



**Partners for the Future**

# Partners for the Future

## How can a metals and mining company impact the future?

Can an ancient industry like mining find a place for itself in a rapidly modernising society? We believe that it can.

At our core, we are miners of potential. From natural resources to people, when both these reserves are harnessed responsibly and sustainably the destiny of nations can change. As a large, diversified metals and mining company, we have the potential to transform the future of the communities, regions, and countries from where we operate.

In FY 2017-18 alone, we generated an economic value of US\$ 15,092 million, of which only US\$ 526 million was retained by the company. The remaining was distributed to our employees, investors, communities and governments in the form of wages, dividends, interest payments, community investments and taxes. We contributed nearly US\$ 5.4 billion to the exchequer and invested US\$ 39 million in community support and CSR programmes.

Sustainable development is the only way forward. In this form of development, local communities benefit from our presence; employees & contract workers don't just earn a paycheck, but thrive through their association with us, are safe and are able to transform the future of their families positively. In this sustainable future, both genders are able to harness their potential and the environment is treated as a stakeholder that is cared for; and that care is reflected in the way we conduct our business.

Vedanta has committed to walk-the-talk on sustainability and in the process, we are confident that we will become a partner in the future of the countries where we are located.

## ABOUT THIS REPORT

Welcome to our 10th Sustainable Development Report, which has been prepared in accordance with the Global Reporting Initiative (GRI) Standards: Core option. It is mapped to the United Nations Global Compact (UNGC) and aligns to Sustainable Development Goals (SDGs). It reports our approach and disclosure towards triple bottom line principles - people, planet and profit over FY 2017-18. See page 82 for more information about our reporting.

Visit our online  
Sustainable Development  
Report 2017-18 at  
[http://sd.vedantaresources.com/  
SustainableDevelopment2017-18/](http://sd.vedantaresources.com/SustainableDevelopment2017-18/)

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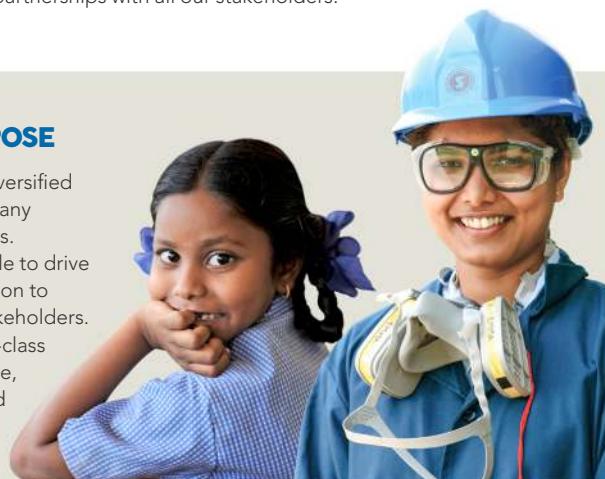
# VEDANTA AT A GLANCE

Vedanta Resources is a London Stock Exchange listed, globally diversified natural resources company with interests in Zinc, Lead, Silver, Copper, Iron Ore, Aluminium, Power and Oil & Gas. Our exploration portfolio from all the four continents that we operate in, follows a history of consistent geological discovery, sustainable growth, long-term value creation and improved best-in-class operations. Our focus on sustainable development is reinforced through building strong, engaging and beneficial partnerships with all our stakeholders.



## OUR CORE PURPOSE

Vedanta is a globally diversified natural resources company with low-cost operations. We empower our people to drive excellence and innovation to create value for our stakeholders. We demonstrate world-class standards of governance, safety, sustainability and social responsibility.



### Zinc-Lead-Silver

- Debari smelter
- Chanderiya smelters
- Rampura-Agucha mine
- Rajpura Dariba mine & smelters and Sindesar Khurd mine
- Zawar mine
- Skorpion mine, Namibia
- Black Mountain mine, South Africa
- Lisheen mine, Ireland\*

### Oil & Gas

- Rajasthan block
- Ravva (PKGM-1) block
- Cambay (CB/052) block
- South Africa block
- KG-OSN-2009/3 block
- PR-OSN-2004/1 block

### Iron Ore

- Iron ore operations - Goa
- Iron ore operations - Karnataka
- Iron ore projects - Liberia

### Copper

- Silvassa refinery
- Tuticorin smelter
- Mt Lyell mine, Australia\*\*
- Konkola Copper Mines, Zambia

### Power

- MEL power plant
- SEL
- Talwandi Sabo Power Plant

### Aluminium

- Lanjigarh alumina refinery
- Jharsuguda smelters & power plants
- Korba smelters & power plants

\* Lisheen had safe, detailed and fully-costed closure after 17 years of operation in November 2015

\*\* Under care and maintenance

VEDANTA OPERATES ACROSS THE VALUE CHAIN - FROM EXPLORATION, ASSET DEVELOPMENT, AND EXTRACTION, TO PROCESSING AND VALUE ADDITION, TO DELIVER LONG-TERM VALUE AND GROWTH ACROSS ALL STAGES.



# ZERO HARM WASTE DISCHARGE

## HSE CHARTER

We will fulfill our duty to protect the safety and welfare of our people and plan to achieve our health, safety and environment goal of zero harm to become the best performer in the resources industry by:

- ✓ Implementing world class standards that deliver our legal obligations and company policies

- ✓ Managing risk in all forms by applying controls and testing their effectiveness
- ✓ Setting priorities and commitments and measuring, monitoring and reporting performance
- ✓ Maintaining an open dialogue with our business partners and stakeholders
- ✓ Applying this discipline every day in every aspect of our business

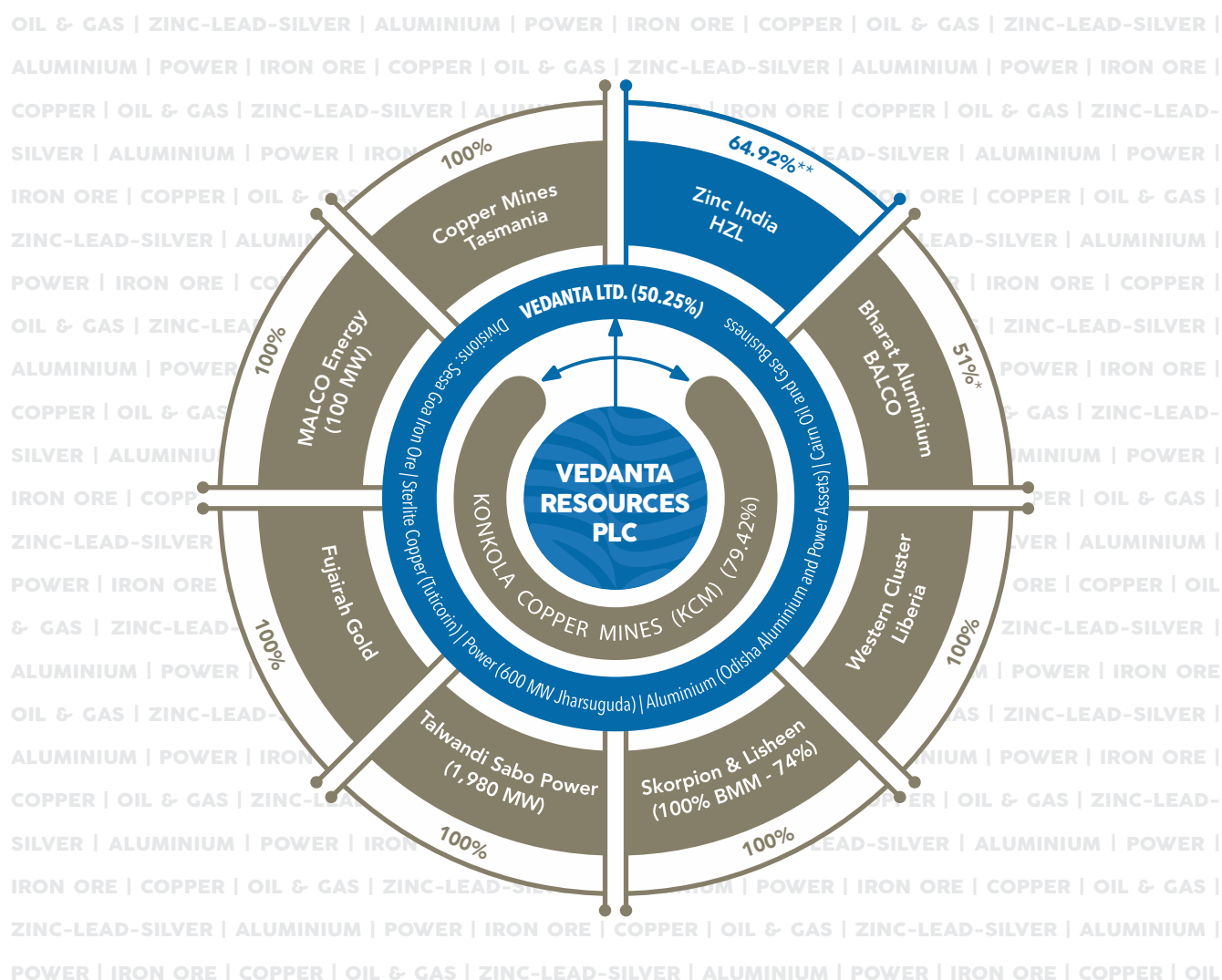
It's all of our responsibility to ensure that everyone who works on our site returns home safely every day while protecting the environment for our future generations.



**ANIL AGARWAL**  
Chairman

June 2016

## GROUP STRUCTURE



● Listed entity ● Unlisted entity

\*Option to increase stake to 100% | \*\*Option to increase stake to 94.4%

## FROM THE CHAIRMAN'S DESK



Vedanta is a purpose-driven organisation. Our vision is to leverage innovation and technology to harness the elements of natural resources and transform them to fuel progress and development, with a committed goal of Zero Harm, Zero Discharge and Zero Waste.

To achieve this vision, sustainable development principles are inter-twined with each of our businesses and our growth agenda.

A company's performance should be measured by its contribution to society as well as by financial metrics. It is encouraging to see investors and non-financial stakeholders value firms that have social and responsible ways of working. We want communities to feel that they are an integral part of Vedanta's growth story.

### Zero Harm, Zero Waste, Zero Discharge

In recent years, we have put our energies into improving our safety performance and environmental standards. Our vision is to have an organisation that works on the premise of 'Zero Harm, Zero Waste, and Zero Discharge'. We have made good progress in both areas; however the loss of nine of our colleagues in work-related accidents in the past year is a reminder that further improvement is required. I am encouraged by the response of our organisations leadership to these incidents - whether it is emphasising improved training methods, enhancing leadership presence on the ground, or inducting global experts into our workforce. I am confident that we will become a significantly safer organisation in the years to come.

Waste from extractive operations is significant and our endeavour has always been to create value from this waste. We have put considerable efforts into programmes such as 'waste to wealth'.

**AT VEDANTA JHARSUGUDA, WE DEDICATED THE 1<sup>ST</sup> 'GREEN ROAD' MADE USING FLY ASH AS THE PRIMARY COMPONENT.**

In the pursuit of our goal of Zero Waste, we will continue to develop innovative ways to upcycle/recycle all waste produced as part of our operations.

We are also cognizant of the role large businesses such as ours need to take in combating climate change. We remain fully supportive of the outcomes from the Paris Agreement from three years ago. Internally, we have constituted a 'Carbon Forum' to help steer the group towards a less carbon-intensive way of operating.

Renewable energy can help us reduce our carbon footprint. Our zinc business in India has installed 324 MW of renewable energy and has plans of installing an additional 110 MW in the near future. As a group, we are also excited by the rise of the renewable economy, because our products - copper, zinc, lead, aluminium, silver, and iron - will play a crucial role in helping this industry achieve scale.

## Harnessing Talent

A talented, diverse and an inclusive workforce has helped make us one of the leaders in natural resources. At Vedanta, we respect merit and have nurtured a culture, which enables our employees to realise their full potential. We have identified 500+ young leaders across the organisation and entrusted them with leadership opportunities to drive the next phase of business growth.

Vedanta Group is also rapidly moving to become more gender inclusive. Today, women constitute nearly 11% of our total workforce and 14.3% of our Board. We have set ourselves a target to achieve 33% women representation at the Board-level by 2020.

## Commitment to Society

Over the course of the last year, Vedanta invested over US\$ 39 million in social programmes. Our efforts have touched the lives of 3.4 million people in over 1,400 villages. Our flagship programme, 'Nandghar' aims to transform pre-primary education and healthcare in rural India. We have committed to construct 4,000 state-of-the-art child welfare centres across the country to support women and children by providing nutrition, education, skills development and healthcare they need.

**VEDANTA, THROUGH THE VEDANTA MEDICAL RESEARCH FOUNDATION, ALSO INAUGURATED CENTRAL INDIA'S FIRST WORLD-CLASS CANCER FACILITY IN NAYA RAIPUR, CHHATTISGARH IN THE PAST YEAR.**

This initiative aligns with the larger vision of Vedanta Group's commitment to give back to society, and I look forward to many more research & development initiatives from the foundation going forward.

Our programmes in children's well-being & education, women's empowerment, healthcare, drinking water & sanitation, skilling of youth, environmental protection, sports & culture, community infrastructure development, and agriculture & animal husbandry will continue to enhance lives of those who live around our operating sites.

I am happy to note that in the last year our work in sustainability is being recognised by global organisations.

**BOTH VEDANTA LIMITED AND HINDUSTAN ZINC IMPROVED THEIR RANKINGS IN THE METALS & MINING SECTOR AND MOVED UP TO THE 17<sup>TH</sup> AND 11<sup>TH</sup> PLACE RESPECTIVELY IN THE DOW JONES SUSTAINABILITY INDEX.**

Vedanta Limited was again ranked as India's leading publicly listed company in the India Disclosure Index 2017 after having achieved the same recognition in 2016. I am proud of our transparency and commitment to welfare of all our stakeholders.

As we look out into the next year and beyond, Vedanta will continue to operate under the highest standards of corporate governance and deliver value to all our stakeholders. There is much potential in the markets where we operate and Vedanta is positioned well to create an impact not just for ourselves but also for the communities, regions, countries and industries where we operate.

It is an exciting journey to be part of!

**ANIL AGARWAL**

**CHAIRMAN, VEDANTA RESOURCES**

## CEO'S MESSAGE



At Vedanta, Sustainable Development is the core belief driving all our actions and decisions. In the decade since we began disclosing the company's sustainability performance, we have made significant improvements to our safety, environmental and social management systems and have laid a strong foundation for the future growth of the company.

Our approach to sustainability is very simple. The work that we do should add value not just to our shareholders, but should improve and enhance the futures of the communities, regions and nations where we operate, and do so in a manner that causes zero harm to the environment and society. The Vedanta Sustainable Development Model comprises of four key elements - Responsible Stewardship, Building Strong Relationships, Adding & Sharing Value and Strategic Communications. This model is integral to all our businesses and helps them evolve their risk management strategy.

### Responsible Growth

While we pursue our goals of delivering growth through higher volumes, optimising costs and leveraging of technology & innovation for operational excellence, we are focused on achieving these with robust safety, health and environmental performance.

We have taken sustained action to reduce impact on environment. Our vision of 'Zero-harm' and 'Zero-discharge' saw us spend nearly US\$ 100 million on environmental management and improvement activities.

**OUR WASTE TO WEALTH PHILOSOPHY HAS SEEN US RECYCLE 82% OF OUR HIGH-VOLUME, LOW-IMPACT WASTES SUCH AS FLY ASH, SLAG, GYPSUM AND RED MUD.**

We have successfully met targets to reduce our water and energy consumption. We saved 4.1 million M<sup>3</sup> of water against a target of 2.2 million M<sup>3</sup>. We also conserved 2.6 million GJ of energy against a target of 1.39 million GJ.

We remain committed to minimise our carbon footprint and are well ahead in our plan to reduce our GHG emissions intensity by 16% by 2020 compared to a 2012 baseline. As of 31<sup>st</sup> March 2018, we have already reduced our GHG emissions intensity by 14%.

We seek to implement international best practices in tailings-dam management and have appointed a global-



expert to provide long-term monitoring and advice on the design, construction, and operation of each dam.

We have a workforce of over 78,000 people, and our overriding goal is that every one of them goes home safe every single day. Our 'zero harm' policy puts health and safety firmly at the forefront of our operations.

We have been working relentlessly to enhance the safety culture of the organisation. No injury, much less a loss of life, is ever acceptable and we continue to invest in training and skill enhancement to prevent accidents before they can happen. The need for improvement, and our determination to achieve zero harm, means that this priority is receiving the direct attention of the Executive Committee. Due to our continued intense focus on safety, our Lost Time Injuries Frequency Rate has improved by nearly 37% over the last five years and we strive to get better.

**OUR EFFORTS HAVE BEEN RECOGNISED BY ORGANISATIONS SUCH AS THE BRITISH SAFETY COUNCIL WHO AWARDED OUR STERLITE COPPER BUSINESS THE PRESTIGIOUS 'SWORD OF HONOUR' AND THE UPSTREAM AND MIDSTREAM OPERATIONS OF CAIRN OIL & GAS A '5-STAR RATING'.**

To introduce new ideas that drive an improved safety culture, we have reinforced our HSE organisation by recruiting 10 HSE experts with global experience. New safety standards (in addition to the existing six standards) on Machine Guarding, Cranes and Lifting, Molten Metals, and Pit, Dump & Stockpile Safety have been introduced and we continue to provide training to both employees and contractors. Last year, they underwent around 921,550 hours in safety training. Our effort is to eliminate fatalities by instilling an intense safety discipline among our workforce through continuous education, motivation and rigorous implementation of safety procedures.

I am however deeply saddened by the loss of nine lives during the course of the year and offer my condolences to their families. We have conducted a thorough root-cause analysis and formulated definitive steps to strengthen visible leadership, especially in high-risk areas. We would not like to repeat these unfortunate incidents in the future.

## Connecting with Communities

I strongly believe that our social license to operate hinges on good relations with the communities who live around our operating sites. Last year, we spent US\$ 39 million on community development programmes and positively impacted 3.3 million people. Our programmes seek to improve the lives of these communities through

multi-pronged interventions including development of community infrastructure, empowering women entrepreneurs, providing safe drinking water, teaching youth vocational skills, improving agricultural yield and many others. Our flagship programme - Nandghar - is a reimagined anganwadi addressing nutritional and educational needs of young children and empowering women. We built the 154<sup>th</sup> Nandghar this year and our goal is to build 4,000 across 11 Indian states. We also established a 170-bed cancer hospital - The BALCO Medical Center - in Naya Raipur, thereby bringing much-needed modern oncology care to the state of Chhattisgarh and central India.

While we have one of the largest CSR programmes in India, we have more work to do in engaging with the community and seeking their feedback. The incidents in Tuticorin are a reminder of the need for strong community relations. This year we began the process of improving our social performance standards and we hope to see significant changes in the manner in which the company engages with its communities over the next few years. That is the next phase of our growth as a sustainable company.

## Future Outlook

Vedanta's robust performance led by significant increases in our revenues and expansion in our production volumes has created a clear pathway for sustainable growth. Vedanta's Sustainability Framework will play a central role as we ramp-up Zinc India's operations, commission the Gamsberg project, grow our Oil & Gas business and integrate Electrosteel into our business structure. Each project and activity needs to meet our high standards of sustainability performance.

We have made a commitment to deploy new technologies such as autonomous equipment to improve operational efficiencies and on-site safety.

Digitisation of our systems and process will also go a long way in improving the overall performance of our businesses. The programme on business excellence will help achieve the full potential of our assets. Leadership development, energising and facilitating teams, and driving high impact projects at each of our businesses are all aspects of this growth journey, and I look forward to the results.

Each year we enjoy presenting our sustainability performance to our stakeholders and we look forward to your feedback and comments. You can write to us at [sustainability@vedanta.co.in](mailto:sustainability@vedanta.co.in).

At Vedanta, we believe that progress and development should not just improve the economic status of communities but should enhance their dignity. We will continue to operate our business with this underlying philosophy, and I look forward to a sustainable growth journey ahead!

**KULDIP K. KAURA**

**CHIEF EXECUTIVE OFFICER**

## GLOBAL CONTEXT

2017 saw the global economy grow by 3.8% according to the IMF's World Economic Outlook (WEO). This was a 0.5% increase over the previous year and the fastest growth rate since 2011. This global uptick was driven by resilient growth in advanced economies combined with a continued pick-up in growth in emerging markets. Key drivers included an increase in investment spend, supported by an improved outlook and a rise in private consumption.

Global metals markets are still looking at China to play a key role given that it accounts for more than 50% of world metal consumption. However, India is projected to grow by 7.4% in 2018 and 7.8% in 2019, maintaining its status as one of the fastest-growing major economies in the world, according to the IMF's WEO.

In the medium term, growth is expected to rise gradually as structural reforms continue to be implemented, raising productivity and incentivising private investment. An amended MMDRA (Mines and Mineral Development and Regulation Act) in 2015 has brought increased clarity on the licencing around mining. Key regulatory reforms around opening commercial coal mining to the private sector and the launch of Open Acreage Licensing Policy (OALP) in the oil & gas sector to improve exploration,

are some of the steps in the past year towards creating a more favourable operating environment.

Positive demographic factors such as an increasing workforce and urbanisation are driving a greater need for infrastructure development. The Indian government continues to invest in the infrastructure sector, having increased its spending in the Union Budget 2018-19.

Vedanta, as the only diversified natural resources company in India, is uniquely positioned to leverage India's growth potential by catering to that demand. With such a vast domestic market, everything we produce in India, we aim to sell in India.

We expect to see a continued focus and further investments in the infrastructure, transportation and power sectors. We also anticipate changes in government policy to incentivise domestic metal and energy production, and to reduce dependence on imports. These initiatives will lead to an increasing demand for domestically produced metals.

With various growth opportunities in the pipeline, we anticipate that our performance in FY 2018-19 will be even stronger.

**We expect to focus on organic growth in areas where we have deep expertise: principally, oil & gas, and zinc. Equally, we continue to monitor markets and make our decisions with a strong sense of realism.**



Some of the other factors that will continue to affect the mining industry in general and Vedanta in particular include:

## CLIMATE CHANGE



Changing climate can have a dual impact on the natural resources industry. It can directly impact operations and performance and indirectly can affect supplies and increase energy costs. Vedanta is sensitive to the impact we have on the environment.

Vedanta is committed to addressing the challenges posed by climate change. Our energy management approach hinges on a two-pronged strategy:

### Improving energy and process efficiency

#### Diversifying our energy portfolio to the extent possible

We continued to take sustained actions to address climate change. Our Sustainable Development Framework is in place, which includes an Energy and Carbon Policy, and an Energy and Carbon Management Standard. As responsible stewards of sustainable development, we report our GHG emissions as per the requirements of the World Business Council for Sustainable Development (WBCSD), World Resource Institute (WRI) GHG Protocol and Carbon Disclosure Project (CDP). Our zinc and lead mining operations are transitioning from open pit to underground mining. This will help us in reducing our carbon footprint.

Our Carbon Forum - a group-level body led by the CEO-Diversified Metals comprises of business COOs and representatives from Corporate HSE and Sustainability. We have formulated a Carbon Strategy and are planning to initiate carbon pricing. By putting a price on carbon, we will be able to reduce emissions while encouraging sustainable and robust growth.



SDG 7, 13

## THE RIGHT TALENT



As Vedanta grows across sectors and geographies, we want to ensure that we are able to do so in the most sustainable manner possible. To be able to deliver on this ambition, we need people who have global exposure and a proven track record of delivering sustainable solutions in the mining industry. We are also mindful that as we create new opportunities, we do so in a manner that enables gender diversity within the workforce as well as allows local communities to become part of this workforce - whether directly or with our multiple suppliers, vendors, and partners.

**Vedanta has been attracting the right talent from across the globe due to our employee-centric human resources policies and culture that fosters entrepreneurship. The new, diverse talent that we attract is given the freedom to innovate and create.**

We routinely induct a large numbers of university graduates, which gives us an influx of fresh minds, while providing them with lucrative growth opportunities. Our Global Leadership Programme provides an ideal opportunity to develop mutual appreciation for the best practices across the Group companies and leverage the synergy. This programme also helps the organisation create talented global resource pools that can bring out the best and excel in a multi-cultural environment.

Internal growth workshops identify young leaders through a structured process, in order to develop them into highly competitive leaders and provide them growth and recognition. We attract female candidates as our policies are progressive and women-friendly. We provide leadership development, women-networking forums and enhanced parental leave policy.



SDG 8, 5

## RETAINING OUR SOCIAL LICENSE TO OPERATE



The metals & mining industry has always walked a fine balance between creating new economic value, ensuring that local communities benefit from the presence of the industry and minimising the impacts on the environment. In areas with indigenous populations, additional care needs to be exercised to ensure community buy-in. Given the nature and scale of the industry, challenges to social license to operate by local communities have been common in the metals & mining sector. In response companies and industry organisations such as IFC and ICMIM have developed several guidelines and best practices to aid greater acceptance of the industry in communities.

Vedanta connects with the community even in the remotest areas where we operate. As responsible stewards of sustainable development, we create direct and indirect employment, empower local communities through initiatives in health and living standards; and add value to the economy. We also provide employment to candidates from the community in senior management and other positions to empower them and enable economic activity in the region.

Apart from providing employment to the youth, we work for children's well-being & education, women's empowerment, healthcare, drinking water & sanitation, agriculture & animal husbandry, skilling the youth for new opportunities, environment protection & restoration, sports & culture and community infrastructure.

**We are also committed to ensuring that indigenous communities have the opportunity to give free, prior, informed consent for new projects that we plan to undertake.**



SDG 1, 5, 6

## OUR STRATEGY AND APPROACH

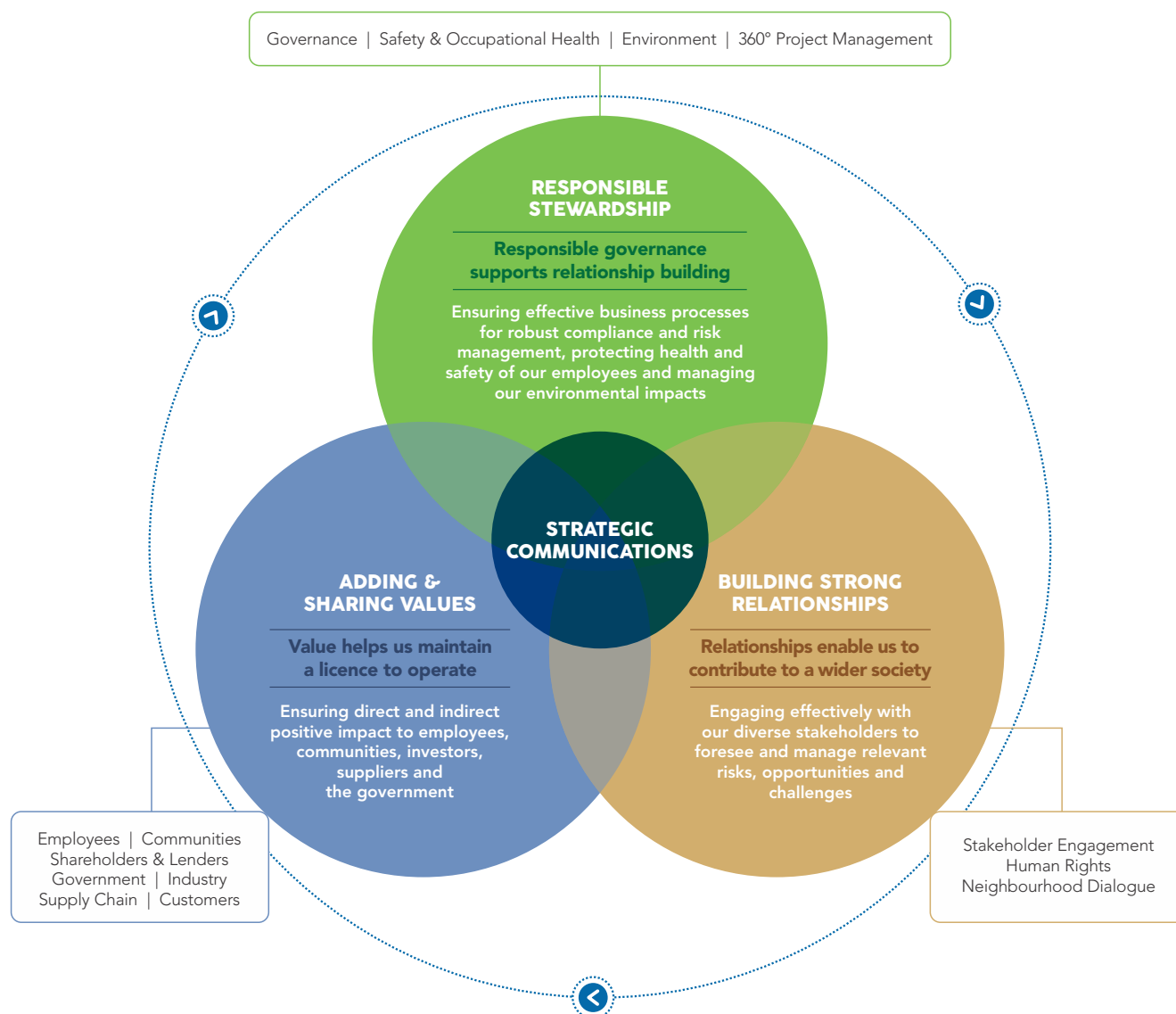
Our strategy continues to focus on delivering long-term value and growth to our shareholders through a diversified portfolio of large, long-life and low-cost assets. We want to achieve this while upholding the principles of sustainable development.

At Vedanta, we understand the value of a unified sustainable development agenda that goes beyond compliance. Though each of our subsidiary businesses operate independently under a federal structure, we have developed the Vedanta Sustainability Framework, which is integral to the core business and risk management strategy.

Developed keeping in mind multiple internal and external sustainability imperatives like materiality and core values of Vedanta, UNGC's 10 Principles, United Nation's SDGs, standards set by International Finance Corporation (IFC), ICMM and OECD, our Sustainable Development Model comprises four pillars - responsible stewardship, building strong relationships, adding and sharing value, and strategic communications.

### APPROACH

The Vedanta Sustainability Framework is central to our sustainability agenda. It has allowed the Group to operationalise the intent that is centred on our four strategic pillars of: Responsible Stewardship, Building Strong Relationships, Adding and Sharing Value, and Strategic Communications.



**These four pillars are critical to ensuring the long-term successful future of our business - meeting our strategic goals of growth, long-term value and sustainability.**

For further details on Vedanta Sustainability Framework, refer to Governance Section page 15



# MATERIALITY

Materiality assessment helps us maintain the relevancy and credibility of the report, and ensures that it remains focused on what matters. Our materiality process is in line with Global Reporting Initiative (GRI) standards. We seek to identify the issues most important to our stakeholders and our business, and prioritise our interventions accordingly.

Two years ago, Vedanta identified and prioritised those issues that are most material to our business. We sought the views of a diverse group of stakeholders and their responses were presented to our management group, who then prioritised the most important issues for our business.

## MATERIAL ASPECTS

M A T E R I A L I T Y M A T R I X			
Critical importance	High importance	Average importance	Low importance
Policies and actions to restrict unethical business practices	Leadership development and talent management	Public policy and advocacy	Local hiring and content
Rights of indigenous peoples and human rights	Disclosure on slavery and human trafficking - UK's Modern Slavery Act	Diversity and equal opportunity	
Employee health, safety and well-being	Transparency in reporting on revenue and production figures	Broader economic benefit to host country	
Community engagement and development initiatives	Labour rights and industrial relations	Responsible Supply Chain Management	
Ethics and integrity - compliance to Code of Conduct	Community health and safety		
Environmental management (water management, waste management, air emissions and quality control, biodiversity management, environmental incidents management)	Energy management and climate change		
	Mine and site closure plans		
	Employee retention		
	Tax transparency and reporting		

This materiality matrix is reviewed and ratified by both the Executive Committee (EXCO) and the Sustainability Committee.

During the year, we continued our efforts to improve our systems and their performance in all the key issues identified in the matrix through our Sustainability Framework. As the year progressed, the following material areas emerged as the most significant drivers of our business - commanding either management or stakeholder attention:



Our sustainability roadmap sets out our targets and performance during the year on the key material issues.

## ROADMAP & PROGRESS

OBJECTIVES AND TARGETS FY 2017-18	STATUS	PERFORMANCE FY 2017-18	OBJECTIVES AND TARGETS FY 2018-19
<b>THE SAFETY OF OUR WORKFORCE</b>			
Achieve score >75% in six safety performance standards	●	<ul style="list-style-type: none"> <li>4 of 11 businesses achieved score of 75% or above</li> <li>9 of 11 businesses achieved 70% or above</li> </ul>	Achieve score >75% in six safety performance standards
Extend baseline health assessment across businesses	●	Hindustan Zinc, Sterlite Copper, Cairn Oil & Gas, KCM and BALCO have completed their initial exposure survey	
Zero fatal incidents and 26% reduction in Lost Time Injury Frequency Rate (LTIFR)	●	9 fatalities occurred in the fiscal year. LTIFR improved from 0.39 to 0.34 - a reduction of ~13%	Zero fatal accidents and an LTIFR of 0.30
<b>ENVIRONMENT MANAGEMENT</b>			
<ul style="list-style-type: none"> <li>Standardise water risk assessment approach for business</li> <li>Undertake water risk assessment for significant businesses with water as a material issue</li> <li>Water savings target: 2.2 million m<sup>3</sup></li> </ul>	●	<ul style="list-style-type: none"> <li>Water risk assessment tool developed in collaboration with independent experts</li> <li>Water risk assessment studies conducted for 30 significant business units across the group</li> <li>Water savings of 4.1 million m<sup>3</sup> achieved</li> </ul>	Achieve water saving of 4.0 million m <sup>3</sup>
Compliance with environmental and social management plan for new projects across the business	●	Work in progress	
Complete Biodiversity Management Plan at our Oil & Gas business	●	BMP study complete	
Achieve 50% of fly ash utilisation rate	●	90% of the generated fly ash utilised	Achieve fly ash utilisation of 75%
We are considering formal GHG reduction targets and we expect to achieve a 16% reduction in carbon intensity by 2020 from a 2012 baseline, which was the first year of audited data	●	~14% reduction achieved in GHG intensity over baseline of 2012	Continue our reduction trajectory and formalise our GHG intensity reduction target
Energy Saving: 1.39 million GJ	●	Energy saving of 2.6 million GJ achieved	Achieve 2 million GJ energy saving
Complete the dam break analysis of the identified facilities across businesses	●	<ul style="list-style-type: none"> <li>In FY 2016-17, two dams across our businesses had been identified for the analysis. Analysis completed at both</li> <li>We have taken a serious note of the dam-failure incidents at VAL-Jharsuguda and BALCO and have taken appropriate actions to ensure this is not a recurring issue for our business</li> </ul>	Develop capability and facilitate strengthening of tailing management practices across the Group
Initiate the capacity-building of selected professionals on biodiversity	●	Not initiated	

OBJECTIVES AND TARGETS FY 2017-18	STATUS	PERFORMANCE FY 2017-18	OBJECTIVES AND TARGETS FY 2018-19
<b>RETAINING OUR SOCIAL LICENSE TO OPERATE</b>			
Social impact studies to be continued for remaining sites	●	Partnered with an independent expert to conduct baseline, need, impact and SWOT assessments in all businesses. Work is under way	Complete the baseline and social impact assessments in all businesses
Increase the implementation and utilisation rate of the SAP system	●	<ul style="list-style-type: none"> <li>The development of a unified reporting system to record aggregated impact of CSR initiatives, and to manage entire CSR cycle, is in process</li> <li>IFMR has been commissioned to develop unified indicators, and Goodera (under process) has been identified for providing the software platform</li> </ul>	
Expand the company's flagship Nandghar CSR programme to all our businesses	●	Nandghars constructed: 54 in FY 2017-18; 154 till date; 250 under construction	250 Nandghars to be constructed in FY 2018-19 and planning for additional 1,000 to be completed.
Embed and encourage employee volunteering for social initiatives	●	<ul style="list-style-type: none"> <li>Employee engagement initiatives have been undertaken in businesses including HZL, Sterlite Copper and BALCO</li> <li>These initiatives included <i>Khushi Baatiye</i>, audio description movie for visually impaired children, and mentoring programme by employee families, among other activities</li> </ul>	Develop employee engagement as a standard policy for the group
<b>PEOPLE AND DIVERSITY</b>			
Employee scorecard coverage to be extended to 100% of the professional employees	●	Target completed	-
Ensure 100% coverage of code of conduct training for all new professional employees	●	95.7% of our new hires have received the Code of Conduct training. The balance at KCM will be covered within the initial 12 months of their joining date as per the Code of Conduct training calendar	Continue to focus on Code of Conduct training for all professional employees including new hires
Increase gender diversity by hiring 20% women this financial year	●	~21% of all new full-time hires in FY 2017-18 have been women	-
Achieve 33% female representation at Vedanta Board-level by 2020	●	<ul style="list-style-type: none"> <li>Currently, female representation on the Board of Vedanta Resources is 14.3%</li> <li>We continue to focus on our target of achieving 33% representation</li> </ul>	<ul style="list-style-type: none"> <li>Achieve 33% female representation at Vedanta Board-level by 2020</li> <li>Focus on anchoring and engagement of high potential employees through our flagship programme V-Connect</li> <li>Focus on Right Management In place in each SBU</li> </ul>

● Achieved in Progress
 ● Partially Achieved
 ● Not Achieved

# SUSTAINABLE DEVELOPMENT JOURNEY

Our sustainable development journey continues to create value for our stakeholders. We have invested our time and resources in introspecting our actions; we have achieved our targets and formulated ambitious new ones; we have adopted global best practices and taken innovative leaps; we have aligned our standards with industry benchmarks and charted some of our own. We have done all this and continue to do it with a singular agenda: ensuring long-term growth for all stakeholders.

## SNAPSHOT OF OUR JOURNEY

**FY 2013-14**



**Businesses started embedding Vedanta Sustainable Development Framework** training and implementation of policies and standards

**External Review Concluded (URS - Scott Wilson)** all recommendations got successfully closed

**Sustainability linked with Remuneration** Sustainable development KPIs linked to executive remuneration

**Vedanta Sustainability Assurance Programme (VSAP) into its Second Year of Implementation** supported by external auditors

**FY 2014-15**



**Introducing 'Strategic Communications'** as a new pillar of our Sustainable Development Model

**Rolling out of Vedanta Sustainable Development Framework continues** Introduction of safety performance standards, formal safety risk assessment, industrial hygiene baseline assessment and safety leadership coaching

**VSAP into its Third Year of Implementation** revised as per the material priorities, supported by external auditors

**Environment & Social Review of VSAP** Started external review

**Revisiting our Community Need Assessment Studies** aligning all community projects with updated studies

**FY 2015-16**



**Environment & Social Review of VSAP** Continued external review

**VSAP into its Fourth Year of Implementation** revised as per the material priorities with more emphasis and focus on safety by inclusion of safety performance standards, supported by external auditors

**Advancing Safety** by developing safety performance standards and incorporating executive remuneration

**Social Impact Assessment Studies - HZL & Cairn India** aligning all community projects with updated studies

**FY 2016-17**



**VSAP and its Implementation**

**VSAP material priorities identified for the FY 2016-17** are occupational health and safety, resource use and management, stakeholder engagement, and supplier and contract management

**Social Impact Assessment Studies completed for nearly all our businesses.** The major social impact assessment studies were done at Cairn Oil and Gas Business

**Advancing Accountability** employee health, safety and well-being identified as the material issue is a key priority for the company.

**FY 2017-18**



**Strong Focus on Safety**

**Alignment across businesses on a collective carbon strategy**

**Launching a systematic, Group-wide programme to monitor and maintain tailings dams in line with global best practices**

**Consolidating efforts to drive effective implementation of the provisions of the Modern Slavery Act across our businesses**

**Re-evaluating our social performance standards in order to enhance our Social License to Operate**





# Responsible Stewardship

GOVERNANCE  
SAFETY & OCCUPATIONAL HEALTH  
ENVIRONMENT

# GOVERNANCE

**OUR GOVERNANCE PHILOSOPHY IS TO ENSURE COMPLIANCE TO ACHIEVE DEVELOPMENT THAT IS SUSTAINABLE, GROWTH THAT IS INCLUSIVE AND PROGRESS THAT IS ACCOUNTABLE.**

We are a multi-locational federated Group, where each company is independent for its day-to-day operations and the comprehensive governance structure acts like a glue to ensure a uniform culture of accountability, fairness and transparency.

At the helm of our governance structure is the Board of Directors, who provide leadership for the Group and strategic direction to the management. It is collectively responsible to shareholders for promoting long-term success of the Group through the creation and delivery of sustainable shareholder value.

## COMPOSITION OF THE BOARD

In accordance with the UK Corporate Governance Code, the majority of our Board, excluding the Chairman, comprises independent Non-Executive Directors. As of March 31, 2018, our Board consists of the Executive Chairman, Executive Vice Chairman, and five independent Non-Executive Directors.

AGE GROUP	LESS THAN 30 YEARS	0
	BETWEEN 30-50 YEARS	1
	ABOVE 50 YEARS	6

The Board has four established committees that help oversee the management of the Group:

SUSTAINABILITY  
COMMITTEE

AUDIT  
COMMITTEE

NOMINATIONS  
COMMITTEE

REMUNERATION  
COMMITTEE

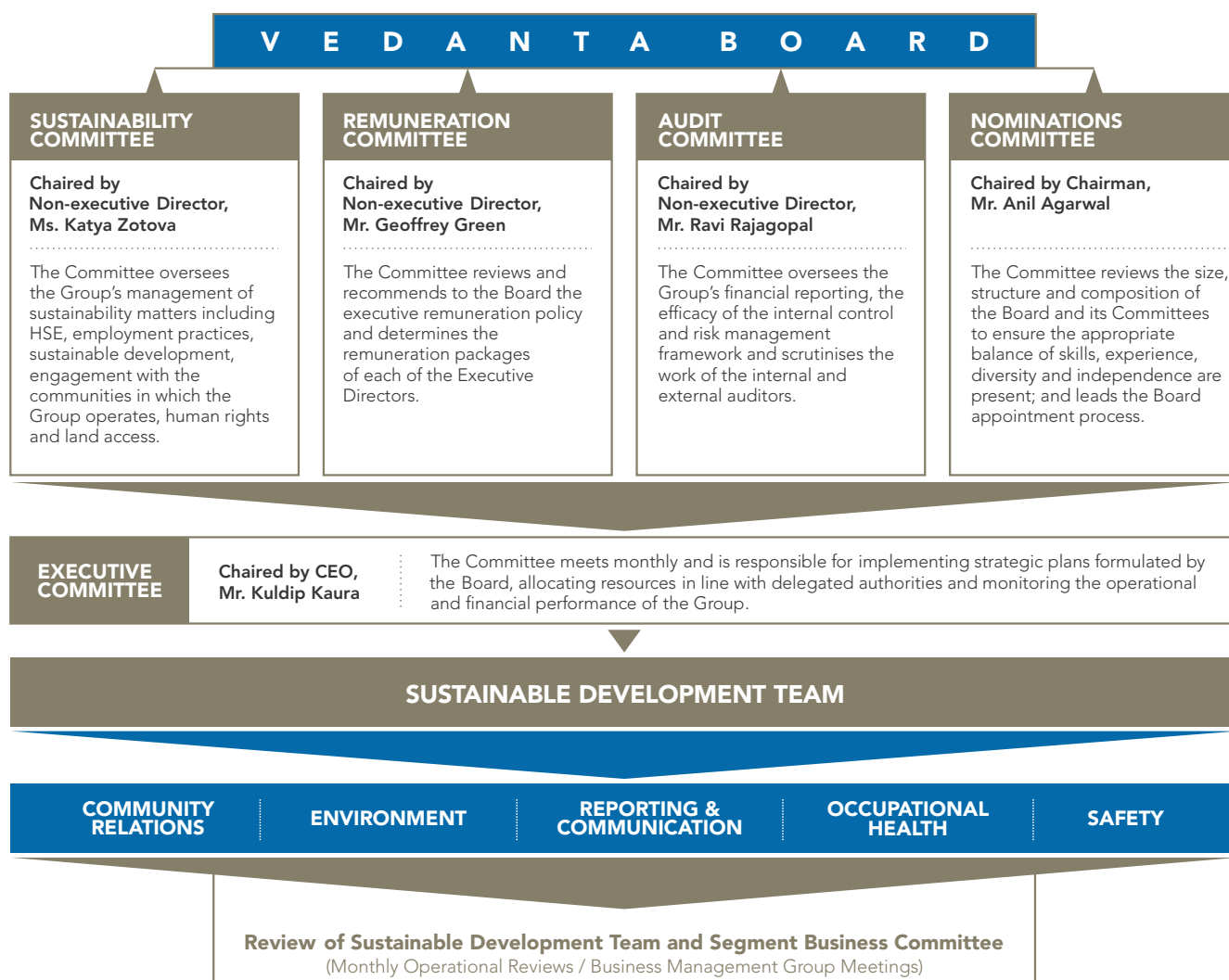


Ablly assisting the Board are our 'Code of Business Conduct and Ethics' and the Vedanta Sustainability Framework. While the Code is a guiding set of principles for our employees to conduct themselves impeccably, the Framework is for our businesses to understand and integrate sustainability into their operation and decision-making.

To further ensure the robustness of our structure, we also follow global standards and good practices such as ICMM, IFC and OECD guidelines. International consultants are also engaged to audit and provide feedback on the structure's strengths and weaknesses.

## BOARD OF DIRECTORS





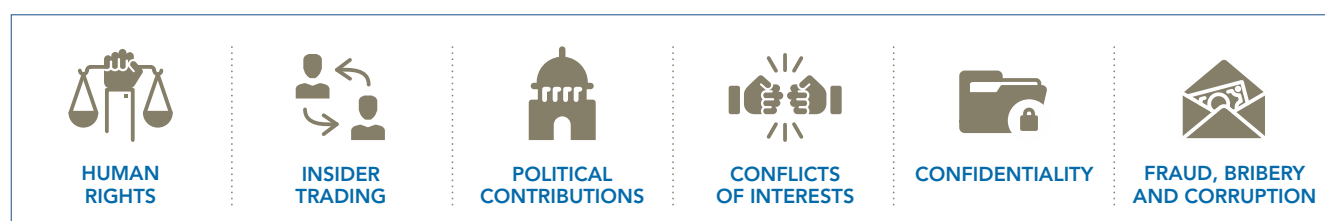
For Vedanta, compliance with the local regulations is non-negotiable. Requisite checks and balances are built in the system with a well-defined reporting structure and responsibilities to address local issues equitably. A responsive feedback mechanism and quick redressal system ensure that we are effective and efficient.

See the Annual Report for detailed information on the performance of the Board Committees

## CODE OF BUSINESS CONDUCT AND ETHICS



Our Code of Business Conduct and Ethics (CBCE) provides a set of principles, which ensure compliance with the law of the land and sets out expected standards of behaviour. Our reporting requirements in the UK, comprise various governance facets such as:



Vedanta will not compromise on ethics and integrity. Fraud, bribery or any form of corruption is non-negotiable, and the Company is committed to their eradication. Each suspected case is thoroughly investigated and concluded. The Audit Committee reviews the actions taken by management in the elimination of fraudulent practices and to promote ethical working practices.



## The CBCE:

- Complies with the UK Bribery Act, 2010
- Prohibits payment and receipt of bribes directly or indirectly through associated persons
- Is applicable across the organisational hierarchy
- Is aligned with the UK Modern Slavery Act 2015

The CBCE is supported by the following additional policies and guidance notes:

- The Insider Trading Prohibition Policy
- The Whistle-blower Policy
- Anti-trust Guidance Notes
- The Supplier Code of Conduct

**This year, we provided more than 13,000 hours of training on Code of Conduct, including Human Rights aspect, to further reinforce implementation of CBCE.**

In order to ensure transparent and easy access to our policies in the public domain, our Insider Trading Prohibition Policy and Anti-trust Guidance Notes relating to Disclosure of Sensitive Information are publicly available on our website and are incorporated into contracts where relevant.

Vedanta's Whistle-blower Policy currently communicates our commitment to a 'policy against retaliation', and commitment to maintaining confidentiality, in case of a company employee.

Number of whistle-blower cases opened in 2017-18	<b>87</b>
Number of whistle-blower cases upheld and found correct in 2017-18	<b>23</b>
Number of whistle-blower cases closed in 2017-18	<b>76</b>

Appropriate disciplinary actions against erring employees, contract workforce and vendors, including warning, counselling, transfer and separation, were taken.

Awareness of CBCE among the employees is important. To make sure that all our employees are well-versed with our Code, mandatory training is provided for new recruits, and refresher workshops on anti-corruption policies and procedures are conducted for relevant employees. As part of our commitment to continual improvement, and going 'beyond legal compliance', we are currently working on rolling out an e-learning module for the CBCE across the Group and issuance of post-training e-certificates.

The supply chain is a significant contributor to our performance and we have institutionalised a dedicated accountability mechanism for suppliers and contractors. Our Suppliers' Code of Conduct communicates our requirement for our suppliers to operate in compliance with all relevant legislation, align to our policies while executing work for, or on behalf of Vedanta or on our sites, and adopt ethical practices. Vedanta encourages suppliers to adopt principles and practices comparable to our own, including the Supplier Code of Conduct, supplier and contractor management policies and supplier screening checklist.

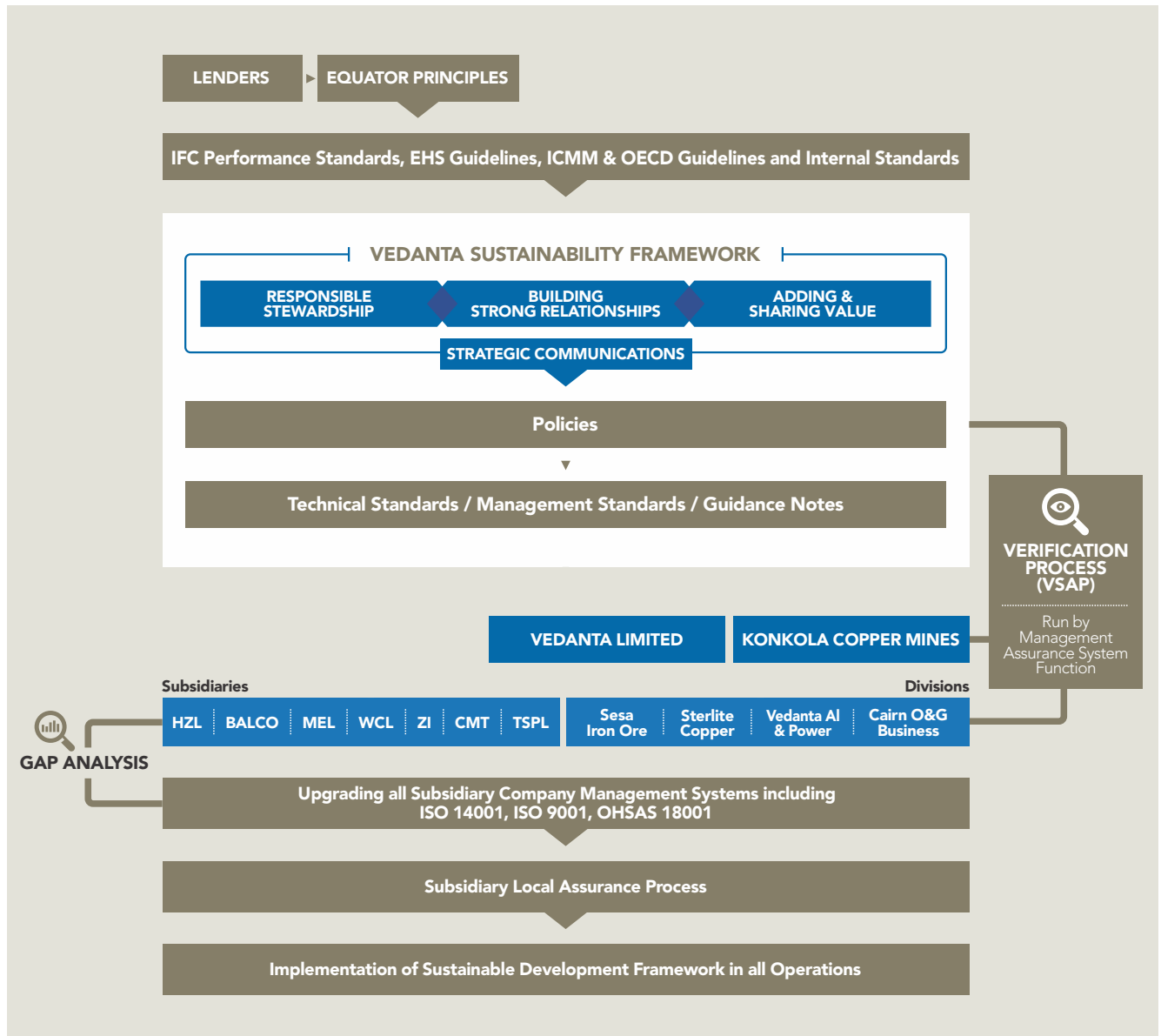




## A FRAMEWORK FOR SUSTAINABILITY

Our Sustainable Development Model is reinforced by a Vedanta Sustainability Framework (VSF), which assists each business in the implementation of the Model. Developed in line with ICMM, IFC, OECD, UNGC and SDGs guidelines, the Framework comprises several policies, standards and guidance notes which help us in its execution.

The chart below illustrates the implementation of our comprehensive Sustainability Framework aligned to global standards and practices.



The Framework is an effective tool to unify Vedanta's sustainability approach across locations and businesses. It is an integral part of our business strategy and helps us to conduct business in line with our core values of trust, entrepreneurship, innovation, excellence, integrity, respect and care. It is a great sieve to check all our decisions, which ensures that we remain safe, ethical, transparent and responsible all the time.

It is also a tool to help strengthen our commitment to conduct our business in an ethical and responsible manner. Every year, a gap analysis to identify any lacunae between the existing management systems and the requirements of the Framework is conducted at each business. The identified gaps are discussed and reviewed by the leadership teams, and action plans are put in place to ensure compliance within a specified period.

**VEDANTA SUSTAINABILITY ASSURANCE PROGRAMME (VSAP), OUR INTERNAL RISK MANAGEMENT TOOL RUN BY THE GROUP'S MANAGEMENT ASSURANCE SYSTEM, ASSURES THAT ALL BUSINESSES ARE IMPLEMENTING THE FRAMEWORK CONSISTENTLY. SUSTAINABILITY OBJECTIVES ARE MONITORED AND REVIEWED IN COMPLIANCE WITH THE FRAMEWORK.**

## THE SUSTAINABILITY COMMITTEE REPORT

The Sustainability Committee has been established at Vedanta to assist the Board in meeting its responsibilities in relation to matters of sustainable development arising out of the activities and operations of the Company and its subsidiaries.

The top priority for the Committee is to ensure robust implementation of Vedanta Sustainability Framework (VSF).

### ADDRESSING SAFETY

Our focus remains on our philosophy of 'Zero Harm, Zero Waste and Zero Discharge'. While we have achieved a lot in strengthening safety, we also had disappointments. Nine deaths occurred across our businesses in the financial year. This led to much soul-searching by our senior leadership, by the Sustainability Committee (including an extraordinary meeting) and the Board. Our Executive Committee (ExCo) has taken the role of directly monitoring implementation of safety standards and risk management plus other issues, which directly affect safety performance. These are discussed at the monthly ExCo meetings with all businesses present, performance is compared and pro-active interventions encouraged.

**As a result of the fatal accidents, we also introduced three new safety performance standards - Machine Guarding, Molten Materials, and Pits, Stockpiles and Waste Dump Stability.**

While these actions resulted in improvement, we did have one fatality in the fourth quarter near the end of the financial year.

We will continue to increase our efforts next year with a particular emphasis on leadership's role and capability in managing safety in work teams and on task hazard assessment. A strong part of this focus will be on the engagement and management of business partners (or contractors) who have a majority representation in our safety statistics.



### IMPROVING HSE PERFORMANCE

To boost our HSE performance and capability, we have inducted 11 global experts into our operating businesses with three further appointments on the anvil. These experts have been brought on board to design and implement programmes needed at the business level to address high potential incidents and eliminate fatalities, in addition to improving our overall HSE performance.



### KEEPING THE DOOR OPEN FOR DIALOGUE

We have continued to improve our social performance and this has been seen positively in several areas. Despite this, we did have an unfortunate incident at our Tuticorin smelter that started due to dissatisfaction with the contracting arrangements with local providers and then escalated to a more significant social and environmental concern. We continue to engage with the community and regulatory authorities to resolve the matter.



### ASSESSING TAILINGS DAMS

During the year, we undertook third-party assessments of all our tailings dams and ash dykes following an ash dyke breach at our aluminium business in India. Further, we have engaged reputed consultants to provide engineering advice in developing and implementing effective tailings management systems at all businesses.

**Our operations focused on air, water, waste and energy management to minimise our environmental impact and we achieved our annual target on resource conservation.**

This year the Company also conducted a Group-wide water risk assessment exercise to identify potential water-related business risks.

The Committee regularly reviewed and will continue to evaluate progress on significant sustainability issues for the Group such as safety performance at BALCO mines, KCM water and emission management projects, and the outcomes of social measures following the BALCO chimney incident.

During the year, we welcomed Mr. Kuldip Kaura as a member of the Committee following his appointment as Interim Group Chief Executive Officer. Mr. Sunil Duggal, CEO, Base Metals and Zinc India and Deshnee Naidoo, CEO - Africa Base Metals also joined the Committee. We look forward to their contributions in strengthening our performance. Mr. Tom Albanese and Mr. Kishore Kumar also made valuable contributions to the Committee.

## MEMBERSHIP AND ATTENDANCE

The Sustainability Committee comprises five Directors and it met on five occasions (including one extraordinary meeting) during the year.

<b>Katya Zotova**</b>	5/5	100%
<b>Ravi Rajagopal**</b>	5/5	100%
<b>Kuldip Kaura*</b>	2/2	100%
<b>Deshnee Naidoo*</b>	New Appointees	
<b>Sunil Duggal*</b>	New Appointees	
<b>Tom Albanese</b>	2/2	100%
<b>Kishore Kumar</b>	3/3	100%

\*Current Members  
#Board Members



**Katya Zotova**  
Chairperson,  
Sustainability  
Committee

**The Vedanta Sustainability Framework guides us to ensure a long-term, sustainable future for our business operations, meeting our growth aspirations, and creating long-term value for all our stakeholders.**

## SUSTAINABILITY COMMITTEE ACTIVITIES DURING THE YEAR

Area of Responsibility	Description
 <b>Sustainability Framework</b>	<ul style="list-style-type: none"> <li>Review of the Sustainability Committee performance and Terms of Reference</li> </ul>
	<ul style="list-style-type: none"> <li>Oversee development and roll out 3 new safety performance standards</li> </ul>
	<ul style="list-style-type: none"> <li>Review and approve annual HSE &amp; sustainability targets</li> </ul>
	<ul style="list-style-type: none"> <li>Periodic review of HSE programmes and performance</li> </ul>
	<ul style="list-style-type: none"> <li>Review VSAP score and VSF implementation for the Group</li> </ul>
	<ul style="list-style-type: none"> <li>Review sustainability issues significant to the Group and stakeholders</li> </ul>
 <b>Health &amp; Safety</b>	<ul style="list-style-type: none"> <li>Review the Group's safety incidents and performance</li> </ul>
	<ul style="list-style-type: none"> <li>Oversee the implementation of corrective actions for fatal incidents</li> </ul>
	<ul style="list-style-type: none"> <li>Review progress on implementation of the Safety Performance Standards</li> </ul>
	<ul style="list-style-type: none"> <li>Review progress on the safety improvements at BALCO mines</li> </ul>
 <b>Environment</b>	<ul style="list-style-type: none"> <li>Review outcomes of the third-party tailings dam assessments, corrective actions and implementation plans</li> </ul>
	<ul style="list-style-type: none"> <li>Review the Group's resource conservation targets and achievements</li> </ul>
	<ul style="list-style-type: none"> <li>Review progress on KCM's environmental projects</li> </ul>
 <b>Community Relations and Stakeholder Engagement</b>	<ul style="list-style-type: none"> <li>Engage with stakeholders at the Sustainable Development Day in London</li> </ul>
	<ul style="list-style-type: none"> <li>Review outcomes of the BALCO chimney social remedial measure</li> </ul>
	<ul style="list-style-type: none"> <li>Review Vedanta's stakeholder engagement strategy</li> </ul>

## MANAGING OUR RISKS

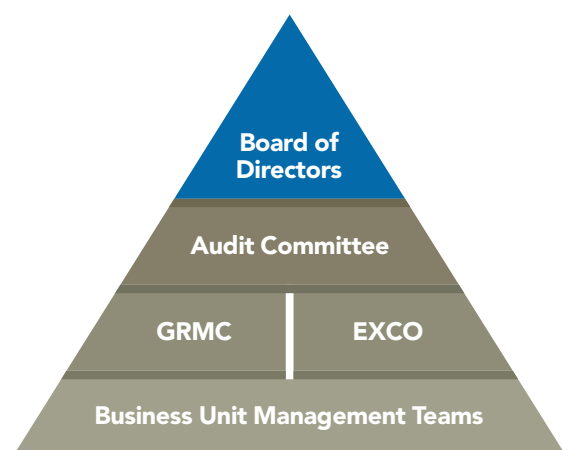
Risks are inherent in a business opportunity. We recognise that identifying and actively managing them leads to sustainable growth for all stakeholders. A robust risk governance framework and a risk management framework are in place to identify, assess and respond to the principal and emerging risks facing the Group's businesses.

### RISK GOVERNANCE

The Board has the ultimate responsibility for management of risks and for ensuring the effectiveness of internal control systems. The Audit Committee's report on the risk matrix and significant risks, and actions put in place to mitigate these risks, helps the Board gain a detailed understanding of the risks.

The Audit Committee is in turn supported by the Group-level Risk Management Committee (GRMC), which assists them in evaluating the design and operating effectiveness of the risk mitigation programme and the control systems. The Group has a consistently applied methodology for identifying risks at the individual business level for existing operations and for ongoing projects.

#### RISK GOVERNANCE FRAMEWORK



Our management systems, organisational structures, processes, standards, and Code of Conduct and Ethics together form the system of internal control that governs how the Group conducts its business and manages associated risks.

The effective management of risk is critical to support the delivery of the Group's strategic objectives. Risk management is, therefore, embedded in critical business activities, functions and processes. The risk management framework is designed to manage rather than eliminate the risk of failure.

#### GROUP RISK MANAGEMENT FRAMEWORK



Each business has developed its own risk matrix of top twenty risks, which is reviewed by their respective Management Committee/ Executive Committee, chaired by their respective Chief Executive Officers. In addition, each business has developed its own risk register depending on the size of its operation and number of SBUs/locations. Risks across these risk registers are aggregated and evaluated, and the Group's principal risks are identified based on the frequency, potential magnitude and potential impact of the risks identified.

Key sustainability risks that are part of the corporate risk register:

- Health • Safety • Environment • Climate Change
- Managing Relationship with Stakeholders • Tailings Dam Stability

For more information about our Risk Management mechanism, please refer to the Vedanta Annual Report.



# SAFETY & OCCUPATIONAL HEALTH



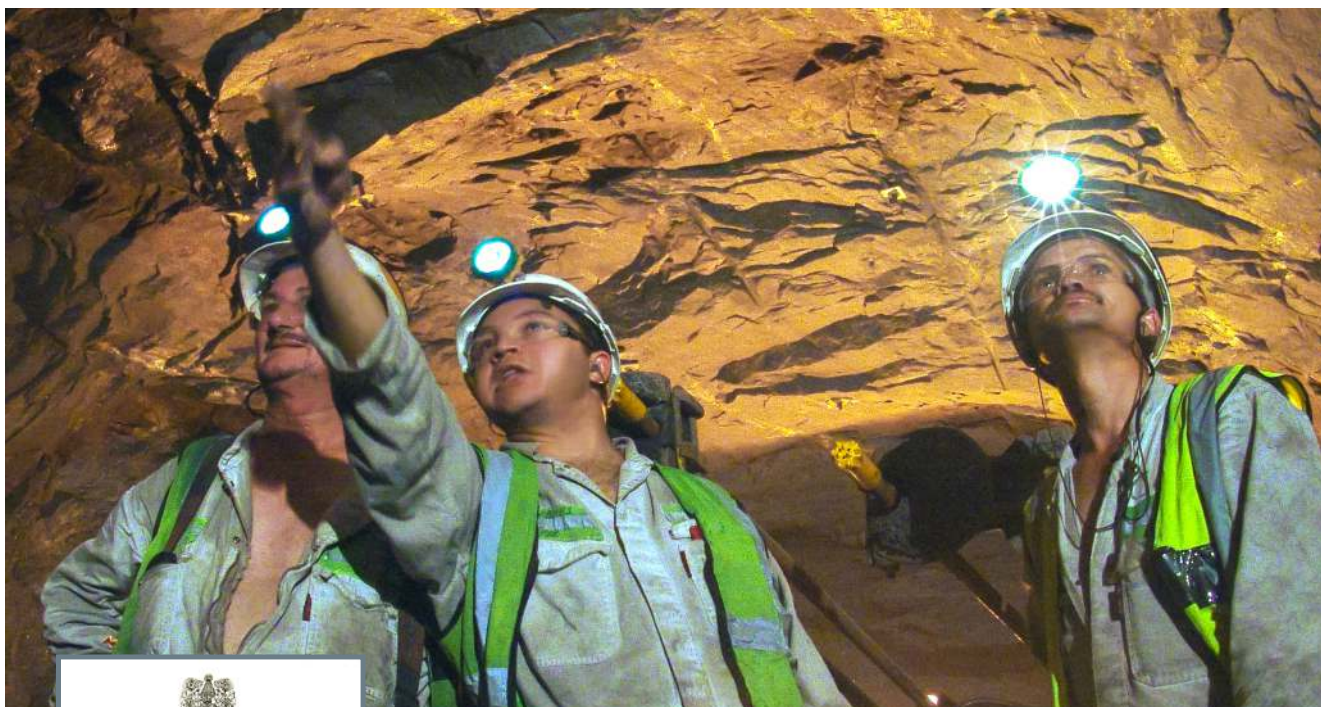
**SAFETY & OCCUPATIONAL HEALTH ARE PRIME ELEMENTS OF THE VEDANTA SUSTAINABILITY ASSURANCE PROGRAMME (VSAP) AND EVERY MEMBER OF THE WORKFORCE IS EDUCATED AND ENCOURAGED TO EMBRACE SAFETY WHOLEHEARTEDLY.**

Our products help shape the destiny of nations, but it is our workforce that has allowed us to become one of the largest metals & mining company on the planet. We believe that long-term success is only possible if each one of our employees and workers is able to return to their families safely at the end of the day. Their safety and well-being drives our performance. Health and safety of our workforce is therefore a material issue for us.

## APPROACH

We are building a positive safety culture at Vedanta where employees get to perform to their peak potential in a safe environment and where they feel part of the safety solutions. A system has been put in place to ensure higher ownership and accountability of safety across the organisational hierarchy. Safety is discussed at senior leadership meetings and incidents fully investigated.

The message from our Board and Senior Leadership is very clear – we will continue to operate in a manner that puts safety first. To ensure that the organisation lives up to those expectations, we have a comprehensive group-level HSE policy that seeks to embed safety as a value across our operations. This policy is supported by several management and technical standards that seek to guide our workforce into implementing safe operations.



## SAFETY HIGHLIGHTS

**921,550** MAN-HOURS OF TRAINING ON SAFETY

**100%** PERIODICAL MEDICAL EXAMINATION

LOST TIME INJURIES FREQUENCY RATE REDUCED FROM

**0.39** TO **0.34**  
in FY 2016-17 in FY 2017-18

STERLITE COPPER RECEIVED THE BRITISH SAFETY COUNCIL

**SWORD OF HONOUR**

## ZERO HARM CULTURE

**THE IMPORTANCE OF ACHIEVING A ZERO-HARM WORKPLACE HAS BEEN PROMOTED IN ALL OUR GROUP COMPANIES. THIS ASPIRATION IS DRIVING A CULTURAL SHIFT, WITH AN EMPHASIS ON A SYSTEMIC RISK-BASED APPROACH, CLEAR EXPECTATIONS FROM OUR LEADERSHIP TEAM, AND BENCHMARKING WITH GLOBAL STANDARDS**

Our Board-Level Sustainability Committee, chaired by the Board's senior independent director, and our Executive Committee, chaired by our CEO, regularly review our safety performance and share recommendations.

For a culture of safety to gain permanence, it needs to permeate across every level of the organisation. This year, we continued to enthuse, educate and encourage every member of our workforce to embrace safety as a value and managers at all levels were made accountable for ensuring safe performance. Safety & Occupational Health is a mandatory module in our induction and refresher training programme, and periodic workshops are conducted to enhance safety awareness and knowledge among employees and contractors.

*Despite our consistent efforts to strengthen safety, the number of fatalities this year increased. This is unacceptable to us and is a matter of great concern and regret for the entire Vedanta Group. We have analysed the root causes of these incidents and have come up with definitive steps to stem and reverse this trend.*

### SAFETY OVERHAUL AT VEDANTA

#### MAIN AREAS OF INTERVENTION

##### REDESIGNED THE HSE ORGANISATION TO DRIVE SAFETY PERFORMANCE

Appointed Chief Health & Safety Officers and Chief Environment Managers to enhance engagement with businesses on safety. Also appointed site-based line leaders to implement effective safety controls. Experienced employees were given the responsibility at 'regional' levels to drive safety performance and ensure that knowledge sharing and lessons learnt are adequately implemented across all sites.

##### ADDED NEW SAFETY STANDARDS

Apart from the six existing standards, new standards on Machine Guarding, Cranes and Lifting, Molten Metals, and Pit, Dump and Stockpile Safety were added. All sites are expected to strictly adhere to the provisions of these standards and will be audited against their implementation in our annual VSAP audit.

##### APPOINTED ZONE-WISE MANAGERS

To ensure that every area in our operations adheres to all principles of safe operations, we have appointed zone-wise managers who are accountable for the overall safety of their areas.

##### HIRED EXPERTS TO DRIVE INTERNATIONAL SAFETY PRACTICES

Global experts on safety will drive international safety practices at the unit and regional level. 11 experts have been brought on-board.

##### INTRODUCED SAFETY AS COMPETENCY METRIC TO EVALUATE EMPLOYEE PERFORMANCE

Safety competency was introduced as an indicator in the KPI of each employee. This will help us track employees on their ability to follow safe behaviour as well as keep themselves abreast of safe work practices through training and capacity building programmes.





## SAFETY PERFORMANCE

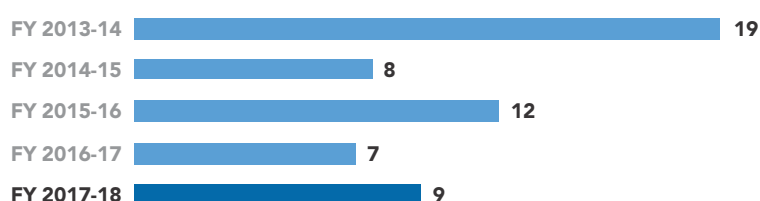
Safety incidents in the areas where we put our focus have reduced over a 3-year period. This can be seen in the LTIFR, which has reduced from a high of 0.54 in FY 2013-14 to 0.34 in FY 2017-18. Against the target to achieve more than 75% in six safety performance standards, average safety score across all our businesses increased from 52% to 60%.

However, this positive trend has been marred by an uptick in the number of fatalities experienced in the reporting period. After seeing a downward trend in the number of fatalities in the previous years, our operations experienced 9 fatalities this year. Two thirds of these fatalities occurred in areas that were outside of the focus of our 'fatal risk standards campaign'.

### LTIFR (Lost Time Injury Frequency Rate)



### FATALITIES



In one way it is an affirmation of our approach. However, it also tells us that safety is all-inclusive, and we need to remain ever vigilant. We have introduced additional safety standards considering these events, and we are also conducting trainings and programmes for our workforce so that they can identify, prevent, and manage safety risks irrespective of the presence of a standard.

LAST YEAR,  
WE PROVIDED

**984,137**  
MAN-HOURS OF HSE TRAINING,  
WHICH INCLUDED

**89,567**  
MAN-HOURS FOR  
THE EMPLOYEES AND

**894,570**  
MAN-HOURS FOR CONTRACTORS  
& THIRD-PARTY WORKERS



**MBRD**  
Making  
Better  
Risk Decisions

**CRI**  
Critical  
Risk  
Identification

Training programmes such as 'Making Better Risk Decisions' (MBRD) and 'Critical Risk Identification' are among the key programmes through which we have collectively imparted over 921,550 hours of safety training to our employees, contractors, and third-party vendors. We also regularly share learnings from the investigations to our High Potential and Fatal safety incidents.

## KEY INITIATIVES



### OCCUPATIONAL HEALTH AND SAFETY AUDIT – CAIRN

1

With the objective of validating effective implementation of safety programmes and strengthening workplace safety, Cairn Oil & Gas roped in British Safety Council to conduct a health and safety audit. The Five Star Audit process focused on the key aspects of managing health and safety in the workplace and offered a structured path for continual improvement towards best practice status.

Throughout the audit, five best practice indicators, including leadership, stakeholder engagement, risk management, organisation health and safety culture, and continual improvement, were evaluated. Cairn achieved an audited score of 92.96%, equating to five stars.

### GOOD HOUSEKEEPING LEADS TO SAFER WORKPLACES

2

Housekeeping is crucial to workplaces as it helps prevent injuries and improves productivity. In FY 2017-18, we launched the '5S Housekeeping Programme', with a goal to achieve a score of 90% in housekeeping audit across all of our assets. The thinking was very clear – bad housekeeping is one of the primary reasons why accidents take place. If we are able to systematically improve housekeeping, then we are likely to see a reduction in safety incidents.

During the reporting period, we have been able to improve the 5S score from an average of 65 at the beginning of the year to an average of 74, and we hope to achieve a score of 90 by the close of the next fiscal year.

5S SCORE **65 TO 74**

### CASE STUDY

## BEING SAFE – A STEP TOWARDS ATTAINING 'NO UNSAFE ACT'

With more than 10,000 contract employees working on various sites in Hindustan Zinc, propagating safe work practices to everybody is no mean feat. While stringent safety procedures play a decisive role, actions to elicit individual buy-in can go a long way in creating positive & safe outcomes.

Multiple outreach mechanisms were developed to create self-awareness for the overarching need to remain safe.

**SAFETY OWNERSHIP**

**PROMOTING SAFETY TO MASSES**

**CATCHING THEM YOUNG**







## CASE STUDY



### SAFETY OWNERSHIP

A scientifically designed interactive project, the objective of 'Being Safe' is to reduce the mental stress of employees and help them realise the importance of safety for themselves and their families. The project used several engagement tools, such as informal interactions, screening of specially crafted films on safety and meditation sessions to help employees imbibe safety as a value. Post-film interactions with the employees brought forth several examples in the form of case studies or personal incidents that put a spotlight on how safety is compromised knowingly/unknowingly, at work or away from work. Each attendee was asked to pledge to follow the path of Being Safe henceforth.

### CATCHING THEM YOUNG

Extending 'Being Safe' to children, workshops were conducted for school students of Rajasthan where over 200 students pledged for being safe and conveyed the same to their parents and extended family members.

### PROMOTING SAFETY TO MASSES

Conceptualised as part of our communication project, Being Safe workshops have touched many families through on-ground interactions. With the aim to promote safety beyond the boundaries of Hindustan Zinc, among the citizens of Rajasthan, a new initiative titled – 'Be Safe' was launched in association with All India Radio (AIR) Rajasthan. This 5-minute programme is broadcast daily by AIR and reaches the masses in urban and rural Rajasthan, motivating self and the families to remain safe.

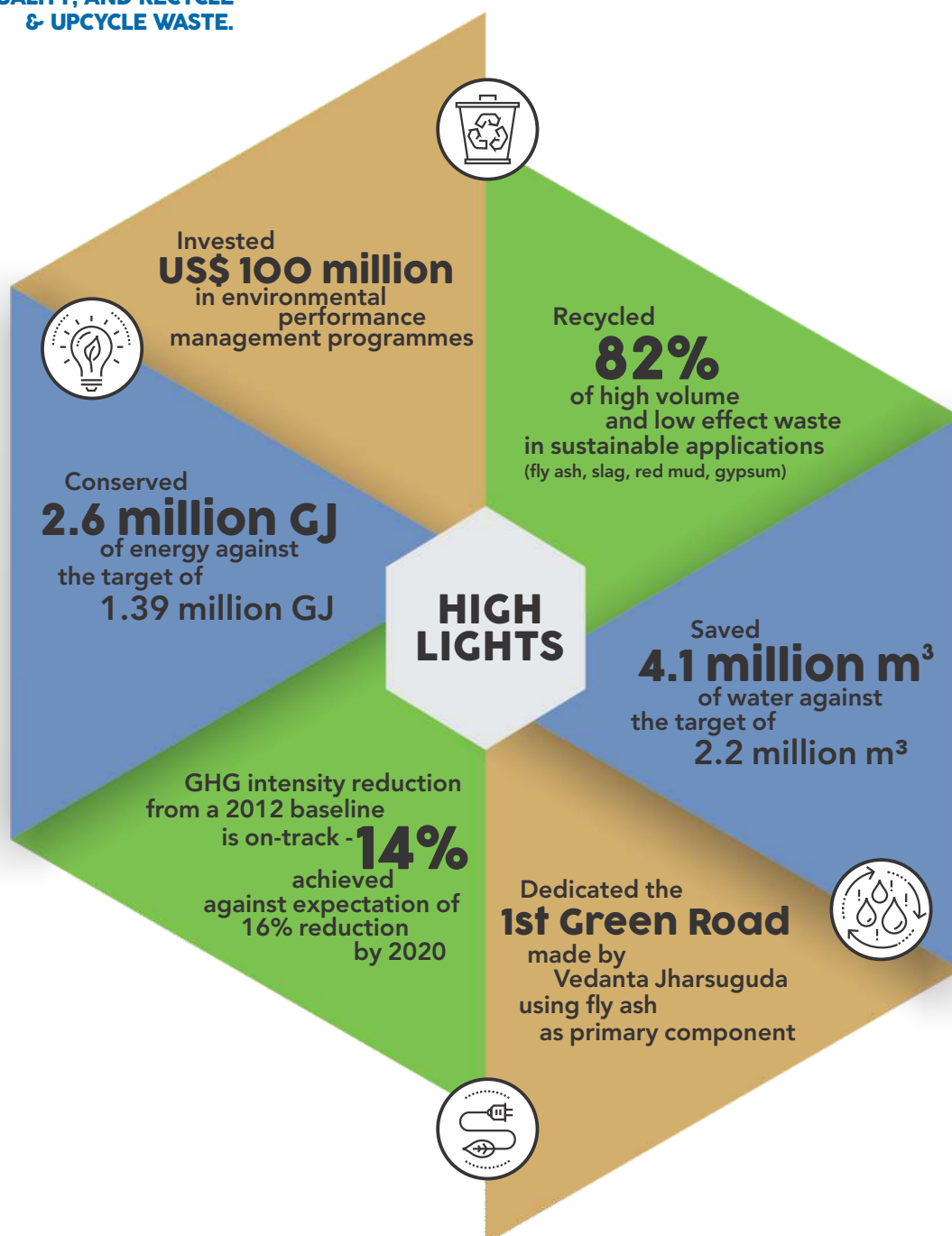


# ENVIRONMENT

**WE HAVE IMPLEMENTED TECHNOLOGIES AND SYSTEMS TO OPTIMISE WATER CONSUMPTION, ENHANCE ENERGY PRODUCTIVITY, SAFEGUARD BIODIVERSITY, MAINTAIN AIR QUALITY, AND RECYCLE & UPCYCLE WASTE.**

All that Vedanta produces comes from the earth and it is thus natural that protecting and nurturing the environment is built into our business strategy and philosophy. Both our products and processes have sustainability as their central pivot.

Our products enhance longevity of other products and over time, reduce demand for natural resources. For instance, a coat of Zinc increases the longevity of metal bodies, Lead is used in the covering on wires and cables to protect them from corrosion and Silver helps in preserving food. Aluminium is one of the most recyclable metals on the planet and over the long-term, if recycled, can help reduce the need to mine virgin ore. Copper is the ubiquitous metal that powers our life. By being a strong conductor of electricity, it is one of the primary metals of an increasingly electrified society and is a key component of the renewable energy industry.



## APPROACH

The Vedanta Sustainability Framework comprises comprehensive policies, standards and guidance notes, which instil systems thinking and process-oriented approach to manage environmental impacts. We have developed and publicly announced specific objectives and targets for environmental issues material to our stakeholders and to our business. We review and report our performance against these targets on an annual basis.

**As part of the quantitative risk assessment and critical control development exercise, all our businesses evaluate the effectiveness of their current environmental controls and strengthen them where required. The goal is to minimise risks arising from environmental factors**

**THE VEDANTA SUSTAINABILITY FRAMEWORK ENSURES THAT EACH OF OUR BUSINESSES FOLLOW THE SAME HIGH STANDARDS OF ENVIRONMENTAL MANAGEMENT**

## WATER

 SDG 6, 12

Water plays a crucial role in the socio-economic development of a nation. Once considered as a free and infinite resource, water because of its growing demand, increasing scarcity, and insufficient access, has moved right up on the national and business agendas. More than ever, stakeholders now expect organisations to disclose the water risks they face.

We believe that Vedanta can help alleviate the situation by effective management of water within our operations and aiding rejuvenation of sources beyond our facilities.



**1ST**

**STERLITE COPPER WAS PLACED FIRST UNDER THE CATEGORY OF 'INDUSTRIAL WATER USE EFFICIENCY' AT NATIONAL COMPETITION FOR EXCELLENCE IN WATER MANAGEMENT 2017 ORGANISED BY FICCI INDIA.**

## APPROACH

Our approach to water management respects the water use rights of all stakeholders, which in turn helps strengthen our license to operate. We have instituted a water policy and a water management standard that integrates with decision-making processes for all our new and existing projects, thereby ensuring that necessary measures are in place to minimise the water footprint of our projects. We deploy a two-pronged strategy towards better water management within our operations - optimising our water consumption, and minimising the amount of fresh water we consume by reusing as much water as possible in our processes.

## WATER RISK ASSESSMENT

We undertook a 'water risk assessment' exercise at 30 of our most significant business locations this year to evaluate physical, social/reputational, and regulatory risks related to water.

The risk assessment evaluated all of the processes that utilise water at our operations to understand where vulnerabilities exist. It also looked at the internal and external perception of water risk and compared it with the water stress information available in global, public databases and site-specific measurements. The study also sought to standardise the water risk assessment approach across our Group companies so that we have a consistent methodology to evaluate this risk.

### Findings

The water risk assessment found that our business operations in India (Rajasthan, Punjab, Tamil Nadu) have manifested higher degree of physical risks compared to our businesses in other locations due to their presence in high water-stress areas.

In Zambia, our operations perceive that they have higher regulatory risks due to legacy water pollution challenges. Based on these findings, we identified the areas of improvement and are in the process of developing and implementing strategies to mitigate the risks.

### Measures Taken to Counter Risk

Each of our businesses has been mandated to review and put in place appropriate mitigation measures to counter water-related risks.

Hindustan Zinc has entered into a Public – Private Partnership to install and treat 20,000 m<sup>3</sup>/day of Municipal Wastewater from City of Udaipur. The water will be used for operations at Rajpura Dariba Complex and replace part of the unit's freshwater.

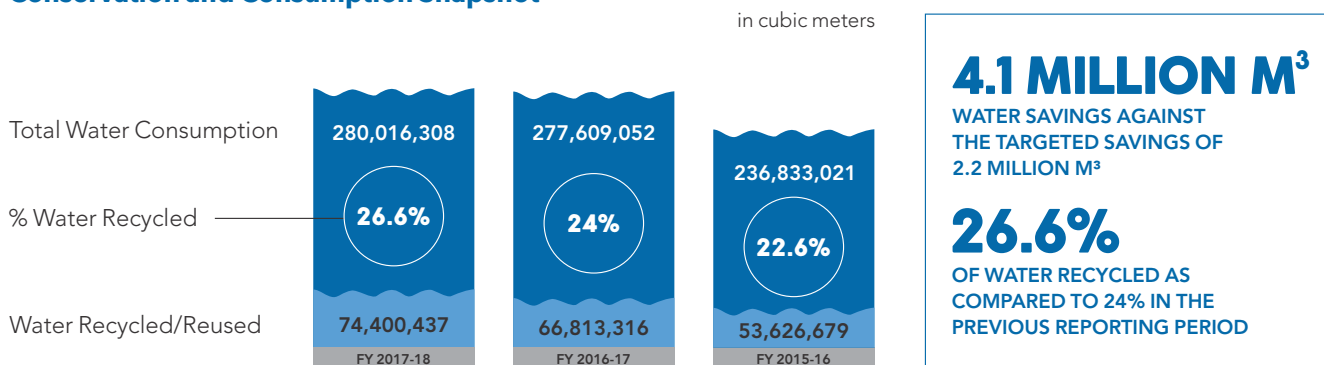
KCM's Zambian operations are working with the regulatory agency and other stakeholders to mitigate water-risks.

Sterlite Copper has increased the proportion of desalinated sea-water in its water mix.

**TO FURTHER SUPPORT THE BETTER MANAGEMENT OF WATER, WE HAVE ROLLED OUT A REVISED WATER MANAGEMENT PERFORMANCE STANDARD. IN THE NEXT FISCAL YEAR, WE PLAN TO RELEASE A GUIDANCE NOTE ON WATER MANAGEMENT TO ALLOW FOR A UNIFORM IMPLEMENTATION OF THE PERFORMANCE STANDARD.**

## WATER PERFORMANCE DASHBOARD

### Conservation and Consumption Snapshot



## CASE STUDY

### IMPROVING THE QUALITY OF DISCHARGE WATER | KCM

#### CHALLENGE

The Copper mines at Konkola in Zambia are some of the wettest mining operations in the world. The mining processes require ~ 350,000 m<sup>3</sup> of water to be removed per day in order to dewater the mine shafts. Only 10% of this water is used in the processing plant and other mining operations, while the remaining 90% is discharged into a local water body – the Kakosa stream. Historically, prior to Vedanta's ownership, this discharged water had concentrations of total suspended solids (TSS) of 260 mg/l; this was significantly higher than the statutory threshold of 100mg/l prescribed by the Zambia Environmental Management Agency.



#### INTERVENTION

KCM embarked on a 10-year, \$22 million project to improve the quality of the discharge water. Ore in KCM is mined from 'wet' pits that need to be dewatered. In the past, sediments were removed from the water that flows through the mine before being discharged to the surface. However, the concentration of suspended solids remained high, which meant that additional measures were needed to improve discharge water quality. The primary means of separating TSS from the water is via 20 settling tanks, some of which are as deep as 1,850 feet below the ground. In order to improve the efficiency of the settling tanks, four major projects were undertaken:

**Refurbishment of existing underground settlers to make them more efficient**

**Desilting of choked drain drives, which included the removal of mud that had accumulated over the years**

**Procurement and installation of slurry pumps, which allowed the desludging period to be reduced from 8 months to 3 weeks**

**Procurement and use of flocculants to enhance settling**

#### OUTCOME

The immediate outcomes of this project have been two-fold:

1. TSS levels are now below the statutory threshold of 100 mg/l
2. Wear and tear on pumping infrastructure is notably reduced due to improved water quality, which has lessened abrasive impacts.



# ENERGY, EMISSIONS AND CLIMATE RELATED BUSINESS RISK

## APPROACH

Vedanta's Energy and Carbon Management policy and performance standard are the guiding documents for the organisation's approach to mitigating our climate related business risk and ensuring that we minimise our energy consumption and air emissions.

We have constituted a 'Carbon Forum', which is led by the Chief Operating Officers of our businesses. The Carbon Forum has been tasked with developing and overseeing the implementation of the group's carbon mitigation approach.

Among the aspects that are managed by the Forum are discussions related to: approving the group carbon management strategy, long-term GHG emissions intensity reduction targets, alignment with investor requirements as part of the 'Task Force on Climate-related Financial Disclosures' (TCFD), emerging regulatory risks, and carbon pricing.

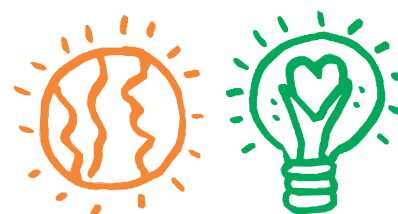
## ENERGY AND EMISSIONS

Climate change continues to pose an ever-present risk to the planet. India has set ambitious targets of reducing its emission intensity by 33-35% by 2030 and sourcing 40% of its electric power from non-fossil sources.

### IN LINE WITH INDIA'S COMMITMENTS, AT VEDANTA, WE EXPECT TO REDUCE OUR GHG INTENSITY BY ABOUT 16% BY 2020 FROM A 2012 BASELINE.

Companies such as Hindustan Zinc and Cairn Oil & Gas increased their investment in solar power, while other businesses made significant improvements in their process efficiencies.

During the reporting period, we were able to achieve a 14% reduction in our GHG intensity from our baseline number. Additionally, this was coupled with a 2% decline in absolute GHG emissions as compared to the previous year, which is a testament to our emission mitigation measures.



## ENERGY & GHG EMISSIONS PERFORMANCE DASHBOARD

### GHG Emissions – Group-wide

in tons of CO<sub>2</sub> equivalent

	Scope 1 (Direct)	Scope 2 (Indirect)	Total
FY 2017-18	51,142,511	1,202,076	52,344,587
FY 2016-17	51,896,907	1,432,665	53,329,572
FY 2015-16	39,581,088	1,567,606	41,148,693

We calculate and report Greenhouse Gas (GHG) inventory i.e. Scope 1 (process emissions and other direct emissions) and Scope 2 (purchased electricity) as defined under the World Business Council for Sustainable Development (WBCSD) and World Resource Institute (WRI) GHG Protocol.

### Energy Consumption

in million GJ

	Direct	Indirect	Total
FY 2017-18	425.5	21.12	446.62
FY 2016-17	413.39	14.61	428
FY 2015-16	394	11	405

## HIGHLIGHTS

WE ACHIEVED OUR ANNUAL ENERGY SAVING TARGET AND SAVED ABOUT

**2.6 MILLION GJ**

OF ENERGY THROUGH OPERATIONAL EFFICIENCY AND ENERGY SAVING PROJECTS AGAINST THE TARGET OF 1.39 MILLION GJ OF ENERGY IN THE YEAR

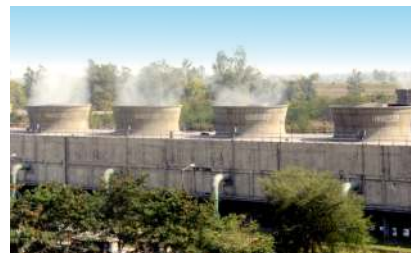
Our total energy consumption increased by 4% as compared to the previous year on account of increased production volumes across our businesses.



## CONSERVING ENERGY

### Closing the Loop to Save Energy | BALCO

To cut down on energy consumption, we introduced the closed-loop system in Rectifier Pot line - 1 & 2 pump houses. Through this new system, the process water in the rectifier is directly sent to cooling tower instead of going to the two hot well pumps for processing. The new system helped save 2.5 MWH of energy per day in each rectifier pump house. This initiative also helped reduce consumption of chemicals and water.



### Changing Lights and Changing Perspectives | BALCO

We replaced conventional street lights and office lights with LED lights in BALCO's plant and township, which reduced the lighting load by 40%.

To further promote LED lights among the local community, we set up a distribution counter of energy efficient light fittings and fans under the government's Ujala & Pawan Scheme through EESL in BALCO township. We reached out to the school children and distributed 5,000 booklets, which detailed energy saving best practices.



### Installation of Vapour Absorption Machine Chiller | HZL

The installation of a Vapour Absorption Machine Chiller at the Captive Power Plant of the Dariba Smelter Complex (CPP) resulted in savings of 2000 KwH/day by utilising the waste steam from the lead plant. Additionally, the Absorption Water Chiller uses water as a natural refrigerant, eliminating the need of CFC or HCFC refrigerants, which have a high global warming potential.



## CLIMATE RELATED RISKS & OPPORTUNITIES

THE TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES (TCFD) PUBLISHED ITS FINAL REPORT SETTING OUT RECOMMENDATIONS FOR HELPING BUSINESSES DISCLOSE CLIMATE-RELATED FINANCIAL INFORMATION. WE ARE STUDYING IT CLOSELY AND LOOK FORWARD TO INCORPORATING RELEVANT FACETS INTO OUR EXISTING FRAMEWORK OF RISK MANAGEMENT.

We are aware that climate change is triggering regulatory changes, which might affect our business operations. At Vedanta, climate related business risk sits at the Group level risk register. This enables us to review its progress at the highest level in the organisation.

We believe that resilience is the best approach we can take to safeguard our climate related business risks and are committed to work with all our stakeholders in safeguarding our business.

Carbon and water are two of our key focus areas. To keep in step with evolving national and global priorities, we have activated a group-wide carbon strategy. An internal carbon price mechanism to embed climate related financial risk in business decisions, is on the anvil.

While we continue to monitor and mitigate climate related risks, we are gearing our businesses through expansion projects, to harness climate related business opportunities. For example, copper is a key material for clean energy and we are working to increase copper production capacity at our Zambia operations to meet the expected increase in demand. We are also hopeful that our copper operations in Tasmania will start operations in the near future. We have also increased the production volumes of other metals (zinc, silver) that will be part of the renewable energy industry.





## CHECKING THE HIDDEN FUGITIVE | CAIRN OIL & GAS

### CHALLENGE

In the oil & gas industry, fugitive emissions can often constitute a significant proportion of the company's GHG emissions.

These invisible but accounted for emissions are not only a waste of resources, but also have a high global warming potential (GWP), as they are primarily methane emissions, which are 23 times more potent than carbon dioxide in terms of GWP. Excessive, unchecked fugitive emissions also pose a potential fire hazard.

### INTERVENTION

Cairn Oil & Gas, along with an independent external expert, conducted a fugitive emissions study, based on the US EPA Method 21 approach, for its Rajasthan operations.

A leak detection and repair (LDAR) programme was carried out to check for emission leaks from process equipment. All joints such as valves, connectors, pumps, sampling connections, compressors, pressure relief devices and open-ended lines in the process plant and well pads were monitored.

### OUTCOME

**The findings were surprisingly positive, fugitive emissions accounted for only 0.011% of the total GHG emissions of the process and well pad areas; significantly lower than the 13% correction factor that was being applied to account for the unmeasured emissions.**

These numbers also compared favourably with fugitive emission ranges found in North American oil and gas installations. This study highlights the excellent asset management and upkeep of facilities in our oil and gas business.



## UNLOCKING PIPELINE CAPACITY TO REDUCE EMISSIONS | CAIRN OIL & GAS

### CHALLENGE

At Raageshwari Gas terminal, wet gas received from well pads is separated as gas, hydrocarbon condensate and water.

Separated condensate is transferred to the Mangala Processing Terminal, 150 km away, through a 4-inch pipeline. The carrying capacity of this pipeline was limited to 3,000 barrels per day and to manage additional condensate production, trucking was the only solution.

### INTERVENTION

Drag Reducing Agent was introduced in the pipeline to reduce turbulence. This diminished the drag force between pipeline wall and condensate resulting in unlocking of additional capacity.



### OUTCOME

The injection of drag reduction agent helped:

**Increase flow capacity of the pipeline from 3,000 barrels per day to 5,000 barrels per day reducing trucking requirements**

**Reduction of risks involved in daily transportation of hydrocarbon condensate**

**Reduced GHG emissions by around 900 tCO<sub>2</sub> equivalent per year**

## BIODIVERSITY

**VEDANTA STRIVES TO PREVENT ANY ADVERSE IMPACTS ON BIODIVERSITY. WE MANAGE AND USE LAND ACROSS THE ENTIRE PROJECT LIFE-CYCLE IN A MANNER THAT BIODIVERSITY CONSERVATION NEEDS ARE INTEGRATED WITH BUSINESS NEEDS.**

### APPROACH

We have adopted a 'Biodiversity Policy and Management Standard' in line with international standards and guidelines of IFC. It is an integral part of Vedanta's commitment to sustainable development.

We also follow International Finance Corporation (IFC) guidelines and ICMM mitigation hierarchy - an internationally recognised approach designed to help limit, as far as possible, the impacts of development projects on biodiversity and ecosystem services.

**BIODIVERSITY MANAGEMENT HAS BEEN MADE INTEGRAL IN ALL OUR PROJECTS ACROSS ALL THREE PHASES - THE DESIGN STAGE, THE OPERATION PHASE AND DURING THE POST CLOSURE PHASE.**

We conduct Environmental Social Impact Assessment (ESIA) of new projects or major expansions to understand the presence of critical biodiversity attributes before commencing work on a new project.

Sites that have the potential for having a significant impact on the biodiversity of an area have developed a Biodiversity Management Plan (BMP) to mitigate the impact of our operations.

**As of FY 2017-18, more than 80% of our sites have re-evaluated their BMP and are in the process of developing plans to mitigate any impact.**

Even after the project site closure we continue our efforts to restore and rejuvenate the site by developing degraded land into green zones.

### CASE STUDY

## TURNING DEGRADED LANDS INTO GREEN ZONES | KCM

### CHALLENGE

Over 70 years of mining operation in Zambia have resulted in the degradation of large tracts of land by mine waste that contains elevated levels of heavy metals and low levels of plant nutrients, beneficial soil micro-organisms and poor water retention capabilities. Weak consolidation, pollution and low fertility mean that the land is not useful for conventional agriculture. Plus, wind and water erosion of sediments pose a serious potential threat to the environment and human health.

### INTERVENTION

KCM and BetterWorld Energy Ltd. pioneered a phyto-stabilisation and phyto-remediation approach for the regeneration of disused copper-tailings-storage facilities and overburden. In a pilot programme, 3,000 nitrogen fixing, drought and salinity tolerant, non-edible oil-seed *Pongamia pinnata* were planted on 5 hectares of land at TD2 Nchanga Mine Site, Chingola. Tree survival rates after 1 year exceed 99%.

### OUTCOME

The growing trees and intercrops are solving several critical environmental and employment issues such as:

**Reducing wind and water erosion and river sedimentation as roots bind the soil**

**Phytostabilisation of heavy metals in their roots system and in the soil through strong binding with organic matter that is built up in the soil from leaf fall**

**The land regeneration approach is providing jobs in post-mining and peri-urban towns of Zambia not just during the land regeneration process but also beyond**





## PROTECTING THE WILDERNESS WHERE WILDLIFE LIVES | CAIRN OIL & GAS

### CHALLENGE

Deserts are usually stereotyped as lifeless wastelands, low in diversity of both plants and animals. But the Rajasthan block of our oil & gas business is one of the exceptions. It is home to 300 flora and fauna species, which are supported by a good distribution of water-bodies. However, due to low rainfall, recurring drought-like conditions, and depleting ground water table, water availability beyond the monsoon becomes a challenge.

### INTERVENTION

#### Pond Development

Cairn developed a pond 'Gajjar' in the reserved forest area of Gangali in Barmer district with the purpose of making water available to the wild animals throughout the year. Water to this pond is supplied from a dedicated bore-well equipped with a solar power operated 5-HP water pump.

The habitat in Gangali is vastly different from the habitats observed in the block area and it is known to support wildlife such as Indian gazelle and many other wild animals and birds.

#### De-silting of Water Bodies

Cairn, under its CSR projects, carried out de-silting of seven water bodies with cumulative storage of ~10 lakh cum of rainwater, which is available during post-monsoon period or throughout the year in some cases.

#### Ambulance for Injured Wild Animals

Cairn handed over to the forest department a dedicated vehicle with necessary tools and tackles to transport injured and dead wild animals.

#### Shelterbelt Plantation on Community Land

Cairn in collaboration with the local forest department developed ~84 ha of greenbelt cover on community land in Barmer and Jalore districts. These greenbelts provide good shelter for wild animals.

### OUTCOME

**A significant number and variety of wild animals and bird species are thriving in this area since the commissioning of the pond in June 2017**



## AIR QUALITY

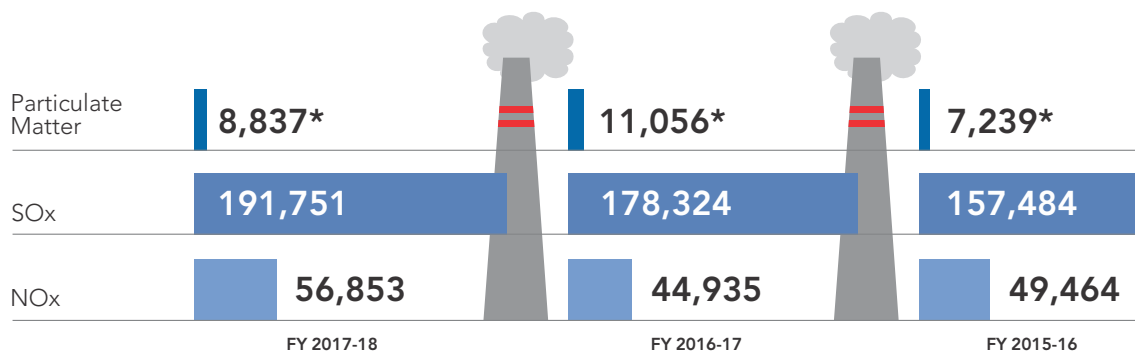
### APPROACH

**VEDANTA OPERATES WITH A PHILOSOPHY OF 'ZERO HARM' AND MANAGE EMISSIONS TO AIR FROM POINT SOURCES AND FROM PROCESS ACTIVITIES ASSOCIATED WITH COMBUSTION.**

As part of our ambient air quality monitoring process, we monitor Particulate Matter (PM) and SO<sub>x</sub>. We also monitor lead, fluoride and Polycyclic Aromatic Hydrocarbons (PAHs) emissions from our operations as applicable. We do not record ozone-depleting emissions as this is not a material issue to our operations.

New stringent norms for stack emissions - SO<sub>x</sub>, NO<sub>x</sub>, Particulate Matter and Water Efficiency from independent and captive power plants in India came into effect in December 2017. Most of our operations meet the NO<sub>x</sub> and Particulate Matter norms or are in the process of meeting them, but the challenge for us is to meet the new SO<sub>x</sub> norms considering our site layout and effectiveness of available technologies in abating overall pollution and environmental impact.

### STACK EMISSIONS SNAPSHOT in MT



\* Numbers have minor variations from those reported in the Annual Report 2017-18

## WASTE

**EXPLORATION AND DEVELOPMENT OF NATURAL RESOURCES PROVIDES GREAT ECONOMIC OPPORTUNITIES FOR RESOURCE-RICH COUNTRIES. BUT IT ALSO GENERATES LARGE QUANTUM OF WASTE, WHICH NEEDS TO BE MANAGED WELL.**

### APPROACH

In accordance with our Resource Use and Waste Management Technical Standard, we follow the waste management hierarchy of first decreasing the waste, quantitatively as well as qualitatively by reducing its toxicity, and then recovering and recycling where possible, either by ourselves or through authorised recyclers. The last stage is disposal in landfill or by incineration, using authorised, licenced and secured landfills. We aim to remain environmentally friendly across all the stages.

The major wastes generated from our operations can be segmented into two categories:

**Hazardous waste which includes used/spent oil, waste refractories, aluminium dross, spent pot lining and residual sludge from smelters**

**High-Volume Low-Effect waste which includes fly ash, slag, red mud, gypsum, and jarosite**

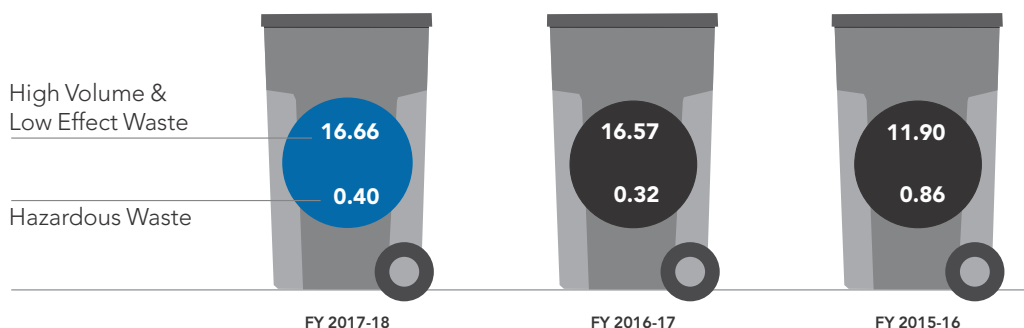




## WASTE PERFORMANCE DASHBOARD

### Waste Generation & Recycle Snapshot

in million MT



### High-Volume & Low-Effect Waste Management

in million MT

	Fly Ash	Slag	Red Mud	Gypsum	Jarosite	Total
Generated	11.88	1.43	1.69	1.12	0.53	16.66
Recycled	10.70	1.56	0.24	1.17		13.67
Percentage %	90%	109%	14%	104%*	0%	82%

\*includes recycling of legacy waste

## HIGHLIGHTS

#### REUSED / RECYCLED

**~61%**  
OF OUR  
HAZARDOUS WASTE

**82%**  
OF OUR HIGH-VOLUME AND  
LOW-EFFECT WASTE IN  
SUSTAINABLE APPLICATIONS

#### TOTAL FLY ASH UTILISATION INCREASED TO

**90%** IN FY 2017-18  
FROM 53% IN THE PREVIOUS YEAR AS WE DEPLOYED  
IT TO REPAIR THE TAILINGS DAM AND ASH-DYKE  
WALLS AT JHARSUGUDA AND BALCO

## TAILINGS DAMS

Tailings dams are considered a significant HSE risk and have been part of the Group Risk Register since FY 2015-16. A breach in the dam is a loss of containment event, which results in the spillage of accumulated wastes that can pollute the soil and damage property due to a 'flood' event. It therefore becomes imperative that their integrity is maintained.

Last year we conducted a tailings dam risk assessment study at nine dams across our businesses that would have significant impacts in case of failure. In two out of these nine dams, an additional dam-break analysis was conducted due to the condition of their structures.

However, as responses to the findings were being designed, one of the dams - located at our Aluminium & Power Business in Jharsuguda - experienced a breach in the wall of the ash dyke.

This resulted in a spillage of the contained fly ash onto an adjacent plot of land, majority of which belongs to Vedanta.

In anticipation of a lack of storage space for newly produced fly ash, the regulator (Odisha State Pollution Control Board) imposed partial restrictions on operation of our power plants. This restriction was progressively lifted as storage space became available. Corrective actions have been taken at both the critical structures where the dam-break analysis was conducted.

We also experienced a minor overflow of the ash dyke at BALCO. However, the incident did not result in any significant environment, health and safety, and social impacts.

These incidents have raised the urgency with the organisation on potential failures in the future. A comprehensive plan to eliminate this risk has been undertaken.

A crucial first step is the decision to further review all our dams globally so that we can ensure they are all designed, constructed and managed consistently in line with global practices.

We have engaged an experienced third party to conduct this evaluation. We have also rolled out the 'Vedanta Tailings Management Standard', to ensure that we have consistent dam management practices across all Group companies.

The assessment was completed in March 2018 and the findings have been shared with our Group executive committee and risk committee. The businesses are in the process of addressing issues reported from the assessment.

**We have also established a regular third-party inspection to critical locations and appointed a global expert to provide long term advice and monitoring, covering the design, construction and operation of each storage dam.**





# Building Strong Relationships

STAKEHOLDER ENGAGEMENT  
HUMAN RIGHTS  
NEIGHBOURHOOD DIALOGUE



# STAKEHOLDER ENGAGEMENT

Open, ongoing and organised dialogue contributes significantly to trust and transparency, which is a vital ingredient of a successful partnership. At Vedanta, we believe that such partnerships with stakeholders, with a focus on 'development where it matters most' can lead to economic, environmental and social well-being.

Our key stakeholders include:



**THE FOURTH PILLAR OF OUR SUSTAINABLE DEVELOPMENT MODEL - STRATEGIC COMMUNICATION (DETAILS ON PAGE 77), IS TESTIMONY OF OUR COMMITMENT TO CONTINUALLY ENGAGE IN A TRANSPARENT AND TIMELY DIALOGUE WITH ALL OUR STAKEHOLDERS.**

Diverse stakeholders necessitate varied modes of engagement. So, we deploy a range of engagement channels based on the nature of the stakeholder segment. These include public hearings to one-on-one discussions, information disclosures to feedback forms, and participatory sessions to satisfaction surveys, with a view to understand stakeholder expectations, aligning their interests and updating them on our intentions and actions.

All stakeholder engagements are anchored by our social responsibility performance standards with an aim to transform relationships into partnerships, provide adequate grievance mechanisms to help resolve situations of potential conflict and enhanced interaction with vulnerable communities such as indigenous people.

## OUR ENGAGEMENT MODEL

Ask	Answer	Analyse	Align	Act
Our dialogue begins with questions that solicit feedback. Our stakeholders have access to a number of platforms to reach out to Vedanta personnel and voice concerns.	We disclose not just because we want to be heard, but because we are responsible. We aim to provide a constructive response to feedback received.	We have established a robust investigation process for complaints reported via the whistleblowing mechanism, sustainability ID and group communications ID, involving senior management and relevant personnel.	We work hand-in-hand with stakeholders and align our goals and actions with their high-priority areas. The feedback from all our engagement becomes part of our materiality identification process.	We back up our words with demonstrable actions that move the needle towards promised outcomes.

## STAKEHOLDER ENGAGEMENT MECHANISM

Our Group-level Stakeholder Engagement Standards have been formulated with an aim of ensuring effective and efficient engagement across multiple industries and geographies where we operate. Stakeholder identification and engagement analysis is done every year and the channels and periodicity of engagement for the identified stakeholders are updated to meet the changing requirements on the ground.

Local expectations are identified, impacts monitored, and engagement plans are finalised and implemented, with regular reviews and revisions. Dedicated stakeholder representatives facilitate stakeholder engagement at all our operations.

The engagement mechanism has become integral to our sustainable development approach and helps us:

<b>1 Identify, categorise and engage stakeholders across the project life cycle for each business</b>	<b>2 Determine engagement modes and frequency for each stakeholder</b>	<b>3 Disclose information in a timely manner</b>	<b>4 Implement interventions in consultation with stakeholders</b>
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## STAKEHOLDER ENGAGEMENT STRUCTURE

At Vedanta, we employ formal and informal channels to engage with our stakeholders. Each department is responsible for ensuring effective engagement with their primary internal and external stakeholders during their daily business functioning.

### INTERNAL STAKEHOLDER ENGAGEMENT

Vedanta has developed several communication channels to ensure that information about evolving ground realities reaches the organisation's decision-makers in a timely manner and the stand of the Company on an issue is communicated to all the internal stakeholders. We keep all lines of engagement open with our employees as well as contract workforce.

COMMUNICATION CHANNELS SUCH AS CHAIRMAN'S WORKSHOPS, TOWN HALL MEETINGS, DAILY LEADERSHIP UPDATE FORUMS, HSE LEADERSHIP AND SUSTAINABILITY STEERING COMMITTEE MEETINGS, SITE-LEVEL RISK SUB-COMMITTEES, EMPLOYEE ENGAGEMENT SURVEYS, AND THE VARIOUS ENGAGEMENT FORUMS AT SITE - BOTH FORMAL AND INFORMAL, ALLOW US TO KEEP A CONSTANT FINGER ON THE PULSE OF OUR INTERNAL STAKEHOLDERS.



## EXTERNAL STAKEHOLDER ENGAGEMENT

Teams from across our businesses engage with our external stakeholders over various platforms.

### Local Communities



The CSR teams across our businesses have the primary responsibility of overseeing our engagement with local communities. Stakeholder Engagement Teams and Grievance Cells have been formed so that members of the local community can bring their grievances and suggestions to the Company. In the event of plant expansions, the HSE and CSR teams are mandated with conducting public hearings for the Environmental & Social Impact Assessment process.

### Investors



Our Investor Relations (IR) team interacts with our investors and rating agencies and when appropriate, directs their queries to the relevant departments.

In FY 2017-18, the IR team received several enquiries from our investors about our sustainable business practices and in coordination with our HSE & Sustainability teams ensured that all of them were resolved to the satisfaction of the investors.

### Media and Industry Associations



The Corporate Communication team is primarily responsible for any engagement with the media and with industry bodies such as Confederation of Indian Industries (CII), Federation of Indian Chambers of Commerce and Industry (FICCI), and the Associated Chambers of Commerce and Industry of India (ASSOCHAM). The team is also responsible for connecting with our stakeholders via regular and social media platforms.

### Vendors, Contractors and Suppliers



Vendors, contractors, and suppliers form a large component of our external stakeholders and our Commercial team is empowered to manage and communicate with them.

In FY 2017-18, the team organised several capacity building sessions for our large vendors, in our on-going commitment to help them comply with the requirements of the Modern Slavery Act 2015.

### Governmental Ministries and Regulators



Multiple teams across each business are responsible for engaging with Governmental Ministries and regulators on specific issues.

Our Legal, HSE and on-site teams are responsible for engaging with regulators such as the District Administration, Ministry of Environment and Forests, State and Central Pollution Control Boards, and the Directorate General of Mines Safety (DGMS) among others.

In addition, the CEO's Office along with identified ExCo members are responsible for engaging with senior government functionaries in the respective line ministries. The office also engages with ministries through industry associations on industry-specific policy matters.

## RESPONDING TO STAKEHOLDER CONCERNS

Engagement is a two-way process. To facilitate easy communication with the group we have created two simple points of contact- dedicated public email addresses - [sustainability@vedanta.co.in](mailto:sustainability@vedanta.co.in), and [ir@vedanta.co.in](mailto:ir@vedanta.co.in) for all queries regarding the Vedanta Group and its Companies.

Our Sustainability Team is also the single point of contact for all emails and correspondence related to our sustainable development initiatives, received by corporate functions like Corporate Communications and Investor Relations teams. Feedback received through our website, sustainability and annual reports, and all other modes, is recorded to review and revise our stakeholder engagement performance. Eventually, all these serve as valuable inputs in our materiality identification exercise.

We also utilise every opportunity available to share our view, whether it is industry associations, meeting with governments, media, community, NGOs or any other external stakeholder. In-house journals and newsletters along with social media is used to engage and interact with internal stakeholders.

## OUR RESPONSE TO THE INCIDENTS IN TUTICORIN

Our social licence to operate was challenged this year by communities living around our Sterlite Copper Plant in Tuticorin. The protests were based on misinformation around the perceived pollution caused by the plant. The fears stem from historic incidents, for which the company received legal sanctions in 2013. However, it has since taken corrective and progressive measures to ensure that incidents of pollution are not repeated.



### Some facts:

- Sterlite Copper has been operating in Tuticorin for the last twenty years
- Produces approximately 1/3rd of the country's present demand for copper
- Since 2010, contributed approximately US\$ 1.7 million (₹ 110 billion) to the state exchequer
- Provided direct and indirect employment to around 4,000 people
- Till date, we have invested more than US\$ 77 million (₹ 5 billion) in environment measures
- Till date, we have invested US\$ 13 million (₹ 850 billion) in social development measures covering 88 villages of Tuticorin
- Leveraging technology to ensure operations are safe for employees and communities
- Hazardous waste is transferred to a secure landfill as guided by the CPCB guidelines
- Before plant was shut, it was operating well within regulatory limits for air emissions

- Our SO<sub>2</sub> levels are well within the prescribed national limits
- Dust extraction allows capturing of fugitive emissions, which goes through scrubbing
- Continuous air emissions monitoring system that reports data to TNPCH in real-time
- Being a zero liquid discharge plant, no effluents pollute local water sources

In 2013, the Honourable Supreme Court of India, asked us to deposit ₹ 1 billion with the District Collector. The money was to be used for remedial actions in case of any environmental damage due to the plant's operations. Till date, more than 90% of those funds remain un-utilised. After the 2013 verdict we have implemented all 30 recommendations made by NEERI. We have also taken action on the 15 directions given by the National Green Tribunal.

We understand that pollution will remain a key issue in the region, which is an industry cluster with more than 60 manufacturing units (including thermal power plants, dyeing units, and other large, medium and small-scale industries), and we would like to play a key role in reaching long-term solutions that incorporate the views of all stakeholders.

We are deeply saddened by the shootings that occurred during in front of the District Collector's office (located 9 KM away from the plant) the protests of 22<sup>nd</sup> May 2018. The police in India and in Tuticorin are independent and they were responding to a very fast-changing situation. We had no role to play in the decisions taken by the police on that day. **A much under-reported story was that the protestors attacked the homes and property of our employees, many of them saw their vehicles damaged and set ablaze.** This is a situation that we would never like to see repeated. We remain open to sit and negotiate with the community on how to move forward amicably and within the legal framework. We remain hopeful for a positive outcome for all stakeholders.

# HUMAN RIGHTS

At Vedanta, human rights are accorded the highest category of 'critical importance' in the materiality matrix and forms an integral part of our core value of Respect.

Our human rights policy is aligned to the 'United Nations Guiding Principles on Business and Human Rights' and includes strict prohibition on the use of child or forced labour - either directly or through contract vendors. We adhere to all human rights regulations, in letter and spirit, ensuring the protection of fundamental rights of all direct and indirect employees as well as those who are in our circle of influence.

We recognise that for our workforce to adhere to the tenets of human rights they need to undergo training. We ensure that all our new hires go through Code of Conduct and Human Rights training. In FY 2017-18, more than 95% of our new hires received this training. We also train our security personnel on the organisation's policies and procedures related to human rights. In the last fiscal year, nearly 95% of our security force underwent this training.

## DIRECT & INDIRECT WORKFORCE

Employees, whether direct or indirect, are a part of the Vedanta family and human rights of each of them are respected. Comprehensive systems, which include employee grievance processes, collective bargaining and contract labour management cells are in place at all our locations to protect their interests and partner in their progress.



## COLLECTIVE BARGAINING

At Vedanta, we believe that collective bargaining is a collaborative process which ensures better compensation, allowances, incentives and bonuses, and creates a more productive and vibrant work environment in terms of output, health and safety.

Thus, the right to freedom of association is endorsed at all our operations. The collective bargaining agreements are formed based on transparent and fair discussions between the management and union representatives. Remuneration, allowances, working conditions, incentives and bonuses, health and safety, manpower productivity are part of the arrangement.

**59% of our full-time employees at BALCO, CMT, HZL, KCM, Sesa, and Zinc International are covered by collective bargaining agreements**



## SUPPLIER DILIGENCE

As one of the global leaders in the natural resource industry, we feel responsible to percolate the principles of human rights to our circle of influence. Our Suppliers Code of Conduct is implemented as part of the terms and conditions of supplier contracts across the Group and all new suppliers are required to sign, endorse and practice this Code.

We also have in place a Supplier & Contractor Sustainability Management Policy to implement sustainable practices across the supply chain. Both the Code and the Policy clearly communicate our expectations from our suppliers: to operate in compliance with all relevant legislation and follow our policies while executing work for or on our behalf.

The Supplier and Contractor Technical Standard further includes a Supplier Screening Checklist to evaluate contractor compliance relating to key issues, e.g. legal compliance, HSE management, labour management, human rights and child labour.

We continue to enhance adherence by conducting inductions, screenings, inspections and audits. Any concerns raised by interested parties on any of our key suppliers is promptly addressed by undertaking an independent assessment.

## ENSURING RIGHT AGE FOR THE RIGHT JOB

Child, forced, or compulsory labour is a non-negotiable offence at Vedanta - be it direct or through a contractor. We strictly enforce this policy at all our operations. Further, we carry out periodic inspections of our remote mine locations and require proof of age for all contract workers.

**AT STERLITE COPPER, WE USE A FOOL-PROOF RADIOLOGICAL AGE IDENTIFICATION PROCESS TO ASSESS CHILD LABOUR VIOLATIONS.**

## LOCAL COMMUNITIES

The nature of our industry necessitates our presence in remote corners and diverse geographies. While operating in multiple locations and multicultural communities, we always respect the local people and their culture. We abide by the following well-articulated and communicated standards to conserve and nurture the native heritage:

**Cultural  
Heritage Standard**

**Land & Resettlement  
Management Standard**

**Indigenous People and  
Vulnerable Tribal Groups Standard**

**These standards have been developed in alignment with international practices including ICMM guidelines and IFC standards.**





# NEIGHBOURHOOD DIALOGUE

At Vedanta, we believe that meaningful dialogue and positive outcomes lay the foundation for a strong social licence to operate.

**Our operational locations are spread over a large cumulative area across India, South Africa, Zambia, Namibia, Australia and Ireland, and this brings us in contact with diverse communities. Many of these communities are agrarian in nature, depending on farming or animal husbandry for their livelihood. Traditionally, these areas have ranked low on human development index parameters such as education, healthcare and nutrition, gender justice and women's empowerment, and economic development.**

Enhanced economic activity ushers a multitude of new paradigms in these geographies and we realise the importance of expectation setting through communication, consultation and participation. Our goal is to jointly arrive at a shared purpose and vision that integrates local voices and choices.

Our structured process includes:

Environmental and Social Impact Assessments (ESIA) led by our HSE and CSR teams, to help in early identification of potentially affected communities at the planning stage of every new project

During the operational phase, these teams undertake ongoing consultation with interested and affected parties to manage changes in the risk profile of our operations and sustain our positive relationship with communities

Cultural Heritage Land Acquisition and Resettlement Standards include consideration of Indigenous People and have been developed to reflect relevant ICMM guidance (including ICMM Guidance Document: 'Indigenous Peoples and Mining') and IFC Performance Standards

A Guidance Note addressing Indigenous People/Vulnerable Tribal Groups (IP/VTGs) to help operations understand these standards. The core aim of the standard is to enable our teams to engage, negotiate, and partner with IPs/VTGs to avert negative impacts and risks for all stakeholders while establishing new projects

**In FY 2017-18, several of our locations put their expansion plans into motion. As part of the process of seeking approvals from the appropriate government authorities, we held several public hearings with village communities, explaining to them the environmental and social impacts of our expanded operations. The EIA's that were conducted at the commencement of our operations can be found publicly on the website of the Ministry of Environment and Forests.**



## COMMUNITY GRIEVANCE MECHANISM

Grievances are the seeds of disputes. At Vedanta, we have institutionalised globally benchmarked redressal processes to deal with the grievances in a timely manner.

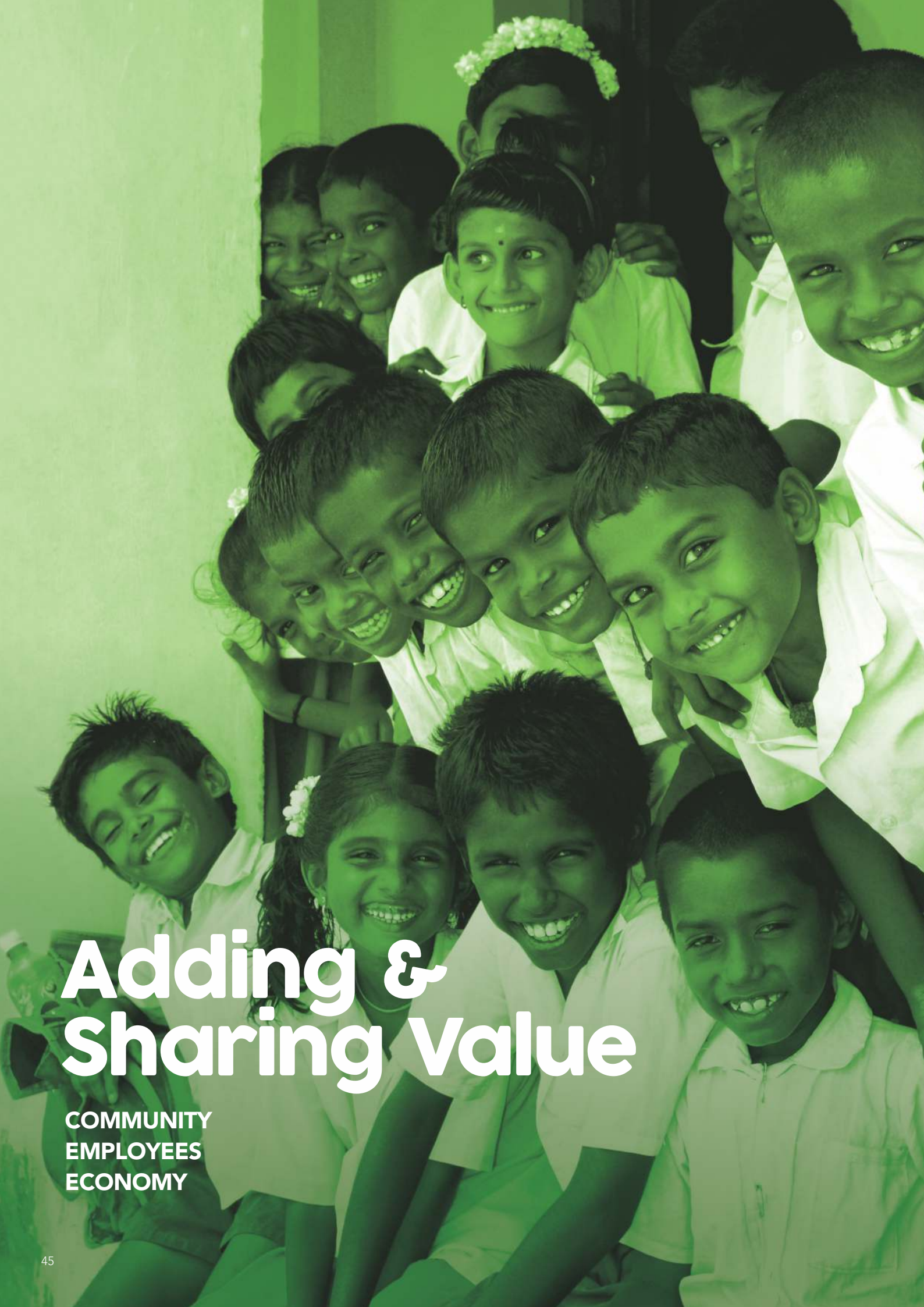
**All community incidents (social and labour) and grievances are recorded and categorised as negligible (1), minor (2), moderate (3), serious (4) or disastrous (5)**

Each grievance is addressed by the concerned department as per our Grievance Mechanism standard

Unresolved grievances are escalated to senior management for their perusal and decision-making

### Community Engagement at SKM

The expansion of Sindesar Khurd Lead-Zinc underground Mine (SKM) from 4.5 million TPA to 6 million TPA ore production, and beneficiation from 5 million TPA to 6.5 million TPA, involved community engagement. The public hearing was conducted by Rajasthan State Pollution Control Board on 1st November 2017 outside SKM. It was presided by the Government officials and about 800 villagers from nearby areas participated in it and shared their views. The mine has since received the Environmental Clearance for the expansion, after a successful public hearing process.



# Adding & Sharing Value

COMMUNITY  
EMPLOYEES  
ECONOMY



# COMMUNITY

**IT IS IMPORTANT TO GIVE BACK WHAT WE EARN FOR THE GREATER GOOD OF SOCIETY. COMMUNITY PROGRAMMES THAT WORK TOWARDS ERADICATION OF POVERTY, CHILD WELFARE AND WOMEN EMPOWERMENT WILL BE OUR FOCUS FOR COMMUNITIES AT LARGE IN OUR COUNTRY.**

**Anil Agarwal**  
Chairman, Vedanta Resources

Business and society are interdependent. Strong economic growth advances community development, which, in turn, promotes economic growth. At Vedanta, inclusive development has always formed an integral part of our progress and we continue to invest in initiatives that lead to equitable growth in society.

Our social programmes are designed to empower the impoverished and mainstream the marginalised, thus, partnering in their progress. The social interventions are developed using a needs-based approach. They seek to bring about long-term impact and are often implemented to supplement or enhance existing government programmes. Vedanta's CSR policy lists the following ten focus areas of work:



<b>OUTREACH</b> <b>580</b> CORE VILLAGES	<b>859</b> PERIPHERAL VILLAGES (INCLUDES 24 OUTREACH VILLAGES)	<b>SOCIAL INVESTMENTS</b> (In alignment with SDGs) <b>39</b> MILLION US\$	<b>BENEFICIARIES</b> <b>3.36</b> MILLION
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## SIGNATURE PROGRAMMES

### NANDGHAR

This is a pioneering initiative for children's well-being and education, along with women's health and empowerment. Vedanta signed an MoU with the Ministry of Women & Child Development in FY 2015-16 to construct 4,000 new-age Nandghars (Anganwadis) across India. It aims to touch the lives of around 4 million community members, while directly impacting around 200,000 children and around 180,000 women on an annual basis.

**Nandghars are designed as state-of-the-art child friendly spaces that facilitate quality preschool education, primary healthcare and entrepreneurship training, besides being a convergence point for several government programmes.**

Till now, 154 Nandghars have been started in Rajasthan, Uttar Pradesh, Goa and Madhya Pradesh. In Rajasthan:

- Over 1,000 children are being provided pre-packed, hot-served wholesome nutrition every day
- Around 150 Anganwadi workers/sahayikas have been trained to utilise TV for e-learning sessions and smart kits for interactive teaching sessions in all Nandghars
- Nearly 1,000 OPDs are being conducted every week by the Nandghar Mobile Health Vans
- More than 750 pregnant and lactating women are provided with immunisation and regular health check-ups at Nandghars
- 72% children at the Barmer Nandghars are fully immunised, which is higher than the state average for Rajasthan (53%)
- 100% Nandghars have pre-defined curriculum for imparting pre-school education
- More than 1,600 women have been trained and 165 women have started their own micro-enterprises with nearly US\$ 27,000 (₹ 17.50 lakh) of credit distributed

We plan to construct 250 Nandghars in FY 2018-19 and another 1,000 are in the planning process.

Although the focus of all our development programmes is to partner with the communities for their progress, there are certain initiatives, which we consider as our Signature Programmes. These programmes are: **Nandghar, Football and Healthcare through Hospitals.**



Hirakali Devi, an Anganwadi worker at the Nandghar in Ghera Richola, Pilibhit, Uttar Pradesh, not only encourages parents to educate their children, but also inspires other women in her village to become self-dependent and organises health awareness sessions for pregnant women and new mothers. Her Nandghar that has an average attendance of 43 children a day has been declared a 'Model Anganwadi Centre'. Hirakali Devi's efforts were rewarded by the Ministry of Women and Child Development when she won the National Award, which comprises a citation and a cash award of US\$ 400 (₹ 25,000).

THE NANDGHAR PROJECT WAS AWARDED THE PRESTIGIOUS 'CSR PROJECT OF THE YEAR AWARD' FOR THE YEAR 2017 BY INDIA CSR GROUP, WHICH ENCOURAGES PRACTITIONERS AND ORGANISATIONS IN INDIA TO BUILD RESPONSIBLE AND SUSTAINABLE BUSINESSES CONTRIBUTING TOWARDS SUSTAINABLE DEVELOPMENT OF SOCIETY.

**154** functional Nandghars across Rajasthan, Madhya Pradesh, Goa & Uttar Pradesh

**IMPACT**

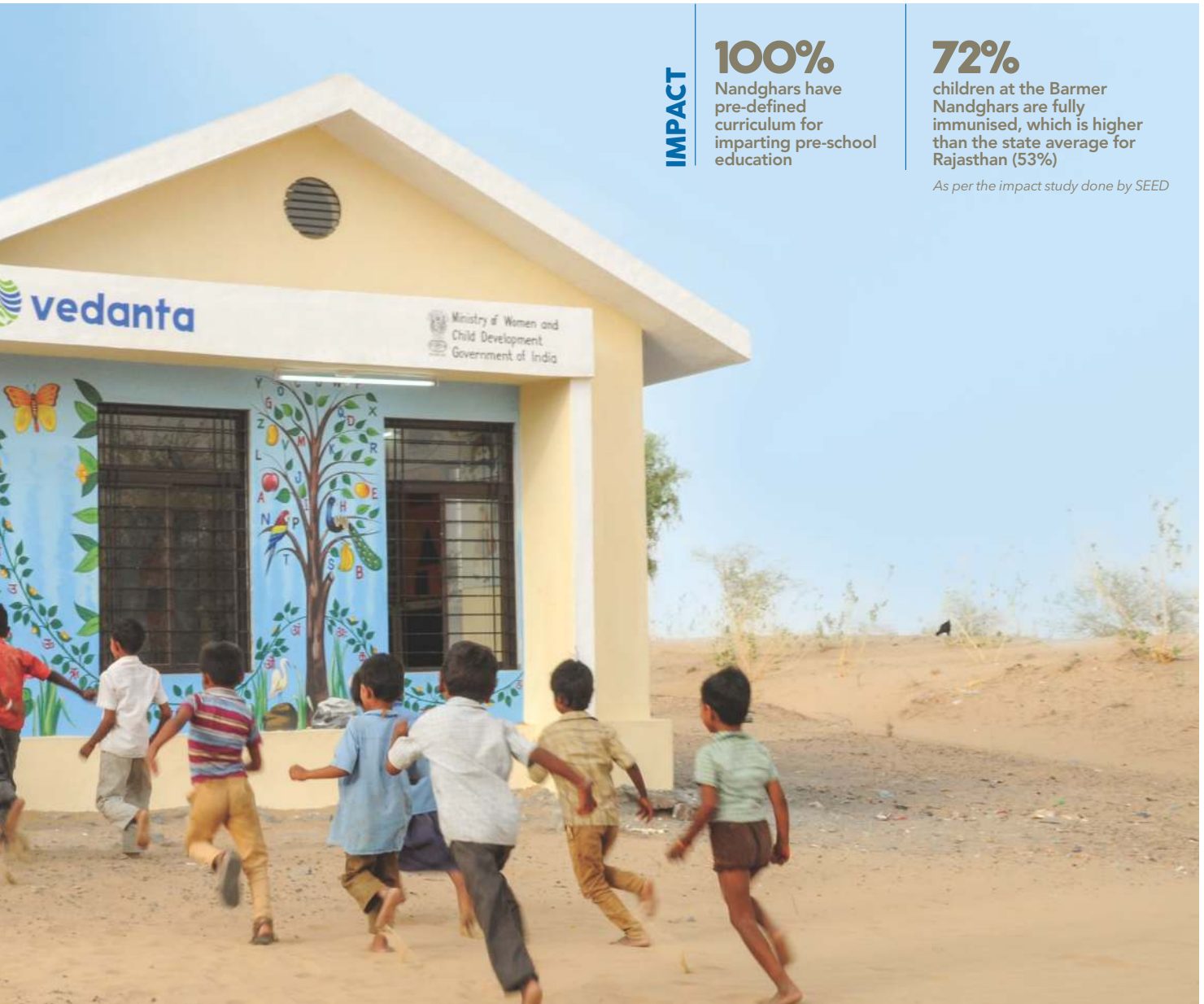
**100%**

Nandghars have pre-defined curriculum for imparting pre-school education

**72%**

children at the Barmer Nandghars are fully immunised, which is higher than the state average for Rajasthan (53%)

*As per the impact study done by SEED*



Nandghars benefit scores of children and women by providing pre-school education, nutrition for children and skill development for women.

**Smt. Vasundhara Raje**  
Hon'ble CM, Rajasthan

These centres are 'happy' places with modern infrastructure including solar power, treated drinking water and IT-enabled learning equipment. They have slowly become centres in the villages not only for supplementary nutrition and early education services, but also centres for capacity building for women and mothers.

**Smt. Maneka Sanjay Gandhi**  
Minister, Women and Child Development, GoI



## FOOTBALL

### SESA FOOTBALL ACADEMY

Established in 1999 on a reclaimed mine at Sanquelim, this started as a CSR programme at our Iron Ore Business, with the vision to become a premier academy in India. Till date, the Sesa Football Academy (SFA) has graduated 123 boys, some of whom have represented India internationally and many are pursuing their football career with major Indian football clubs.



**SEVEN ALUMNI OF SFA HAVE PLAYED FOR THE INDIAN NATIONAL TEAM AND EIGHT ARE PLAYING IN THE ELITE INDIAN SUPER LEAGUE 2017-18 SEASON.**



Taking forward the commitment and passion to nurture the girl child through sports, we launched the 'Vedanta Women's Football League' in November 2017 with the support of Goa Football Association (GFA). Vedanta created history through this first-of-its-kind league by providing women footballers, a prominent platform to showcase their talent and skills.

**137 WOMEN FOOTBALLERS HAILING FROM ALL OVER GOA PARTICIPATED IN THIS LEAGUE THROUGH 6 TEAMS AND MADE IT A GRAND SUCCESS.**



## ZINC FOOTBALL ACADEMY

Hindustan Zinc has been organising the 'All India Mohan Kumar Mangalam Hindustan Zinc Football Tournament' in Zawar for the last 42 years. Given this long and rich footballing tradition, the Company has now set up a Football Academy, which will not only have a residential academy, but also 64 community academies across five districts. The residential academy also has a technology centre which helps bring more objective metrics to player assessments.



**DURING THE YEAR, SCOUTING CAMPS WERE HELD ACROSS RAJASTHAN, EVALUATING NEARLY 3,500 CHILDREN AND SHORTLISTING 56 OF THEM FOR THE RESIDENTIAL ACADEMY. CURRENTLY, 58 COMMUNITY FOOTBALL CENTRES ARE OPERATIONAL, INCLUDING FOUR CENTRES FOR GIRLS WHO MADE THEIR DEBUT IN RAJASTHAN STATE CHAMPIONSHIP AND REACHED THE SEMI-FINALS.**

## HEALTHCARE THROUGH HOSPITALS

### BALCO MEDICAL CENTRE

The Vedanta Medical Research Foundation (VMRF), a voluntary, non-profit organisation, has been set up by BALCO, to contribute to the prevention, control and eradication of cancer and related illnesses.



Dr Raman Singh (center left), Chief Minister of Chhattisgarh inaugurates the BALCO Medical Centre along with Vice-Chairman, Mr Navin Agarwal (center right)



**VMRF'S FIRST FLAGSHIP INITIATIVE WAS TO ESTABLISH 'BALCO MEDICAL CENTRE' - A 170-BED, STATE-OF-THE-ART TERTIARY CARE ONCOLOGY FACILITY IN NAYA RAIPUR. THIS FACILITY WAS INAUGURATED ON 25TH MARCH 2018, AND BRINGS MODERN, COMPREHENSIVE AND HIGH QUALITY MEDICAL CARE WITHIN THE REACH OF THE POPULATION OF CENTRAL INDIA IN GENERAL, AND CHHATTISGARH IN PARTICULAR.**

The services rendered include: Medical Oncology, Surgical Oncology, Radiation, Nuclear Medicine, Critical Care, Pain and Palliative Care, Laboratory Services, Radiology and Transfusion Medicine.



## CHILDREN'S WELL-BEING AND EDUCATION

Education is the great engine of personal development. It is through education that the daughter of a peasant can become a doctor, that the son of a mine worker can become the head of the mine that a child of farm workers can become the president of a great nation. **Nelson Mandela**

Vedanta firmly believes in the power of education to unlock the potential of a nation. We therefore, have a broad spectrum of community interventions around education - beginning from pre-school and all the way to higher education. Our education programmes are carried out in partnership with government and civil society, and at times, independently.

### THE MAIN AREAS OF INTERVENTION ARE:

Access to quality pre-primary, primary, high school, college and university level education

Basic infrastructure development at schools such as sanitation facilities, drinking water facilities and recreational facilities

Counselling, career guidance workshops and financial assistance to talented students from low income families

OUR EDUCATION INITIATIVES HAVE IMPACTED OVER 230,000 CHILDREN IN FY 2017-18 THROUGH THESE PROGRAMMES. THE COMPANY IS ALSO SERVING HOT, FRESH & NUTRITIOUS MEALS TO MORE THAN 56,000 STUDENTS THROUGH 4 KITCHEN CENTRES.

### CASE STUDY

#### KHUSHI | HINDUSTAN ZINC

Hindustan Zinc's Khushi programme focuses on supporting the government in improving the functioning of the Integrated Child Development Services (ICDS) programme in 5 districts of Rajasthan.

The programme is the largest such Public-Private-People initiative in the ICDS space and aims to improve children's attendance, retention, learning levels, health status and community engagement.

Children's attendance at the centres has gone up from 43% last year to 60% this year. A unique Anganwadi Grading Tool was developed and is used to rate each one of the 3,089 Anganwadis and will be used year-on-year to assess progress.

Total coverage

**3,089**

Anganwadi Centres (AWCs) directly reaching

**64,000**

children in the age group of 3-6 years



25,067 COMMUNITY MEETINGS WERE HELD DURING THE YEAR, AND COMMUNITY CONTRIBUTIONS EQUIVALENT TO NEARLY US\$ 83,500 (₹ 54.32 LAKH) WERE MOBILISED



## HEALTHCARE

To keep the body in good health is a duty... otherwise we shall not be able to keep our mind strong and clear. **Gautam Buddha**

Our effort is to bring quality healthcare closer to the communities of our operational areas through our health initiatives. We partner with non-governmental organisations and government authorities in their efforts to deliver healthcare facilities to remote rural locations, and in urban areas.

Our healthcare services include clinical healthcare through hospitals using state-of-the-art methods and practices, mobile healthcare vans, and health camps. The focus is on both preventive and curative services.



**DURING FY 2017-18, OUR HEALTH SERVICES BENEFITTED 1.13 MILLION PATIENTS, AND MORE THAN 168,000 PEOPLE WERE REACHED THROUGH HEALTH AWARENESS CAMPAIGNS.**

### SETTING UP A MEDICAL COLLEGE AT KALAHANDI

**Vedanta Limited has signed a Memorandum of Understanding (MoU) with the Government of Odisha for setting up a medical college and a 500-bed hospital at Bhawanipatna with an investment of US\$ 15.3 million (₹ 100 crore).**

This will be the first such facility to come up in the Kalahandi District - a big leap towards bringing quality and comprehensive medical care to the people of Kalahandi.

Presently, the company runs the Vedanta Hospital in Lanjigarh, which is a state-of-the-art hospital with 24x7 ambulance and emergency services. It was established in 2010 and continues to serve the neighbouring communities with free medicine, treatment and consultation. Mobile Health Units offer free doorstep consultation and medicine to more than 45 remote villages in the Lanjigarh and Muniguda Block.



## DRINKING WATER AND SANITATION

We shall not defeat any of the infectious diseases that plague the developing world until we have also won the battle for safe drinking water, sanitation, and basic healthcare. **Kofi Annan**

Clean water and sanitation are the very foundations of a healthy life, which is a prerequisite for progress. Ensuring clean and safe drinking water along with adequate sanitation infrastructure, is thus one of our key priorities. Across locations, various initiatives have been taken up to fulfil this objective. Initiatives like installation of borewells, overhead tanks, laying of drinking water pipelines and establishing community water filtration units are a few of them.

**DURING FY 2017-18, CLOSE TO 212,000 INDIVIDUALS BENEFITTED THROUGH OUR SAFE DRINKING WATER INITIATIVES.**

Aligning with the government vision of 'Ghar Ghar Mein Shauchalaya', Vedanta has taken up the initiative of supporting the development of sanitation infrastructure. The initiative also includes hygiene awareness, maintenance of toilets and changing practices to enhance toilet usage.

**MORE THAN 57,000 VILLAGERS ARE BEING BENEFITTED THROUGH THE CONSTRUCTION OF**

**8,746** INDIVIDUAL HOUSEHOLD TOILETS AND

**61** COMMUNITY TOILETS

### CASE STUDY

#### JEEVAN AMRIT YOJANA | CAIRN OIL & GAS

This is Cairn's flagship safe drinking water project being run in Barmer District. The project has also won 2 prestigious awards.

Work is in progress for installation of additional 75 RO plants in Barmer region. In addition, Cairn has reached out to the Border Security Force (BSF) to address their concerns on availability of safe drinking water for its forces deployed in the border area. 4 RO plants will be installed by Cairn under operations & maintenance of BSF.

**During the reporting period, the project touched the lives of more than**

**9,000**

**families with an uptake of more than 3 million litres through 71 RO plants.**





## WOMEN'S EMPOWERMENT

I raise up my voice - not so I can shout, but so that those without a voice can be heard...we cannot succeed when half of us are held back.  
Malala Yousafzai

We believe that empowering women to be economically independent and self-reliant is vital for any society. Financial inclusion, skill development and access to employment opportunities are important for their holistic progress. So, the Company has been working towards a variety of programmes aimed at women's socio-economic development.

Several of our businesses are promoting sustainable, women-run, grassroots institutions like Self Help Groups (SHGs) to act as vehicles for empowerment. The primary objective is to enable women to come together and leverage the power of self-help. We provide them support in terms of linkage with financial institutions, enterprise training and market linkages, so that they begin to take small, but sure steps towards economic empowerment.

There are various women empowerment initiatives running across the group. The total reach at the end of this financial year was:

**2,614**  
TOTAL  
SHGs

**32,838**  
TOTAL  
MEMBERS

TOTAL SAVINGS  
~US\$ 1 MILLION (₹ 6.7 CRORE)  
INTER-LOANING AMOUNT  
~US\$ 2.2 MILLION (₹ 14.3 CRORE)

CREDIT LEVERAGED FROM BANKS  
~US\$ 0.83 MILLION (₹ 5.3 CRORE)  
SHG MEMBERS WHO STARTED  
THEIR MICROENTERPRISES 3,001

### CASE STUDY

#### SAKHI | HINDUSTAN ZINC

Sakhi, Hindustan Zinc's Self-Help Group (SHG) programme, has a mission to form 2,000 SHGs by the year 2021, touching lives of nearly 24,000 women. By then, the project also aims to have set up 6 self-sustaining federations owned and managed by these women.

During the year, 10,580 women took loans amounting to US\$ 1.2 million (₹ 7.9 crore). These loans were taken for household consumption, agriculture, health & sanitation and animal husbandry. Women used the loans to set up new or expand existing enterprises. At Pantnagar, a sanitary napkin making unit 'Sparsh' was established in collaboration with ICDS. This unit is giving direct employment to 20 women.

International Women's Day 2018 was celebrated across all HZL locations with the participation of more than 12,400 women from the communities and company's own employees.

By the end of FY 2017-18,  
HZL had set up

**1,299**

functional SHGs, with  
a membership of over

**16,620**

women, having an accumulated  
savings of about US\$ 0.5  
million (₹ 3 crore).





## SKILLING THE YOUTH FOR NEW OPPORTUNITIES

The youth of a nation are the trustees of posterity. **Benjamin Disraeli**

India is poised to benefit from having a very young population at this juncture in its history. The resultant demographic dividend can be huge, but it will need our young people to be skilled and educated. Skill India is the government's initiative to bridge the skilled manpower gap by providing training to all sections of the workforce. We at Vedanta, are committed and collaborating for the same.

The skilling initiatives are especially important, if we want to include youth from rural areas into the national development process. We are also looking to skill them in such a way that they not only get employment, but also improve their entrepreneurship skills.

**THERE ARE 11 WORKING PROJECTS FOR SKILLING THE YOUTH ACROSS THE GROUP. IN FY 2017-18, CLOSE TO **3,400** YOUTHS WERE TRAINED IN DIFFERENT TRADES AND 77% OF THEM WERE PLACED IN WELL-PAYING JOBS.**

### CASE STUDY

#### TAMIRA MUTHUKKAL | STERLITE COPPER

Sterlite Copper commenced this project in 2008 as a 'Coastal Livelihood Project' (CLP) in partnership with NGOs and vocational training institutes. Youth were trained in disciplines like computer training, beautician, nursing assistant, cell phone mechanic, embroidery, tailoring and shipping management.

As part of our continued care to the community, CLP has metamorphosed as 'Tamira Muthukkal' with the objective to mobilise, motivate and train unemployed, unskilled youth and facilitate suitable employment linkages within or outside the district.

In partnership with the IL&FS Skills, the centre began by offering training courses for the following vocations - electrician, data entry operator, and sewing. However, to keep pace with

the requirements of new skill-sets, the institute added three additional courses in 2017 - welding technician, solar PV technician, and forklift operator/driver.

Since 2014, more than

**1,100**

young people have been placed with an employer or have become self-employed.



## SPORTS & CULTURE

Sports has the power to change the world. It has the power to inspire, it has the power to unite people in a way that little else does.  
Nelson Mandela

We believe that there are few things as powerful as sports. It has the ability to improve health and builds an individuals' character, which in turn can build communities and nations. However, often the lack of infrastructure and opportunity, lead to this potential remaining locked.

AS A GROUP, WE ARE DEEPLY INVESTED IN BRINGING SPORTS OPPORTUNITIES CLOSER TO OUR CHILDREN AND YOUTH.

FOOTBALL IS ONE THAT WE HAVE CHOSEN TO FOCUS ON, WITH ONE ACADEMY ALREADY FUNCTIONAL IN GOA AND ANOTHER ONE NOW BEING SET UP IN RAJASTHAN BY HINDUSTAN ZINC.

### KALAHANDI UTSAV, LANJIGARH



Like every year, the 'Kalahandi Utsav' is hosted by the district administration of Kalahandi in Odisha as a platform to encourage and showcase their art and culture to the world.

**Vedanta also participated in the festival to pay homage to the native culture and enlighten visitors about health, education and development as a way forward for both the community and the organisation.**

### KUMBHALGARH HERITAGE WALK



With an objective to promote tourism, and to preserve and protect the traditional culture, Kumbhalgarh Heritage Walk is being organised every year. This year, it was organised on 30th November 2017 by District Administration, Archaeological Survey of India with the support of HZL.

**More than 400 people from across the country participated in the 12 km long walk along the boundary wall of the Kumbhalgarh fort.**

### UDAIPUR WORLD MUSIC FESTIVAL



Conceptualised by the cultural organisation SEHER and supported by HZL, the Udaipur World Music Festival has become a matter of cultural pride in the city of Udaipur.

**This year the festival hosted over 200 musicians from 17 countries over 3 thrilling days and was attended by 50,000 people.**

### SWACHH ICONIC PLACES INITIATIVE



We strongly value the conservation of our heritage and under this initiative, HZL took the responsibility of maintaining cleanliness at the Ajmer Sharif Dargah. Our vision for this initiative is to convert the Dargah into a future-ready, iconic site. This includes the development of a state-of-the-art Interpretation Centre as per the Ministry's agenda, and the process of appointing an architecture firm for this Centre is complete.



## AGRICULTURE AND ANIMAL HUSBANDRY

Agriculture is our wisest pursuit, because it will in the end contribute most to real wealth, good morals, and happiness. **Thomas Jefferson**

Agriculture is the backbone of the village economy. We believe that strengthening farmers' capabilities helps strengthen not just farm-linked livelihoods, but also makes for a stronger foundation for the rural economy. Our programmes in agriculture include a whole gamut of activities including agriculture, horticulture, animal husbandry and water conservation measures.

**THIS YEAR, WE SUPPORTED 8,735 FARMERS IN ADOPTING SUSTAINABLE FARMING PRACTICES IN NEARLY 5,900 ACRES OF LAND. ABOUT 2,900 FARMERS HAVE ADOPTED HORTICULTURE AS WELL AS FLORICULTURE TILL DATE, AS A SOURCE OF LIVELIHOOD AND HAVE BEEN FOLLOWING IT ON 446 ACRES OF LAND.**

**152** VETERINARY CAMPS WERE HELD IN OUR OPERATIONAL VILLAGES WHICH BENEFITTED 6,769 ANIMALS.

### CASE STUDY

#### PROJECT UNNATI | CAIRN OIL & GAS

Project Unnati, part of Cairn's livelihood project in Rajasthan, was launched to increase the income of farmers by implementing measures to enhance their agricultural productivity. Over the last 5 years, the project has touched the lives of farmers in ~130 villages of Barmer district. Not only has the project helped increase farmer incomes, but it has done so by improving the overall environmental conditions of the region.

The key to improve farming yields was the construction and/or renovation of several water-harvesting structures (850 *wadis*, 550 *khadins* or on-farm check-dams, and 5 *nadis* or traditional community water bodies). The *khadins* have harvested nearly 270,000 cubic metres of water and helped conserve nearly 30,000 tons of fertile soil annually. The *nadis* have helped harvest nearly 500,000 cubic metres of water.

**All of this has resulted in farmers being able to plant fruit trees, set-up 3 silvi-pastoral units, start 32 milk-chilling units that procure and sell nearly 11,500 litres of milk/day, and procure livestock for 36 landless and marginal farmers.**

Collectively, the programme is well on its way to help improve farmer incomes in the region.





## ENVIRONMENT

It is our collective and individual responsibility... to preserve and tend to the world in which we all live. **Dalai Lama**

For us, responsible environmental stewardship is of vital importance. Our efforts are towards creating a cleaner and greener environment with the help of technology, resources, intent and action. Our initiatives include the restoration of water bodies, promoting the use of solar-powered devices, tree plantation activities, and development of soak pits to manage household sewage.

**74,410** PLANTS WERE PLANTED ON 132 ACRES OF LAND.

**582** SOLAR STREET LIGHTS WERE INSTALLED IN VILLAGES NEAR OUR OPERATING LOCATIONS.

### CASE STUDY

#### SOAK PITS TO SAVE WATER | TSPL

It is anticipated that Punjab faces a looming water crisis brought on by declining rainfall and excessive withdrawal of ground water. Recycling household waste water can help alleviate this problem, up to a certain limit.

In continuation of the successful joint effort by TSPL and Zilla Parishad (under MGNREGA) initiated last year, 32 soak-pits were developed in FY 2017-18 in the village of Aspal. The development of these soak-pits takes the total number of soak-pits constructed over a two-year period to 97. These soak-pits have helped tackle waste-water management in the areas facing water disposal and sanitation issues. The soak-pit based system, which results in the filtration of household waste water, has also enabled in the recharge of approximately 17 million litres of ground water per year.

Looking at the successful outcomes of the soak pits, the Secretary, Rural Development, Punjab, ordered the replication of the project across Punjab.

**97** soak pits constructed over two years of which 32 soak pits were developed in FY 2017-18. This has enabled recharge of approximately **17 million** litres of ground water/year



THE PROJECT HAS BEEN RECOGNISED BY THE MINISTRY OF RURAL DEVELOPMENT IN IT'S ANNUAL PERFORMANCE REPORT 'SANKALAN' AND 'SADA PIND', A MONTHLY MAGAZINE PUBLISHED BY THE DEPARTMENT OF RURAL DEVELOPMENT AND PANCHAYATS, PUNJAB.

# EMPLOYEES

**THE DIFFERENCE BETWEEN A GOOD COMPANY AND A GREAT ONE, ARE ITS EMPLOYEES. THEY ARE THE ONES WHO ACTUALISE THE VISION. AT VEDANTA, WE BELIEVE THAT HUMAN CAPITAL DRIVES CORPORATE PERFORMANCE, AND PARTNERING IN THEIR PROGRESS, IS THE MOST IMPORTANT INVESTMENT WE CAN MAKE.**

With a 78,000+ diverse workforce spread across four continents and multiple countries, we have fostered a unified performance culture. A culture that exemplifies our core values and nurtures excellence, creativity and diversity.



## HIGHLIGHTS

**21%**

OF THE NEW EMPLOYEES ARE WOMEN

**12,000**

EMPLOYEES ARE PART OF THE V-CONNECT MENTORSHIP PROGRAMME

**500+**

CROSS-FUNCTIONAL, HIGH-POTENTIAL NEW LEADERS IDENTIFIED

**921,550**

HOURS OF SAFETY TRAINING GIVEN TO EMPLOYEES IN FY 2017-18

**<6%**

ATTRITION RATE

**2,832**

EMPLOYEES WERE GIVEN ESOS IN FY 2017-18

## WORKFORCE SNAPSHOT

Business	Location	Full-time Employees		Contract Employees		Retainers	TOTAL
		Male	Female	Male	Female	Male+Female	
<b>Zinc, Lead &amp; Silver</b>	India	4,022	362	11,836	113	14	<b>16,347</b>
	Namibia	614	97	887	0	24	<b>1,622</b>
	South Africa	732	118	3,288	188	30	<b>4,356</b>
<b>Copper</b>	Australia	20	1	9	0	0	<b>30</b>
	Zambia	5,735	673	6,151	736	95	<b>13,390</b>
	India	1,034	136	2,883	53	2	<b>4,108</b>
<b>Aluminium</b>	India	5,811	705	16,278	530	61	<b>23,385</b>
<b>Iron Ore</b>	India	2,628	167	2,350	99	20	<b>5,264</b>
<b>Power</b>	India	84	22	1,462	22	2	<b>1,592</b>
<b>Oil &amp; Gas</b>	India	1,270	253	5,790	75	262	<b>7,650</b>
<b>Others*</b>	India	80	66	323	10	15	<b>494</b>
	<b>TOTAL</b>	<b>22,030</b>	<b>2,600</b>	<b>51,257</b>	<b>1,826</b>	<b>525</b>	<b>78,238</b>

\*Includes the Port Business and corporate office locations

## OUR PRIORITIES

Our priority is to ensure that our employees remain motivated and deliver to their full potential. Their health, safety, and well-being are key focus areas for the organisation. The company also has put significant efforts to provide expanded career and leadership opportunities across all levels, with an emphasis on promoting gender diversity across roles.

**WE HAVE SEEDED AND NURTURED A CULTURE OF TRUST, INTEGRITY, DISCIPLINE, EMPOWERMENT AND OWNERSHIP IN EVERYTHING WE DO.**

Starting from recruitment to development, and engagement to retention, we are constantly evolving at all phases of the talent management cycle. Digitisation and user-friendly technology are our allies in upgrading and introducing best-in-class people practices.

## TALENT ACQUISITION

Vedanta's push to become one of the most efficient and sustainable mining businesses on the planet can only be achieved if we have the right people managing our business. As our collective businesses mature, we need to ensure that we hire, train, and equip our workforce to handle the complexities of an increasing inter-connected business. We have put a range of initiatives in place for hiring quality talent.

### VEDANTA'S GLOBAL INTERNSHIP PROGRAMME

The Global Internship Programme (GIP) seeks to attract the best talent from the world's leading universities. We want to on-board students who have exposure to the best and most current management thinking. Our GIP candidates are first-year MBA students from premier B-schools including Harvard, INSEAD, London Business School, IIM-Ahmedabad, IIM-Bangalore and IIM-Kolkata. The GIP is designed to create a symbiotic relationship wherein the students get hands-on business experience and Vedanta attracts emerging bright managers.

Internships provide these candidates with an opportunity to work with the top management, especially the C-suite, on live projects that directly impact the business. They work in a dynamic, fast-paced team environment, and gain broad experience in several facets of the natural resources industry.



### VEDANTA LEADERSHIP DEVELOPMENT PROGRAMME (VLDP)

The Vedanta Leadership Development Programme for full-time hires aims to build organisational capability for the future by onboarding best-in-class young talent from the top management and technology institutes as full-time employees.

We nurture them to be the leaders of tomorrow by providing them with a tailored programme including induction, job rotation, and a range of roles, opportunities and anchoring.

**During the first year of the programme FY 2016-17, 19 students were selected and in the second year FY 2017-18, 28 students have been enlisted.**

### RIGHT MANAGEMENT IN PLACE (RMIP) - STRATEGIC HIRING

We introduced a recruitment drive to fill several leadership positions including expat/specialist positions to realign the organisation structure and strengthen our management teams across the business. Hiring for these positions focused on recruitment of high performing individuals and domain specialists from leading global companies.

## TALENT MANAGEMENT AND DEVELOPMENT

We have a sharp focus on nurturing existing employees and grooming them to take up leadership roles within the organisation. An assortment of talent management and development initiatives are in place. These include training and development programmes, job rotations, additional projects and responsibilities, and mentoring programmes. These have helped us build a talent pipeline of future leaders across levels.

### Employee Training

	man-hours	
	Male	Female
Full-time Employees (FTE)	660,854	80,611
Average Training Hours for FTEs	30	31
Contract Employees	1,219,852 (male + female)	
Average Training Hours for Contract Employees	23 (male + female)	





## FUTURE LEADERSHIP

Nothing makes us happier than accelerating the careers of our people and witnessing their professional development, thus creating value for both the organisation and our employees.

### CHAIRMAN'S INTERNAL GROWTH WORKSHOPS

We have always aimed to be an organisation headed by 'leaders from within'. Recognising internal talent and promoting them to leadership roles has been a driving factor in our rapid growth. Aligned with this philosophy, the Group conducts 'Chairman's Internal Growth Workshops' to identify potential candidates across the Group.

#### The objective

Identifying young leaders for enhanced and elevated roles through a structured process

Developing highly competent leaders and motivating them to perform exceptionally well

Evaluating corrective actions, providing growth and recognition wherever required

**These workshops have resulted in the identification of 500+ cross-functional, high-potential new leaders in the Group's businesses to date, who have taken up significantly enhanced roles and responsibilities.**

Our Internal Growth Workshops have also enabled us to reduce our lateral hiring significantly for critical roles across the Group in the past two years.

**An outstanding platform to identify talent and give them growth opportunities, Internal Growth Workshops shall be patented as Vedanta DNA. I personally felt very energised to be a part of this process, and thankful to the management for such a great opportunity and confidence in my capabilities. This move has motivated me to put forth my best efforts and surpass management expectations by delivering my best in the Gamsberg Project and by making Zinc International, a best-in-class business.**

**Pushpendra Singla** | CFO, Zinc International

### 'V-CONNECT' INITIATIVE

This initiative was launched across the Group in association with Aon as an anchoring/mentoring and training partner, covering 12,000 professionals. The key output has been to derive enhanced engagement levels from employees.

**V-CONNECT**  
Inspire | Engage | Deliver

MORE THAN **5,000** CONVERSATIONS HAVE BEEN COMPLETED TILL DATE



As part of my group connects, I recently conducted an exercise with my talents to help them identify their leadership styles and build effective relationships with their stakeholders. V-Connect has given the opportunity for Anchors and Talents to learn together.

Anchor

**Mr. Deepak Prasad**

Head - Aluminium Operations,  
BALCO

The V-Connect sessions are continuously contributing to enhance my leadership and functional skills by providing abundant opportunities to work in cross-functional areas beyond my area of expertise.

Talent

**Mr. Subrata Dasgupta**

Associate GM, MRSDS & Rectifier,  
BALCO

### NON-HR TO HR

One of our popularly christened programme, Non-HR to HR is aimed at 'developing and deploying diverse perspectives' in HR function for achieving next level growth and setting up a platform for aspiring leaders to get into General Management Leadership roles.

Over the last two years 9 non-HR leaders have been selected for this program. These new leaders are encouraged to connect with the leadership team and are being anchored by the HR Heads at respective businesses.



## DIVERSITY AND INCLUSION

At Vedanta, merit is the only criteria for growth. We provide equal opportunities to all our employees, irrespective of gender, nationality and background. We strongly believe that diverse individuals bring varied perspectives and new ideas to the organisation, and collectively can take collaborative decisions and create superior outcomes.

Since most of our operations are in remote areas, we place a strong emphasis on recruiting employees from among the local population. A significant percentage of our employees are recruited from the country in which our operations are located, creating jobs for people and partnering in the progress of the local economy.

In FY 2017-18, a majority of the individuals hired at our operations were local to the business. This strategy ensures that our business benefits from the socio-cultural knowledge that those individuals bring in their management approach. It also allows us to create a direct economic and skills-based impact for the individuals who live in the communities where we operate, which is a crucial element for our social license to operate.



### New hires who are local, across regions



INDIA  
**82%**



SOUTH AFRICA  
**39%**



NAMIBIA  
**91%**



ZAMBIA  
**92%**



AUSTRALIA  
**67%**

**VEDANTA IS RAPIDLY MOVING  
TO BECOME MORE GENDER INCLUSIVE.**

**21%**  
OF NEW EMPLOYEES  
ARE WOMEN



**10.56%**  
WOMEN IN OUR  
TOTAL WORKFORCE



**14.3%**  
WOMEN IN  
OUR BOARD

**WE HAVE SET OURSELVES A TARGET TO REACH OVER 33% WOMEN AT SENIOR LEVELS BY 2020 AND AIM TO ACHIEVE 20% DIVERSITY AMONGST OUR EMPLOYEES.**

Some of the women-oriented initiatives during FY 2017-18:

## TARANG

We have a clear commitment towards a diverse workforce and priming our employees to take up leadership roles. A unique developmental initiative has been launched this year by the Iron Ore Business for our women professionals across functions including Geology, Civil, Mining, Maintenance, Finance and others. This programme aims to improve the gender diversity in businesses' Executive Committee through a structured intervention.

**The individual development plans for these participants have been charted out based on psychometric assessment and career development plans, and further focus would be on building competencies in financial acumen, strategic thinking and leadership.**

## PROGRESSIVE POLICIES

The liberal parental leave policy wherein maternity leave is 26 weeks, adoption leave is 12 weeks and paternity leave is 1 week has resulted in better productivity and retention, especially of our women employees.

	Male	Female
Number of employees who have taken parental leave in FY 2016-17	635	180
Number of employees who were in continuous service for the next 12 months after returning from parental leave	433	141
Retention* %	68.18%	78.33%

\*Retention % is calculated based on the number of employees who returned and were in continuous service for the next 12 months / number of people who went on parental leave.

## TUFemina

An initiative launched at Sterlite Copper, TUFemina is a forum where our women employees get an opportunity to learn, share and experience new things.

There are teams, divided and named after colours of the rainbow: Violet, Indigo, Blue, Green, Yellow, Orange and Red. A monthly meet is hosted by each colour where experienced women professionals share their journey at Sterlite.

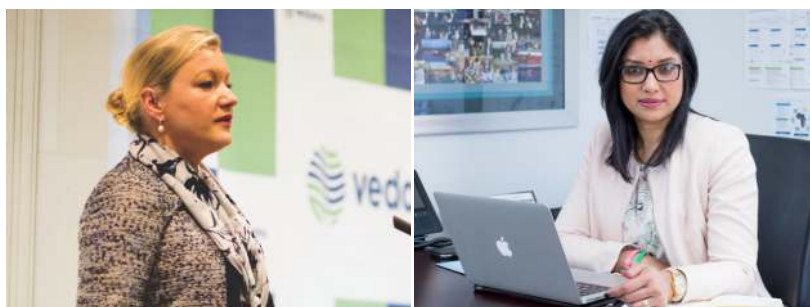


For returning mothers, we also provide flexibility to move into another job profile or continue with the same role, to manage both professional and personal priorities.

These policies make them feel more engaged and motivated as a result, and their positivity rubs off on the entire workforce.

## WOMEN ACROSS THE BOARD

Amongst the few global natural resources companies that enjoy a healthy gender diversity ratio across all levels, we believe women are critical to a healthy and productive work environment. With varied perspectives and patterns, they are helpful in providing a different set of solutions for the challenges we face, making us more responsive to future risks and opportunities.



**28**

of our top leadership positions are being held by women professionals

Over 500 individuals were identified at Vedanta as high potential,

**10%**

of whom are women

In our 'Club 100' of potential future leaders, we have

**7%**

women leaders

We have placed internal recruitment targets to ensure equal gender representation.



**We are signatories of the 'CEO Statement of Support' for the United Nations' Women's Empowerment Principles (WEP) - 'Equality Means Business'.**

**We continually focus on improving gender diversity across the group, across grades and management levels.**



## EMPLOYEE ENGAGEMENT AND RETENTION

Engaged employees are more effective and efficient employees, doing well for themselves as well as the organisation. We realise the importance of an engaged workforce and work towards building an inclusive workplace through various initiatives, enabling our employees to make meaningful contributions. We also ensure that we monitor and reward performance.



The various internal channels of communication, including Chairman's workshops, town hall meetings, daily leadership update forums, HSE Leadership and Sustainability Steering Committee meetings, site-level risk sub-committees, employee engagement surveys, and the various engagement forums at site - both formal and informal, allow us to keep a pulse on the day-to-day functioning of the company.

Collective bargaining also offers the opportunity to build a constructive relationship between the Management and Union representatives. 59% of our full-time employees at BALCO, CMT, HZL, KCM, Sesa, and Zinc International are covered under collective bargaining agreements across the organisation.

**ATTRITION RATE IN FY 2017-18 WAS LESS THAN 6%. ALSO, LESS THAN 1% OF OUR FEMALE EMPLOYEES LEFT US IN THAT PERIOD, WHICH IS A TESTAMENT TO VEDANTA BEING A GREAT COMPANY FOR WOMEN TO WORK AND DEVELOP THEIR CAREERS.**

### CAIRN LEADERSHIP CONNECT - EXPRESS | LEARN | INNOVATE

Leadership Connect is a highly engaging forum that gives employees an opportunity to learn about the company's leadership perspective in an informal & interactive platform with its leaders.

As part of this initiative, Cairn's leaders throw light on their personal career anchors and talked about the career trajectory, whilst also spending time talking about key approaches towards Cairn's short and long-term objectives. Three such Connect Workshops were organised with three different leaders. Each one of them received enthusiastic participation and a total of 360 employees attended these sessions.

**To-the-point sessions clearing some very basic points and highly interactive, given by a leader who inspired me within an hour. [Surabhi Paharia](#) | PSCM, Gurugram**

**It was well organised and an excellent session - planned, focused and transparent, with great replies on diverse questions raised by participants. Not only are these types of sessions good for getting to know more about our company direction, but also good for participant motivation. [Navratan Sharma](#) | HSEQ, Gurugram**

### V-PERFORM: ONE PERFORMANCE SYSTEM FOR ONE VEDANTA

V-Perform is a pan-Vedanta initiative to standardise our performance management system (PMS) and processes by leveraging technology. This assists the functions, teams and individuals in tracking performance, generating analytics and taking steps to ensure they are achieving Vedanta's overall business plan and targets.

To enhance our safety performance in the workplace and achieve our ultimate vision of zero harm, a safety competency assessment process has also been initiated as part of V-Perform to strengthen our existing safety management system.

## ONE VEDANTA NETWORK

As an international company employing thousands of people working across a range of remote and diverse geographic locations, we recognise the importance of fostering a culture of transparency, collaboration and knowledge-sharing across the organisation to keep employees informed and engaged. As social networking platforms continue to grow in popularity, we have developed One Vedanta - a platform on Workplace by Facebook, which enables all Vedanta employees to share content with their peers using a range of interactive tools such as live videos, news feeds, posts and media upload options.

**THE PLATFORM WAS LAUNCHED IN EARLY 2017 AND CURRENTLY MORE THAN 13,000 EMPLOYEES ARE SIGNED UP TO THIS EMPLOYEE ENGAGEMENT TOOL WITH 4,000 ACTIVE CONVERSATIONS PER WEEK. IN NOVEMBER 2017, A NEW 'CHAIRMAN CONNECT' BOT APPLICATION WAS LAUNCHED ON ONE VEDANTA BY OUR CHAIRMAN, ANIL AGARWAL.**

This application aims to give every employee direct access to the Chairman and the leadership team to share ideas, feedback and to post questions. Mr Agarwal's vision is to tap into the rich pool of ideas and experiences shared by employees and to make Vedanta, an open and connected organisation.

During the year, Vedanta Resources Chairman Mr. Anil Agarwal interacted with more than

<b>5,000</b>	<b>30</b>	<b>5</b>
EMPLOYEES ACROSS	LOCATIONS IN	COUNTRIES

## ADDING PURPOSE TO THE PROFESSION

Employee volunteering has been an important way for involving team members to go beyond their work and donate time, money and skills for the betterment of society. During the reporting period, nearly 2,500 employees of HZL were engaged through various CSR initiatives such as:

### KHUSHI BAATIYE



A fundraising campaign held during the festival of Diwali to spread joy among the children of our anganwadi (child day-care) programmes. Employee contributions made it possible to donate new clothes and footwear to 64,000 children.

### PAINT FOR JOY



100 employees volunteered to help children with hearing impairment, autism, and cerebral palsy showcase their talents in a painting event. While the children exhibited their ability, this one-on-one connect with the kids was very fulfilling for the employees.

## EMPLOYEE STOCK OPTION SCHEME (ESOS) 2017

We launched an Employee Stock Option Scheme to reward our employees and enable them to share in the financial success of the company. The scheme was launched after obtaining statutory approvals, including shareholders' approval in 2016.

ESOS 2017 covers 2,832 employees of the Company and aims at rewarding them with wealth creation opportunities, encouraging high-growth performance and reinforcing employee pride.



## HEALTH AND WELL-BEING

The World Health Organisation defines health as a 'state of complete physical, mental, and social well-being and not merely the absence of disease'. It is with this definition in mind that we at Vedanta have institutionalised various programmes across our locations.

### EMPLOYEE WELLNESS PROGRAMME - NCHINGILILE UBUMI | HEALTH

Nchingilile Ubumi, a Zambian phrase which means 'I will protect my health', is a 100-day wellness journey aimed at improving the health and well-being of our people at the Zambian operations.

KCM's intent behind launching the programme was to have the staff recognise that exercise is an important part of healthy living and should be a lifestyle choice, not a one-off event. Under this programme, while the main physical activity is walking, other forms of exercise such as aerobics, soccer, golf, netball, cycling and volleyball are also encouraged. This wellness journey was launched for all KCM staff and contractors.



### FINANCIAL MANAGEMENT WORKSHOP - HAPPY HOME | PERSONAL FINANCES

Concerned about the number of miners in the Nchanga & Nampundwe Business Units (BUs) who were heavily in debt, their Manager initiated a Human Capital Management (HCM) workshop focused on educating them and their spouses about wealth management.

Knowing that their financial status and personal life affects not only their concentration at work, but also their productivity and safety, she came up with the initiative where KCM as an organisation could help improve the quality of life in general, and the lives of impacted families in particular.

The workshop was designed to educate these couples on Property and Finance Management - causes and effects of debt, and ways of eliminating them.



# ECONOMY

**WE LEVERAGE INNOVATION AND TECHNOLOGY TO HARNESS THE ELEMENTS OF NATURAL RESOURCES AND TRANSFORM THEM TO FUEL PROGRESS AND DEVELOPMENT, WITH A COMMITTED GOAL OF ZERO HARM, ZERO DISCHARGE AND ZERO WASTE.**

**Anil Agarwal**  
Chairman, Vedanta Resources

Natural resources form a significant portion of the world's economy. As a globally diversified company operating in the energy and metals sector, with operations spread across four continents, we have a long history of creating consistent value for our shareholders, while taking care of all stakeholders.

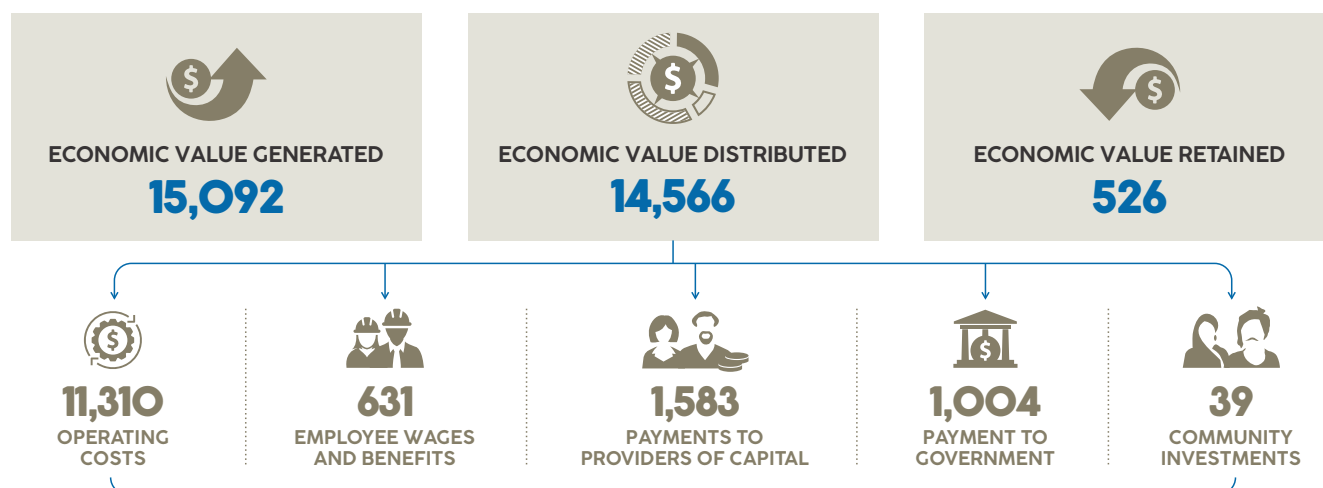
At Vedanta, we believe that wealth generation is not an end in itself, but the means to distribute better shareholder returns and employee benefits plus contribute to the exchequer, invest in social prosperity and fund environmental protection.



## ECONOMIC PERFORMANCE

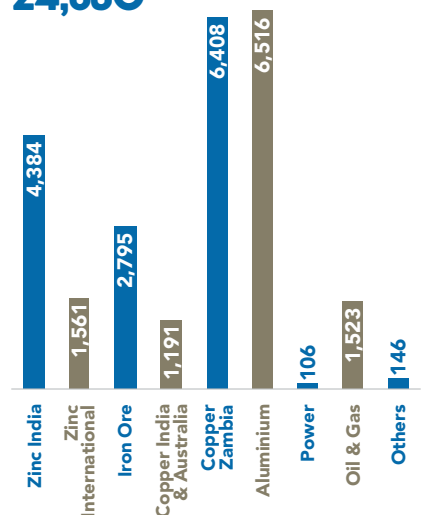
### ECONOMIC VALUE GENERATED & DISTRIBUTED

In million US\$



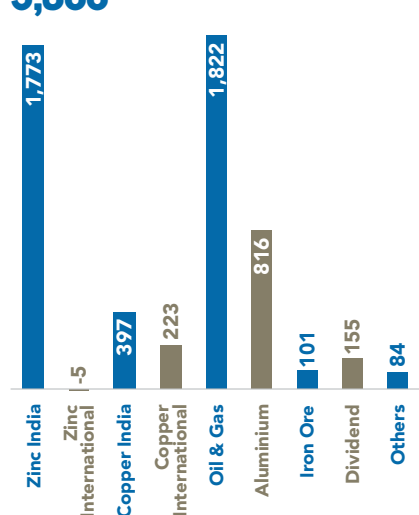
### Total Full-time Direct Employees (By Business)

**24,630** in Nos.



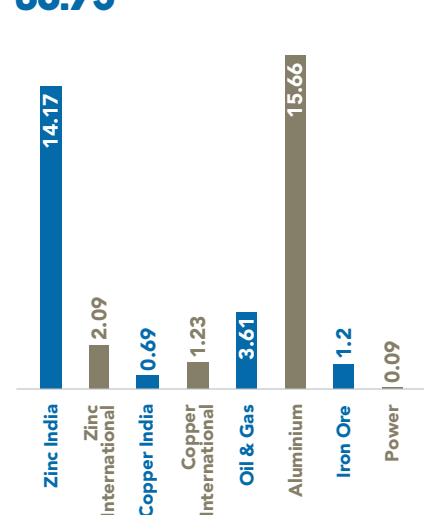
### Payment to Exchequer

**5,366** in US\$ mn



### CSR Investment (By Business)

**38.75** in US\$ mn



During the reporting period, Vedanta saw its direct economic value generated (a function of its revenue generation) increase by 30% from the last fiscal year. In line with our strategy to ramp up across our asset base, we had record production of Zinc, Copper and Aluminium, whilst growth projects in our Oil & Gas business are on track.

Favourable market conditions, higher production volumes and firmer commodity prices, combined with enhanced productivity and material efficiency, resulted in a strong annual performance.

**MOODY'S UPGRADED THE CORPORATE FAMILY RATING (CFR) OF THE COMPANY FROM B1 TO BA3 IN NOVEMBER 2017 AND THE RATING ON ITS SENIOR UNSECURED BONDS TO B3 FROM B2.**

## ECONOMIC PERFORMANCE ACROSS THE STAKEHOLDER SPECTRUM

# SHAREHOLDERS & LENDERS

Our focus continues to be on generating shareholder earnings through prudent capital allocation, with a focus on low-risk, phased projects with high returns. Our cost saving programme coupled with plant productivity and material efficiency continue to result in low cost operations, contributing to investor returns. During FY 2017-18, Vedanta Limited took successful steps towards acquiring Electrosteel Steels Limited (ESL). The final closure of the transaction will happen after applicable regulatory requirements.



ESL has steelmaking design capacity of 2.5 MTPA in Bokaro, Jharkhand with blast furnace/basic-oxygen-furnace technology. It manufactures pig iron, billets, thermo-mechanically treated bars, wire rods and ductile iron pipes. The acquisition would provide the Group, an opportunity for an integrated iron ore and steel play, at the same time benefitting from the fast-growing steel sector in the country, leading to the creation of long-term sustainable value.

## REVENUE & EBITDA

In FY 2017-18, our revenue stood at US\$ 15.4 billion compared with US\$ 11.5 billion in FY 2016-17 - a growth of 34%. EBITDA for FY 2017-18 improved by 28% to US\$ 4.1 billion from US\$ 3.2 billion. This was primarily driven by higher commodity prices, the ramp-up at our Zinc and Aluminium businesses and cost efficiencies across the business.



**VEDANTA LIMITED WINS TOP ACCOLADE FOR INVESTOR RELATIONS IN INSTITUTIONAL INVESTOR MAGAZINE'S 2017 ASIA EXECUTIVE TEAM RANKINGS.**

**RECOGNISED AS AN 'HONOURED COMPANY' AMONG THE TOP 4.7% OF NOMINATED COMPANIES**

**RANKS AMONG TOP THREE COMPANIES IN THE BASIC MATERIALS SECTOR IN 2017**

**WE DELIVERED A ROBUST YEAR WITH EBITDA SIGNIFICANTLY HIGHER AND WITH OUR EBITDA MARGIN REMAINING STRONG.**

**Kuldip Kaura**  
Chief Executive Officer, Vedanta Ltd.

REVENUE

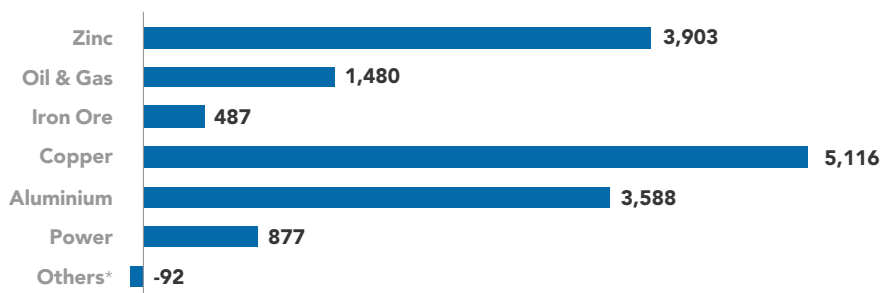
**34%**

EBITDA

**28%**

## SEGMENT CONTRIBUTION TO REVENUE

In million US\$



\*Others include port business and eliminations of inter-segment sales, which were lower in the current period.



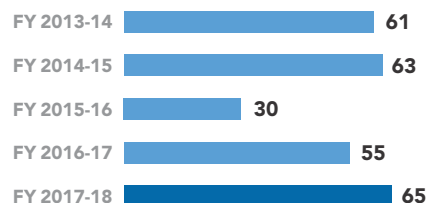
## DIVIDEND

We have always believed in sharing the economic value generated. A consistent dividend is a healthy sign of a growing company. With a robust operational performance and a complementary market environment, we returned impressive numbers for FY 2017-18.

**THE FINAL DIVIDEND OF US CENTS 41 PER SHARE (TOTAL DIVIDEND OF US CENTS 65 PER SHARE) WAS DECLARED, WITH A YIELD OF 6%.**

## RETURN TO SHAREHOLDERS

In US Cents per share



## GOVERNMENT

We collaborate with governments across every country we operate in, contributing to the exchequer by paying direct as well as indirect taxes, creating direct as well as indirect jobs and by purchasing goods and services. We also contribute to reduce the country's import dependency, by enhancing production of natural resources.

**IN FY 2017-18, WE CONTRIBUTED US\$ 5.4 BILLION TO THE EXCHEQUER THROUGH DIRECT AND INDIRECT TAXES, LEVIES, ROYALTIES AND DIVIDEND.**

We also work closely with host governments, on initiatives to protect the environment and become active partners in community programmes that touch the lives of innumerable people.



We have not received any direct financial assistance from governments during the reporting year, although as part of various direct tax holidays and similar exemptions, Vedanta did benefit by US\$ 157.5 million during FY 2017-18.

## TAX TRANSPARENCY

At Vedanta, we believe that transparency breeds trust and accountability builds responsibility. Governance principles, Code of Business Conduct & Ethics, and systems of checks and balances are in place, and bribery and corruption are non-negotiable. In whichever nation we operate, all disclosures based on local laws are made.

Starting 2015-16, we publish a Tax Transparency Report (TTR) every year and it is made available on our website. It contains all the details of the contributions we made to public finances in the countries of our operations. The latest TTR of 2017-18 is also available on: [www.vedantaresources.com](http://www.vedantaresources.com).



## POLITICAL PARTIES

In accordance with the UK Bribery Act, it is a Vedanta Board policy that neither the Group nor its subsidiaries will make donations or contributions to political parties within the United Kingdom or European Union. In India, political donations or contributions made within the context of legitimate business operations are made only with the approval of the Board. Last year, no political donation was made by any of our businesses.

## EMPLOYEES

**Human resources are instrumental in making Vedanta one of the global leaders in natural resources. We continually invest in the well-being and development of our 78,000 strong workforces and in providing them a safe and conducive work environment.**

Industry-best remuneration and benefits coupled with merit-based growth opportunities are offered to all employees. Employee-friendly policies and inventive programmes nurture talent and keep them motivated to deliver their best.

Benefits to our employees include: life insurance, mediclaim, disability coverage, parental leave, pension and retirement benefits, stock ownership, and educational assistance.

**IN THE LAST FINANCIAL YEAR, WE SPENT US\$ 630.70 MILLION FOR EMPLOYEE WAGES AND BENEFITS.**

*To read more about our employee-centric initiatives, please refer to the Employees section on page 60*





## SOCIETY

Through our operations, we generate profits, employment, and economic growth and through partnerships with government and civil society, we ensure that benefits of mining extend beyond the boundary of the mine itself. It is our constant endeavour to see that the mining industry has a long-lasting positive impact on the natural environment and social capital.

Many of our operations are located in remote, often economically backward regions. We invest in developing infrastructure, taking care of people's health, providing education and training, creating opportunities for employment and entrepreneurship, and speeding up the development curve of the regions where we operate.

Many spearhead programmes have been initiated, like Nandghar for children's well-being and education, Subhalaxmi and Sakhi projects for women empowerment, Vedanta hospitals and mobile hospitals for health, skill schools for skill enhancement through vocational courses, and various projects for farming and animal husbandry.

### SOCIAL INVESTMENT

**38.75**  
US\$ MILLION

### BENEFICIARIES

**3.36**  
MILLION

A LION'S SHARE OF OUR INITIATIVES  
ARE PLANNED TO ASSIST  
ACHIEVEMENT OF THE UN SDGs



To read more about our community initiatives, please refer to the Community section on page 46



## SUPPLY CHAIN

Holistic sustainability is not a localised phenomenon and cannot be achieved by a few companies. It requires global adoption and everyone's support including people, business and nations. We help propagate sustainability further and faster, by cascading it through our supply chain.

At Vedanta, we believe that by managing and improving environmental, social and economic performance throughout supply chains, we can:

CONSERVE RESOURCES | OPTIMISE PROCESSES | UNCOVER PRODUCT INNOVATIONS | SAVE COSTS | INCREASE PRODUCTIVITY | PROMOTE CORPORATE VALUES.

It is a material issue for us as it affects both, upstream and downstream, and hence given prime importance.

**We have an established Supplier Code of Conduct, Supplier and Contractor Management Policies and Supplier Screening Checklists that encourage business partners and suppliers to adopt principles and practices comparable to our own.**

These include key aspects on legal compliance, HSE management, labour management, human rights and child labour.

The nature of our industry stipulates our presence in far-flung areas, where we support local suppliers to boost local economy and mitigate carbon footprint. We engage with them to make them understand their responsibilities towards the environment, safety, human rights and also support them to come up to international standards.

### MODERN SLAVERY ACT 2015 (MSA)

In accordance with the UK's Modern Slavery Act 2015, we have updated our Supplier Code of Conduct & Contract Conditions, and our Code of Business Conduct & Ethics to ensure the prevention of modern slavery and human trafficking in our operations and supply chain.

**WE HAVE ALSO INTRODUCED THE MSA FRAMEWORK AT ALL OUR BUSINESS UNITS. UNDER THIS FRAMEWORK, WE HAVE A SYSTEM IN PLACE FOR TRAINING OF VENDORS/SUPPLIERS, DUE-DILIGENCE AND SELF-DECLARATION. WE PERIODICALLY UNDERTAKE INTERNAL AS WELL AS EXTERNAL AUDITS, TO ENSURE RIGOROUS ADHERENCE TO THE FRAMEWORK BY ALL BUSINESS UNITS.**

Implementation of the compliance framework for MSA rests with the Commercial teams at each BU. They have been given the responsibility to ensure that all our vendors meet the stringent requirements of the Act.

**Our businesses continued to cascade adherence to the act across the supply chain and highlights during the reporting period include:**

**BALCO has received MSA declaration from around 90% of its vendors**

**VAL - Jharsuguda, stopped dealing with 6 suppliers on the basis of non-compliance with the MSA requirements**

**Cairn Oil & Gas introduced external due diligence for MSA as part of the vendor registration process and has raised awareness towards MSA in Vendor Conferences. Annual declarations have been obtained from 70% of the vendors and external audits are in progress at vendor sites**

**IOB stopped dealing with 2 vendors based on the audit report. Of the remaining 15 vendors, most have formulated internal policies in line with the requirements of the MSA. The company has also received Annual MSA declaration from about 60% of our Medium-Risk Vendors**

**Konkola Copper Mines completed an audit of high-risk vendors. They stopped dealing with one vendor as a result of the audit. They also introduced supplier declaration electronically during the registration process and have conducted MSA training programmes for internal teams and contract employees**





## CUSTOMERS

**Vedanta is now the sixth largest diversified natural resources company in the world, with operations in four continents and customers across the globe. With products in energy and metals sector, we invest time, money and talent to understand evolving customer requirements and fulfil them safely, speedily while matching their desired quality and quantity.**

Engagement with the customers is our priority, and pre-defined modes and platforms, which include third party surveys, are in place to understand and meet their expectations. Innovation and technology are leveraged to increase operational efficiency, value addition and logistics. Our advanced supplier portal is equipped to handle supplier as well as customer's needs, and handle auctions.

**OUR METAL PRODUCTS MEET THE REQUIRED LONDON METAL EXCHANGE (LME) STANDARDS.**

No cases of non-compliance with relevant regulations, anti-competitive behaviour, anti-trust, monopoly and voluntary codes concerning the health and safety impacts of our products and services were observed or reported. Similarly, no significant fines for non-compliance with laws and regulations concerning the provision and use of products and services were reported.





A woman with blonde hair tied back, wearing a patterned scarf and a textured jacket, stands at a clear podium with an AKG microphone. She is looking to her right. The background features a wall with a grid of blue and white squares, some containing logos, and a large 'vedanta' logo with its symbol. The entire image has a blue tint.

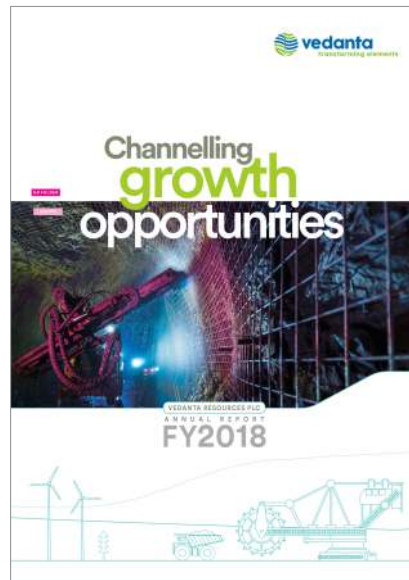
# Strategic Communication

**COMMUNICATING CONSTRUCTIVELY  
STRATEGY ENGAGEMENTS & ADVOCACY  
AWARDS & ACCOLADES**

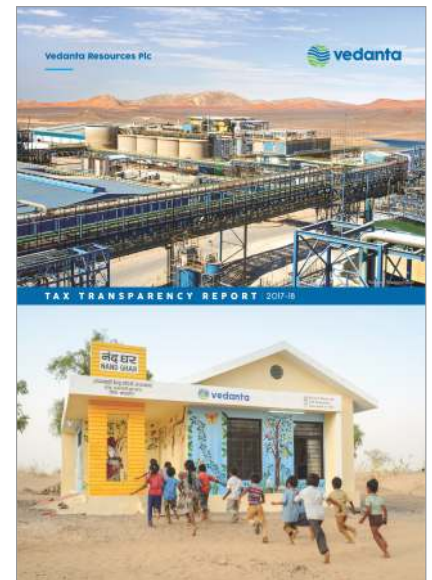
# COMMUNICATING CONSTRUCTIVELY

## INVESTORS & LENDERS

The best approach to communicate with investors and lenders is to do it early and as often as possible. We communicate with our investors and lenders periodically through investor calls, performance reports & meetings and forums such as Sustainable Development Day.



Vedanta Plc. Annual Report 2017-18



Vedanta Resources Plc TTR 2017-18

## CELEBRATING SUSTAINABILITY

Each year since 2015, Vedanta has hosted the Sustainable Development Day in London. The day allows us to update analysts, investors and members of key industry bodies on the company's sustainable development activities in the past year and give them an opportunity to hold an open discussion with our management team.

At the meeting Vedanta Resources Chairman Mr. Anil Agarwal reiterated the commitment to make a positive impact through operations by caring for employees, eradicating poverty, protecting the environment and contributing to the development of strong and vibrant nations.



## GOVERNMENTS

Policies and regulations have a profound impact on the natural resources industry and thus we invest time and effort to maintain a proactive, honest, transparent and sustainable relationship with the government.

We consistently engage with governments and offer our expertise where required and keep them informed on the progress of our projects, milestones traversed and challenges faced.



## EMPLOYEE ENGAGEMENT

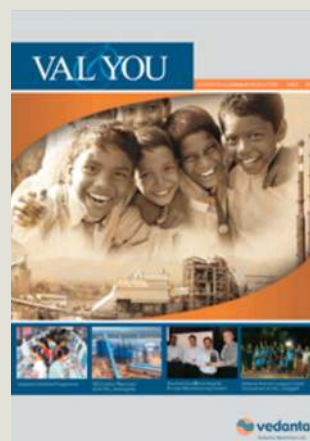
Our employees are our biggest assets and it's their perseverance that drives the Group's success. 'One Vedanta', the Group's intranet, enables effective engagement and communication with employees and is the preferred platform to share information, ideas and opportunities quickly. In addition to the intranet, there are Group-wide and business-specific newsletters that are distributed on a monthly or quarterly basis to help us engage with our employees in a transparent and timely manner.

**Zinc News:** HZL's monthly in-house newsletter



**Pulse:** A Group-wide monthly HR newsletter

**Weekly Buzz/VAL YOU**  
A weekly E-Newsletter by Vedanta Limited Jharsuguda



**E-Finder**  
The monthly newsletter at Cairn

## NEWSLETTERS

**Konkola News**  
The KCM in-house monthly newsletter includes updates and case studies



**Dhortori:** Vedanta Sesa, Goa's quarterly newsletter

**BALCO Manch:** The company's monthly newsletter



**Copper Tones:** A quarterly in-house magazine by Sterlite Copper

# STRATEGIC ENGAGEMENTS & ADVOCACY



Leaders shape behaviours and as a leader in the natural resources industry it is our duty to mobilise interest and actions across peer groups. We engage and communicate with the industry and the community to build long-term sustainable relationships.

Our advocacy efforts include organising and attending conferences on the natural resource sector, liaising with governments on public policy, and using mass media to communicate our positions on important issues.

We participate in the major industry summits and forums to share and get insights on emerging opportunities and persisting challenges. High frequency interactions with media and academia help us gain strategic inputs, raise awareness about Vedanta and the natural resources industry among our stakeholders.

## COMMUNICATING WITH THE WORLD AT DAVOS

World Economic Forum at Davos discusses major political, economic, social and environmental issues. Mr. Anil Agarwal, Chairman of Vedanta Resources, announced US\$ 8 billion investment over the next three years to increase capacities across most of the ventures.

## NEWS18 RISING INDIA SUMMIT

Mr. Anil Agarwal, was a speaker at the News18 Rising India Summit, a marquee thought leadership initiative which brought together thinkers, scholars, global statesmen, high achievers and well-wishers of India, from around the world. Mr. Agarwal made a pertinent case for the privatisation of state-run companies to enhance their productivity and efficiency.



## MEDIA

Media helps amplify our message to a wide audience. Our strategy is to provide the media consistent and credible information to shape the true brand image of Vedanta among our stakeholders and build trust through transparency.

### Gazing in the Media Mirror

While media is a gateway to all our stakeholders, one of our vital constituencies is the media itself. During the reporting period, we conducted a dipstick research about Vedanta with 25 key journalists and analysts of the natural resources sector. The findings were very encouraging.

**80%**

Respondents gave a bright outlook of Vedanta

**36%**

Mentioned CSR and credible management as a positive of the company

**48%**

Indicated regulatory hurdles as being a key challenge for Vedanta

### Social Media – fast emerging as the engagement tool of choice

Social media as a medium has gained popularity across the group and among our senior leadership. Daily updates and posts on our handles across Facebook, Twitter and LinkedIn help us communicate the achievements of the Group, across the triple bottom-line, to the world. All Group Companies have a vibrant presence on social media.

# AWARDS AND ACCOLADES



## SUSTAINABLE DEVELOPMENT & CSR

### VEDANTA LIMITED

- Awarded the '**2GOOD, 4GOOD CERTIFICATION RATING**' by Economic Times

### BALCO

- Won the **Asia Sustainability Excellence Award 2017** under the category 'Best Overall Sustainable Performance' by World CSR Day
- Won the **Award for Excellent Management** in Industrial Health, Safety & Environment from Grow Care India

### HINDUSTAN ZINC LIMITED

- Ranked 11th Globally by Dow Jones Sustainability Index, featured in the Sustainability Year Book by RobecoSAM**
- Won **Best Sustainable Practices, Best Sustainability Report** and **Best Carbon Foot Printing** at the National Awards for Excellence in CSR and Sustainability
- Ranked **20th in Responsible Business Rankings - 2017** by Economic Times and IIM, Udaipur
- Won the **Safaigiri Award 2017** under the category of Best Public Private Partnership (PPP) Model for Project - Sewage Treatment Plant, Udaipur awarded by the India Today Group
- Awarded with **Bhamashah Award 2016-17** for Exceptional Contribution in the Field of Education by the Government of Rajasthan
- Kayad Mine bagged the **Global Sustainability Award** under Gold Category. Award given by the Energy and Environment Foundation
- Won the **CSR Leadership Award 2018** in the category of Best CSR Practices on World CSR Day

### STERLITE COPPER

- Won the **BT-CSR Excellence Award** for Promoting Education through the project IIAM Mottukal, organised by Bureaucracy Today
- Won a **Silver Trophy** in the category Best Higher Vocational Institute for Skill Development for Project Tamira Muthukkal, organised by and presented at ASSOCHAM India Summit

### SKORPION ZINC

- Skorpion Zinc was **placed First** at the **Keetmanshoop Agricultural & Industrial Show**

### SESA GOA

- Bagged the National Award for **Excellence in Water Management, 2017** presented by Confederation of Indian Industry (CII)
- Won **Best Community Development Award** at National Awards for Excellence in CSR & Sustainability

### VAL - JHARSUGUDA

- Won **Kalinga Award for Best CSR Practices** from the Institute of Quality and Environmental Management Service

### KONKOLA COPPER MINES

- Won the **Best CSR Award** by Kitwe Chamber of Commerce & Industry

### TALWANDI SABO POWER LIMITED

- Distinction in CSR Governance Mechanism and Established Processes** by Economic Times

### VAL - LANJIGARH

- Won the **FAME Excellence Award** for Women Empowerment Project
- Won the **Community Initiative Award** by India CSR
- Winner of **Chairman Sustainability Award 2017-18**
- Won the **Healthcare Support Initiative of the Year** by CSR Health Impact Award



# ENVIRONMENT

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## BALCO

- Won **Environment Excellence Award** at ICC Environment Excellence Award, 2017
  - Won **Excellent Energy Efficient Unit** at CII Energy Summit, 2017
  - Conferred **Most Innovative Project-Power Sector** by the CII Energy Summit
  - Won the **D.L. Shah Gold Award, 2017** for project implementation in Reduction of SCC in 540 MW Power Plant, conferred by the Quality Council of India
- 

## HINDUSTAN ZINC LIMITED

- Won the **Solar Innovation & Excellence Award** during 2nd Annual Conference Expo Awards
  - Won the **8th Rajasthan Energy Conservation Award 2017** by Government of Rajasthan
  - Won the **Gold Award for Best Performing Project of the Year** in the 'Rising' Category at RE ASSETS Excellence Awards Summit
  - Won the **2nd Prize in the Fertilizer (Phosphate) Sector** at the National Energy Conservation Award, 2017
  - Zawar Mines recognised as **Energy Efficient Plant for Business Sustainability** at the 3rd International Conference of Society of Power & Energy Professionals
  - Dariba Smelter Complex won at **Water Awards 2016-17** presented by The Water Digest
  - Kayad Mine won **Environment Excellence Award 2017** by Indian Chamber of Commerce
- 

## KONKOLA COPPER MINES

- Won the **Golden Ribbon Award** for the Company's stewardship in Environmental Sustainable Development
- 

## TALWANDI SABO POWER LIMITED

- Runner up for **Srishti Good Governance Award 2017** for high commitment towards environment management
  - Runner up **Award for Excellence in Research & Development** for Innovation in Fly Ash Utilisation
- 

## SESA GOA

- Won the **National Award for Excellence in Energy Efficiency** by CII
- 

## STERLITE COPPER

- Won **First Prize in 'Industrial Water Use Efficiency'** at the National Competition for 'Excellence in Water Management' by FICCI
- 

## VAL - JHARSUGUDA

- Awarded **Excellent Energy Efficient Unit** by CII
  - Won the **Innovation Award in Energy Conservation Category** by IPPAI
-

## HEALTH & SAFETY

### CAIRN OIL & GAS

- Awarded at **Health Awareness Campaign of the Year 2017** at the CSR Health Impact Awards
- **Obtained 5 Star Rating from British Safety Council for our Upstream and Midstream operations**

### HINDUSTAN ZINC LIMITED

- Rampura Agucha Cast Mine won **First Prize in 31st Mines Safety Week** of Ajmer Region
- Awarded the **Safety Innovation Award** by Institution of Engineers, Delhi State Chapter

### KONKOLA COPPER MINES

- Conferred the **Business Leaders Award for the fight against Malaria** by the Zambia Chamber of Commerce and Industry

### VAL - JHARSUGUDA

- Won the **Kalinga Safety Award (Silver)** for the performance year 2016

### VAL - LANJIGARH

- Won the **Safety Gold Award 2018** at the Greentech Safety Awards

### TALWANDI SABO POWER LIMITED

- Won **Gold Award for Outstanding Achievements in Safety Management System 2017** at the GreenTech Safety Awards

### STERLITE COPPER

- **Won the British Safety Council's Sword of Honour**

## GOVERNANCE

### VEDANTA LIMITED

- **Highest Ranking for Disclosure** in the 'India Disclosure Index 2017' by FTI Consulting in the metals & mining sector

### BLACK MOUNTAIN MINING

- Won the **Chairman's Award** for Best Business Performance

## HUMAN RESOURCES

### HINDUSTAN ZINC LIMITED

- Certified as **Great Place to Work** by Great Place to Work Institute

### VAL - JHARSUGUDA

- Won the **Significant Achievement in HR Excellence** at the 7th CII National HR Excellence Awards 2016-17

### SESA GOA

- Won the **Best Employer Brand in Goa** by the Goa State CSR Leadership Awards 2017

### STERLITE COPPER

- Won the Golden Peacock **HR Excellence Award** for 'Overall Excellence in HR' and 'People Management Practices'
- Won the **Talent Acquisition Award** at 7th National Conference & Game Changer Awards by The HR Club
- Won the **Strong Commitment to HR Excellence Award** by CII

# ABOUT THIS REPORT

This is our tenth Sustainable Development Report and coincides with the publication of our Annual Report. Combined these two documents provide an overview of our approach and our achievements in FY 2017-18, outlining our actions over the past year to achieve our mission to be a world-class diversified natural resource company.

## REPORTING SCOPE AND BOUNDARY

Covering the financial year 2017-18, the report is structured around our Sustainable Development Model's pillars of Responsible Stewardship, Building Strong Relationships, Adding and Sharing Value, and Strategic Communications.

All group subsidiary companies have been reported in full as though they were 100% wholly owned as we recognise the level of control and sphere of influence the Group has over these operations.

The aspect boundaries and content of this Sustainable Development Report have been defined using reporting principles prescribed in the GRI Sustainability Reporting Standards (GRI Standards) of the Global Reporting Initiative. We followed the approach described in GRI implementation manual for designing the report content. The material aspects that have been covered in the report are clearly brought out in the materiality matrix. In the report, the DMA (Disclosure on Management Approach) describes the Company's approach to the subjects relevant to it and the indicators provide details on performance on the specific subjects.

There are no specific restatements of the information provided in the previous reports and no significant changes in terms of acquisition and physical boundaries from the previous reporting periods in the scope and aspect boundaries.

The report is also mapped to the United Nations Global Compact (UNGC) and United Nations Sustainable Development Goals (UN SDGs) principles. It reports our approach and disclosure towards triple bottom line principles - people, planet and profit over the financial year 2017-18.

## GRI STANDARDS CONTENT AND DISCLOSURE DOCUMENT

The GRI Standards detailed content index and Vedanta GRI Standards Disclosure Document FY 2017-18 includes additional indicators including the Mining and Metal and Oil and Gas supplements disclosure is available on our website.

## ASSURANCE AND DISCLOSURE

Assurance of this report was carried out by KPMG under 'limited assurance' services in accordance with the ISAE 3000. There is an internal approval system in the Company for appointment of external assurance provider for the sustainability report.



# EXTERNAL INDICES

## UNITED NATIONS GLOBAL COMPACT

We continue to uphold the ten principles of the UNGC. Our Sustainable Development report communicates our progress in implementing the ten principles, and below we have mapped the principles against our various sustainability aspects and specific report sections.

Aspect	UNGC Principle	Report Reference	Page No.
Human Rights	Principle 1: Businesses should support and respect the protection of internationally proclaimed human rights	Human Rights	42
	Principle 2: Make sure that they are not complicit in human rights abuses	Human Rights	42
Labour Rights	Principle 3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining	Human Rights	42
Child and Forced Labour	Principle 4: The elimination of all forms of forced and compulsory labour	Human Rights	43
	Principle 5: The effective abolition of child labour	Human Rights	43
	Principle 6: The elimination of discrimination in respect of employment and occupation	Employees	63
Environment	Principle 7: Business should support a precautionary approach to environmental challenges	Environment	27
	Principle 8: Undertake initiatives to promote greater environmental sustainability	Environment	27
	Principle 9: Encourage the development and diffusion of environmentally friendly technologies	Environment	27
Anti-Corruption	Principle 10: Business should work against corruption in all its forms, including extortion and bribery	Governance	16, 17

## UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS (UN SDGS)

In September 2015, the UN member states agreed on a set of 17 Sustainable Development Goals (SDGs), to end poverty, fight inequality and injustice, and tackle climate change by 2030. Given below is our SDG priority list which states our endeavours that align with the said goals.

SDGs	Corresponding Sections	Page No.
SDG1 Poverty	Community	8, 55
SDG2 Hunger	Community	52, 58
SDG3 Good Health and Well-being	Safety and Occupational Health Community Employees	22, 24, 25 53 67
SDG4 Quality Education	Community	52, 53, 56
SDG5 Gender Equality	Employee	8, 63
SDG6 Clean Water and Sanitation	Community	8, 27, 28, 54, 59
SDG7 Affordable and Clean Energy	Environment	8, 27, 30
SDG8 Decent Work and Economic Growth	Employee	8, 42
SDG9 Industry, Innovation and Infrastructure	Executive Statements	3-5
SDG10 Reduced Inequalities	Employees	42
SDG12 Responsible Consumption and Production	Environment	27, 28, 35
SDG13 Climate Action	Environment	8, 27, 30
SDG15 Life on Land	Environment	27, 33
SDG16 Peace, Justice and Strong Institutions	Governance	15, 16, 42
SDG17 Partnership to achieve the Goal	Stakeholder Engagement Strategic Engagements & Advocacy	38 78

# ASSURANCE STATEMENT



**KPMG (Registered)**  
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## INDEPENDENT LIMITED ASSURANCE STATEMENT TO VEDANTA RESOURCES PLC ON THEIR CORPORATE SUSTAINABILITY REPORT FOR FY 2017-18

### To the management of Vedanta Resources Plc

KPMG in India (KPMG) was engaged by Vedanta Resources Plc ('the Company' or 'Vedanta') to provide an independent assurance on its Sustainability Report for FY 2017-18 ('the Report'). The Report is prepared by the Company based on Global Reporting Initiative (GRI) Standards 'in accordance - core' option for sustainability reporting.

The development of Report, its content, identification of key material topics and related impacts, 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

Vedanta applies its sustainability performance reporting criteria based on Sustainability Reporting Standards of Global Reporting Initiative (GRI Standards) including the Mining and Metals and Oil & Gas 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 Goal frameworks for the Company 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 information presented in the report against the characteristics of relevance, completeness, reliability, neutrality and understandability.

### SCOPE, BOUNDARY AND LIMITATIONS OF ASSURANCE

The Assurance has been provided for selected sustainability performance disclosures presented by Vedanta in its Report. The reporting boundary included data and information for the period 01 April 2017 to 31 March 2018 for India and Global operations, based on Global Reporting Initiative's (GRI) Standards in accordance Core option. Our Scope of assurance included verification of the sample data and information on selected material topics reported at the following units/locations and Corporate offices in Gurgaon and Udaipur:

- **Vedanta Limited** (Jharsuguda smelter & power plant, Orissa)
- **Vedanta Limited** (Narain Mines, Iron Ore Operations, Karnataka)
- **Konkola Copper Mines Plc** (Zambia)
- **Cairn India Limited** (Bhagam field)
- **Cairn India Limited** (Viramgam Gas Terminal, Gujarat)
- **Hindustan Zinc Limited** (Dariba Smelting Complex, Rajasthan)
- **Hindustan Zinc Limited** (Kayad Mines, Rajasthan)
- **Hindustan Zinc Limited** (Rajpura Dariba Mines, Rajasthan)
- **Hindustan Zinc Limited** (Sindesar Khurd Mines, Rajasthan)
- **Vedanta Limited** (Gurgaon Corporate Office, Haryana)
- **Hindustan Zinc Limited** (Udaipur Corporate Office, Rajasthan)

- **Vedanta Limited** (BALCO Korba Smelter & Power Plants, Chattisgarh)
- **Vedanta Limited** (Tuticorin Smelter & Captive Power Plant, Tamil Nadu)
- **Cairn India Limited** (Mangala Processing Terminal, Rajasthan)
- **Cairn India Limited** (Aishwariya Field, Rajasthan)
- **Hindustan Zinc Limited** (Chanderiya Lead and Zinc Smelters, Rajasthan)
- **Hindustan Zinc Limited** (Debari Zinc Smelter, Rajasthan)
- **Hindustan Zinc Limited** (Pantnagar Metal Plant, Uttarakhand)
- **Hindustan Zinc Limited** (Rampura Agucha Mines, Rajasthan)
- **Hindustan Zinc Limited** (Zawar Mines, Rajasthan)
- **Cairn India Limited** (Gurgaon Corporate Office, Haryana)

The assurance scope excludes:

- Data and information outside the defined reporting period and boundary;
- The Company's financial performance;
- The Company's compliance to legal obligations/disclosures;
- 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 Universal and Topic Specific Standard Disclosures subject to assurance were as follows:

#### Universal Standard Disclosures

- General Disclosures** • Organizational Profile (102-7 to 102-11) • Strategy (102-14) • Ethics and Integrity (102-16) • Governance (102-18)  
• Stakeholder Engagement (102-40 to 102-44) • Report Profile (102-46 to 102-56)

- Management Approach** • Disclosure on Management Approach (103-1)<sup>1</sup>

<sup>1</sup> Disclosures on Management Approach were verified for select topic specific disclosures as per the given table

**Topic Specific Standard Disclosures**

**Environment** • Energy (302-1, 302-3, 302-4, OG3) • Water (303-1, 303-3) • Biodiversity (304-1)  
• Emissions (305-1, 305-2, 305-4, 305-7) • Effluents and Waste (306-1, 306-2, OG5, OG7, MM3)

**Social** • Employment (401-1, 401-2, 401-3) • Occupational Health and Safety (403-2) • Training & Education (404-1, 404-2, 404-3)  
• Diversity and Equal Opportunity (405-1) • Non Discrimination (406-1) • Local Communities (413-1)

**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 which included:

- Assessing that the report is prepared in accordance with the Sustainability Reporting Standards of the Global Reporting Initiative (GRI Standards - in accordance "Core" option).
- 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 Vedanta.
- Understanding the appropriateness of various assumptions used for estimation of data by Vedanta.
- Assessing the systems used for data collection and reporting of the Universal Disclosures and Topic Specific Disclosures of material topics as listed in the assurance scope above.
- Verifying systems and procedures used for quantification, collation and analysis of sustainability performance disclosures 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 Vedanta has adopted to address the same.
- Assessing data reliability and accuracy.
- 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 disclosures 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 the information, our team verified the same at Vedanta's premises.

**CONCLUSIONS**

We have reviewed the Sustainability Report of Vedanta. Based on our limited review and procedures performed in line with scope, boundary and limitations of assurance, 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 topics and is in accordance with the sustainability reporting standards of the Global Reporting Initiative (GRI Standards).

We have provided our observations and areas for improvement 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**

Vedanta is responsible for developing the Report contents. The Company is also responsible for identification of material sustainability topics, 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 Vedanta 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 Vedanta 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 Vedanta 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**  
24<sup>th</sup> August, 2018



# GRI STANDARDS INDEX

GRI Standard	Disclosure	Response
<b>GRI 101: Foundation 2016</b> [GRI 101 does not include any disclosures]		
<b>General Disclosures</b>		
<b>Organisational Profile</b>		
GRI 102- General Disclosures 2016	102-1: Name of the Organisation	<b>Vedanta Resources plc</b>
	102-2: Activities, brands, products, and services	<b>Vedanta Sustainability Report 2017-18:</b> Page 01 (Vedanta at a Glance)
	102-3: Location of headquarters	<b>Vedanta Sustainability Report 2017-18:</b> Back Cover
	102-4: Location of operations	<b>Vedanta Sustainability Report 2017-18:</b> Page 01 (Vedanta at a Glance)  <b>Australia, India</b> (Andhra Pradesh, Chhattisgarh, Goa, Gujarat, Karnataka, Odisha, Rajasthan, Tamil Nadu), <b>Namibia, South Africa, Zambia</b>
	102-5: Ownership and legal form	<b>Vedanta Resources plc Annual Report 2017-18:</b> Pages 105, 167, 241-246,
	102-6: Markets served	<b>Vedanta Sustainability Report 2017-18:</b> Page 01 (Vedanta at a Glance)
	102-7: Scale of the organisation	<b>Vedanta Sustainability Report 2017-18:</b> Page 01 (Vedanta at a Glance), Page 68 (Economic), Page 70 (Segment contribution of revenue)
	102-8: Information on employees and other workers	<b>Vedanta Sustainability Report 2017-18:</b> Page 60 (Employees)
	102-9: Supply chain	Vedanta's supply chain spans all five areas of the metals & mining business - exploration, asset development, extraction, processing, and value addition. Given the nature of our business, our supply chain consists of vendors who provide us with the workforce who help us operate our extractive and processing businesses as well as operators who supply us with high-end technologies that help us conduct our operations in the most efficient, responsible, and cost effective manner possible.  We are also committed to ensuring that we encourage local vendors become part of our supply chain so that the presence of our businesses benefits the local economies and communities.
	102-10: Significant changes to the organisation and its supply chain	There were no significant changes to the organisation and its supply chain in FY 2017-18.
	102-11: Precautionary principle or approach	Vedanta seeks to ensure that all of our operations follow a stringent application of environmental and social principles. All of our businesses undergo an Environmental and Social Impact Assessment before beginning operations. Findings from the ESIA are considered and a mitigation plan developed. We have also committed to ensuring that we receive the Free, Prior, Informed Consent of indigenous communities from where we source our ores.
	102- 12: External initiatives	Vedanta aligns itself with the following external charters & principles: UN Global Compact, UN Sustainable Development Goals, ICM, IOGP, IFC Performance Standards, GHG Greenhouse Gas Protocol.
	102- 13: Memberships of associations	<b>Vedanta Sustainability Report 2017-18:</b> Page 78 (Strategic Engagements & Advocacy)  Vedanta is also a member of various industry associations in the countries where it operates (Eg: Confederation of India Industry)
<b>Strategy</b>		
GRI 102- General Disclosures 2016	102-14: Statement from senior decision-maker	<b>Vedanta Sustainability Report 2017-18:</b> Page 03 (From the Chairman's Desk), Page 05 (CEO's Message)
<b>Ethics &amp; Integrity</b>		
GRI 102- General Disclosures 2016	102-16: Values, principles, standards, and norms of behaviour	<b>Vedanta Sustainability Report 2017-18:</b> Page 01 (Vedanta at a glance)
<b>Governance</b>		
GRI 102- General Disclosures 2016	102-18: Governance Structure	<b>Vedanta Sustainability Report 2017-18:</b> Page 15 (Governance)
<b>Stakeholder Engagement</b>		
GRI 102- General Disclosures 2016	102-40: List of stakeholder groups	<b>Vedanta Sustainability Report 2017-18:</b> Page 38 (Stakeholder Engagement)
	102-41: Collective bargaining agreements	<b>Vedanta Sustainability Report 2017-18:</b> Page 42 (Collective Bargaining)
	102-42: Identifying and selecting stakeholders	<b>Vedanta Sustainability Report 2017-18:</b> Page 38 (Stakeholder Engagement)
	102-43: Approach to stakeholder engagement	<b>Vedanta Sustainability Report 2017-18:</b> Page 38-40 (Stakeholder Engagement)
	102-44: Key topics & concerns raised	<b>Vedanta Sustainability Report 2017-18:</b> Page 38-40 (Stakeholder Engagement)  <b>Vedanta Resources plc Annual Report 2017-18:</b> Page 126
<b>Reporting Practice</b>		
GRI 102- General Disclosures 2016	102-45: Entities included in the consolidated financial statements	<b>Vedanta Resources plc Annual Report 2017-18</b>
	102-46: Defining report content and topic boundaries	<b>Vedanta Sustainability Report 2017-18:</b> Page 82 (About this report)
	102-47: List of material topics	<b>Vedanta Sustainability Report 2017-18:</b> Page 10 (Materiality)
	102-48: Restatements of information	<b>Vedanta Sustainability Report 2017-18:</b> Page 82 (About this report)
	102-49: Changes in reporting	<b>Vedanta Sustainability Report 2017-18:</b> Page 82 (About this report)

GRI Standard	Disclosure	Response
	102-50: Reporting period	The reporting period for this report is FY 2017-18
	102-51: Date of most recent report	Vedanta's previous sustainability report was released in June 2017
	102-52: Reporting cycle	Annual
	102-53: Contact point for questions regarding the report	Questions can be directed to: <a href="mailto:sustainability@vedanta.co.in">sustainability@vedanta.co.in</a>
	102-54: Claims of reporting in accordance with the GRI Standards	<b>Vedanta Sustainability Report 2017-18:</b> Page 82 (About this report)
	102-55: GRI Content Index	<b>Vedanta Sustainability Report 2017-18:</b> Page 86 (GRI Content Index)
	102-56: External Assurance	<b>Vedanta Sustainability Report 2017-18:</b> Page 84 (Assurance Statement)

## Specific Standard Disclosures

### Category: Economic

GRI Standard	Disclosure	Response		
ECONOMIC PERFORMANCE				
GRI 103: Management Approach 2016	103-1: Explanation of the material topic and its boundary	Boundary: Entire organisation		
	103-2: The management approach and its components	Vedanta Resources plc Annual Report 2017-18: Page 6, Pages 26-29		
	103-3: Evaluation of management approach	Vedanta Resources plc Annual Report 2017-18: Pages 32-33, Page 107		
GRI 201: Economic Performance 2016	201-1: Direct economic value generated and distributed	Vedanta Sustainability Report 2017-18: Page 68 (Economic Performance)		
		Economic Value Generated and Distributed (in US\$ million)	FY 2017-18	FY 2016-17
		Economic value generated	15,092.14	11,579.40
		Economic value distributed	14,566.30	11,130.73
		a) Operating Costs	11,309.80	8,842.00
		b) Employee wages and benefits	630.70	591.10
		c) Payment to providers of capital	1,582.60	901.00
		d) Payment to government	1,004.45	779.00
		e) Community investments (including donation)-	38.75	17.63
	Economic value retained (Calculated as Economic value generated less economic value distributed)	525.84	466.30	
	201-3: Defined benefit plan obligations and other retirement plans	Coverage of the organisation's defined benefit plan obligations (US\$ million)	FY 2017-18	FY 2016-17
		Defined contribution pension scheme costs	16.40	22.00
		Defined benefit pension scheme costs	37.10	21.00
		Share based payment charge	20.50	16.00
		Total	74.00	59.00
201-4: Financial assistance received from government		FY 2017-18	FY 2016-17	
	Financial assistance received from government (US\$ million)	157.50	204.80	
MARKET PRESENCE				
GRI 103: Management Approach 2016		Vedanta Resources plc Annual Report 2017-18: Page 20-25		
GRI 202: Market Presence 2016	202-1: Ratios of standard entry level wage by gender compared to local minimum wage	At all our significant locations, we ensure that the ratios of entry level wages meets or exceeds the legal requirements and complies with all applicable laws. With regards to gender, the ratio is 1:1 and we don't discriminate in any way in terms of standard entry level wages.		
	202-2: Proportion of senior management hired from local community	Vedanta Sustainability Report 2017-18: Page 63 (Diversity and inclusion)		
INDIRECT ECONOMIC IMPACTS				
GRI 103: Management Approach 2016		Vedanta Sustainability Report 2017-18: Page 08 (Global Context – Retaining our social license to operate), Page 46 (Community)		
GRI 203: Indirect Economic Impacts 2016	203-1: Infrastructure investments and services supported	Vedanta Sustainability Report 2017-18: Page 46 (Community), Page 47 (Nandghar), Page 51 (Healthcare through hospitals)		
ANTI-CORRUPTION				
GRI 103: Management Approach 2016		Vedanta Resources plc Annual Report 2017-18: Page 123, Pages 117-124		
GRI 205: Anti-Corruption 2016	205-1: Operations assessed for risks related to corruption	100% of our operations are assessed for risks related to corruption. The assessments are conducted by the Management Assurance Services (MAS) team. More details can be found at:  Vedanta Resources plc Annual Report 2017-18: Pages 117-124		
	205-2: Communication and training about anti-corruption policies and procedures	Vedanta Sustainability Report 2017-18: Page 16 (Code of business conduct and ethics)		

GRI Standard	Disclosure	Response																																												
	205-3: Confirmed incidents of corruption and action taken	<table><tr><td>Number of whistle-blower cases opened in 2017-18</td><td>87</td></tr><tr><td>Number of whistle-blower cases upheld and found correct in 2017-18</td><td>23</td></tr><tr><td>Number of whistle-blower cases closed in 2017-18</td><td>76</td></tr></table>	Number of whistle-blower cases opened in 2017-18	87	Number of whistle-blower cases upheld and found correct in 2017-18	23	Number of whistle-blower cases closed in 2017-18	76																																						
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ANTI-COMPETITIVE BEHAVIOUR																																														
GRI 103: Management Approach 2016		<p><b>From of Code of Business Conduct and Ethics:</b></p> <p>Vedanta is committed to free and open competition in the marketplace. Employees should avoid actions that would be contrary to laws governing competitive practices in the marketplace, including federal and state anti-trust laws. Such actions include misappropriation and/or misuse of a competitor's confidential information or making false statements about the competitor's business and business practices. The Group and its employees shall under no circumstances engage in any anti-competitive practices such as illegal fixing of prices, sharing of markets or other actions which prevent, restrict or distort competition in violation of applicable anti-trust laws.</p>																																												
GRI 206: Anti-Competitive Behaviour 2016	206-1: Legal actions for anti-competitive behaviour, anti-trust, and monopoly practices	No legal action.																																												
MATERIAL ASPECT: OIL RESERVES																																														
OG1	Volume and type of estimated proved reserves and production.	<table><tr><th rowspan="2"></th><th colspan="2">Proved &amp; Probable Reserves</th><th colspan="2">Proved &amp; Probable Reserves (developed)</th></tr><tr><th>Oil (mmstb)</th><th>Gas (bscf)</th><th>Oil (mmstb)</th><th>Gas (bscf)</th></tr><tr><td><b>Reserves as of 1 April 2016</b></td><td><b>160.20</b></td><td><b>55.05</b></td><td><b>144.73</b></td><td><b>28.47</b></td></tr><tr><td>Additions/revision during the year</td><td>(4.81)</td><td>(2.48)</td><td>(1.60)</td><td>(8.83)</td></tr><tr><td>Production during the year</td><td>(43.43)</td><td>(4.84)</td><td>(43.43)</td><td>(4.84)</td></tr><tr><td><b>Reserves as of 31 March 2017</b></td><td><b>111.96</b></td><td><b>47.73</b></td><td><b>99.70</b></td><td><b>14.80</b></td></tr><tr><td>Additions/revision during the year</td><td>27.68</td><td>12.01</td><td>13.44</td><td>20.95</td></tr><tr><td>Production during the year</td><td>(41.86)</td><td>(8.42)</td><td>(41.86)</td><td>(8.42)</td></tr><tr><td><b>Reserves as of 31 March 2018</b></td><td><b>97.78</b></td><td><b>51.32</b></td><td><b>71.27</b></td><td><b>27.32</b></td></tr></table>		Proved & Probable Reserves		Proved & Probable Reserves (developed)		Oil (mmstb)	Gas (bscf)	Oil (mmstb)	Gas (bscf)	<b>Reserves as of 1 April 2016</b>	<b>160.20</b>	<b>55.05</b>	<b>144.73</b>	<b>28.47</b>	Additions/revision during the year	(4.81)	(2.48)	(1.60)	(8.83)	Production during the year	(43.43)	(4.84)	(43.43)	(4.84)	<b>Reserves as of 31 March 2017</b>	<b>111.96</b>	<b>47.73</b>	<b>99.70</b>	<b>14.80</b>	Additions/revision during the year	27.68	12.01	13.44	20.95	Production during the year	(41.86)	(8.42)	(41.86)	(8.42)	<b>Reserves as of 31 March 2018</b>	<b>97.78</b>	<b>51.32</b>	<b>71.27</b>	<b>27.32</b>
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## Category: Environment

GRI Standard	Disclosure	Response																																							
ENERGY																																									
GRI 103: Management Approach 2016		Vedanta Sustainability Report 2017-18: Page 30 (Energy, Emissions and Climate Related Business Risk - Approach)																																							
GRI 302: Energy 2016	302-1: Energy consumption within the organisation	<p>Vedanta Sustainability Report 2017-18: Page 30 (Energy, Emissions and Climate Related Business Risk)</p> <p>Unit wise breakup of total energy consumption (GJ) within organisation is as below:</p> <table><tr><th>Business</th><th colspan="2">Total Energy (GJ)</th></tr><tr><th></th><th>FY 2017-18</th><th>FY 2016-17</th></tr><tr><td>Zinc India</td><td>50,654,946</td><td>44,356,047</td></tr><tr><td>Zinc International</td><td>3,060,086</td><td>3,016,401</td></tr><tr><td>Aluminium India</td><td>161,939,598</td><td>177,781,326</td></tr><tr><td>Copper India</td><td>4,107,254</td><td>4,074,534</td></tr><tr><td>Copper Australia</td><td>92,959</td><td>76,263</td></tr><tr><td>Copper Africa</td><td>7,498,295</td><td>6,972,026</td></tr><tr><td>Iron Ore Business</td><td>1,445,642</td><td>1,774,212</td></tr><tr><td>Oil and Gas Sector</td><td>19,358,552</td><td>19,624,038</td></tr><tr><td>Power Business</td><td>198,418,692</td><td>170,302,121</td></tr><tr><td>Port Business</td><td>42,343</td><td>26,952</td></tr><tr><td>Total</td><td>446,618,367</td><td>428,003,920</td></tr></table> <p>Our CMT operations in Australia and KCM operations in Zambia fetch electricity from Hydro Power station. There is a minor deviation (&lt;4%) in the energy number, observed during the assurance exercise. The change is not reflected in this disclosure in order to maintain consistency with all of the public disclosures in FY 2017-18. It will be restated in all disclosures in FY 2018-19.</p>	Business	Total Energy (GJ)			FY 2017-18	FY 2016-17	Zinc India	50,654,946	44,356,047	Zinc International	3,060,086	3,016,401	Aluminium India	161,939,598	177,781,326	Copper India	4,107,254	4,074,534	Copper Australia	92,959	76,263	Copper Africa	7,498,295	6,972,026	Iron Ore Business	1,445,642	1,774,212	Oil and Gas Sector	19,358,552	19,624,038	Power Business	198,418,692	170,302,121	Port Business	42,343	26,952	Total	446,618,367	428,003,920
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	302-3: Energy Intensity	<p>Specific Energy Consumption (GJ/Unit of Production Output)</p> <table><tr><th>Business Sector</th><th>Company Name</th><th>FY 2017-18</th><th>FY 2016-17</th></tr><tr><td rowspan="2">Zinc India</td><td>HZL – Mines</td><td>0.29</td><td>0.39</td></tr><tr><td>HZL – Smelts</td><td>17.05</td><td>17.62</td></tr><tr><td rowspan="3">Zinc International</td><td>Skorpion</td><td>29.31</td><td>27.97</td></tr><tr><td>Lisheen</td><td>-</td><td>-</td></tr><tr><td>BMM</td><td>0.35</td><td>0.41</td></tr><tr><td>Copper Australia</td><td>CMT</td><td>-</td><td>-</td></tr><tr><td>Copper India</td><td>Sterlite Copper</td><td>8.33</td><td>8.35</td></tr></table>	Business Sector	Company Name	FY 2017-18	FY 2016-17	Zinc India	HZL – Mines	0.29	0.39	HZL – Smelts	17.05	17.62	Zinc International	Skorpion	29.31	27.97	Lisheen	-	-	BMM	0.35	0.41	Copper Australia	CMT	-	-	Copper India	Sterlite Copper	8.33	8.35										
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	302-4: Reduction of energy consumption	<b>Vedanta Sustainability Report 2017-18:</b> Page 30 (Energy, Emissions and Climate Related Business Risk)																																																												
	OG2: Total amount invested in Renewable Energy	During FY 2017-18 our Cairn Oil & Gas business invested US\$ 18,000 in renewable energy.																																																												
	OG3: Total amount of renewable energy generated by source	During FY 2017-18, total renewable energy generated at Cairn Oil & Gas in reporting period is 483.91 Mwh																																																												
<b>WATER</b>																																																														
GRI 103: Management Approach 2016		<b>Vedanta Sustainability Report 2017-18:</b> Page 28 (Water)																																																												
GRI 303: Water 2016	303-1: Water withdrawal by source	<p>During the reporting period, we withdrew nearly 332 million cubic metres of water. The water was sourced from: 54.2% - ground water, 42.5% - surface water, 1.6% - wastewater from another organisation, 0.4% - water from tankers and 1.4% - rain-water harvesting. The total water withdrawal has decreased in comparison to FY 2016-17, when we withdrew 371 million cubic meters of water.</p> <table><tr><th></th><th colspan="2">FY 2017-18</th><th colspan="2">FY 2016-17</th></tr><tr><th>Business</th><th>Ground Water (m³)</th><th>Surface Water (m³)</th><th>Ground Water (m³)</th><th>Surface Water (m³)</th></tr><tr><td>Zinc India</td><td>3,681,071</td><td>20,382,341</td><td>3,289,487</td><td>16,684,509</td></tr><tr><td>Zinc International</td><td>2,002,257</td><td>5,027,207</td><td>1,364,266</td><td>4,339,589</td></tr><tr><td>Aluminium India</td><td>59,195</td><td>28,097,056*</td><td>59,200</td><td>50,719,645</td></tr><tr><td>Copper India</td><td>14,756</td><td>1,313,793</td><td>15,484</td><td>3,807,720</td></tr><tr><td>Copper Australia</td><td>4,015,868</td><td>3,425,614</td><td>3,352,162</td><td>3,139,927</td></tr><tr><td>Copper Africa</td><td>158,468,504</td><td>38,083,904</td><td>153,548,896</td><td>40,246,679</td></tr><tr><td>Iron Ore Business</td><td>259,120</td><td>3,139,259</td><td>341,946</td><td>2,638,065</td></tr><tr><td>Oil and Gas Sector</td><td>11,563,732</td><td>-</td><td>12,537,279</td><td>-</td></tr><tr><td>Power Sector</td><td>-</td><td>41,563,995</td><td>631,457</td><td>38,644,650</td></tr><tr><td>Total</td><td>180,064,503</td><td>141,033,169</td><td>175,140,177</td><td>160,220,784</td></tr></table>		FY 2017-18		FY 2016-17		Business	Ground Water (m³)	Surface Water (m³)	Ground Water (m³)	Surface Water (m³)	Zinc India	3,681,071	20,382,341	3,289,487	16,684,509	Zinc International	2,002,257	5,027,207	1,364,266	4,339,589	Aluminium India	59,195	28,097,056*	59,200	50,719,645	Copper India	14,756	1,313,793	15,484	3,807,720	Copper Australia	4,015,868	3,425,614	3,352,162	3,139,927	Copper Africa	158,468,504	38,083,904	153,548,896	40,246,679	Iron Ore Business	259,120	3,139,259	341,946	2,638,065	Oil and Gas Sector	11,563,732	-	12,537,279	-	Power Sector	-	41,563,995	631,457	38,644,650	Total	180,064,503	141,033,169	175,140,177	160,220,784
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	303-2: Water sources significantly affected by withdrawal of water	In about five locations, our water withdrawals are greater than or equal to 5% of the water body's annual average volume. However, none of these withdrawals can be considered sensitive as it does not threaten the biodiversity of the area. At all of our locations, we carefully monitor our water withdrawals and usage and where feasible, make efforts to recharge the water sources.																																																												
	303-3: Water recycled and reused	<b>Vedanta Sustainability Report 2017-18:</b> Page 29 (Water) Vedanta has historically reported water recycling rates based on our total water consumption volumes. This amounts to 26.6% of water recycled.  However, as per GRI requirements, the recycle rate of water is to be taken on water withdrawal volumes. The corresponding recycle rate becomes 22.3% in FY 2017-18.																																																												
<b>BIODIVERSITY</b>																																																														
GRI 103: Management Approach 2016		<b>Vedanta Sustainability Report 2017-18:</b> Page 33 (Biodiversity)																																																												
GRI 304: Biodiversity 2016	304-1: Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	<b>Vedanta Sustainability Report 2017-18:</b> Page 33 (Biodiversity)																																																												
	304-2: Significant impacts of activities, products, and services on biodiversity	<b>Vedanta Sustainability Report 2017-18:</b> Page 33 (Biodiversity)																																																												
	304-3: Habitats protected or restored	<b>Vedanta Sustainability Report 2017-18:</b> Page 33 (Biodiversity)																																																												

GRI Standard	Disclosure	Response																																			
	304-4: IUCN Red List species and national conservation list species with habitats in areas affected by operations	<table><tr><th>IUCN Classification</th><th>Africa</th><th>Asia</th><th>Australia</th></tr><tr><td>Critically Endangered</td><td>0</td><td>3</td><td>0</td></tr><tr><td>Endangered</td><td>5</td><td>21</td><td>8</td></tr><tr><td>Vulnerable</td><td>8</td><td>29</td><td>7</td></tr><tr><td>Near Threatened</td><td>4</td><td>7</td><td>0</td></tr><tr><td>Least Concern</td><td>184</td><td>8</td><td>0</td></tr></table>	IUCN Classification	Africa	Asia	Australia	Critically Endangered	0	3	0	Endangered	5	21	8	Vulnerable	8	29	7	Near Threatened	4	7	0	Least Concern	184	8	0											
IUCN Classification	Africa	Asia	Australia																																		
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	MM2: The number and percentage of total sites identified as requiring biodiversity management plans according to stated criteria, and the number (percentage) of those sites with plans in place	Vedanta Sustainability Report 2017-18: Page 33 (Biodiversity)																																			
	OG4: Number and percentage of significant operating sites in which biodiversity risk has been assessed and monitored	All sites in our Oil & Gas business																																			
EMISSIONS																																					
GRI 103: Management Approach 2016		Vedanta Sustainability Report 2017-18: Page 35 (Air quality)																																			
GRI 305: Emissions 2016	305-1: Direct (Scope 1) GHG emissions	<p>Vedanta Sustainability Report 2017-18: Page 30 (Energy, Emissions and Climate Related Business Risk)</p> <p>Our business-wise Scope I emissions are:</p> <table><tr><th rowspan="2">Business</th><th colspan="2">Scope I Emission (tCO<sub>2</sub>e)</th></tr><tr><th>FY 2017-18</th><th>FY 2016-17</th></tr><tr><td>Zinc India</td><td>4,830,185</td><td>4,288,645</td></tr><tr><td>Zinc International</td><td>87,919</td><td>54,168</td></tr><tr><td>Copper India &amp; Australia</td><td>624,738</td><td>148,078</td></tr><tr><td>Copper Africa</td><td>150,306</td><td>153,127</td></tr><tr><td>Aluminium India</td><td>33,167,409</td><td>24,808,807</td></tr><tr><td>Power Sector</td><td>8,894,216</td><td>18,996,251</td></tr><tr><td>Oil &amp; Gas Sector</td><td>1,550,610</td><td>1,465,348</td></tr><tr><td>Iron Ore Business</td><td>1,837,129</td><td>1,982,484</td></tr><tr><td>Port Business</td><td>0</td><td>0</td></tr><tr><td>Total</td><td>51,142,511</td><td>51,896,908</td></tr></table>	Business	Scope I Emission (tCO <sub>2</sub> e)		FY 2017-18	FY 2016-17	Zinc India	4,830,185	4,288,645	Zinc International	87,919	54,168	Copper India & Australia	624,738	148,078	Copper Africa	150,306	153,127	Aluminium India	33,167,409	24,808,807	Power Sector	8,894,216	18,996,251	Oil & Gas Sector	1,550,610	1,465,348	Iron Ore Business	1,837,129	1,982,484	Port Business	0	0	Total	51,142,511	51,896,908
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Port Business	0	0																																			
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	305-2: Energy indirect (Scope 2) GHG emissions	<p>Vedanta Sustainability Report 2017-18: Page 30 (Energy, Emissions and Climate Related Business Risk)</p> <p>Our business-wise Scope II emissions are:</p> <table><tr><th rowspan="2">Business</th><th colspan="2">Scope II Emission (tCO<sub>2</sub>e)</th></tr><tr><th>FY 2017-18</th><th>FY 2016-17</th></tr><tr><td>Zinc India</td><td>154,564</td><td>114,211</td></tr><tr><td>Zinc International</td><td>594,167</td><td>644,554</td></tr><tr><td>Copper India &amp; Australia</td><td>87,591</td><td>515,274</td></tr><tr><td>Copper Africa</td><td>4,780</td><td>4,613</td></tr><tr><td>Aluminium India</td><td>237,024</td><td>52,542</td></tr><tr><td>Power Sector</td><td>8,901</td><td>6,736</td></tr><tr><td>Oil &amp; Gas Sector</td><td>84,980</td><td>70,827</td></tr><tr><td>Iron Ore Business</td><td>18,428</td><td>18,986</td></tr><tr><td>Port Business</td><td>11,641</td><td>4,922</td></tr><tr><td>Total</td><td>1,202,076</td><td>1,432,665</td></tr></table> <p>Our Australia and Zambia operation purchased electricity from hydro emission with low GHG emission factor.</p>	Business	Scope II Emission (tCO <sub>2</sub> e)		FY 2017-18	FY 2016-17	Zinc India	154,564	114,211	Zinc International	594,167	644,554	Copper India & Australia	87,591	515,274	Copper Africa	4,780	4,613	Aluminium India	237,024	52,542	Power Sector	8,901	6,736	Oil & Gas Sector	84,980	70,827	Iron Ore Business	18,428	18,986	Port Business	11,641	4,922	Total	1,202,076	1,432,665
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GRI Standard	Disclosure	Response																																																																																				
	305-4: GHG emissions intensity	<table><tr><th></th><th colspan="3">FY 2017-18</th><th colspan="3">FY 2016-17</th></tr><tr><th>Business</th><th>Scope 1 + Scope 2 GHG Emissions (tCO<sub>2</sub>e)</th><th>Revenue (US\$ mn)</th><th>GHG Intensity</th><th>Scope 1 + Scope 2 GHG Emissions (tCO<sub>2</sub>e)</th><th>Revenue (US\$ mn)</th><th>GHG Intensity</th></tr><tr><td>Zinc India</td><td>4,984,749</td><td>3,369</td><td>1,480</td><td>4,402,856</td><td>2,525</td><td>1,744</td></tr><tr><td>Zinc International</td><td>682,086</td><td>535</td><td>1,275</td><td>698,722</td><td>332</td><td>2,102</td></tr><tr><td>Copper India &amp; Australia</td><td>712,329</td><td>3,833</td><td>186</td><td>663,353</td><td>3,134</td><td>212</td></tr><tr><td>Copper Africa</td><td>155,086</td><td>1,283</td><td>121</td><td>157,740</td><td>874</td><td>180</td></tr><tr><td>Aluminium India</td><td>33,404,433</td><td>3,588</td><td>9,310</td><td>24,861,348</td><td>2,040</td><td>12,187</td></tr><tr><td>Power Sector</td><td>8,903,117</td><td>877</td><td>10,152</td><td>19,002,987</td><td>836</td><td>22,734</td></tr><tr><td>Oil &amp; Gas Sector</td><td>1,635,590</td><td>1,480</td><td>1,105</td><td>1,536,175</td><td>1,223</td><td>1,256</td></tr><tr><td>Iron Ore Business</td><td>1,855,557</td><td>487</td><td>3,810</td><td>2,001,470</td><td>615</td><td>3,252</td></tr><tr><td>Port Business</td><td>11,641</td><td>(92)</td><td>(127)</td><td>4,922</td><td>(59)</td><td>(83)</td></tr><tr><td>Total</td><td>52,344,587</td><td>15,360</td><td>3,480</td><td>53,329,573</td><td>11,520</td><td>4,629</td></tr></table>		FY 2017-18			FY 2016-17			Business	Scope 1 + Scope 2 GHG Emissions (tCO <sub>2</sub> e)	Revenue (US\$ mn)	GHG Intensity	Scope 1 + Scope 2 GHG Emissions (tCO <sub>2</sub> e)	Revenue (US\$ mn)	GHG Intensity	Zinc India	4,984,749	3,369	1,480	4,402,856	2,525	1,744	Zinc International	682,086	535	1,275	698,722	332	2,102	Copper India & Australia	712,329	3,833	186	663,353	3,134	212	Copper Africa	155,086	1,283	121	157,740	874	180	Aluminium India	33,404,433	3,588	9,310	24,861,348	2,040	12,187	Power Sector	8,903,117	877	10,152	19,002,987	836	22,734	Oil & Gas Sector	1,635,590	1,480	1,105	1,536,175	1,223	1,256	Iron Ore Business	1,855,557	487	3,810	2,001,470	615	3,252	Port Business	11,641	(92)	(127)	4,922	(59)	(83)	Total	52,344,587	15,360	3,480	53,329,573	11,520	4,629
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	305-5: Reduction of GHG emissions	Vedanta Sustainability Report 2017-18: Page 11 (Roadmap & Progress), Page 30 (Energy, Emissions and Climate Related Business Risk)																																																																																				
	305-7: NO <sub>x</sub> , SO <sub>x</sub> , and other significant air emissions	<p>Vedanta Sustainability Report 2017-18: Page 35 (Air Quality)</p> <table><tr><th></th><th colspan="3">FY 2017-18 (in MT)</th><th colspan="3">FY 2016-17 (in MT)</th></tr><tr><th>Business</th><th>PM Emissions</th><th>SO<sub>x</sub> Emissions</th><th>NO<sub>x</sub> Emissions</th><th>PM Emissions</th><th>SO<sub>x</sub> Emissions</th><th>NO<sub>x</sub> Emissions</th></tr><tr><td>Zinc India</td><td>1,039</td><td>22,112</td><td>6,798</td><td>887</td><td>19,255</td><td>6,328</td></tr><tr><td>Zinc International</td><td>-</td><td>105</td><td>-</td><td>-</td><td>-</td><td>-</td></tr><tr><td>Copper India &amp; Australia</td><td>7</td><td>773</td><td>-</td><td>7</td><td>902</td><td>-</td></tr><tr><td>Copper Africa</td><td>417</td><td>2,018</td><td>104</td><td>1,760</td><td>3,984</td><td>125</td></tr><tr><td>Aluminium India</td><td>2,733</td><td>35,144</td><td>12,406</td><td>2,344</td><td>40,104</td><td>10,273</td></tr><tr><td>Power Sector</td><td>4,387</td><td>131,579</td><td>37,526</td><td>5,101</td><td>113,838</td><td>28,003</td></tr><tr><td>Oil &amp; Gas Sector</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr><tr><td>Iron Ore Business</td><td>255</td><td>20</td><td>20</td><td>957</td><td>242</td><td>206</td></tr><tr><td>Port Business</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr><tr><td>Total</td><td>8,837</td><td>191,751</td><td>56,854</td><td>11,056</td><td>178,324</td><td>44,935</td></tr></table>		FY 2017-18 (in MT)			FY 2016-17 (in MT)			Business	PM Emissions	SO <sub>x</sub> Emissions	NO <sub>x</sub> Emissions	PM Emissions	SO <sub>x</sub> Emissions	NO <sub>x</sub> Emissions	Zinc India	1,039	22,112	6,798	887	19,255	6,328	Zinc International	-	105	-	-	-	-	Copper India & Australia	7	773	-	7	902	-	Copper Africa	417	2,018	104	1,760	3,984	125	Aluminium India	2,733	35,144	12,406	2,344	40,104	10,273	Power Sector	4,387	131,579	37,526	5,101	113,838	28,003	Oil & Gas Sector	-	-	-	-	-	-	Iron Ore Business	255	20	20	957	242	206	Port Business	-	-	-	-	-	-	Total	8,837	191,751	56,854	11,056	178,324	44,935
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GRI 103: Management Approach 2016		Vedanta Sustainability Report 2017-18: Page 35 (Waste)																																																																																				
GRI 306: Effluents and Waste 2016	306-1: Water discharge by quality and destination	<p>Vedanta Sustainability Report 2017-18</p> <p>Most of our operational processes have been designed to be ‘zero discharge’ facilities, where the generated waste water is treated and completely recycled back into process areas such as slag granulation, lime preparation and gas cleaning plants.</p> <p>In addition to these initiatives, effluent and sewage treatment plants are installed at many locations for reusing water at primary locations. Waste water discharge complies with applicable regulatory limits and, at all sites waste water is treated in effluent treatment plants. Metals are precipitated by addition of lime and flocculants with the use of sediment ponds.</p> <p>Waste Water Discharged:</p> <table><tr><th>Business</th><th>FY 2017-18 (m<sup>3</sup>)</th><th>FY 2016-17 (m<sup>3</sup>)</th></tr><tr><td>Zinc International</td><td>72,551</td><td>894</td></tr><tr><td>Copper India &amp; Australia</td><td>4,208,027</td><td>3,379,344</td></tr><tr><td>Copper Africa</td><td>147,094,781</td><td>148,568,472</td></tr><tr><td>Aluminium India</td><td>310,497</td><td>414,826</td></tr><tr><td>Oil &amp; Gas Business</td><td>1,009,356</td><td>750,258</td></tr><tr><td>Iron Ore Business</td><td>180,939</td><td>113,556</td></tr><tr><td>Power</td><td>-</td><td>94,700</td></tr><tr><td>Port Business</td><td>7</td><td>-</td></tr><tr><td>Total</td><td>152,876,157</td><td>153,322,050</td></tr></table>	Business	FY 2017-18 (m <sup>3</sup> )	FY 2016-17 (m <sup>3</sup> )	Zinc International	72,551	894	Copper India & Australia	4,208,027	3,379,344	Copper Africa	147,094,781	148,568,472	Aluminium India	310,497	414,826	Oil & Gas Business	1,009,356	750,258	Iron Ore Business	180,939	113,556	Power	-	94,700	Port Business	7	-	Total	152,876,157	153,322,050																																																						
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Copper Africa	147,094,781	148,568,472																																																																																				
Aluminium India	310,497	414,826																																																																																				
Oil & Gas Business	1,009,356	750,258																																																																																				
Iron Ore Business	180,939	113,556																																																																																				
Power	-	94,700																																																																																				
Port Business	7	-																																																																																				
Total	152,876,157	153,322,050																																																																																				



GRI Standard	Disclosure	Response																																																																																																												
	306-2: Waste by type and disposal method	<div>Vedanta Sustainability Report 2017-18: Page 36 (Waste)</div> <table><tr><th></th><th colspan="4">FY 2017-18</th><th colspan="4">FY 2016-17</th></tr><tr><th>Business</th><th colspan="2">Hazardous Waste (MT)</th><th colspan="2">Non-Hazardous Waste (MT)</th><th colspan="2">Hazardous Waste (MT)</th><th colspan="2">Non-hazardous Waste (MT)</th></tr><tr><th></th><th>Generated</th><th>Recycled</th><th>Generated</th><th>Recycled</th><th>Generated</th><th>Recycled</th><th>Generated</th><th>Recycled</th></tr><tr><td>Zinc India</td><td>71,712</td><td>42,022</td><td>1,085,397</td><td>413,671</td><td>63,318</td><td>24,911</td><td>820,028</td><td>87,502</td></tr><tr><td>Zinc International</td><td>705</td><td>91</td><td>-</td><td>-</td><td>359</td><td>9</td><td>-</td><td>-</td></tr><tr><td>Copper India/ Australia</td><td>83,938</td><td>39,053</td><td>1,788,903</td><td>1,857,134</td><td>71,732</td><td>25,899</td><td>1,771,050</td><td>1,791,993</td></tr><tr><td>Copper Africa</td><td>11</td><td>-</td><td>297,656</td><td>503,880</td><td>1,662</td><td>386</td><td>231,009</td><td>-</td></tr><tr><td>Aluminium India</td><td>241,366</td><td>157,413</td><td>7,724,472</td><td>5,362,730</td><td>176,635</td><td>146,704</td><td>7,973,313</td><td>3,223,538</td></tr><tr><td>Power Sector</td><td>36</td><td>3</td><td>5,531,056</td><td>5,260,133</td><td>90</td><td>67</td><td>5,525,581</td><td>2,832,176</td></tr><tr><td>Iron Ore Business</td><td>1</td><td>-</td><td>240,721</td><td>282,313</td><td>2,913</td><td>-</td><td>247,066</td><td>221,307</td></tr><tr><td>Oil and Gas</td><td>5,164</td><td>5,916</td><td>-</td><td>-</td><td>1,747</td><td>90</td><td>-</td><td>-</td></tr><tr><td>Total</td><td>402,933</td><td>244,498</td><td>16,661,562</td><td>13,673,587</td><td>318,456</td><td>198,066</td><td>16,568,047</td><td>8,156,516</td></tr></table>		FY 2017-18				FY 2016-17				Business	Hazardous Waste (MT)		Non-Hazardous Waste (MT)		Hazardous Waste (MT)		Non-hazardous Waste (MT)			Generated	Recycled	Generated	Recycled	Generated	Recycled	Generated	Recycled	Zinc India	71,712	42,022	1,085,397	413,671	63,318	24,911	820,028	87,502	Zinc International	705	91	-	-	359	9	-	-	Copper India/ Australia	83,938	39,053	1,788,903	1,857,134	71,732	25,899	1,771,050	1,791,993	Copper Africa	11	-	297,656	503,880	1,662	386	231,009	-	Aluminium India	241,366	157,413	7,724,472	5,362,730	176,635	146,704	7,973,313	3,223,538	Power Sector	36	3	5,531,056	5,260,133	90	67	5,525,581	2,832,176	Iron Ore Business	1	-	240,721	282,313	2,913	-	247,066	221,307	Oil and Gas	5,164	5,916	-	-	1,747	90	-	-	Total	402,933	244,498	16,661,562	13,673,587	318,456	198,066	16,568,047	8,156,516
	FY 2017-18				FY 2016-17																																																																																																									
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Total	402,933	244,498	16,661,562	13,673,587	318,456	198,066	16,568,047	8,156,516																																																																																																						
	MM3: Total amounts of overburden, rock, tailings, and sludge's and their associated risks	<table><tr><th></th><th>Unit</th><th>FY 2017-18</th><th>FY 2016-17</th></tr><tr><td>Overburden</td><td>MT</td><td>112,770,226</td><td>103,115,851</td></tr><tr><td>Tailings</td><td>MT</td><td>29,490,392</td><td>27,979,345</td></tr><tr><td>Waste Rocks</td><td>MT</td><td>29,626,329</td><td>15,566,958</td></tr></table>		Unit	FY 2017-18	FY 2016-17	Overburden	MT	112,770,226	103,115,851	Tailings	MT	29,490,392	27,979,345	Waste Rocks	MT	29,626,329	15,566,958																																																																																												
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Waste Rocks	MT	29,626,329	15,566,958																																																																																																											
	OG5: Volume and disposal of formation or produced water	<table><tr><th></th><th>Unit</th><th>FY 2017-18</th><th>FY 2016-17</th></tr><tr><td>Total Produced Water</td><td>KL</td><td>32,230,591</td><td>30,236,351</td></tr><tr><td>Produced Water Re-injected</td><td>KL</td><td>37,807,548</td><td>35,139,091</td></tr></table>		Unit	FY 2017-18	FY 2016-17	Total Produced Water	KL	32,230,591	30,236,351	Produced Water Re-injected	KL	37,807,548	35,139,091																																																																																																
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Produced Water Re-injected	KL	37,807,548	35,139,091																																																																																																											
	OG6: Volume of flared and vented hydrocarbon	<table><tr><th></th><th>Unit</th><th>FY 2017-18</th><th>FY 2016-17</th></tr><tr><td>Volume of Flared Hydrocarbon</td><td>SCM</td><td>70,786,868</td><td>78.6 million</td></tr><tr><td>Volume of Vented Hydrocarbon</td><td>SCM</td><td>922,253</td><td>1.06 million</td></tr></table>		Unit	FY 2017-18	FY 2016-17	Volume of Flared Hydrocarbon	SCM	70,786,868	78.6 million	Volume of Vented Hydrocarbon	SCM	922,253	1.06 million																																																																																																
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Volume of Vented Hydrocarbon	SCM	922,253	1.06 million																																																																																																											
	OG7: Amount of drilling waste (drill mud and cuttings) and strategies for treatment and disposal	<div>The figure represents quantity of drilling waste generated.</div> <table><tr><th>Category</th><th>Unit</th><th>Disposal Method</th><th>FY 2017-18</th></tr><tr><td>Drilling waste containing oil</td><td>MT</td><td>Secure Landfill</td><td>3,257</td></tr><tr><td>Water Based Mud Drill Cuttings</td><td>MT</td><td>Used as subgrade material for construction</td><td>1,998</td></tr><tr><td>Synthetic Oil Based Mud Drilling Waste</td><td>MT</td><td>Secure Landfill</td><td>0</td></tr></table>	Category	Unit	Disposal Method	FY 2017-18	Drilling waste containing oil	MT	Secure Landfill	3,257	Water Based Mud Drill Cuttings	MT	Used as subgrade material for construction	1,998	Synthetic Oil Based Mud Drilling Waste	MT	Secure Landfill	0																																																																																												
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PRODUCT AND SERVICES																																																																																																														
	G4 – OG8: Benzene, lead and sulphur content in fuels	Not applicable																																																																																																												
SUPPLIER ENVIRONMENTAL ASSESSMENT																																																																																																														
GRI 103: Management Approach 2016		At each of our businesses, the vendor on-boarding process requires vendor disclosure of their HSE & Sustainability systems. In addition, project specific requirement may require additional screening of vendors for the environmental management systems.																																																																																																												
GRI 308: Supplier Environmental Assessment 2016	308-1: New suppliers that were screened using environmental criteria	All new suppliers undergo Sustainability screening checklist and scoring system before getting registered with us.																																																																																																												

## Category Social

GRI Standard	Disclosure	Response																																																																																																																																																																																																																																																																																																																																																																																																																																																				
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GRI-401: Employment 2016	401-1: New employee hires and employee turnover	<table><tr><th rowspan="2">Gender</th><th rowspan="2">Region</th><th rowspan="2">Age</th><th>CMT</th><th>KCM</th><th colspan="3">VZI</th><th>BALCO</th><th>VL Lanj</th><th>VL Jhar</th><th>HZL</th><th>TSPL</th><th>MALCO</th><th>Stellite Copper</th><th>Iron Ore</th><th>Corporate</th><th>Vizag Ports</th><th>Cairn Oil &amp; Gas</th><th>Fujairah Gold</th><th rowspan="2">Total</th></tr><tr><th>Australia</th><th>Zambia</th><th>Namibia</th><th>SA - Gamsberg</th><th>South Africa - BMM</th><th colspan="15">India</th><th>UAE</th></tr><tr><td rowspan="10">Male</td><td rowspan="5">Local</td><td>Below 20 Yrs</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>2</td><td>-</td><td>2</td><td>1</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>5</td></tr><tr><td>20-30 Yrs</td><td>-</td><td>27</td><td>14</td><td>5</td><td>12</td><td>61</td><td>73</td><td>827</td><td>121</td><td>1</td><td>-</td><td>33</td><td>10</td><td>5</td><td>1</td><td>264</td><td>-</td><td>1,454</td></tr><tr><td>31-45 Yrs</td><td>1</td><td>38</td><td>16</td><td>2</td><td>11</td><td>-</td><td>3</td><td>19</td><td>13</td><td>-</td><td>-</td><td>3</td><td>-</td><td>3</td><td>1</td><td>893</td><td>-</td><td>1,003</td></tr><tr><td>46-58 Yrs</td><td>1</td><td>17</td><td>4</td><td>2</td><td>-</td><td>-</td><td>-</td><td>2</td><td>1</td><td>-</td><td>-</td><td>-</td><td>-</td><td>1</td><td>-</td><td>16</td><td>-</td><td>44</td></tr><tr><td>Above 58 Yrs</td><td>-</td><td>12</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>2</td><td>-</td><td>-</td><td>-</td><td>-</td><td>3</td><td>-</td><td>30</td><td>-</td><td>47</td></tr><tr><td rowspan="5">Non Local</td><td>Below 20 Yrs</td><td>-</td><td>-</td><td>-</td><td>-</td><td>1</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>1</td></tr><tr><td>20-30 Yrs</td><td>-</td><td>6</td><td>-</td><td>-</td><td>20</td><td>119</td><td>-</td><td>-</td><td>166</td><td>9</td><td>-</td><td>28</td><td>77</td><td>-</td><td>-</td><td>-</td><td>1</td><td>426</td></tr><tr><td>31-45 Yrs</td><td>-</td><td>6</td><td>4</td><td>1</td><td>31</td><td>4</td><td>-</td><td>1</td><td>33</td><td>2</td><td>-</td><td>4</td><td>15</td><td>-</td><td>-</td><td>-</td><td>1</td><td>102</td></tr><tr><td>46-58 Yrs</td><td>1</td><td>3</td><td>-</td><td>-</td><td>14</td><td>2</td><td>-</td><td>4</td><td>8</td><td>-</td><td>-</td><td>1</td><td>-</td><td>-</td><td>-</td><td>7</td><td>-</td><td>40</td></tr><tr><td>Above 58 Yrs</td><td>-</td><td>1</td><td>-</td><td>-</td><td>1</td><td>-</td><td>-</td><td>-</td><td>3</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>1</td><td>-</td><td>6</td></tr><tr><td rowspan="10">Female</td><td rowspan="5">Local</td><td>Below 20 Yrs</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>1</td><td>1</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>2</td></tr><tr><td>20-30 Yrs</td><td>-</td><td>37</td><td>2</td><td>3</td><td>10</td><td>16</td><td>18</td><td>127</td><td>58</td><td>1</td><td>1</td><td>15</td><td>10</td><td>10</td><td>-</td><td>178</td><td>-</td><td>486</td></tr><tr><td>31-45 Yrs</td><td>-</td><td>18</td><td>4</td><td>2</td><td>2</td><td>-</td><td>3</td><td>1</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>3</td><td>-</td><td>93</td><td>-</td><td>126</td></tr><tr><td>46-58 Yrs</td><td>-</td><td>18</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>13</td><td>-</td><td>31</td></tr><tr><td>Above 58 Yrs</td><td>-</td><td>35</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>35</td></tr><tr><td rowspan="5">Non Local</td><td>Below 20 Yrs</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr><tr><td>20-30 Yrs</td><td>-</td><td>2</td><td>-</td><td>-</td><td>-</td><td>33</td><td>-</td><td>-</td><td>44</td><td>5</td><td>-</td><td>12</td><td>38</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>134</td></tr><tr><td>31-45 Yrs</td><td>-</td><td>-</td><td>-</td><td>-</td><td>5</td><td>-</td><td>-</td><td>-</td><td>5</td><td>-</td><td>-</td><td>-</td><td>3</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>13</td></tr><tr><td>46-58 Yrs</td><td>-</td><td>-</td><td>-</td><td>-</td><td>3</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>3</td></tr><tr><td>Above 58 Yrs</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr></table>	Gender	Region	Age	CMT	KCM	VZI			BALCO	VL Lanj	VL Jhar	HZL	TSPL	MALCO	Stellite Copper	Iron Ore	Corporate	Vizag Ports	Cairn Oil & Gas	Fujairah Gold	Total	Australia	Zambia	Namibia	SA - Gamsberg	South Africa - BMM	India															UAE	Male	Local	Below 20 Yrs	-	-	-	-	-	2	-	2	1	-	-	-	-	-	-	-	-	-	5	20-30 Yrs	-	27	14	5	12	61	73	827	121	1	-	33	10	5	1	264	-	1,454	31-45 Yrs	1	38	16	2	11	-	3	19	13	-	-	3	-	3	1	893	-	1,003	46-58 Yrs	1	17	4	2	-	-	-	2	1	-	-	-	-	1	-	16	-	44	Above 58 Yrs	-	12	-	-	-	-	-	-	2	-	-	-	-	3	-	30	-	47	Non Local	Below 20 Yrs	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	20-30 Yrs	-	6	-	-	20	119	-	-	166	9	-	28	77	-	-	-	1	426	31-45 Yrs	-	6	4	1	31	4	-	1	33	2	-	4	15	-	-	-	1	102	46-58 Yrs	1	3	-	-	14	2	-	4	8	-	-	1	-	-	-	7	-	40	Above 58 Yrs	-	1	-	-	1	-	-	-	3	-	-	-	-	-	-	1	-	6	Female	Local	Below 20 Yrs	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	2	20-30 Yrs	-	37	2	3	10	16	18	127	58	1	1	15	10	10	-	178	-	486	31-45 Yrs	-	18	4	2	2	-	3	1	-	-	-	-	-	3	-	93	-	126	46-58 Yrs	-	18	-	-	-	-	-	-	-	-	-	-	-	-	-	13	-	31	Above 58 Yrs	-	35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	35	Non Local	Below 20 Yrs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20-30 Yrs	-	2	-	-	-	33	-	-	44	5	-	12	38	-	-	-	-	-	134	31-45 Yrs	-	-	-	-	5	-	-	-	5	-	-	-	3	-	-	-	-	-	13	46-58 Yrs	-	-	-	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	3	Above 58 Yrs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gender	Region	Age				CMT	KCM	VZI			BALCO	VL Lanj	VL Jhar	HZL	TSPL	MALCO	Stellite Copper	Iron Ore	Corporate	Vizag Ports	Cairn Oil & Gas	Fujairah Gold		Total																																																																																																																																																																																																																																																																																																																																																																																																																														
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Male	Local	Below 20 Yrs	-	-	-	-	-	2	-	2	1	-	-	-	-	-	-	-	-	-	5																																																																																																																																																																																																																																																																																																																																																																																																																																	
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		31-45 Yrs	1	38	16	2	11	-	3	19	13	-	-	3	-	3	1	893	-	1,003																																																																																																																																																																																																																																																																																																																																																																																																																																		
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	401-2: Benefits provided to full-time employees that are not provided to temporary or part-time employees	Benefits provided to full-time employees that are not provided to part-time or temporary employees include: life-insurance scheme, health-insurance scheme, disability coverage, parental leave, retirement benefits and management grades are covered under stock options scheme of Vedanta.																																																												
	401-3: Parental leave	<b>Vedanta Sustainability Report 2017-18: Page 64 (Progressive Policies)</b>																																																												
LABOUR/MANAGEMENT RELATIONS																																																														
GRI 103: Management Approach 2016																																																														
GRI 402: Labour/Management Changes 2016	402-1: Minimum notice periods regarding operational changes	Mechanism to bring awareness to all employees on any significant operational change like restructuring, mergers, acquisitions, expansions etc. is in place. Notice period(s) regarding significant operational changes is indicated in collective bargaining agreements and certified standing order of respective entities. For example in India it is minimum 21 days, Zambia minimum notice period is one year; Namibia three months and South Africa one month.																																																												
	G4-MM4: Number of strikes and lock-outs exceeding one week's duration, by country	All incidence pertaining to social are categorised - negligible (category 1), minor (category 2), moderate (category 3), serious (category 4) and disastrous (category 5) and captured on a monthly basis.																																																												
OCCUPATIONAL HEALTH AND SAFETY																																																														
GRI 103: Management Approach 2016		<b>Vedanta Sustainability Report 2017-18: Page 22 (Safety &amp; Occupational Health)</b>																																																												
GRI 403: Occupational Health & Safety	403-1: Workers representation in formal joint management-worker health and safety committees	100% of total workforce represented in formal joint management - worker health and safety committee.  All units are having safety committee, having representation from the management and unionised workers, which covers entire workforce working at site. The total workforce vary significantly based on the operations and are generally specified in collective contractual agreements. The committee meets on regular basis to advice on occupational health and safety improvement. In case of operations without a worker union, the principle contractor along with sub-contractors is invited to the monthly meetings to discuss specific HSE issues.																																																												
	403-2: Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of work related fatalities	<b>Vedanta Sustainability Report 2017-18: Page 24 (Safety Performance)</b> All definitions as per ICMM guidelines <table><tr><td></td><td></td><td>FY 2017-18</td></tr><tr><td rowspan="4">Employees</td><td>Total Injuries</td><td>53</td></tr><tr><td>Injury Rates (Total Recordable Injury FR)</td><td>1.01</td></tr><tr><td>Lost Day Rate</td><td>14.68</td></tr><tr><td>Work-Related Fatalities</td><td>2</td></tr><tr><td rowspan="4">Contract Workers + Third Party</td><td>Total Injuries</td><td>191</td></tr><tr><td>Injury Rates (Total Recordable Injury FR)</td><td>1.23</td></tr><tr><td>Lost Day Rate</td><td>14.92</td></tr><tr><td>Work-Related Fatalities</td><td>7</td></tr><tr><td>Combined</td><td>Total Recordable Disease Frequency Rate</td><td>2.82</td></tr></table>			FY 2017-18	Employees	Total Injuries	53	Injury Rates (Total Recordable Injury FR)	1.01	Lost Day Rate	14.68	Work-Related Fatalities	2	Contract Workers + Third Party	Total Injuries	191	Injury Rates (Total Recordable Injury FR)	1.23	Lost Day Rate	14.92	Work-Related Fatalities	7	Combined	Total Recordable Disease Frequency Rate	2.82																																				
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	403-3: Health and safety topics covered in formal agreements with trade unions	Health and safety topics are covered in the formal agreements with trade union. It is clearly stated in the agreement that the workmen / recognised union / federation will support in all the measures / initiatives to be taken by the Company for improving production / productivity, work culture, quality & safety.  Beside this, certified Standing Orders of units also cover these topics.																																																												



GRI Standard	Disclosure	Response																													
TRAINING AND EDUCATION																															
GRI 103: Management Approach 2016		Vedanta Sustainability Report 2017-18: Page 61 (Talent Management and Development)																													
GRI 404: Training and Education 2016	404-1: Average hours of training per year per employee	Vedanta Sustainability Report 2017-18: Page 61 (Talent Management and Development)																													
	404-2: Programs for upgrading employee skills and transition assistance programs	In line with our philosophy, continuous learning & capability building is imperative for an organisation to grow. To cater to this need, our business entities provide training on technical skill building. We also conduct structured programs to assist employees for smooth transitioning from work to retirement. Some of the programs are on Computer Literacy programs, wealth management, tradesman skill building programs, certificates and diploma courses, retirement workshops & employee assistance programs.																													
	404-3: Percentage of employees receiving regular performance and career development reviews	100% of our employees receive regular performance reviews.																													
DIVERSITY AND EQUAL OPPORTUNITY																															
GRI 103: Management Approach 2016		Vedanta Sustainability Report 2017-18: Page 63 (Diversity and Inclusion)																													
GRI 405: Diversity and Equal Opportunity 2016	405-1: Diversity of governance bodies and employees.	<table><tr><th colspan="6">Composition of Governance Bodies</th></tr><tr><th rowspan="2">List different type of Board</th><th colspan="3">Age group</th><th colspan="2">Gender</th></tr><tr><th>Less than 30 years</th><th>Between 30-50 years</th><th>Above 50 Years</th><th>Male</th><th>Female</th></tr><tr><td>Board of Directors</td><td>0%</td><td>14.3%</td><td>85.7%</td><td>85.7%</td><td>14.3%</td></tr><tr><td>Employees</td><td colspan="3">-</td><td>89.44%</td><td>10.56%</td></tr></table>	Composition of Governance Bodies						List different type of Board	Age group			Gender		Less than 30 years	Between 30-50 years	Above 50 Years	Male	Female	Board of Directors	0%	14.3%	85.7%	85.7%	14.3%	Employees	-			89.44%	10.56%
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Employees	-			89.44%	10.56%																										
405-2: Ratio of basic salary and remuneration of women to men.	We are an equal opportunity employer. Across Vedanta Group we recruit both men & women on equal salary ratio. Our remuneration is linked to performance of the individual, business entity and overall group.																														
NON-DISCRIMINATION																															
GRI 103: Management Approach 2016																															
GRI 406: Non-discrimination	406-1: Incidents of discrimination and corrective actions taken	Vedanta is an equal opportunity employer and does not discriminate based on race, religion, caste, gender, age, disability, HIV/AIDS status, and any other characteristic.																													
		We see sexual harassment at the workplace as one form of discriminatory behaviour. We have formal procedures for mediating cases of sexual harassment brought to a committee. The committee includes external members on the panel to ensure independence and provide balance.																													
		<table><tr><th colspan="2">Sexual Harassment cases FY 2017-18</th></tr><tr><td>Number of sexual harassment cases opened</td><td>16</td></tr><tr><td>Number of sexual harassment cases upheld and found correct</td><td>14</td></tr><tr><td>Number of sexual harassment cases closed</td><td>15</td></tr></table>	Sexual Harassment cases FY 2017-18		Number of sexual harassment cases opened	16	Number of sexual harassment cases upheld and found correct	14	Number of sexual harassment cases closed	15																					
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FREEDOM OF ASSOCIATION AND COLLECTIVE BARGAINING																															
GRI 103: Management Approach 2016		Vedanta’s Human Rights Policy recognises the right to associate freely and to collective bargaining.																													
GRI 407: Freedom of Association and Collective Bargaining 2016	407-1: Operations and suppliers in which the right to exercise freedom of association and collective bargaining may be violated or at significant risk	Vedanta Sustainability Report 2017-18: Page 42 (Collective Bargaining)  We have collective bargaining agreements with our workmen at HZL, BALCO, CMT, KCM, Sesa and Zinc International Operations. The agreements are negotiated and agreed by both management and union representatives. The agreements include clauses relating to remuneration, allowances, working conditions, incentives and bonuses, health and safety, manpower productivity. All the significant policy and operational changes affecting the unionised employees are intimated to them through union representatives. Our units at BALCO, CMT, HZL, SESA GOA, KCM & Zinc International have recognised unions while other locations have adequate systems and processes for employee development, appraisal, remuneration and grievance redressal.  Similarly our significant suppliers are generally the big & well reputed industry organisations like Coal India, SAIL and L&T etc. with whom we engage directly for the bulk of material for further processing or as raw material. All these organisations have the collective bargaining and other labour union mechanisms.																													
CHILD LABOUR																															
GRI 103: Management Approach 2016		Vedanta’s Human Rights Policy states that the company has zero tolerance for child labour – directly or through contracted labour.																													
GRI 408: Child Labour 2016	408-1: Operations and suppliers at significant risk for incidents of child labour	Vedanta Sustainability Report 2017-18: Page 43 (Ensuring right age for the right job)																													

GRI Standard	Disclosure	Response
<b>FORCED OR COMPULSORY LABOUR</b>		
GRI 103: Management Approach 2016		Vedanta's Human Rights Policy states that the company has zero tolerance for forced or compulsory labour – directly or through contracted labour.
GRI 409: Forced or Compulsory Labour 2016	409-1: Operations and suppliers at significant risk for incidents of forced or compulsory labour	<b>Vedanta Sustainability Report 2017-18: Page 43 (Supplier Diligence)</b>
<b>SECURITY PRACTICES</b>		
GRI 103: Management Approach 2016		
GRI 410: Security Practices 2016	410-1: Security personnel trained in human rights policies or procedures	<b>Vedanta Sustainability Report 2017-18: Page 42 (Human Rights)</b>
<b>RIGHTS OF INDIGENOUS PEOPLES</b>		
GRI 103: Management Approach 2016		<p>Vedanta has well-defined policies and standards to ensure that we uphold the rights of indigenous peoples, should we need to interact with them around our operations. The standards outline the actions Vedanta needs to take at each stage of its operations in case we are operating on or near their traditional lands and/or are faced with relocation of indigenous peoples due to our activities.</p> <p>The standards call upon the company to:</p> <ul style="list-style-type: none"> <li>- Ensure full respect for the dignity, human rights, aspirations, cultures, and natural-resource based livelihoods of the IPs.</li> <li>- Avoid adverse impacts of the project on the IPs and when avoidance is unfeasible to minimise those impacts</li> <li>- Establish and maintain an on-going relationship with the affected IPs</li> <li>- Foster good faith negotiations and informed participation of IPs when projects are located on traditional lands</li> <li>- Respect and preserve the culture, knowledge, and practices of IPs</li> </ul>
GRI 411: Rights of Indigenous Peoples	411-1: Incidents of violations involving rights of indigenous peoples	There were no violations involving the rights of indigenous peoples during the reporting year.
	G4-MM5: Total number of operations taking place in or adjacent to Indigenous Peoples' territories, and number and percentage of operations or sites where there are formal agreements with Indigenous Peoples' communities.	None of our operating mines are operating in or adjacent to indigenous people territory.
	G4-OG9: Operations where indigenous communities are present or affected by activities and where specific engagement strategies are in place.	Our operations in Odisha are located near indigenous peoples territories.
	G4-MM6: Number and description of significant disputes relating to land use, customary rights of local communities and Indigenous Peoples.	No significant disputes relating to land use, customary rights of local communities and indigenous peoples was brought to our notice during the reporting year.
GRI 411: Rights of Indigenous Peoples	G4-MM7: The extent to which grievance mechanisms were used to resolve disputes relating to land use, customary rights of local communities and Indigenous Peoples, and the outcomes.	No significant disputes relating to land use, customary rights of local communities and indigenous peoples was brought to our notice during the reporting year.
	G4-OG10: Number and description of significant disputes with local communities and indigenous peoples.	None
<b>HUMAN RIGHTS ASSESSMENT</b>		
GRI 103: Management Approach 2016		<p><b>Vedanta Sustainability Report 2017-18: Page 42 (Human Rights)</b></p> <p>Vedanta's Human Rights policy is the guiding document for our human rights practices.</p>

GRI Standard	Disclosure	Response												
GRI 412: Human Rights Assessment 2016	412-1: Operations that have been subject to human rights reviews or impact assessments.	Each year, all of our operational sites undergo the Vedanta Sustainability Assurance Program (VSAP) audit. This audit is conducted by an external 3 <sup>rd</sup> party overseen by our Management Assurance Services (MAS) team. As part of the audit, sites are evaluated on their human rights management related to supplier and vendor management.												
	412-2: Employee training on human rights policies or procedures	<b>Vedanta Sustainability Report 2017-18: Page 42 (Human Rights)</b>												
	412-3: Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	Through our Human Rights policy – which has been implemented across all Group businesses - Vedanta is committed to ensuring that the processes that it has in place, and continues to develop, follow the UN Guiding Principles.  By conducting ESIs in compliance with applicable legal requirements and Vedanta Sustainability Framework, human rights considerations are taken into account for all new projects, including the obligation to undertake a human rights screening process in all merger and acquisition activities.												
<b>LOCAL COMMUNITIES</b>														
GRI 103: Management Approach 2016		<b>Vedanta Sustainability Report 2017-18: Page 46 (Community)</b>												
GRI 413: Local Communities 2016	413-1: Operations with local community engagement, impact assessments, and development programs	<b>Vedanta Sustainability Report 2017-18: Pages 44-59</b>  All of our operations have on-going local community engagements. These engagements are driven by a structured stakeholder engagement plan for all of the mapped stakeholders.  In this fiscal year, we also began the process of conducting a mid-term needs and impact assessment for all of our CSR projects. The work will be completed in FY 2018-19.  Prior to starting operations, all of our sites conduct an Environmental Impact Assessment and Social Impact Assessment. These assessments are updated in case the sites undergo significant expansion programs.  Public disclosure is a mandated part of the EIAs and SIAs.												
<b>SUPPLIER SOCIAL ASSESSMENT</b>														
GRI 103: Management Approach 2016		Vedanta's Supplier Code of Conduct (SCOC) serves at the guiding document for all our interactions with suppliers and vendors. It is mandatory for all our suppliers to abide by the Code. The SCOC covers aspects related to: Labour & human rights, Health, Safety, Environment & Sustainability, Ethics & business integrity, Intellectual property, and Prohibition on insider trading.												
GRI 414: Supplier Social Assessment	414-1: New suppliers that were screened using social criteria.	<b>Vedanta Sustainability Report 2017-18: Page 73 (Supply Chain)</b>												
<b>PUBLIC POLICY</b>														
GRI 103: Management Approach 2016		Vedanta's Code of Business Conduct and Ethics is the guiding document on our interactions with the government and political parties.												
GRI 415: Public Policy 2016	415-1: Political Contributions	<b>Vedanta Sustainability Report 2017-18: Page 71 (Political Parties)</b>												
<b>ARTISANAL AND SMALL-SCALE MINING</b>														
G4 – MM8	Number (and percentage) of company operating sites where artisanal and small-scale mining (ASM) takes place on, or adjacent to, the site; the associated risks and the actions taken to manage and mitigate these risks.	Nil												
G4 – MM9	Sites where resettlements took place, the number of households resettled in each, and how their livelihoods were affected in the process.	Nil												
<b>MATERIAL ASPECT: CLOSURE PLANNING</b>														
G4 – MM10	Number and percentage of operations with the closure plans.	As a part of statutory clearance all our mines operations have a closure plan.												
G4 – OG11	Numbers of sites that have been decommissioned and sites those are in the process of being decommissioned.	No site has been decommissioned or are in the process of decommissioning in the oil & gas business.												
<b>PROCESS SAFETY</b>														
G4 – OG13	Number of process safety events, by business activity.	There were total 7 incident of Tier 1 (3) and Tier 2 (4) process safety events reported in financial year <table border="1"> <thead> <tr> <th>Process Safety Tier</th><th>FY 2017-18</th><th>FY 2016-17</th></tr> </thead> <tbody> <tr> <td>Tier 1</td><td>1</td><td>3</td></tr> <tr> <td>Tier 2</td><td>2</td><td>4</td></tr> <tr> <td><b>Total</b></td><td><b>3</b></td><td><b>7</b></td></tr> </tbody> </table>	Process Safety Tier	FY 2017-18	FY 2016-17	Tier 1	1	3	Tier 2	2	4	<b>Total</b>	<b>3</b>	<b>7</b>
Process Safety Tier	FY 2017-18	FY 2016-17												
Tier 1	1	3												
Tier 2	2	4												
<b>Total</b>	<b>3</b>	<b>7</b>												



## WE VALUE YOUR FEEDBACK

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NOTES

Handwriting practice lines consisting of 20 horizontal dotted lines.



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[sustainability@vedanta.co.in](mailto:sustainability@vedanta.co.in)

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