



Water 2017 Information Request Hindustan Zinc

Module: Introduction

Page: W0. Introduction

W0.1 Introduction

Please give a general description and introduction to your organization

Hindustan Zinc is a Vedanta Group company in zinc, lead and silver business. We are one of the world's largest integrated producers of zinc and are among leading global lead and silver producers. We are one of the lowest cost producers in the world and are well placed to serve the growing demand of Asian countries. Hindustan Zinc is a subsidiary of the BSE and NSE listed Vedanta Limited (ADRs listed on the NYSE; earlier known as Sesa Sterlite Limited), a part of London listed diversified metals and mining major, Vedanta Resources plc.

History of the business- Hindustan Zinc Limited was incorporated from the erstwhile Metal Corporation of India on 10 January 1966 as a Public Sector Undertaking.

In April 2002, Sterlite Opportunities and Ventures Limited (SOVL) made an open offer for acquisition of shares of the company; consequent to the disinvestment of Government of India's (GOI) stake of 26% including management control to SOVL and acquired additional 20% of shares from public, pursuant to the SEBI Regulations 1997. In August 2003, SOVL acquired additional shares to the extent of 18.92% of the paid up capital from GOI in exercise of "call option" clause in the shareholder's agreement between GOI and SOVL. With the above additional acquisition, SOVL's stake in the company has gone up to 64.92%. Thus GOI's stake in the company now stands at 29.54%.

Later on SOVL was merged with Sterlite Industries India Ltd in April 2011, which in turn merged with Sesa Goa Ltd to form Sesa Sterlite Limited in August 2013. Sesa Sterlite was renamed to Vedanta Limited in April 2015. Hindustan Zinc is now a direct subsidiary of Vedanta Limited.

Our core business comprises of mining and smelting of zinc and lead along with captive power generation. We have a metal production capacity of over one million tonnes per annum with our key lead-zinc mines in Rampura Aguicha and Sindesar Khurd; and key modern smelting complexes in Chanderiya and Dariba, all in the state of Rajasthan in India. We are focused on operational excellence and long-term sustainability on the back of our high-quality assets, long mine life of over 25 years and low cost base. With reserves and resources of 404 million tonnes, our exploration programme is integral to our growth and future expansions. Successful exploration and subsequent development of mineral assets underlines our mission and business strategy. We own 474 MW of coal based thermal captive power plants in Rajasthan to support our metallurgical operations. In addition, our environment friendly power generation includes 274 MW of wind energy, 16 MW Solar power and 35.4 MW from waste heat generation.

The company has constructed 20 million liters per day (MLD) Sewage Treatment Plant (STP) in Udaipur at the cost of Rs. 170 Crores. This Sewage Treatment Plant is a significant step towards conservation of fresh water and care for environment by cleaning the Ahar River, Pichola lake and Udai Sagar thereby improving overall health & hygiene of Udaipur city. As a socially responsible corporate, Hindustan Zinc is making sustainable efforts in uplifting the socio-economic condition of the rural community in the areas it operates. In close association with State and Central Government, Hindustan Zinc is reaching out to around 500,000 people in 184 villages in Rajasthan, focusing on community population, towards their sustainable development.

Company received following awards for Water Stewardship in last three years:

- National Award for Excellence in Water Management 2016 by CII (Confederation of Indian Industry) to Dariba Smelter Complex as "Noteworthy Water Efficient Unit", "within the fence" category.
- The Indian Chamber of Commerce (ICC) awarded Dariba Smelter Complex the Corporate Governance & Sustainability Vision Awards 2017. Dariba Smelter Complex bagged the second prize in the 'Water Stewardship' category.
- Dariba smelter received "Excellence Award for the best Sustainable water management" by Advance Water Digest
- 'Global Water Award 2015' (UK) for Sewage Treatment Plant at Udaipur
- In the "Asia Corporate Excellence and Sustainability Awards, 2016", HZL awarded in Category comprised of projects related to Environment Concern for Wastewater Treatment Plant, Udaipur.

Further details are available in the company's website at <http://www.hzindia.com/>

W0.2 Reporting year

Please state the start and end date of the year for which you are reporting data

<p>Period for which data is reported Fri 01 Apr 2016 - Fri 31 Mar 2017</p>

W0.3 Reporting boundary

Please indicate the category that describes the reporting boundary for companies, entities, or groups for which water-related impacts are reported

Companies, entities or groups over which operational control is exercised

W0.4 Exclusions

Are there any geographies, facilities or types of water inputs/outputs within this boundary which are not included in your disclosure?

Yes

W0.4a

Exclusions

Please report the exclusions in the following table

Exclusion	Please explain why you have made the exclusion
Marketing offices	We have excluded marketing offices where we consider our water footprint and risks to be very small. We do not collect the water input or output data of our offices that do not have a direct association with an operation (for example our marketing offices).

Further Information

Sustainability Report 15-16 Attached for reference Award Photographs are attached for reference

Attachments

- [https://www.cdp.net/sites/2017/70/8370/Water 2017/Shared Documents/Attachments/Water2017/W0.Introduction/HZL Final SDR.pdf](https://www.cdp.net/sites/2017/70/8370/Water%202017/Shared%20Documents/Attachments/Water2017/W0.Introduction/HZL%20Final%20SDR.pdf)
- [https://www.cdp.net/sites/2017/70/8370/Water 2017/Shared Documents/Attachments/Water2017/W0.Introduction/Water Digest Award.jpg](https://www.cdp.net/sites/2017/70/8370/Water%202017/Shared%20Documents/Attachments/Water2017/W0.Introduction/Water%20Digest%20Award.jpg)
- [https://www.cdp.net/sites/2017/70/8370/Water 2017/Shared Documents/Attachments/Water2017/W0.Introduction/Green Building Certification.jpg](https://www.cdp.net/sites/2017/70/8370/Water%202017/Shared%20Documents/Attachments/Water2017/W0.Introduction/Green%20Building%20Certification.jpg)

Module: Current State

Page: W1. Context

W1.1

Please rate the importance (current and future) of water quality and water quantity to the success of your organization

Water quality and quantity	Direct use importance rating	Indirect use importance rating	Please explain
Sufficient amounts of good quality freshwater available for use	Vital for operations	Important	Our operations are significant water users. Fresh water is required for all the operational process viz. mining & beatification process, smelting and refining process etc. Fresh water is also required for maintaining the employee health at workplace (drinking water, sanitation etc.). Indirect freshwater use is also of most importance to our operations where this relates to freshwater consumption by the nearby communities who are also the key stakeholders of the water resources. Our operations ensure the sustainable water use and minimizing the impact on water resources. Environmental assessments help ensure that water withdrawal and uses are assessed and any potential impacts are identified and mitigated using ISO14001 based management systems. And this also helps us in maintaining the zero discharges at all our operational sites.
Sufficient amounts of recycled, brackish and/or produced water available for use	Vital for operations	Important	All the fresh water after usage at the facilities is reused by providing treatment at onsite Effluent Treatment Plant (ETP, RO, and MEE). The treated effluents conform to the prescribed standards and being recycled in the process. Tailing water recycling, deep cone thickner are the major initiatives at mines. Sewage Treatment Plant based on Fluidized Aerobic Bed Reactors (FAB) technology has been provided for all townships. Treated domestic waste water is being used for horticultural purpose. Storm water collection pond constructed to collect rainwater runoff and treated in ETP for reuse. Invested in 20 MLD sewage treatment plant for treating municipal sewage of Udaipur city and using the treated water at our operations. Recycling and reusing treated water reduces pressure on supply demand thereby reducing fresh water consumption. We are also working on expanding our STP by another 40 MLD which can be utilized in our operations which will reduce the current fresh water drawl.

W1.2

For your total operations, please detail which of the following water aspects are regularly measured and monitored and provide an explanation as to why or why not

Water aspect	% of sites/facilities/operations	Please explain
Water withdrawals- total volumes	76-100	The total water withdrawals from surface water sources are measured and tested, & treated wherever required to ensure that they meet the standards for domestic use and operational requirements. Regular metered monitoring & stewards system is in place to ensure that water usage is optimised. This is done to track performance indicators and used to see whether water reduction targets are met.
Water withdrawals- volume by sources	76-100	The total water withdrawals from surface water sources are measured and tested, & treated wherever required to ensure that they meet the standards for domestic use and operational requirements. Regular metered monitoring & stewards system is in place to ensure that water usage is optimised. This is done to track performance indicators and used to see whether water reduction targets are met. HZL records consumption of water withdrawn from different sources, including surface water, ground water and municipal water at all operational sites. It is important for HZL to measure withdrawals from all of these sources in order to implement reduction measures and report our data externally in our Sustainability report in line with the Global Reporting Initiative (GRI-G4) guidelines.
Water discharges- total volumes	76-100	All of our sites adhere to zero discharge standards.
Water discharges- volume by destination	76-100	All of our sites adhere to zero discharge standards.
Water discharges- volume by treatment method	76-100	All of our sites adhere to zero discharge standards.

Water aspect	% of sites/facilities/operations	Please explain
Water discharge quality data-quality by standard effluent parameters	76-100	All of our sites adhere to zero discharge standards.
Water consumption-total volume	76-100	Entire water consumption data is continuously recorded by means of appropriate metered monitoring and recording methodology. All our sites are having water management plans. We do the water balancing of the water we are withdrawing and consuming in our operations. Measures are in place to reduce intake of fresh water as well as recycling and reusing of water. In addition, all our sites are maintaining zero discharge. .
Facilities providing fully-functioning WASH services for all workers	76-100	Water network providing water for WASH services is measured by means of appropriate monitoring and recording methodology. We pledged universal access to safe Water, Sanitation and Hygiene (WASH), an initiative of the World Business Council for Sustainable Development (WBCSD). We as a Company are committed to implementing access to safe water, sanitation and hygiene at the workplace at an appropriate level of standard for all employees in all premises under direct control within three years. Furthermore, it is aligned to Sustainable Development Goal 6 (To ensure access to safe water sources and sanitation for all). Initiatives taken during the year: • Conducted awareness-cum-training session • Display boards and signage • Safety Chaupal: WASH pledge for contract employees • Ensuring safe water supply and workplace hygiene and sanitation • Easy access to drinking water, toilets, hand dryer, hand-washing facilities etc.

W1.2a

Water withdrawals: for the reporting year, please provide total water withdrawal data by source, across your operations

Source	Quantity (megaliters/year)	How does total water withdrawals for this source compare to the last reporting year?	Comment
Fresh surface water	16769	Lower	We are reporting first time for water CDP, however Have implemented various water efficiency measures and majority of our operational processes are under stage that consumes less fresh water.(Last year data 17275 mega liters/year)
Brackish surface water/seawater	0	About the same	We are not with-drawling such water
Rainwater	4.7	Much lower	During the reporting year only one facility has used rain water , last year data was 38 mega liters/year
Groundwater - renewable	3321	Lower	We are reporting first time for water CDP, however Have implemented various water efficiency measures and majority of our operational processes are under stage that consumes less fresh water.(Last year data 3875 mega liters/year)
Groundwater - non-renewable	0	About the same	We are not with-drawling such water
Produced/process water	0	About the same	We are not using process water/ produced water from other companies , however water recycled with integrated waste water treatment facilities at our sites and reused for reporting year is 11431 mega liters/year
Municipal supply	5	Lower	We are reporting first time for water CDP, however Have implemented various water efficiency measures and majority of our operational processes are under stage that consumes less fresh water.(Last year data 8 mega liters/year)
Wastewater from another organization	4766	Lower	Treated water is being obtained from Municipal sewage treatment plant. (Last year data 5362 mega liters/year)
Total	24866.47	Lower	We are reporting first time for water CDP, however Have implemented various water efficiency measures and majority of our operational processes are under stage that consumes less fresh water.(Last year data 26541 mega liters/year)

W1.2b

Water discharges: for the reporting year, please provide total water discharge data by destination, across your operations

Destination	Quantity (megaliters/year)	How does total water discharged to this destination compare to the last reporting year?	Comment
Fresh surface water	0	About the same	No discharge of fresh water takes place.
Brackish surface water/seawater	0	About the same	No Brackish surface water is used at any site.
Groundwater	0	About the same	No groundwater is discharged
Municipal/industrial wastewater treatment plant	0	About the same	Zero discharge is achieved at all operational sites.
Wastewater for another organization	0	About the same	Minor losses viz. evaporation and leakage occur in transportation of water but no discharge of fresh water takes place.
Total	0	About the same	All of our operational sites are zero discharged

W1.2c

Water consumption: for the reporting year, please provide total water consumption data, across your operations

Consumption (megaliters/year)	How does this consumption figure compare to the last reporting year?	Comment
22703	Lower	We are reporting first time for water CDP, however have implemented various water efficiency measures and majority of our operational processes are under stage that consumes less water. This total water consumption includes 18085.63 megaliters/year of fresh water and 4617.15 megaliters/year of waste water from Municipal sewage treatment plant Udaipur City. (Last year total consumption was- 24571 megaliters/year which includes fresh water 19579 megaliters/year and 4992 megaliters/year of waste water from Municipal sewage treatment plant Udaipur City.) Our consumption figures only includes of operational water requirement.

W1.3
Do you request your suppliers to report on their water use, risks and/or management?

Yes

W1.3a
Please provide the proportion of suppliers you request to report on their water use, risks and/or management and the proportion of your procurement spend this represents

Proportion of suppliers %	Total procurement spend %	Rationale for this coverage
1-25	51-75	HZL' approach to procurement is aligned to Supplier and contractor sustainability management policy and supplier code of conduct. Based on a risk ranking, suppliers have previously been requested to complete a prequalification (PQ) questionnaire. This is typically for the Tier 1 suppliers who represent our most critical suppliers. Environmental Management certification information was requested in the questionnaire. Along with this, suppliers may be required to provide proof of statements made and demonstrate that the supplier code of conduct is followed. HZL may conduct site visits and audits to verify compliance with the code. Where elements of the code aren't met, suppliers are required to implement corrective action plans to prevent recurrence. HZL may revoke the contracts of suppliers who fail to comply with the code. (Total Tier-1 Suppliers are -2135 , Critical supplier identified and requested to report on environment parameters are- 86, total procurement spend from critical suppliers is 68%)

W1.4
Has your organization experienced any detrimental impacts related to water in the reporting year?

No

Further Information

Our Supply chain management Strategy is attached

Attachments

[https://www.cdp.net/sites/2017/70/8370/Water 2017/Shared Documents/Attachments/Water2017/W1.Context/Supply chain management strategy.pdf](https://www.cdp.net/sites/2017/70/8370/Water%202017/Shared%20Documents/Attachments/Water2017/W1.Context/Supply%20chain%20management%20strategy.pdf)

Module: Risk Assessment

Page: W2. Procedures and Requirements

W2.1
Does your organization undertake a water-related risk assessment?

Water risks are assessed

W2.2
Please select the options that best describe your procedures with regard to assessing water risks

Risk assessment procedure	Coverage	Scale	Please explain

Comprehensive company-wide risk assessment	Direct operations	All facilities	HZL evaluates risk at both a company and site level. The Company continuously identifies, assesses and mitigates risks arising out of internal as well as external factors under its robust Risk Management Framework. Risk Management is embedded in our critical business activities, functions and processes. Materiality and tolerance of risk is key considerations in our decision making. There is a formal monitoring process at unit and Company level, wherein new risks are identified, categorised as per impact & likelihood, mapped to key responsibilities of select managers and managed with appropriate mitigation plan. Formal discussion on risk management happens in unit level review meetings on quarterly basis. The control measures stated in the risk register are periodically reviewed to verify their effectiveness. Water risks are assessed with the following check: 1) Study of Climatic data viz.; rainfall intensity, total precipitation and temperature. 2) Study of Ground water pattern. 3) Water availability from municipal source and duration of supply. 4) Quality of water with respect to Indian standards. A similar process is used to develop ways to avoid (wherever possible) and mitigate risks. We have identified 11 headline risks (Part of Annual report – Risk framework), with water being one of those risks. Further we are partnering in Group level comprehensive water risk assessment for all the subsidiaries units of Vedanta resources through third party, which is under progress.
--	-------------------	----------------	---

W2.3
Please state how frequently you undertake water risk assessments, at what geographical scale and how far into the future you consider risks for each assessment

Frequency	Geographic scale	How far into the future are risks considered?	Comment
Six-monthly or more frequently	Business unit	3 to 6 years	This can assessed as part of risk management for business. Water risks and opportunities are identified at operational level on a continual basis. The approach adheres to our Water Management Technical Standard (TS-14) and water management plan at all units. Emerging water risks are evaluated over the next five years to align with the long term water targets of the business.

W2.4
Have you evaluated how water risks could affect the success (viability, constraints) of your organization's growth strategy?

Yes, evaluated over the next 5 years

W2.4a
Please explain how your organization evaluated the effects of water risks on the success (viability, constraints) of your organization's growth strategy?

Water is a critical natural resource in the Rajasthan region of country. The risks associated with the limited availability and supply of water in Rajasthan is high. Water risk assessment is integral part of overall risk management framework both at company and site level.

- An example of risk(s) identified which could impact on the growth strategy

All our operations exist in water stressed areas where water availability is a significant concern. Our risk assessment considers the water needs and availability of each facility. For example for one of our location water availability is identified as potential risk. For future development of this site and overall business out of the site water availability is one of the risk. So A Sewage Treatment Plant (STP) was set up in Udaipur city which not only reduces inflow of sewage into local lakes but also provides a sustainable water source to our operations. Company is also partnering with the administration to expand the capacity for second phase of STP. This initiative has enabled the company to secure its water requirements with out depending on fresh water and also facilitated availability of this fresh water for the community.

Given the water availability risks faced by the business, which are anticipated to increase in the future, we assessed our long term business plan against the available water supplies and invested in new water sources and augment current water supplies with postconsumer treated wastewater. This will allow us to grow our existing operations in a sustainable manner, without compromising water to our neighbouring communities.

W2.5
Please state the methods used to assess water risks

Method	Please explain how these methods are used in your risk assessment
Internal company knowledge Regional government databases Other: Indian Water Portal	HZL uses internal knowledge to assess water risks at each operation. This approach allows us to provide specific details of water related risks in the areas in which we operate. Key risks are identified following a bottom up approach and reflected within a structured framework such that they are systematically managed. Our risk management process includes risk assessment, the compilation of risk registers and associated action plans. Sustainable development risks, including water, form a substantial part of our organisational risk profile. Each operation has a designated environmental manager and water managers who is able to provide contextual, site specific information. Through these processes we are able to integrate internal company knowledge into water risk assessment process. The operational scope of the risk assessment includes all operations. We use the regional government data base and Indian water portal to understand future water risks in terms of stress, seasonal variability, water supply and water demand. This information regarding the availability, quality and other water parameters also serves as baseline for any new project and data points on which future investment decisions are based. India Water Tool is a tool linked with WBCSD and WRI which provides details on water stressed areas (groundwater, surface water and river basin). Under all the three categories, Rajasthan state falls under low category and as all our operations are situated in the state of Rajasthan, hence we consider all our operational sites under water stressed area.

W2.6
Which of the following contextual issues are always factored into your organization's water risk assessments?

Issues	Choose option	Please explain
--------	---------------	----------------

Current water availability and quality parameters at a local level	Relevant, included	Our operations exist in water stressed areas where water availability is a significant concern. We are doing systematic tracking and monitoring of water availability at the local level. For the same we have online monitoring system for measuring the quality of water at all operation sites. For measuring the quantity of water, we have water meters at all suitable locations. Under the monitoring program, our focus is on quality waste water generated & treated, water consumption trend, and quality of surface & ground water in surrounding villages. Water consumption is tracked on daily basis and reviewed in morning meeting. Yearly, water conservation projects are identified and reduction targets are developed. Quantum of waste water generation and its treatment is tracked on daily and monthly basis. The surface and ground water quality is monitored on the monthly basis. We have developed the schedule for potable water quality monitoring also. Internal monitoring is being done on Daily Weekly, Monthly, basis and third party monitoring is being done on half-yearly basis. Also we are required to report these parameters to the regional authorities as part of our license requirements.
Current water regulatory frameworks and tariffs at a local level	Relevant, included	Hindustan Zinc has always adhered to the changes in regulations and pricing structure and will continue to do so in future as well. We report certain water information to the regional authorities as part of our consent requirements and monthly water cess requirement are fulfilled. We use both internal knowledge and external legal compliance audits to ensure we stay up to date with current regulatory information and tariffs.
Current stakeholder conflicts concerning water resources at a local level	Relevant, included	We deliver strong water stewardship for the sustainability of our operation and nearby community. Our stakeholder engagement plan and Grievance Redressal mechanism allow us to resolve any such conflict and also we consider their concern during public hearing process at the start of any project. Environment and social impact assessment is mandate for all new projects as part of our Sustainability framework. As part of our risk assessment we identify opportunities to work in partnership with the water utilities and community to manage the water supply. Recent example is Municipal Sewage treatment plant which serves the requirement of both community and operation. Using the treated water at site, reducing the fresh water consumption and thus leaving the significant amount of water for nearby communities.
Current implications of water on your key commodities/raw materials	Relevant, included	Majority of raw material is internally sourced being a mining company. Water is essential for our operations as well as for the suppliers. Thus the implications due to shortage of water are evaluated during site selection or procurement decision.
Current status of ecosystems and habitats at a local level	Relevant, included	Due care is taken during conceptual stage that there is no impact to the natural ecosystem and habitat exhibiting at project location. Measures are taken to always enhance the ecosystem. All our sites are having Biodiversity management plan. Impact of project on biodiversity is well assessed and action plan is in place to mitigate the risks. Few of the major initiatives are : Nursery for endangered plant species, Medicinal park, peacock garden, butterfly park, extensive plantation.
Current river basin management plans	Relevant, included	There is very limited impact to river basin through our operations.
Current access to fully-functioning WASH services for all employees	Relevant, included	We as a Company are committed to implementing access to safe water, sanitation and hygiene at the workplace at an appropriate level of standard for all employees in all premises under direct control within three years. Furthermore, it is aligned to Sustainable Development Goal 6 (To ensure access to safe water sources and sanitation for all). Initiatives taken during the year: • Conducted awareness-cum-training session • Display boards and signage • Safety Chaupal: WASH pledge for contract employees • Ensuring safe water supply and workplace hygiene and sanitation • Easy access to drinking water, toilets, hand dryer, hand-washing facilities etc. Improvement in housekeeping across all locations
Estimates of future changes in water availability at a local level	Relevant, included	We undertake the water risk assessment and based on it we have the following measures in place to mitigate the future changes in water availability. 1. Integrated wastewater treatment plant: To maintain zero discharge 2. 20 MLD Municipal Sewage Treatment Plant: Using the treated sewage water to reduce fresh water consumption, we are further planning to install another 40 MLD plant to treat maximum sewage of Udaipur city and making our operations less dependent on fresh water. 3. Township Sewage Treatment Plant 4. Rainwater Harvesting Structures 5. Artificial Groundwater Recharge System 6. Water Conservation Projects 7. Technical Intervention for Water Reduction (air filters, adiabatic cooling towers, air cooled condenser, deep con thickener)
Estimates of future potential regulatory changes at a local level	Relevant, included	India as a country falls under water stress regions. India accounts for 15% of the world population and about 4% of the world's water resources. There is national policy which was updated in 2012. There would be future regulatory changes which would be implemented by State to be applicable for local level. Thus the business keeps up to date on the future changes and its possible implications to business. HZL also working to minimise fresh water dependence as well as water free technologies to prepare itself for future regulatory threats.
Estimates of future potential stakeholder conflicts at a local level	Relevant, included	As part of materiality analysis for sustainability, Environment management which includes water is identified as material issue to business. There are various ways in which we engage with stakeholders (regular interaction as part of stakeholder engagement plan, public hearing) during which feedback on water and its future issues are gathered. Thus to overcome with this we are further planning to expand the sewage treatment plan by another 40 MLD to treat the maximum sewage of Udaipur city and with this reducing our dependency on fresh water.
Estimates of future implications of water on your key commodities/raw materials	Relevant, included	Majority of raw material is internally sourced being a mining company. Water is essential for our operations as well as for the suppliers. Thus the implications due to shortage of water are evaluated during site selection or procurement decision.
Estimates of future potential changes in the status of ecosystems and habitats at a local level	Relevant, included	The future potential changes in the status of ecosystems and habitats are considered at a local level during project conceptualization stage as well as biodiversity management plan.
Scenario analysis of availability of sufficient quantity and quality of water relevant for your operations at a local level	Relevant, included	All our operations are ISO 14001 certified and in addition we follow the technical standard on water management which has been developed on the group level for the risk management of water. Scenario analysis is relevant to our business and is taken into account while planning and designing of project.

Scenario analysis of regulatory and/or tariff changes at a local level	Relevant, included	All our operations are ISO 14001 certified and in addition we follow the technical standard on water management which has been developed on the group level for the risk management of water. Scenario analysis is relevant to our business and is taken into account while planning and designing of project.
Scenario analysis of stakeholder conflicts concerning water resources at a local level	Relevant, included	All our operations are ISO 14001 certified and in addition we follow the technical standard on water management which has been developed on the group level for the risk management of water. Scenario analysis is relevant to our business and is taken into account while planning and designing of project.
Scenario analysis of implications of water on your key commodities/raw materials	Not relevant, included	Although we do engage with our suppliers, the risk is not so material that it requires us to conduct scenario analyses of water on our commodities as we engage with reputed suppliers who evaluate their risk.
Scenario analysis of potential changes in the status of ecosystems and habitats at a local level	Relevant, included	We proactively manage the ecosystems and habitats within which we operate on a continuous basis through our environmental management programmes and related biodiversity action plans.
Other	Not evaluated	Not applicable

W2.7

Which of the following stakeholders are always factored into your organization's water risk assessments?

Stakeholder	Choose option	Please explain
Customers	Relevant, included	The customers are the most important stakeholder to our business and water as risk assessment to deliver to our customers is always considered. Examples where we used voice of customer for improving our products and services: • A specific requirement of Zinc pre alloyed with Aluminium was expressed by some of HZL customers. HZL has developed Continuous Galvanizing Grade of Zinc for our Customers. CGG alloys provide a number of important technical and economic benefits for the CGL operation: • By using CGG alloys, the efficiency of aluminium usage is better. • Greater ease of Bath Management • Using CGG alloy eliminates the need for manufacturing Zn-Al toning alloy in-plant which is a cost burden • On our customers request Zinc in Jumbo shape (supplied as 1.0 metric tonne instead of 25kg ingots) is being provided. Following are the advantages – • Convenience • The smaller surface area to weight ratio of zinc jumbos compared to small ingot means less turbulence during galvanizing bath and therefore less ash is produced. • Ease of handling and better safety in customer's operations due to much lesser risk of operator injury since loading into the bath primarily utilizes only the crane. • Cost Saving & Better bath Management • PW (Prime Western) zinc is a pre-alloyed zinc lead combination and with its use there is no need to add lead separately in zinc galvanizing bath resulting in avoiding occupational hazards of operators in dealing with lead in galvanizing plant.
Employees	Relevant, included	Engagement with our employees is done on a continuous basis and includes water. For example, the celebration of World Water day and world Environment Day through engagement with employees. The environmental team at sites put up posters water saving messages and held quiz, poster making , slogan making competition to raise awareness of water efficiency
Investors	Relevant, included	Investors are increasingly aware that water is a necessity to our operations and a loss of investor confidence would affect our share price and access to capital. Views expressed by investors are through meetings, such as the AGM. We incorporate the views of these investors into the risk assessment, where relevant.
Local communities	Relevant, included	Water stewardship is a key pillar to our water management policy, availability of good quality potable water is a significant concern to us and the communities we operate in. We engage with communities through Stakeholder engagement programs and specific opportunity like the social impact assessment, Base line need assessment undertaken by third party. Through these channels local communities are consulted on the aspect of water.
NGOs	Relevant, included	NGOs play a great role by helping to acquire details locally and helping spread awareness among the surrounding area through programs and workshops.
Other water users at a local level	Relevant, included	Water demands from municipalities as water service authorities, mining and agricultural entities are assessed along with the local communities and government to calculate the overall water demand in order to mitigate the risk of stakeholder conflict in a catchment.
Regulators	Relevant, included	There is local regulation applicable on quantity and quality of water discharge at the site. So during approval stage as well as compliance to the consents requires engagement with local regulators.
River basin management authorities	Not relevant, included	No major impact on river basin, as we are withdrawing most of the water from our captive dams are situated on tributaries of river basins and surface runoff water is collected in dams and used for industrial purpose.
Statutory special interest groups at a local level	Relevant, included	They will be consulted in specific cases.
Suppliers	Relevant, included	Suppliers are consulted through stakeholder consultation as part of our overall sustainability strategy. There are other engagement opportunities like supplier's meet through which they can provide key feedback on such risk assessment.
Water utilities at a local level	Not relevant, included	We are not directly depending on water utilities/ suppliers
Other	Not evaluated	Not applicable

Further Information

We contribute to society by creating infrastructure and facilities for the communities and for the state. In this regard, we were proud partners of the Chief Minister's special campaign this year – "Mukhyamantri Jal Swavlamban Yojana". Under this programme, which emphasised water conservation, we have undertaken several infrastructure development initiatives, including 34 Sankirn Gali Percolation Tank (SGPTs); 8 building anicuts, deepening of 4 ponds and 3 wells; water harvesting structures, contour trenches, overhead tanks, installation of borewells and pipelines etc. Another major work included construction of retaining wall on both sides of TIDI-Amarapura Saddle dam construction of an approach road upto the bund to prevent flooding of the nearby villages. Detailed Risk management framework and water identified as key risk is part of our annual report Risk chapter page no. 48-52

Attachments

[https://www.cdp.net/sites/2017/70/8370/Water 2017/Shared Documents/Attachments/Water2017/W2.ProceduresandRequirements/HZ_Final_Annual_Report-15-16.pdf](https://www.cdp.net/sites/2017/70/8370/Water%202017/Shared%20Documents/Attachments/Water2017/W2.ProceduresandRequirements/HZ_Final_Annual_Report-15-16.pdf)

Module: Implications

Page: W3. Water Risks

W3.1

Is your organization exposed to water risks, either current and/or future, that could generate a substantive change in your business, operations, revenue or expenditure?

Yes, direct operations and supply chain

W3.2

Please provide details as to how your organization defines substantive change in your business, operations, revenue or expenditure from water risk

Substantive change' to us would be a disruption in our primary operations that can result in a less production at our facilities caused by non-availability of quality water or disrupted supply chain. This information is reviewed daily and any deviation from the business plan is reported to the management. A "substantive change" could be the result of either an inadequate supply or a poor quality of water that prevents desired production.

Method of review:

The change shall be reviewed during BMG meetings, supplier meetings and regular stakeholders meeting.

W3.2a

Please provide the number of facilities* per river basin exposed to water risks that could generate a substantive change in your business, operations, revenue or expenditure; and the proportion of company-wide facilities this represents

Country	River basin	Number of facilities exposed to water risk	Proportion of company-wide facilities that this represents (%)	Comment
India	Other: Not applicable	0	Less than 1%	Not applicable- No major impact on river basin, as we are withdrawing most of the water from our captive dams are situated on tributaries of river basins and surface runoff water is collected in dams and used for industrial purpose.

W3.2b

For each river basin mentioned in W3.2a, please provide the proportion of the company's total financial value that could be affected by water risks

Country	River basin	Financial reporting metric	Proportion of chosen metric that could be affected	Comment
India	Other: Not applicable	Other: Not applicable	Less than 1%	Not applicable- No major impact on river basin, as we are withdrawing most of the water from our captive dams are situated on tributaries of river basins and surface runoff water is collected in dams and used for industrial purpose.

W3.2c

Please list the inherent water risks that could generate a substantive change in your business, operations, revenue or expenditure, the potential impact to your direct operations and the strategies to mitigate them

Country	River basin	Risk driver	Potential impact	Description of potential impact	Timeframe	Likelihood	Magnitude of potential financial impact	Response strategy	Costs of response strategy	Details of strategy and costs
---------	-------------	-------------	------------------	---------------------------------	-----------	------------	---	-------------------	----------------------------	-------------------------------

India	Other: Not Applicable	Physical-Climate change	Other: Higher operating costs	The water for our all sites are sourced from our captive dams. There is possibility due to continuous usage of water by community and other users, its quantity and quality may deteriorate over time. In that scenario the treatment cost of this water will be increased	>6 years	Unlikely	Low	Promote best practice and awareness Other: Stakeholder engagement to Promote best practice and awareness	Upto 0.5 % of the total project cost.	The strategy adopted are 1) various water initiatives which shall reduce fresh water usage for operations. 2) Use of treated water of municipal sewage treatment plant- Investment of 170 crores, future investment of 80 crores to expand the capacity to treat maximum Udaipur city sewage
-------	-----------------------	-------------------------	-------------------------------	--	----------	----------	-----	---	---------------------------------------	--

W3.2d
Please list the inherent water risks that could generate a substantive change in your business operations, revenue or expenditure, the potential impact to your supply chain and the strategies to mitigate them

Country	River basin	Risk driver	Potential impact	Description of potential impact	Timeframe	Likelihood	Magnitude of potential financial impact	Response strategy	Costs of response strategy	Details of strategy and costs
India	Other: Not applicable	Physical-Climate change	Supply chain disruption	Raw material supplies which have their source from the region near water scare area may affect.	>6 years	Unlikely	Low	Engagement with suppliers New products, markets Supplier diversification	The investment could be upto 5% of total investment on sustainability initiatives	The strategy adopted is as follows: 1) Annual Suppliers meeting is held to continuously review the suppliers performance. 2) Raw material source auditing is done by the procurement team to analyse the future risk. 3) Developing contacts with alternate suppliers.

Further Information

Page: W4. Water Opportunities

W4.1
Does water present strategic, operational or market opportunities that substantively benefit/have the potential to benefit your organization?

Yes

W4.1a
Please describe the opportunities water presents to your organization and your strategies to realize them

Country or region	Opportunity	Strategy to realize opportunity	Estimated timeframe	Comment
India	Improved community relations Social licence to operate	Water scarcity is an increasingly prominent issue in Rajasthan where we operate. Being a responsible water steward through improving water infrastructure will facilitate interactions with the communities in which we operate and ensure that we are recognised as a partner of choice. For Example- Hindustan Zinc has already commissioned Sewage Treatment Plant of 20 MLD capacity, and currently, we are adding Sewage Treatment Plant of 40 MLD capacity of which Sewage Treatment Plant of 25 MLD capacity will be constructed at Eklingpura, and two decentralized Sewage Treatment Plants with combined capacity of 15 MLD will be constructed along Ayad lake. The company is expected to spend Rs. 80 crores for this project." Earlier while installing the 20 MLD Sewage Treatment Plant, the company had invested Rs. 170 crores that involved expenditure pertaining to laying the pipelines for carrying the sewage to the plant. This is going to satisfy both the stakeholders need maintaining the aesthetic look of the lakes of tourist city as well as reduction in fresh water consumption at our operational sites. Case study on this project was published in WRG 2030 https://www.waterscarcitysolutions.org/new-innovative-public-private-partnership-to-improve-water-quality-and-availability/	1-3 years	Ensure the long-term security of water availability for our operations and surrounding communities. . In a major relief to the people of City of Lakes, Udaipur and Hindustan Zinc signed an agreement with Udaipur Smart City Limited to set-up another 40 million litres per day (MLD) capacity Sewage Treatment Plant (STP) in Udaipur. It will prove to be a major step towards treatment of domestic sewage and water conservation in Udaipur. Hindustan Zinc to spend Rs. 80 crores on expansion of Sewage Treatment Plant to 40 MLD in Udaipur – the total investment now Rs. 250 crores INR.

Further Information

All our sites are having water management plan in place , Water management plan of one of our facility is attached here. Our case study published in WRG 2030 is attached here for reference

Attachments

[https://www.cdp.net/sites/2017/70/8370/Water 2017/Shared Documents/Attachments/Water2017/W4.WaterOpportunities/WRG 2030 Innovative-public-private-partnership final in public domain.pdf](https://www.cdp.net/sites/2017/70/8370/Water%202017/Shared%20Documents/Attachments/Water2017/W4.WaterOpportunities/WRG%2030%20Innovative-public-private-partnership%20final%20in%20public%20domain.pdf)
[https://www.cdp.net/sites/2017/70/8370/Water 2017/Shared Documents/Attachments/Water2017/W4.WaterOpportunities/Water Management Plan.pdf](https://www.cdp.net/sites/2017/70/8370/Water%202017/Shared%20Documents/Attachments/Water2017/W4.WaterOpportunities/Water%20Management%20Plan.pdf)

Module: Accounting

Page: W5. Facility Level Water Accounting (I)

W5.1

Water withdrawals: for the reporting year, please complete the table below with water accounting data for all facilities included in your answer to W3.2a

Facility reference number	Country	River basin	Facility name	Total water withdrawals (megaliters/year) at this facility	How does the total water withdrawals at this facility compare to the last reporting year?	Please explain
Facility 1	India	Other: Not Applicable	Chanderiya Lead and Zinc Smelter	8675	Lower	Last year withdrawal 9645 megaliters/year
Facility 2	India	Other: Not Applicable	Dariba Smelting Complex	5781	Lower	Last year withdrawal including withdrawal from municipal STP water 6315 megaliters/year
Facility 3	India	Other: Not Applicable	Debari Zinc Smelter	1595	Lower	Last year withdrawal 2024 megaliters/year
Facility 4	India	Other: Not Applicable	Pantnagar Metal Plant	72	Lower	Last year withdrawal 94 megaliters/year
Facility 5	India	Other: Not Applicable	Rampura Agucha Mine	3195	Lower	Last year withdrawal 3701 megaliters/year
Facility 6	India	Other: Not Applicable	Rajpura Dariba Mine	989	Higher	Last year withdrawal 915 megaliters/year
Facility 7	India	Other: Not Applicable	Sindesar Khurd Mine	670	Much higher	Last year withdrawal 154 megaliters/year Higher consumption is owing to expansion from 2 Million TPA to 3.75 Million TPA
Facility 8	India	Other: Not Applicable	Zawar Mines complex	3736	Higher	Last year withdrawal 3468 megaliters/year
Facility 9	India	Other: Not Applicable	Kayad Mine	33	About the same	Last year withdrawal 31 megaliters/year

Facility reference number	Country	River basin	Facility name	Total water withdrawals (megaliters/year) at this facility	How does the total water withdrawals at this facility compare to the last reporting year?	Please explain
Facility 10	India	Other: Not Applicable	Central research and development laboratory	24	About the same	Last year withdrawal 20 megaliters/year
Facility 11	India	Other: Not Applicable	Head Office	97	About the same	Last year withdrawal 97 megaliters/year

Further Information

Page: W5. Facility Level Water Accounting (II)

W5.1a
Water withdrawals: for the reporting year, please provide withdrawal data, in megaliters per year, for the water sources used for all facilities reported in W5.1

Facility reference number	Fresh surface water	Brackish surface water/seawater	Rainwater	Groundwater (renewable)	Groundwater (non-renewable)	Produced/process water	Municipal water	Wastewater from another organization	Comment
Facility 1	8675	0	0	0	0	0	0	0	From captive dam
Facility 2	1568	0	0	0	0	0	0	0	From captive dam and Common STP based at Udaipur
Facility 3	1595	0	0	0	0	0	0	0	Udai Sagar Dam
Facility 4	0	0	4.7	67	0	0	0	0	Groundwater authorization in place , Rain water harvesting structure in place to augment water
Facility 5	0	0	0	3195	0	0	0	0	Groundwater authorization in place , Rain water harvesting structure in place to augment water, Anicuts/ artificial recharge ponds provided for ground water recharge
Facility 6	989	0	0	0	0	0	0	0	From captive dam
Facility 7	84	0	0	32	0	0	0	554	Treated water is taken from Common STP based at Udaipur Groundwater authorization in place , Rain water harvesting structure in place to augment water, Anicuts/ artificial recharge ponds provided for ground water recharge
Facility 8	3736	0	0	0	0	0	0	0	From captive dam

Facility reference number	Fresh surface water	Brackish surface water/seawater	Rainwater	Groundwater (renewable)	Groundwater (non-renewable)	Produced/process water	Municipal water	Wastewater from another organization	Comment
Facility 9	0	0	0	27	0	0	5	0	Groundwater authorization in place , Rain water harvesting structure in place to augment water, Anicuts/ artificial recharge ponds provided for ground water recharge
Facility 10	24	0	0	0	0	0	0	0	Udai Sagar Dam
Facility 11	97	0	0	0	0	0	0	0	Authorization in place

W5.2

Water discharge: for the reporting year, please complete the table below with water accounting data for all facilities included in your answer to W3.2a

Facility reference number	Total water discharged (megaliters/year) at this facility	How does the total water discharged at this facility compare to the last reporting year?	Please explain
Facility 1	0	About the same	The total process water is treated and reused for secondary purpose. Landscaping etc.. Zero Discharge of water is ensured at site.
Facility 2	0	About the same	The total process water is treated and reused for secondary purpose. Landscaping etc.. Zero Discharge of water is ensured at site.
Facility 3	0	About the same	The total process water is treated and reused for secondary purpose. Landscaping etc.. Zero Discharge of water is ensured at site.
Facility 4	0	About the same	The total process water is treated and reused for secondary purpose. Landscaping etc.. Zero Discharge of water is ensured at site.
Facility 5	0	About the same	The total waste water is reused for secondary purpose. Landscaping etc.. Zero Discharge of water is ensured at site.
Facility 6	0	About the same	The total waste water is reused for secondary purpose. Landscaping etc.. Zero Discharge of water is ensured at site.
Facility 7	0	About the same	The total waste water is reused for secondary purpose. Landscaping etc.. Zero Discharge of water is ensured at site.
Facility 8	0	About the same	The total waste water is reused for secondary purpose. Landscaping etc.. Zero Discharge of water is ensured at site.
Facility 9	0	About the same	The total waste water is reused for secondary purpose. Landscaping etc.. Zero Discharge of water is ensured at site.
Facility 10	0	About the same	Zero Discharge of water is ensured at site
Facility 11	0	About the same	Zero Discharge of water is ensured at site

W5.2a

Water discharge: for the reporting year, please provide water discharge data, in megaliters per year, by destination for all facilities reported in W5.2

Facility reference number	Fresh surface water	Municipal/industrial wastewater treatment plant	Seawater	Groundwater	Wastewater for another organization	Comment
Facility 1	0	0	0	0	0	The total process water is treated and reused for secondary purpose. Landscaping etc.. Zero Discharge of water is ensured at site.
Facility 2	0	0	0	0	0	The total process water is treated and reused for secondary purpose. Landscaping etc.. Zero Discharge of water is ensured at site.
Facility 3	0	0	0	0	0	The total process water is treated and reused for secondary purpose. Landscaping etc.. Zero Discharge of water is ensured at site.
Facility 4	0	0	0	0	0	The total process water is treated and reused for secondary purpose. Landscaping etc.. Zero Discharge of water is ensured at site.
Facility 5	0	0	0	0	0	The total waste water is reused for secondary purpose. Landscaping etc.. Zero Discharge of water is ensured at site.

Facility reference number	Fresh surface water	Municipal/industrial wastewater treatment plant	Seawater	Groundwater	Wastewater for another organization	Comment
Facility 6	0	0	0	0	0	The total waste water is reused for secondary purpose. Landscaping etc.. Zero Discharge of water is ensured at site.
Facility 7	0	0	0	0	0	The total waste water is reused for secondary purpose. Landscaping etc.. Zero Discharge of water is ensured at site.
Facility 8	0	0	0	0	0	The total waste water is reused for secondary purpose. Landscaping etc.. Zero Discharge of water is ensured at site.
Facility 9	0	0	0	0	0	The total waste water is reused for secondary purpose. Landscaping etc.. Zero Discharge of water is ensured at site.
Facility 10	0	0	0	0	0	Zero Discharge of water is ensured at site
Facility 11	0	0	0	0	0	Zero Discharge of water is ensured at site

W5.3

Water consumption: for the reporting year, please provide water consumption data for all facilities reported in W3.2a

Facility reference number	Consumption (megaliters/year)	How does this compare to the last reporting year?	Please explain
Facility 1	8439	Lower	Last year water consumption was 9031 megaliters/year
Facility 2	5540	Lower	Last year water consumption including water from STP was 5904 megaliters/year
Facility 3	790	Much lower	Last year water consumption was 2024 megaliters/year Consumption is at much lower side owing to shutdown of the business units
Facility 4	71	Lower	Last year water consumption was 85 megaliters/year
Facility 5	3173	Lower	Last year water consumption was 3669 megaliters/year
Facility 6	132	Higher	Last year water consumption was 71 megaliters/year Higher owing to less availability of recycled water in the reporting year .
Facility 7	670	Much higher	Last year water consumption was 96 megaliters/year Higher owing to Expansion
Facility 8	3736	Higher	Last year water consumption was 3468 megaliters/year
Facility 9	31	About the same	Last year water consumption was 26 megaliters/year
Facility 10	24	About the same	Last year water consumption was 21 megaliters/year
Facility 11	97	About the same	Last year water consumption was 97 megaliters/year

W5.4

For all facilities reported in W3.2a what proportion of their water accounting data has been externally verified?

Water aspect	% verification	What standard and methodology was used?
Water withdrawals- total volumes	76-100	This is reported as per GRI-G4 guidelines and Verified based on ISAE:3000 (revised) standard
Water withdrawals- volume by sources	76-100	This is reported as per GRI-G4 guidelines and Verified based on ISAE:3000 (revised) standard
Water discharges- total volumes	76-100	This is reported as per GRI-G4 guidelines and Verified based on ISAE:3000 (revised) standard
Water discharges- volume by destination	76-100	This is reported as per GRI-G4 guidelines and Verified based on ISAE:3000 (revised) standard
Water discharges- volume by treatment method	76-100	This is reported as per GRI-G4 guidelines and Verified based on ISAE:3000 (revised) standard
Water discharge quality data- quality by standard effluent parameters	76-100	This is reported as per GRI-G4 guidelines and Verified based on ISAE:3000 (revised) standard
Water consumption- total volume	76-100	This is reported as per GRI-G4 guidelines and Verified based on ISAE:3000 (revised) standard

Further Information

Assurance Statement for Water CDP is attached for reference

Attachments

[https://www.cdp.net/sites/2017/70/8370/Water 2017/Shared Documents/Attachments/Water2017/W5.FacilityLevelWaterAccounting\(II\)/Assurance Statement on Water Disclosures to Hindustan Zinc Limited-.docx.pdf](https://www.cdp.net/sites/2017/70/8370/Water%202017/Shared%20Documents/Attachments/Water2017/W5.FacilityLevelWaterAccounting(II)/Assurance%20Statement%20on%20Water%20Disclosures%20to%20Hindustan%20Zinc%20Limited-.docx.pdf)

Module: Response**Page: W6. Governance and Strategy****W6.1**

Who has the highest level of direct responsibility for water within your organization and how frequently are they briefed?

Highest level of direct responsibility for water issues	Frequency of briefings on water issues	Comment
Board of individuals/Sub-set of the Board or other committee appointed by the Board	Scheduled - monthly	We operate through a three tier sustainability governance structure driving down from the Vedanta Board to the units of operation at site level. These committees at Group Level, Company Level and Unit level, regularly keep track of our sustainability performance throughout the year. Sustainability Committee at Group meets quarterly, Sustainability Business Management Group at Company Level meets monthly and Sustainability Review at Unit/ Operation level also meets monthly. Hindustan Zinc Limited (HZL) has a Business Management Group at company level, headed by the CEO of the company, which has the ultimate responsibility for Water management. Performance of water consumption and status of water projects has been reviewed by the committee on monthly basis and objectives and Targets are set for every action towards mitigation of Water risk.. All these meetings review all projects and operational issues during which water as part of overall sustainability is reviewed.

W6.2
Is water management integrated into your business strategy?

Yes

W6.2a
Please choose the option(s) below that best explains how water has positively influenced your business strategy

Influence of water on business strategy	Please explain
Alignment of public policy positions with water stewardship goals	Our water strategy is to be a "Responsible Water Steward" which is aligned to Sustainable Development Goal 6 (To ensure access to safe water sources and sanitation for all). Considering the significant water requirements at our smelters, we have developed strategies to reduce our water consumption. While managing this precious resource, we also consider that it needs to be saved for future use as well. Hence, guided by our exclusive Water Management Policy, we take steps for water conservation at the source, zero discharge from operations, efficient water usage by the community, rainwater harvesting, and water accounting. The outcomes from this strategy include the development of new water sources and augmentation of current water supplies with treated municipal sewage. This has led to the improvement of municipal infrastructure and release of more potable water for the benefit of the communities we operate in. We are also planning to further expansion of municipal STP by another 40 MLD to treat maximum sewage of the Udaipur city and using the treated water at our operations and thus reducing our fresh water requirement. Target was taken during the year to Achieve Water Savings - 0.13 MCM through various water conservation initiatives.
Introduction of water management KPIs	Impact of Sustainability (VSAP- Vedanta sustainability Assurance programme which includes Water management as one of the key component) on Variable pay structure and it has an inbuilt threshold of achievement to qualify. Each unit has a water manager whose primary role is to ensure optimized water usage. Water consumption is a part of the senior leadership deliverables.

W6.2b
Please choose the option(s) below that best explains how water has negatively influenced your business strategy

Influence of water on business strategy	Please explain
Increased capital expenditure	We are investing in various infrastructure and developmental projects to reduce our dependency on fresh water and providing water for communities. We are further planning to invest 80 crores INR to expand Municipal Sewage treatment plant. We financially assist such projects thus resulting in increased capital expenditure.

W6.3
Does your organization have a water policy that sets out clear goals and guidelines for action?

Yes

W6.3a
Please select the content that best describes your water policy (tick all that apply)

Content	Please explain why this content is included
Publicly available	We have a dedicated water Management policy and also we are following the Water Management Standard (TS-14) of Vedanta Sustainability Framework. Our water Management policy is publicly available at our website- http://www.hzindia.com/common/images/Water_Management_Policy_2016.pdf to showcase our commitment to safe and sustainable mining along with sustainable use of water within its organisation.

W6.4
How does your organization's water-related capital expenditure (CAPEX) and operating expenditure (OPEX) during the most recent reporting year compare to the previous reporting year?

Water CAPEX (+/- % change)	Water OPEX (+/- % change)	Motivation for these changes

102	3	We do not track water related expenditure separately , Total expenditure for Environment Management is being tracked 2015-16 Environment Capex- 128907000 INR Environment Opex- 502531339 INR 2016-17 Environment Capex- 260308000 INR Environment Opex- 485046076 INR During the reporting year Environment Management Capex increased by 102 % and there is 3% reduction in Opex from last year
-----	---	---

Further Information**Attachments**

[https://www.cdp.net/sites/2017/70/8370/Water 2017/Shared Documents/Attachments/Water2017/W6.GovernanceandStrategy/Water Management Policy.pdf](https://www.cdp.net/sites/2017/70/8370/Water%202017/Shared%20Documents/Attachments/Water2017/W6.GovernanceandStrategy/Water%20Management%20Policy.pdf)

Page: W7. Compliance

W7.1
Was your organization subject to any penalties, fines and/or enforcement orders for breaches of abstraction licenses, discharge consents or other water and wastewater related regulations in the reporting year?

No

Further Information**Page: W8. Targets and Initiatives**

W8.1
Do you have any company wide targets (quantitative) or goals (qualitative) related to water?

Yes, targets and goals

W8.1a
Please complete the following table with information on company wide quantitative targets (ongoing or reached completion during the reporting period) and an indication of progress made

Category of target	Motivation	Description of target	Quantitative unit of measurement	Base-line year	Target year	Proportion of target achieved, % value
Other: Water Savings - 0.13 MCM.	Other: Through various water conservation initiatives and projects	The company has long term commitment to sustainability. We have taken water saving targets based on the identified water conservation initiatives and projects. Against the target reported in our 15-16 SD report this year we have achieved Water Savings - 0.18 MCM.	Other: million cubic meters	2016	2017	100%

W8.1b
Please describe any company wide qualitative goals (ongoing or reached completion during the reporting period) and your progress in achieving these

Goal	Motivation	Description of goal	Progress
Other: Incorporating water efficiency in design of products	Recommended sector best practice	Green Building certification to the existing buildings after incorporating the requirement to reduce the energy and water consumption.	Our Head office at Udaipur is certified to green building Platinum certification by Confederation of Indian Industry (CII)-Indian Green Building Council (IGBC) in January 2017. It is one of the only 14 CII-IGBC Platinum rated buildings in India and the first ever in Rajasthan. This has strategies of water management like rain water harvesting, sewage treatment plant etc. and thus resulted in water use reduction of 37%. Progress in place for certification of other buildings at units also.
Other: Reducing Fresh water consumption	Recommended sector best practice	Reducing the dependency on fresh water consumption at operations	We have already invested 170 crores INR for 20 MLD municipal sewage treatment plant and achieved the fresh water reduction by 85% at one of our facility and further planning to commission another STP of 40 MLD of 80 crores INR investment.

Further Information

Details on Green building certification to our HO building is part of CII- IGBC booklet, attached for reference

Attachments

[https://www.cdp.net/sites/2017/70/8370/Water 2017/Shared Documents/Attachments/Water2017/W8.TargetsandInitiatives/IGBC Green Habitat Feb 2017 .pdf](https://www.cdp.net/sites/2017/70/8370/Water%202017/Shared%20Documents/Attachments/Water2017/W8.TargetsandInitiatives/IGBC%20Green%20Habitat%20Feb%202017.pdf)

Module: Linkages/Tradeoff**Page: W9. Managing trade-offs between water and other environmental issues**

W9.1
Has your organization identified any linkages or trade-offs between water and other environmental issues in its value chain?

Yes

W9.1a

Please describe the linkages or trade-offs and the related management policy or action

Environmental issues	Linkage or trade-off	Policy or action
Water Management	Linkage	Identification of Linkage: 20 MLD Municipal sewage treatment plant is a Public-private partnership (PPP) deal between the Hindustan Zinc and the local government (Udaipur Municipal Corporation and Rajasthan State-Owned Urban Improvement Trust) to develop the city's first Wastewater Treatment Plant (WWTP) which addressed both stakeholder's objectives.: Outcomes of the Municipal Sewage treatment plant- - Reduction in Input Sewage to the lake, 30% treatment of historical sewage water, Beautification of the lake and Biodiversity Improvement- Aquatic Life, Our industrial complex is located in a water starved area and as we are now using treated water from this STP with lesser quantity fresh water, leaving an adequate amount of water for the nearby communities which serve as an optimal modal for the surroundings. Reduction in Fresh Water Consumption by 85% at Industrial Complex.

Further Information**Module: Sign Off****Page: Sign Off****W10.1**

Please provide the following information for the person that has signed off (approved) your CDP water response

Name	Job title	Corresponding job category
V. Jayaraman	Vice President	EHS manager

W10.2

Please indicate that your organization agrees for CDP to transfer your publicly disclosed data regarding your response strategies to the CEO Water Mandate Water Action Hub.

Note: Only your responses to W1.4a (response to impacts) and W3.2c&d (response to risks) will be shared and then reviewed as a potential collective action project for inclusion on the WAH website.

By selecting Yes, you agree that CDP may also share the email address of your registered CDP user with the CEO Water Mandate. This will allow the Hub administrator to alert your company if its response data includes a project of potential interest to other parties using water resources in the geographies in which you operate. The Hub will publish the project with the associated contact details. Your company will be provided with a secure log-in allowing it to amend the project profile and contact details.

Yes

Further Information

CDP: [D][,-,][D2]