

Focused on Managing Risks Effectively to Protect Outcomes

Effective risk management being critical to the success of our business, we remain consistently focused on ensuring regular mapping and mitigation of all the risks that can potentially impact our business. We have in place a clearly-articulated risk management framework, which enables us to identify, assess, categorize, address and mitigate all relevant risks through a well-formulated process, with defined roles and responsibilities assigned at every stage. It is structured to ensure continuous mapping and categorization of the risks, their regular monitoring and tracking, review and mitigation through a well laid-out Governance and Process framework.

Our risk management profile is based on a highly transparent system, where teams across hierarchies are encouraged to report any type/category of risk through various online reporting platforms accessible to them. These platforms also facilitate the teams in escalating the risks to the next level. Risk management targets and indicators are clearly defined as part of the risk scorecard, while performance evaluation is done at the management level and above on a regular basis.

RISK MANAGEMENT FRAMEWORK



Governance

Board Risk Management Committee Overview

- > Reviews key risks along with mitigation plan
- > Guides on strengthening of overall risk management framework

Quarterly Review by Management Committee

- > Quarterly reviewed by Senior Management and presented before the Risk Management Committee annually
- > Chief Risk Officer to monitor and co-ordinate

Location - Risk Review Meetings

- > Quarterly structured Risk meetings at Location/Unit level and Corporate level to review risks for impact and likelihood along with mitigation plans
- > Updation in Risk Register



Process

Risk Owner Mapping

- > Mapping of risks & mitigation plans in Risk Matrix with KRAs
- > Risk Owner assigned to each risk, to monitor the Risk on ongoing basis

Risks Categorization

- > High Impact Risks - Category 4 & 5 - Significant & Critical to be categorized as "Principal Risks"
- > Other Risks

Digital Dashboard Tracking

- > Well-organized digitalized repository containing information on all risks across business locations
- > Provides live and swift overview of Risk Register




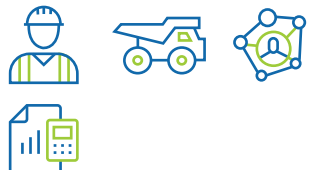
The table explains some of the prominent risks and the steps adopted to mitigate them.






Operational Risk



People Risk

<p>Types of Risks</p>	<p>Our profitability is dependent on our price realization, which is linked to zinc-lead LME and silver London Bullion Market Association (LBMA) and our cost of production. A negative movement in international prices directly impacts our operating profit.</p> <p>Rising cost of production due to the falling grade of existing mines, higher coal and fuel prices and lower metal recovery also impact profitability.</p>	<p>There is limited availability of experienced underground mining contractors in India. Also, digital enablement in operations attracts increased technological skill and specialization among employees and opportunity for business disruption and risk on the future of the existing workforce.</p>
<p>Mitigation Steps</p>	<p>To offset adverse LME and LBMA price movement, we focus on reducing our cost of production and increase our metal premiums.</p> <p>We proactively manage commodity costs, especially oil and coal basket, to drive lower structural costs via focus on efficiency (consumption norms, recoveries, manpower and equipment productivity) and increase our VAP portfolio.</p> <p>To prevent a fall in ore grades and recovery, we are improving stope ore recovery through better instrumentation and drilling plan and conduct mine by mine study to understand the challenges and peculiarity of every mine location.</p>	<p>Investments are being made in suitably trained external and internal workforce with specialized skills in the domains of digitalization and automation to stay efficient and minimize business disruption.</p> <p>We are hiring expats for specialized jobs in the area of underground mining. We have established the Underground Mining Academy to improve local skillset. We are strengthening capability mapping and skill tracking of contractual manpower via Project RuBaRu.</p>
<p>Risk Class</p>		
<p>Key Capitals Impacted</p>		

-  Risk with high probability and high negative impact on financials
-  Risk with medium probability and medium negative impact on financials
-  Risk with low probability and medium impact on financials or high probability, but negligible impact on financials



Financial Risk



R&R and Discovery Risk

Types of Risks

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

Our Company's long-term viability depends on its ability to access mineral resources that have the desired geological characteristics, enabling mining at competitive costs.

Mitigation Steps

We have adopted a conservative treasury policy revolving around capital protection and yield maximization, in that order.

We have defined policies to mitigate counter-party risks by making the most of our sales on a secured basis, while our investments are only in highly rated debt instruments with defined counter-party limits.

Our investment portfolio is periodically reviewed by an external agency.

We have a well-structured insurance program in place.

One of our strategic priorities is to extend the life of our resources at a faster rate than we consume them, through focus on drilling high-potential exploration targets within mine leases.

To achieve this, we have a strong exploration organization, latest tools and technologies and right fit contractors.

Additionally, our Company has an active portfolio of tenements where it has preferential rights under MMDR Act, 2015 at different stages of approval. It also participates regularly in mineral auctions announced by the government.

Risk Class



Key Capitals Impacted





Health and Safety Risk

The resources sector has inherent hazards and is therefore subject to extensive health, safety and environmental laws, regulations and standards. Any incident can result in property damages, injuries and potential fatalities

and also adversely impact the surrounding communities and environment. Such incidents may result in litigation, disruption of operations, penalties and loss of Company image and goodwill.

Our Company has implemented a set of standards that align its sustainability framework to globally accepted international practices such as International Finance Corporation (IFC), International Council on Mining and Metals (ICMM) and the Organization for Economic Co-operation and Development (OECD) standards.

The Company regularly monitors occupational health, identifies hazards and incorporates analysis in all critical operations. The focus is on capturing leading indicators to eliminate incidents, while continuing to invest in the training of employees and contractors. The focus is also on creating a zero-harm culture across the organization.

associated risks. The first Dry Tailing Plant has been commissioned at Zawar and the Company plans to adopt it at all its mining locations.

To increase the safety of underground operations, we have 100% traffic management and use of technology to reduce man-machine interaction and exposure of risk-prone areas, along with regular trainings. We are constructing an underground workshop to manage and reduce vehicular movement under the surface.

All safety and environmental incidents are thoroughly investigated for root cause analysis and to eliminate recurrence.

Tailings dam management has been a recent area of focus, where the Company is implementing recommendations from global experts to mitigate



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Environment Risk



Community Relations Risk

Types of Risks

The Company is subject to extensive environment laws related to emission norms, waste discharge, waste management, etc. Non-compliance with these laws may result in suspension of operations, occupational hazards to employees and cancelation of Consent to Operate.

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

Mitigation Steps

The Company has undertaken several initiatives to control air, water and noise pollution, including dust suppression, electronically delayed blasting for minimal vibrations and dust, regular effluent monitoring and waste management.

It has also committed to reducing its environmental footprint by judicious use of natural resources such as water and energy and has taken concrete steps for alternate use of various wastes.

The Company is investing in technologies to minimize emissions and waste generation. It has also invested in wind and solar energy and has already started working towards reducing GHG emissions to meet its commitments as a signatory to the Science Based Targets initiative (SBTi).

Establishing and maintaining close links with stakeholders is an essential part of our sustainability journey and we work with our stakeholders to understand their expectations and alleviate disruptions to the maximum extent feasible.

A baseline and impact assessment study was conducted in FY2022 and a community-need assessment is planned in the current year. The Company will refocus its CSR efforts based on the results of the impact study. The Company has initiated several projects for enhancing the skills of the local youth to increase their employment prospects and for supporting community water requirements, apart from ongoing projects in its focus areas.

Risk Class



Key Capitals Impacted





Technology Transition Risk

Globally, companies are facing disruptions by digital technologies.

Our success depends on our ability to successfully adapt to emerging technology trends, including digitalization. This is an emerging risk for the Company.

We have implemented key digitalization projects, including Collaboration Center, Project Drishti at mines, Project Sarathi for supply chain automation, and EVOLVE for real-time pricing and online purchasing of our metals.

We are exploring digital solutions for exploration, mining operations, mining value chain processing, maintenance and trading in line with new-generation digital technologies and have made a time-bound short-term and long-term digital roadmap. To integrate multiple databases and systems, the OSISoft-PI system has been selected and deployment is in progress.

We are hiring specialized manpower in niche areas such as AI, intelligent automation and advanced optimization.



Availability of Natural Resources Risk

We are highly dependent on the availability of water, energy and land. Lack of availability of these resources will hamper our operations and impact future projects.

The Company maintains several water sources in conjunction with the government. A network of Sewage Treatment Plants (STPs) were also set up in Udaipur, which provides a sustainable water source to its operations. Dry Tailing Plants are planned across all mining sites and strengthening of wastewater recycling system with additional Reverse Osmosis (RO) and Multiple Effect Evaporation (MEE) plants in all smelters will further reduce our dependency on freshwater. We are further exploring options to utilize treated sewage generated from other cities/towns situated in the vicinity of our operations.

We are self-sufficient in power through coal-based captive power generation for which we source high calorific value coal from the global market in addition to established linkages from indigenous sources. We have also invested in technologies to minimize emissions and waste generation.

We are aiming at zero waste to secured landfill. Fly ash generated in power plants is sold to the cement industry while major waste from zinc smelters is stabilized in an environment-friendly manner and disposed in secured landfills. Further, use of smelter waste in road construction and cement manufacturing and introduction of fumer, ancillary plants and paste fill technology will help in eliminating land requirement for landfills and would convert wastes into commercially usable byproducts/slag/backfilling and help in manufacturing paver blocks.



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Grey Swan Events



Political, Legal and Regulatory Risk

Types of Risks

This covers emerging risks that are unlikely to occur. One such development at the end of the previous fiscal year was the emergence of the COVID-19 pandemic around the world and the consequent measures taken to contain it, such as nationwide lockdowns.

Such events can significantly reduce labor supply and lead to canceled/unfulfilled customer orders, interruption in supply chain management and unavailability of support services.

They can lead to closure of all mining and operating facilities and result in operating loss.

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

Mitigation Steps

Continuous environment scan
Preparation, review and implementation of the business continuity plan.

The following actions are planned for future preparedness for such events:

- > Identify critical processes, operations and functions
- > Identify key dependencies and other areas that could possibly affect operations
- > Determine possibility of remote working for core operations
- > Response to medical emergencies where human intervention is drastically reduced
- > Test this plan of pandemic response after its formation

We have a strong team of professionally qualified experts to manage compliance with laws in addition to built-in checks and balances to monitor compliance through technology.

We proactively engage with all government functionaries to ensure that our suggestions and views are heard before policy making, which may impact the industry and our business.

We believe in responsible policy advocacy. We do not contribute funds to any political party.

Risk Class



Key Capitals Impacted





Cyber Security Risk

With growing use of Information Technology (IT), there is an enhanced risk of loss of data, operations and reputation due to exploitation of vulnerabilities in the IT infrastructure.

Leakage of sensitive data and information can affect the organization's smooth operations and performance. Hacking of operational systems may bring complete organization to a standstill, which can lead to production, operational and financial loss to the Company.



Fraud Risk

"Corruption, embezzlement, fraud, these are characteristics that exist everywhere. It is regrettably the way human nature functions, whether we like it or not..."

- Alan Greenspan

We have an IT security framework in place, which is periodically reviewed through expert agencies and strengthened to mitigate newer threats and risks.

We have recently deployed ISO standards for Information Security Management and have been accredited with ISO 27001 certification.

We adhere to a strong Code of Conduct and encourage reporting of irregularities through our whistle-blower mechanism.

We have various control measures in place to prevent frauds. These are executed via the Foreign Corrupt Practices Act (FCPA) / ethics training, updated SOPs, Training, IT/authorization controls and consequence management.

We are strengthening controls surrounding IT security through physical access control and logical access management.



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