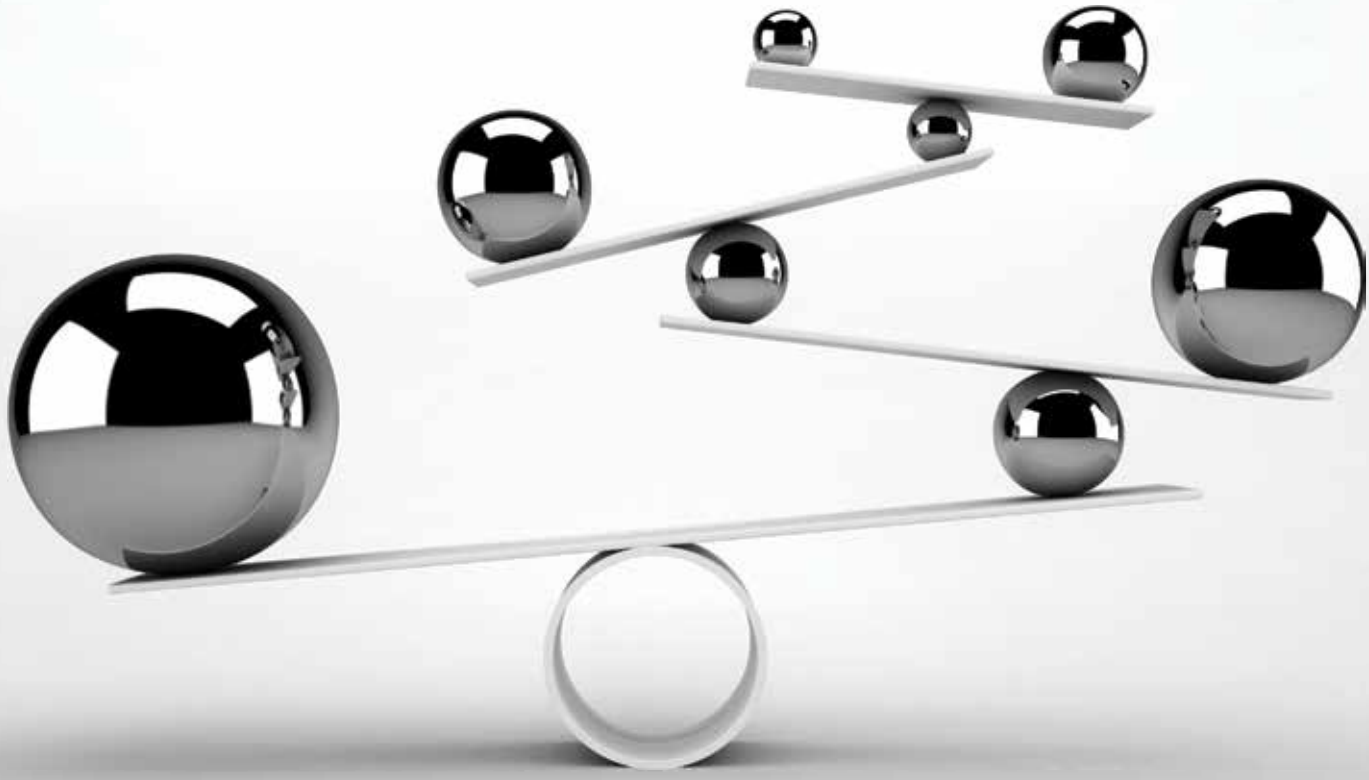
सेल SAIL

Great Place To Work. Certified DEC 2023 – DEC 2024 INDIA

Corporate SUSTAINABILITY Report 2023-24



Balancing Nature and Innovation

A Key to Sustainability


LET'S SAVE
THE WORLD
TOGETHER

Content

Chairman's Message

Dear Stakeholders,

I am delighted to share with you our 14th Corporate Sustainability Report, presenting comprehensive information about SAIL's environmental, social and governance (ESG) performance for the financial year 2023-24.

SAIL has consistently advanced its ESG initiatives, with a pronounced focus on decarbonization and environmental stewardship. We are committed to reduction of our carbon footprint, with a vision for a future that prioritizes sustainability management to safeguard the planet, upholds societal equilibrium and ensures the well-being of every individual.

Across its five integrated steel plants, three special steel plants, captive mines and other units, SAIL has adopted a multi-faceted approach towards de-carbonization with focus on Technology, Research and Modernisation. Our key initiatives towards technology improvement focus on digitalization, material efficiency by emphasizing beneficiation and pelletisation, energy efficiency, increased adoption of RE Power, deployment of Top Gas Pressure Recovery Turbines and improvement in Coal Dust Injection in Blast Furnaces along with phasing out of old and inefficient units. We have adopted several schemes for "Zero Liquid Discharge" to reduce water intake and have achieved over 100% utilization of solid waste, maximizing the benefits of the Waste to Wealth concept.

Research & Development activities are being carried out at our own R&D centre for future use of non-fossil fuels in Blast Furnaces and reducing moisture in coal. SAIL is also in active collaboration with concerned experts for exploring industrial level application of Carbon capture, storage and utilization systems. SAIL has been making significant investments for augmenting, modernizing and expanding its operations across various Plants which focus on adoption of Best Available Technologies with lower carbon footprints. These initiatives are leading to significant reductions in emission, effluent discharge and energy consumption.

SAIL is deeply committed to enhancing the well-being of its employees and the communities we serve, through continuous investment in health, education, and infrastructure, fostering a supportive and thriving environment for all. SAIL has earned the prestigious 'Great Place to Work' certification by the Great Place To Work Institute, India. This certification is a testament to SAIL's innovative HR initiatives and its dedication towards providing the employees an environment built on trust, collaboration and empowerment. To aid employee development, SAIL has opened

(GRI 2-22)

the doors of several e-learning platforms for its employees to enable self-paced learning in desired domains. Such initiatives aim to boost employee productivity, prepare employees for future technological advancements, and fully utilize their potential.

SAIL has been continuously engaging with the societies in which it operates with the aim of social upliftment. Since inception, over 8000 water sources have been installed and maintained by SAIL, thereby enabling easy access to drinking water to over 50 lakh people living in far-flung areas. Over 79 Lakh people across 450 villages have been connected to mainstream by SAIL since its inception by construction and repair of roads. SAIL's Healthcare Infrastructure has provided treatment to nearly 183.74 Lakh people living in the vicinity of its Plants and Units during the period 2011-2024. Health Camps and Mobile Medical Units have benefitted about 1.80 Lakh people in FY 2023-24 at their doorsteps. SAIL is supporting over 77 schools in steel townships imparting modern education to over 40,000 children; and is also involved in providing Mid-day meals and Dry ration kits for 63,000 students in 600 Schools. We also support societal development through recruitment policies that promote inclusion and equal opportunity, especially for disadvantaged groups. Further, in the FY 2023-24, SAIL has trained more than 3600 unemployed youth & contractual workmen under Pradhan Mantri Kaushal Vikas Yojana and corresponding skill certification as Recognition of Prior Learning (RPL) has been provided to them.

Maintaining the highest standards of corporate governance is fundamental to SAIL's operations. With strong focus on ethical business practices and zero-tolerance towards corruption, SAIL is the first Maharatna Public Sector Undertaking to have implemented Anti-Bribery Management System. We ensure transparency in all our systems and provide clear and comprehensive information to our stakeholders, ensuring accountability and trust.

SAIL's commitment to ESG principles has delivered substantial results. We recorded the best ever production figures for Hot Metal, Crude Steel and Saleable Steel in the year 2023-24; and also achieved highest ever sales turnover of ₹ 1,04,545 Crores.

Our achievements are a testament to the unwavering support of our stakeholders. I extend my deepest gratitude to employees for their dedication and excellence, our customers for their trust in our products, our shareholders for their confidence and investment, our communities and partners for their collaboration and support. With your continued partnership, SAIL has made significant progress towards a sustainable industry and nation. As we navigate the future of the steel industry and climate change challenges, I am confident that SAIL will achieve even greater heights in the coming years.

Jai Hind

With best compliments

(Amarendu Prakash)
Chairman

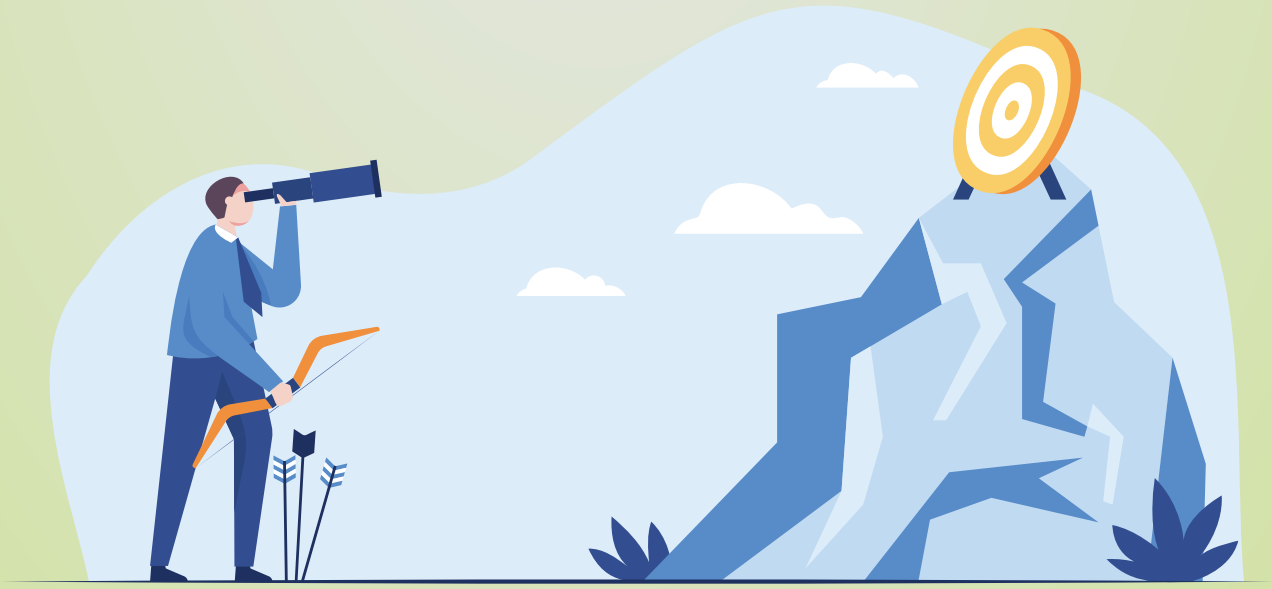
(GRI 2-22)

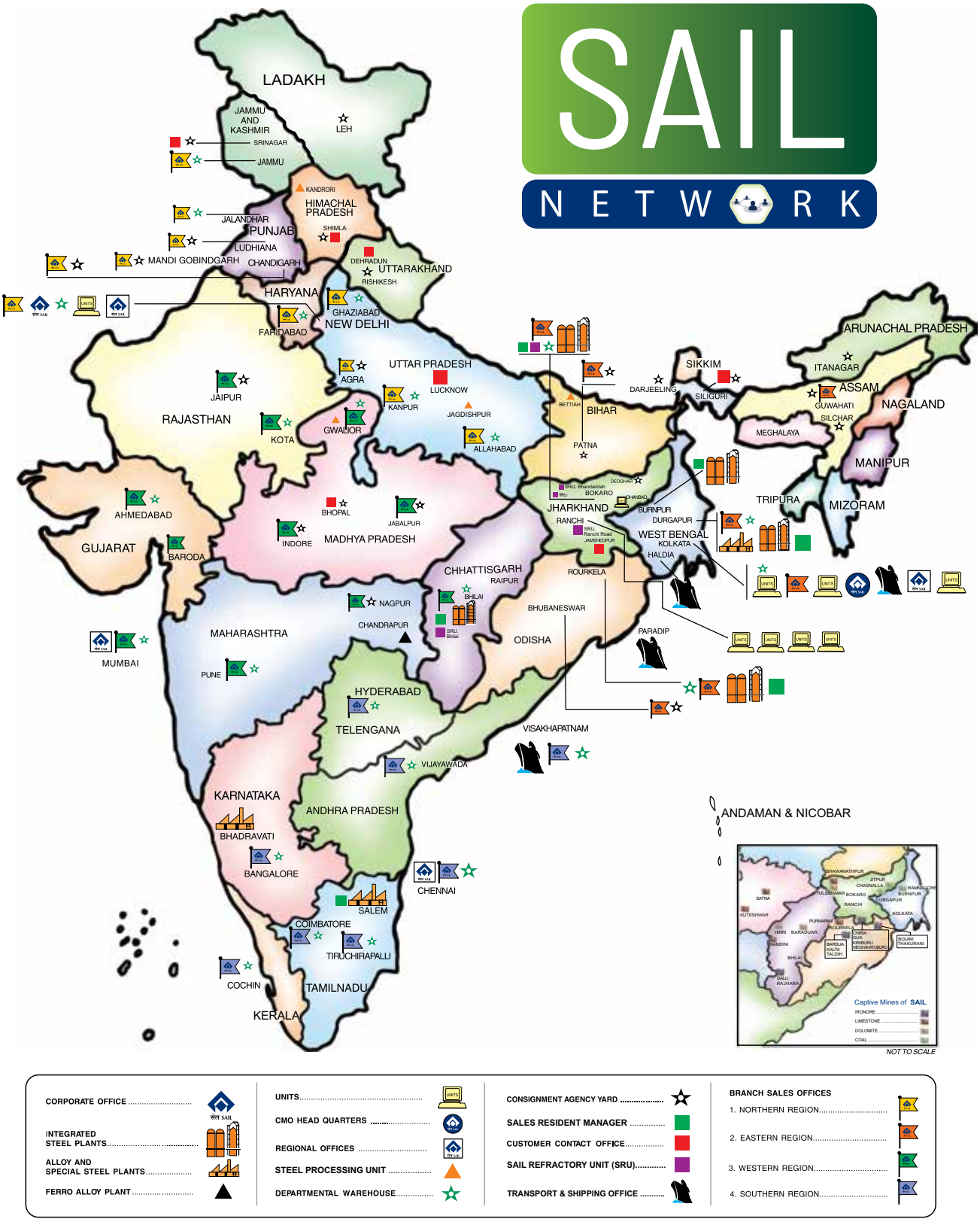
OUR VISION

To be a respected world class corporation and the leader in Indian steel business in quality, productivity, profitability and customer satisfaction.

OUR CREDO

- We build lasting relationships with customers based on trust and mutual benefit.
- We uphold highest ethical standards in conduct of our business
- We create and nurture a culture that supports flexibility, learning and is proactive to change.
- We chart a challenging career for employees with opportunities for advancement and rewards.
- We value the opportunity and responsibility to make a meaningful difference in people's lives.





SAIL Organisational Network in India

(GRI 2-2)

About the Report

(GRI 2-2)

Period

(GRI 2-2)

SAIL has been regularly publishing its Annual Sustainability Report since FY 2010-11 and is pleased to now present its 14th Sustainability Report for FY 2023-24. All Sustainability Reports have integrated the business operations in an ethical and transparent manner while reinforcing commitment towards sustainable development, keeping interests of the Company's Stakeholders at the forefront. The report has information on the material topics significant for SAIL's business as well as for the stakeholders.

Reporting Year & Cycle

(GRI 2-3 a, b, c)

The present report covers sustainability performance of the Company for the period April 1, 2023 to March 31, 2024. This report is in continuation to the earlier report published for the FY 2022-23. The report can also be downloaded from SAIL website (www.sail.co.in).

Framework

All Corporate Sustainability Reports of SAIL have followed the GRI Reporting framework. The top management has decided to continue to use the GRI Standards for FY 2023-24 also. This report has been prepared in accordance with the GRI Standards 2021. The report has been prepared to disclose Company's performance on Economic, Environmental, Social and Governance topics to its stakeholders.

Scope

(GRI 2-2, 2-3b, 2-4, GRI 204-1 b, c)

Information from the Annual Report of the Company for the Financial Year 2023-24, ending March 31, 2024 has been used for presenting financial details in the economic performance section of this report and social and environmental performances of Plants, Units and Mines (operating) located in India in the respective sections. Pages 10-11 of the report give information on the boundary of the report covering inter-alia Plants, Units and Mines. In this report, the local implies operation in India. No unit has been shifted, divested or closed during the FY 2023-24. SAIL is transparent in sharing all significant events of the past and the projections of their impacts to occur in future. The Company maintained the data quality of the report while ensuring accuracy, reliability, timeliness, clarity and comparability of figures and periods that form the base of reporting.

Standards

International Standards such as ISO 9001, ISO 14001, ISO 45001 and SA 8000 have been used for reporting on Quality, Environment, Health and Safety Management and Social Accountability. For reporting financial performance of the Company, the Company Law guidelines have been referred to. The Company ensures commitment to Economic and Financial systems by regularly under taking the statutory audits as well as internal audits. Our systems are open to verification and review by the government authorities. For reporting on Carbon Dioxide (CO_2) emissions from our Integrated Steel Plants (ISPs), we follow the World Steel Association (WSA) guidelines and calculation methodologies. For maintaining the Company's work environment and safety regulations, we diligently follow requisite regulations issued from time to time by the Ministry of Environment, Forest and Climate Change (MoEFCC) and the Factories Act, 1948. Materiality Assessment has definitely helped us in prioritizing issues pertaining to economic, environment and social aspects of Sustainability and stakeholder engagement process. The material topics, explained in the respective chapter, are established through this materiality assessment process.

Data Validation and Assurance

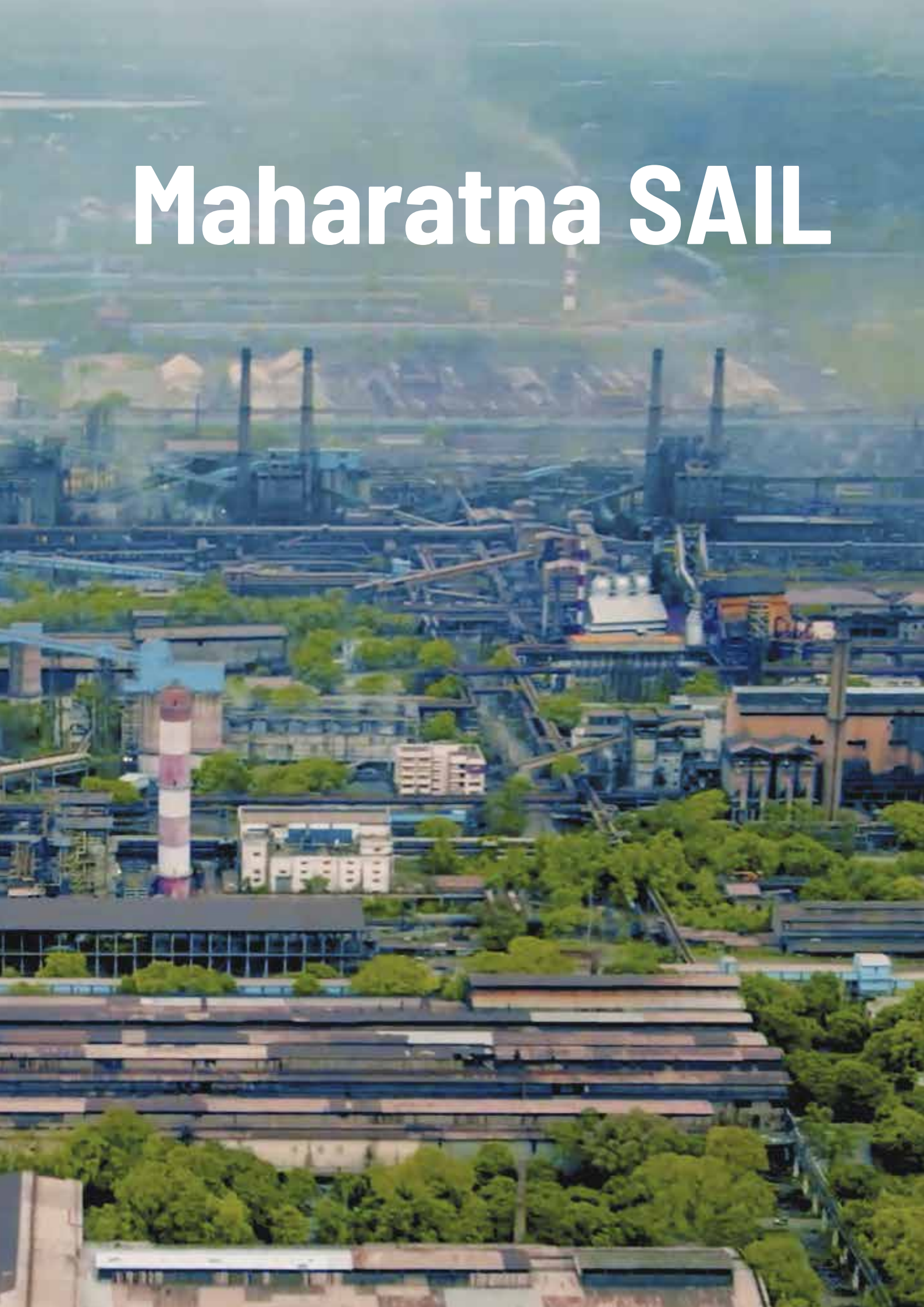
(GRI 2-5a, b, 2-3d)

No External Assurance was carried out for this report.

The full report has been prepared using English Language. The report can be requested via email too. Stakeholder feedback on the report shall be reported to the relevant department upon its receipt via email. Any other additional information about SAIL's efforts on sustainable development can be sought at sailsustainability@gmail.com


सेल SAIL

Maharatna SAIL



Maharatna SAIL

(GRI 2-1a, b, c, d, 2-2a, b, c, 2-6 a, b, c, d)

Steel Authority of India Limited (SAIL), headquartered at New Delhi, India is one of the largest steel-making company in India and one of the 13 Maharatnas of the Country's Central Public Sector Enterprises.

SAIL is a fully integrated iron and steel maker, producing both basic and special steels for domestic construction, engineering, power, railway, automotive & defence industries and for sale in export markets thereby responsible for driving the industrial revolution of modern India for more than six decades. SAIL produces iron and steel at five integrated plants and three special steel plants, located principally in the eastern and central regions of India and situated close to domestic sources of raw materials.

The Government of India owns about 65% of SAIL's equity and retains voting control of the Company. However, SAIL, by virtue of its 'Maharatna' status, enjoys significant operational and financial autonomy. Other shareholders include Insurance Companies (9.42%), Mutual Funds and UTI (6.29), Foreign Institutional Investors (3.18%), Banks & Financial Institutions (0.01%) and others (16.10%).

SAIL has been contributing in nation building since inception by servicing the requirement of various infrastructure projects and also projects of strategic importance. SAIL is proud to be associated with important and strategic sectors like Defence, Railways, Metro, Infrastructure, Space, Power, Manufacturing, Irrigation etc. SAIL has formulated its VISION 2030 whereby it is envisaged to enhance the crude steel capacity in a plant-wise phased manner. SAIL has also done its desktop study on the market scenario, available resources including land bank. With the improved leverage position, the Company is ready to move into the next realm of expansion.

Scope of the Report

The following SAIL Plants, Units and Mines (operating) are covered in the Scope of this report.

Plants

- Bhilai Steel Plant
- Durgapur Steel Plant
- Rourkela Steel Plant
- Bokaro Steel Plant
- IISCO Steel Plant
- Alloy Steels Plant
- Salem Steel Plant
- Visvesvaraya Iron and Steel Plant

Units

- Central Marketing Organization
- Research and Development Centre for Iron & Steel
- Centre for Engineering and Technology
- SAIL Safety Organization
- Environment Management Division
- Management Training Institute
- SAIL Refractory Unit
- Chandrapur Ferro Alloy Plant
- SAIL Growth Works, Kulti

Operating Mines

JHARKHAND GROUP OF MINES

- Kiriburu Iron Ore Mine
- Meghahatuburu Iron Ore Mine
- Gua Ore Mines
- Manoharpur Iron Ore Mines

ODISHA GROUP OF MINES

- Bolani Ores Mines,
- Barsua Iron Mine
- Taldhi Iron Mine
- Kalta Iron Mine

BSP GROUP OF MINES

- Iron Ore Complex, Rajhara
- Rowghat Deposit -F
- Nandini Limestone Mines
- Kuteshwar Limestone Mines
- Hirri Dolomite Mines

The Marketing Network

(GRI 2-2, 2-6 a, b, c, d)

SAIL has the largest marketing network among all steel producers in the Country. As on March 31, 2024, SAIL's functional network of marketing offices consists of 37 Branch Sales offices, 5 Customer Contact offices and 37 Stockyards (18 departmental Warehouses, 17 Functional Consignment agency yards and 2 Consignment handling agency yards). Marketing efforts are further supplemented through SAIL's retail Channel that reaches the products of mass consumption to remote corners of India.

SAIL has an extensive dealership network comprising of more than 5100 dealers spread across the Country. With 50 distributors already in place in the 2-tier distribution network as on 31st March, 2024, this channel of retail sales is being further strengthened. Around 9.47 lakh tonnes of TMT were supplied through the 2 Tier distributor network during FY 2023-24. SAIL also has Tier-I distributor system to improve the system of servicing demand of small consumers, B2B industrial segments and to provide single window servicing of small customers including value added services and has 58 distributors as on 31st March, 2024. This huge network spread across the Country helps in meeting the requirements of a wide range of customers spread through length and breadth of the Country. Out of total sales of 22.86 lakh tonnes to retail segment during April to March, 2024, sales through Tier-2 distributors and dealers was 10.27 lakh tonne consisting of TMT & GC, against 8.26 lakh tonne in the previous year. Sales through Tier-1 distributors during the Financial Year 2023-24 was 12.59 lakh tonne.

In order to help build awareness and acceptance of steel usage in rural areas, SAIL has an ongoing rural outreach 62 programme "Gaon ki ore". Under the campaign, 400 workshops have been conducted during FY 2023-24 across the Country with focus on small consumers, etc.

SAIL launched its reinforcement bar brand "SAIL-SeQr" in 2019-20. The brand is being promoted as better quality steel for safer homes. This brand is focused to enhance retail presence of SAIL with special emphasis on rural penetration. During the FY 2023-24, the Company sold about 8.44 lakh tonnes of "SAIL SeQr" reinforcement bars. During the coming years, in addition to contribution to top line value, the brand "SAIL SeQr" is expected to not only meet the quality expectation of the retail Sector but also to drive brand presence of the Company.

SAIL Subsidiaries and Joint Ventures

Subsidiary Companies
• SAIL Refractory Company Limited
• Chhattisgarh Mega Steel Limited

Joint Venture Companies
• NTPC-SAIL Power Company Limited
• Bokaro Power Supply Company Private Limited
• SAIL Bansal Service Centre Limited
• Mjunction Services Limited
• Bhilai Jaypee Cement Limited
• International Coal Ventures Private Limited
• SAIL SCL Kerala Limited
• SAIL-RITES Bengal Wagon Industry Private Limited
• SAIL Kobe Iron India Private Limited
• Prime Gold-SAIL JVC Limited
• VSL SAIL JVC Limited
• GEDCOL SAIL Power Corporation Limited
• Romelt-SAIL (India) Limited
• Bastar Railway Private Limited

Associate Company
• Almora Magnesite Limited

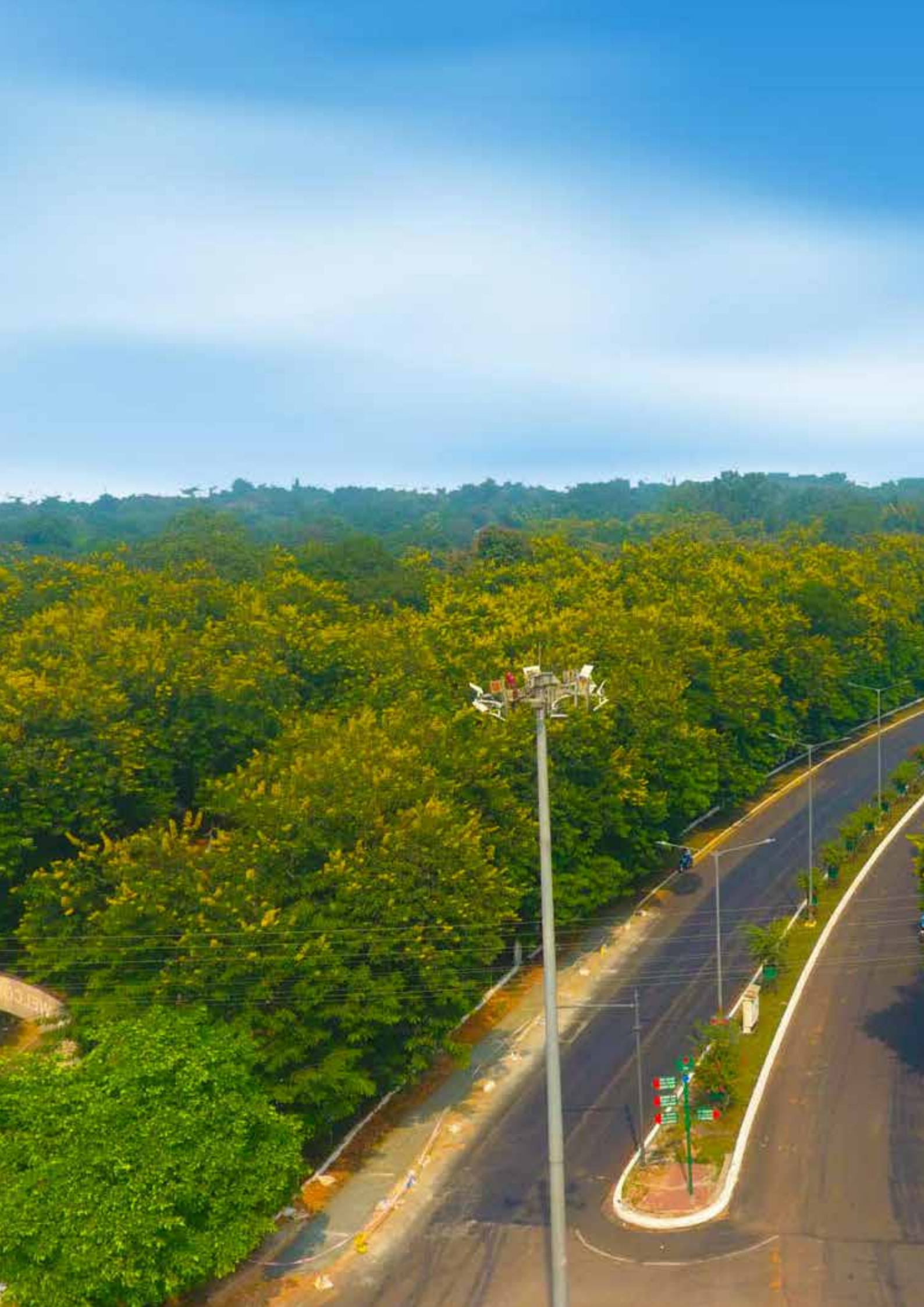
Other Associations and Memberships

(GRI 2-6, 2-28)

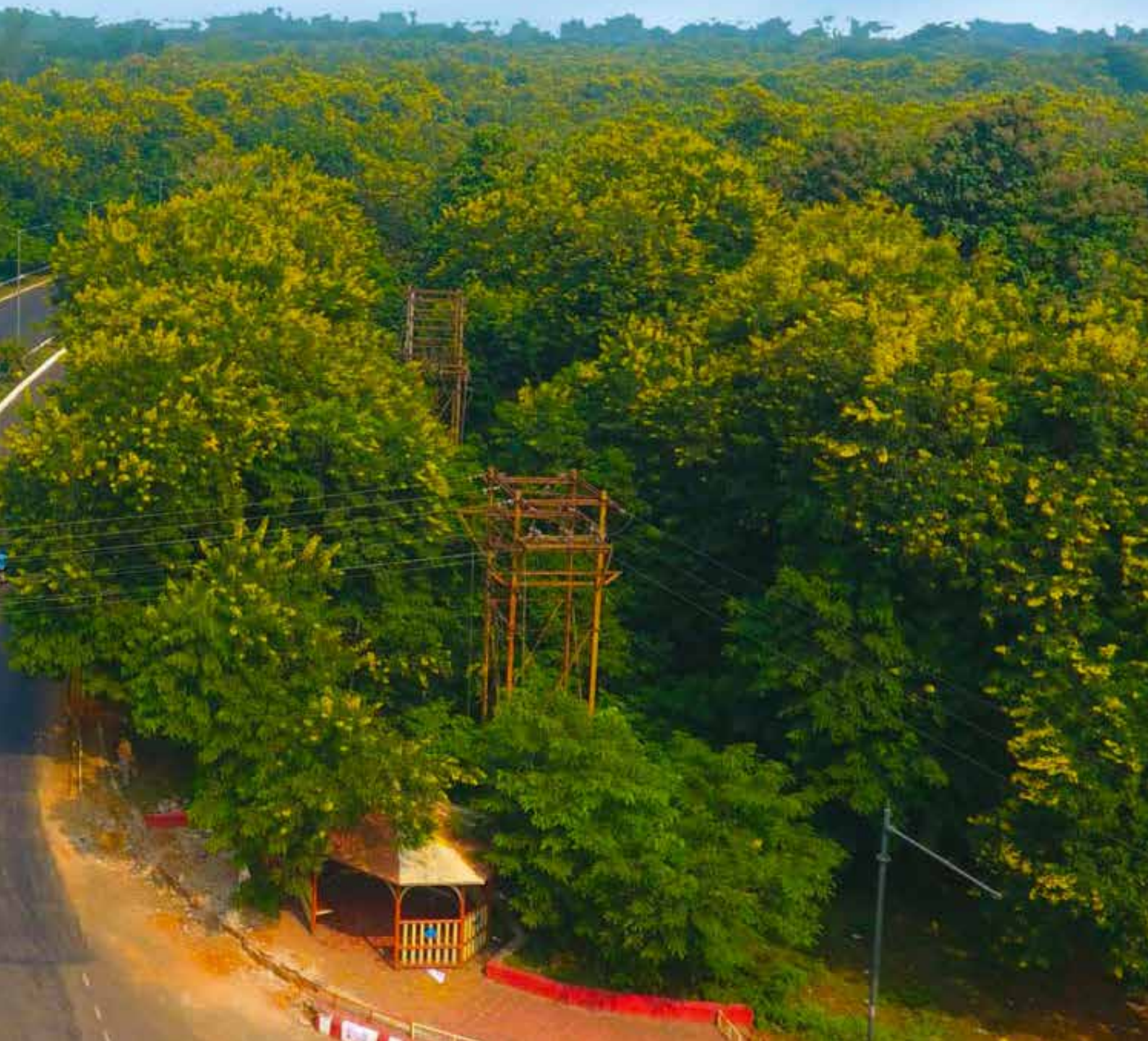
SAIL is associated with various Government and Regulatory Authorities that support the Company to abide by its values and operate with integrity and transparency. Our stakeholders are valuable to us, and we engage ourselves with matters relating to public good for our stakeholders through these associations. During FY 2023-2024, the Company has 19 active affiliations with trade and industry chamber associations. The top 10 trade and industry chambers/ associations are given below:

S. No.	Name of the trade and industry chambers/ associations	Reach of trade and industry chambers/ associations (State/National)
1.	Federation of Indian Chambers for Commerce and Industry (FICCI)	National
2.	Standing Conference of Public Enterprises (SCOPE)	National
3.	Indian Steel Association (ISA)	National
4.	World Steel Association & International Stainless-Steel Forum (ISSF)	International
5.	Indian Iron and Steel Sector Skill Council (IISSSC)	National
6.	All India Management Association (AIMA)	National
7.	Forum of Women in Public Sector (WIPS)	National
8.	World Confederation of Productivity Science (WCPS)	International
9.	Centre for Organization Development (COD)	National
10.	Indian Institute of Metals, Kolkata (IIMK)	National

Performance Highlight 2023-24



Sustainable Development Strategy



Sustainable Development Strategy

SAIL is deeply committed to giving back to society, a value that has not only fostered meaningful engagement with stakeholders but also positioned the Company as a global leader in sustainability efforts. This commitment is realized through well-designed community initiatives and the unwavering dedication of our corporate family. Our operations, spanning across Plants, Mines and Units, are guided by our core principles of social, ethical, and environmental responsibility.

The Company's Sustainable Development Policy is the cornerstone of our vision and action, shaping our approach to business integrity, governance, product development, social responsibility, and environmental stewardship. We embed sustainability into every aspect of our operations, continuously launching programs that align the business objectives of our employees with the mission and values of SAIL. This approach ensures the well-being of our employees and the communities we serve.

Our sustainability priorities are shaped by ongoing feedback from stakeholders, emerging industry trends, and evolving regulatory standards. These insights are integrated into our organizational framework, fostering accountability and driving the successful implementation of sustainability initiatives. We also collaborate closely with our supply chain partners to enhance our product portfolio and quality, thereby making a positive impact on societal development. We monitor and optimize supply chain processes, logistics, and technologies, ensuring any changes in product mix or quality improvements align with our sustainability goals.

Through this holistic approach, SAIL has strengthened its reputation, exceeded customer expectations, and identified new growth opportunities, all while fostering a positive work environment. Our commitment to corporate social responsibility continues to play a central role in our ability to engage with stakeholders constructively, driving our leadership in global sustainability efforts. This success is the result of a strong commitment to community engagement, ethical practices, and the collective dedication of our corporate family.

Sustainability Strategic Priorities of SAIL

- **Lead the Steel Industry:** To be a pioneering force in the steel sector, driving innovation and excellence in every facet of the business.
- **Uphold High Ethical Standards:** To conduct business with the utmost integrity, ensuring transparency, fairness, and ethical decision-making at all levels.
- **Drive Sustainable Growth:** To develop and implement growth strategies that enable continuous market expansion while ensuring long-term sustainability.
- **Benchmark against Global Best Practices:** To continuously assess and enhance our operations, striving for excellence across the entire value chain by adopting global best practices.
- **Achieve Excellence in Environmental Management:** To lead in environmental stewardship by embracing cutting-edge technologies and processes that minimize our ecological footprint.
- **Enhance Operational Efficiency:** To monitor and implement continuous improvements in our comprehensive business model, including mining, steelmaking, marketing, human resources, and community development initiatives.
- **Fulfill Social Responsibilities:** To remain a socially responsible company, fulfilling our commitments to society through impactful initiatives that support sustainable development.

- **Foster Stakeholder Engagement:** To create participative mechanisms that engage all stakeholders-employees, customers, suppliers, and local communities-ensuring that "development with sustainability" is at the core of our operations.
- **Ensure Financial and Operational Sustainability:** To maintain a sustainable business model by adopting multidimensional approaches in cost management, financial planning, technology upgrades, product innovation, and the addition of new products that meet future market demands.
- **Invest in Future Growth:** To meet both domestic and global market demands by accelerating investments in new products, processes, and technologies, ensuring that SAIL remains a future-ready leader in the industry.

These strategic priorities guide SAIL's commitment to sustainable growth, ensuring that every aspect of our business is aligned with the long-term well-being of our stakeholders, the environment, and the global community.

SAIL SWOT Analysis during the reporting period is

Strengths

1. **Multi-located production units:** Facilitates access to diverse and far-reaching markets, enhancing competitive advantage over domestic peers.
2. **Extensive marketing and distribution network:** Strong nationwide presence supports effective product delivery and market penetration.
3. **Diversified product portfolio:** Offers resilience against market fluctuations and caters to a broader customer base.
4. **Land availability for expansion:** Enables brownfield expansions, reducing cost and time associated with new projects.
5. **Self-sufficiency in iron ore:** Ensures input security and reduces dependency on external suppliers.
6. **New infrastructure-oriented mills:** Aligns with increasing demand for infrastructure, boosting relevance in the market.
7. **Potential for operational efficiency:** Opportunities exist to optimize costs and improve the product mix through modernized units.
8. **Experienced professionals:** Strong technical expertise supports superior steel production.

Weakness

1. **Dependence on coking coal imports:** Vulnerable to price volatility and supply chain risks.
2. **Aging workforce:** High manpower costs coupled with lower productivity require modernization of HR policies and practices.

Opportunities

1. **Government initiatives:** Policy emphasis on infrastructure and construction boosts steel demand.
2. **Low per capita steel consumption:** Room for growth as the country aligns closer to global standards.
3. **Increasing domestic demand:** Expanding urbanization and industrialization create long-term growth prospects.

Threats

1. **Rising competition:** Both domestic and international players intensify the competitive landscape.
2. **Green steel trends:** Global focus on sustainability and decarbonization may require significant adaptation and investment.
3. **Domestic production expansion:** Potential oversupply could pressure prices and margins.
4. **Inflationary pressures:** Increased costs in raw materials and operations may challenge profitability.

Risk Mitigation Strategies

(GRI 201-2)

- **Market Expansion and Diversification:** Strengthen our market position by exploring new growth segments, including rural markets, and driving product innovation to offer cutting-edge solutions that retains and attracts customers.
- **Accelerated Ramp-Up of New Units:** Expedite the development and scaling of new units to enhance production capacity and meet growing demand.
- **Long-Term Supplier and Customer Relationships:** Secure long-term contracts with suppliers and establish strong, enduring relationships with customers to ensure supply chain stability and customer loyalty.
- **Raw Material Security and Strategic Partnerships:** Focus on the development of new mining operations and seek international partnerships to enhance the security and sustainability of our raw material supply.
- **Workforce Optimization and Professional Development:** Streamline workforce processes while ensuring the continued professional growth of employees, fostering a skilled, adaptable, and motivated workforce.
- **Regulatory Compliance and Beyond:** Adhere to all applicable regulations and pro-actively prepare for a "beyond compliance" approach, ensuring the Company exceeds industry standards and anticipates regulatory changes.
- **Community Engagement and Social Upliftment:** Conduct thorough needs assessments and invest in targeted community development programs that promote social upliftment and enhance the well-being of the communities where we operate.
- **Waste Management and Resource Efficiency:** Develop and implement strategies for the proper handling, recycling, and reuse of waste materials, minimizing environmental impact and promoting resource efficiency.
- **Adoption of Clean Technologies and Carbon Reduction:** Prioritize the adoption of clean, energy-efficient technologies to reduce CO_2 emissions and establish an internal carbon pricing mechanism to drive sustainability and environmental accountability.
- **Environmental Protection Initiatives:** Launch new initiatives aimed at environmental preservation, with a special focus on promoting greenery development and enhancing biodiversity across our operational areas.

These risk mitigation strategies ensure that SAIL remains resilient in the face of industry challenges, while fostering long-term sustainability, environmental stewardship, and positive social impact.

Growth Strategies

- **Strengthening Leadership through Capacity Expansion:** Consolidate and reinforce our market leadership by enhancing production capacity, ensuring we meet growing demand and maintain a competitive edge.
- **Strategic Alliances for Accelerated Growth:** Forge strategic partnerships and alliances that support our growth initiatives, leveraging synergies to expand our capabilities and market reach.

- **Securing Raw Material Supply through New Mines:** Develop and expand new mining operations to ensure a consistent and secure supply of raw materials, reducing reliance on external sources and enhancing supply chain resilience.
- **Enhancing Input Material Quality:** Focus on improving the quality of input materials, ensuring that high-quality raw materials are sourced and utilized in production, thereby enhancing overall product quality.
- **Increased Focus on Value-Added Steel Products:** Shift focus toward the production of value-added steel products, diversifying our portfolio to meet evolving market demands and generate higher margins.
- **Continuous Improvement in Operational Efficiency:** Drive continuous improvements in operational processes and productivity to enhance overall efficiency, reduce waste, and increase throughput.
- **Cost Optimization for Enhanced Competitiveness:** Implement targeted cost optimization strategies across all areas of operations, focusing on reducing costs without compromising quality, thereby improving profitability and competitiveness in the market.

These growth strategies are designed to ensure that SAIL remains at the forefront of the steel industry, consistently expanding its market position, improving operational performance, and securing sustainable, long-term growth.


Great
Place
To
Work.
Certified

Governance at SAIL

Governance at SAIL

Good Governance is the cornerstone of a successful business, enabling organizations to make timely, effective decisions.

Corporate Governance encompasses the policies, rules, procedures, and practices through which a company is directed and controlled, aiming to maximize value for all stakeholders, including the government, investors, shareholders, customers, vendors, employees, the environment, and society as a whole. At SAIL, Corporate Governance is more than a compliance requirement; it is a core philosophy. Our commitment is rooted in transparency, ethical conduct, and robust policies that align with laws, regulations, and DPE guidelines. This approach ensures full disclosure and accountability, with the ultimate goal of enhancing shareholder value while safeguarding the interests of all stakeholders. As a responsible corporate citizen, SAIL upholds the highest standards of governance in the Country. Our Board recognizes its accountability to shareholders and prioritizes protecting and advancing the interests of the Company. Each board member is dedicated to ensuring decisions are made with integrity, fairness and professionalism.

SAIL's commitment to trust-building and transparency enhances its reputation and strengthens stakeholder confidence. Regular and proactive communication with stakeholders across multiple channels ensures openness and accessibility.

Our Vision and Credo also plays an important role in steering our Board of Directors to conduct business in an economically, socially and environmentally responsible manner.

SAIL Board

(GRI 2-9 a, 2-27)

Our Board is at the Apex of the Governance Framework and is accountable to all stakeholders and for protecting and furthering the interest of the Company. The Board of Directors being at the core of our corporate governance practice, is entrusted with the responsibility of management, direction, performance of the company and ensuring that the long-term interest of the stakeholders is protected and stakeholders' value enhanced.

The Board reviews and approves management's strategic plans and business objectives and monitors the Company's strategic direction. The Board of Directors functions in accordance with the powers delegated under the Companies Act, 2013, SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015, Corporate Governance Guidelines issued by DPE and other guidelines issued by the Government of India from time to time, as applicable to the Company.

The robust protocols such as independent internal audit, documented policies, guidelines, procedures, regular review by Audit Committee, CAG Audit of Corporate Governance, and Independent Audit by Auditors etc. help in efficient functioning of the Board. There was no incident of non-compliance with laws & regulations.

Board Composition, Nomination, Tenure, Competencies, Independence

(GRI 2-9, 2-10, 2-11, 2-17, 405-1)

SAIL Chairman is the Chairman of the Board. SAIL Board is a mix of full time Executive Directors, Non-Executive Directors and Independent Directors, conforming to the provisions the Company's Act, SEBI (LODR) and DPE Guidelines. Government, being the largest shareholder, the views are taken during nomination of the Board members.

As on 31st March 2024, the Board of Directors comprised of full-time Chairman, 7 Whole Time Directors (i.e. Executive Directors) and 8 Non-Executive Directors (consisting of 2 Government Nominee Directors and 6 Independent Directors).

During 2023-24, the composition of the Board of Directors of the Company was not as per requirements. The appointment of Independent Directors on the Board of the Company is made by the Company based on nomination by the Government of India and the Company has requested Ministry of Steel, Government of India for nomination of requisite number of independent directors on its Board.

SAIL being a Government Company under the control of its administrative Ministry viz. Ministry of Steel, all the Directors of the Company viz. Whole-time, Independent Directors, Nominee Directors are appointed/ nominated by the Ministry of Steel. The Whole Time Directors are nominated for appointment as Director for a period of five years or till the age of superannuation or until further orders, whichever is the earliest. They are initially appointed by the Board of Directors as Additional Directors and, thereafter, by the Shareholders in the Annual General Meeting in terms of the provisions of the Companies Act, 2013. As on March 31st, 2024, there were one Non-executive Government Nominee Woman Director and one Independent Woman Director on the Board of the Company.

The skills/expertise/competencies as required in the context of business and areas pertaining to the Company are identified by Government of India. Further, selection of Directors on the Board of SAIL is made by Government of India/ Ministry of Steel as per their defined procedures and rules in vogue. In this regard, details on skills/ expertise/ competence of the Directors on the Board of SAIL are mentioned in details in the Corporate Governance Report of the Annual Report 2023-24.

An induction cum familiarization programme for Independent Directors is organized on their appointment, where an overall view of the Company is presented to them which includes, inter-alia, details of organization Structure, Company's Plants & units, Product Portfolio, Financial and operational Performance, Modernization and expansion Programme, ESG etc. The Company also organizes visits of the Directors to various Plants/Units of the Company for first-hand knowledge of the operations. Further, the Directors are nominated to the training programmes organized by various institutions such as DPE, SCOPE, IOD and other institutions on issues related to Corporate Governance, etc. The details of familarisation programmes imparted to independent directors are available on the website of the Company - *www.sail.co.in* through structured presentations. Besides, information regarding their roles and responsibilities at their position is also furnished to them.

As far as Independence of the Board is concerned, all the Independent Directors submit the declaration of independence, as required under the Companies Act, 2013 stating that they meet the criteria of independence and they have confirmed that they are not aware of any circumstance or situation which exists or may be reasonably anticipated that could impair or impact their ability to discharge their duties. The same has been taken on record by the Board.

The Status of number of other directorships held by each of the member of Board is provided in the Corporate Governance Report included in the Annual Report 2023-24.

Committees of the Board

(GRI 2-9b, 2-9c, 2-12, 2-13)

The details about Board Committees are given in the Corporate Governance Report included in the Annual Report (**Annexure-IV** to the Board's Report).

The Agenda, including compliance reports of all the laws applicable to the Company, along with Explanatory Notes is provided to the Board Members in advance. The Board Members take active part in the deliberations in the Board and Board Sub-committee meetings by providing valuable suggestions, advice and guidance on various are as of the Company's Business thus adding value to the decision making process. Additional information as sought are provided to the members. The recommendations of the meetings of the Board Sub-committees are placed before the Board for necessary approval. As an effective post meeting follow-up system, action taken on its decisions is apprised to the Board.

For management of diverse issues, pertaining to economic, environmental and social areas, various departments regularly assimilate, compile and monitor the status reports in conjunction with the agenda papers. These reports are prepared with the valuable inputs provided by the respective Plants/Units, on the economic, environment and social performances including legal compliance and are regularly and methodically put up to the Board for examination, comments and recommendations. Senior executives at various levels have been identified for execution of these assignments. The inputs and observation of the Board are examined and analyzed by the top management and subsequently envisioned for business decision-making.

Not only the Board but specialized Committees also, led and supervised by Independent Directors having valuable and varied experience, enable our Company to have an independent perception on various governance issues before the same are considered by the Board of Directors. Some of the key committees and their objectives are as follows:

Audit Committee

The primary function is to assist the Board of Directors in fulfilling its oversight responsibilities by reviewing the Financial Reports; the Company's systems of internal financial controls and Risk management systems, Accounting and Legal compliance that Management and the Board have established; review Related Party Transactions in accordance with the Related Party Transaction Policy of the Company; and the Company's Auditing, Accounting and Financial Reporting process generally.

Nomination & Remuneration Committee

SAIL, being a Government Company, the nomination and fixation of terms & conditions for appointment of its Directors, are made by the Government of India. However, the Company has constituted a Nomination & Remuneration Committee (NRC), in order to look into various HR issues, matters prescribed under the Companies Act, 2013 and SEBI Regulations; to finalize Performance Related Pay (PRP) for the executives of the Company in terms of DPE Guidelines on Corporate Governance for Central Public Sector Enterprises; etc.

Stakeholders' Relationship Committee

Its function is to consider and resolve the grievances of the security holders of the Company including complaints related to non-receipt of balance sheet, non-receipt of dividend, transfer/transmission of shares, etc.

Risk Management Committee

The Committee's objective is establishment of a risk management system; formulation, adoption and implementation of the Risk Management Policy; setting standards for risk documentation; to review the Enterprise Risk Management framework to assess its continuing effectiveness; to monitor emerging issues and oversee the risk management.

Corporate Social Responsibility Committee

Corporate Social Responsibility is the Company's commitment to its stakeholders to conduct business in an economically, socially and environmentally sustainable manner, whereby organizations serve the interests of the society, by taking responsibility for the impact of their activities.

(GRI 2-12, 2-13)

During the year, besides, these mandatory Committees, various other Board Sub-Committees (BSC) are also there to strengthen the systems at SAIL.

(GRI 2-12)

S. No.	Board Sub Committee	Objective of BSC
1.	Strategic Issues & Joint Ventures Committee	To examine and recommend to the Board the issues relating to formation of Strategic Alliance(s) and Joint Ventures of the Company and review their performance.
2.	Projects Committee	To monitor and recommend to the Board the matters regarding taking up of new projects, monitoring implementation of major capital projects vis-a-vis approved plan, etc.
3.	Health, Safety & Environment Committee	To review the policy, procedures and systems on Health, Safety and Environmental matters in respect of Plants & Mines.
4.	Share Transfer Committee	To consider (i) transmission, rejection, issue of duplicate share certificate and split share certificates; and (ii) transfer of shares for which request was received before 31st March, 2019 but was rejected earlier on account of discrepancies, and resubmitted after duly rectifying the objections.
5.	Operational Issues Committee	To periodically review performance in the areas of Production, Sales & Marketing, Mines and Collieries. To review coordination amongst Plants and Central Marketing Organisation.

Conflict of Interest

(GRI 2-15 a, b)

SAIL has a policy on Related Party Transaction which governs the transparency of approval process and disclosures requirements to ensure fairness in the conduct and reporting of the 'Related Party Transactions', as per the applicable laws. The Policy is applicable to the Director and all the KMPs and they are responsible for providing notice to the Company, of any potential 'Related Party Transaction' involving him/her or Relative(s), including any additional information about the transaction. The Policy establishes procedure to avoid/manage cases of conflict of interest. Link of the Policy - *https://sail.co.in/sites/default/files/2020-06/policy_for_related_party.pdf*

There were no transactions by the Company of material nature with Promoters, Directors or the Management, Subsidiaries, relatives during the year, which may have potential conflict with the interests of the Company at large.

Communication of Critical Concerns

(GRI 2-16)

The various Mechanisms for communication of concerns are:

Right to Information: All the Plants and Units of SAIL comply with the provisions under the Right to Information Act, 2005(Act). SAIL has a Public Information Officers (PIO)/Assistant Public Information Officers and Appellate Authorities and Transparency Officer in each Plant and Unit under the Act for speedy redressal of the queries received under the Act. An exclusive RTI Portal has also been developed with link available on the website of the Company. All the Plants/ Units have listed 17 manuals and details of Authorities under the Act are uploaded on the website of the Company. Quarterly Returns and Annual Returns on implementation of the Act are being submitted online through the Central Information Commission (CIC) portal. SAIL received a total of 3,071 applications and 529 appeals under the act during the FY 2023-24 and all of them have been disposed of within the time frame stipulated under the act. CIC has also taken up 43 cases and most of these cases were disposed of in favour of the Company. Since enactment of the Act, SAIL has received a total of 55,567 applications and 8,582 appeals up to 31st March, 2024, which were disposed-off within the stipulated time. Out of these, 1,151 cases were taken up by the CIC and most of these cases were disposed of in favour of the Company.

Vigil Mechanism & Whistle Blower Policy: SAIL has adopted Whistle Blower Policy of Central Vigilance Commission (CVC) and it has not denied access to any personnel to approach the Audit Committee/ Management on any issue. The Whistle Blower Policy is available on the website of the Company - *www.sail.co.in*. The Company has also formulated a Vigil Mechanism for conducting the affairs in a fair and transparent manner by adopting highest standards of professionalism, honesty, integrity and ethical behaviour. All employees of the Company and Directors on the Board of the Company are covered under this Mechanism. This Mechanism has been established for employees to report

concerns about unethical behaviour, actual or suspected fraud or violation of Code of Conduct. It also provides for adequate safeguards against the victimization of employees who avail the Mechanism and allows direct access to the Chairperson of the Audit Committee in exceptional cases. The Vigil Mechanism has been posted on the website of the Company - *www.sail.co.in*.

Anti-Corruption: SAIL as an organization follows well defined systems & procedures to prevent, detect and address bribery. Steel Authority of India Limited (SAIL) has achieved the distinction of becoming the first Maharatna Public Sector unit to have implemented the Anti-Bribery Management System (ABMS) across all its Plants/units. ABMS is a Management System that is designed in line with ISO 37001:2016 to help an organization prevent, detect and respond to bribery. The Anti-Bribery Management Policy (Vision Statement) of SAIL is available at weblink: *https://sail.co.in/sites/default/files/Comp_policies/2022-04/ABMS.pdf*

Evaluation of the Performance of Board

(GRI 2-18a,b,c)

The appointment of Functional Directors as well as Part Time Non-Official Directors (Independent Directors) on the Board of SAIL is made based on nomination/appointment by Government of India. The terms & conditions of appointment as well as tenure of all Directors are also decided by GOI and there is a well laid down procedure for evaluation of Functional Directors and CMD by the Administrative Ministry.

As per the Companies Act, 2013, the Nomination and Remuneration Committee (NRC) shall identify persons who are qualified to become directors and who may be appointed in senior management in accordance with the criteria laid down, recommend to the Board their appointment and removal and shall specify the manner for effective evaluation of performance of the Board, its committees and individual directors. The evaluation is to be carried out either by the Board, NRC or by an independent external agency and NRC shall review the implementation and compliance of the evaluation system. Further, Regulation of SEBI (LODR) 2015 and the Code for Independent Directors under the Companies Act, 2013 requires the performance evaluation of Independent Directors to decide their continuance or otherwise. The Ministry of Corporate Affairs (MCA) has notified exemptions to Government Companies from certain provisions of the Companies Act, 2013 which, inter-alia, provides that appointment, performance evaluation and remuneration shall not apply to Directors of Government Companies.

Remuneration Policies

(GRI 2-19, 2-20)

The details of remuneration to Whole Time Directors for FY 2023-24 are given in the Corporate Governance Report included in the Annual Report. The salary of the Whole Time Directors is governed by Pay scales and Rules issued by the Department of Public Enterprises. No variable incentive is being paid to the Directors except Performance Related Pay (PRP), paid to them on annual basis as per DPE Guidelines. No Bonuses, severance fees and Stock Options were paid during the FY 2022- 23.

The Non-Executive Directors (other than Government Nominee Directors) are paid only sitting fee for each Board/ Board Sub-Committee/ Meeting attended by them. The sitting fee of ₹ 30,000/- for each Board Meeting attended and ₹ 25,000/- for each Board Sub-committee Meeting and Independent Directors Meeting attended is paid, as approved by the Board of Directors in its 485th meeting held on 31st January, 2022.

Annual Total Compensation Ratio

(GRI 2-21)

The ratio of annual total compensation for the organizaiton's highest paid individual to that of Median annual total compensations for all the organization's employees excluding the highest paid individual is 5.19, whereas the ratio of percentage increase in annual compensation for the organization's highest paid individual to that of median percentage decrease in annual total compensation for the organization's employees excluding the highest paid individual is 2.493 for the reporting period.

Remediation of Negative Impacts

(GRI 2-25)

A Stakeholders' Relationship Committee is functioning to consider and resolve the grievances of the security holders of the Company including complaints related to non-receipt of balance sheet, non-receipt of dividend, transfer/ transmission of shares, etc.

There was no complaint pending for redressal as on 31st March, 2024. Number of shareholders' complaints received during the year from 1st April, 2023 to 31st March, 2024 was 28. All the 28 complaints were resolved and no complaint was pending for redressal as on 31st March, 2024.

Grievance Redressal Mechanism

(GRI 2-26)

Effective internal grievances redressal mechanism has been evolved and established in SAIL Plants and Units, separately for Executives and Non-executives. Joint grievance committees have been set up at Plant / Unit level for effective redressal of grievances.

SAIL Plants/Units are maintaining grievance handling mechanism and employees are given an opportunity at every stage to raise grievances relating to wage irregularities, working conditions, transfers, leave, work assignments, welfare amenities, etc. Majority of grievances are redressed informally in view of the participative nature of environment prevailing in the Steel Plants/Units. The system comprehensive, simple and flexible and has proved effective in promoting harmonious relationship between employees and management. 273 staff grievances were received during the FY 2023-24 and with 11 grievances were pending from previous year, 252 staff grievances have been disposed of during the year, achieving 89% fulfillment and leaving 32 grievances outstanding at the end of FY 2023-24. Further, during FY 2023-24, 732 grievances were received under Centralized Public Grievance redressal and Monitoring System (CPGRAMS), a national level online system managed by department of administrative reforms and Public Grievance (DARPG), Government of India. The Status of Grievances received and disposed from 1st April, 2023 to 31st March, 2024 is as under:

S. No.	Particulars	Received (including Brought Forward)	Disposed	Pending as on 31st March, 2024
1	Public Grievances	585	549	36
2	Appeals	147	132	15
	Total	**732**	**681**	**51**

BOARD OF DIRECTORS

As on 1st August, 2024

Shri Amarendu Prakash
Chairman

GOVERNMENT DIRECTORS

Smt. Sukriti Likhi
Additional Secretary and Financial Advisor,
Ministry of Steel, Government of India

Shri Abhijit Narendra
Joint Secretary,
Ministry of Steel, Government of India

INDEPENDENT DIRECTORS

Shri Ashok Kumar Tripathy

Shri Kanhaiya Sarda

Shri Sagi Kasi Viswanatha Raju

Dr. Gopal Singh Bhati

Prof. (Dr.) K. Jayaprasad

FUNCTIONAL DIRECTORS

Shri Anirban Dasgupta
Director In-charge (Bhilai Steel Plant)

Shri Vejendla Srinivasa Chakravarthy
Director (Commercial)

Shri Atanu Bhowmick
Director In-charge (Rourkela Steel Plant)

Shri Brijendra Pratap Singh
Director In-charge (Burnpur & Durgapur Steel Plant)

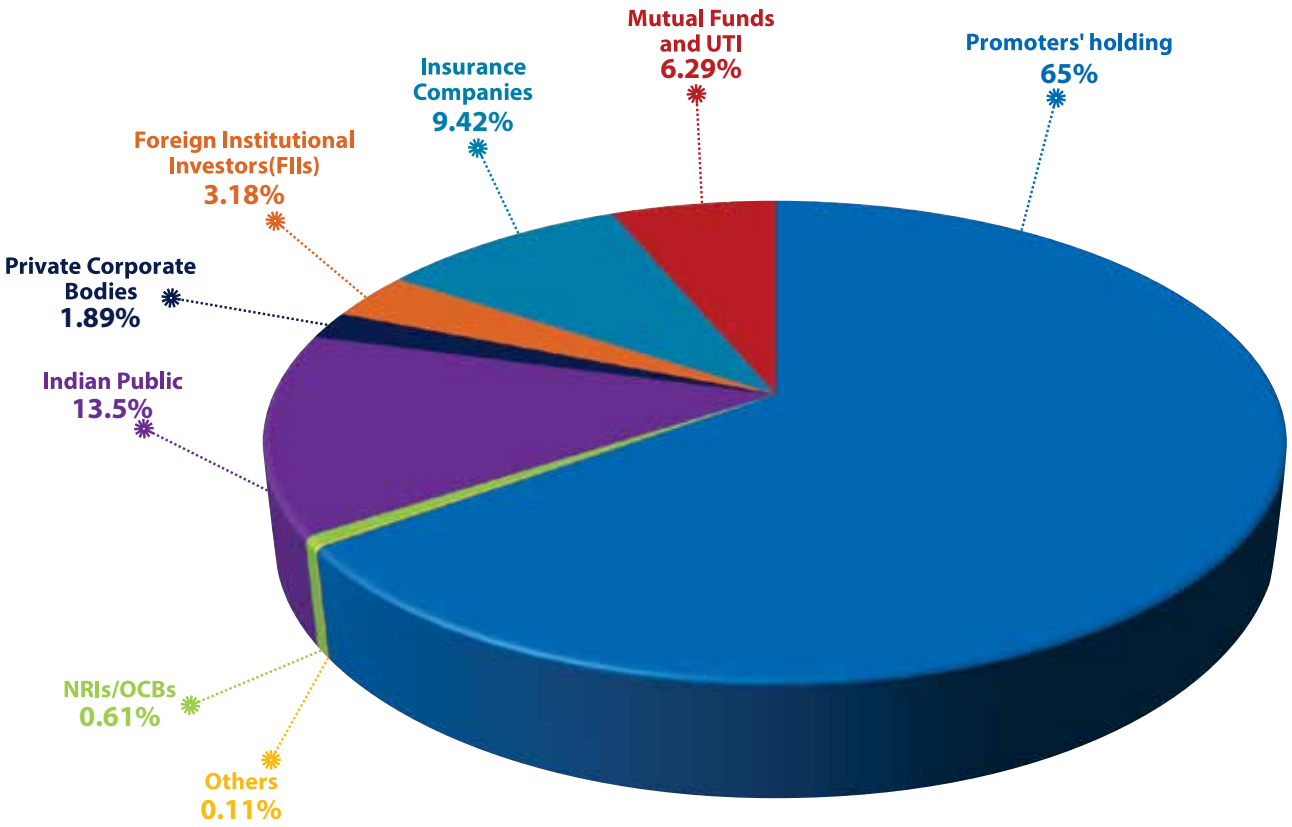
Shri Anil Kumar Tulsiani
Director (Finance)

Shri Krishna Kumar Singh
Director (Personnel)

Shri Arvind Kumar Singh
Director (Technical, Projects & Raw Materials)

Shri Birendra Kumar Tiwari
Director In-charge (Bokaro Steel Plant)

Shareholding Pattern



Policies at SAIL

(GRI 2-23, 2-24)

The Company has well established and documented policies and procedures, which are adhered to for transparent, efficient and ethical conduct of business and for safeguarding its assets, prevention and detection of frauds and errors, accuracy and completeness of the records and disclosures. Policy and Strategy formulation is a well-structured process guided by Company's Vision and Credo. The basket of policies that are available on SAIL website include Policies on Anti-Bribery Management (Vision Statement), Enterprise Risk Management, Corporate Social Responsibility, SAIL Mediclaim Scheme For Retired Employees, Inter Plant Standardization in Steel Industry (IPSS), Safety, Quality, Corporate Environment, Human Resource, HIV/AIDS, Information.

The policies on Human Resource, Occupational Health and Safety, Communication, Maintenance, Township, Energy Management and Social Accountability, etc. at the Plant level also promote concept of transparency and accountability.

Enterprise Risk Management (ERM)

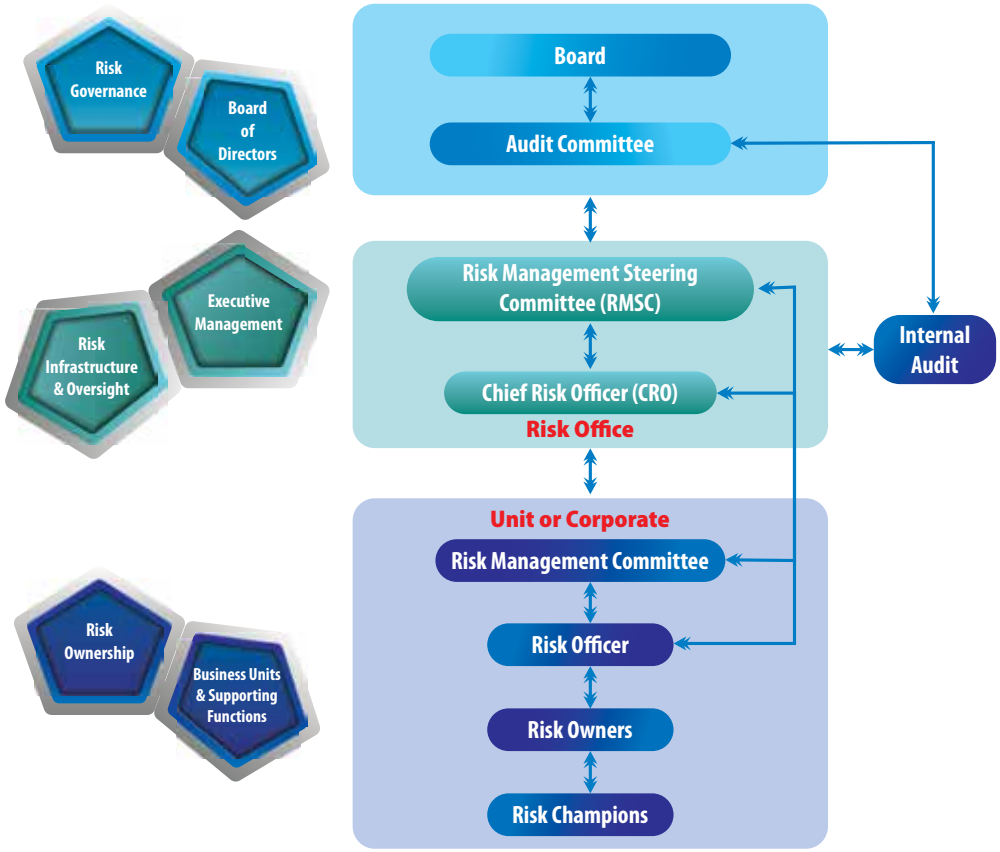
Enterprise Risk Management (ERM) is a strategic business discipline that supports the organization's objectives by addressing its risks and managing the impact of these risks. It is the practice of planning, coordinating, executing and handling the activities of an organization in order to minimize the impact of risk on investment and earnings and also strategic, financial and operational risks. The Risk Management Policy was approved by the SAIL Board much before the same became a statutory requirement and since then, the risk management in SAIL has grown and developed in line with internal and external requirements.

The Policy provides guidance for the management of the business risks across the organisation. It focuses on ensuring that the risks are identified, evaluated and mitigated. The risks identified are being addressed regularly and actions are being taken in a time bound manner to mitigate them which is an ongoing process. Currently, the architecture of Enterprise Risk Management in SAIL comprises a well-designed multi-layered organization structure, with each Plant/Unit having its own perceived risks which are under the constant monitoring by the Risk Owners / Risk Champions who frame and implement the mitigation strategy and take it to its logical conclusion.

Risk Management Committee (RMC) of the Plant/ Unit is chaired by the Head of the Plant /Unit that periodically reviews the risks, prepares its mitigation plans and takes necessary actions / measures to mitigate them and reports the same to the Chief Risk Officer (CRO) of SAIL.

SAIL Risk Management Committee (SRMC) oversees the Risk Management function in the Company by addressing issues pertaining to the policy formulation as well as evaluation of risk management function to assess its continuing effectiveness.

Governance Structure of Risk Management at SAIL



Technology Security and Sustainable Development

REGULATORY COMPLIANCES

SAIL understands the need as well as the advantages of adhering to the regulatory compliances. There is compliance with the relevant international standards, regional regulations, and best practices. SAIL stays informed about evolving regulations & industry standards and ensures that compliance requirements are met and stakeholder expectations are addressed effectively. Systems here are regularly audited by both internal and external auditors.

DIGITAL TRANSFORMATION IN SAIL

In today's fast-paced business environment, digital transformation is critical for organizations seeking to stay competitive and agile. A significant component of this transformation is the adoption of advanced technologies in time. SAIL undertook a comprehensive digital transformation journey by introducing digitized systems much earlier in its journey.

IT has a footprint in all verticals at SAIL. In order to streamline the operations, improve efficiency, and foster growth, SAIL had moved from the traditional technologies and systems to SAP ERP . The organization's reliance on SAP ECC had served it well for years, but the need for real-time data processing, advanced analytics, streamlined business processes and the need to comply with an ever evolving digitalized environment prompted the decision to upgrade to SAP S/4HANA and SAIL is on that journey today.

While, SAIL is moving ahead on the S/4HANA journey, the digital transformation journey continues. Not only is there introduction of third party systems but the skilled in-house software development team has developed and implemented various robust online local level and centralized systems introducing efficiency and transparency in the processes.

SAIL has introduced a plethora of new IT system. Few of the latest ones are mentioned here. Suvidha – an online system for Vigilance which is a comprehensive database for all Complaints, RDA (Regular Departmental Action), Surprise Checks & CBI Cases in SAIL. Sakhi- A women centric portal has been introduced for female employees. Online Legal Information Management system has been introduced for digital monitoring of legal and arbitration cases of SAIL and the facility has been extended to the Ministry of Steel. Sanshleshan' an HR Dashboard for Senior Management and all executives of SAIL has been implemented to provide information pertaining to the various strategic HR initiatives like WoW (Work from Other than Workplace), Shabash, Sakhi, e-Abhigyaan, Future Skills, LinkedIn etc. SAIL has collaborated with NASSCOM for learning through Future Skills and also through LinkedIn. Knowledge sharing portal for Internal Audit of SAIL is instrumental in the consolidation of information related to Audit.

Implementation of Digital Signatures in Invoices, Test Certificates and Services PRs in various modules.

Implementation of payment gateway for accepting remittances from multiple sources like vendors and customers of Marketing, Township, hospital, personal, Material Management as well as from employees. Implementation of Hospital Management System.

SAP was implemented at CFP (Chandrapur Ferro Alloy Plant) in SAIL BSP's (Bhilai Steel Plant) instance. Also, the Odisha Group of Mines (OGM) have been integrated with Rourkela SAP. It will bring ease of business processes, uniformity with other SAIL units, integration of all business processes, and transparency and data security in the system.

Digital Project Management System implemented in order to manage projects more efficiently and effectively to help make quicker data-driven decisions.

Centralized Bill processing system / Vendor Portal System for Vendor Bills & related documents implemented, thus standardizing the bill processing life cycle.

Resource Optimization

SAIL is on the continuous improvement and growth path where the locations are taking individual steps for resource optimization. Major steps taken by some of the SAIL locations have been enumerated here.

SAIL has been Implementing automation and robotics to streamline production, minimize material wastage, and improve efficiency in resource utilization. Digital twins continue to be introduced creating digital replicas of physical assets to simulate and optimize processes, reducing the need for physical trials and minimizing material waste.

Portal for providing real-time prediction of 350 motors deployed across the landscape of the Plant.

For the first time in SAIL, a dedicated air gap operational network has been deployed.

Various other initiatives include unmanned Weighbridge: Automation of weighbridge operations for enhanced operational efficiency and accuracy.

AI-based models implemented for predicting coke quality and optimizing blending processes. GPS-based vehicle tracking systems for real-time vehicle tracking and logistics management. AI/ML-Based Asset Health Monitoring for leveraging artificial intelligence and machine learning to monitor critical plant assets.

Online Monitoring of furnaces and substation has been done where the access of the identified furnaces operation data is given in the plant network. The running status of all the furnaces can be monitored through intranet/internet.

System implemented for SMS Alert for Despatch of Rakes to reduce Railways demurrage. IoT based Health Monitoring of various equipment for Live 24×7 monitoring. AI Vision based Cycle Time Analysis for Improvement in Shop Productivity.

Integration of SAP system with Third Party Portal for on-line entry of payments details and automation of Secondary Steel Stockyard processes.

Data Security

SAIL is continuously implementing measures to enhance cyber security and has ensured that there have been no information security breaches in the FY 2023-24.

CUSTOMER EXPERIENCE

SAIL recognizes that sustainability is not only about minimizing the environmental impact but also about enhancing the overall experience for the customers. As part of commitment to corporate sustainability, SAIL actively seeks to understand and improve the sustainability efforts aligned with customer expectations and contribute to overall customer satisfaction.

SAIL's corner stone approach is to integrate customer experience into the sustainability strategy. By aligning sustainability initiatives with customer needs and feedback, not only is the product offering enhanced but it also contributes to a more sustainable and environmentally responsible future. SAIL is committed to continuing this journey, ensuring that the customers' voices drive sustainability efforts and that the impact on both people and the planet remains positive.

SAIL Plants and Units take pride in being customer oriented and have locally taken many initiatives. Some major initiatives include-

QR Code based Made-In-India Product identification & tagging implemented as per the Government guidelines for proper tracking of materials up to the customer end, thus reducing product mix-up & enhancing the customer experience.

Payment portal implemented for enabling seamless receipts of payment from customers. The real time payment liability of the customer is available to them after mobile based authentication and the user can make payment with any digital instrument. Launched in June 2023, this SAIL location has received more than INR 1000Cr payments till date with real time posting in the existing SAP system.

Structural Digital Database system for compliance of Regulation-3 of SEBI regarding sharing of price sensitive information has been implemented.

SAIL Pension portal was developed to facilitate ex-employees to apply for SAIL Pension Scheme.

Process of Risk Purchase tendering of services has been implemented in SRM7 platform.

Various other initiatives include Auto Refund of Security Deposit and Hold Back Amount to contractors (Service Contracts) for faster clearance. New Reverse Auction guidelines implemented successfully in e-tendering portal. Contractual gate pass format has been newly designed on a water-marked, pre-printed thick cut sheet paper with enhanced legibility and embossed to make it tamper-proof. Exploration of Underwater structures at Mandira Dam through AI and Sonar based Underwater Autonomous Vehicle to assimilate data to formulate detailed Repair/ restoration Plan.

Customer Self Service Portal implemented with 274X7 availability reducing dependence of customers on SAIL marketing officers.

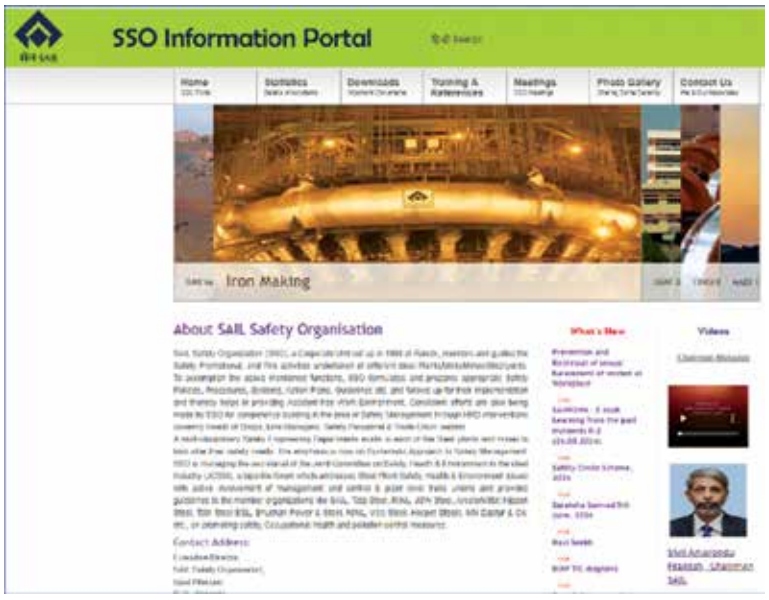
Integrated Vehicle Tracking system implemented in all warehouses.

ENERGY EFFICIENCY

Smart sensors have been installed throughout the production process to monitor and optimize energy consumption, temperature, and other crucial parameters Fostering Sustainable Growth

Safety

Digital/ IT Initiatives in Safety:



State-of-the-art technological tools & techniques have been deployed to improve safety in the workplace in SAIL. Wide variety of latest tools are used, like drones (for inspections of roof top, chimneys etc.), AR/ VR (Augmented Reality/Virtual Reality) for simulator based training (in EOT-Electric Overhead Traveling cranes, dumper/ heavy equipment etc.), robotic marking machine, geo-fencing (i.e. digital barricading), ANPR (Automatic Number Plate Recognition) system, Laser projection in EOT cranes, QR code based access to important documents like SOPs, SMPs etc. E-learning modules on different aspects of safety have been developed to enable the employees to upgrade their knowledge. Various kinds of mobile applications are also available for the employees, which provide real-time process as well as safety related information & updates. Safety related electronic newsletters/ magazines, publications etc. are brought out periodically which give wide range of useful information pertaining to Safety & Health from experts from the steel industry.

Also as part of the on-going Safety Management Consulting Assignment in the plants, customized web portals have been developed which are tailor-made to the plant's safety requirements. Details related to Behavioural Interventions, Standards & Procedures, Near Miss & other incidents, Incident Investigation etc. are uploaded in these web-portals for the benefit of all employees with in-depth analysis in the form of user-friendly dashboards. These portals have become an integral part of our IT set-up and are maintained with in-house resources.

With a view to learn from similar systems & practices prevailing in other steel producers in the country, a Learning from Each Other (LEO) workshop on 'Use of Digital Technologies in Safety Management' was organized by SSO during 2nd – 3rd November 2023 which was attended by participants i.e. IT & safety professionals, from all plants of SAIL, M/s TATA Steel and M/s AMNS.

Video-conferencing tools like Webex, Zoom, MS-Teams etc. are used widely for conducting safety awareness programmes & knowledge-sharing sessions (Suraksha Samvad, Suraksha Manthan etc.) thru' virtual platforms. Social media platforms, like Facebook, Twitter, WhatsApp etc. are extensively utilised to spread safety related updates & messages to the end users.

Information technology is pivotal in SAIL's quest to become the leading player in the steel industry.

The integration of information technology (IT) into our corporate sustainability efforts has proven to be a transformative force. By leveraging advanced technologies such as cloud computing, data analytics, and IoT, we have enhanced our operational efficiencies, reduced our carbon footprint, and fostered a culture of sustainability across all levels of the organization.

Our commitment to sustainable IT practices-such as energy-efficient data centres, responsible e-waste management, and sustainable software development-has not only minimized our environmental impact but also driven innovation and competitive advantage. Furthermore, the transparency and traceability offered by IT solutions have enabled us to better engage stakeholders and promote accountability in our sustainability initiatives.


सेल SAIL
Great Place To Work. Certified
ACVOs MEET
CORPORA FICE
10th - 11th Januar
STEEL
There's

Vigilance at SAIL

Vigilance at SAIL

(GRI 3-3, 205-1, 205-2, 205-3)

SAIL has strategically implemented a robust framework of Policies, Rules, and Mechanisms to combat corruption and bribery within the organization, aligning with the GRI Sustainability Reporting Standards. The Company has established dedicated Vigilance Departments across all Plants/Units to execute preventive and punitive functions. The primary objective is to cultivate an environment fostering employee integrity, efficiency, and transparency; while adhering to the highest ethical standards as outlined in the GRI Standards.

To ensure the prevention of corruption, the Vigilance Department meticulously scrutinizes all operations of SAIL. SAIL Vigilance team, comprising approximately 140 employees, is led by a Chief Vigilance Officer appointed by the Central Government on a tenure basis. Operating independently, the Chief Vigilance Officer reports directly to the Central Vigilance Commission, focusing on aspects related to corruption.

The ethical conduct of all executives is governed by the Conduct, Discipline, and Appeal (CDA) Rules, prescribing a Code of Conduct/Misconduct. Simultaneously, non-executive workmen are guided by the Code of Conduct/ Misconduct specified in the Standing Orders of respective Plants/Units of SAIL. An essential document and approach, the Integrity Pact, covers all contracts/procurements with a value of ₹ 20 Crores and above and tenders related to handling contracts in CMO departmental warehouses, irrespective of the threshold value. Guidelines for prohibiting business dealings with bidders/contractors/agencies dealing with SAIL are integral to the Integrity Pact, emphasizing appropriate action against signatories found involved in unethical practices, including corruption and bribery.

SAIL's meticulous approach extends to detailed procurement guidelines, emphasizing equity, fairness, accountability, and compliance with directions issued by the Central Vigilance Commission. The Purchase/Contract Procedure delineates steps to be followed from raising the indent to making payments on a first-in, first-out basis. Transparency in the price discovery process is ensured through Reverse Auction guidelines, and a Standard Bidding Document promotes uniformity in processing Turnkey Projects. The 'SAIL Tenders' website acts as a centralized hub, providing relevant information on tenders floated by SAIL.

In adherence to directives from the Central Vigilance Commission (CVC), SAIL has identified sensitive areas and posts within the organization. Executives in these sensitive posts for over three years undergo annual rotations, aligning with the principles outlined in the GRI Standards.

94 additional sites of SAIL including Bhilai Steel Plant, Durgapur Steel Plant, Rourkela Steel Plant, IISCO Steel Plant, Alloy Steels Plant, Salem Steel Plant, Central Marketing Organization, Chandrapur Ferro Alloys Plant, SAIL Refractory Unit, Ranchi based units and Environment Management Division have been included by BIS under SAIL ABMS (as per ISO 37001 : 2016) License No. CRO/AB/L-8000027 dated 02.11.2022. Thus, Steel Authority of India Limited has achieved the distinction of becoming the first Maharatna Public Sector Unit to have implemented the Anti-Bribery Management System (ABMS) across all its Plants/Units.

The ABMS Policy has been approved by the SAIL Board. The ABMS Manual of SAIL is an integral part of SAIL's actions aimed at preventing bribery in the conduct of its business operations and exhibits SAIL's commitment to corruption free governance. It sets out SAIL's ABMS Policy prohibiting bribery, corruption and other improper payments in the conduct of business operations and lists out key responsibilities of all SAIL Personnel, Top Management & Governing Body of SAIL and also Business Partners for ensuring implementation of the Policy. The key objectives of the ABMS

program are to prevent bribery related risk exposures by implementing processes, training and awareness activities that ensure:

A. Compliance with applicable anti-bribery laws;

B. Creating awareness about SAIL's emphasis on ethical business practices and its zero-tolerance approach towards conduct that is in breach of ABMS Policy;

C. Effective Implementation of ABMS by Incidence reporting, investigation and compliance.

Under ABMS, Risks Assessment for Bribery and its mitigation plans have been done for all the Sensitive Departments of all the Plants and Units of SAIL.

The SAIL Board undertakes half yearly review of all the Vigilance Activities of SAIL and also yearly review of ABMS related activities. The SAIL Vigilance Manual, Quality Policy, ABMS Policy, ABMS Manual etc. are readily available to all the employees through SAIL Intranet. Further, the ABMS Policy is available on the SAIL website i.e. *www.sail.co.in* and *www.sailtenders.co.in* for the information of the employees, business partners, customers, vendors and stake holders.

Further, information on Guidelines on Banning of Business Dealings and a list of Agencies (being updated on a regular basis) which have been banned is also displayed on *www.sailtenders.co.in*.

SAIL Vigilance, which is ISO 9001:2015 certified, undertakes several Preventive/ Participative Vigilance activities to prevent corruption in all the operations of SAIL; inter-alia including:

- Conducting Surprise Checks/File Scrutiny/Joint Surprise Checks in various areas
- Identification of Thrust Areas and focussing Vigilance activities towards these areas
- Undertaking Intensive Examinations and System Improvement Projects in various Plants / Units of SAIL
- Coordinating with Central Bureau of Investigation and other Central Agencies in anti-corruption matters
- Conducting training and awareness programmes to sensitize officials
- Periodically publishing SAIL Vigilance journal
- Laying emphasis on updation of existing systems & procedures
- Ensuring Job rotation in Sensitive areas
- Giving Preventive & Administrative recommendations on case to case basis as per requirement
- Handling of movable and immovable property returns with respect to executives
- Providing Vigilance Status / Clearance for various purposes like Promotion, completion of Probation period, final settlement of dues for Superannuation, conferment of Award, selection for PESB posts, etc.
- Monitoring the implementation of Integrity Pact
- Maintaining List of Officers of Doubtful Integrity and an Agreed List of suspect officials
- Laying emphasis on technology leverage for increasing e-tendering and e-payment etc.

To bring uniformity and clarity regarding acceptable modes of lodging complaints and processing of the same, a complaint handling policy for SAIL Vigilance has been implemented from January 2022. The complaint handling policy of SAIL Vigilance seeks to ensure that complaints about corruption, malpractice or misconduct by officials of SAIL are received, recorded and acted upon in a manner consistent with the complaint handling policy of CVC. Now the complainants can also lodge Vigilance related complaints through SAIL Website – *www.sail.co.in*.

SAIL follows a very effective channel of Whistle Blower Mechanism, which establishes comprehensive protection for reporting persons. The Government of India has authorized the Central Vigilance Commission (CVC) as the designated agency to receive written complaints for disclosure on any allegation of corruption or misuse of office and recommend appropriate action under the Government resolution "Public Interest disclosure and Protection of Informer", which is also known as "Whistle Blower Resolution". In addition, the Chief Vigilance Officers of the Ministries or Departments of the Government of India are also authorized as designated authority to receive written complaint or disclosure of any allegation of corruption or misuse of office by any employee of that Ministry or department.

Complaints under the Whistle Blower Resolution are received by Central Vigilance Commission (CVC) / concerned Ministry of the Government of India; and the relevant complaints are forwarded to SAIL for investigation after duly concealing identity of the complainant. The objective of the Whistle Blower Mechanism is to provide necessary safeguard for protection of employees from reprisal or victimization.

In addition to the above, the Vigilance Department also provides inputs on existing systems to respective administrative authorities for ensuring greater transparency. Thirteen cases were taken up for Intensive Examination during the year at different Plants / Units. During these Intensive Examinations, high value procurement / contracts are scrutinized comprehensively and necessary recommendations are forwarded to concerned departments for implementing suggestions for improvement.

The Vigilance Department receives and investigates complaints as per guidelines of CVC. During the year 2023-24, 687 complaints were received in SAIL Vigilance and 679 complaints were disposed off (including carry forward complaints from 2022-23); out of which 156 complaints were found anonymous / pseudonymous, 193 complaints were forwarded to other departments, 188 complaints were closed as the allegations had no vigilance angle / were not substantiated, 116 complaints were closed with preventive / administrative recommendations whereas regular departmental actions were initiated in 26 complaints against 51 employees. A total of 2214 surprise checks / file scrutiny were conducted by Vigilance Department in the vulnerable areas / departments of different Plants / Units.

In the year 2023-24, 190 vigilance awareness workshops / trainings were organized at different Plants / Units, covering 4,092 participants to create awareness among the employees on aspects such as Whistle Blower Policy, PIDPI, Purchase/Contract Procedures, Preventive Vigilance, Conduct and Discipline Rules, Common Irregularities, System and Procedures followed in SAIL etc.

With reference to the Vigilance Awareness workshops as mentioned above, it is noteworthy that during the FY'2023-24, 18 dedicated two-day Preventive Vigilance training programs (as per guidelines of CVC and MoS) were organized wherein a total of 327 mid-level executives and fresh entrants of SAIL were covered.

As a part of maintaining regular interaction with Additional Chief Vigilance Officers (ACVOs) who head Vigilance Departments at Plant / Unit level, CVO conducted regular review meetings known as ACVO Meets. During the meetings, performance of SAIL Vigilance was reviewed. Presentations on case studies / other vigilance related matters were made by different Plants/ Units which would ensure adoption of good practices / procedures by all.

SAIL Vigilance mainly focuses on Preventive Vigilance and brings out many systemic improvements to curb the malpractices / irregularities. During last one year some of the important systemic improvements brought are:-

(i) A system for recording of manpower deployed by the contractor for execution of the service contracts and enabling Engineer In-charge / CLC to ensure payment to the Contractual Workmen has been implemented at Bokaro Steel Plant.

(ii) A system for Daily entry of performance parameters in SAP for application part against supply & apply contract of refractory material used as lining material in Steel Ladle, Tundish in SMS department has been implemented at Durgapur Steel Plant.

(iii) A system for Issuance of SAP based Test Certificate number from CA / WLA / SPU has been implemented at Central Marketing Organization.

The following five thrust areas were identified and pursued by SAIL Vigilance during the year:

(i) Scrutiny of Stock verification system at WH / Stores / other service units associated

(ii) Scrutiny of cases, where the items like spares, consumables, etc. have been procured and are lying in inventory for more than 3 years after receipt of the items

(iii) Scrutiny of cases where single techno-commercial eligible offer has been received against OTE cases.

(iv) Scrutiny of procurement cases through GeM portal.

Every year, as per the guidelines of Central Vigilance Commission, Vigilance Awareness Week is observed in SAIL. This year, the week (from 30th October to 5th November 2023) started with administering the Integrity pledge and reading out of messages of dignitaries at SAIL Corporate Office and all other Plants/Units of SAIL. During the week, workshops/ sensitization programmes, customers meet, events like quiz, essay, slogan & drawing / poster, debate competition etc. were organized for SAIL employees. As outreach measures, various events like Speech / Oratory competition, Essay / Slogan competition etc were organized for School / College students in SAIL townships.

To enhance Vigilance awareness, in-house journal 'Inspiration-Prerna' having case studies and informative articles was also published by SAIL Vigilance Department during VAW-2023.

In another Participative Vigilance initiative taken up by Vigilance, Ethics Club and Ethics Circle activities were undertaken in different Plants / Units of SAIL during the FY'2023-24. In order to propagate ethical behavior in the society at large, Ethics Clubs had been formed in the schools of SAIL Townships at various Plants / Units with the belief that it is essential to create a strong ethical and moral foundation for children to facilitate formation of an ethically sustainable society. On the similar lines, Ethics Circles have been formed in SAIL Plants / Units for its employees to discuss matters / issues related to corruption, honesty, integrity in organization.

The concept of Learn from Each Other (LEO) Workshops has been started in SAIL Vigilance with the aim of arriving at result oriented solutions in common areas where complaints are being received in various Plants / Units and also to standardize the functioning of Vigilance. The LEO workshops provide a platform for Vigilance executives from SAIL Plants / Units as well as other PSUs to collaborate with each other on carving out new paths to take on the challenges of various important topics pertinent to Vigilance. The main takeaways from these workshops are also submitted to Higher Management for further necessary actions.

Bonding with Stakeholder

Bonding with Stakeholder

(GRI 2-29, 3-1)

At SAIL, Stakeholder Engagement is a dynamic and continuous process, driven by a structured and comprehensive approach. We prioritize identifying and understanding our stakeholders, evaluating their expectations, addressing material issues, and defining sustainability indicators. By preparing actionable plans, implementing them effectively, and maintaining clear communication, we aim to strengthen the connection between our business strategy and the sustainability vision of the Company.

Stakeholder identification at SAIL involves a thorough process based on their influence on our business goals. This is complemented by in-depth desk research, community need assessments, benchmarking against industry peers, and consultations with key personnel. Special attention is given to vulnerable and marginalized stakeholders to ensure inclusivity in our approach.

SAIL is deeply committed to respecting and upholding the human rights of all its stakeholders, including employees, their families, contract workers, and the communities we serve. Regular reviews of policies and processes ensure alignment with contemporary needs and a focus on the welfare of the broader community.

Stakeholders are at the center of SAIL's growth strategy. Their engagement has been instrumental in helping the Company navigate challenges, identify risks, and develop effective management plans. At SAIL, we believe that our proactive and collaborative approach to stakeholder engagement is a cornerstone of our success and sustainability journey.

Stakeholder Consultation

(GRI 2-29, 3-1)

Engaging with stakeholders is a cornerstone of the materiality assessment process, ensuring a holistic understanding of the diverse perspectives that influence our operations. At SAIL, our stakeholder engagement model is highly dynamic, designed to foster strong, collaborative relationships while addressing key concerns.

We prioritize continuous dialogue with a wide array of stakeholders, including government bodies, shareholders, employees, customers, suppliers, local communities, NGOs, academics, consultants, competitors, and financial institutions. By engaging these groups, we gain valuable insights into our organization's impact, enabling the identification of material issues that are critical to sustainable and inclusive growth.

Our engagement methods are varied and tailored to suit the needs of different stakeholders. These range from daily interactions with employees to structured forums such as Annual General Meetings (AGMs) for shareholders. Additionally, we conduct regular, need-based discussions with key stakeholders like suppliers to address emerging challenges and opportunities effectively. This collaborative approach not only strengthens relationships but also enhances our ability to drive meaningful change.

Additionally, SAIL has established dedicated Board Sub-Committees that focus on economic, environmental, and social matters. These sub-committees meet regularly to review and discuss significant issues, with their recommendations submitted to the Board for approval. A robust follow-up mechanism ensures the Board is kept informed of the actions taken.

Engagement Process

Stakeholder Identification: Strategic understanding of stakeholder groups with a vested interest in SAIL's business operations.

Stakeholder Engagement: Pre-decided strategy to engage with stakeholders based on their influence and impact.

Understanding Stakeholder Concerns: A framework that enables stakeholders to raise concerns, with a focus on addressing them effectively.

Developing Strategic Response: Incorporating stakeholder feedback into strategic action plans to align stakeholder expectations with business activities.

Stakeholder Engagement Summary

(GRI 2-29)

SAIL's stakeholder engagement process involves structured and consistent interactions with various groups, each with unique concerns and communication preferences. Stakeholders, including shareholders, employees, suppliers, customers, the community, NGOs, and regulators, are engaged through customized channels such as meetings, surveys, and digital platforms, with engagement frequency ranging from daily to annually. Key topics discussed include profitability, safety, remuneration, environmental quality, job opportunities, and regulatory compliance. This proactive approach ensures concerns are addressed effectively, strengthening relationships and aligning business operations with stakeholder expectations for sustainable growth.

The details of this engagement process, including communication methods, frequency, and key concerns, are summarized in the table below, providing a clear overview of how SAIL fosters responsive and strategic interactions with its stakeholders.

Stakeholder Group	Vulnerable & Marginalized Group (Yes/No)	Modes of communication	Frequency of engagement	Key topics and concerns raised during engagements
Shareholders	No	1. Annual General Meetings 2. Quarterly reports to shareholders 3. Shareholder relation meets 4. Investor queries/interaction	Annually/ Quarterly/ as and when required	1. Profitability of the Company 2. Creation of wealth 3. Stock Price 4. Grievances and Complaints
Employees	Yes	1. Labor Unions, Bipartite & Tripartite Meetings 2. Departmental & Zonal Committee Meetings 3. Various Platforms for Dialogues & Communication 4. D I/c Interactions, 5. Employee Satisfaction Surveys, 6. Annual Appraisals, 7. Internal newsletters etc.	Daily	1. Safety and Healthy working conditions 2. Good remuneration package 3. Professional Growth 4. Quality of life 5. Welfare Measures 6. Training and 7. Career Development
Suppliers	Yes	1. Vendor meetings 2. Meetings with suppliers 3. Ancillary Association Meetings 4. Supplier Relationship Management	Quarterly & as and when required	1. Partnership with Value creation 2. Timely Payment 3. Engaging more local suppliers 4. Supplier Satisfaction
Customers	No	1. Regional Customer meets 2. Plant visits, Director's conference with customer groups 3. Visits to customers and customer satisfaction surveys 4. Virtual Meetings, visit by customers 5. Telephonic conversation emails 6. AI ChatBot	Continuous basis	1. Partnership with Value creation 2. Product Quality 3. Delivery 4. Compliance, Customer 5. Satisfaction 6. Resolution of complaints.
Community	Yes	1. Community meetings 2. Interaction with municipalities 3. Town administrative committee 4. Involvement in local society functions	As and when required	1. Quality of life 2. Job opportunities 3. Education 4. Welfare Measures 5. Medical Facilities 6. Sustainable Livelihood
NGOs	No	1. Visit to plants 2. Seminars 3. Conferences 4. Interactions, etc.	As and when required	1. Environment Quality 2. Human Rights 3. Freedom of association 4. Compliance to regulations
Regulators	No	1. Meetings with Central and state Govt./Steel Ministry/Trade Bodies 2. Industry Associations 3. Ministry of Environment, Forests & Climate Change 4. Other Statutory bodies, etc.	Annually/ As and when required	1. Economic, Environmental and Social Compliance 2. Human Rights 3. Safety 4. Compliance to ILO Conventions
Competitors	No	1. Knowledge sharing, Partnership with value creation, Anti-competitive behavior 2. Consumer privacy	As and when required	1. Fair Business 2. Partnership 3. Public policy Advocacy

(GRI 2-29, 3-1)

Stakeholder Group	Vulnerable & Marginalized Group (Yes/No)	Modes of communication	Frequency of engagement	Key topics and concerns raised during engagements
Industry Associations	No	1. Conferences 2. Workshops 3. Seminars	Annually/ As and when required	1. Industry Policy, Regulations 2. Technology 3. Environment 4. CSR 5. Business Excellence
Academic Bodies	No	1. Conferences 2. Workshops 3. Seminars	As and when required	1. Knowledge Management Activities 2. Partnership for value Creation
Professionals/ Consultants	No	1. Visit to Plants 2. Seminars 3. Conferences, Interactions	As and when required	1. Partnership with Value creation 2. Training and Development
Media	No	1. Press Meets, Interactions with Plants & Corporate Communications	As and when required	1. Economic, Environmental and Social Performance Achievements

Principles of Materiality Assessment

(GRI 2-14, 2-29, 3-1a, b)

SAIL conducts materiality assessments at regular intervals to systematically capture and address critical issues impacting its operations and stakeholders. The Company follows a comprehensive 3-pillar approach, encompassing Completeness, Materiality, and Responsiveness, to ensure a robust and transparent process.

- Completeness involves identifying key issues while maintaining balanced and transparent reporting practices.
- Materiality focuses on evaluating the significance of these issues from the perspectives of both stakeholders and management, ensuring that only the most relevant matters are prioritized and reported.
- Responsiveness emphasizes taking action on identified issues and providing stakeholders with timely and relevant information.

To support these principles, SAIL engages constructively with both internal and external stakeholders through multiple channels, carefully capturing their expectations. The Company employs tools such as the Customer Satisfaction Index and Employee Satisfaction surveys to systematically gather and quantify stakeholder feedback.

The insights derived from these assessments are integrated into SAIL's medium- and long-term strategies, enabling the organization to align its goals with stakeholder needs. Customer feedback, in particular, serves as a foundation for product improvement, innovation, and service enhancements-essential for customer retention, market expansion, and sustainable growth. This commitment to addressing stakeholder priorities reflects SAIL's dedication to shared growth, benefiting both the Company and Society at large.

As Sustainability is a multifaceted concept that extends beyond environmental concerns to encompass social, governance and economic dimensions, we believe that effective stakeholder engagement plays a pivotal role in advancing and achieving Company's Sustainability goals. To arrive at materiality issues/topics that are relevant, opinion from key employees at Plants, Mines and Units was sought through online survey form filling. The reporting boundary for all topics was restricted to the operations of SAIL. A total of 109 responses received from stakeholders were mapped with the sustainability priorities of the Company. Basis the surveys, we are highlighting materiality topics and taking them into consideration. The material issues thus identified were discussed with the senior management, who then studied the procedure and outcomes of the assessment and finally provided the feedback. Based on the input from the senior management the issues were prioritized as High, Medium and Low.

The Material Issues identified are tabulated below:

Sl.No	Material Topics	Priority	Linkage to GRI Topic
1.	Compliance with product specification	High	Customer Health and Safety
2.	Investing in employees safety during catastrophic situations viz. Natural calamities, medical emergencies (COVID-19)etc.	High	Occupational Health and Safety
3.	Effective corporate governance and managing risk	High	Tax
4.	Enhancing profitability and growth	High	Economic Performance
5.	Compliance to legal regulations	High	Anti-competitive Behavior
6.	Reducing emissions, discharges and noise pollution	High	Water and Effluents
7.	Reducing greenhouse gas emissions & carbon footprint	High	Emissions
8.	Phasing out of ozone depleting substances	High	Waste
9.	Enhancing energy efficiency and adopting renewables	High	Energy
10.	Preventing corruption	High	Anti-corruption
11.	Upholding human rights in operations and supply chain	High	Child Labour, Forced or Compulsory Labour, Rights of Indigenous Peoples Supplier Social Assessment
12.	Providing fair and equal wages	High	Market Presence
13.	Ensuring customer data privacy	High	Customer Privacy
14.	Enhancing employee productivity	Medium	Training and Education
15.	Investing in CSR activities	Medium	Local Communities

(GRI 3-2)

Sl.No	Material Topics	Priority	Linkage to GRI Topic
16.	Managing resource and conserving minerals	Medium	Materials
17.	Adopting sustainable sourcing practices	Medium	Supplier Environmental Assessment
18.	Conserving biodiversity and land rehabilitation	Medium	Biodiversity
19.	Implementing Security practices	Medium	Security Practices
20.	Product labelling and compliance	Medium	Marketing and Labelling
21.	Addressing grievances of workforce and community	Medium	Labour/Management Relations, Freedom of Association and Collective Bargaining
22.	Enhancing gender empowerment amongst employees	Medium	Diversity and Equal Opportunity, Non-discrimination
23.	Providing sustainable livelihood	Low	Indirect Economic Impacts
24.	Engaging with supplier and contractors	Low	Procurement Practices
25.	Generating Employment	Low	Employment
26.	Public policy engagement	Low	Public policy

(GRI 3-2)

The key material issues across environmental, social and governance dimensions along with their mitigation strategy are outlined in the table below:

Subject	Material issues	Mitigation Strategy	Financial implications of the risk or opportunity (Indicate positive or negative implications)
Environment	Conserving water by recycling and reusing	Investment in treatment and recycling of effluent at plants to achieve the long-term goal of "Zero Liquid Discharge"	Negative
	Reducing greenhouse gas emissions & carbon footprint	Increase the share of renewable / non-conventional energy by 2030 as well as to achieve net zero emission by 2070.	Negative
Social	Upholding human rights in operations and supply chain	Stick compliance to all aspects of Human Rights.	Negative
	Providing fair and equal wages	-	Positive
	Investing in employee's health and safety during catastrophic situations viz. Natural calamities, medical emergencies (COVID-19) etc.	Constant efforts to avert all illnesses and accidents related to the workplace and strict compliance to ISO 45001:2018. Internal and surveillance audits and evaluations on a regular basis.	Negative
Governance	Ethics / Code of Conduct	Strict compliance to SAIL Policy on Code of Conduct for all levels.	Negative
	Data Privacy and Cyber Security	SAIL has a policy on information technology Security by which the Company ensures data privacy, information protection and cyber security.	Negative

Economic Stability

Economic Stability

(GRI 3-3, 201-4, 415-1)

Global Economic Scenario

The global economy in FY 2023-24 continues to navigate significant challenges, albeit with signs of stabilization. According to International Monetary Fund (IMF) the global growth rate is 3.2% in 2023, down from 3.5% in 2022. High inflation, driven by supply chain disruptions, effects of the Russia-Ukraine conflict, and energy market volatility, remains a pressing concern for both advanced and emerging markets. Central banks, particularly in the US and Europe, have raised interest rates to counter inflation, but these measures have tempered growth prospect.

Indian Economic Scenario

India's GDP growth rate for the FY 2023-24 was 8.2%, which was higher than the 7% growth rate in 2022. This growth rate was higher than all market estimates and helped India become one of the world's fastest-growing major economies. Despite global uncertainties, India remains a bright spot among major economies, thanks to a robust domestic market, increased government spending on infrastructure, and effective inflation management. The Indian government has allocated ₹10 lakh crore in capital investments for FY 2023-24, marking a 33% increase over the previous fiscal.

India's Index of Industrial Production (IIP) grew by 5.9% in the 2023-2024 Financial Year. The IIP is a measure of the overall health of India's industrial sector. The growth rates for the mining, manufacturing, and electricity sectors were 6.6%, 4.6%, and 13.7%, respectively. Within the manufacturing sector, the top three contributors to the growth of the IIP were the manufacture of basic metals, pharmaceuticals, medicinal chemicals, and botanical products, and electrical equipment.

Steel Scenario

The World Steel Association (WSA) forecasts a 2.3% increase in global steel demand for 2023, with a further rise of 1.7% in 2024. Manufacturing activities, particularly in the automotive and construction sectors, are expected to lead the demand recovery. However, persistent high-interest rates could weigh on steel consumption, particularly in developed economies

India's finished steel consumption stood at 119.17MT in FY23 and increased by 16.2%, 138.5MT in FY'24 which is reflecting robust domestic activity in construction and infrastructure projects. The Indian government's continued emphasis on infrastructure development is also expected to boost demand for specialty steel, with private sector investments playing a pivotal role.

SAIL's Economic Performance

(GRI 3-3, 201-1)

In FY 2023-24, SAIL sustained its position as India's largest steel producer while navigating challenges posed by inflation and rising input costs. Building on the momentum of the previous year, SAIL's production of hot metal, crude steel, and saleable steel stood at 19.24 MT, 18.5 MT, and 17.02 MT, respectively, demonstrating modest growth.

Despite global inflationary pressures, SAIL achieved financial resilience through strategic initiatives aimed at optimizing production processes and improving operational efficiencies. These included enhancing the coke rate, reducing energy consumption, and maximizing the usage of modernized units.

SAIL's gross turnover for FY 2023-24 reached ₹ 1.05 lakh crore, with net profits stabilizing at ₹ 4,529 crore. Notable financial indicators include a continued focus on reducing borrowing costs and improving the return on capital employed. The percentage increase in EBITDA (compared to FY-23) stood at 30.9%, highlighting SAIL's focus on cost optimization and efficient resource management.

Major financial parameters of the SAIL for the last three years are presented below

Particulars	2021-22	2022-23	2023-24
Gross Turnover (Direct Economic Value Generated)	1,02,805.13	1,03,768.00	1,04,545.00
Net Turnover	1,02,805.13	1,03,768.00	1,04,545.00
Cost of Material consumed including bought out goods	42,776.46	62,091.00	57,618.84
Employee Wages & Salaries	12,846.24	12,053.62	11747.92
Payments to Providers of Capital			
Interest (Finance Cost)	1,697.89	2,037.47	2,474.00
Interest (Capital-Expenditure During construction)	193.53	211.06	183.38
Dividends	3,614.21	620.00	826.00
Community Investments (CSR Expenditure)	94.24	162.46	161.93
Contribution to Government /Exchequer	24,302.00	23,625.00	22,015.00
Operating Profit	9,638.00	18,090.01	7,002.32
Profit After Tax	12,015.04	1,903.00	2,733.11
Income Retained in Business	2,694.00	8,400.83	1,907.00

Tax Strategy

(GRI 3-3, 207-1, 207- 2, 207- 3, 207- 4)

SAIL, as a listed public sector undertaking with the Government of India (GOI) holding 65% of its paid-up equity share capital, adheres to a robust framework for tax compliance and governance. While the Company does not maintain a separate tax policy due to the GOI's role in governing tax policies through the annual Finance Bill, it ensures full compliance with all applicable tax laws at both the central and state levels. These include statutes related to Provident Funds, Income Taxes, Goods and Services Tax (GST), Customs, and other statutory obligations. SAIL adopts a proactive tax strategy, leveraging opportunities such as Vivad Se Vishwas Schemes, Amnesty Schemes, and conciliation mechanisms introduced by the GOI. The taxation function and associated strategies are overseen by the Director (Finance) and periodically reviewed by the Board's Audit Committee to ensure alignment with organizational objectives.

Management of concerns related to tax has not been identified as a material topic in the stakeholder engagement. However, as part of our public advocacy, the Company has been giving its suggestions and ideas on the taxation regime regularly at the time of finalization of Union Budget by the Government. The information is sent through mails, etc. directly to the Government or through Trade Associations such as FICCI, CII, etc.

SAIL employs a multi-tiered tax governance framework, incorporating oversight by the Audit Committee, Internal and Statutory Audits, audits by the Comptroller and Auditor General (C&AG) of India, and external audit bodies. These mechanisms ensure tax compliance, accurate disclosures, and adherence to ethical business conduct. No concerns regarding tax compliance or organizational integrity have been raised, as evidenced in the Company's publicly available Annual Report.

Potential tax-related risks are identified and managed by the SAIL Risk Management Committee, comprising Board members. Mitigation measures are promptly undertaken, and the Company provides stakeholders with assurance of compliance through the Independent Auditors' Report and audit findings presented to both houses of Parliament.

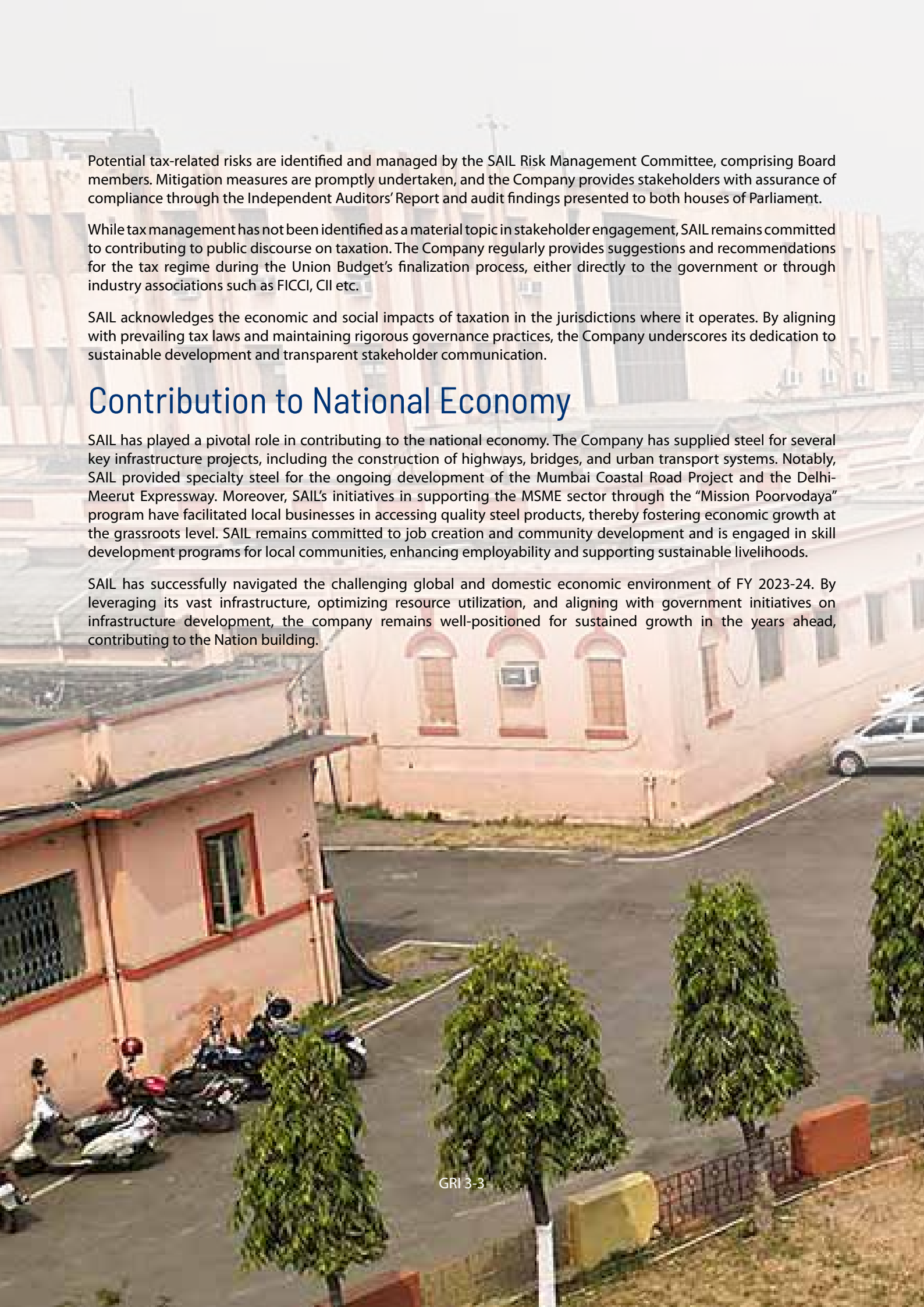
While tax management has not been identified as a material topic in stakeholder engagement, SAIL remains committed to contributing to public discourse on taxation. The Company regularly provides suggestions and recommendations for the tax regime during the Union Budget's finalization process, either directly to the government or through industry associations such as FICCI, CII etc.

SAIL acknowledges the economic and social impacts of taxation in the jurisdictions where it operates. By aligning with prevailing tax laws and maintaining rigorous governance practices, the Company underscores its dedication to sustainable development and transparent stakeholder communication.

Contribution to National Economy

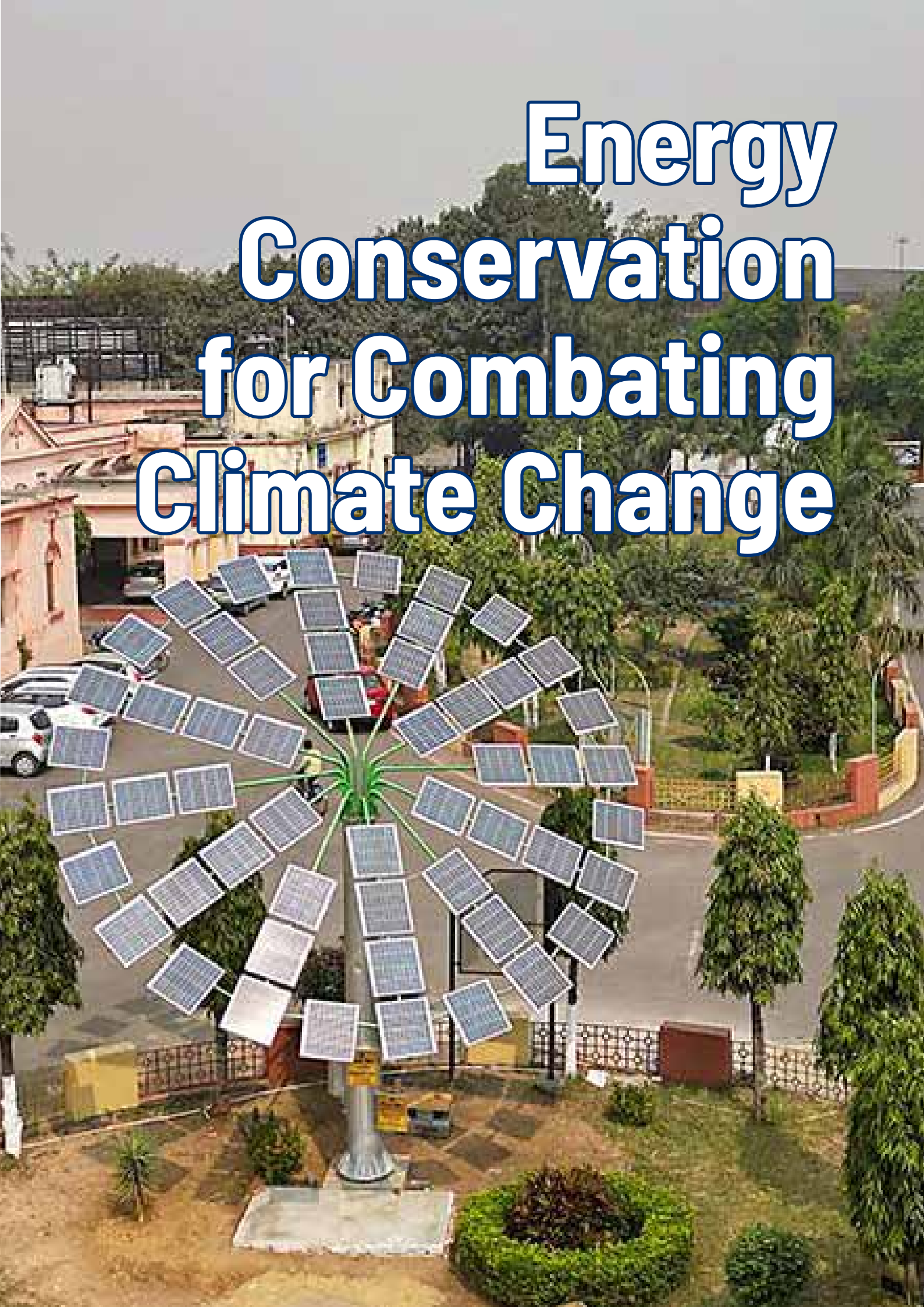
SAIL has played a pivotal role in contributing to the national economy. The Company has supplied steel for several key infrastructure projects, including the construction of highways, bridges, and urban transport systems. Notably, SAIL provided specialty steel for the ongoing development of the Mumbai Coastal Road Project and the Delhi-Meerut Expressway. Moreover, SAIL's initiatives in supporting the MSME sector through the "Mission Poorvodaya" program have facilitated local businesses in accessing quality steel products, thereby fostering economic growth at the grassroots level. SAIL remains committed to job creation and community development and is engaged in skill development programs for local communities, enhancing employability and supporting sustainable livelihoods.

SAIL has successfully navigated the challenging global and domestic economic environment of FY 2023-24. By leveraging its vast infrastructure, optimizing resource utilization, and aligning with government initiatives on infrastructure development, the company remains well-positioned for sustained growth in the years ahead, contributing to the Nation building.



GRI 3-3

Energy Conservation for Combating Climate Change



Energy Conservation for Combating Climate Change

(GRI 3-3, 305-5)

Steel production is a highly energy-intensive process, and optimizing energy usage is a key strategy for enhancing energy efficiency, reducing environmental impact, and simultaneously cutting operational costs. Steel Authority of India Limited (SAIL) has been unwaveringly committed to energy conservation. This commitment is evident in the phased retirement of old, energy-intensive units, maximization of Coal Dust Injection, utilization of by-product gaseous fuels, and various process optimization initiatives such as increased production and enhanced capacity utilization.

Our business plan is strategically designed to expedite progress toward low-carbon steel production. Embracing a framework for a decarbonized company, key drivers for our energy transition include the integration of renewable energy into the supply mix, adoption of electrification measures, exploration of new energy forms such as hydrogen, Coal Bed-methane Gas (CBG), and biofuels, along with focused efforts on CO_2 valorization and energy storage. Our commitment to Environmental, Social, and Governance (ESG) stands at the core of our future growth strategies, emphasizing responsible business practices.

In response to global energy policy changes, we actively participate in accelerating clean energy investments, emphasizing decarbonization and the transition to renewable energy. The ongoing crisis presents an opportunity to address both energy security and emissions reduction, aligning with global climate goals. SAIL, with a commitment to creating long-term value for stakeholders, has developed a sustainability roadmap to ensure the enduring positive impact of our operations on the environment and society.

SAIL has embraced cutting-edge, clean, and energy-efficient technologies in its operations. Notable examples include the implementation of 7-meter tall Coke Oven Batteries equipped with Coke Dry Quenching facilities, high-capacity Blast Furnaces featuring Top Gas Pressure Recovery Turbines, installation of gas holders, energy-efficient mills incorporating walking-beam type reheating furnaces, and recovery of waste heat from Sinter coolers, Torpedo Ladles, as well as the adoption of energy-efficient motors and Variable Voltage Variable Frequency (VVVF) drives. These advancements have collectively resulted in energy-efficient operations across SAIL's Plants and Units.

The Company is transitioning to energy-efficient and durable LED lighting in line with the Government of India's "UnnatJyoti by Affordable LEDs for All (UJALA) Scheme." More than a million LED lights have been installed across Company Plants and Units. Going forward, all upcoming projects will exclusively incorporate LED lighting systems, reflecting the commitment to energy efficiency and sustainable practices.

CO_2 emission and Energy Consumption during last 2 years:

GHG Emissions and Intensity

(GRI 305-1, 305-2, 305-3, 305-4, 305-5)

Parameter	Unit	FY 2023-24	FY 2022-23
Total Scope 1 emissions (Break-up of the GHG into CO_2, CH_4, N_2O, HFCs, PFCs, SF_6, NF_3 if available)	Tonnes of CO_2	52622079	47603938
Total Scope 2 emissions (Break-up of the GHG into CO_2, CH_4, N_2O, HFCs, PFCs, SF_6, NF_3 if available)	Tonnes of CO_2	2446629.724	3020822
Total Scope 1 and Scope 2 emission	**Tonnes of CO_2**	**55068708.72**	**50624760**

Parameter	Unit	FY 2023-24	FY 2022-23
Total Scope 1 and Scope 2 emission intensity per rupee of turnover (total Scope 1 and Scope 2 GHG emissions/Revenue from operations)	Tonnes / ₹ in Crs	502	488
#Total Scope 3 emissions (Break-up of the GHG into CO_2, CH_4, N_2O, HFCs, PFCs, SF_6, NF_3 if available)	Metric tonnes of CO_2 equivalent	-5300064	-5620400
Total Scope 3 emissions per rupee of turnover	Tonnes / ₹ in Crs	48.3	54.2

 # Partial capture of Scope 3

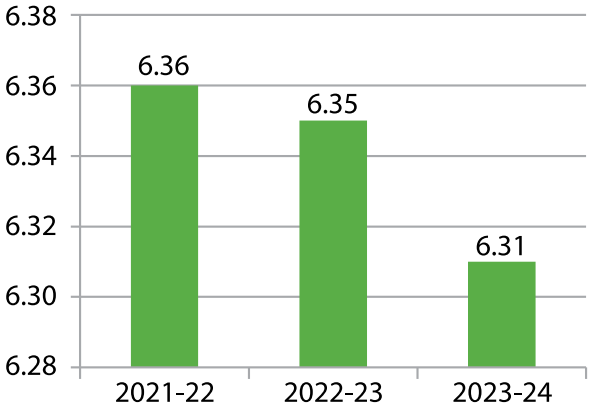
Energy Consumption and Intensity

(GRI 302-1, 302-3)

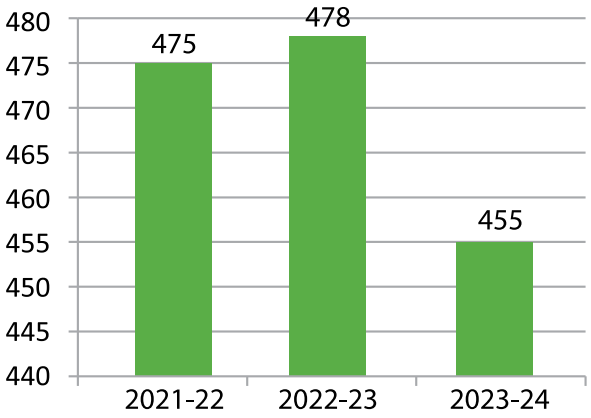
All our 5 Integrated Steel Plants have been identified as Designated Consumer by Bureau of Energy Efficiency, Govt of India. The energy consumption from renewable, non renewable along with fuel consumption is provided below:

Parameter	Unit	FY 2023-24	FY 2022-23
Total electricity consumption (A)	TJ	266.00	230.00
Total fuel consumption (B)	TJ	-	-
Energy consumption through other sources (C)	TJ	-	-
Total energy consumed from renewable sources (A+B+C)	**TJ**	**266.00**	**230.00**
Total electricity consumption (D)	TJ	1,43,445.00	1,40,245.00
Total fuel consumption (E)	TJ	4,69,777.00	4,49,756.00
Energy consumption through other sources (F)	TJ	678.50	916.00
Total energy consumed from non-renewable sources (D+E+F)	TJ	**6,13,900.00**	**5,90,917.00**
Total energy consumed (A+B+C+D+E+F)	TJ	**6,14,166.00**	**5,91,147.00**
% of energy consumed from renewable sources		0.043%	0.039%

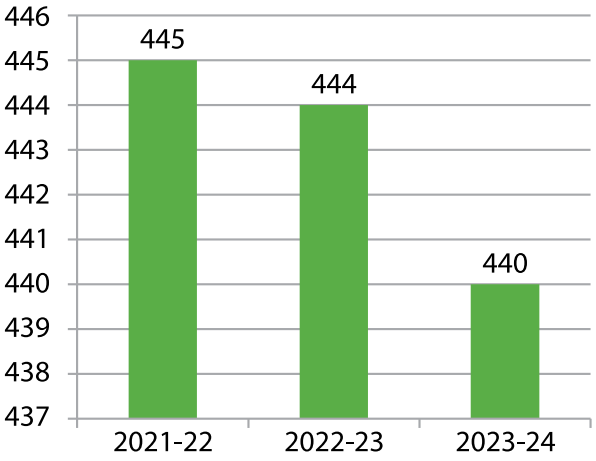
Specific Energy Concumption (GCal/Tcs)



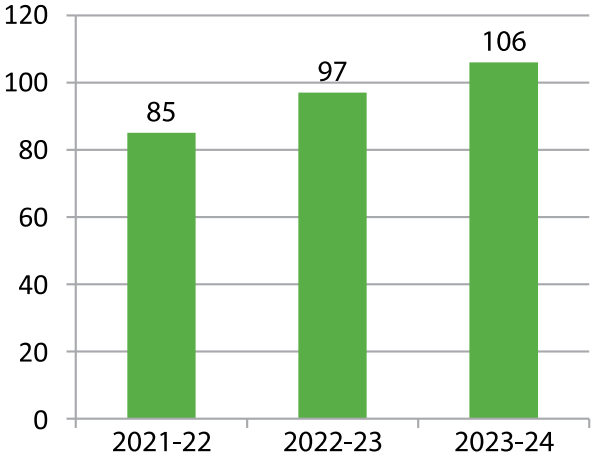
Specific Power Consumption (Kwh/TSS)



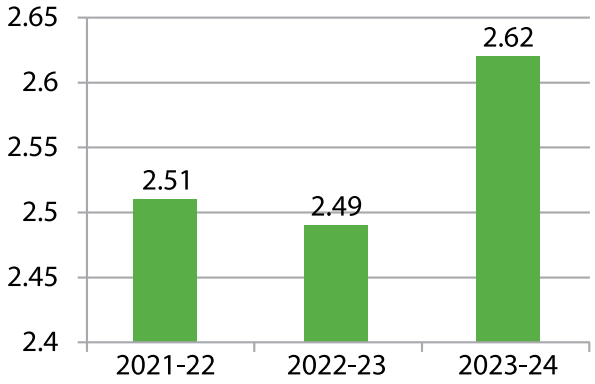
Coke Rate (Kg/Thm)



CDI Rate (kg/Thm)



Specific CO_2 Emissions (T/Tcs)*



**CO_2 emissions increased due to revision in calculation methodology*

(GRI 302-4, 305-4, 305-5)

Information on Utilization type of Power and Fuel

Type of Power/Fuel Consumed	Unit	FY 2023-24	FY 2022-23
Power Generation from BF and CO gas (Waste gases)	MW	187.6	139.3
Renewable Power purchased	MUs	61.85	54.3
Generation of RE power from own and JV installations	MUs	8.84	6.6
Boiler/Middling/Steam Coal	TONNE	81768	111994.4
FURNACE OIL	KL	19656	22034.2
LSHS	KL	4531	8902.3
LDO	KL	191	536.5
LPG	TONNE	22620	17702.5

Generation and Utilization of Renewable Energy

(GRI 3-3, 302-1)

In addition to the aforementioned efforts, the optimization of electricity consumption in various steelmaking processes stands as a pivotal focus area for SAIL Plants, aiming to reduce power consumption per tonne of saleable steel production. Demonstrating a commitment to corporate responsibility, the company has placed significant emphasis on the development and utilization of renewable power sources in SAIL's plants, mines, and the surrounding villages and areas, particularly through a targeted approach to Roof Top Solar (RTS) Power Plants. SAIL has taken up a strong drive for promoting Renewable Energy usage at its Plants, Units and Mines and has started installing facilities for harnessing solar energy for generation of power as well as for heating purposes.

The majority of SAIL's guest houses and hospitals are outfitted with solar water heaters and solar lighting systems. As part of our commitment to sustainable energy practices we have successfully installed Roof Top Solar power plants with a total capacity of 7.5 MWp across plants and units. Further, SAIL's first Floating Solar Power Plant of 4 MWp at ISP has been commissioned in January, 2024 and it produced 0.88 MUs of green power in February and March, 2024. In addition to this, a 15 MW capacity Floating Solar Power Plant over Cooling Pond in BSP through NSPCL is likely to be commissioned by June, 2025. A capacity of 176.45 MWp of rooftop solar plants at various Plants/ Units of the Company across the Country is in progress. Moreover, the ongoing initiatives include the installation of a 4 MWp floating solar plant at ISP and 7.11 MWp capacity rooftop solar plants at various plants and units nationwide. Future plans encompass the installation of 176.5MWp capacity floating solar plants over cooling ponds at various company plants.

The key renewable power projects under implementation are:

Solar Projects through NSPCL

- 25 MW Ground-mounted Solar Plant at BSL Township
- 30 MW Floating Solar Plant over Cooling Pond in BSL
- 20 MW Ground-mounted Solar Plant, DSP Township
- 15 MW Floating Solar Plant over Waria Reservoir, DSP
- 25 MW Ground-mounted Solar Plant in SAIL Growth Works, Kulti
- 20 MW Floating Solar Plant over Maroda-2 reservoir, BSP
- 6 MW capacity at Utai near CSVTU on BSP land parcel and 500 kW capacity on available land parcel at Hirri Mines, BSP through CREDA.

To further bolster its green initiatives, SAIL is procuring renewable bagasse-based power for Salem Steel Plant. Additionally, a joint venture with Green Energy Development Corporation of Odisha Ltd. (GEDCOL) is underway for the proposed development of a 10 MW Small Hydro Electric Plant over Mandira Dam in Rourkela. The company has drawn up ambitious plans to increase its renewable energy capacity to 384 MW by the year 2028-29. Collectively, these efforts are progressively enhancing the company's environmental sustainability and contributing to an expanded green footprint.

In addition, SAIL has continually undertaken various measures like optimization in Plant utilization, improvement in existing processes, introduction of new technologies and increase in waste heat recovery along with a focus is also on reducing consumption of purchased fuel and power.

The tangible outcomes of these efforts are reflected in the reduced energy consumption and CO_2 emissions. SAIL's persistent dedication to energy conservation stands as a testament to its proactive stance in addressing environmental concerns and promoting sustainable steel production practices. The process optimization initiatives during the Financial Year 2023-24 and associated benefits are listed below:

Bhilai Steel Plant (BSP)

a) Best ever production of Hot Metal production from BF-8 at 2.68 MT, using same facilities, surpassing previous best of 2.35 MT in 2022-23, leading to reduced specific energy consumption at BF-8 by 0.06 Gcal/thm.

b) Best ever Crude Steel production from Steel Melting Shop (SMS-3) at 3.44 MT, using same facilities, surpassing previous best of 3.06 Mt achieved in the previous year, leading to reduced specific energy consumption at SMS-3 by 0.045 Gcal/tcs.

c) Best ever Waste Heat recovery from hot coke in Coke Dry Cooling Plant (CDCP) facility resulting in generation of 29.7 GWh power from Back Pressure Turbine Generator (BPTG) in Coke Oven Battery (COB)–11, surpassing previous best of 29.2 GWh achieved in 2022-23.

d) Increase in conversion of high top-gas discharge pressure to electrical energy in BF-8 resulting in highest ever generation of 98.85 GWh of power through Top-pressure Recovery Turbine (TRT), as compared to previous best of 91.52 GWh achieved in 2022-23.

e) Best ever average Coal Dust Injection (CDI) rate of 120 kg/thm in BFs, surpassing previous best of 119.7 kg/thm achieved in 2022-23.

f) Highest ever Basic Oxygen Furnace (BOF) gas recovery from SMS-3 was achieved with annual recovery of 86.7 Nm^3/tcs, as compared to previous best of 46.1 Nm^3/tcs in 2022-23.

g) Revamping of BOF gas holder at SMS-2 and in-house modification for dual injection of BOF gas into both Coke Oven (CO) gas and BF gas networks resulted in highest annual BOF gas recovery of 3.55 x 108 Nm^3 from all SMSs, surpassing previous best BOF gas recovery at all SMSs of 2.35 x 108 Nm^3, achieved in 2022-23.

h) Judicious utilization of by-product gases resulted in reduced boiler coal consumption by 52 % to 6.6t/day and furnace oil consumption by 50% to 12.2 L/d from previous year.

i) Lowest ever Specific Heat consumption achieved in Plate Mill,Bar& Rod Mill, Universal Rail Mill at 432 Mcal/t Slabs rolled, 277 Mcal/t Billets rolled and 314 Mcal/t Blooms rolled respectively.

j) Installation of Variable Voltage Variable Frequency Drives (VVVFDs) for gas booster-4 of BOF gas holder in SMS-2, trolley of shuttle charge distributor-2& coke crusher-5 in Sinter Plant (SP) -2, stove booster fans in BF-7, CDI mill, gas booster fan & cast house jib cranes in BF-8.

k) Condenser tube cleaning in steam turbo generator-4 and steam turbo blowers at regular intervals by high pressure jet pump resulted in reduced steam consumption by about 30 t/h.

Durgapur Steel Plant (DSP)

a) Optimisation of steelmaking operation resulted in lowest ever overall Total Metallic Input (TMI) of 1,108 kg/tcs in SMS, as compared to 1113 kg/tcs achieved in 2022-23.

b) Lowest ever BF Coke Rate of 448 kg/thm against previous best of 457 kg/thm achieved in 2022-23.

c) Best ever CDI rate of 68 kg/thm against previous best of 57 kg/thm achieved in 2022-23.

d) Replacement of conventional light fittings with Light-Emitting Diode (LED) fittings in street lights & high mast towers, etc. leading to saving of around 196 MWh electrical power.

Rourkela Steel Plant (RSP)

a) Installation of Variable Voltage Variable Frequency Drives(VVFD) with waste gas fan motor (2 × 2.3 MW) in place of damper control in Sinter Plant-1 resulted in saving of about 8.059 GWh of electricity.

b) Enhanced availability of additional mixed gas to CPP-1 by 5,000 Nm^3/h during Hot Strip Mill off days by laying of additional 800 mm NB mixed gas line to CPP-1 resulted in annual energy saving of 26,370 Gcal.

c) Installation of 50 nos. of compact type steam traps resulted in annual energy savings of about 293.5 Gcal.

Bokaro Steel Plant (BSL)

a) Significant increase in CDI rate in Blast Furnaces to 78.8 kg/thm in 2023-24 from 56 kg/thm in 2022-23.

b) Commissioning of new Basic Oxygen Furnace (BOF) gas holder of SMS-New with recovery of 1,050 Nm^3 of BOF gas from SMS-New leading to best ever annual BOF gas recovery of 2.35 x 108 Nm^3 from SMS-2 and SMS-New together.

c) Implementation of an automated air-fuel system in two rotary kilns at Refractory Material Plant to enhance combustion efficiency resulted in energy saving of about 8,000 Gcal.

d) Replacement of old recuperator with new recuperator in Reheating Furnace 1 - 3 during cold repair resulted in recovery of energy in tune of 1,75,000 Gcal.

e) Installation of 10 nos. of variable frequency drive at Sinter and Coke Vibrators of BF-4 resulted in electricity saving of about 15.60 MWh.

f) Saving of about 18.69 MWh electrical power due to replacement of 64 nos. of high mast light with LED light in Plant premises.

g) Liquidation of 150 nos. of steam leakages, insulation of 800 m^2 steam line and replacement of 26 nos. of steam traps.

IISCO Steel Plant (ISP)

a) Best ever Crude Steel production of 2.53 MT, using same facilities, surpassing previous best of 2.42 MT in 2022-23, leading to reduced Specific Energy consumption by 13 Mcal/tcs in SMS.

b) Optimization of BF network pressure and judicious utilization of BOF gas resulted in increased power generation through Power & Blowing Station-2 by 1.78 MW to 36.25 MW from previous year.

c) Increase in conversion of high top-gas discharge pressure to electrical energy in BF resulted in increased power generation through TRT by 1.0 MW to 12.8 MW from previous year.

A Capital Expenditure of about ₹ 66 crore has been incurred on energy conservation equipment/measures during the Financial Year 2023-24.

Initiatives for Decarbonisation and Carbon Capture, Utilisation and Sequestration

(GRI 3-3, 201-2)

Strategic Approach on Decarbonisation

Keeping in view India's NDC commitment of achieving 2.30 tonnes of CO_2 per tonne of Crude Steel (t/tcs) by 2030, the decarbonisation programme of SAIL has been segregated in three distinct phases, incorporating Action Plans to achieve 2.19 t/tcs by the year 2030-31. SAIL's decarbonisation strategy has been designed based on the existing architecture and logistics, availability of technology, product basket and market dynamics, technology infusion rate & availability of fund, future expansion plan, breakthrough technological developments, Government policies, and the Company's social commitment. The decarbonisation journey of our operations can be categorized into three phases described below:

Phase-I Decarbonisation: From 2005-06 to 2022-23

During Phase-I, SAIL reduced its CO_2 emission intensity by around 20%. Major initiatives taken for reduction of CO_2 emission intensity are enumerated below:

Adoption of energy-efficient cum CO_2 mitigating technologies:

- Coke Dry Cooling Plant (CDCP) facility in tall Coke Oven Batteries (COBs).
- BF Top gas Pressure Recovery Turbine (TRT), Coal Dust Injection (CDI) and Waste Heat Recovery (WHR) in large volume BFs.
- Torpedo ladle for Hot Metal transfer from BF to SMS.
- WHR System in Sinter Plants
- Walking Beam type Reheating Furnaces in Rolling Mills.
- Gas-fired boilers for power generation.
- Energy efficient shaft kilns.
- Variable Voltage Variable Frequency (VVVF) drives in plant machineries.
- Use of renewable energy: 6.115 MW of solar plants already set up. Floating type & roof-top solar plants and hydel power plant under installation.

- Switching over to energy-efficient illumination: More than 7.34 lakh nos. of conventional lights already replaced with LED lights
- Plantation of around 22 million trees since inception and eco-restoration of mined out areas.

Phase-II Decarbonisation: Post-modernisation period till 2030-31

In consonance with the Country's demand and Make in India initiative, SAIL is also poised to increase its Crude Steel production from 19.2 Million Tonne (MT) during 2023-24 to 31.49 MT by 2030-31 from its Integrated Steel Plants and is committed to substantially reduce CO_2 emissions through adoption of new technologies and increased share of renewable/non-conventional energy.

In Phase-II, SAIL has set a target of ~12% reduction of CO_2 emission intensity in line with India's NDC, thereby, bringing down the CO_2 emission below 2.19 tonne CO_2 /tcs.

Phase-III Deep Decarbonisation for Net Zero by 2070

With the presently available and established technologies in the steel sector, target of carbon neutrality is extremely challenging. The goal carbon neutrality can be achieved through adoption of some breakthrough technologies for steelmaking, which mainly utilize non-fossil fuel based reductant or any alternate fuel and processes which can significantly reduce the emission from steelmaking. The significant ones are as under:

- Further improvement in energy efficiency of processes through retrofitting Best Available Technologies (BATs).
- Phasing out the energy-intensive old processes.
- Full capacity utilization of the installed units.
- Usage of improved quality raw material by enhancing beneficiation facilities and sourcing of good quality raw material from new mines.
- Increasing share of renewable/green power to substitute fossil based power.
- Integration of Industry 4.0.
- Product and Process Innovation through R&D along with new initiatives for developing low carbon technologies for Iron & Steel making.
- Partnership with the Technology providers and academic institutes of national/international repute for CCUS/ Green Steelmaking.
- Increase green cover to augment carbon sink.
- Maximizing the use of tools like Life Cycle Assessment (LCA) to identify the weak areas and formulating action plans for improving the process and energy efficiency shall help SAIL in achieving the targeted CO_2 emissions at a much faster pace
- Gradually influence supply chain to reduce carbon footprint.

Initiatives towards Carbon Capture Utilization and Storage (CCUS)

The equation of carbon neutrality shall remain unsolved in hard-to-abate sector as achieving net zero emissions is a difficult proposition and Carbon Capture Utilization and Storage (CCUS) may be a positive factor to solve this inequality by being useful in bridging the gap. In its commitment, SAIL is actively collaborating with leading research institutes and technology providers to drive decarbonisation through technological advancements and renewable energy applications. The Company initiatives to integrate CCUS in its operations are listed below:

- MoU has been signed between IISCO Steel Plant and National Centre of Excellence in Carbon Capture and Utilization (NCoE-CCU) of IIT, Bombay for Pilot study on carbon capture, its utilization and geological sequestration in nearby CBM wells.

- The proposal is being implemented A bench scale CO_2 capture model of 1 tonne per day capacity is being developed in association with M/s UGreen Technology Private Limited Capturing CO_2 from BF stove flue gas and converting to Syngas at Bokaro Steel Plant (BSL).
- The project to Capture CO_2 from flue gases using Hybrid Functionalized Sorbents, viz. slag and Fly Ash has been taken-up in association with the Indian Institute of Technology, Dhanbad, at Bokaro Steel Plant. Hybrid functionalized sorbent based on slag from steel plant and fly ash from power plant is being developed by the IIT. The identified sorbent shall be used to capture CO_2 from flue gases.
- Utilization of steelmaking slag for capturing CO_2 from flue gases and storage is under active consideration for developing mineralisation technology for capture of CO_2 from flue gases of steel plant using steel slag at Bhilai Steel Plant in association with National Centre of Excellence -CCU of IIT, Bombay.

Other initiatives to drive decarbonisation

Utilization of Biomass in Steelmaking

- With its in-house R&D efforts, SAIL is exploring the use of biochar (derived from biomass), having high calorific value in production of steel to minimise the emissions. The use of biochar in sinter production is not only helpful in reducing the CO_2 emissions but also improving the sinter quality by increasing its strength and decreasing the impurities. The trials are being conducted to co-inject the biochar with pulverised coal at the Rourkela Steel Plant to evaluate the reduction in emissions.

Coke Moisture Reduction

- SAIL has Collaborated with IOCL and is developing a specialty fluid to reduce moisture in wet quenched coke to potentially lower the coke consumption and CO_2 emissions to the tune of 4-5 kg per ton of steel.

Hydrogen-Rich Coke Oven Gas Injection

- SAIL is leveraging coke oven gas, rich in hydrogen, to reduce coke usage in blast furnaces. Plans are in place to inject significant volumes of this gas, which could lead to substantial emissions reductions.

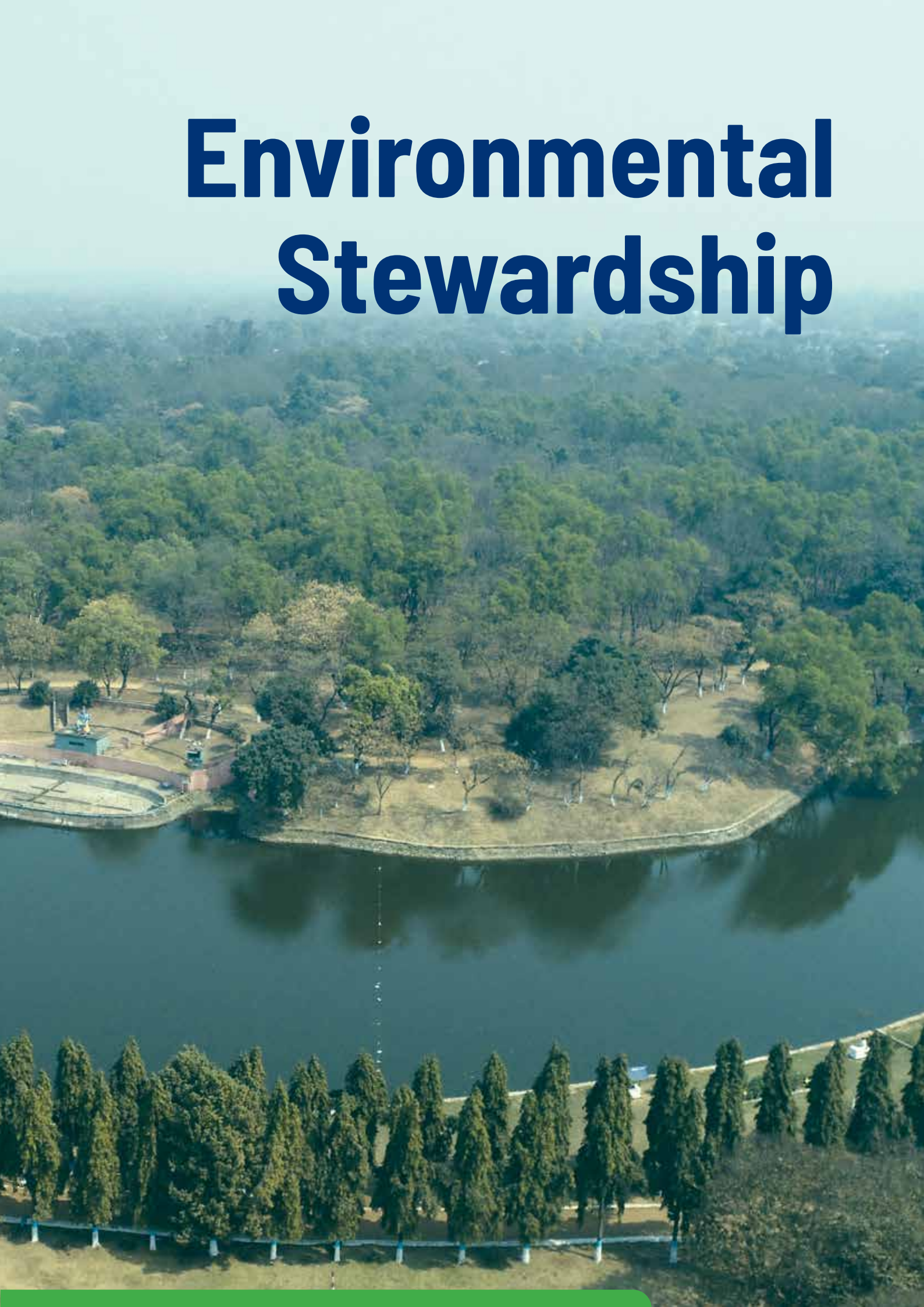
Green Hydrogen Initiatives

- The National Green Hydrogen Mission has set the stage for pilot projects aimed at integrating hydrogen into steelmaking processes, with SAIL actively participating in multiple schemes. In partnership with IIT Kharagpur, SAIL is also engaged developing technology for using green hydrogen in Direct Reduced Iron (DRI) production

Leasing Electric Vehicles (EVs) for Board-Level Officers

- SAIL is sensitive to global concern for climate change and reduction in carbon footprint has become an integral part of our corporate policies and operations. The company has taken a significant step towards sustainable development and environmental responsibility by leasing Electric Vehicles (EVs) for its board-level officers. This initiative is part of SAIL's broader commitment to reducing carbon emissions, promoting eco-friendly practices. This move not only underscores SAIL's dedication to environmental stewardship but also sets a benchmark for other corporations to follow.
- SAIL Steel Plants have also reinforced their commitment to environment sustainability by provides Electrical Cars to Chief General Managers with the objective of driving into a greener future. The introduction of Electrical Cars is a strategic move to combat noise and air pollution caused by traditional fossil fuel vehicles. By incorporating electric vehicles into its operations, SAIL aims to reduce its carbon footprint and lead the way towards a cleaner and greener future.

Environmental Stewardship



Environmental Stewardship

Steel Authority of India Limited embodies a robust commitment to environmental stewardship, integrating |sustainable practices into its core operations. Recognizing the importance of balancing profitability with ecological responsibility, SAIL prioritizes clean and green growth, aiming to safeguard both the environment and public health.

At the heart of SAIL's approach is its Corporate Environmental Policy, which emphasizes pollution prevention and climate change mitigation. The policy drives initiatives to reduce greenhouse gas emissions, enhance green cover, and adopt energy-efficient and renewable technologies.

SAIL's specialized; multi-layered environmental management system addresses the unique challenges associated with its extensive operations, from mineral extraction to steel production. The Environment Management Division (EMD) oversees this framework, supported by dedicated environmental control departments at each facility, staffed by qualified personnel focused on robust protection measures.

Training and awareness programs are central to SAIL's philosophy, fostering a culture of environmental responsibility among employees. The company implements key initiatives such as energy conservation, resource optimization, biodiversity protection, and eco-restoration across all its operations.

SAIL adheres to strict environmental standards for air emissions, water discharge, and noise pollution, while managing waste responsibly within industrial and surrounding community contexts. The company's commitment to compliance is evident in its proactive measures to secure necessary statutory permissions and exceed regulatory requirements, with regular compliance reports submitted to the Ministry of Environment, Forest and Climate Change (MoEFCC).

To ensure transparency and accountability, SAIL utilizes NABL-accredited laboratories and real-time monitoring systems linked to State and Central Pollution Control Boards. This comprehensive approach highlights SAIL's dedication to sustainable practices and its role as a responsible leader in the steel industry.

To minimize its environmental and social impact, Company is advancing research in several key areas: optimizing coal blending, enhancing sinter quality, boosting productivity and quality across all processes, and developing strategic products. The company is also focusing on increasing energy efficiency in re-heating furnaces and coke oven batteries, improving waste recycling, maximizing pellet utilization, refining effluent treatment, and upgrading refractory linings. During the fiscal year the percentage of R&D and capital expenditure (capex) investments in specific technologies to improve the environmental and social impacts of product and processes to total R&D and capex investments made by the entity, was 10.63% and 5646 crore respectively.

Proactive Environmental Monitoring

Regular monitoring of environmental parameters is essential to prevent any adverse environmental incidents. At the highest levels of management, SAIL ensures compliance with statutory environmental requirements for its plants and mines through quarterly reviews conducted by the Board of Directors, specifically via its Board Sub-committee on Health, Safety, and Environment. The Environmental Policy, of the Company not only addresses the need for compliance with stipulated norms but also emphasizes striving to go beyond. While the SAIL Plants and Mines operate their processes without disturbing the ecological balance, SAIL have also been taking all appropriate measures to restore and rehabilitate the degraded ecosystem and maintain and enhance biodiversity via activities like ecological restoration of mined-out areas, fresh plantation, enhancing utilization of wastes, efficiently operating the pollution control devices/facilities & maintaining them regularly through revamping/refurbishing/ revitalization and through utilization of renewable energy sources, etc. As a result of these efforts, all the sustainability parameters

like Specific PM Emission Load, Specific Water Consumption, Specific Effluent Discharge, Specific Effluent Load, Solid Waste utilization, etc. have showed improvement with respect to previous years.

Environmental KPIs

Environmental KPIs	Unit	2021-22	2022-23	2023-24
Sp. PM Emission	kg/tcs	0.59	0.57	0.58
Sp. Water Consumption	m^3/tcs	3.12	3.06	3.02
Sp. Effluent Discharge	m^3/tss	1.35	1.32	1.27
Sp. Effluent Load	kg/tcs	0.062	0.052	0.054
BOF Slag Utilisation	%	69	90	113
Total Solid Waste Utilisation	**%**	**95**	**101**	**103**

Additionally, SAIL has proactively identified key environmental risks and developed targeted mitigation strategies, which are outlined as follows:

ENVIRONMENTAL RISKS

- Increased global concern for climate change prompting adoption of challenging targets by the Regulators
- Operational and Financial risk to the industry in the form of carbon taxes, emission caps etc.
- Increasing quantity of waste requiring proper management and disposal
- Deteriorating air and water quality as a result of increasing concentration of industries in the vicinity

MITIGATION STRATEGIES

- Regular adoption of clean technologies to reduce CO_2 emissions
- Adoption of robust environmental protection measures and in the process of fixing up internal carbon price to offset this risk
- Developing strategies for proper handling, recycling and reuse of waste
- Preparing for 'beyond compliance' scenario, greenery development and regular interaction with statutory bodies

SAIL's Commitment to Social Responsibility and Sustainable Development

SAIL is dedicated to fulfilling its social responsibilities through proactive environmental management and economic initiatives that positively impact society. This commitment to sustainable development is underscored by its adherence to the Charter on Corporate Responsibility for Environmental Protection (CREP), a voluntary agreement between industry and MoEFCC that encourages steel plants to reduce their environmental footprint.

In line with the Sustainable Development Guidelines from the Department of Public Enterprises (DPE), SAIL has established a Sustainable Development (SD) Policy and launched specific SD projects across its plants, units, and mines.

SAIL is committed to integrating ethical and transparent practices into its operations, reflecting its dedication to sustainable development and stakeholder interests. Each year, SAIL publishes a Business Responsibility and Sustainability Report (BRSR) as part of its Annual Report, highlighting its efforts and achievements. SAIL is actively reducing carbon emissions in line with Nationally Determined Contributions (NDC) goals. The Company participates in the World Steel Climate Action Recognition Program, which supports steel producers in tracking and reducing CO_2 emissions through a comprehensive data collection system.

Through these ongoing efforts, SAIL is not only reinforcing its commitment to sustainability but also leading the way in responsible industrial practices that benefit both the environment and society.

SAIL proudly stands as a signatory to the Sustainable Development Charter, affirming its commitment to integrating sustainability into core business practices as a member of the global steel community. The updated worldsteel Sustainability Charter encompasses nine principles and twenty criteria focused on Environmental, Social, Governance, and Economic (ESGE) aspects, with SAIL submitting data to demonstrate compliance.

Durgapur Steel Plant has distinguished itself as the first public sector steel plant in India to have its TMT rebar and Structural Products certified with the prestigious 'GreenPro' label from the Confederation of Indian Industry (CII). This GreenPro Ecolabel, accredited by the Global Ecolabelling Network (GEN) through its internationally coordinated eco labelling system, serves as a Type-1 Ecolabel. It empowers end users in the building and manufacturing sectors to select products, materials, and technologies that minimize environmental impacts throughout construction, operation, and maintenance phases.

Clean Technology and Energy Efficiency

SAIL's technology plan emphasizes clean technology and includes state-of-the-art energy-efficient solutions and pollution control measures. These initiatives encompass facilities such as Coke Dry Cooling Plants (CDCP) with advanced coke oven batteries, Waste Heat Recovery (WHR) systems from sinter coolers, Coal Dust Injection (CDI) methods, Top Gas Pressure Recovery Turbines (TRT), and more. Additionally, SAIL has implemented Continuous Casting and Walking Beam Reheating Furnaces in its rolling mills, along with energy-efficient motors and Variable Voltage Variable Frequency (VVVF) drives in its machinery to enhance environmental performance.

Dedication to Cleaner Environment

(GRI 3-3)

SAIL is committed to reducing stack emissions from its chimneys, demonstrating its dedication to fostering a cleaner environment and continuously improving its environmental performance. To meet increasingly stringent statutory norms, SAIL is replacing outdated pollution control equipment with newer, high-capacity systems. All SAIL plants and units actively maintain and operate their pollution control facilities to ensure optimal performance. As a result, the company has successfully reduced specific particulate matter emissions, reflecting its unwavering commitment to environmental stewardship and sustainability.

Monitoring and Mitigation of Non GHG Emissions

(GRI 305-7)

To effectively curb sulfur dioxide (SO_2) emissions, SAIL employs low-sulfur coal and utilizes desulfurized coke oven gas in its operations. Additionally, to manage nitrogen oxides (NOx) emissions, the company has installed specially designed burners and implemented process-related modifications. These proactive measures ensure that emissions remain within the applicable environmental standards, contributing to a cleaner environment both within and around SAIL's plants and townships. During the reporting period the SOx and NOx intensity (kg/tcs) were 0.76 and 1.10 respectively.

The air quality in work zones and the surrounding areas has been closely monitored, and the parameters for the period 2023-24 reflect the positive impact of these initiatives.

Below are the key air quality indicators for SAIL plants:

Fugitive emission at different shops/work zones

Fugitive emission at different shops/work zones inside plant boundary is tabulated below:

Coke Oven Batteries (By-product type)

Table: Fugitive visible emission

Plant	Parameters													
	PLD %				PLL %				PLO %				Charging Emission (Second/charge)	
Norm	5[1]		10[2]		1		4		16[3]		50[4]		75[5]	
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
BSP	4.20	4.80	1.80	4.80	0.00	0.03	0.00	1.98	13	15	4	49	NA	
DSP	NA		1.12	6.16	0.22	0.85	0.45	3.65	NA		30	48	30	67
RSP	3.17	4.29	5.62	9.54	0.00	0.12	0.00		14	15	40	49	NA	
BSL	NA		0.00	7.24	0.00	1.00	0.00	3.69	NA		28	50	32	50
ISP	3.40	4.70	0.93	1.20	0.19	0.60	0.58	1.90	13	14	11	14	NA	

Note: [1] Norm of PLD for new batteries (at green field site)
[2] Norm of PLD for rebuilt and existing batteries
[3] Norm of Charging Emission for new batteries (with HPLA)
[4] Norm of Charging Emission for rebuilt batteries (with HPLA)
[5] Norm of Charging Emission for existing batteries
NA - Not Applicable

Table: Fugitive emission of Benzo (a) Pyrene (BaP)

Benzo (a) Pyrene (BAP)				
Plant	(Top of Coke Oven Battery)		(Other units in Coke Oven Battery)	
Norm	5 µg/m³		2 µg/m³	
	Min.	Max.	Min.	Max.
BSP	1.850	1.910	BDL	1.348
DSP	0.610	1.730	0.160	0.840
RSP	0.179	0.186	0.008	0.098
BSL	1.687	3.406	0.188	0.787
ISP	0.002	0.006	0.001	0.001

Blast Furnace

Table: Fugitive visible emission

Plant	Parameters															
	PM				SO_2				NO_x				CO		Lead as Pb in fugitive dust at Cast House	
Norm	3000[1] µg/m³		4000[2] µg/m³		150[1] µg/m³		200[2] µg/m³		120[1] µg/m³		150[2] µg/m³		10000[3] µg/m³		2 µg/m³	
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
BSP	106	2537	134	2480	40	87	43	60	47	89	46	60	862	1307	0.06	
DSP	NA		610	1630	NA		6	47	NA		23	44	1660	3711	0.08	0.12
RSP	1632	2933	1598	3032	15	29	13	33	22	79	22	74	1589	3562	<0.1	<0.4
BSL	NA		1675	3861	NA		29	55	NA		26	49	5082	5315	0.34	0.58
ISP	623	1604	NA		52	71	NA		68	84	NA		1100	1600	0.10	

Note: [1] Norm for new units of Blast Furnace

[2] Norm for Existing units of Blast Furnace

[3] At BSP, monitoring of CO is done on 8 hourly basis, for which norm is 5000 µg/m³, other plants are monitoring CO on 1 hourly basis, for which norm is 10000 µg/m³

NA- Not Applicable

Steel Melting Shop

Table: Fugitive emission

Plant	Parameters													
	PM				SO_2				NO_x		CO		Lead as Pb in dust at Converter Floor	
Norm	3000[1] µg/m³		4000[2] µg/m³		150[1] µg/m³		200[2] µg/m³		150 µg/m³		10000[3] µg/m³		2 µg/m³	
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
BSP	204	2389	266	1587	45	70	46	60	40	81	938	1344	0.01	
DSP	NA		580	1140	NA		6	34	22	42	1421	3140	0.08	0.14
RSP	NA		1419	3241	NA		10	33	26	71	1665	3186	<0.1	<0.4
BSL	NA		2213	3988	NA		32	55	19	50	4838	6042	0.42	0.52
ISP	517	2061	NA		23	49	NA		41	71	400	1500	0.10	

Note: [1] Norm for new units of Blast Furnace

[2] Norm for Existing units of Blast Furnace

[3] At BSP, monitoring of CO is done on 8 hourly basis, for which norm is 5000 µg/m³, other plants are monitoring CO on 1 hourly basis, for which norm is 10000 µg/m³

NA- Not Applicable

Ambient Air Quality at Plant

Table: Ambient air quality

Plant	Parameters											
	$PM_{2.5}$		PM_{10}		SO_2		NO_2		NH_3		CO	
Norm	60 µg/m³		100 µg/m³		80 µg/m³		80 µg/m³		400 µg/m³		4000 µg/m³	
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
BSP	12	30	24	56	9	22	10	21	1	4	209	398
DSP	23	47	55	89	<4.0	19	21	35	1	18	110	1280
RSP	25	51	48	89	7	32	13	49	<20	74	356	1360
BSL	18	57	35	98	1	35	7	49	3	41	140	2160
ISP	29	59	63	99	10	42	9	59	62	92	400	1800

Table: Ambient air quality

Plant	Parameters											
	C_6H_6		O_3		Pb		As		Ni		BaP	
Norm	5 µg/m³		180 µg/m³		1 µg/m³		6 ng/m³		20 ng/m³		1 ng/m³	
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
BSP	BDL	1.56	BDL	1.56	0.03	0.06	BDL		2	6	BDL	
DSP	<2.0		11	<2.0	<0.1		<1.0		<5.0		<0.5	
RSP	<0.5		12	<0.5	<0.4		<0.2	<2	<12		<0.1	
BSL	0.23	<1	0	<1	<0.06	0.54	<0.01	<2	1	19	<0.08	<0.5
ISP	<2.08	<4.2	16	<4.2	<0.01	0.04	<1.0		<4.0	<5.0	<0.4	<0.5

Note: BDL - Below Detection Limit

Decarbonization Strategy

(GRI 305-5)

SAIL is acutely aware of global climate change concerns, and reducing its carbon footprint has become a fundamental aspect of its corporate policies and operations. In alignment with the Government of India's enhanced ambitions articulated at COP26, SAIL reaffirms its commitment to significantly reduce CO_2 emissions, increase the share of renewable and non-conventional energy by 2030, and ultimately achieve net-zero emissions by 2070.

The company has already taken substantial steps to minimize the impact of its operations on climate change. SAIL's decarbonization strategy is structured into three distinct phases, taking into account existing infrastructure, established technology, product diversity, technology infusion rates, funding availability, future market alignment, emerging green technologies, government policies, carbon sequestration, shadow carbon pricing, and the company's social commitments.

The decarbonization efforts at SAIL gained momentum during the Modernization and Expansion Programme (MEP), which began in 2008. This initiative introduced a range of energy-saving clean technologies across various processes, resulting in more than15% reduction in CO_2 emissions during the 2023-24 period compared to 2005 levels. As SAIL ramps up the capacity of its MEP facilities, further improvements in emission reduction are anticipated. The company aims to exceed its NDC commitment of 2.30 t/tcs of CO_2 emissions by the year 2030, demonstrating its proactive approach to environmental sustainability and has drawn up ambitious plans to increase its renewable energy capacity to 384 MW by the year 2028-29.

Optimized Water Use

(GRI 3-3, 303-1)

Water is an essential resource for our country, and its conservation and judicious use are critical. For SAIL, managing water resources is one of the key sustainability challenges it faces. The Corporate Environmental Policy emphasizes the integration of the "reduce, recover, recycle, and reuse" principles into its operations to conserve natural resources, including water. Additionally, various regulatory requirements mandate industries to prioritize water conservation.

To ensure a sustainable future and continually enhance environmental performance, SAIL is setting ambitious targets, implementing a transparent reporting system, and establishing a robust review mechanism. Specific targets for water consumption at each plant are integral components of the company's annual business plan.

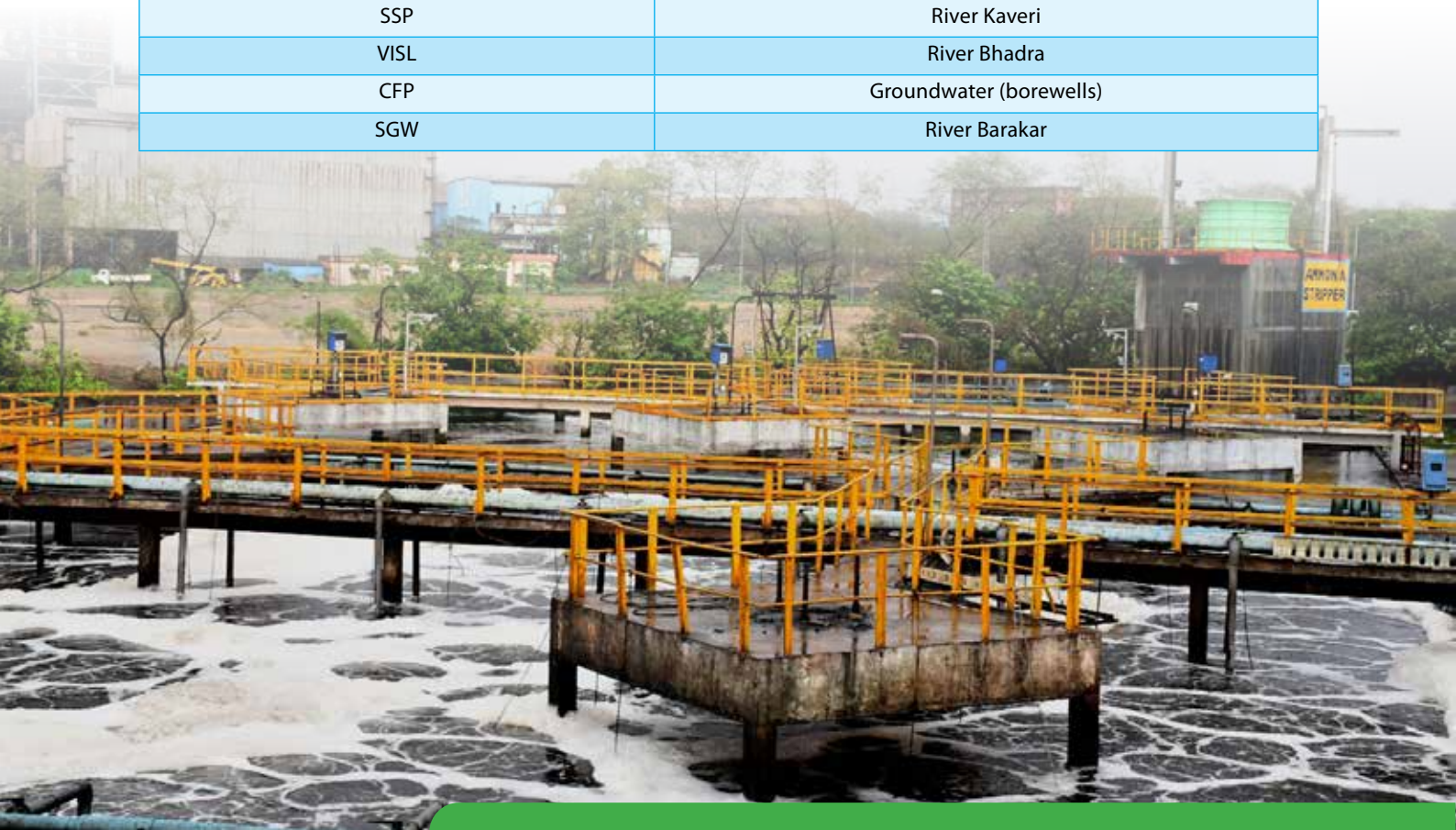
All SAIL plants and units, with the exception of the Chandrapur Ferro-Alloy Plant (CFP), source fresh water for industrial use primarily from perennial rivers, strategically chosen to guarantee a consistent supply without drawing from water-stressed areas. Through a structured management policy, SAIL has developed efficient water resource systems that cater to both industrial needs and community use. This is achieved by fostering awareness of the importance of water management and adopting technological innovations for effective utilization.

SAIL is committed to ensuring that water conservation remains a top priority, recognizing that sustainable water management is vital for the well-being of both the environment and society.

Water Sources for the Plants and Units

(GRI 303-3, 303-5)

Plant/Unit	Water Source
BSP	River Mahanadi
DSP	River Damodar
RSP	River Brahmni
BSL	River Damodar
ISP	River Damodar
ASP	River Damodar
SSP	River Kaveri
VISL	River Bhadra
CFP	Groundwater (borewells)
SGW	River Barakar



Water Conservation Initiatives

(GRI 303-5)

Despite the steel industry's significant water usage for cooling, gas cleaning, descaling, dust scrubbing, and other processes, the actual water consumption is minimal since nearly all wastewater is recycled and reused. Over time, SAIL has implemented various initiatives aimed at reducing overall water consumption in its operations. These initiatives include identifying and repairing leakage sources, establishing Effluent Treatment Plants (ETPs), and conducting assessments of discharged water to pinpoint opportunities for reducing fresh makeup water needs.

To further enhance water conservation, SAIL has prioritized this crucial resource across its plants and townships. This ongoing effort aims to instigate social change and promote a culture of sustainability. Each year, SAIL observes a "Water Conservation Month," during which events and seminars are organized to raise awareness and develop actionable plans for water conservation.

SAIL is dedicated to water conservation across its plants through several key initiatives. These include actively involving employees and local communities to encourage water-saving practices. The company has invested in advanced treatment facilities and established effective rainwater harvesting systems. To ensure sustainable water management, SAIL closely monitors the quality and quantity of effluent from its operations. Independent third-party assessments are conducted to uncover opportunities for improvement, and ongoing upgrades to systems are implemented to enhance overall water efficiency. This comprehensive approach underscores SAIL's commitment to responsible resource management and has helped SAIL to emerge as a leader in water conservation, achieving a remarkable reduction of over 3% in specific water consumption over the past three years. This significant progress underscores the company's commitment to efficient water management and the conservation of precious environmental resources. In the fiscal year 2023-24, SAIL's total water consumption amounted to 57,396 mega liters (3.02 m^3/tcs) and water discharged was 22,985 (1.27 m^3/tss), reflecting the ongoing efforts to balance industrial needs with sustainability.

Rainwater Harvesting

SAIL has implemented various rooftop rainwater harvesting schemes, effectively utilizing harvested rainwater for industrial purposes. In total, these systems have created an annual recharge potential of 291 million liters across plants, mines, and townships. In alignment with the Ministry of Jal Shakti's 'Catch the Rain' campaign, rainwater harvesting facilities are integrated into the planning of new projects and incorporated into the technical specifications of proposals.

Wastewater Management

(GRI 3-3, 303-2, 303-4)

The steel industry's effluent, if not managed properly, can significantly impact local ecosystems and natural water bodies. To safeguard water quality, SAIL rigorously monitors and manages the effluent discharged from its plants and mines through well-operated effluent treatment plants (ETPs). The quality of discharged effluent is regularly assessed to ensure compliance with standards set by regulatory authorities.

To enhance monitoring, online effluent quality monitoring systems have been installed at SAIL plants, with data uplinked to the State Pollution Control Boards (SPCBs) and the Central Pollution Control Board (CPCB). Environment Impact Assessment (EIA) studies have been conducted at our production facilities, confirming that our operations have not adversely affected water sources or nearby bodies of water.

SAIL is actively pursuing the long-term goal of "Zero Liquid Discharge" by ensuring adequate treatment and recycling of effluent discharged at plant boundaries. In order to achieve this goal, special drives have been undertaken to utilize the industrial effluent after suitable treatment in the Effluent Treatment Plants. A total of around 123 million m^3 /year wastewater across SAIL plants is being treated and recirculated for further use. Several schemes have been adopted for achieving ZLD and are presently under various stages of implementation. During 2023-24, effluent treatment facilities with a total capacity of 2235 m^3 /hr have been installed and are under operation. Apart from the above, capacity of lagoon at RSP has been enhanced by 3 lakh m^3 through de-silting.

Notably, the Chandrapur Ferro Alloy Plant has maintained zero liquid discharge since 2013.

Specific Effluent Discharge and Load Data

The specific effluent discharge and load metrics for SAIL plants during 2023-24 are as follows:

Effluent discharge quality at the Outfalls

Table: Effluent discharge quality at Integrated Steel Plants

Plant	Parameters															
	pH		SS		BOD		COD		Phenol		Cyanide		Oil & Grease		Amm. Nitrogen	
Norm	6.0-8.5		100 mg/l		30 mg/l		250 mg/l		1.0 mg/l		0.20 mg/l		10 mg/l		50 mg/l	
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
BSP	6.6	8.4	27	70	12	24	39	63	BDL	0.12	BDL	0.09	1.2	4.5	2	25
DSP	6.7	8.3	10	58	7	24	51	151	0.20	0.75	0.01	0.15	1.0	6.2	1	48
RSP	7.5	8.0	13	58	8	13	28	40	0.14	0.32	0.02	0.08	2.0	3.2	13	17
BSL	6.5	7.9	14	67	5	8	52	84	0.01	0.36	0.01	0.06	0.4	1.6	1	9
ISP	7.2	8.0	7	35	5	17	6	120	<0.1	0.26	0.01	0.12	<1		4	24

Table: Effluent discharge quality at Special Steel Plants

Plant	Parameters									
	pH		SS		Fe		F-		Cr^{+6}	
Norm	5.5-9.0		100 mg/l		3 mg/l		2 mg/l		0.1 mg/l	
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
ASP	6.9	8.7	6	86	<0.05	0.62	<0.2		<0.04	<0.05
SSP	7.2	8.5	4	12	<0.05		<0.05	1.72	<0.05	
VISL	No discharge from plant outlet. Major production units like BF & SMS are not in operation									

Table: Effluent discharge quality at Special Steel Plants

Plant	Parameters									
	Ni		O & G		NH_3 - N		BOD		COD	
Norm	3 mg/l		10 mg/l		50 mg/l		30 mg/l		250 mg/l	
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
ASP	0.01	<0.05	<2	<5.0	<0.05	<1	<2	21	8	101
SSP	<2		<3		1	2	1	5	6	80
VISL	No discharge from plant outlet. Major production units like BF & SMS are not in operation									

Table: Effluent discharge quality at Chandrapur Ferro-alloy Plant

Plant	Parameters									
	pH		SS		Fe		F-		Cr^{+6}	
Norm	5.5-9.0		100 mg/l		5 mg/l		2 mg/l		0.1 mg/l	
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
CFP	7.8	8.3	41	94	0.39	4.16	NA		NA	

Table: Effluent discharge quality at Chandrapur Ferro-alloy Plant

Plant	Parameters									
	Ni		O & G		NH_3 - N		BOD		COD	
Norm	3 mg/l		10 mg/l		50 mg/l		30 mg/l		250 mg/l	
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
CFP	NA		BDL		NA		22	30	82	248

BDL: Below Detectable Limit

NA: Not Applicable

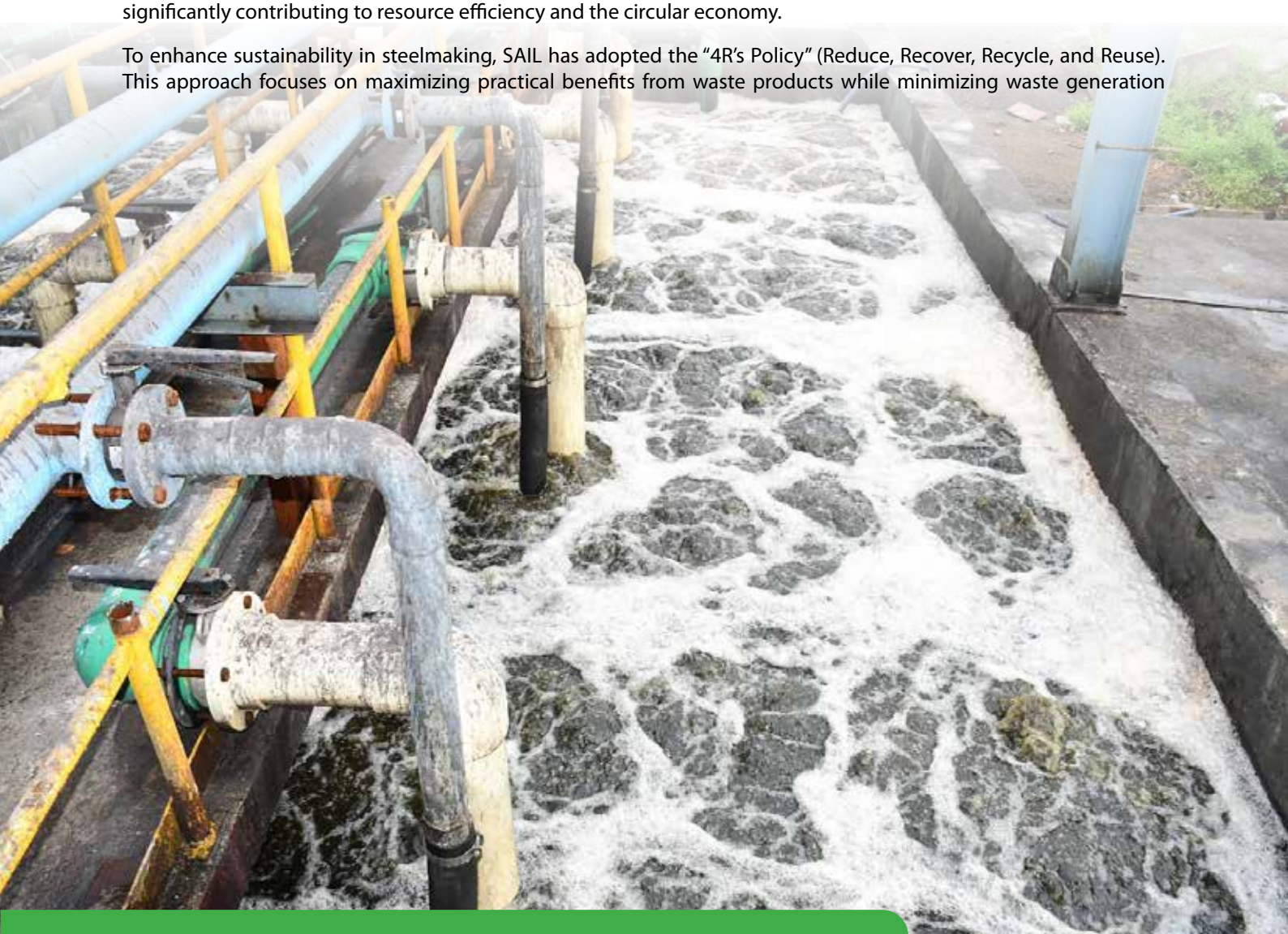
Recycling and Waste Management

(GRI 3-3, 306-1, 306-2, 306-4)

In today's world, businesses, governments, and citizens are increasingly recognizing the challenges posed by the traditional "take-make-dispose" model of production and consumption. The resulting waste from the manufacturing sector has a profound impact on the environment and human health. The concept of a Circular Economy prioritizes the creation of loops for materials, products, energy, and waste flows, promoting the elimination of waste and the continual safe use of natural resources.

Steel stands out as the most recycled material globally, retaining its unique properties through repeated processing. However, the steelmaking process generates solid wastes such as blast furnace (BF) slag, basic oxygen furnace (BOF) slag, mill scale, flue dust, and waste refractory bricks. These materials can substitute natural resources in other sectors, significantly contributing to resource efficiency and the circular economy.

To enhance sustainability in steelmaking, SAIL has adopted the "4R's Policy" (Reduce, Recover, Recycle, and Reuse). This approach focuses on maximizing practical benefits from waste products while minimizing waste generation



to comply with environmental regulations and optimize disposal costs. While SAIL does not have procedures for reclaiming packaging products, it ensures that all by-products are handled responsibly and disposed of in an environmentally safe manner.

The molten BF slag (Iron Slag) is granulated via the Cast House Slag Granulation Plant (CHSGP) for sale to cement industries, where it serves as a valuable input material. 100% utilization of iron slag is being achieved through its granulation and utilization in the cement industries. Meanwhile, BOF slag (Steel Slag), which contains iron-bearing particles, is used mainly internally through recycling it in blast furnaces & steel melting shops as a partial replacement of limestone and in sinter making as base-mix. Solid wastes like mill scale and lime/Dolo fines are recycled entirely through the sinter-making process and finally back into the steelmaking process.

During the fiscal year 2023-24, SAIL generated approximately 729kg of solid waste per tonne of crude steel produced, including 491 kg/tcs of BF slag and 132 kg/tcs of BOF slag. In 2023-24, SAIL achieved over 100% utilization of solid wastes. Percentage of recycled or reused input material (BOF Slag, BF Flue Dust, BOF Sludge, Lime/Dolo fines, Mill Scale, ESP (RMP) Dust, Sinter Plant dust, Coke Breeze and Scrap) was 6% to total material (by value) used in production.

Solid Waste Generation and Utilisation

a) Integrated Steel Plants (ISPs)

(GRI 306-3, 306-5)

Type of Waste	Generation (T)	Utilisation (%)
BF slag	9314548	100
BOF slag	2504691	113*
BF Flue dust	223983	102*
BF Sludge	115519	23
BOF Sludge	252768	156*
Lime/Dolo Fines	784865	100
Mill scale	334408	101*
Refractory Wastes	36566	68
TOTAL	**13567348**	**103***

** Excess utilisation from old stock*

b) Special Steel Plants (SSPs)

Type of Waste	Generation (T)	Utilisation (%)
ASP		
EAF / AOD Dust	444	0
EAF Slag	2816	0
Grinding Dust	591	100
Mill scale	2001	83
Refractory Bricks	335	72
Total	**6187**	**40**

Type of Waste	Generation (T)	Utilisation (%)
SSP		
SGL Swarf	13	0
Boiler Ash	1175	0
Steel Shot Dust	374	122*
Mill Scale (HRM & APL)	1967	107*
SMS Slag	45294	20
EAF Dust	2621	0
AOD Dust	3212	0
Grinding Swarf & Dust	440	0
Torch Cutting Bag house Dust & Caster Scale Pit	187	0
Refractory wastes	5228	0
TOTAL	**60511**	**19**
VISL *(Operation of major production units suspended during 2023-24)*		

**Excess utilization from legacy stock*

c) Ferroalloy Plant (CFP)

Type of Waste	Generation (T)	Utilisation (%)
MnO Slag	0	0
Si Mn Slag	82876	162*
MCFeMn Slag	4932	0
Mn Ore Fines	34083	1
Coke Fines+Charcol fines	9596	0
Quartz Fines	334	0
Flux Fines	1439	0
Iron Ore Fines	158	0
GCP Sludge	7260	2
Total	**140678**	**96**

**Excess utilization from legacy stock*

Extended Producer Responsibility(EPR) applies to SAIL's activities. All the steel plants of SAIL have registered on the CPCB portal and have obtained the EPR registration certificate as per the amended Schedule-II Rule of the Plastic Waste Management (Amendment), Rules-2022. According to the EPR regime, it is the responsibility of Producers, Importers, and Brand-owners (PIBOs) to ensure the processing of their plastic packaging waste through recycling, re-use or end-of-life disposal (such as co-processing/Waste-to-energy / Plastic-to-oil / roadmaking / industrial-composting). SAIL plants receive most of the imported items wrapped in plastic packaging to restrict ingress of moisture and/or prevent damage, for which the plant is required to upload its EPR registration certificate in the Customs Portal, without which clearance of the goods is not permitted.

(GRI 3-3, 301-1, 301-2, 301-3)

R&D Initiatives to Broaden Waste Management Strategy

To further maximize the benefits of the "Waste to Wealth" concept, SAIL has undertaken various R&D studies through its in-house research wing and in collaboration with esteemed research centers. One notable initiative is SAIL's participation as industry partner in a Ministry of Steel-sponsored R&D project focused on developing cost-effective, eco-friendly fertilizers from steel slag for sustainable agriculture. Conducted through ICAR-IARI, this project aims to address the issue of acidic soil on approximately 49 million hectares of India's arable land. Given that BOF slag is rich in lime and micronutrients like potassium, silicon, and phosphorus, it can be effectively utilized as a soil amendment. The study is currently being conducted at eight IARI centers across India and holds promise for enhancing agricultural productivity.

SAIL has a long-standing practice of using steel slag for constructing internal roads and is also actively promoting the use of BOF slag in rural road construction under the Pradhan Mantri Gramin Sadak Yojna (PMGSY). Additionally, SAIL has initiated efforts to utilize legacy BOF slag in the secondary market.

Furthermore, SAIL is committed to managing solid wastes from discarded plastic items, particularly those that cannot be easily recycled, as part of its broader waste management strategy. Through these comprehensive initiatives, SAIL exemplifies its dedication to a circular economy, turning waste challenges into opportunities for sustainable growth.

Hazardous Wastes Management

(GRI 3-3, 305-6)

In addition to the solid wastes mentioned above, SAIL also generates hazardous wastes due to their physical and chemical characteristics. Comprehensive inventory and quantification of these hazardous wastes have been conducted across SAIL plants and units. Management adheres strictly to the guidelines set forth in the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016. These wastes are safely disposed of in either a Secured Landfill Facility or through authorized agencies specializing in the treatment, storage, and disposal of hazardous materials. Notably, some hazardous wastes are reused or co-processed. During the fiscal year 2023-24, approximately 1.62 lakh tonnes of hazardous waste were generated and disposed of in an environmentally sound manner.

One innovative initiative at the Bhilai Steel Plant focuses on the environmentally sound management and disposal of Polychlorinated Biphenyls (PCBs), in collaboration with the MoEFCC and UNIDO. This project, unique in the country, ensures compliance with the Stockholm Convention on Persistent Organic Pollutants (POPs) and addresses the safe disposal of PCBs, commonly used as coolants in electrical transformers. Furthermore, SAIL has long ceased the use of Ozone-Depleting Substances (ODS) in accordance with the Montreal Protocol.

Optimized Raw Material Use

(GRI 3-3, 301-1, 301-2, 301-3)

SAIL's major raw materials p-iron ore, coal, limestone, and dolomite - are finite resources, and the growing demand for these materials necessitates optimized consumption and conservation strategies. Recognizing the depletion of high-grade ore deposits, SAIL has enacted policies aimed at maximizing the efficient use of raw materials.

To this end, SAIL is adopting modern technologies and practices to reduce raw material consumption, utilize lower-grade resources, and enhance the recycling of waste materials. The beneficiation of ore has been prioritized to ensure effective raw material management. In particular, the company is promoting pelletizing technology for the productive use of low-grade iron ore micro-fines, tailings, sludge, and ESP dust, thereby supporting a circular economy. Upcoming projects include:

- **RSP:** 2 MTPA Pellet Plant
- **ISP:** 0.25 MTPA Micro-Pellet Plant
- **Gua Ore Mines:** 4 MTPA Pellet Plant
- **Dalli Mines:** 1 MTPA Pellet Plant

Increased recycling efforts have led to a notable reduction in the consumption of coal, iron ore, and flux materials like dolomite and limestone, optimizing the use of these raw materials. SAIL recognizes that the future of the steel industry hinges on effective recycling practices, and the company is taking substantial steps to maximize the recycling of internal scrap. All scrap generated within operational units is fully recycled, and additional wastes are effectively reused in Sinter Plants, Blast Furnaces, and Steel Melting Shops.

By prioritizing sustainability in waste management and raw material optimization, SAIL is not only contributing to environmental conservation but also setting a standard for responsible industrial practices.

In the FY 2023-24, total requirement of iron ore was met from the captive sources. The Company's captive mines produced about 34.34 million tonnes (MT) of iron ore. However, in case of clean coking coal, out of total consumption of 19.37 MT, about 2.45 MT was met from indigenous sources (Coal India Limited & captive sources) and for the balance requirement of coking coal (16.92 MT), the Company had to depend on imports due to constraint in availability of required quality, within the Country.

The coal production from the captive collieries of the Company, including middling & jhama, was about 1.184 MT, out of which 0.466 MT was raw coking coal and balance 0.718 MT was non-coking coal. In case of fluxes, around 1.533 MT of limestone and 0.485 MT of dolomite were produced from captive sources.

Scrap utilization during 2023-24

Plant	BSP	DSP	RSP	BSL	ISP
Scrap Utilised (T)	463720	110640	345281	375746	85986

Tree Plantation Initiatives

SAIL recognizes the profound benefits of tree plantation and its crucial role in environmental management. Plants are vital components of our ecosystem, functioning as natural carbon sinks. They not only produce oxygen and sequester carbon dioxide but also provide habitats for wildlife, recharge groundwater, enrich soil nutrients, and prevent erosion.

To promote this initiative, SAIL conducts structured plantation programs annually across all its plants, units, and mines. These efforts are tailored to the availability of local species, soil characteristics, and meteorological conditions. Biodiversity is fundamental to human existence, and SAIL actively maintains zoological and botanical parks in its townships to preserve various flora and fauna species. Notable projects include the "Vasundhara" Biodiversity Park, which spans 409 acres at Durgapur Steel Plant, and "Ispat Nandan Vihar," covering 1.5 acres at Rourkela Steel Plant. Local communities benefit significantly from these green spaces, enjoying a serene environment away from the hustle and bustle of urban life.

During 2023-24, more than 2.5 lakh saplings were planted, with over 22 million saplings planted across SAIL Plants and Mines to date. Around 34.2% of SAIL's land area is under green cover. The tree plantation efforts over the past five years are illustrated below:

Tree Plantation Data (in lakh)

- **2019-20:** 4.4
- **2020-21:** 1.7
- **2021-22:** 3.3
- **2022-23:** 2.8
- **2023-24:** 2.5

SAIL has also successfully enrolled in the Green Credit Programme (GCP) of MoEFCC wherein the Generated Green Credit (GGC) can be exchanged to fulfil compensatory afforestation obligations in cases of forest land diversion for non-forestry purposes under the Van (Sanrakshan Evam Samvardhan) Adhiniyam, 1980. The Company submitted applications for two plantation blocks, measuring 25 hectares and 10 hectares respectively, in the State of Chhattisgarh.

While SAIL aims to assess the carbon footprint of its products, processes, and activities it is also estimating the potential for carbon sequestration through both existing and proposed plantations. To support this, the Tropical Forest Research Institute, Jabalpur was engaged as a partner for a study on carbon sequestration through afforestation, which was implemented at the Rourkela Steel Plant.

Restoration and rehabilitation of degraded ecosystem is essential for maintaining and enhancing bio-diversity as well as replenishing the ecosystem services. After the degraded landscapes in and around Purnapani Limestone Mines in Odisha had been successfully restored, fresh initiative has been taken for eco-restoration of Meghahatuburu Iron Ore Mines and Kiriburu Iron Ore Mines. An MOU has been signed with Institute of Forest Productivity, Ranchi for eco-restoration of mined out area and waste dumps at both the Mines. The work is under progress.

Implementing Environmental Management System (EMS)

To enhance operational efficiency and sustainability, SAIL has integrated established global management standards, such as ISO 9001, ISO 14001, ISO 45001 and SA 8000, into its systems across most steel plants, mines, and units. SAIL has been at the forefront of establishing an Environmental Management System (EMS) compliant with ISO 14001, aimed at managing both immediate and long-term environmental impacts of its operations. SAIL initiated this commitment in the mid-90s at its Salem Steel Plant and has since expanded EMS implementation across all integrated steel plants, major units, and warehouses.

The EMS framework has proven effective, ensuring that SAIL's environmental performance consistently meets or exceeds applicable regulatory requirements. Here's a snapshot of the plants and units accredited with ISO 14001:

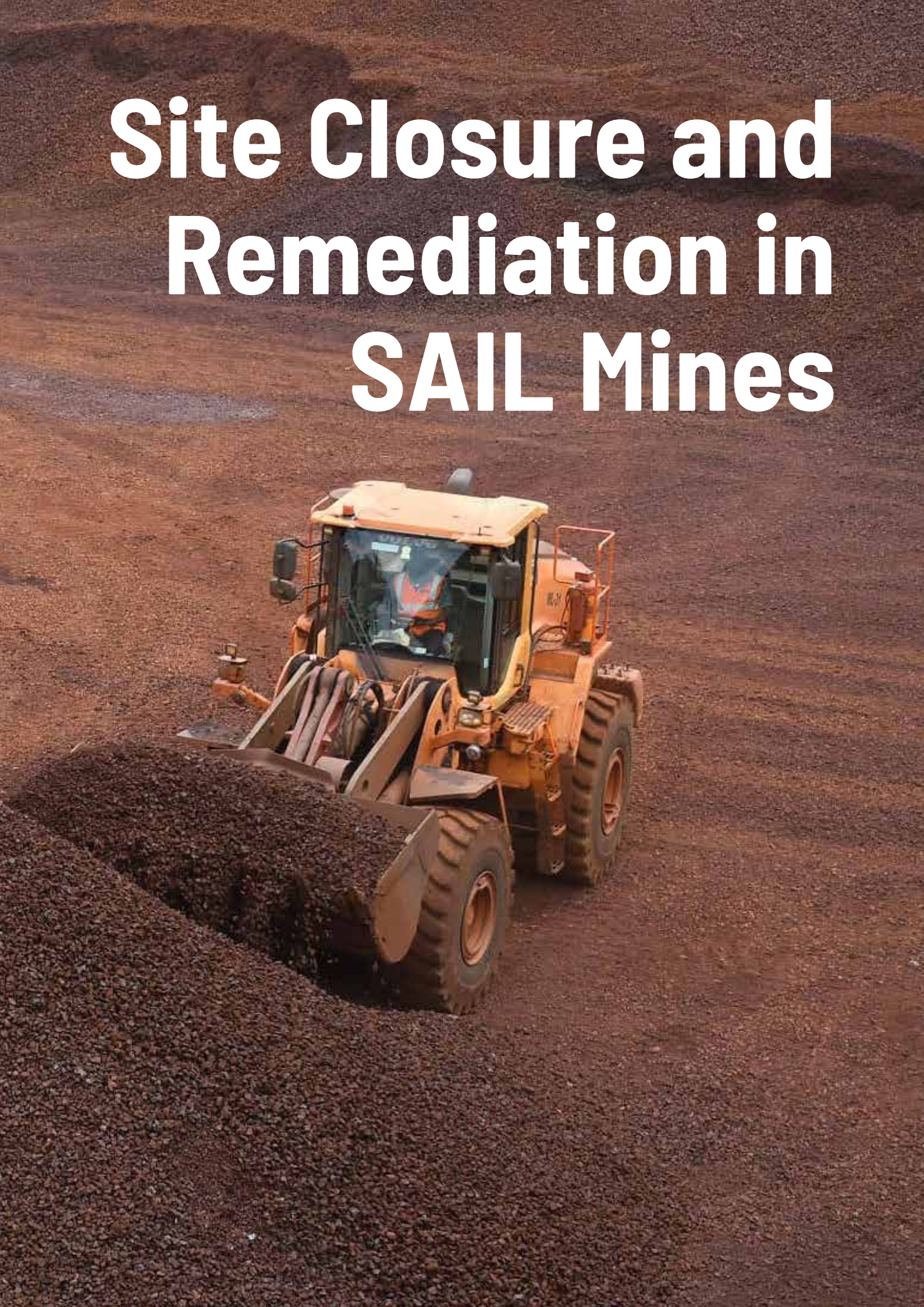
Accredited Plants and Units

Plants	Certification Status	Mines/Units	Certification Status
Bhilai Steel Plant (BSP)	Entire Plant & Township	Kiruburu Iron Ore Mine	Entire Mine
Salem Steel Plant (SSP)	Entire Plant & Township	Meghahatuburu Iron Ore Mine	Entire Mine
Bokaro Steel Plant (BSL)	Entire Plant	Bolani Ores Mines	Entire Mine
Ispat Steel Plant (ISP)	Entire Plant	Barsua Iron Ore Mine	Entire Mine
Alloy Steel Plant (ASP)	Entire Plant	Gua Iron Ore Mine	Entire Mine
Durgapur Steel Plant (DSP)	Entire Plant	Manoharpur Ore Mines	Entire Mine
Visvesvaraya Iron & Steel Ltd. (VISL)	Entire Plant	Dalli (Mechanical) Iron Ore Mine	Entire Mine
Chandrapur Ferro Alloy Plant (CFP)	Entire Plant	Transport and Shipping	BTSO Vizag
Rourkela Steel Plant (RSP)	Various Units and Township	Warehouses under CMO	Various locations

Through these initiatives, SAIL is committed to enhancing its environmental stewardship and contributing to a sustainable future.

Environment Month Celebration

Site Closure and Remediation in SAIL Mines



Site Closure and Remediation in SAIL Mines

Background

(GRI 3-3, 304-1, 304-4)

SAIL has been mainly into the mining business to support the requirement of raw material for its Steel Plants. These include mining of iron ore which is main ore required for the steel making, the mines of which are mainly located in Jharkhand, Odisha and Chhattisgarh. Apart from this, SAIL fulfils its flux requirement i.e. Limestone and Dolomite from its mines located in Chhattisgarh and Madhya Pradesh. SAIL's Integrated Steel Plants requires Coal as a fuel and reducing agent in the steel making process and partly fulfil its requirement from its captive mines located in Jharkhand and West Bengal.

SAIL being a responsible company and a PSU of Government of India carries out its mining operations in an environmentally sustainable and socially responsible manner and believes in giving back to the forest cover that has been taken off during mining operations, following all the statutory compliances during its mining activities. The Company has implemented several initiatives to ensure environmental protection and community welfare and has been on a path of continual improvement.

SAIL is not operating its activity in the vicinity of protected areas. No species from the Internation Union for Conservation of Nature (IUCN). Red List has habitat in the area of operation.

Regulations pertaining to Site Closure and Rehabilitation

(GRI 3-3, 304-3)

Ministry of Mines, Government of India has been governing body related to the mining operations in India. Prior to commencement of mining operations, a mine plan is prepared which is a comprehensive and detailed plan that outlines how a mine will be developed and operated over its lifetime. The same has to be approved from the Indian Bureau of Mines (IBM) (a government agency under the Ministry of Mines, responsible for the regulation and promotion of mineral resources in India).Also,Ministry of Mines has formulated guidelines for mine closure and rehabilitation once the mining operations are exhausted at a particular site, and it is mandatory for mining companies to follow these guidelines. The process includes preparing a closure plan, implementing it during the mine's operational phase, and monitoring the rehabilitation process after the mine's closure. A progressive mine closure plan (PMCP) is an important chapter of the mine plan approved by IBM which outlines the steps and measures to be taken during the mining operations to close the pits and rehabilitate them in a progressive manner once they are exhausted. This plan is developed early in the mine planning process and is updated throughout the life of the mine to ensure that closure requirements are considered and incorporated into mining operations. A final mine closure plan is further implemented to close a mine safely and responsibly once the total mine lease is exhausted and mining operations are completed.

Rehabilitation activity is the next step which involves restoring the site to a safe and stable condition that is compatible with the surrounding environment. This may involve activities such as re-vegetation, contouring of the land, and installation of erosion and sedimentation control measures. The goal of rehabilitation is to ensure that the site can support sustainable land uses, such as agriculture, forestry or mine pit lakes, and that it can contribute to the local economy.

Restoration and Rehabilitation Activities in SAIL

(GRI 3-3, 304-2, 304-3)

All the working mining leases of SAIL are currently operational based on the approved mining plan which also covers PMCP. Most of the mining leases are still in operations for decades and complete exhaustion has not reached. However,

SAIL has undertaken restoration and rehabilitation activities in some of its mines which accounts to 524.63 ha out of total broken land of 3709.707 ha area. Some of the restored and rehabilitated cases are discussed below.

Kiriburu-Meghahatuburu Iron Ore Mines, Jharkhand: Concurrent backfilling & biological rehabilitation of mined out areas in existing operating blocks are being done as per the approved mining plans to the possible extent in consultation with IBM and State Forest Dept. So far, 19.75 ha of mined out areas have been reclaimed through concurrent backfilling of the wastes and about 10.40 ha mined out areas have been rehabilitated through plantation. Old overburden dumps i.e. 41 ha have been stabilized & rehabilitated through plantation. Therefore, total area reclaimed & rehabilitated is 51.40 ha (mined out pits & overburden dumps).

- For effective restoration & rehabilitation measures, MOU's has been signed with Institute of Forest Productivity (IFP), Ranchi on 18.01.2021 for eco-restoration of mined out areas and overburden dumps. The salient features are as follows:
    - ❖ IFP, Ranchi is providing technology and services for scientific reclamation & rehabilitation of mined out areas and overburden dumps for a period of 5 years in consultation and close coordination with State Forest Department.
    - ❖ The project plan envisages restoration of degraded hills, hill slopes, sand dunes, ravines and saline areas through the introduction of new genotypes/ varieties/ species and natural resource conservation in different landscape.
    - ❖ A site has been selected at the Kiriburu Iron Ore Mine. A total of 15,000 seedlings of selected species have been raised in the nursery. Site clearance and land leveling have been completed. Seeds have been sown in beds and polythene bags, approximately 18,000 seeds in total. Proper irrigation and maintenance have been carried out. During 2022, 6,619 different species of trees, shrubs, and herbs, such as Albizialebbeck, Terminalia bellerica, Bauhinia variegata, Mangiferaindica, Syzygiumcumini, Emblica officinalis, Artocarpusheterophyllus, Pongamiapinnata, Dalbergiasissoo, Cassia fistula, Bombaxceiba, Gmelinaarborea, Ziziphusmauritiana, Pithecellobiumdulce, Melia azedarach, Oroxylumindicum, Dendrocalamusstrictus, Shorearobusta, Bambusabambusoides, Tamarindusindica, and Vitexnegundo, have been planted over an area of 5.5 hectares. In 2023, an additional 2,663 trees, shrubs, and herb species were planted on 2.20 hectares, including slopes and benches. In total, plantation work has been completed over 7.70 hectares, with 9,282 trees, shrubs, and herb species planted, spaced at 3m x 3m.

- During the year 2023-24, the plantation work has been carried out using different soil amendments in newly sites 2 including slopes and benches of which 2.20 Hectare been completed out of total 10 ha of the overburdened area of the mine.
- Monitoring of species under regeneration and vegetation recovery and species composition under different works are under process. Six-month interval growth data collection is completed for year 2023, and the process is ongoing for the year 2024 and 32 new species were observed at field Kiriburu.
- Erosion control processes have been started with traditional method using boulders at erosion sites, and Bamboo mat used for control soil erosion at slope. Many shrubs and grasses (Deenanath grass Pennisetumpedicellatum) species used in seed ball and spread at slope for soil binding. Continuous and staggered contour trenches (22 nos.) were identified on the slopes to check the water flow and soil erosion.

Purnapani Limestone Mines, Odisha: Purnapani Limestone & Dolomite Quarry (PL&DQ) Mining Lease (ML-153) spread over an area of 230.525 ha in the village Purnapani, district Sundargarh was granted in favour of Rourkela Steel Plant (RSP) of SAIL on 06.01.1960. However, mining operations at PL&DQ were suspended w.e.f. 01.03.2004, due to poor quality of Limestone and being unsuitable for use of iron / steel making process as flux. SAIL decided to develop the Mine-out & degraded area through ecological restoration of PLDQ Mining Lease as a model project in collaboration with the Department of Bio-technology (DBT), Govt. of India through University of Delhi which is one of the success story of restoration and rehabilitation of major minerals mining affected areas of SAIL- Rourkela Steel Plant. In the year 2005, SAIL signed an agreement with Department of Bio-technology (DBT), Government of India and Centre for Environment of Degraded Eco-system (CEMDE), University of Delhi in order to enhance bio-diversity as well as replenish the eco-system services at PL&DQ Mine. The aim of the project was to develop a large plot of 200 acre or more to serve as a model for restoration of degraded landscape to original productive natural ecosystem characteristic of that landscape.

(i) 200-acre plot was successfully restored to native tropical forest ecosystem having different plant communities ranging from grassland and bamboo thicket to broad leaved forest communities.

(ii) The restored terrestrial forest ecosystem had high biodiversity value in terms of species richness and diversity, stratification and species abundance and generating ecological services (in terms of recharging, purification of water, nutrient enrichment and cycling) and goods (fodder, minor forest products) to local communities within span of 6 years.

(iii) Deep water body (void) restored to biologically productive ecosystem that provide ecosystem services such as recharging of ground water and ecological goods such as production of fish. Fishing has become one of the livelihood options for the local communities.

(iv) The soil nutrient levels were found to be approaching to the levels of almost similar to that found in natural forest ecosystem; both surface and ground waters were not polluted due to immobilization of heavy metals in vegetated OBDs and in fact no soil erosion was observed after restoration.

(v) The below ground bio-diversity in terms of species of different groups such as bacteria, fungi and insects was more diversified and richer in restored sites than in the natural forest ecosystems.

Nandini Limestone Mines, Chhattisgarh: Nandini Mines is a Captive Limestone Mines of Bhilai Steel Plant. Around 1000 Acers of land has been selected for restoration of eco system surrounding to this mine. To safeguard the area, 17000 running meter chain-link fencing work was successfully completed on June 2022. This fencing will protect outsider activity and give help to natural growth of flora & fauna. More than 8000 local species of plant have been afforested to develop the area of 358.0 of land adjacent to Nandini Mines in which 58 ha is SAIL's land adjoining Nandini Limestone Mines. The project shall also take care & maintain old vegetation & trees which is already available in more than 1500 acers land in this development. Gap plantation has been done to increase density of forest in this project. The key task of the project is to provide & facilitate the living environment for wetland birds and animals. To develop living environment for herbivore animal is a major concern of this project, for eco-tourism. Thus, under the project in Nandini Mines for FY 2021-22 by the help of A.D.B. and D.M.F. fund 83200 trees has been planted over an area of 358 Hect., and construction of fencing of 17000 RM with costing of ₹ 335.15 lakhs.

5.1 Sq. Miles, Bolani Ore Mines, Odisha: 24.3 ha area has been rehabilitated through dense plantation.

Barsua Taldih Kalta Amalgamated Lease, Odisha: 3.8 ha area has been rehabilitated through dense plantation.

Pandridalli and Rajhara Hills Lease, Chhattisgarh: 24.48 ha area has been rehabilitated through dense plantation.

Rajhara Hills Lease, Chhattisgarh: 9 ha area has been restored through stabilization of Dump through Geo-Textile Coir matting in part of inactive waste dump of Dalli Mechanised mines.

Dalli Forest Range, Chhattisgarh: 8.7 ha area has been rehabilitated through dense plantation.

Mahamaya Dulki Lease, Chhattisgarh: 2 ha area has been rehabilitated through dense plantation.

Apart from the above successful cases, SAIL is strictly following the rules and regulations under Environment Protection Act 1986, Forest Conservation Act, 1980 etc. SAIL has been granted Environment Clearance and Forest Clearance (as applicable) permissions for functioning of these mines. The permissions are granted with various conditions to ensure that mining activities are carried out in an environmentally sustainable and responsible manner and to mitigate the potential environmental impacts of the proposed project in compliance to environmental regulations. Accordingly, SAIL is complying with these conditions and also submits self-compliance reports to the regulatory bodies for monitoring the status of the project and environmental safeguards. The reports are also uploaded on SAIL's website at the following link: *https://sail.co.in/en/plants/raw-materials-division*

Challenges faced by SAIL in implementation of rehabilitation plan

Although the guidelines are in place, the enforcement of mine closure and rehabilitation in India is still a challenge. Scientifically, backfilling and reclamation work will start after complete extraction of ore from the earth crust inside the mining leases with the approval of Indian Bureau of Mines. Most of the SAIL Iron Ore Mines are under active stage, which only can be reclaimed after the deposit is fully exhausted, which is possible before the end of the life of the mine. That can only be restored and biologically reclaimed after the end of the life of the mine i.e. after all the mineral deposits is exploited within the lease area. Therefore, practically, limited areas have been reclaimed & rehabilitated from the already diverted area after complete exploitation of the ore from the existing mining leases. All mines are implementing concurrent reclamation of the mined-out area as per the approved Progressive Mine Closure Plan by the IBM. However, the complete bottom out of the mineral deposit has not been done till date.

Photographs of reclamation & rehabilitation work at mined out areas & waste dumps

Glimpses of plantation work carried out by IFP, Ranchi at KIOM-MIOM

Purnapani Limestone Mines, Odisha




Pandardalli Rajhara Pahar Mine 100.76 Ha Dump Plantation (12.0 ha)




Mahamaya Mine (84.0 Ha) Dump Plantation

Rajhara Hills Lease (283.6 ha)
Safety Zone Plantation by Forest Department

Dalli Forest Range (100.0 ha)

Rajhara Hills Lease (719.6 ha) Dump Restoration through Coir Matting

Preparatory Work Nandini Eco Restoration Project of Government of
Chhattisgarh partially in acquired land of SAIL adjoining Nandini Limestone Mine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Green Credit Programme

Green Credit Programme

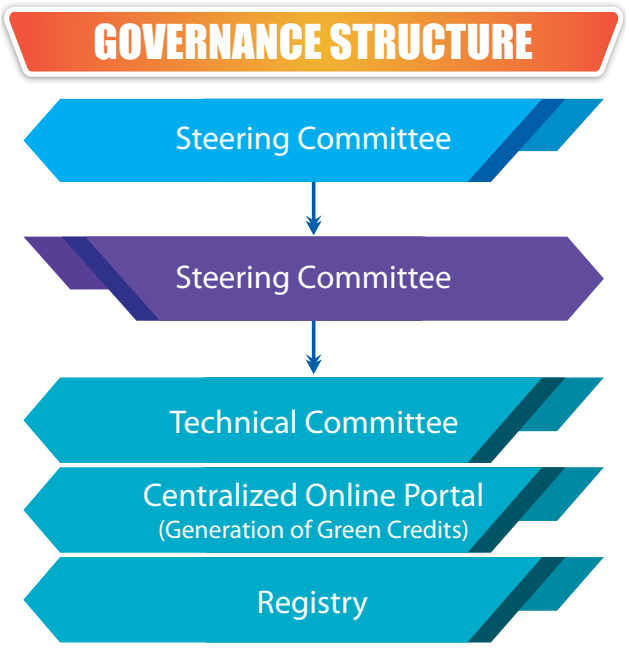
The Green Credit Programme, recently introduced by the Government in the form of Green Credit Rules, 2023, under the Environment Protection Act, 1986 is a voluntary and innovative initiative designed to incentivize individuals and entities for their positive environmental contributions. It operates as part of the broader 'LiFE' campaign (Lifestyle for Environment), promoting voluntary environmentally-positive actions. Participants can earn Green Credits for a wide range of activities promoting environmental preservation and sustainable practices.

Objectives of the Green Credit Programme (GCP)

- GCP aims to establish a dynamic land bank for plantations accessible via a dedicated web portal. This facility enables the registration of degraded forest lands by Forest departments. The inventory thus formed becomes a valuable resource available for voluntary plantation activities.
- Encouraging Government Institutions/Public Sector Undertakings/Non-Government Organisations/Private Companies/Organisations/Philanthropies/Individuals/Group of Individuals registered under Societies Registration Act to select Plantation Blocks from the registered Plantation blocks for encouraging afforestation.
- **Issuance of Green Credits:** Green Credits serve as a key incentive for entities engaging in tree plantation. The issuance follows specific methodologies and guidelines stipulated by the Administrator.
- **Digital Processes:** The GCP streamlines its operations through technology-based tools like a web platform and a registry. These digital resources ensure seamless registration, verification, and monitoring of plantation-related activities.

Governance Structure

The Green Credit Programme operates under a structured framework comprising three essential components: the Steering Committee, the Green Credit Programme Administrator, and Technical Committees. Each component has a specific role outlined in the Notification, contributing to the effective implementation and oversight of the program.



Details about Green Credit

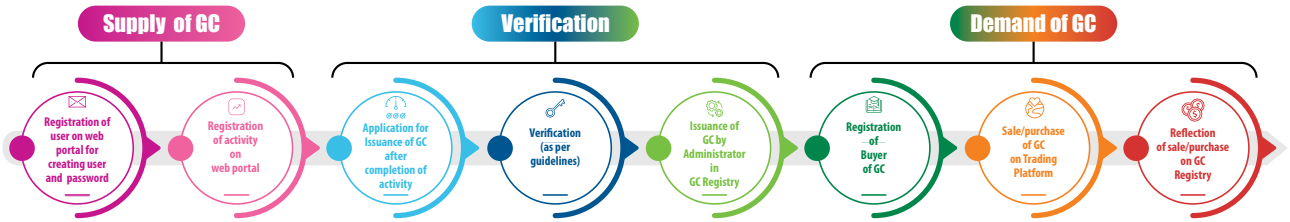
Green Credit refers to a unit of incentive provided to individuals and entities engaged in a specified activity that deliver a positive impact on the environment.

The Green Credit programme covers eight key activities aimed at enhancing environmental sustainability which includes tree plantation, water management, sustainable agriculture, waste management, air pollution reduction, and mangrove conservation.

Methodology, Accrual and Computation of Green Credits

To earn Green Credits, participants need to register their activities through a dedicated website established by the Central Government, undergo verification by a designated agency, and receive a certificate from administrator (The Indian Council of Forestry Research and Education) based on the agency's report. The calculation of Green Credits considers factors like resource requirements, scale, scope, size, and other parameters contributing to positive environmental outcomes. Typically, the entire process may take several weeks to a few months. MoEFCC through its Notification Vide S.O. 884(E) dated 22.02.2024), further notified the methodology, for calculation of green credit in respect of tree plantation.

GCP Process: Registry, Verification and Trading



Issuance of Green Credits

The issuance of green credits is illustrated through a following example:

- **Selection of Plantation Blocks by Entity for Afforestation:** From the registered Plantation block details, Registered entity will select suitable grids for plantation. The Administrator will inform the Entity about the amount of funds to be paid for undertaking the plantation. Once charges are paid, the plantation activity will be undertaken by concerned Implementation Agency (Forest Department/Forest Development Corporation) on the grid/Plantation Blocks selected by the Entity.
- **Issuance of GC:** GCs will be issued in 2nd year completion of plantation based on methodology and guidelines as defined by Administrator. GC will be allocated at the rate of 1 GC per tree, on the generation of plantation completion certificate in the GCP portal. The Implementing agency (Forest department) will be responsible for ensuring completion of plantation within 2 years.

Green Credit Registry and Trading Platform

Key components of the program include the establishment of a Green Credit Registry to track and manage earned credits, as well as a trading platform for domestic credit trading. Notably, the Green Credit programme operates independently of the Carbon Credit Trading Scheme, although environmental activities may have climate co-benefits such as reducing or removing carbon emissions that could lead to acquiring both types of credits.

Program Commencement and Subsequent Strides

The commencement of the Green Credit program is underway, and the corresponding website has been inaugurated, accessible at *https://www.moefcc-gcp.in/*.

Participation of SAIL

SAIL has been registered in the Green Credit Portal program. To ensure the program is implemented effectively, a Central Core Committee has been established by SAIL's Competent Authority. This committee includes the program coordinator and nodal officers from the four states where SAIL's mining projects operate - Jharkhand, Odisha, Chhattisgarh, and Karnataka - along with other members. Following a meeting of the Central Core Committee, two

plantation blocks have been booked in the initial phase: one block of 25 hectares (Block/Reg No. 202) and another of 10 hectares (Block/Reg No. 249) in Mahasamund District, Chhattisgarh, totaling 35 hectares, based on following parameters:

- **Proximity to the SAIL Plant / Mines :** The selected blocksare closer to the BSP, Bhilai, and Dalli Rajhara Mines compared to other plantation blocks in other districts of Chhattisgarh available on GCP portal.
- **Density of the block :** The current density of the 10-ha block is good enough to undertake the afforestation program in accordance with GCP Rules.
- **Presence of Water Body:** The presence of a water body near the 25-ha block, which is expected to maintain soil fertility and good plantation.

The application is currently in process, with the applied blocks having been accepted by the authority. The issuance of a demand note for payment is underway. Once the demand note is issued, SAIL will proceed with the necessary payment for the authority's further action.

Product Responsibility

Product Responsibility

The Company is focused on strengthening relationships with both existing customers and potential prospects, enhancing its products and services through branding, promotions, research, process optimization, and digitalization. SAIL has firmly established itself as a leader in the minds of consumers and is continually striving to meet the ever-evolving expectations of an increasingly competitive business environment, with a clear emphasis on profitability and enterprise value.

Since its inception, the company has played a vital role in nation-building by supporting various iconic structures and strategic infrastructure projects. In FY 2023-24, SAIL made significant contributions to major sectors such as power, transportation, oil and gas, and infrastructure. SAIL supplied significant steel to Power Projects, Road, Rail, Airport Infrastructure Projects, Oil & Gas Sector, etc., the major projects being the Bengaluru Metro Rail, Chennai Metro Rail, Kalapakkam Nuclear Project, Mumbai Trans Harbour Link, Versova-Borivali Sea Link, Surat-Dahod Package of the Mumbai-Delhi Expressway, Rawatbata Nuclear Plant, Zojila Tunnel in Sonmarg, Ganga Expressway (Meerut to Prayagraj), Delhi-Amritsar-Katra Highway, AIIMS Deoghar, the 111 km broad-gauge extension project connecting Jiribam-Tupul-Imphal, Mokama Railway Bridge in Patna, the Jagannath Pilgrimage Centre at Puri, and numerous other key infrastructure initiatives across India.

The company's branded products, such as SAIL SeQR for TMT bars, have gained substantial traction, with sales of 8.44 lakh tonnes in FY 2023-24 - a 50% increase from the previous year's 5.61 lakh tonnes. The NEX brand for structural steel continues to grow in popularity among consumers. To further boost retail sales, 41 new distributors were added to the 1-Tier channel in FY 2023-24. As of March 31, 2024, SAIL has established a strong network of approximately 5,200 dealers and distributors nationwide.

During FY 2023-24, the continuous activities in respect of product development have led to development of 25 new Steel Products, including development of new sections. The company's Research and Development Centre for Iron & Steel (RDCIS) has played a pivotal role in driving technological innovation across SAIL's plants, with a focus on improving processes, quality, product development, and commercialization. RDCIS works with Steel Plants and Central Marketing Organisation of the Company to reduce product cost, develop value added market centric products and demonstrate the application of SAIL products amongst the customers.

In FY 2023-24, the company allocated ₹ 239.47 crore toward research and development expenses, compared to ₹ 397.60 crore in the previous year. An additional ₹ 67.61 crore was invested in fixed assets and capital work-in-progress, up from ₹ 32.88 crore the previous year. The detailed breakdown of research and development expenses is outlined below:

Head of Account	For the Year ended	
	As at 31st March, 2024	As at 31st March, 2023
Raw Materials	**75.72**	217.91
Employees Benefits Expense	**80.49**	88.79
Stores & Spares Consumed	**6.10**	7.04

Head of Account	For the Year ended	
	As at 31st March, 2024	As at 31st March, 2023
Power & Fuel	**6.94**	16.30
Repairs & Maintenance	**5.06**	6.56
Depreciation and Amortisation Expense	**8.22**	11.63
Other Expenses	**55.30**	45.40
Finance Cost	**1.64**	3.97
Total	**239.47**	397.60

Product Development and Improvement

(GRI 3-3, 417-1)

Research and Development Centre for Iron & Steel (RDCIS) of the Company is India's premier research organization in the field of ferrous metallurgy. Recognizing that development and assimilation of new technologies & process innovations are basic tenets for sustainable growth, SAIL has given thrust for its R&D efforts through its well equipped R&D Centre located at Ranchi. The major thrust of RDCIS is to plan, demonstrate and implement multi-disciplinary R&D programmes in SAIL Plants to improve their key performance indices related to quality, productivity and yield. It has more than three hundred diagnostic equipment and adequate pilot facilities under fifteen major laboratories. The Centre undertakes research projects encompassing the entire spectrum of iron & steel starting from raw materials to finished products. In the year 2023-24, 49 R&D projects were completed with substantial benefits to the Company.

RDCIS also pursues pioneering work in the area of development of niche products as per market requirements aiming at superior performance based on application. During FY 2023-24 various Value Added Semis like 19MnB4, SUP11A, IS 11169 25C10BT/SAE 15B/25, etc. have been developed for applications in Forging, Spring steel, Auto industry, Hi-Tensile TLT segment/ General engineering, etc. SAIL FORMING 410 and HSFQ 550 grade HR Coil for Automotive component, API X60/X65/X70 HR Coil for Oil and Gas Pipe Line and IS 5914 HS345 2.2/2.5mm HR Coil for LPG cylinder have been developed. Semis in grades AISI SS 410 Low Phosphorous Low Sulphur for usage in oil pipelines and grade CF-53 for nuclear applications have been developed at the Special Steel Plants.

The company has been fulfilling the entire demand of steel tracks from Indian railways for decades. A total of 11.50 32 lakh tonnes of Rails were supplied to Indian Railways in FY 2023-24, the 260m long-rail welded-panel component in the total Rail supply being about 87.5%, which is highest ever and registered a growth of 8% over the previous year. It may be mentioned that 100% of the 60 kg Rail supplied to Railways during FY 2023-24 comprised the newly developed R-260 grade in 60E-1 profile. In addition to this, commercial supply of Long Rail Panels in R350 HT Grade has been started in FY 2023-24 as per Railway's requirement for Higher Axles Load (25T) routes. Various technological developments, including installation of new flash butt welding machine at Rail & Structural Mill, Bhilai Steel Plant have been carried out to improve the supply component of Long Rail panels, as per demand from Indian Railways. Further, supplies of Long Rail Panels have been started from Flash Butt Welding Plant (FBWP), Sabarmati, as per MoU with Indian Railways during FY 2023-24.

SAIL has been also been pioneer and the only domestic producer catering to the forged steel wheel requirements of Indian Railways. In addition to being the largest domestic producer of Loco Wheels for Indian Railways, over the years, a number of wheel profiles have been developed by SAIL, which have substituted imports, thereby, furthering the cause of Atmanirbhar Bharat initiative of the Government of India. In this regard, 42,024 numbers of WTA (Wheel, Tyre, Axle) items were supplied to Indian Railways in FY 2023-24, including few profiles which are import substitution items.

Product Development & Application RDCIS, through continuous technological inputs, has been assisting the Company in producing value added steel products at a competitive price. In its pursuit for excellence in various research fields, RDCIS enters into collaboration mode of research in specific areas with renowned research institutions and academia. Several new products, particularly special steels, having superior product quality attributes have been developed and commercialized by RDCIS and SAIL Plants for meeting stringent requirement of various market segments. Principle of cost effective alloy design and optimization of process parameters were the prime considerations for development of the new market oriented products. During the year 2023-24, the following 10 nos. of products have been developed.

S. No.	Product	Plant/Unit	Application
1	Is 2062 1450 High Strength Structural	DSP	Infrastructure Construction
2	Is 7904 K388 H 91h Carbon Wire Rod	BSP	High Tensile Wire
3	Ultra low NB (UINB) slabs for IPT to SSP (HR Coils of IS 2062 E350 grade rolled at SSP)	BSP	High Strength Structural Component
4	HSFQ 550 grade & SAIL FORMING 410/ 450 (ISH540R) HR Coils	RSP	Automotive Component
5	API X70 HR Coil	RSP	Oil & Gas Line Pipe
6	IS 2041 R60 HR Coil	RSP	Boiler/Pressure Vessel
7	HRC 2.0-2.5mm in E350 BR and HRC 1.6-1.8mm in 250BR	RSP	General Fabrication
8	HDG 0.35 mm GSM 80 Galvanized Coils	BSL	Roofing & Ducting
9	IS 5986 ISH4905 11.8 mm HR Coil	BSL	Indian Railway/Auto Segment
10	IS 2062 E350 ULNb HR Coil	BSL	Hollow Sections

Each product is meticulously designed with a strong focus on social responsibility, environmental sustainability, and risk management. The company actively engages with prestigious international organizations such as ASME, ASTM, and ROHS, collaborating to develop cutting-edge technologies and certification standards that prioritize safety, eco-friendliness, and compliance with global regulations.

Environmental stewardship has always been at the heart of SAIL's operations. The company has pioneered numerous innovations in steel processing technologies that significantly reduce carbon emissions, aligning with global efforts to combat climate change. Through these innovations, SAIL not only enhances the efficiency of its production processes but also minimizes the ecological impact of its manufacturing activities.

Furthermore, SAIL ensures that its products adhere to the highest standards of quality, conforming to both Indian and international norms set by bodies such as the Bureau of Indian Standards (BIS) and other relevant authorities. Whether it's developing customized products for specific customer needs or contributing to international environmental goals, SAIL is committed to maintaining the balance between industrial growth and environmental protection, driving sustainable progress in the steel industry.

Procurement on GeM Portal

(GRI 3-3, 204-1)

In the Financial Year 2023-24, SAIL further scaled up its procurement of Goods and Services through Government e-Marketplace (GeM), with a special focus on procurement of Services, by achieving a total procurement value of ₹ 10,421.65 crore, including ₹ 1,031.08 crore of Services. For the last 3 years since FY 2021-22, SAIL has successively maintained its position amongst top three CPSE buyers on GeM. While the total Goods & Services registered a growth of about 13%, Services were higher by about 568% over the previous financial year. In the Buyer Seller Honour Ceremony 2023 held on 26th June, 2023, SAIL was awarded the Gold award in the category of Top Organisations with respect to Government e-Marketplace (GeM) Gross Merchandise Value (GMV) in FY 2022-23.

SAIL's procurement from MSE's in FY 2023-24 was 29.28% against a target of 25%. SAIL is continuously making endeavors to develop new MSE vendors and provide support to local MSEs by mentoring, training, handholding and providing technical support to such MSEs in their chosen areas of functioning. In this regard, SAIL Plants and Units conducted 38 Vendor Development Programs during FY 2023-24. Vendor Development Programs were also conducted especially for SC/ST and Women MSME vendors, to inform them about the opportunities, item requirement and vendor registration procedures in the organization

Product and Service Labelling

(GRI 3-3, 417-1)

The Company's website, www.sail.co.in, provides comprehensive product information. For TMT bars, SAIL has implemented QR coding on stud-welded tags attached to each bundle, enabling users to scan through an app and access detailed chemical and physical properties. Similarly, products like PM Plate feature information on size, grade, and technical delivery conditions directly on the product. Additionally, at specified sales offices and warehouses, hard copies of catalogues containing details on grade, size, and application are readily available for customers.

The delivery of products adheres to the two fundamental principles of Quality and Transparency. To guarantee both quantity and quality of the supplied material, the Company provides test certificates along with deliveries to customers. Strict adherence to established norms for physical dimensions and chemical composition is maintained throughout the production and dispatch of various products manufactured by SAIL.

There was no incidence of non-compliance with respect to regulations and voluntary codes concerning product and service information and labeling.

Customer Satisfaction

SAIL's customer satisfaction strategy is built on delivering quality, customization, innovation, and sustainability while fostering strong relationships through excellent customer service and reliable performance. By continuously improving its processes and staying attuned to the needs of its customers, SAIL remains a trusted partner in the global steel industry, committed to delivering exceptional value to its customers. SAIL prioritizes strong communication with its customers, ensuring that they receive consistent updates on product availability, delivery schedules, and technical assistance.

For Customer Complaints: Robust systems have been put in place to address the grievances of the customers across SAIL. The customers can lodge Quality complaint (QC) following which the material under QC is inspected by the

Branch Executive. SAIL extends help of regional AE (Application Engineer) or respective Plant to the Branch Executive to aid and expedite the process, if required. Based on the genuineness of complaint, return order and subsequent refund is issued to the customer to ensure the trust of the customers.

For Feedback: AI based Chatbot 'SAIL SARATHI' has been introduced for facilitating easier navigation & information accessibility for customers and visitors. SAIL has opened a verified business account on WhatsApp. The WhatsApp account is integrated with SAIL SARATHI APP. A customer contact app with the name "SAIL Grahak Sampark" has been launched by CMO to streamline, organize and maximize Customer Meetings by CMO Executives. Customer feedback also goes into forming the basis for product improvement, product, and services development necessary for customer retention, market penetration, and growth.

Moreover, monthly Customer Satisfaction report is taken from all Key Account Customer. In addition service performance feedback is taken at servicing points like warehouses on monthly basis. In addition to this, customer Feedback Form is also available at SAIL's website: *https://www.sail-steel.com/cust_enq/feedback.jsp.* Online Feedback is taken w.r.t product (viz: quality, dimensional tolerance, surface finish and packing) and Quality of service (viz: service relating to issuance of Delivery Order, enquiry, issuance of credit notes, time taken for truck turnaround in warehouse). For FY 2023-24, our CSI was over 97%.

Health & Safety of Customers

(GRI 3-3, 416-1, 416-2, 417-1, 417-2, 417-3)

SAIL is committed to providing the highest level of service to our customers by implementing best practices and procedures that ensure the health and safety of all stakeholders. Steel products are generally safe for use and pose no inherent health or safety risks, so specific procedures for customer health and safety during product use are not required. However, material handling remains a key safety concern, and we mandate the use of appropriate safety equipment, such as helmets, gloves, and boots, in our warehouses.

All of our products comply with Bureau of Indian Standards (BIS), and we issue Technical Certificates (TC) for products as per the prescribed BIS guidelines. We have had no instances of non-compliance with health and safety regulations or voluntary codes during the reporting period.

Regarding hazardous waste, we adhere to the Hazardous Waste Management Rules, 2016, and all of our plants, units, and mines have the necessary authorizations for handling such materials. Throughout the lifecycle of our products and services, we ensure strict compliance with health, safety, and environmental regulations, with no non-compliance incidents reported.

Online Publication and Data Privacy

(GRI 3-3, 206-1, 417-3, 418-1)

To reduce paper usage, SAIL has transitioned to digital versions for PR publications. We are committed to protecting the sensitive information shared by our stakeholders and maintaining their trust. Our corporate policies on data privacy, confidentiality, and security are designed to safeguard the information we collect. Consumer data, such as specifications for customized products, is protected through confidentiality agreements.

In the 2023-24 period, there were no incidents of non-compliance with regulations or voluntary codes related to marketing communications, advertising, promotions, or sponsorships. We received no complaints regarding breaches of customer privacy or data loss, and no fines were imposed for non-compliance with laws and regulations concerning the provision or use of products and services. Additionally, there were no instances of anti-competitive behavior or violations of antitrust and monopoly legislation.

SAIL is continuously implementing measures to enhance cyber security and there have been no information security breaches in the FY 2023-24.

Supply Chain Management

(GRI 3-3, 308-1, 414-1, 414-2)

At SAIL, we consider ourselves a large family, including not only our Iron and Steel Plants but also our suppliers and other key stakeholders, all of whom contribute to our goal of a cleaner environment. We recognize that our products have a long life cycle, and we take responsibility for managing their environmental and social impacts throughout their entire journey - from production to disposal. Our commitment extends beyond our operational boundaries to ensure environmental conservation.

We engage in rail transportation for both raw material receipt and the dispatch of finished goods, prioritizing it over road transport due to its lower environmental impact. Rail transport improves operational efficiency and reduces environmental footprint. However, to meet market demands, we also use road transportation from warehouses to customers, ensuring all transportation methods comply with health and safety regulations. In 2023-24, we recorded no instances of non-compliance.

Our Corporate Environmental Policy underpins our commitment to socially and environmentally responsible management of materials, processes, and services. We work closely with suppliers, vendors, and stakeholders to raise awareness about environmental and social considerations, ensuring ethical business practices throughout the product life cycle. We also require declarations on human rights from all value chain partners, and any violations lead to the termination of business relations. Our major suppliers, particularly global coal companies, already adhere to high human rights standards, and no significant risks or concerns were identified.

In conclusion, SAIL's efforts to minimize environmental impact and ensure social responsibility are reflected in our comprehensive programs, stakeholder engagement, and strict adherence to regulatory and voluntary codes. Our use of rail transport and proactive management practices contribute to a more sustainable and efficient operation.

Striving Towards Zero Effect on Environment

(GRI 3-3, 308-2)

Steel itself has minimal environmental impact, but we continuously assess our products, processes, and services to mitigate any potential effects. Thirteen of our warehouses have earned ISO 14001 accreditation for environmental management, reflecting our commitment to sustainability. Our environmental measures include road and hardstand maintenance, replacing wooden railway sleepers with concrete ones, recycling used oil, promoting afforestation, converting vacant plots into flower gardens, using energy-efficient lighting, installing rainwater harvesting systems, and equipping DG sets with acoustic covers.

We also focus on promoting eco-friendly and energy-efficient practices with local SSI/MSME vendors. All handling equipment undergoes regular maintenance to ensure a safe and healthy environment within the warehouses. Packaging materials are typically sent with consignments, and any leftover packaging is responsibly disposed of at regular intervals. While vehicular traffic in warehouses can cause some localized pollution, all vehicles are checked for compliance with pollution control standards.

In sum, while the steel industry has faced environmental challenges, we remain dedicated to continuous improvement. Our efforts, from reducing waste to adopting renewable energy and efficient processes, contribute to a more sustainable operation.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Safety and Occupational Health

Safety and Occupational Health

(GRI 3-3)

SAIL believes that excellence in Safety and Health yields excellent business results, therefore at SAIL nothing is more important than the Safety and Health of the people working in and around steel plants. To ensure this, SAIL has been continually & consistently improving its safety and health management systems & practices with the ultimate aim to have safe and healthy workplace. Safety is fully adhered in all processes and operations inside Plants/ Units premises. Safety & Health issues are monitored and guided from the apex level of management i.e. our Board as well as Board Sub-committee on Health, Safety & Environment. All pertinent issues related to safety & health are discussed and deliberated as opening item at all appropriate forums in various levels of management hierarchies.

SAIL aspires / envisions becoming as one of the industry's leaders in safety performance. To realize this vision, SAIL has a Corporate Safety Policy and guiding Principles aiming at providing a safe and conducive work environment to all its employees, contractors and all stakeholders / people associated in its operations including those living in the neighborhood of its Plants, Mines and Units. All safety activities & measures are planned in consonance with the Safety Policy.

With the aim of continuous improvement, the safety & health objectives are planned and set well in advance and successfully achieved through well established OH&S management programmes. SAIL has achieved consistent improvement and steady growth in Safety and Occupational Health parameters as a result of proper systems, procedures and improved work practices. Internationally established standards - OHSAS 18001/ ISO 45001, ISO 9001 and ISO 14001 are followed religiously for Safety, Occupational Health and Environment protection. Internal as well External audits are conducted periodically to bring improvements and check compliance. Partnership with reputed bodies in the area of safety is made in the form of MoU signed with National Safety Council, Mumbai for mutual engagement and collaboration in the areas of Safety Audits, Training etc.

It is increasingly being recognized that Safety being a cultural issue, change in behavior or mindset of individuals will take place by bringing attitudinal change towards safety, which will help in improving safety culture at the Company level. With this objective, a safety consultant of repute has been deployed at Bhilai Steel Plant for strengthening the safety management systems apart from addressing behavioural related issues. Based on the feedback, it would be deployed in other Plants phase wise. Apart from this, Behavioural Based Safety (BBS) is being implemented at Plants to improve at-risk behavior of people which is the root cause of many incidents.

Safety Setup

(GRI 3-3, 403-1, 403-2)

Effective leadership is critical in achieving and sustaining a positive Safety culture that supports the goal of zero harm. Safety performance is regularly monitored at the highest level of management i.e. Board, Chairman and Directors' level. The efforts of the Company for achieving a safe and healthy environment are guided and monitored by a Board Sub Committee on Health, Safety & Environment (BSC on HSE). Directors In-charges, Chief Executives & Executive Directors of respective Plants & Units closely monitor safety aspects. At the Corporate level, SAIL Safety Organisation (SSO) coordinates and guides the Safety and Fire service activities. A full-fledged Safety Engineering Deptt. (SED) functions at each Plant/ Unit to assist in compliance of safety standards and procedures in operations, maintenance and repair jobs. Fire Services Deptt., fully equipped with necessary resources & facilities, remains on alert for meeting various emergency requirements, relief & rescue operations as well as monitoring fire prevention related aspect.

In each department/ shop, Departmental Safety Officer (DSO) & Safety Steward/ Captain / Warrior ensures adherence to laid down standards & safe working procedures. DSOs play an important role by monitoring safety aspects at the

shop floor on daily basis and working in close coordination with SED. In Project & expansion areas, Safety Officers are deployed to monitor safety during various phases of project / construction work.

Systems and Procedures

(GRI 3-3, 403-1, 403-2)

Steel manufacturing involves processes with intrinsic hazards that need to be carefully managed as measures needed to manage these hazards are often complex. Safety is a blend of engineering, operation and management skills focused on preventing accidents. Systematic approach is adopted by following 3 E's of Safety Management i.e. Engineering, Enforcement & Education in all spheres of working.

Safety is incorporated in the very design & development stage and state-of-the-art technology is adopted which helps in minimizing human exposure to hazards and ensures safety of the workforce along with surroundings. Adequate emphasis is given towards safety during execution & commissioning of new projects / facilities by adhering to Safe Commissioning Procedures & Protocols.

All the statutory provisions pertaining to safety are being adhered to. Safety aspects have been incorporated in SOPs, SMPs & WIs which helps in maintaining necessary technological discipline. These documents provide vital guidance to the workmen and are reviewed periodically with changing technology / process requirements and updated accordingly. The updated version of the documents is made readily available on web portals /Knowledge Management (KM) portals and can be easily accessed and referred by all employees.

'Permit to Work' & 'Protocol' Systems, having necessary safeguards, are religiously followed during execution of hazardous & critical jobs involving multiple agencies. The practice of taking extra precaution during major capital repairs/ shut down jobs through intensive safety surveillance & monitoring ensures safe & timely completion. 'Inter Plant Standards in the Steel Industry (IPSS)' in the area of safety also help in augmenting safety standards of the Company. IPSS 1:11 - Standards Committee on Personnel Safety Appliances and Procedures, formulates new standards as well as reviews and updates existing standards by utilizing knowledge & experience of the domain experts as well as core safety professionals. The standards developed are uploaded on IPSS portal which is available in the SAILNet as well as open domain i.e. internet and accessible for the benefit of common user. Emergency preparedness Plan has been prepared for handling emergency situations and mock drills are conducted to assess preparedness with the involvement of all the connected agencies like shop / department concerned, SED, Fire Services, Gas Safety, OHSC etc. Periodic mock drills are also conducted in association with external expert agencies such as National Disaster Response Force (NDRF) along-with participation of all the agencies in the plant including Central Industrial Security Force (CISF).

All work related incidents are investigated to find out the root cause and appropriate actions are taken to prevent its recurrence. The needed corrective & preventive actions are taken to minimize the risk as per the hierarchy of controls.

As a new initiative, SAIL played a key role as one of the member of working group which was constituted by Ministry of Steel (MoS), Govt. of India for preparation of comprehensive Code of Practices for enhancing the safety eco-system in the steel producers in the Iron & Steel sector. 25 nos. safety guidelines were finalized and uploaded on the MoS website for reference & use by all stakeholders. Further, 15 nos. of process based safety guidelines finalized and submitted to the MOS.

Workers' Involvement in Safety Management

(GRI 3-3, 403-1, 403-2, 403-4, 403-6, 403-8)

Joint participation of management & workmen is important for a sustainable health and safety culture which is maintained by the Company's Health and Safety Committees. All of our employees are covered by the formal joint management-worker Health and Safety Committees at Plant/ Units and are duly involved and consulted on Health & Safety issues including in identification & mitigation of workplace hazards. Bi-partite forums like Central/ Apex Safety Committees, Departmental Safety Committees, Pit safety committee etc. function at Plants / Units / Mines with participation of Company's top management, trade union representatives & employees. Meetings of these

Committees are held in a scheduled manner in which all health and safety issues are deliberated for bringing continuous improvement of the OH&S Standards. Employee engagement initiatives are regularly undertaken to ensure commitment of every employee in enhancement of the safety culture and aiming for achieving 'zero accident' in his respective workplace, department and Company as a whole. Good safety initiatives taken by the employees from all plants & mines are identified and suitably rewarded in *HazAn.Com* - Hazard Analysis Competition organised at whole SAIL level by SSO which gives the employees an opportunity to showcase their work and spread the learning points at organisation level.

Joint Committee on Safety, Health & Environment in the Steel Industry (JCSSI), a unique bipartite forum at national level with representation from major central trade unions and management of major steel producers of the country acts as a common bridge by jointly evolving recommendations/ action plans for ensuring safe & healthy work environment in the entire steel industry. For recognising and rewarding good safety performance of the member organizations & their employees, various competitions & an annual award functions & meetings of the Committee are organized. Distinguished performance of the individuals is also suitably rewarded. Learning from each other approach is followed for sharing best practices of the participating steel producers through periodic meetings as well as various workshops / seminars, plant visits etc. Sharing of information among members is also facilitated through the JCSSI website - *www.jcssi.com*.

Safety Training, Education & Awareness

(GRI 3-3, 403-5)

Education is an important element of Safety Management System, which is fulfilled in SAIL by regularly organising training for Company's regular & contractual employees on variety of topics including safe working, accident prevention, risk control etc. based on competency mapping. This helps in equipping them with requisite skills & knowledge. Apart from variety of skill enhancement training, awareness programmes, trainings/ workshops etc. are organised covering topics like statutory requirements, gas safety, electrical safety, crane safety, conveyor safety, material handling, Behavior Based Safety (BBS) occupational health & hygiene, first aid, stress management, preventive care for occupational diseases, HIV/ AIDS etc. For different work zones/ areas, 'Learning from Each Other (LEO)' workshops with participation of other Indian steel producers covering salient issues of concern as well as 'Large Group Interactions' are organised which helps in greater and effective sharing & learning. BBS approach is practiced to inculcate safe habits in employees and build positive safety culture. Refresher training is regularly imparted in classroom as well as on the specific job. Post-learning test is conducted to ascertain the learning level.

Feedback is taken from the participants which is constructively used to bring further improvements. Safety related information is broadcast by Plant TV cable networks covering larger cross-section of people at Plant townships. Training on safety & health is also imparted to Central Industrial Security Force (CISF) workforce & security staff.

A compulsory safety and work environment related training is duly provided to every contractual worker before deployment on any job. For each contract worker, Induction training of two days duration followed by job specific training covering area specific hazards & associated risks and required control measures is imparted before engaging on the job. To assess learning level, post test is conducted after the training and accordingly, re-training is conducted as well. For undertaking height, roof sheeting jobs etc. which involve greater risk, competence of the workers is assessed on training rig, especially fabricated for the purpose. As a result of dedicated & consistent efforts, a safe & healthy working environment has been achieved by the Company for all of its employees and those living in the neighborhood.

Awareness generation drives and safety campaigns are regularly organised by SEDs in various department/ areas of the Plant/ Unit. All important days like National safety day, Steel safety day, World steel safety day etc. are celebrated in a befitting manner by organizing various safety promotional activities.

Following webinars / DSaP (Safety Awareness Programmes) / Learning from Each Other (LEO) workshops were organised by SSO to continually spread safety awareness among the plant personnel:

- 3 nos. of 'Safety Awareness program for DSOs, Safety Officers and Line Managers titled D-SAP' was organized by SSO. 73 executives across the SAIL participated in the programs.

- To enhance knowledge in Mines Safety, training program on 'Mine Safety Management Plan' was organized by SSO through experts from DGMS. 22 executives across the SAIL participated in the programs.
- A Learning from Each Other (LEO) workshop on 'Safety During Operation & Maintenance of Conveyors' organized by SSO was attended by 27 participants covering all ISPs of SAIL, TATA Steel, JSW and RINL.
- A Learning from Each Other (LEO) workshop on 'Safety During Rail Traffic Movement' organized by SSO was attended by 24 participants covering all ISPs of SAIL, TATA Steel, JSPL and RINL.
- A Learning from Each Other (LEO) workshop on 'Use of Digital Technologies in Safety Management' was organized by SSO, attended by 18 participants covering all ISPs of SAIL, TATA Steel and AMNS.
- A Learning from Each Other (LEO) workshop on 'Safety in Project Management' organized by SSO was attended by 24 participants covering all ISPs of SAIL, TATA Steel, JSW(Dolvi), RINL and AMNS.
- A specially designed Safety Awareness Programme for Ware House Managers of CMO was organized by SSO covering Safety & Accident Prevention; Safety during Material Handling; Case study; Role of Ware House Managers and Brief of Contractor Safety Management.

Practicing IT Based Systems

Technology benefits of latest IT tools & mobile applications have been harnessed by extensive deployment in the area of Safety & Health. Latest safety related information is shared amongst all cross section of employees through online safety portals maintained by SSO as well as Plants / units. These web portals are an effective tool in sharing information across the organisation. Employees can submit suggestions for bringing improvements in safety standards as well as submit near miss cases through these online systems.

SSO & Plants/ Units regularly bring out various publications, electronic newsletters/ magazines, e-digest etc., that have wide range of useful information pertaining to Safety & Health from experts from the steel industry.

Safety Audits, Inspections & Review

(GRI 3-3, 403-7)

To assess the effectiveness of prevailing OS&H systems, compliance to regulatory requirements and identify areas or improvement, Safety Audits are conducted on regular basis in accordance with Indian Standard IS 14489:1998 i.e. 'Code of Practice on Occupational Safety & Health Audit'. Major departments of all Plants/ Units including Mines and Warehouses are covered during such audits. Emphasis is laid on identifying issues of concern and carries out in-depth system-based audit. Compliance audits are also conducted to verify implementation status of suggested measures. Besides this, inspections, walk around surveys etc. are also conducted to identify gaps and action plans are drawn to bridge the gaps. As a new initiative, training programmes for DSOs were organised on Occupational Safety & Health audit and cross – functional teams of the trained participants conducted an internal audit across the whole plant.

Periodic review of safety performance is made at top management level of respective plants/ units. Structured review meetings are conducted by SSO through scheduled Heads of Safety & Heads of Fire Services of all SAIL plants /units. Issues of concern are discussed and strategic action plans are drawn on priorities for action to bring continuous improvement. Such meetings also serve as an experience sharing platform to the concerned professionals through Learning from Each Other (LEO) approach. Good practices of other plants/ organizations are also shared to promote benchmarking. The decision points are followed up for timely implementation. Recently, Video Conferencing (VC) as modern communication tool is being increasingly utilized for such review meetings and interactions. This helps in efficient resource utilization & effective / better communication. SSO leadership conducts periodic reviews and surprise visits to plants, interacts with cross – section of people such as DSOs, SED collective and submits feedback to CEO/ ED (works).

Three tier Safety Audits are being conducted at plants & units as mentioned below:

1) Internally by concerned area safety officer of Safety Engg. Department & DSO

2) Safety audit by SAIL Safety Organisation

3) Externals safety audits by third parties as per statutory requirements

Safety inspections are conducted at different levels in Plants & Units.

a) By Safety Engg. Departments associating DSOs

b) By Safety Engg. departments associating different departments like Civil Engg Department, Electrical department, Crane Engg. Department, Structural Inspection departments etc.

c) Fire safety inspections by Fire services department associating DSOs

d) Apex inspection by line managers & DSOs

Salient Safety Highlights of SSO & Steel Plants

SSO

- Meetings of BSC on HSE during the year deliberated on safety initiatives in SAIL. Chairman's meeting BSE on HSE and meetings with Chairman, SAIL were attended by ED, SSO wherein Safety initiatives were deliberated upon Chairmans' meeting through video conference.
- Chairman reviewed the safety performance of SAIL in November 2023 at MTI, Ranchi, laying thrust on bring out the real / root cause of the problem in the report and Inclusion of safety right from design & engineering stage
- A meeting of the Working Group / Sub Group was held at MoS, New Delhi under the convener ship of ED, SSO in the presence of all the Steel Manufacturers to finalise Process Based Safety Guidelines for the Steel Industry.
- A new safety interaction module 'Sampark' conceived for better communication & implementation for achieving zero fatality was introduced by SSO. 4th session were held at Chasnalla Colliery where the ED, SSO & CGM (Safety), SSO interacted with non- executives (supervisors, workmen inspectors etc.) and Executives for further strengthening the safety management system at Collieries division. 5th session held at Faridabad Warehouse where CGM (Safety), SSO visited site and interacted with non- executives & executives and suggested for improving the safety system at Warehouse.
- An interactive session (Sampark) was held with the workers of Vishakhapatnam warehouse to sensitise them about the various safety aspects and recent incident occurred at Dankuni Warehouse.
- 1st Safety Operating Committee meeting on the theme 'Safety during Steel Making' was organized by DSP in association SSO. The meeting was attended by 73 participants from 19 organisations like Directorate of Factories (WB), Major Technology Provider (Prime Metal, SMS Group), TATA Steel, JSW - Dolvi & Vijayanagar, AM/NS, Hospet Steel, NMDC, MECON etc. The learning points of the meeting was shared with all the participants for implementation at their workplace.
- Meeting of committee constituted by Ministry of Labour & Employment, GoI for studying organisational setup of DGFASLI (Directorate General, Factory Advice Service And Labour Institutes) & suggesting measures for revamping / strengthening the organisation was held at Kolkata, Chennai & Mumbai. CGM (Safety), SSO attended the meeting as Member of the Committee.
- A meeting for formulating the 'Safety Operating Committee' was held to discuss the modalities with SSO and Heads of Safety of the Plants & Units.
- A visit to IIT, Kharagpur (IIT-KGP) was conducted with a view to explore possibilities of developing customised safety modules for SAIL. Detailed discussions were held covering requirements related to safety in SAIL plants for further engagement.
- Suraksha Samvad platform was created where any technical reason behind the accident is being discussed by the concerned domain experts of the department of all Plants to find out the root cause and good practices of each other so that the common SOP is emerged out. 3 nos of Suraksha Samvads were conducted in March 2024. In this, DNW incident in BSL, SMS incidents in DSP & ASP and BF incident in DSP were discussed in presence of the experts. The Takeaway Points from Suraksha Samvads were shared with Plants & Units for implementation.
- SURAKSHA MANTHAN"- Head of Safety (HoS) Meeting: 6 nos. of Suraksha Manthan were held during 2023-24, where presentations were made by SSO and plants covering safety performance, salient activities, Issues & Concerns and Way Forward, which invited detailed discussions & deliberations from the participants on various points. Take away points of each Suraksha Manthan is sent to all Plants & Units. SSO follows – up the take away points of 'Suraksha Manthan' for its implementation during subsequent visit to plant.

- 24 safety audits and 21 compliance audits were conducted during the period.
- As per directive from Secretary, Steel, Govt. of India, a Safety Audit was conducted by a team of executives from SSO & RSP at NMDC Steel Plant, Nagarnar. Also a Customised Safety Awareness Training Programme (C-SAP) was organized for 42 DSOs & Frontline executives.
- Worldsteel Safety Day was organized by SSO. As a prelude to the occasion, Hazard Analysis Competition *'HazAn. Com'* was organized for executives and non-executive employees of Plants and Units. 9 teams from executives and 12 from non-executives were shortlisted for final presentation at Ranchi.
- A workshop on Contractor Safety Management (CSM) was held with Heads of Safety of five Integrated Steel Plants of SAIL & ASP at MTI, Ranchi, which was chaired by ED, SSO.
- A video – conference with all Safety Consultants and HOS of ISPs was organised to discuss the Effectiveness of Consultant assignment and corporate concern on recent accidents.
- The Memorandum of Understanding with M/s National Safety Council, Mumbai, in the area of Safety Audit & Training was renewed for one (01) year. This MOU was signed as an expression of the intention of SAIL and NSC to collaborate on SHE issues.
- SSO prepared a handbook considering all possible reasons for Liquid metal spillage in SMS. The existing & additional measures in the report was prepared after visiting SMS of 5 ISPs and interacting with the domain experts including the practices of other steel plants. It's a ready reference for understanding the safety measures to be taken while handling the liquid metal. The report was circulated among the SMS personnel & all the stakeholders for its implementation.
- **Nayi Soch:** Customised animations were made for enhancing learning and to better understand the risk perception of the associated risks. Two nos. of animations were made in 2023-24.

BSP

- In-house E-Suraksha Module has been developed by C&IT in association with SED Inaugurated by Shri Anirban Dasgupta (Director I/c BSP).

- Safety Governance System, which has been put in place, is being strengthened. All applicable standards have been implemented except Contractor Safety Management which is under implementation in different departments. Training on these standards are also being given.
- Installed biometrics at different locations in SMS-3 for restricting entry to MCC and panel Rooms through in-house resources.
- As per MoS guidelines No. of Regular Employees imparted training during 2023-24 against the yearly target: 12477 and actual 13579 (109%).
- Half day Interaction programme with stakeholders for implementing CSM (Contractor Safety Management) at HRDC wherein Total 248 participants attended the programme.
- Two In-plant Training programmes of two day duration on 'Hazard and operability study (HAZOP) by National Safety Council, Mumbai was organised at HRDC, Bhilai. 40 participants attended.
- On-site Rescue Training: Confined Space Rescue training (4) & Working at height (1) by KARAM organized by M/s SWASYA at CV-2, SMS-3. Five batches from BFs, COCCD, SP-3, MARS, SMS-2, SMS-3, PlateMill, URM, BRM, RSM, EMD, PBS, PEM, RED, WMD, SED are covered and 52 employees participated.
- On line Contractor Violation & New Contract workers reward system introduced. Three prizes namely "Suraksha Sarvottam, Suraksha Anmol & Suraksha Daksh" are being incorporated to enhance safety culture in all department of Bhilai Steel plant, total 29 departments covered in Works area, Town Services & Medical and Health Services. Each half of a calendar year, 373 no. of awards given to contractor workers.
- Pali Shiromani Award was awarded to Shri Gulab Singh, Fire Station Officer of Fire Service Dept. for his dedicated work and contribution as a shift I/c of the department.
- Karma Shiromani Award was awarded to Shri Derhu Singh, LFM, Shri Man Singh Koma, Fire Man, Shri Arvind Mandle, Fire Man & Shri Dashrath Ram Bhagat, LFM of Fire Service Dept. for their dedicated work towards their job responsibility in regular as well as in emergency situation.
- Fire Service day was observed to enhance general public awareness about the necessity of minimizing losses due to fires.
- One Foam tender, two Combined tenders & three AFT carrier's were inaugurated by Director I/c of BSP and put in to service for fire safety of the plant and surrounding area.

DSP

- DSP was awarded with "Kalinga Safety Excellence Award- Platinum category" for performance year 2022
- Safety exhibitions on the theme "Work Safe. Home Safe. Everybody, every day" was organized. The exhibition focused on Zero Harm at workplace and beyond. Employees showcased live models on safety practices in the shop floors.
- A special training cum workshop on 'Prevention of Occupational Diseases and Management in Steel and Allied Factories' in collaboration with Directorate of Factories, Government of West Bengal was organized at Safety Excellence Centre. DSOs and contract workers supervisors were attended the program.
- The seminar on 'Health & Safety of Contract Workers" was organized in association with National Safety Council [NSC]. More than 150 contract workers participated in the day long program.
- 5 Nos. Workshop on 'Work Place Safety' were held at COCC, RMHP, Blast Furnace & Sinter, SMS and Mills Zone. Around 300 Nos. employees (Regular & Contractual) participated in those programs.
- Implementation of Zero Tolerance Rules for 9 violations has been implemented from September 2023

RSP

- RSP has been awarded as the winner of "21st Annual Greentech Safety Award 2023"
- RSP was awarded with prestigious 14th "Kalinga Safety Award", 2022 in Platinum Category on 20/12/2023.
- One day Industrial Safety Training on Hazardous Processes in MAH Industries was Organized by IQEMS & RSP in association with Directorate of Factories & Boilers, Govt. of Odisha at Civic Centre (Total Participants- 320 including 100 nos of Executives from RSP).
- Red Light Violation Detection System was inaugurated by ED(W). RLVD is an advanced traffic monitoring system that uses high-resolution cameras and sensors to detect vehicles that violate red lights. The system is designed to capture the license plate of the offending vehicle and automatically identify the registered owner of the vehicle.

- Safety Park inaugurated by ED (Project) at Caster #4 project site. The safety park is made with demonstration of display of standard procedures & Do's and Don'ts at work place, emergency contact numbers different safety, fire & life saving equipments like fall protection arrangements, height rig structures, different fire fighting equipments, hand protection, eye protection, foot protection PPEs etc.
- An innovative mobile App "RSP SAFE" was inaugurated by ED (Works) at ED (Works) conference hall for easy access to Safety Ambulance (First Aid), Fire, and Emergency centre (Plant Control) in case of any emergency. Special series contact numbers both Intercom (I/C) and CUG (Mobile) have been allotted. A QR code has also been developed to download the mobile App.
- Session on Emergency rescue plan, usage of Safe App, Gas Safety, Acid handling safety precautions organised. Participants - 37 nos.
- A Demonstration training on "Work at height rescue and Painting Kit" conducted by SED team in association with representatives from PPE vendor M/s Karam Safety Pvt Ltd at Pipe Coating Plant premises.
- Standardize Scaffolding erection by M/s Leadtek {Centralised contract by RC(M)} at different departments.
- On observance of Chemical disaster prevention day, Road show campaign organized. Safety Oath Taken on observance of Chemical disaster prevention day. Pocket guide on acid safety & gas safety distributed.
- Digital Barricading provided on crane at SMS-2.
- 2 Suraksha Raths were flagged off to mark commencement of National Road Safety Month.
- Road Safety campaign conducted on various areas of plant during the 35th National Road Safety Month celebration.
- Fire Safety Awareness Convoy was publicized in Steel Township to create awareness on occasion of "Deepawali".
- Fire Service observed 'National Fire Service Day' followed by the Fire Service Week. Various competitions were organized for Plant, Fire Service employees, housewives, school children etc. Further, Fire Safety Awareness campaigning were done in various departments, Schools, Market etc during the week.

BSL

- 23 Deptts. were free of Fatal & Reportable Accidents in Works during the Financial Year 2023-2024

- Road Safety Month was observed in January 2024. Different activities, like Display of flexes/banners on road safety, Bike Rally / Road Show in township, Inter-departmental Nukkad Natak competition, Movement of Suraksha Rath in Plant/Township were organised.
- National Safety Day was celebrated.
- BSL was awarded the Safety Innovative Practices Award at 4th International Sustainability Conference on Health, Safety, Fire and Environmental Advances (HSFEA).
- Safety Induction Training was imparted to contractual workers at Safety Excellence Centre, Sector-2/C before issue of gate passes. (Total 26,495 participants).
- On-the-Job training was imparted to all contractual workers before execution of job in critical areas (Total 17,983 participants). Thereafter safety clearance was given in SAP system for starting the job.
- Round-the-clock Safety Monitoring done during Capital Repair/Shut Down/Protocol Jobs in Financial Year 2023-24 (Total 120 Nos.)
- ₹ 6,99,500.00 for 160 nos. Safety Violations
- A Kavach portal was developed for BIP (Behavioral Intervention Programme), IRIS (Incident Reporting & Investigation System), JHA (Job Hazard Analysis) etc.
- Developed e-Learning modules for Confined Space, Basic Rigging, IRIS & Work at Height
- 858 nos. of Key resource persons were developed as trainers for BIP.
- 129 key resource persons were developed as trainers under ongoing Safety Management Consultancy Assignment and BIP training has been imparted to more than 50% of executives, non-executives and contract workforce.
- An IRIS module on Kavach portal was developed exclusively for IRIS through root cause analysis (Why technique). 104 key resource persons were developed as trainers
- 05 star contractor evaluation rating methodology was developed and CSSA for 122 existing contractors was conducted. 120 key resource persons were developed as trainers.
- 1152 Trainers were developed under competency and capability development training program
- CISF-Fire Wing provided First Aid Fire Fighting Training to Employees, Contractual Workers, Students, House-wives & Other Govt. Employees.

ISP

- ISP, Burnpur has been awarded as Winner for "Safety Innovation Award 2023", constituted by Safety & Quality Forum (SQF) established by Institution of Engineers (India), during 20th Safety Convention.
- ISP, Burnpur received "Safety Excellence Award" in the 4th International Sustainability Conference on Health, Safety, Fire, and Environmental Advances (HSFEA 2023).
- ISP, Burnpur selected as Winner for "Kalinga Safety Excellence Award- Gold Category" for the performance year-2022 instituted by Institute of Quality & Environment Management Services, award was presented to ISP, Burnpur during 14th "National Safety Conclave".
- A motivational award scheme "Enhancement of Safety Culture" has been introduced to instil a culture of continual improvement amongst employees in their respective workplace with special thrust to assess departments wise near miss reporting, inspection & evaluation of housekeeping initiatives, evaluation of best DSO (Iron/Steel/Services) zone and evaluation of best safety supervisor (Iron/Steel/Services) zone.
- Safety circle are formed at departments/shops for the identification and mitigation of workplace hazards.
- A leadership workshop was organized where expert faculty from M/s. ASK EHS Engineering & consultants Pvt. Ltd. deliberated on Safety Leadership & emphatic leadership at Workplace to Functional Heads, CGMs and Sectional Heads, 45 Senior level Executives attended the seminar.
- IC (ISP & DSP) reviewed Safety performance during monthly review meetings.
- "Fire Service Day" was observed at ISP.
- 35th National Road Safety Month celebrated at ISP, Burnpur where a tableau carrying road safety massage was flagged-off by the Director-in Charge (DIC) followed by Road Safety rally by School children.

- SHE Walk by Director-in Charge (DIC) along-with Functional & Sectional Heads : Total 24 such safety walks are conducted, covering- housekeeping drive and revival of drainage network and peripheral cleaning at Coke Oven, Sinter Plant & RMHP area, CO & CC, WRM & BM, USM, CCAS, Road Safety, Operation garage, RMHP, PBS, BF, LDCP, HMS, BOF GH, Central Workshop, Sinter Plant, Oxygen Plant, SMS, Utilities depts.
- More than 50 Safety Supervisors are nominated from departments to assist DSOs. These Supervisors to look after safety of respective shops in a dedicated way.
- "Accident Reduction Tool (ART)" App launched by Director-in Charge (DIC) for online reporting of Near Miss, Unsafe Condition, At-Risk Behaviour.
- Statutory testing of EOT cranes- 210 nos., lifting tools & tackles- 1420 nos., lifts- 20 nos. and pressure vessels- 260 nos. done on continual basis.

Occupational Health Management

(GRI 3-3, 403-1, 403-2, 403-3, 403-6, 403-7)

SAIL has established full-fledged and well equipped Occupational Health Services (OHS) centres with required infrastructure & modern healthcare equipment at all Plants & Mines to deliver a comprehensive, multidisciplinary and multidimensional health programme. OHS is committed 'to promote and maintain the physical, mental and social wellbeing of our employees at the highest possible level'. The committed services provided by the OHS in Plants have made them an integral part of the production setup and they've contributed actively to prevent illness & disability as well as to protect & promote the health of the employees. The Company has been giving priority towards improving workers' health by covering 100% employees under various OHS programmes. National OHS Centre (NOHSC) at BSP is a multi-disciplinary, multi-dimensional OHS centre, which functions as a Central Nodal Agency to monitor Occupational Health activities in different SAIL Units.

An integrated approach towards comprehensive health care is followed for preventive, curative, promotive and rehabilitative health services and maintaining a conducive work environment in line with the requirements of ISO 45001 / OHSAS 18001 & SA 8000 Standards. Periodic internal as well as external surveillance audits are conducted to make the systems more effective. Computer based software tool named Health Information System (HIS) is utilised for collection, compilation, analysis, retrieval and dissemination of necessary information.

Health awareness is promoted across the company by celebrating special days like World Health Day, International Yoga Day, Occupational Health Day, Doctors' Day, AIDS Awareness Day, World TB Day, Diabetes Day, World Kidney Day, World Malaria Day, International Women's Day etc. Various programmes focused on regular and contracted female employees are also organised. To promote learning & experience sharing among the OHS fraternity, seminars, workshops such as All India Steel Medical Officers' Conference (AISMOC) are held regularly where good performance is recognised & rewarded. Also important issues are deliberated among doctors / medical professionals belonging to our steel hospitals. OHS bulletin covering vital information are published by NOHSC for the benefit of employees.

Infrastructure & Facilities

(GRI 3-3, 403-2, 403-7)

Preventive

Periodical Medical Examination (PME), shop floor based health & hygiene survey, Departmental health check-up (DHC), Hazard Identification & Risk assessment (HIRA) at shop-floor, fundamental research on occupational health and several programme on health education, Occupational Medicine Clinic, Industrial Hygiene Survey setup, Computerized Health Information System (HIS).

Promotive

Awareness programmes, Training on Ergonomics & work design, Occupational health hazards, Industrial Hygiene, Use of PPEs for dust & noise, First Aid and Emergency care, Stress Management, Yoga at OHS centre, AIDS Control, Life Style Diseases, Special programmes for working women, Celebration of Special Days.

Curative

General OPD, Pharmacy, Plant Casualty services with Disaster Management facilities. Round-the-clock Ambulance services, Eye wash Fountains, Minor OT.

Rehabilitative

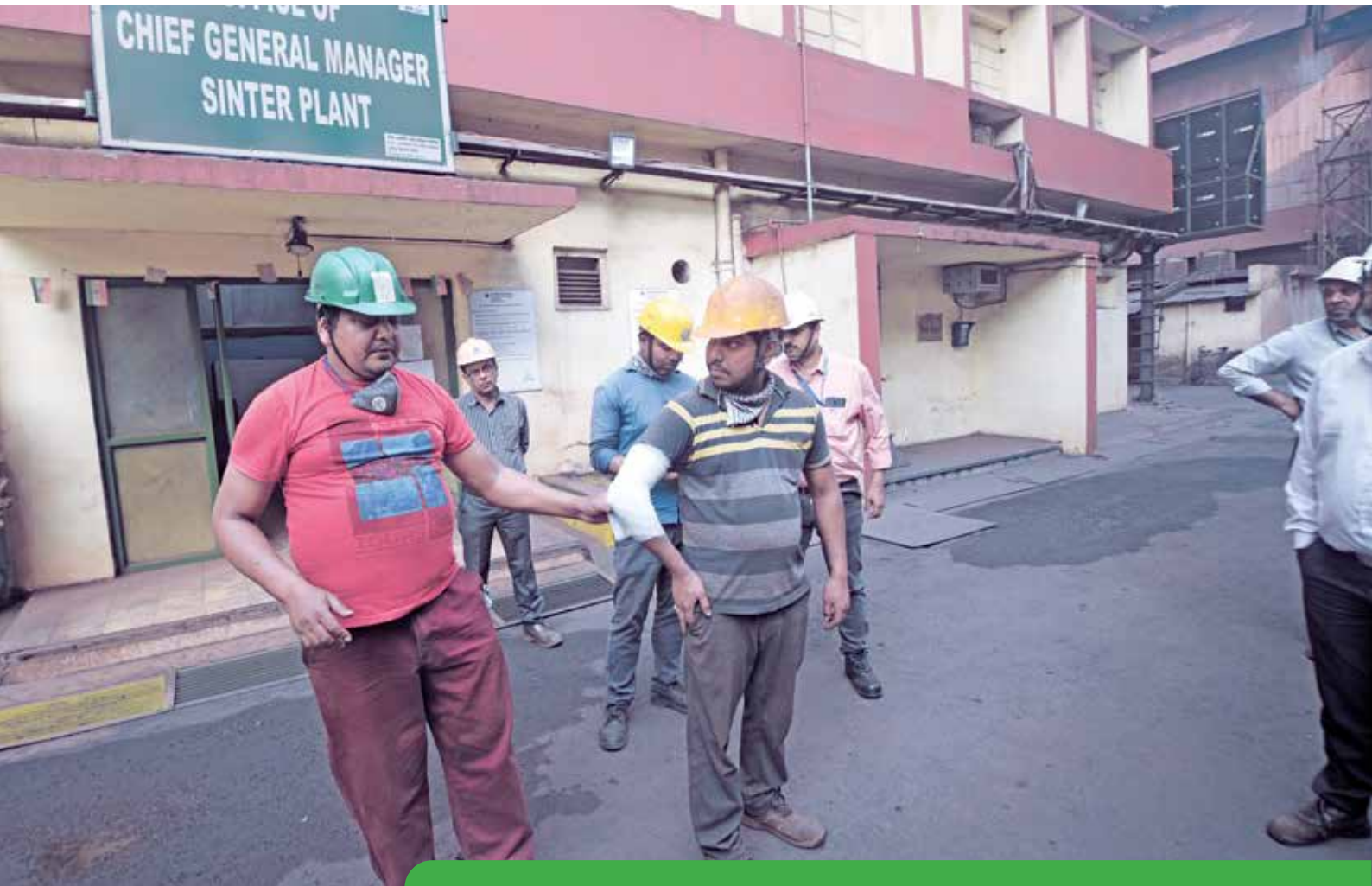
Disability assessment following any work injury through Disability Medical Board, Redressal of complaint cases from work places / departments, Job rotation based on deviation found in PME & recommendations of DMB being implemented by redeployment Committee, documenting follow up & feedback.

Facilities

Lung Function Test, Biochemical investigation, Clinical Pathology, Digital X-Ray, Vision Test, Health Education & Training, OHS Library, ECG, Psychology, Health Information System, Audiometry etc. Occupational Health Research: Fundamental research in various areas of occupational health is considered to be one of the prime activities of OHS centers. Several scientific papers are published and presented on regular basis in the National and International Journals & Conference proceedings on Occupational health & Ergonomics. Several National Institutes & Universities have a close coordination with OHS centres and many post-graduate students have completed their Master's programme thesis under the guidance of OHS professionals.

Salient Activities undertaken by OHS Centres

- Periodical Medical Examination of 34,073 employees carried out.
- OHS OPD services provided to 92,396 employees.
- 594 Training programmes conducted by OHSC covering 13,169 participants.
- Special Days like World Day for Safety & Health at Work, International Yoga Day, World Malaria Day, International Women's Day, National Occupational Health Day, World No Tobacco Day, World Diabetes Day & World AIDS Day celebrated.



Work Related Health Data

(GRI 403-10)

Sl. No.	DESCRIPTION	DETAILS
A	For Employees	
(i)	Number of fatalities as a result of work related ill health	NIL
(ii)	Number of cases of recordable work related ill health	NIL
(iii)	Main types of work related ill health	NA
B	For all workers who are not employees but whose work place is controlled by the organisation	
(i)	Number of fatalities as a result of work related ill health	NIL
(ii)	Number of cases of recordable work related ill health	NIL
(iii)	Main types of work related ill health	NA
C	Work related hazards that pose a risk of ill health, including	
(i)	Types of Work related hazards	Fuel gases, chemicals, Fire, Noise, illumination, Vibration, Dust, fumes and Heat
(ii)	How these hazards have been determined	The hazards have been identified through techniques such as HIRA (Hazard Identification & Risk Assessment), HAZOP (Hazard and Operability Study), hygiene survey, safety audits, safety inspections etc.
(iii)	Which of these hazards have caused or contributed to cases of ill health during the reporting period	NA

Sl. No.	DESCRIPTION	DETAILS
(iv)	Action taken or underway to eliminate these hazards and minimize risks using hierarchy of controls	The hazards & associated risks have been minimized / controlled using hierarchy of controls as mentioned below: • Elimination: by incorporating necessary measures in design stage. • Substitution: by replacing the hazardous substance with lesser ones and reducing human interaction with the machine. • Engineering Controls: by using state of the art technology • Administrative Controls: through training programmes & mock drills etc. • Personnel Protective Equipment: such as safety helmet, safety shoes, ear muffs/ plugs, full body harness, flame retardant garments, gas monitors etc.
D	Whether and if so, why any worker has been excluded from this disclosure, including the types of worker excluded.	NA
E	Any contextual information necessary to understand how the data have been compiled, such as any standards, methodologies and assumptions used.	The data of OHS are analyzed through standard statistical methods

Safety Statistics (Plants, Units and Mines)

(GRI 403-5, 403-9)

Injury Rate (per 200,000 hours worked)

2021-22	2022-23	2023-24
0.06	0.04	0.05

Mandays Lost*

2021-22	2022-23	2023-24
1,625*	1,184	971

**Excluding Mandays lost on account of fatal accidents*

Accidents by Category (nos.)

YEAR	2021-22	2022-23	2023-24
Regular Employees	40	28	33
Contractor Worker	50	35	42

Total Nos. of Safety Training Imparted

YEAR	2021-22	2022-23	2023-24
Numbers	97,214	1,59,833	1,92,490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Human Resource

Human Resource

(GRI 2-7a, b, c, d, e, 2-8a, b, c)

Human Resource Management involves the management of an organization's workforce to achieve business objectives. This includes fulfilling the organization's staffing needs and maintaining ideal workplace conditions. The HR department accomplishes this by utilizing HR strategies and policies focusing on the work force. With a view to achieve its objectives, several disciplines and facilitating elements including industrial psychology, business management, analytics and sociology are used for a comprehensive approach to managing an organization's most important asset, its workforce. The role of HR department encompasses all issues related to people such as hiring/ recruiting, training/skill development, compensation & benefits, wellness, communication, administration and safety.

The workforce of the company, the most valuable asset of any organization, is a dynamic resource that needs to be managed effectively in order to achieve the business goals. Human resource department in SAIL goes beyond the hiring process and also plays a crucial role in the day to day operations. The importance that an organization accords to human resource management gets reflected through the success of an organization.

The manpower strength of the SAIL was 55,989 as on 1st April 2024 based on reports furnished by all Plants, Units and Mines. The labour productivity during the year was 579 TCS/Man/Year. Despite reduction in manpower, improvement in productivity could be achieved as a result of judicious recruitments, competency building, availability of learning opportunities for employees, building a sense of commitment & passion among employees to excel and strengthen the Company culture. Manpower numbers vary on year to year basis on account of superannuation and other separations (death, resignations etc.). As regards the labour deployed by various Contractors under various job contracts, their numbers was 72,141 as on 1st April 2024 as reported by Plants, Units and Mines of SAIL. Their numbers fluctuate depending upon the job contract awarded by the respective Plants, Units and Mines. The ratio of employees in the gender category (Female/ Male) remains at 6.3:93.7.

Name of Plant/ Unit	Permanent (Gender-wise manpower as on 1.4.2024)				Total SAIL Manpower as on 1.4.2024	Contract Labour (As on 1.4.2024)
	Executive		Non-Executive			
	Male	Female	Male	Female		
BSP	2351	228	11884	656	15119	19136
DSP	1110	57	6025	315	7507	5661
RSP	1679	120	10042	609	12450	16586
BSL	1805	175	8558	559	11097	13077
ISP	921	63	3752	198	4934	6732
ASP	132	8	413	25	578	1106
SSP	161	17	587	27	792	846
VISL	42	6	183	15	246	1259
CCSO	12	0	29	1	42	16
CMO	366	157	284	78	885	2375
RDCIS	131	13	23	6	173	190
CET	167	11	8	6	192	47
MTI	17	4	17	3	41	50
CO	147	62	100	23	332	0

Name of Plant/ Unit	Permanent (Gender-wise manpower as on 1.4.2024)				Total SAIL Manpower as on 1.4.2024	Contract Labour (As on 1.4.2024)
	Executive		Non-Executive			
	Male	Female	Male	Female		
GD+SGW	13	0	1	0	14	541
EMD	7	5	8	1	21	3
SSO	15	0	3	0	18	0
SRU	99	7	321	20	447	1956
CFP	57	5	92	2	156	578
Coll.	117	2	787	39	945	1982
Total	**9349**	**940**	**43117**	**2583**	**55989**	**72141**

Harmonious Employee Relations

(GRI 2-30, 3-3, 402-1, 407-1)

Positive employee relations play a vital role in accomplishment of organizational tasks and goals. Management of employee relations in the workplace helps build effective teams where employees respect 3& trust each other, are open to implementation of new ideas and work seamlessly as a team. Harmonious relationship between employees and employers contributes to increase in efficiency, higher productivity and improvement in various other efficiency parameters thereby leading to the overall growth and development of Organization

SAIL has maintained its glorious tradition of building and maintaining a conducive and fulfilling employer-employee relations environment. The healthy practice of sorting out and settling issues through discussions with trade unions/ workers' representatives enabled in ensuring workers' participation at different levels and establishing a peaceful industrial relations climate. Some of the bipartite forums are functioning since early seventies and are sufficiently empowered to address different issues related to wage, safety and welfare of workers, thus, helping in establishing a conducive work environment.

Existence of bipartite forums like National Joint Committee for Steel Industry (NJCS), Joint Committee on Safety, Health & Environment in Steel Industry (JCSSI)have facilitated safe and harmonious work culture. The said bi-partite forums have workers' representatives of Plants / Units belonging to major Central Trade Unions. These forums hold meetings periodically and jointly evolve recommendations / action plans for ensuring a safe environment and strong work culture which gets substantiated from the harmonious Industrial Relations witnessed over the years by SAIL Plants/ Units, marked with SAIL work culture at multi-locations. The Company believes in workers' participation and promotes involvement of workers in various organizational activities such as Quality Circles, Suggestion Schemes, Shop Welfare Committees, Safety Committees, Canteen Management Committee, Production-Productivity Committee, etc. Workers are also kept abreast of strategic business decisions and their views sought thereon through structured / interactive workshops.

All non-executive employees / workmen of SAIL who are on permanent rolls of the Company are covered under wage settlement finalized in National Joint Committee for Steel Industry (NJCS) which is the apex bi-partite body in SAIL comprising of Management and Workers representatives.

NJCS comprises of workers representatives from major Central Trade Union Organizations, representatives from recognized Unions of SAIL Steel Plants and RINL and Management representatives of SAIL & RINL. Cordial industrial relation ambience with trade unions/workers' representatives is maintained by a healthy practice of continuous communication and dialogue which helps in settling issues through participative discussions. The recommendations/ action plans for wages and benefits for non-executive employees are evolved jointly based on discussions amongst workers representatives and Management. This kind of an environment in the organization which promotes trust, respect and camaraderie, inter-alia, a common SAIL culture has led to growth & development, reduction in turnover of manpower, exposure to intra-company best practices, enhanced motivation,enhanced employee loyalty and improvement in financials. The discussions and agreement in NJCS inter-alia includes and covers issues such as Productivity, Safety, Health and Environment.

As per the terms of Wage Agreement, the Unions can submit their Charter of Demands 6 months before expiry of the Wage Agreement arrived in NJCS. Also, at the time of negotiation, date and time of meetings of NJCS forum are decided with mutual consent of both the parties i.e. Management as well as Unions.

In the case of Executives, the Steel Executives' Federation of India (SEFI) - the apex body representing the executives in SAIL, takes up various issues concerning executives including their remuneration. There is no incident with respect to operations and suppliers in which the right to freedom of association and collective bargaining may be at risk.

There is no incident with respect to operations and suppliers in which the right to freedom of association and collective bargaining may be at risk.

Recruitment & Remuneration Policy

(GRI 3-3, 202-1, 202-2,401-1, 404-3,405-1, 405-2, 406-1)

SAIL clearly specifies the pay package / remuneration in the advertisement notifying the vacancy / role and this act promotes transparency and equity right from the very beginning of the hiring process. SAIL as a responsible and transparent organization makes sure of taking the aforementioned step when planning for a recruitment.

Recruitment & remuneration complement each other. SAIL believes in hiring and retaining the best talent irrespective of sex, caste, creed, or religion. The selection process is well structured, transparent and follows the laid down norms of a Government organization. Thus, SAIL complies with Presidential Directives issued by Government of India for ensuring representation of disadvantaged section of society viz. Scheduled Caste (SC) / Scheduled Tribe (ST) / Other Backward Class (OBC), Persons with Disabilities (PWD), Economically weaker section (EWS)& ex-servicemen (ESM) and carry out the recruitment with the reservation specified by Government.

The candidates from the disadvantaged section of society are being provided with relaxation in eligibility criteria like age, educational qualification, qualifying marks, fees etc. It is a part of the Board approved codified Recruitment Policy. Interview Committees / Selection Committees which carry out the Recruitment has the mandatory representation from the said Groups such as SC / ST / OBC / Minorities for ensuring fairness in selection. Special Recruitment Drive especially for the qualified candidates belonging to disadvantaged section of society is also carried out to liquidate any shortfall in their numbers vis-à-vis reservation percentage stipulated in Presidential Directive. SAIL also promotes inclusion of local people in various kinds of jobs through local employment exchange, and also through open advertisement for recruitment purpose. Locally Displaced People are also sponsored for undergoing training at ITI and thus get an opportunity for employment.

In SAIL, the upper age limit for entry level positions is 28 years. In 2023-24, a total of 777 nos. of new employees were hired across SAIL, out of which 181 were executives and 596 were non-executive workers. Out of the total newly recruited employees, 72 were females (9.26%). Turnover rate for permanent employees in 2023-24 was around 6.7%.

SAIL provides equal and uniform benefits to its workforce. All employees (non-executive and executive) are being paid salary / wages irrespective of their gender, caste, creed, religion, region etc. There is no discrimination in payment of Wages / Salaries. The wages of non-executive employees are based on negotiated agreement under National Joint Committee for Steel (NJCS), whereas the salary of Executives is based on applicable government guidelines issued on the subject. There is a robust Performance Management System in SAIL whereby all executives are evaluated by the reviewing and reporting officers every year to assess their performance and part of their annual remuneration is linked to the Company's performance and their performance.

For contract labours engaged under various job contracts by Contractors, the payment is made to them by the Contractors which is over and above the minimum wages. It would be pertinent to mention that the minimum wages of contract workers are fixed by the respective State government for that location, without any gender differentiation.

HR Systems and Processes

(GRI 3-3, 401-3, 402-1)

The human resources management system of SAIL ensures that HR processes are manageable and easy to access. Human resource information systems provide a means of acquiring, storing, analyzing, and distributing information

to various stakeholders. Workers' participation at SAIL, at different levels, right from National level up to shop-floor level, is ensured through an established system of negotiation. Fair dealing & compliance on labour issues are ensured by the designated Labour Welfare Officers of the respective Plant/Unit/Mines.

The three key benefits of having a structured HR system makes it efficient and impartial. It also helps the organization to make informed business decisions and enhances employee engagement by connecting with employees.

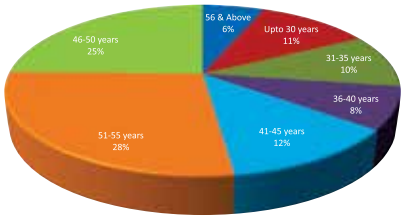
There is no discrimination between employees and SAIL believes in providing the right opportunity to the most deserving employee. The HR department regularly monitors fairness in activity and services of the Company.

The Company encourages Freedom of Association, as enshrined under the Constitution of India and envisaged in the Trade Union Act. The Right to exercise the Freedom of Association and Collective Bargaining in SAIL's operations is also actively used at SAIL.

SAIL is a Central Public Sector Enterprise with Government having 65% stake. SAIL is committed to protect the Fundamental Rights of the workforce as described in the Constitution of India. Human Rights are necessarily being complied by SAIL. The Government of India through its Administrative Ministry i.e. Ministry of Steel regularly monitors the performance of SAIL on various parameters. As a result of this, the Company is proud that there was no recorded case during the reporting year on any violation of Human Rights. Efforts have been made to implement and manage Succession Planning and Career Development policy in respect of all employees. Accordingly, regular performance and career development reviews are done for all the employees.

Aspects of Human Rights are communicated to all the vendors & suppliers through implementation of SA 8000. SAIL arranges for training & awareness workshops for employees on different aspects of SA 8000 which cover areas relating to child labour, forced labour, non-discrimination, freedom of association, safe work environment and health & safety. The SA 8000 clause on abolition/prohibition of child labour includes employment of persons of age 18 and above as a precondition to partnering with SAIL. In the event of any kind of violation of aforesaid SA 8000 clause by any vendor within or outside the Company premises, liabilities for the education of the child until the completion of high school accrue to the defaulting party. This condition is clearly communicated to all the vendors and suppliers during their engagement with the Company.

Being a large and multi-unit organization, the need for having uniform and codified rules and policies had driven the organization to evolve and bring about significant changes in the HR policies and rules over the years. In case of transfer from one Plant/ Unit to another, an employee, is extended benefits to cater to all their needs which include travelling allowance for self & family, transportation of personnel effects including packing charges. In addition, the transferred employee is given reasonable time to join their new place of posting i.e. six working days for change of station and one working day within same station. Sufficient time to execute the journey is also provided to the transferred employee. If the employee desires to retain facilities at previous location, permission for retention is also granted as per the Rules. A well-structured exit policy is also in place at SAIL. As per codified rules of the company, an employee has to serve notice period as specified in their employment offer after putting in the resignation.



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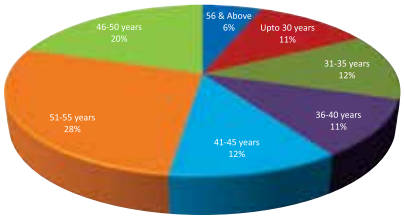
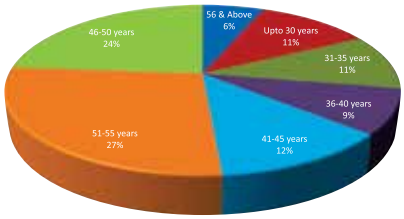


EXECUTIVE



TOTAL

SAIL encourages employees to a have a healthy work life balance which creates an environment where everyone is dedicated to the work at hand. Maintaining work-life balance helps reduce stress and helps prevent burnout in the workplace. By creating a work environment that prioritizes work-life balance, employers can maintain a healthier, more productive workforce. To support work life balance, appropriate leave policies are available for the employees. All regular employees enjoy benefits like Health care, Disability /Invalidity coverage, Maternity Leave, Retirement Benefits. A female employee may be granted maternity leave for a period of 180 days with pay from the date of its

commencement. A women employee may be granted child care leave of 730 days without pay during her entire service period for taking care of two surviving children. Also, the workman engaged by the Contractors in establishments of SAIL, are covered under the ESI Benefits.

SAIL also provides its employees with various social benefits in the form of housing, education, civic amenities, sports &recreation, and social welfare. Full-fledged townships have been developed over the years at all Plant locations with modern infrastructural facilities along with premier schools, super specialty hospitals, shopping malls, multiplexes, parks, gymnasium, and stadiums which enable employees and their families to lead a comfortable life replete with all modern amenities.

Communication with Employees

Clear two way communication is vital for the health and strength of a company. Without it, managers would not be able to properly lead the Teams and achieve the Organizational goals. The more effectively a business executes an employee communication strategy, the more successful it will be. SAIL feels that employees who communicate effectively with colleagues, managers and customers are always valuable assets to an organization and it is a skill which can often set people apart from their competition when applying for various roles within the organisation.

Communication is done in a structured manner with employees at various levels on a wide range of issues impacting the Company's performance as well as those related to employees' welfare across the Company. Mass communication campaigns are undertaken at Director In-charges' / Senior Officers' level involving structured discussion with large group of employees. These interactive sessions help employees to align their working with the goals and objective of the Company leading to not only higher production and productivity but also enhance the sense of belongingness of the employees. It also helps in maintaining workplace harmony, improves employee experience, encourages innovation and increases inter-departmental co-operation.

Grievance Redressal Mechanism

(GRI 3-3)

A grievance mechanism is a procedure that provides a clear and transparent framework for addressing grievances related to employees in the workplace. This typically takes the form of an internal procedure for complaints, followed

by consideration/examination and management response and feedback. To achieve consistent treatment in the handling of grievances at the workplace, well laid out procedures have been defined at SAIL to defend employee rights. Effective internal grievances redressal machinery has been established at SAIL Plants and Units, separately for executives and non-executives. Joint grievance committees have been set up at Plant/Unit level for effective redressal of grievances. The employee is empowered to raise his or her grievance with the immediate supervisor. If the decision taken by the supervisor is not acceptable to the aggrieved employee, he or she can approach the next higher level in the management for redressal of grievance. Majority of grievances are redressed informally in view of the participative nature of environment prevailing in the Steel Plants / Units. The system is comprehensive, simple and flexible and has proved effective in promoting harmonious relationship between employees and management.

SAIL Plants/Units maintain 3 stage grievance handling mechanism. The employees are given an opportunity to raise grievances pertaining to areas relating to wage irregularities, working conditions, transfers, leave, work assignments and welfare amenities. A total of 273 numbers of staff grievances were received during the FY 2023-24 in addition to the 11 grievances that were pending and carried forward from previous year. Out of the aforesaid, 252 staff grievances were disposed of during the year, achieving 89% fulfillment and only 32 grievances remained outstanding at the end of FY 2023-24.

Human Rights

(GRI 3-3, 408-1, 409-1, 410-1, 411-1)

SAIL deeply values the vital role that companies can play in safeguarding and promoting human rights in the long term. As a leading corporate, SAIL recognizes it's responsibility to uphold the spirit of human rights, as outlined in existing international standards, such as the Universal Declaration and the Fundamental Human Rights Conventions of the International Labour Organization. SAIL's commitment extends to respecting the human rights of it's workforce and all individuals associated directly or indirectly with it's operations including the contractors, suppliers and even their employees. To achieve this, SAIL continuously strives to adhere to the recognized frameworks.

Accordingly, SAIL has put in place 'Human Rights Charter', to express & steer it's commitment to carry out the business with ethical values and embrace practices that support human rights in every aspect of its function. Through the charter, SAIL strives to ensure that human rights are safeguarded throughout it's operations, and it continues to nurture an environment where dignity, fairness, and respect are fundamental values for all stakeholders involved.

SAIL Human Rights Charter is available to all stakeholders' at SAIL Website and SAIL Intranet Portal of the Plants/Units.

SAIL continues to adhere to its human rights objectives and there are no known cases of discrimination or any violations of human rights at SAIL, including incidents of child, forced labour or rights of indigenous people.

In SAIL Plants/ Units, Central Industrial Security Force (CISF), a Government Security Force, has been entrusted with the security arrangements. The said specialized Security Force specializes in Industrial Security of Steel Plants and are deployed only after proper training in all aspects of Human Rights. For other non-core areas, security personnel are engaged through security agencies that deploy ex-servicemen.

Diversity, Inclusion & Belonging

(GRI 3-3, 406-1)

SAIL is committed to foster an enabling work-environment that values diversity, promotes equality, and ensures that all employees &the business partners, regardless of their social & cultural backgrounds, have equal opportunities to thrive and reach their full potential. SAIL actively encourages diversity by embracing employees from various backgrounds, cultures, and experiences. SAIL believes that diverse perspectives enrich the organization and lead to innovative solutions. SAIL's commitment to equal opportunity ensures that all hiring and promotion decisions are based on skills, qualifications, and merit, without any discrimination based on factors such as gender, religion, caste, ethnicity, or disability. By fostering understanding to address unconscious biases, cultural differences and respectful communication, SAIL has been able to create an inclusive work environment where every employee feels valued and heard.

Medical Facilities for Employees

(GRI 201-3, 401-2)

SAIL is committed to health and well being of its employees and has made consistent efforts towards ensuring holistic health of its employees. SAIL, the largest steel producer of India, in its endeavour to maintain a healthy workforce focuses on promoting and maintaining the health of its employees by providing them a conducive and healthy environment to work, and an efficient and advanced health care system with a balance of preventive, promotive and curative measures. As employees' health and wellness is of paramount importance to the Company, SAIL provides its employees with a range of options for medical facilities. These medical and health facilities are available to all employees, even post-retirement.

The Company has extended its medical and healthcare facilities to the serving employees and the eligible dependent family members of the employees. SAIL boasts of a huge medical setup comprising of multi-specialty Hospitals and Primary Health Centres, located across its Steel Townships. In case the required treatment/cure is not available at SAIL hospitals, the employees (& their dependents) are referred for medical treatment to hospitals located pan-India as per rules and requirement. For the city based employees and their eligible dependents, where SAIL's own hospitals are not available, employees are provided comprehensive medical facilities in the empanelled reputed hospitals. The facility of reimbursement of medical expenditure is also permissible for expenses incurred in non-empanelled setups as per rules & approved provisions.

A Mediclaim Scheme has been in operation in SAIL since 1991 for all retired employees and their spouses. The Mediclaim Scheme being operated by SAIL has evolved over the years. SAIL Mediclaim Scheme is amongst the largest group Mediclaim Schemes in India. The premium payable by the beneficiaries for SAIL Mediclaim scheme is highly subsidized.

Employee Family Benefit Scheme (EFBS)

SAIL also has a novel welfare scheme namely EFBS which establishes that SAIL believes in taking care of the employees at the time of distress. Employee Family Benefit Scheme (EFBS) supports families in cases of death of an employee while in service or on account of Permanent Total Disablement.

Employees Superannuation Benefit Fund

(GRI 201-3)

Employees Superannuation Benefit Fund (SESBF) at SAIL exhibits the Company's commitment towards its employees even after their retirement. SAIL employees contribute @ 2% of their Basic Pay plus DA towards SESBF. The SESBF Fund is managed by a Trust representing Unions, SEFI and Management.

Training & Development

Training & Development

(GRI 3-3, 404-1, 404-2)

At SAIL, the training functions are validated by an apex body known as Training Advisory Board (TAB). It is an advisory body on training matters and its key role is to fix the goal and set a direction for focussing on future training needs. TAB is headed by the Chairman and has Directors and CEOs of the Company as its members. At the Plant/Unit level there is a Training Advisory Committee (TAC) to oversee and monitor the implementation of training and development initiatives in line with TAB guidelines. TAC is attended by zonal and departmental heads and chaired by the respective Director In-charge. With this hierarchal set up, these bodies generate several organizational learning needs and thrust areas which are included in the annual development plans.

The Annual Training Plan (ATP) is an important arrangement that forms the basis for enhancing the competencies of all employees. The Training & Development team at SAIL prepares this Plan for each Plant/Unit covering new entrants, executives and non-executives.

Management Training Institute (MTI) is the apex training institute of Steel Authority of India Limited and is catering to the managerial training needs of senior executives of the company and other organisations by imparting a very high standard of training and related support services. MTI conducts over one hundred and thirty training programmes per year covering over 3000 senior executives of SAIL in different areas of management. This includes General Management Programmes, Functional Management Programmes, Managerial Skill Development Programmes, and Customized Programmes based on requests from Plants and Units.

MTI has designed mechanisms like training to bridge the Critical Skills Gaps, Learning from Each Other (LEO) Workshops to share the best practices, Performance Improvement Workshops (PIWs) aimed at resolving specific technical issues & problems arising at shop floor, through collaborative activities. Interface Workshops between organizational units (customer and supplier) to provide an opportunity to understand each other's problems and enable the personnel to mutually appreciate each other's role and the impact on the overall organizational performance. Action plans are built for addressing issues covering production and productivity, cost reduction, maintenance, housekeeping, and safety at the respective area / shops.

MTI uses competitions as triggering mechanism for self-learning through exploration by providing a context and goal for learning. Some of the important competitions conducted by MTI are Chairman's Trophy for Young Managers (to encourage research at the workplace on issues critical for the organization), Anubhav: The Case Study Competition (to encourage case study writing); and UDAAN (Corporate Business Quiz).

The Faculty of MTI has a rich blend of academics and industry experience with specialization in different functions like Finance, HR, Marketing, Projects, OB etc. In specific areas, MTI takes support of eminent business consultants and senior practicing managers as faculty. The top and senior executives of the Company also interact with the participants. Committed service teams who make MTI a home away from home; back them with exemplary dedication to the wellbeing of our guests.

MTI is on the path of making its training world class and is making relevant networking with professional institutions. In the wake of SAIL's modernization program, MTI has joined hands with technological leaders to support technical training for Plants & Units by signing MoUs with world renowned technology suppliers – SKF Ltd, Siemens Ltd, Bosch Rexroth Ltd.

MTI on behalf of SAIL has signed an MoU with IIM(Raipur) and IIM(Ranchi) to collaborate on academics activities and HRD interventions.

The special initiatives taken by MTI for L&D recently are as under:

A. Digital Outreach

1. A series of online interactions under the name Antardrishti are being organized for senior executives with thought leaders to share insights and discuss the nuances of the topics.

   Some of the topics covered are-

   - Leveraging Networks for Organizational Excellence
   - Dialogue with thought leaders on Overcoming Challenges in Digital Transformation
   - Impactful Business Communication and Storytelling for Senior Leaders
   - Cultural Transformation for Execution Excellence through Total Productive Maintenance

2. Anveshan-Knowledge byte session for Reverse mentoring on topics such as
   - Internet of Things
   - Government e-Market Place (GeM)
   - AP S4 HANA
   - Beyond the *inbox-email.gov.in*
   - Introduction to AI/ML

3. Abhyuday-Cohort Learning session for Harvard Manage Mentor (HMM) on topics such as-
   - Stress Management
   - Strategic thinking
   - Leveraging Global Collaboration and Crisis

4. To cater to the need of capability building for digital transformation, SAIL has forged a partnership with the FutureSkills Prime - India's Technology Skilling Hub, which is a joint initiative by nasscom and MeitY for upskilling its employees in emerging technologies. An MoU was signed between SAIL & FutureSkills Prime, on 1st September 2023. All executives of SAIL have been onboarded on the FutureSkills Prime platform for learning various courses on emerging technologies from basic modules to deep skilling. 20000+ modules have been completed as of now.

B. Training as a Learning Journeys has been introduced for sustaining long term interventions involving multiple interactions in blended mode.

i. AANYA-Leadership development journey for select female executives

ii. TARANG-Leadership development journey for Young Managers

iii. Coaching-Leader as Coach is a 3 phase intervention with focus on developing internal coaches with follow-up through Nudge sessions and ICF Coaching Certification Program- The Art & Science of Coaching Peer coaching sessions being done continuously in triads among participants.

C. Interventions on emerging issues of ESG

i. Environment Protection and Innovation for Carbon Reduction (EPIC)- 5 modules developed by CTYM finalists of 2022-23 for delivery at Plants during a Special Workshop. Based on EPIC modules, RSP has launched Vasundhara and BSL organised Awareness Session for HOD's & Training Engineers.

ii. Seminar on Green Steel organized by SMS Group at MTI covering 77 participants.

iii. Workshop on CO_2 Calculation methodology & SAIL Roadmap organized.

D. e-Learning Interventions

i. LinkedIn learning – 440 users have undergone various course through videos, Learning Paths, articles, etc. on the World class AI based LinkedIn learning platform. Approx 14985 learning hours completed.

ii. Harvard Manage Mentor (HMM) – 41 e-learning modules have been launched for ADC assesses of E6-E7 grade. 3789 courses completed since launch from Sept'23.

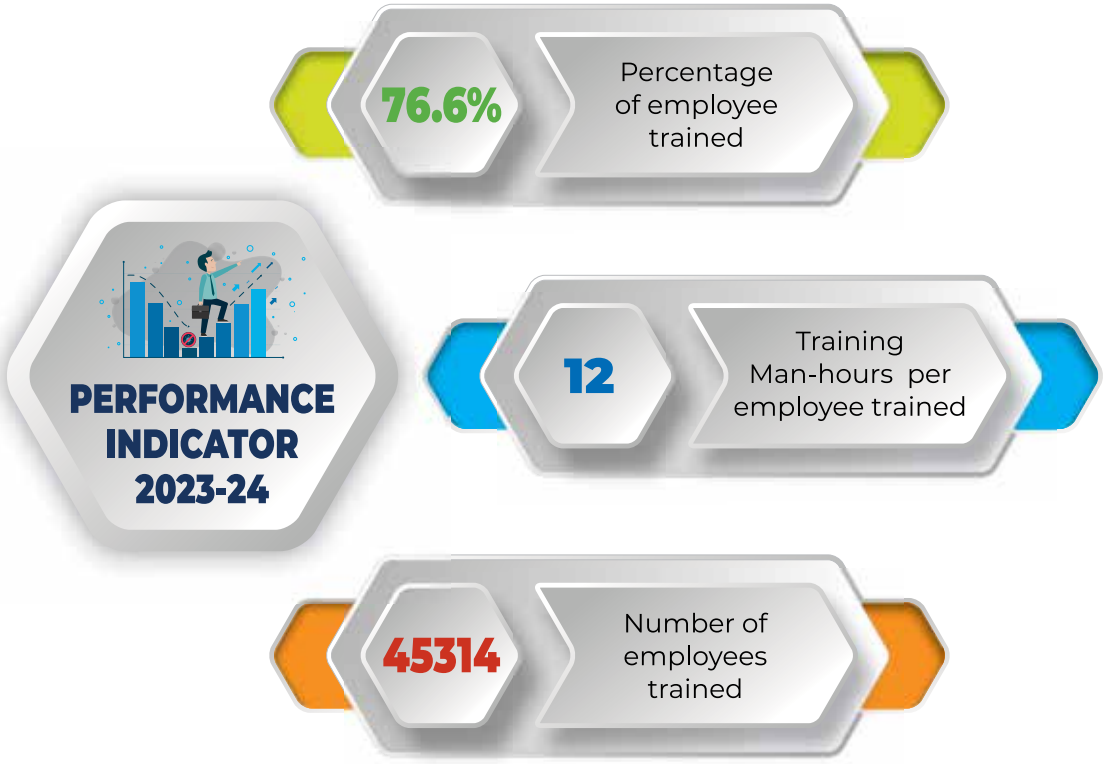
iii. Asynchronous Online learning through FutureSkills Prime- AROHAN- Campaign launched for FSP enrolment. 23000+ modules have been completed and Badges.

iv. Enrolments in e-Pathshala scheme- 475 enrolled .

Average Hours Training Profile for 2023-24

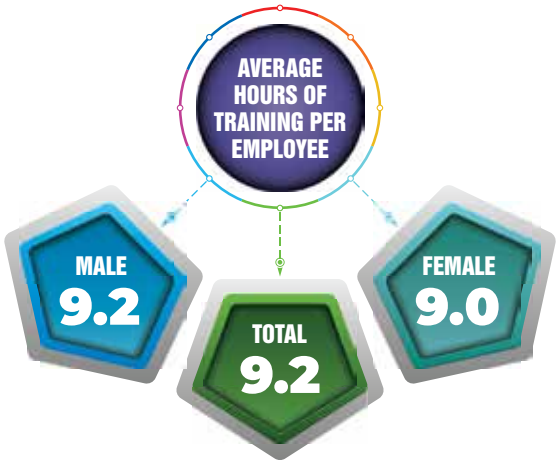
Particular	Executive	Non-Executive	Total
External Training (including MTI/CPTI)	32892	8604	41496
Foreign Training	1068	168	1236
Specific Areas	88860	226044	314904
Managerial Competence Enhancement	36408	19404	55812
Technical Competence Enhancement	30984	60648	91632
Fresh/New Entrants	6720	13884	20604
Other Areas	9468	8616	18084

Average hours of training undertaken by employees during 2023-24

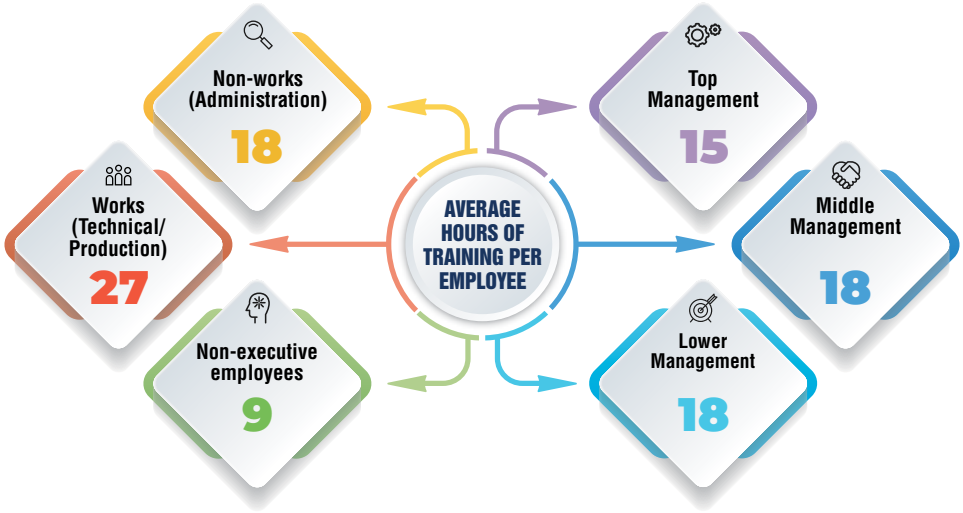


Training programmes at SAIL provide its employees with lifelong learning and skills that not only enables a successful and fulfilling career at SAIL but also benefits them in their retired life.

Gender-wise



Employees-wise




A CSR Initiativ
DURGAPUR ST

Community Development

Community Development

(GRI 3-3, 203-2, 413-1, 413-2)

SAIL's Social Objective is synonymous with Corporate Social Responsibility (CSR). Apart from the business of manufacturing steel, the objective of the company is to conduct business in ways that produce social, environmental and economic benefits to the communities in which it operates. For any organization, CSR begins by being aware of the impact of its business on society.

With the underlying philosophy and a credo to make a meaningful difference in people's lives, SAIL has been structuring and implementing CSR initiatives right from the inception. These efforts have seen the erstwhile obscure villages located around SAIL Plants, turn into large industrial hubs today.

SAIL's CSR initiatives are inspired by Isha Upanishad, Gandhiji's theory of trusteeship of property which gives a strong philosophical foundation to business ethics and social responsibility. We treat local communities as prime stakeholders in our business process. Accordingly, for us CSR begins by being aware of the impact of our business on society. By virtue of its business, SAIL Plants/ Units including Mines are located in remote areas of the country touching lives of millions of people in terms of livelihood, culture, respect for local traditions and growing along with the community.

SAIL CSR initiatives have always been undertaken in conformity to the CSR provisions (Section 135) of Companies Act, 2013, its Schedule-VII, CSR (CSR Policy)Rules, 2014, and CSR Amendment Rules, 2021 & 2022. SAIL carries out CSR projects mainly in periphery of steel townships and mines in the thrust areas falling in line with the Schedule-VII, namely,Promotion of Education and Health, Women Empowerment, Sustainable Income Generation through Self Help Groups, Assistance to Divyangs (People with Special Abilities), Access to Water and Sanitation facilities, Village development, Environment sustenance, Sports coaching, promotion of traditional Art and Culture, etc.

Highlights of SAIL-CSR

SAIL CSR initiatives

(GRI 3-3)

Healthcare: SAIL's extensive and specialised Healthcare Infrastructure provided specialized and basic healthcare to nearly 183.74 Lakh people living in the vicinity of its Plants and Units during the period 2011-24. Surgeries like Cataract and lens implant, cleft lip and palate disorder, polio-leg correction, etc. are conducted. Treatment of hearing impaired, anemia and identification and counseling of Sickle cell and Thalassemia patients, women with gynecological disorders, Leprosy and Tuberculosis patients is provided free of cost.

In order to deliver quality healthcare at the doorsteps of the needy, regular health camps in various villages on fixed days are being organized for the people living in the periphery of Plants/Units, mines and far-flung areas. Health Camps and 5 Mobile Medical Units have benefitted about 1.80 Lakh in FY 2023-24at their doorsteps.

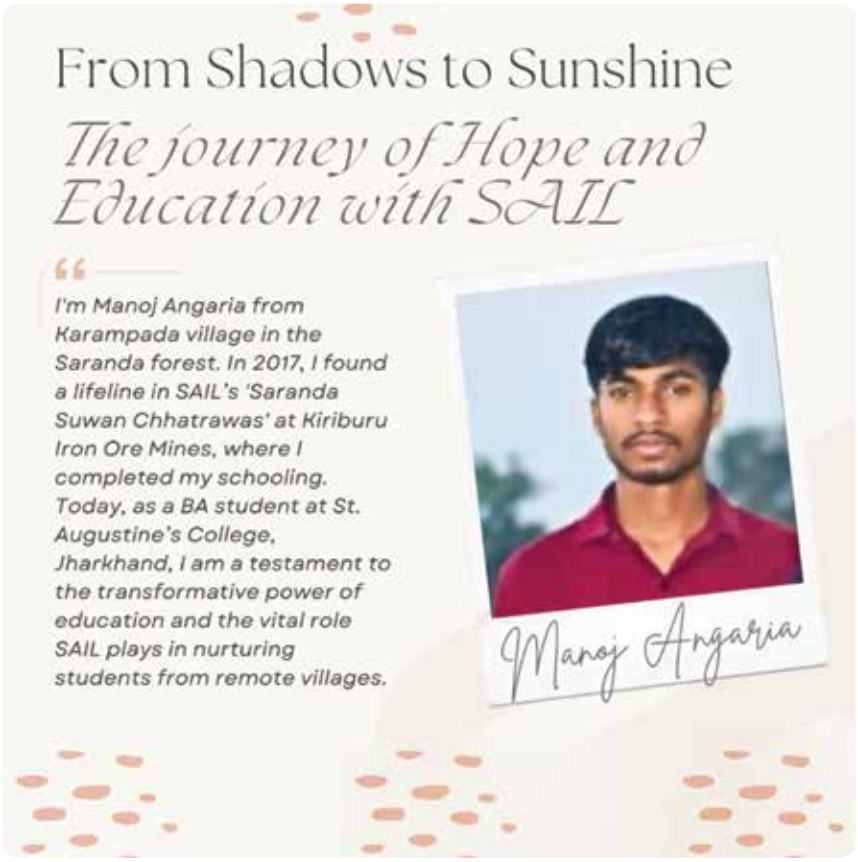
24 Primary Health centers at Plants exclusively provided free medical care and medicines to above 84,000 in FY 2023-24.

A day-long Health Camp at Village Kargadih

Education: To develop the society through education, SAIL is supporting about 77 schools providing modern education to more than 40,000 children in the steel townships and is assisting 600 Govt. schools in Bhilai and Rourkela with about 60,000 students by providing Mid-day meals and dry ration kits in association with Akshya Patra Foundation. 22 Special Schools (Kalyan, Mukul & DAV Vidyalayas) benefitting around 12,026 BPL category students at integrated steel plant locations with facilities like free education, mid-day meals, uniform including shoes, text books, stationary items, school bags and water bottles, etc., are running under CSR.

Mid day meals through Akshaya Patra Foundation

- More than 450 children from tribal and naxal-affected/Aspirational Districts are getting free of cost comprehensive educational facilities viz. Schooling, Meals, Uniforms, Textbooks, Accommodation and infrastructure, etc. at Saranda Suvan Chhatravas and Central School, Kiriburu; Gyanodaya Chhatravas, BSP School Rajhara, Bhilai; Gyanjyoti Yojna, Bokaro DAV schools-Nandini & Kuteshwar Mines, and other schools.



Free of cost comprehensive educational facilities

- Over 1000 school students are awarded annual scholarships in plant peripheries.
- **Gyan Jyoti Yojana:** Bokaro Steel Plant has introduced this scheme for providing education and holistic development for the children of Birhor tribe, which is at the verge of extinction. 15 Birhor children were adopted and provided free Education along with boarding, lodging, nourishing and wholesome food, clothing, free medical treatment, sports and cultural opportunities in a conducive atmosphere. They are the first Matriculates and 12th pass from their community. For Skill Development and better employability, 9 Matriculate Birhor Boys adopted under Gyan Jyoti Yojana had been sponsored for ITI training in "Welder trade" alongwith stipend of ₹ 2500/- each, accommodation and fooding facility at Bokaro Pvt ITI. Inspired from their achievements, 2nd batch of 15 Birhors adopted have similarly completed their education and ITI trainings. 3rd batch of 12 Birhor children has been adopted, who have begun their life in new surroundings.

A cheque for ₹ 114.8 lakhs for construction of 10 primary schools in the far-flung villages of Kabirdham was handed over to District Collector in his office by CSR Dept of Bhilai Steel Plant

Women Empowerment and Sustainable Income Generation: Vocational and specialised skill development training targeted towards sustainable income generation were imparted to 383 youths and 703 women folks in FY 2020-21, 223 youths and 1306 women in FY 2021-22, 2265 youths and 2315 women in FY 2022-23 and during FY 2023-24 1578 youths and 2369 women have undergone skills trainings, in areas such as Nursing, Physiotherapy, LMV Driving, Computers, Mobile repairing, Welder, Fitter and Electrician Training Improved agriculture, Mushroom cultivation, Goatery, Poultry, Fishery, Achar / Pappad / Agarbatti / Candle making, Screen printing, Handlooms, Sericulture, Yarn Weaving, Tailoring, Sewing and embroidery, Gloves, Spices, Towels, Gunny-bags, Low-cost-Sanitary Napkins, Sweet Box, Bans/Jute Shilp, Smokeless chullah making etc.

- The above activities are being carried out at various centres located in and around steel plant and Mines locations such as Bhilai Ispat Kaushal Kutir, Swayamsiddha and PG College of Nursing: Bhilai with free Boarding and Lodging, Kishori: Rourkela, Shilpangan and Skill Development and Self Employment Training Institute: Durgapur, Low Cost Sanitary Napkins Unit andJ HARCRAFT: Bokaro,Vocational Training Centre and Mahila Mangal Sabha: Burnpur, Garment Technician Training: Salem, Self-Employment Centres 'KIRAN': Kiriburu and Meghahathaburu Mines, Aashaye Handloom: Gua, etc. SAIL is also instrumental in marketing of the products manufactured at such centers.

Handloom training under Project Kiran

- Approximately 490 youths have been supported for ITI training at ITCs Bolani, Bargaon, Baliapur, Bokaro Pvt ITI and Rourkela etc. The ITIs at Bolani and Bursua have been adopted for upgradation and operation by SAIL/RSP mines. Also, at Bokaro Pvt. ITI youths from the periphery are being trained in streams of Electrician, Welder and Fitter.

Women engaged in Mushroom Cultivation at SAIL IISCO Steel Plant, Burnpur

Infrastructure Development in Rural Areas: Over 79.03 Lakh people across 450 villages have been connected to mainstream by SAIL since its inception by constructing and repairing of roads. Over 8176 water sources have been installed and maintained,since inception, thereby enabling easy access to drinking water to over50lakh people living in far-flung areas.

Four new drinking water supply points at the Govt. Middle School in Kankaniur, Karukkalvadi Panchayat, and at Chamundi Nagar, Pon Nagar & Bharati Nagar in Maramangalathupatti Panchayat were inaugurated by Executive Director, Salem Steel Plant on 28/02/2024

Environment Conservation: To promote renewable sources of energy, Solar street lights have been installed in rural areas, Solar Lanterns and smokeless chullahs have been distributed among the rural people of Saranda and other locations. Maintenance of parks, botanical gardens, water bodies, plantation/maintenance of over 5 Lakh trees in its townships is being undertaken.

SAIL has supported setting up and operation of 100 KW Capacity Solar Power Plant at Jari, Gumla in Jharkhand.

Distribution of 500 saplings of fruit bearing trees to students by RSP

Support to Divyangs (Differently Abled) and Senior Citizens: Divyang (children/people) are being supported through provision of equipments like- tricycle, motorized vehicles, calipers, hearing aids, artificial limbs, etc. SAIL supports centers and programs at SAIL Plants like 'School for blind, deaf and mentally challenged children", Home and Hope' Rourkela, 'Ashalata Kendra' Bokaro, 'Handicapped Oriented Education Program' and 'Durgpaur Handicapped Happy Home' Durgapur, and 'Cheshire Home' Burnpur. Old age homes are being supported at different Plant townships like 'Siyan Sadan' Bhilai, 'Acharya Dham' & 'Abasar' Durgapur and 'Sr. Citizens' Home' Rourkela, etc.

Distribution of prosthetics and assistive devices by RSP

On 'International Day of Persons with Disabilities', i.e. 3rd December, 2023 SAIL Plants/Units distributed assistive devices to Divyangjans across the country. This priority programme of SAIL is continuing across several locations in the country under "Azadi Ka Amrit Mahotsav". Approx 3,000 Divyangjans have been benefitted with assistive devices like Tricycle, Motorized Vehicles, Calipers, Hearing Aids, Smart Phones, Smart Canes etc., provided through the implementing partner Artificial Limbs Manufacturing Corporation of India (ALIMCO).

SAIL has adopted, developed and is maintaining a Lepers Colony at Kajora through Durgapur Steel Plant wherein all the social and infrastructure facilities have been maintained.

Sports, Art and Culture and Heritage Conservation: SAIL is regularly organizing inter-village sports tournaments, extending support to major national sports events and tournaments. SAIL is also supporting and coaching aspiring sportsmen and women through its residential sports academies at Bokaro (football), Rourkela (Hockey) - with world class astro-turf ground, Bhilai (Athletics for boys), Durgapur (Athletics for girls) and Kiriburu, Jharkhand (Archery).

Academy at SAIL Steel Plant

- Bokaro Steel Plant organised Special Olympics Bharat(SOB) under National sports Preparatory Training Camps and also supported participation expenditure to the selected/trained Divyang athletes for Special Olympics Summer World Games 2023 (SOSWG 2023) at Berlin.

Adding another feather to their capabilities the SAIL Hockey Academy team beat FCI in the finals of All India Public Sector Hockey Tournament 2024.

Cultural events like Chhattisgarh Lok Kala Mahotsav, Gramin Lokotsav are organized every year. Conservation and maintenance of National heritage sites such as 5 monuments in the Lodhi Gardens at Delhi, "Ved-vyas" of Mahabharat fame historical site in Rourkela, etc. are supported by SAIL.

Folk dance presented during Synergy Lok Mahotsav

Disaster relief: SAIL, as a responsible corporate citizen, supported the rehabilitation initiatives for the people affected by National and Natural Calamities, the recent being Covid-19 pandemic throughout the country, flood ravaged Jammu and Kashmir, Phylin cyclone in Odisha, Flash Floods in Uttarakhand, etc.

McGibony, Institutional award to SAIL for efforts during COVID-19 pandemic

SAIL Employees Rendering Volunteerism & Initiatives for Community Engagement [SERVICE]: The SAIL supported volunteerism scheme [SERVICE] explicitly encourages and values employee volunteerism to benefit not only the ecosystem of SAIL but is an integral element of the Corporate Social Responsibility of SAIL. SAIL's investment in community involvement through its own employees also provide the impetus for building long-term loyalty, enhance legitimacy with the wider public, build trust and brand equity that, in turn, reinforces other strategic objectives of SAIL. Over 29,000 volunteers have registered on the SERVICE portal.

Special CSR Initiatives

(GRI 3-3, 203-1)

1. Aspirational Districts:

In order to provide comprehensive development of both physical and social infrastructure, SAIL has undertaken CSR activities in 6 Aspirational Districts, viz. Kanker, Narayanpur and Rajnandgaon in Chhattisgarh and West Singhbhum, Bokaro, Ranchi in Jharkhand and Banka in Bihar.

2. Model Steel Villages

In order to bridge the gap between rural and urban areas and to provide comprehensive development of both physical and social infrastructure, 79 villages were developed as "Model Steel Villages" across the country (in eight states). The developmental activities undertaken in these villages include medical and health services, education, roads and connectivity, sanitation, community centers, livelihood generation, sports facilities, etc. The facilities developed at these MSVs are being run and maintained regularly.

3. Swachha Bharat Abhiyaan-Swachha Vidhyalaya Abhiyaan

SAIL participated in the "Swachh Bharat Abhiyan" initiated by the Hon'ble Prime Minister of India. Under the campaign, 672 toilets were constructed in schools falling within the periphery of its Plants and Mines in the States of Chhattisgarh, W.Bengal, Odisha, Jharkhand, M.P. and Tamil Nadu. These toilets are being maintained by the respective School Management Committees. Awareness campaigns and Cleanliness drive are going on at various rural locations.

4. SARANDA Forest Development

In an effort to bring the marginalized masses of the remote forest areas to the mainstream of development, SAIL in association with Govt. of Jharkhand and Ministry of Rural Development, Govt. of India actively participated in the development process of Saranda forest, Jharkhand. SAIL provided ambulances, 7000 each of bicycles, transistors, solar lanterns and established an Integrated Development Centre (IDC) at Digha village in Saranda forest. IDC comprises of facilities like Bank, Panchayat Office, Ration shop, Telecom office, Anganwadi Centre, Meeting room etc. for the local populace.

- The details of CSR activities undertaken are available on :
  - ❖ DPE Webpage wrt CSR in CPSEs
  - ❖ SAIL website *www.sail.co.in* included in the Directors' Annual Report and Sustainability Report

Awards and Accolades

Awards and Accolades

Steel Authority of India Limited (SAIL) has continued its legacy of excellence with multiple awards and recognitions across various sectors. In 2023, the company demonstrated its leadership in environmental management, corporate communication, and employee welfare, securing its place at the forefront of India's steel industry.

Golden Peacock Environment Management Award - 2023

SAIL was recognized as the winner of the prestigious Golden Peacock Environment Management Award 2023 in the steel sector by the Institute of Directors. This award underscores SAIL's commitment to sustainable practices and its relentless focus on minimizing its environmental impact.

Public Relations Excellence

SAIL's Corporate Communications team has made remarkable strides in digital engagement and storytelling, winning four awards at the Public Relations Council of India (PRCI). These include:

- Best Digital Newsletter
- Best Use of Social Media
- Best Storytelling
- Best Corporate Film

These accolades highlight SAIL's innovative approach to engaging with its stakeholders and building its corporate narrative.

McGibony Institutional Award

SAIL also received the McGibony Institutional Award from the Academy of Hospital Administration in recognition of its outstanding efforts during the COVID-19 pandemic. This award acknowledges SAIL's proactive approach in providing medical care, managing resources, and contributing to the nation's fight against the pandemic.

Great Place to Work Certification

In recognition of its people-centric culture, SAIL was certified as a Great Place to Work for the period December 2023 to December 2024 by the Great Place to Work Institute. This certification reinforces SAIL's commitment to creating a supportive and inclusive workplace.

Kalinga Environment Excellence Award - 2022

SAIL also earned a **5-Star Rating** in the **Kalinga Environment Excellence Award 2022**, launched by the Institute of Quality and Environment Management Services (IQEMS). This accolade recognizes SAIL's significant efforts in environmental conservation and enhancing the quality of life in the communities surrounding its operations.

Bhilai Steel Plant (BSP)

- Bhilai Steel Plant (BSP) won the **Greentech PCWR Awards 2024** for its innovative approach in waste management. BSP utilized BOF slag to produce paver blocks and tiles, a remarkable step towards sustainable construction and waste recycling.

Rourkela Steel Plant (RSP)

- Rourkela Steel Plant earned the **Environment Preservation Gold Award 2023** from the Sustainable Development Foundation for its stellar performance in sustainable environmental practices. Additionally, RSP was conferred the Global Environment Award 2024 in the Platinum Category by the Global Environmental Excellence Foundation (GEEF).
- RSP also received the **"Wings of Steel" Award** from the India Steel Association (ISA) for advancing gender diversity and inclusion, furthering RSP's commitment to fostering a diverse and inclusive workplace in challenging environments.

Bokaro Steel Plant (BSL)

Bokaro Steel Plant continues to be a leader in productivity and sustainability:

- **CII-Productivity Awards 2023-24:** Team Cold Rolling Mill – III at Bokaro won this prestigious recognition for outstanding performance.
- **Exceed Green Future Award 2023:** Bokaro received the platinum category award for its exemplary commitment to environmental sustainability from the Sustainable Development Foundation.
- **Greentech Environment Awards 2023:** Bokaro also clinched the Environmental Excellence Award at the 23rd edition of the Greentech Environment Awards.
- **ICC Environmental Excellence Award 2023:** Bokaro was awarded the platinum category for its outstanding contributions to environmental conservation.

Barsua, Kalta, and Taldih Iron Mines

In a significant achievement for SAIL's mining operations, the Barsua, Kalta, and Taldih Iron Mines were honored with the Pollution Control Excellence Award 2023 by the Odisha State Pollution Control Board for their exceptional efforts in managing and controlling pollution.

These awards are a testament to SAIL's holistic approach toward sustainable development, operational excellence, and corporate social responsibility. The company's efforts in advancing environmental conservation, enhancing employee welfare, and communicating effectively with stakeholders continue to set industry standards and contribute to a greener, more inclusive future for India.

GRI Content Index

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			Requirement(s) Omitted	Reason	Explanation
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GRI 3: Material Topics 2021	3-3 Management of material topics	114, 115, 116, 117, 123			
GRI 403: Occupational Health and Safety 2018	403-1 Occupational health and safety management system	114, 115, 123			
	403-2 Hazard identification, risk assessment, and incident investigation	114, 115, 123			
	403-3 Occupational health services	123			
	403-4 Worker participation, consultation, and communication on occupational health and safety	115			
	403-5 Worker training on occupational health and safety	116, 126			
	403-6 Promotion of worker health	115, 123			

Gri Standard/Other Source	Disclosure	Location	Omission		
			Requirement(s) Omitted	Reason	Explanation
	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	117, 123			
	403-8 Workers covered by an occupational health and safety management system	115			
	403-9 Work-related injuries	126			
	403-10 Work-related ill health	125			
Effective corporate governance and managing risk					
GRI 3: Material Topics 2021	3-3 Management of material topics	55, 56			
GRI 207: Tax 2019	207-1 Approach to tax	55			
	207-2 Tax governance, control, and risk management	55			
	207-3 Stakeholder engagement and management of concerns related to tax	55			
	207-4 Country-by-country reporting	55			
Enhancing profitability and growth					
GRI 3: Material Topics 2021	3-3 Management of material topics	54, 56, 64			
GRI 201: Economic Performance 2016	201-1 Direct economic value generated and distributed	54			
	201-2 Financial implications and other risks and opportunities due to climate change	18, 64			
	201-3 Defined benefit plan obligations and other retirement plans	136			
	201-4 Financial assistance received from government	54			
Compliance to legal regulations					
GRI 3: Material Topics 2021	3-3 Management of material topics	110			
GRI 206: Anti-competitive Behavior 2016	206-1 Legal actions for anti-competitive behavior, anti- trust, and monopoly practices	110			
Reducing emissions, discharges and noise pollution					
GRI 3: Material Topics 2021	3-3 Management of material topics	76, 77, 79			
GRI 303: Water and Effluents 2018	303-1 Interactions with water as a shared resource	76			
	303-2 Management of water discharge-related impacts	77			
	303-3 Water withdrawal	76			
	303-4 Water discharge	77, 79			
	303-5 Water consumption	76, 77			

Gri Standard/Other Source	Disclosure	Location	Omission		
			Requirement(s) Omitted	Reason	Explanation
Reducing greenhouse gas emissions & carbon footprint					
GRI 3: Material Topics 2021	3-3 Management of material topics	58, 72, 82			
GRI 305: Emissions 2016	305-1 Direct (Scope 1) GHG emissions	58			
	305-2 Energy indirect (Scope 2) GHG emissions	58			
	305-3 Other indirect (Scope 3) GHG emissions	58			
	305-4 GHG emissions intensity	58, 60			
	305-5 Reduction of GHG emissions	58, 60, 75			
	305-6 Emissions of ozone-depleting substances (ODS)	82			
	305-7 Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	72			
Phasing out of ozone depleting substances					
GRI 3: Material Topics 2021	3-3 Management of material topics	79			
GRI 306: Waste 2020	306-1 Waste generation and significant waste-related impacts	79			
	306-2 Management of significant waste-related impacts	79			
	306-3 Waste generated	80			
	306-4 Waste diverted from disposal	79			
	306-5 Waste directed to disposal	80			
Enhancing energy efficiency and adopting renewables					
GRI 3: Material Topics 2021	3-3 Management of material topics	61			
GRI 302: Energy 2016	302-1 Energy consumption within the organization	59, 61			
	302-2 Energy consumption outside of the organization	-		Information unavailable	Gathering of required information is challenging due to limited data availability considering the entire supply chain or product life cycle. SAIL is contemplating to streamline this with the help of a consultant in near future
	302-3 Energy intensity	59			
	302-4 Reduction of energy consumption	60			

Gri Standard/Other Source	Disclosure	Location	Omission		
			Requirement(s) Omitted	Reason	Explanation
	302-5 Reductions in energy requirements of products and services	-		Information unavailable	The manufacturing of iron and steel is energy intensive relative to the energy requirements of products while being used or in services. SAIL has prioritized reporting of energy consumption within the organization. SAIL opts not to report on this metric to maintain data quality and credibility
Preventing corruption					
GRI 3: Material Topics 2021	3-3 Management of material topics	40			
GRI 205: Anti-corruption 2016	205-1 Operations assessed for risks related to corruption	40			
	205-2 Communication and training about anti-corruption policies and procedures	40			
	205-3 Confirmed incidents of corruption and actions taken	40			
Upholding human rights in operations and supply chain					
GRI 3: Material Topics 2021	3-3 Management of material topics	110, 135			
GRI 408: Child Labor 2016	408-1 Operations and suppliers at significant risk for incidents of child labor	135			
GRI 409: Forced or Compulsory Labor 2016	409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labor	135			
GRI 411: Rights of Indigenous Peoples 2016	411-1 Incidents of violations involving rights of indigenous peoples	135			
GRI 414: Supplier Social Assessment 2016	414-1 New suppliers that were screened using social criteria	110			
	414-2 Negative social impacts in the supply chain and actions taken	110			
Providing fair and equal wages					
GRI 3: Material Topics 2021	3-3 Management of material topics	132			
GRI 202: Market Presence 2016	202-1 Ratios of standard entry level wage by gender compared to local minimum wage	132			
	202-2 Proportion of senior management hired from the local community	132			
Ensuring customer data privacy					
GRI 3: Material Topics 2021	3-3 Management of material topics	110			
GRI 418: Customer Privacy 2016	418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data	110			

Gri Standard/Other Source	Disclosure	Location	Omission		
			Requirement(s) Omitted	Reason	Explanation
Enhancing employee productivity					
GRI 3: Material Topics 2021	3-3 Management of material topics	132, 138			
GRI 404: Training and Education 2016	404-1 Average hours of training per year per employee	138			
	404-2 Programs for upgrading employee skills and transition assistance programs	138			
	404-3 Percentage of employees receiving regular performance and career development reviews	132			
Investing in CSR activities					
GRI 3: Material Topics 2021	3-3 Management of material topics	144, 145			
GRI 413: Local Communities 2016	413-1 Operations with local community engagement, impact assessments, and development programs	144			
	413-2 Operations with significant actual and potential negative impacts on local communities	144			
Managing resource and conserving minerals					
GRI 3: Material Topics 2021	3-3 Management of material topics	81, 83			
GRI 301: Materials 2016	301-1 Materials used by weight or volume	81, 83			
	301-2 Recycled input materials used	81, 83			
	301-3 Reclaimed products and their packaging materials	81, 83			
Adopting sustainable sourcing practices					
GRI 3: Material Topics 2021	3-3 Management of material topics	110, 111			
GRI 308: Supplier Environmental Assessment 2016	308-1 New suppliers that were screened using environmental criteria	110			
	308-2 Negative environmental impacts in the supply chain and actions taken	111			
Conserving biodiversity and land rehabilitation					
GRI 3: Material Topics 2021	3-3 Management of material topics	90			
GRI 304: Biodiversity 2016	304-1 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	90			
	304-2 Significant impacts of activities, products and services on biodiversity	90			
	304-3 Habitats protected or restored	90			

Gri Standard/Other Source	Disclosure	Location	Omission		
			Requirement(s) Omitted	Reason	Explanation
	304-4 IUCN Red List species and national conservation list species with habitats in areas affected by operations	90			
Implementing Security practices					
GRI 3: Material Topics 2021	3-3 Management of material topics	135			
GRI 410: Security Practices 2016	410-1 Security personnel trained in human rights policies or procedures	135			
Product labeling and compliance					
GRI 3: Material Topics 2021	3-3 Management of material topics	105, 108, 109, 110			
GRI 417: Marketing and Labeling 2016	417-1 Requirements for product and service information and labeling	105, 108, 109			
	417-2 Incidents of non-compliance concerning product and service information and labeling	109			
	417-3 Incidents of non-compliance concerning marketing communications	109, 110			
Addressing grievances of workforce and community					
GRI 3: Material Topics 2021	3-3 Management of material topics	131, 132, 134			
GRI 402: Labor/Management Relations 2016	402-1 Minimum notice periods regarding operational changes	131, 132			
GRI 407: Freedom of Association and Collective Bargaining 2016	407-1 Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	131			
Enhancing gender empowerment amongst employees					
GRI 3: Material Topics 2021	3-3 Management of material topics	132, 135			
GRI 405: Diversity and Equal Opportunity 2016	405-1 Diversity of governance bodies and employees	23, 132			
	405-2 Ratio of basic salary and remuneration of women to men	132			
GRI 406: Non-discrimination 2016	406-1 Incidents of discrimination and corrective actions taken	132, 135			
Providing sustainable livelihood					
GRI 3: Material Topics 2021	3-3 Management of material topics	144, 153			
GRI 203: Indirect Economic Impacts 2016	203-1 Infrastructure investments and services supported	153			
	203-2 Significant indirect economic impacts	144			

Gri Standard/Other Source	Disclosure	Location	Omission		
			Requirement(s) Omitted	Reason	Explanation
Engaging with supplier and contractors					
GRI 3: Material Topics 2021	3-3 Management of material topics	107			
GRI 204: Procurement Practices 2016	204-1 Proportion of spending on local suppliers	7, 107			
Generating Employment					
GRI 3: Material Topics 2021	3-3 Management of material topics	132			
GRI 401: Employment 2016	401-1 New employee hires and employee turnover	132			
	401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	136			
	401-3 Parental leave	132			
Public policy engagement					
GRI 3: Material Topics 2021	3-3 Management of material topics	54			
GRI 415: Public Policy 2016	415-1 Political contributions	54			

Abbreviations

AGM	Annual General Meeting
AIDS	Acquired Immune Deficiency Syndrome
AIMA	All India Management Association
AISMOC	All India Steel Medical Officers' Conference
AOD	Argon Oxygen Decarburization
ASP	Alloy Steels Plant
ATP	Annual Training Plan
BDL	Below Detectable Level
BF	Blast Furnace
BOD	Biochemical Oxygen Demand
BOF	Basic Oxygen Furnace
BPL	Below Poverty Line
BPTG	Back Pressure Turbine Generator
BSC	Board Sub-Committee
BSL	Bokaro Steel Plant
BSP	Bhilai Steel Plant
CAD	Corporate Affairs Division
CDA	Conduct, Discipline and Appeal
CDCP	Coke Dry Cooling Plant
CEMDE	Centre for Environment Management of Degraded Ecosystem
CET	Centre for Engineering and Technology
CFP	Chandrapur Ferro Alloy Plant
CHSGP	Cast House Slag Granulation Plant
CII	Confederation of Indian Industries
CMO	Central Marketing Organisation
CO	Coke Oven
CO_2	Carbon Dioxide
COD	Chemical Oxygen Demand
COP	Conference of the Parties
CPP	Captive Power Plant
CPTI	Central Power Training Institute
CREP	Corporate Responsibility for Environment Protection
Cr.	Crore (Ten Millions)
CSR	Corporate Social Responsibility
DG	Diesel Generator
DMB	Disability Medical Board
DMRC	Delhi Metro Rail Corporation
Dolo	Dolomite
DPE	Department of Public Enterprises
DSO	Departmental Safety Officer
DSP	Durgapur Steel Plant
EAF	Electric Arc Furnace
EBIDTA	Earnings Before Interest, Tax, Depreciation and Amortization
ECG	Electrocardiography
ED	Executive Director
EMD	Environment Management Division
EMS	Environment Management System
ETPs	Effluent Treatment Plants
FICCI	Federation of Indian Chambers for Commerce and Industry
GCal	Giga Calorie
GCP	Gas Cleaning Plant
GD	Growth Division
GHG	Green House Gas
GoI	Government of India
GRI	Global Reporting Initiative
HIRA	Hazard Identification and Risk Assessment
HIS	Health Information System
HR	Human Resource
HRD	Human Resource Development
HRM	Hot Rolling Mill
IIM	Indian Institute of Metals
IITF	India International Trade Fair
ILO	International Labour Organization
INDCs	Intended Nationally Determined Contributions
IPSS	Inter Plant Standard - Steel
ISO	International Organization for Standardization
ISP	IISCO Steel Plant
ISPs	Integrated Steel Plants
ITI	Industrial Training Institute
IUCN	International Union for Conservation of Nature
JCSSI	Joint Committee on Safety, Health and Environment in the Steel Industry
JV	Joint Venture
JVC	Joint Venture Company
KAM	Key Account Management
KL	Kilo Litres

kWh	Kilo Watt Hour
Lakh	Hundred Thousand
LD	Linz Donawitz
LED	Light Emitting Diode
LEO	Learning from Each Other
LHB	Linke Hofmann Busch
IISCO	Indian Iron & Steel Company
LMV	Light Motor Vehicle
LODR	Listing Obligations and Disclosure Requirements
MkWH	Million Kilo Watt Hour
MMUs	Mobile Medical Units
MODEX	Modernisation-Expansion
MoEFCC	Ministry of Environment, Forest & Climate Change
MoU	Memorandum of Understanding
MSME	Micro, Small & Medium Enterprise
MSVs	Model Steel Village
MT	Millions Tonne
MTI	Management Training Institute
MTs	Management Trainees
MWp	Megawatt Peak
NGO	Non-Governmental Organization
NHPC	National Hydroelectric Power Corporation
NJCS	National Joint Committee for the Steel Industry
NMDC	National Mineral Development Corporation
NOHSC	National Occupational Health Service Centre
NOx	Oxides of Nitrogen
NSC	National Safety Council
NTPC	National Thermal Power Corporation
ODS	Ozone Depleting Substances
OH&S	Occupational Health & Safety
OHS	Occupational Health Service
OHSAS	Occupational Health and Safety Management System
OPD	Out Patient Department
PAT	Profit After Tax
PCB	Poly Chlorinated BiPhenyls
PIWs	Performance Improvement Workshops
PM	Particulate Matter
PMGSY	Pradhan Mantri Gramin Sadak Yojna
POPs	Persistent Organic Pollutants
PPEs	Personal Protective Equipments
PSC	Portland Slag Cement
PSU	Public Sector Undertaking
QMS	Quality Management System
R&D	Research & Development
RDCIS	Research & Development Centre for Iron & Steel
RINL	Rashtriya Ispat Nigam Ltd.
RITES	Rail India Technical and Economic Service
RSP	Rourkela Steel Plant
₹	Rupees
S&OP	Sales & Operations Planning
SAIL	Steel Authority of India Limited
SCL	Steel Complex Limited
SCOPE	Standing Conference of Public Enterprises
SD	Sustainable Development
SEBI	Securities & Exchange Board of India
SED	Safety Engineering Department
SEFI	Steel Executives Federation of India
SESBF	SAIL Employees Superannuation Benefit Fund
SGL	Shot Grinding Line
SGW	SAIL Growth Works, Kulti
SHE	Safety, Health and Environment
SMPs	Standard Maintenance Practices
SMS	Steel Melting Shop
SO_2	Sulphur Dioxide
SOP	Standard Operating Practices
SRU	SAIL Refractory Unit
SSO	SAIL Safety Organization
SSP	Salem Steel Plant
TAB	Training Advisory Board
TCE	Trichlorethylene
tcs	Tonnes of Crude Steel
THF	Twin Hearth Furnace
TJ	Tera Joule
TMT	Thermo Mechanically Treated
TRT	Top Pressure Recovery Turbine
TRTG	Top Recovery Turbine Generator
UNIDO	United Nations Industrial Development Organisation
VC	Video Conferencing
VISL	Visvesvaraya Iron and Steel Plant
VVVF	Variable Voltage Variable Frequency
WCPS	World Confederation of Productivity Science
WIPS	Forum of Women in Public Sector
WSA	World Steel Association
ZLD	Zero Liquid Discharge


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