

ANNUAL REPORT 2021-22

Responsible Mining - Sustainable Living



**SUSTAINABLE MINING INITIATIVE
FEDERATION OF INDIAN MINERAL INDUSTRIES**

FIMI House, B-311, Okhla Industrial Area, Phase-I, New Delhi - 110 020 (India)

Tel.: (011) 26814596, Fax: (011) 26814594

E-mail: smi@fedmin.com; Website: <http://fedmin.com/smi>



SUSTAINABLE MINING INITIATIVE

FOUNDING MEMBERS



ACC Limited



Essel Mining & Industries Ltd



Hindustan Zinc limited



MSPL Limited



National Aluminium Co. Ltd.



NMDC Limited



Rio Tinto India Private Limited



Rungta Mines Limited



Tata Steel Limited



Vedanta Limited

ASSOCIATE MEMBERS



Adani Enterprises Limited



Ambuja Cements Limited



Andhra Pradesh Mineral Development Corporation Limited



Associated Soapstone Dist. Co. (P) Ltd.



Bharat Aluminium Co. Ltd.

BKG MINES - SANDUR

BKG Mining Pvt. Ltd.



Dalmia Cement (Bharat) Limited



GHCL Limited



Hindalco Industries Limited



Hothur Ispat Pvt. Limited



JSW
JSW Steel Limited



Karnataka State Minerals Corporation Limited

MGM MINERALS LTD.

MGM Minerals Ltd.

M.G. MOHANTY

M.G. Mohanty



Mineral Enterprises Ltd



Odisha Mining Corporation Limited



R. Praveen Chandra

SERAJUDDIN
RESPONSIBLE MINING

Serajuddin & Co.



S. N. Mohanty Group of Companies



Sandur Manganese and Iron Ores Limited



Sri Kumaraswamy Mineral Exports (Pvt.) Limited



Trimex Industries Pvt.Ltd.



Wolkem Industries Ltd

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1. Introduction

Mining has been an equal partner in the progress of mankind. Absolutely everything we depend on is either made from minerals or relies on minerals for its production. As humankind strives to improve its standard of living and nations push for development and mitigating climate change, demand for minerals is bound to rise exponentially and mining has come to play a more vital role. Given the importance of mining contribution to nation's development both in terms of GDP and employment generation, sustainability has become a key enabler for the mining sector and hinges upon efficient extraction and judicious use of resources with adequate environmental safeguards and social welfare measures in mining jurisdictions.



Realizing the need to mainstream sustainability in the mining sector and to counter the negative perception of mining, FIMI, launched *Sustainable Mining Initiative* (SMI) in 2009. The overarching aim of SMI is to promote the tangible and measurable concepts of sustainable mining, assist the mining sector to inculcate sustainable practices in mining operations and tackle the industry-wide challenges of environmental management and socio-economic development.

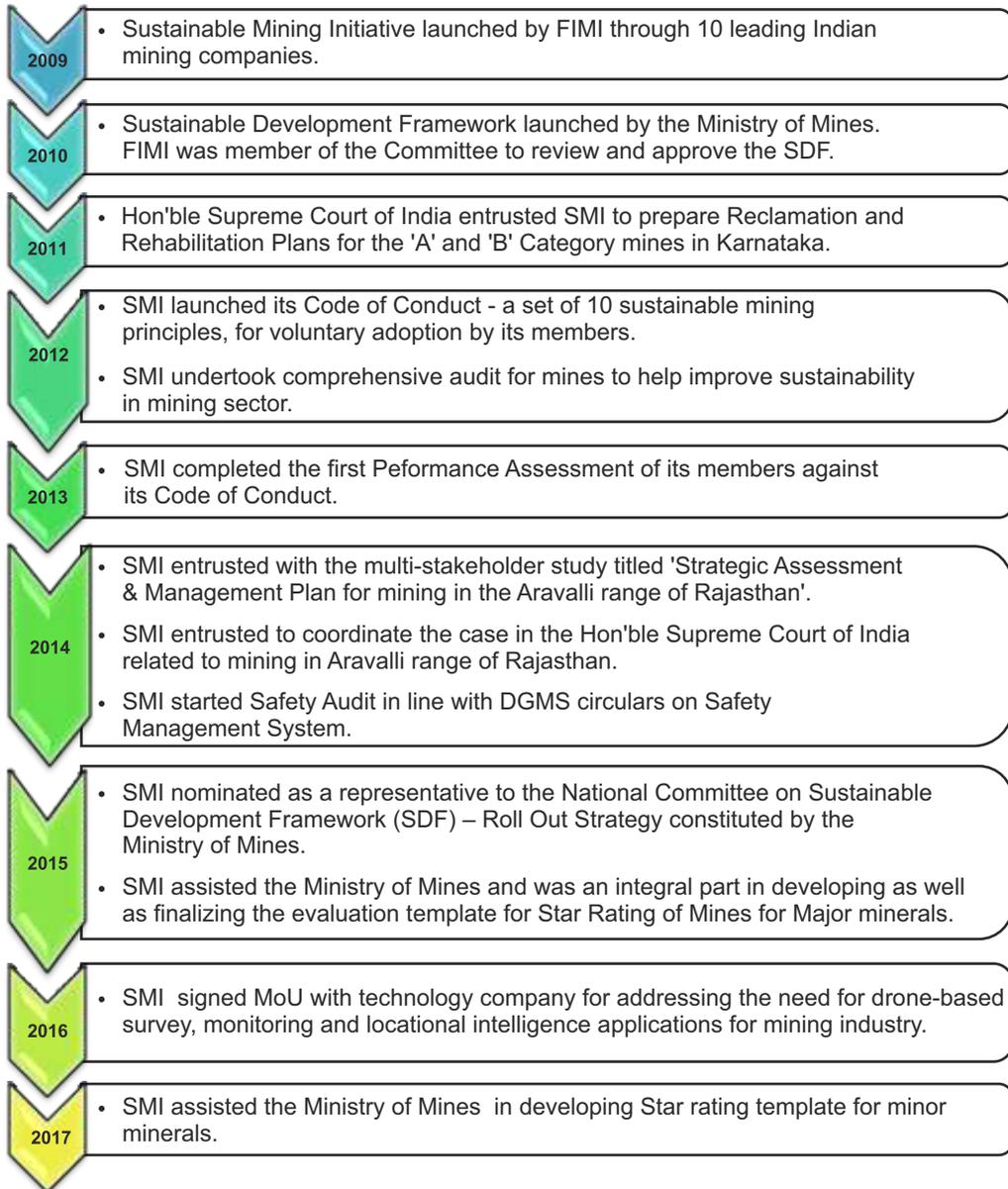
SMI, in its 13 years of journey since 2009, has grown in stature for leading the sustainable mining movement in India and continues to serve as a driving force for change and continual improvement on issues relating to mining and sustainable development in India. SMI engages with all stakeholders including government, industry, communities, civil societies, academia etc. to positively influence Indian policy and regulations to promote sustainable mining. Moreover, SMI has also been entrusted with high level engagements in mining sector both by the Government and the Industry.

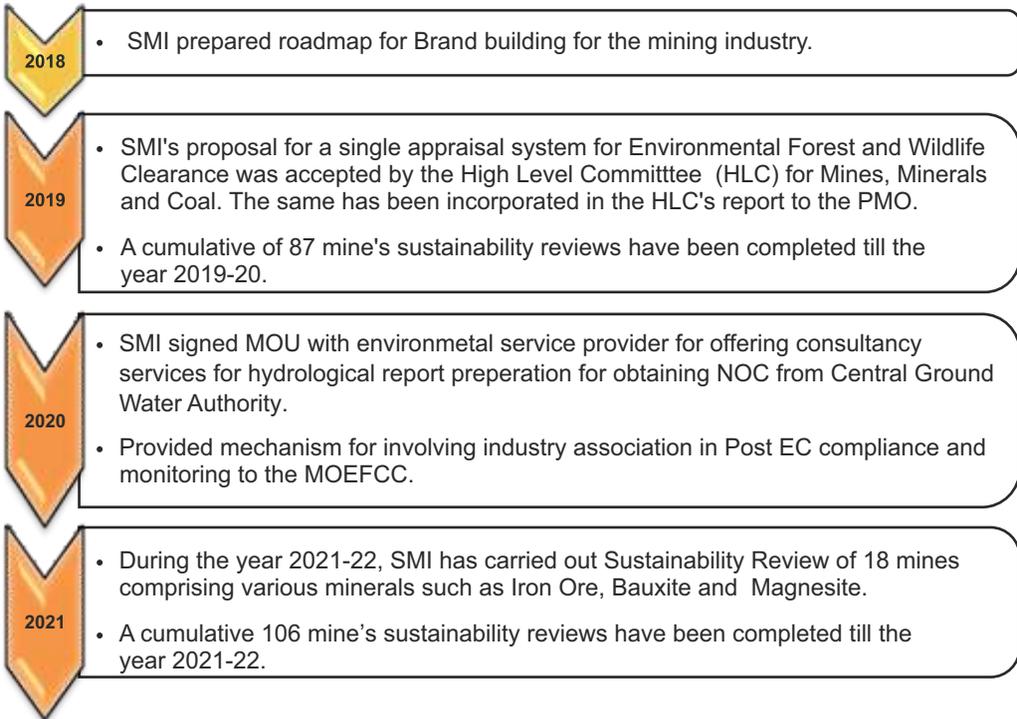
- It has also been a great honor for SMI to be recognized by the Central Empowered Committee (CEC) and subsequently entrusted by the Hon'ble Supreme Court to prepare the Reclamation & Rehabilitation Plans (R&R Plans) for 'A' and 'B' category mines in Karnataka in 2011 and to evaluate their production enhancement proposals.
- SMI assisted the Ministry of Mines to implement Sustainable Development Framework (SDF) at individual mine level and has been an integral part in developing the Star Rating Scheme for mines. Owing to SMI's contribution in formulating and finalizing the Star Rating Scheme, the Ministry of Mines has particularly recognized SMI's capacity and appreciated its work.

SMI has evolved itself as an important encouragement for the inclusive and responsible growth of the mining sector. It has been effectively working with the mining industry to integrate sustainable practices and bring out the optimistic aspects of mining. SMI has defined a pathway through its Code of Conduct and follow-up activities to help the mining sector address sustainability issues. The SMI Code of Conduct is a set of 10 sustainable mining principles for voluntary adoption by companies to become SMI members; and is also the first step towards sustainable mining in India.

This report provides an overview of SMI's path of fulfilling its objectives, milestones achieved, various activities and achievements in the year 2021-22.

SMI – Milestones





2. Objectives of SMI

Mining sector plays an important role in meeting the ever increasing demand for minerals and metals not just to facilitate high economic growth rate of the country, but also to help the population progress its standard of living. The challenge for the sector is to incorporate the environmental, social and sustainability concerns into the business so as to ensure responsible extraction of minerals and metals in a holistic manner, while contributing to national and community development.

To ensure that the integration process mentioned above happens, SMI has outlined its specific objectives to mainstream sustainability in the mining sector.

OBJECTIVES

-
- Promote and foster responsible mining
 - Assist mining companies to incorporate principles of sustainable mining into their business practices
 - Create positive public perception towards mining
 - Identify, develop and promote use of best practices and create enabling framework for proactive pursuance of the fundamental tenets of Sustainable Development
 - Provide platform for sharing of best practices, training and capacity building
 - Assist and advise mining companies for continued improvement of their environmental, social and economic performance
 - Interact with all the stakeholders including Governments, Civil Society Organizations for creating enabling climate for sustainable mining to thrive

3. Membership

Mining companies have become the member of SMI by voluntarily adopting the Code of Conduct, comprising of ten sustainability principles.

Currently, 34 responsible mining companies have adopted the Code and have become SMI members.

Founding and Governing Council Members

10 of the premier mining companies were the first ones to come together and support the formation of SMI. These 10 companies are the **Founding** and **Governing Council Members** of SMI. Subsequently, 24 more mining companies joined SMI as **Associate Members**.

GOVERNING COUNCIL MEMBERS



ACC Limited



Essel Mining & Industries Ltd



Hindustan Zinc limited



MSPL Limited



National Aluminium Co. Ltd.



NMDC Limited



Rio Tinto India Private Limited



Rungta Mines Limited



Tata Steel Limited



Vedanta Limited

ASSOCIATE MEMBERS OF SMI



Adani Enterprises Limited



Ambuja Cement
Ambuja Cements Limited



Andhra Pradesh Mineral
Development Corporation Limited



GOLCHA
Associated Soapstone
Dist. Co. (P) Ltd.



Bharat Aluminium Co. Ltd.



BKG Mining Pvt. Ltd.



Dalmia Cement (Bharat) Limited



GHCL Limited



Hindalco Industries Limited



Hothur Ispat Pvt. Limited



IMFA Group



JSW Steel Limited



Karnataka State Minerals
Corporation Limited



MGM Minerals Ltd.



M.G. Mohanty



Mineral Enterprises Ltd



Odisha Mining Corporation Limited



R. Praveen Chandra



Sandur Manganese and
Iron Ores Limited



Serajuddin & Co.



S. N. Mohanty Group of Companies



Sri Kumaraswamy Mineral Exports
(Pvt.) Limited



Trimex Industries Pvt.Ltd.



Wolkem Industries Ltd

The Governing Council of SMI comprises of ten founding members and the President, Vice-President and Secretary General of FIMI as permanent ex-officio members. The Governing Council meets regularly to review SMI's progress towards achieving its objectives and to provide guidance/direction for undertaking new programmes to accelerate the process.

4. Code of Conduct and Sustainable Mining Principles

SMI launched its 'Code of Conduct' (CoC) on August 4, 2012. The CoC is a set of 10 sustainable mining principles meant for voluntary adoption by FIMI members and on adopting the Code, the FIMI member becomes a member of SMI.

This CoC aims to provide a framework to mining companies and entrepreneurs to demonstrably adopt 'good behavior', open themselves to measurement and scrutiny, and reduce the negative perceptions about the mining sector so widely prevalent today.

Member companies have made a commitment to advance their sustainability performance and are required to report against their progress on an annual basis.



The CoC has been evolved in line with the expectation of the stakeholders, and aligns with international statements like ICMM's Sustainable Development Framework, with suitable modifications to suit Indian requirements.

Sustainable Mining Principles of SMI

Principle 1

- Integrate sustainable development considerations within the corporate decision making

Principle 2

- Conduct business with ethical practices and sound systems of corporate governance

Principle 3

- Implement risk management strategies based on valid data and sound science

Principle 4

- Seek continual improvement in health and safety performance

Principle 5

- Seek continual improvement of our environment performance based on a precautionary approach

Principle 6

- Uphold fundamental human rights and respect cultures, customs and values in dealings with employees and others who are affected by our activities

Principle 7

- Contribute to conservation of biodiversity and integrated approaches to land use planning and management

Principle 8

- Facilitate and encourage responsible use, reuse and recovery of mined materials including associated natural resources

Principle 9

- Contribute to the social, economic and institutional development of the communities in which we operate

Principle 10

- Implement effective and transparent engagement, communication and verifiable reporting arrangements with our stakeholders

Key action points in respect of each of these principles are mentioned in **Annexure**.

Adoption of these principles is expected to result in improved sustainability performance of the Indian mining sector, thereby improving the society's perceptions about the mining industry and reduce the tough stance of government, judiciary and society in general.

SMI annually conducts performance assessment of its member companies, through desktop assessment and site visit(optional), against the Code of Conduct to ensure the commitment of the companies to move towards sustainable development. Members' performance assessment against Code of Conduct has been completed for 2020-21. The report is shared with members and published on SMI website (www.fedmin.com/smi) as well as SMI's Annual Report. Over the years, there has been a remarkable increase in the sustainability performance of SMI members, as measured by the Code of Conduct assessment.

SMI Code of Conduct – Assessment Report 2020-21

Assessment Report 2020-21											
Sl. No.	Members	1	2	3	4	5	6	7	8	9	10
GOVERNING COUNCIL MEMBERS											
1	ACC Limited										
2	Essei Mining and Industries Ltd.										
3	Hindustan Zinc Limited										
4	MSPL Ltd.										
5	NALCO										
6	NMDC Ltd.										
7	Rio Tinto India (P) Ltd. *#										
8	Rungta Mines Ltd.										
9	TATA Steel Ltd.										
10	Vedanta Ltd. - Iron Ore Business										
ASSOCIATE MEMBERS											
11	Wolkem Industries Ltd										
12	M/s. R. Praveen Chandra										
13	M/s. M.G. Mohanty										
14	Mineral Enterprises Ltd*#										
15	MGM Minerals Ltd										
16	M/s. S. N. Mohanty										
17	BALCO										
18	Associate Soapstone Distributing Co. Pvt. Ltd.										
19	Hothur Ispat Pvt. Ltd.										
20	Sandur Manganese and Iron Ores Limited										
21	M/s. BKG Mining Pvt. Ltd.										
22	M/s. Sri Kumaraswamy Mineral Exports (P) Ltd.										
23	Trimex Industries Pvt. Ltd.*										
24	IMFA Group										
25	Serajuddin & Co.†										
26	Dalmia Cement (Bharat) Ltd.										
27	Ambuja Cements Ltd.										
28	JSW Steel Ltd.										
29	Adani Enterprises Ltd.										
30	Hindalco Industries Ltd.										
31	GHCL Limited										
32	APMDC										
33	KSMCL†										

Note: * Members with no working mines during the assessment period
 # Information not provided for the year 2020-21
 † Odisha Mining Corporation Limited has become SMI Member in March, 2022, will be covered in next assessment period.

INDEX FOR COLOUR CODE	
	Policies framed and Implementation substantially progressed
	Policies framed and Implementation in progress
	Policies framing in progress, Implementation substantially progressed
	Both Policy framing and implementation in progress
	Information not provided for desktop assessment

5. Activities of SMI

SMI undertakes various activities to achieve its objectives, viz., mainstreaming scientific and sustainable mining practices, promoting ethical behavior and ensuring responsible extraction of minerals, thereby enhancing mining sector's contribution to sustainable development in the country.

There are many ongoing activities and projects, which have been undertaken to support the sustainable mining agenda of SMI.

5.1 Implementation of Sustainable Development Framework & Star Rating Scheme

SMI regularly works with the Government of India to create an enabling climate for sustainable mining to thrive in India. SMI has played an integral role in formulating and finalizing the Star Rating Scheme for the Ministry of Mines, along with public consultation and on-ground support to numerous mines to implement the system. This has helped in implementation of Sustainable Development Framework at individual mine level.

Owing to SMI's contribution in formulating and finalizing the Star Rating Scheme, the Ministry of Mines has particularly recognized SMI's capacity and appreciated its work. SMI has been part of the Government's various committees on sustainable mining, including:

- National Committee on Sustainable Development Framework (SDF) – Roll Out Strategy, constituted by Ministry of Mines
- Executive Committee constituted by Ministry of Mines to monitor the Star Rating Scheme across India

The Ministry of Mines in consultation with SMI has finalized the Star Rating Scheme for minor minerals and requested the States for its proper implementation. SMI has also assisted various mines across India to improve their Star Rating through its Sustainability Reviews.

5.2 Sustainability Reviews and Technical Consultancy

SMI has been assisting and advising mining companies to continually improve their sustainability performance through its Sustainability Review System. It covers 5 key aspects for a mine – compliances, economic, environmental, social and health & safety performance.

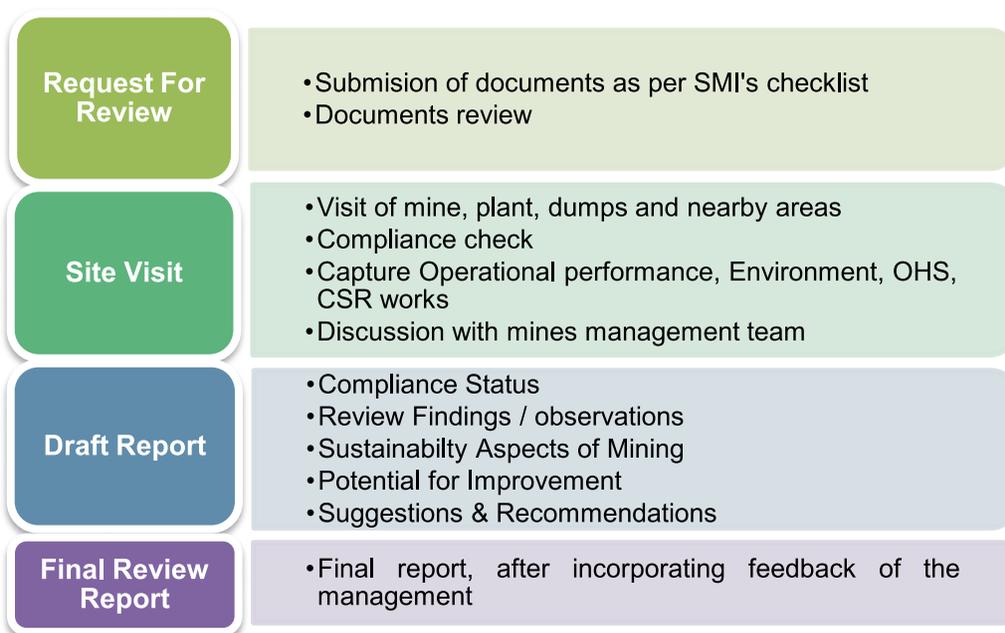
SMI's Sustainability Review helps the mines to:

❖ Evaluate the present environmental and safety performance of the mine (both from compliance as well as sustainability perspective)
❖ Identify productivity enhancement measures and improve mine's operational performance
❖ Review the social welfare activities undertaken for neighboring communities
❖ Help to improve performance for achieving required Star Rating
❖ Manage regulatory risks and compliance system in the mine
❖ Stay updated about regulatory changes and take preparatory action well in time
❖ Identify best practices for implementing in the mine and areas of further improvement
❖ Effectively communicate its sustainability goals to the management

SMI has a team of domain experts having hands on rich experience, knowledge and insight into the regulatory and policy framework and international sustainable mining practices.

SMI has cumulatively completed 106 sustainability reviews for various types of minerals. SMI has helped these mines to review their overall performance (both from compliance as well as sustainability perspective) and identify critical areas of improvement, comply with statutes and reduce long term risks. SMI also undertakes customized studies as per client requirement such as specific Health & Safety reviews, R&R review, etc.

SUSTAINABILITY REVIEW SYSTEM



During the financial year 2021-22, SMI has completed 18 Sustainability Reviews viz 9 Iron ore mines of JSW Ltd., 5 Iron ore mines of NMDC Ltd, 1 Magnesite mine of Tamil Nadu Magnesite Ltd and 3 Bauxite mines of Hindalco Industries Limited.

List of Sustainability Reviews completed

S. No.	Name of the Company	No. of Mines
Sustainability Review		
1.	Ambuja Cements Ltd., Himachal Pradesh, Maharashtra, Chhattisgarh, Rajasthan, Gujarat (Limestone)	9
2.	Vedanta Limited, Goa & Karnataka (Iron ore)	5
3.	Mineral Enterprises Limited, Karnataka (Iron ore)	2
4.	Mahavir Trading Company, Rajasthan (Soapstone)	1
5.	S N Mohanty, Odisha (Iron ore, Manganese, Bauxite)	4
6.	Wolkem Industries Ltd., Rajasthan (Wollastonite)	2
7.	H L Nathurmal, Goa (Iron ore)	1
8.	BALCO, Chhattisgarh (Bauxite)	2
9.	ACC Limited, Karnataka (Limestone)	1
10.	Magnum Minerals, Goa (Iron ore)	2
11.	Penguin Trading & Agencies Ltd., Odisha (Iron ore)	1
12.	Rungta Group, Odisha (Iron ore, Manganese ore)	5
13.	Ultratech Cement Ltd, Karnataka and A.P. (Stone quarries for aggregates)	2
14.	MGM Minerals, Odisha (Iron ore)	3
15.	National Enterprises Ltd. (Iron ore)	2
16.	HZL – SindesarKhurd Mine, Rajasthan (Lead & Zinc)	1
17.	Golcha Associated Group, Rajasthan (Soapstone)	2
18.	S N Mohanty, Odisha – Follow up Audit (Iron ore & Bauxite)	3
19.	Balasore Alloys Limited, Odisha (Chromite)	1
20.	NMDC Limited, Chhattisgarh (Iron Ore)	6
21.	MGM Minerals, Odisha (Iron & Manganese ore)	1
22.	S N Mohanty, Odisha (Iron ore, Manganese ore, Bauxite)	3
23.	M G Mohanty, Odisha (Iron ore & Bauxite)	2
24.	Hindalco Industries Limited (Bauxite)	2
25.	Hindalco Industries Limited (Coal)	2
26.	Andhra Pradesh Mineral Development Corporation, AP (Barytes)	1
27.	A.P. Trivedi & Sons Pvt. Ltd, Madhya Pradesh (Manganese ore)	1
28.	Atha Group, Odisha (Iron ore)	1
29.	BALCO, Chhattisgarh (Bauxite)	2
30.	Balasore Alloys Ltd., Odisha (Iron ore)	1
31.	NALCO, Odisha (Bauxite)	1
32.	Hindalco Industries Limited, Jharkhand (Bauxite)	4
33.	BALCO, Chhattisgarh (Coal)	1
34.	NMDC Limited, KIOM, Karnataka (Iron ore)	1
35.	JSW Steel Limited, Karnataka (Iron ore)	9
36.	NMDC Limited, BIOM- Kirandul Complex, Chhattisgarh (Iron ore)	3
37.	NMDC Limited, BIOM- Bachel Complex, Chhattisgarh (Iron ore)	2
38.	Tamil Nadu Magnesite Limited (TANMAG), Tamil Nadu (Magnesite)	1
39.	Hindalco Industries Limited, Chhattisgarh (Bauxite)	3
		96
Review of Progressive and Final Mine Closure Plan		
40.	NALCO, Odisha (Bauxite)	2
Health & Safety Review		
41.	Karnataka State Minerals Corporation Limited (Iron ore, Chromite, Magnesite)	8
Total		106

5.3 Environmental Change Detection Study for Mines

SMI assists mines to evaluate their environmental impact over a period of time through **Environmental Change Detection Study (ECDS)**. Objective of this study is to highlight the actual impact of a mine on environment (upto 10kms from mine boundary), with the help of satellite imageries and field surveys.

ECDS is an evidence-based scientific study and helps mines to:

- Correlate the environmental impact of the mine on green cover, agriculture, water (ground and surface water), air and noise etc.
- Prioritize critical zones for environmental protection and plan for necessary action
- Highlight the positive impacts in buffer zone and R&R in mined-out areas
- Demonstrate environmental stewardship, especially for obtaining statutory clearances
- Integrate sustainability in its mine planning through remote sensing.

ECDS acts as a report card for past environmental performance of the mine and is especially helpful during expansion of Environmental Clearance (EC) capacity, where the MOEFCC and EAC are keen to understand the mine's actual impact on its surroundings (forest / tree cover, agriculture, water, air and noise, etc.). SMI has completed such a study for a large coal mine and assisted it to increase its EC capacity by 50%.

5.4 Brand building for the Mining Industry

While many mining companies have become pioneers of sustainable mining and implemented global best practices in environmental protection and socio-economic development of communities, the positive contribution of mining industry is not being highlighted. Rather, the mining industry is being perceived by various stakeholders to be indulging in illegalities, irregularities, damaging land and forests, insufficient effort for the protection of environment and community development. As a result of such a negative public perception, the industry has been facing increasing number of adverse judicial pronouncements and policy decisions that have almost crippled the Indian mining industry.

To change the negative perception of mining in India and to place it at its rightful position as the building block of India's economy and sustainable development, FIMI has been working on this important aspect through various ways like publication, media engagement, stakeholder engagement etc., as part of regular activities of SMI.

5.5 Support to mining industry in the Aravalli Hills matter in the Hon'ble Supreme Court of India

Taking cognizance of the unique ecology of Aravalli hills, heightened environmental awareness, and history of litigations and absence of a regional assessment of impacts of mining on the Aravalli, SMI has been entrusted by the mining industry of Rajasthan to coordinate the Aravalli Hills case in the Hon'ble Supreme Court. SMI has been supporting the industry with strategy in this case, managing stakeholder interaction, consultation with experts and Government agencies, preparing notes, etc.

To support the Court case, SMI has also prepared a comprehensive scientific study titled "*Strategic Assessment & Management Plan for mining in Aravalli range of Rajasthan*". The study covered 15 districts of Rajasthan across which the Aravalli range is passing. This study is the first of its kind to scientifically establish the impacts of mining on environment and bridge the existing knowledge gap between the facts and the preconceptions of the regulators and the society at large. Methodology included Land Use Land Cover (LULC) change studies over a decade (2000-14) using satellite imageries, in addition to field surveys for extensive primary and secondary data collection.

The study has brought out the ground-truth about mining and other anthropogenic activities in the region. Some of the key findings are highlighted below:

- It is observed that mining has a very insignificant role in the alleged wanton damage to the ecosystem.
- Loss in forest cover in the 15 districts is primarily due to its conversion into scrubs and agricultural land; and this phenomenon is observed even in areas devoid of any mining activities.
- The study has also established that there is no eastward march of the Thar desert and most of the sand dunes have been stabilized over the years.

-
- Study of the gap areas in Aravalli range also suggests that there is hardly any apparent signs of Trans-Aravalli sand drifting.
 - The study also brought out the role mining has played in socio-economic development in the Aravalli region.

The study has been well appreciated by the Aravalli Stakeholders group. In addition, SMI has been assisting the mining industry of Rajasthan in the Aravalli hills legal matter in the Hon'ble Supreme Court of India.

5.6 Preparation of R&R Plans for Iron-ore leases in Karnataka

On recommendations of Central Empowered Committee (CEC), SMI was entrusted by the Hon'ble Supreme Court of India in 2011 for preparing Reclamation & Rehabilitation Plans (R&R Plan) and Supplementary Environment Safeguard Plans (SESP) for Iron-ore mining leases located in three districts – Bellary, Chitradurga and Tumkur – of Karnataka, based on which the mines are allowed to reopen subject to Category, CEC approval and compliance of other conditions prescribed by the Hon'ble Supreme Court of India. SMI has prepared and submitted R&R reports of 100 leases of A & B category mines.

5.7 Evaluation of Production Enhancement proposals

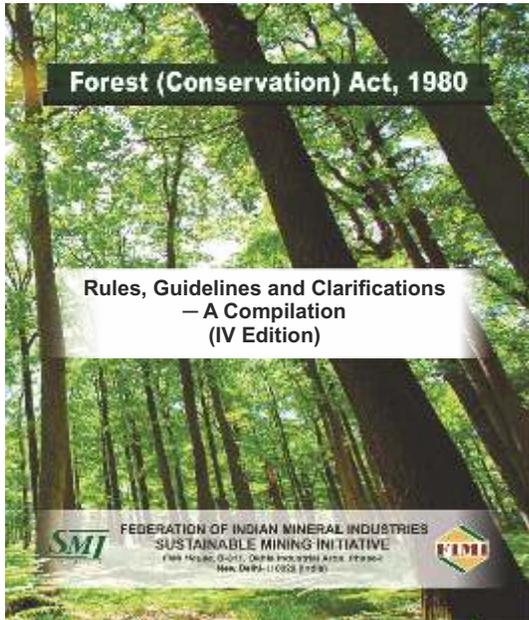
CEC has directed SMI to evaluate the production enhancement proposals of leases of A & B category mines of Karnataka. The proposals are from the mines which have resumed the operations after successful implementation of R&R plan, enhanced resource base by exploration and/or addressed issues related to dump and road capacity.

SMI has evaluated 59 proposals and submitted the reports to CEC and 46 proposals are approved by CEC. For the year 2021-22, SMI has submitted 5 production enhancement proposals to CEC.

5.8 Publications and Knowledge Sharing

SMI is engaged in research and brings out publications on a variety of topics for the benefit of the mining industry and other stakeholders, with an aim to keep them updated with the dynamic mining scenario in India and to provide relevant information in an easy and readily accessible manner. SMI acts as a platform for knowledge sharing on sustainable mining in India.

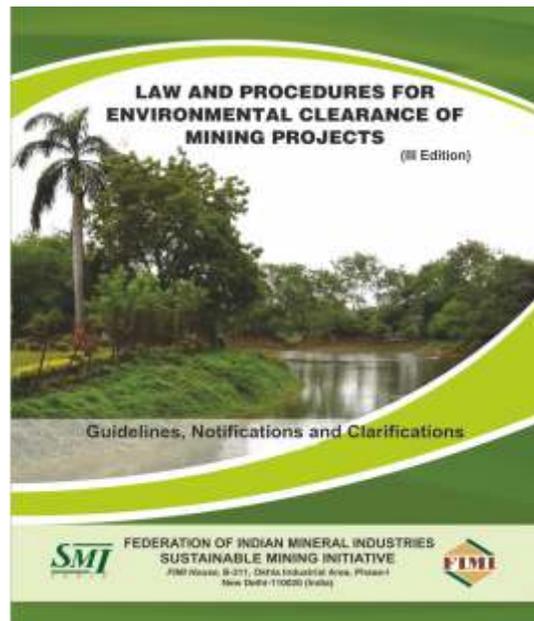
SMI has brought out the following publications for the benefit of mining stakeholders:

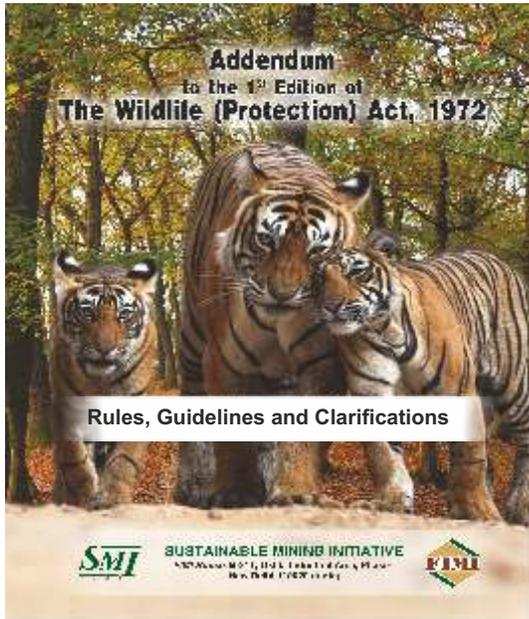


**Forest (Conservation) Act,
1980 – Rules, Guidelines and
Clarifications – A Compilation
(IV Edition) (updated till date)**

*Compilation of all the amendments
in the Act and guidelines*

**Law and Procedures for
Environmental Clearance of
Mining Projects (III Edition) –
Guidelines, Notifications and
Clarifications (updated till date)**



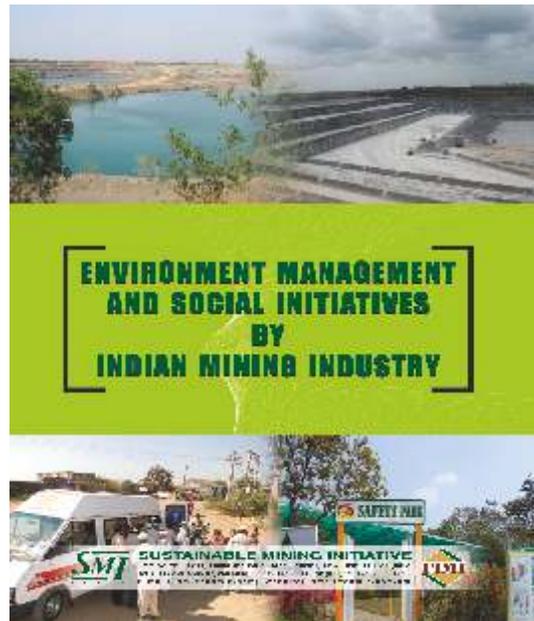


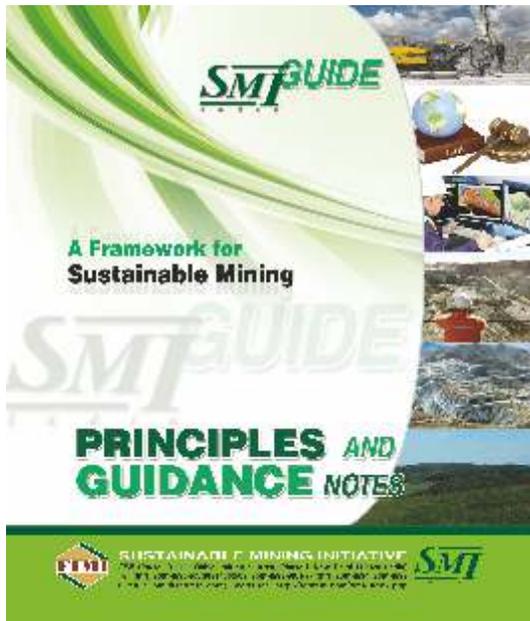
**Addendum to the 1st edition of
The Wildlife (Protection)
Act, 1972 : Rules, Guidelines
and Clarifications (updated till date)**

*Compilation of all the amendments
in the Act and guidelines*

**Environment Management
& Social Initiatives by
Indian Mining Industry**

*Highlights the best practices in
environment management, R&R
and socio-economic development
by mining industry. Aims to bring
out the positive aspects of mining
and improve the public perception
towards mining*





SMI Guide: A Framework for Sustainable Mining

Practical tips & guidelines for carrying out sustainable mining

5.9 Regulatory Interventions

At SMI, we believe that regulatory environment - laws and regulations including enforcement thereof – plays an extremely crucial role in determining the performance and behavior of individuals and industry sectors. SMI believes that laws should be rational, implementable, and cost-effective (in the sense that benefits to the society exceeding the cost to the society due to the additional regulation).

Since a complex regulatory scenario for mining sector runs counter to the objective of promoting sustainable mining practices, SMI therefore advocates for a simpler and rationalized regulatory framework by the Government which will be easier to comply and enforce. SMI makes various representations to the Government taking into account the inputs from mining companies, facts, statutory provisions and follows it up regularly. These interventions have received positive response from the Ministries in the form of representations in their Committees and amendments to various regulations, which has been appreciated by the members as well.

Among numerous representations, some of the important regulatory interventions undertaken by SMI during 2021-22 are listed below:

1.	<p>Cancellation of conducting Public Hearing during recent upsurge in COVID-19 pandemic by Odisha State Pollution Control Board – request for conducting public hearing- A representation was sent to MOEFCC on 4th May, 2021 requesting to advise the State Pollution Control Boards to conduct public hearing following the provisions of EIA Notification, 2006 instead of cancelling them for indefinite period.</p>
2.	<p>Request for easing Forest Clearance for Slurry Pipeline projects along roads- A representation was sent to Director General (Forest) and Special Secretary, IG (Forest) and AIG (Forest) MOEFCC on 16th June, 2021 requesting to consider relaxing the provision 4.2 of the Handbook of FCA, 1980 to allow iron ore slurry pipeline projects to utilize entire width of ROW along roads, particularly National Highways (NH), State Highways (SH), District Metalled Roads and other PWD Road in already diverted forestland.</p>
3.	<p>FIMI's suggestions on draft fly ash utilization - Inputs submitted to MOEFCC on 18th June, 2021 on the draft notification on fly ash utilization.</p>
4.	<p>Request for exempting Forest Clearance (FC) to Secondary User agency for laying Slurry Pipeline projects along National Highways - A representation was sent to Secretary, Ministry of Steel on 21st June, 2021 for taking up this matter with MOEFCC to amend provision 5.6(b) for exempting FC for secondary user agency in case if FC is already obtained by Primary user agency after requisite payment of compensatory levies.</p>
5.	<p>Request for modification in MOEFCC guideline dated 07th July 2021 regarding transfer of approvals granted under FC Act 1980 of mining lease allotted to a new lessee - A representation was sent to MOEFCC on 09th July, 2021 requesting to modify the guideline and allowing transfer of approval under FC Act, 1980 on termination of lease.</p>
6.	<p>Ongoing proceedings before the Hon'ble High Court of Madras at Madurai in Fatima Banu vs Union of India W.P. (MD) No. 11757 of 2021 – request for necessary steps in light of the Order dated 15.07.2021.- A representation was sent to Secretary, MOEFCC on 13th August, 2021 requesting to seek urgent relief from Hon'ble Madras High Court interim order for violation cases.</p>
7.	<p>FIMI's Comments / suggestions on proposed amendments in Forest (Conservation) Act, 1980- Comments submitted to MOEFCC on 1st November, 2021 on the discussion paper on amendments in Forest (Conservation) Act, 1980.</p>

8.	<p>Request for extending the guideline for allowing expansion upto 20% exempting public hearing for the entire non coal sector including all minerals without any stipulation of star rating – A representation was sent to Secretary MOEFCC on 5th November, 2021 requesting to allow expansion upto 20% exempting public hearing for the entire non coal sector including all minerals without any stipulation of star rating.</p>
9.	<p>FIMI's comments on optimization and harmonization of Environmental Compliance Conditions of mining sector- Based on inputs received from the members, comments submitted to CSIR-NEERI on optimization and harmonization of Environmental Compliance Conditions of mining sector on 3rd December, 2021.</p>
10.	<p>Request for grant of Environmental Clearance in case where Forest Clearance is yet to be obtained or is at advance stage - A representation was sent to Secretary, MOEFCC on 11th January, 2022 requesting to consider grant of Environmental Clearance in case where Forest Clearance is yet to be obtained or is at advance stage for timely development of mineral blocks.</p>
11.	<p>Request for extending the guideline for allowing expansion upto 20% exempting public hearing for all major minerals without any stipulation of Star Rating - A representation was sent to Secretary, Ministry of Mines on 14th February, 2022 requesting to take up the matter with MOEFCC for allowing expansion upto 20% exempting public hearing for all major minerals (non-coal sector) without any stipulation of star rating till the referred draft EIA Notification is finalized.</p>

5.10 Conferences and Workshops

SMI organizes conferences and workshops around the country to promote sustainable mining. The events focus on updating stakeholders about legal requirements and compliance matters in mining projects, sustainable mining practices adopted in different parts of the world, other aspects of sustainable mining stakeholders' engagement processes, social and environmental issues etc.

Events

SMI events have been receiving active support of the industry and government. SMI organizes the Sustainable Mining Summit every year, with an objective to share views and issues of the mining sector including regulations, technical aspects, etc.

2012: The “Sustainable Mining Summit 2012” was organized in Goa on 13th-14th January, 2012. Theme: Mining for Sustainability- Beyond Compliance.

2013: The “Sustainable Mining Summit 2013” was organized in Goa on 22nd-23rd April, 2013. Theme: Raw Material Security for metal industries and Sustainable Mining.

2014: The “Sustainable Mining Summit 2014” was organized in Goa on 17th-18th July, 2014. Theme: Raw Material Security and Sustainable Mining.

2015: The “Sustainable Mining Summit 2015” was organized in Goa on 17th-18th April, 2015. Theme: Sustainable Mining for Unlocking Indian Mineral Resource.

2016: The “Sustainable Mining Summit 2016” was organized in Bhubaneswar on 10th-11th May, 2016. Theme: Environmentally sound practices and technologies in the mineral sector.

2017: The “Sustainable Mining Summit 2017” was organized in Goa on 20th – 21st April, 2017. Theme: Sustainability in the changed regulatory economic scenario.

2018: The “Sustainable Mining Summit 2018” was organized in Bhubaneswar on 31st May – 1st June, 2018. Theme: Mining and Sustainable Development Framework.

2019: The “Sustainable Mining Summit 2019” was organized in Bhubaneswar on 11th – 12th April, 2019 on following themes:

- Mining: Global and Regulatory Scenario
- Sustainability in the changed regulatory economic scenario
- Sustainable development framework

During the year 2020 & 2021, due to COVID-19 pandemic, Sustainable Mining Summit could not be organized. Hence, the same was organized at Bhubaneswar on 28th and 29th April 2022.

Meetings, Conferences & Workshops

SMI also actively participates and shares its views in other forums, mining conferences and seminars to promote sustainability in the sector. Some of the meetings attended by delegates of SMI during the year are:

MoEFCC's meeting on effective development and implementation of Centralized Processing Centre (CPC-Green): In line with the Government of India policy “Maximum Governance, Minimum Government”, MoEFCC is planning to set up Centralized Processing Centre (CPC-Green). In this regard, MoEFCC convened meeting under the chairmanship of Mr. R.P. Gupta, Secretary, MoEFCC on 26th April, 2021 through video conferencing to have suggestions / views from different stakeholders for an effective development and implementation of CPC-Green. Mr. B.K. Bhatia, Joint Secretary General, FIMI, Mrs. Pronota Mitra Mukherjee, Assistant Director and Mr. Abhishek Srivastava, Environment Executive, FIMI-SMI attended the meeting.

Stakeholder Consultation on Certified Environment Auditor: Stakeholder Consultation meeting on Certified Environment Auditor (CEA) Scheme was held

under the chairmanship of Mr. R.P. Gupta, Secretary, MoEFCC on 7th May, 2021 through video conferencing to have suggestions / views of stakeholders on CEA Scheme towards strengthening and effective implementation of monitoring and compliance of environmental conditions associated with various environmental approvals. Mr. B.K. Bhatia, Joint Secretary General, FIMI, Mrs. Pronota Mitra Mukherjee, Assistant Director and Mr. Abhishek Srivastava, Environment Executive, FIMI-SMI attended the meeting.

Aditya Birla Group (ABG)'s online session – World Environment Day 2021: “Eco-restoration, a game changer in Sustainable Mining”: Mr. B.K. Bhatia, Joint Secretary General, FIMI participated as a distinguished speaker in the online session “*Eco-restoration, a game changer in Sustainable Mining*” on 3rd June, 2021. Mr. Abhishek Srivastava, Environment Executive, FIMI-SMI also attended the session.

Virtual Celebration of World Environment Day: Ms. Pronota Mitra Mukherjee, Assistant Director and Mr. Abhishek Srivastava, Environment Executive, FIMI-SMI attended the virtual programme on 5th June, 2021 organized by ICFRE, Dehradun.

Jury Committee Meeting for FIMI Awards 2020-21: The Jury Committee Meeting for FIMI Awards 2020-21 was held virtually under the chairmanship of Prof. B.B. Dhar, Former Professor and Head, Department of Mining Engineering, IIT - BHU and Former Director – CSIR-CIMFR on 16th July, 2021 at FIMI House, New Delhi.

Meeting with Industry Associations regarding EC Compliance and Monitoring: Mr B K Bhatia, Additional Secretary General, FIMI, Mrs. Pronota Mitra Mukherjee, Assistant Director and Mr. Abhishek Srivastava, Environment Executive, FIMI-SMI attended the online meeting on 17th November, 2021 organized by QCI-NABET regarding role of IAs in post EC compliance and monitoring.

Meeting with Assistant Inspector General of Forest: Mr. B.K. Bhatia, Additional Secretary General, FIMI and Mrs. Pronota Mitra Mukherjee,

Assistant Director, FIMI-SMI had a meeting with Mr. Sandeep Sharma, Assistant Inspector General of Forest, MoEFCC on 23rd December, 2021 with regard to transfer of forest clearances of expired / terminated mines to new lessees.

Single Window solution for administration of all Green Clearances: To have suggestions/views from the Industry Associations/Industries, for an effective development and implementation of providing the Single Window solution for administration of all Green Clearances, MoEFCC convened the meeting through video conferencing under the chairmanship of Dr.Sujit Kumar Bajpayee, Joint Secretary, MoEFCC on 17th February, 2022. Mr. B.K. Bhatia, Additional Secretary General, FIMI and Mrs. Pronota Mitra Mukherjee, Assistant Director, FIMI-SMI attended the meeting.

Meeting with Member Secretary, Expert Appraisal Committee (EAC) – Non-Coal Mining Sector: Mr. B.K. Bhatia, Additional Secretary General, FIMI and Mrs. Pronota Mitra Mukherjee, Assistant Director, FIMI-SMI had a meeting with Mr. Pankaj Verma, Member Secretary, Expert Appraisal Committee (EAC) - Non-Coal Mining Sector on 25th February, 2022 with regard to Sustainability Mining Charter.

Interactive Session on Hindalco's Sustainable Mining Charter- FIMI organized a meeting on 'Interactive Session on Hindalco's Sustainable Mining Charter-Proposal under consideration by MoEFCC on 25th March, 2022 which was attended by domain experts across the mining industry.

5.11 Networking

Realizing the importance of sharing information in mining to move together towards sustainability, SMI regularly interacts and collaborates with National and International level organizations, mining companies, think-tanks and regulators. Networking provides for a platform to absorb as well as share global best practices in the sector. All these enable SMI to be at the forefront of knowledge related to

sustainable mining, which SMI disseminates with the mining industry and other stakeholders.

List of few organizations with whom SMI constantly interacts and networks is given below:

1. International Council on Mining & Metals (ICMM)
2. International Union for Conservation of Nature (IUCN)
3. United Nations Environment Programme (UNEP)
4. World Economic Forum (WEF)
5. International Labour Organization (ILO)
6. Global Reporting Initiative (GRI)
7. Extractive Industry Transparency Initiative (EITI)
8. International Finance Corporation (IFC)
9. Indian Council for Research on International Economic Relations (ICRIER)
10. Minerals Council of Australia
11. Centre for Science and Environment (CSE)
12. Quality Council of India-NABET

5.12 FIMI Awards

In order to motivate and recognize the efforts of the Indian mining industry for having addressed various sustainability challenges through exemplary ways, FIMI had constituted awards and SMI administers the FIMI Award Scheme.

FIMI has instituted a new award “**Hindalco-Aditya Birla Award for Sustainable Mining**” in its Award Scheme 2021-22. This award has been generously sponsored by Hindalco Industries Limited.

There are twelve awards under six categories for the FIMI Award Scheme:

Excellence Award	Bala Gulshan Tandon Award of Excellence
Sustainability Awards	<ol style="list-style-type: none"> 1. Tata Steel Award for Sustainable Mining 2. Hindalco-Aditya Birla Award for Sustainable Mining
Mining Innovation Award	Vedanta – Sesa Goa Mining Innovation Award
Environment Awards	<ol style="list-style-type: none"> 1. Subh Karan Sarawagi Environment Award 2. Abheraj Baldota Environment Award 3. Misrilall Jain Environment Award 4. Gem Granites Environment Award
Social Responsibility Awards	<ol style="list-style-type: none"> 1. Sita Ram Rungta Award for Social Responsibility 2. NMDC Award for Social Responsibility
Health & Safety Awards	<ol style="list-style-type: none"> 1. Rio Tinto Health & Safety Award 2. Hindustan Zinc Health & Safety Award

The Awards and the assessment process is overseen by a distinguished Jury comprising of national experts. The Awards help in benchmarking the excellent standards adopted by the mining industry and in spreading the message of sustainable mining among the members.

During 2021-22, overwhelming response was received from the industry and in total 76 awards applications were received under various categories.

For FIMI Awards 2020-2021, the following mines were considered as the Awardees:

1. **Bala Gulshan Tandon Award of Excellence –Kayad Mines of Hindustan Zinc Limited (Ajmer, Rajasthan)**



Charmec system to improve safety and productivity



Mechanized wire meshing



Separate parking yard for HEMM and LMVs



Refuge Chamber for emergency



Leaky-Feeder Communication System



Auto Lube Dispensing system



Solar Power Plant of 1 MW capacity



Ground water recharge pit



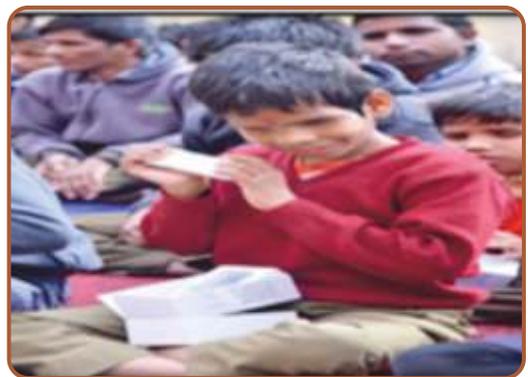
Peacocks at Conservation Area



Waste composting machine



Vaccination drive for Covid-19



Jeevan Tarang program for children with disabilities

2. Tata Steel Award for Sustainable Mining – Kovandakurichi Limestone Mines of Dalmia Cement (B) Limited (Trichy, Tamil Nadu)



Non-Conventional method of mining using Rock Breaker



Rock breakers used for mining



Computer Aided Deposit Evaluation



Rain water harvesting in mine sump



Plantation of Native species like Neem, Pungan varieties of Trees





Environment awareness programme for school children



Making of Seed balls by school students



Livelihood -SHG Training



Training on first aid



Encouragement to employees



Safety meeting

3. Vedanta-Sesa Goa Mining Innovation Award – Noamundi Iron Mines of Tata Steel Limited (West Singhbhum, Jharkhand)



Drone application in mines



Integrated control room for mining operation



HEMM simulator for training



Digitalized training



Solar power plant of 3 MW capacity



Organic composter



Biogas plant for disposal of food waste



Seed ball method for dump reclamation



Rain water harvesting structure



Providing ITI courses for fitter and electrician



Training on mushroom cultivation

4. Subh Karan Sarawagi Environment Award – Narmada Cement Mine of UltraTech Cement Limited (Amreli, Gujarat)



Rain water harvesting in mined out pit



Plantation in mined out area



Biodiversity park



Beekeeping inside mine



Green belt in mines complex



Biodiversity in surrounding area

5. Abheraj Baldota Environment Award – Ubbalagundi Iron Ore Mines of JSW Steel Limited (Ballari, Karnataka)



24 Kms Long conveyor for ore transport



Tipper communication through MIS software



Wet drilling



Tarpaulin covered tippers



Toe Wall



View of Geo Textile Area

6. Gem Granites Environment Award – Adityana Limestone & Marl Mine of Saurashtra Cement Limited (Porbandar, Gujarat)



Masonry boundary wall along Lease



Surface miner for mining operations



Covered yard for material handling



GW monitoring through piezometer



Covered crusher hopper



Rain water harvesting pit

7. Misrilall Jain Environment Award – Kathautia Opencast Coal Mine of Hindalco Industries Limited (Palamau, Jharkhand)



Air quality monitoring station



Water Sprinkling on haul road



NONEL used during blasting



Fruit bearing trees on reclaimed area



Migratory birds in water reservoir



Plantation on Top Soil capped dump

8. Jury Special Environment Award – Usenabad South Limestone Mine of The Ramco Cement Limited (Ariyalur, Tamil Nadu)



Use of Xcentric ripper in mining operations to reduce noise and vibration



Solar Panel installed at mines offices



Plantation near mines office



Sapling distributed to school children



Side cladding work on mine lease boundary

9. Sita Ram Rungta Award for Social Responsibility – Baphlimali Bauxite Mine of Utkal Alumina International Limited (Rayagada, Odisha)



Paddy cultivation under project Swabalambi



Farmers with their harvested crop from orchards



**Training local youth on
Electric appliances repairing**



Garment Production Unit



Multispeciality Hospital



Mobile Medical Unit in villages

10. NMDC Award for Social Responsibility – Oraghat Iron Mines of Rungta Sons Private Limited (Sundergarh, Odisha)



Sanitization during Covid-19 outbreak



Awareness during Covid-19



Support to Anganwadis



Promotion of education



Encouragement to sports



Provision of drinking water

11. Jury Special Award for Social Responsibility – Ramrama Manganese Mine of A.P Trivedi Sons (Balaghat, Madhya Pradesh)



Furniture donated to school



School constructed for students



Skill training for youth



Community Centre for local villagers



Eye camp for villagers



12. Rio Tinto Health & Safety Award – Rama Iron Ore Mines of JSW Steel Limited (Ballari, Karnataka)



Mines Integrated System for communication



Mock Drill at Mine



Vocational Training Centre



Safety week celebration at mines



Mobile Medical unit launch



Workers rewarded for Safety performance

13. Hindustan Zinc Health & Safety Award – Sukinda Mines (Chromite) of India Metals and Ferro Alloys Ltd. (Jajpur, Odisha)



Fatigue sensor in HEMM



AC cabin for operator for comfort



Social distancing at mines



Thermal Screening



Dispensary at mines



Emergency rescue training at mines

6. Way Forward

India, being the second most populated country with the largest percent of aspiring young generation, is witnessing a fast growth in middle class, leading to urbanization and infrastructure development. Mining is an important sector which contributes significantly to our gross domestic product and generates employment in remote and far-off regions. India is endowed with abundant reserves of key minerals such as iron ore, coal, bauxite, dolomite, limestone, chromite, manganese ore, zinc etc. which accords significant opportunities in mining sector. However, there are many areas that need to be explored.

Many mining companies are involved in various voluntary initiatives that go beyond the social and environmental performance set by the legislation. Innovation and adoption of new technologies helps in the productivity of mining sector. While concerns for shortage of metals can be offset by improved technology but focus today is on other sustainability challenges such as access to land, mitigating the environmental impacts, achieving high health and safety standards and proactively engaging in community development. With the increase in rate of extraction, direct as well as indirect jobs in mining sector are also augmented.

Mining being a site specific activity needs to systematically address the issues of its environmental and social impacts in a sustainable manner. The mining business has crossed geographical boundaries to face stiff global competitions. Fast and effective communication has increased the global networking and awareness. The complex regulatory system needs to be simplified and rationalized. All these factors resulted in the following emerging issues:

- Growing concerns of inequality, impacts of project affected families, mines safety, community health, water consumption, climate change, biodiversity, cultural diversity etc.
- “Concerns” shifting to “Rights” through intervention of judiciary system, green tribunals and NGO activities.
- Increasing public pressure for transparency and accountability on business houses.

-
- Thrust on collaboration approach by all industry members to resolve the issues.
 - Emphasis on innovation and digitalization in mining.

Under the situation of huge growth potential of mining industry in the country coupled with these emerging trends, Sustainable Mining Initiative (SMI) envisages pivotal role to assist its member by updating critically on anticipating changes and emerging issues so that members can better understand evolving values, proactively address risks, avoid crisis and serve in a leadership position in resolving issues of public concerns. It is necessary to improve the basic building blocks of governance required for the extractive industry to contribute to sustainable development.

Our focal thrust areas are:

- Communicating the importance and contribution of mining and metal in the sustainable socio-economic development of the nation.
- Facilitating the strengthening of mining industry and community relationship.
- Providing technical support for better environment & climate change management, and better health and safety performance over and above the regulations.

SMI will keep evolving itself in developing comprehensive programs and models which will help in identification and mitigation of sustainability related risks in the Indian mining industry.

KEY ACTION POINTS OF CODE OF CONDUCT

Principle 1

1. Integration of sustainable principles into company policies.
2. Plan, design, operate & close operations to enhance sustainable development.
3. Encourage and ensure good practice & innovation to improve sustainable performance.
4. Encourage customers, business partners and suppliers of goods and services to adopt principles that are comparable to our own.
5. Provide sustainable development training at all levels.
6. Support public policies and practices that foster open and competitive markets.

Principle 2

1. Develop and implement ethical business practices.
2. Comply with or continually exceed the requirements of the laws and regulations.
3. Work with the governments, industry and other stakeholders to evolve appropriate public policy, laws and regulations that contribute to national sustainable development.

Principle 3

1. Conduct base line survey.
2. Stakeholder's engagement in management of social, health, safety, environmental and economic impacts.
3. Undertake risk management systems.
4. Inform potentially affected parties of significant risks.
5. Develop and maintain effective emergency response measures.

Principle 4

1. Focused systems for improvement of all aspects of operations that could have impact on the health and safety.
2. Provide necessary medical facilities.
3. Talk all practical measures to eliminate workplace fatalities, injuries and diseases.

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4. Provide all employees and those of contractors with health and safety training.
 5. Implement regular health surveillance and risk based monitoring of employees.

Principle 5

1. Assess the positive and negative, the direct and indirect and the cumulative environment impacts of new projects.
2. Focused environmental management system to mitigate adverse environmental impacts.
3. Involve local communities and authorities to avoid or minimize local and regional environmental impacts.
4. Rehabilitate land disturbed or occupied by operations with appropriate post mining land uses.

Principle 6

1. Ensure fair remuneration and work conditions and ban forced, compulsory or child labour.
2. Provide for the constructive engagement of employees in upholding the freedom of association and right to collective bargaining.
3. Implement policies and practices to eliminate unfair discrimination.
4. Provide all staffs including subcontractors with appropriate cultural and human rights training.
5. Minimize involuntary resettlement and compensate fairly for adverse effects on the community where they cannot be avoided.

Principle 7

1. Respect legally designated protected areas and culturally sensitive sacred grooves.
2. Emphasis on restoration of natural ecosystems to rebuild local bio diversity.
3. Disseminate scientific data and promote practices in biodiversity assessment and management.

Principle 8

1. Advance understanding of the properties of mined out resources and their lifecycle effects.
2. Conduct and support research that promotes effective use of resources.
3. Develop and promote the concept of integrated resource management.

-
4. Provide regulators and other stakeholders with scientifically sound data.
 5. Support the development of scientifically sound policies, regulations, standards and material choice decision that encourage the safe use of mined out material.
 6. Provide for safe storage and disposal of residual wastes and process residues.

Principle 9

1. Engage community to discuss and respond to issues and conflict concerning the management of social impacts.
2. Involve affected communities in developing work programs and determining outcomes.
3. Encourage partnerships with governments and non-governmental organizations for effectively delivered of programmes.
4. Contribute to skill and capacity building of individuals and community groups.

Principle 10

1. Engage with and respond to stakeholders through open and a participative consultation process.
 2. Constantly document and report on economic, social and environmental performance.
 3. Exchange data, implementation procedures, and experiences even personal wherever necessary.
 4. Provide information that is independently verifiable.
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SUSTAINABLE DEVELOPMENT GOALS



SUSTAINABLE MINING INITIATIVE FEDERATION OF INDIAN MINERAL INDUSTRIES

FIMI House, B-311, Okhla Industrial Area, Phase-I, New Delhi - 110 020 (India)

Tel.: (011) 26814596, Fax: (011) 26814594

E-mail: smi@fedmin.com; Website: <http://fedmin.com/smi>

