Registered address	Yashad Bhawan, Udaipur - 313004 (Rajasthan) India
4. Website	www.hzlindia.com
5. E-mail id	hzl.cosecy@vedanta.co.in
6. Financial Year reported	April 1, 2016 - March 31, 2017
7. Sector(s) that the Company is engaged in (industrial activity code-wise)	Mining and Smelting of Non Ferrous metal National Industrial Classification Code: Zinc - 27204 Lead - 27209
8. List three key products/services that the Company manufactures/provides (as in balance sheet)	Zinc, Lead and Silver
9. Total number of locations where business activity is undertaken by the Company	
i. Number of International Locations	Nil
ii. Number of National Locations	11 operating units (excluding wind farms & administrative offices)
10. Markets served by the Company - Local/State/National/International	Our products are sold almost in all the states in India. We also export, primarily to Asia & Middle East

SECTION B: FINANCIAL DETAILS

1. Paid up Capital	₹ 845 Crore
2. Total Turnover	₹ 18,798 Crore
3. Total profit after taxes	₹ 8316 Crore
4. Total spending on Corporate Social Responsibility (CSR) as percentage of profit after tax (%)	₹ 49.40 Crore, equivalent to 0.56% of the profit before tax of the last three years, as prescribed (see also Annexure-5 to Directors' Report)
5. List of activities in which expenditure in 4 above has been incurred	Education; Sustainable Livelihoods; Women's Empowerment; Health, Water & Sanitation; Sports & Culture; Environment; and Community Development

SECTION C: OTHER DETAILS

1.	Does the Company have any Subsidiary Company/ Companies?	No
2	Do the subsidiary Company/Companies participate in the BR Initiatives of the parent company? If yes then indicate the number of such subsidiary Company(s)	NA
3	Do any other entity/entities (e.g. suppliers, distributors etc.) that the Company does business with, participate in the BR initiatives of the Company? If yes, then indicate the percentage of such entity/entities? [Less than 30%, 30-60%, More than 60%]	No

SECTION D: BR INFORMATION

1. DETAILS OF DIRECTOR/DIRECTORS RESPONSIBLE FOR BR

a) Details of the Director/Director(s) responsible for implementation of the BR policy/policies

Sr. No.	Particulars	Details
1.	DIN Number (if applicable)	07291685
2.	Name	Mr. Sunil Duggal
3.	Designation	Chief Executive Officer & Whole-time Director
4.	Telephone number	0294 6604000
5.	e-mail id	hzl.cosecy@vedanta.co.in

b) Details of the BR head — same as above

2. PRINCIPLES OF BUSINESS RESPONSIBILITY (BR) POLICY AS PER NATIONAL VOLUNTARY GUIDELINES (NVG)

Principle 1 (P1) : Conduct, Governance, Ethics, Transparency and Accountability

Principle 2 (P2) : Safety and Optimal Resource Utilisation across Product Lifecycle

Principle 3 (P3) : Employee Well-being

Principle 4 (P4) : Engaging Stakeholders

Principle 5 (P5) : Respecting and Promoting Human Rights

Principle 6 (P6) : Nurturing the Environment

Principle 7 (P7) : Responsible Policy Advocacy

Principle 8 (P8) : Supporting Inclusive Development

Principle 9 (P9) : Providing Customer Value

PRINCIPLE-WISE (AS PER NVGS) BR POLICY/POLICIES

	Questions	P1	P2	P3	P4	P5	P6	P7	P8	P9
1.	Do you have a policy/policies* for....	Y	Y	Y	Y	Y	Y	Y	Y	Y
2.	Has the policy been formulated in consultation with the relevant stakeholders?	Y	Y	Y	Y	Y	Y	Y	Y	Y
3.	Does the policy conform to any national / international standards? If yes, specify? (50 words) Please refer footnote * below	Y	Y	Y	Y	Y	Y	Y	Y	Y
4.	Has the policy been approved by the Board*? If yes, has it been signed by MD/ owner/CEO/ appropriate Board Director?	Y	Y	Y	Y	Y	Y	Y	Y	Y
5.	Does the company have a specified committee of the Board/ Director/Official to oversee the implementation of the policy?	Y	Y	Y	Y	Y	Y	Y	Y	Y
6.	Indicate the link for the policy to be viewed online?	http://www.hzlindia.com/code_conduct.aspx								
7.	Has the policy been formally communicated to all relevant internal and external stakeholders?	The policies have been communicated to the key internal stake holders and are enshrined in the company website.								
8.	Does the company have in-house structure to implement the policy/policies?	Y	Y	Y	Y	Y	Y	Y	Y	Y
9.	Does the Company have a grievance redressal mechanism related to the policy/ policies to address stakeholders' grievances related to the policy/policies?	Yes, any grievances or the feed-back relevant to the policies can be sent to hzl.cosecy@vedanta.co.in or hzl.whistleblower@vedanta.co.in								
10.	Has the company carried out independent audit/evaluation of the working of this policy by an internal or external agency?	The policies have been evaluated internally. Several of the policies are also included in third party audits.								

* All the policies of the Company emanate from Vedanta Sustainability Governance Standards, which are aligned with International Finance Corporation and meeting the requirement of IMS Standards. Most of these policies are enshrined in the Company's Business Ethics & Code of Conduct, which has been approved by the Board.

2a. If answer to S.No. 1 against any principle, is 'No', please explain why

Not Applicable

3. Governance related to BR

I. Indicate the frequency with which the Board of Directors, Committee of the Board or CEO assess the BR performance of the Company. Within 3 months, 3-6 months, Annually, More than 1 year.

CEO & Whole-time Director and Senior Management assess the BR performance on an on-going basis, at least annually.

II. Does the Company publish a BR or a Sustainability Report? What is the hyperlink for viewing this report? How frequently it is published?

Separate Sustainability report has been published and is hosted on the Company website.

SECTION E: PRINCIPLE-WISE PERFORMANCE

PRINCIPLE 1: CONDUCT, GOVERNANCE, ETHICS, TRANSPARENCY AND ACCOUNTABILITY

1. **Does the policy relating to ethics, bribery and corruption cover only the Company? Yes/No. Does it extend to the Group/Joint Ventures/Suppliers/ Contractors/NGOs /Others?**

   No. The Business Ethics and Code of Conduct serves as the guiding philosophy for all employees, suppliers, customers, NGOs and others who have dealings with the Company. All stakeholders are expected to comply with the Business Ethics and Code of Conduct. A separate Vendor's Code of Conduct specifically covers our vendors and partners. Both the codes are available on the Company's website.

2. **How many stakeholder complaints have been received in the past financial year and what percentage was satisfactorily resolved by the management? If so, provide details thereof, in about 50 words or so.**

   29 investor complaints were received during FY 2017 and all were resolved. Other complaints are received by different functionaries in the Company and are suitably addressed. In addition, customer complaints and whistle blower complaints are monitored separately and all have been satisfactorily resolved.

PRINCIPLE 2: SAFETY AND OPTIMAL RESOURCE UTILISATION ACROSS PRODUCT LIFECYCLE

1. **List up to three of your products or services whose design has incorporated social or environmental concerns, risks and/or opportunities.**

   Our three major products are zinc, lead and silver metal. We make all efforts to ensure that we produce in a safe and environmentally responsible manner. Over the year, we have constantly improved our recoveries, reduced hazardous waste generation, improved water and energy consumption and adopted new technologies to optimally use available natural resources to improve our environment footprint. Below are three illustrations:

   - Zinc in Jumbo shape helps in lesser zinc wastage, ease of handling, cost efficiency and better safety in customer's operations. The smaller surface area to weight ratio of zinc jumbos compared to small ingot means less turbulence during galvanizing bath and therefore less ash is produced.
   - Continuous Galvanizing Grade (CGG) zinc alloy as per customer requirement removes the need to alloy at customer's premises and thus saves energy, cost and improves bath management during galvanizing.
   - PW zinc is a pre-alloyed zinc lead combination and with its use there is no need to add lead separately in zinc galvanizing bath reducing occupational hazards of operators in dealing with lead in galvanizing plant.

2. **For each such product, provide the following details in respect of resource use (energy, water, raw material etc.) per unit of product (optional):**

   Energy Conservation: Energy consumption is constantly monitored at the mines, smelters and refineries with a view to achieve overall reduction. In order to conserve energy, the Company has taken many initiatives like replacement of old high pressure burner with low pressure burner, duct modifications, process optimisation, VFDs, replacement of motors with energy efficient motors and LED lights in place of conventional lights.

   Water use efficiency: Used water is reclaimed and re-used in order to conserve water. All units are maintaining zero discharge via treatment plants. The processes are also reviewed and modified so as to reduce the requirement of water from time to time.

I Reduction during sourcing/production/distribution achieved since the previous year throughout the value chain?

	2015-16		2016-17	
	Sp. Energy Consumption	Sp. Water Consumption	Sp. Energy Consumption	Sp. Water Consumption
HZL	23.49	14.56	21.33	13.78

Energy (GJ/MT of Metal in Concentrate)
Water (m3/MT of Metal in Concentrate)

ii. Reduction during usage by consumers (energy, water) has been achieved since the previous year?

Our increased focus on value added products has improved energy consumption at the consumer's end. As an illustration of Jumbo zinc, with innovative design and customization of products, better zinc galvanizing bath management is achieved since melting of uniform bigger blocks is less energy consuming than smaller ingots due to lesser surface area, better transmission of heat and no energy wastage due to lesser splashing in zinc bath. Substantial amount of energy cost saving has been realized by zinc consumers. Customers get benefit of less dross generation and less recycling cost. Also with CGG, Pre-aluminum alloyed zinc etc., the customer gets benefit of avoiding the alloying energy cost. Some customers have reported a saving to the extent of $15 per Mt of alloy supplied by us.

3. Does the Company have procedures in place for sustainable sourcing (including transportation)?

i. If yes, what percentage of your inputs was sourced sustainably?

The Company sources its primary raw-material from captive mines. Beneficiation is generally carried on within the mine premises to minimise transportation. For the past several years, the Company has added more to its mining reserves and resources than it has depleted, through systematic exploration efforts.

The Company has now developed in conjunction with transporters and third parties, mechanised shutter vehicles for movement of concentrate. This will be proliferated during the coming years and will reduce spillage, pilferage and dust pollution on the roads. We are increasing transportation of raw material and finished goods through Rail which will help in reduction in carbon emissions. The company also encourages Vendors to set up local manufacturing units in vicinity of our operations to reduce transportation.

Please also refer to our Environment section from 45 to 51 of Annual Report for details about our water, waste and energy conservation initiatives.

4. Has the company taken any steps to procure goods and services from local & small producers, including communities surrounding their place of work? If yes, what steps have been taken to improve their capacity and capability of local and small vendors?

The Company sources its major inputs from OEMs and large national and international manufacturers. There is limited industrial activity around our operations. We are actively promoting "Make in India" and are influencing some of our major suppliers to set up manufacturing facility in proximity of our operations which will provide local employment and technology development in India. Our direct & indirect employment as also our CSR activities are largely focused on the communities surrounding our operations.

5. Does the company have a mechanism to recycle products and waste? If yes what is the percentage of recycling of products and waste (separately as <5%, 5-10%, >10%). Also, provide details thereof, in about 50 words or so.

Our production process is based on principles of optimal use of the material and natural resources. Our primary activities are in the extraction, processing and smelting of various minerals as well as power generation using well-established processes and technologies. Our focus on best available technology helps us to produce these products using efficient energy consumption and maximum mineral recovery. We have in place a Resource Use and Waste Management Technical Standard and supporting guidance notes which augment us to mitigate the environmental impacts of our products and process.

We have been constantly enhancing technical capabilities for better recoveries of main products and by-products. We have commenced construction of a Fumer plant in our existing leaching circuit of Hydrometallurgical process. This will eliminate generation of hazardous waste and help us to eliminate the use of land for storing this waste. We have also commissioned Paste Fill Plants for the first time in India, at Sindesar Khurd Mine and Rampura Agucha mine as an environmentally sustainable global practice.

PRINCIPLE 3: EMPLOYEE WELL-BEING

1. **Please indicate the total number of employees.**

   4,421 as at March 31, 2017

2. **Please indicate the total number of employees hired on temporary/contractual/casual basis.**

   13,155 under our contractors as at March 31, 2017

3. **Please indicate the number of permanent women employees.**

   324 as at March 31, 2017

4. **Please indicate the number of permanent employees with disabilities**

   Not tracked

5. **Do you have an employee association that is recognized by the management?**

   Yes, there are recognised trade unions

6. **What percentage of your permanent employees are members of this recognized employee association?**

   Over 99% of all non-executives

7. **Please indicate the Number of complaints relating to child labour, forced labour, involuntary labour, sexual harassment in the last financial year and pending, as on the end of the financial year.**

   Nil

Sr. No.	Category	No of complaints filed during the financial year	No of complaints pending as on end of the financial year
1	Child labour/forced labour/ involuntary labour	Nil. The Company does not hire child labour, forced labour or involuntary labour	Not applicable
2	Sexual Harassments	1	Nil
3	Discriminatory employment	The Company does not discriminate in the recruitment process. No reported case.	Not applicable.

8. **What percentage of your under mentioned employees were given safety & skill up-gradation training in the last year?**

Category	Safety Training	Total (as on March 31, 2017)	%	Skill Upgradation Training	%
Permanent Executives*	23539	4421	NA	13109	NA
Permanent Women Employees	1864	324	NA	1763	NA
Contractual Employees	114656	13155	NA	7552	NA
Employees with Disability	Separate list not available				

* Includes executives and workmen

Since many employees go through multiple training programs, percentage is not relevant

PRINCIPLE 4: ENGAGING STAKEHOLDERS - SUSTAINING VALUE

1. **Has the Company mapped its internal and external stakeholders? Yes/No**

   Yes. Our primary stakeholders are our employees, vendors, customers, governments, shareholders and the communities around our operations. We continuously engage with each of our stakeholder groups on a pro-active basis and have different grievance redressal mechanisms and stakeholder engagement methodologies in place.

2. **Out of the above, has the Company identified the disadvantaged, vulnerable & marginalized stakeholders.**

   Identification of the disadvantaged, vulnerable & marginalized stakeholders is an on-going process. In particular, for any new proposed project or expansion, we map and engage with all such stakeholders on a proactive basis, particularly through our CSR activities. Further, we have stakeholder management and grievance mechanism in place at all our locations.

3. **Are there any special initiatives taken by the Company to engage with the disadvantaged, vulnerable and marginalized stakeholders. If so, provide details thereof, in about 50 words or so.**

   Yes, we engage with the disadvantaged, vulnerable and marginalised stakeholders. Yes. This year we have launched an initiative for the specially abled people- Jeevan Tarang Zinc Ke Sang. This is an initiative to mainstream people with disabilities - Schools for Deaf-Mute, Visually Impaired and for children with Brain Damages. We have identified institutions working with the disabled near Kayad Mine, Rampura Agucha Mine, Chanderiya Zinc Smelter and Udaipur. We have also reached out to experts to develop a long-term vision and roadmap for these institutes. Other than that, we extended support to Badhir Bal Kalyan Vikas Samiti, Bhilwara & Viklang Kalyan Samiti, Udaipur where 348 differently abled children were taken care of.

   Further, our Sakhi Women's Empowerment Program is running for rural and tribal women to empower them socio-economically and to build grass-root institutions. Details of this are given on Page No. 55 & 56 of Annual report.

PRINCIPLE 5: RESPECTING AND PROMOTING HUMAN RIGHTS

1. **Does the policy of the Company on human rights cover only the Company or extend to the Group/Joint Ventures/Suppliers/ Contractors/ NGOs/Others?**

   Our Human Rights policy is aligned to the United Nations Guiding Principles on Business and Human Rights. The policy also covers all its suppliers, contractors and NGOs. The clauses of the Code of Conduct and SA 8000 standards extend to all business partners.

2. **How many stakeholder complaints have been received in the past financial year and what percent was satisfactorily resolved by the management?**

   There have been no stakeholder

complaints related to human rights. Please also refer to principle 1, point 2.

PRINCIPLE 6: NURTURING THE ENVIRONMENT

1. **Does the policy cover only the Company or extends to the Group/Joint Ventures/ Suppliers/Contractors/NGOs/others.**

   All our Sustainability policies (HSE, Biodiversity, Energy & Climate change, Water Management, HIV/ AIDs, Human Rights and Supplier & Contractor Management and CSR Policy) is applicable and extended to Suppliers/ Contractors/NGOs/others. We aim to propagate the principles of Sustainability throughout our Value chain and to all stakeholders. The Policy on 'Supplier & Contractor Management' encourages resource efficiency in the supply chain which together with the 'Code of Conduct for Vendors and Service Providers' provide guidance to supply chain members and partners to adopt sustainable practices. Also, induction and refresher trainings are imparted to our contract employees and others to raise awareness on sustainability policies and standards.

2. **Does the Company have strategies/ initiatives to address global environmental issues such as climate change, global warming etc.? Y/N. If yes, please give details.**

   Majority of the manufacturing locations of Hindustan Zinc Limited are certified as per ISO: 14001 Environment Management System and OSHAS 18001. Our Sindesar Khurd Mine has been certified as per ISO: 50001 Energy Management System. There are several innovative technologies which have been implemented to reduce the energy consumption as well as to use the renewable energy at corporate office. We are also conducting energy audits and taking measures to improve energy efficiency continuously.

   Energy & Climate Change Management policy and HSE policy guides the organisation to proactively address the impact of climate change and other global environment issues through adopting and maintaining global best practices in Energy and Climate Change Management, Water Management and to minimise greenhouse gas emissions.

   Most of our operations are in State of Rajasthan which is a water scare region and we see climate change as a material concern for our business and stakeholders. Our focus is on both climate mitigation and adaption measures. This includes the diversifying water and energy resources, securing alternative water source for the business, public private partnership for municipal water reuse / recycling, sustainable agriculture, energy use optimization, efficiency improvement, alternative source of energy use etc.

   The Company has undertaken several water conservation and harvesting initiatives for reduction in fresh water intake. These include continual improvement in specific water consumption; adoption of best practices to achieve zero discharge in the Company's operating units and the establishment of rainwater harvesting structures both within the Company's premises and in the catchment areas of its operations. These initiatives not only lower fresh water consumption but also maximise groundwater recharge. Our Dariba Smelter Complex has been recognized as a 'Noteworthy Water Efficient Unit - Within the fence' category in 'National Award for Excellence in Water Management 2016' by Confederation of Indian Industry. The Indian Chamber of Commerce (ICC) awarded Dariba Smelter Complex the Corporate Governance & Sustainability Vision Awards 2017. DSC bagged the second prize in the 'Water Stewardship' category.

   Hindustan Zinc's Kayad Mine, SK Mine and Rampura Agucha Mine were bestowed with '5 STAR Rating Mine Award- 2017' under aegis of Indian Bureau of Mine, Ministry of Mine.

   Taking cognizance of green initiatives by Hindustan Zinc, CII-Indian Green Building Council (IGBC) awarded Platinum rating to 'Yashad Bhawan' Hindustan Zinc's Head Office-Udaipur, one of only fourteen buildings in the country and the first Company in Rajasthan to be awarded under the existing building category.

   We continuously monitor our greenhouse gas emission intensity for reduction and endeavour to minimize our carbon footprint. We have been voluntarily participating in Carbon Disclosure Project program since 2011. We are also signatory of UNGC and FIMI and we submit the communication of progress every year. We have also initiated the process of reporting our sustainability performance as per the GRI G4 Guidelines through our Sustainability report. The Company is also computing its Greenhouse Gas Inventory in line with the Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard, which is being assured as per the ISAE 3000 standard by a third-party assurance provider.

3. **Does the company identify and assess potential environmental risks? Y/N**

Yes, Environmental risks are regularly identified and assessed through the following:

- Environment & Social Impact Assessment (ESIA) studies carried out by recognized and approved third parties to identify risks and based on that mitigation plan is prepared in the form of Environmental & Social Management Plan, which is integral part of ESIA document.
- Environmental risks are being identified and assessed as part of Integrated Management system ISO: 14001.
- Risk register is being maintained by all units under the guidance of Risk Management policy and major risk is being reviewed periodically at corporate level.
- Hazard identification and Risk assessment are also conducted as part of safety management system to identify potential environmental hazards and risks.
- Environment incidents are being captured through online module. Root cause analysis is being done through why-why analysis and learnings are being shared to all units to avoid the reoccurrence.

To effectively manage each of environmental risks, we have a set of Sustainability policies and management and technical standards. An integrated sustainability database management system implemented across the Company ensures monitoring and reviewing of sustainability performance through defined key performance indicators. We have Sustainability Assurance Process in place for ensuring accuracy and verifiability of sustainability performance against the four pillars of our Sustainability Framework.

4. **Does the Company have any project related to Clean Development Mechanism? If so, provide details thereof, in about 50 words or so. Also, if Yes, whether any environmental compliance report is filed?**

As a responsible corporate entity, the Company measures its carbon footprint and constantly focuses on reducing the same. We have 274 MW wind farms, in Gujarat, Karnataka, Rajasthan, Maharashtra and Tamil Nadu which are registered under Clean Development Mechanism (CDM) program by United Nations Framework Convention on Climate Change (UNFCCC).

We also have 34.4 MW of power capacity through waste heat recovery from roasters and Steam Turbo Generator out of which 9.4 MW WHRB projects are registered under CDM along with 21 TPH LCV boilers for steam generation project. Our 10 UNFCCC registered projects reduce our carbon footprint by 583,685 tonnes CO2 emission per annum while our unregistered projects reduce our carbon footprints by 116,992 tonnes CO2 emissions per annum.

In continuation of investment in green energy this year we have commissioned two solar power projects with a capacity of 16 MW at our Dariba and Debari locations for captive use of generated green energy. The solar power project at Debari smelter is installed on Jarosite pond while the Dariba project has been set-up on used secure land fill, which demonstrates our efforts towards gainful utilization of wasteland. We are also trying to register these projects under CDM program of UNFCCC. These projects will further reduce our carbon footprints by 30,000 tonnes CO2 emission per annum. We have been voluntarily participating in Carbon Disclosure Project program since 2011 and have set a target to reduce our footprint by 5% assuming 2016 as baseline.

We received the National Energy Conservation Award – 2016 at State and Central levels for implementation of various power saving projects and reducing the specific energy consumption by 4.81 Kwh/MT of ore treatment. On the National Energy Conservation Day, 2nd prize in the Mining Sector at Central Level and the First Prize in Large Scale-Mining Sector at the Rajasthan State Level to RAM Mill Stream-

3. Our Dariba CPP unit has been honoured with the 'IPPAI POWER Awards 2016' under 'Best innovation in power sector'.

5. **Has the Company undertaken any other initiatives on - clean technology, energy efficiency, renewable energy, etc. Y/N. If yes, please give details.**

Hindustan Zinc has been working on climate change issues by improving its process efficiency and taking initiatives in energy efficiency, development of green zones at units and water conservation etc. We have installed 274 MW of wind power and 35 MW of waste heat recovery power plants to give an impetus to green energy. In continuation to investment in green energy, this year we have commissioned two solar power projects with total installation capacity of 16 MW at our Dariba mine and Debari Zinc Smelter for captive use of generated green energy. Wherever feasible we have introduced the solar or energy efficient lights. We focus on energy consumption reduction through various in-process innovations and adoption of best practices like machine productivity and improving throughput to reduce specific energy consumption.

The Corporate Office in Udaipur is a certified Green Building. Several green features are implemented to enhance the building performance. Fresh air ventilation system is integrated with active cooling system to improve indoor air quality, which would enhance occupant comfort. On-site renewable energy of 100 KW is installed that would generate 1,62,000 units every year, offsetting 15% energy requirement by Renewable Energy. Online energy monitoring system is installed to track the building energy performance of the project and would help in identifying energy usages by various building components such as lighting, UPS, air-conditioning, exterior lighting usages, etc. Air Handling Units are integrated with Indoor Environmental Quality monitoring system to ensure continuous measurement of indoor environment thereby thermal comfort conditions. Similarly, water meters are installed at several places to record water usage. These monitoring systems would support segregated energy usage and take appropriate action to further optimise energy performance. We have also developed a green belt across the corporate office and residential colony to improve the outdoor environment.

6. **Is the Emissions/Waste generated by the company within the permissible limits given by CPCB/SPCB for the financial year being reported?**

Yes, we are well within the prescribed limits by the relevant pollution control authorities. The Company continues to invest in reducing air emission levels through adoption of cleaner technologies/fuels, monitoring of combustion efficiencies and investments in state-of-the-art pollution control equipment, such as bag filters, electrostatic precipitators, etc. Regular monitoring of significant air emission parameters, such as Particulate Matter, Nitrogen Oxide and Sulphur Dioxide to ensure compliance with regulatory requirement. Majority of the units have online ambient air quality monitoring station and meet the National Ambient Air Quality standards. We also have online monitoring systems in place for monitoring of emission and effluent to transmit data from field instrument directly to CPCB/SPCB servers.

All wastes are being stored at earmarked places and timely disposed through the approved registered recyclers as per the Hazardous Waste Rule. The Company has laid down comprehensive guidelines on waste management for all its units, which cover hazardous as well as non-hazardous waste and monitoring of performance for each unit is carried out on a regular basis. The Company has measures across units to ensure waste minimisation, segregation at source and recycling. Our Chanderiya CPP received Fly Ash utilization award-2016 by Mission Energy Foundation under CPP category.

7. **Number of show cause/ legal notices received from CPCB/SPCB which are pending (i.e. not resolved to satisfaction) as on end of Financial Year.**

Nil

PRINCIPLE 7: RESPONSIBLE POLICY ADVOCACY

1. **Is your Company a member of any trade and chamber or association? If Yes, name only those major ones that your business deals with:**

Yes, the Company is a member of the following organisations:

a) Federation of Indian Mineral Industries

b) Confederation of Indian Industry

c) Federation of Indian Chambers of Commerce & Industry

d) Indian Chamber of Commerce

e) Associated Chambers of Commerce and Industry of India

f) India Lead Zinc Development Association

2. **Have you advocated/lobbied through above associations for the advancement or improvement of public good? Yes/No; if yes specify the broad areas (drop box: Governance and Administration, Economic Reforms, Inclusive Development Policies, Energy security, Water, Food Security, Sustainable Business Principles, Others)**

   Yes, for economic reforms.

PRINCIPLE 8: SUPPORTING INCLUSIVE DEVELOPMENT

1. **Does the Company have specified programmes/initiatives/projects in pursuit of this policy? If yes details thereof**

   As a responsible corporate citizen, the Company focuses on community development through its CSR activities. Details of our CSR activities are provided from page 52 to 57 of Annual Report.

2. **Are the programmes/projects undertaken through in-house team/own foundation/external NGO/government structures/any other organization?**

   We undertake our CSR activities through all of the above routes, including Vedanta foundation.

3. **Have you done any impact assessment of your initiative?**

   Yes, the same is done internally and also at times with external agencies at periodical intervals.

4. **What is your Company's direct contribution to community development projects- Amount in INR and the details of the projects undertaken.**

   The total amount spent on all CSR activities and projects during the FY 2017 was ₹ 49.40 Crore. Details of our CSR activities are provided from page 52 to 57 of Annual Report.

5. **Have you taken steps to ensure that this community development initiative is successfully adopted by the community? Please explain in 50 words, or so.**

   Yes. Details of our CSR activities are provided from page 52 to 57 of Annual Report.

PRINCIPLE 9: PROVIDING CUSTOMER VALUE

1. **What percentage of customer complaints/consumer cases are pending as on the end of financial year.**

   Out of 37 complaints received during FY 2017, 3 complaints were pending as on March 31, 2017 for closure.

2. **Does the Company display product information on the product label, over and above what is mandated as per local laws? Yes/No/N.A. /Remarks (additional information)**

   Yes, the Company displays the product name, batch number, grade, purity, date of production on the product label, as per industry practice.

3. **Is there any case filed by any stakeholder against the Company regarding unfair trade practices, irresponsible advertising and/or anti-competitive behaviour during the last five years and pending as on end of financial year. If so, provide details thereof, in about 50 words or so.**

   No.

4. **Did your Company carry out any consumer survey/ consumer satisfaction trends?**

   Yes, the Company carries out customer satisfaction survey periodically. The last survey conducted was in FY 2015. In FY 2015, the Company scored 77 on the total customer satisfaction index(CSI) as against 75 in FY 2012, with substantial improvement seen on the experience front.

FINANCIAL STATEMENTS


DARIBA SMELTER COMPLEX
DSC SECURITY
BARRIER
AHEAD

INDEPENDENT AUDITOR'S REPORT

To the Members of Hindustan Zinc Limited

Report on the Ind AS Financial Statements

We have audited the accompanying Ind AS financial statements of Hindustan Zinc Limited ("the Company"), which comprise the Balance Sheet as at March 31, 2017, the Statement of Profit and Loss, including Other Comprehensive Income, the Cash Flow Statement and the Statement of Changes in Equity for the year then ended, and a summary of significant accounting policies and other explanatory information.

Management's Responsibility for the Financial Statements

The Company's Board of Directors is responsible for the matters stated in Section 134(5) of the Companies Act, 2013 ("the Act") with respect to the preparation of these Ind AS financial statements that give a true and fair view of the financial position, financial performance including other comprehensive income, cash flows and changes in equity of the Company in accordance with accounting principles generally accepted in India, including the Indian Accounting Standards (Ind AS) specified under section 133 of the Act, read with the Companies (Indian Accounting Standards) Rules, 2015, as amended. This responsibility also includes maintenance of adequate accounting records in accordance with the provisions of the Act for safeguarding of the assets of the Company and for preventing and detecting frauds and other irregularities; selection and application of appropriate accounting policies; making judgments and estimates that are reasonable and prudent; and the design, implementation and maintenance of adequate internal financial controls that were operating effectively for ensuring the accuracy and completeness of the accounting records, relevant to the preparation and presentation of the Ind AS financial statements that give a true and fair view and are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these Ind AS financial statements based on our audit. We have taken into account the provisions of the Act, the accounting and auditing standards and matters which are required to be included in the audit report under the provisions of the Act and the Rules made thereunder. We conducted our audit of the Ind AS financial statements in accordance with the Standards on Auditing, issued by the Institute of Chartered Accountants of India, as specified under Section 143(10) of the Act. Those Standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the Ind AS financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the Ind AS financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal financial control relevant to the Company's preparation of the Ind AS financial statements that give a true and fair view in order to design audit procedures that are appropriate in the circumstances. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of the accounting estimates made by the Company's Directors, as well as evaluating the overall presentation of the Ind AS financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion on the Ind AS financial statements.

Opinion

In our opinion and to the best of our information and according to the explanations given to us, the Ind AS financial statements give the information required by the Act in the manner so required and give a true and fair view in conformity with the accounting principles generally accepted in India, of the state of affairs of the Company as at March 31, 2017, its profits including other comprehensive income, its cash flows and the changes in equity for the year ended on that date.

Report on Other Legal and Regulatory Requirements

1. As required by the Companies (Auditor's report) Order, 2016 ("the Order") issued by the Central Government of India in terms of sub-section (11) of section 143 of the Act, we give in the Annexure 1 a statement on the matters specified in paragraphs 3 and 4 of the Order.

2. As required by section 143 (3) of the Act, we report that:

   a) We have sought and obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purpose of our audit;

   b) In our opinion, proper books of account as required by law have been kept by the Company so far as it appears from our examination of those books;

   c) The Balance Sheet, Statement of Profit and Loss including Other Comprehensive Income, the Cash Flow Statement and Statement of Changes in Equity dealt with by this Report are in agreement with the books of account;

   d) In our opinion, the aforesaid Ind AS financial statements comply with the Accounting Standards specified under section 133 of the Act, read with Companies (Indian Accounting Standards) Rules, 2015, as amended;

   e) On the basis of written representations received from the directors as on March 31, 2017, and taken on record by the Board of Directors, none of the directors is disqualified as on March 31, 2017, from being appointed as a director in terms of section 164 (2) of the Act;

   f) With respect to the adequacy of the internal financial controls over financial reporting of the Company and the operating effectiveness of such controls, refer to our separate Report in Annexure 2 to this report;

   g) With respect to the other matters to be included in the Auditor's Report in accordance with Rule 11 of the Companies (Audit and Auditors) Rules, 2014, in our opinion and to the best of our information and according to the explanations given to us:

      i) The Company has disclosed the impact of pending litigations on its financial position in its Ind AS financial statements - Refer Note 30 to the financial statements;

      ii) The Company did not have any long-term contracts including derivative contracts for which there were any material foreseeable losses;

      iii) There has been no delay in transferring amounts, required to be transferred, to the Investor Education and Protection Fund by the Company.

      iv) As per books of accounts of the Company and as represented by the management of the Company, the Company did not have cash balance as on November 8, 2016 and December 30, 2016 and has no cash dealings during this period.

Other Matter

The comparative financial information of the company for the year ended March 31, 2016 and the transition date opening balance sheet as at April 1, 2015 prepared in accordance with Ind AS, included in these Ind AS financial statements, have been audited by the predecessor auditor who had audited the financial statements for the relevant periods. The report of the predecessor auditor on the comparative financial information and the opening balance sheet dated April 20, 2017 expressed an unmodified opinion.

For S.R. Batliboi & CO. LLP
Chartered Accountants
ICAI Firm Registration Number: 301003E/E300005

per Raj Agrawal
Partner
Membership Number: 82028

Place: Mumbai
Date: April 20, 2017

ANNEXURE 1

REFERRED TO IN PARAGRAPH 1 UNDER THE HEADING "REPORT ON OTHER LEGAL AND REGULATORY REQUIREMENTS" OF OUR REPORT OF EVEN DATE

Re: Hindustan Zinc Limited ('the Company')

(i) (a) The Company has maintained proper records showing full particulars, including quantitative details and situation of fixed assets.

(b) All fixed assets have not been physically verified by the management during the year but there is a regular programme of verification which, in our opinion, is reasonable having regard to the size of the Company and the nature of its assets. No material discrepancies were noticed on such verification.

(c) According to the information and explanations given by the management, the title deeds of immovable properties included in property, plant and equipment are held in the name of the Company.

(ii) The management has conducted physical verification of inventory at reasonable intervals during the year and no material discrepancies were noticed on such physical verification.

(iii) (a) The Company had granted loan to one company covered in the register maintained under section 189 of the Act. In our opinion and according to the information and explanations given to us, the terms and conditions of the grant of such loan was not prejudicial to the company's interest.

(b) The schedule of repayment of principal and payment of interest has been stipulated for the loan granted and the repayment/receipts were regular.

(c) There are no amounts of loan granted to the company listed in the register maintained under section 189 of the Act, which were overdue for more than ninety days.

(iv) In our opinion and according to the information and explanations given to us, there are no loans, investments, guarantees, and securities given in respect of which provisions of section 185 and 186 of the Act are applicable and hence not commented upon.

(v) The Company has not accepted any deposits within the meaning of Sections 73 to 76 of the Act and the Companies (Acceptance of Deposits) Rules, 2014 (as amended). Accordingly, the provisions of clause 3(v) of the Order are not applicable.

(vi) We have broadly reviewed the books of account maintained by the Company pursuant to the rules made by the Central Government for the maintenance of cost records under section 148(1) of the Act, related to the manufacture of products and generation of electricity, and are of the opinion that prima facie, the specified accounts and records have been made and maintained. We have not, however, made a detailed examination of the same.

(vii) (a) Undisputed statutory dues including provident fund, income-tax, sales-tax, service tax, duty of custom, duty of excise, value added tax, cess and other statutory dues have generally been regularly deposited with the appropriate authorities though there has been a slight delay in a few cases. The provisions relating to employees' state insurance are not applicable to the Company.

(b) According to the information and explanations given to us, no undisputed amounts payable in respect of provident fund, income-tax, service tax, sales-tax, duty of custom, duty of excise, value added tax, cess and other statutory dues were outstanding, at the year end, for a period of more than six months from the date they became payable. The provisions relating to employees' state insurance are not applicable to the Company.

(c) According to the records of the Company, the dues of income-tax, sales-tax, service tax, duty of custom, duty of excise, value added tax and cess on account of any dispute, are as follows:

Name of the statute	Nature of the dues	Amount * (₹ in Crore)	Period (Financial year) to which amount relates	Forum where the dispute is pending
Income tax act, 1961	Income tax	2,558	1995-96, 1996-97, 1998-99, 2007-08, 2009-10, 2011-12, 2012-13	Commissioner of Income tax (Appeals)
		1,350	1988-89 to 1990-91, 1992-93, 1995-96, 1997-98, 1999-00 to 2008-09, 2010-11	Income Tax Appellate Tribunal
		113	1989-90 to 1996-97, 1998-99, 2000-01 to 2008-09	High Court / Supreme Court
Customs Act, 1962	Customs duty	42	2008-09 to 2013-14	CESTAT
Central Excise Act, 1944	Excise duty	304	1991-92, 1995-96 to 2015-16	CESTAT
		32	1997-98 to 2002-03, 2006-07 to 2015-16	Commissioner (Appeals)
		-**	2002-03 to 2011-12	High Court
Rajasthan sales tax act, 1994	Sales tax	27	1994-95, 1996-97 to 2003-04 , 2005-06 to 2013-14	Deputy Commissioner (Appeals)
Finance Act, 1994	Service tax	20	2002-03 to 2004-05, 2007-08 to 2014-15	Commissioner (Appeals)
		38	1997-98, 1998-99, 2004-05 to 2015-16	CESTAT

* Net of amounts paid under protest/adjusted against refunds
** Amount involved is ₹ 44 Lakhs.

(viii) In our opinion and according to the information and explanations given by the management, the Company has not defaulted in repayment of loans or borrowings to financial institutions. The Company did not have any outstanding dues in respect of banks, government or debenture holders during the year.

(ix) According to the information and explanations given by the management, the Company has not raised any monies by way of initial public offer / further public offer / debt instruments or term loans hence, reporting under clause 3(ix) is not applicable to the Company and hence not commented upon.

(x) Based upon the audit procedures performed for the purpose of reporting the true and fair view of the financial statements and according to the information and explanations given by the management, we report that no fraud by the Company or material fraud on the Company by the officers and employees of the Company has been noticed or reported during the year.

(xi) According to the information and explanations given by the management, the managerial remuneration has been paid / provided in accordance with the requisite approvals mandated by the provisions of section 197 read with Schedule V to the Act.

(xii) In our opinion, the Company is not a nidhi company. Therefore, the provisions of clause 3(xii) of the order are not applicable to the Company and hence not commented upon.

(xiii) According to the information and explanations given by the management, transactions with the related parties are in compliance with section 177 and 188 of Companies Act, 2013 where applicable and the details have been disclosed in the notes to the financial statements, as required by the applicable accounting standards.

(xiv) According to the information and explanations given to us and on an overall examination of the balance sheet, the Company has not made any preferential allotment or private placement of shares or fully or partly convertible debentures during the year under review and hence, reporting requirements under clause 3(xiv) are not applicable to the Company and not commented upon.

(xv) According to the information and explanations given by the management, the Company has not entered into any non-cash transactions with directors or persons connected with them as referred to in section 192 of Companies Act, 2013.

(xvi) According to the information and explanations given to us, the provisions of section 45-IA of the Reserve Bank of India Act, 1934 are not applicable to the Company.

For S.R. Batliboi & CO. LLP
Chartered Accountants
ICAI Firm Registration Number: 301003E/E300005

per Raj Agrawal
Partner
Membership Number: 82028

Place: Mumbai
Date: April 20, 2017

ANNEXURE 2

REFERRED TO IN PARA 2(F) UNDER THE HEADING "REPORT ON OTHER LEGAL AND REGULATORY REQUIREMENTS" TO THE INDEPENDENT AUDITOR'S REPORT OF EVEN DATE ON THE STANDALONE IND AS FINANCIAL STATEMENTS OF HINDUSTAN ZINC LIMITED

Report on the Internal Financial Controls under Clause (i) of Sub-section 3 of Section 143 of the Companies Act, 2013 ("the Act")

We have audited the internal financial controls over financial reporting of Hindustan Zinc Limited ("the Company") as of March 31, 2017 in conjunction with our audit of the Ind AS financial statements of the Company for the year ended on that date.

Management's Responsibility for Internal Financial Controls

The Company's Management is responsible for establishing and maintaining internal financial controls based on the internal control over financial reporting criteria established under the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) ('COSO 2013 criteria'), which considers the essential components of internal control stated in the Guidance Note on Audit of Internal Financial Controls Over Financial Reporting issued by the Institute of Chartered Accountants of India. These responsibilities include the design, implementation and maintenance of adequate internal financial controls that were operating effectively for ensuring the orderly and efficient conduct of its business, including adherence to the Company's policies, the safeguarding of its assets, the prevention and detection of frauds and errors, the accuracy and completeness of the accounting records, and the timely preparation of reliable financial information, as required under the Act.

Auditor's Responsibility

Our responsibility is to express an opinion on the Company's internal financial controls over financial reporting based on our audit. We conducted our audit in accordance with the Guidance Note on Audit of Internal Financial Controls Over Financial Reporting (the "Guidance Note") and the Standards on Auditing as specified under section 143(10) of the Companies Act, 2013, to the extent applicable to an audit of internal financial controls, and, both issued by the Institute of Chartered Accountants of India. Those Standards and the Guidance Note require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether adequate internal financial controls over financial reporting were established and maintained and if such controls operated effectively in all material respects.

Our audit involves performing procedures to obtain audit evidence about the adequacy of the internal financial controls system over financial reporting and their operating effectiveness. Our audit of internal financial controls over financial reporting included obtaining an understanding of internal financial controls over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. The procedures selected depend on the auditor's judgement, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion on the internal financial controls system over financial reporting.

Meaning of Internal Financial Controls over Financial Reporting

A company's internal financial control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal financial control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorisations of management and directors of the company and (3) provide reasonable assurance regarding prevention or timely detection of unauthorised acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Inherent Limitations of Internal Financial Controls over Financial Reporting

Because of the inherent limitations of internal financial controls over financial reporting, including the possibility of collusion or improper management override of controls, material misstatements due to error or fraud may occur and not be detected. Also, projections of any evaluation of the internal financial controls over financial reporting to future periods are subject to the risk that the internal financial control over financial reporting may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Opinion

In our opinion, the Company has, in all material respects, an adequate internal financial controls system over financial reporting and such internal financial controls over financial reporting were operating effectively as at March 31, 2017, based on the internal control over financial reporting in COSO 2013 criteria, considering the essential components of internal control stated in the Guidance Note on Audit of Internal Financial Controls Over Financial Reporting issued by the Institute of Chartered Accountants of India.

For S.R. Batliboi & CO. LLP

Chartered Accountants
ICAI Firm Registration Number: 301003E/E300005

per Raj Agrawal
Partner
Membership Number: 82028

Place: Mumbai
Date: April 20, 2017

BALANCE SHEET
as at March 31, 2017

(₹ in Crore)

Particulars	Notes	As at March 31, 2017	As at March 31, 2016	As at April 01, 2015
ASSETS				
Non-current assets				
a) Property, Plant and Equipment	4	**9,865**	10,265	9,783
b) Capital work-in-progress	4	**3,071**	2,428	2,005
c) Intangible Assets	5	**128**	120	117
d) Financial assets				
i) Loans	6	**19**	19	24
e) Deferred tax assets (net)	32	**2,748**	2,498	1,140
f) Other non-current assets	7	**1,315**	952	849
Total Non-current assets		**17,146**	**16,282**	**13,918**
Current assets				
a) Inventories	8	**1,936**	1,058	1,212
b) Financial Assets				
i) Investments	9	**23,783**	35,221	27,314
ii) Trade receivables	10	**136**	107	560
iii) Cash and cash equivalents	11	**189**	51	50
iv) Other Bank balances	12	**8,191**	2	3,535
v) Loans	6	**1**	2	1
vi) Other	13	**5**	5	3
c) Other current assets	7	**408**	467	409
Total Current assets		**34,649**	**36,913**	**33,084**
TOTAL		**51,795**	**53,195**	**47,002**
EQUITY AND LIABILITIES				
Equity				
a) Equity share capital	14	**845**	845	845
b) Other equity		**29,960**	36,540	43,776
Total Equity		**30,805**	**37,385**	**44,621**
Liabilities				
Non-current liabilities				
a) Financial liabilities				
i) Other financial liabilities	15	**93**	101	96
b) Provisions	16	**111**	19	11
c) Other non-current liabilities	17	**556**	563	596
Total Non-current liabilities		**760**	**683**	**703**
Current liabilities				
a) Financial liabilities				
i) Borrowings	18	**7,908**	-	-
ii) Trade payables	19	**1,205**	931	762
iii) Other financial liabilities	15	**8,603**	10,548	414
b) Other current liabilities	17	**2,327**	3,504	385
c) Provisions	16	**17**	30	73
d) Current tax liabilities		**170**	114	44
Total Current liabilities		**20,230**	**15,127**	**1,678**
TOTAL		**51,795**	**53,195**	**47,002**

See accompanying notes to financial statements.
As per our report on even date

For S.R. Batliboi & Co. LLP
Chartered Accountants
ICAI Firm Registration No.:301003E/E300005

per Raj Agrawal
Partner
ICAI Membership No.: 82028

Date: April 20, 2017
Place: Mumbai

For and on behalf of the Board of Directors

Sunil Duggal
CEO & Whole-time Director
DIN: 07291685

A. R. Narayanaswamy
Director
DIN: 00818169

Amitabh Gupta
Chief Financial Officer

R. Pandwal
Company Secretary
ICSI Membership No.: A9377

STATEMENT OF PROFIT AND LOSS
for the year ended March 31, 2017

(₹ in Crore)

Particulars	Notes	For the year ended March 31, 2017	For the year ended March 31, 2016
Revenue from operations	20	18,798	15,463
Other income	21	2,474	2,763
Total Income		**21,272**	**18,226**
Expenses:			
Cost of materials consumed	22	26	51
Purchase of traded goods		336	-
Changes in inventories of finished goods and work-in-progress	23	(676)	184
Employee benefits expense	24	722	774
Finance costs	25	202	17
Depreciation and amortization expense	26	1,811	745
Power, fuel and water		1,060	1,404
Royalty		2,269	1,634
Other expenses	27	5,322	4,764
Total expenses		**11,072**	**9,573**
Profit before exceptional item and tax		**10,200**	**8,653**
Exceptional item	28	-	30
Profit before tax		**10,200**	**8,623**
Tax expense :			
Current tax	32	2,196	1,805
Deferred tax credit	32	(312)	(1,357)
Total tax expenses		**1,884**	**448**
Profit for the year		**8,316**	**8,175**
Other comprehensive income			
A) Items that will not be reclassified to profit or loss			
(a) Remeasurements of the defined benefit plans		(4)	(12)
(b) Tax benefit on items that will not be reclassified to profit or loss		1	4
B) Items that will be reclassified to profit or loss			
(a) Effective portion of gains and loss on designated portion of hedging instruments in a cash flow hedge		-	11
(b) Debt instrument through other comprehensive income		78	(1)
(c) Tax expenses on items that will be reclassified to profit or loss		(20)	(4)
Total other comprehensive income		**55**	**(2)**
Total comprehensive income for the year		**8,371**	**8,173**
Earnings per share (of ₹ 2 each)			
-Basic earnings per share (₹)	29	19.68	19.35
-Diluted earnings per share (₹)	29	19.68	19.35

See accompanying notes to financial statements.
As per our report on even date

For S.R. Batliboi & Co. LLP
Chartered Accountants
ICAI Firm Registration No.:301003E/E300005

per Raj Agrawal
Partner
ICAI Membership No.: 82028

Date: April 20, 2017
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Director
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Amitabh Gupta
Chief Financial Officer

R. Pandwal
Company Secretary
ICSI Membership No.: A9377

CASH FLOW STATEMENT

for the year ended March 31, 2017

(₹ in Crore)

Particulars	Note	For the year ended March 31, 2017	For the year ended March 31, 2016
(A) CASH FLOW FROM OPERATING ACTIVITIES :			
Net profit before tax		10,200	8,623
Adjustments to reconcile profit to net cash provided by operating activities:			
Depreciation and amortization expense	26	1,811	745
Interest expense		191	10
Interest income	21	(400)	(624)
Amortization of deferred revenue arising from government grant	21	(107)	(32)
Net gain on investments measured at FVTPL	21	(1,552)	(1,699)
Loss / (Gain) on sale of fixed assets (net)		(11)	12
Net Gain on sale of financial asset investments	21	(415)	(394)
Operating profit before working capital changes		9,717	6,641
Changes in assets and liabilities			
(Increase)/Decrease in Inventories	8	(878)	154
(Increase)/Decrease in Trade receivables	10	(29)	453
(Increase)/Decrease in Other current assets		61	(59)
(Increase)/Decrease in Other non current assets		(11)	(23)
Increase in Trade payables	19	274	169
Increase in Other current liabilities		786	905
Increase/(Decrease) in Other long term liabilities		(5)	33
Cash generated from operations		9,915	8,273
Income taxes paid during the year		(2,338)	(1,822)
Net cash generated from operating activities		7,577	6,451
(B) CASH FLOW FROM INVESTING ACTIVITIES :			
Purchases of property, plant and equipment (including intangibles, CWIP and Capital Advances)		(2,008)	(1,550)
Interest received		327	509
Short-term deposits made		(8,296)	(410)
Proceeds from short-term deposits		107	3,890
Inter-corporate loans given		(500)	-
Inter-corporate loans repaid		500	-
Purchase of current investments		(27,173)	(44,481)
Sale of current investments		40,838	38,789
Proceeds from sale of property, plant and equipment		21	17
Net cash generated from investing activities		3,816	(3,236)

(₹ in Crore)

Particulars	Notes	For the year ended March 31, 2017	For the year ended March 31, 2016
(C) CASH FLOW FROM FINANCING ACTIVITIES :			
Interest paid		(183)	(10)
Proceeds from short term borrowings		15,772	-
Repayment of short term borrowings		(7,872)	-
Dividend and tax paid thereon		(18,972)	(3,204)
Net cash used in financing activities		**(11,255)**	**(3,214)**
Net increase in Cash and cash equivalents		138	1
Cash and cash equivalents at the beginning of the year		51	50
Cash and cash equivalents at the end of the year (Refer Note 11)		**189**	**51**

See accompanying notes to financial statements.
As per our report on even date

For S.R. Batliboi & Co. LLP
Chartered Accountants
ICAI Firm Registration No.:301003E/E300005

per Raj Agrawal
Partner
ICAI Membership No.: 82028

Date: April 20, 2017
Place: Mumbai

For and on behalf of the Board of Directors

Sunil Duggal
CEO & Whole-time Director
DIN: 07291685

A. R. Narayanaswamy
Director
DIN: 00818169

Amitabh Gupta
Chief Financial Officer

R. Pandwal
Company Secretary
ICSI Membership No.: A9377

STATEMENT OF CHANGES IN EQUITY
for the year ended March 31, 2017

a. Equity share capital

Equity shares of ₹ 2 each issued, subscribed and fully paid	Numbers of shares (in Crore)	₹ in Crore
As at 1 April, 2015, March 31, 2016 and March 31, 2017	423	845

b. Other equity

(₹ in Crore)

Particulars	Reserve and surplus			Items of other comprehensive income		Total
	Capital Reserve	Retained earnings[1]	General reserve[2]	Effective portion of cash flow hedge	Debt instruments through OCI	
Balance as at the beginning of the year April 01, 2015	**1**	**33,303**	**10,383**	**(7)**	**96**	**43,776**
Profit for the year	-	8,175	-	-	-	8,175
Change in fair value of debt instruments at FVTOCI	-	-	-	-	19	19
Reclassification to Statement of Profit and Loss	-	-	-	11	(20)	(9)
Remeasurement of net defined benefit plan	-	(12)	-	-	-	(12)
Tax effect	-	4	-	(4)	-	-
Total comprehensive income for the year	**-**	**8,167**	**-**	**7**	**(1)**	**8,173**
Dividend declared - Paid	-	(2,662)	-	-	-	(2,662)
Dividend distribution tax - Paid	-	(542)	-	-	-	(542)
Dividend declared - Unpaid	-	(10,141)	-	-	-	(10,141)
Dividend distribution tax - Unpaid	-	(2,064)	-	-	-	(2,064)
Balance as at the end of the year March 31, 2016	**1**	**26,061**	**10,383**	**-**	**95**	**36,540**
Profit for the year	-	8,316	-	-	-	8,316
Change in fair value of debt instruments at FVTOCI	-	-	-	-	91	91
Reclassification to Statement of Profit and Loss	-	-	-	-	(13)	(13)
Remeasurement of net defined benefit plan	-	(4)	-	-	-	(4)
Tax effect	-	1	-	-	(20)	(19)
Total comprehensive income for the year	**-**	**8,313**	**-**	**-**	**58**	**8,371**
Dividend declared - Paid	-	(4,234)	-	-	-	(4,234)
Dividend distribution tax - Paid	-	(862)	-	-	-	(862)
Dividend declared - Unpaid	-	(8,188)	-	-	-	(8,188)
Dividend distribution tax paid on unpaid dividend	-	(1,667)	-	-	-	(1,667)
Balance as at the end of the year March 31, 2017	**1**	**19,423**	**10,383**	**-**	**153**	**29,960**

(1) During the year Company had declared interim dividend of ₹ 803 Crore (₹ 1.90 per share) in November 2016 and ₹ 11,619 Crore (₹ 27.50 per share) special dividend in March 2017. During the previous year Company had paid final dividend of ₹ 1,056 Crore (₹ 2.50 per share) in April 2015 for the year ended on March 31, 2015 and declared Interim and special dividend of ₹ 1,606 Crore (₹ 3.80 per share) in October 2015 and interim dividend of ₹ 10,141 Crore (₹ 24 per share) in March 2016.

(2) General reserve: Under the erstwhile Companies Act 1956, general reserve was created through an annual transfer of net income at a specified percentage in accordance with applicable regulations. The purpose of these transfers was to ensure that if a dividend distribution in a given year is more than 10% of the paid-up capital of the Company for that year, then the total dividend distribution is less than the total distributable results for that year. Consequent to introduction of the Companies Act 2013, the requirement to mandatorily transfer a specified percentage of the net profit to general reserve has been withdrawn. The balance in the general reserve, as determined in accordance with applicable regulations, was ₹ 10,383 Crore as at March 31, 2017, March 31, 2016 and April 1, 2015.

See accompanying notes to financial statements.
As per our report on even date

For S.R. Batliboi & Co. LLP
Chartered Accountants
ICAI Firm Registration No.:301003E/E300005

per Raj Agrawal
Partner
ICAI Membership No.: 82028

Date: April 20, 2017
Place: Mumbai

For and on behalf of the Board of Directors

Sunil Duggal
CEO & Whole-time Director
DIN: 07291685

A. R. Narayanaswamy
Director
DIN: 00818169

Amitabh Gupta
Chief Financial Officer

R. Pandwal
Company Secretary
ICSI Membership No.: A9377

NOTES FORMING PART OF THE FINANCIAL STATEMENTS

as at and for the year ended march 31, 2017

Note 01

COMPANY OVERVIEW

Hindustan Zinc Limited (“HZL” or “the Company”) was incorporated on January 10, 1966 and has its registered office at Yashad Bhawan, Udaipur (Rajasthan). HZL’s shares are listed on National Stock Exchange and Bombay Stock Exchange. The Company is engaged in exploring, extracting and processing of minerals.

HZL’s operations include five zinc-lead mines, four zinc smelters, one lead smelter, one zinc-lead smelter, seven sulphuric acid plants, one silver refinery plant and six captive power plants in the state of Rajasthan. In addition, HZL also has a rock-phosphate mine in Matoon near Udaipur in Rajasthan and zinc, lead, silver processing and refining facilities in the State of Uttarakhand. The Company also has wind power plants in the states of Rajasthan, Gujarat, Karnataka, Tamil Nadu and Maharashtra and solar power plants in the state of Rajasthan.

Note 02

BASIS OF PREPARATION OF FINANCIAL STATEMENTS

a) Basis of preparation

These financial statements are prepared on a going concern basis, in accordance with Indian Accounting Standards (Ind AS) under the historical cost convention on the accrual basis except for financial instruments which are measured at fair values (refer note 3(a)), the provisions of the Companies Act , 2013 (‘Act’) (to the extent notified). The Ind AS are prescribed under Section 133 of the Act read with Rule 3 of the Companies (Indian Accounting Standards) Rules, 2015 and Companies (Indian Accounting Standards) Amendment Rules, 2016.

Accounting policies have been consistently applied except where a newly issued accounting standard is initially adopted or a revision to an existing accounting standard requires a change in the accounting policy hitherto in use. The financial statements were approved for issue by the Board of Directors on April 20, 2017.

These are Company’s first financial statements prepared in accordance with Ind AS, using April 1, 2015 as the transition date.

The Company has adopted all the Ind ASs and the adoption was carried out in accordance with Ind AS 101 First time adoption of Indian Accounting Standards. The transition was carried out from Indian Accounting Principles generally accepted in India as prescribed under Section 133 of the Act, read with Rule 7 of the Companies (Accounts) Rules, 2014 (IGAAP), which was the previous GAAP.

An explanation of how the transition to Ind AS has affected the reported Balance sheet, Statement of Profit & loss and cash flows of the Company and the exemptions claimed by the Company on first time adoption of Ind AS are given in note 39.

b) Critical accounting estimate and judgement

The preparation of the financial statements in conformity with Ind AS requires management to make judgments, estimates and assumptions that affect the application of accounting policies and the reported amount of assets, liabilities, income, expenses and disclosures of contingent liabilities at the date of these financial statements. Actual results may differ from these estimates under different assumptions and conditions.

The management believes that the estimates used in preparation of the financial statements are prudent and reasonable. Information about estimates and judgments made in applying accounting policies that have the most significant effect on the amounts recognized in the financial statements are as follows:

Significant Estimates

(i) Mining property and Ore reserve

Ore reserves and mineral resource estimates are estimates of the amount of ore that can be economically and legally extracted from the Company's mining properties. The Company estimates its ore reserves and mineral resources based on information compiled by appropriately qualified persons relating to the geological and technical data on the size, depth, shape and grade of the ore body and suitable production techniques and recovery rates. Such an analysis requires complex geological judgements to interpret the data. The estimation of recoverable reserves is based upon factors such as estimates of foreign exchange rates, commodity prices, future capital requirements and production costs, along with geological assumptions and judgements made in estimating the size and grade of the ore body.

(ii) Restoration, rehabilitation and environmental costs:

Provision is made for costs associated with restoration and rehabilitation of mining sites as soon as the obligation to incur such costs arises. Such restoration and closure costs are typical of extractive industries and they are normally incurred at the end of the life of the mine or oil fields. The costs are estimated on the basis of mine closure plans and the estimated discounted costs of dismantling and removing these facilities and the costs of restoration are capitalized when incurred reflecting the Company's obligations at that time. The provision for decommissioning assets is based on the current estimate of the costs for removing and decommissioning production facilities, the forecast timing of settlement of decommissioning liabilities and the appropriate discount rate.

(iii) Stripping cost:

As part of its mining operations, the Company incurs stripping (waste removal) costs both during the development phase and production phase of its operations. Stripping costs incurred in the development phase of a mine, before the production phase commences (development stripping), are capitalized as part of the cost of constructing the mine and subsequently amortized over its useful life using a UOP method. The capitalization of development stripping costs ceases when the mine/component is commissioned and ready for use as intended by management.

In identifying components of the ore body, the Company works closely with the mining operations personnel for each mining operation to analyse each of the mine plans. Generally, a component will be a subset of the total ore body, and a mine may have several components. The mine plans, and therefore the identification of components, can vary between mines for a number of reasons. The stripping activity asset is initially measured at cost, which is the accumulation of costs directly incurred to perform the stripping activity that improves access to the identified component of ore, plus an allocation of directly attributable overhead costs. If the costs of the inventory produced and the stripping activity asset are not separately identifiable, a relevant production measure is used to allocate the production stripping costs between the inventory produced and the stripping activity asset. This production measure is calculated for the identified component of the ore body and is used as a benchmark to identify the extent to which the additional activity of creating a future benefit has taken place. The Company uses the expected volume of waste extracted compared with the actual volume for a given volume of ore production of each component.

The stripping activity asset is accounted for as an addition to, or an enhancement of, an existing asset, being the mine asset, and is presented as part of 'Mine properties' in the statement of financial position. The stripping activity asset is subsequently depreciated using the UOP method over the life of the identified component of the ore body that became more accessible as a result of the stripping activity. Economically recoverable reserves, which comprise proven and probable reserves, are used to determine the expected useful life of the identified component of the ore body. The stripping activity asset is then carried at cost less depreciation and any impairment losses.

(iv) Useful lives of property, plant and equipment

The Company reviews the useful life of property, plant and equipment at the end of each reporting period. This reassessment may result in change in depreciation expense in future periods.

Change in pattern of utilization of plant and equipment.

The Company, basis an independent technical review, has reassessed the method of charging depreciation basis actual economic benefits derived from asset and has decided to change the depreciation method for plant and equipment. Effective April 1, 2016, the method of depreciation on Plant and Equipment has been changed from Straight Line Method to Written Down Value Method on remaining useful life, resulting in higher depreciation charge and lower profits of ₹ 711 Crore and ₹ 465 Crore respectively for the year ended March 31, 2017. Further, the Company has also revised the useful life of plant and equipment deployed in the generation of wind energy from 22 years to 27 years based on the technical assessment undertaken by the management. The impact of the revision results in lower depreciation and higher profits of ₹ 26 Crore and ₹ 17 Crore respectively for the year ended March 31, 2017.

Significant Judgement

Contingencies:

In the normal course of business, contingent liabilities may arise from litigation, taxation and other claims against the Company. Where it is management's assessment that the outcome cannot be reliably quantified or is uncertain, the claims are disclosed as contingent liabilities unless the likelihood of an adverse outcome is remote. Such liabilities are disclosed in the notes but are not provided for in the financial statements. While considering the possible, probable and remote analysis of taxation, legal and other claims, there is always a certain degree of judgement involved pertaining to the application of the legislation which in certain cases is supported by views of tax experts and/or earlier precedents in similar matters. Although there can be no assurance regarding the final outcome of the legal proceedings, the Company does not expect them to have a materially adverse impact on the Company's financial position or profitability.

Note 03

SIGNIFICANT ACCOUNTING POLICIES

a) Fair value measurement

The Company measures financial instruments, such as, derivatives at fair value at each balance sheet date. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The fair value measurement is based on the presumption that the transaction to sell the asset or transfer the liability takes place either:

- In the principal market for the asset or liability, or
- In the absence of a principal market, in the most advantageous market for the asset or liability

The principal or the most advantageous market must be accessible by the Company.

The fair value of an asset or a liability is measured using the assumptions that market participants would use when pricing the asset or liability, assuming that market participants act in their best economic interest.

A fair value measurement of a non-financial asset takes into account a market participant's ability to generate economic benefits by using the asset in its highest and best use or by selling it to another market participant that would use the asset in its highest and best use.

The Company uses valuation techniques that are appropriate in the circumstances and for which sufficient data are available to measure fair value, maximizing the use of relevant observable inputs and minimizing the use of unobservable inputs.

All assets and liabilities for which fair value is measured or disclosed in the financial statements are categorized within the fair value hierarchy, described as follows, based on the lowest level input that is significant to the fair value measurement as a whole:

Level 1 - Quoted (unadjusted) market prices in active markets for identical assets or liabilities

Level 2 - Valuation techniques for which the lowest level input that is significant to the fair value measurement is directly or indirectly observable

Level 3 - Valuation techniques for which the lowest level input that is significant to the fair value measurement is unobservable

For the purpose of fair value disclosures, the Company has determined classes of assets and liabilities on the basis of the nature, characteristics and risks of the asset or liability and the level of the fair value hierarchy as explained above.

b) Current and non-current classification

The Company presents assets and liabilities in the balance sheet based on current/ non-current classification.

An asset is treated as current when it is:

- Expected to be realized or intended to be sold or consumed in normal operating cycle
- Held primarily for the purpose of trading
- Expected to be realized within twelve months after the reporting period, or
- Cash or cash equivalent unless restricted from being exchanged or used to settle a liability for at least twelve months after the reporting period

All other assets are classified as non-current.

A liability is current when:

- It is expected to be settled in normal operating cycle
- It is held primarily for the purpose of trading
- It is due to be settled within twelve months after the reporting period, or
- There is no unconditional right to defer the settlement of the liability for at least twelve months after the reporting period

The Company classifies all other liabilities as non-current.

Deferred tax assets and liabilities are classified as non-current assets and liabilities.

The operating cycle is the time between the acquisition of assets for processing and their realization in cash and cash equivalents. The Company has identified twelve months as its operating cycle.

c) Functional and presentation currency

The financial statements are prepared in Indian Rupees (INR), which is the Company's functional currency. All financial information presented in INR has been rounded to the nearest crores.

d) Revenue recognition

Revenue is recognized to the extent that it is probable that economic benefit will flow to the Company and the revenue can be reliably measured, regardless of when the payment is being made. Revenues are measured at the fair value of the consideration received or receivable, net of discounts, volume rebates, outgoing sales taxes and other indirect taxes excluding excise duty. Excise duty is a liability of the manufacturer which forms part of the cost of production, irrespective of whether the goods are sold or not. Since the recovery of excise duty flows to Company on its own account, revenue includes excise duty.

(i) Sale of goods

Revenues from sales are recognized when all significant risks and rewards of ownership of the goods sold are transferred to the customer which usually is on delivery of the goods to the shipping agent/passage of title to customer and it can be reliably measured and it is reasonable to expect ultimate collection. Revenues from sale of by-products are included in revenue. Certain of the Company's sales contracts provide for provisional pricing based on the price on the London Metal Exchange ("LME"), as specified in the contract, when shipped. Final settlement of the price is based on the applicable price for a specified future period. The Company's provisionally priced sales are marked to market using the relevant forward prices for the future period specified in the contract and is adjusted in revenue. Revenue from operations comprises proceeds from sale of scrap net of disposal expenses.

(ii) Sale of wind energy

Revenue from sale of wind energy is recognized when delivered and measured based on rates as per bilateral contractual agreements with buyers and at rate arrived at based on the principles laid down under the relevant Tariff Regulations as notified by the regulatory bodies, as applicable.

(iii) Dividends

Dividend income is recognised in the statement of profit and loss only when the right to receive payment is established, provided it is probable that the economic benefits associated with the dividend will flow to the Company, and the amount of the dividend can be measured reliably.

(iv) Interest income

Interest income from a financial asset is recognised when it is probable that the economic benefits will flow to the Company and the amount of income can be measured reliably. Interest income is accrued on a time basis, by reference to the principal outstanding and at the effective interest rate applicable, which is the rate that exactly discounts estimated future cash receipts through the expected life of the financial asset to that asset's net carrying amount on initial recognition.

(v) Others

Revenue relating to insurance claims and interest on delayed or overdue payments from trade receivable is recognized when no significant uncertainty as to measurability or collection exists. Export benefits are accounted for in the year of export based on eligibility and when there is no significant uncertainty in receiving the same.

e) Property, plant and equipment

(i) Property, plant and equipment other than mining properties

The initial cost of property, plant and equipment comprises its purchase price, including import duties and non-refundable purchase taxes, and any directly attributable costs of bringing an asset to working condition and location for its intended use. It also includes the initial estimate of the costs of dismantling and removing the item and restoring the site on which it is located. Expenditure incurred after the property, plant and equipment have been put into operation, such as repairs and maintenance, are normally charged to the Statement of Profit and Loss in the period in which the costs are incurred. Major inspection and overhaul expenditure is capitalized.

Gains and losses on disposal of an item of property, plant and equipment are determined by comparing the proceeds from disposal with the carrying amount of property, plant and equipment, and are recognized net within other income/other expenses in the Statement of Profit and Loss.

Assets held for sale are carried at lower of their carrying value or fair value less cost to sell. Major machinery spares parts are capitalized when they meet the definition of Property, Plant and Equipment.

The cost includes the cost of replacing part of the plant and equipment when significant part of plant and equipment are required to be replaced at intervals, the Company depreciates them separately based on their specific useful lives. All other repairs and maintenance cost are recognized in the Statement of Profits or Loss as incurred.

Government grant related to fixed asset is capitalized along with the asset that it relates to and depreciated over the life of the primary asset.

On transition to Ind As in respect of property, plant and equipment, the Company has applied Ind As retrospectively from the date of their acquisition.

(ii) Mining properties

The costs of mining properties, which include the costs of acquiring and developing mining properties are capitalized as Property, Plant and Equipment under the heading "Mining properties" in the year in which they are incurred. When a decision is taken that a Mining property is viable for commercial production (i.e. when the Company determines that the Mining Property will provide sufficient and sustainable return relative to the risks and the Company decided to proceed with the mine development), all further pre-production primary development expenditure other than land, buildings, plant and equipment is capitalized as developing asset until the mining property are capable of commercial production. Revenue derived during the project phase is adjusted from the cost incurred on the project from which such revenue is generated. With respect to open pit operations, waste removal costs that are incurred in the open pit operations during the operational phase of these mines which provide improved access are recognized as assets. The cost of normal on-going operational stripping activities are recognized in the Statement of Profit and Loss as and when incurred.

When the benefit from the stripping costs are realized in the current period, the stripping costs are accounted as charge in Statement of Profit and Loss in deferred mining expenses head. Deferred stripping costs are included in mining properties within Property, Plant and Equipment and disclosed as a part of Mining properties. After initial recognition, the stripping activity asset is depreciated on a unit of production method over the expected useful life of the identified component of the ore body to which it improves access.

(iii) Capital work in progress (CWIP)

Assets in the course of construction are capitalized in capital work in progress account. At the point when an asset is capable of operating in the manner intended by management, the cost of construction is transferred to the appropriate category of property, plant and equipment. Costs associated with the commissioning of an asset are capitalized in CWIP until the period of commissioning has been completed and the asset is ready for its intended use.

(iv) Depreciation

Depreciable amount for assets is the cost of an asset, or other amount substituted for cost, less its estimated residual value. Depreciation on tangible property and other equipment has been provided on the straight-line method and written down value method of depreciation is followed for plant and machinery effective April 1, 2016.

- Depreciation has been provided over residual life of the respective property, plant and equipment in respect of additions arising on account of insurance spares, on additions or extension forming an integral part of existing plants and on the revised carrying amount of assets identified as impaired.

- Mining properties are amortized, from the date on which they are first available for use, in proportion to the annual ore raised to the remaining mineable ore reserves (on a unit-of-production basis) over the total estimated remaining commercial reserves of each property or group of properties and are subject to impairment review. Commercial reserves are proved and probable reserves and any changes affecting unit of production calculations are dealt with prospectively over the revised remaining reserves. In the year of abandonment of mine, the residual balance in mining properties are written off.

- Based on technical evaluation, the management believes that the useful lives as given below best represent the period over which the management expects to use the asset.

Assets	Useful life in years
Factory buildings	30 years
Residential buildings	60 years
Roads (included in buildings)	5-10 years
Computers and data processing equipment	3-6 years
Plant and machinery (Including captive power plant)	8 to 40 years
Railway sidings	15 years
Office equipment	5 years
Furniture and fixtures	10 years
Vehicles	8-10 years

The useful lives of the above assets are in line with the useful lives as prescribed under Part C of schedule II of the Companies Act, 2013, except plant and equipment pertaining to wind energy segment. The Company based on technical assessment made by technical experts and basis management estimate, depreciates these assets over estimated useful lives over which the asset is expected to be used. The management believes that these estimated useful lives are realistic and reflect fair apportionment of the period over which the assets are likely to be used.

The residual values, useful lives and methods of depreciation of property, plant and equipment are reviewed at each financial year end and adjusted prospectively, if appropriate.

f) Intangible assets

Intangible assets acquired separately are measured on initial recognition at cost. Following initial recognition, intangible assets are carried at cost less any accumulated amortization and accumulated impairment losses. Gains or losses arising from derecognition of an intangible asset are measured as the difference between the net disposal proceeds and the carrying amount of the asset and are recognized in the Statement of Profit and Loss when the asset is derecognized.

Intangible assets are amortized over their estimated useful life . Software is amortized on straight line method over the useful life of the asset or 5 years whichever is shorter. Amounts paid for securing mining rights are amortized over the period of mining lease. The estimated useful life of the intangible assets and the amortization period are reviewed at the end of each financial year and the amortization period is revised to reflect the changed pattern, if any.

g) Impairment of non-financial assets

Impairment charges and reversals are assessed at the level of cash-generating units. A cash-generating unit (CGU) is the smallest identifiable group of assets that generate cash inflows that are largely independent of the cash inflows from other assets or group of assets.

Impairment tests are carried out annually for all assets when there is an indication of impairment. The Company conducts an internal review of asset values annually, which is used as a source of information to assess for any indications of impairment or reversal of previously recognized impairment losses. External factors, such as changes in expected future prices, costs and other market factors are also monitored to assess for indications of impairment or reversal of previously recognized impairment losses.

If any such indication exists then an impairment review is undertaken, the recoverable amount is calculated, as the higher of fair value less costs of disposal and the asset's value in use.

Fair value less costs of disposal is the price that would be received to sell the asset in an orderly transaction between market participants and does not reflect the effects of factors that may be specific to the entity and not applicable to entities in general. Fair value for mineral assets is generally determined as the present value of the estimated future cash flows expected to arise from the continued use of the asset, including any expansion prospects, and its eventual disposal, using assumptions that an independent market participant may take into account. These cash flows are discounted at an appropriate post tax discount rate to arrive at the net present value.

Value in use is determined as the present value of the estimated future cash flows expected to arise from the continued use of the asset in its present form and its eventual disposal. The cash flows are discounted using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset for which estimates of future cash flows have not been adjusted. Value in use is determined by applying assumptions specific to the Company's continued use and cannot take into account future development. These assumptions are different to those used in calculating fair value and consequently the value in use calculation is likely to give a different result to a fair value calculation.

The carrying amount of the CGU is determined on a basis consistent with the way the recoverable amount of the CGU is determined.

If the recoverable amount of an asset or CGU is estimated to be less than its carrying amount, the carrying amount of the asset or CGU is reduced to its recoverable amount. An impairment loss is recognized in the Statement of Profit and Loss.

Any reversal of the previously recognized impairment loss is limited to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined if no impairment loss had previously been recognized.

h) Financial instruments

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity.

Financial assets – recognition

All financial assets are recognized initially at fair value plus, in the case of financial assets not recorded at fair value through profit and loss, transaction costs that are attributable to the acquisition of the financial asset. Purchases or sales of financial assets except treasury investment that require delivery of assets within a time frame established by regulation or convention in the market place (regular way trades) are recognized on the trade date, i.e., the date that the Company commits to purchase or sell the asset. Treasury investments are accounted for when the amount is settled in Bank account. For purposes of subsequent measurement, financial assets are classified in three categories:

- Debt instruments at amortized cost

  A 'Debt instrument' is measured at the amortized cost if both the following conditions are met:

  a) The asset is held within a business model whose objective is to hold assets for collecting contractual cash flows, and

  b) Contractual terms of the asset give rise on specified dates to cash flows that are solely payments of principal and interest (SPPI) on the principal amount outstanding.

  After initial measurement, such financial assets are subsequently measured at amortized cost using the effective interest rate (EIR) method. Amortized cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the EIR. The EIR amortization is included in finance income in the Statement of Profit and Loss. The losses arising from impairment are recognized in the Statement of Profit and Loss. This category generally applies to trade and other receivables.

- Debt instruments at fair value through other comprehensive income (FVTOCI)

  A 'debt instrument' is classified as at the FVTOCI if both of the following criteria are met:

  a) The objective of the business model is achieved both by collecting contractual cash flows and selling the financial assets, and

  b) The asset's contractual cash flows represent SPPI.

  Debt instruments included within the FVTOCI category are measured initially as well as at each reporting date at fair value. Fair value movements are recognized in the other comprehensive income (OCI). However, the Company recognizes interest income, impairment losses and reversals and foreign exchange gain or loss in the profit and loss. On derecognition of the asset, cumulative gain or loss previously recognized in OCI is reclassified from the equity to profit and loss. Interest earned whilst holding FVTOCI debt instrument is reported as interest income using the EIR method

- Debt instruments, derivatives and equity instruments at fair value through Statement of Profit or Loss (FVTPL)

  FVTPL is a residual category for debt instruments. Any debt instrument, which does not meet the criteria for categorization as at amortized cost or as FVTOCI, is classified as at FVTPL.

  In addition, the Company may elect to designate a debt instrument, which otherwise meets amortized cost or FVTOCI criteria, as at FVTPL. However, such election is allowed only if doing so reduces or eliminates a measurement or recognition inconsistency (referred to as 'accounting mismatch'). The Company has not designated any debt instrument as at FVTPL.

  Debt instruments, derivatives and equity instruments included within the FVTPL category are measured at fair value with all changes recognized in the Statement of Profit and Loss.

Financial assets - derecognition

A financial asset (or, where applicable, a part of a financial asset or part of a group of similar financial assets) is primarily derecognized (i.e. removed from the Company's balance sheet) when:

- The rights to receive cash flows from the asset have expired, or

- The Company has transferred its rights to receive cash flows from the asset or has assumed an obligation to pay the received cash flows in full without material delay to a third party under a 'pass-through' arrangement; and either (a) the Company has transferred substantially all the risks and rewards of the asset, or (b) the Company has neither transferred nor retained substantially all the risks and rewards of the asset, but has transferred control of the asset.

When the Company has transferred its rights to receive cash flows from an asset or has entered into a pass-through arrangement, it evaluates if and to what extent it has retained the risks and rewards of ownership. When it has neither transferred nor retained substantially all of the risks and rewards of the asset, nor transferred control of the asset, the Company continues to recognize the transferred asset to the extent of the Company's continuing involvement. In that case, the Company also recognizes an associated liability. The transferred asset and the associated liability are measured on a basis that reflects the rights and obligations that the Company has retained.

Impairment of financial assets

In accordance with Ind AS 109, the Company applies expected credit loss (ECL) model for measurement and recognition of impairment loss on the following financial assets:

- Financial assets that are debt instruments, and are measured at amortized cost e.g., loans, debt securities, deposits and trade receivables

- Financial assets that are debt instruments and are measured as at FVTOCI

The Company follows 'simplified approach' for recognition of impairment loss allowance on trade receivables.

The application of simplified approach does not require the Company to track changes in credit risk. Rather, it recognizes impairment loss allowance based on lifetime ECLs at each reporting date, right from its initial recognition.

For recognition of impairment loss on other financial assets and risk exposure, the Company determines whether there has been a significant increase in the credit risk since initial recognition. If credit risk has not increased significantly, 12-month ECL is used to provide for impairment loss. However, if credit risk has increased significantly, lifetime ECL is used. If, in a subsequent period, credit quality of the instrument improves such that there is no longer a significant increase in credit risk since initial recognition, then the Company reverts to recognizing impairment loss allowance based on 12-month ECL.

Lifetime ECL are the expected credit losses resulting from all possible default events over the expected life of a financial instrument. The 12-month ECL is a portion of the lifetime ECL which results from default events that are possible within 12 months after the reporting date.

ECL is the difference between all contractual cash flows that are due to the Company in accordance with the contract and all the cash flows that the entity expects to receive (i.e. all cash shortfalls), discounted at the original EIR.

ECL impairment loss allowance (or reversal) recognized during the period is recognized as income/ expense in the Statement of Profit and Loss (P&L). This amount is reflected under the head 'other expenses' in the P&L. The balance sheet presentation for various financial instruments is described below:

- Financial assets measured as at amortized cost: ECL is presented as an allowance, i.e., as an integral part of the measurement of those assets in the balance sheet. The allowance reduces the net carrying amount. Until the asset meets write-off criteria, the Company does not reduce impairment allowance from the gross carrying amount.

- Debt instruments measured at FVTOCI: Since financial assets are already reflected at fair value, impairment allowance is not further reduced from its value. Rather, ECL amount is presented as 'accumulated impairment amount' in the OCI.

For assessing increase in credit risk and impairment loss, the Company's financial instruments on the basis of shared credit risk characteristics with the objective of facilitating an analysis that is designed to enable significant increases in credit risk to be identified on a timely basis.

Financial liabilities – recognition and measurement

Financial liabilities are classified, at initial recognition, as financial liabilities at fair value through profit or loss, loans and borrowings, payables, or as derivatives designated as hedging instruments in an effective hedge, as appropriate.

All financial liabilities are recognized initially at fair value and, in the case of loans and borrowings and payables, net of directly attributable transaction costs.

The Company's financial liabilities include trade and other payables, loans and borrowings including bank overdrafts and derivative financial instruments.

Subsequent measurement

The measurement of financial liabilities depends on their classification, as described below:

- Financial liabilities at fair value through profit or loss

Financial liabilities at fair value through profit or loss include financial liabilities held for trading and financial liabilities designated upon initial recognition as at fair value through profit or loss. Financial liabilities are classified as held for trading if they are incurred for the purpose of repurchasing in the near term. This category also includes derivative financial instruments entered into by the Company that are not designated as hedging instruments in hedge relationships as defined by Ind AS 109. Separated embedded derivatives are also classified as held for trading unless they are designated as effective hedging instruments.

Gains or losses on liabilities held for trading are recognized in the profit or loss.

- Financial liabilities designated upon initial recognition at fair value through profit or loss are designated as such at the initial date of recognition, and only if the criteria in Ind AS 109 are satisfied. For liabilities designated as FVTPL, fair value gains/ losses attributable to changes in own credit risk are recognized in OCI. These gains/ loss are not subsequently transferred to Statement of Profit and Loss. However, the Company may transfer the cumulative gain or loss within equity. All other changes in fair value of such liability are recognized in the Statement of Profit and Loss. The Company has not designated any financial liability as at fair value through Profit and Loss

- Financial Liabilities at amortized cost (Loans and borrowings)

After initial recognition, interest-bearing loans and borrowings are subsequently measured at amortized cost using the EIR method. Gains and losses are recognized in profit or loss when the liabilities are derecognized as well as through the EIR amortization process.

Amortized cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the EIR. The EIR amortization is included as finance costs in the Statement of Profit and Loss.

Financial liabilities - derecognition

A financial liability is derecognized when the obligation under the liability is discharged or cancelled or expires. When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as the derecognition of the original liability and the recognition of a new liability. The difference in the respective carrying amounts is recognized in the Statement of Profit and Loss.

Embedded derivatives

An embedded derivative is a component of a hybrid (combined) instrument that also includes a non-derivative host contract – with the effect that some of the cash flows of the combined instrument vary in a way similar to a stand-alone derivative. An embedded derivative causes some or all of the cash flows that otherwise would be required by the contract to be modified according to a specified interest rate, financial instrument price, commodity price, foreign exchange rate, index of prices or rates, credit rating or credit index, or other variable, provided in the case of a non-financial variable that the variable is not specific to a party to the contract. Reassessment only occurs if there is either a change in the terms of the contract that significantly modifies the cash flows that would otherwise be required or a reclassification of a financial asset out of the fair value through Profit or Loss.

If the hybrid contract contains a host that is a financial asset within the scope of Ind AS 109, the Company does not separate embedded derivatives. Rather, it applies the classification requirements contained in Ind AS 109 to the entire hybrid contract. Derivatives embedded in all other host contracts are accounted for as separate derivatives and recorded at fair value if their economic characteristics and risks are not closely related to those of the host contracts and the host contracts are not held for trading or designated at fair value though Profit or Loss. These embedded derivatives are measured at fair value with changes in fair value recognized in profit or loss, unless designated as effective hedging instruments.

Reclassification of financial assets

The Company determines classification of financial assets and liabilities on initial recognition. After initial recognition, no reclassification is made for financial assets which are equity instruments and financial liabilities. For financial assets which are debt instruments, a reclassification is made only if there is a change in the business model for managing those assets. Changes to the business model are expected to be infrequent. The senior management determines change in the business model as a result of external or internal changes which are significant to the group's operations. Such changes are evident to external parties. A change in the business model occurs when the group either begins or ceases to perform an activity that is significant to its operations. If the Company reclassifies financial assets, it applies the reclassification prospectively from the reclassification date which is the first day of the immediately next reporting period following the change in business model. The Company does not restate any previously recognized gains, losses (including impairment gains or losses) or interest.

Offsetting of financial instruments

Financial assets and financial liabilities are offset and the net amount is reported in the balance sheet if there is a currently enforceable legal right to offset the recognized amounts and there is an intention to settle on a net basis, to realize the assets and settle the liabilities simultaneously.

i) Derivative financial instruments and hedge accounting

Initial recognition and subsequent measurement

In order to hedge its exposure to foreign exchange, interest rate, and commodity price risks, the Company enters into forward currency contracts, commodity contracts and other derivative financial instruments. The Company does not hold derivative financial instruments for speculative purposes.

Such derivative financial instruments are initially recognized at fair value on the date on which a derivative contract is entered into and are subsequently re-measured at fair value. Derivatives are carried as financial assets when the fair value is positive and as financial liabilities when the fair value is negative.

Any gains or losses arising from changes in the fair value of derivatives are taken directly to profit or loss, except for the effective portion of cash flow hedges, which is recognized in OCI and later reclassified to profit or loss when the hedge item affects profit or loss or treated as basis adjustment if a hedged forecast transaction subsequently results in the recognition of a non-financial asset or non-financial liability.

For the purpose of hedge accounting, hedges are classified as:

- Fair value hedges when hedging the exposure to changes in the fair value of a recognized asset or liability or an unrecognized firm commitment
- Cash flow hedges when hedging the exposure to variability in cash flows that is either attributable to a particular risk associated with a recognized asset or liability or a highly probable forecast transaction or the foreign currency risk in an unrecognized firm commitment

At the inception of a hedge relationship, the Company formally designates and documents the hedge relationship to which the Company wishes to apply hedge accounting and the risk management objective and strategy for undertaking the hedge. The documentation includes the Company's risk management objective and strategy for undertaking hedge, the hedging/ economic relationship, the hedged item or transaction, the nature of the risk being hedged, hedge ratio and how the entity will assess the effectiveness of changes in the hedging instrument's fair value in offsetting the exposure to changes in the hedged item's fair value or cash flows attributable to the hedged risk. Such hedges are expected to be highly effective in achieving offsetting changes in fair value or cash flows and are assessed on an on-going basis to determine that they actually have been highly effective throughout the financial reporting periods for which they were designated.

Hedges that meet the strict criteria for hedge accounting are accounted for, as described below:

(i) Fair value hedges

Changes in the fair value of derivatives that are designated and qualify as fair value hedges are recognized in profit or loss immediately, together with any changes in the fair value of the hedged asset or liability that are attributable to the hedged risk.

If the hedged item is derecognized, the unamortized fair value is recognized immediately in profit or loss. When an unrecognized firm commitment is designated as a hedged item, the subsequent cumulative change in the fair value of the firm commitment attributable to the hedged risk is recognized as an asset or liability with a corresponding gain or loss recognized in Statement of Profit and Loss.

(ii) Cash flow hedges

The effective portion of the gain or loss on the hedging instrument is recognized in OCI in the cash flow hedge reserve, while any ineffective portion is recognized immediately in the Statement of Profit and Loss.

Amounts recognized as OCI are transferred to Statement of Profit and Loss when the hedged transaction affects profit or loss, such as when the hedged financial income or financial expense is recognized or when a forecast sale occurs. When the hedged item is the cost of a non-financial asset or non-financial liability, the amounts recognized as OCI are transferred to the initial carrying amount of the non-financial asset or liability.

If the hedging instrument expires or is sold, terminated or exercised without replacement or rollover (as part of the hedging strategy), or if its designation as a hedge is revoked, or when the hedge no longer meets the criteria for hedge accounting, any cumulative gain or loss previously recognized in OCI remains separately in equity until the forecast transaction occurs or the foreign currency firm commitment is met.

j) Government grants, subsidies and export incentives

Grants and subsidies from the government are recognized when there is reasonable assurance that

(i) the Company will comply with the conditions attached to them, and

(ii) the grant/subsidy will be received.

When the grant or subsidy relates to revenue, it is recognized as income on a systematic basis in the Statement of Profit and Loss over the periods necessary to match them with the related costs, which they are intended to compensate.

Where the grant relates to an asset, it is recognized as deferred income and released to income in equal amounts over the expected useful life of the related asset and presented within other income.

When the Company receives grants of non-monetary assets, the asset and the grant are recorded at fair value amounts and released to profit or loss over the expected useful life in a pattern of consumption of the benefit of the underlying asset i.e. by equal annual instalments.

When loans or similar assistance are provided by governments or related institutions, with an interest rate below the current applicable market rate, the effect of this favourable interest is regarded as a government grant. The loan or assistance is initially recognized and measured at fair value and the government grant is measured as the difference between the initial carrying value of the loan and the proceeds received. The loan is subsequently measured as per the accounting policy applicable to financial liabilities.

k) Inventories

Inventories are valued at the lower of cost and net realizable value.

Costs incurred in bringing each product to its present location and condition are accounted for as follows:

(i) Ore, concentrate (mined metal), work-in-progress and finished goods (including significant by-products i.e. silver) are valued at lower of cost or net realizable value on weighted average basis.

(ii) Stores and spares are valued at lower of cost or net realizable value on weighted average basis.

(iii) Immaterial by-products, aluminium scrap, chemical lead scrap, anode scrap and coke fines are valued at net realizable value.

Net realizable value is determined based on estimated selling price, less further costs expected to be incurred to completion and disposal.

l) Taxation

Current tax

Current income tax assets and liabilities are measured at the amount expected to be recovered from or paid to the taxation authorities. The tax rates and tax laws used to compute the amount are those that are enacted or substantively enacted, at the reporting date.

Current income tax relating to items recognized outside profit or loss is recognized outside profit or loss (either in other comprehensive income or in equity). Current tax items are recognized in correlation to the underlying transaction either in OCI or directly in equity. Management periodically evaluates positions taken in the tax returns with respect to situations in which applicable tax regulations are subject to interpretation and establishes provisions where appropriate.

Deferred tax

Deferred tax is provided, using the balance sheet method, on all temporary differences at the reporting date between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes at the reporting date.

Deferred tax liabilities are recognized for all taxable temporary differences, except:

- When the deferred tax liability arises from the initial recognition of goodwill or an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss
- In respect of taxable temporary differences associated with investments in subsidiaries, associates and interests in joint ventures, when the timing of the reversal of the temporary differences can be controlled and it is probable that the temporary differences will not reverse in the foreseeable future

Deferred tax assets are recognized for all deductible temporary differences, the carry forward of unused tax credits and any unused tax losses. Deferred tax assets are recognized to the extent that it is probable that taxable profit will be available against which the deductible temporary differences, and the carry forward of unused tax credits and unused tax losses can be utilized, except:

- When the deferred tax asset relating to the deductible temporary difference arises from the initial recognition of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss.
- In respect of deductible temporary differences associated with investments in subsidiaries, associates and interests in joint ventures, deferred tax assets are recognized only to the extent that it is probable that the temporary differences will reverse in the foreseeable future and taxable profit will be available against which the temporary differences can be utilized

The carrying amount of deferred tax assets is reviewed at each reporting date and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be utilized. Unrecognized deferred tax assets are re-assessed at each reporting date and are recognized to the extent that it has become probable that future taxable profits will allow the deferred tax asset to be recovered.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply to the year when the asset is realized or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted at the reporting date.

Deferred tax relating to items recognized outside profit or loss is recognized outside profit or loss (either in other comprehensive income or in equity). Deferred tax items are recognized in correlation to the underlying transaction either in OCI or directly in equity.

Deferred tax assets and deferred tax liabilities are offset if a legally enforceable right exists to set off current tax assets against current tax liabilities and the deferred taxes relate to the same taxable entity and the same taxation authority.

Minimum Alternate Tax ('MAT') paid in a year is charged to the Statement of Profit and Loss as current tax. MAT paid in accordance with the tax laws, which gives future economic benefits in the form of adjustment to future income tax liability, is considered as an asset if there is convincing evidence that the Company will pay normal income tax. Accordingly, MAT is recognized as an asset in the Balance Sheet when it is probable that future economic benefit associated with it will flow to the Company.

m) Retirement and other Employee benefit schemes

i. Short-term employee benefits

Employee benefits payable wholly within twelve months of receiving employee services are classified as short-term employee benefits. These benefits include salaries and wages, performance incentives and compensated absences which are expected to occur in next twelve months. The undiscounted amount of short-term employee benefits to be paid in exchange for employee services is recognized as an expense as the related service is rendered by employees.

ii. Post-Employment Benefits

Gratuity

In accordance with the Payment of Gratuity Act of 1972, the Company contributes to a defined benefit plan (the “Gratuity Plan”). The Gratuity Plan provides a lump sum payment to employees who have completed at least 5 years of service; at retirement, disability or termination of employment being an amount equal to 15 days’ salary (based on the respective employee’s last drawn salary) for every completed year of service.

Based on actuarial valuations conducted as at year end, a provision is recognized in full for the benefit obligation over and above the funds held in the Gratuity Plan.

In respect of defined benefit schemes, the assets are held in separately administered funds. In respect of defined benefit schemes, the cost of providing benefits under the plans is determined by actuarial valuation separately each year using the projected unit credit method by independent qualified actuary as at the year end.

Re-measurements, comprising of actuarial gains and losses, the effect of the asset ceiling, excluding amounts included in net interest on the net defined benefit liability and the return on plan assets (excluding amounts included in net interest on the net defined benefit liability), are recognized immediately in the balance sheet with a corresponding debit or credit to retained earnings through OCI in the period in which they occur. Re-measurements are not reclassified to the Statement of Profit and Loss in subsequent periods.

The Company recognizes the following changes in the net defined benefit obligation as an expense in the Statement of Profit and Loss:

- Service costs comprising current service costs, past-service costs, gains and losses on curtailments and non-routine settlements; and
- Net interest expense or income

Provident Fund

The Company offers retirement benefits to its employees, under provident fund scheme which is a defined benefit plan. The Company and employees contribute at predetermined rates to 'Hindustan Zinc Limited Employee's Contributory Provident Fund' ('Trust') accounted on accrual basis and the conditions for grant of exemption stipulate that the employer shall make good the deficiency, if any, between the return guaranteed by the statute and actual earning of the Trust. The contribution towards provident fund is recognized as an expense in the Statement of Profit and Loss.

Family Pension

The Company offers its employees benefits under defined contribution plans in the form of family pension scheme. Contributions are paid during the year into the fund under statutory arrangements. The contribution to family pension fund is made at predetermined rates by the Company based on prescribed rules of family pension scheme. The contribution towards family pension is recognized as an expense in the Statement of Profit and Loss.

Superannuation

Certain employees of the Company, who have joined post disinvestment are members of the Superannuation plan. The Company has no further obligations to the Plan beyond its monthly contributions which are periodically contributed to a trust fund, the corpus of which is invested with the Life Insurance Corporation of India. The contribution is recognized as an expense in the Statement of Profit and Loss.

iii. Other Long-Term Employee Benefits

Compensated absences

The Company has a policy on compensated absences which are both accumulating and non-accumulating in nature. The expected cost of accumulating compensated absences is determined by actuarial valuation performed by an independent actuary at each balance sheet date using projected unit credit method on the additional amount expected to be paid/availed as a result of the unused entitlement that has accumulated at the balance sheet date. Expense on non-accumulating compensated absences is recognized in the period in which the absences occur.

n) Provision

(i) General

Provisions are recognized when the Company has a present obligation (legal or constructive), as a result of past events, and it is probable that an outflow of resources, that can be reliably estimated, will be required to settle such an obligation. If the effect of the time value of money is material, provisions are determined by discounting the expected future cash flows to net present value using an appropriate pre-tax discount rate that reflects current market assessments of the time value of money and, where appropriate, the risks specific to the liability. Unwinding of the discount is recognized in the Statement of Profit and Loss as a finance cost. Provisions are reviewed at each reporting date and are adjusted to reflect the current best estimate.

(ii) Provision for Decommissioning

The Company recognizes a provision for decommissioning costs of smelting and refining facilities. Decommissioning costs are provided at the present value of expected costs to settle the obligation using estimated cash flows and are recognized as part of the cost of the particular asset. The cash flows are discounted at pre-tax rate that reflects current market assessment of time value of money and the risks specific to the liability. The unwinding of the discount is expensed as incurred and recognized in the Statement of Profit and Loss as a finance cost. Changes in the estimated future costs or in the discount rate applied are added to or deducted from the cost of the asset.

The Company recognizes provision for discontinuing of a smelting operation which is charged to the Statement of Profit and Loss. Management estimates are based on third party technical estimates. The actual costs and cash outflows may differ from estimates because of changes in laws and regulations, changes in prices, analysis of site conditions and changes in restoration technology. The estimated future costs of decommissioning are reviewed annually and adjusted as appropriate.

(iii) Provision for Restoration, rehabilitation and environmental costs

An obligation to incur restoration, rehabilitation and environmental costs arises when environmental disturbance is caused by the development or on-going production of a mine. Such costs, discounted to net present value, are provided for and a corresponding amount is capitalized at the start of each project, as soon as the obligation to incur such costs arises. These costs are charged to the Statement of Profit and Loss over the life of the operation through the depreciation of the asset and the unwinding of the discount on the provision (considered as finance cost). The cost of the related asset is adjusted for changes in the provision due to factors such as updated cost estimates, changes to lives of operations, new disturbance and revisions to discount rates. The adjusted cost of the asset is depreciated prospectively over the lives of the assets to which they relate.

Costs for the restoration of subsequent site damage, which is caused on an on-going basis during production, are charged to the Statement of Profit and Loss as extraction progresses. Where the costs of site restoration are not anticipated to be material, they are expensed as incurred.

o) Foreign currency translation

The functional currency for the Company is determined as the currency of the primary economic environment in which it operates. For the Company, the functional currency is the local currency of the country in which it operates, which is Indian Rupee.

In the financial statements of the Company, transactions in currencies other than the functional currency are translated into the functional currency at the exchange rates ruling at the date of the transaction. Monetary assets and liabilities denominated in other currencies are translated into the functional currency at exchange rates prevailing on the reporting date. Non-monetary assets and liabilities denominated in other currencies and measured at historical cost or fair value are translated at the exchange rates prevailing on the dates on which such values were determined.

All exchange differences are included in the Statement of Profit and Loss except any exchange differences on monetary items designated as an effective hedging instrument of the currency risk of designated forecasted sales or purchases, which are recognized in the other comprehensive income.

p) Earnings per share

The Company presents basic and diluted earnings per share (“EPS”) data for its equity shares. Basic EPS is calculated by dividing the profit or loss attributable to equity shareholders of the Company by the weighted average number of equity shares outstanding during the period. Diluted EPS is determined by adjusting the profit or loss attributable to equity shareholders and the weighted average number of equity shares outstanding for the effects of all dilutive potential equity shares.

q) Segment reporting

Operating segments are reported in a manner consistent with the internal reporting provided to the Chief Operating Decision-Maker i.e. CEO. Revenue and expenses are identified to segments on the basis of their relationship to the operating activities of the segment. Revenue, expenses, assets and liabilities which are not allocable to segments on a reasonable basis, are included under "Unallocated revenue/ expenses/ assets/ liabilities".

r) Leases

The determination of whether an arrangement is (or contains) a lease is based on the substance of the arrangement at the inception of the lease. The arrangement is, or contains, a lease if fulfilment of the arrangement is dependent on the use of a specific asset or assets and the arrangement conveys a right to use the asset or assets, even if that right is not explicitly specified in an arrangement.

For arrangements entered into prior to April 1, 2015, the Company has determined whether the arrangements contain lease on the basis of facts and circumstances existing on the date of transition.

Company as a lessee

A lease is classified at the inception date as a finance lease or an operating lease. A lease that transfers substantially all the risks and rewards incidental to ownership to the Company is classified as a finance lease. Finance leases are capitalized at the commencement of the lease at the inception date fair value of the leased property or, if lower, at the present value of the minimum lease payments. Lease payments are apportioned between finance charges and reduction of the lease liability so as to achieve a constant rate of interest on the remaining balance of the liability. Finance charges are recognized as finance costs in the Statement of Profit and Loss, unless they are directly attributable to qualifying assets, in which case they are capitalized in accordance with the Company’s general policy on the borrowing costs. Contingent rentals are recognized as expenses in the periods in which they are incurred. Operating lease payments are recognized as an expense in the Statement of Profit and Loss on a straight-line basis over the lease term.

Company as a lessor

Leases in which the Company does not transfer substantially all the risks and rewards of ownership of an asset are classified as operating leases. Rental income from operating lease is recognized on a straight-line basis over the term of the relevant lease. Initial direct costs incurred in negotiating and arranging an operating lease are added to the carrying amount of the leased asset and recognized over the lease term on the same basis as rental income. Contingent rents are recognized as revenue in the period in which they are earned.

s) Cash and cash equivalents

Cash and cash equivalents comprise cash at bank and on hand and short-term money market deposits with original maturities of three months or less that are readily convertible to known amounts of cash and which are subject to an insignificant risk of change in value.

For the purpose of the statement of cash flows, cash and cash equivalents consist of cash and short-term deposits, as defined above, net of outstanding bank overdrafts as they are considered an integral part of the Company's cash management.

t) Cash dividend to equity shareholders of the Company

The Company recognizes a liability to make distribution to equity shareholders of the Company when the distribution is authorized and it is no longer at the discretion of the Company. Interim dividend is paid as and when declared by the Board. Final dividend is paid after obtaining shareholders' approval. Dividends are paid in Indian Rupees.

u) Investment in joint venture

Investments representing equity interest in joint ventures are carried at cost. A joint venture is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the arrangement. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require unanimous consent of the parties sharing control.

v) Standards issued but not effective

In March 2017, the Ministry of Corporate Affairs issued the Companies (Indian Accounting Standards) (Amendments) Rules, 2017, notifying amendments to Ind AS 7, 'Statement of cash flows' and Ind AS 102, 'Share-based payment.' These amendments are in accordance with the recent amendments made by International Accounting Standards Board (IASB) to IAS 7, 'Statement of cash flows' and IFRS 2, 'Share-based payment,' respectively. The amendments are applicable to the Company from April 1, 2017.

Amendment to Ind AS 7:

The amendment to Ind AS 7 requires the entities to provide disclosures that enable users of financial statements to evaluate changes in liabilities arising from financing activities, including both changes arising from cash flows and non-cash changes, suggesting inclusion of a reconciliation between the opening and closing balances in the balance sheet for liabilities arising from financing activities, to meet the disclosure requirement.

Amendment to Ind AS 102:

The amendment to Ind AS 102 provides specific guidance to measurement of cash-settled awards, modification of cash-settled awards and awards that include a net settlement feature in respect of withholding taxes. It clarifies that the fair value of cash-settled awards is determined on a basis consistent with that used for equity-settled awards. Market-based performance conditions and non-vesting conditions are reflected in the 'fair values', but non-market performance conditions and service vesting conditions are reflected in the estimate of the number of awards expected to vest. Also, the amendment clarifies that if the terms and conditions of a cash-settled share-based payment transaction are modified with the result that it becomes an equity-settled share-based payment transaction, the transaction is accounted for as such from the date of the modification. Further, the amendment requires the awards that include a net settlement feature in respect of withholding taxes to be treated as equity-settled in its entirety. The cash payment to the tax authority is treated as if it was part of an equity settlement.

The Company will adopt these amendments from their applicability date. The Company is evaluating the requirements of the amendment along with the impact on the financial statements.

Note 04

PROPERTY, PLANT AND EQUIPMENT

(₹ in Crore)

Particulars	Freehold land	Buildings	Plant and equipment (refer note 34)	Furniture and fixtures	Vehicles	Office equipment	Railway siding	Mining properties[1]	**Total**
At Cost									
As at April 1, 2015	230	1,268	12,852	26	28	188	60	516	**15,168**
Additions	12	63	420	2	5	15	25	681	**1,223**
Disposals/ adjustments	(16)	(8)	45	-	1	1	-	-	**23**
As at March 31, 2016	**258**	**1,339**	**13,227**	**28**	**32**	**202**	**85**	**1,197**	**16,368**
Additions	1	41	822	1	4	13	-	530	**1,412**
Disposals/ adjustments	-	46	53	-	2	2	1	(53)	**51**
As at March 31, 2017	**259**	**1,334**	**13,996**	**29**	**34**	**213**	**84**	**1,780**	**17,729**
Accumulated depreciation									
As at April 1, 2015	-	213	4,830	14	14	146	9	159	**5,385**
Depreciation charge for the year	-	39	602	2	3	15	4	69	**734**
Disposals/ adjustments	-	-	15	-	-	1	-	-	**16**
As at March 31, 2016	**-**	**252**	**5,417**	**16**	**17**	**160**	**13**	**228**	**6,103**
Depreciation charge for the year	-	56	1,433	3	1	13	5	289	**1,800**
Disposals/ adjustments	-	4	33	-	1	1	-	-	**39**
As at March 31, 2017	**-**	**304**	**6,817**	**19**	**17**	**172**	**18**	**517**	**7,864**
Net Book Value									
As at April 1, 2015	230	1,055	8,022	12	14	42	51	357	**9,783**
As at March 31, 2016	258	1,087	7,810	12	15	42	72	969	**10,265**
As at March 31, 2017	259	1,030	7,179	10	17	41	66	1,263	**9,865**

(₹ in Crore)

Carrying amount of	As at March 31, 2017	As at March 31, 2016	As at April 1, 2015
Capital work in progress[2]	3,071	2,428	2,005

Note 05

INTANGIBLE ASSETS

(₹ in Crore)

Particulars	Computer Software	Mining rights	Right to use asset (refer note 34)	Total
At Cost				
As at April 1, 2015	25	67	50	142
Additions	2	-	12	14
Disposals	-	-	-	-
As at March 31, 2016	**27**	**67**	**62**	**156**
Additions	13	-	6	19
Disposals	-	-	-	-
As at March 31, 2017	**40**	**67**	**68**	**175**
Amortization				
As at April 1, 2015	18	5	2	25
Charge for the year	4	4	3	11
As at March 31, 2016	**22**	**9**	**5**	**36**
Charge for the year	4	4	3	11
As at March 31, 2017	**26**	**13**	**8**	**47**
Net Book Value				
As at April 1, 2015	7	62	48	117
As at March 31, 2016	5	58	57	120
As at March 31, 2017	14	54	60	128

(1) Additions to mining property includes deferred stripping cost of ₹ 21 Crore (March 31, 2016 ₹ Nil)
(2) Capital work in progress includes employee benefits and other expense of ₹ 28 Crore and ₹ 133 Crore respectively. (March 31, 2016: ₹ 37 Crore and ₹ 277 Crore respectively.)

Note 06

LOANS (At amortized cost)

(₹ in Crore)

Particulars	As at March 31, 2017	As at March 31, 2016	As at April 01, 2015
Non-current			
Unsecured, considered good			
Loans to employees	2	3	5
Security deposits	17	16	19
Unsecured, considered doubtful			
Security deposits	23	23	23
Provision for security deposits	(23)	(23)	(23)
	-	-	-
Investment in joint ventures (Refer Note 33)	2	2	3
Provision for investment in joint ventures	(2)	(2)	(3)
	-	-	-
Total	19	19	24
Current			
Unsecured, considered good			
Loans to employees	1	2	1
Total	1	2	1

Note 07

OTHER ASSETS

(₹ in Crore)

Particulars	As at March 31, 2017	As at March 31, 2016	As at April 01, 2015
Non-current			
Unsecured, considered good			
Capital advances	430	319	329
Claims and other receivables[(1)]	179	157	146
Security Deposits	35	41	21
Advance income tax (net)	530	289	203
Prepayments[(2)]	141	146	150
Unsecured, considered doubtful			
Claims and other receivables	34	28	28
Security deposits	5	5	5
Provision on doubtful deposits and claims	(39)	(33)	(33)
	-	-	-
Total	**1,315**	**952**	**849**
Current			
Unsecured, considered good			
Advance given to vendors for supply of goods and services	127	189	116
Prepayments	21	17	31
Balance with central excise and government authorities	195	193	194
Export incentive receivable	65	68	68
Total	**408**	**467**	**409**

(1) Includes ₹ 101 Crore for March 31, 2017 (March 31, 2016 : ₹ 73 Crore and April 1, 2015 : ₹ 52 Crore) paid under protest as mentioned in Note 30 on account of Entry tax. Balance pertains to Indirect taxes and royalty deposited under dispute with respect to various matters currently litigated in court of law and at various levels of adjudication authorities.

(2) Represents prepayments in respect of land taken under operating leases, being amortised equally over the period of the lease.

Note 08

INVENTORIES*

(₹ in Crore)

Particulars	As at March 31, 2017	As at March 31, 2016	As at April 01, 2015
Lower of cost or net realizable value			
a. Raw material	-	-	47
b. Work in progress			
Ore[(1)]	307	48	94
Mined Metal	525	182	284
Others	334	276	295
c. Finished goods[(1)]	54	38	55
d. Fuel Stock	61	137	76
[Including goods in transit Nil (2016: ₹ 26 Crore; 2015: ₹ 52 Crore)]			
e. Stores and spare parts[(2)]	655	377	361
[Including goods in transit ₹ 278 Crore (2016: ₹ 12 Crore; 2015: ₹ 65 Crore)]			
Total	**1,936**	**1,058**	**1,212**

* For method of valuation of inventories, Refer note 3(k)

(1) Inventory held at net realizable value amounted to Rs 24 Crore (March 31, 2016 : ₹ 13 Crore and April 01, 2015 : ₹ 6 Crore).The write down on this inventory of ₹ 9 Crore (March 31, 2016 : ₹ Nil) has been taken to Statement of Profit and Loss.

(2) Net of provision of ₹ 44 Crore (2016: ₹ 45 Crore; 2015: ₹ 54 Crore)]

Note 09

INVESTMENTS

(₹ in Crore)

Particulars	As at March 31, 2017	As at March 31, 2016	As at April 01, 2015
Financial assets measured at fair value through other comprehensive income			
Investment in bonds-quoted	1,829	1,918	2,272
Investment in zero coupon bonds- quoted	2,618	1,890	1,709
Financial assets measured at fair value through profit and loss			
Investment in mutual funds-quoted	12,167	14,420	13,310
Investment in mutual funds-unquoted	7,169	16,993	10,023
Total	**23,783**	**35,221**	**27,314**
Aggregate amount of quoted investment	**16,614**	**18,228**	**17,291**
Market value of quoted investment	**16,614**	**18,228**	**17,291**
Aggregate amount of unquoted investment	**7,169**	**16,993**	**10,023**

Note 10

TRADE RECEIVABLES[1] (At amortized cost)

(₹ in Crore)

Particulars	As at March 31, 2017	As at March 31, 2016	As at April 01, 2015
Unsecured, considered good[2]	136	107	560
Unsecured, considered doubtful	1	1	1
Provision on doubtful debts	(1)	(1)	(1)
	-	-	-
Total	**136**	**107**	**560**

(1) The average credit period given to customer ranges from zero to ninety days. Interest is charged on trade receivables for the credit period, from the date of the invoice at 9.5% to 12.25% per annum on the outstanding balance.

(2) Unsecured considered good includes, ₹124 Crore (March 31, 2016: ₹ 31 Crore, April 1,2015: ₹ 40 Crore) due from wind energy segment's trade receivables.
There are no other customers who represent more than 10% of the total balance of trade receivables.
For terms and condition relating to related party receivables, see note 38.

Note 11

CASH AND CASH EQUIVALENTS

(₹ in Crore)

Particulars	As at March 31, 2017	As at March 31, 2016	As at April 01, 2015
Balances with banks			
On current accounts	189	51	28
Deposits with original maturity of less than 3 months	-	-	22
Total	**189**	**51**	**50**

Disclosure of Specified Bank Notes*

(₹ in Crore)

Particulars	Specified bank notes	Other denomination notes	Total
Closing cash in hand as on 8th November 2016	**-**	**-**	**-**
Add: Permitted receipts	-	-	-
Less: Permitted payments	-	-	-
Less: Amounts deposited in Banks	-	-	-
Closing cash in hand as on 30th December 2016	**-**	**-**	**-**

*During the period from November 8, 2016 to December 30, 2016, the Company did not hold or transact in any Specified Bank Notes as defined in the notification of the Government of India, the Ministry of Finance, Department of Economic Affairs number S.O. 3407(E), dated November 8, 2016.

Note 12

OTHER BANK BALANCES

(₹ in Crore)

Particulars	As at March 31, 2017	As at March 31, 2016	As at April 01, 2015
Fixed deposits having maturity more than 3 months but not more than 12 months	-	-	3,534
Earmarked unpaid dividend accounts	8,191	2	1
Total	**8,191**	**2**	**3,535**

Note 13

OTHER FINANCIAL ASSETS - CURRENT

(₹ in Crore)

Particulars	As at March 31, 2017	As at March 31, 2016	As at April 01, 2015
Unsecured, Considered Good			
Interest accrued on deposits (at amortized cost)	3	3	2
Derivative assets (Refer note 36)	2	2	1
Total	**5**	**5**	**3**

Note 14

EQUITY SHARE CAPITAL

(₹ in Crore)

Particulars	As at March 31, 2017	As at March 31, 2016	As at April 01, 2015
A. Authorized equity share capital			
Equity shares of ₹ 2 (March 31,2016: ₹ 2, April 1,2015: ₹ 2) each.	1,000	1,000	1,000
No. of Shares (In Crore)	500	500	500
B. Issued, subscribed and paid up			
Equity shares of ₹ 2 (March 31,2016: ₹ 2, April 1,2015: ₹ 2) each.	845	845	845
No. of Shares (In Crore)	423	423	423
C. Equity shares held by holding Company			
Vedanta Limited			
No. of Shares (In Crore)	274	274	274

(₹ in Crore)

Particulars	As at March 31, 2017	As at March 31, 2016	As at April 01, 2015
% of Holding	64.92%	64.92%	64.92%
D. Aggregate number of bonus shares issued, shares issued for consideration other than cash and shares bought back during the period of five years immediately preceding the reporting date			
Equity shares allotted as fully paid up by way of bonus shares without payment being received in cash in financial year 2010-11	-	-	211
E. Details of shareholders holding more than 5% shares in the Company			
Vedanta Limited			
No. of Shares (In Crore)	274	274	274
% of Holding	64.92%	64.92%	64.92%
Government of India- President of India			
No. of Shares (In Crore)	125	125	125
% of Holding	29.54%	29.54%	29.54%

F. Terms/Rights attached to equity shares

The Company has one class of equity shares having a par value of ₹ 2 per share. Each equity shareholder is eligible for one vote per share held. Each equity shareholder is entitled to dividend as and when declared by the Company. Interim dividend is paid as and when declared by the Board. Final dividend is paid after obtaining shareholders' approval. Dividends are paid in Indian Rupees. In the event of liquidation, the equity shareholders are eligible to receive the remaining assets of the Company after distribution of all preferential amount in proportion to their shareholding. The Company has a dividend policy to pay a minimum dividend of 30% of profit after tax or 5% of opening net worth which ever is higher.

Note 15

OTHER FINANCIAL LIABILITIES

(₹ in Crore)

Particulars	As at March 31, 2017	As at March 31, 2016	As at April 01, 2015
Non-current			
Capital creditors	93	101	96
Total	**93**	**101**	**96**
Current			
Derivatives - Liabilities (Refer Note 36)	47	12	21
Others			
Due to related party (Refer Note 38)	25	28	17
Deposits from vendors	189	209	212
Dividend payable	8,191	10,142	1
Other liabilities (Includes employee benefits etc.)	151	157	163
Total	**8,603**	**10,548**	**414**

Note 16

PROVISIONS

Non-Current

(₹ in Crore)

Particulars	Provision for mine restoration[1]	Provision for decommissioning[2]	Total
As at April 1, 2015	4	7	11
Addition during the year	-	8	8
Utilized	-	-	-
As at March 31, 2016	4	15	19
Addition during the year	83	7	90
Unwinding of discount	2	-	-
Utilized	-	-	-
As at March 31, 2017	89	22	111

[1] The provision for restoration, rehabilitation, and environmental cost represents the Company's best estimate of the costs which will be incurred in the future to meet the obligations under the laws of the land and the terms referred to in the Company's mining arrangements. The principal restoration, rehabilitation and environmental provisions are the costs, which are expected to be incurred in restoration at the end of life of these mines at Rampura Agucha, Rajpura Dariba, Zawar Mines, Sindesar Khurd and Matoon.

[2] Provision for decommissioning is created to meet the obligation at decommissioned smelting facility at Vizag location basis an independent technical evaluation.

Current

(₹ in Crore)

Particulars	As at March 31, 2017	As at March 31, 2016	As at April 01, 2015
Provision for gratuity	16	25	48
Provision for compensated absences	1	5	25
Total	17	30	73

Note 17

OTHER LIABILITIES

(₹ in Crore)

Particulars	As at March 31, 2017	As at March 31, 2016	As at April 01, 2015
Non-Current			
Deferred government grant[3]	556	563	596
Total	556	563	596
Current			
Advance from customers[1]	1,515	457	92
Others			
Statutory and other liabilities[2]	698	2,950	262
Deferred government grant[3]	114	97	31
Total	2,327	3,504	385

[1] Advance from customers includes the amount received under short term supply agreements.

[2] Statutory and other liabilities mainly includes contribution to PF, Excise duty, VAT, service tax, amount payable to District Mineral Fund (DMF) and National Mineral Exploration Trust (NMET) etc.

[3] Represents government assistance in the form of the duty benefit availed under Export Promotion Capital Goods (EPCG) Scheme on purchase of property, plant and equipments accounted for as government grant and being amortised over the useful life of such assets.

Note 18

BORROWINGS

(₹ in Crore)

Particulars	As at March 31, 2017	As at March 31, 2016	As at April 01, 2015
Current			
Commercial Paper (Unsecured)[1]	7,908	-	-
Total	**7,908**	**-**	**-**

[1] Commercial papers carry an effective interest rate in the range of 6.35% to 6.38%, and are repayable within 56 days to 91 days from the date of issue of commercial papers.

Note 19

TRADE PAYABLES

(₹ in Crore)

Particulars	As at March 31, 2017	As at March 31, 2016	As at April 01, 2015
Total outstanding dues of Micro, Small and Medium enterprises	10	7	3
Total outstanding dues to creditors other than Micro, Small and Medium enterprises	1,195	924	759
Total	**1,205**	**931**	**762**

The disclosures relating to Micro, Small and Medium Enterprises have been furnished to the extent such parties have been identified on the basis of the intimation received from the suppliers regarding their status under the Micro, Small and Medium Enterprises Development Act, 2006. There is no interest paid/payable as at March 31, 2017 (March 31, 2016: Nil , April 1, 2015: Nil).

(₹ in Crore)

Particulars	As at March 31, 2017	As at March 31, 2016	As at April 01, 2015
The principal amount and the interest due thereon remaining unpaid to any supplier as at the end of each accounting year.			
i) Principal amount due to micro and small enterprises	10	7	3
ii) Interest due on above	-	-	-
iii) The amount of interest paid by the buyer in terms of section 16 of the MSMED Act, 2006 along with the amounts of the payment made to the supplier beyond the appointed day during each accounting year.	-	-	-
iv) The amount of interest due and payable for the period of delay in making payment (which have been paid but beyond the appointed day during the year) but without adding the interest specified under the MSMED Act, 2006.	-	-	-
v) The amount of interest accrued and remaining unpaid at the end of each accounting year.	-	-	-
vi) The amount of further interest remaining due and payable even in the succeeding years, until such date when the interest dues as above are actually paid to the small enterprise for the purpose of disallowance as a deductible expenditure under section 23 of the MSMED Act, 2006.	-	-	-

Note 20

REVENUE FROM OPERATIONS

(₹ in Crore)

Particulars	For the year ended March 31, 2017	For the year ended March 31, 2016
Sale of products (including excise duty)[1]	18,395	14,971
Income from wind energy	176	164
	18,571	15,135
Other operating income		
Sale of Scrap and Residuals	111	141
Export incentives	71	106
Others (unclaimed amount, carbon credits, liquidated damages etc.)	45	81
Total	**18,798**	**15,463**

[1] Sale of products includes excise duty collected from Customers of ₹ 1,525 Crore (March 31, 2016 : ₹ 1,282 Crore)

Note 21

OTHER INCOME

(₹ in Crore)

Particulars	For the year ended March 31, 2017	For the year ended March 31, 2016
Net gain on investments measured at FVTPL	1,552	1,699
Net gain on sale of investments	415	394
Net gain on foreign currency transactions and translation	-	14
Amortization of deferred revenue arising from government grant	107	32
Interest Income		
Bank deposits at amortized cost	4	262
Investments at fair value through other comprehensive income	321	322
Interest others (interest from customers, staff loans, etc.) at amortized cost	75	40
Total	**2,474**	**2,763**

Note 22

COST OF MATERIALS CONSUMED[1]

(₹ in Crore)

Particulars	For the year ended March 31, 2017	For the year ended March 31, 2016
Opening inventory	-	47
Add: Purchase	26	4
Less: Closing inventory	-	-
Cost of materials consumed	**26**	**51**

[1] Represents zinc and lead concentrate purchased

Note 23

CHANGES IN INVENTORIES OF FINISHED GOODS AND WORK-IN-PROGRESS

(₹ in Crore)

Particulars	For the year ended March 31, 2017	For the year ended March 31, 2016
Opening inventory		
Finished goods	38	55
Work in progress :-		
Ore	48	94
Mined metal	182	284
Others (includes various semi-finished goods having Zinc, Lead & Silver content)	276	295
Total	**544**	**728**
Closing inventory		
Finished goods	54	38
Work in progress :-		
Ore	307	48
Mined metal	525	182
Others (includes various semi-finished goods having Zinc, Lead & Silver content)	334	276
Total	**1,220**	**544**
Changes in Inventory	**(676)**	**184**

Note 24

EMPLOYEE BENEFIT EXPENSE

(₹ in Crore)

Particulars	For the year ended March 31, 2017	For the year ended March 31, 2016
Salaries, wages and bonus	576	629
Contribution to provident and other funds	45	46
Share based compensation(1)	23	22
Staff welfare expenses(2)	78	77
Total	**722**	**774**

(1) The Company offers equity-based award plans to its employees, officers and directors through its parents, Vedanta Resources Plc. [Vedanta Resources Long-Term Incentive Plan (""LTIP""), Employee Share Ownership Plan (""ESOP"") and Performance Share Plan ("PSP")] collectively referred to as 'VR PLC ESOP' scheme and Vedanta Limited [Vedanta Limited - Employee Stock Option Scheme ("Vedanta Limited- ESOS")].

During the year, share- based incentives arrangement under VR PLC ESOP scheme and ESOS of Vedanta Limited (introduced effective December 2016) are provided to the defined management group. The maximum value of shares that can be awarded to members of the defined management group is calculated by reference to the individual fixed salary and share-based remuneration consistent with local market practice. ESOP scheme of VR Plc. and Vedanta Limited are both tenure and performance based share schemes. The awards are indexed to and settled by Parent's shares (Vedanta Resources Plc. shares or Vedanta Ltd shares as defined in the scheme). The awards have a fixed exercise price denominated in Parent's functional currency (10 US cents per share in case of Vedanta Resources Plc. and ₹ 1 in case of Vedanta Limited), the performance period of each award is three years and is exercisable within a period of six months from the date of vesting beyond which the option lapses.

Further, in accordance with the terms of the agreement between the Parent and the Company, the cost recognised towards ESOP scheme is recovered by the Parent from the Company.

(2) Includes Corporate social responsibility expenses of ₹ 11 Crore (March 31, 2016 : ₹ 14 Crore). Refer Note 34 on Corporate Social Responsibility.

Note 25

FINANCE COSTS

(₹ in Crore)

Particulars	For the year ended March 31, 2017	For the year ended March 31, 2016
Interest expense on borrowings	192	10
Bill discounting charges	8	6
Bank charges	2	1
Total	**202**	**17**

Note 26

DEPRECIATION AND AMORTIZATION EXPENSES

(₹ in Crore)

Particulars	For the year ended March 31, 2017	For the year ended March 31, 2016
Depreciation on property, plant and equipments	1,800	734
Amortization on intangible assets	11	11
Total	**1,811**	**745**

Note 27

OTHER EXPENSES

(₹ in Crore)

Particulars	For the year ended March 31, 2017	For the year ended March 31, 2016
Consumption of stores and spare parts	1,134	1,014
Excise duty on sale of goods	1,525	1,282
Repairs and Maintenance -		
Plant and equipment	1,042	957
Building	42	40
Others	2	2
Carriage inwards	176	204
Mine expenses	476	382
Other manufacturing and operating expenses	279	250
Rates and taxes	2	4
Conveyance and travelling expenses	32	32
Directors sitting fees and commission	1	1
Payment to auditors[(1)]	2	2
Carriage outwards	246	269
Grass root exploration expenses	55	67
Donations	50	-
Legal and professional expenses	89	66
Research and development expenditure	7	5
Corporate social responsibility (Refer Note 34)	34	43
Miscellaneous expenses	128	144
Total	**5,322**	**4,764**

[1] Remuneration to auditors

(₹ in Crore)

Particulars	For the year ended March 31, 2017	For the year ended March 31, 2016
- Audit fees	1	1
- Other services	1	1
Total	2	2

Note 28

EXCEPTIONAL ITEMS

(₹ in Crore)

Particulars	For the year ended March 31, 2017	For the year ended March 31, 2016
Voluntary retirement expenses	-	30
Total	**-**	**30**

The Company announced voluntary retirement to its employees under the revised Voluntary Retirement Scheme, 2000. Under the scheme, 162 employees opted for Voluntary retirement, during the year ended March 31, 2016.

Note 29

EARNINGS PER SHARE

Particulars	For the year ended March 31, 2017	For the year ended March 31, 2016
Basic earnings per share (₹)	19.68	19.35
Diluted earnings per share (₹)	19.68	19.35

The earnings and weighted average number of equity shares used in the calculation of basic earnings per share are as follows:

Particulars	For the year ended March 31, 2017	For the year ended March 31, 2016
Profit after tax attributable to owners of the Company (in Crore)	8,316	8,175
Earnings used in the calculation of basic earnings for the year (in Crore)	8,316	8,175
Weighted average number of equity shares outstanding (in Crore)	423	423
Nominal Value per share	2	2

Note 30

CONTINGENT LIABILITIES AND CAPITAL COMMITMENTS

(₹ in Crore)

Particulars	As at March 31, 2017	As at March 31, 2016	As at April 01, 2015
a. Contingent liabilities[1]			
Claims against the Company not acknowledged as debts			
- Suppliers and contractors	43	45	31
- Ex-employees and others	9	9	10
- Land acquisition	6	7	6
- Mining cases[2]	334	334	334
- Government : Electricity Duty	9	9	9
: Renewable Energy	-	-	180
: Road Tax	15	-	-
: Environmental Cess[3]	142	128	112
Guarantees issued by the banks (excluding Financial guarantee)	65	51	56
Sales tax demands	26	11	13
Entry tax demands[4]	199	128	122
Income tax demands[5]	4,267	2,110	1,129
Excise Duty demands[6]	424	369	465

(1) Future cash out flows in respect of the above matters are determinable only on receipt of judgments or decisions pending at various forums. Accordingly interest and penalty where applicable will be additionally payable.

(2) The Department of Mines and Geology of the State of Rajasthan issued several show cause notices in August, September and October 2006 to HZL, amounting to ₹ 334 Crore. These notices alleged unlawful occupation and unauthorised mining of associated minerals other than zinc and lead at HZL's Rampura Agucha, Rajpura Dariba and Zawar mines in Rajasthan during the period from July 1968 to March 2006. HZL believes that the likelihood of this claim is not probable and thus no provision has been made in the financial statements. HZL had filed writ petitions in the High Court of Rajasthan in Jodhpur and had obtained a stay in respect of these demands. The High Court restrained the Department of Mines and Geology from undertaking any coercive measures to recover the penalty. In January 2007, the High Court issued another order granting the Department of Mines and Geology additional time to file their reply and also ordered the Department of Mines and Geology not to issue any orders cancelling the lease. The Company is currently awaiting listing of the said case in Rajasthan High Court.

(3) The State of Rajasthan issued a notification in June 2008 notifying the Rajasthan Environment and Health Cess Rules, 2008, imposing environment and health cess on major minerals including lead and zinc. HZL and other mine operators resisted this notification and the imposition thereunder before the High Court of Rajasthan on the ground that the imposition of such cess and all matters relating to the environment fall under the competence of the Central government as opposed to the State government. In October 2011, the High Court of Rajasthan disposed the writ petitions and held the Rajasthan Environment and Health Cess Rules, 2008 that imposes a levy of cess on minerals, as being constitutionally valid. An amount of ₹ 150 per metric ton of ore produced would be attracted under the Statute if it is held to be valid. HZL challenged this order by a special leave petition in December 2011 before the Supreme Court of India. The Supreme Court of India issued a notice for stay. Further direction was issued by the Supreme Court on March 23, 2012 not to take any coercive action against HZL for recovery of cess. During the current year, the above mentioned notification has been rescinded via notification dated January 6, 2017, with immediate effect and thus the Company is not recognising any amount after the notified date as a contingent liability.

(4) The Company challenged the constitutional validity of the local statutes and related notifications in the state of Rajasthan pertaining to the levy of entry tax on the entry of goods brought into the state from outside. Post some contradictory orders of High Courts across India adjudicating on similar challenges, the Supreme Court referred the matters to a nine judge bench. Post a detailed hearing, although the bench rejected the compensatory nature of tax as a ground of challenge, it maintained status quo with respect to all other issues which have been left open for adjudication by regular benches hearing the matters. The total claims on the Company as at March 31, 2017, March 31, 2016 and April 1, 2015 is ₹ 199 crore, ₹ 128 crore and ₹ 122 crore respectively. Post the order of the nine judge bench, the regular bench of the Supreme Court proceeded with hearing the matters. The regular bench remanded the entry tax matters relating to the issue of discrimination against domestic goods from other States to the respective High Courts for final determination but retained

the issue of jurisdiction on levy on imported goods, for determination by Supreme Court. The Company is looking to file writ petition before the Rajasthan High Court.

(5) As of March 31, 2017, the Company has open tax demands of contingent nature of ₹ 4,267 crore for relevant assessment years 1989-90 through 2013-14. The demand is raised mainly on account of disallowance of certain benefits under section 80IA and 80IC of the Indian Income Tax Act and on account of depreciation disallowances and interest thereon. Although, the Company has paid an amount of ₹ 526 crore in relation to these demands, which are pending at various levels of appeals, management considers these disallowances as not tenable against the Company, and therefore no provision for tax contingencies has been established.

(6) Contingent liability towards excise duty of ₹ 424 crore includes various demands raised on the Company towards CENVAT, service tax and excise for FY 1991-92 to 2015-16. These demands include an amount of ₹ 271 crore towards reverse credit on inputs used for manufacture of silver cleared without payment of duty during the period Oct 2008 to Feb 2013. The Company has paid an amount of ₹ 43 crore against these demands under protest and is confident of the liability not devolving on the Company.

b. Commitments

Estimated amount of contracts remaining to be executed on capital account and not provided for ₹ 1,636 Crore (March 31, 2016: ₹ 2,015 Crore, April 1, 2015: ₹ 1,798 Crore).

c. Other Commitments - Export obligations

The Company had export obligations of ₹ 1,244 Crore (March 31, 2016: ₹ 166 Crore) on account of concessional rates of import duties paid on capital goods under the Export Promotion Capital Goods Scheme enacted by the Government of India which is to be fulfilled over the next six years from purchase. If the Company is unable to meet these obligations, its liabilities currently not provided would be ₹ 207 Crore (March 31, 2016: ₹ 33 Crore) reduced in proportion to actual export. This liability is backed by the bonds executed in favour of Customs department amounting to ₹ 268 Crore (March 31, 2016: ₹ 122 Crore). Further, bonds amounting to ₹ 346 Crore (March 31, 2016: ₹ 581 Crore) will be released subject to verification of EODC (Export obligation discharge certificate) by the Customs department.

Note 31

RETIREMENT AND OTHER EMPLOYEE BENEFIT SCHEMES

a. Defined contribution schemes

Family Pension Scheme

The contributions are based on a fixed percentage of the employee's salary, subject to a ceiling, as prescribed in the scheme. A sum of ₹ 6 Crore (March 31, 2016: ₹ 7 Crore) has been charged to the Statement of Profit and Loss during the year.

Superannuation fund

A sum of ₹ 2 Crore (March 31, 2016: ₹ 2 Crore) has been charged to the Statement of Profit and Loss in respect of contributions made to the superannuation fund. The Company has no further obligations to the plan beyond the monthly contributions.

b. Defined benefit plans

For defined benefit pension schemes, the cost of providing benefits under the plans is determined by actuarial valuation each year for the plan using the projected unit credit method by independent qualified actuaries as at the year end. Remeasurements in the year are recognized in full in other comprehensive income for the year.

Provident fund

The Company offers its employees, benefits under defined benefit plans in the form of provident fund scheme which covers all employees. Contributions are paid during the year into ‘Hindustan Zinc Limited Employee’s Contributory Provident Fund’ (‘Trust’). Both the employees and the Company pay predetermined contributions into the Trust. A sum of ₹ 25 Crore (March 31, 2016: ₹ 24 Crore) has been charged to the Statement of Profit and Loss in this respect during the year.

The Company’s Trust is exempted under section 17 of Employees Provident Fund Act, 1952. The conditions for grant of exemption stipulate that the employer shall make good the deficiency, if any, between the return guaranteed by the statute and actual earning of the trusts. Having regard to the assets of the Trust and the return on the investments, the Company does not expect any deficiency in the foreseeable future.

The details of fund and plan asset position are given below:

(₹ in Crore)

Particulars	As at March 31, 2017	As at March 31, 2016	As at April 01, 2015
Plan assets fair valued	1,112	991	921
Present value of benefit obligation at period end	1,110	987	886
Net Plan Assets	**2**	**4**	**35**
% allocation of plan assets by category			
Central government securities	23%	27%	29%
State government securities	59%	66%	66%
Private Sector Bonds, Mutual funds	18%	7%	5%
Principal actuarial assumptions			
Financial Assumptions			
Discount rate	8%	8%	8%
Expected statutory interest rate on the ledger balance	9%	9%	9%
Expected short fall in interest earnings on the fund	0%	0%	0%
Demographic Assumptions			
i) Retirement Age (Years)	58	58	58
ii) Mortality rates inclusive of provision for disability	100% of IALM (2006 - 08)		
iii) Withdrawal rates			
Up to 30 Years	3% - 9.4%	3%	3%
From 31 to 44 years	2% - 5.6%	2%	2%
Above 44 years	1% - 1.5%	1%	1%

Gratuity plan

The gratuity plan is governed by the Payment of Gratuity Act, 1972. Under the Act, an employee who has completed five years of service is entitled to specific benefit. The level of benefits provided depends on the member's length of service and salary at retirement age. The Company's defined benefit plans are funded with Life Insurance Corporation of India (LIC). The Company does not have any liberty to manage the fund provided to LIC.

The following tables set out the funded status of the gratuity plans and the amounts recognized in the financial statements.

(₹ in Crore)

Particulars	As at March 31, 2017	As at March 31, 2016	As at April 01, 2015
Principal actuarial assumptions			
Principal actuarial assumptions used to determine the present value of the defined benefit obligation are as follows:			
Financial Assumptions			
Discount rate	7.6%	8.0%	7.8%
Expected rate of increase in compensation level of covered employees	6% - 8%	5.5%	5.5%
Demographic Assumptions			
i) Retirement Age (Years)	58	58	58
ii) Mortality rates inclusive of provision for disability	100% of IALM (2006 - 08)		
iii) Withdrawal rates			
Up to 30 Years	3% - 9.4%	3%	3%
From 31 to 44 years	2% - 5.6%	2%	2%
Above 44 years	1% - 1.5%	1%	1%

(₹ in Crore)

Particulars	As at March 31, 2017	As at March 31, 2016	As at April 01, 2015
Amount recognized in the balance sheet consists of:			
Fair value of planned assets	200	183	168
Present value of defined benefit obligations	(216)	(208)	(216)
Net liability arising from defined benefit obligation	**(16)**	**(25)**	**(48)**

(₹ in Crore)

Particulars	As at March 31, 2017	As at March 31, 2016
The movement during the year of the present value of the defined benefit obligation was as follows:		
Opening Balance	208	216
Service cost	10	9
Benefits paid	(24)	(47)
Interest cost	17	17
Actuarial loss on obligation	5	13
Closing Balance	**216**	**208**
The movement during the year in the fair value of plan assets was as follow:		
Opening Balance	183	168
Employer Contributions	25	48
Benefits paid	(24)	(47)
Remeasurement gain / (loss) arising from return on plan assets	1	1
Interest income	15	13
Closing Balance	**200**	**183**

(₹ in Crore)

Particulars	For the year ended March 31, 2017	For the year ended March 31, 2016
Amounts recognized in Statement of Profit and loss in respect of defined benefit plan are as follows:		
Current service cost	10	9
Net Interest cost	2	4
Total charge to Statement of Profit and Loss	**12**	**13**
Amounts recognized in Other Comprehensive Income in respect of defined benefit plan are as follows:		
Actuarial (Gain)/Loss arising from Change in Demographic Assumption	(1)	-
Actuarial (Gain)/Loss arising from Change in Financial Assumption	(18)	2
Actuarial (Gain)/Loss arising from Experience Adjustment	15	(16)
Loss on Plan assets (excluding amounts included in net interest cost)	1	1
Remeasurement of the net defined benefit liability	**(3)**	**(13)**
Expected contribution for the next Annual reporting period:		
Service Cost	11	9
Net Interest Cost	1	2
Expected Expense for the next annual reporting period	**12**	11

(₹ in Crore)

Particulars	As at March 31, 2017	As at March 31, 2016	As at April 01, 2015
% allocation of plan assets by category			
Government Securities	45%	45%	45%
Debentures / bonds	35%	35%	35%
Equity instruments	10%	10%	10%
Money market instruments	10%	10%	10%

Sensitivity analysis

Below is the sensitivity analysis determined for significant actuarial assumptions for the determination of defined benefit obligations and based on reasonably possible changes of the respective assumptions occurring at the end of the reporting period while holding all other assumptions constant.

(₹ in Crore)

Particulars	For the year ended March 31, 2017	For the year ended March 31, 2016
Impact of change discount rate		
Increase by 0.50%	(6)	(6)
Decrease by 0.50%	6	6
Impact of change in salary increase rate		
Increase by 0.50%	6	6
Decrease by 0.50%	(6)	(6)

The above sensitivity analysis may not be representative of the actual benefit obligation as it is unlikely that the change in assumptions would occur in isolation of one another as some of the assumptions may be correlated.

In presenting the above sensitivity analysis, the present value of defined benefit obligation has been calculated using the projected unit credit method at the end of reporting period, which is the same as that applied in calculating the defined obligation liability recognized in the balance sheet.

Risk analysis

The Company is exposed to a number of risks in the defined benefit plans. Most significant risks pertaining to defined benefits plans and management estimation of the impact of these risks are as follows:

Investment risk

The Company's defined benefit plans are funded with Life Insurance Corporation of India (LIC). The Company does not have any liberty to manage the fund provided to LIC. The present value of the defined benefit plan liability is calculated using a discount rate determined by reference to Government of India bonds for the Company's operations. If the return on plan asset is below this rate, it will create a plan deficit.

Interest risk

A decrease in the interest rate on plan assets will increase the plan liability, however this will be partially offset by increase in the return on plan debt investment.

Longevity risk/ Life expectancy

The present value of the defined benefit plan liability is calculated by reference to the best estimate of the mortality of plan participants both during and at the end of the employment. An increase in the life expectancy of the plan participants will increase the plan liability.

Salary growth risk

The present value of the defined benefit plan liability is calculated by reference to the future salaries of plan participants. An increase in the salary of the plan participants will increase the plan liability.

Note 32

INCOME TAX EXPENSES

The major components of income tax expense for the year ended March 31, 2017 are indicated below:

(₹ in Crore)

Particulars	For the year ended March 31, 2017	For the year ended March 31, 2016
a. Tax charge recognised in Profit and Loss		
Current tax:		
Current tax on profit for the year	2,196	1,805
Total Current tax	**2,196**	**1,805**
Deferred tax:		
Property, plant and equipment, Exploration and evaluation and intangible assets	(172)	265
Fair valuation of assets/liabilities	(154)	(118)
MAT credit asset (recognized)/ utilisation	41	(1,410)
Adjustment in respect of earlier years	64	(129)
Others	(91)	35
Total Deferred tax	**(312)**	**(1,357)**
Tax expense for the year	**1,884**	**448**
Effective income tax rate (%)	**18.47%**	**5.20%**
b. Statement of other comprehensive income		
Deferred tax (credit) / charge on:		
Unrealized (gain) on FVTOCI debt securities	(20)	(4)
Remeasurement of defined benefit obligation	1	4
Total	**(19)**	**-**

A reconciliation of income tax expense applicable to accounting profits before tax at the statutory income tax rate to recognized income tax expense for the year is as follows:

Particulars	For the year ended March 31, 2017	For the year ended March 31, 2016
Accounting profit before tax (after exceptional item)	**10,200**	8,623
Statutory income tax rate	34.61%	34.61%
Tax at statutory income tax rate	3,530	2,984
Disallowable expenses	33	67
Non-taxable capital gains	(885)	(886)
Tax holidays and similar exemptions	(744)	(1,555)
Additional depreciation under income tax reversible within tax holiday period	(44)	(4)
Investment allowance	(41)	(24)
Utilization of tax losses	(29)	(5)
Adjustments in respect of prior years	64	(129)
Total	**1,884**	**448**

There are certain income-tax related legal proceedings which are pending against the company. Potential liabilities, if any have been adequately provided for and the Company does not currently estimate any probable material incremental tax liabilities in respect of these matters. (Refer note 30)

Investment Allowance U/s.32 AC of the Income Tax Act

Incentive for acquisition and installation of new high value plant or machinery to manufacturing companies by providing an additional deduction of 15% of the actual cost of plant or machinery acquired and installed during the year. The actual cost of the new Plant or Machinery should exceed ₹ 25 Crore to be eligible for this deduction. Deduction U/s.32AC is available up to financial year March 31, 2017.

The Company is eligible for specified tax incentives which are included in the table above as 'tax holidays and similar exemptions'. These are briefly described as under:

The location based exemption

In order to boost industrial and economic development in undeveloped regions, provided certain conditions are met, profits of newly established undertakings located in certain areas in India may benefit from a tax holiday. Such a tax holiday works to exempt 100% of the profits for the first five years from the commencement of the tax holiday, and 30% of profits for the subsequent five years. This deduction is available only for units established up to March 31, 2012. However, such undertaking would continue to be subject to the Minimum Alternative tax ('MAT'). The company has such types of undertakings at Haridwar and Pantnagar.

Sectoral Benefit - Power Plants

To encourage the establishment of certain power plants, provided certain conditions are met, tax incentives exist to exempt 100% of profits and gains for any ten consecutive years within the 15 year period following commencement of the power plant's operation. The Company currently has total operational capacity of 474 Mega Watts (MW) of thermal based power generation facilities and wind power capacity of 274 MW. However, such undertakings generating power would continue to be subject to the MAT provisions.

Significant components of deferred tax assets and (liabilities) recognized in the balance sheet are as follows:

(₹ in Crore)

Particulars	**As at March 31, 2017**	As at March 31, 2016	As at April 01, 2015
Property, plant and equipment, Exploration and evaluation and intangible assets	(1,610)	(1,782)	(1,517)
Fair valuation of other assets/liabilities	(827)	(949)	(1,066)
Fair value of derivative assets/ liabilities	16	4	7
Employee benefits	1	-	-
Voluntary retirement scheme	16	24	25
Other temporary differences	231	90	33
MAT credits entitlement	4,880	5,069	3,658
Unutilised tax losses	41	42	-
Deferred Tax Assets (net)	**2,748**	**2,498**	**1,140**

The unused long term capital losses for which no deferred tax asset is recognised amounts to ₹ 935 Crore and ₹ 948 Crore as at March 31, 2016 and April 1, 2015 respectively. These losses begin to expire from financial year 2018-19 to 2022-2023.

As at March 31, 2017, the Company has minimum alternate tax (MAT) credit carry forward of ₹ 4,880 Crore (March 31, 2016: ₹ 5,069 Crore) which will begin to expire from FY 2025-26. MAT paid can be carried forward for a period of 15 years and can be set off against the future tax liabilities. MAT is recognised as a deferred tax asset only when the asset cab be measured reliably and it is probable that the future economic benefit associated with the asset will be realised.

Note 33

JOINT VENTURE

The Company had access of upto 31.5 million MT of coal as a partner in the joint venture 'Madanpur South Coal Company Limited' (Madanpur JV), a Company incorporated in India, where it holds 18.05% of ownership interest. During the year 2013-14, Honourable Supreme Court had passed the judgment cancelling all the coal blocks including Madanpur JV allocated since 1993 with certain exceptions and consequently the Company does not have any business to pursue. Accordingly, the Company had created 100% provision against its investment in Madanpur JV amounting to ₹ 2 Crore.

The Company's share of each of the assets, liabilities, income and expenses etc., related to its interests in Madanpur JV are:

(₹ in Crore)

Particulars	As at March 31, 2017	As at March 31, 2016	As at April 01, 2015
Investment in Joint venture			
Madanpur South Coal Company Limited (at cost)	2	2	3
1,52,266 equity shares of ₹ 10 each (2016: 1,52,266 equity shares of ₹ 10 each, 2015: 2,01,362 equity shares of ₹ 10 each)"			
Less: Aggregate amount of impairment in the value of investment	(2)	(2)	(3)
Total	-	-	-
The Company's share of each of the assets, liabilities, income and expenses etc., related to its interests in Madanpur JV are:			
Non-current assets (Includes property, plant and equipment)	1	1	1
Current assets (Includes investments and deposits)	-	-	1

(₹ in Crore)

Particulars	For the year ended March 31, 2017	For the year ended March 31, 2016
Income	-	-
Expenses	-	-

The Company has not prepared consolidated financial statements as at March 31, 2017, March 31, 2016 and April 1, 2015 as the Company does not have any investment in subsidiaries or associates apart from the above investment in Madanpur JV. The operations of Madanpur JV has been discontinued pursuant to cancellation of coal allocation by Supreme Court and the investments in Madanpur JV are completely impaired. Accordingly, the profits, equity and cash flows on consolidation of Madanpur JV with the Company would remain consistent with the standalone financial statements.

Note 34

CORPORATE SOCIAL RESPONSIBILITY EXPENSES

The Company is required to spend a gross amount of ₹ 175 Crore and ₹ 170 Crore for the year ending March 31, 2017 and March 31, 2016 respectively.

(₹ in Crore)

Particulars	Year ended March 31, 2017		
	In- Cash	Yet to be Paid in Cash	Total
Amount spent during the year on			
i) Depreciation and amortization[(1)]	5	-	5
ii) Other expenses including employee benefit expenses	39	6	45
Total amount spent	**44**	**6**	**50**

(₹ in Crore)

Particulars	Year ended March 31, 2016		
	In- Cash	Yet to be Paid in Cash	Total
Amount spent during the year on			
i) Depreciation and amortization[(1)]	3	-	3
ii) Other expenses including employee benefit expenses	55	5	60
Total amount spent	**58**	**5**	**63**

(1) Represents depreciation on the sewage treatment plant (STP) and related assets of ₹ 2 Crore and ₹ 1 Crore for the year ended March 31, 2017 and March 31, 2016 respectively. The amortisation expenditure on right to use the water of STP is ₹ 3 Crore and ₹ 3 Crore for the year ended March 31, 2017 and March 31, 2016 respectively.

Note 35

SEGMENT REPORTING

a. Basis of Segmentation

The Company is engaged in exploring, extracting and processing minerals. The Company produces zinc, lead, silver and commercial power. The Company has two reportable segments: i) zinc, lead and silver and ii) wind energy. The management of the Company is organized by its main products: zinc, lead and silver and wind energy. Each of the reportable segments derives its revenues from these main products and hence these have been identified as reportable segments by the Company's Chief Operating Decision Maker ("CODM"). Segment profit amounts are evaluated regularly by the CEO, who has been identified as the CODM, in deciding how to allocate resources and in assessing performance.

Zinc, Lead and Silver

The Company's operations include five lead-zinc mines, one rock phosphate mine, four hydrometallurgical zinc smelters, two lead smelters, one pyro metallurgical lead-zinc smelter, seven sulphuric acid plants, a silver refinery and six captive power plants in State of Rajasthan in Northwest India and one zinc ingot melting and casting plant at Haridwar and one silver refinery, one zinc ingot melting and casting plant and one lead ingot melting and casting plant at Pantnagar in the State of Uttarakhand in North India.

Wind energy

The Company has installed 274 MW wind power plants in Gujarat, Karnataka, Rajasthan, Maharashtra and Tamil Nadu.

The accounting policies of the reportable segments are the same as the Company's accounting policies described in Note 3. The operating segments reported are the segments of the Company for which separate financial information is available. Segment profit (Earnings before interest, depreciation and amortization, and tax) amounts are evaluated regularly by the CEO who has been identified as its CODM in deciding how to allocate resources and in assessing performance. The Company's financing (including finance costs and finance income) and income taxes are reviewed on an overall basis and are not allocated to operating segments. Transfer prices between operating segments are on an arm's length basis in a manner similar to transactions with third parties.

Revenue and expenses directly attributable to segment are reported under each reportable segment. Expenses which are not directly identifiable to each reporting segment have been allocated on the basis of appropriate cost drivers of the segment.

Asset and liabilities that are directly attributable for allocable to segments are disclosed under each reportable segment. All other assets and liabilities are disclosed as unallocable.

The following table presents revenue and profit information and certain assets information regarding the Company's business segments for the year ended March 31, 2017.

b. Information about reportable segments

I. Information about primary segment

(₹ in Crore)

Particulars	Year ended March 31, 2017			Year ended March 31, 2016		
	Business Segment	Unallocated	Total	Business Segment	Unallocated	Total
Revenue[1]						
Zinc, Lead and others	16,577	-	16,577	13,575	-	13,575
Silver	1,889	-	1,889	1,501	-	1,501
Wind Energy	176	-	176	165	-	165
Segment revenue	**18,642**	**-**	**18,642**	**15,241**	**-**	**15,241**
Segment Results						
Zinc, Lead and others	6,469	-	6,469	4,646	-	4,646
Silver	1,486	-	1,486	1,179	-	1,179
Wind Energy	79	-	79	130	-	130
Segment Results	**8,034**	**-**	**8,034**	**5,955**	**-**	**5,955**
Less: Finance costs	-	202	202	-	17	17
Add: Interest income	-	400	400	-	623	623
Add: Other unallocable income	-	1,968	1,968	-	2,092	2,092
Profit before tax and exceptional items	-	-	10,200	-	-	8,653
Less: Exceptional item	-	-	-	-	30	30
Profit before tax	-	-	10,200	-	-	8,623
Tax expenses	-	1,884	1,884	-	448	448
Profit for the year			**8,316**			**8,175**
Depreciation & amortisation Expense						
Zinc, Lead and others	1,732	-	1,732	705	-	705
Wind Energy	79	-	79	40	-	40
Total	**1,811**	**-**	**1,811**	**745**	**-**	**745**

[1] Includes export incentives of ₹ 71 Crore (March 31, 2016 : ₹ 106 Crore)

(₹ in Crore)

Particulars	Zinc, Lead and Silver	Wind energy	Unallocated	Total
As at March 31, 2017				
Assets and liabilities				
Assets				
Segment assets	15,559	772	23	16,354
Financial assets investments	-	-	23,783	23,783
Deferred tax asset (net)	-	-	2,748	2,748
Cash and cash equivalent	-	-	189	189
Other bank balance	-	-	8,191	8,191
Advance income tax (net of provision for tax)	-	-	530	530
Total assets	**15,559**	**772**	**35,464**	**51,795**

(₹ in Crore)

Particulars	Zinc, Lead and Silver	Wind energy	Unallocated	Total
Liabilities				
Segment liability	4,711	12	8,190	12,913
Borrowings (Including accrued interest)	-	-	7,908	7,908
Current Tax Liabilities (Net)	-	-	170	170
Total liabilities	**4,711**	**12**	**16,268**	**20,991**
As at March 31, 2016				
Assets and liabilities				
Assets				
Segment assets	14,296	815	23	15,134
Financial assets investments	-	-	35,221	35,221
Deferred tax asset (net)	-	-	2,498	2,498
Cash and cash equivalent	-	-	51	51
Other bank balance	-	-	2	2
Advance income tax (net of provision for tax)	-	-	289	289
Total assets	**14,296**	**815**	**38,084**	**53,195**
Liabilities				
Segment liability	3,442	7	12,247	15,696
Current Tax Liabilities (Net)	-	-	114	114
Total liabilities	**3,442**	**7**	**12,361**	**15,810**
As at April 1, 2015				
Assets and liabilities				
Assets				
Segment assets	13,934	805	21	14,760
Financial assets investments	-	-	27,314	27,314
Deferred tax asset (net)	-	-	1,140	1,140
Cash and cash equivalent	-	-	50	50
Other bank balance	-	-	3,535	3,535
Advance income tax (net of provision for tax)	-	-	203	203
Total assets	**13,934**	**805**	**32,263**	**47,002**
Liabilities				
Segment liability	2,285	30	22	2,337
Current Tax Liabilities (Net)	-	-	44	44
Total liabilities	**2,285**	**30**	**66**	**2,381**

Other Segment Information

Segment capital expenditure

The below expenditure includes additions to property, plant and equipment, intangible assets, capital work in progress and capital advances:

(₹ in Crore)

Particulars	Zinc, Lead and Silver	Wind energy	Total
As at March 31, 2017	2,185	-	**2,185**
As at March 31, 2016	1,650	-	**1,650**

II. Information based on Geography

(₹ in Crore)

Geographical Segments	For the year ended March 31, 2017	For the year ended March 31, 2016
Revenue by geographical segment		
India	14,004	11,742
Asia	3,901	3,006
Rest of the World	737	493
Total	**18,642**	**15,241**

(₹ in Crore)

	As at March 31, 2017	As at March 31, 2016	As at April 01, 2015
Non-current assets[(1)]			
India	14,398	13,385	12,493
Asia	-	-	-
Rest of the World	-	-	-
Total	**14,398**	**13,385**	**12,493**

[(1)] The above assets exclude financial instruments and deferred tax assets.

(₹ in Crore)

	For the year ended March 31, 2017	For the year ended March 31, 2016
Segment capital expenditure		
India	2,185	1,650
Asia	-	-
Rest of the World	-	-
Total	**2,185**	**1,650**

Information about major customer

No single customer accounted for 10% or more of the revenue during the year.

Reconciliation between segment revenue and enterprise revenue

(₹ in Crore)

	For the year ended March 31, 2017	For the year ended March 31, 2016
Segment Revenue		
Zinc, Lead and others	16,577	13,575
Silver	1,889	1,501
Wind Energy	176	165
Total Segment Revenue	**18,642**	**15,241**
Enterprise Revenue		
Revenue from operations	18,798	15,463
Less: Other operating revenues	(227)	(328)
Add: Export Incentives	71	106
Total Segment Revenue	**18,642**	**15,241**

Note 36

FINANCIAL INSTRUMENTS

This section gives an overview of the significance of financial instruments for the Company and provides additional information on the balance sheet. Details of significant accounting policies, including the criteria for recognition, the basis of measurement and the basis on which income and expenses are recognized, in respect of each class of financial asset, financial liability and equity instrument are disclosed in Note 2 and Note 3.

Financial assets and liabilities:

The accounting classification of each category of financial instruments, and their carrying amounts, are set out below:

(₹ in Crore)

Particulars	Fair Value through profit and loss	Fair Value through other comprehensive income	Amortized Cost	Total carrying value	Total fair value
As at March 31, 2017					
Financial assets					
Cash and cash equivalents	-	-	189	189	189
Other bank balances	-	-	8,191	8,191	8,191
Current investments	19,336	4,447	-	23,783	23,783
Trade receivables	-	-	136	136	136
Other Current financial assets and loans	2	-	4	6	6
Other Non-current financial assets	-	-	19	19	19
Total	**19,338**	**4,447**	**8,539**	**32,324**	**32,324**
Financial liabilities					
Short term borrowings	-	-	7,908	7,908	7,908
Trade payables	-	-	1,205	1,205	1,205
Other Current financial liabilities	47	-	8,556	8,603	8,603
Other Non-current financial liabilities	-	-	93	93	93
Total	**47**	**-**	**17,762**	**17,809**	**17,809**
As at March 31, 2016					
Financial assets					
Cash and cash equivalents	-	-	51	51	51
Other bank balances	-	-	2	2	2
Current investments	31,413	3,808	-	35,221	35,221
Trade receivables	-	-	107	107	107
Other Current financial assets and loans	2	-	5	7	7
Other Non-current financial assets	-	-	19	19	19
Total	**31,415**	**3,808**	**184**	**35,407**	**35,407**
Financial liabilities					
Trade payables	-	-	931	931	931
Other Current financial liabilities	12	-	10,536	10,548	10,548
Other Non-current financial liabilities	-	-	101	101	101
Total	**12**	**-**	**11,568**	**11,580**	**11,580**

(₹ in Crore)

Particulars	Fair Value through profit and loss	Fair Value through other comprehensive income	Amortized Cost	Total carrying value	Total fair value
As at April 1, 2015					
Financial assets					
Cash and cash equivalents	-	-	50	50	50
Other bank balances	-	-	3,535	3,535	3,535
Current investments	23,332	3,982	-	27,314	27,314
Trade receivables	-	-	560	560	560
Other Current financial assets and loans	0	0	4	4	4
Other Non-current financial assets	-	-	24	24	24
Total	**23,332**	**3,982**	**4,173**	**31,487**	**31,487**
Financial liabilities					
Trade payables	-	-	762	762	762
Other Current financial liabilities	10	11	393	414	414
Other Non-current financial liabilities	-	-	96	96	96
Total	**10**	**11**	**1,251**	**1,272**	**1,272**

The management assessed that Cash and cash equivalents, Other bank balances, Trade receivables, Trade payables, other current financial assets and liabilities approximate their carrying amounts largely due to the short term maturities of these instruments.

The Fair value of the Company's interest bearing borrowings are determined using amortised cost basis using a discount rate that reflects the issuer's borrowing rate as at the end of the reporting period. The own non performance risk as at March 31, 2017 was assessed to be insignificant [a level 2 technique].

Fair value of the current instrument in bonds and zero coupon bonds are based on the price quotations at the reporting date. Fair value of current investments that are in the nature of 'close ended' mutual funds are based on market observable inputs [a level 2 technique].

Fair value of current investments that are in the nature of 'open ended' mutual funds are derived from quoted market prices in active markets [a level 1 technique].

The Fair value of Non current financial assets and liabilities are estimated by discounting the expected future cash flows using a discount rate equivalent to the risk free rate of return adjusted for the appropriate credit spread.

The Company enters into derivative financial instruments with various counterparties, principally financial institutions with investment grade credit ratings. Commodity derivative contracts are valued using the forward LME rates of commodities actively traded in the listed metal exchanges (i.e. London Metal Exchange). Forward foreign currency contracts are valued using valuation technique with market observable inputs. The most frequently applied valuation techniques for such derivatives include forward pricing using present value calculations. The models incorporate various inputs including the credit quality of counterparties, foreign exchange spot and forward rates, yield curves of the respective currencies, currency basis spreads between the respective currencies, interest rate curves and forward rate curves of the underlying commodity. Commodity contracts are valued using the forward LME rates of commodities actively traded on the listed metal exchange i.e. London Metal Exchange, United Kingdom (U.K.) [a level 2 technique].

Fair value hierarchy

The table shown below analyses financial instruments carried at fair value, by measurement hierarchy. The different levels have been defined below:

- Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities
- Level 2: inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e., as prices) or indirectly (i.e., derived from prices)
- Level 3: inputs for the asset or liability that are not based on observable market data (unobservable inputs)

(₹ in Crore)

Financial Assets	Level-1	Level-2	Level-3
As at March 31, 2017			
At fair value through profit and loss			
Short term investment	7,169	12,167	-
Derivatives financial Assets*			
Commodity Contracts	-	1	-
At fair value through Other Comprehensive Income			
Short term investment	-	4,447	-
Total	**7,169**	**16,615**	**-**
Financial Liabilities			
At fair value through profit and loss			
Derivatives financial Liabilities*			
Forward foreign currency contracts	-	47	-
Fair value of liabilities carried at amortised cost			
Borrowings	-	7,908	-
Total	**-**	**7,955**	**-**
As at March 31, 2016			
Financial Assets			
At fair value through profit and loss			
Short term investment	16,993	14,420	-
Derivatives financial Assets*			
Commodity Contracts	-	2	-
At fair value through Other Comprehensive Income			
Short term investment	-	3,808	-
Total	**16,993**	**18,230**	**-**
Financial Liabilities			
At fair value through profit and loss			
Derivatives financial Liabilities*			
Forward foreign currency contracts	-	12	-
Total	**-**	**12**	**-**
As at April 1, 2015			
Financial Assets			
At fair value through profit and loss			
Short term investment	10,023	13,309	-
At fair value through Other Comprehensive Income			
Short term investment	-	3,982	-
Derivatives financial Assets*			
Commodity Contracts	-	1	-
Total	**10,023**	**17,292**	**-**
Financial Liabilities			
At fair value through profit and loss			
Derivatives financial Liabilities*			
Forward foreign currency contracts	-	10	-
At fair value through Other Comprehensive Income			
Derivatives financial Liabilities*			
Commodity Contracts	-	11	-
Total	**-**	**21**	**-**

* Refer section-"Derivative financial instruments"

There is no financial instrument which is classified as level 3 during the year. There were no transfers between Level 1, Level 2 and Level 3 during the year.

Risk management framework

Risk management

The Company's businesses are subject to several risks and uncertainties including financial risks. The Company's documented risk management polices act as an effective tool in mitigating the various financial risks to which the business is exposed to in the course of their daily operations. The risk management policies cover areas such as liquidity risk, commodity price risk, foreign exchange risk, interest rate risk, counterparty and concentration of credit risk and capital management. Risks are identified through a formal risk management programme with active involvement of senior management personnel and business managers. Each significant risk has a designated 'owner' within the Company at an appropriate senior level. The potential financial impact of the risk and its likelihood of a negative outcome are regularly updated.

The risk management process is coordinated by the Management Assurance function and is regularly reviewed by the Company's Audit Committee. The Audit Committee is aided by the Risk Management Committee, which meets regularly to review risks as well as the progress against the planned actions. Key business decisions are discussed at the periodic meetings of the Executive Committee. The overall internal control environment and risk management programme including financial risk management is reviewed by the Audit Committee on behalf of the Board.

The risk management framework aims to:

- improve financial risk awareness and risk transparency
- identify, control and monitor key risks
- identify risk accumulations
- provide management with reliable information on the Company's risk situation
- improve financial returns

Treasury management

The Company's treasury function provides services to the business, co-ordinates access to domestic financial markets, monitors and manages the financial risks relating to the operations of the Company through internal risk reports which analyse exposures by degree and magnitude of risks. These risks include market risk (including currency risk, fair value interest rate risk and price risk), credit risk, liquidity risk and cash flow interest rate risk.

Treasury management focuses on capital protection, liquidity maintenance and yield maximization. The treasury policies are approved by the Board and adherence to these policies is strictly monitored at the Executive Committee meetings. Day-to-day treasury operations of the Company are managed by the finance team within the framework of the overall Company's treasury policies. A monthly reporting system exists to inform senior management about investments, currency and, commodity derivatives. The Company has a strong system of internal control which enables effective monitoring of adherence to Company's policies. The internal control measures are effectively supplemented by regular internal audits.

The investment portfolio at the Company is independently reviewed by CRISIL Limited and it has been rated as "Very Good" meaning highest safety.

The Company uses derivative instruments as part of its management of exposure to fluctuations in foreign currency exchange rates, interest rates and commodity prices. The Company does not acquire or issue derivative financial instruments for trading or speculative purposes. The Company does not enter into complex derivative transactions to manage the treasury and commodity risks. Both treasury and commodities derivative transactions are normally in the form of forwards and these are subject to the Company's guidelines and policies.

Market risk

Market risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate because of changes in market prices. Market risk comprises interest rate risk, currency risk and commodity risk. Financial instruments affected by market risk include loans and borrowings, deposits, FVTOCI investments and derivative financial instruments.

The sensitivity analyses in the following sections relate to the position as at March 31, 2017, March31, 2016 and April 1, 2015. The sensitivity analyses have been prepared on the basis that the amount of net debt, the ratio of fixed interest rates of the debt and derivatives and the proportion of financial instruments in foreign currencies are all constant. The analyses exclude the impact of movements in market variables on: the carrying values of gratuity and other post-retirement obligations, provisions and the non-financial assets and liabilities of foreign operations.

Commodity price risk

The Company is exposed to the movement of base metal commodity prices on the London Metal Exchange. Any decline in the prices of the base metals that the Company produces and sells will have an immediate and direct impact on the profitability of the businesses. As a general policy, the Company aims to achieve the monthly average of the commodity prices for sales realization. Hedging is used primarily as a risk management tool and, in some cases, to secure future cash flows in cases of high volatility by entering into forward contracts or similar instruments. The hedging activities are subject to strict limits set out by the Board and to a strictly defined internal control and monitoring mechanism. Decisions relating to hedging of commodities are taken at the Executive Committee level and with clearly laid down guidelines for their implementation by the Company.

Whilst the Company aims to achieve average LME prices for a month or a year, average realized prices may not necessarily reflect the LME price movements because of a variety of reasons such as uneven sales during the year and timing of shipments.

Financial instruments with commodity price risk are entered into in relation to following activities:

- economic hedging of prices realized on commodity contracts
- cash flow hedging on account of forecasted highly probable transactions (for the year ended March 31, 2016)

The sales prices of zinc and lead are linked to the LME prices. The Company also enters into hedging arrangements for its Zinc and Lead sales to realize month of sale LME prices.

Total exposure on provisionally priced Zinc and Lead contracts as at March 31, 2017 were ₹ 38 crore (March 31, 2016 ₹ 17 crore) and ₹ 31 crore (March 31, 2016 ₹ 19 crore). The impact on net profits for a 10% movement in LME prices of zinc and 5% movement in LME price of lead that were provisionally priced as at March 31, 2017 and March 31, 2016 is ₹ 4 crore and ₹ 2 crore for zinc and ₹ 2 crore and ₹ 1 crore for lead respectively.

Financial risk

The Company's Board approved financial risk policies comprise liquidity, currency, interest rate and counterparty risk. The Company does not engage in speculative treasury activity but seeks to manage risk and optimize interest and commodity pricing through proven financial instruments.

a. Liquidity risk

The Company requires funds both for short-term operational needs as well as for long-term investment programme mainly in growth projects. The Company generates sufficient cash flows from the current operations which together with the available cash and cash equivalents and short-term investments provide liquidity both in the short-term as well as in the long-term.

The Company has been rated as 'AAA'/Stable for long term and A1+ for short term by CRISIL Limited during the current and previous financial years.

The Company remains committed to maintaining a healthy liquidity, gearing ratio and strengthening the balance sheet. The maturity profile of the Company's financial liabilities based on the remaining period from the date of balance sheet to the contractual maturity date is given in the table below. The figures reflect the contractual undiscounted cash obligation of the Company.

(₹ in Crore)

Payment due by years	<1 year	1-2 Years	2-5 Years	> 5 Years	Total
As at March 31, 2017					
Trade and other payables	9,761	93	-	-	9,854
Derivative financial liabilities	47	-	-	-	47
Borrowings	8,000	-	-	-	8,000
Total	**17,808**	**93**	**-**	**-**	**17,901**
As at March 31, 2016					
Trade and other payables	11,467	80	19	2	11,568
Derivative financial liabilities	12	-	-	-	12
Total	**11,479**	**80**	**19**	**2**	**11,580**
As at April 1, 2015					
Trade and other payables	1,155	79	17	0	1,251
Derivative financial liabilities	21	-	-	-	21
Total	**1,176**	**79**	**17**	**-**	**1,272**

The company had access to following funding facilities.

(₹ in Crore)

Funding facility	Total facility	Drawn	Undrawn
As at March 31, 2017			
Less than 1 year	2,400	1,095	1,305
More than 1 year	-	-	-
Total	**2,400**	**1,095**	**1,305**

(₹ in Crore)

Funding facility	Total facility	Drawn	Undrawn
As at March 31, 2016			
Less than 1 year	1,980	717	1,263
More than 1 year	-	-	-
Total	**1,980**	**717**	**1,263**
As at April 1, 2015			
Less than 1 year	1,910	579	1,331
More than 1 year	-	-	-
Total	**1,910**	**579**	**1,331**

b. **Foreign exchange risk**

Fluctuations in foreign currency exchange rates may have an impact on the Statement of Profit and Loss, where any transaction references more than one currency other than the functional currency of the Company.

The Company uses forward exchange contracts, to hedge the effects of movements in exchange rates on foreign currency denominated assets and liabilities. The sources of foreign exchange risk are outstanding amounts payable for imported raw materials, capital goods and other supplies denominated in foreign currency.The Company is also exposed to foreign exchange risk on its exports. Most of these transactions are denominated in US dollars. The policy of the Company is to determine on a regular basis what portion of the foreign exchange risk on financing transactions are to be hedged through forward exchange contracts and other instruments. Short-term net exposures are hedged progressively based on their maturity. A more conservative approach has been adopted for project expenditures to avoid budget overruns. Longer term exposures, are normally unhedged. The hedge mechanisms are reviewed periodically to ensure that the risk from fluctuating currency exchange rates is appropriately managed. The following analysis is based on the gross exposure as at the reporting date which could affect the Statement of Profit and Loss. The below table summarises the foreign currency risk from financial instrument and is partly mitigated by some of the derivative contracts entered into by the Company as disclosed under the section on “Derivative financial instruments.”

	As at March 31,2017		As at March 31, 2016		As at April 1, 2015	
Currency exposure	Financial Asset	Financial Liability	Financial Asset	Financial Liability	Financial Asset	Financial Liability
US Dollar	58	170	79	70	158	52
Australian Dollar	-	1	-	1	-	1
SEK	-	4	-	-	-	-
Euro	-	82	-	37	-	4

The Company’s exposure to foreign currency arises where a Company holds monetary assets and liabilities denominated in a currency different to the functional currency of the Company, with US dollar and Euro being the major non-functional currency. The value of a financial instrument may change as a result of changes in the interest rates, foreign currency exchange rate, liquidity and other market changes.

The results of Company operations may be affected largely by fluctuations in the exchange rates between the Indian Rupee, against the US dollar. The foreign exchange rate sensitivity is calculated by the aggregation of the net foreign exchange rate exposure with a simultaneous parallel foreign exchange rate shift in the currencies by 5% against the functional currency of the respective entities.

Set out below is the impact of a 5% strengthening in the INR on pre-tax profit/(loss) arising as a result of the revaluation of the Company’s foreign currency financial assets/liabilities:

Particulars	Total exposure		Effect of 5% strengthening of INR on pre-tax profit/(loss)	
	For the year ended March 31, 2017	For the year ended March 31, 2016	**For the year ended March 31, 2017**	For the year ended March 31, 2016
US Dollar	112	(9)	6	(1)
Euro	82	37	4	2

c. Interest rate risk

Floating rate financial assets are largely mutual fund investments which have debt securities as underlying assets. The returns from these financial assets are linked to market interest rate movements; however the counterparty invests in the agreed securities with known maturity tenure and return and hence has manageable risk. Additionally, the investments portfolio is independently reviewed by CRISIL Limited, and it has been rated as “Very Good” meaning highest safety.

The exposure of the Company’s financial assets to interest rate risk is as follows:

(₹ in Crore)

Particulars	**Total**	**Floating rate**	**Fixed rate**	**Non-interest bearing**
As at March 31, 2017				
Financials assets	32,324	19,336	4,447	8,541
Financial liabilities	17,809	-	7,908	9,901
As at March 31, 2016				
Financials assets	35,407	31,413	3,808	186
Financial liabilities	11,580	-	-	11,580
As at April 1, 2015				
Financials assets	31,487	23,332	7,807	348
Financial liabilities	1,272	-	-	1,272

Interest rate risk is the risk that the fair value of future cash flows of financial instruments will fluctuate because of changes in market interest rate. The Company does not have floating interest rate borrowing during the year ended March 31, 2017, March 31, 2016, and April 01, 2015, and it is not significantly exposed to interest rate risk.

Considering the net investment position as at March 31, 2017 and the investment in bank deposits, bonds and debt mutual funds, any increase in interest rates would result in a net increase and any decrease in interest rates would result in a net decrease. The sensitivity analysis below has been determined based on the exposure to interest rates for both derivative and non-derivative instruments at the balance sheet date.

The below table illustrates the impact of a 0.5% to 2.0% change in interest rate of floating investment on profit/(loss) and equity and represents management’s assessment of the possible change in interest rates.

The impact of change (increase/(decrease)) in interest rate of 0.5%, 1.0% and 2.0% on profits for year ended March 31, 2017 is ₹ 97 crore, ₹ 193 crore and ₹ 387 crore and for year ended March 31, 2016 is ₹ 157 crore, ₹ 314 crore and ₹ 628 crore respectively.

d. Counterparty and concentration of credit risk

Credit risk refers to the risk that counterparty will default on its contractual obligations resulting in financial loss to the Company. The Company has adopted a policy of obtaining sufficient collateral, where appropriate, as a means of mitigating the risk of financial loss from defaults. The Company is exposed to credit risk for receivables, cash and cash equivalents, short-term investments and derivative financial instruments. Credit risk on receivables is limited as almost all credit sales are against letters of credit and guarantees of banks of good financial repute.

Moreover, given the nature of the Company’s business, trade receivables are spread over a number of customers with no significant concentration of credit risk. No single customer accounted for 10% or more of revenue on a % basis in any of the years indicated. The history of trade receivables shows a negligible provision for bad and doubtful debts. Therefore, the Company does not expect any material risk on account of non-performance by any of the Company's counterparties.

For short-term investments, counterparty limits are in place to limit the amount of credit exposure to any one counterparty. For derivative and financial instruments, the Company attempts to limit the credit risk by only dealing with reputable banks and financial institutions having high credit-ratings assigned by international credit-rating agencies. Defined limits are in place for exposure to individual counterparties in case of mutual funds schemes and bonds.

The carrying value of the financial assets represents the maximum credit exposure. The Company's maximum exposure to credit risk as at March 31, 2017, March 31, 2016 and April 01, 2015 are ₹ 32,324 Crore, ₹ 35,407 Crore and ₹ 31,487 Crore respectively.

None of the Company's cash equivalents, including time deposits with banks, are past due or impaired. Regarding trade and other receivables, and other non-current assets, there were no indications as at March 31, 2017, that defaults in payment obligations will occur.

Of the year end trade receivables, loans and other financial assets, following balances were past due but not impaired as at March 31, 2017, March 31, 2016 and April 1, 2015:

(₹ in Crore)

Particulars	As at March 31, 2017	As at March 31, 2016	As at April 01, 2015
Neither impaired nor past due	30	8	429
Past due but not impaired			
Less than 1 month	17	19	56
Between 1-3 months	6	40	32
Between 3-12 months	82	39	43
Greater than 12 months	1	1	-
Total	**136**	**107**	**560**

Receivables are deemed to be past due or impaired with reference to the Company's normal terms and conditions of business. These terms and conditions are determined on a case to case basis with reference to the customer's credit quality and prevailing market conditions. Receivables that are classified as 'past due' in the above tables are those that have not been settled within the terms and conditions that have been agreed with that customer.

The credit quality of the Company's customers is monitored on an on-going basis and assessed for impairment where indicators of such impairment exist. The solvency of the debtor and their ability to repay the receivable is considered in assessing receivables for impairment. Where receivables have been impaired, the Company actively seeks to recover the amounts in question and enforce compliance with credit terms.

Derivative financial instruments

The Company does not acquire or issue derivative financial instruments for trading or speculative purposes. The Company does not enter into complex derivative transactions to manage the treasury and commodity risks. Both treasury and commodities derivative transactions are normally in the form of forward contracts and these are subject to the Company guidelines and policies.

All derivative financial instruments are recognized as assets or liabilities on the balance sheet and measured at fair value based on quotations obtained from financial institutions or brokers. The accounting for changes in the fair value of a derivative instrument depends on the intended use of the derivative and the resulting designation.

The fair values of all derivatives are separately recorded in the balance sheet within current assets and liabilities. Derivatives that are designated as hedges are classified as current depending on the maturity of the derivative.

The use of derivatives can give rise to credit and market risk. The Company tries to manage credit risk by entering into contracts with reputable banks and financial institutions. The use of derivative instruments is subject to limits, authorities and regular monitoring by appropriate levels of management. The limits, authorities and monitoring systems are periodically reviewed by management and the Board. The market risk on derivatives is mitigated by changes in the valuation of the underlying assets, liabilities or transactions, as derivatives are used only for risk management purposes.

Embedded derivatives

Derivatives embedded in other financial instruments or other contracts are treated as separate derivative contracts and marked-to-market when their risks and characteristics are not clearly and closely related to those of their host contracts and the host contracts are not fair valued.

Cash flow hedges

The Company also enters into commodity price contracts for hedging highly probable forecast transaction and account for them as cash flow hedges and states them at fair value. Subsequent changes in fair value are recognized in equity until the hedged transaction occurs, at which time, the respective gains or losses are reclassified to the Statement of Profit and Loss. These hedges have been effective for the year ended March 31, 2016. There were no cash flow hedges for the year ended March 31, 2017.

Fair value hedges

The fair value hedges relate to commodity price risks and foreign currency exposure. The Company's sales are on a quotational period basis, generally one month to three months after the date of delivery at a customer's facility. The Company enters into forward contracts for the respective quotational period to hedge its commodity price risk based on average LME prices. Gains and losses on these hedge transactions are substantially offset by the amount of gains or losses on the underlying sales. These hedges have been effective for the year ended March 31, 2016. There were no fair value hedges for the year ended March 31, 2017.

Non-qualifying/economic hedges

Non-qualifying hedges related to commodity price risks and foreign currency exposure. The Company's sales are on a quotational period basis, generally one month after the date of delivery at a customer's facility. The Company enters into forward contracts for the respective quotational period to hedge its commodity price risk based on average LME prices. The Company enters into forward foreign currency contracts and commodity contracts (for the year ended March 31, 2017) which are not designated as hedges for accounting purposes, but provide an economic hedge of a particular transaction risk or a risk component of a transaction. Fair value changes on such forward contracts are recognized in the Statement of Profit and Loss.

The fair value of the Company's derivative positions recorded under derivative financial assets and derivative financial liabilities are as follows:

(₹ in Crore)

	As at March 31,2017		As at March 31, 2016		As at April 01, 2015	
Derivative financial instruments	Asset	Liability	Asset	Liability	Asset	Liability
Current						
Cash flow hedges*						
Commodity contracts	-	-	-	-	1	11
Non - qualifying hedges						
Commodity contracts	2	-	2	-	-	-
Forward foreign currency contracts	-	47	-	12	-	10
Total	**2**	**47**	**2**	**12**	**1**	**21**

*Refer Statement of Profit and Loss and Statement of Change in Equity for the change in the fair value of cash flow hedges.

36 A. The following are the outstanding forward exchange contracts entered into by the Company and outstanding as at year end

(in Crore)

Currency	Foreign currency	Indian Rupees	Buy / Sell	Cross Currency
As at March 31, 2017				
EUR	2	164	Buy	INR
USD	22	1,431	Buy	INR
AUD	1	33	Buy	USD
EUR	3	203	Buy	USD
GBP	0	3	Buy	USD
SEK	1	7	Buy	USD
As at March 31, 2016				
AUD	0	1	Buy	INR
EUR	1	74	Buy	INR
USD	14	929	Buy	INR
AUD	0	3	Buy	USD
EUR	1	62	Buy	USD
JPY	26	15	Buy	USD
SEK	1	6	Buy	USD
As at April 1, 2015				
AUD	0	2	Buy	INR
EUR	1	38	Buy	INR
USD	8	505	Buy	INR
USD	1	70	Sell	INR
AUD	0	4	Buy	USD
EUR	3	217	Buy	USD
JPY	4	2	Buy	USD

36 B. The following are the outstanding position of commodity hedging open contracts as at March 31, 2017 :-

Zinc forwards/futures sale/buy for 1,700 MT (2016: 1,775 MT, 2015: 3,000 MT)

Lead forwards/futures sale/buy for 2,775 MT (2016: 5,750 MT, 2015: 1,500 MT)

Silver forwards/futures sale/buy for 126,684 Oz (2016: 1,32,460 Oz, 2015: 3,87,459 Oz)

36 C. All derivative and financial instruments acquired by the Company are for hedging purposes.

36 D. Unhedged foreign currency exposure

(₹ in Crore)

Particulars	As at March 31, 2017	As at March 31, 2016	As at April 01, 2015
Debtors	58	74	157
Creditors	257	25	32

Note 37

CAPITAL MANAGEMENT

The Company's objectives when managing capital is to safeguard, maintain a strong credit rating and healthy capital ratios in order to support its business and provide adequate return to shareholders through continuing growth. The Company's overall strategy remains unchanged from previous year. The Company sets the amount of capital required on the basis of annual business and long-term operating plans which include capital and other strategic investments. The funding requirements are met through a mixture of internal accruals, equity and short term borrowings. The Company has short term borrowings in the form of Commercial Paper at the end of the year. There are no long term borrowings outstanding as at end of the year. The Company monitors capital on the basis of net debt to equity. Equity comprises all components including other components of equity. The Company is not subject to any externally imposed capital requirement.

(₹ in Crore)

Particulars	As at March 31, 2017	As at March 31, 2016	As at April 01, 2015
Equity	**30,805**	37,385	44,621
Cash and cash equivalents (See Note 11)	189	51	50
Short term investments (See Note 9)	23,783	35,221	27,314
Total cash (a)	**23,972**	35,272	27,364
Total debt (b)	7,908	-	-
Net debt (c = (b-a))	-	-	-
Total equity (equity + net debt) (See Statement of changes in Equity)	**30,805**	37,385	44,621
Net debt to equity ratio	-	-	-

Note 38

RELATED PARTY

a. List of related parties:

Particulars

(i) **Holding Companies:**
Vedanta Limited (Immediate Holding Company)
Vedanta Resources Plc. (Intermediate Holding Company)
Volcan Investments Limited (Ultimate Holding Company)

(ii) **Fellow Subsidiaries (with whom transactions have taken place):**
Bharat Aluminium Company Limited
Sterlite Technologies Limited
Sterlite Power Transmission Limited
Malco Energy Limited
Talwandi Sabo Power Limited
Copper Mines of Tasmania Pty Limited
Konkola Copper Mines Plc.
Fujairah Gold FZC
Skorpion Zinc (Pty) Limited
Namzinc (Pty) Limited
Black Mountain Mining (Pty) Limited
Lisheen Milling Limited

(iii) **Related Party having a Significant Influence**
Government of India - President of India

(iv) **Other related party**
Vedanta Foundation
Madanpur South Coal Company Limited (jointly controlled entity)
Hindustan Zinc Limited Employee's Contributory Provident Fund Trust

b. Transactions with Key management Personnel:

Compensation of key management personnel of the Company recognised as expense during the reporting period

(₹ in Crore)

Nature of transactions	For the year ended March 31, 2017	For the year ended March 31, 2016
Short-term employee benefits [(1)]	7	6
Share-based payment transactions	1	1
Total compensation paid to key management personnel	**8**	**7**

[(1)] Excludes gratuity and compensated absences as these are recorded in the books of accounts on the basis of actuarial valuation for the Company as a whole and hence individual amount cannot be determined

c. Transactions with Government having significant influence:

Central government divested its 64.92% share in Hindustan Zinc Limited in the year 2002-03. Since then, HZL is under significant influence of Government of India. Company has been allotted the biggest Zinc Mines of India, on which Royalty is paid basis the extraction done during the period. During the year, Company has availed incentives in the form of export incentive under Export promotion and credit guarantee scheme announced by the Government of India. Also, HZL has transactions with other government related entities (Public sector undertakings) including but not limited to sales and purchase of goods and ancillary materials, rendering and receiving services and use of public utilities.

d. Transactions with Related Parties[(1)]:

The details of the related party transactions entered into by the Company, for the year ended March 31, 2017 and March 31, 2016 are as follows

(₹ in Crore)

Nature of transactions	For the year ended March 31, 2017	For the year ended March 31, 2016
Sale of Goods		
Vedanta Limited	1	-
Sterlite Technologies Ltd	5	16
Sterlite Power Transmission Ltd	10	-
Namzinc (PTY) Ltd	2	2
Fujairah Gold FZC	18	-
Total	**36**	**18**
Sale of property, plant and equipment		
Vedanta Limited	1	-
Bharat Aluminium Company Limited	0	-
Total	**1**	**-**
Purchase of property, plant and equipment		
Vedanta Limited	0	-
Total	**0**	**-**
Interest Income[(1)]		
Bharat Aluminium Company Limited	18	-
Total	**18**	**-**

(₹ in Crore)

Nature of transactions	For the year ended March 31, 2017	For the year ended March 31, 2016
Purchase of Goods		
Vedanta Ltd	28	52
Bharat Aluminium Company Limited	17	13
Sterlite Technologies Ltd	4	1
Sterlite Power Transmission Ltd	3	-
Total	**52**	**66**
Dividend		
Vedanta Limited (Paid)	521	1,728
Vedanta Limited (Unpaid)	7,544	6,584
Government of India (Paid)	3,669	786
Government of India (Unpaid)	-	2,995
Total	**11,734**	**12,093**
Other Expenses and other reimbursements		
Vedanta Limited	139	137
Fellow Subsidiaries	(5)	-
Total	**134**	**137**
Loan given and repaid during the year[(2)]		
Bharat Aluminium Company Limited ('BALCO')	500	-
Total	**500**	**-**
Donations		
Vedanta Foundation	50	2
Total	**50**	**2**
Contribution to Provident Fund		
Hindustan Zinc Limited Employee's Contributory Provident Fund Trust	31	33
Total	**31**	**33**

(1) All the transactions entered by the company with the related parties are at arm's length price.

(2) The Company had given a loan to BALCO of ₹ 500 Crore carrying an interest of 10.3% for meeting short term commitments. The loan amount has been repaid by BALCO along with interest thereon of ₹ 18 Crore.

The balances receivable/payable as at year end:

(₹ in Crore)

Particulars	As at March 31, 2017	As at March 31, 2016	As at April 01, 2015
Receivable From			
Konkola Copper Mines Plc.	4	-	-
Vedanta Ltd.	-	3	-
Fujairah Gold FZC	5	-	-
Total	**9**	**3**	**-**
Payable To			
Bharat Aluminium Company Limited	4	2	2
Vedanta Ltd.	21	44	16
Sterlite Technologies Limited	1	-	-
Hindustan Zinc Limited Employee's Contributory Provident Fund Trust	3	4	4
Vedanta Ltd. (Dividend payable)	7,544	6,584	686
Government of India (Dividend Payable)	-	2,995	312
Total	**7,573**	**9,629**	**1,020**

Note 39

FIRST TIME ADOPTION OF IND AS

These are the Company's first financial statements prepared in accordance with Ind AS. For all periods upto and including the year ended March 31, 2015, the Company prepared its financial statements in accordance with accounting standards notified under Section 133 of the Companies Act 2013, read together with paragraph 7 of the Companies (Accounts) Rules, 2014, hereafter referred to as 'Previous GAAP'.

Ind AS 101 First-time Adoption of Indian Accounting Standards allows first-time adopters to certain exemptions from retrospective application of certain requirements under Ind AS. The Company has in accordance with the exemptions provided, opted to capitalize stripping cost of a surface mine (incurred during the production phase) from the date of transition to Ind AS.

I. Reconciliation of Equity between IND-AS and previous GAAP

The transition from previous GAAP to Ind AS did not have any impact on total equity presented in the balance sheet of the Company. Accordingly, its total equity remained consistent at ₹ 37,385 Crore.

II. Reconciliation of Profit after tax between IND-AS and previous GAAP

(₹ in Crore)

S. No.	Particulars	For the year ended March 31, 2016
a)	**Net profit as per previous GAAP**	**8,166**
	i) Remeasurements of the defined benefit plans recognized in other comprehensive income [1]	8
	ii) Debt instrument through other comprehensive income[2]	(1)
b)	**Net profit as per Ind AS**	**8,173**
c)	**Add:**	
	i) Remeasurement of defined benefit plans (net of tax)[1]	(8)
	ii) Debt instrument through other comprehensive income[2]	1
	iii) Effective portion of gains and losses on cash flow hedge [3]	7
d)	**Total Comprehensive Income as per Ind AS**	**8,173**

Notes on adjustments:

(1) Re-measurement gains or losses: Ind AS 19 Employee Benefits requires the impact of re-measurement in net defined benefit liability (asset) to be recognized in Other Comprehensive Income (OCI). Re-measurement of net defined benefit liability (asset) comprises actuarial gains and losses, return on plan assets (excluding interest on net defined benefit asset/liability). However, under IGAAP this was being recognized in the Statement of Profit and Loss. Accordingly, the net effect of actuarial gain/loss on employee defined benefit liability and related tax effect is recognized in OCI amounting to ₹ 3 Crore (₹ 8 Crore).

(2) Fair valuation of financial assets: Under IGAAP, current investments were being measured at fair value in accordance with provisions of erstwhile AS 30 'Financial Instruments-Measurement and Recognition'. Accordingly, there are no changes with regard to fair valuation of the Company's investments in mutual funds except for corporate and zero coupon bonds which have been classified as at FVTOCI as required under Ind AS 109 'Financial Instruments'.

Consequently changes in fair value of such debt instruments during the year, which were earlier accounted in the Statement of Profit and Loss under the Indian GAAP, have now been accounted for under the Other Comprehensive Income.

(3) Under Ind AS, all items of income and expense recognised in a period should be included in profit or loss for the period, unless a standard requires or permits otherwise. Items of income and expense that are not recognised in profit or loss but are shown in 'other comprehensive income' which includes effective portion of gains and losses on cash flow hedging instruments. The concept of other comprehensive income did not exist under previous GAAP.

III. Reconciliation of cash flows for the year ended March 31, 2016

The transition from previous GAAP to Ind AS did not have any impact on the statement of cash flows.

In terms of our report attached

For S.R. Batliboi & Co. LLP Chartered Accountants ICAI Firm Registration No.:301003E/E300005	**For and on behalf of the Board of Directors**	
per Raj Agrawal Partner ICAI Membership No.: 82028	**Sunil Duggal** CEO & Whole-time Director DIN: 07291685	**A. R. Narayanaswamy** Director DIN: 00818169
Date: April 20, 2017 Place: Mumbai	**Amitabh Gupta** Chief Financial Officer	**R. Pandwal** Company Secretary ICSI Membership No.: A9377

CORPORATE INFORMATION

BOARD OF DIRECTORS

Mr Agnivesh Agarwal
Chairman

Mr Navin Agarwal
Director

Mr A R Narayanaswamy
Director

Mr Arun L Todarwal
Director

Ms Reena Sinha Puri
Director

Ms Farida M Naik
Director

Mr Sudhir Kumar
Director

Mr Sunil Duggal
Chief executive Officer & Whole-time Director

BANKERS

IDBI bank limited
ICICI bank Limited
HDFC bank Limited
State bank of Bikaner & Jaipur
Yes bank Limited
Standard Chartered bank.

CHIEF FINANCIAL OFFICER

Mr Amitabh Gupta

COMPANY SECRETARY

Mr Rajendra Pandwal

REGISTERED OFFICE

Yashad Bhawan
Udaipur - 313004
Rajasthan, India

STATUTORY AUDITORS

SR Batliboi & Co. LLP
Chartered Accountants

Golf View Corporate Tower-B
Sector 42,
Near DLF Golf Course,
Gurgaon, Haryana - 122002

NOTES

NOTES

HINDUSTAN ZINC

Hindustan Zinc Limited
Yashad Bhawan,
Udaipur-313004, Rajasthan.
Tel: +91 294 6604000-02

www.hzlindia.com

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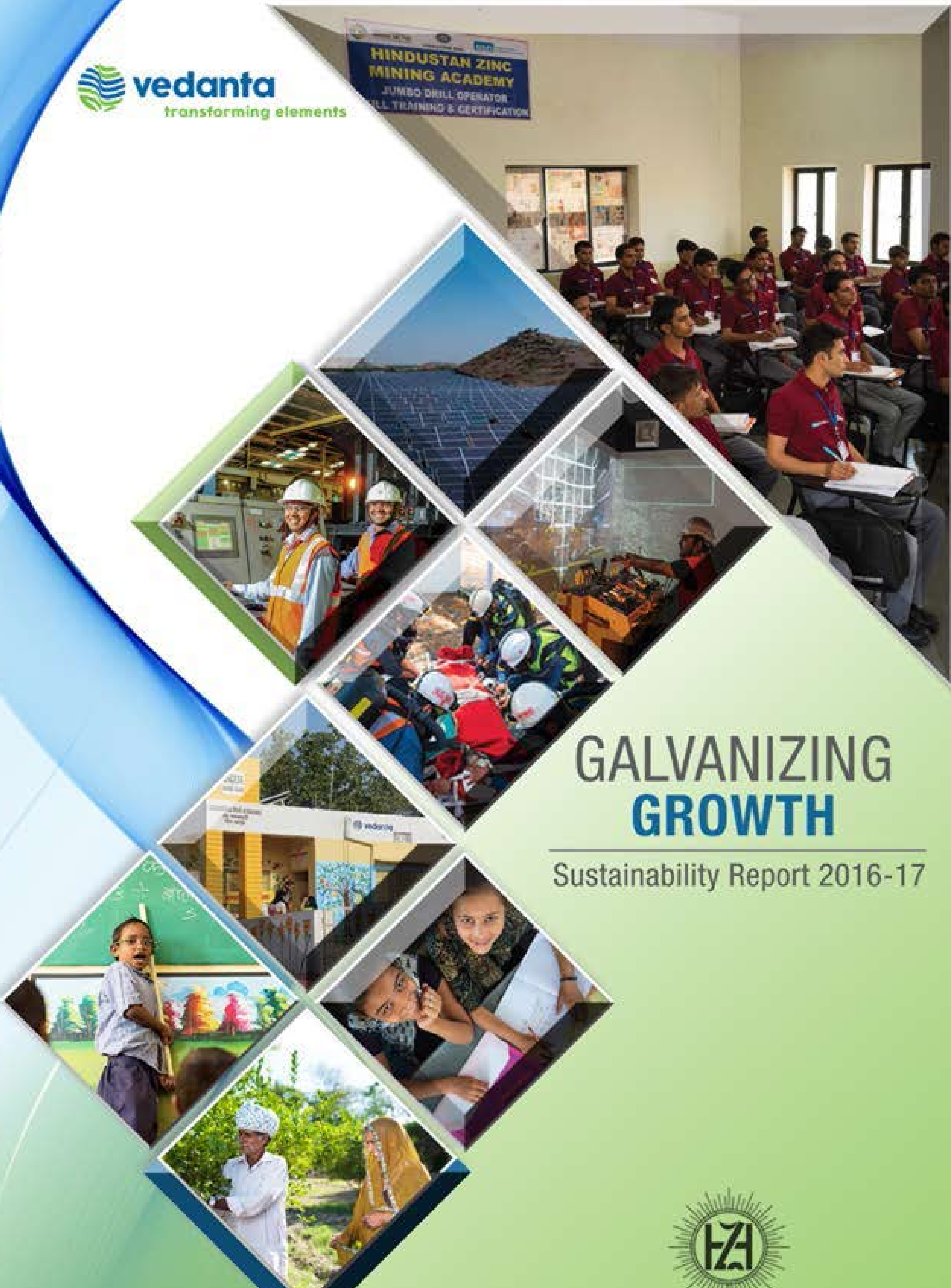
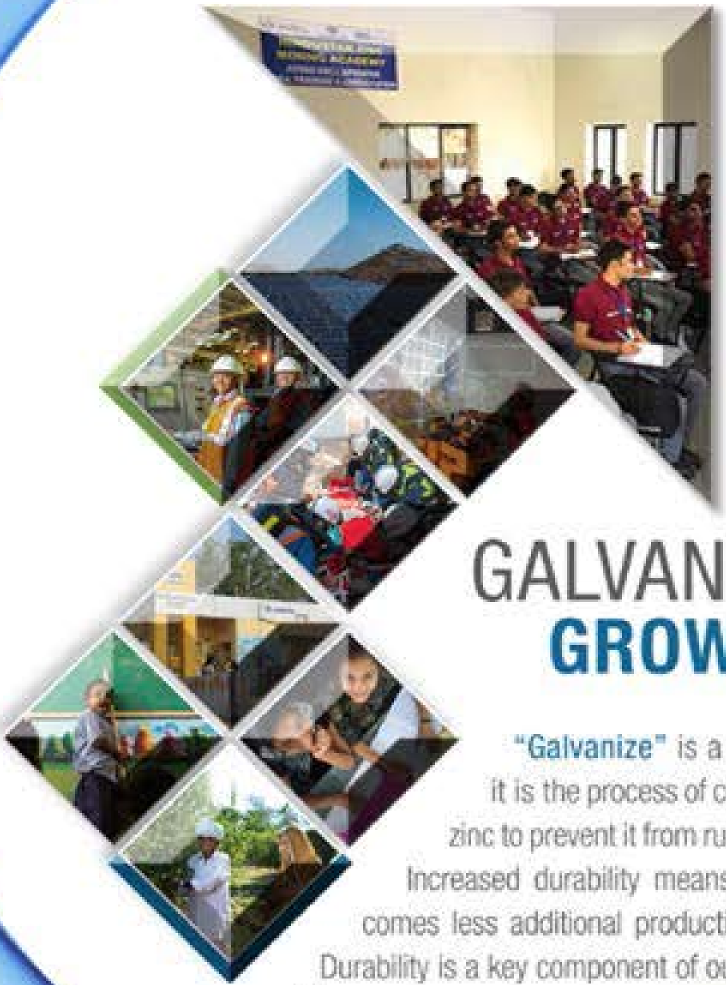
vedanta
transforming elements



GALVANIZING GROWTH

Sustainability Report 2016-17

Hindustan Zinc Limited



GALVANIZING
GROWTH

"Galvanize" is a familiar word in the zinc industry; it is the process of coating metal with a protective layer of zinc to prevent it from rusting, thus guaranteeing its durability. Increased durability means a longer lifespan; with longer life comes less additional production and less resource consumption. Durability is a key component of our growth and business sustainability strategy.

At Hindustan Zinc, we are focused on taking action by adopting the principles of the triple bottom line and implementing strategies that protect the people and conserve resources for the future. This contributes to protecting the planet and enhancing profits through volume and growth, thus protecting wealth; in essence, galvanizing.

With increasing depth of zinc deposits from the Rampura Agucha open pit, mining is becoming tougher, so we have explored additional deposits much further down, but accessing them will need a transformation from open cast mining to underground mining. Making this transition will allow us to continue operations for several decades, thus safeguarding our peoples' jobs and allowing us to continue contributing to the economy and giving returns to our stakeholders.

While underground mining undoubtedly has lower environmental impacts, it comes with additional challenges in technology, required manpower skills, and safety measures. But change is the road to growth. Remembering our commitment to society and the economy, we are ready to make this transition and give new life to our operations.

For ourselves and the world around us, we are committed to **GALVANIZING GROWTH**.

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

Values

Trust

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

Entrepreneurship

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

Innovation

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.

Excellence

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.

Integrity

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.

Respect

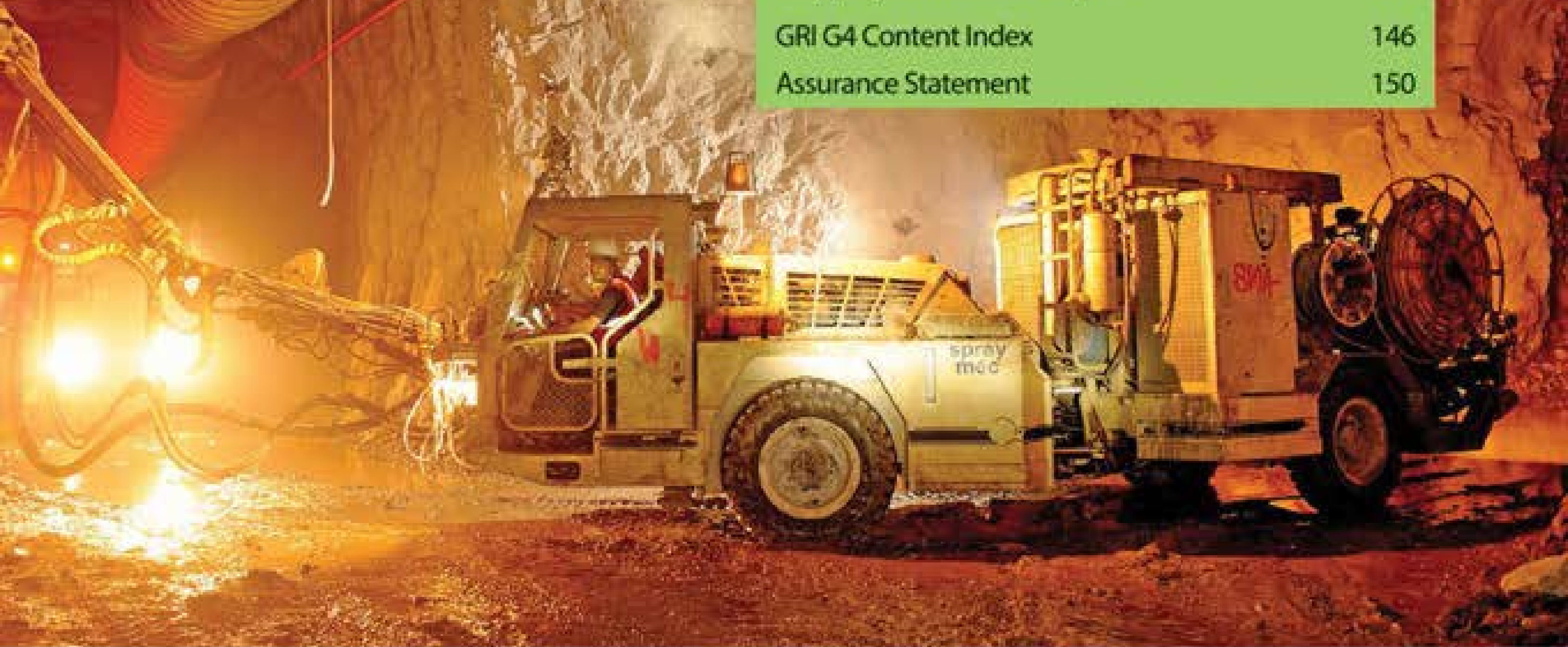
We lay consistent emphasis on Human Rights, respect the principle of free, prior, informed consent, while our engagements with stakeholders give local communities the opportunity to voice their opinions and concerns.

Care

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.

CONTENTS

ANNEXURES

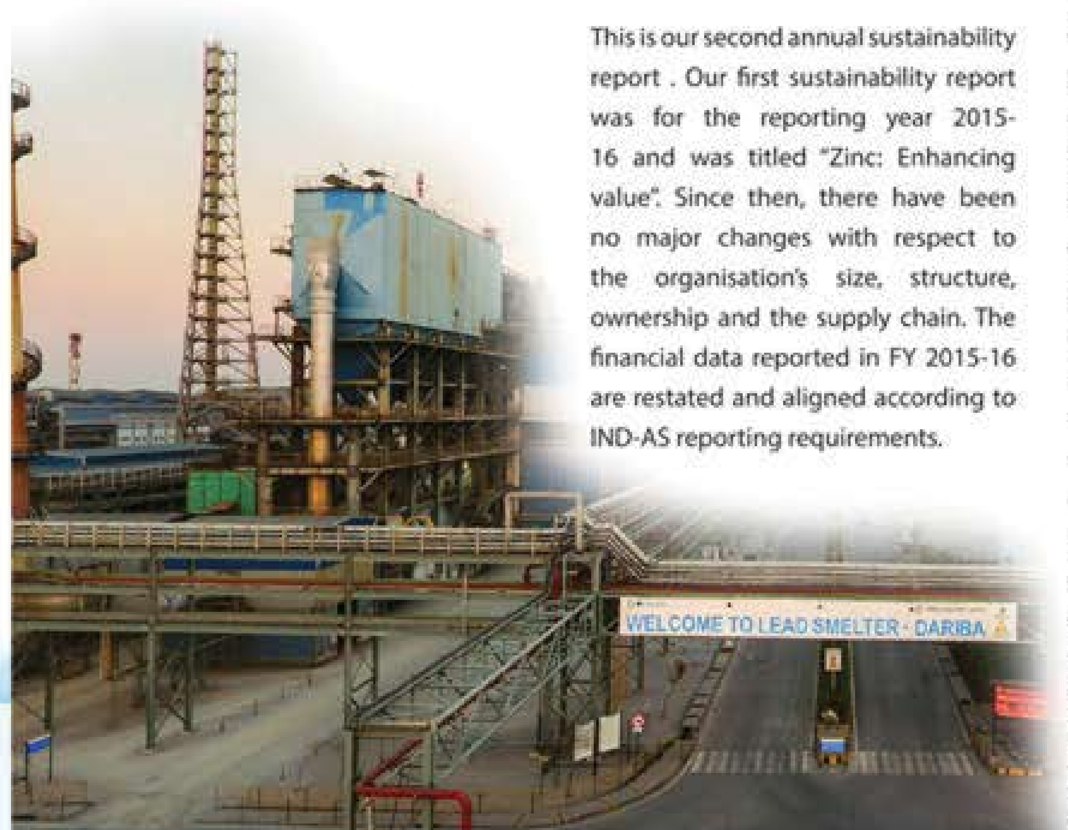


REPORTING
ON GROWTH

"The report is a compilation of our approach for a sustainable future demonstrating our performance in meeting our growth targets, and creating long-term value for all our stakeholders."

This report 'Galvanizing Growth' represents our progress in the sustainability space during the phase of transition from opencast mining method to underground mining. Coping with the significant challenges posed due to this transition, we are determined to progress by protecting and strengthening our operations and processes. Much similar to the role of zinc in galvanization, where zinc protects iron from rusting by adding strength to the metal surface by its protective layer. At this juncture of transition, we strategize to focus on strengthening our governance systems; develop world-class operational facilities; and adopt an all-inclusive growth model. The report is a compilation of our approach for a sustainable future demonstrating our performance in meeting our growth targets, and creating long-term value for all our stakeholders.

This is our second annual sustainability report . Our first sustainability report was for the reporting year 2015-16 and was titled "Zinc: Enhancing value". Since then, there have been no major changes with respect to the organisation's size, structure, ownership and the supply chain. The financial data reported in FY 2015-16 are restated and aligned according to IND-AS reporting requirements.



Report Scope and Boundary

The scope of the report extends to all operations of Hindustan Zinc Limited. These include five mining locations, three smelters, and one refinery. During the reporting period, the Maton Mine and Haridwar Zinc Plant were not in operation and hence data of these operations has not been covered in this report.

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 2016 - 31st March 2017 . 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 at the end of this report 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 (revised) by M/s KPMG.

G4-13 G4-18 G4-22 G4-23 G4-28 G4-29 G4-30

Growth Boundaries

Mines

- Rampura Agucha Mine
- Kayad Mine
- Zawar Mining Complex
- Sindesar Khurd Mine
- Rajpura Dariba Mine

Smelters & Refineries

- Chanderiya Smelting Complex
- Dariba Smelting Complex
- Debari Zinc Smelter
- Pantnagar Metal Plant

For further details Please visit http://www.hzlindia.com

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

REDEFINING THE FUTURE

> We at Hindustan Zinc take advantage of this firm footing to strengthen our operational processes and enhance the growth of our business performance, thus redefining our future.

Galvanizing Growth through Sustainability

'In our past lies our future' – this holds true for Hindustan Zinc as well. With a rich heritage of zinc mining, we have the benefit of owning a vast resource base of the nonferrous base metals – zinc, lead, and silver. This marks our journey into the new markets, which acknowledge the use of these metals for several industrial and domestic purposes. We at Hindustan Zinc take advantage of this firm footing to strengthen our operational processes and enhance the growth of our business performance, thus redefining our future.

The growth of the zinc-lead industry dates back to the 9th century, with the Zawar mines being the first evidence of zinc deposits in Rajasthan, India; these mines are currently under the operational premise of Hindustan Zinc. Zinc as a metal was recognised under the designation of 'Yasada' or 'Jasada' in the medical lexicon, way back in 1374. And while the rest of the world was unaware of this novel metal, the smelting and extraction of zinc was already underway in India by the 13th century.

The elements of growth in our history of success encompasses the entire metal lifecycle, from the metal hidden within the earth's crust to the metal available in the markets. Across all these lifecycle stages, with a positive vision for future growth, we have created innovative and profitable solutions to drive regional and global sustainability. Accordingly, we have identified four distinct growth factors that resonate with the various stages of the metal lifecycle – growth in R&R base, growth in metal production, growth in businesses, and growth in new markets – which determine our sustainable growth as a corporate entity.

Growth in R&R Base

Our vast resource and reserve (R&R) base forms the foundation of our business existence. With 404.4 million MT of zinc-lead reserves, we have an assured ore reserve that will last for the next 25 years. By strengthening our exploration efforts, we are continuously expanding this resource base. This follows with redefining the extraction and production targets for the future, by considering the newly identified resources. Thus, in all these years of our mining experience, we have recognised 'growth in resource and reserve' as the stepping stone for sustainable growth. And details on how we are progressively meeting our enhanced production targets is shared in the chapter - 'Transitioning for Growth'.

Growth in Metal Production

Progressing into the next stage of the metal lifecycle, another key determinant of growth, is the extraction of the metal ores from the deep layers of the earth and making the pure metal available to the industrial sector. Built on the heritage of smelting and refining processes, today we aim at developing world-class facilities for mining and refining operations. Our focus to enhance production from underground mines is aligned with the objective of maximizing production to meet the demands of the market. Attaining the highest mined metal production of 907 kt is enabled by the growth of our talent pool and deployment of advanced technologies, coupled with innovation, research & development, and greater concern for the environment. Thus, 'growth in metal production' has started the chain reaction of an all-inclusive growth involving the people, processes, and environment. Further details on the ramp-up production plan are shared in the chapter 'The Transition Blueprint'.

Growth in Businesses

This takes us to the next operational cycle, where we are ready with our finished product and are making it available in the market to earn profits. Zinc, being the fourth most used metal, possesses an indispensable status in the industrial world. With the physical properties of high specific energy, high power density, recharge-ability, zero emission, and recyclability, it is one of the most sustainable metals. It finds applications in the automobile industry (galvanized car bodies), infrastructure (galvanized steel structures), pharmaceutical industry (multi-vitamin supplements, antidepressants), cosmetics and personal care (dental creams, shampoos), agriculture (zinc fertilisers), and paints and emulsions (zinc paints), to name a few. Our other products, silver and lead, also have similar industrial applications in telecommunications, solar panels, electrical contacts, medical supplies, etc. Evidently, the growth of Hindustan Zinc drives the growth of the downstream supply chain, with its influence in such a wide range of industry sectors. Thus, the growth in our business reflects in the contribution made to the country's GDP, reaffirming our commitment to regional and global sustainability.

Growth in New Markets

This is the ultimate stage which keeps the growth cycle continuing. With new applications of these metals being regularly identified, and new regulations coming up in contemporary markets, we stand a fair chance of achieving growth in the emerging markets. In the Indian scenario, where galvanization of car bodies is still not a regulatory mandate, the automobile industry is gradually moving towards adopting galvanization as a best practice for business sustainability. This has a direct and positive influence on our business and scope for growth in this new market in India.

Thus, our story of growth is a continuous process, and will continue in helping us redefine our future as we work to overcome fundamental environmental and social challenges, and reshape business landscapes to become an inspirational model for our new-market peers and companies worldwide. Our approach on how we are growing the new markets is further detailed in the chapter 'Galvanizing the Market Trend'.

> "Growth is a continuous process, and will continue in helping us redefine our future."

'This is our story of galvanizing growth through SUSTAINABILITY'!

Growth Elements in Hindustan Zinc's Business

2017: BUSINESS PERFORMANCE

Operational Highlights - FY 2016-17

- Record mined metal production of 907 kt against 889 kt from previous year
- Record integrated silver production of 453 MT, up 7% from previous year
- Total R&R of 404.4 million MT, a net addition of 14.5 million from previous year

Production of Zinc Refined Metal

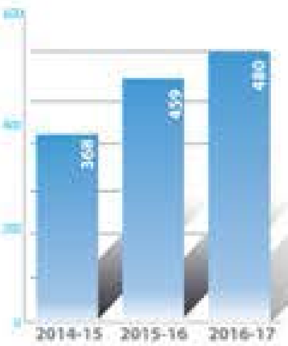
(000' MT)

Production of Lead Refined Metal

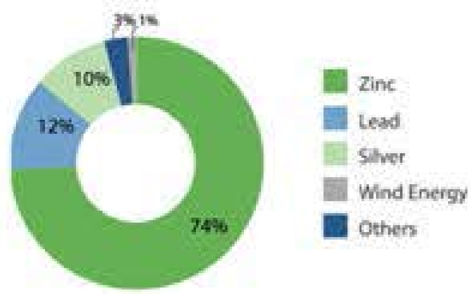
(000' MT)

Production of Silver

(MT)



Revenue Share 2016-17



CHAIRMAN'S MESSAGE

We at Hindustan Zinc believe in partnering India in its new phase of development which intends to benefit the entire populace. We see a new era of sustainable development, as India takes charge to unleash its human and natural resources potential to create growth and employment.

Dear Stakeholders,

It gives me great pleasure in presenting Hindustan Zinc's second Sustainability report showcasing our efforts towards galvanized future growth by being consistent and growing intrinsically for supplying world-class products to meet the ever increasing infrastructure requirements of the country and the globe. During the year the global zinc prices strengthened; enhanced demand has enabled us to deliver higher outputs and return higher values to our investors in form of a special dividend.

We at Hindustan Zinc believe in partnering India in its new phase of development which intends to benefit the entire populace. We see a new era of sustainable development, as India takes charge to unleash its human and natural resources potential to create growth and employment. As the country surges ahead with its thrust on 'Make in India' as well as concerted effort on investing in the best and clean technology such as renewable energy, we are also aligned to this by investing in sustainable opportunities and contributing to the development of our host communities.

Sustainability is vital to steer operational excellence and ensure sustainable business growth. Hence, we have embedded sustainability as a strategic tool in our business to ensure our continuity in the ever-changing world of business. We agree, as resource industry, we have the opportunity to advance the Sustainable Development Goals (SDGs) which represents the World's agenda for equitable, socially inclusive and environmentally sustainable economic development. Our report demonstrates efforts to the important objectives embodied in the SDGs.

We believe that for setting a growth trend empowered workforce is vital for the business, in this endeavor, the recent restructuring of our governance structure and leveraging the female potential in our workforce has enabled us to work towards more empowered teams and supporting our mission of faster growth.

It is our firm belief that sustained efforts in the domain of social, economic and environmental fronts beyond compliance results in higher returns and this is our long term strategy for galvanizing our growth. With this we are focusing on delivering the production by expediting ramp up of the capacities at our underground mining operations whilst maintaining a disciplined sustainable approach on optimization of resources across our operations. Leveraging technology

"We are deploying the best in class technology available in sync with a meticulously detailed transition blueprint."

G4-1

"Hindustan Zinc is the only Company in the country with three mines given Five Star ratings by Indian Bureau of Mines.

and innovation to excel in operations and deliver outcome with robust safety, health and environmental performance has been our endeavour. Currently all our efforts are concentrated towards the underground mine transition and as we do so, we are deploying the best in class technology available in sync with a meticulously detailed transition blueprint which focuses on all stakeholders impacted through the same. I am proud to share that Hindustan Zinc is the only Company in the country with three mines given Five Star ratings by Indian Bureau of Mines (Ministry of Mines, Government of India). Rampura Agucha, Sindesar Khurd and Kayad mines were rated as 'Five Star' for their efforts and initiatives taken for implementation of the Sustainable Development Framework.

At Hindustan Zinc Safety is always our prime responsibility. We firmly believe that successful & sustainable processes have always been safely executed and this lays the foundation for sustainable business. It's pleasing to report that in the year 2017 our lost time frequency rate reduced by 40% over 2016. However it is extremely painful that we had an incident at one of our project site resulting in four fatalities of contract employees' inspite of all our efforts towards minimizing the risks at workplace. With our unwavering commitment to safety we have further strengthened our 'Aarohan' program to work towards the ultimate aim of achieving 'zero harm' across all our operations and stakeholders.

As a responsible corporate, we acknowledge environment as one of the most significant stakeholder and we strategized and delivered our plan to mitigate climate change using the reduction in usage of natural resources through innovative technologies, investments in green energy and reducing & recycling waste effectively.

Growth of the host communities through social and economic development is a key component of our sustainable growth strategy. This encourages us to engage with the community and to invest in the various developmental programs. This reporting year is marked with the inclusion of a new CSR target stakeholder group – people with disabilities; we have initiated an exclusive program to meet their needs.

We commit ourselves to ensuring that Hindustan Zinc continues to be the leading corporate in Rajasthan state partnering for a better tomorrow and to be India's foremost company committed for development with responsibility. The success of our Company is only made possible by the dedication of our people, partners and host communities. I thank everyone who has contributed for making our journey successful. We will work with our empowered team in FY 2018 to build upon our performance across every element of sustainability.

Agnivesh Agarwal
Chairman

CEO'S MESSAGE

Hindustan Zinc is a company which has surmounted changing macro-economic environment to galvanize growth for all its stakeholders.

Dear Stakeholders,

It is my pleasure to present our second Sustainability report to you with the theme Galvanizing Growth. This report gives you an insight to our sustainability journey and the constructive ways we took to create success stories.

Despite global consumption challenges during the year and the reduced liquidity in India, Company delivered highest ever production of ore, mined metal & silver, EBITDA & net income. With a relentless discipline on efficiency and productivity across all our operations, the strong earnings buoyed by strong metal prices enabled us to create shareholder value and declare record dividends. This year has witnessed launching of a new product – HZDA 3 (Hindustan Zinc Die-Casting Alloy), which is created to cater to the needs of Auto and Steel Industry in India. We are proud to have three Five Star ratings mines by Indian Bureau of Mines for their efforts and initiatives taken to implement the Sustainable Development Framework.

We aim to be self-sufficient in fulfilling our energy requirement. Our portfolio of 325 MW of renewable energy generation through Waste heat recovery, Solar and Wind power is a testimony to our philosophy of responsible growth. After the recent commissioning of 16 MW captive solar power, we are looking at further opportunities to enhance our green power portfolio.

Zero Harm

Safety remains our top priority at every level of operations. We are pleased to inform that we have achieved 40% reduction in LTIFR compared to the previous year. Our TRIFR has reduced significantly with consistent focus on enhanced reporting of leading indicators like HIPOs. We also enhanced our focus towards our high risk activity and launched the FSIPP program, helping us in improving the controls and build the proactive culture. In our operations, we registered a fatality free year after 7 years which is a positive step towards our vision of zero harm. Unfortunately, despite all the efforts, one of the project sites had an incident resulting in four fatalities of our contractor's employees. No fatality is acceptable, we are committed to our goal of zero fatalities and we have strengthened our efforts to ensure that we build a culture which is resilient and sustainable with an ultimate aim of achieving the interdependent mode by 2020. We are also focused on off the job safety programs which can enable us to build a sustainable culture.

G4-1

> "Company delivered highest ever production of ore, mined metal & silver, EBITDA & net income."

"We at Hindustan Zinc strive to conserve natural resources, reduce our emissions and adopt greener technologies."

Towards Greener Zinc

It is our constant effort to go beyond compliance in enhancing our environment performance through innovation and technological interventions. We have set up 16MW solar power in our waste lands which would help us to reduce our carbon footprint. We are investing in green projects like metal recovery through tailings, utilization of tailings and overburden for paste fill, FUMER project for metal recovery etc. We are pleased to communicate that our head office has been certified as a Platinum rated CII – IGBC Green Existing Building – the first in Rajasthan and one of the only 14 buildings in India. We are in the process of setting up more such green buildings to support the global climate change endeavor. We continue to strengthen our environmental performance and management practices resulting in significant reduction in specific water consumption and specific energy consumption.

Employee Well-being

We are driving various programs to develop a more focused and engaged workforce. One such unique initiative is the CEO Townhall through which the employees have an opportunity to directly interact with leadership team. Hindustan Zinc has been certified as "Great Place to Work". We are constantly focusing on enhancing the diversity and equal employment opportunity among workforces.

Communities- Partnering to Prosper

Developing and maintaining a positive relationship with the communities and other key stakeholders has enabled us to address key sustainability issues and set ourselves bold targets towards growth. We spearhead a number of initiatives and long-term programs with special emphasis on education, vocational training, sustainable livelihood, women empowerment, health and medical camps, water and sanitation facilities, sports and culture, environment preservation and holistic community development. We have partnered with a national organization to set up a mining academy to train the youth on various skills to make them self-reliant. During the year, we invested nearly Rs. 50 Crores in our extensive CSR programs across our business locations.

Supply Chain - Partnering for Progress

We have a collaborative approach towards our supply chain and have focused on long term sustainable partnerships. We are working on various innovative programs like the transport management system, vendor managed inventory, development of ancillary unit to enhance networking and improve partnership on real-time basis.

Regulatory and Policy Developments

We abide by the necessary legal compliances for our operations. It is a critical foundation for creating shared value. Our aim is to go beyond compliance by contributing to the Sustainable Development Goals (SDGs) in partnership with stakeholders who shared our vision of transformed mining sector. As a part of commitment to development and transparent communications, we have joined the UN Global Compact initiative and annually disclose our progress through COP.

One of the most significant stakeholders are our employees. We leave no stone unturned to ensure that their training and development help us create a sustainable pipeline of resources who will take Hindustan Zinc to even greater heights. These are the assets who truly Galvanize Growth for our company.

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 Galvanizing Growth.

Sunil Duggal
CEO

COMPANY OVERVIEW

> With the ownership of major zinc ore mines of India, we have a market share of 70% in zinc and 53% in lead as of FY 2016. We are on the track to become one of the world's top Silver producers at 500 tonnes.

Hindustan Zinc at a Glance

Hindustan Zinc is the world's second largest integrated producer of Zinc-Lead as well as leading producer of Silver in the world. With the ownership of major zinc ore mines of India, we have a market share of 70% in zinc and 53% in lead as of FY 2016. We are on the track to become one of the world's top Silver producers at 500 tonnes.

We have a world-class resource base with total reserve & resource of 404.4 million MT and average zinc-lead reserve grade of 15.8%. Our Company has a track record of consistently growing its reserve & resource base since 2003 and currently has a mine life of over 25 years.

Headquartered at Udaipur, we are an integrated mining and resources producer of zinc, lead, and silver, operating with a workforce of 17,576. We are renowned globally for the high purity refined metals that we supply. Marketed under various brand names, our product line also includes LME registered Special High Grade (SHG) zinc and lead. Our business entails mines, smelters and refineries.

Our Company is self-sufficient in power with an installed base of 474 MW coal-based captive power plants. Additionally, we have green power capacity of 325 MW including 274 MW of wind power, 35 MW of waste heat power and 16MW of solar power commissioned this year for captive consumption.

Our long mine life of over 25 years ensures that the long term sustainability of our business is combined with our strong financials, executional excellence and strategic business management capabilities.

Kayad Mine
Rampura Agucha Mine
Rajpura Dariba Mine
Sindesar Khurd Mine
Zawar Mining Complex
Pantnagar Metal Plant
Zinc Smelter Debari
Dariba Smelting Complex
Chanderiya Smelting Complex
Profile Summary
Zinc Smelting : 823,000 tpa
Lead Smelting : 185,000 tpa
Silver Refining : 518 tpa
Captive Power : 474 MW
Wind Power : 274 MW
Solar Power : 16 MW
Mine
Smelter
Refinery
Captive Power Plant
Wind Power Plant
Solar Power Plant

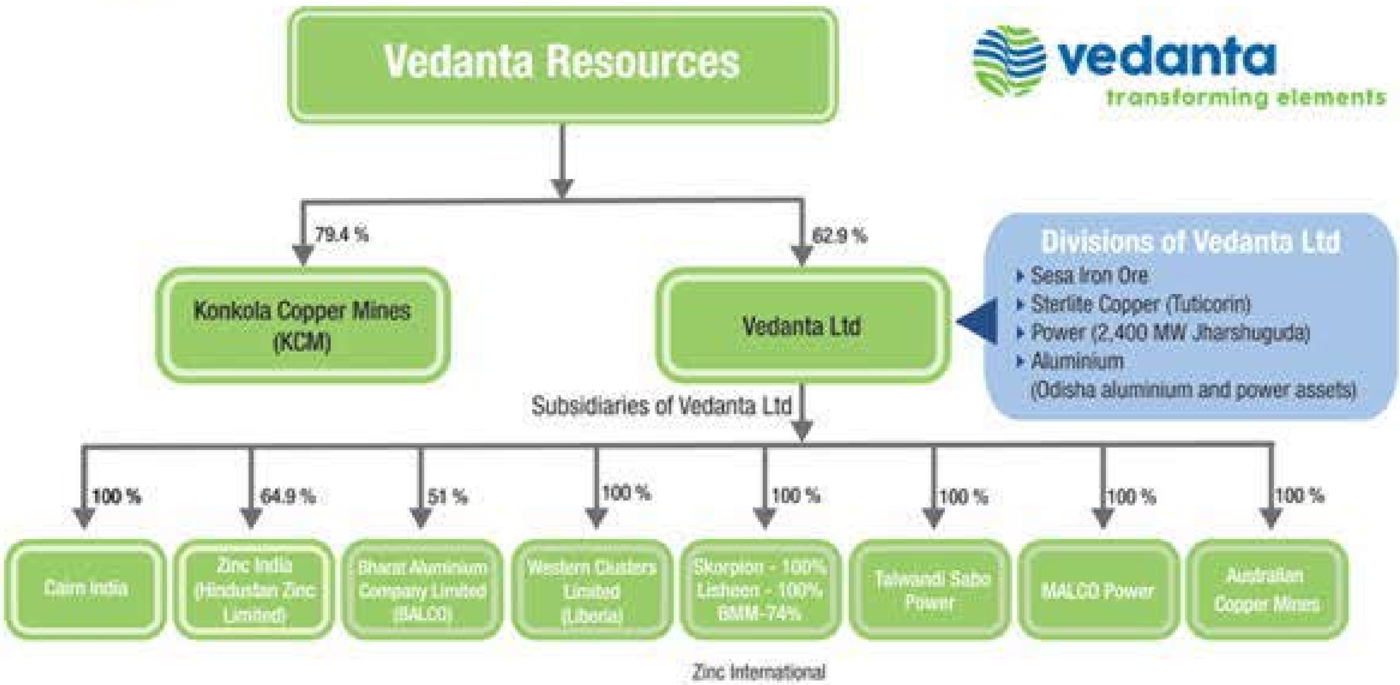
Management

"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."

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, aluminum, 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. 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. More details can be found on www.vedantalimited.com



Board of Directors

Mr. Agnivesh Agarwal
Chairman

Mr. Sunil Duggal
CEO & Wholetime Director

Mr. Navin Agarwal
Director

Mr. A. R. Narayanswamy
Director

Ms. Reena Sinha Puri
Director

Ms. Farida M. Naik
Director

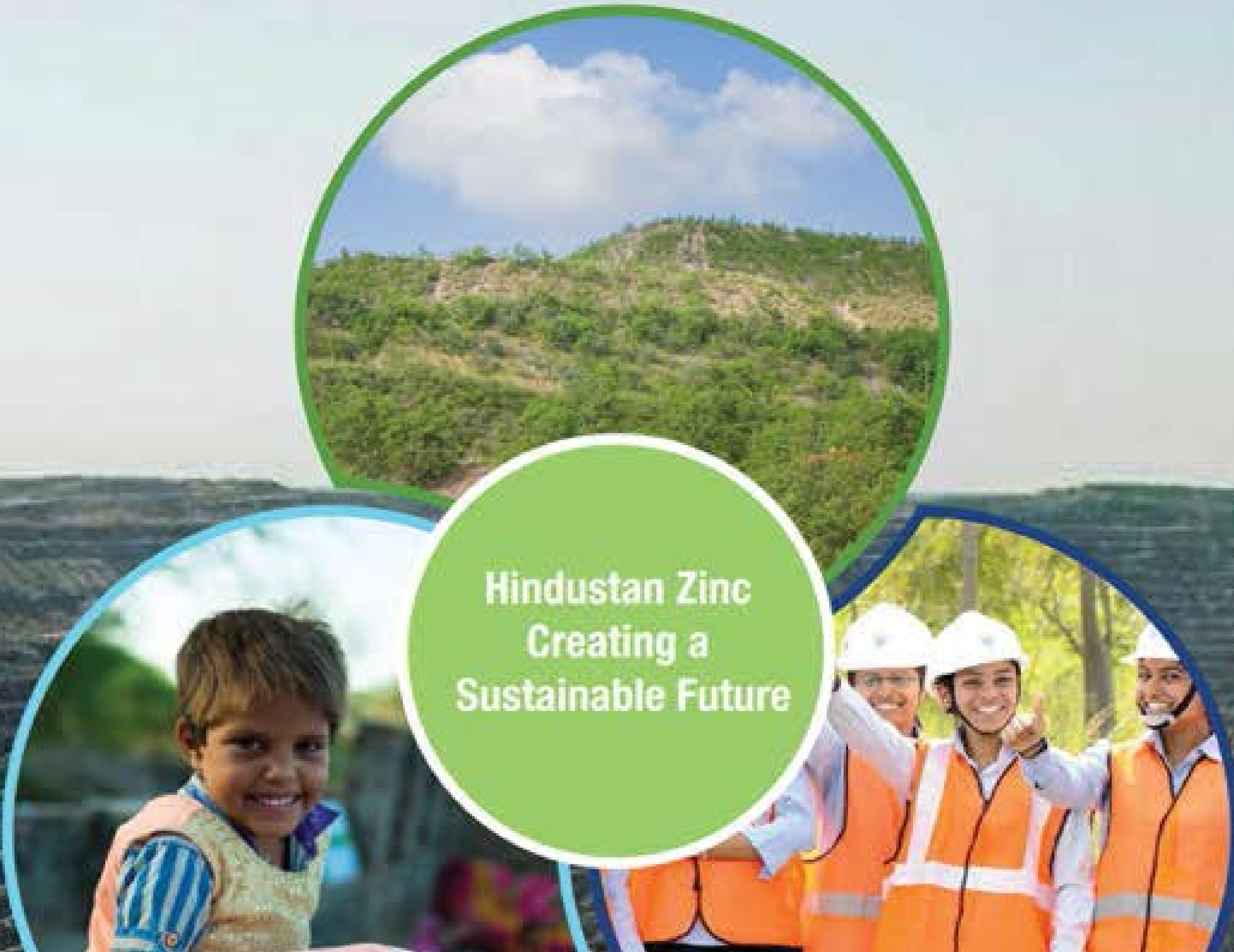
Mr. Arun L. Todarwal
Director

Mr. Sudhir Kumar
Director

OUR
MANAGEMENT STRUCTURE

- **CEO** – Sunil Duggal
  - **CFO** – Amitabh Gupta
    - Dy. CFO – Sonal Shrivastava
    - Dy. CMO – Vijay Murthy
    - Head - IT – Chetan Trivedi
  - **CCO** – Ramakrishnan K
  - **COO Mines** – L S Shekhawat
    - Site President Agucha IBU – R P Dashora
    - Site President Dariba IBU – K C Meena
    - Site President Zawar IBU – P S Jaitawat
    - Head CDC – Con Panidis
  - **Director Projects** – Naveen Singhal
    - Head Projects – Mahesh Todkar
  - **Head HR** – Dilip Pattanayak
  - **COO Smelters** – Pankaj Kumar
    - Site President Chanderiya IBU – Rajesh Kundu
    - Head Power Business – Rajendra Ahuja
    - Unit Head Dariba Smelter – Deepak Sopori
    - Head CRDL – Akhilesh Shukla
    - Unit Head PMP +HZP – C Chandru
    - Unit Head PMP Debari – Manoj Nashine
    - Head Office Excellence – Manoj Soni
  - **Head - HSE** – V Jayaraman
  - **Head - CSR** – Neelima K
    - Dy. Head Legal – Vineet Bose
    - Head- Exploration – Scott Caithness
    - Head- Corp Affairs – Praveen Jain
    - Head- PR & Commn – Pavan Kaushik

ExCO Members of Hindustan Zinc



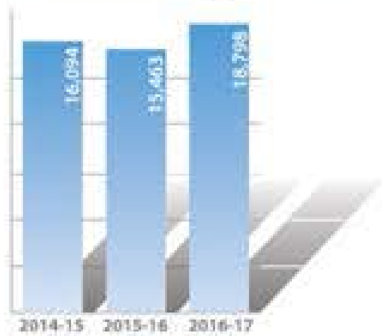
Hindustan Zinc Creating a Sustainable Future

Most of our units are accredited with ISO 9001 (Quality Management System), ISO 14001 (Environment Management System) and OHSAS 18001 (Occupational Health and Safety System), SA 8000 (Social Accountability). We are complying with these standards and certificates are getting renewed on regular basis. This year SK Mine was also certified to ISO 50001 (Energy Management System).

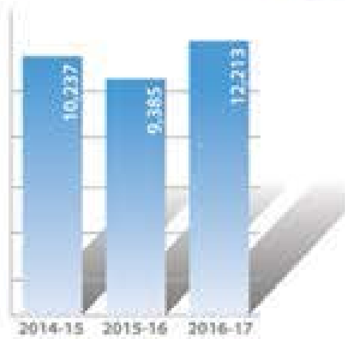
FINANCIAL

- Record EBITDA at Rs. 9,736 Crores for FY 2017; up 46% year on year
- Record Net Profit Rs. 8,316 Crores for FY 2017; up 2% year on year

Net Revenue
(INR Crores)



Profit before Depreciation, Interest & Tax
(INR Crores)



Profit after Tax
(INR Crores)

Earning per Share
(INR)

Special one-time interim dividend announced by Hindustan Zinc!

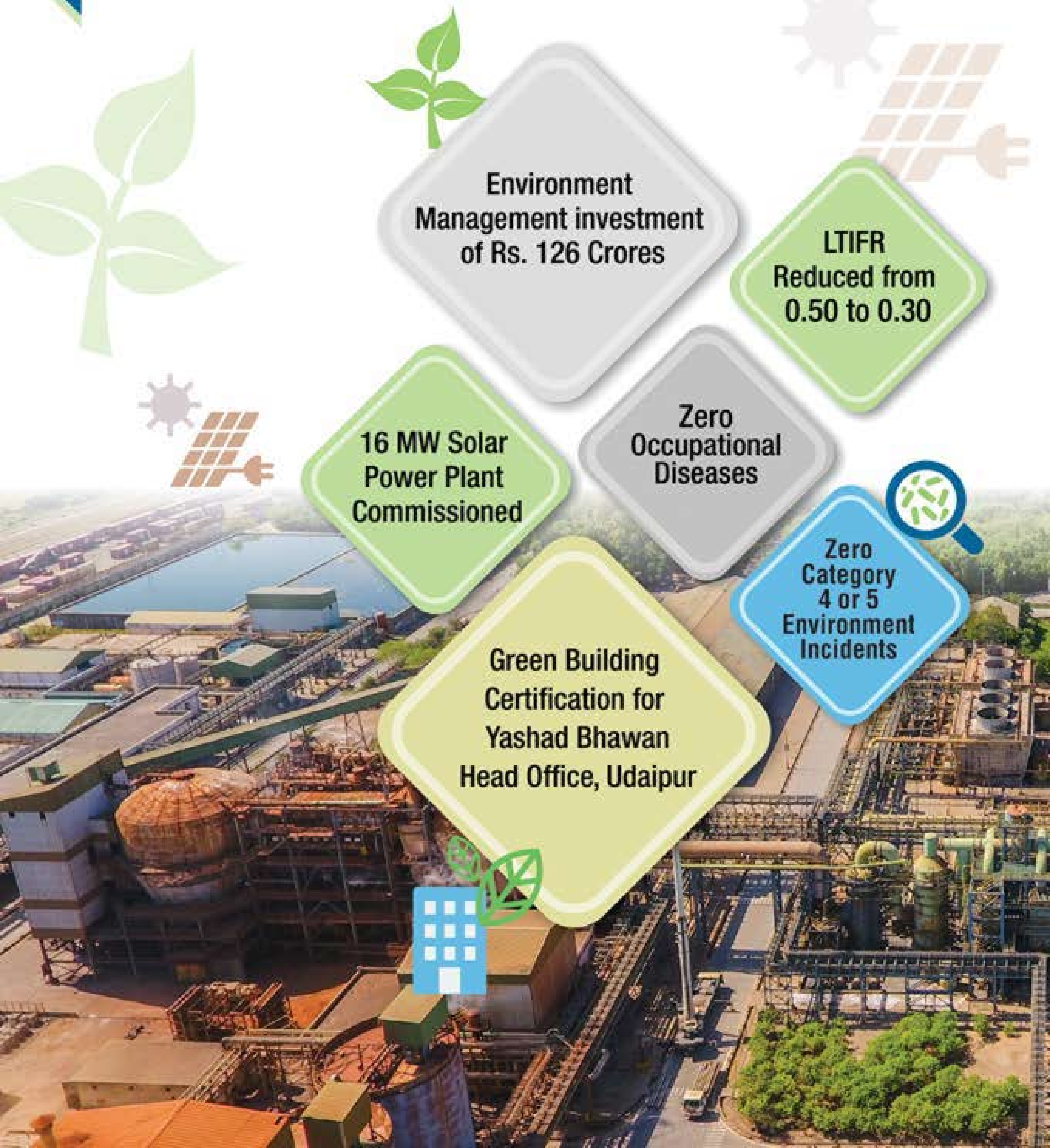
At Hindustan Zinc, we are taking the necessary steps to enhance the productivity. This has resulted in contributing a special dividend and has proven to be our latest success story.

Our Board of Directors declared a special one-time interim dividend of **1375% i.e. Rs 27.50** on every equity share of Rs 2, entailing an outflow of Rs 13,985 Crores, including Dividend Distribution Tax (DDT). The record date for the dividend was March 30, 2017.

Together with dividend paid in April 2016 and interim dividend in October 2016, the dividends paid in FY 2017, **totalling Rs 27,157 Crores,** have broken the record for one of the highest dividend payouts by any private company in India in any fiscal year.

One of the highest dividend payouts by any private company in India in any fiscal year.

NON-FINANCIAL




0.64 million man hours of Safety Trainings Provided
Great Places to Work Certification
Community Welfare Investment of Rs. 49.4 Crores
184 Villages Reached
100% Periodic Medical Examination for all Applicable Employees
3 Five Star Rated Mines

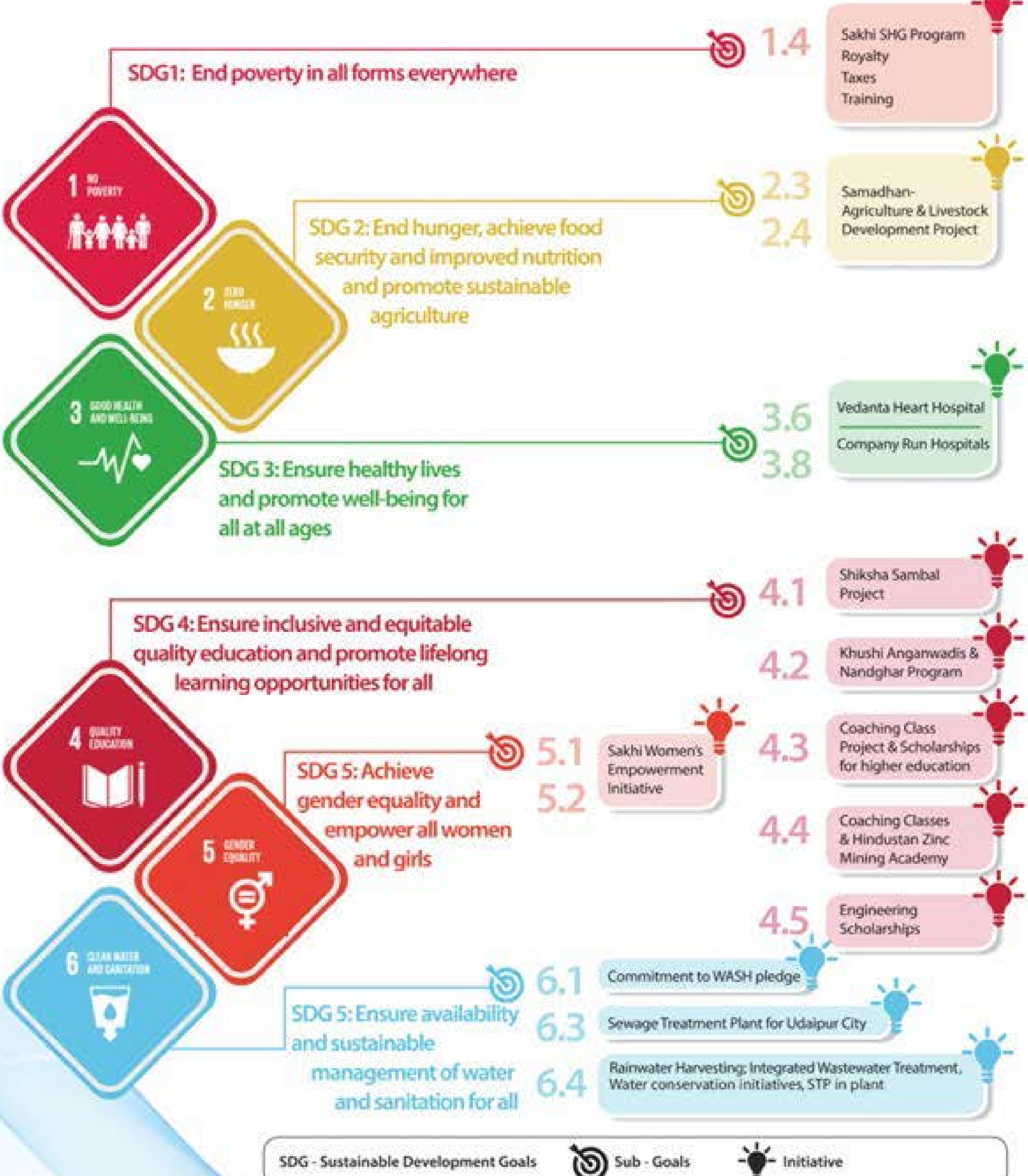
SUSTAINABILITY
SCORECARD

Goals and Targets FY 2016-17	Performance FY 2016-17	Status
Health and Safety		
Achieve zero fatal incidents	Four fatalities (All 4 contract employees) in project	✘
Achieve zero occupational Illness cases	No occupational illness cases recorded	✔
Reduce Lost Time Injury Frequency Rate (LTIFR) to 0.45 or less	LTIFR reduced to 0.30	✔
Reduce Total Recordable Injury Frequency Rate (TRIFR) to be 1.02 or less	TRIFR reduced to 0.98	✔
Mock drills for emergency responses to be charted and executed	Emergency response plan review completed for all units	✔
Safety Standards- Implementation	10 high risk safety standards rolled out for implementation across units	⇨
Human Resource Management		
Business ACT UP to be rolled out in Q1 and Technical ACT UP to be rolled out in Q2	16 stars were identified in Business ACT UP and 33 in Technical ACT UP	✔
Achieve 20% women employee strength	20.1% women employee hired during the reporting year	✔
Employee engagement to be enhanced through periodic interaction schedule with stars/young leaders/women executives	The engagement scores of Hindustan Zinc have shown 5% improvement and have got > 70% on most of the counts. There has been a progressive move in the engagement scores as compared to previous year.	✔

Goals and Targets FY 2016-17	Performance FY 2016-17	Status
Environment		
Achieve Water Savings - 0.13MCM	The water saving targets achieved(Actual- 0.18MCM)	✔
Achieve energy Savings - 0.042 Million GJ	Due to delay in the commencement of few scheduled initiatives, the energy savings targets could not be achieved.	✘
Achieve GHG emission reduction by 5% in next five years	We are in the process of achieving the target in the next five years	⇨
Implementation of BMP recommendations	Annual phase wise implmentation of BMP recommendation projects have been started across all Hindustan Zinc sites. E.g. awareness drive in villages for plantation and biodiversity at Rampura Agucha Mine (around 20 villages are covered)	⇨
Community		
Develop impactful, flagship community programs with effective outcome based metrics	Started and strengthened flagship programs like Khushi Anganwadis, Sakhi - Women's empowerment, Samadhan - Agriculture & Livestock Development, Shiksha Sambal and Hindustan Zinc Mining Academy for neighbourhood communities	✔
Strengthened governance systems and review protocols	Revised CSR Policy, CSR SOPs, DOA in place. Rigorous governance and monitoring systems in place. CSR internal auditor in place with clear and comprehensive scope.	✔
Generate ideas and plans for new and innovative CSR projects for coming years	Vision drawn up for new programs on disability, higher technical education, sports, etc.	✔
Start and increase employee participation in CSR activities	Some special employee engagement drives undertaken this year; others are in the pipeline	⇨

COMMITMENT TO GROWTH BY
ALIGNMENT WITH SUSTAINABLE DEVELOPMENT GOALS

As a responsible organization, we align our sustainability interventions with the UN Sustainable Development Goals (SDGs) universal framework to achieve meaningful impacts and results. We prioritize the UN SDGs on the basis of our material issues and devise action plan in collaboration with our business partners to mitigate future risks, meet stakeholder expectations and enhance our reputation.



SDG 7: Ensure access to affordable, reliable, sustainable and modern energy for all

7 AFFORDABLE AND CLEAN ENERGY

- **7.2** — Solar Power; Wind Power; Waste Heat Recovery Boiler
- **7.3** — Energy saving initiatives throughout operational processes; ISO 50001; Carbon Pricing

SDG 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

8 DECENT WORK AND ECONOMIC GROWTH

- **8.5** — Workplace diversity & Local employment
- **8.6** — Hindustan Zinc Mining Academy
- **8.7** — Commitment to UK Modern Slavery Act, 2015; Collective Bargaining
- **8.8** — Aarohan journey for safe work place; OHSAS 14001

SDG 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

- **9.4 & 9.6b** — Waste Utilization in Cement Industry; Green Building Certification
- **9.5** — Innovations in waste by CRDL

SDG 12: Ensure sustainable consumption and production patterns

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

- **12.4 & 12.5** — Fumer Technology; Pastefill Plant; Captive Solar Power Plant; Digitisation of Mines
- **12.6** — Annual Sustainable Development Report basis GRI / UNGC-COP

SDG 13: Take urgent action to combat climate change and its impacts

13 CLIMATE ACTION

- **13.1** — Alternative Energy; Energy Efficiency; Awareness Drive on Biodiversity Conservation

SDG 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

15 LIFE ON LAND

- **15.1** — Tree Inventorization; Butterfly Park; Medicinal Plants Garden; Nursery for Endangered species
- **15.10a** — Signatory to the Indian Biodiversity Business Initiative (IBBI); Biodiversity management Plan

SDG 17: Strengthen the means of implementation and revitalize the global partnership for sustainable development

17 PARTNERSHIPS FOR THE GOALS

- **17.16** — Stakeholder Engagement
- **17.17** — Partnership with Government of Rajasthan for developing STP for Udaipur City

SDG - Sustainable Development Goals | Sub - Goals | Initiative

ETHICS AND
CORPORATE GOVERNANCE

> "We strive to have a high level of corporate governance through a three tier structure driven by the Board of Directors and supported by five committees that help to implement strategic decisions."

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 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 behavior and sound corporate governance practices.

Committees of the Board

- Audit Committee
- Stakeholder Relationship Committee
- CSR Committee
- Risk Management Committee
- Nomination and Remuneration Committee

Corporate Governance Framework

Strategic Supervision

Board of Directors — Lay down strategic goals, major expansion projects, capital expenditure and business plan approvals

Operation Management and Control

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

Plant/ Unit Executive Management

Comprises of several strategic SBU's — Responsible for overall execution and empowerment through decentralized decision making

'The Code'

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 along with the new joinees.

Anti-Bribery and Anti-Corruption

We aim to reduce the bribery and the potential for corruption in our entire value chain from initial stage to the final sale and delivery of our commodities to the customers. Employees shall not offer or provide undue monetary or facilitation payments, other advantage to any person or persons, including public officials, customers or employees, any associated persons, in violation of laws and the officials' legal duties in order to obtain or retain business.

We are a signatory to the United Nation Global Compact, and abide by the UNGC principle 10 which states that business should work against corruption in all its forms including extortion and bribery. To address the specific issue of bribery and corruption, our code covers topics such as the Securities dealing code (Insider Trading Regulations), Gift Policy, the UK Bribery Act and the Foreign Corrupt Practices Act (USA). All employees are communicated on the same as a part of our code of conduct training. The same is also dealt with in our supplier code of conduct and communicated with them prior to contract approval. All our operations our regularly assessed for risk of corruption. During FY 2016-17, there have been no reported legal cases on anti-competitive behaviour, anti-trust and monopoly practices. Also there were no significant fines levied on us for non-compliance with laws and regulations.

Slavery and Human Trafficking

At Hindustan Zinc Limited, we are committed in our approach to tackling modern slavery in our business and supply chain, consistent with the disclosure obligations under the UK Modern Slavery Act 2015. We expect the same high standards from all our contractors, suppliers and other business partners. We are committed to ensuring that there is no use of forced, compulsory or trafficked labor or anyone held in slavery or servitude in any part of our business and we expect that our suppliers will apply the same high standards to their own organization and supply chain.

"We have a whistle Blower policy to record the complaints against breach of code of conduct anonymously."

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 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, is reported to the Group Head-Management Assurance who is independent of operating management and business. The Head-Management Assurance ensures investigation of complaints and submits regular reports on any complaints received to the Company's Audit Committee for review. During the reporting year, whistle blower complaints were monitored and all have been satisfactorily resolved. We received 29 investor complaints and all of them were also resolved. Other complaints including customer complaints that were received have also been suitably addressed.

Complaints can also be sent to:

Email: **hzlwhistle.blower@vedanta.co.in**

Hotline number: **(000-800-100-1681)**

Web based reporting platform: **http://www.vedanta.ethicspoint.com**

GALVANIZING
THE MARKET TREND

With huge investments being made for the development of smart cities and furthering of existing infrastructure, 'galvanization' is quickly becoming the trend in India. The demand for zinc is likely to grow as a consequence of massive capital outlays in the infrastructure, power & telecom, and building & construction sectors, among others. Being the single largest zinc and lead producing company in India, we are well-equipped to capture these emerging markets. The reporting year evidenced an escalation in the sales of several of our products, the launch of new products, expansion into new markets, export trials, etc, all of which favour continued growth for the company.

Even as we are confident of an assured market, we recognise that there is immense scope to promote the uses of zinc and lead in Indian industry. We therefore take this opportunity to spread knowledge of zinc and lead to other industry sectors; especially those that could possibly be a part of our downstream supply chain.

Besides a focus on new markets, we believe in driving the growth of our sales volume by improving business relationships and retaining our existing customers. To accomplish this, we provide different channels as touch points – website, telephone, live chat, direct mails, marketing media, and personal visits. To create a long-term association with our customers, we have designed several customer-specific programs. Apart from this, our regular timely engagement with our customers has been the key to a strengthened relationship with them; we intend to make use of this relationship to galvanize growth for the company as well as the country.

"The reporting year evidenced an escalation in the sales of several of our products, the launch of new products, expansion into new markets, export trials, etc, all of which favour continued growth for the company."

2017 Market Successes

- Highest ever zinc sales of 87,158 MT in the month of March, with Q4 market share at ~84%
- Highest domestic lead sales ever for FY 2017: 1,17,313 MT
- CGG sales growth enhanced by 125% YoY
- SHG sales growth enhanced by 52% YoY
- Launch of New Product - HZDA 3 die-cast alloy
- First ever Export trial lot of three CGG Jumbos shipped to Nippon Steel Thailand
- Re-entry into Bangladesh market with good starting volume of 1,000 MT per month
- Deal with Adani Mundra saving USD 3 per MT in internal logistics cost for exports

PRODUCT **PROFILE**

Special High Grade Zinc (SHG)

Chemical Composition
99.995% Zinc

Conforms to the following standards:

ASTMB6— SHG Z13001 Grade
BS EN 1179:2003—Z1 Grade

LME Registered Brands

HZL SHG	99.995%
HZL Zn SHG	99.995%
VEDANTA SHG	99.995%
VEDANTA Zn SHG	99.995%

High Grade Zinc

Chemical Composition
99.95% Zinc

Conforms to the following standards:

IS 13229:1991

Prime Western (PW)

Chemical Composition
98.65% Zinc

Conforms to the following standards:

IS 13229:1991

Continuous Galvanizing Grade (CGG)

Chemical Composition
>>Aluminium 0.25 to 0.80%
Remaining Zinc

Hindustan Zinc Die Casting Alloy (HZDA 3)

Chemical Composition
>>Aluminium 3.9 to 4.2%
Magnesium 0.035 to 0.060%
Remaining Zinc

Zinc

Product Portfolio

Silver

Purity
98.5% to 99.9%

Lead

LME Registered Brand
Vedanta 99.99%

We are honoured to be a part of the galvanizing process for the tallest national flag mast manufactured to celebrate two years of growth and development by Telengana state.

Endorsing Make in India: Hindustan Zinc Launches its New Product, HZDA 3

"Hindustan Zinc is ready to meet 100% of the die-casting requirement in India. For meeting 1% of GDP through mining, the Indian mining industry needs to grow 27%, and Hindustan Zinc by atleast 50%."

Sunil Duggal, CEO

Hindustan Zinc added a new product to its portfolio with the launch of Hindustan Zinc Die Casting Alloy (HZDA 3) - a unique product developed using primary zinc and pure aluminum. HZDA 3 will cater to the needs of the die casting sector, with applications in automobile components, household appliances, sanitary ware and defense.The launch of HZDA 3 is in sync with the Prime Minister's flagship program "Make in India", and is expected to replace imported zinc alloys. The product launched at the second International Galvanizing Conference, organised by the International Zinc Association (IZA) under the auspices of Hindustan Zinc Limited, is also known to be cost-effective, as it lowers maintenance costs of the under-body and structural components, saving the cost of after-market anti-corrosion treatments and annual inspection. Armed with several advantages, the product is a boon to the Indian automotive industry.

Fostering Zinc for Nutrition

Meerut-based M/s Dayal Fertilizers bagged the **HZL-FAI Award 2016** for its pioneering role in the state of U.P. in producing zinc fertiliser. The award was instituted along with Fertiliser Association of India (FAI) in 2013 to promote the use of zinc fertilisers to address the severe zinc deficiency in Indian soiland ensure the nutritional security of the country. The award, which includes a cash prize of INR 1,00,000/-, a certificate and a plaque, was conferred during the Annual FAI Seminar (November 30 to December 2, 2016).

Continuing with our Lead Patronage

We were proud co-sponsors of the **International Conference & Exhibition on Lead Batteries**, held in Delhi in November 2016. The conference focused on upgradingthe technology in lead battery manufacturing, as well as the promotion of environment-friendly lead battery recycling in the country. Rajesh Kundu, Head– Location, Chanderiya Lead Zinc Smelter received the award for 'Excellence in Technology'.

As part of our market development initiatives to grow the lead acid battery market in India, we supported the bi-annual event organised under the auspices of the ILZDA, in association with the ILA and ILZSG.

OUR STRATEGY
FOR MARKET PROGRESS

Market Share Progress
(INR Crores)

Market Share Progress

We at Hindustan Zinc take pride in being one of the world's largest integrated zinc producer, and the third largest zinc-lead miner; maintaining this status has not been an easy journey. Inspite of the inherent advantages of having possession of captive mines and thermal power plants, we have always strived to deliver quality by continually increasing our market share and maintaining a stable supply chain.

Our success in the market is driven by our three-pronged strategy, which emphasises:

- **Customer Centricity**
- **Market Intelligence**
- **Market Development**

CUSTOMER **SPEAK**

We always thank Hindustan Zinc for their kind cooperation. Whenever we faced any difficulty in our business, we have always received help from them. Acknowledging this, we have always tried to meet their requirements to the extent possible. We would like to continue this special relationship we share with Hindustan Zinc for a long time.

Jeongwoo Choi,
Assistant Manager, STX Corporation

Taiwan Zinc and Hindustan Zinc share a long-term partnership. They are trying to meet customers' demand, if any. Overall, we have had good experiences with them. The major challenges we face are of unstable sailing schedules and container claim charges. If Hindustan Zinc could dedicate more to these issues, we see an enhanced performance with Taiwan Zinc in the long run.

Judy Chang,
Ambrian, Sales Manager

	Growth Interventions of Hindustan Zinc	Sustainability Impact on Customer Relations
Customer Satisfaction	▸ Biennial customer satisfaction survey ▸ Personalised services for key customers	▸ Customer satisfaction leads to a secure downstream supply chain
Customer Relationship Management	▸ Customer relationship management portal - ConnektHub	▸ ConnektHub expedites procurement, billing, and grievance redressal, thus strengthening the relationship with customers
Transperancy	▸ LME price-based pricing policy	▸ Product quality retains market
Responsiveness	▸ Tenax strap replaced steel strap for packaging of lead bundles ▸ New product / value added product development	▸ New product – zinc die casting alloy, HZDA –launched for applications in automobile components, household appliances, sanitary ware and defense sectors. This will develop precise control over aluminum in the galvanizing bath.
Accessibility and Sales Support	▸ Voice of Customer (CGG Alloy; 1 MT Zinc Jumbos; Prime Western zinc) ▸ Network of depots, vaults, and regional marketing offices	▸ Continuous Galvanizing Grade (CGG) zinc alloy eliminates the need for manufacturing Zn-Al toning alloy in-plant ▸ Prime Western (PW) zinc eliminates the need to add lead separately at the customer end, thus voiding lead-related occupational health hazards

Goals and Targets

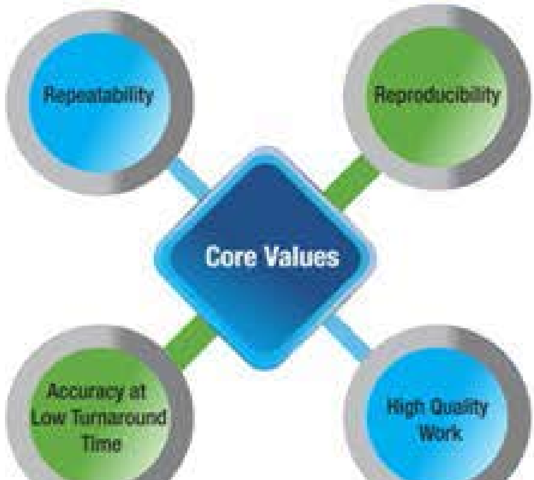
- Increase in Customer Satisfaction Index by 7 points
- Optimization of out-bound logistics to reduce our carbon footprint
- Depot consolidation to prevent double handling
- Increase of value added products in product portfolio

We established the modern Central Research & Development Laboratory (CRDL) back in 1976, with an objective to enhance metal recoveries, to recover values from the waste and optimise waste management. CRDL has developed various processes that includes process to recover lead and silver from low grade lead concentrate and hot gas precipitator dust.

With an aim of enhancement of our business, CRDL drives quality assurance and control. CRDL is certified with ISO 9001:2008, 14001:2004, OHSAS 18001:2007 and 5-S work place management systems. The laboratory has been recognised by the Department of Scientific and Industrial Research and it is listed in American Society for Testing and Materials online directory for testing laboratories.

With core values of Repeatability; Reproducibility; High Quality Work; and Accuracy at Low Turnaround Time, the center works on several projects in partnership with other reputed education institutes of the country.

> "CRDL has developed various processes that includes process to recover lead and silver from low grade lead concentrate and hot gas precipitator dust."



Innovation in Integrating Processes Leading to Growth

Pyro unit of the Chanderiya Lead Zinc Smelter (CLZS) produced about **150 – 200 MT of Cd-Zn alloy.** Distillation of this material was discontinued due to cost economics and about 1700 MT inventory was locked up. However, the material contained about **85% of Zn** and **15% of Cd** and was not being utilised. Due to high Cd values, selling of the material was also not possible. For this, the consumption of Cd-Zn alloy in hydro-plants as partial replacement of HG/SHG Zn dust was considered.

Starting as an experiment, CRDL proposed to convert this material into dust in the Zn dust plant and partially replace HG/SHG Zn dust with the Cd-Zn alloy dust with a vision to use it in the purification section at Hydro-plants for $ZnSO_4$ solution purification. The experiments were conducted and 5-10% replacement of HG/SHG Zn dust with Cd-Zn alloy dust was found suitable. Plant implementation was done successfully.

As a result, currently Hydro unit, **CLZS is consuming more than 100 MT/month of Cd-Zn alloy as dust** (about 8% of Zn dust consumption), thereby having improved realization of Cd-Zn alloy which was lying as an unsold inventory. The inventory and balanced alloy has been treated in distillation furnace, and more importantly there has been a reduction in HG/SHG Zn ingot based Zn dust consumption, leading to more finished goods production of equivalent amount.

Waste Inventory Cd - Zn Alloy replaces HG/SHG Zinc in the purification plants of CLZS.

CASE STUDY

Unused Inventory Discovered as Repository of Essential Metals

At the Pantnagar Silver Plant, in the process of recovering 99.99+% Silver from different sources, about **180 – 240 MT of OPS – B is also produced** which is bled out of impurities. OPS – B slag is rich in Cu, Bi, Pb and Ag was earlier being sold at a lower realization of these metal values. CRDL's objective was to recover these metal values.

CRDL developed a process flow sheet where, this material grounded, to separate out high (>15% Ag) and low Silver bearing material. The high Silver bearing slag is directly fed to Pantnagar plant while low Silver material rich in other impurities is treated for Copper recovery as CuSO4 solution. This **resulted in more than 85% of Copper recovery** and the solution was transferred to Hindustan Zinc mines for internal consumption. The Copper leached residue was then treated for Bismuth recovery as Bismuth concentrate and this material can now be sold in the market. The left out residue rich in Lead and Silver contents was fed to pyro metallurgical furnace for metal recovery. A 10 MT/month treatment pilot plant was established at CRDL and is successfully running since December 2016. The pilot plant is continuing to validate the flow sheet and generate engineering data.

Collaborations

- Indian Institute of Technology, Roorkee
- National Council for Cement & Building Material Research (NCCBM), Ballabhgarh
- Central Mining Research Institute (CMRI), Dhanbad

Patents Applied & Paper Publications

- 01 US Patent
- 01 European Patent
- 01 National Patent
- 01 paper in Hydrometallurgy Journal
- 01 paper in MPT conference

Production of $CuSO_4$ solution for internal consumption and generation of new product - Bismuth concentrate

MEMBERSHIPS AND
INDUSTRY ASSOCIATIONS

FICCI

FAI
ENSURING FOOD SECURITY

FIMI

CII
Confederation of Indian Industry

ASSOCHAM
INDIA

ILZDA

UN GLOBAL COMPACT

ICC
Indian Chamber of Commerce

international zinc association

INDIAN INSTITUTE OF MINERAL ENGINEERS
ESTD. 1969

Operational Excellence

- IPPAI Power Award under "best innovation in power sector" to DSC CPP, Hindustan Zinc
- IEI Industry Excellence Award in Category A of Engineering Manufacturing & Processing industry presented to Hindustan Zinc
- 5 Star Rating Mine Award under aegis of Indian Bureau of Mine, Ministry of Mine, awarded to Hindustan Zinc's Kayad Mine, SK Mine and Rampura Agucha Mine
- First prize for 'Best Fly Ash Utilization' by Mission Energy Foundation, presented to Hindustan Zinc's Chanderiya Lead Zinc Smelter – CPP
- Dun & Bradstreet Corporate Award to Hindustan Zinc in 'Non-Ferrous & Precious Metals' Category
- Zinc Smelter Debari rescue team honoured by Hon'ble Home Minister for arresting ammonia leakage at ice factory
- SAP ACE Award given to Hindustan Zinc IT department; Head IT was conferred with 'IT Person of the Year' in individual category
- 'Par Excellence Award' to Hindustan Zinc at 4th National Conclave on 5S

Corporate Communication

- 'India Today - Visionary of Rajasthan' Award to Hindustan Zinc's Corporate Communication
- Udaipur Ratan Award awarded to Hindustan Zinc by Press Club of Udaipur
- Excellence in Corporate Communication given to Hindustan Zinc by Public Relations Society, Jaipur
- Shan-e-Rajasthan Award given to Hindustan Zinc by Zee News Rajasthan
- Udaipur Chamber of Commerce and Industries (UCCI) honoured corporate communication team for excellence in communication of social projects of Sakhi and Khushi

Environment

- CII - National Award for Excellence in Water Management to Dariba Smelter Complex; recognized as "Noteworthy Water Efficient Unit", "within the fence" category
- Asia Corporate Excellence and Sustainability Awards, presented to Hindustan Zinc in category comprised of projects related to Environment Concern for Wastewater Treatment Plant, Udaipur
- National Energy Conservation Award at State and Central levels for implementation of various power saving projects for reducing the specific energy consumption by 4.81 KWH MT of ore treatment, presented to RAM Mill Stream-3, Hindustan Zinc
- "Platinum certification for green building by IGBC CII" presented to Yashad Bhawan – Head Office, Hindustan Zinc
- Corporate Governance & Sustainability Vision Award, by Indian Chamber of Commerce (ICC), DSC bagged the second prize in the 'Water Stewardship' category
- "Excellence Award for the Best Sustainable Water Management" by Advance Water Digest, awarded to Dariba smelter

Sustainability

- Sustainable Plus Platinum Label awarded to Hindustan Zinc by CII
- Finalist in the category of Asia's Best First Time Sustainability Report in the Asia Sustainability Reporting Awards
- Commendation certificate for strong commitment - "CII-ITC Sustainability Award" presented to Hindustan Zinc
- "India Sustainability Leadership and Award" by World CSR Day Organization to Hindustan Zinc for First Sustainability Reporting"

CSR

- State Level Bhamashah Award for significant contribution to education - received by four units of Hindustan Zinc, i.e. RAM, RDC, CSC, and KM
- FIMI NMDC Social Awareness Award for significant contribution to socio-economic development of the community near Sindesar Khurd mines
- Appreciation Plaque by FICCI for commendable work in education
- CSR Excellence Award conferred by Govt. of Rajasthan for commendable CSR interventions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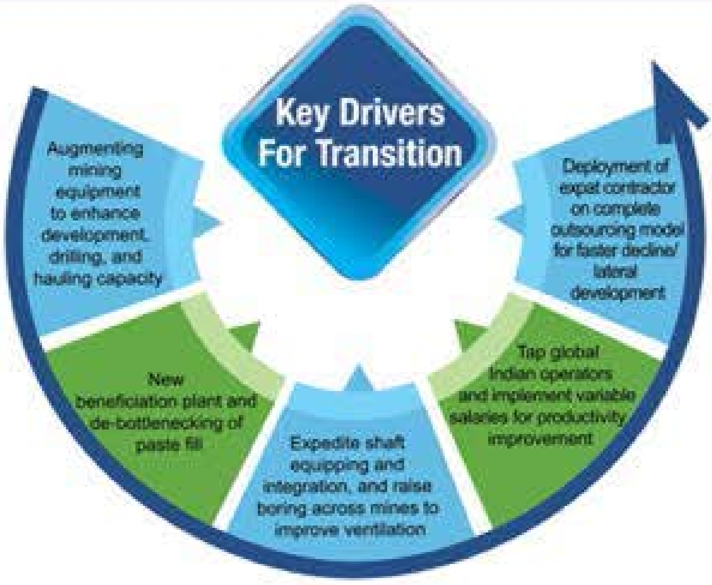
TRANSITIONING FOR GROWTH



Extraction of ore is possible from the surface and underground by employing various mining methods. Surface mining is known to have several advantages over underground mining in the context of recovery, production capacity, operational flexibility, economics, and safety. However, from an environmental perspective, underground mining is preferable due to its smaller footprint. Mining method is usually decided by the depth of ore body. Shallow depth ore body is often reached by open pit and deep-seated ore body are approached by underground mines.

At Hindustan Zinc, we predicted a scenario in our Rampura Agucha mine a few years back, where mining had reached the transistion depth. The Rampura Agucha mine houses the largest and richest lead-zinc deposit in the world, having ore reserves and resources (R&R) of 100.58 million MT, with an in situ average grade of 12.76% zinc and 2% lead. In 2006, we realised that we were approaching the base of the open pit, and drilling further might not be in the company's economic favour. This prompted us to transform our mode of operations to underground mining.

Even as we decided this, we were aware that underground mining at RAM would not meet the ore requirements of our smelters and sustain the expected metal production of 1.2 million MT by 2020. Further, it would also be required to extract and refine greater quantities of the ore to achieve the desired metal. Hence, we decided to expand our existing underground mines – Rampura Agucha underground mine, Sindesar Khurd mine, the Zawar group of mines, and Rajpura Dariba mine –whilst progressively increasingour production targets.

Enabling a Transition

The transition from open pit to underground mining involves several drastic changes in our production method; our equipment, logistics, and transportation all needed to be changed to suit the new operations. All this called for large investments in underground infrastructure and equipment. Being well aware of the consequences, we progressed with a meticulously planned approach, attempting to create a balance between project expansion and production.

For an expeditious augmentation of the capacity of our underground mines, we have advanced with upgrading the existing infrastructure facilities like ventilation, de-watering, paste fill, new beneficiation plants, etc. We envisaged an eventually entirely 'digital mine', with completely automated operations in the future. For sustainable operations, we have chosen a novel paste fill technology for backfilling. Mine backfill is a procedure adopted in underground mines to fill the voids created due to extraction of ore. It enables improved safety through stability of the mined out areas, avoids subsidences and also helps in increased ore extraction from the pillars. Waste rock & hydraulic fill are some of the techniques practised earlier. It helps in utilising the waste generated from the underground mining.

Besides technological interventions, we have taken the necessary steps to ensure the safety of our personnel. We have also initiated skill enhancement programs for employees which will enable them to work confidently in the underground mining areas, whilst also securing us with a skilled talent pool. A few of our success stories have been captured as case studies in the sections that follow. As we progress with our expansion ventures, these successes reaffirm our commitment to galvanizing growth by establishing zero-harm underground environments with world-class facilities, enabling smooth operations and increasing productivity.

Transition Blueprint

Hindustan Zinc is one of the largest integrated lead-zinc producers and a leading producer of silver, and we take pride in operating with the largest open pit mine in the world – Rampura Agucha. As the open pit mine at Rampura Agucha is approaching the base of the pit, we have decided to ramp up production at our underground mines. For a smooth transition from open pit to underground mining, the current production level is required to be enhanced from 8.7 million MTPA to ~15 million MTPA. The enhanced ore production will be contributed by our Sindesar Khurd mine (6 million MTPA), Rampura Agucha underground mine (4.5 million MTPA), the Zawar Mining Complex (4 million MTPA), and Rajpura Dariba mine (1.2 million MTPA). With a clear vision, planned approach, and set targets for the year 2020, we are currently engaged in expanding these underground mines to establish a zero-harm work environment with world-class facilities.

	VISION 2020	Achievements 2016-17	Future Targets
Sindesar Khurd Mine	Target Production: **6 million MTPA**	▸ Increasing trend observed for all KPIs with 3.66 million MT ore production and 2.88 million MT ore treatment ▸ 6.3% improvement in asset optimisation score ▸ Successful commissioning of new plant ▸ Successful operation of paste fill plant	▸ Achieve 4.5 million MT production by 2017-18 ▸ Transform the existing mine to 'digital mine' ▸ Introduce next generation mining machinery for fully automated operations ▸ S.K. Mill expansion to 6.5 million MTPA
Rampura Agucha Underground Mine	Target Production: **4.5 million MTPA**	▸ Increasing trend observed for all KPIs with 1.38 million MT ore production ▸ Highest ever asset optimisation score of 81.5% ▸ Mine development of 15.1kms	▸ Achieve 2.5 million MT production by 2017-18 ▸ Commission all major infrastructure such as shaft hoisting system, primary and secondary ventilation circuit, and UG de-watering system by 2018
Zawar Mines	Target Production: **4 million MTPA**	▸ Increasing trend observed for all KPIs with 1.77 million MT ore production and 1.457 million MT ore treatment ▸ 13% improvement in asset optimisation score ▸ Approval of mining plan and environmental clearances obtained for 4 million MTPA ore production and ore beneficiation	▸ Achieve 2.5 million MT production by 2017-18 ▸ Transform the existing mine to 'digital mine' ▸ Introduce backfilling for efficient waste disposal ▸ Change of mining methods for enhanced recovery ▸ Zawar mills expansion to 8 Million MTPA
Rajpura Dariba Mine	Target Production: **1.2 million MTPA**	▸ Increasing trend observed for all KPIs with 0.745 million MT ore production ▸ Enhancement from basic to moderate in asset optimisation score	▸ Achieve 0.9 million MT production by 2017-18 ▸ Enhancement in all major infrastructure such as shaft hoisting system, ventilation, and advanced de-watering system

Zawar Mines: Expanding through Inclusion

Operational for the last 2,500 years, the Zawar mines have been contributing to the ore production capacity of Hindustan Zinc by 1.2 million MTPA until 2015. Constant exploration efforts since 2007 discovered depth continuity of ore lenses and a possibility of hidden lenses, whilst also focussing on the lateral untapped areas of the mines. This led to the thought of expanding the Zawar mines to extract from the 98 million MTPA resource base by renovating the mine infrastructure and improving operating conditions therein.

The project has progressed with conducting a **public hearing with participation of more than 250 people.** Following this the necessary environmental clearance from MoEF for expansion of the Zawar mines ore production and beneficiation from 1.5million MTPA to 4 million MTPA has been obtained.

Key Points Discussed at the Public Hearing:

- Appreciation for education; especially girls' education
- Demand for set up of more industries in the area for employment generation
- Appreciation for maintaining the environment and tree planting in the area
- Chances of dust generation from the tailing dam
- General problem of tree felling by villagers in the area
- Improvement of the road network in the area
- Water conservation and harvesting measures
- Drinking water problem in Kanpur village

Zawar Mines: Expansion Plans

Major Developments

- Augmenting rock-handling facilities
- Planned surface and underground best-in-class infrastructure facilities
- Raise boring planned from the surface to establish adequate ventilation
- De-bottlenecking of existing mill to 2.7 million MTPA capacity and an addition of a 2 million MTPA mill to match the 4 million MTPA capacity
- Power augmentation for mill, mine, and equipment procurement
- Engaging with expert agencies for mine develpoment

Environmental clearance from MoEF for expansion of the Zawar mines has been obtained

CASE STUDY

GCMP: Our Mantra for Combatting Underground Risks

A zero-harm work environment being our foremost priority, we have resolved to adopt all possible management and technological interventions to facilitate safe working in our underground mines. In the same context, we have developed a Ground Control Management Plan (GCMP) – a document that elaborates on the existing support systems to ensure the safety of our employees and avoid all possible hazards. The document, approved by our Rock Mechanic Cell, considers various safety aspects in sync with the challenges associated with depth, stress, and ground parameters.

Inadequate information and improper reporting make ground monitoring a challenging task; hence, through **monthly GCMP and Trigger Action Response Plan (TARP) awareness** and training sessions, we continuously enhance the reporting culture in our underground mines. In tandem with these are our other safety management processes, which help record any changes observed in the ground behaviour. Periodic safety interaction sessions also help to arrive at the required solutions for ensuring safety.

Thus, the GCMP has proved to be our mantra for combatting underground risks and escalating the productivity metrics.

Salient Features of the Ground Control Management Plan:

- Definition of authority and responsibility for ground support
- Systematic support rules defining the appropriate types of ground support
- Trigger Action Response Plan (TARP) providing indicators and responses to changes in the ground condition
- Describing the process for reporting and communication of geotechnical hazards
- Ensuring no employee or contractor shall work under unsupported ground
- Design review and feedback

Training Focus for Ground Control Management Plan

GCMP ensures safety and avoids possible hazards

CASE STUDY

Hindustan Zinc: A Trendsetter in Trackless Mining

We are rapidly adopting mechanization to meet the production targets in line with our Vision 2020. A major challenge in underground mines is the transportation of ore to the surface from varied depths, after extraction. In our mines at RajpuraDariba and Zawar, which have been operating since olden times, we have reworked the ore transportation system to eliminate tracks and increase productivity by involving automation.

At **RajpuraDariba, we eliminated the main haulage from the transportation track by creating an additional raise** which directly connected the 11 mRL to the ore pass. At **Zawar mines, we eliminated the 105 mRL haulage** system by developing a raise from 130 mRL to 105 mRL, which allowed direct unloading into the COB. We also have plans to eliminate the 45 mRL track haulage by developing a ramp to the COB of the Mochia mine.

Trackless Mining Successes:

01 Increased Production

02 Reduced Manpower Requirement

03 Less Breakdown Hours

04 Improved Safety

05 Reduced Consumption of Explosives

"Our vision and mission echo the ideals and objectives of sustainable growth, which galvanises value for all our stakeholders."

Strategy and Approach

Creating long term value arising from natural resources is our core business strategy. In our case, this is aided by zinc having intrinsic galvanization properties. In a way, as we strengthen our growth, we in turn fuel the progress of the nation and the world at large. At the same time, we also advocate growth in a sustainable manner, which brings our processes full circle. Whether it is our policies, processes, or the overall management and practices that we adhere to, the ethos of sustainability and growth are built into each and every aspect of what we do and the way we do it.

Our vision and mission echo the ideals and objectives of sustainable growth, which galvanises value for all our stakeholders. We operate through a sustainability framework, strengthened by the four guiding pillars of responsible stewardship, building strong relationships, adding and sharing value, and strategic communications.

Sustainability Vision

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

Sustainability Mission

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

- Improving health, safety, and wellbeing at the workplace
- Eliminating the potential damage of our activities on the environment, and reducing our environmental footprint with the adoption of sustainable practices and preservation of natural resources
- Benefitting the communities in which we operate and enhancing their livelihood
- Communicating our sustainability efforts and performance to our stakeholders with transparency, authenticity, and integrity

Vedanta Sustainabilty Framework

SUSTAINABILITY GOVERNANCE

> "Using Vedanta Sustainability Assurance Programme (VSAP), we continue our business by setting sustainability targets and reviewing our progress through compliance assessments and audits."

Our sustainability governance structure consists of a three-tier governance mechanism, which is directed by the Vedanta Board to the units of operations at the site level. These committees –at the group, company, and unit levels – keep a close eye on our sustainability performance throughout the year. Using our internal sustainability risk management tool, the Vedanta Sustainability Assurance Programme (VSAP), we continue our business by setting key sustainability targets, even as we regularly review our progress through compliance assessments and audits. The VSAP aids us in identifying shortfalls and helps us take the necessary corrective and preventive actions.

We have eight sustainability policies which influence every decision we make and give us the confidence to perform in a safe, ethical, and transparent manner. Through a dedicated sustainability taskforce, which includes officials from the safety, environment, and occupational health division, we are able to drive sustainability throughout our company.

Sustainabilty 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 Management Policy
8. HIV - AIDS Policy

Sustainabilty Governance Framework

Tier-1 (at Group Level)
Sustainability Committee at Group | Quarterly Meeting

Tier-2 (at Company Level)
Sustainability Business Management Group at Company Level | Monthly Meeting

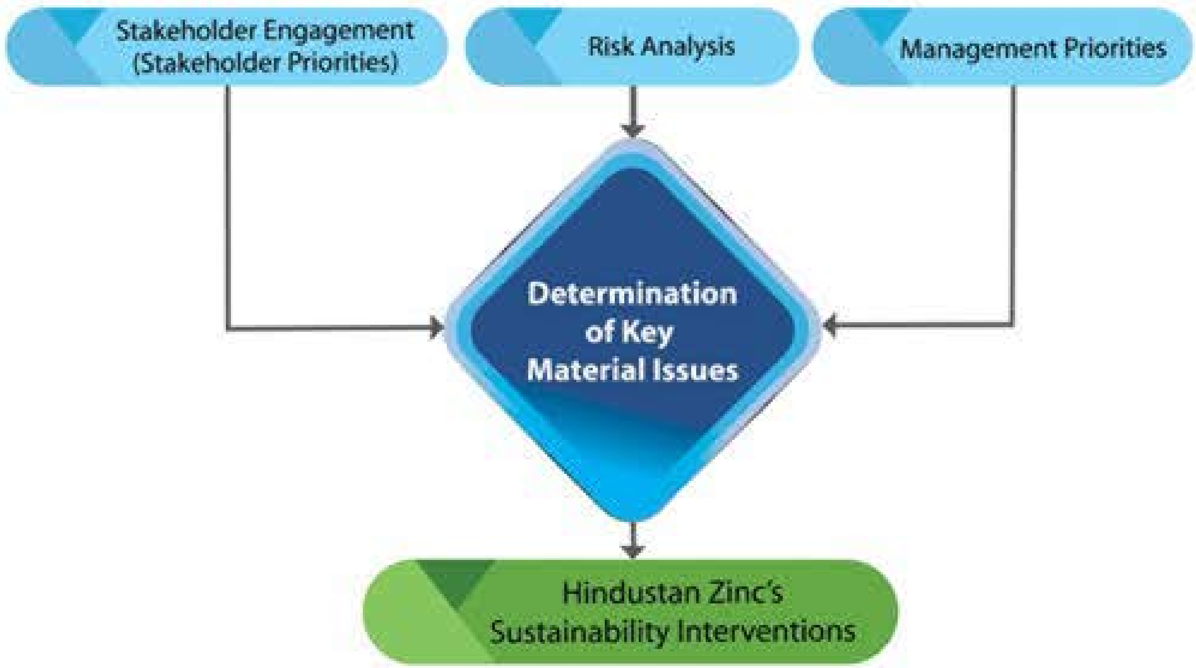
Tier-3 (at Unit Level)
Sustainability Review at Unit/ Operation level | Monthly Meeting

EMBEDDING
SUSTAINABILITY IN OUR BEST PRACTICES

At Hindustan Zinc, we are aware of the changing paradigms of sustainable business. As much as we value our production, we place similar emphasis on the sustainability of our business. As a large business enterprise, our focus has been to work with our stakeholders and include them in our business decisions; this is essential to maintain the social licence to operate. Hence, we prioritise planned engagements with our stakeholders at regular intervals, so that we are continuously aware of their concerns. Simultaneously, we keep a close eye on the business risks that can potentially impact the growth of the company. The analysis of these risks, in congruence with stakeholder and management priorities, forms the basis for identifying the key material issues that the company must focus onto achieve the desired growth in our performance.

"The analysis of business risks, in congruence with stakeholder and management priorities."

Strategy for Sustainable Growth



“We are committed to an active process of engagement with our stakeholders. We also have a Grievance Committee, chaired by the respective unit heads, to review the grievances on a periodic basis.”

Stakeholder Engagement Plan

Our business operations have several stakeholder groups, wherein each has diverse interests and distinct priorities. Therefore, we have in place a stakeholder engagement plan which is a structured method of understanding the concerns of our stakeholders and incorporating their views in our sustainability strategy. Our stakeholder engagement plan is revised every two years or earlier, if there is a significant change in operations or an increase in community grievances or incidents.

We are committed to an active process of engagement with our stakeholders.

This involves:

- Making public disclosures of appropriate information so as to enable a meaningful consultation with our stakeholders
- Meaningful consultation with potentially affected parties
- Establishing procedures through which people can makecomments or complaints

Our stakeholder engagement plan is in line with Vedanta's Technical Standard on Stakeholder Engagement, and includes stakeholder identification and analysis, information disclosure, communication, problem or conflict anticipation and prevention, ongoing consultation, formation of partnerships, construction of grievance resolution mechanisms, negotiated problem solving, employee involvement in project monitoring, regular reporting forums and procedures, and other related management activities.

Grievance redressal is an important aspect of our stakeholder engagement process. We have a Grievance Committee, chaired by the respective unit heads, to review the grievances on a periodic basis. An apex committee, chaired by the location head, meets every quarter and theunit level committee meets every month and are apprised on the grievance received and action taken by the respective committees.

Stakeholder Identification

Stakeholder identification is an important exercise under our engagement plan. This helps us classify the stakeholders who have concerns or interests in our operations and the need for their involvement; it includes assessing the influence and importance of the identified stakeholders. Influence refers to the power (political, social, and economic) that the stakeholders have over an operation. Engagement with stakeholders is part of an ongoing process, wherein concerns and feedback from different stakeholder groups are sought at regular intervals throughout the year through various modes of engagement. The description of the same is highlighted in the table 'Stakeholder Engagement: Methods and Frequencies'.

"Stakeholder identification is an important exercise under our engagement plan. This helps us classify the stakeholders who have concerns or interests in our operations and the need for their involvement."

Key Stakeholders

Stakeholder Identification Process

1. Identify and record the individuals or groups who are affected or are likely to be affected by our operations, either directly or indirectly, or who may have an interest in the operation.
2. Identify potential stakeholder representatives, especially in the form of community leaders, who could act as conduits for both dissemination of information to a large numbers of stakeholders and for the operations to receive information from them.
3. Identify individuals and groups who may be differentially or disproportionately affected by operations due to their disadvantaged, isolated, or vulnerable status, and consider specific and proactive communication routes for these groups.
4. Identify individuals or a group of people who have been benefited or marginalised due to the overall development of an area after the enactment of Hindustan Zinc's business plan.

STAKEHOLDER ENGAGEMENT: METHODS AND FREQUENCIES

Stakeholder & their Key Concerns	Objective of Consultation	Engagement Mechanism	Frequency of Engagement
Stakeholder Group – Employees			
Employees Safe workplace Employee engagement Career development Senior Management interaction	Employee retention and their satisfaction; Suggestions for improvements; Productivity; Welfare amenities	Mentor-Mentee, Senior Management Meet, Open Forum, Suggestion Scheme, Employee Engagement, Training Program , Town hall Meeting, V Connect	• Senior management interact with employee by rotation on a monthly basis • Act Up Processes – Yearly Performance linked appraisal system- Twice a year • Safety Committee - Monthly/ Quarterly • Suraksha Chaupal – Regular • Quarterly meetings with Contractors
Stakeholder Group – Trade Unions			
Trade Unions Workforce welfare	Collective Bargaining	• Group Meeting • One-on-One Meeting	As and when required
Stakeholder Group – Community			
Community Socio-economic development	Smooth operation of Plants; Resolving conflicts; Participation in CSR initiatives; Branding	• Baseline survey • Regular interaction by CSR field teams • Public hearing	Weekly, monthly and annually as per the requirement
Stakeholder Group – Contractors and Suppliers			
Contractors Safe workplace On going engagement	Enhanced understanding of work culture; Impart knowledge on safety requirements during operation; Imparting knowledge of sustainability practices throughout association	• Vendor Meet • Pre-qualification Meeting • Meeting with Senior Management	Regular interaction
Stakeholder Group – NGOs			
NGOs Community development	Partnering in the Community development initiatives	One-on-One /Group Meeting	Regular interaction
Stakeholder Group – Customers			
Customers Product quality & delivery	Enhanced customer satisfaction and loyalty; Better product packaging; improved delivery experience	• Online customer complain tracking system • Customer satisfaction survey every two year • Site audit	• Regular interaction • Customer Satisfaction survey- once in 2 year
Stakeholder Group – Government			
Government Regulatory compliance Regional economic development	Compliance to all the regulations Securing approvals and Understanding about new development.	• Engagement for requisite approvals • Compliance of all the regulations • Liaison with all the regulatory bodies • Sponsoring events • Periodic submission of the compliance status	• On need basis • For regular meetings on progress of work

Risk Identification and Management

Mitigating the identified operational risks with established policies and procedures is what drives our risk management and analysis process. The asset lifecycle has been taken into account when we created our risk management policy. Our code of business conduct and ethics, the sustainable development framework, management systems, and other internal control systems drive the necessary controls in the process.

Framework for Managing Risks

With a robust risk management framework in place, we have managed to identify and mitigate risks that come from both internal and external factors. This has given rise to a risk management routine which has been embedded in our core and critical business activities, systems, and functions, thus shaping our business conduct while reaching for our sustainable growth ideals. Our key business decisions are taken in tandem with the impact and likelihood of various risks. Thereafter, these key considerations are linked with a formal monitoring process so that they may be classified in terms of impact and likelihood, before being handed over to the relevant managers with respect to their areas of responsibility.

This is met with a proper mitigation plan, with formal discussions and review meetings that happen on a quarterly basis.

At these meetings, the risks are reviewed and assessed vis-à-vis the control measures that have been adopted, so that further action plans may be chalked out. Critical assessment and transparency are put into place with the help of a risk management framework that is carried out by a Group Management Assurance System, which annually reviews the reports of the Audit Committee on behalf of the Board. This is supported by the Board Level Management Committee which is made up of the CEO, CFO, and Chairman of the Audit Committee.

Additionally, we have a comprehensive risk management policy, which is also reviewed by the Audit Committee at regular intervals, with relevant suggestions put forth by the Committee for immediate implementation. Risk registers are also maintained at all our sites, which are then sent for review by the Committee. The major risks that are recorded in these registers are also reviewed by the CEO, so that the mitigation measures are appropriately implemented.

Risk Governance Structure

"Our key business decisions are taken in tandem with the impact and likelihood of various risks."

Risk Impact and Analysis

We regularly predict associated business risks, which allows us to prepare for the future and any consequences that we may face. At this phase of the transition, when we are rapidly progressing towards a complete underground mining process, we have analysed all our processes and spheres of influence for potential risks. This has enabled us to plan the appropriate mitigation measures and adopt specific initiatives in sync with the material priorities of the company.

Sustainability Risks	Impacts
Safety, Health, and Environment	
• Incidents • Explosions • Leakage of hazardous emissions and wastes	• Adverse impact on surrounding communities and loss of goodwill/ brand image • Adverse impact on environment • Litigation and disruption to operations • Penalties • Adverse impact on productivity • Property or bodily damage
Community Relations	
• Inability to provide inclusive growth • Disruption to their lifestyles due to the company's operationse	• Discontent amongst the community • Loss of social license to operate
Natural Resources	
• Lack of availability of natural resources like water, energy, and land	• Negative impact on operations and effect on future projects
Human Resources	
• Talent retention and lack of underground mining skills	• Adverse impact on productivity • Attrition of talent pool

Determination of Key Material Issues

We have a firm belief that the growth of our company is greatly dependent on how well we address and manage our material issues. An extensive 7 step Materiality Assessment Process was undertaken in FY 2015-16 which helped us identify and prioritise key material issues using inputs from extensive stakeholder engagement. In 2016-17 too, we continued the ongoing engagement with our stakeholders through the year, and realised that the stakeholder and management priorities remained unchanged. Therefore, we continue to report on all the same material issues in this report too. However, the presentation of most of the key materiality topics has been re-structured in a way that is easy to comprehend in context of our business across 5 strategic sections in this report as shown below.

Stakeholder Priorities

- Health and Safety
- Environment Management
- Employee Engagement and Well-being
- Community Development

Management Priorities

- Health and Safety
- Environment Management
- Energy and Climate Change
- Economic Value
- Regulatory Compliance
- Ethics and Governance
- Human Rights
- Community Development
- Supply Chain Management
- Training and Skill Development

Key Priority Material Issues for FY 2016-17

The material issues of our company have presented a positive impact by galvanizing our strategy for business growth in the reporting period of 2016-17. The strategy involves a well chalked out plan for implementing several interventions, based on the foundation of a sound approach resonating with both stakeholder and management priorities.

The report henceforth discloses to all its stakeholders the approach adopted by the company to address the identified material issues. It also entails exclusive case studies narrating the noteworthy initiatives we have implemented in our attempt to satisfy all our stakeholders and meet their expectations.

Galvanizing Business Growth Strategy - 2016-17

APPROACH

1 SAFEGUARDING LIFE	2 ENHANCING OUR GREEN FOOTPRINT	3 UNLEASHING THE HUMAN POTENTIAL	4 TRANSFORMING COMMUNITIES	5 COLLABORATING AND STEPPING UP THE SUPPLY CHAIN
Safety culture transformation	Responsibility towards our resources	Building an empowered workforce	Strengthening community well-being	Bringing digital transformation
Safety capacity building	Sensitivity towards environmental footprint	Creating an engaging work environment	Contributing to local and national priorities	Focusing on process innovations
Safety process management	Zero harm to environment			

INTERVENTIONS

1 SAFEGUARDING LIFE	2 ENHANCING OUR GREEN FOOTPRINT	3 UNLEASHING THE HUMAN POTENTIAL	4 TRANSFORMING COMMUNITIES	5 COLLABORATING AND STEPPING UP THE SUPPLY CHAIN
Safety Perception Survey	Green Building Certification	Technology enabled HR processes	Nandghar	Supplier's Day
Online Safety Awareness Test	16 MW Solar Power Plant for Captive Usage	CEO Townhall	Khushi Anganwadis	Buyer's Training Program
Safety Whistle Blower	Initiation of Fumer Project		Shiksha Sambal	Transport Management System
Safety Training Kiosk	Tree Inventorisation		Sakhi	Vendor Managed Inventory
Being Safe			Hindustan Zinc Mining Academy	
Safety Training Park at RDC			'Jeevan Tarang'...Zinc ke Sang	
Fatalities and Serious Injury Prevention Plan (FSIPP)			Unchi Udaan	
Action Employee Can Take (AECT)				
Safety Standards				

SAFEGUARDING LIFE

Human life is more important than anything. Following from this truth, we prioritise providing our people with an environment where they can work without fear of hazards and accidents. This is why health and safety is one of our core values, and occupies the highest place when it comes to achieving operational excellence.

At Hindustan Zinc, we believe that every incident is preventable at work. Hence, we seek to identify and mitigate health and safety risks, and continue with our plans to safeguard the lives of our people as we progress on the path to growth.

SAFETY
DASHBOARD

VISION
2020

Establishing a zero harm culture at work and enhancing safety by eliminating fatalities; incidents and illnesses

Material Aspect
Health & Safety

Aspect Boundaries

Health and safety has relevance both inside and outside organization. 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 only with partners who are willing to work with us by adopting safe business practices

Performance 2016-17

- **0.30** Lost Time Injury Frequency Rate
- **38.49%** increase in Leading Indicator
- **4** Fatalities of Contractor Employees
- **100%** Periodic Medical Examinations for all Applicable Employees
- **0.64** million hours of Safety Trainings

> We ensure that all essential safety features are included in the underground mines to convert them into world-class facilities.

Strategy and Approach

Safety continues to be our top priority, and a critical component of any business decision that we make. It is our strategic goal to ensure zero harm for all our employees, contractors, and communities. We intend to imbibe the safety concept in our organisation through a strategically planned approach, based on the three pillars of safety culture transformation, safety capacity building, and safety process management.

Our endeavours help us work towards enhancing our safety standards and processes, so as to minimise the health and safety risks across all our operations. We consider health and safety to be a tool for growth, hence, we foster a culture wherein health and safety are core values. We have a dedicated HSE Principles and Policy, which is our primary commitment towards employee health and workplace safety; also all our major units are OHSAS 18001:2007-certified. Our Safety performance is reviewed against set targets during management review meetings. Safety is not compromised under any circumstance and, even as we pass through this transition phase, we ensure that all essential safety features are included in the underground mines to convert them into world-class facilities. For all potential emergencies, we also have an emergency response preparedness plan in place. Our safety strategy runs throughout our business lifecycle, thus perpetuating the ideal of galvanizing growth at every stage, from start to finish.

Safety Governance

Our integrated safety organisation structure is driven by the Corporate Safety Council, which is chaired by the CEO and Corporate Head – EOHS, is the Member Secretary of this council. The council operates through the five corporate sub-committees and six zone apex committees, which are primarily responsible for establishing the safety culture at the unit level through various prioritised work streams, namely the Safety Interaction Committee, Incident Management Committee, Contractor Safety Management Committee, Standard Rules and Procedures Committee, and Process Safety Management Committee.

We also have a formal joint management – worker health and safety committee, which is responsible for monitoring our occupational health & safety programs at sites. Both management and workers, including contract workers, are equally represented in these safety committees. 100% of our employees are represented in these safety committees. Committee meetings are held regularly to check the progress of these programs, so that the best standards are constantly put into practice.

Safety Governance Structure

Safety Committees: Roles & Responsibilities

1. Safety Interaction Sub-committee

- To ensure that all unit employees have adequate standard 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

2. Incident Management Sub-committee

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

3. Contractor Safety Management Sub-Committee

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

4. Process Safety Management Sub- committee

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

5. Standards, Rules and Procedures Sub-committee

- To implement a proces to identify, develop, train and implement the high risk standard and procedure

> For enhancing safety performance, we keep track of the high-potential (HIPO) incidents.

Galvanizing Growth

through Safety

When we take on the objective of galvanizing growth, we recognise the fact that this cannot happen in isolation. Our vision of zero harm is based on the belief that safety is every individual's right and responsibility. We believe that this can only be achieved when our employees take responsibility for their own safety as well as the safety of those working with or around them. With the ideals of zero harm, we are trying to involve everyone in upholding the best standards to create a safe environment that will fuel growth in a wholesome manner.

The reporting period of 2016-17 saw a mix as far as our safety performance is concerned: while the LTIFRs continued their decreasing trend, we also had the misfortune of four fatalities at the S.K. Mill project site. Four of our contract employees lost their lives due to crane boom failure. This unfortunate incident tells us that we still have a long way to go in our safety journey.

For enhancing safety performance, we keep track of the high-potential (HIPO) incidents as well. A HIPO is an incident or near-miss that, realistically, could have under other circumstances caused one or more major injuries. Awareness of HIPO incidents is a key factor in preventing them and we share the learnings of HIPO to prevent their reoccurring at other sites. During the year, we recorded a total of 56 HIPO incidents, with each fully investigated and the lessons learned promoted across all businesses.

With our strengthened resolution to achieve zero harm; we intend to continue our 'Aarohan' journey with more conviction and new processes to drive enhanced safety.

CASE STUDY
Misfortune of Facing 4 Fatalities

In a saddening incident which took place on 31st January 2017 at the S.K. Mill Project site, we lost four of our contract employees. The accident involved a fabricated roof structure which was being lifted for erection on top of the fine ore bin. At the verge of completion of this project, when there was just one last structure left to be erected, the crane boom failed and fell on ground along with structure. Three of our contract employees got fatal injuries and another three got injured. One of them later succumbed during treatment in the hospital.

The learnings of the incident has been shared across all our units along with the following recommendations:

- All high risk activities to be undertaken post pre-assessment, with supervision.
- Safety inspection, monitoring and audit plan mandatory for all projects.
- New standard for operation of mobile cranes to be followed.
- Strict access control mechanisms in place and mobiles allowed at site only under special circumstances.
- All high risk activities must have specific work permit system for lifting and supporting loads.
- Loading beyond 75% crane capacity is to be avoided. In exceptional circumstances when load is more than 75% such lift would be accompanied by well deliberated and mutually signed off written critical lift plan.
- Mock drills to be conducted on regular basis for emergency response and crisis management planning. Creation of 'lifting plan' for any critical and heavy lift.

Training on Crane Safety

Aarohan –
Going the Safety Way

Hindustan Zinc's flagship program for achieving safety excellence, Aarohan, has been running since 2013. We have partnered with DuPont to enhance our safety culture and inculcate a behaviour and habit of safety amongst our workforce. This initiative has helped us to reorganise our safety architecture. Our safety management design is based on a safety management evaluation and safety perception survey. Aarohan's success in inculcating a positive behavioural change and improvement in many areas has been witnessed over time. With these positive trends, we continue with our journey towards zero harm, implementing the three pillars of our strategy for enhanced safety–safety culture transformation, safety capacity building and safety process management.

" Hindustan Zinc's flagship program for achieving safety excellence, Aarohan, has been running since 2013. "

Progressing towards Zero Harm

Safety Culture Transformation
- Safety Whistle Blower
- Being Safe
- Safety Town hall
- Safety Stand Down
- Action Employees Can Take (AECT)

Safety Capacity Building
- Safety Trainings
- Safety Training Kiosk
- Safety Training Park
- Online Safety Awareness Test

Safety Process Management
- Safety Standards
- Fatalities and Serious Injury Prevention Plan (FSIPP)
- Safety in Operations
- Contractor Safety Management
- Hazard Analysis

Celebrating the Association with DuPont!

On completion of the third year of our 'Aarohan' journey, a safety exhibition was organised at Yashad Bhawan, Udaipur. The exhibition which was also open to family members, included stalls focusing on specific safety topics; photo booth and gaming zones as special attractions.

Aarohan Achievements

- Reporting of leading indicators
- Reduction in incident rate
- Improvement in quality of incident investigation
- Increased employee engagement
- Increased structured processes
- Enhanced hazard awareness
- Increased employee participation in safety-related activities and campaigns
- Enhancement in standardisation of systems and skill development, etc.

Safety
Culture Transformation

Understanding the behaviour of a human being is key when it comes to creating new habits and breaking old ones. In a bid to transform the safety culture, we have chosen to delve deeper into the behavioural culture of our people, so as to prompt them to start inculcating safety as a culture in our work environment. From growing awareness to changing behaviours, we have designed and implemented measures that will cater to all these purposes. Specific initiatives undertaken during the year are highlighted in this section.

Safety Whistle Blower

We have launched the safety whistle blower program to foster safety across our operations. This is a portal designed for employees to reach out to senior management when they observe any serious safety violation during operations. The portal allows employees to report on serious concerns at the site; it also has an escalation mechanism to higher authorities for immediate action regarding the serious nature of violation observed. This portal is accessible to all employees, including contractual employees, and from any network. The reported cases can be analysed and communicated to other operational sites, and proactive steps can be taken to avoid such incidents. It is not compulsory for the employees to reveal their identity; however, disclosing their identity will help the organisation in identifying employees who have imbibed safety as an ideal, and can be rewarded for the same.

Being Safe

Being safe is an initiative which targets spreading the message of safety to a much larger audience; which includes our employees and their families. This initiative helps position safety as an individual's responsibility. Undesirable incidents due to lack of safety can affect their lives and that of their families, thus establishing the fact that safety begins at home.

Under this program, our corporate communications team has made 11 visits to all our locations (except Pantnagar) and the Zinc School during the reporting year; they interacted with about 1,500 employees and their families. Four safety feature films focusing on safety and involving the families of our own employees have been made. Meditation sessions are organised post the screening of these films, to introspect on what goes on in the mind after such incidents. On-the-spot feedback is also taken from the participants. Participants can also share their personal experiences and incorporate safety measures when it comes to their day-to-day practices.

"We have launched the safety whistle blower program to foster safety across our operations."

Stakeholder Feedback on Being Safe

- Safety Workshop 87%
- Safety Films 86%
- Safety Rules 83%

CASE STUDY
Measuring Safety Perception

The second Safety Perception Survey (SPS)was conducted to assess the effectiveness of the Aarohan journey. This survey helped us map the safety culture changes over time across all levels of the organization.

The survey was conducted in a dual mode – online and offline; the trained employees helped other employees fill the form. The survey was successful, with huge employee participation. Number of respondents increased by 46% from the last survey in February 2013 with participation of 15,914 employees. **'Perception towards safety' score increased from 62% to 88% in this survey.**

"Excellent focus on Safety in our Company. It is world class & we are trying to excel in this field. "

"Freedom of expression through evaluating our own views on safety culture and feel very good to be a part of this journey."

Advantages of the Safety Perception Survey

- Increase employee engagement and morale
- Capture the overall effectiveness of the safety program
- Identify areas that are in need of corrective action
- Provide management with sensitive leading indicators for safety metrics
- Effectively incorporate safety into the improvement process
- Motivate the organisation to find gaps, devise an action plan and make changes

Safety Town Hall

Safety is a common thread which runs through our company, binding the top management and the workers. In order to reinforce our safety culture and help everyone understand why safety is paramount, senior management engages with the workforce and their families at the safety town hall, which has been instituted to strengthen our safety culture. Along with town hall at HO wherein all units are connected, during the reporting year, town hall meetings were organised at all operational units every quarter, and the senior management addressed the employees. Employees from all our locations, including contractual employees, attend this interactive session. The emphasis is both on-site and off-site safety conditions, and the employees are made to realise how critical safety is for each individual, and the company as a whole. These sessions give employees a platform to ask questions, have their queries addressed, and provide suggestions for improving the safety of our operations. Such town halls are also being conducted regularly at the operational sites, under the leadership of the site leader.

Safety Stand Down

We have introduced the safety stand down platform to extend the learnings of an incident at any site to other units. Ensuring horizontal deployment and cross-learnings from these safety incidents, the program is conducted by the site leaders of all the units on a quarterly basis. In this interactive session, the site leaders and the employees discuss and share their experiences and learnings about LTIs and HIPOs. This focused group interaction saw participation from employees, including non-executives, contract employees, vehicle drivers, security guards, and others who shared their experience and provided feedback as well.

Action Employees Can Take (AECT)

This is a unique platform that empowers the workforce to willingly interact with their co-workers and discuss the impact of unsafe acts that have the potential to result in a serious incident that could impact them and their family members. It also proactively encourages the workforce to take action to prevent unsafe acts. This program also enhances the risk perception of the workforce.

Several sessions on AECT have been successfully conducted, benefiting employees at various locations. The program has also been well-received by employees on the shop floor. Another program in the same space, 'Train the Trainer', is being conducted with an intention to develop more trainers who can correct the behaviour of their peers while also changing their own.

Safety Stand Down Protocol

- Reporting of leading indicators
- Description of the incident
- What went wrong/why safety systems were bypassed
- HZL Life saving rules
- What is expected from employees
- Suggestions for improvement

Safety

Capacity Building

> Safety trainings play a pivotal role in establishing the safety culture at Hindustan Zinc and we continue to train employees to achieve and maintain zero-harm work environment.

Growing our capacities in the spectrum of safety is what we target when we attempt to spread the message of safety throughout the organisation. Through focused trainings, we try to improve awareness on safety and infuse in our employees the importance of a safe working environment and its positive impact in meeting production targets.

Safety Trainings

Safety trainings play a pivotal role in establishing the safety culture at Hindustan Zinc. Acknowledging this fact, we continue to train employees to achieve and maintain a zero-harm work environment. Apart from safety trainings, we also had following initiatives during the reporting year to improve the awareness on safety.

Safety themes: We rolled out monthly themes for our high-risk activities and conducted various program (training and awareness sessions, competitions, etc.) around these themes. Some of these themes included permit to work; vehicle and traffic safety; lockout tag out; confined space entry; chemical storage and handling safety, etc. to spread awareness across our operations.

Safety videos: We have developed seven in-house safety videos to create awareness on various aspects of safety; these videos are now part of our induction and refresher trainings.

Safety Training Kiosk: This is an initiative focused on training the transport drivers in the dos and don'ts in the plant premises, to ensure that they work in a safe manner inside the company premises. Started at the Chanderiya Lead-Zinc Smelter, the safety training kiosks are installed in driver's rest room; this training is part of their safety induction. The program has been helpful in expediting the rapid safety induction of the transport drivers, and is aiding in the smooth running of the plant.

With all these key initiatives, during the reporting year, our contractors and employees received a total of 0.64 million man hours of training.

Safety Park

To create a lasting impression on the importance of safety, we attempted to provide our new inductees with a real operation site safety experience, thus enhancing the quality of our safety induction training. The safety training park has displays of standard scaffolding, model conveyor, confined space – vertical entry, confined space – horizontal entry, reactor with agitator system, crusher, job-specific PPE models, double earthing, LOTO, bonding (providing continuity), and test before touch. In addition, the park also has learning boards which highlight the HSE Principles & Policy, life-saving rules, pillars of Aarohan, and safety high risks standards.

Online Safety Awareness Test

In order to increase the awareness among employees relating to high risks during operations, and moving towards risk-free growth, we have started conducting monthly safety online tests. This IT-driven initiative is mandatory for all executives across our operations and is conducted on various high risk activities, including work at height, confined space, vehicle and driving, electrical, permit to work, lockout and tag out, and scaffolding and rigging safety. These tests are an attempt to educate employees on the high risk of operational activities.

Process
Safety Management

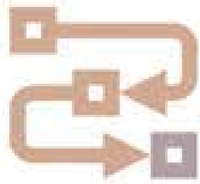
With our belief that a structured process drives success, we progressed with modifying our processes by inculcating different aspects of safety management. We have developed, established, and implemented the process safety management standards and procedures for process technology, Process Hazard Analysis (PHA), Management of Change, and Pre - Start up Safety Review (PSSR).

Hazard Analysis

Hazard analysis is the first step to assess risks at workplace. Therefore, we regularly conduct a number of Process Hazard Analysis (PHAs) to identify and evaluate the hazards, so that we are in a good position to analyse the effectiveness of the existing control mechanisms to eliminate risks. All the changes in technology and facilities are reviewed by the senior management and authorised prior to implementation through the MOC procedure. Pre-Start up Safety Reviews were conducted, and the senior management authorised the plant startups, as required. There is also a continuous review and update of our emergency crisis and response plans. Regular mock drills are conducted to build better understanding and confidence among the workers; these drills and measures place due emphasis on preventing mishaps, and ensure that the required policies are put into place on an everyday basis, thus ensuring a high standard of functioning.

Safety Standards

Continuing with our tradition of strengthening our safety processes by introducing safety standards, we rolled out two new safety standards this reporting year–chemical handling and storage and lifting and shifting of material.



Strengthening Processes with Safety Standards

- Scaffolding
- Work at Height
- Personal Protective Equipment
- Confined Space Entry
- LOTO (Lock out Tag out)
- Permit to Work
- Electrical Safety
- Vehicles and Traffic Safety
- Chemical Handling and Storage
- Lifting and Shifting of material

> "Safety standards are employed at all our locations, and we have dedicated champions who ensure their uniform implementation."

> "The use of safer technology, bringing innovations, and reducing manual intervention/ dependency has been major focus for safety in operations."

These safety standards are employed at all our locations, and we have dedicated champions who ensure their uniform implementation.

Fatalities and Serious Injury Prevention Plan (FSIPP)

Planning and laying the foundation for a better safety perspective involves putting numerous targeted programm into place. The FSIPP is a recent initiative taken at Hindustan Zinc to deal with the high risk activities performed at our operations. The program has been initiated in order to deal with these risks, and to measure and mitigate the same using effective methods. The FSIPP helps in prioritising risks and identifying barriers. Further, accountability for managing risks through the barriers is defined, even as the health quotient and adequacy of barriers are checked through periodic audits. All our mine and smelter operations identify and prioritise these risks, besides trying to identify corresponding barriers which can be periodically checked using the bow tie diagram. These diagrams are also displayed at each site for the employees, so that all their checkpoints are clearly highlighted as they go through the process.

Safety in Operations

Apart from focusing on management initiatives, we at Hindustan Zinc also give importance to the strengthening of the safety of the machines we use. The use of safer technology, bringing innovations, and reducing manual intervention/dependency has been major focus areas during 2016-17. We have reviewed our existing systems and explored the possibility of automation to make operations safer. We have also emphasised the introduction of safety features at the designing and procurement stages.

Several initiatives undertaken at the Rampura Agucha mine can be read about in the case study, titled 'Vehicle Safety Innovation'.

Safety in a mine is constantly at-risk due to its vulnerability to natural disasters, faulty equipment, and human error; consequently, productivity is threatened by potential accidents and breakdowns. In open pit mines, collision among heavy-duty and light vehicles driven can easily be fatal.

To avoid such accidents we have tweaked the kind of vehicles and equipment that we are using to mitigate the risk of fatalities.At the Rampura Agucha mine, we are using various sizes of dumpers, like 240 T class and 100 T class dumpers for hauling material, and LMVs for manpower transportation. To avoid any mishap or incident, **we are using various unique safety devices for the dumpers, such as proximity sensors, fatigue monitoring system, tyre management etc.**

The year 2016-17 saw a drastic shift to automation in machine-handling and other operations:

- Operator's Fatigue Alarm System
- Rear-view Camera with Inside Cabin Monitor
- Proximity Sensors on Dumpers
- Interlocking of Seatbelt with Audio Visual Alarm
- Auto Dipper of Headlight System
- Auto Fire Suppression System

Proximity Sensor System

A proximity sensor systems is designed to detect people and objects in blind spots. With the ability to detect both stationary and moving objects, these systems provide the driver with an in-cab audible and visual warning. The sensor works effectively in harsh environments and in poor visibility (darkness, smoke, fog).

Fatigue Monitoring System

Another unique device is the fatigue monitoring system which captures the infrared images of people's eyes and alerts the driver in time without blocking the vision. It also detects operator face in same time and gives alarm for same. This advanced, smart and intelligent System works around the clock.helping protect our work environment and reducing production downtime.

Proximity Sensor

Fatigue Monitoring

> We have an exclusive program of contractor safety management, which is a six-step process that emphasises continual monitoring of the safe execution of the contractual work carried out by our business partners.

Contractor
Safety Management

To strengthen our safety excellence, we have also taken steps to extend this safety message to our partners – our contractors. We have an exclusive program of contractor safety management, which is a six-step process that emphasises continual monitoring of the safe execution of the contractual work carried out by our business partners. It involves monitoring work that includes providing them with initial safety training, daily tool box talks, a work permit system, and an independent assessment of their tools and tackles, along with regular audits. In addition, routine Contractor Field Safety Audits (CFSA) are also conducted by trained executives in existing contractor's field to improve their safety standards at par with our standards.

We encourage our contractors to report near misses. Empowering them further, we give them the liberty to say "no" to any unsafe act/condition. A periodic evaluation of business partners through the monthly tracking of their prequalification score and safety improvement plan is done using a transparent and structured process. We also reward and incentivise our contractors based on their safety performance during the contract execution period. While the corporate CSM sub-committee provides strategic guidelines/ directions on improving contractor safety and new initiatives (viz. safety passport for all employees, drivers passport, etc.); the zonal sub-committee (line managers) drives the ongoing process through unit implementation committees. Overall, this CSM process helps in strengthening our partnership with our business partners for working towards "target zero harm".

Contractor Safety Management

Safety
Beyond Boundaries

We have also extended our responsibility to our communities, and engage with them regularly to impart knowledge on safety. Throughout the year, we took every opportunity to engage with our external stakeholders and provide them with the necessary information for leading a safe life. Through various programs we reached to 7,900 people that include:

- **Road Safety and Defensive Driving training:** Organised in collaboration with Rajasthan Sadak Suraksha Society, Udaipur, this program benefitted around 400 to 500 cadets from Udaipur who were informed about the basics of road safety and defensive driving
- **CPR & First Aid Training:** Organised for 37 Anganwadis coordinators at Sevamandir, these sessions were created awareness ondealing with the common emergencies
- **Road Safety Rally:** Conducted along with 50 Yashad Sumedha Schlorship students, the rally from Chetak circle to Yashad Bhawan, Head Office, created awareness on road safety
- **Training on Safe Use of LPG:** Provided to approximately 40 ladies of SHG of nearby villages
- **Road Safety Awareness Training:** Imparted to the students of Zinc School & teachers
- **Fire Prevention Training:** Conducted training for the school students of villages around our operations to prevent fire
- **Safety Orientation Program:** Conducted the program for partner's representatives including all members & field workers of BISLD NGO (Agriculture & Livestock Development Program); field staff of Manjari Foundation (Women empowerment project) working at RDC location and CSR field coordinator of RDC location which was majorly focusing on Vehicle & Driving Safety. Visit to the Safety Park was also in the agenda of this program.

CASE STUDY
Community Safety: Our Priority

Quick response is our forte when it comes to matters pertaining to the communities in which we operate. One such example is an event that took place on **January 23, 2017, when a major fire occured in a chemical factory, M/s. Deepa Chemicals & Scientific House,** located in Sukher industrial area, Udaipur. This major offsite emergency was reported to the Hindustan Zinc Debari plant. The firefighting team promptly acquired the details of stored material and its MSDS to decide the kind of fire extinguishing material to be used. There was a huge stock of inflammable substances stored in the factory. Explosions at regular intervals inside the factory were resulting into spread of fire from one storage area to another. The team used foam extinguishers and with persistent efforts it doused the fire completely.

The prompt steps taken by our Hindustan Zinc team successfully arrested the fire.

It was yet another occasion in which we were successful in demonstrating our responsibility to our community.

> At Rampura Agucha, we have recently conducted a quality risk assessment study by Industrial Hygiene Services, Vadodara.

Safety
as well as Health

We at Hindustan Zinc believe in providing a vibrant and supportive work environment for our employees. The health of our employees is a concern which receives high priority in our company. Health-related risks being kept to a minimum is very important for the growth of the company; accordingly, we have various processes in place to manage and monitor the health of our employees.

Health Management

Keeping a healthy mind and fit body is one the best ways to enhance the growth of human capital, which in turn triggers the growth of the organisation as a whole. Hindustan Zinc emphasises a holistic approach towards health management, including health centersand health check-ups, workplace hygiene, protective equipment, and training and awareness on health. Our health services begin with a pre-employment medical check-up, followed by periodic medical check-ups and other on-site tests to keep track of employees' occupational exposure limits. Other specific examinations, including the routine health parameters, are also conducted. During the reporting period, 17,678 employees, including contract employees, underwent the initial and periodic medical examinations. None of our permanent and contract employees were identified to be at the risk of incidence of occupational diseases during the reporting year.

In our attempt to maintain workplace hygiene at all our locations, we have undertaken several awareness programs and are abiding by our WASH pledge for safe access to water, sanitisation, and hygiene. All our employees, both permanent and contract, are provided with personal protective equipment, and are expected to use them at all times. We also have dedicated occupational health centers established at all major mine and smelter locations. These centers are well-equipped with the latest technology and are supported by occupational health experts who offer guidance and support to prevent and treat health problems.

At Rampura Agucha, we have recently conducted a quality risk assessment study by Industrial Hygiene Services, Vadodara, for setting occupation exposure limits and tracing high occupational health risk areas on location. As a result, the frequency of special tests like audiometry and spirometry has been made annual, from the erstwhile once every three years, and from five years for monitoring of hearing and lung functions of workers in high noise and high dust areas. This year we have initiated monthly tracking of community health management as well.

Health Management at Hindustan Zinc

Driving 'Rajasthan Road Safety Awareness Mission Program'

Being well aware of the increased death toll statistics in road accidents, we realise the need to improve safety on the roads. As a responsible corporate and for a social cause, we have entered into an MoU with Rajasthan Parivahan Nirikshak Sangh (RPNS) – a body affiliated with the All India Federation of Motor Vehicles Department Technical Executive Officers Association, Bangalore. Accordingly, we have provided a well-equipped safety mobile van to the All India Federation of Motor Vehicles for a year under the 'Rajasthan Road Safety Awareness Mission Program'. **This mission is the first in Rajasthan to spread road safety education and awareness among the general public.**

The road safety van used to spread road safety awareness in schools, colleges, corporates, and rural areas has succeeded in **reducing road accidents by 40%** in Rajsamand **within** a period of **three years.** The mission, which has received appreciation from all corners, is a novel endeavour to ensure that every individual drives back home safely.

Before the Mission	After the Mission
Lack of Awareness	Awareness creation amongst 1.56 lakh people through 1472 education programmes
No Helmet/Seat belt	Enhanced compliance and reduction of 40% accidents in 3 years
Poor Road Condition	Road conditions improved

CASE STUDY

Being trained to be the First to Aid

Health and safety issues are vital to our operations. Our office employees are trained not only to protect their own health and safety, but also to help others while on assignment; for example, by performing first aid and providing emergency help. Health and safety aspects can vary depending on the assignment, and customer sites are therefore assessed from a health and safety perspective. The employees receive training, instructions, and equipment in line with the assignment.

A two-day certified training session on first aid was conducted by Red Cross Society for our head office employees. Practical demonstrations of CPR, first aid for fractures and cuts, different types of bandages and their uses, etc. were also given.

ENHANCING OUR GREEN FOOTPRINT

As we grow as a business entity, we realise that the secret to this growth lies in the sustainable path that we have taken. Moving forward, we acknowledge that our evolution as a leader amongst the corporates will entail steering development on the environmental front to enhance our green footprint.

Our trials for this encompass our efforts to care for nature's resources, and reduce our negative impacts while thinking ahead to the likely consequences on the environment, due to our operations. Transforming these novel thoughts into reality will eventually help us grow our green footprint.

ENVIRONMENT
DASHBOARD

VISION
2020

To be an industry leader in using green technologies for reducing our environmental footprint; this we envisage to achieve by innovating processes for water stewardship; introducing captive usage of energy from renewable sources; and adopting new methods for waste reduction

Material Aspect
Environment Management

Aspect Boundaries

Mining and smelting operations are hazardous to the environment by nature. Unless the associated risks are managed properly, it can have a negative impact on the communities surrounding our operations.

Performance 2016-17

- Achieved water savings of **0.18 million cubic metres**
- Total energy consumption recorded at **41.98 million GJ**, equating to a total carbon emission of **4.4 million tCO_2e**
- Phase-wise implementation of BMP- recommended projects commenced across all sites
- Commissioning of **16 MW** captive solar power plant
- Significant monetary savings incurred due to **waste-to-resource** conversions

ENVIRONMENTAL PROTECTION EXPENDITURES AND INVESTMENTS

> Our environmental policies help us define our approach towards meeting our commitments.

Strategy and Approach

The growth of an organisation depends on a holistic approach, and environment management plays a vital role in this. In the current scenario, when businesses are increasingly moving towards sustainable growth, we recognise that enhancing our green footprint is the only path to success. As we make this responsible choice, we progress with a well-defined strategy, laid on the foundation of three pillars: responsibility towards our resources, sensitivity towards our environmental footprint, and zero harm to the environment.

Our environmental policies help us define our approach towards meeting our commitments. We begin by evaluating the risks posed towards the environment due to our activities at every stage of the operational lifecycle. To grow our green footprint, we proceed with mitigation measures by setting measurable targets, developing action plans, and achieving the milestones laid down in our sustainability roadmap.

Our goals for the environment are well defined, with targets set for Vision 2020 that emphasise the judicious use of natural resources like water and energy, exploring alternate uses of various wastes, reducing emissions, and achieving a net positive impact on biodiversity. In this journey of ours, we intend to partner with communities, governments, and other organisations to expedite action and increase knowledge sharing, thus continuously enhancing our green footprint.

Environmental
Governance

We are progressing on the environmental front with a well-planned approach wherein, for all our existing projects, we have established Environmental Management Systems (EMS). Compliance with the EMS is monitored internally and evaluated at regular intervals. To ensure the effectiveness of the EMS and compliance with environmental norms and standards, all our major units are certified for ISO 14001:2004. We advance with our environmental programs by executing the formulated environment management plans (EMP), guided by our environmental policies – the Energy and Climate Change Management Policy, Water Policy, and Biodiversity Policy. We also regularly keep track of all our reported environmental incidents and conduct a stringent investigation into their causes. Further, compliance with the Vedanta Sustainability Framework is ensured through an internal audit process called the Vedanta Sustainability Assurance Programme (VSAP), which also assures compliance with the EMS.

For all our new projects, we begin with Environment and Social Impact Assessments (ESIAs). This brings to the fore our mitigation plan, developed based on the analysis of the potential impacts of our projects on the surrounding environment and associated communities.

We have an exclusive HSE team which is responsible for executing the EMPs. This highly committed team also drives various awareness activities and campaigns, and publishes posters and publications to spread knowledge on the concepts of environmental protection to reduce our green footprint and contribute to our overall growth.

During the reporting year 2016-17, there were no significant monetary or non-monetary fines for non-compliance with environmental laws and regulations. Similarly, there were no environmental incidents of category 3, 4 or 5 and environmental grievances during the reporting period.

Galvanzing
Green Growth

In our attempt to further expand our green footprint, we assess and improve the performance of the following five verticals: water, energy and climate change, waste, biodiversity, and emissions. In this section of the report, we present a glimpse of all our endeavours undertaken for offsetting our adverse effects on the environment and galvanizing green growth.

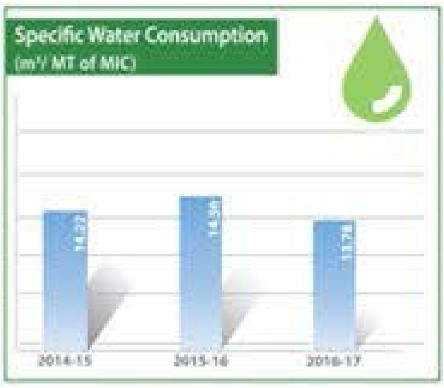
> "For all our new projects, we begin with Environment and Social Impact Assessments (ESIAs)."

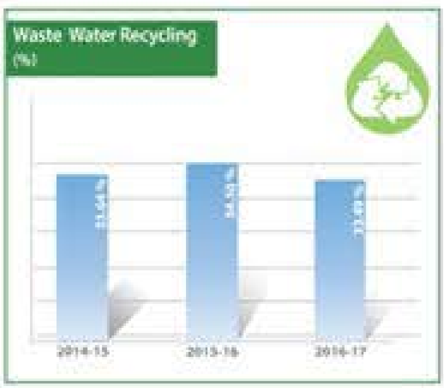
Dariba Smelting Complex at the Forefront of Water Stewardship

- The Confederation of Indian Industry (CII) recognised the Dariba smelter complex as a "Noteworthy Water Efficient Unit - Within the Fence" category in "National Award for Excellence in Water Management 2016"
- The Indian Chamber of Commerce (ICC) awarded the second prize in the 'Water Stewardship' category to the Dariba smelter complex (DSC) in the Corporate Governance & Sustainability Vision Awards 2017

G4-DMA G4-EN34 G4-EN29

> As we continue to maintain zero-discharge operations, we recycle 33.49% of the total volume of water used in our operations.





Surviving the Water Scarcity

Operating in the water-scarce zone of Rajasthan highlights how valuable a resource is for us. Considering the significant water requirements at our smelters, we have developed strategies to reduce our water consumption. While managing this precious resource, we also consider that it needs to be saved for future use as well. Hence, guided by our exclusive Water Management Policy, we take steps for water conservation at the source, zero discharge from operations, efficient water usage by the community, rainwater harvesting, and water accounting.

Our attempts on this front begin by keeping a proper accounting of the water that is used at our mines and smelters; efforts are continuously made to decrease this use at source. To further reduce our fresh water requirements, we maximise the possibilities of water recovery and recycle them at our operations. To add to this, we have also intensified efforts to treat the wastewater generated by our operations and reuse the treated water at our units. At present, we are also trying to capture and harness rainwater as an alternative source of water. All our initiatives for water conservation and water resource management have been elaborated on as exemplary case studies.

During FY 2016-17, the specific water consumption was 13.78 cubicmetre/MT of MIC (Metal in Concentrate), which is has seen a reduction of 5% from the last year. During the reporting year we recorded a withdrawal of 24.86 million m^3 of water from various sources, such as ground water, surface water, municipal water supplies, other water utilities, wastewater from other organisations, etc. Our efforts have resulted in a significant reduction in fresh water consumption and has reduced our dependency on natural resources. As we continue to maintain zero-discharge operations, we recycle 33.49% of the total volume of water used in our operations.

Continuing with our efforts on sourcing sustainable water, our 20 Million litres per day (MLD) Sewage Treatment Plant (STP) at Udaipur catered to 30% of wastewater as source of fresh supply. We are planning for setting up another 40 MLD capacity STP in Udaipur, by partnering with Udaipur Smart City Limited. The construction of 40 MLD capacity STPs will be based on Sequencing Batch Reactor (SBR) process. Thus, the STP ratifies our commitment towards conservation of water, care for environment and ensuring zero discharge to the beautiful lakes of Udaipur and also maintaining these lakes.

CASE STUDY
Water Innovations Paving the Way to Sustainable Growth

Being well aware of the global water scarcity scenario, we understand the need for preserving this valuable resource. Our focused approach to preventing a single drop of water from going to waste has taken us a long way when it comes to creating alternatives for existing processes. Here, we try to showcase several water innovations that we have developed in our operations, leading to huge savings in money and water.

Innovations Resulting in Water Saving

- **Dariba Smelting Complex (Leaching & Purification Plant)**

  About 360 m^3 / day of water was saved by introducing a new purification condensate for the water flowing from the purification plant after cooling below 50 degrees Centigrade for use in the plant. The project created savings of **INR 5,40,000 per month.**

- **Rampura Agucha Mill**

  Approximately **3.10 lakh m^3 of fresh water was saved** by blending tailings dam water with fresh water in a suitable ratio, without comprising the process / capital equipment requirements.

- **Captive Power Plant at Chanderiya Lead-Zinc Smelter**

  The condensate from the boiler circuit of Hydro I at Chanderiya Smelter was recovered utilising in-house resources. The condensing system connected before final vent to convert the excess steam in to condensate water and recycled the same in to the boiler circuit. This leads to **water recovery of more than 200 m^3/day** from vent steam.

CASE STUDY
Progressing Towards Water Positivity

Operating in Rajasthan, a state that faces acute water shortage throughout the year, we value water as the most precious resource. Being a responsible corporate, one of our major goals is to make this essential resource available to our local community also. In our pursuit to reduce our dependency on fresh water sources, and to have a positive water footprint, we invested in creating water harvesting structures to tap more rainwater. Our special initiatives, conducted at the township hospital of Chanderiya Lead Zinc smelter and the nearby villages of Sindesar Khurd mines, have **captured a total of 2.8 lakh CUM of rainwater**, and marks our achievement for the reporting year.

Major Interventions during 2016-17	Location	Potential Impact	Investment (INR)
Ground water recharge structure of 1,200 m^2 built-up area	Township Hospital of Chanderiya Lead Zinc Smelter	Harvesting 900 CUM of rainwater	0.11 crores
Deepening of nine water ponds	Nearby villages of Sindesar Khurd Mine	Increased total capacity of 2,77,575 CUM	2.27 crores

Combatting
Climate Change

Preserving our energy resources is the need of the hour. The global revolution to tackle the pertinent issue of climate change calls for accountability for the energy we consume. This further implies a targeted and planned approach to reduce resource consumption. Being a responsible corporate in the mining sector, energy use is a major source of GHG emissions at our operations, incurring energy costs which are a significant portion of our operational expenditure. Thus, we have volunteered to take action on climate change by reducing our GHG emissions through improved energy efficiency and investments in alternative energy generation.

We have an exclusive Energy and Climate Change Management Policy that helps us achieve a balanced energy-carbon cycle at Hindustan Zinc. We periodically monitor our progress in energy and climate change management, and adopt best practices to reduce our energy intensity. In sync with our Vision 2020, we aim to improve our energy efficiency, reduce our GHG emissions, and intensify our efforts for the captive use of energy from renewable resources (wind power, power from waste heat, and solar power). During the reporting period, our approach for a lean energy and carbon footprint included the use of energy-efficient equipment and usage of captive solar power generated at our operations.

"We periodically monitor our progress in energy and climate change management, and adopt best practices to reduce our energy intensity."

- RAM Mill Stream-3 wins **National Energy Conservation Award – 2016** for the successful implementation of various power saving projects, thus reducing the specific energy consumption by 4.81KWH/MT of ore treatment.
- DSCCPP unit honoured with the **"IPPAI POWER Awards 2016"** under the category "Best innovation in the Power Sector".

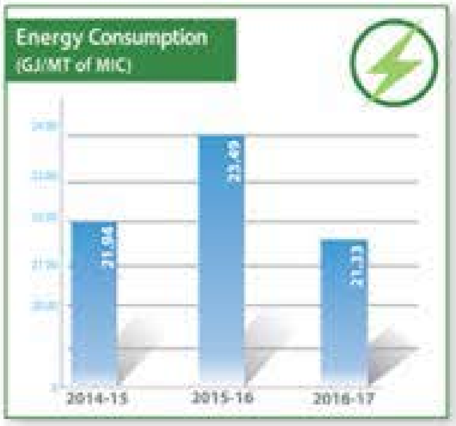
Energy Efficiency

The primary energy resources at our operations include coke, diesel, petrol, LPG, coal, propane, and grid power, among others. We focus on reducing the usage of these resources through various in-process innovations and the adoption of best practices like machine productivity and improving throughput to reduce specific energy consumption. A cautious approach for energy usage can lead to a significant reduction in our GHG emissions. We assess our performance by achieving the set targets through new energy saving projects and improving our disclosure standards.

We continuously monitor our GHG emission intensity in order to reduce our carbon footprint. We have been voluntarily participating in the Carbon Disclosure Project program since 2011. We are currently computing our GHG inventory in line with the Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard, evaluated by a third party as per the ISAE 3410 standard.

During the reporting period, our direct and indirect energy consumption was 41.98 million GJ. This equated to a total carbon emission of 4.4 million tCO_2e, covering both direct and indirect emissions. We have set a target to reduce our carbon footprint by 5%, assuming 2016 as a baseline. Our 16 MW solar power projects are likely to reduce our carbon footprint by 30,000 tCO_2e emission per annum.

The Green Building Certification of Yashad Bhawan further confirms our commitment to this global cause. The building has several features that make it efficient for energy usage; please see the details in the case study: 'Yashad Bhawan Goes Green'.



"We continuously monitor our GHG emission intensity to reduce our carbon footprint."

Champions of Energy Savings

- ~300 GJ/Month saved @ Sindesar Khurd mine (by increase in throughput of grinding circuit from 160 to 172 TPH)
- 8 GJ/Month saved @ Sindesar Khurd mine (by replacement of 400 70 W HPSV lighting fixtures with 30 W LED lighting)
- 39 GJ/Month saved @ Sindesar Khurd mine (by replacement of 90 KW pump/ motor set by 55 KW pump/ motor)
- 32 GJ/Month saved @Sindesar Khurd mine (by replacement of 90 KW pump/ motor set by 30 KW pump/ motor set)
- 83 GJ/Month saved @ Sindesar Khurd mine (by replacement of 90 KW pump/ motor set by 55 KW pump/motor)
- 100 GJ/Month saved @ Rampura Agucha mine (by reducing dual pumps running of lead cleaner)
- 14 GJ/Month saved @ Rampura Agucha mine (by installing LED lights in mill, mining, and surface street light fittings)

CASE STUDY
Yashad Bhawan Goes Green

In our unceasing pursuit of sustainable growth, we have ventured into transforming our own **Yashad (Zinc) Bhawan to earn the status of a green building.** With meticulous efforts and the use of state-of-the-art technologies, 'Yashad Bhawan', Hindustan Zinc's Head Office at Udaipur, has achieved the honour of becoming Rajasthan's first platinum-rated green building **in the existing building category,** awarded by the CII-Indian Green Building Council (IGBC). YashadBhawan is now one of those 14 CII-IGBC buildings in India that has a platinum rating.

The building was evaluated by a rigorous screening for green features under the categories of site and facility management, water efficiency, energy efficiency, and health and comfort. Some of the key green features include an integrated fresh air ventilation system, active cooling system, and air handling units (AHU) with an integrated indoor environmental quality (IEQ) monitoring system to improve indoor air quality and monitoring, **online energy monitoring system, installation of water meters and creation of lush green belt across the corporate office and residential colony.** Further, rooftop solar panels of 100kWp with a capacity to generate 1,62,000 unitsevery year were installed, offsetting 15% of the total energy requirement.

The project has achieved energy savings of 27% and water use reduction of 37%. With this, Yashad Bhawan opensa novel gateway for building sustainable architecture in Rajasthan, which is known for its heritage of magnificent monuments.

Alternative
Energy

Investing in alternative sources of energy has been one of our major measures when it comes to the reduction of GHG emissions. We continue with our green energy efforts by harnessing wind power, energy from waste heat recovery power plants, and solar power.

We have 274 MW wind farms in Gujarat, Karnataka, Rajasthan, Maharashtra, and Tamil Nadu, which are registered under the Clean Development Mechanism (CDM) Program by the United Nations Framework Convention on Climate Change (UNFCCC). We also generate about 34.4 MW of power through waste heat recovery from roasters and a Steam Turbo Generator (STG). From this, a 9.4 MW WHRB project is registered under the CDM Program, along with 21TPH LCV boilers for steam generation. Our 10 UNFCCC registered projects reduce our carbon footprint by 5,83,685 tonnes of CO_2 emission per annum, while our unregistered projects reduce our carbon footprint by 1,16,992 tonnes of CO_2 emission per annum. We continue investing in solar energy projects and have commissioned two solar power projects – one at the Dariba mine (4 MW) and the other at Debari Zinc smelter (12 MW) for captive use. We have also installed two solar rooftop projects with a capacity of 200 kW and one solar water heater with a capacity of 1,000 LPD. Wherever feasible, we have introduced solar and energy-efficient lights as well.

"We have commissioned two solar power projects – one at the Dariba mine (4 MW) and the other at Debari Zinc smelter (12 MW) for captive use."

G4-EN19 G4-EN6

Powering Operations with Nature's Resources

The captive usage of solar energy is one of our core focus areas at Hindustan Zinc. Solar rooftop projects with a capacity of 200 KW have already been installed at each of our head offices, including the Udaipur and Chanderiyalead zinc smelter. This development took place in January 2016. This is only the beginning for us, as we plan to expand the solar energy interventions with an investment to the tune of INR 630 Crores in different solar energy projects. The total capacity of these projects is pegged at 115 MW. Hindustan Zinc already holds an energy portfolio of 474 MW in thermal power and 274 MW in wind energy.

We have commissioned **16 MW solar power projects during this reporting year comprising of a 12 MW project at Debari Zinc Smelter.** Additionally, a solar project with a capacity of **4 MW** has also been commissioned **at Rajpura Dariba mine** for captive consumption. Whilst the 12 MW project at Debari Zinc Smelters happens to be the largest solar energy project in the Udaipur district; the 4 MW project at Rajpura Dariba mine is the first of its kind in the Rajasmand district of Rajasthan.

In the next phase, we have planned to commission **a 100 MW solar power plant by March 2018,** with a planned investment of INR 500 Crores. These efforts are geared to help Hindustan Zinc establish a firm footing in the field of solar energy generation for energy efficiency.

G4-EN6 G4-EN19

Responsible
Waste Management

The generation of waste is inevitable in any mining process. The only way to deal with this scenario is to have a well-defined waste route to facilitate the efficient handling of wastes. For proper tracking, the process is to be monitored at each step. Waste efficiency at Hindustan Zinc is achieved by two means – minimising the quantum of waste generated and maximising the recycling and reuse of wastes.

Our Resource Use and Waste Management Technical Standard helps in guiding our efforts to mitigate the environmental impacts of our products and processes. We ensure that we store our waste in all the earmarked places, from where they are disposed of in a timely manner with approved and registered recyclers, as per the Hazardous Waste Regulations. The monitoring of this activity is conducted at regular intervals for each of the units; we refer to the company's comprehensive guidelines on waste management, which covers hazardous as well as non-hazardous wastes, to do this. We take measures to ensure waste minimisation, segregation at source, and recycling across all our business units.

Besides this, we have extended our focus to capitalise on waste and identify them as raw materials for other companies. This has created the potential for expanding our spheres of influence by opening new streams in our value chain.

Reducing Waste Generation

During FY 2016-17, we have generated 1.04 million MT of waste, covering both hazardous and non-hazardous waste. During the past three years, we have observed a nearly constant trend in our waste generation pattern.

Our major focus has been to manage the industrial wastes (hazardous and non-hazardous) that we generate at our operations. Jarosite is one such hazardous substance, produced during the zinc refining process. This waste material, generated in bulk amounts, poses a severe problem. To mitigate this, we are working towards introducing an advanced technology – Fumer technology– which eliminates the formation of Jarosite altogether. The formal order has been processed by China Non Ferrous Metal Industry's Foreign Engineering & Construction Co. Ltd. (NFC) and the first Fumer is likely to be commissioned by mid-2018 at Chanderiya, with a cost of INR 570 crores. In the future, the company plans to replicate the technology at its other smelting complexes, including the Hydro-I at Chanderiya and Dariba smelting complex. Using this technology would yield a 97.5% recovery of zinc, along with lead and silver, which cannot be obtained through the Jarosite process.

"We have extended our focus to capitalise on waste and identify them as raw materials for other companies."

Advantages of Fumer Technology

- Conversion of hazardous waste (jarosite) to a non-hazardous saleable product (slag)
- Sustainable solution for eliminating recurring land requirement for jarofix storage
- Recovery of lead and silver from the hydro-circuit against no recovery as on date
- Enhanced zinc recovery
- Conservation of mineral resources like metals, lime, and cement

Chanderiya smelting complex proves to be an industry leader in gainful waste utilisationby receiving the 'Fly Ash Utilisation award- 2016', conferred by the Mission Energy Foundation.

Transforming Waste into a Resource

In a bid to continue with our goal of adding significant economic value to all our environmental verticals, we are constantly analysing our processes and implementing the necessary changes. Two major wastes generated at our smelting and power units, fly ash and ISF slag, are sourced to the cement industry, where they are used as a replacement for virgin material. Thus, while reducing our waste inventory, these materials are also facilitating the conservation of resources in the cement industry.

We are constantly enhancing our technical capabilities for better recoveries of metal products and by-products from the wastes, such as tailings, ISF slag, Jarosite, etc. Trials have been conducted with tailings and the study suggests that 100 MT of tailings is likely to generate 35% concentrate of the zinc-lead grade; a large scale trial is being planned to validate the process. Trials with ISF slag showed encouraging results, but the project is not economically viable. We are also exploring the possibilities of metal recovery from residues like PF cake, antimony dust, and copper cement. Hence, we have progressed with installing an ancillary plant at our Dariba smelting complex.

Alternative uses of jarosite are also being studied; advanced studies are being conducted by IIT Roorkee to establish replacement of cement with Jarosite in mortar and concrete. We are also looking at introducing jarosite in the cement industries. We are in discussion with the cement industries regarding trials, after seeking approvals from the RPCB. Simultaneously, we have also initiated trials for vermi-remediation of jarosite and ETP sludge to convert it into a suitable substitute for fertiliser. The NABL report has confirmed that the outcome of the process can be used as manure.

Another innovation is the replacement of cement with Jarosite/ flyash/ ISF slag in the paste fill plant at Sindesar Khurd mine. Trials with fly ash have been successful; trials with the other two wastes are being continued. M/s CIMFR has been awarded the work to conduct these trials and establish facts.

"We are constantly enhancing our technical capabilities for better recoveries of metal products and by-products from the wastes, such as tailings, ISF slag, Jarosite"

Waste Generation Trend
(Million MT)

"Our adoption of the '4R' waste strategy - Reduce, Recycle, Reuse and Reclaim and 'eco-friendly' disposal of process residues has been fairly effective."

CASE STUDY
Tapping Wealth from Waste

In the wake of the green revolution, we have ventured into value creation from waste. Since we don't want potentially valuable materials to end up going to the landfill or into an incinerator, we have ventured into extracting metals from the process residues of the zinc hydro smelters and lead pyro smelters.

We have begun the initial steps for setting up a processing unit (ancillary unit) for the recovery of valuable metals from waste at the Rajpura Dariba complex, along with one major recycler of lead and zinc residue. The unit has the capacity to **treat 9,000 MT of zinc process residue to recover zinc (1,900 MT) and copper (500 MT). By-products like Sb concentrate, having precious metals, are treated to recover 6 MT of silver.**

Apart from metal recovery, there are other **by-products** that are recovered, including **$CuSO_4$ solution used at mines as a substitute for imported $CuSO_4$ crystal to reduce spent base and potassium antimony tartrate** (PAT) from antimony used at all zinc hydro smelters.

Recovery trials for metals and other valuable by-products are in progress and soon, we will see our production targets aided with the positive outcome of these units.

Maintaining
Air Quality

"Maintaining the ambient air quality around our operations is a very important aspect of our EMS, which emphasises the reduction of emissions (from point sources, mobile sources, and other fugitive emissions."

Maintaining the air quality is something that we need to take care of, because air is a primary life-giving requirement for human beings and all the other species that populate the planet. In order to ensure that we are breathing high quality air, we need to take care of the emissions around us so that the air is not overly contaminated. This is especially relevant for the mining industry because the various processes in the mining lifecycle have the potential to damage many natural resources, including the air. Hence, we strive to maintain the ambient air quality around our operations. This is also a very important aspect of our EMS, which emphasises the reduction of emissions (from point sources, mobile sources, and other fugitive emissions).

Regular environmental monitoring is a part of our best practices; we record the stack emission parameters, including particulate matter (PM), SOx, and NOx. During the reporting year, the emissions from all these sources was recorded as 0.027 million MT. To control these emissions, we are working towards improving and modifying our operational processes and enhancing efforts through awareness drives. As a best practice management, we have installed an online effluent and emission monitoring system that is connected directly to the servers of the pollution control board.

Dust mitigation is the other focus area where we attempt maintaining the ambient air quality. To avoid emissions during transportation, we ensure that the transporting trucks are covered with tarpaulin. Dust settled on the roads inside the plant is removed by daily sweeping using mechanical sweepers. If the problem still persists, we try to suppress the dust by sprinkling water. Additionally, we make use of mechanised sprinklers installed at ore loading points and throughout the ore transportation channel, from the mines to the mills, for suppressing dust. We are also using chemical dust suppressants along with the water spray on haul roads to reduce the dust generation and water consumption.

Dust Suppresion

Rejuvenating
Biodiversity

We cannot ignore biodiversity protection in our bid to enhance our green footprint. Hence, we emphasise the rejuvenation of biodiversity to mark the growth of our surrounding environments. Our endeavours in achieving these objectives are backed by our tree-planting efforts, biodiversity conservation projects, and programs to create awareness on the need for biodiversity protection.

Further with an exclusive policy on biodiversity, we concentrate on conserving species of high biodiversity value and mitigating risks in high priority conservation areas in the vicinity of our operations. 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 hotspots. Using the Integrated Biodiversity Assessment Tool (IBAT) mapping tool, we categorised our operations as high/ medium/ low risk. The study confirmed that most of our operations did not pose any threat to their associated biodiversity and hence, was classified in the low risk category. Based on this initial risk screening, we have developed exclusive BMPs for all our sites.

Further, we plan to streamline sustainable businesses with components of biodiversity and so, we are also a signatory of the IBBI (Indian Biodiversity Business Initiative), which is supported by the CII and German Cooperation (GIZ). 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 at one of our major operating sites (Rampura Agucha mine).

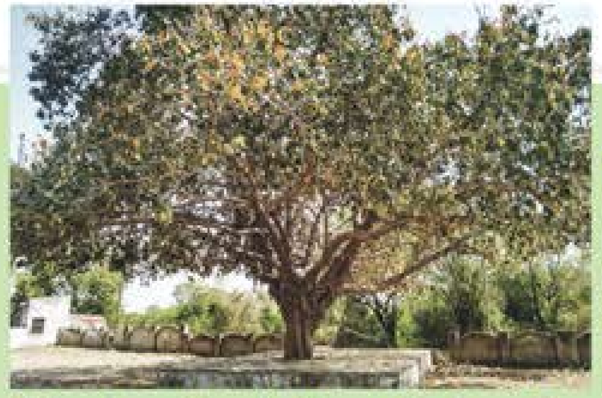
Growing the Green Peripheries

Greenery is an important aspect of where and how we operate; in our attempt to create natural reserves, we have implemented extensive green belt development projects. 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 have planted more than 1.5 million plants around our operations. Mass planting was carried out in a forest area of 75 Ha (23,500 plants) through Van Suraksha Evam Prabandh Samiti. 800 saplings, with tree guards, were planted along the roadside of the Tidi Zawar mines, and 10,000 saplings were distributed for planting in nearby villages.

> "We have planted more than 1.5 million plants around our operations"

Attempts have 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, and the Rampura Agucha and Kayad mines. The plants that we grow in our nurseries are given to communities in the local areas for further planting. Till date, 10,000 saplings of various endemic and medicinal species have been distributed.

CASE STUDY
Tree Inventorisation



Trees play a vital role in urban communities, providing shade, blocking the wind, absorbing pollutants, reducing erosion, screening noise, retaining storm water, and sequestering carbon dioxide. They also provide economic benefits by reducing cooling and heating costs, and raising property values. The ability to locate and properly manage tree resources is a complex process that can be made easier by using an urban tree inventory.

A tree inventory is the gathering of accurate information on the health and diversity of the species of trees. There are several types of tree inventories that can be utilised for managing and maintaining the trees within a municipal boundary. One of the methods to conduct a tree inventory is a tree census; this is the method we used at Hindustan Zinc. Various details such as species name, girth, height (approx.), health condition, etc. were collected in order to assess the quality of the existing arboreal cover.

The boundary of the tree inventory project included three locations of Hindustan Zinc Limited, i.e., Head Office at Udaipur, Rampura Agucha Mines and Chanderiya Lead Zinc Smelter. All relevant information as per the tree census was collected and the location of the trees was established through advanced GPS techniques. The data obtained from the tree inventory was then analysed using various statistical methods to understand the distribution pattern, diversity of trees, and carbon dioxide sequestered by the existing trees.

This GPS-based tree inventory is useful to monitor the arboreal cover and, in future, information from this inventory can be used in managing the green infrastructure of HZL. Further, the study also suggestedthat the enumerated 2,94,528 trees could contribute to32,83,356 Kg of carbon sequestration.

CASE STUDY
"Plant a Tree for Life!" – Our Slogan for a Progressive Community

In our conviction to build an environmentally-friendly community, our environment team at Rampura Agucha mine organised a two-three day awareness drive on biodiversity conservation in four nearby villages, i.e. Kotri, Baranthia, Rampura, and Jaisinghpura, from August 21-30, 2016.

The program, titled 'Awareness on Plantation, Water Conservation, and Biodiversity' and organised with the help of a local agency, had unique events that had a significant impact on all the participants. The program began with an introductory note on tree planting, water conservation, and biodiversity, followed by a distribution of pamphlets which were read by school children. The salient features of the program included:

Gram Sangosthi: A discussion with villagers and children on the uses and importance of a variety of saplings.

Vriksh Mitras: A unique event wherein each child was gifted with a sapling to be planted and was given the responsibility of taking care of it by being their 'Vriksh Mitra'.

Plant Distribution: Approximately 1,000 saplings of fruit and shade-giving trees were distributed.

Apana Gaon Samiti: The formation of a body that would be responsible for tree planting and protecting the biodiversity in that village.

The program was highly appreciated by the local people and it was definitely successful in creating a bond between the villagers and their surrounding environment. With such a positive response, we plan to replicate this model in other villages and continue the thread of creating awareness on the need for biodiversity and environmental protection.

UNLEASHING THE HUMAN POTENTIAL

Our growth process is one that galvanizes our workforce into action. With the help of engagement, motivation, and training and development-based activities, as well as an eye on their general welfare and wellbeing, we endeavour to unleash the potential within our employees – our main stakeholders. We recognise the fact that unless we give them the opportunities to nurture their own talent, we will not be able to optimise our processes to make a difference within our organisation or in the market. We therefore, see our growth arising from theirs.

HR
DASHBOARD

VISION
2020

To build a highly empowered and engaged workforce by delivering innovative HR programs and practices that foster a high performance, talent-based environment aligned with strategic business goals

Material Aspect
Employee Engagement And Well being

Aspect Boundaries

This aspect poses relevance within the boundaries of the company

Performance 2016-17

- 33 Technical STARS and 16 STARS of Business identified
- Females comprised **21.5%** of total new hires in reporting year
- Received **Great Place to Work** certification

STRATEGY
and Approach

At Hindustan Zinc, we believe that human resource management plays a crucial role in achieving our strategic and transitional vision. Tuned to our HR Vision 2020, we aim bring out the talent within our workforce as we strive for productivity; this is where growth meets our goals and becomes the underlying value of our organisation. Accordingly, we look for the highest calibre of talent in each and every employee. The employment lifecycle is one that is driven by this process, even as we take each deserving employee up the ladder with succession planning and appropriate training to nurture leadership.

> "We aim bring out the talent within our workforce as we strive for productivity; this is where growth meets our goals and becomes the underlying value of our organisation."

HR Vision

To create and communicate the most admired employer brand, where every employee sees development and engagement in a high performance and talent - based environment, thus becoming our best brand ambassador

We emphasise two important HR strategies that drive growth and productivity at Hindustan Zinc; we focus on employee engagement for:

- Building an empowered workforce
- Creating an engaging work environment for our employees

Building
an Empowered Workforce

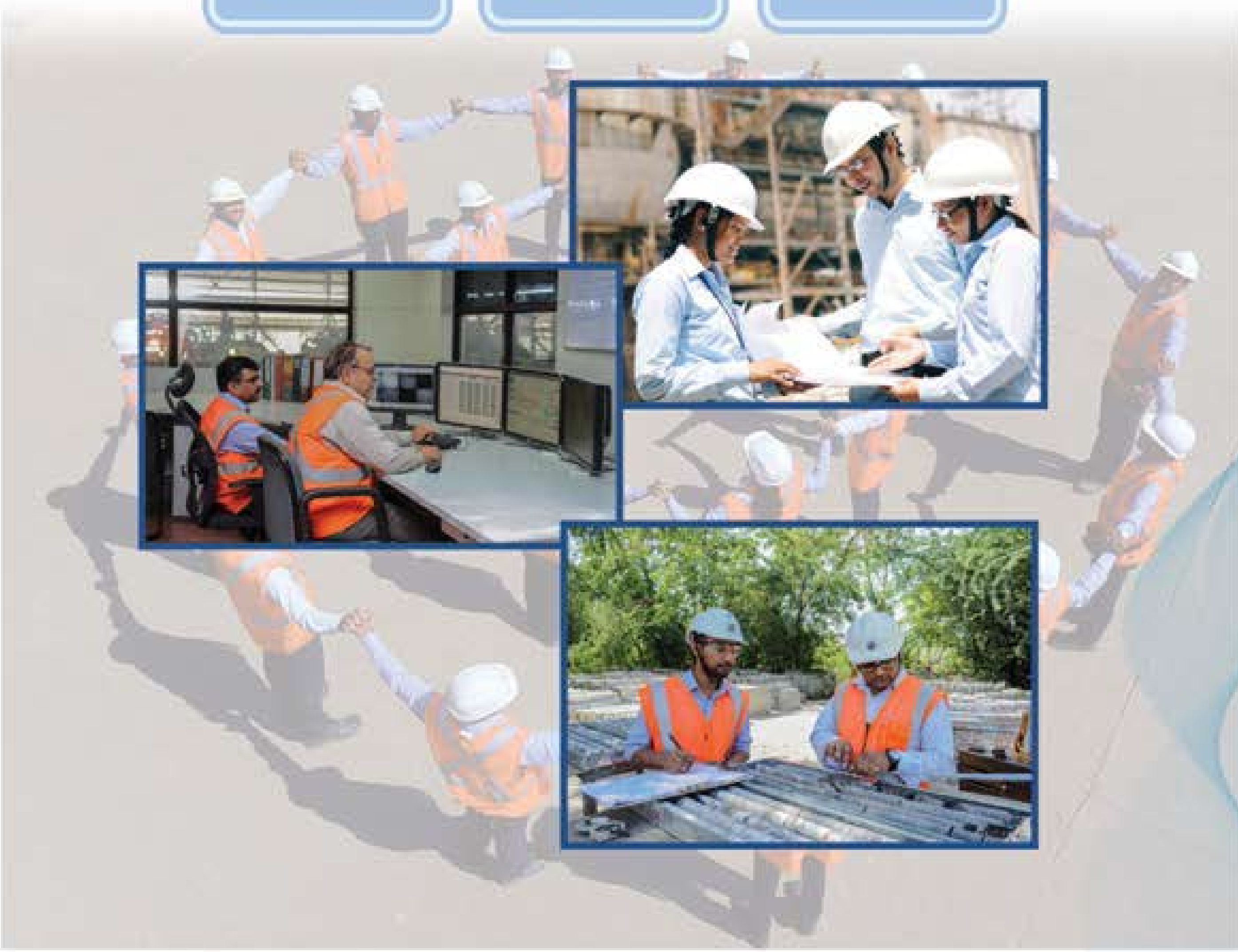
Our ideal for building an empowered workforce begins by creating a pool of diverse talent. We aim to build organisational capabilities at all levels, so that our employees are able to do justice to their respective roles. Focused on unleashing employee potential for growth and excellence, we have taken up several initiatives that span capacity-building and leadership development to encouraging diversity.

Hindustan Zinc bags the award for "Best Use of Technology in HR"In our digital HR journey, HZL has been conferred with the "HR Tech: Best Use of Technology in HR-2016" award by the World HRD Congress. Hindustan Zinc was recognised for the best utilisation of various technology platforms to simplify HR activities and strategically align HR with business.

"We aim to build organisational capabilities at all levels."

Approach to Building Empowered Workforce

- Capacity Building
- Leadership Development
- Workforce Diversity



> Internal training sessions in areas such as behavioural training, general management, technical programs, safety trainings, and leadership programs are the regular competence-building programs.

Capacity Building

Our employees are exposed to various types of training and capacity-building modules and sessions on an ongoing basis. During the reporting year, training worth 1,03,204 man-hours was imparted to our permanent workforce; our contract workforce benefited from 3,92,238 man-hours of training. Internal training sessions in areas such as behavioural training, general management, technical programs, safety trainings, and leadership programs are the regular competence-building programs that we encourage our employees to utilise. Besides these, they have the chance to attend external trainings (including site visits to international mines and smelters); to encourage them to do so, we provide them with the necessary financial support. Employees also have the opportunity to take a six-month sabbatical for a postgraduate diploma (PGD) certification course on safety. All our security personnel were trained on human rights aspects and code of conduct during the reporting year.

During the reporting year, we organised an exclusive program for the freshers, to engage with them and familiarise them with our work culture. The program was a great success and was much appreciated by the new inductees, who were able to put aside their apprehensions about the company right in the beginning. Details of the program can be found in the case study – 'Freshers' Engagement and Development Program: The Welcome Note'.

In the context of the current transition phase and the company's ambitious growth plan, we have set up a Hindustan Zinc Mining Academy, in collaboration with the 'Indian Institute of Skill Development' for developing underground mining skills. Through this initiative, we will be able to meet the future talent requirements of the company, while also improving the employability of the local youth through skill upgradation.

Our employees also acknowledge the ample scope to develop new skills and explore new opportunities through rigorous training sessions. Many of our employees prefer to nurture their talents by transitioning from their existing work domains; moving from non-HR to HR positions and vice-versa is encouraged to create a high calibre talent pool.

G4-HR7 G4-LA10 G4-DMA

CASE STUDY
The Welcome Note

With an objective of engaging with young engineers and providing them with a learning opportunity, a **robust 90-day induction program wasorganised in the reporting year for the diverse batch of 79 graduate engineer trainees(GET) from across 31 premier engineering institutes.** The broad framework of the program was to engage the millennials through paperless on-boarding, online weekly assessments, merit-based posting allocations, and live projects.

The classroom training included sessions on safety and cross-functional and domain-specific modules, appropriately designed and facilitated by our in-house functional experts. The progress of all the GETs was monitored through online weekly assessments. The top performers were given preferential postings and were recognised at the valedictory ceremony, chaired by the CEO and leadership team.

In addition, the induction program also had experience-sharing sessions by senior and young leaders, and behavioural sessions with external faculty members. This ensured that the freshers were provided with a plethora of learning opportunities facilitating business know-how, thereby making them the "Best Brand Ambassadors of Hindustan Zinc".

CASE STUDY
Non-HR to HR: Leading the way

One of our employees, Roohi Khan Sherwani, Head HR - RDM, joined Hindustan Zinc in June 2009 as a GET Instrumentation, and was initially posted at Debari. She was later transferred to Dariba for the commissioning of a roaster plant. After the successful commissioning, she was given an opportunity to be part of the team responsible for commissioning another roaster. She gained knowledge and experience on building and sustaining systems, improvement projects, quality circles tools, etc. Her zeal for her work was really inspiring, and she was given another opportunity to be rotated to asset optimisation. **Roohi was recognised as a 'Business Star' in 2011.** She was selected for Non-HR to HR movement through an internal job posting selection process in June 2016.

"I would like to thank the senior management for considering me for this challenging yet joyful opportunity for a Non-HR to HR role. *Presently, the HR Business Partner role has broadened my vision and taught me the right way to analyse the business and its intricacies, especially from peoples' points of view. I feel empowered when I introspect at the end of each day on the challenging tasks of bringing various stakeholders together, aligning them, engaging as well as encouraging them, and in the end, marking success to achieve the target which ultimately enhances HZL's brand value. The quantum of exposure given at HZL – be it a selection for the Management Development Program (MDP) from one of the prestigious and celebrated management institutes like XLRI, being a member of an ExCO observer team, or being part of the vendor rationalisation project team for the Vedanta Group – is immense and has no boundaries. I strongly believe that my technical experience, complemented by my HR assignment, will definitely help me achieve the best results for my organisation."*

Roohi Khan Sherwani,
Head HR - RDM

> The ACT-UP program involves an assessment of our employees to identify the 'Stars of Business' and 'Technical Stars'.

Leadership Potential

Leadership is a hidden trait in most individuals; we facilitate our employees with opportunities to develop this hidden talent. Leadership development being one of our key HR strategies, we invest in programs to promote a competitive spirit among our employees, so that they are always motivated to put in their very best effort.

One such innovative initiative is our Accelerated Competency Tracking & Upgradation Program (ACT-UP). Based on the Vedanta Competency Framework, the program involves an assessment of our employees to identify the 'Stars of Business' and 'Technical Stars'; this lets us develop a talent pool of people with managerial and technical abilities. For every 'Star' identified, an Individual Development Plan (IDP) is prepared and they are given enhanced roles and responsibilities. During the reporting period, 90 employees participated in the Business ACT-UP and 16 stars were identified. For the Technical ACT-UP, we saw participation from 117 employees; 33 Technical Stars were identified through the process.

Another intervention along similar lines is the Chairman's internal growth workshop, wherein high potential employees are identified and provided with an opportunity to explore their individual leadership abilities. More details on this can be found in the case study, 'Unlocking Leadership Potential'.

During the reporting period, we started yet another unique program to offer specialised coaching to our executive leadership team. In partnership with YSC, the coaching program was conducted to inspire our leaders and enable them to successfully achieve the goals of the company. The program was successful in:

- Generating greater self-awareness in our ExCO, as individuals and as a team.
- Creating a meaningful vision and alignment on collective goals and processes for the team.
- Facilitating conversations that build trust and enable greater effectiveness.
- Creating development plans for the leaders and supporting their development through executive coaching.

*"I thank HZL for giving me such a wonderful opportunity to showcase my abilities in the ACT-UP. **It was great competition amongst peers in different aspects.** Career anchor sessions helped me identify my career anchors and I felt extremely valued when the organisation awarded me with the Business Star badge. It was a remarkable achievement in my professional life. I look forward to contributing my best and living up to the expectations of HZL."*

Prasanth Vankalaya
Executive Finance, CRDL

Unlocking Leadership Potential

The Chairman's internal growth workshop is a unique and rich platform which allows direct interaction between top management and the employees. High potential employees are identified based upon an objective assessment conducted by top management. Workshops are held function-wise and serve as a distinct arena for employees to express their ideas on business and lead the way. This helps unlock their confidence and allows them to journey towards becoming the most successful "Business Leaders of Tomorrow".

High potential employees are given enhanced roles, job rotation, and varied opportunities to excel. This intervention widely contributes in our leadership development by:

- Building a pipeline and providing identified employees with opportunities to excel
- Creating a succession of internal talent for key leadership roles
- Robust build vs buy capability

"This is a wonderful opportunity and an excellent platform to grow and excel in the organisation. I would like to thank the senior management for showing such trust in me and investing valuable time in guiding me and sharing their thoughts. ***I feel really proud and excited to be part of this elite group of IT leaders,*** *who are chosen after a rigorous process. In this new and challenging role, I will assure to put my best foot forward and exceed management's expectations of the digital journey of Vedanta."*

Atul Patni,
Lead - IT Innovation / Digital Transformation.

"It was a highly motivating growth exercise to interact with the Chairman and our leaders. I sincerely commit that, as a team, ***we are highly enthusiastic to take our company to new heights, as per the expectations of our leaders.*** *During the workshop, clear expectations, as put forth by our respected chairman, were deliberated and accordingly, we have started ground implementation. Thanks to our HR team for carrying out such a structured evaluation process, which is something unique industry wide."*

Pradeep Singh
Unit Head Environment, RDC.

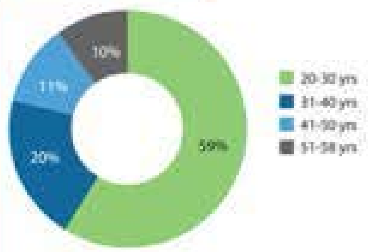
Workforce Diversity

Diversity is the current corporate mantra for creating a balanced business ecosystem. We acknowledge the same in our HR pursuits and encourage employees to take frontline roles and contribute to the growth of our company irrespective of gender, race, religion, disability, or any other indicators of diversity. Our remuneration policy also does not discriminate on the basis of these diversity indicators, establishing us as an equal opportunity employer. We recruit both men and women on equal salary ratio at all levels and attract the best talents. We do not differentiate in terms of pay by gender.

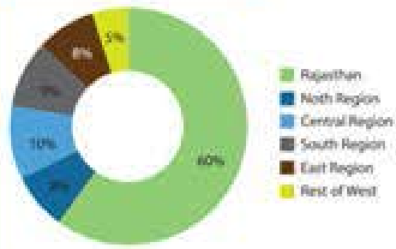
We have a young, dynamic workforce at HZL, 59% of which is in the age group of 21-30 years. Locals from Rajasthan comprise 60% of our total workforce. Further encouraging our women employees is our secure work environment, where they can perform with dignity. To maintain these women-friendly conditions, we have a sexual harassment prohibition policy and sexual harassment committee 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.

> "We encourage employees to take frontline roles and contribute to the growth of our company irrespective of gender, race, religion, disability, or any other indicators of diversity."

AGE DIVERSITY



REGIONAL DIVERSITY



"Meritocracy is supreme and diversity is built on this bedrock at Vedanta. *The organisation adds new dimensions and thoughts to business through this. I have never seen any organisation encouraging diversity at such a level. I am quite excited to work at HZL and feel responsive towards the faith put in me."*

Sonal Shrivastava

Dy. CFO, Hindustan Zinc

Creating an Engaging Work Environment

Approach to Building Engaged Work Environment

- Progressive Policy Changes
- Technology Driven HR Processes
- Safety Engagements

Our continuous endeavour is to create a work environment that motivates our employees to perform their best and experience Hindustan Zinc as one of the "Great Places to Work". The recent recognition from the Great Place to Work Survey further cements our commitment to this ideal. In our pursuit of creating an engaging work environment for our employees, we undertake various initiatives throughout the year. In this context, the focus of this reporting year included progressive policy changes, technology interventions for enabling HR processes, and enhanced safety engagements. Our initiatives are described as case studies that follow.

We also have a comprehensive performance management system in place, which contributes to the effective management of individuals and teams in order to achieve the highest levels of organisational performance. The system has been developed on the OKR (Objective and Key Results) basis, which enables an outcome-based approach through clear goal setting and objective performance assessment. Further, 100% of our employees received performance and career development reviews during the reporting year.

Our encouraging incentive policies, which are among the best in the country, also add to employees' satisfaction. 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, healthcare, disability/invalidity coverage, parental leave, and retirement provisions. Identified high potential employees are also rewarded with Employee Stock Ownership Plan (ESOP). Apart from this, we also provide a range of non-statutory benefits like mediclaim, housing, leave travel allowance, and paternity leave. During 2016-17, 180 male and 15 female employees were granted parental leave and all the employees returned to work after availing their leave. We also ensure that the ratios of entry level wages meet or exceed the legal requirements. The ratio of the wages provided to our unskilled workers for above the ground and under ground activities are 2.318 & 1.857 respectively.

> "The recent recognition from the Great Place to Work Survey further cements our commitment to this ideal."

Hindustan Zinc Joins the Family of Great Place to Work!

We participated in the Great Place to Work Survey in the year 2016-17 and, as a result of the response from all our employees and the audit of our HR practices, and culture in the organisation, we have been certified as a **"Great Place to Work".**

GREAT PLACE TO WORK® CERTIFIED INDIA

“Location-level town halls are held on a quarterly basis, wherein the Unit / Location Heads share the quarterly performance updates with their teams.”

In our tryst to create an engaging work environment, we encourage employee associations. Our non-executives are covered under collective bargaining agreements and they are a 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. On issues pertaining to production/productivity, health, safety, we engage with the union in a bi-partite forum like Joint Consultative Committee with and seek their suggestions for effective implementation. Health and safety topics are also included in formal agreements with trade unions. Moving forward, we want to continue fostering harmonious industrial relations, and work towards achieving win-win outcomes in all our dealings with the union. For all significant changes, the minimum notice periods are decided mutually in agreement with our employee associations. During the reporting period, there were no strikes or lockouts. To create an engaging work environment, we also emphasise enhancing employee engagements with management. The CEO town hall is one such communication platform which is conducted with themes varying from safety to business priorities. Location-level town halls are held on a quarterly basis, wherein the Unit / Location Heads share the quarterly performance updates with their teams. The platform enables the employees to voice their feedback and have a one-on-one interaction with management.

'Change Leadership' – Inspiring Talents

The CEO town hall in November 2016 was a motivational event for the young talent in the company. CEO Sunil Duggal emphasised taking on new challenges, and motivated the youngsters to be driven by their passion and to utilise their potential to the fullest to bring a positive change to the organisation.

Technology-enabled HR Processes

In an endeavour to realise our vision of end-to-end digitisation of HR processes to encompass a highly empowered and engaged workforce, we are transforming the HR function into a strategic business partner. We have put in place a robust HR-IT architecture which lays a foundation of digitisation tools that are leveraged to enable an effective, efficient, and transparent delivery of HR processes. Through My HR Canvas (a Success Factors platform for developmental HR) and the SAP-HCM revamp, we are moving towards paperless HR, with improved process efficiency and a greater focus on data-driven decisions and analytics. Some of the focus areas being targeted in driving this vision are:

- HR process automation, standardisation, and harmonisation
- Leveraging technology to gain efficiencies within the HR function and transforming legacy HR management practices.
- Aligning HR processes to become a strategic partner in achieving organisational goals.
- Adequate, comprehensive, and real-time metrics on human capital to facilitate HR planning and managerial decision-making.

CASE STUDY
Progressive Policy Changes

To continuously benchmark our people policies and practices with the best in the industry, we revisited our existing rules regarding time off and successfully implemented a simplified leave policy. The highlights of this in addition to adequate work-life balance are:

- Maternity Leave- applicable to all permanent female executives, enhanced from 12 weeks to 26 weeks.
- Paternity Leave- Paternity leave of 1 week is applicable to all permanent male executives
- Adoption Leave- Female employees who legally adopt a child underone yearare eligiblefor 12 weeks of adoption leave.
- All intervening Weekly Off/Public Holidays falling within different leaves wouldnot be counted as leave days.
- PL wouldbe credited to employees on 1st July (12 days) and on 1st Jan (13 days) for the quota earned in preceding year. No encashment of CLs would be allowed.
- All existing leave combination restrictions have been withdrawn and henceforth, all leave types can be combined.

*"I feel privileged to avail 26 weeks of enhanced maternity leave. As it is rightly said that **becoming mother is like a new birth in the life** of a lady and, in this perspective, every day spent with the newborn is very precious, so the extension of the maternity leave is no less than a boon for me. I thank my organization Hindustan Zinc for bringing such a humble policy change. It has been really motivating."*

Shama Jain
Associate Manager, Environment

*"It's a great pleasure to welcome a new angel into the family and **availing paternity** leave has given me an opportunity to spend more valuable time with my family in need."*

Rama Subba Thota
Associate Manager, Electrical

CASE STUDY

V-Connect: An Amalgamation of Growth and Technology

This landmark Vedanta initiative, launched in July 2016, is a flagship **Talent Development & Engagement Program** which ensures that each employee has an anchor/ mentor in the organisation. It is a platform for the anchors/ mentors and anchorees/ mentees to connect, engage, ideate, and learn from each other in their personal as well as professional journeys. The overall objective has been to "create an engaged workforce which delivers a sustainable business performance across Vedanta".

V-Connect is built on three broad pillars, as shown in the figure. As part of the program, timely connects are held between the anchor/mentor and anchoree/mentee.

The program is designed to cover each stakeholder's role, as listed below:

V-Connect Anchoring: Close to 1,000 'talent' were identified across the group companies to be a part of V-Connect and to guide them. About 70 ExCO leaders from across the group companies were identified as 'anchors', with each 'talent' being mapped to an anchor.

V-Connect Mentoring: Similar to the anchoring program, mentors were identified and assigned to cover the remainder of our 10k population.

The heart of the anchoring program is the V-Connect mobile app with the following features:

- Scheduling meets /connects between the anchor and anchoree
- Submission of feedback for the anchor and anchoree
- Tracking connects across the Vedanta Group
- Elimination of manual intervention by HR in organising connects
- Keeping employees updated with Vedanta news and articles

Anchor Speak

"The interaction with my anchorees gives me immense satisfaction as it results in igniting the spark of possibilities in both my anchorees and me. ***While you guide, you are also guided - that is the beauty of this program."***

Ramakrishnan Kasinath,
Chief Commercial Officer

"V-Connect is a unique learning partnership. It ***helps us to rewind, support people with our experience, and inspire young leaders,*** *while improving our own learning in the process."*

V Jayaraman,
Head EOHS

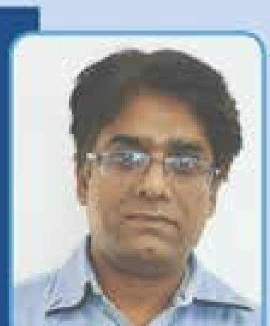
Talent Speak

"Interaction with my mentor is always evolving and enriching. *Drawing on his global experience, he shares what the essentials are to excel in an organisation and as an individual. He always stresses on the need to keep developing skills, think global, and solve problems for the long-term."*

Neelesh Chawda,
Manager, PMO

"I think we have built a strong relationship based on trust and openness. The programme and my anchor have given me an opportunity to really ***gain an independent perspective on my leadership style and brought incredible insight, balanced perspectives*** *and, at the same time, has challenged me at all the right times to push myself that much harder to achieve my ambitions far beyond what I thought was possible. I believe that my experiences as a key talent and the guidance of my anchor are the contributory factors in attaining significant achievements, both professionally and personally."*

Madan Singh Bhadoria,
Head, Coal- Logistics



CASE STUDY
HR as a Safety Tool

A safe working environment is the responsibility of every employee. At Hindustan Zinc, the aim of the HR department is to provide a safe workplace that is injury-free for all our employees, permanent and contractor. Hence, HR plays a pivotal role in building a safe atmosphere, and we do it through our various interventions such as introducing policies, prominent displays of life saving rules, counselling offenders, and advising line managers on handling matters of non-compliance. During the year, we have undertaken several initiatives to inculcate safety in our work environment.

CEO Safety Town Halls: This includes safety-centric conversations between senior management and employees across Hindustan Zinc. It engages and drives employees towards safe working habits and behaviour at the workplace. In the same vein, townhalls are being conducted at regular intervals at unit-levels, which are chaired by the Unit / Location Heads; there is good participation from all the permanent and contract employees at these sites.

New Joinees Safety Induction: For every new joinee, HR is the first guide who shares and imparts training on basic Hindustan Zinc safety norms and lifesaving rules.

Safety Course: In line with our philosophy of safety being the line manager's responsibility, we provide a platform for young and experienced line managers to pursue a PG diploma in safety from an authorised Regional Labour Institute (RLI). The selected executives are sponsored to complete the course, wherein official release is given with full pay.

Suraksha Chaupals: The HR team has taken lead in organising safety chaupals. Here, direct interaction and learning is imparted by senior leadership and line managers. Both our direct and indirect employees are encouraged to speak up about any safety pitfalls in their work area, followed by on the spot appreciations.

Performance Scorecard: For executives, our performance-driven appraisal program has safety as one of the key parameters, along with operational performance. For contractual workforce, safety forms a vital part of our contractor scorecard, through which their safety performance is monitored; the monthly contractor payment is linked with this score. Also, to ensure a safe workplace with zero harm, they follow Contractor Safety Management initiatives.

These initiatives, taken at the management level, help in providing the employees with a safe work environment.

TRANSFORMING COMMUNITIES

Hindustan Zinc 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.

CSR
DASHBOARD

Material Aspect
Community Development

Transforming the quality of life and economic well-being of the communities around our operations

Aspect Boundaries

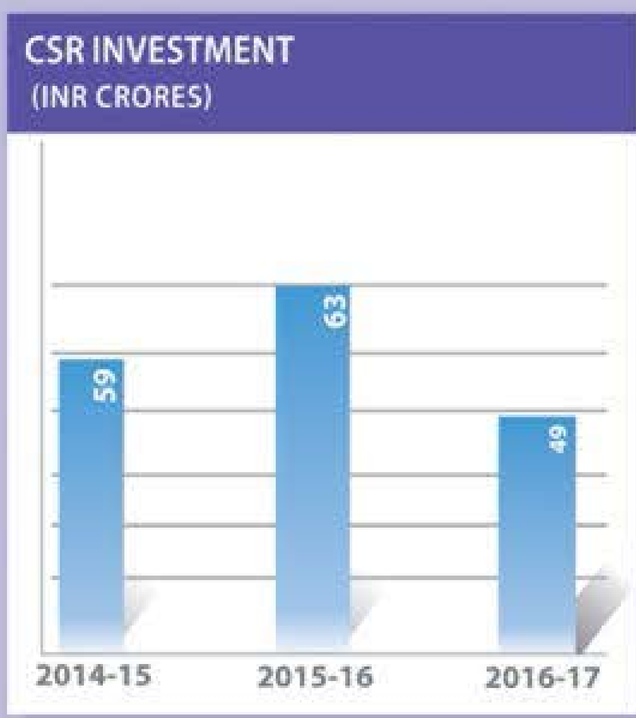
Our community comprises of neighbourhood villages surrounding our operations. We believe that CSR is about building long term relations with communities and stakeholders. Our efforts are directed towards improving well-being of people, in close collaboration with communities.

Our Goals

- To positively and holistically impact the quality of life of communities living around our areas of operation
- To work in partnership through a multi-stakeholder approach for innovatively,effectively and sustainably addressing development challenges
- To emerge as a thought leader, creating benchmarks of good practice in CSR across Rajasthan & the country
- To contribute to national priorities as also to the United Nation's Sustainable Development Goals (SDGs)

Performance 2016-17

- Reached out to **5 lakh** beneficiaries in **184** villages.
- Strengthened flagship programs like **Khushi Anganwadis, Sakhi- Women's empowerment, Samadhan, Shiksha Sambal, and Hindustan Zinc Mining Academy.**
- **Initiated program** to bring people with **disabilities** into the mainstream, higher technical education, sports, etc.
- **Employee volunteering** introduced for CSR interventions.



STRATEGY
and Approach

At Hindustan Zinc, we believe that our license to operate comes not only from the government but also from the communities surrounding our operations and particularly the people of Rajasthan. We are successful because we contribute to society and build collaborative relationships. Our growth has true meaning when it creates betterment opportunities for the people around us.

We are guided in achieving our goals by Vedanta's Sustainability Framework – 'Building Strong Relationships' and 'Adding and Sharing Value' – and also Hindustan Zinc's CSR Policy, as approved by its Board. At the beginning of this reporting year, the Board reviewed the CSR policy, further strengthening and streamlining our CSR governance processes.

FOCUS
and Reach

At Hindustan Zinc, our first priority for our CSR initiatives is our neighbourhood communities (in Udaipur, Rajsamand, Chittorgarh, Bhilwara, and Ajmer districts of Rajasthan). We have identified a total of 184 villages surrounding our operations, who constitute the core of our engagement. However, we also have a mandate to work beyond these villages, on programs of national importance. Once every three years we carry out a detailed needs assessment exercise, which then becomes the basis of our future plans.

In terms of thematic emphasis, our CSR Policy lays down 7 focus areas. These focus areas have been selected on the basis of needs assessments and past experience, and they touch the lives of children, women, youth and farmers in our communities.

The Governance
Framework

At Hindustan Zinc, we have a multi-tiered governance system, driven by the company's CSR Board Sub-committee. The forward-looking and well-experienced committee ensures that the execution of the company's CSR activities is in accordance with its CSR Policy.

There is then the Executive Committee, consisting of the top Hindustan Zinc management, which reviews the CSR plans and progress once every quarter. At the third level, there is the Implementation Monitoring Committee, which approves all projects, partners and budgets. The IMC meets once every month and takes close interest in on-ground implementation as well. We also have a dedicated external auditor for undertaking partner due diligence, concurrent financial audits and on-site implementation verification.

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 and budget
- Review the progress of the programs once every quarter

Implementation Monitoring Committee
- Monthly Meeting
- Approve specific projects, partners, and budgets
- Monitor audit reports and their compliances
- Review CSR program process and outcomes

Education

Education is the foundation to individual and community well-being, and has been a key component of our community programs for a very long time. During the reporting period, we initiated 'Nandghar' (the Vedanta Flagship Community Programs), at Hindustan Zinc. Nandghar seeks to convert the existing Anganwadis into state-of-art facilities, which will bring the best possible early childhood care and development to India's rural areas. We also took up two other new programs under education this year – 'Unchi Udaan' and 'Jeevan Tarang'... Zinc ke Sang'. The first program is aimed at identifying talented students and grooming them for the IITs and other institutions of national repute; the latter is our entry into a new stream of CSR intervention, where we focus on mainstreaming people with disabilities.

Key Programs for Enabling Education

- Khushi Anganwadis
- Nandghar
- Shiksha Sambal
- Unchi Udaan
- Engineering Scholarships
- Coaching Classes for Government Competitive Exams
- 'Jeevan Tarang'... Zinc ke Sang

Khushi Anganwadi Program

Khushi is a unique tri-partite public-private-people initiative aiming to reach 3,055 Anganwadi Centres (AWCs) in selected blocks of the Ajmer, Bhilwara, Chittorgarh, Rajsamand, and Udaipur districts. The program began with a 5-year MoU signed in 2015, between Hindustan Zinc and the Integrated Child Development Services (ICDS) Department of the Government of Rajasthan. The objective of the partnership is to strengthen the functioning of these Anganwadi Centres, thereby improving the health and wellbeing of children below six years of age. This year, the program was re-launched in 2,295 (out of 3,055) AWCs, with reputed NGO partners like Care India, Gramin Avam Samajik Vikas Sanstha, Seva Mandir, and Jatan Sansthan. Through this program, we are reaching about 36,000 children in the age group of three to six years, and another 63,000 children below the age of three years. The first year of interventions has already yielded positive results, with a significant increase in the attendance of children at the centers, higher community engagement, and an enhanced level of pre-school education at the centers.

The Joy of Giving!

Through our new initiative 'Khushi Batiye' we celebrated the "Joy of giving week". The event targeted spreading happiness to children who are part of Hindustan Zinc's Anganwadi Program, and saw success when 16 of our employees donated indoor and outdoor toys, uniforms, shoes, sweaters, and assisted in the refurbishing and painting of the centers. These donations reached a total of 25 AWCs and 500 children.

CASE STUDY

Spreading 'KHUSHI'

(CSR Program – Khushi Anganwadi)

Vijay

Hindustan Zinc is working with Jatan Sansthan in Rajsamand district to improve the health, nutrition, hygiene and preschool education of children in **504 Anganwadis** of the Government's Integrated Child Development Services (ICDS) program.

Enrolled in one of these centres was Vijay, who, at 18 months weighed only 3.25 kg. But Vijay's mother was reluctant to take him to the hospital. When the Khushi team came to know about this, they visited Vijay's home and after much persuasion, were able to bring Vijay to the hospital. Diagnosis revealed that Vijay's haemoglobin level was just 3.5 g/dL instead of 10.3-12 g/dL which is the level of a normal 18-month-old child. The doctors initiated treatment immediately and the child stayed in the hospital for about 12 days. During this time, the Khushi team frequently met Vijay and provided counselling to his family. They also did crowd-funding on social media, to raise in-kind food contributions for Vijay's family. **Timely medical care and food led to a remarkable improvement in the health of the child** and the family. In just two months, Vijay's haemoglobin level rose to be 10.2 g/dL, and his weight increased from 3.25 kg to 8.5 kg.

The Khushi team has since then **referred another 300 such severely malnourished children to the hospital** for care.

Nandghar

Nandghar is Vedanta's flagship CSR initiative, aimed at improving the health & well-being outcomes for young children, and empowering women. A remodelled Anganwadi-Nandghar is equipped with state-of-the-art child-friendly infrastructure, including access to nutritious food, e-learning, clean water, sanitation and an uninterrupted supply of solar power. The centre also becomes the hub for entrepreneurship trainings for women. Towards this end, Vedanta has signed an MoU with the Ministry of Women and Child Development to construct 4,000 Nandghars, across India.

At Hindustan Zinc, we have begun with integrating the Nandghar idea with our ongoing Khushi initiative, so that both the software and hardware are brought together to provide a unique model for women and children's development. This year, we piloted with 2 Nandghars and encouraged by the results, are now on way to doing 200 more.

> "Nandghar is equipped with state-of-the art child-friendly infrastructure."

CASE STUDY

Nandghar – A Haven of Warmth and Care

(CSR Program – Nandghar)

The Nandghar in the Padakhadri village of Udaipur District is a magical place. There is a slide outside as well as other enticing toys, and inside the centre the walls are freshly painted with images attractive to children. The whole place is spick and span inside and out. What shines through above all is the enthusiasm and warmth of the Anganwadi Worker (AWW) and her assistant. While the AWW leads activities, the assistant goes to help any children who are not participating. There are **25 girls and 12 boys enrolled and they are now coming regularly.**

The AWW tells us that, whereas, before, she used to have to go and collect the children to come to the Anganwadi, now parents are delighted to send their little ones. She can feel the difference in both children and parents now that they have this beautiful new centre and such exciting activities to take part in every day. This enthusiasm is reflected in the fact that the children are now coming to the centre neat and clean – a big change from before. They also have smart new uniforms, given as part of the project. The kitchen is a well-organized and clean area, with clean new utensils, a water purifier (which runs on the solar system installed recently) and the walls show pictures of everyday foods/vegetables and the chart of daily activities at the centre.

The attractive Nandghar and the resounding voices of children engaged in fun learning and play activities seem to be lifting the whole area to a new level of hope and aspiration.

> Shiksha Sambal project was implemented in 57 schools across five districts, impacting the lives of 6,194 children from grades nine to twelve.

Shiksha Sambal Program

In the last few years, the country has seen a lot of work on primary and middle school education, particularly in the context of underprivileged rural children. While this is important, but the personal and social aspirations of children and parents, requires further focus on education beyond the middle school. A vast majority of our young people in government schools fail in class X, and that often becomes the end of their educational journey; it also dashes the hopes of the family for an improvement in their standard of living. Often, children struggle most with subjects like Science, English, and Mathematics (SEM).

Given this backdrop Hindustan Zinc began the Shiksha Sambal program, which aims to strengthen the teaching of SEM subjects in government senior schools. This year, the project has been implemented in 57 schools across the five districts, impacting the lives of 6,194 children from grades nine to twelve. The project is being implemented in partnership with Vidya Bhawan Society, Udaipur.

CASE STUDY
An Inspiring Champion
(CSR Program – Shiksha Sambal)

Viram

Viram studies in Class 10 in Putholi Village in Chittaurgarh. His blue eyes reflect a desire to do well in school, follow a good career and help his poor family. His father makes 'jhadoo' from palm fronds, which is hardly enough to raise his two sons and three daughters. Viram was frustrated because there were no teachers in his school to teach Mathematics, Science and English.

Things have looked up since his school became a part of Shiksha Sambal. Three Field Instructors from Vidya Bhawan are there to help him now. There are many activities, such as solving worksheets, doing science experiments and using library books to deepen conceptual understanding. **Encouraged by the CSR team of Hindustan Zinc, Viram was selected for his district cricket team** and went to take part in the state level tournament. Things are beginning to look up for Viram and his family.

Unchi Udaan

Building on the Shiksha Sambal Program's base, we have initiated another unique program which identifies and prepares young talent from these schools for entry into IITs and other institutions of national repute. The program is called "Unchi Udaan" giving wings to children's dreams. This two year residential program is being run in partnership with 'Resonance' (Rajasthan's leading coaching institute) as the technical partner, and Vidya Bhawan as the school & hostel partner. The first batch of 27 children was selected through a rigorous two-stage selection process, with 2,327 students appearing for level one and 575 for level two.

Engineering Scholarships

Beyond the school years, Hindustan Zinc also provides several merit-cum-means scholarships. One of these is done in partnership with Sumedha (called the 'Yashad-Sumedha Scholarship'). This support is meant for students from families with annual income of Rs. 1 lakh or less, aggregate marks of 75% or more and who wish to pursue engineering programs. This year, 50 students (including 12 girls) from our operational districts received this scholarship. We are also partnering with the College of Technology & Agricultural Engineering (CTAE) in Udaipur, where we recognize the toppers of the batch through a Yashad Scholarship which includes a handsome cash prize as well.

Coaching Classes for Government Competitive Exams

Another of our CSR initiatives under the education theme is holding preparatory classes for youth in neighbouring communities, to train them for entrance examinations for government jobs like LDC, Gram Sevak, police constable, REET, II grade teachers, and staff selection commission. 342 young people received coaching this year, provided on our behalf by Anushka Academy, Udaipur. While selecting students for the project, youth from BPL families were prioritised.

> "Youth of BPL families are prioritised for coaching classes for competitive exams."

'Jeevan Tarang'... Zinc Ke Sang

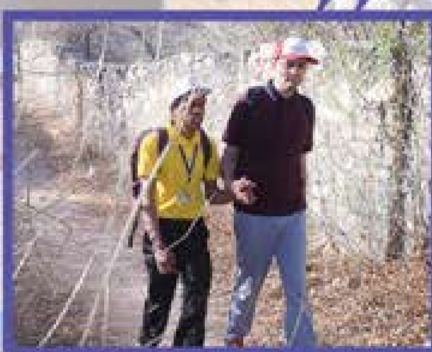
This is a very special and new initiative at Hindustan Zinc. Launched on 10th January, 2017 (our 51st Foundation Day), the program aims to bring people with disabilities into the mainstream and support them in their journey from disability to independent ability. We have identified schools for the deaf-mute, visually-impaired, and children with brain damage near Kayad Mine, Rampura Agucha Mine, Chanderiya Zinc Smelter, and Udaipur. We have also brought on-board experts to hand-hold these organisations in making a qualitative jump in terms of skill building and sensitisation.

In the same vein, we have also begun efforts on raising awareness on disabilities – with our employees, our partners and also with other industry players. It began with a 'Disability Awareness Workshop for Corporates', which was attended by leading industry representatives of Udaipur and the senior ExCO members of Hindustan Zinc, followed by a trek for the blind – TrekkAbility, with a one-on-one pairing as buddies, by our own employees. Both these events elicited a lot of excitement and engagement – which we hope to build on in the coming months.

> "The program aims to bring people with disabilities into the mainstream and support them in their journey from disability to independent ability.
>
> We have begun efforts on raising awareness on disabilities – with our employees, our partners and also with other industry players."

"Mujhe aaj hiking or trekking bahut achi lagi, prakarti ko aaj mehsoos kiya

- Lokesh, Visually Impaired Student"



"Sabse achi cheej thi logon ko nature ke close lana, in bacchon nature feel karwa kar mujhe bahut sukoon mila

– Smurti Shikha, Exploration"

Sustainable
Livelihoods

For most of our neighbourhood communities, agriculture and animal husbandry is still the mainstay of their livelihoods. Hence, both agriculture and animal husbandry have since long been strong pillars of our community engagement. But alongside, we are also investing in equipping the youth with modern day skills which will not only help them find new age jobs, but also convert India's demographic dividend into a real asset for nation building.

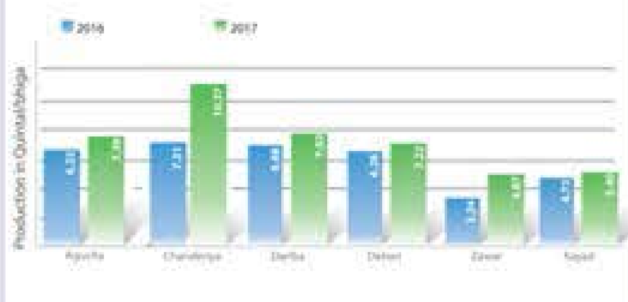
Samadhan – an Integrated Agriculture and Livestock Development Program

Samadhan project, running in partnership with the BAIF Institute of Sustainable Livelihood Development, works to ensure sustainable community livelihoods through integrated farmingsystems and livestock development. During the reporting year, the agriculture interventions reached 1,100 families – focusing on improved agricultural practices, providing quality inputs, technical knowhow, and the formation of farmers' interest groups. Additionally, the Livestock Development Program reached 2,600 families with doorstep services of artificial insemination, consultations with subject matter experts, and timely veterinary and vaccination camps.

Farmer's Prowess in increased yield

This year, the Rabi crop production (for participating farmers) increased by almost 28% due to improved crop varieties, package of practices, etc.

WHEAT PRODUCTION (2016 v/s 2017)



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CASE STUDY
From Subsistence To Substance

(CSR Program – Samadhan)

Naru Lal Gurjar

Naru Lal Gurjar hails from a small hamlet called Gurjar Kheda at Nagari Panchayat, in Chittorgarh district in Rajasthan. After a tragic accident where he lost one of his legs, Naru Lal Gurjar had lost all hope in life. He shut down his business of selling ice cream in Gujarat and came back to Chittorgarh, where he started a tea shop; unfortunately, that also did not do well. A dejected Naru Lal was left with only one bigha of land and a monthly government disability pension of INR 500, barely making ends meet.

But then, **Samadhan Project came to Naru's village, and he opted for the goatery program.** As part of the project, Naru Lal Gurjar received five goats and a buck one year ago. He devoted himself to this little herd, and today he has seven goats which yield around two litres of milk a day, thus providing him with an additional income of about INR 1,800 per month. This journey of Naru Gurjar from 'Subsistence to Substance' is an inspiration for all who have lost hope.

Hindustan Zinc Mining Academy – Skilling for the Mining Sector

In the recent past, there has been a country wide emphasis on skill building, and we at Hindustan Zinc are also committed to this national agenda. Being a mining company, we decided to focus our efforts into bridging the skill gaps in the mining sector, and have set up a Mining Academy.

Under its aegis, and in partnership with the Skill Council of Mining Sector (SCMS) and Indian Institute of Skill Development (IISD), we are currently running two training programs – one is an intense 18-month residential training program for heavy earth moving machinery (with each batch consisting of 100-120 rural youth), and the other is an eight-month residential program for winding engine drivers (each batch comprising 40-50 rural youth).

Both programs have been well received, and despite a demanding curriculum, the trainee enthusiasm is extremely high. All the graduates from our first pilot batches are currently employed, some even by international mining companies, on the strength of this training.

> "We are currently running two training programs – one is an intense 18-month residential training program for heavy earth moving machinery and the other is an eight-month residential programme for winding engine drivers."

Women's
Empowerment

The empowerment of women is key to societal growth and transformation. By empowering women, we empower more than just one individual, as this poses a positive impact on their families and eventually, on society. Convinced of this fact, we have advanced a unique program – Sakhi – for equipping the rural women with skills and opportunities to evolve as independent individuals and drive growth in their communities. We also continuously organise events throughout the year to spread awareness of women empowerment.

Sakhi – A Women's Empowerment Initiative

Under this flagship initiative, we are working to promote programs for the sustainable livelihood for women. This program is run along with grassroot institutions like Self Help Groups (SHGs) and their federations, along with the support of the Manjari Foundation. We have set a target to establish 2,000 SHGs across 174 villages over the next five years. This year alone, 505 SHGs have been formed, with the association of more than 6,600 women. With this kind of support, a few production centers have also been set up that are making garments, papad, spices, and other such products that can help women achieve sustainable growth, by helping them find a means of livelihood and work.

"Under this flagship initiative Sakhi, we are working to promote programs for the sustainable livelihood for women. This year alone, 505 SHGs have been formed, with the association of more than 6,600 women."

Women's Day at Hindustan Zinc: Making Memories with the Zinc Family

This year, we celebrated International Women's Day across all locations of Hindustan Zinc. The event saw participation from over 6,500 village women; it was a great success, bringing together the women employees of Hindustan Zinc; the spouses of employees; government and police officials, and elected women representatives.

CASE STUDY
Moving Towards An Empowered Society
(CSR Program – Sakhi)

Kani Bai – Setting Trends beyond Imagination

Kani Bai, is from Bhallon ka Guda, a small village near Debari. Hailing from a poor economic background, she had to drop out of school after class X. The condition remained the same when she had to struggle to make ends meet even after marriage. This adverse situation motivated her to find a way to contribute to the family income. Looking for opportunities, she joined the Amliya Ji Bawaji Mahila Samuh SHG. Soon, she found her financial status improving and, with her innate leadership potential, she was chosen as the Samuh Sakhi by the group members. Today, she is not only a member of the SHG but also facilitates and strengthens other groups in the village, setting trends that were beyond imagination a few years ago.

"The dark days of constantly worrying about food and money are gone, and all of it is because of good institutional support and the will to empower others."

Kani Bai,
Samuh Sakhi, Bhallon ka Guda

Leela Meghwal – finds her 'Sakhi' at Hindustan Zinc

Leela Meghwal, from Khempura, Rajasthan, grew up in a financially challenged family environment. Being the eldest of the siblings, and to support her mother, she took on the domestic responsibilities and missed out on her formal education. Things did not change much even after she got married. With the hope of improving their standard of living, she moved to Udaisagar with her husband who managed to get a job at Hindustan Zinc. With passage of time their family grew and there was a need to move to a bigger accommodation. So they decided to make their own house by taking a loan and agreed to repay the loans by contributing mutually.

Although illiterate, Leela possessed the skills of stitching. When she heard of the 'Sakhi Kendra' from a friend, she could see a faint ray of hope for completing her dreams. Within a span of 6 months, she got trained and was proficient in making finished hand stitched products. Soon she began to bring money into the house, is now independent and able to pay her children's fees, pay for household items and pay off their house debts.

"All these changes came when I joined Sakhi Kendra and it made me fearless and self- reliant. Employment is at our doorstep; it should go on and on as our livelihood depends on this."

Leela Meghwal,
Khempura, Rajasthan

Health,

Water & Sanitation

Hindustan Zinc recognizes that the vital need for people is to access safe drinking water, utilize toilets and practice good hygiene. There are various initiatives taken round the year to create awareness and accessibility to quality healthcare and sanitation.

Health Camps

We regularly hold health and awareness camps in our neighborhood communities, both as taking curative services to the doorsteps of people as also conveying preventive care messages. This year, we conducted 140 such camps, covering approximately 22,400 people.

Company Run Hospitals

We have 6 company run hospitals based at our locations including Udaipur which serve our employees and the local population. During the year, the hospitals reached out to around 1,03,000 external patients apart from the in-house ones.

Vedanta Heart Hospital

About 16 years ago, Hindustan Zinc had helped the Udaipur District Hospital set up a specialized Heart Hospital, which brought state-of-art heart care services to the reach of the needy. During the year, about 3,000 patients were treated every month.

Sanitation

As part of an ongoing MoU with the District Administration, Hindustan Zinc constructed 1,116 individual household toilets in Chittorgarh District this year. Additionally, 3 community toilet complexes were constructed in villages in the vicinity of Zawar, Rampura Agucha and Kayad mines.

Environment

At Hindustan Zinc, we are committed to environmental concerns, not just within our operations, but also within our communities. We regularly support plantation and biodiversity conservation programs. During the year, among other programs, we were proud to partner with the Udaipur Urban Improvement Trust in undertaking the regeneration of two hills in the city – Ratnagiri and Kali Magri. We also supported the Forest Department in the development of the Biodiversity Park in Udaipur. As per regular environmental activities at the unit levels, we distributed 500 plants to the Bhallon ka Guda panchayat, Debari, for road side plantation and planted 1000 saplings for plantation on wasteland at Kayad village in Ajmer.

> "Hindustan Zinc recognizes that the vital need for people is to access safe drinking water, utilize toilets and practice good hygiene."

Ratnagiri

Sports
& Culture

Sports and culture have long been a theme under our community programs. Almost all our locations work with local schools and communities in providing support for building sporting opportunities and tradition. And within culture too, Hindustan Zinc has been a big support to keeping alive traditional music and dance, as also bringing contemporary music to the general public.

"Hindustan Zinc has been a big support to keeping alive traditional music and dance, as also bringing contemporary music to the general public."

Sports

Sports are a field where excellence is a matter of training, performance, and an alignment of the mind and body. We at Hindustan Zinc have always believed in encouraging people to take up various sports, and promote our sports persons. During the reporting year, we have supported sportsmen and sports tournaments which have benefitted over 10,000 people across our locations.

Culture

Under the culture theme, some of the main activities during the year included:

- Udaipur World Music Festival, Udaipur –a 3 day program which brought together nearly 150 musicians from 15 different countries, representing diverse music genres. The concerts were attended by more than 40,000 people.
- Celebration of Rajasthan Diwas, Jaipur – this event showcased the culture of Rajasthan, and was enjoyed by over 10,000 people.
- Maharana Kumbha Sangeet Sammelan, Pandit Chatur Lal Memorial Concert, etc were some other concerts that we continued to support this year as well.

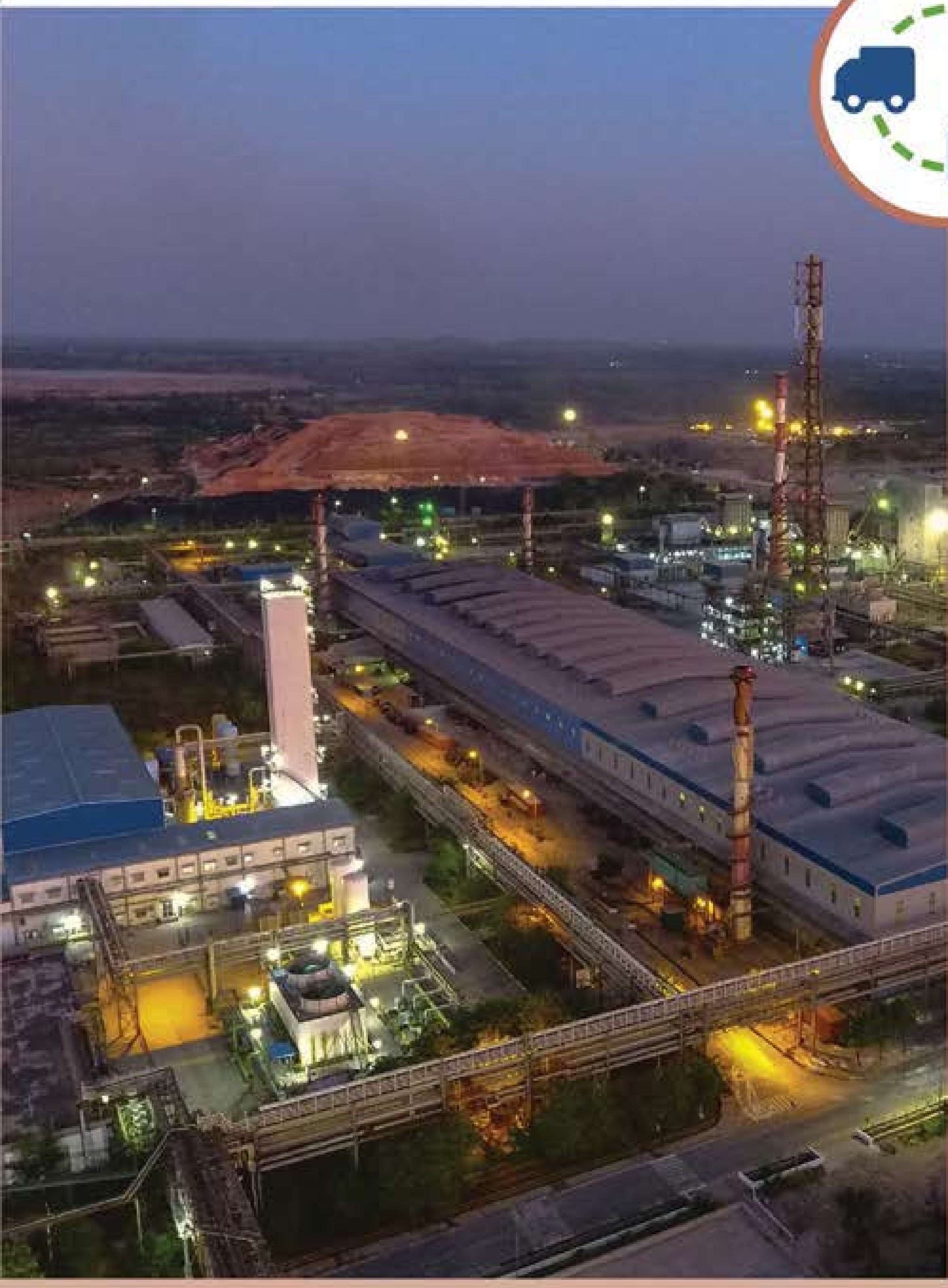
Community Development
including Community Assets Creation

We contribute to society by creating infrastructure and facilities for the communities and for the state. In this regard, we were proud partners of the Chief Minister's special campaign this year – "Mukhyamantri Jal Swavlamban Yojana". Under this program, which emphasised water conservation, we have undertaken several infrastructure development initiatives, including 34 Sankirn Gali Percolation Tank (SGPTs); 8 building anicuts, deepening of 4 ponds and 3 wells; water harvesting structures, contour trenches, overhead tanks, installation of borewells and pipelines etc. Another major work included construction of retaining wall on both sides of TIDI-Amarpura Saddle dam construction of an approach road upto the bund to prevent flooding of the nearby villages. Additionally, our community asset creation also involved infrastructure development for nearby government schools and rural infrastructure including repair and renovation of schools; construction of boundary walls, community centres and roads.

COLLABORATING & STEPPING UP THE SUPPLY CHAIN

With our holistic approach to 360 degree growth, we value the relationship we share with our partners in business – our suppliers, vendors, and contractors. We are convinced that strengthening the collaboration will help us continue towards creating a sustainable future.

This section of the report describes some of our strategic interventions to improve collaboration throughout the supply chain, and our attempts to impart the key message in sustainability. Vividly captured here are some of our innovations that highlight our commitment to galvanizing growth.



SUPPLY CHAIN
DASHBOARD

VISION
2020

Digital transformation with a focus on innovation

Material Aspect

Supply Chain Management

Aspect Boundaries

The supply chain being an integral component of our business, we strive for a strong and resilient relationship with our partners. Accordingly, we focus on strategies and processes to develop the capacities of our employees as well as our suppliers / vendors / contractors and deliver business excellence.

Performance 2016-17

- **SAP-ARIBA** implementation in progress
- **Transport Management System** implemented
- Supplier screening for sustainability practices
- Skill building of our contract workforce and stepping up local recruitments

Action Plan

- Establish procurement process that promotes speed transparency
- Promote green procurement
- Introduce digitization that makes procure-to -pay process seamless
- Optimize our procurement strategy, to work more collaboratively with our suppliers to deliver innovatively
- Supplier and contractor performance management, monitoring and recognizing the best in class
- Lower transaction and productivity improvement

“The association with our partners begins with an introduction to the Supplier Code of Conduct.”

STRATEGY
and Approach- The Road to Growth

We recognize our supply chain as one of the key factors contributing to our business performance, as well as being an area in which there is considerable potential to innovate and step up. Hence, we focus on identifying and making strategic improvements to our procurement practices and instill sustainable practices throughout the supply chain. We create value for all our stakeholders and propelling us to the next stage of development.

At Hindustan Zinc, our highly efficient supply chain comprises a vendor-supplier base of 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 . Our selection of these partners is done after a stringent evaluation, which is a part of our techno-commercial bidding process. The selection process is guided through two robust policies, namely the Procurement Policy and Supplier & Contractor Management Policy. All our new suppliers are screened basis their practices in the areas of human rights, labour practices, environment and impact on society; thus, establishing the ideals of sustainability from the very beginning. The association with our partners begins with an introduction to the Supplier Code of Conduct – our internal guidance document for suppliers' conduct at Hindustan Zinc. Compliance with the same is regularly monitored to maintain the highest standards of sustainability throughout our supply chain. During the reporting period none of our suppliers were identified as being at risk for labour practices including child labour, forced or compulsory labour

Strategic Supply Chain Objectives and Implementation

Implementation Plan

Objective 1 (Safety of Suppliers/ Vendors/ Contractors)
- Ensuring use of PPEs
- Replacement of worn out PPEs
- Ensuring correct usage of PPEs
- Monitoring through Safety Scorecard

Objective 2 (Sustainability in Supply Chain)
- Online vendor registration, including sustainability aspects
- Sustainability considered for techno-commercial evaluation
- Company compliance with contract worker compensation and welfare management
- Monitoring the supply chain

Objective 3 (Considering Human Rights and Contractor Employee Health and Well-Being)
- Human rights compliance as a clause in the Code of Conduct
- Ensure water, sanitation and hygiene facilities

Objective 4 (Developing competency, training, and awareness)
- Induction and refresher training
- Gate passes issued on completion of training

Objective 5 (Inspection and Monitoring)
- Review meeting
- Performance scorecards
- Data capture in SAP MM module
- Contractor field safety audit

> We have realised that the transition phase that we are presently in calls for breakthrough innovations in the supply chain.

Our management approach for the procurement function rests on the principles of productivity, quality, reliability, and sustainability. To transform these ideals into action, we have chalked out a set of five sustainability objectives for the supply chain, which we aim to achieve through targeted action plans.

In addition, we have realised that the transition phase that we are presently in calls for breakthrough innovations in the supply chain. Treating these needed changes as a growth opportunity will enable a smooth transition from open pit to underground mining, whilst also making significant improvements in the way we function. Thus, aligned with our Vision 2020, we are making efforts to bring about a digital transformation and focus on innovations in the supply chain processes.

Convinced that digitisation will simplify the rather complex procurement processes, we have begun by adopting the best practice in the industry; i.e. strengthening our relationship with our business partners. More confidence was gained when we realised that there is immense scope for innovations in our supply chain processes. Whilst working towards these strategic goals, during the reporting period we also placed emphasis on the enhancement of supplier performance.

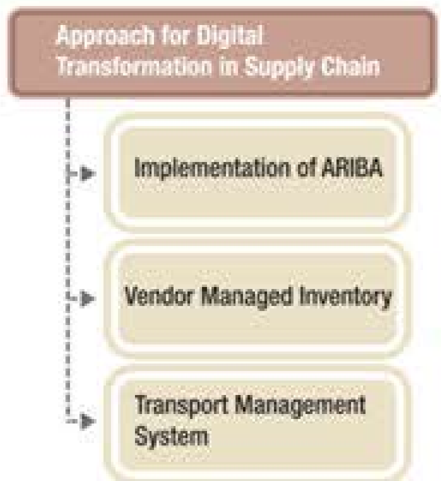
Enhancing
our Supply Chain Performance

As we embark on the challenge of a complete transition from open cast to underground mining, we have partnered with global suppliers for our underground mines. We are focusing on digitisation to improve the mechanisation of our operations and enhance productivity. Simultaneously, we are tuned to reinvent the supply chain processes to create a more eco-friendly, cohesive environment that is conducive for sustainable performance. We are also aware of the plight of the local community and contractors, linked with the loss of livelihood during this transition phase. Hence, we are trying to transition most of our workforce from the open cast to the underground mines by providing them with the requisite training.

Even as we attempt to create a world class mining infrastructure, we have ensured that we retain our local suppliers.

Digital Transformation

In our endeavour for digital transformation, we have implemented the following to streamline the procurement process. Simultaneously, we have also worked towards introducing mechanisation in our logistics and transportation, leading to improved productivity in the supply chain.



> We are also implementing a Transport Management System across all our locations; this will automate the entire transportation process.

Future Plan- Implementation of ARIBA

We are progressing towards implementation of SAP ARIBA Supply Chain Collaboration. This is a network-based collaboration platform that makes it safe and easy to connect and share information across our partners and vendor networks in real-time. It also provides crucial intelligence that can help detect early warning and implement quick and informed decisions to help mitigate risks. It will add significant value across the supply chain lifecycle as it enables efficient onboarding and easy integration, will provide actionable intelligence, help in improving transparency & compliance, and allows scope for broader collaboration.

Vendor Managed Inventory

To reduce inventories while also eliminating stock-out situations, we have introduced the Vendor Managed Inventory (VMI) process for the supply of C class items. The VMI process enables the vendors to create orders based on demand information. The VMI stores are maintained at CSC and shall be operated on a milk-run basis (to deliver materials across Hindustan Zinc locations). Presently, approximately 8% of the total items procured have been covered through the VMI, and this will reach 35% in the next six months.

Transport Management System

We are also implementing a Transport Management System across all our locations; this will automate the entire transportation process and eliminate all manual interventions. This technology will ensure a reduction in the turnaround time of the vehicles, reduction in fuel consumption, and better utilization of the assets. It will bring about increased visibility, better control of vehicle movement, and enhanced safety and security of the cargo, which will subsequently result in increased productivity and cost savings.

Our ITMS (Integrated Transport Management System) interfaces between SAP, Web Portal and GPS to optimise efficiency across the supply chain. For drivers and vehicle registration it uses Biometric registration, RFID and GPS to authenticate and helps beef the safety by sending SMS and email alerts for violations. It also helps regulate transportation demand and vehicle allocation using Auto allow slip and schedule the inbound and outbound movement allowing for seamless traffic monitoring. Last but not the least feature of the ITMS, is enabling of Automatic GRN and invoicing. With this best in class practice in transportation using technology we are trying to embed sustainable growth throughout our supply chain process.

Innovations in our Supply Chain Processes

We acknowledge that there is immense scope for bringing innovations in our supply chain, to trigger an eventual growth that will reflect in our overall business performance. Hence, we are steadily analysing all aspects of our supply chain to identify processes suitable for such reinvention. For the reporting year, we have implemented the following innovations:

Innovations in Supply Chain Processes

- Sustainability innovations in trasportation
- Stepping up our suppliers' capabilities
- Infusing buyer competency

Sustainability Innovations in Transportation

Significant changes have been made in our methods of zinc and lead concentrate transportation, wherein we have increased the carrying capacity of the vehicles to be more energy-efficient. In conjunction with transporters and third parties, we have developed mechanised shutter vehicles for the movement of these concentrates. This will be proliferated in the coming years and will reduce spillage, pilferage, and dust pollution on the roads.

We have implemented system for real time tracking of all the vehicles deployed for inbound and outbound movement of material. All the vehicles are equipped with GPS devices which are being tracked through Logistics Control Centre on 24X7 basis to have better visibility & control over the movement. We are also developing world class logistics infrastructure at all locations which includes parking plaza with rest room and other basic amenities for drivers.

We have also implemented No-Go Criteria across all the locations to ensure compliance to vehicle & driving safety standards. Regular training programs are being organized to train the drivers in defensive driving and create safety awareness among them.

Stepping up our Suppliers' Capabilities

To build a sustainable supply chain, it is essential to transform the traditional approach of our suppliers and educate them about current global practices. We therefore engage with our partners and motivate them to adopt sustainability practices for a secure future. As a new initiative, we have started visiting our suppliers' facilities, to understand their processes and the sustainability measures they undertake to maintain quality at the workplace. In the same context, we organised our first ever 'Supplier's Day' meet, bringing all strategic suppliers together under a single roof and sharing thoughts on the ideal supply chain that we envisage developing with them as our partners in our journey. More details on this can be found in the case study: 'Supplier's Day – A Step Towards Sustainable Value'.

Through formal and informal senior management engagements, we ensure that our suppliers adopt sustainability practices. Through audits, satisfaction surveys, and risk assessments, which are an integral part of our operational management, we have been able to achieve their compliance with our sustainability standards. Additionally, through knowledge sharing of new technologies and process innovation techniques applied on-ground, we have prepared them to respond to and mitigate the associated risks. In our mantra of 'Green Zinc', we have made it mandatory for our suppliers to be ISO-certified. If they are not, we maintain strict vigilance of their status and issue a timeframe within which they must get themselves certified. As one of our future endeavours, we plan to audit our suppliers' green practices and introduce a sustainability award to encourage them to continue their efforts in this area.

We also invest in skill development for our contractual workers; one of our key programs is the 'Driver Education Program'. Here, we organise regular in-house camps, at individual plant levels, to create safety awareness among the drivers. We are also in the process of hiring a reputed agency for imparting the requisite training to the drivers and enhancing their understanding of road safety.

Besides the above interventions, we have critically reviewed our supply chain to identify the potential risks arising on the part of our suppliers. In the identified cases, we have worked towards enlarging our supplier base for mitigating the sustainability risk of a single vendor scenario. This has indirectly provided opportunities for new suppliers to be a part our supply chain and, in some cases, we have determined to proceed with technological process changes as well. Exemplar cases are detailed in the case study, 'Transforming our Risks into Opportunities through our Partners'.

"Through formal and informal senior management engagements, we ensure that our suppliers adopt sustainability practices"

Infusing Buyer Competency

While we were analysing all our processes, we realised that a competent employee base is essential to maintain and enhance our supply chain practices. To build capacity for the procurement function, we continuously train our employees. During the reporting year, we conducted an exclusive workshop for building buyer competency. The details are provided in the case study, 'Building Competence Step by Step – A Buyer Training Program'.

CASE STUDY

Transforming our Risks into Opportunities through our Partners

A single supplier for a product poses a significant risk for any buyer company; enlarging the supplier base is the only solution for this. At Hindustan Zinc, when we have encountered such scenarios, we have tried to turn the situation around and create opportunities for new suppliers. A glimpse into some of these cases follows:

A Million Dollar Saving by Identifying Alternatives for High Chromium Cast Grinding Media

High Chromium Cast Grinding Media was single supplier source. To mitigate the significant risk it posed, we attempted developing M/s Bluestar to expand our supplier base. Simultaneously, we initiated trials for alternatives to the grinding media with forged media. These trials are in progress at our S.K. Mines, and are showing encouraging results.

Low COD Sodium Sulphate can do Wonders too!

Sodium sulphate with a 400 ppm COD has been used as a flux with the concentrate. We had a single supplier source for this product that posed a significant risk. In search of alternatives, trials were executed with a mix of high-low COD sodium sulphate obtained from another supplier, M/s Atul Limited. Eventually, 40% of the sodium sulphate requirement was sourced from this company and this has reduced the cost by 50%.

CASE STUDY
Building Competence Step by Step – A Buyer Training Program

We organised the "Procurement Functional Training and Competency Building Workshop" with the intention of providing our commercial executives with first-hand knowledge on the procurement function. With **56 executives** and **six commercial leads** as participants, motivated by **five energisers** (functional experts), the workshop was a success.

The two-day workshop began with knowledge sessions on the key aspects of the supply chain, including sources of waste, spend analytics and category management, sourcing strategies and supply market analysis, clean sheet costing, and transactional purchase to value buying with process simplification through outsourcing and automation. Subsequently, the participants were exposed to the best practices of the industry to give them a feel for the realm of procurement.

The enormous scope for improvements through the supply chain was highlighted through interesting case studies from the industry, role plays, and real examples from Hindustan Zinc as well. The speakers emphasized **green sourcing** & **collaborative working**, **vendor management**, the importance of continuous learning to learn, and respecting the vendors as well as long term associates.

The workshop was a great platform for Hindustan Zinc purchasing team to network with domain experts and work towards building a sustainable supply chain.

CASE STUDY
Supplier's Day – A Step Towards Sustainable Value

Innovation is crucial in order to sustain progress and discover new opportunities for growth; however, it is not possible to come up with in-house innovations every time. In order to drive sustainable improvements throughout our value chain, we collaborate closely with our suppliers; Supplier's Day is one such step forward.

We organised our first Supplier Annual Meet on February 1, 2017 at Udaipur, with approximately **50 of the strategic suppliers** across India as participants. The emphasis lay on our commitment towards creating a sustainable supply chain and zero non-compliance.

The program began by sharing our growth plans as well as our expectations regarding productivity, quality, reliability, and sustainability . The management delivered the key message of global excellence through innovation. The suppliers were shown of our journey so far in the digital transformation of our supply chain, by showcasing future projects including ITMS and automated shipping through the vendor portal. To further encourage our suppliers towards business excellence, they were recognised under the categories of Operational Excellence, Supply Chain Alignment, Innovation Project, and best Debut Vendor.

The program also served as a platform for sharing the various best practices our suppliers are following, with **special focus on health and safety**, **the environment**, and **other technology-based innovations**. Some valuable ideas for collaborative growth were received, which included creating an innovation charter, leveraging the vendor portal creating a green channel for zero defect suppliers. Suppliers were also keen to work together with Hindustan Zinc on our sustainability initiatives including CSR to create positive impact on the society we belong to.

Annexures

Growth in Future

As we progress to achieve our future goals, we wil ensure that we meet the expectations of all our stakeholders and continue with our commitment to 'Galvanizing Growth'.

Safeguarding Life

Goals & Targets (2017-18)

- Achieve zero fatal incidents
- Achieve zero occupational illness cases
- Reduce Lost Time Injury Frequency Rate (LTIFR) to 0.27 or less
- Reduce Total Recordable Injury Frequency Rate (TRIFR) to be 0.70 or less
- Critical Review & audit of Safety Standard implementation
- Improvement in Risk analysis and evaluation methodology

Enhancing our Green Footprint

Goals & Targets (2017-18)

- Saving of 0.32 Million cum meter
- Saving of 0.030 Million GJ
- Achieve GHG Emission reduction by 5% in next five years
- Implementation of BMP recommendations
- Zero 4 or 5 environment incident

Unleashing the Human Potential

Goals & Targets (2017-18)

- Create and develop leadership pipeline and succession planning for key positions
- Develop operational skills in Underground mining for enhanced performance and productivity
- Leverage technology for data driven people decisions
- Foster environment of high engagement and admired employer in industry

Transforming Communities

Goals & Targets (2017-18)

- Expanding the Group's Flagship CSR programme Nandghar
- Social audit & needs assessment to be conducted
- Embed and encourage employee volunteerism in social initiatives
- Encourage safety practices and initiatives among partners and communities

Collaborating and Stepping Up the Supply Chain

Goals & Targets (2017-18)

- Driving supplier co-innovations to improve TCO and Green sourcing, Technological investments (ARIBA, TMS) for enhanced supply chain collaboration
- Zero defect culture with our suppliers and Zero waste in supply chain
- Supplier scorecards for star rating of supplier performance and recognising best in class performance
- Investment in Skill enhancement of our contract workforce and driving Zero non compliance of our suppliers

KEY PERFORMANCE
INDICATORS

FINANCIAL INDICATORS			
	UNITS OF MEASURE	FY 2015-16	FY 2016-17
Economic value generated (A)			
Revenue from Operation	INR Crores	15,463*	1 8,798
Other Income	INR Crores	2,763*	2 ,474
Total (A)	INR Crores	18,226*	2 1,272
Economic Value Distributed - Expenses (B)			
Employee Wages and Benefits	INR Crores	774	722
Operating Costs	INR Crores	6,691	6,763
Payment to Providers of Capital	INR Crores	11,764	12,624
Payment to Government (Income Tax)	INR Crores	5,478	6,250
Community Investments	INR Crores	63	49
Total (B)	INR Crores	24,770	26,408
Economic Value Retained (A-B)	INR Crores	(6,544)	(5,136)
Profit before depreciation, interest and tax	INR Crores	9,385*	12,213
Profit before tax	INR Crores	8,623*	10,200
Net tax expense/(benefit)	INR Crores	448*	1,884
Profit for the year	INR Crores	8,175*	8,316
Earnings per equity share	INR	19.35*	19.68

* The financials are restated and aligned according to IND-AS reporting requirements and the same has been reviewed by Statutory Auditors.

PRODUCTION INDICATORS					
	UNITS OF MEASURE	FY 2015-16		FY 2016-17	
		Mined Metal	Refined Metal	Mined Metal	Refined Metal
Zinc	Million MT	0.74	0.76	0.76	0.67
Lead	Million MT	0.14	0.15	0.15	0.14
Silver	MT		459		480

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HUMAN RESOURCE INDICATORS							
		FY 2015-16			FY 2016-17		
	UNITS OF MEASURE	Male	Female	Total	Male	Female	Total
WORKFORCE							
Full-time Employees	Number	4,365	325	4,690	4,097	324	4,421
Contract Employees	Number			12,410	13,049	106	13,155
New Hires	Number			157	117	32	149
New Hire Rate	Percentage			3.35	2.6	0.7	3.37
New Hires (Age-wise split)							
Less than 20 years	Number				1	0	1
20-30 years	Number				114	30	144
31-45 years	Number				1	2	3
46-58 years	Number				1	0	1
Employee Turnover Rate	Percentage			8.7			10.28
EMPLOYEE TRAININGS							
Full-time Employees	Man-hours	1,44,908*	6,398*	1,51,306*	89,205*	13,999*	1,03,204*
Contract Employees	Man-hours			2,86,710	3,91,159	1079	3,92,238

*Including workmen

HEALTHY AND SAFETY INDICATORS							
		FY 2015-16			FY 2016-17		
	UNITS OF MEASURE	Male	Female	Total	Male	Female	Total
FATALITIES							
Full-time Employees	Number	2	0	2	0	0	0
Contract Employees	Number	2	0	2	4	0	4
LOST TIME INJURY FREQUENCY RATE							
Full-time Employees	Number per Million Hours Worked			0.28			0.32
Contract Employees	Number per Million Hours Worked			0.57			0.30
Overall HZL	Number per Million Hours Worked			0.50			0.30
TOTAL RECORDABLE INJURY FREQUENCY RATE							
Full-time Employees	Number			0.75			0.95
Contract Employees	Number			1.25			1.00
OCCUPATIONAL DISEASE RATE	Number per Million Hours Worked			0.00			0.00
PROCESS INCIDENTS	Number per Million Hours Worked			5.96			7.72

ENVIRONMENTAL INDICATORS							
		FY 2015-16			FY 2016-17		
	UNITS OF MEASURE	MINES	SMELTERS	TOTAL	MINES	SMELTERS	TOTAL
MATERIALS USED							
Raw Material	Million MT	11.04	0.00	11.04	11.15	0	11.15
Semi-manufactured goods or parts	Million MT	0.00	1.63	1.63	0.00	2.08	2.08
Associated Process Materials	Million MT	0.12	0.45	0.57	0.17	0.49	0.66
Packing Material	MT	0.00	663.93	663.93	0.00	469	469
ENERGY CONSUMPTION							
Direct Energy	Million GJ	9.36	33.97	43.3	9.31	32.17	41.48
Indirect Energy	Million GJ	0.22	0.74	0.96	0.11	0.39	0.5
TOTAL ENERGY CONSUMPTION							
Fossil fuels purchased and consumed	Million MWh			12.03			11.52
Electricity purchased	Million MWh			0.26			0.14
Total renewable energy purchased or generated	Million MWh			0.16			0.14
Total non-renewable energy sold	Million MWh			0.16			0.14
Total non-renewable energy consumption	Million MWh			12.29			11.65
Total costs of energy consumption	INR Crores			1,381.79			1,593.46
WATER WITHDRAWL							
Ground water	Million m^3	3.73	0.13	3.86	3.25	0.067	3.32
Surface water	Million m^3	4.66	12.62	17.27	4.93	11.84	16.77
Rainwater	Million m^3	0.04	0.00	0.04	0.00	0.005	0.005
Waste water from another organization	Million m^3	0.00	5.36	5.36	0.55	4.21	4.77
Municipal water supplies or other water utilities	Million m^3	0.008	0.00	0.008	0.005	0	0.005
Total net fresh water consumption	Million m^3			19.58			18.09
WATER RECYCLED	Million m^3	7.16	5.78	12.94	6.38	5.05	11.43
AIR EMISSIONS							
PM Emission from stacks	MT			1,083			887
SOx Emission from stacks	MT			32,328			19,255
NOx Emission from stacks	MT			8,075			7,602

ENVIRONMENTAL INDICATORS							
		FY 2015-16			FY 2016-17		
	UNITS OF MEASURE	MINES	SMELTERS	TOTAL	MINES	SMELTERS	TOTAL
CARBON EMISSIONS*							
Scope I Emission*	Million MT CO_2e			4.47			4.29
Furnace oil (FO)*	Million MT CO_2e			0.038			0.042
High Speed Diesel (HSD)*	Million MT CO_2e			0.23			0.20
Propane*	Million MT CO_2e			0.016			0.016
Liquified Petroleum Gas (LPG)*	Million MT CO_2e			0.002			0.001
Coal*	Million MT CO_2e			3.79			3.64
Coke*	Million MT CO_2e			0.39			0.38
Pyrolysis Oil*	Million MT CO_2e			0.00			0.002
LSHS*	Million MT CO_2e			0.0008			0.00
Scope II Emission (electricity purchased from state grid)*	Million MT CO_2e			0.22			0.11
Scope III Emission*	Million MT CO_2e						2.77
WASTE GENERATION	Million MT						
Hazardous Waste	Million MT	0.001	0.58	0.58	0.001	0.53	0.53
Non-Hazardous Waste	Million MT	0.06	0.42	0.47	0.06	0.45	0.51
Overburden/ Waste Rock	Million MT	64.71	0.00	64.71	37.64	0.00	37.64
Tailings (gross generation)	Million MT	8.92	0.00	8.92	9.09	0.00	9.09
SOLID WASTE DISPOSED							
Total waste disposed#	Million MT			72.91			45.35

* GHG emissions have been computed in line with the Greenhouse Gas Protocol: Corporate Accounting and Reporting Standard, evaluated by a third party as per the ISAE 3410 standard

Waste disposal quantity is provided for the Hazardous Waste given which is being disposed in the Secure Landfill (SLF) and the common Treatment, Storage and Disposal Facility (TSDF), tailing which is being disposed in tailing dam and overburden at dump area. Our Non Hazardous Waste is being sold or stored in the store yard.

MAPPING WITH
UNGC PRINCIPLES

Principles	Statement	Page No.
	Human Rights	
Principle 1	Businesses should support and respect the protection of internationally proclaimed human rights	28-30
Principle 2	Make sure that they are not complicit in human rights abuses	28-30
	Labour	
Principle 3	Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining	108
Principle 4	The elimination of all forms of forced and compulsory labour	28-30
Principle 5	The effective abolition of child labour	28-30
Principle 6	The elimination of discrimination in respect of employment and occupation	106
	Environment	
Principle 7	Businesses should support a precautionary approach to environmental challenges	49-58, 82
Principle 8	Undertake initiatives to promote greater environmental responsibility	79-96
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For more information please refer UNGC - COP Advance 2016-17

MAPPING WITH
FIMI PRINCIPLES

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G4-15

GRI G4 Content Index
'In accordance' Core Criteria

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KPMG (Registered)
Building no. 10, 8th Floor, Tower-C
DLF Cyber City, Phase - II
Gurugram - 122 002 (India)

Telephone: + 91 124 307 4000
Fax: + 91 124 254 9101
Internet: www.kpmg.com/In

Independent Limited Assurance Statement to Hindustan Zinc Limited on their Corporate Sustainability Report 2016-17

To the management of Hindustan Zinc Limited,
Yashad Bhawan, Udaipur,
Rajasthan, India – 313 004

Introduction

KPMG in India (KPMG) was engaged by Hindustan Zinc Limited ('the Company' or 'HZL') to provide an independent assurance on its Sustainability Report for FY 2016-17 ('the Report'). The Report is prepared by the Company based on Global Reporting Initiative (GRI) G4 Guidelines 'in-accordance – core' disclosure criteria for sustainability reporting.

The development of Report, its content, identification of key material issues, engaging with stakeholders is the sole responsibility of the management of the Company. KPMG's responsibility is to provide limited assurance on the Report content as described in the scope of assurance.

Reporting Criteria

Hindustan Zinc Limited applies its sustainability performance reporting criteria based on Sustainability Reporting Guidelines (G4) of Global Reporting Initiative (GRI) including the Mining and Metals Sector Disclosures, National Voluntary Guidelines on Social, Environmental and Economic Responsibilities of Business (NVG) framed by the Ministry of Corporate Affairs (MCA), Government of India, United Nations Global Compact (UNGC) principles, International Council on Mining and Metals(ICMM) and Sustainable development Goals framework as detailed in the 'Scope, Boundary and Limitations'.

Assurance Standards Used

We conducted limited assurance in accordance with the requirements of International Federation of Accountants (IFAC), International Standard on Assurance Engagement (ISAE) 3000, (Revised) Assurance Engagements Other than Audits or Reviews of Historical Financial Information. Under this standard, we have reviewed the selected information presented in the Report against the criteria of relevance, completeness, reliability, neutrality and understandability.

Scope, Boundary and Limitations of Assurance

The Assurance has been provided for sustainability performance disclosures presented by Hindustan Zinc Limited in its Report for the period 01 April 2016 to 31 March 2017. Our Scope of assurance included verification of the sample data and information on material aspects reported at the following units/locations in Rajasthan:

- **Sindesar Khurd Mine**
- **Chanderiya Smelting Complex**
- **Rampura Agucha Mine**
- **Rajpura Dariba Mine**
- **Dariba Smelting Complex**
- **Corporate Office- Udaipur**

The assurance scope excludes:

- Data and information outside the defined reporting period and boundary;
- The Company's financial performance;
- The Company's statements that describe expression of opinion, belief, aspiration, expectation, aim or future intention and assertions related to Intellectual Property Rights; and
- Aspects of the report other than those mentioned below;

The General and Specific Standard Disclosures subject to assurance were as follows:

General Standard Disclosures	Specific Standard Disclosures
• Strategy and Analysis- G4-1 • Description of key impacts, risks, and opportunities- G4-2 • Organizational Profile – G4-3 to G4-16 • Identified Material Aspects and Boundaries- G4-17 to G4-23 • Stakeholder Engagement- G4-24 to G4- 27 • Report Profile- G4-28 to G4-33 • Governance- G4-34-38, G4-45 to G4 -47 • Ethics and Integrity- G4-56 to G4-58	• Environment – Energy (G4 EN3, G4 EN5, G4 EN6), Water (G4 EN8, G4-EN10), Biodiversity (G4 EN11, G4-EN14), Emissions (G4 EN15, G4 EN16, G4 EN18, G4 EN21), Effluents and Waste (G4 EN22 to G4 EN24, Environmental Expenditure G4 EN31, G4 MM3) • Labor Practices and Decent Work – Employment (G4 LA1 to G4 LA3), Occupational Health and Safety (G4 LA6), Training & Education (G4 LA9 to G4 LA11), Diversity and Equal Opportunity (G4 LA12) • Human rights – Non-discrimination (G4 HR3), Child Labor (G4 HR5), Forced or Compulsory Labor (G4 HR6) • Society – Local Communities (G4-SO1, G4-SO2)

Methodology Adopted for Assurance

Our assurance processes involve performing procedures to obtain evidence about the reliability of specified performance information. The nature, timing and extent of procedures selected depend on our judgment, including the assessment of the risks of material misstatement of the selected sustainability disclosures whether due to fraud or error. In making those risk assessments, we have considered internal controls relevant to the preparation of the Report in order to design assurance procedures that are appropriate in the circumstances.

We have obtained sample evidence, information and explanations that were considered necessary in relation to the assurance scope and have arrived at conclusions mentioned below. Our work included a range of evidence-gathering procedures including:

- Assessing that the report is prepared in accordance with the Sustainability Reporting Guidelines of the Global Reporting Initiative (GRI G4 – in accordance "Core" criteria).
- Reviewing the Report to ensure that there is no misrepresentation of disclosures as per scope of assurance and our findings.
- Reviewing the materiality and stakeholder engagement framework deployed at Hindustan Zinc Limited.
- Understanding the appropriateness of various assumptions used for estimation of data by Hindustan Zinc Llimited.
- Assessing the systems used for data collection and reporting of the General Standard Disclosures and Specific Standard Disclosures of material aspects as listed in the assurance scope above.
- Verifying systems and procedures used for quantification, collation and analysis of sustainability performance indicators included in the Report.
- Holding discussion with senior executives at the plant locations and at the corporate office to understand the risks and opportunities from a sustainability perspective including the strategy that Hindustan Zinc Limited has adopted to address the same.
- Verifying select key performance data through site visits to operational locations and corporate office for:
  - Testing reliability and accuracy of data on a sample basis.
  - Assessing stakeholder engagement process through interactions with relevant internal stakeholders and review of related documentation.
  - Limited review of the materiality assessment process
  - Reviewing the processes deployed for collection, compilation and reporting of sustainability performance indicators at corporate and plant level.

Appropriate documentary evidence was obtained on a sample basis to support our conclusions on the information and data verified. Where such documentary evidence could not be collected due to sensitive nature of information, our team verified the same at Hindustan Zinc Limited's premises.

Conclusions

We have reviewed the Sustainability Report of Hindustan Zinc Limited. Based on our review and procedures performed as described above, nothing has come to our attention that causes us not to believe that the sustainability data and information presented in the Report is fairly represented in line with the identified material issues and is in accordance with the sustainability reporting guidelines (G4) of the Global Reporting Initiative.

We have provided our observation to the company in a separate management letter. These, do not, however, affect our conclusions regarding the Report.

Independence

The assurance was conducted by a multidisciplinary team including professionals with suitable skills and experience in verifying environmental, social and economic information in line with the requirements of ISAE 3000 (Revised) standard. Our work was performed in compliance with the requirements of the IFAC Code of Ethics for Professional Accountants, which requires, among other requirements, that the members of the assurance team (practitioners) as well as the assurance firm (assurance provider) be independent of the assurance client, in relation to the scope of this assurance engagement, including not being involved in writing the Report. The Code also includes detailed requirements for practitioners regarding integrity, objectivity, professional competence and due care, confidentiality and professional behavior. KPMG has systems and processes in place to monitor compliance with the Code and to prevent conflicts regarding independence. The firm applies ISQC 1 and the practitioner complies with the applicable independence and other ethical requirements of the IESBA code.

Responsibilities

Hindustan Zinc Limited is responsible for developing the Report contents. The Company is also responsible for identification of material sustainability issues, establishing and maintaining appropriate performance management and internal control systems and derivation of performance data reported. This statement is made solely to the Management of Hindustan Zinc Limited in accordance with the terms of our engagement and as per scope of assurance. Our work has been undertaken so that we might state to Hindustan Zinc Limited those matters for which we have been engaged to state in this statement and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than Hindustan Zinc Limited. For our work, for this Report, or for the conclusions expressed in this independent assurance statement. The assurance engagement is based on the assumption that the data and information provided to us is complete and true. We expressly disclaim any liability or co-responsibility for any decision a person or entity would make based on this assurance statement. By reading this assurance statement, stakeholders acknowledge and agree to the limitations and disclaimers mentioned above.

Santhosh Jayaram
Partner
KPMG
06 July 2017

WE ALL HAVE ZINC IN OUR LIVES...

Helps and Heals

Fortifies and Fertilizes

Evolves and Ensures Greenery

Brilliant and Beautiful

Tyre'd and Tested

Great and Geared Up

Enlivens and Energizes

Supports and Steels You Up

Hearty and Healthy

Hindustan Zinc Limited

Yashad Bhawan, Udaipur - 313 004, Rajasthan, INDIA

Tel: +91 294-6604000-02

Report Developed by Green Evangelist