

ENRICHING LIVES

# MINING FOR A GREENER FUTURE





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# About the Report

Essel Mining & Industries Limited (EMIL) is a part of global conglomerate Aditya Birla Group. We are a diversified natural resource company operating in the sectors of commercial coal mining, Iron Ore Beneficiation & Pelletization (IoBP), Noble Ferro Alloys (NFA), Commercial Coal Mining Services and renewable energy. EMIL envisions a future powered by green and clean energy. To report on our progress and our

future strategy in our endeavor to enrich lives and mine for a greener future, we present our third Sustainability Report. Our Sustainability Report for FY 2022-23 offers an in-depth insight into our sustainability strategy, our Environment, Social, and Governance commitment and targets and the progress made so far.

## Scope and Reporting Period

This report covers the period from April 1, 2022, to March 31, 2023. It provides a comprehensive overview of the following divisions and subsidiaries of EMIL.



Commercial Coal



Iron Ore Beneficiation & Pelletization (IoBP)



Mining Services



Noble Ferro Alloys business (hereafter referred as 'NFA')



Renewable Energy business (hereafter referred as 'Wind and Solar')



EMIL Head Office

## EMIL subsidiaries



Bhubaneshwari Coal Mining Limited (hereafter referred as 'BCML')



Rajmahal Coal Mining Limited (hereafter referred as 'RCML')



Amelia Coal Mining Limited (hereafter referred as 'ACML')



Subhadra Coal Mining Limited (hereafter referred as SCML)



EMIL Mines and Mineral Resources Limited (hereafter referred as 'EMMRL')

## Standards, Principles, and Objectives

In preparing this report, we have adhered to the following standards and frameworks:

- The Global Reporting Initiative (GRI)
- United Nations Sustainable Development Goals (UN SDGs)

## Materiality Approach

Our company is committed to long-term success through a strategic approach to materiality. We prioritize identifying and addressing Environmental, Social, and Governance (ESG) issues that are most pertinent to both our business and stakeholders. Our aim is to comprehensively understand the societal and environmental impacts of our business operations. Through a meticulous ESG materiality assessment, we have successfully identified key aspects that allow us to gain valuable insights into our stakeholders' expectations. In the preceding fiscal year, we conducted a thorough materiality assessment in alignment with the

Global Reporting Initiative (GRI) framework. This assessment, conducted with a focus on short, medium, and long-term perspectives, has enabled us to prioritize and address ESG issues that are of utmost significance to our company and its stakeholders.

## Assurance

To uphold the standards of accuracy and reliability in the information presented within this report, we have diligently engaged external assurance to validate the disclosed data. For the assurance statement, please refer to pages 100-103 of this report.

## Communication

We look forward to feedback and suggestions from our stakeholders on this report and our sustainability performance. You may write to:

[emil.registered@adityabirla.com](mailto:emil.registered@adityabirla.com)



# Theme and Positioning Statement



## Enriching Lives. Mining for a Greener Future

In today's global landscape the imperative of sustainability has ushered in a shift in the demands and expectations of the stakeholders. Investor and consumer preferences are undergoing a notable evolution, with sustainability as the driving factor. Consequently, economies and businesses worldwide are producing goods and services that not only meet the market demand but also contribute positively to the environment and society. Considering this, the Mining industry holds a critical place in unfolding the true potential of nation's mining resources that caters to the changing demands of an increasing global population.

The impact of the industry is manifold. Going beyond the vital role of supplying essential resources necessary for human existence and generating employment opportunities, it also plays a role in sustaining a diverse and dependent ecosystem of businesses through the provision of necessary raw materials. Therefore, as India and other nations worldwide align their economic ambitions with the Paris Agreement and the United Nations Sustainable Development Goals (SDGs) the current responsible evolution of the mining industry is bound to have cascading effects through the spectrum of sustainability.

To catalyze India's transition to a net-zero economy by 2070 and emerge as one of the frontrunners in doing so Essel Mining & Industries Limited (EMIL) is deeply committed to mining for a greener and more sustainable future. Guided by

our purpose of 'Creating Value and Touching Lives' we harness the power of innovation and technology toward diversifying our resource portfolio, exploring and adopting greener methods of mining and thereby facilitating the **maximization of our nation's resource efficiencies to address both the immediate demands of today and the transformative requirements of tomorrow.**

As a responsible organization, we are fully aware, and we acknowledge the inherent environmental and social implications of the increase in mining activities. We are, therefore, striving for **comprehensive and impactful progress. The progress we want to make to mitigate the industry-specific implications will aim to resolve and address issues of economic growth, environmental stewardship, and social development.**

To harness our strategic goals and in line with our commitment to achieve sustainable growth we are making continuous attempts to mitigate our carbon footprint, preserve natural resources, and foster community development. Our goal is to foster growth not only by expanding the scope of our asset portfolio but also by instigating a paradigm shift in our operational approach. Through our endeavors, we aspire to create a positive and enduring impact on the lives of our employees and the communities in which we operate.

# Building a Sustainable Mining Future

## FROM THE DESK OF MANAGING DIRECTOR



**“We would like to deliver on our unwavering commitment to attain the highest standards of resource efficiencies and responsible mining. Through our operations and their resultant outcomes, we aspire to foster sustainability both within and outside the organization. We will continue to enrich lives and create stakeholder value, sustainably. ”**

**Dear Stakeholders,**

**I would like to take the opportunity to present to you the 3rd Sustainability Report.**

In our incessant endeavor to disclose the overall impact of our operations with all transparency and further strengthen your trust in us, I am pleased to present to you all Essel Mining & Industries Limited (EMIL)'s FY 2022-23 Sustainability Report. The report provides a holistic picture of our sustainability strategy and our goals and progresses across the three pillars of Environment, Social, and Governance. As we shoulder the responsibility of advancing India towards resource self-sufficiency and efficiency, our dedication to responsible mining, which generates value for both the present and the future, is also highlighted in the report.

As one of the leading diversified natural resource companies in India, EMIL has been successfully catering to the nation's resource requirements for over seven decades now. The enduring success of the organization is reflective of our resilience and our ability to stay relevant in an industry as dynamic as mining. As the world moves towards achieving net-zero goals, there is growing pressure on mining companies to extract green resources sustainably. Drawing upon our extensive experience and adaptive prowess, we stand resolute in our commitment to continue enhancing lives as the global push for sustainability accelerates.

We have integrated sustainability as an inherent aspect of our business operations. We aspire to create an impact that is reflective of the **communities** we are a part of, the **people** we collaborate with, and the **environment** where we operate in.

This aspiration is strengthened by our **technological advancements and diversified portfolio expansion**, enabling responsible mineral extraction and processing. that promote both **socio-economic growth** and **environmental restoration**.

**Environmental Commitment and Action:**

As part of our environmental stewardship commitment, we adopt a holistic approach that integrates various facets of environmental protection and restoration. All our business divisions strictly adhere to responsible mining and manufacturing principles, incorporating robust environmental management systems and ESG compliance frameworks. This involves thorough monitoring of diverse environmental aspects like land use changes, water management, pollution control, waste handling, and air emissions. Our proactive approach guides us in strategizing precautionary measures to prevent or minimize any environmental impact resulting from our operations. Simultaneously, we undertake initiatives for environmental restoration. We understand that the mining industry has always been viewed as having a large environmental footprint and our efforts to mitigating the impact is a very critical and core part of our overall ESG strategy.

In line with our net-zero commitment, we closely monitor and act on our scope 1, scope 2, and scope 3 emissions and to further our aspirations of environmental protection, we aim to commit to global targets such as adoption of Science-Based Targets (SBTi). EMIL has also historically invested and operates 75 MW of wind power generation and 80 MW of solar power generation facilities to offset carbon emission in mining operations at company level.

In addition, we are actively promoting resource efficiency and a circular economy to alleviate pressure on mineral resources. Water is the most essential resource for sustaining human existence. In our efforts to preserve water, we are working on increased use of recycling of water through investment in STP & MEE. Looking ahead, we aim to conduct biodiversity assessments across all our new operations to gauge the changes caused by our activities. Reforestation and topsoil protection are also integral to our efforts.

**Prioritizing Safety & Health:**

Safety & Health of our people stands as our utmost priority, and we continually strive to uphold the highest health and safety standards within our organization. We are committed to ensure processes and systems to continually improve safety and well being around all our operations.

In line with this commitment, we have initiated a safety leadership development program known as 'Inspire.' Its core objective is to empower our leaders to embody and promote safety. Our organization maintains a rigorous occupational health and safety framework, reinforcing our unwavering commitment to zero harm. We drive a safety culture by regular training and awareness programs for all employees, as well as the deployment of dedicated personnel in safety roles at all our sites. Our safety strategy involves identifying potential risks comprehensively and developing strategies to mitigate / eliminate them accordingly.

**Enriching Lives:**

Driven by our purpose to enrich lives, we create shared value across stakeholders and foster societal development, we are deeply committed to leaving a positive impact on the communities we serve. Our CSR initiatives are centered on driving social and economic empowerment, with a focus on uplifting the vulnerable sections of society. We implement these initiatives programs through collaborations with reputable organizations and address multiple facets of community development and pressing concerns, including education, women's empowerment, infrastructure, health, and well-being.

Our distinctive CSR project, '**The Lifeline Express,**' delivers high-quality healthcare to remote regions via specially equipped trains, ensuring essential medical services reach underserved areas. This program has made a significant contribution to healthcare accessibility and has positively impacted numerous beneficiaries. Looking ahead, we aim to expand the reach of the Lifeline Express Program, further enhancing its impact within the community. To date, we've provided care to more than 34,000 people through this initiative.

In the fiscal year 2022-2023, our total CSR spending amounted to INR 32.52 cr. All of this has been made possible through the dedicated efforts of our enthusiastic workforce. We're committed to fostering an inclusive, equal, and respectful workplace for everyone.

We would like to deliver on our unwavering commitment to attain the highest standards of resource efficiencies and responsible mining. Through our operations and their resultant outcomes, we aspire to foster sustainability both within and outside the organization. We will continue to enrich lives and creating stakeholder value, sustainably.

## Thomas M Cherian

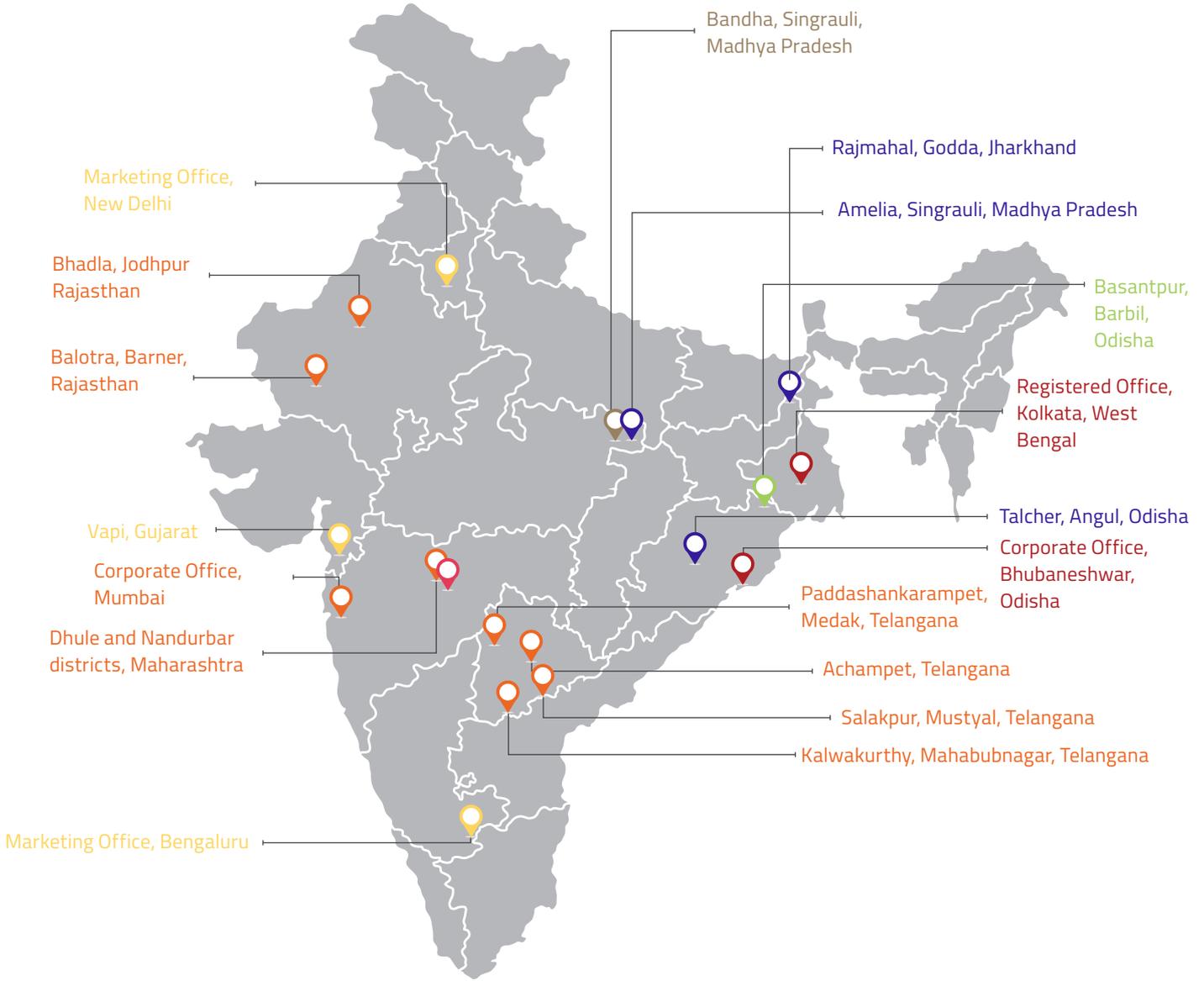
# Organizational Overview

Essel Mining and Industries limited (EMIL) incorporated in 1950, is a part of the Aditya Birla Group which is US \$65 million conglomerate. EMIL went on to become one of the leading mining and mineral processing companies in India. Under Aditya Birla Group today, EMIL has built a strong foundation of value creation for its stakeholders upholding the example of responsible mining. Our main offering of mining essential minerals like iron ore, coal and Nobel Ferro Alloys has been a crucial contributor to independent India's progress and development over the span of seven decades. In the past few years, some of the major projects bagged by

us includes 2 new coal Mine developer and Operator (MDO) in Amelia and Subhadra located in states of Madhya Pradesh and Odisha respectively. Furthermore, we purchased the iron ore beneficiation and pelletization plant (IoBP) in Basantpur, the Keonjhar district of Odisha in 2019. Operating under the cutting edge Circular Pelletization Technology (CPT), the IoBP plant consists of one MTPA iron ore beneficiation plant and one MTPA iron ore pelletization unit.

We manage a broad range of operations directly and through subsidiaries, operating out of 14 locations throughout India.





 Noble Ferro Alloys

 Solar Power Generation

 Offices

 Wind Power

 Mining Services Coal

 Iron Ore Benefication & Pelletization

 Commercial Coal

# EMIL at a Glance

## 1 Iron Ore Beneficiation and Pelletization Plant

- Located at Koenjhar, Odisha
- Circular Pelletizing technology (CPT)
- Capacity - 1 MTPA

## 2 Mining Services (Coal)

- 1st MDO to start operation in India
- Operating Locations- Orissa, Jharkhand, Madhya Pradesh
- Operating Capacity: -51 MTPA

## 3 Noble Ferro Alloy Unit

- Located in Vapi, Gujarat
- Produces, FeMo, FeTi, FeV
- Capacity: 9000 metric TPA

## 4 Commercial Coal

- Bandha in Madhya Pradesh
- Capacity-5 MTPA (under project stage)

## 5 Renewables

- Wind Power Plant located in Dhule, Maharashtra.
- Solar Power Generation located in Gujarat, Rajasthan and Telangana
- Capacity of Wind Power Plant 75 MW
- Capacity of Solar Power Generation 80 MW

Under the direction and guidance of an empowered and experienced leadership team we have laid out a strategic growth framework driven by future-ready goods and personnel, state-of-the-art technology and innovation enabling, transparent governance and people practices. We are integrating ESG practices across our operations, strengthening and preserving biodiversity, and refining our

water management to progress towards a net-zero future. All this is supported by a robust supply chain and ethical conduct. As more nations, like India, adopt sustainable practices across their business operations and commit to the pledge to become net-zero we see an opportunity to broaden our portfolio to include additional metals, minerals and energy solutions.

# Group Purpose

**"To enrich lives, by building dynamic and responsible businesses and institutions, that inspire trust."**



# EMIL'S MISSION, VISION AND VALUES

## Mission

To consistently be the best in creating value for our shareholders, customers, employees and community.



## Vision

To be a value adding Global Natural Resource Company cherished by our customers and the communities in which we work.



## Values



				
Integrity	Commitment	Passion	Seamlessness	Speed
<p>Acting and taking decisions in a manner that is fair and honest. Following the highest standards of professionalism and being recognized for doing so. Integrity means not only financial and intellectual integrity but also all other as are generally understood.</p>	<p>On the foundation of integrity, doing all that is needed deliver value to all stakeholders. In the process, being accountable for our own actions and decisions, those of our team and those in parts of the organisation for which we are responsible.</p>	<p>An energetic, intuitive zeal that arises from emotional engagement with the organisation that makes work joyful and each one gives his or her best. A voluntary, spontaneous and relentless pursuit of goals and objectives with the highest level of energy and enthusiasm.</p>	<p>Thinking and working together functional groups, business and geography. Leveraging diverse competencies and perspectives to garner the benefits of synergy while promoting organisational unity through sharing and collaborative efforts.</p>	<p>Responding to internal and external customers with a sense of urgency. Continuously striving to finish deadlines and choosing the best rhythm to optimise organisational efficiencies.</p>

# Leadership's Voice

## Synergizing Financial and Sustainable Paths

### MESSAGE FROM THE DESK OF CFO & HEAD WIND POWER



**“At EMIL, we view financial and sustainable growth as mutual enablers. The seamless integration of sustainability into our business operations has not only yielded financial prosperity but has also propelled operational growth for our business.”**

As the world transitions towards sustainability, businesses are poised to play a prominent role in catalyzing this transformation. Financial performance is no longer the sole indicator reflecting organizational growth. Stakeholders' expectations have broadened to know the overall impact of the business on the environment, society, and the communities. At EMIL, we view financial and sustainable growth as mutual enablers. The seamless integration of sustainability into our business operations has not only yielded financial prosperity but has also propelled operational growth for businesses. We have witnessed positive outcomes in our operations and strengthened relationships with stakeholders resulting from the seamless integration of sustainability. Therefore, we are committed to making substantial investments across the three foundational pillars of environment, social, and governance.

To minimize our environmental impact, we have allocated funds to foster various environmental protection and restoration initiatives. A substantial investment is being made to conduct climate assessment studies across our new project locations. Additionally, in our endeavour to transition to cleaner and greener ways of generating power in our portfolio of businesses.

Simultaneously, to promote socio-economic development, and ensure the health and safety of all stakeholders, we have undertaken various Corporate Social Responsibility (CSR) aimed at uplifting and enriching the lives of the communities we serve. Our total CSR expenditure amounted to INR 32.52 Cr, impacting lives in 9,000 villages pan India. These endeavors underscore our dedication to a sustainable and responsible business approach that extends beyond financial metrics to actively contribute to the well-being of both the environment and society.

**Arun Garg**

# Cultivating Growth Hand in Hand

## MESSAGE FROM THE DESK OF CHRO



**“Our employees are not just our contributors they are integral partners in our journey toward excellence and we are dedicated to ensuring their continued development and success within our Company.”**

The enduring growth and resilience of EMIL over the past seven decades stand as a testament to the incessant dedication and hard work of our exceptionally talented workforce. Our people form the cornerstone of our success and our sustainable transformation moving forward. They are our greatest strength,

and we hold their contributions in the highest regard. To reciprocate the commitment of our employees we aim to cultivate a positive environment where they feel respected, valued, recognized, and are able to foresee growth in the future.

Inspired by and aligned with the Aditya Birla Group’s employee value proposition we are dedicated to instilling the principles of diversity, equity, and inclusion in our workplace. Tangible steps in this direction are outlined in our ESG targets and commitments. We recognize and celebrate people for the value they bring to the Company offering equal opportunities and benefits regardless of background, caste, culture, creed, and religion. We see strength in individuality within our diverse workforce, recognizing its role in fostering innovation and growth. This Financial Year we have implemented several initiatives to promote diversity reflected in our enhanced female-to-male percentage.

To ensure alignment with employee expectations we ensure that they feel heard and cared for. To this end, every month we organize forums where employees are provided an opportunity to voice their concerns in front of the leadership. We also have a robust tracking mechanism in place to ensure timely and effective resolution of all the issues. Our commitment to employee satisfaction extends to various training and engagement programs designed to nurture their interests and foster a positive work experience.

Being a mining company, we are aware of the inherent safety risks associated with our operations and are taking proactive measures to foster a safe working environment. We have an apex safety committee leading our safety initiatives. Our commitment to employee safety extends beyond operational safety and includes the overall holistic well-being of the employees, addressing both their mental and physical well-being. Additionally, we are committed to protecting the rights of the workforce. At our mines and plants, we are adhering to the highest standards of statutory and Company-related norms regarding human rights. We aspire to conduct due diligence with respect to human rights assessment in the future.

In our continuous endeavor to cultivate talent, we promote both internal as well as acquire external talent on need basis. Prioritizing prioritizing the satisfaction of our employees we facilitate seamless transitions within the group to align them with the roles that capitalize on their strengths and skills. This year, we welcomed 44 new talents and successfully transitioned 51 employees within the firm.

As we continue to prioritize employee growth, we look forward to achieving operational and sustainability milestones together. Our employees are not just our contributors they are integral partners in our journey toward excellence and we are dedicated to ensuring their continued development and success within our Company.

**Sreekanth Reddy**

## Striding Ahead with Responsible Actions

### MESSAGE FROM THE DESK OF SENIOR VICE PRESIDENT STRATEGY, BUSINESS DEVELOPMENT & SUSTAINABILITY



**“To embrace sustainability in its essence, we are focusing on transforming our process as well as our outcome efficiencies. By expanding our outcome efficiencies and strategically harnessing resources for a greener future we are enabling the nation to transition to a net-zero economy.”**

At EMIL, we believe in the importance of sustainability as a guiding principle that shapes our identity as a forward-thinking organization. Sustainability is a key strategic pillar that is woven into the fabric of our operations, aligning seamlessly with our overarching objective of building a future-fit enterprise. To ensure responsible growth, we evaluate every new business decision and opportunity through the lens of sustainability. By incorporating this perspective into our decision-making process, we not only drive the success of our business but also make a meaningful and lasting impact on the broader ecological and social landscape. As we strive to become a diversified global mineral resource company our path is guided by the principles of sustainability of enriching lives and contributing to a greener future through responsible mining.

To advance our ambitions of responsible growth we have implemented a comprehensive sustainability strategy guided by key initiatives and have also made commitments aligned with this strategy. We transparently report on our impact through our sustainability reports and have taken proactive steps based on the insights gathered from these reports. This year, we have released our third sustainability report. The report provides in-depth insight into how EMIL is promoting sustainability both within and beyond our operations.

To embrace sustainability in its essence we are focusing on transforming our process as well as our outcome efficiencies. By expanding our outcome efficiencies and strategically harnessing resources for a greener future we are enabling the nation to transition to a net-zero economy. Operational efficiencies will focus on minimizing our impact on the environment promoting the socio-economic development of the communities and the people we employ prioritizing health and safety for everyone involved.

Our environmental initiatives are diverse promoting a **judicious and conscious utilization of resources**. In our pursuit of net-zero commitments, we have expanded the scope of our greenhouse gas accounting to include the monitoring of Scope-3 emissions, conducted site-specific inspections to assess climate risks, and adopted Science-Based Target initiatives (SBTi). We are also harnessing the power of wind and solar energy and leveraging energy-efficient technologies.

To preserve essential natural resources, we have undertaken initiatives such as topsoil management and biodiversity protection. In our commitment to promote a circular economy, we are going the extra mile by extracting value (Vanadium) from waste sludge of Aluminium Industry, we are endeavouring to ensure that ensuring resources are efficiently and sustainably utilized throughout our operations.

Beyond environmental stewardship, we are strategically advancing initiatives to foster community development and the comprehensive well-being of our workforce. The subsequent sections of this report delve into our commitment to generating shared value for all stakeholders while aligning with our core purpose of creating value and positively impacting lives.

Through our strategic ESG framework and inspired by the tangible progress made so far, we aim to continue working toward achieving our short-term, medium-term, and long-term ESG goals. We are cognizant of the vital role that the mining industry is poised to play in turning India's sustainability aspirations into actions. To emerge as a crucial contributor in this journey we are committed to further our initiatives through strategic collaborations and investments.

## Ashishkumar Desai

# Stakeholder Engagement and Materiality Assessment

Our stakeholders serve as a valuable resource for gauging the business impact. With critical role in the holistic strategy of EMIL, we ensure that the Company's objectives and strategies are in sync with their requirements. The goal is to ultimately deliver comprehensive and inclusive value to them. Our continuous, transparent and open communication with stakeholders enables us to understand their concerns, and cultivate deeper trust-based relationships by addressing their concerns. The stakeholder engagement mechanism allows us a business to gather insights to enhance our business and ESG performance.

**Stakeholder feedback is instrumental in driving innovation and the creation of new products and portfolios to expand our market presence, maintaining accountability and proactively identifying and mitigating both existing and emerging risks.**



# OUR KEY STAKEHOLDERS



# Memberships and Association

EMIL actively engages in various business associations, such as the Confederation of Indian Industries (CII), the Federation of Indian Chambers of Commerce & Industry (FICCI), and the Federation of Indian Pellet Manufacturers Association of India. In these forums, EMIL plays a proactive role in advocating for measures aimed at fostering holistic and sustainable growth within the industry.

By actively participating in these associations, EMIL contributes to the formulation and promotion of policies that support the overall development of the industry. This involvement reflects EMIL's commitment to the broader goals of economic progress, responsible business practices, and environmental sustainability.



Confederation of Indian Industry



Federation of Indian Mineral Industries



pellet manufacturers association of india

# STAKEHOLDER ENGAGEMENT MATRIX

Category	Engagement Frequency	Key Focus Areas	Mode of Engagement
Investors and Shareholders	Monthly/Quarterly/ Half-yearly/Annually	<ul style="list-style-type: none"> <li>Financial Performance</li> <li>Responsible Investments</li> <li>Ethical Business Conduct</li> <li>Long-term Business Growth</li> <li>Risk Management</li> <li>Corporate Governance</li> <li>Brand Management</li> </ul>	<ul style="list-style-type: none"> <li>Board Meetings</li> <li>Shareholder meetings</li> <li>Investor calls and presentations</li> <li>Conferences</li> <li>One-on-one meetings</li> <li>Annual Reports</li> <li>Press releases</li> <li>Company website</li> </ul>
Government and Regulators	Quarterly/Annually/ Half-yearly, need based	<ul style="list-style-type: none"> <li>Regulatory compliance</li> <li>Participation in Public Policy</li> <li>Corporate Governance disclosures</li> </ul>	<ul style="list-style-type: none"> <li>Legal filings</li> <li>Industry representation forums</li> <li>One-on-one meetings</li> </ul>
Employees	Weekly/Monthly/Quarterly	<ul style="list-style-type: none"> <li>Health and safety</li> <li>Training &amp; learning</li> <li>Career progression</li> <li>Growth opportunities</li> <li>Recognition</li> <li>Job security</li> <li>Fair remuneration</li> <li>Diverse, inclusive and enabling work culture</li> <li>Work-life balance</li> <li>Business updates</li> </ul>	<ul style="list-style-type: none"> <li>MD Connect</li> <li>Online surveys</li> <li>HR for You</li> <li>Comex</li> <li>Value Forum</li> <li>"My Essel" (Newsletter)</li> <li>"PITSTOP" (e-Platform)</li> <li>Policies</li> <li>Training and Development</li> <li>One-to-one connect through periodic leadership visits</li> </ul>
Suppliers and Partners	Monthly/quarterly/ annually/need basis	<ul style="list-style-type: none"> <li>Product quality and safety</li> <li>Data privacy and security</li> <li>Value added services</li> <li>Customer services</li> <li>Supply chain management</li> </ul>	<ul style="list-style-type: none"> <li>Supplier performance evaluation</li> <li>Supplier engagement forum</li> <li>Procurement meetings</li> </ul>
Customers	Monthly/half yearly/ annually	<ul style="list-style-type: none"> <li>Product quality and safety</li> <li>Data privacy and security</li> <li>Value added services</li> <li>Customer services</li> <li>Supply chain management</li> </ul>	<ul style="list-style-type: none"> <li>Surveys</li> <li>Web portals</li> <li>Performance review meetings</li> <li>Customer meetings and audits</li> </ul>

Category	Engagement Frequency	Key Focus Areas	Mode of Engagement
Industry Associations and NGOs	Need based/quarterly/ annually	<ul style="list-style-type: none"> <li>Partnership for CSR project implementation</li> <li>Policy advocacy discussion</li> </ul>	<ul style="list-style-type: none"> <li>Management Committees</li> <li>Seminars</li> <li>Representations</li> <li>CSR implementation</li> </ul>
Community	Continuous/need basis/ annually	<ul style="list-style-type: none"> <li>Community development needs</li> <li>Operate as a responsible company</li> <li>Meet community expectations and needs</li> </ul>	<ul style="list-style-type: none"> <li>CSR projects</li> <li>Grievance mechanisms</li> </ul>



# Aligning Strategic Priorities through Materiality Assessment

Our primary objective for long-term success is to identify and prioritize the Environmental, Social, and Governance (ESG) issues that hold the most relevance for both our business and our stakeholders. We aim to gain a more comprehensive understanding of the impact our business operations have on society and the environment. Through a thorough ESG materiality assessment we have been able to discern these key aspects and gain better insight into our stakeholders' expectations.

In the previous fiscal year, we conducted a comprehensive materiality assessment following the Global Reporting Initiative (GRI) framework. This assessment was designed to pinpoint and prioritize ESG issues that hold the utmost significance for our Company and our stakeholders in the short, medium, and long term. We carefully identified our primary internal and external stakeholders through discussions with our Board and the management team considering their relevance to our business and our ESG commitments, all aligning with industry best practices and global standards. Our consultations with these stakeholders enabled us to identify and create a matrix of material issues

that are most pertinent to our business and the pursuit of a sustainable future.

In FY 2022-23, we conducted a review of our previously identified material topics. Our previous materiality was an extensive exercise wherein all stakeholders, both internal and external were involved. This year, as a refresher we carried out a review by conducting a detailed peer benchmarking and an overview from some of the key internal stakeholders. The purpose of the exercise was to understand any changes in the material topics with respect to changing business scenarios. However no significant changes were notices to the already existing focus areas.

By consistently monitoring and assessing these material topics we aim to remain responsive to evolving stakeholder expectations and emerging sustainability trends. Our steadfast commitment to integrating ESG considerations into our business strategy not only contributes to a sustainable future but also fosters positive relationships with our stakeholders.

## ESG



### Environment

- Emissions and energy reduction
- Water stress
- Waste and effluent management
- Responsible mining
- Biodiversity

### Social

- Employee, contractor and supplier safety
- Talent attraction and development
- Diversity, Equality and Inclusion
- Strengthening communities



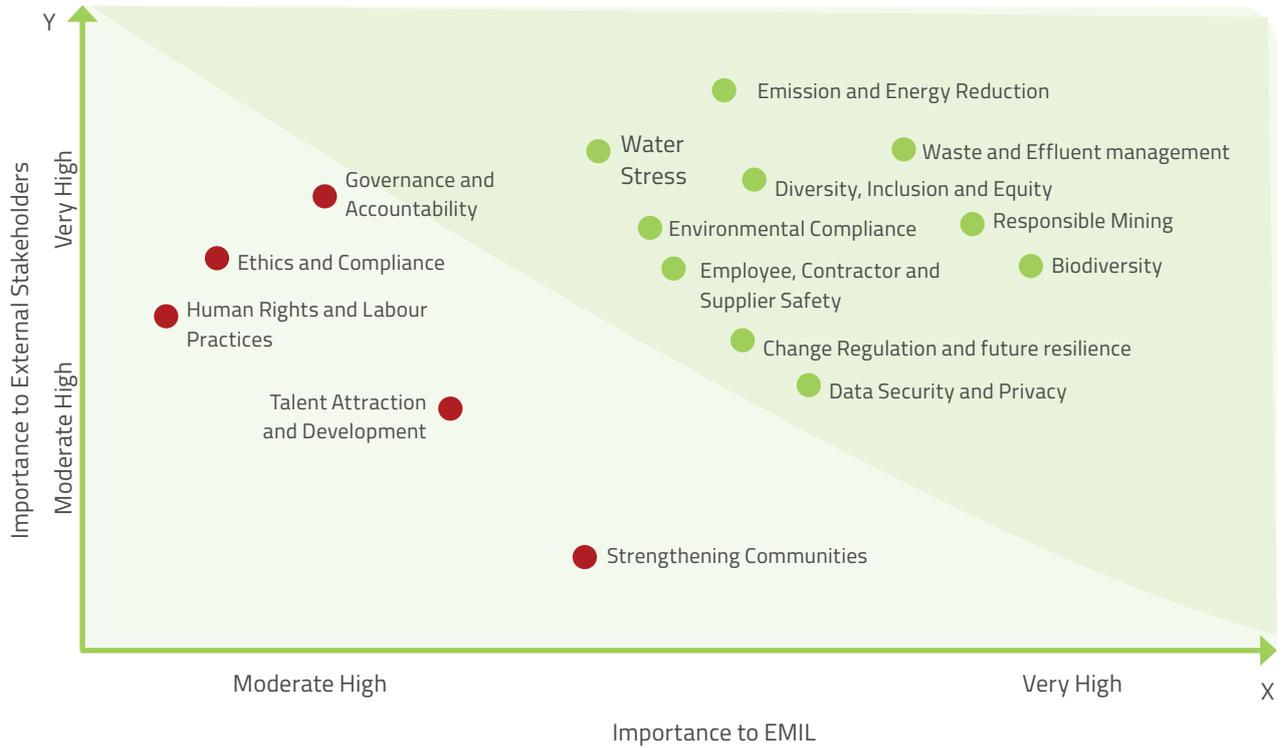
### Governance

- Changing regulation and future resilience
- Data security and privacy
- Governance and accountability
- Ethics and compliance
- Environmental compliance



# MATERIALITY MATRIX

While the materiality matrix includes topics rated Moderate High to Very High on relevance, the materiality of identified issues may change given any variations in business imperatives, market trends, regulatory environment or unforeseen disruptions. We will periodically review the current materiality matrix to ensure it stays relevant to current realities.



- EMIL perceives as moderate importance in terms of risk
- EMIL perceives as High importance in terms of risk

# Fulfilling Sustainability Goals through our ESG Strategy

**EMIL is committed to evolving into a globally diversified mineral resource company by embracing sustainable business practices that prioritize value creation for stakeholders.**

Our ESG strategy is firmly rooted in the principles of sustainability upheld by the Aditya Birla Group. It serves as a clear roadmap for our transformation into an eco-conscious mining company. We have identified 18 critical areas of focus to address our most important concerns, each with specific short, medium, and long-term objectives. The execution of this strategy will rely on two foundational pillars: technology and people, within three main areas of emphasis being, Environment, Social, and Governance. These elements will drive the digitization of our operations and strengthen relationships with stakeholders, fostering shared values. The implementation of this strategy will be carried out by the management team and will be overseen by the Board of Directors to ensure progress is achieved.



**Digital Technology**

- Deriving business value by moving towards digital technology

**People**

- Frequent engagement with stakeholders
- Building strong relationships and sharing values



**Environment**

- Decarbonisation/Net-zero
- Climate change adaptation strategy
- Biodiversity management
- Water positive
- Circularity (including Tailings Management)

**Social**

- Occupational health and safety
- Human rights
- Diversity, Equity and Inclusion
- Talent Management
- Empowering communities
- Responsible Product Services

**Governance**

- Transparency and reporting
- Strategic stakeholder engagement
- IT enabled MIS & assurance system
- Risk management
- Roles & responsibilities
- Mineral Resource Governance
- Mine Closure

● Enablers

● ESG Pillars

# ESG Strategy

EMIL's Focus Areas	Short Term Targets (1-2 years)	Medium term/ long term targets (3-4 yrs)	Long term (4+ years)
<b>Energy &amp; Emission Management</b>	<ul style="list-style-type: none"> <li>Develop an action plan for energy efficiency</li> <li>Transition to renewables</li> </ul>	<ul style="list-style-type: none"> <li>Obtain ISO 50001 certification, ISO 14001 certification, ISO 9001 quality assurance</li> <li>Identify alternate sources of energy</li> <li>Replace existing equipment with energy efficient equipment</li> </ul>	Adopt a phased approach to achieve net-zero emissions across operations
	<ul style="list-style-type: none"> <li>GHG Inventorization of Scope 1,2 and 3</li> <li>Alignment with SBTi</li> </ul>	<ul style="list-style-type: none"> <li>Commit to SBTi once the Oil and Gas sector standards are released</li> <li>Create an automated energy management system and a dashboard to track the performances</li> <li>Disclose on other emissions (Nox, Sox, PM)</li> </ul>	
<b>Climate Change Adaptation Strategy</b>	<ul style="list-style-type: none"> <li>Carry out site-specific inspections to understand climate change risk</li> <li>Integrate vulnerability assessment tool in the climate strategy</li> </ul>	Integrate climate risk into risk management framework as per the TCFD recommendations and understand financial implications	Implementation of action plans as per the climate related risk assessment outcomes (as per international frameworks)
<b>Biodiversity Management</b>	<ul style="list-style-type: none"> <li>Biodiversity policy Pilot of Miyawaki plantation</li> </ul>	Initial biodiversity assessment of all the new sites/upcoming operations and periodical updation and implementation of the action plans	Biodiversity impact assessment focusing on No Net Loss
<b>Water Resilience</b>	<ul style="list-style-type: none"> <li>Carry out water audits internally/externally to evaluate opportunities for water reduction/recycling</li> </ul>	Use WRI and WRF risk filters to evaluate water related risks	Aim towards implementation of ZLD in all the operational sites and achieve a water-positive status over time
<b>Circularity (including tailing management)</b>	<ul style="list-style-type: none"> <li>Identify amounts of waste directed to the landfill and evaluate opportunities for diverting the waste from landfill (recycling/reuse etc.)</li> </ul>	<ul style="list-style-type: none"> <li>Adherence to global standards such as Global Industry Standards for Tailing Management</li> <li>Set targets to minimize waste</li> </ul>	Focus towards waste minimization and zero waste to landfill

EMIL's Focus Areas	Short Term Targets (1-2 years)	Medium term/ long term targets (3-4 yrs)	Long term (4+ years)
<b>Occupational Health and Safety</b>	<ul style="list-style-type: none"> <li>Develop a comprehensive safety management system consisting of SI, IM, CSM, PSM and High Risk Activities in lines with ISO 45001</li> <li>Achieve ISO 45001 certifications</li> <li>Conduct health and safety trainings for 100% of permanent and contractual employees</li> <li>Development of stringent SOPs for health and Safety across all sites</li> <li>Focus on behavioral based safety initiatives for employees</li> </ul>	<ul style="list-style-type: none"> <li>Development of an app based system to record injuries on real time basis</li> <li>Focus on improvements related to behavioral based safety initiatives</li> </ul>	<ul style="list-style-type: none"> <li>Achieve zero cases of injuries in the workforce</li> <li>Aim for zero fatalities</li> </ul>
<b>Human Rights</b>	<ul style="list-style-type: none"> <li>Develop a human rights policy aligned with global standards</li> <li>Develop a framework for HR Due Diligence and Conduct (HRDD)</li> <li>Provide trainings/ refresher to relevant workforce on human rights</li> </ul>	Conduct a human rights assessment across all sites to assess the understanding of human rights protection amongst the employees and workers	Conduct HRDD across 100% sites to ensure no human rights violation occurs on the premises
<b>Diversity, Equity and Inclusion</b>	<ul style="list-style-type: none"> <li>Develop a diversity policy</li> <li>Focus on diversity based hiring</li> <li>Create an action plan to build an inclusive workforce</li> </ul>	<ul style="list-style-type: none"> <li>Disclose the gender pay ratio in public reporting</li> <li>Execution and implementation of the action plan to build an inclusive workforce</li> </ul>	Aim to attain a higher percentage of overall diversity
<b>Talent Management</b>	<ul style="list-style-type: none"> <li>Carry out talent attraction and retention initiatives</li> </ul>	Conduct employee satisfaction surveys to ensure employee satisfaction and continuous improvement in talent management and engagement initiatives	Achieve best place to work certification

EMIL's Focus Areas	Short Term Targets (1-2 years)	Medium term/ long term targets (3-4 yrs)	Long term (4+ years)
<b>Empowering Communities</b>	<ul style="list-style-type: none"> <li>Continue engaging and upskilling the local communities through CSR programs</li> <li>Set a target to hire workforce from the local communities</li> </ul>	<ul style="list-style-type: none"> <li>Implement employee volunteering schemes</li> <li>Conduct strategic CSR activity with a thematic intervention approach</li> </ul>	Review of need/impact assessment for the CSR programs
<b>Responsible Product Services</b>	<ul style="list-style-type: none"> <li>Develop a Responsible Mining Policy</li> </ul>	<ul style="list-style-type: none"> <li>Engage a digital monitoring system to assess project's end to end life and minimize negative impact, improve efficiency and implement optimal solutions wherever possible</li> </ul>	Ensure no harm throughout the lifecycle of the product
<b>Transparency and Reporting</b>	<ul style="list-style-type: none"> <li>Report the company's ESG performance as per the GRI standards</li> <li>Conduct a gap assessment as per the BRSR requirements</li> </ul>	<ul style="list-style-type: none"> <li>Align KPIs with International council on minings and metals, SASB</li> <li>Participate in CDP</li> <li>Develop systems in line with the requirements of BRSR</li> <li>Participate in DJSI ratings</li> </ul>	
<b>Strategic Stakeholder Engagement</b>	<ul style="list-style-type: none"> <li>Develop a stakeholder engagement plan with defined frequency of communication</li> <li>Conduct a stakeholder engagement survey and disclose the same</li> <li>Review the grievance redressal mechanisms for different stakeholders</li> <li>Review the relevant requirements of ABG Guidance Note 74 for supplier management</li> </ul>	<ul style="list-style-type: none"> <li>Need based assessments for stakeholders engagements</li> <li>Implementation of ABG GN 74 in the context of EMIL</li> </ul>	<b>Stakeholder engagement surveys and scores</b>

EMIL's Focus Areas	Short Term Targets (1-2 years)	Medium term/ long term targets (3-4 yrs)	Long term (4+ years)
<b>IT enabled MIS &amp; Assurance System</b>	<ul style="list-style-type: none"> <li>Automate the data collection process</li> <li>Strengthen internal audit systems</li> <li>Revisit the data privacy policy</li> <li>Identify software and systems for climate related risks and monitoring of ESG KPIs creation of a real time dashboard to track performance</li> </ul>	Conduct regular risk assessments and due diligence for IT systems	Regular and periodic IT audits
<b>Risk Management</b>	<ul style="list-style-type: none"> <li>Include climate related risks in the responsibility of the Risk Management Committee</li> <li>Identify climate related risks</li> </ul>	<ul style="list-style-type: none"> <li>Integrate climate risk in the enterprise risk registers</li> <li>Integrate TCFD recommendations in risk management systems</li> <li>Revisit the Risk management framework</li> </ul>	Develop an integrated governance and oversight process for risk management
<b>Roles &amp; Responsibilities</b>	<ul style="list-style-type: none"> <li>Link KMP KPIs with ESG parameters in the financial review</li> <li>Identify ESG criteria to be included as a part of KPIs in performance reviews</li> </ul>	<ul style="list-style-type: none"> <li>ESG to be embedded across committees with defined roles and responsibilities</li> <li>Board meeting agenda should also include discussions on climate change adaptation and mitigation measures</li> </ul>	Periodically revisit the roles and responsibilities as per the changing scenarios
<b>Mine Closure &amp; Mineral Resource Governance</b>	<ul style="list-style-type: none"> <li>Define responsible mining KPIs which can include-</li> <li>Ensure responsible extraction</li> <li>Publish mine closure playbooks</li> <li>Include mine closure considerations in overall operational plan of new mines</li> <li>Adherence to regulations</li> </ul>	<ul style="list-style-type: none"> <li>Adherence to global standard's guidance for responsible supply chain of minerals and conflict affected and high risk areas</li> <li>Follow ICMM integrated mine closure good practice guide</li> </ul>	Adhering to the Indian regulatory requirements and disclosure as per the global standards

# Driving ESG Excellence through Strategic Digitalization

The rapid digitalization of our mining processes is propelling our journey towards sustainability, enhancing the well-being of our employees, vendors, and customers, fortifying our operational robustness, and diminishing our impact on the environment. By seamlessly integrating innovative technologies, we are not only optimizing efficiency but

also fostering a culture of continuous improvement in our commitment to our ESG goal. This strategic approach not only strengthens our core values but also positions us at the forefront of responsible and forward-thinking resource management.

## Solution

## Impact



### Plant Maintenance

The primary maintenance procedures at IoBP and Nobel Ferro Alloy (NFA) are executed through Systems Application and Products software (SAP). This system enables the real-time monitoring and management of maintenance tasks significantly enhancing the safety and well-being of plant machinery. Maintenance orders' status and estimated costs for each task can be accessed online eliminating the need for physical visits leading to increased operational efficiency, reduced transportation expenses and a decreased carbon footprint.



### E-Waybill & E-Invoice Automation

E-invoicing has been implemented at the IoBP and NFA units since October 2020, at the Bhubaneswari Coal Mines Ltd (BCML), and Rajmahal Coal Mines Ltd (RCML) units since January 2021, and at the IOBP since April 2021. This system is seamlessly integrated with the SAP Weighbridge. The automation of the e-waybill generation process represents a digital innovation that not only reduces operational risks and turnaround time but also minimizes paper consumption while ensuring compliance.



### Auto GRN for Incoming Raw Material

The automation of the Goods Received Note (GRN) process which records the receipt of goods by buyers, has eliminated the need for manual interventions and significantly reduced data entry errors. Previously, this process involved manual steps such as security check-ins, weighing truckloads, gate entries, and recording information in the SAP platform. Now, security checks are conducted through QR codes. After recording cargo weight in SAP, the GRN for incoming raw materials is automatically generated streamlining the process enhancing transparency and improving efficiency.

**Solution**

**Impact**



**CO-PA (Costing & Profitability Analysis)**

CO-PA offers actionable insights to support pricing decisions and evaluates performance relative to competitors for sales, marketing, product management and corporate planning departments. This tool provides a detailed view of Cost of Goods Sold (COGS) at a granular level comparing standard and actual prices. It equips leadership with comprehensive cost and profitability insights at the product, unit, and group levels, ensuring fair pricing for customers.



**Asset QR Code based Transaction**

QR-based coding system is in place to enhance the tracking and control of movable assets simplifying the physical verification process. Any changes in the asset master module in SAP are updated in real-time to prevent information gaps. This has significantly improved the efficiency and transparency of the asset security process.



**SAP Migration to (Amazon Web Services) AWS Cloud**

When the hardware supporting our SAP platform reached the end of its life cycle, we made the strategic decision to migrate to the Amazon Web Services (AWS) Cloud to take advantage of new functionalities. The migration, including the lift and shift process was executed smoothly with minimal downtime. Additionally, we leveraged on-demand services from SAP Developer (SAP DEV) and User Acceptance Testing (UAT) for SAP Enhancement Package (EHP) upgrade and UAT refresh which helped save costs associated with individual servers and energy consumption.

# Ensuring ESG Compliance

## MESSAGE FROM DESK OF HEAD LEGAL



**“At Essel Mining, we aim to uphold the highest standards of ethics in our business conduct. In line with our commitment, we are dedicated to staying up-to-date and compliant with the dynamic landscape of ESG regulations.”**

As sustainable development and climate change have got significant importance globally, the ESG regulatory landscape is also rapidly evolving. Economies and governments around the world are formulating and implementing regulations that compel businesses to transparently report their comprehensive environmental and societal impact while taking concrete measures to address these issues.

In India, the introduction of the Business Responsibility and Sustainability Report (BRSR) represents a significant step in this direction. At Essel Mining, we aim to uphold the highest standards of ethics in our business conduct. In line with our commitment, we are dedicated to staying up-to-date and compliant with the dynamic landscape of ESG regulations. Furthermore, we have implemented new policies and processes aimed at guiding our organization to operate in an environmentally conscious and socially responsible manner. This is evident from our Group Purpose Statement i.e., **‘To enrich lives, by building dynamic and responsible businesses and institutions, that inspire trust’**. When reporting on our ESG performance we strive to align with globally recognized standards such as the Global Reporting Initiative (GRI) and the UN Sustainable Development Goals (UNSDG) among others.

The mining industry in general has to abide by a plethora of legal and statutory requirements, in terms of the state and national permits that our operations attract. To ensure our complete compliance with these legal and statutory obligations we have established a structured system in place that proactively alerts the relevant departments within our Company, ensuring timely adherence to these standards. In addition to this, we conduct training and awareness programs to keep our people abreast of any new legal updates.

This dedication has translated into our **achievement of compliance and zero legal and statutory infractions demonstrating our unwavering commitment to responsible and ethical conduct.**

**Anju Desai**

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# Prioritizing Safety, Well-being, and Environmental Responsibility: Executive Insights

## MESSAGE FROM THE DESK OF HEAD MINING SERVICES



**“At Essel Mining and its operating subsidiaries, our aspiration is for our mines to mirror our Environmental, Social, and Governance (ESG) philosophies. In this endeavor, we have implemented various responsible initiatives across our mines, aimed at minimizing the environmental and social impact of our mining operations”**

Among the various environmental and social initiatives implemented, ensuring the safety of our workers is a top priority for us. We take immense pride in our commitment to cultivating a culture of well-being and security. Our safety initiatives are a key testament to our dedication to our workers and employees. To underscore our commitment to safety, we invest in skilled supervisors sponsoring their training at our cost complementing the efforts of third-party supervisors.

Our commitment to employee and worker safety also extends to ensuring financial security. In line with this, we ensure fair and timely payment of wages and promptly address issues related to wages and other monetary benefits. To ensure a brighter future, we also invest in various employee engagement and development initiatives. The training and learning opportunities provided by EMIL have significantly enhanced and honed the skill development of our employees.

In line with our dedication to environmental responsibility, we have implemented strategic measures across our operations. At one of our coal mine, we have transitioned to in-pit conveyor of 4.3 KM in lieu of trucks, reducing traffic congestion internally and positively impacting the environment by reducing GHG emissions. Further we have eliminated the use of smaller trucks in coal transportation thus making our mines safer and environment friendly.

However, we recognize that open-cast mining has potential to affects both land and air. As a part of our sustainable approach, the successful reclamation of land is equally important for us. We have fully reclaimed about 146 Ha. of land in one of our projects. We prioritize the use of high capacity water sprinklers to control dust.

We acknowledge the challenges posed by stringent laws and regulations but remain resolute in our commitment to upholding the highest standards of safety, environmental responsibility and workforce well-being. Our dedication to these principles is not just a responsibility; it reflects our ethos and a commitment to shaping a future that is not only successful but also sustainable.

**Rajinder Malhotra**

## MESSAGE FROM THE DESK OF HEAD COMMERCIAL COAL & MINING SERVICES



**“Health, Safety and Environment are the paramount focus area at EMIL. We exercise due diligence to ensure that our operations are conducted safely, thereby promoting a healthy environment and secure working and living conditions for our people and communities.”**

As a responsible Company, we are deeply committed to safeguarding the interests of our stakeholders, with a primary focus on the well-being of our valued employees and workers. We are aware of the inherent risks associated with mining activities and are committed to our efforts to proactively mitigate and prevent potential hazards. Safety is a paramount focus area at EMIL. We exercise due diligence to ensure that our operations are conducted safely, thereby promoting a healthy environment and secure working and living conditions for our people and communities. In line with our commitment and guided by the policy framework of the Aditya Birla Group, we have deployed the Quality Health, Safety, and Environment (QHSE) management system. The robust system adheres to the requirements of globally acclaimed quality and environment management standards - ISO 9001:2015, ISO 14001:2015, and ISO 45001:2018.

To cultivate a ‘zero-harm’ work culture’ we take a proactive stance to avoid any safety-related risks. This includes conducting training and awareness programs, thorough risks of the jobs, and working on a permit basis. Additionally, we are incorporating infrastructural modifications to enhance safety such as separate mining lanes for incoming and outgoing traffic and the installation of safety features like bumps on mine benches. These deliberate changes are designed to minimize risks and create a secure working environment. At the forefront of our safety initiatives are dedicated safety officers leading safety teams at each site. Moreover, our personnel are equipped with appropriate personal protective equipment (PPE) tailored to the specific nature of their tasks reinforcing our commitment to safeguarding their well-being.

In our efforts to ensure environmental safety, we are taking proactive measures to monitor and minimize the adverse impact of our operations on land, water, air, and biodiversity. Our recent initiative of commissioning a zero liquid discharge mechanism across our operations stands as a testimony to our strategic and responsible operational practices. To uphold our pledge to minimize environmental impact we have strategically placed settling tanks across our sites. These tanks prevent the dissemination of Insoluble particles into natural water sources.

Recognizing our role in contributing to air pollution through dust dispersion resulting from our activities, we are proactively addressing this challenge to elevate air quality standards. A pivotal step in this direction involves the deployment of water tankers and a state-of-the-art pump pipeline nozzle system. This strategic combination serves as a highly effective measure significantly mitigating dust dispersion and consequently improving overall air quality substantially. Through these concerted efforts we aspire to set industry benchmarks and contribute positively to the preservation of our planet.

**Umesh Mahato**

## MESSAGE FROM THE DESK OF UNIT HEAD IRON ORE BENEFICIATION & PELLETIZATION



**“We at Essel Mining abide by the ABG core values and direct our focus towards making our work environment sustainable and environmentally friendly. We have undertaken numerous initiatives that highlight our commitment towards sustainable workspaces.”**

As a mining company resource optimization remains one of our biggest key areas and in the recent years we have upgraded from using low grade ore to high grade ore whose heat value is high hence less emissions are emitted. We have installed state of art burners and use advance technologies to reduce our CO2 emissions. As an organization, we understand the importance of Scope 3 emissions and hence to reduce the same, one of the key initiatives undertaken by us is that we now make maximum use of railways as a means of transportation of final products rather than opting for road transport. We are also exploring the availability of LNG near our plant location to migrate on clean fossil fuel for our operations.

Water at our plant is being harvested to its full potential and no water has been discharged outside the premises. A concrete drain has been constructed at appropriate places within the plant to maintain zero liquid discharge and there is a continuous monitoring for the same. As a conservation measure, we are also migrating from using groundwater to surface water source. This demonstrates that our commitment is rooted to its deepest level.

One of the biggest focus areas for a mining and mineral processing company is dust emissions. To control the same we have installed bag filters into our process, we have deployed water sprinkling systems and constructed concrete roads to control fugitive emissions in the premise. We are focused on process improvement through digitization and implementing of Artificial Intelligence & digital furnace analytics systems.

Our workforce is a critical element of our business and realizing the same, we at our plant level have undertaken several initiatives to imbibe safety culture. Safety committees have been constituted unit wise to make sure that all the workforce knows how, when and what to report in case of any incident. Inspire leadership training program implementation is one of the latest additions to it.

We aim at continuous improvement in our processes that help us perform better and continue to create value for the company and the communities.

**Pavan Kumar Kakani**

## MESSAGE FROM THE DESK OF UNIT HEAD NOBLE FERRO ALLOYS



**“As a responsible manufacturing business, it is important for us to embed sustainable practices across our operations. Not only is it a moral obligation in a world of conscious stakeholders but it is also crucial for our long-term viability in the manufacturing business.”**

At Essel Mining, we are committed to improving our processes to align with sustainability goals as a fundamental to begin with.

Our efforts to control emissions have yielded positive results, with our current emission levels much below the prescribed threshold. This not only showcases our commitment to environmental responsibility but also positions us as a benchmark for others in the industry. We are proactively working towards aligning our processes with even more stringent norms set by the pollution board highlighting our commitment to being at the forefront of sustainability.

To enhance our energy efficiency, we have installed new energy efficient boiler by use of high temperature condensate to utilize the sensible heat of water for production of steam. This is in addition to initiatives to reduce natural gas usage through maintenance practices and equipment health management.

By leveraging state of art technologies, we have successfully implemented measures to capture and recover dust generated during the production of alumino thermic process. This is enabling us to contribute towards cleaner environment and also creating economic value in the process.

Water conservation is another critical area of focus for our sustainability goals. The establishment of a Sewage Treatment Plant (STP) marks a milestone in our water conservation efforts. We are now recovering domestic water, recycling it for use in sewage and flush water.

Looking ahead, we plan to commission Multi-Effect Evaporator (MEE) to recover & recycle water. This in-house facility is a strategic move toward further reducing our environmental footprint. As we move forward, we will continue to prioritize water efficiency and align with the Aditya Birla Group's sustainability commitments.

**Parvesh Garg**

# Towards a Greener Future

In a time marked by a greater emphasis on environmental responsibility, our Company fully recognizes the significant role of Environmental Stewardship. The worldwide concern regarding the environmental impact of business activities and the increasing instances of climate-related disruptions have become priorities for investors, customers, employees, communities, and numerous other stakeholders. Embracing sustainable mining practices is a substantial step toward curbing and addressing the carbon footprint generated by our operations. This commitment involves implementing

measures to reduce water and energy usage, minimize land disruption, and waste production. It also entails preventing soil, water, and air pollution, and executing effective mine closures and reclamation activities, all of which underscore our dedication to environmental management.

Our approach to environmental management is guided by the policies, guidance notes and technical standards of the Aditya Birla Group Sustainable Business Framework Document.

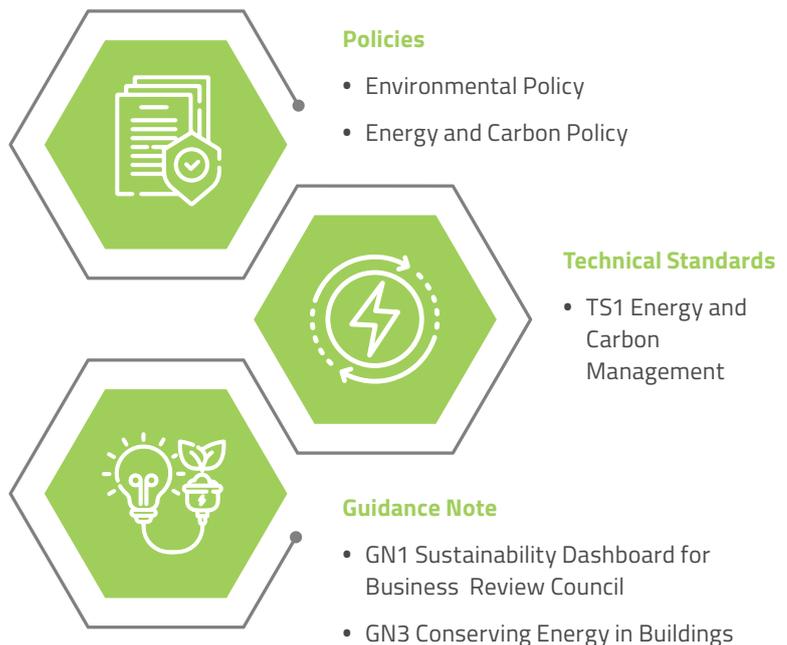
## UN SDGs supported



## ENERGY MANAGEMENT

Energy stands as the essential resource that sustains the seamless operation of our essential processes. We understand its importance for the continuity of our operation, and thus, we underline our efforts towards energy management with the policies, technical standards and guidance notes of the ABG Group's Sustainable Business Management Document.

To effectively manage this invaluable resource, we employ various strategies. These include redesigning our mining processes, enhancing ore quality, amplifying our use of renewable energy sources, and minimizing the transportation of waste. We also employ state-of-the-art machinery to decrease the energy



intensity of our products, all aimed at reducing greenhouse gas emissions. The energy to carry out our operations is drawn from a variety of sources such as the grid, coal, PNG, furnace oil, and high-speed diesel.

In our relentless pursuit of efficient energy management, we are set to undertake a series of impactful measures.

This involves-

- Implementation of large-scale integration of renewable energy sources.
- Installation of rooftop solar panels across all our facilities
- Construction of energy-efficient infrastructures.

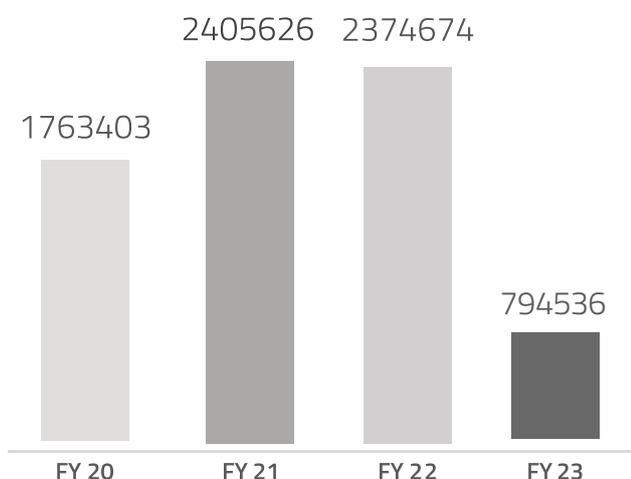
## EMIL ENERGY CONSUMPTION TREND

Energy Source	Unit	FY 20	FY 21	FY 22	FY 23
1. Direct Energy (Fuels)	GJ	1763403	2405626	2374674	<b>794536</b>
2. Indirect Energy (Grid Electricity)	GJ	54361	62047	63661	<b>188897</b>
3. Purchased Electricity (Renewable)	GJ	-	-	2997	-
<b>Total Energy Consumption</b>	<b>GJ</b>	<b>1817765</b>	<b>2467673</b>	<b>2441334</b>	<b>983433</b>
<b>Total Renewable Energy Sold to Grid</b>	<b>GJ</b>	<b>689108</b>	<b>558408</b>	<b>652343</b>	<b>633710</b>

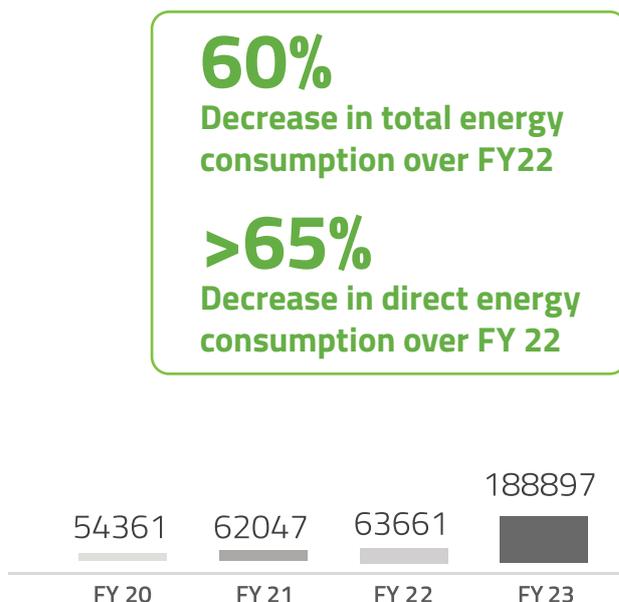
## ENERGY INTENSITY

#	Intensity basis and Unit	FY 20	FY 21	FY 22	FY 23
A	Production basis (GJ/MT)	0.383	0.0527	0.0690	<b>0.0285</b>

Total Energy consumption (GJ) Y-o-Y trend



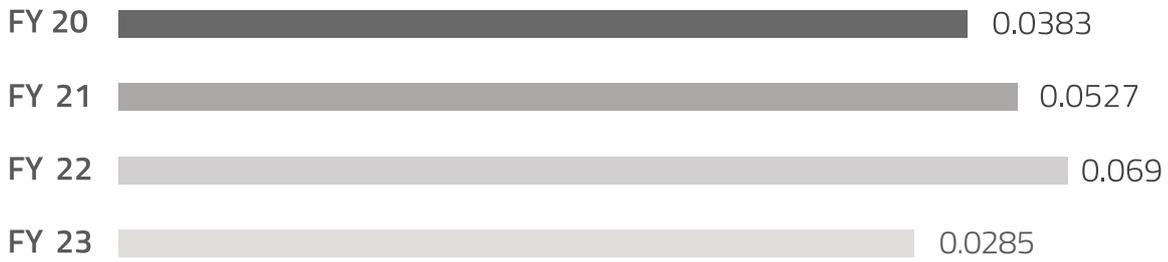
Direct Energy (Fuels)



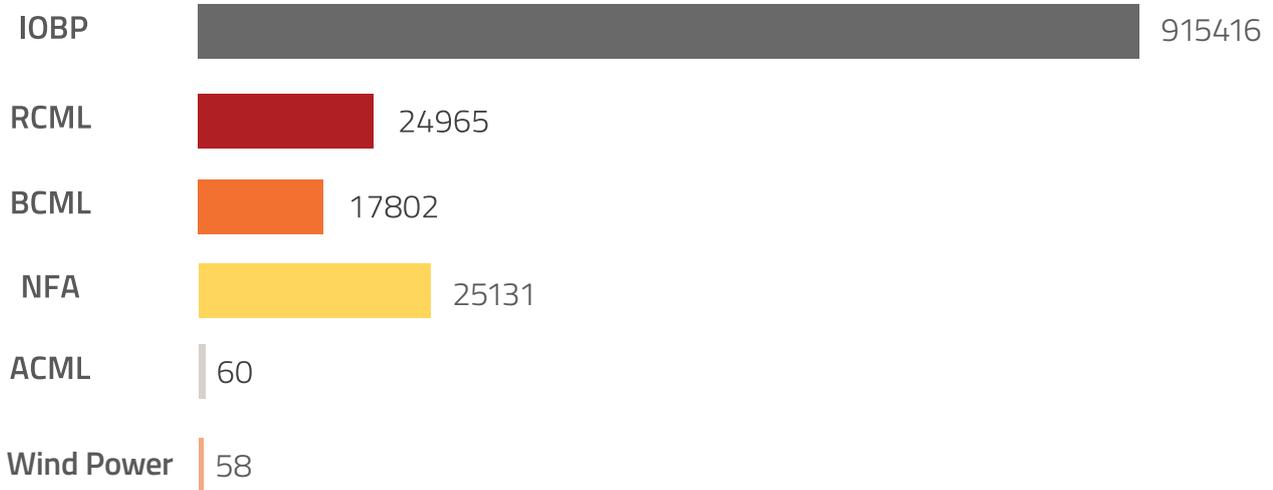
Indirect Energy (Grid Electricity)

The decrease in energy consumption in FY 23 can be attributed to the shift in IoBP's reliance from DG sets to grid electricity.

**Energy Intensity (GJ/MT) (Production basis) Y-o-Y Trend**



**Unit-wise Energy Consumption (GJ) FY 23**



## ENERGY CONSERVATION

We maintain a steadfast commitment to scrutinizing and optimizing our energy consumption through continuous monitoring, the exploration of cutting-edge technologies, and process innovation.

One notable accomplishment is the redesign of the boiler pipelines at our Nobel Ferro Alloy unit resulting in a remarkable 5.11 SCM reduction in natural gas consumption per metric tonne of ferrovandium produced.

Throughout the reporting year, a multitude of energy-saving initiatives have been successfully implemented across our various units including:

- At Rajmahal Coal Mines Ltd (RCML) we replaced sodium vapor lamps with energy-efficient LED lighting yielding substantial energy savings. We have also replaced 70 watt HPSV lights with 40 Watt LED lights.
- At NFA, we achieved impressive energy savings through the rationalization of air compressors and improved boiler efficiencies, guided by precise excess air control.
- At Bhubaneswari Coal Mines Ltd (BCML), the optimization of Max Engine RPM in PC-2000 and 1250 has resulted in substantial energy savings.

## EMISSION MANAGEMENT

Crucial in our roadmap towards achieving a carbon-neutral future is the meticulous attention and control given to stack emissions, the reduction of fugitive emissions and the vigilance in preserving ambient air quality within specified regulatory thresholds.

Recognizing the critical significance of emission management, we steadfastly align our endeavors with the meticulously crafted policies, technical standards, and guidance notes outlined in the ABG Group's Sustainable Business Management Document.

In this fiscal year our focus remains on the comprehensive monitoring of greenhouse gas (GHG) emissions across scopes 1, 2, and 3. Our dedicated business sustainability team diligently reviews monthly data to ensure regulatory compliance. Additionally, independent third-party assessments consistently monitor ambient air quality and stack emissions within our mining and mineral processing operations.

Scope 1 emissions primarily stem from fuel utilization within our facilities, vehicle operations under our management and

other direct emission-generating activities and equipment.

Conversely, Scope 2 emissions arise from indirect sources such as grid electricity consumption.

Our Scope 3 emissions emanate from various activities upstream in our value chain. In the current fiscal year, the designated categories for emission calculations encompass a comprehensive range, spanning purchased goods and services, capital goods, fuel-related activities, transportation and distribution, waste generated in operations, business travel, employee commuting, and upstream leased assets.

We proactively adhere to the standards mandated by both the State Pollution Control Board and the Central Pollution Control Board. Our systems and processes are crafted to align with global benchmarks, ensuring compliance. This dedication reflects our ability to maintain the levels of suspended particulate matter and control emissions of SO<sub>x</sub> and NO<sub>x</sub> within permissible limits reflecting our commitment to environmental responsibility and sustainable practices.

**Guidance Note**

- GN1 Sustainability Dashboard for Business Review Council
- GN2 GHG Accounting
- GN13 Water Stress, Carbon Footprint and Waste Management

**Policies**

- Environmental Policy
- Energy and Carbon Policy

**Technical Standards**

- TS1 Energy and Carbon Management
- TS5 Air Quality Management

## EMIL SCOPE 1, 2, AND 3 EMISSIONS TREND

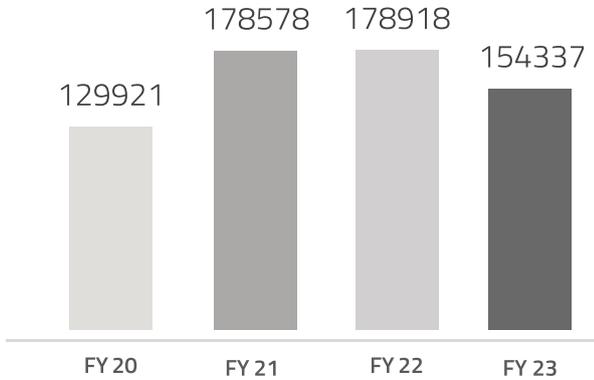
#	Emission Type	Unit	FY 20	FY 21	FY 22	FY 23
1	Scope 1 Emissions	tCO2e	129921	178918	178578	<b>154339</b>
2	Scope 2 Emissions	tCO2e	11929	13558	13911	<b>47814</b>
3	Scope 3 Emissions	tCO2e	-	-	-	<b>71606150</b>

Reporting on Scope 3 emissions initiated from FY 23 and includes categories 1 to 9.

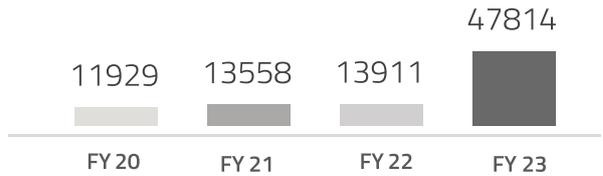
## EMISSION INTENSITY

#	Intensity Basis	Unit	FY 20	FY 21	FY 22	FY 23
1	Production Basis (Scope 1 & 2)	tCO2e/MT	0.00299	0.00411	0.00544	0.00586
2	Production Basis (Scope 1,2 & 3)	tCO2e/MT	-	-	-	2.08435

Scope 1 and Scope 2 emissions (tCO2e) Y-o-Y trend



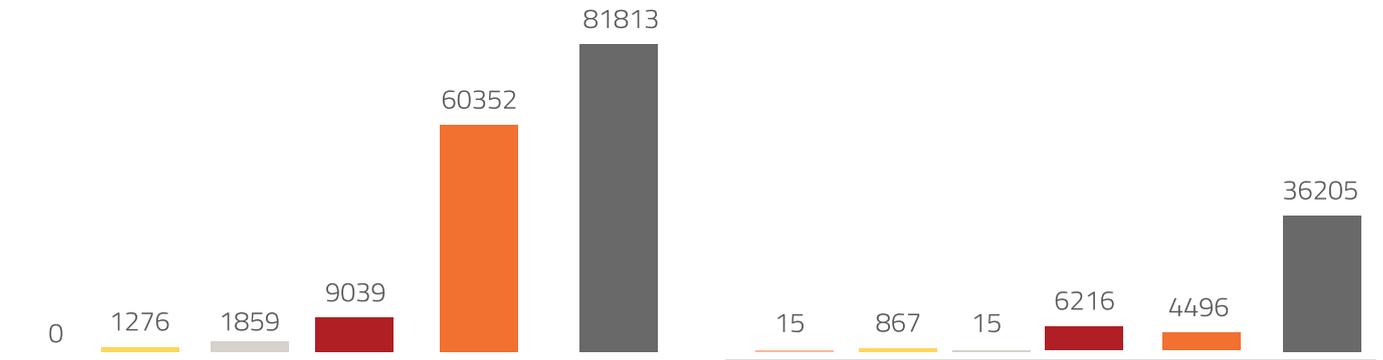
**14%**  
Reduction in Scope 1 emissions over FY 22



Scope 1 Emissions

Scope 2 Emissions

Unit-wise Scope 1 and Scope 2 Emission (tCO2e)



Scope 1 Emissions

Scope 2 Emissions

- BCML
- RCML
- NFA
- IOBP
- ACML
- Wind Power

## SOURCES OF EMISSIONS

In our mining operations, emissions primarily originate from the consumption of high-speed diesel which powers heavy earth-moving machinery, diesel generator sets, and supports tasks like blasting, crushing, and mineral transportation. These functions represent the main contributors to emissions.

In addition, at our IOBP and NFA units, the processing of raw materials into pellets leads to gaseous emissions, while dust pollution is another significant source of air emissions in these respective locations.

# MANAGING EMISSIONS

We have implemented a range of innovative measures to significantly reduce dust and gas emissions in our operations. These include:



Utilizing emulsion explosives during blasting to optimize energy transfer, thereby minimizing emissions.



Equipping drill machines with dust collector systems to capture particulate matter.



Employing multi-row blasts in a staggered pattern to prevent fly rocks and reduce air pollution.



Fitting both crushing and screening units with mist gun sprayer arrangements to suppress dust.



Installing dry fog systems at transfer points to dampen suspended air particles.



Using mist water gun sprayers and mobile water tankers to maintain dust-free working areas, screening, crushing, and stacking zones.



Placing two pressurized water sprinklers on feeder and haul roads to effectively control dust.



Incorporating chemical-based Dust Bloc agents in the sprinkling water to enhance dust particle control.

At RCML, we have adopted wet drilling techniques to further reduce dust emissions during mining activities. Dust suppression systems have been deployed within our crushing and conveying systems and water is applied on haul roads to mitigate ambient dust.

Furthermore, we have implemented robust dust suppression measures, including charging hoods over the hearth surface pits. These hoods create multi-cyclones and a bag filter house, which collectively minimize the release of dust into the environment.

### Dust Control Measures

One of the biggest challenges that we face as a mining company is dust emissions. Our unwavering commitment to environmental compliance is exemplified by our adoption of cutting-edge heavy earth-moving machinery that not only boosts productivity but also enhances fuel efficiency. These advancements ensure our adherence to stringent standards like the US EPA Tier 2 and BS 04 norms, significantly reducing our high-speed diesel (HSD) consumption.



In our continuous quest for reducing air emissions, we've integrated two new surface miners equipped with built-in dust suppression systems, effectively curbing airborne dust generation. Additionally, our fleet of excavators has been fine-tuned with a modified fuel throttle system that aligns with each excavator's load factor, achieving a remarkable 10% reduction in fuel consumption while enhancing dust suppression. To monitor the same, we have installed new bag filters, large water express systems have been deployed and concrete roads have been constructed that have helped reduce dust emissions on the premises.

We have also employed water sprinklers to mitigate ambient air dust levels, and the recent introduction of three mist sprinklers has substantially improved the process. These mist sprinklers disperse water particles as fine as 300 microns, significantly enhancing the binding of dust particles.

### Dust-Free Drive: Revolutionizing Transportation with Conveyor Belts at RCML

In response to the progressive expansion of the active mining area, the lead distance for transportation surged to 6 to 7 kilometers. This led to a corresponding rise in the number of dumpers required to accommodate the increased lead distance, resulting in increase emission load and traffic congestion, dust generation, and safety concerns. The amplified fleet of dumpers not only strained operational efficiency but also posed environmental and safety challenges. The adverse effects of traffic congestion and dust generation prompted the need for an innovative and sustainable solution.



To address these multifaceted challenges in a cost-effective and environmentally friendly manner, the concept of in-pit coal crushing and conveying system was conceived. This solution involved the strategic integration of advanced technology to optimize coal handling processes within the mining site.

The implementation of the in-pit coal crushing and conveying system in proved to be a game-changer. The system not only eliminated the need for extensive transportation over long lead distances but also streamlined the coal-handling process, reducing traffic congestion, dust generation and emissions significantly.

# WATER CONSERVATION

Our water usage is intricately tied to the volumes of minerals we mine and the ongoing operational processes. Our water management framework is derived from the ABG Water Management framework, which is underpinned by policies, technical standards, and guidance notes outlined in the ABG Sustainable Business Management Document.

We are acutely aware of the water footprint associated with our suppliers' services and the water incorporated into the final product.

In response to water related challenges, we have implemented a comprehensive array of measures aimed at managing our water consumption and mitigating the impact of our water use on the surrounding communities and the environment. These efforts reflect our commitment to responsible water management and environmental stewardship.

## Policies

- Environmental Policy
- Water Stewardship Policy



## Guidance Note

- GN4 Water Recycling and Reuse
- GN5 Rainwater Harvesting and Artificial Aquifer Recharge
- GN13 Water Stress, Carbon Footprint and Waste Management

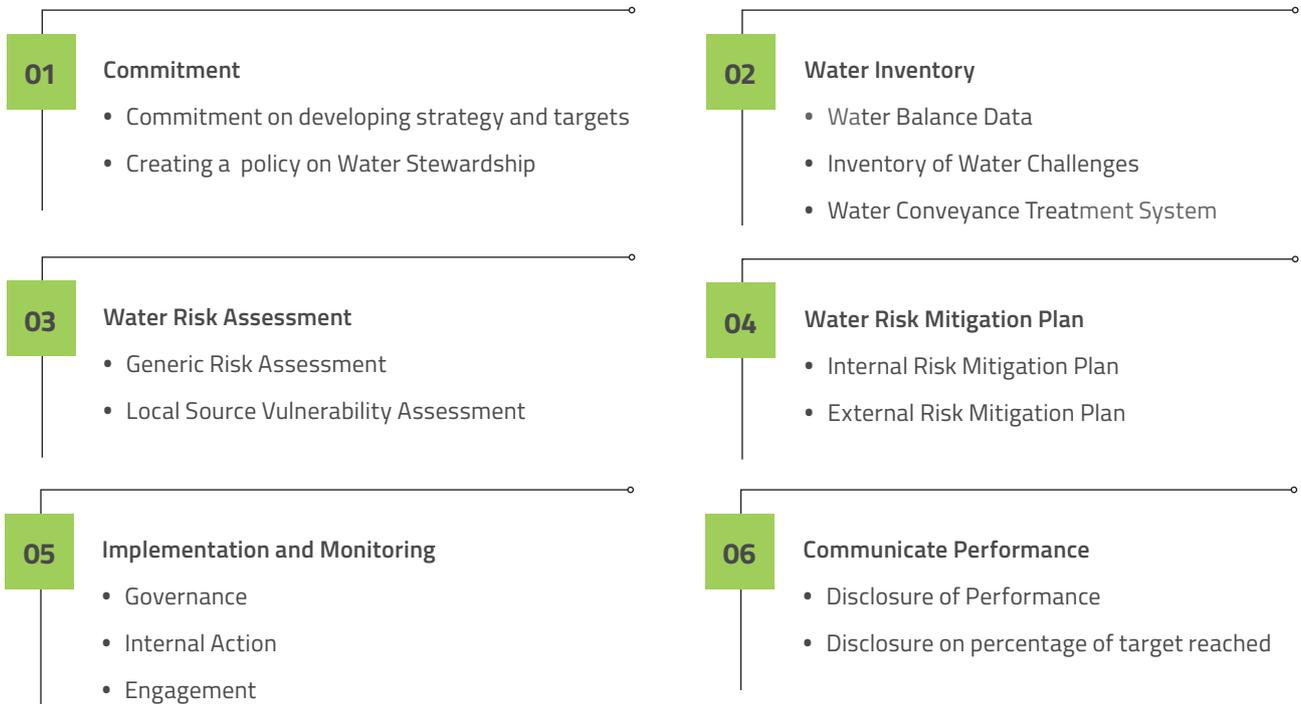
## Technical Standards

- TS2 Water Management
- TS4 Waste Water Management

# WATER MANAGEMENT FRAMEWORK

At EMIL, we are firmly committed to water stewardship, and our approach is guided by the Aditya Birla Group water management framework. This framework aligns with the principles established by the Alliance of Water Stewardship (AWS) standards, offering a comprehensive set of actions, criteria, and indicators essential for effective water management at both the site level and in broader contexts.

## Aditya Birla Group Water Management Framework



## EMIL Water Management Execution Approach

Guided by the Group's strategic direction, EMIL describes its approach to water management execution as follows:



## WATER USAGE

Our mining and processing operations rely on a combination of harvested rainwater, third-party sources, and groundwater to fulfill their water requirements. Additionally, our NFA unit supplements its supply with piped water sourced from the Gujarat Industrial Development Corporation (GIDC) as needed.

To maximize water efficiency and sustainability we employ a two-fold approach. Firstly, we harvest rainwater and recycle water from Effluent Treatment Plants (ETPs), repurposing it for mining activities. Secondly, we incorporate water-conserving equipment such as mist guns, high-pressure

nozzle-based water pipes and dry fog tankers to effectively control road dust minimizing water wastage.

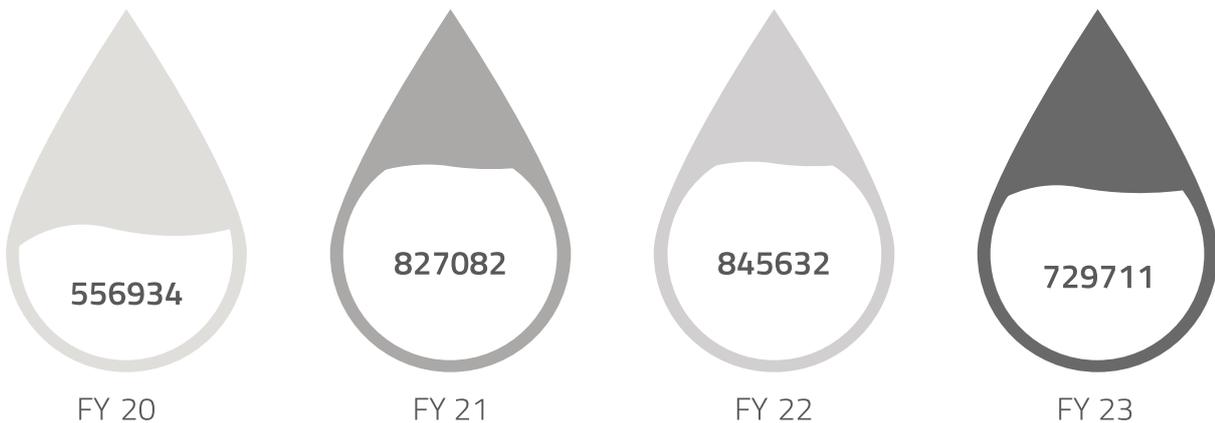
In our commitment to water conservation, we regularly conduct awareness sessions to educate employees and their families living in residential colonies around our mines. These sessions serve to engage our community about the responsible and sustainable use of water aligning with our water conservation objectives.

# EMIL TOTAL WATER WITHDRAWAL TREND

#	Source	Unit	FY 20	FY 21	FY 22	FY 23
1	Surface water	M <sup>3</sup>	-	-	-	-
2	Groundwater	M <sup>3</sup>	46163	182137	251392	<b>180911</b>
3	Seawater	M <sup>3</sup>	-	-	-	-
4	Produced water	M <sup>3</sup>	493042	619374	562629	-
5	Third-party water	M <sup>3</sup>	117729	25571	31611	<b>36230</b>
6	Rainwater	M <sup>3</sup>	-	-	-	<b>512570</b>
<b>Total water Withdrawal</b>		M <sup>3</sup>	556934	827082	845632	<b>729711</b>

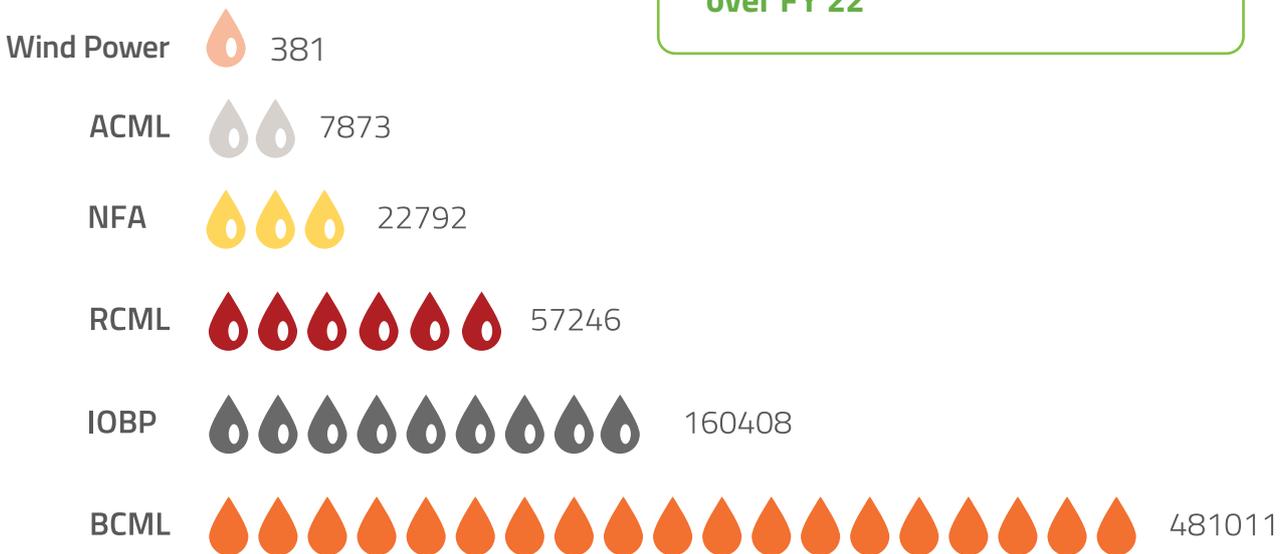
Note: From this FY, Rainwater is reported as a separate category

### Total Water Withdrawal- Y-o-Y trend (m<sup>3</sup>)



**14%**  
Reduction in water withdrawal over FY 22

### Unit-wise Water Withdrawal (m<sup>3</sup>) for FY 23



# MONITORING USAGE

Water flow meters installed across our mining operations help monitor ongoing usage. These meters are calibrated annually and duly certified by the legal and metrology department. Daily meter readings are consolidated every month and submitted to the concerned authorities. Water meters have been installed at all withdrawal points for the processing units and the consumption is monitored daily. This data helps us to set the baseline for performance improvements and bring conservation measures to ensure we meet our water consumption goals and targets. Additionally, all units monitor and strictly adhere to the annual budgets for water use.

# WATER CONSERVATION

## Recycle and Reuse

We recharge groundwater levels and recycle and reuse water across our divisions and subsidiaries. A network of sumps and recharge pits form the foundation of our recycling process. The water accumulated from the mines and rainwater in the sumps is used for dust suppression, firefighting requirements, workshop utilities and in the canteen and the operator’s hostel. We only need to source water from outside agencies for the NFA Plant.

At the RCML unit in Godda, Jharkhand a well-entrenched rainwater harvesting system recharges the water table and supplements groundwater offtake. Additionally, we are deepening ponds in nearby villages to raise the groundwater table and store seeped water from the mines in a sump for use.

A huge reservoir with a capacity of more than 2 lakh metric cubes has been constructed inside the loBP unit to collect the runoff from the rainwater for reuse for sprinkling and recharging groundwater. Our solar energy plant in Telangana has also introduced rainwater harvesting to meet its water needs.

Total water recycled and reused:  
**362 m<sup>3</sup>**

Water Consumption:  
**730073 m<sup>3</sup>**

### Rainwater Harvesting at loBP

In regions grappling with water scarcity, rainwater harvesting emerges as a pivotal method for sustainable water management. Our Rainwater Harvesting Project is designed to unlock the potential of rainwater as a precious resource, fostering water conservation and environmental sustainability. The objective of setting up a rainwater harvesting plant was to conserve water by capturing and storing rainwater for diverse purposes, including beneficiation, road sprinkling, domestic use, and groundwater recharge. This also helped the site reduce its dependence on traditional water sources, leading to cost savings.

#### Methodology:

- **Site Selection:**  
Approach: Identified strategic locations within the plant premises based on factors such as rainfall patterns, topography, and accessibility.
- **Infrastructure Setup:**  
Implementation: Installed rainwater harvesting structures, including rooftop collection systems, storage tanks, and distribution networks, designed to efficiently capture and store rainwater for various uses at our pond.
- **Community Workshop:**  
Initiative: Conducted workshops to educate the community about the benefits of rainwater harvesting, proper system maintenance, and water conservation practices.

#### Benefits Post-Implementation:

- **Water Security:**  
Outcome: Enhanced water security during periods of scarcity or drought by capturing and storing approximately 5600KL of rainwater from a 5500 square meter built-up area, resulting in a 1.5% reduction in total water usage for the plant.
- **Environmental Impact:**  
Result: Mitigated environmental strain on existing water sources by reducing the need for excessive groundwater extraction or dam construction.
- **Financial Savings:**  
Impact: Improved economic conditions within the community, with reduced water bills and increased agricultural productivity for households and farmers.

# WASTEWATER MANAGEMENT

We have established a comprehensive system for the treatment and recycling of wastewater generated throughout various processes to promote reuse. For instance, water that seeps from our mining operations is utilized in the BCML workshops for washing heavy earth-moving machinery. The resulting soiled water is then directed to an effluent treatment plant (ETP) designed specifically to treat and recycle wastewater at the mines.

Similarly, at RCML we have a dedicated ETP with a capacity of 100 cubic meters, which effectively treats wastewater

generated during machinery washing for subsequent reuse. The treated water undergoes a process where it percolates through a series of chambers allowing for the removal of impurities that are either denser or lighter than the water. An oil skimmer is employed to separate oil from the liquid and the purified water is collected in a separate chamber for reuse in the machinery washing process.

The quality of both the incoming and outgoing water from all ETPs is regularly tested to ensure it adheres to specified standards.

# WASTE MANAGEMENT

Within our operations various wastes such as rock, overburden waste, tailings, and hazardous substances like spent oil are generated. To mitigate this, we employ advanced mining practices aimed at minimizing waste production and we actively recycle materials wherever feasible to support multiple aspects of our operations. Our waste management practices draw reference from the ABG Sustainable Business Management Document. For instance, overburden waste finds reuse in the process of backfilling excavated land, contributing to land rehabilitation efforts. Hazardous substances such as spent oil are conscientiously managed through authorized recyclers, ensuring their sustainable and responsible disposal in accordance with regulatory standards.

**Policies**

- Environmental Policy



**Technical Standards**

- TS3 Solid and Hazardous Waste Management
- TS8 Resource Conservation

**Guidance Note**

- GN7 Developing Waste Management Plan
- GN8 Non-Hazardous Waste Management
- GN9 Hazardous Waste Management

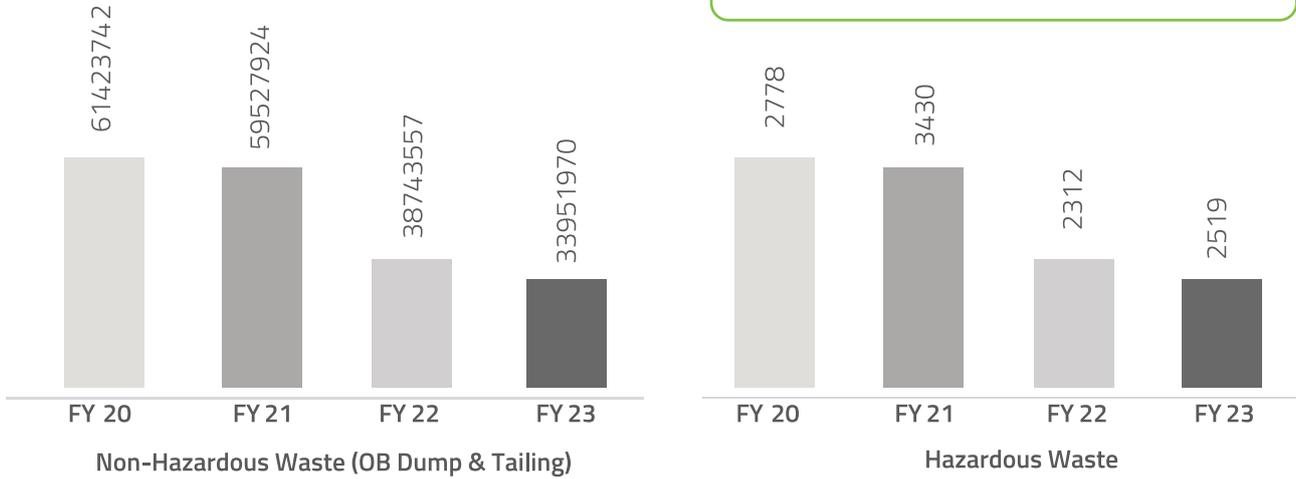
# EMIL TOTAL WASTE GENERATION

#	Category of Waste	Unit	FY 20	FY 21	FY 22	FY 23
1	Hazardous Waste	MT	2778	3430	2312	<b>2519</b>
2	Non-Hazardous Waste	MT	61423742	59527924	38743557	<b>33951970</b>
<b>Total Waste Generated</b>		MT	61426520	59531354	38745869	<b>33952945</b>

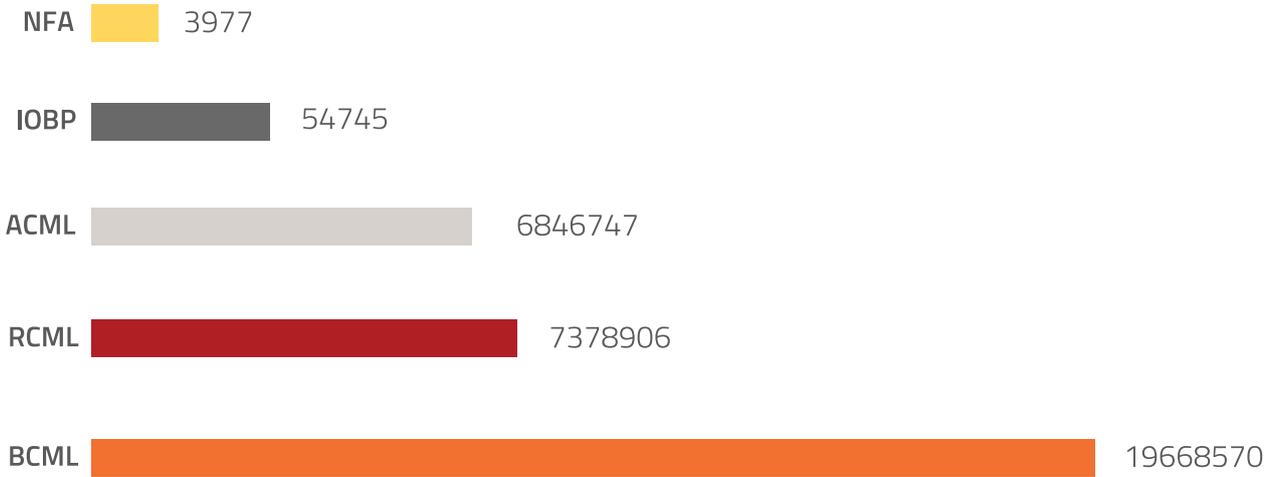
Note: Majority of Non-Hazardous waste comprises of mine overburden in our operations

**Total Waste Generated (MT) Y-o-Y Trend**

**12%**  
 Decrease in total waste generation over FY 22



**Total Waste Generated- Y-o-Y Trend (MT)**



Waste Diverted to Disposal into landfill and mine pits:  
**7381330 MT**

Waste Directed from Disposal:  
**1543 MT**

## NON-HAZARDOUS WASTE MANAGEMENT

The non-hazardous waste, primarily overburden, generated due to mining operations at BCML, RCML and ACML is reused by backfilling into abandoned mine pits.

The NFA plant generates chemically active but non-hazardous waste like thermic process slag, which is reused for civil works or sold to authorized vendors for responsible disposal.



Land reclaimed after dumping overburden waste in the abandoned mining pits at RCML

## HAZARDOUS WASTE MANAGEMENT

The combustion residues from our heavy earth-moving machinery, which include lubricating oil, gear oil, hydraulic oil, and transformer oil, constitute the hazardous waste produced at our mining and mineral processing facilities. This waste is carefully managed in accordance with the Hazardous Waste Management Rules of 2016 and the specific Pollution Control Regulations of the respective states.

We collect and store hazardous waste (spent oil) from mines in line with the statutory guidelines. Subsequently, these

wastes are handed over to authorized vendors for disposal, adhering to approved disposal methods.

Additionally, the NFA division generates hazardous sludge through the V sludge process and the ETP. This sludge is initially stored in a designated shed and then transported to an authorized Treatment, Storage, and Disposal Facility (TSDF) in Dahej.

## E-WASTE MANAGEMENT

Electronic scrap generated at our facilities is stored and, within six months, dispatched to designated vendors for recycling, reuse, or appropriate disposal. Our solar plants have established buy-back arrangements with electronic item suppliers.

## RESPONSIBLE PROCUREMENT

At EMIL, we believe in responsible procurement of our raw materials. At the NFA unit, we recycle the waste procured from other industries to use as raw material in operations. Total Input Material- **1602 MT**  
Recycled Input Material Used- **1543 MT**

**Generating Wealth from Waste: Extracting Vanadium Pentoxide from Alumina Plant Waste**

EMIL's Noble Ferro Alloy (NFA) Unit, situated in GIDC, Vapi, Southern Gujarat, is dedicated to the production of Noble Ferro Alloys like Ferro Vanadium, Ferro Molybdenum, and Ferro Titanium. These alloys find applications in diverse industries, including steel, automotive, dyes, pigments.

Vanadium, a crucial alloying element, is vital for certain specialized steel grades used in applications such as rails, refinery pipelines, and steel cables. The Government of India has recognized vanadium as a Critical Mineral among the 30 critical minerals.

India lacks substantial deposits of vanadium-bearing ore. Presently, the only available source of vanadium in India is vanadium-bearing sludge, considered hazardous waste primarily originating from Alumina Refinery Plants.

EMIL's NFA unit holds the necessary environmental approvals and employs state-of-the-art technology to process hazardous waste, specifically vanadium-bearing sludge obtained from Alumina refineries. This process results in the extraction of vanadium to produce Vanadium pentoxide, and subsequently, value-added products like Ferro Vanadium (Alloy), thereby generating economic value (wealth) from hazardous waste.

The entire value chain exemplifies EMIL's dedication to Sustainable Manufacturing Practices, ensuring the responsible handling of hazardous waste in compliance with regulations to minimize the environmental footprint while concurrently creating value for society by reducing the reliance on imported Vanadium Pentoxide from alternative sources.



## BIODIVERSITY CONSERVATION

The Aditya Birla Group is committed to safeguarding biodiversity, and our Sustainability Vision has been a guiding force in this endeavor since 2016. Preserving biodiversity has become an integral aspect of our sustainable growth plan. Our Group-wide Corporate Policy for 'No Net Loss,' sets the foundation for our actions and demands that any negative impacts are offset by measures to enhance biodiversity. To facilitate this, a comprehensive Group-level biodiversity policy has been established, outlining the technical standards and guidelines to be followed. Importantly, all new projects initiated after 2016 have adhered to the Group Biodiversity Policy, in addition to meeting both central and state government regulations.

Despite the absence of ecological hotspots in proximity to our units we proactively take measures to improve the environmental balance. Our goal is to create a healthy and safe environment for the flourishing of flora and fauna ultimately enhancing the quality of life and livelihoods of the

communities surrounding our operations. Actions such as land use planning and biodiversity surveys conducted at our mines and processing units reflect on our dedication to enriching biodiversity. We maintain close collaboration with local forest officials and actively involve community members in our biodiversity programs. Furthermore, all our units meticulously adhere to the regulations of Environmental Clearance (EC) and Forest Clearance (FC).



# CLIMATE RISK ASSESSMENT

The metals and mining industry is at a critical juncture due to evolving climate dynamics and increasing global concerns about environmental sustainability. Given its inherent connection to the extraction and processing of natural resources, the industry faces various climate-related risks that can impact operations, supply chains, and financial performance. To address these challenges, EMIL conducted a comprehensive climate risk assessment to evaluate vulnerabilities and opportunities in its operations. The goal is not only to enhance resilience against climate change effects but also to promote sustainable practices in line

with global expectations. Engaging an external agency for this assessment demonstrates a strategic commitment to proactively tackle climate change challenges responsibly. The chosen methodology focuses on screening and scoring acute and chronic physical hazards, reflecting a dedication to understanding climate risks comprehensively. By forecasting hazards across different climate scenarios and aligning with the expected lifetime of assets, EMIL adopts a forward-looking approach. The company aims to integrate growth goals with sustainability principles to mitigate potential regulatory risks in the future.

## Climate Hazards

### Acute Climate Hazard

Refers to hazards that are event-driven, including extreme weather events, such as cyclones, droughts, earthquakes or floods.

### Chronic Climate Hazard

Refers to long-term shifts in climate patterns that may cause the continuous evolution in climate variables like sea level rise, water stress, etc.

## Scenarios

### Base case: SSP2-4.5- Middle of the Road Scenario

This scenario is projected to lead to a mid-century warming of 1.6 to 2.5°C and end of the century warming of 2.1 to 3.5°C.

### Pessimistic case: SSP5-8.5- High-reference Scenario (fossil-fueled development)

This scenario, which is the most pessimistic one, is projected to lead to a mid-century warming of 1.9 to 3°C and end of the century warming of 3.3 to 5.7°C

## Timeframes

Three timeframes are considered, consistently with the indicative expected lifetime of the assets and the indications of the EU taxonomy:

- a. **Baseline:** average 1981 and 2010;
- b. **2030:** average between 2015 and 2044 values (be operational ready)
- c. **2050:** average between 2035 and 2064 values (drive investment strategies)

**Peril Score**

Multi-peril scores				
Asset Name	Country	Selected Value (₹)	Iso-Risk	Score
Rajmahal Coal Mining Ltd.	India	3.6B	0.75	0.63
loBP	India	4.9B	1	0.62
Amelia Coal Mining Ltd.	India	Null	Null	0.6
EMMRL- Bandha Coal Mine Ltd.	India	Null	Null	0.51
Subhadra Coal Mining Ltd.	India	Null	Null	0.46
Bhubaneshwari Coal Mining Ltd.	India	3.2B	0.45	0.42
Nobel Ferro Alloys	India	258.4M	0.03	0.3
Windpower Division	India	5.0B	0.43	0.26

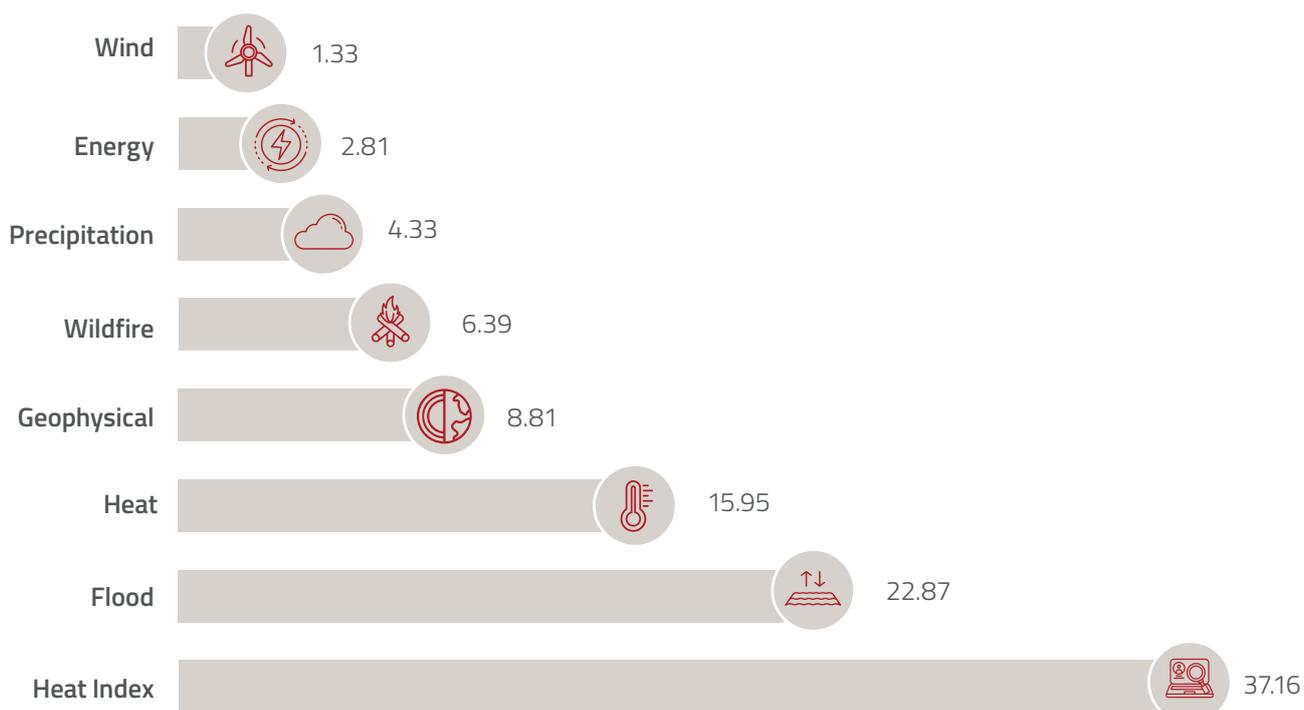
Notably, there are no assets within the BUs that are deemed to have low-risk exposure indicating an overarching need for targeted risk mitigation strategies.

Looking forward, the projections indicate that by 2030, 4 out of the 8 sites operated by EMIL will face High Risk with an additional 4 sites categorized under Moderate Risk. These findings highlight the urgency for proactive measures to enhance resilience and adaptability within our operational landscape. The identified key physical climate risk indicators

including the combined Heat Index, risk of landslides triggered by precipitation, and riverine flooding, necessitate a focused and multifaceted approach to address the complex interplay of factors influencing our assets.

As we navigate these challenges, the insights garnered from this assessment will serve as a critical foundation for strategic decision-making, enabling EMIL to implement targeted and effective measures to safeguard our assets and ensure the long-term sustainability of our operations.

**Perils Contributing to Average Score Average Score (%): 0.46**



Heat Index was identified to be a critical indicator affecting our assets. Elevated temperatures have the potential to induce discomfort leading to heightened fatigue and reduced efficiency.

Impacts Due to Elevated Temperature	Measures Taken
-------------------------------------	----------------

<p>Prolonged exposure to extreme heat may result in severe conditions such as heat stroke, heat cramps or exhaustion necessitating hospitalization and posing a risk of fatalities.</p>	<ul style="list-style-type: none"> <li>• To counter extreme heat we have installed air-conditioned cabins and rest shelters.</li> <li>• Across all sites, we provide workers with oral rehydration solution (ORS) liquids, buttermilk, and cold water to prevent exhaustion and burnout due to extreme heat.</li> <li>• Awareness sessions for employees and workers have been conducted to educate them on the impacts of heat and sunstroke.</li> </ul>
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<p>The escalation of temperatures can elevate industrial cooling needs, alter process chemistry, and increase both process and heating, ventilation and air conditioning (HVAC) cooling requirements consequently raising costs and greenhouse gas emissions associated with energy consumption. Extended periods of extreme heat also pose risks to the integrity of raw materials and stockpiles potentially resulting in losses such as the self-ignition of coal.</p>	<ul style="list-style-type: none"> <li>• All sites are equipped with fire extinguishers and water tankers.</li> <li>• An emergency plan is in place to address natural calamities including wildfires and floods.</li> <li>• Drainage systems are maintained to direct floodwater into natural drains.</li> </ul>
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In addition to these immediate measures, we are actively developing a comprehensive adaptation plan encompassing short-, medium-, and long-term strategies. This plan involves initiatives such as increasing green cover near rest sheds, providing training to employees for heat stress prevention, constructing cool and green roofs on all buildings, installing bond walls around low-lying areas to prevent water entry,

deploying high-capacity pumps for floodwater evacuation, establishing a disaster rescue team, and applying heat-resistant paints to the exteriors of buildings. Through these concerted efforts, we aim to fortify our resilience to climate-related challenges and ensure the well-being of our workforce while minimizing environmental impact.



# Upholding Our Promise of Responsible Mining and Manufacturing with Strong Governance

## Corporate Governance and Ethics

We have always led the course of our business operations and our inherent strategy with ethics, integrity coherent with the laws of industry and the land. We have a deep sense of responsibility to our stakeholders as partners of the Aditya Birla Group. Being a pioneer in the industry we have established norms for responsible operations and efficient governance considering people and the planet while generating long-term value for our stakeholders.

The continual compliance with legislative requirements of land procurement and utilization, contamination levels, and the conservation of ecosystems and water bodies are among the governance framework's core priority areas. Our flexible and responsive governance structure is regularly examined and improved to satisfy constantly changing laws and international sustainability norms.

## GOVERNANCE PHILOSOPHY

We adhere to the governance concept of the Aditya Birla Group which is based on the six pillars that describe our actions and operations. Employee ownership of the organization's values is encouraged by EMIL's ethical and widespread corporate governance culture.



### Transparency and disclosure

The cornerstones of corporate governance principles are disclosures, honesty, and transparency. Our procedures guarantee that we provide accurate and timely disclosures.



### Accountability and Interests

Our practices ensure the safeguarding of minority rights and interests as well as responsibility to all stakeholders.



### Ethics

Our procedures guarantee that we uphold the highest ethical standards.



### Monitor

The framework for risk management and related procedures are consistently tracked and reviewed.



### Review

Improvement is guaranteed by routine evaluation of management systems and procedures.

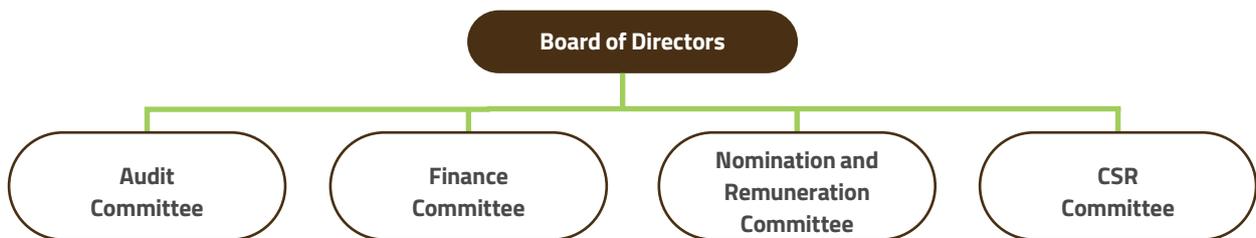


### Control

Maintaining efficient control systems is necessary to guarantee that corporate operations and responsibility are carried out effectively.

## BOARD GOVERNANCE STRUCTURE

Our strong governance framework enables us to manage operations in a risk-averse, responsible, and safe manner in order to provide value to our stakeholders over the long term. The following is the governance structure at EMIL:



## BOARD OF DIRECTORS

Our business is guided by a capable and empowered Board of Directors made up of seasoned individuals from a variety of backgrounds and roles. They oversee our performance and give strategic direction in line with our core values.

Our governance architecture ensures the independence of the Board, allows for versatility in decision-making and mandates that they function inclusively and fairly to enhance stakeholder value throughout the short, medium, and long

terms. To guarantee that stakeholder interests are met by the organization's strategic imperatives and that our performance is routinely and freely discussed with them, the Board frequently engages with the management team.

Mr. Thomas M Cherian, Managing Director, EMIL, chairs our seven-member Board. He has over three decades of expertise in the mining business across several regions.

### Our Board of Directors as on 31st March 2023



**Modifications made to the Board of Directors throughout the reporting time**

- Mr. Thomas M. Cherian appointed as Managing Director w.e.f. 1st April, 2022;
- Mr. Tuhin Kumar Mukherjee appointed as Non – Executive Director w.e.f. 29th September, 2022
- Mr. Ashwin Kumar Kothari resigned as an Independent Director of the Company w.e.f. 6th June, 2022
- Mrs. Anita Ramachandran resigned as an Independent Director of the Company w.e.f. 9th August, 2022
- Mrs. Deeksha Sharma Vats appointed as Additional Woman Director w.e.f. 1st November, 2022
- Mr. Nagendra Chandra Shah ceased to be an Independent Director of the Company w.e.f. 7th January, 2023

**The Management as on 31st March 2023**

Our operations span over numerous divisions, each headed by a team of experienced executives who act as the link between the Board, its standing committees, and the rest of the Company. In their respective businesses, they are accountable for executing the objectives of the organization and frequently notifying the Board on their progress.

Sr. No	Unit / Function	Executive In-Charge
1	Chief Financial Officer	Mr. Arun Garg
2	Company Secretary	Mr. Dhananjoy Karmakar
3	Chief Human Resource Officer	Mr. Vinod Chaturvedi
4	Business Legal	Mr. Anju Desai
5	Strategy, Business Development and Sustainability	Mr. Rakesh Paliwal
6	Iron Ore Beneficiation & Pelletisation	Mr. Prasanna Panda
7	Mining Services (MDO)	Mr. Rajinder Malhotra
8	Commercial Coal Mining	Mr. Satya Prakash
9	Wind Power Business	Mr. Arun Garg
10	Noble Ferro Alloys	Mr. Vinod Chaturvedi
11	Bhubaneswar Coal Mining Ltd.	Mr. Bairagi Sahu
12	Rajmahal Coal Mining Ltd.	Mr. Sanjay Tiwari
13	Bandha Coal Project	Mr. Dipesh Bhatia
14	Subhadra Coal Mining Ltd.	Mr. Bimal Baral
15	Amelia Coal Mine Ltd.	Mr. Shatrujit Kumar

**Board Committees as on 31st March 2023**

In accordance with the Companies Act 2013, the Board functions through specific committees that oversee operational areas and are assisted by teams that are drawn from an array of sites, business units, and endeavors. Each of our four committees look over different aspects of daily operations except for matters that must specifically be

regarded only at the Board's meeting that cannot be entrusted to any committee. The committees are additionally entitled to take any other urgent decisions which may be required, including those that the Board may delegate from time to time. The Board Committee and RMC Committee meet once in each quarter. In FY 23, committees have met four times.

### Audit Committee

The Audit Committee is in-charge of overseeing the financial reporting procedure and examining and approving the financial statements that the management team submits before they are published. The members evaluate the effectiveness of internal controls which encompass the risk management framework and audit procedure.

To improve the adaptability and integrity of operations they define the scope of audits and consult with internal and statutory auditors regarding observations and findings.

#### Chairman

Mr. Sunil Kumar Daga

#### Member

Mr. Giriraj Maheswari  
Mr. Thomas M Cherian

### Finance Committee

The Board's Finance Committee monitors the business and has sufficient funds available to accomplish its execution and strategy goals. After securing loans and operating capital from commercial banks they supervise the availability of resources through funds and non-fund-based facilities. They can grant officers and executives the Power of Attorney and authorize the Company's efforts to engage in commodity and foreign exchange hedging operations, start new initiatives, establish joint ventures, subsidiaries, and special purpose vehicles, among other things as well.

#### Member

Mr. Sunil Kumar Daga  
Mr Giriraj Maheshwari  
Mr. Thomas M Cherian  
Mr. Sushil Agrawal

### Nomination and Remuneration Committee (NRC)

The NRC oversees discovering and recommending potential candidates who meet the requirements to join the senior management group and the Board. The Committee grants its approval for these appointees to be added or removed. Along with creating the Board's diversity policy, evaluating performance and proposing compensation for other staff members, management, and board members, the members are also tasked with these duties.

#### Chairman

Mr. Sunil Kumar Daga

#### Member

Mr. Tuhin Kumar Mukherjee  
Mr. Sushil Agarwal  
Mr. Giriraj Maheswari

### Corporate Social Responsibility (CSR) Committee

In addition to creating the company's CSR policy the Board's CSR Committee also selects and authorizes community-facing projects and allots funds accordingly. To make sure we achieve our objective of significantly improving the lives of the communities in which we operate they consistently offer supervision, direction, and status reports on CSR projects.

#### Chairman

Mr. Sunil Kumar Daga

#### Member

Mr. Giriraj Maheswari  
Mr. Thomas M Cherian

**Risk Management Committee (RMC)**

The Board defines the roles and responsibilities of the RMC. It may delegate preparing, monitoring and reviewing, the risk management plan to this committee or another committee, such as the Audit Committee or other functions as it may deem fit.

The RMC is in charge of EMIL's corporate risk management and answers to the Board Audit Committee. The Managing Director is a member of this team (MD). Chief Human Resources Officer (CHRO) and Chief Financial Officer (CFO) of EMIL. Unit Risk Officers (UROs) for each business unit support the enterprise-level Corporate Risk Officer, who is nominated by this committee.

**Essel Mining & Industries Limited**

Thomas M Cherian (MD)  
Arun Garg (CFO)  
Vinod Chaturvedi (CHRO)

**Bhubaneswari Coal Mining Limited**

Arun Garg (Director)  
Rajinder Malhotra (Director and SBU Head Coal)  
Bairagi Sahu (COO)

**Rajmahal Coal Mining Limited**

Arun Garg (Director)  
Rajinder Malhotra (Director and SBU Head Coal)  
Sanjay Tiwary (COO)

**Essel Mining & Mineral Resources Limited - Bandha**

Arun Garg (Director)  
Krishna Fatesaria (Director)  
Satya Prakash (Head Commercial Coal)

**Subhadra Coal Mining Limited**

Arun Garg (Director)  
Rajinder Malhotra (SBU Head Coal)  
Bimal Baral (Project Head)

**Amelia Coal Mining Limited**

Arun Garg (Director)  
Satya Prakash (SBU Head Coal)  
Shatrujit Kumar (Project Head)

**Board Evaluation**

The yearly official assessment of the Board, its committees, and the individual Directors is carried out by the NRC which also prescribes the procedure. Each individual and group is evaluated based on specifications approved by the Board and the NRC's proposal. Evaluation forms covering various aspects of the Board and its Committees' processes, Independent Directors' and Non-Executive Directors' roles and responsibilities, their contribution to meetings, and their exercise of independent judgment are circulated as part of the process. The Board is evaluated by the Directors who do not include the director who is being assessed, together with

individual members and committees. The Board is informed of the cumulative response from the Directors' submission of a combined perspective of their individual assessments to the NRC.

The Aditya Birla Group code of conduct guides us and encourages us to continuously lead with integrity, acceptance, and honesty. The Board and every employee must abide by the code. Every new employee must undergo mandatory training to completely understand the Company's guiding values and vow to uphold them at all times.



## ABG Code of Conduct

### Integrity in Personal Conduct

- Each of us will exercise the highest level of professional behaviour. Each employee will conduct himself in a manner that will enhance the image of his position, unit and the Group
- Every employee must adhere to the laws of the country in which we operate.
- Every employee must conduct business with people, including one another in a fair and dignified manner, respecting each individual's rights irrespective of their caste, gender, religion, ethnicity to create an encouraging and nurturing work environment.
- To the best of their knowledge each employee is liable for the integrity and fair presentation of the material in the documents they make or approve.
- Employees are required to guarantee that any personal information they supply to the Company such as previous employment history, educational background, pay information, etc., is true and correct as per their knowledge



### Conduct at Work

#### A. Employees:

- We think that our employees assist us in providing value to our shareholders, consumers, and society as a whole. Our people are our greatest asset. We respect everyone's individual rights and dignity.
- We believe in the inherent potential of our employees and are totally committed to fair, equal, and transparent people development processes. We encourage all employees, regardless of nationality, caste, religion, color, or gender, to develop professionally and personally to their full potential. We seek to create an environment that fosters achievement orientation and self-esteem.
- A recognized obligation is to ensure that all of our policies, forward-thinking initiatives, and goals are fully conveyed and understood by all personnel.
- Integrity, trust, fairness, and honesty are the fundamentals that guide our strategy, behavior, and interactions with others both internally and externally. Each of us shall act with the utmost integrity and professionalism.

#### B. Customer:

- We are dedicated to meeting our customers' current demands while anticipating their future requirements.
- We are committed to consistently increasing the quality, accessibility, and value of our products and services that support our customers improve their business operations.
- We seek to make the Aditya Birla Group Companies the customer's business partner of choice by providing value for customers through creativity, innovation, productive relationships, quick response, and simplicity in all that we do.

#### C. The Government

- We respect the governments, laws, and institutions of the countries in which we operate. We stay apolitical while engaging in democratic procedures.

#### D. Environment, Health & Safety

- Environmental stewardship is ingrained in all we do. As an environmentally conscious company, we strive to manufacture our products using procedures that have as little environmental impact as possible.
- We pledge to protect the environment, the health and safety of our employees, and the growth of the communities in which we operate, and we maximize ways to conserve the environment through cutting-edge technology and a personal dedication to eliminate waste in all forms.

# CORPORATE POLICIES

By taking risks and their mitigation into account a thorough policy framework aids in the facilitation of well-informed decisions. These guidelines are accessible for quick reference by all employees and business partners and are applicable to all Company divisions.



## Anti-bribery and Anti-corruption Policy

The norms of fairness and honesty that we demand from both our external value chain partners and our employees are defined in this policy. It addresses matters such as offering and accepting gifts and showing hospitality, extortion or blackmail, providing jobs or contracts to family members, and political payments to name a few.

## Whistleblower policy

We encourage all of our employees, directors, and business partners to report any infractions they observe or become aware of, come forward, and demand fair compensation without fear of retribution.



## Executive Remuneration Policy

This comprehensive document describes the entire compensation journey of an Executive covering retirement benefits, promotions and incentives.

## CSR Policy

The policy describes the extent of our Corporate Social Responsibility (CSR) efforts in compliance with Section 135 of the Companies Act 2013 and the Companies CSR Rules 2014. It addresses the issues and presents guidelines for allocating funds to different activities.



## POSH Policy

This policy encapsulates our commitment to create a workplace environment that is inclusive, safe, free from sexual harassment for all employees irrespective of their race, gender, sexual orientation and/or difference in abilities, in accordance with POSH Act 2013.

## Information Security Policy

This document contains the corporate information and cyber security policy for all Aditya Birla Group (ABG) divisions and business units, providing management guidance on safeguarding ABG's information assets from the effects of confidentiality breaches, integrity issues, and/or disruptions.



Apart from this, EMIL also abides by 17 policies underlined in the ABG Sustainable Business Framework



## Environment and Workplace Safety Governance

A key element of our growth plan involves safeguarding the environment and our assets. A three-tier safety governance framework has been established at the apex, business and unit levels with relevant checks and balances in place. The present Safety Management Standard is in accordance with the Safety Governance Framework of the Aditya Birla Group. Technical Standard and the Safety Management System has eight components. The roles and organization of the teams are described below:



## HR Governance

Under the direction of the Company's HR head and with business centre for Expertise (BCOE)-HR and BCOE-Talent Management, Learning and Development, Organizational Effectiveness, a three-tiered HR governance structure based on Group rules guarantees that employee requirements are met on time.

The policies and procedures for Talent Acquisition, Learning & Development, Performance Management System, Talent Management System, and Organizational Development are all included in the HR governance system. A comprehensive framework for regular evaluations and monitoring of the business's performance on key metrics can assist in discovering areas of improvement

# REWARDS AND RECOGNITION



Given by unit heads and respective managers to recognise individual employee contributions and encourage them further



For recognising and rewarding department-wise contributions and achievements



An online appreciation forum run as part of the Organisational Effectiveness week celebrations



Recognitions awarded during meets like HR for You and ComEx for meritorious employees. Recognition of employees and contractual workers - during Independence day and Republic day celebrations for punctuality, safe driving, integrity etc



To recognise potential performers for extraordinary deliverables



For all round exceptional performances

# Creating Values, Enriching Lives

**Our commitment to social responsibility is grounded in the ABG Sustainable Business Framework, which encompasses several key policies to ensure the well-being and security of our stakeholders. These policies, integral to our social pillar, include the health policy, safety policy, and human right policy, ensuring sustainable and enhanced livelihood across our value chain.**



We at EMIL are committed to the inclusive empowerment and holistic development of all our stakeholders, the -employees, partners, customers and the communities who form the core of our mission towards responsible mining while being environmentally and socially responsible. Our workforce of 377 permanent employees, 1088 contract workers, suppliers and community members are extremely crucial to help us achieve our objectives.

Material topics covered in the section:

- Diversity, Equity and Inclusion
- Talent attraction and development
- Employee contractor and supplier safety
- Strengthening communities

Fueled by financial robustness, ESG goals and an innovative leadership we channelize our efforts into nurturing human capital, delivering quality products, maintaining a responsible value chain and generating meaningful socio-economic opportunities for all.



## NURTURING AN EMPOWERING WORKSPACE

EMIL considers its employees to be the driving force behind its success for decades. They are the key players who have shaped our business and help us achieve continuous improvement. We believe that a motivated and engaged workforce leads to higher levels of productivity, creativity and loyalty ultimately contributing to the long-term sustainability and growth of the organization. In essence, the crucial role of employees extends far beyond the tasks outlined in their job descriptions; it permeates every aspect of an organization's functioning and success.

We aim to cultivate opportunities for their learning, innovation, and growth fostering enriching professional careers and personal lives. We firmly believe in the importance of holistic development, encouraging individuals to venture into unexplored territories, demonstrate leadership with integrity, and show respect and empathy towards their colleagues, partners, community members, and stakeholders. Our team is deeply committed to our values and works tirelessly to research, innovate, and think creatively to provide value across industries.

EMIL places a strong emphasis on promoting diversity, inclusivity and ensuring a safe workplace for all employees. We believe that the physical and mental health and well-being of our employees should always be a top priority. This is why we foster a culture of learning and development that helps us cultivate talent and drive our collective growth.

Permanent employees: **377**

Contractual workforce: **1088**

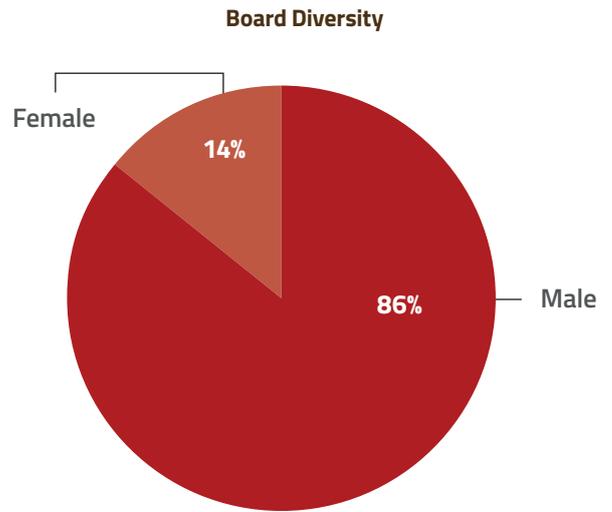
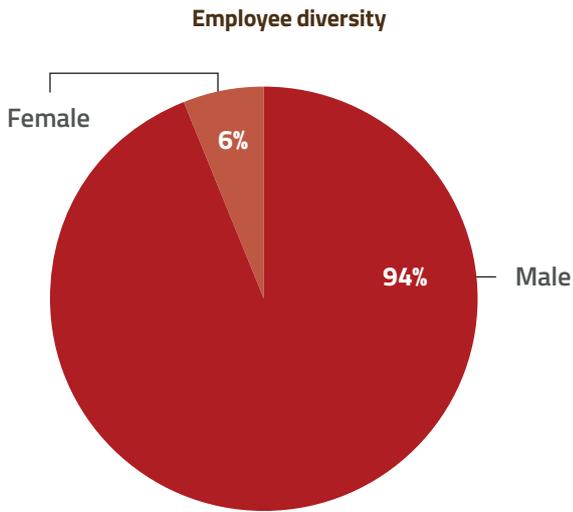
## OUR PLEDGE TO OUR DIVERSITY, EQUALITY AND INCLUSION (DEI)

Creating a thriving and dynamic workplace requires embracing diversity and inclusion. Diversity encompasses the unique differences among individuals such as race, gender, age, background, and perspectives. Inclusion goes beyond mere representation to create an environment where every individual feels valued, heard, and empowered to contribute their unique talents.

We strongly believe that having a diverse workforce is crucial to bringing a wide range of perspectives to the table. A diverse workforce helps us to serve our customers better, develop sustainable growth strategies, and transform and innovate our business through various people-centric initiatives that helps enrich the lives of our employees as well as other important stakeholders. We have put in place a people-centric policy focusing on our employees' welfare that enshrines these principles along with the Code of Conduct that strictly

prohibits any form of discrimination. We are committed to providing equal opportunities to deserving talent regardless of their gender, age, ethnicity, nationality, or any other factor and have zero tolerance for discrimination in the workplace.

Our Company's diversity, equity, and inclusion (DEI) strategies have a strong emphasis on promoting women's participation in the workforce, ensuring their active involvement in decision-making and execution at both corporate and unit levels. Additionally, our entire value chain including suppliers and contractors are required to adopt our DEI principles and create inclusive workplaces where all employees can work freely and without any form of prejudice.



#### E-WiN (Empowering – Women in Network)

In recognizing the pivotal role diversity plays in fostering creativity and innovation, we have actively embraced the ethos of a diverse workplace. To enable women's professional growth in the mining business, our organization has initiated an empowering program known as E-WiN (Empowering Women in Network).

E-WiN serves as more than just a networking forum; it stands as a dynamic platform where women within our organization can articulate their concerns, ranging from seeking career support and guidance to addressing issues related to both work and personal life. This initiative goes beyond traditional networking by creating a space for the exchange of insights, where women can share the latest happenings in the industry, staying abreast of developments that impact their professional landscape.



# TALENT MANAGEMENT

At EMIL, we acknowledge that our personnel are a critical asset that distinguishes us from our competition. To attract and retain top-tier talent we have implemented HR practices that are benchmarked against industry standards. Our focus is on developing our employees internally and recruiting the best external candidates to join our team. Our specialized staffing team is dedicated to attracting and retaining talent.

We always aim to recruit local talent first and ensure that the skills and capabilities of potential candidates match the requirements of the roles we are recruiting for. We also actively explore the inclusion of suitable Potential Alternative Personnels (PAPs) through various contractors that allows us to maximize the utilization of available talent within the organization.

Our recruitment policy emphasizes the strategic deployment of talent resources across the entire corporate group. This approach ensures that we have the right people in the right roles which contributes to our sustained success. Our hiring process is managed through Poornata, an online platform to ensure transparency, efficiency and a seamless employee

experience. Vacancies are published for our internal employees for seven days and then opened for external candidates if no suitable candidate is found within the Group.

For anyone who is interested in applying internally we encourage them to use our user-friendly online platform, Xplore Careers@ABG. This platform is designed to provide internal applicants with the necessary information to make informed decisions about their career trajectory within the Company.

External candidates can submit their applications through our job portal on the Company website. This streamlined process ensures efficiency and accessibility for those seeking opportunities within our Company. Once selected our formal onboarding process is designed to integrate WORK employees seamlessly into the Company culture. This comprehensive program familiarizes new team members with our goals, values, principles, and business operations, helping them to integrate smoothly into our dynamic work environment.

## Talent Retention

EMIL takes great pride in its commitment to retain top talent. We have put in place a comprehensive strategy that includes a rigorous hiring process designed to attract the best candidates, opportunities for ongoing professional development both within our Company and across the wider Group. EMIL offers targeted support to ensure new hires seamlessly integrate into our corporate culture and values and competitive compensation packages that are complemented by an excellent benefits plan. We believe that investing in our employees is the best way to ensure their long-term success and to help our Company continue to thrive. To ensure that employee expectations are met and they feel happy in their current roles and responsibilities we encourage 'Career Conversations', orientation sessions around employee roles and responsibility, expectations and feedback for the career development of employees within the Company. Additionally,



sessions are conducted to sensitize our employees about the importance of actively participating in such sessions.

This year, we welcomed 44 new talents and successfully transitioned 51 employees within the firm.

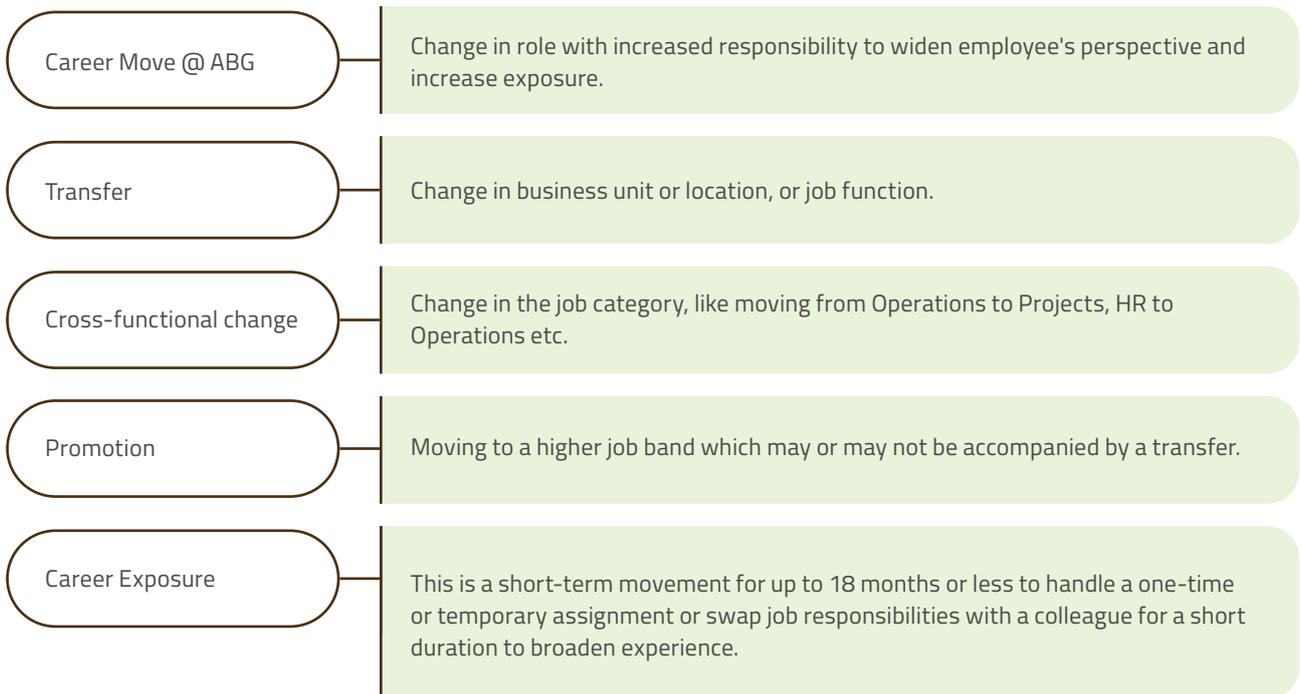
## Cultivating Brilliance: Nurturing Our Own Stars Within

As a member of the Aditya Birla Group, we have access to a pool of talented professionals who share our values and principles. We believe in promoting internal growth and encouraging our employees to explore career prospects within the group. This helps in continuous self-improvement and motivates our team members to seek new opportunities that align with their expertise, learning objectives, and career aspirations. To help our employees excel in their current roles we are taking proactive initiatives to help them establish clarity in their vision and purpose within the Company. This year we organized a goal setting workshop called **'Lakshya'** for the management cadre at IOBP, Kolkata, Vapi, and BCML. The workshop involved expert guidance on adopting a strategic approach toward work and achieving holistic growth through goal setting.

We provide a people-centric work environment to facilitate seamless internal mobility reinforcing our commitment to the



career development of our workforce. Additionally, we offer robust relocation support to ensure that every step of their journey within the Aditya Birla Group is met with encouragement and assistance.



## Talent Management Framework

A strong talent management framework and system is the foundation of successful talent investment that supports the organization in building a competitive edge and robust leadership pipeline. It articulates the organization's talent philosophy, provides a structured approach towards identifying, developing, nurturing and retaining talent. It supports in creating a strong succession pipeline for future growth.

EMIL being part of Aditya Birla Group (ABG) follows the ABG Talent Management Framework. At ABG, the Talent Management Framework and system is well entrenched over the years and has been embraced by leaders, managers, and employees. The Talent Management Policy ensures that there are robust practices & processes in place for building a strong talent pipeline that will support Businesses' growth ambitions.

Our Talent management framework comprises of the following key processes:



The main objective is to support the organization in building a strong talent pipeline that will support the organization's growth ambitions.

### Unnati (Power to Create Careers)

Unnati, a flagship talent management program by EMIL, perceives employee and organizational excellence as mutually reinforcing. The program's overarching objective is to comprehensively assess an employee's current performance and future growth potential in the organization, with a primary focus on management cadre. Basis the insights gathered from the assessment, employees are equipped with necessary guidance and opportunities through career progression plans, individual development plans, and recommendations for excelling both within and beyond the organization. Notably, 100% of our management cadre, along with employees from other categories, are included within the ambit of this program.

The first Unnati forum was held this financial year in October, led by our Managing Director and Chief Human Resource Officer. During this forum, a 360-degree view of selected employees' performance was meticulously gathered. Subsequently, potential actions were identified, and a robust monitoring mechanism was established to ensure the timely completion of these actions. As of the end of this Financial Year 65% of the actions have been completed. The program is designed to be conducted twice annually to review actions and discuss new additions.

The effective implementation of the Unnati program has proven instrumental in fulfilling our commitment to nurturing talent from within, simultaneously fostering organizational growth through the optimal utilization of talent.

## Learning and Development

Our Company's learning and development strategy focuses on cultivating a talented workforce with the skills necessary to meet current demands and adapt to future challenges. This is achieved through identifying key competencies, promoting continuous learning, and anticipating emerging trends in the professional landscape. The strategy is all-encompassing with the goal of empowering employees to thrive in a constantly evolving environment. It includes targeted training programs, skill-building initiatives, and a focus on innovation to equip individuals with the necessary skills to navigate complex and ever-changing global markets.

Our approach is not limited to addressing current skill gaps but also instilling a mindset of adaptability and resilience ensuring that the workforce remains agile and capable of embracing new technologies.

Ultimately, our learning and development strategy is a proactive investment in the continuous growth and future readiness of our workforce. It fosters a culture of innovation, collaboration, and adaptability within the organization helping us stay ahead of the curve in our field.

At EMIL, we believe in empowering our employees to take charge of their professional growth and development. All of our employees also receive regular performance and career development reviews. That's why we have implemented the 'My Development Plan' (MDP) framework which allows for a collaborative process between employees, business and unit leaders, and the training planning team to identify training needs. Managers play an active role in guiding employees along their learning paths and ensure that they acquire relevant skills and build competencies that will prepare them for more significant roles and responsibilities in the future.

EMIL is committed to delivering top-notch learning experiences by leveraging advanced technology to enhance the effectiveness of our workshops. By utilizing state-of-the-art tools and platforms we ensure that our participants have access to the latest advancements resulting in an immersive and dynamic learning environment. In addition to our advanced technology, we also boast top-tier trainers who excel in their respective fields and bring a wealth of expertise to our workshops.

To ensure the relevance and depth of our workshops, we collaborate with subject matter experts who possess in-depth knowledge and understanding of the specific topics covered. These collaborations add a layer of authenticity and industry insight, enriching the learning experience and providing participants with valuable perspectives from those deeply immersed in the subject matter.

We follow 70-20-10 Learning approach where 70% of learning is guided through On the job experience such as long term projects, observations, success, failures, feedbacks, stretched assignments and growth path through movement and exposures; 20% of learning happens through Learning from others such as Coaching, Mentoring, collaborative learning, interaction with peers, shadowing, other guided support and by Leveraging short term & medium-term projects; and 10% through formal channels of learning using synchronous Learning (Facilitator led – Classroom, Virtual, Hybrid) or asynchronous Learning / Online Learning (Self paced eLearning through GVC, Reflection journals, book reading, articles, case studies, seminars, Conferences, and Leader Teach Leader initiatives).

## Categories of Training

Employee training is about assisting your employees in learning and developing their skills so that they can become more efficient in their jobs. Organizations engage in employee training as it boosts enthusiasm, productivity,

and quality of work. There are three categories of training that we at EMIL provide to our workforce. All our employees are required to undergo mandatory policies and training.



**Technical Training**

Focused on developing technical skills of employees to embrace advanced mining practices and stay abreast of evolving technology and processes, global market scenarios etc. Renowned subject matter experts are also invited to conduct sessions.



**Behavioural Training**

Conducted for employees across job levels to improve understanding of teamwork, leadership, planning, decision-making and communication.



**Induction Programme**

For new employees to introduce them to the legacy, vision, mission and core strategies of EMIL and the Aditya Birla Group along with their roles and responsibilities

**Gyanodaya- The Group Training Institute**

Named after the Sanskrit words 'gyana' and 'udaya' which means knowledge and dawn respectively, our Group's training institute known as 'Gyanodaya' serves as a symbol of our unwavering dedication to continuous learning and development. It offers globally benchmarked learning solutions in partnership with reputable institutes. Through 'Gyanodaya' our senior leaders have access to cutting-edge learning modules that abide by global standards. We collaborate with renowned institutions to design these modules ensuring that our senior leaders are equipped with the most up-to-date knowledge and skills to manage their roles globally.



In addition to these standardized programs, 'Gyanodaya' offers a diverse range of learning opportunities to our employees through an e-Learning platform named as Gyanodaya Virtual Campus..

By incorporating globally benchmarked solutions, leveraging advanced e-learning platforms, and providing localized expertise through departmental sessions and workshops we establish a culture of continuous learning and skill development across all levels of our organization. Our commitment reflects our determination to equip our employees not only for their present roles but also for the dynamic challenges of the future.

**EMIL Mining Academy: Tailored Learning for Sustainable Mining Futures**

At EMIL we are on an ambitious vision to power India’s transition to a sustainable economy, by making it energy-independent and mining resources for a greener future. In our strategic pursuit of this vision, we rely on the combined strength of our human resources and our enhanced operational efficiencies.

To elevate the technical competencies of our workforce and enhance our mining operations, we have established the Mining Academy. The Academy is a dedicated center of excellence within the business. Aimed at the holistic development of our mining capabilities, the academy primarily focuses on three segments:



**Mining Leaders / Seasoned Professional (>10 years of experience):** Focuses on new technological trends in exploration, connected mines, green sustainable technology. It goes beyond theoretical knowledge by including leadership talks by Industry experts and physical visits to international/national mines to gain practical exposure.

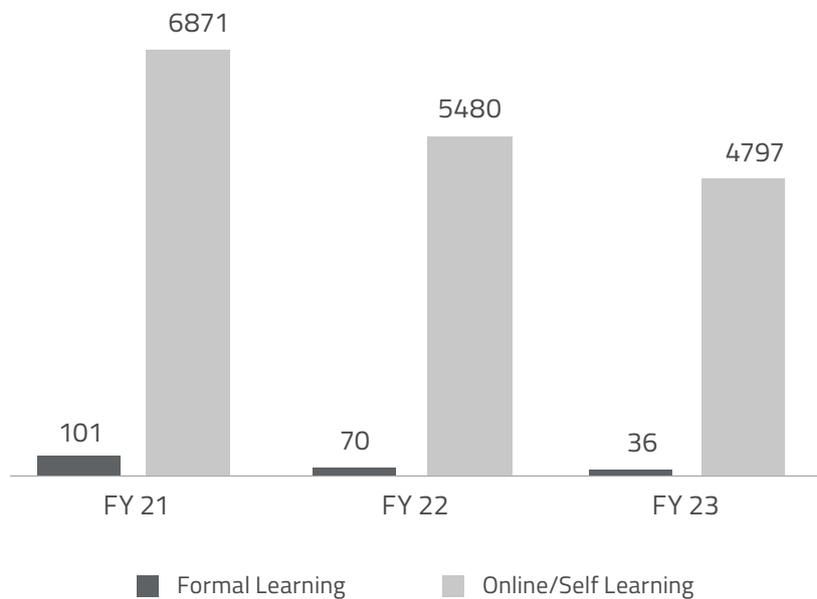
**Professionals in Mining (5-10 years of experience):** Focuses on value chain optimization, fleet and mobile technology, stakeholder engagement, emission reduction, analytics cloud and big data, mine life planning, automation, fleet and mobile technology, application of AR/VRs, etc. It includes functional online programs and mine visits.

**Mining Operation Professionals (L1 Operators/Technicians,0-5 years of mining operations):** Includes classroom/e-learning modules based on mining competencies.

We are proud to receive excellent feedback on our efforts to enhance technical mining competence through continuous training on recent trends and updates in mining technology, and implementing smart workplace learning experiences.

## Employee Learning

Formal Learning VS Self Learning Trend (Hours)



During the COVID period, self-learning surged due to enhanced availability of learners. The company promoted self-learning through online channels like 'Paathshala' on Gyanodaya Virtual Campus. However, there's now a shift towards on-the-job training, aligning with individual development plans, resulting in more emphasis on classroom learning.

## Employee compensation and benefits

We take pride in ensuring our employees receive fair compensation. Our remuneration practices are designed to align with industry benchmarks and Group policies. Different job groups are assigned specific cost-to-company (CTC) structures based on responsibilities, qualifications, and experience in line with our talent staffing policy. Our comprehensive compensation package includes several elements such as gratuity, superannuation, reimbursements, Leave Travel Allowance (LTA), variable pay, medical insurance, and wellness facilities. For employees, we offer Nischint, a term policy, with coverage determined by their Job Band. Employees contribute a portion of the premium while the Company covers the rest. We also provide a similar policy, health insurance, and additional welfare measures to staff cadre employees. Additionally, we conduct awareness sessions for employees to sensitize them on the benefits.

We understand that relocating to a new location can be challenging for new employees. Therefore, we provide support through our Company's guest house for up to 10 days at the new work location. Our Administrative Department assists in finding suitable accommodation and schools for dependent children. Travel and settlement expenses for new employees, their spouses, dependent children, and parents

based on their level are covered, including rail/air travel, local transportation, meals, movers and packers among other provisions. The SAHYOG program aids employees during relocation and a relocation allowance is provided upon joining the Company.

We adhere to state government stipulations for minimum wages across categories including high-skilled, unskilled, and skilled labor for workers. Workers engaged through various contract labor establishments receive payment as per applicable labor laws. Their wages are deposited into their bank accounts before the 7th of the succeeding month. Provident Fund, ESIC, and Workers' Compensation coverage are provided to all employees, and before deployment, contract agreements and notices pertaining to wage payment schedules and terms are clearly posted in units. These provisions are counted as a fundamental aspect of our commitment to their welfare. Before the deployment of any workers, the wage payment schedule and terms are explicitly outlined in contract agreements and transparently displayed in our units. Additionally, to ensure adherence to stipulations and compliance we conduct a rigorous review of the wage structure for workers every six months and monthly verification of wage bills is conducted.

Our commitment to fair compensation is in line with the High-Power Committee (HPC) wage mandate of Coal India Limited which is the proprietor of the BCML mines. The workers receive wages higher than the specified Central Minimum Wages with this rate subject to biannual revisions mirroring the minimum wage notifications of the Centre and States. The wage registers for workers and operators undergo thorough scrutiny and certification by the Personnel Department of MCL each month before the issuance of the CLPC (Contract Labour Payment Certificate) to BCML. This

meticulous process ensures the transparent and equitable compensation of workers in line with regulatory standards and organizational principles.

In our endeavor to provide financial security to our employees, we also conduct training and awareness sessions on taxation, investment, and other personal finance matters. Thus, equipping them to manage their finances better.

Total Parental leaves taken in FY 22-23: **4**

## Employee engagement

Employee engagement is a key indicator of a healthy and thriving workplace, where employees feel valued, involved, and connected to their roles and the company at large. It's about how emotionally invested employees are in their work and the organization's goals.

Our employee engagement initiatives are geared to address physical, emotional & cognitive needs. Our units organize annual sports meets, picnics, and social gatherings that include employees' families. We also celebrate birthdays, religious and social festivals with our workforce, their families, and local community members. Additionally, we mark special occasions such as 'Women's Day' and 'Environment Day' to emphasize our commitment to our sustainable and inclusive

growth objectives. Mindfulness circles are another way we support our employees' emotional stability and mental well-being.

We conduct Employee Engagement Survey 'Vibes' every 2 year to gauge the pulse of changing employee expectations. It helps us on taking actions to keep the organization progressive and relevant. We employee a participative and collaborative approach in action planning. Additionally, we also hold regular open forums where employees can contribute to improving the workplace environment, operational efficiencies, ESG practices, and people policies.

# EMPLOYEE, CONTRACTOR AND SUPPLIER SAFETY

Guided by our Health Policy of the ABG Sustainable Business Framework, we prioritize the health and wellness of our employees, communities, and partners. This policy outlines our commitment to providing a safe and healthy working environment, promoting well-being initiatives, and addressing health-related challenges comprehensively.

Lost Time Injury	1
Lost Time Injury Frequency Rate	0.22
Total Manhours worked (Employee)	1884837.84
Total Manhours worked (workers)	5274424.28
No. of Fatalities (employee)	0
No. of Fatalities (workers)	1
Total Number of Safety Observations for FY 2022-23	3650
High consequences work-related injury or ill-health (excluding fatalities)	0

At EMIL, the Aditya Birla Group's policy framework coupled with the ISO certification requirements, serve as a guiding roadmap for implementing health and safety interventions. To enhance Quality, Environmental impact, and Occupational Health and Safety we have implemented the Quality, Health, Safety and Environment (QHSE MS IMS system in accordance with ISO 9001:2015, ISO 14001:2015 and ISO 45001:2018 standards, aligning with the sustainability framework of the Aditya Birla Group.

These frameworks play a crucial role in establishing overarching goals for the Unit such as achieving 'zero harm' and fostering a safety culture at the plant level. Progress toward these QHSE objectives is regularly assessed during monthly review meetings. Our approach involves utilizing the HIRA (Hazard Identification and Risk Assessment) framework to evaluate workplace safety risks.

Each line manager is assigned specific safety goals. Their performance on the goals assigned is subject to periodic evaluation. Line managers are responsible for maintaining and updating various registers including the quality risk register, HIRA register, business risk register and environment aspect-impact register.



A robust framework is in place to prioritize the safety of our employees and workers in the workplace incorporating various measures:

- 01 Compliance with Safety Regulations:** Ensuring strict adherence to safety regulations to create a secure working environment.
- 02 Enhancing Competence:** Continuous efforts to enhance the skills and knowledge of managers, supervisors, and workers contributing to a more competent and safety-conscious workforce.
- 03 Reporting Unusual Conditions:** Encouraging employees to promptly report any unusual conditions in the workplace or issues affecting installations and equipment to their immediate supervisor or designated safety representative.
- 04 Maintenance of Safe Working Techniques and Equipment:** Regular maintenance of machinery and equipment with special attention to devices designed for safety to guarantee a secure operational setting.
- 05 Hazard Elimination and Control:** Implementation of measures to eliminate or control hazards and risks during production, encompassing proper care and utilization of personal protective gear, facilities, and equipment at their disposal.
- 06 Cooperation for Compliance:** Fostering a collaborative atmosphere where employees cooperate with management and each other to ensure compliance with the duties and responsibilities assigned to both management and employees.



## Strengthening the Safety and Health Culture

We cultivate a comprehensive safety culture supported by a sturdy Occupational Health and Safety Policy, aligning our practices with regulatory standards. Our commitment to ensuring the daily safety of our operations involves active engagement, alignment, and involvement of employees and management at all levels. This is achieved through a series of measures outlined below:

Execution and Compliance	Reviews and Audits	Awareness and Training	Health and Safety
<ul style="list-style-type: none"> <li>On-site Emergency Plan</li> <li>HIRA for hazardous activities &amp; SOPs and SMP for Plan Activities</li> <li>Sharing safety contacts before the start of any meetings</li> <li>Regulatory &amp; Legal compliance concerning Safety &amp; Fire</li> <li>Increase illumination levels inside and surrounding the plants</li> <li>Developing guarding systems for moving machinery &amp; equipment</li> <li>Global Positioning System (GPS) management for tracking vehicle speed to prevent accidents</li> </ul>	<ul style="list-style-type: none"> <li>Internal safety audits/ inspection in hazardous areas</li> <li>Quarterly Apex Safety committee meetings</li> <li>Monthly safety meetings</li> </ul>	<ul style="list-style-type: none"> <li>Mock Drills as per the emergency preparedness plan</li> <li>Safety awareness training for employees</li> <li>Daily tool box talk on the shop floor</li> </ul>	<ul style="list-style-type: none"> <li>Pre-employment and periodic medical examination of employees</li> <li>Systematic drives/campaigns on site-specific prevailing health problems</li> </ul>



At EMIL we pay utmost attention to the health and safety of our employees and keeping them updated with the latest safety trainings and provisions through multiple initiatives such as seminars, regular check up camps, etc.

Health talks were arranged at NFA, Vapi, and BCML. While the participants in Vapi received advice on ergonomics and arthritis, the workshop at BCML concentrated on heatwaves and sunstroke.

Talk about T B and Malaria NFA Vapi arranged a health talk on tuberculosis and malaria for its office workforce out of concern for the lifestyle, ergonomics, and overall health of its staff.

In conjunction with Aditya Birla Capital, BCML arranged a health camp as part of a wellness drive, during which the staff underwent Body Composition Analysis (BCA). As BCA involves analyzing the human body to ascertain the proportion of fat against muscle tissue, the report it produces aids the doctor in creating a precise starting point and a strategy for reaching the patient's health objectives.

BCML held a health awareness program on HIV/AIDS, TB, Leprosy, Malaria, Dengue and Chikungunya in association with Zilla Swasthya Samiti — Angul. With a special attention on the operators and workers, this health camp had more than 100 numbers of employees participating.

Eye check-up camp at RCML An eye check—up and consultation camp was organized for the employees and their families at RCML. In this camp. the patients were tested for eye refraction, vision and colour blindness by a specialized medical team.

Under the direction of the CDMO and the District Medical Team, a quick immunization drive using the government's cost-free vaccine program was carried out at RCML to safeguard the physical well-being of the workforce.

The International Yoga day was celebrated across RCML and IOBP on 21st June 2022. Yoga sessions were organized in association with Patanjali Yogapeeth where benefits of various asanas and pranayama were discussed.

Weekly technical training at BCML, with an emphasis on operational safety expertise in particular. Training session on lifting mechanisms in trucks and tippers conducted by HVVA India Private Ltd at BCML.

With an objective to gain knowledge and preventive measures on Occupational Health & Safety, an awareness session was conducted at BCML in July 2022 by a Senior consultant at Occupational Health, Bhubaneswar.

In August, 2022 a workshop for the technical team responsible for excavation was held at RCML. With the assistance of Construction & Mining Machinery, the trainer provided an explanation of the construction, essential features of HEMM machines, and economical maintenance methods.

### SAKSHAM 2.0

A number of "Saksham" sessions, organized by MPower, were hosted at various EMIL facilities, including Bhubaneswar, Kolkata, BCML, NFA Vapi, and the IOBP unit. With the goal of improving the workplace, the course offered insights on employee mental health.



## The WBCSD Pledge for Sanitation and Hygiene in the Workplace: A Commitment to Universal Access

Access to safe drinking water and sanitation is not only a fundamental human right but also a crucial element of the Millennium Development Goals set by the United Nations. The Vision 2050 of the World Business Council for Sustainable Development (WBCSD) aspires to see '9 billion people living well within the limits of the planet.' In pursuit of this ambitious vision, it is imperative to address the critical issue of the availability of clean and safe drinking water. The availability of clean water is not only a basic human right but also a cornerstone for fostering well-being across the larger society.

At EMIL, we aim to demonstrate leadership in providing access to safe water, sanitation and hygiene which not only enhances employee health, satisfaction and productivity but also serves as a powerful call from the business community for collective action to address this unacceptable crisis. By endorsing this Pledge we commit to implementing access to safe water, sanitation and hygiene in the workplace. This is done by adhering to appropriate standards for all employees across all premises under direct control within three years.

### Creating an Environment of Care and Safety

At EMIL we are on an ambitious vision to power India's Intricately focusing on safety, we conducted weekly technical training at BCML with emphasis on operational safety expertise. This training session on lifting mechanisms in trucks and tippers conducted by HVVA India Private Ltd at BCML. With an objective to gain knowledge and preventive measures on Occupational Health & Safety, an awareness session was conducted at BCML this year. Another workshop for the technical team responsible for excavation was held at RCML. With the assistance of construction and mining machinery the trainer provided an explanation of the construction, essential features of HEMM machines, and economical maintenance methods.



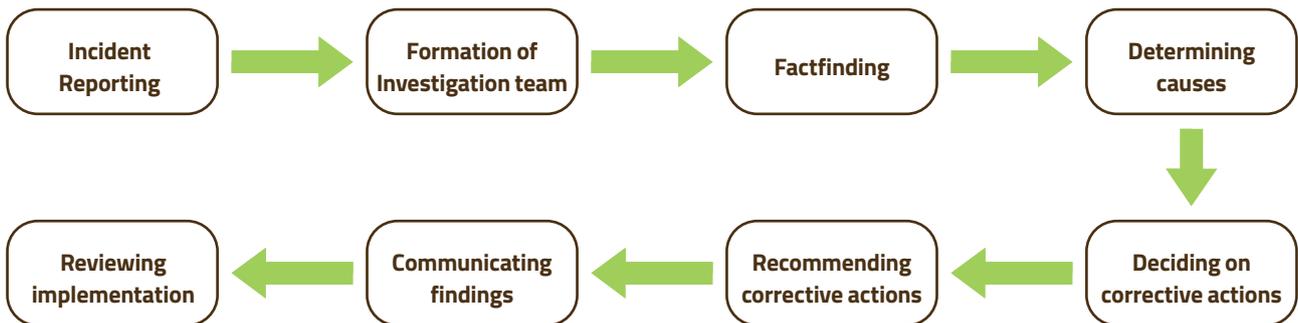
## Environmental Health and Safety Dashboard

We leverage a cloud-based Environmental Health and Safety (EHS) platform to systematically record, monitor and track health and safety parameters across all units. Incidents pertaining to safety are documented on this platform and categorized based on their severity and consequences utilizing a scale ranging from 1 to 5. The dashboard providing a comprehensive overview is accessible to senior executives throughout the reporting chain.

For each reported incident, a meticulous 8-step root cause analysis (RCA) is conducted using the Enablon, a platform that

improves incident investigation by locating the root cause of an issue as opposed to only its symptoms and creates insights to identify and use unconventional approaches to stop reoccurring situations. This thorough analysis helps identify the underlying causes after which subsequent actions are recommended to prevent the recurrence of similar incidents. The implementation of these recommended actions undergoes a rigorous review process until closure ensuring a continuous and proactive approach to improving safety measures across our operations.

## 8 Step Incident Management at EMIL



## OHS at our Units

In our units we employ various assessment tools to gauge our preparedness including self-assessment questionnaires (SAQ), Quantitative Exposure Assessments (QEA), and Qualitative Exposure Assessments (QLEA). The safety practices at all our units consist of a combination of standardized measures shared across EMIL along with specific interventions tailored to the unique conditions and risks inherent to each operation.

To ensure operational safety, we break down each unit's workflow into Standard Operating Procedures (SOPs). These SOPs serve as the foundation for developing Safe Work Procedures (SWPs), incorporating necessary precautions into the work processes. These well-documented SWPs form the core of our safety procedures, encompassing monitoring, prevention, and corrective actions.

We prioritize the safety of our workforce by providing them with the requisite Personal Protective Equipment, taking direct responsibility rather than relying on contractors for this provision.

Furthermore, our wind and solar energy units implement a real-time monitoring system for health and safety parameters with a structured incident reporting procedure carried out daily. In addition to overarching business-level safety committees we establish unit-level committees that convene regularly ensuring a robust and comprehensive approach to safety management at all levels of our organization.

### Enhancing Security at RCML Coal Handling Plant

RCML CHP, an open area, faced significant challenges with unauthorized manpower movement, primarily from local villagers. Instances of conveyor belt cutting by unidentified individuals not only led to damage to the plant's assets but also resulted in plant shutdowns.

In response to the security issues, a proactive step was taken to enhance the safety and security of RCML CHP. A 300-meter area along the length of conveyor streams BC-2 & BC-3 has been fortified with an 8-foot-high metal fence. This measure aims to restrict unauthorized access and mitigate the risks associated with unauthorized personnel infiltrating the conveyor system.

The benefits of the above resulted in movement restrictions of the outsiders. The installation of the metal fence effectively limits the movement of outsiders, including local villagers and potential coal thieves, within the plant area. This significantly reduces the likelihood of unauthorized access and potential asset damage or sabotage by external entities in the future.

The fortification of the designated area contributes to an overall improvement in the safety of the plant, particularly in areas near running conveyors. This strategic intervention not only addressed the immediate security concerns but also established a foundation for sustained operational integrity and safety at RCML CHP. The implementation of the metal fence serves as a practical solution to safeguard plant assets, prevent unauthorized access, and enhance the overall resilience of the facility against external threats.



## Safety Training

The company prioritizes safety through a comprehensive annual training calendar designed to enhance the understanding and adherence to workplace safety practices among employees, contract workers, and other stakeholders involved in our activities. Safety training and awareness is a mandatory component for all new hires emphasizing our commitment to fostering a secure work environment.

First Aid	Fall Protection	Scaffolding	Drilling, charging and blasting	Fire Safety	Confined space
Machine Guarding	HEMM working	Near Miss Reporting and Safety Observations	Hot Work	Electrical Safety	Lifting and Supporting
Personal Protective Equipment	Lock Out Tag Out and Permit System	Hazardous Chemicals Management	Permit to work	Emergency and Disaster Preparedness	Road and Vehicular Safety
		Ergonomics	Welding work		

## Building a Sustainable Supply Chain

In our commitment to enhancing the sustainability of our supply chain we systematically identify and monitor potential ESG risks across our entire value chain. We actively encourage our partners to align with our sustainability commitments and urge them to proactively mitigate or adapt to the identified risks. These proactive measures are integral to safeguarding our Company and our suppliers from potential reputation damage, non-compliance issues, climate change-related disruptions and the prevention of human rights violations. To gauge the satisfaction levels of our suppliers and vendors we conducted a yearly survey to encourage ongoing collaboration and improvement.

Our focus on local sourcing within a streamlined supply chain not only enables increased production but also optimizes resources and minimizes our environmental footprint. Through successful collaborations, innovation and co-creation powered by digitalization and advanced technology we have transformed our supply chain. Initiatives such as the automation of vendor banking transactions and the implementation of e-payments have significantly reduced manual interventions and cheque issuance. This not only ensures immediate fund transfers but also automates the

secure exchange of files and information with approvals on the bank portal incorporating robust encryption measures.

A structured vendor management system allows us to establish transparent and fair contracts with our suppliers and effectively address their concerns. Regular engagement with vendors ensures that we stay attuned to their evolving needs. Our supplier grievance mechanism ensures the timely receipt and redressal of grievances. Annual vendor meets serve as valuable platforms for assessing gaps and collaborating with our partners to enhance their experience with EMIL. Through this approach, we were able to achieve no negative environmental impact in our supply chain for the year.

Aligned with our commitment to fostering inclusive growth and creating shared value we actively promote the development of local and short supply chains involving small and micro-manufacturers. This approach not only de-risks our operations but also reduces our environmental impact related to transportation and storage. Simultaneously, it creates local employment opportunities and contributes to the socio-economic development of communities.

## Introducing a Consolidated Portal for Transparency and Efficiency in the Value Chain

We are excited to propose the implementation of a consolidated portal aimed at digitizing end-to-end processes across our value chain, accessible to EMIL employees, buyers, and suppliers. This comprehensive and automated system starting from vendor registration to bidding processes and the release of requests for quotes (RFQ) will cover the entire lifecycle of our vendor relationships. The primary goal is to render transactions seamless, transparent, and risk-free.

The consolidated portal will serve as a platform for sharing information and conducting business transactions between vendors and EMIL. It will revolutionize the evaluation of vendor quotations, ensuring fairness and transparency in the decision-making process for awarding contracts. The tool will also provide historical data, empowering ongoing decision-making with valuable insights.

One of the significant advantages of this portal is the reduction of time, resources, and paperwork traditionally involved in vendor transactions. Once the portal is live all documents related to a specific transaction, or a family of transactions will be readily available and visible to all stakeholders. This heightened visibility enhances transparency, fosters trust, and streamlines communication between parties contributing to a more efficient and collaborative value chain.

By introducing this consolidated portal EMIL is taking a significant step toward embracing technology to create a more transparent, efficient and interconnected ecosystem for our valued stakeholders.

## STRENGTHENING COMMUNITIES

At EMIL, we are guided by the Aditya Birla Group's concept, which aspires to go beyond the conventional bounds of business because we care. For over 50 years the Group has pioneered impact-led upliftment activities for the underprivileged and vulnerable in 9,000 villages touching the 11 million people lives in India.

Our Corporate Social Responsibility (CSR) efforts are intended to raise the human development index and promote socioeconomic possibilities in our communities. Our actions are guided by a thorough CSR strategy with a structured execution approach and established budgets which are overseen by our Board.

### CSR Framework and Approach

Our community interactions are carried out by 'The Aditya Birla Centre for Community Initiatives and Rural Development,' which is led by Smt. Rajashree Birla. The activities are carried out in collaboration with government agencies, district administrations, village panchayats, and community people. We also actively interact and network with other bilateral

and unilateral organizations to brainstorm, co-create, learn, and exchange experiences to broaden the scope and effect of community engagements and expedite advocacy for long-term socioeconomic reform.

The institutions and non-governmental organizations with whom we have engaged are:

**Calcutta Police  
Sergeants Institute**

**Impact India  
Foundation**

**Cancer Patients  
Aid Association**

**Sankara Netralaya,  
Kolkata**

**Lila Poonawalla Foundation**

**Concern India Foundation**

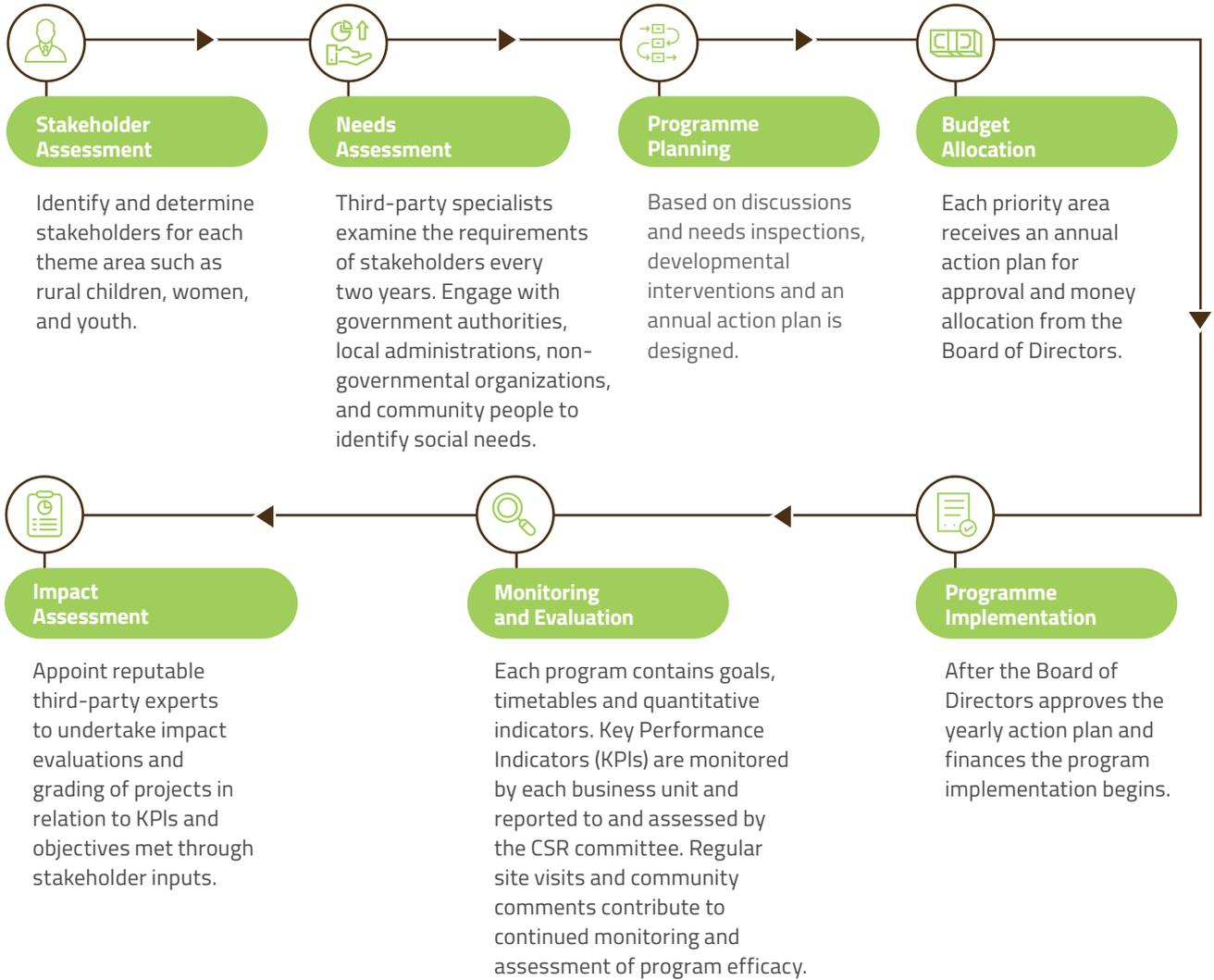
**I Hear Foundation**

**Birla Medical Research  
& Education Foundation**

**National Youth Service Action and Social  
Development Research Institute**

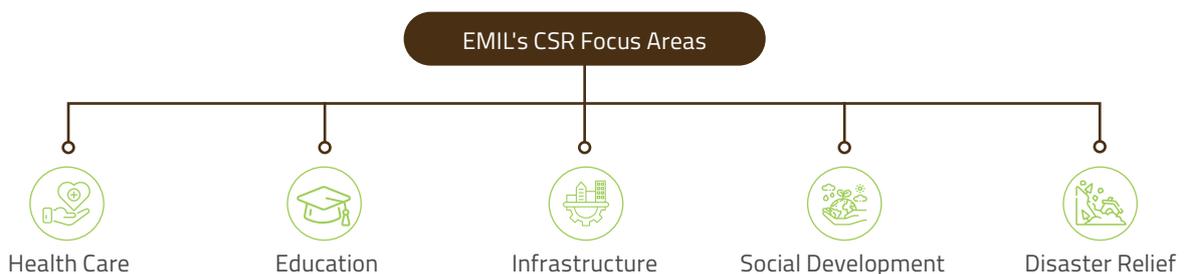
**Northeast Educational  
Development Trust**

We developed a framework and an execution strategy to strategically identify areas where the foundation may focus its efforts, spanning the full process of analyzing stakeholders, developing strategies, putting together a program, and reviewing the effect of those efforts.



## Areas of Focus

The Company's corporate social responsibility initiatives are developed jointly with community people in order to fulfill their necessities and resolve any repercussions of our operations on their lives and livelihoods. They want to address the 'quality of life' issues that disadvantaged and marginalized populations experience and make a 'meaningful difference' in their lives. Our CSR efforts are focused on the following areas of need.



## Health care

Our CSR team's health care projects aim to broaden access to quality and affordable healthcare for community welfare. The project has implemented health care aid to underprivileged section through preventive, curative, promotional and supportive services such as vaccine drives, equipment donations, mental health campaigns in schools and other such institutions.

Other initiatives under the health care focus are:

- Medical Facilities provided in Godda village (Jharkhand), Singrauli (Madhya Pradesh) and Surajpur (Chhattisgarh). The seven-coach hospital train with its state-of-the-art Operation Theatre (OT) facilities provide free Tertiary care to patients. During the project, 13,020 patients had registered in Jharkhand, 9,640 in Madhya Pradesh, and 11,678 in Chhattisgarh to avail this medical facility.
- The Lifeline Express, a super specialist mobile hospital was flagged from district head quarter, Godda. This hospital on wheels is equipped to treat ailments like cataract, knee replacement, dental Surgery, major ENT operations and Ortho cases. Organised with active support from the district administration, this initiative has been benefiting large number patients from nearby villages.
- Free Cataract Operations for 50 underprivileged patients of Sundarbans, West Bengal
- 2 doses of HR-HPV vaccination in 2000 School girls to eliminate Cervical Cancer. The second dose is given at an interval of 6-12 months after the first dose.
- Zeiss CIRRUS 6000 Angioplex and Ultra-wide Field Fundus Camera donated at Sankara Netralaya in Kolkata, West Bengal for the underprivileged people of the society.
- Project OORJA is a mental health awareness campaign at MCGM schools for teachers and students from all wards. This initiative intends to raise mental health awareness among instructors, give interventions to kids, and eventually incorporate mental health curriculum into school instruction by empowering teachers.
- G. D. Birla Medical Research & Education Foundation provides free medical care to impoverished members of society.
- Help to 20 people with hearing loss through I Hear Foundation
- MyLab X 75 Ultrasound Machine with 21.5" LCD Monitor



and 32 Channel ECG Machine donated to Institute of Neurosciences Kolkata for the disadvantaged people of the community.

- EMIL installed a digital X-ray machine at Bada Malhara community health centre in Chhatarpur district. The service was inaugurated by the MLA of Bada Malhara, Mr Pradyuman Singh Lodhi during the Swasthya Mela organised under the aegis Of Azadi Ka Amrit Mahotsava.
- '1Smile on Wheels', a joint initiative of EMIL and Smile Foundation has treated over 2200 patients from 10 villages around Bandha Coal Mines project in villages of Singrauli district.

### Bringing Hope Home: Lifeline Express Touches Lives in Every Household

The foundation of a robust nation lies in ensuring universal and accessible healthcare. Healthcare is a fundamental survival necessity, and we are resolute in extending its reach to every corner of the country. Our unique CSR initiative, 'The Lifeline Express,' brings healthcare to remote regions through specially equipped trains ensuring essential medical services reach underserved areas.



We initiated three impactful Life Line Express (LLE) projects, in Odisha, Jharkhand, and Madhya Pradesh in collaboration with the Impact India Foundation. These projects were designed to bring essential medical services to remote areas benefiting 34,338 villagers across 7,875 households. Our primary focus was on addressing women-related health issues and promoting their overall well-being. Through these initiatives, we successfully conducted 1,548 surgeries, including ENT, orthopedic, and plastic surgery for cleft lips. Additionally, 6,142 aids and appliances such as spectacles, hearing aids and calipers were distributed.

Under the banner of Project Oorja an Mpower initiative for mental health awareness in MCGM schools, EMIL reached out to 1,081 schools benefitting 2,77,298 students. The project focuses on creating mental health awareness by training teachers and offering interventions to students.

Our mobile health unit in Singrauli regularly organizes health camps for 10 villages conducting pathology tests, distributing medicines and offering referral guidance. Over 15,066 patients including 5,700 women, were treated at these medical camps.

Our mobile health unit in Singrauli regularly organizes health camps for 10 villages conducting pathology tests, distributing medicines and offering referral guidance. Over 15,066 patients including 5,700 women, were treated at these medical camps.

Conducting 125 Information, Education, and Communication (IEC) sessions in villages we raised awareness about ORS, breastfeeding, anemia, maternity care, childcare, menstrual hygiene, musculoskeletal pain and skin diseases reaching out to 2,265 people with a significant focus on women.

This program has made a substantial impact on healthcare accessibility positively benefiting numerous individuals. Looking forward, we aspire to amplify the impact of the Lifeline Express Program by expanding its reach within the community.

### Project Oorja- Igniting Awareness

We recently spearheaded an initiative called Project Oorja which aimed to promote mental health awareness in schools under the Municipal Corporation of Greater Mumbai (MCGM). The project had an extensive outreach, reaching over 1,081 educational institutions and impacting the lives of more than 2,77,298 students. The core idea of Project Oorja was to create a better understanding of mental health issues among young people. To achieve this, we conducted training sessions for teachers equipping them with the knowledge and tools to identify and address mental health concerns among their students. We believe that teachers play a crucial role as frontline advocates for mental health awareness and creating a supportive environment within schools.

Besides teacher training, we also implemented targeted interventions directly benefiting students. These interventions were designed to offer support, resources and coping mechanisms nurturing the mental well-being of young minds within the educational framework. Our extensive reach underscores our commitment to instill a culture of mental health awareness within the educational landscape. We strive to go beyond mere awareness and catalyze tangible changes in how mental health is perceived, understood and addressed within the MCGM school community. Through these collective efforts we aim to create a positive and empathetic environment where mental health is prioritized, reducing stigma and fostering a generation that is resilient and well-equipped to navigate life's challenges.

## Education

We at EMIL believe that realizing one's full potential as a person and as a community is made possible through education. It's a crucial instrument for encouraging sustainable growth and increasing people's ability to interact with environmental and development issues. Effective public involvement in decision-making requires the establishment of beliefs, attitudes, abilities, and behaviors that are consistent with sustainable development. Educational outcomes are improved by disciplinary integration and communication techniques.

EMIL's CSR projects based on education focus on making education the cornerstone of inclusive and sustainable growth and development by strengthening educational infrastructure for underserved rural children of our communities. For FY 22-23, EMIL has taken up multiple initiatives to make education more accessible to the community. Skill Improvement sessions in science, technology, engineering and mathematics were

provided to government school children in Rajasthan which benefited around 1200 pupils. Education support was also provided to nearly 350 needy school students at Ambabadi Rajasthan.

As part of CSR initiative, a digital library cum reading room was developed at Godda College near RCML where 20 Computers along with fixture, furniture and reference books were provided. Now available to students, this hybrid reading room and digital library is regarded as a novel endeavor in this field. Furthermore, the Lila Poonawalla Foundation offers grants for postsecondary education to underprivileged children. 56 female engineering students pursuing a four-year degree program were given scholarships and skill development/training.

### School near loBP site



**Empowering Education Across Horizons:** In collaboration with BITSAA Alumni Trust and Grey Sim Learnings Foundation, we embarked on a mission to elevate education in science, technology, engineering, and mathematics (STEM) in Rajasthan. This initiative has had a profound impact, benefiting over 1,200 students. By enhancing STEM education, we aim to empower the youth with the skills and knowledge necessary for success in a rapidly evolving world.

**E-Education Revolution in Rajasthan:** In response to the growing importance of digital learning, our e-education project in Rajasthan, implemented in partnership with our CSR collaborator Ashrya, has proven to be a game-changer. This initiative has provided accessible and quality education to nearly 350 students, bridging the gap and creating opportunities for academic growth in a technologically advanced era.

**Empowering Women in Engineering:** Recognizing the need for gender diversity in STEM fields, we took a significant step forward by offering merit-cum-need-based scholarships and skill-building programs. Fifty-six aspiring young women pursuing a 4-year engineering degree in Bengaluru have been beneficiaries of this initiative, facilitated through our partnership with the Lila Poonawalla Foundation. This endeavor aims to break gender barriers and cultivate a more inclusive and diverse future in the engineering landscape.

**Building Dreams in Assam:** In line with our commitment to social responsibility, we have pledged support towards the construction of 'Vandya International School' in Assam. This forthcoming institution holds the promise of becoming a beacon of hope and education for the underprivileged, providing a conducive learning environment for the holistic development of the community.

## Infrastructure

Development of rural infrastructure does not only alleviate poverty and unemployment but also enhances health and education extending aid in providing necessities like clothing, food and shelter in the long run for rural areas. For example, construction of schools in a rural area not only creates provision of education for children but opportunities to improve future employment opportunities. Construction of roads is not limited to connectivity between two regions but enhances access to basic human rights such as education, health care, etc. for rural population. Keeping these basic tenets in mind, EMIL aims to uplift the rural population for sustainable development of the country.

The infrastructure development projects under our CSR team endeavor to improve quality of life and ease of living by enhancing the infrastructural backbone of the rural areas around our operations. Access to basic amenities like the availability of clean drinking water, electricity and waste disposal is vital for the development of humankind. EMIL, jointly with Concern India Foundation, assisted 4562 rural people for comprehensive local Community Development. Under rural infrastructure development initiatives, the installation of submersible pumps with bore well and overhead storage tank project at Kaddutola and Dumaria village around RCML was nearing completion. The prime objective of this initiative is to make drinking water readily available to inhabitants Of Talihari rehab site. We also provided a Government High School (S.S.D.) in Basantpur a safe drinking water facility which helped around 500 indigenous children and school instructors. Around their project sites, EMIL installed 120 solar lights, formed a village development committee, put up ten dustbins to promote waste management and undertook one- day cleanliness drive with women SHG, empowering women to take up leading roles in these projects.



Amping up our efforts to promote education in rural areas, we have in collaboration with the North-East Educational Development Trust improved access to education by constructing a school building for disadvantaged pupils in Kamrup, Assam. EMIL also donated 136 desks and benches to neighboring schools near BMCL to improve facilities around local schools.

### Transformative Integrated Village Community Development Project in Talcher Block, Angul District, Odisha

The project aims to improve the overall well-being of the community by addressing various needs in a comprehensive manner. We plan to strategically intervene in areas such as infrastructure, education, healthcare, and livelihood opportunities to promote sustainable development in the region. By doing so, we hope to create a positive impact that will last for generations to come. The collaborative effort between our organization and Concern India Foundation reflects a shared vision for community upliftment. By combining resources, expertise, and a commitment to social responsibility, this partnership exemplifies the power of collaboration in driving positive change.

The primary beneficiaries of this initiative are the 4,562 rural residents residing in the Talcher Block. By focusing on a spectrum of needs, including education, healthcare, and livelihoods, the project aims to elevate the overall well-being and quality of life for individuals and families in the region. By addressing the diverse needs of the Talcher Block in Angul District, Odisha, we aspire to set a precedent for sustainable, inclusive, and transformative community development. Through collaborative efforts, we believe in creating a brighter and more promising future for all residents involved in this pioneering project.

## Social Reform

Our CSR projects on social reform strive to protect and preserve the rural traditions of the places in which we work as well as to offer possibilities for community members to improve their economic independence and social integration. These interventions have assisted in maintaining rural heritage, culture and ethnicity while integrating social rehabilitation to raise awareness on issues plaguing the communities such as drug abuse, unemployment, unskilled youth, etc.

Calcutta Police Sergeants' Institute has taken up the fight against drug misuse and doping in order to assist in developing an international society free of drug abuse. Drug misuse and doping are a societal scourge that saps a society's vitality. As a result, to raise awareness about drug abuse and illicit drug trafficking, the Calcutta Police Sergeants' Institute had planned a few activities beginning on June 26th, 2022, the International Drug Day. We also donated 1,000 masks to the Calcutta Police Sergeants' Institute.

350 Odisha girls were trained as 'sewing machine operators' through a collaboration with National Youth Service Action and Social Development Research Institute's sustainable socioeconomic development initiative. These girls were then



hired to assist their livelihood situation. Additionally, EMIL gave 80 women in Singrauli, Madhya Pradesh sewing and stitching training as well as raw materials.

On July 22, 2022, Additional District Magistrate officially opened the 21-day Impact India Lifeline Express Project at Angul Railway Station as part of our CSR project. On this occasion, the senior leadership teams of SCML and BCML were in attendance as well.

# Way Forward

In the dynamic landscape of today's business environment, the integration of ESG principles has emerged as a vital element for sustainable success. At Essel Mining, we are committed to elevating our ESG performance by fortifying various business facets and ensuring the consistent implementation of existing initiatives. Our trajectory aligns with a steadfast commitment to our long-term strategic plan, underpinned by the overarching Sustainability Commitments of the Aditya Birla Group.

As we progress, our focus extends beyond the present, aiming to evolve into a forward-thinking mining company that not only values its history, but also envisions a sustainable future. This exciting transformation involves refining our business strategies and reshaping our operations to foster sustainability. We are poised to enhance our brand and contribute meaningfully to the paradigm shift towards responsible and sustainable business practices.

Directing our focus towards greener operations, we intend to implement a phased approach to achieve net-zero emissions across operations. Our first step towards achieving such a feat is to set and commit to SBTi Net Zero targets. Additionally, we aim to broaden our initiatives, placing heightened emphasis on waste minimization within our operations.

Furthermore, we are committed to enhancing transparency in our reporting practices over the coming year. As part of our forward-looking agenda, we have plans for the next financial year to reassess our materiality. This will enable us to gain a more comprehensive understanding of the business and societal implications of our operations.

Recognizing the climate risks inherent in our business operations, we are committed to mitigating their impact. To address climate-related risks effectively, we aim to integrate them into our risk register and enterprise risk management system.

Central to our business are the people who drive it, and it all begins with the meticulous identification of the right talent for each role and the continuous cultivation of this talent pool to ensure sustained high performance. To achieve this goal, we have established robust systems around this core pillar and are actively seeking to enhance employee engagement in the future.

EMIL remains steadfast in its commitment to adhere to the Aditya Birla Group Sustainable Business Framework, guiding our journey towards a low-carbon sustainable economy and future.

# Abbreviations

ABBREVIATIONS	FULL FORM
ABG	ADITYA BIRLA GROUP
ACML	AMELIA COAL MINING LIMITED
AWS	ALLAINCE OF WATER STEWARDSHIP
BCML	BHUBNESHWARI COAL MINING LIMITED
BF	BLAST FURNACE
BRSR	BUSINESS RESPONSIBILITY & SUSTAINABILITY REPORT
BSI	BRITISH STANDARD INSTITUTION
CDM	CLEAN DEVELOPMENT MECHANISM
CDP	CARBON DISCLOSURE PROJECT
CFO	CHIEF FINANCIAL OFFICE
CHRO	CHIEF HUMAN RESOURCE OFFICER
CLO	CALIBRATED LUMP ORE
COGS	COST OF GOODS SOLD
CO-PA	COSTING AND PROFITABILITY ANALYSIS
COO	CHIEF OPERATING OFFICER
CPT	CIRCULAR PELLETTIZING TECHNOLOGY
CSM	CONTINUOUS SURFACE MINER
CSR	CORPORATE SOCIAL RESPONSIBILITY
DEI	DIVERSITY AND INCLUSION
DJSI	DOW JONES SUSTAINABILITY INDICES
DRI	DIRECT REDUCED IRON
EBITDA	EARNING BEFORE INTEREST TAXES, DEPRICIATION & AMORTIZATION
EC	ENVIRONMENT CLEARANCE
EMIL	ESSEL MINING & INDUSTRIES LIMITED
EMMRL	EMIL MINES & MINERALS RESOURCES LIMITED
ESG	ENVIRONMENTAL, SOCIAL & GOVERNANCE
ETP	EFFLUENT TREATMENT PLANT
FC	FOREST CLEARANCE
FeMo	FERRO MOLYBDENUM
FeTi	FERROTITANIUM
FEV	FERRO VANADIUM
FY	FISCAL YEAR
GHG	GREEN HOUSE GASES
GJ	GIGAJoule
GmbH	GESELLSCHAFT MIT BESCHRANKTER
GRI	GLOBAL REPORTING INITIATIVE

ABBREVIATIONS	FULL FORM
GRN	GOODS RECEIVED NOTE
HIRA	HAZARD IDENTIFICATION & RISK ASSESSMENT
HRDD	HUMAN RIGHTS DUE DILIGENCE
HSD	HIGH SPEED DIESEL
ICMM	INTERNATIONAL COUNCIL OF MINING & METALS
II	INCIDENT INVESTIGATION
IMS	INTEGRATED MANAGEMENT SYSTEM
IOBP	IRON ORE BENEFICIATION AND PELLETTIZATION
KMP	KEY MANAGEMENT PERSONNEL
KPI	KEY PERFORMANCE INDICATOR
LCA	LIFE CYCLE ASSESSMENT
MDO	MINE DEVELOPERS & OPERATORS
MEMCW	MINES ENVIRONMENT AND MINERAL CONSERVATION WEEK
MP	MADHYA PRADESH
MT	METRIC TONNE
MTPA	METRIC TONNES PER UNIT
MW	MEGA WATT
MWH	MEGA WATT HOUR
MWp	MEGA WATT PEAK
NFA	NOBLE FERRO ALLOYS BUSINESS
OECD	ORGANIZATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT
OH & SAS	OCCUPATIONAL HEALTH & SAFETY ASSESSMENT SERIES
PMAI	POWDER METALLURGY ASSOCIATION OF INDIA
PMPL	PRO MINERALS PRIVATE LIMITED
PSM	PROCESS MANAGEMENT
PWDs	PERSONS WITH DISABILITIES
RCM	REGULATORY COMPLIANCE MANAGEMENT
RCML	RAJMAHAL COAL MINING LIMITED
RFQ	REQUESTS FOR QUOTES
SASB	SUSTAINABILITY ACCOUNTING STANDARDS BOARD
SBTi	SCIENCE BASED TARGET INITIATIVE
SCML	SUBHADRA COAL MINING LIMITED
SDF	SUSTAINABLE DEVELOPMENT FRAMEWORK
SI	SAFETY INTERACTIONS
SMP	SAFETY PLAN
SOP	STANDARD OPERATING PROCEDURES
STP	SEWAGE TREATMENT PLANT
TCFD	TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES
UNSDGs	UNITED NATION SUSTAINABLE DEVELOPMENT GOALS
USEPA	UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
XRF	X-RAY FLUORESENE SPECTROSCOPY

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# Assurance Statement



## Independent Assurance Statement

The Directors and Management,  
 Essel Mining & Industries Limited  
 Industry House, 18th Floor,  
 10, Camac Street, Kolkata 700 017, India.

### Introduction and Engagement

'Essel Mining & Industries Limited' (hereafter EMIL) commissioned TUV India Private Limited (TUVI) to conduct the independent external assurance of non-financial ESG performance indicators disclosed in EMIL's Sustainability Report (hereinafter the 'Report') for the period April 1 2022 to March 31 2023. This engagement was comprised a "limited assurance" of EMIL's sustainability information for the applied reporting period. The Verification was conducted using remote assessments in month of October 2023 from 26<sup>th</sup> October till 30<sup>th</sup> October 23 and onsite assessment on 18<sup>th</sup> October 2023 at the EMIL's installations at Vapi as listed under "Scope and Boundary" below. The Report is based on the principles of GRI 2020 Standards (hereafter 'GRI'). This assurance engagement was conducted in accordance with ISAE 3000 (revised).

### Management's Responsibility

EMIL developed the Report's content by monitoring the performance data. EMIL management is responsible for identifying material topics and carrying out the collection, analysis, and disclosure of the information presented in the Report (web-based and print), including website maintenance and integrity, and for ensuring its quality and accuracy in reference with the applied criteria stated in the GRI Standards in such a way that it is free of intended or unintended material misstatements.

### Scope, Boundary and Limitations of Assurance

The scope of work includes limited assurance of the following non-financial performance / KPI disclosures as disclosed in the Report. In particular, the assurance engagement included the following:

- i. Review of the disclosures submitted by EMIL;
- ii. Review of the quality of information;
- iii. Review of evidence (on a sample basis) for identified non-financial indicators

TUVI has verified the below-mentioned disclosures given in the Report:

Topic	Indicator	GRI Disclosure
Governance	Governance structure	102-8, GRI-2
	Management approach	103-1,103-2, 103-3
Water	Water withdrawal	303-1
	Water discharge	303-2
	Water recycled and reused	303-3
	Water discharge	303-4
	Water consumption	303-5
Effluent & waste	Water discharge by quality and destination	306-1
	Waste by type and disposal method	306-2
	Waste generated	306-3
	Waste diverted from disposal	306-4
	Waste directed to disposal	306-5
Emissions	Direct (Scope 1) GHG emissions	305-1
	Energy indirect (Scope 2) GHG emissions & Scope 3 emission (limited to identified GHG sources)	305-2 & 305-3
	GHG emission intensity ratio	305-4
	Reduction of GHG emissions	305-5
	Energy	Energy consumption within the organization Energy intensity

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# TUVINDIA

Occupational Health and Safety	Occupational health and safety management system	403-1
	types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	403-2
	Workers with high incidence or high risk of diseases related to their occupation	
	Work-related injuries	
	Worker participation, consultation and communication on occupational health and safety	403-3
	Worker training on occupational health and safety	403-9
	Promotion of worker health	403-4
	Prevention and mitigation of occupational health and safety impacts linked by business relationships	403-5
	Work-related ill health	403-6
	Workers covered by an occupational And safety management system	403-7
	Average hours of training per year per employee	403-10
	Programs for upgrading employee skills and transition assistance programs	403-8
	Percentage of employees receiving regular performance and career development reviews	404-1
Employment	Total number and rate of new employee hires and employee turnover during the reporting period, by age group, gender and region.	404-2
	Benefits provided to full-time employees that are not provided to temporary or part-time employees	404-3
	Parental leave	401-1
Local communities	Operations with local community engagement, impact assessments, and development programs	401-2
Materials	Materials used by weight or volume	401-3
	Recycled input materials used	413-1
	Reclaimed products and their packaging materials	301-1
Supplier Environmental Assessment	New suppliers that were screened using environmental criteria	301-3
Supplier Environmental Assessment	Negative environmental impacts in the supply chain and actions taken	308-1
Biodiversity	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	308-2
	Significant impacts of activities, products and services on biodiversity	304-1
	Habitats protected or restored	304-2
Diversity and equal opportunity	Diversity of governance bodies and employees	304-3
	Ratio of basic salary and remuneration of women to men	405-1
		405-2

The reporting boundaries for the above topics includes

1. Bhubaneswari Coal Mining Ltd., Old MCL Store campus, Deulabeda Colliery Talcher, Angul, Odisha 759102
2. Rajmahal Coal Mining Ltd, C-19/50, Urja Nagar, Godda, At & PO Mahagama Jharkhand 814154
3. Essel Mining and Industries Limited, Noble Ferro Alloys Unit, Plot No 165 & 166, GIDC, Dist. Valsad, Vapi Gujarat ,396 195
4. Essel Mining and Industries Limited Wind power site office Sakri Dist. Dhulia
5. Amelia Coal Mining Pvt Ltd, Near Dr. Shrivastava Clinic, Mig 68 & 69, Navjeevanvihar, Behind Shivajee Complex, Vindhya Nagar NTPC Township, District- Singrauli, 486885, Madhya Pradesh India.
6. Iron Ore – Beneficiation & Palletisation Village Basantpur, Tehsil – Barbil,P.O.– Debuna, Dist. – Keonjhar, 758034, Odisha
7. Solar site located at Rajasthan (Vituza and Bhadla), Gujarat ( Charanka), Telangana ( Mehbubnagar- Kalwakurthy , Achampet, Alladurg in Medak and Mustyal in Siddipet)

The assurance activities were carried out together with a desk review as well site visit .

## Limitations

TUVI did not perform any assurance procedures on the prospective information, such as targets, expectations, and ambitions, disclosed in the Report. Consequently, TUVI draws no conclusion on the prospective information. During the assurance process, TUVI did not come across any limitation to the agreed scope of the assurance engagement. TUVI expressly disclaims any liability or co-responsibility for any decision a person or entity would make based on this Assurance Statement.

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# TUVINDIA

## Our Responsibility

TUVI's responsibility in relation to this engagement was to perform a limited level of assurance and to express a conclusion on the basis on the work performed. This engagement did not include an assessment of the sufficiency of the principles of GRI Standards: Core option, and ISAE 3000 (revised), other than those mentioned in the scope of the ESG data assurance. TUVI's responsibility regarding this verification is in accordance with the agreed scope of work which includes non-financial Quantitative and qualitative information disclosed by EMIL. This assurance engagement assumes that the data and information provided to us by EMIL are reliable, complete and true.

## Verification Methodology

During the assurance engagement, TUVI adopted a risk-based approach, focusing on verification efforts with respect to disclosures. TUVI has verified the disclosures and assessed the robustness of the underlying data management system, information flows, and controls. In doing so:

- i. TUVI examined and reviewed the documents, data, and other information made available by EMIL for non-financial disclosures;
- ii. TUVI conducted interviews with key representatives, including data owners and decision-makers from different functions of EMIL;
- iii. TUVI reviewed the level of adherence to principles of GRI standards: Core option.
- iv. TUVI examined and reviewed the documents, data (on sample basis) and other information made available by EMIL for the reported disclosures including the Management Approach and performance disclosure;

## Opportunities for Improvement

The following are the opportunities for improvement reported to EMIL. However, they are generally consistent with EMIL management's objectives and programs. EMIL already identified below topics and Assurance team endorse the same to achieve the Sustainable Goals of organization.

- i. Formal grievance mechanism to capture the feedbacks from local community can be established to strengthen the disclosure 413-1 and hence inclusivity principle;
- ii. The evaluation of sustainability impacts of the R & D projects on the existing and the futuristic products will add weightage to ensure that organization is working on the latest technological advances.
- iii. Risk matrix can be considered while assessing new suppliers.
- iv. Policy can be inclusive of all employees including the ones who have taken a sabbatical from the workplace responsibilities.
- v. Life cycle assessment can be performed to quantify the environmental impacts and the mitigation measures can be designed to offset the corresponding environmental impacts
- vi. Provision of coverage of disability and invalidity clause in HR policy is required. Inclusion of more female employees for the administrative work can be considered.

## Conclusions

In our opinion, based on the scope of this assurance engagement, the disclosures on sustainability performance reported in the Report along with the referenced information provides a fair representation of the material topics, related strategies, and performance disclosures and meets the general content and quality requirements of the GRI Standards: Core option.

**Disclosures:** TUVI is of the opinion that the reported disclosures generally meet the GRI Standards reporting requirements in reference with the "Core" option. EMIL refers to general disclosure to report contextual information about EMIL, while the Management Approach is discussed to report the management approach for each material topic.

**Universal Standard:** EMIL followed GRI 101: Reporting Principles for defining report content and quality, GRI 102: General Disclosures were followed when reporting information about an Organization's profile, strategy, ethics and integrity, governance, stakeholder engagement practices, and reporting process. Furthermore, GRI 103 was selected for Management's Approach on reporting information about how an organization manages a material topic. TUVI is of the opinion that the reported specific disclosures for each material topic generally meet the GRI Standards reporting requirements in accordance with the "Core" option.

**Topic Specific Standard:** 200 series (Economic topics), 300 series (Environmental topics), and 400 series (Social topics); These Topic-specific Standards were used to report information on the organization's impacts related to environmental and social topics. *TUVI is of the opinion that the reported material topics and Topic-specific Standards that EMIL used to prepare its Report are appropriately identified and addressed.*

**Limited Assurance Conclusion:** Based on the procedures we have performed, nothing has come to our attention that causes us to believe that the information subject to the limited assurance engagement was not prepared in all material respects. TUVI found the sustainability information to be reliable in all material respects, with regards to the reporting criteria ("Core") of the GRI Standards.

This assurance statement has been prepared in accordance with the terms of our engagement. In accordance to the ISAE 3000 (revised) requirements

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**Quality control:** The Assurance Team complies with the Code of Ethics for Professional Accountants issued by the IESBA, which includes independence and other requirements founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior. In accordance with International Standard on Quality Control, TUVI maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

In the context of Assurance, the following contemporary principles has been observed:

#### Evaluation of the adherence to other contemporary Principles

**Inclusivity:** Stakeholder identification and engagement is carried out by EMIL on a periodic basis to bring out key stakeholder concerns as material topics of significant stakeholders. In our view, the Report meets the requirements.

**Materiality:** The materiality assessment process has been carried out based on the requirements of the GRI Standards, considering topics that are internal and external to the EMIL range of businesses. The Report fairly brings out the aspects and topics and their respective boundaries of the diverse operations of EMIL. In our view, the Report meets the requirements.

**Responsiveness:** TUVI believes that the responses to the material aspects are fairly articulated in the report, i.e., disclosures on EMIL policies and management systems, including governance. In our view, the Report meets the requirements.

**Impact:** EMIL communicates its sustainability performance through regular, transparent internal and external reporting throughout the year, aligned with GRI, and its policy framework encompassing the Environmental, Social, Ethical and other policies. EMIL reports on sustainability performance to the Top Management, who oversees and monitors the implementation and performance of objectives, as well as progress against goals and targets for addressing sustainability-related issues.

TUVI expressly disclaims any liability or co-responsibility for any decision a person or entity would make based on this Assurance Statement. The intended users of this assurance statement are the Management of EMIL. The Management of the EMIL is responsible for the information provided in the Report as well as the process of collecting, analyzing, and reporting the information presented in web-based and printed Reports, including website maintenance and its integrity. TUVI's responsibility regarding this verification is in accordance with the agreed scope of work which includes non-financial quantitative and qualitative information (Sustainability Performance) disclosed by EMIL in the Report. This assurance engagement is based on the assumption that the data and the information provided to TUVI by EMIL are complete and true.

#### TUV's Competence and Independence

TUVI follows IESBA (International Ethics Standards Board for Accountants) Code which, adopts a threats and safeguards approach to independence. It is confirmed that the Assurance Team is selected to avoid situations of self-interest, self-review, advocacy and familiarity. The Assessment Team was safeguarded from any type of intimidation.

#### Our Assurance Team and Independence

TUVI is an independent, neutral third party providing sustainability services with qualified environmental and social specialists. TUVI states its independence and impartiality and confirms that there is "No Conflict of Interest" with regard to this assurance engagement. In the reporting year, TUVI did not work with EMIL on any engagement that could compromise the independence or impartiality of our findings, conclusions, and recommendations. TUVI was not involved in the preparation of any content or data included in the Report, with the exception of this assurance statement. TUVI maintains complete impartiality towards any individuals interviewed during the assurance engagement.

For and on behalf of TUV India Private Limited



Manojkumar Borekar  
Project Manager and Reviewer  
Head – Sustainability Assurance Service



Date: 28-11-2023  
Place: Mumbai, India  
Project Reference No: 8121921663  
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