



SUSTAINABLE MINING CHARTER

An Approach to Sustainable Mining





METAL & MINING SECTOR - TOWARDS A SUSTAINABLE FUTURE

The metals and mining sector in India is bound to witness significant growth in the coming decade with per capita demand for key metals such as steel, projected to increase from 74 kg in 2018 to 158 kg in 2030 (Invest India, 2020) and that for aluminium, projected to increase to more than triple from 2.5 kg in 2018 to 8.7 kg by 2030 (Fitch, 2020). The Government of India recognises the critical importance of the sector to the nation; through ongoing policy reforms, it aims to attract investment and further growth.

However, operational expansion and economic growth must be balanced with a focus on community and worker well-being, environmental stewardship, and the economic development of local communities. This is particularly critical in the mineral-bearing parts of India, which are also rich in forests, biodiversity, and tribal populations.

With greater focus on the environmental and social impact of mining operations, there is an opportunity to adopt a growth model that is integrated and holistic, simultaneously creating economic, social, and environmental value for a wide range of stakeholders

SUSTAINABLE MINING CHARTER

OUR BLUEPRINT FOR SUSTAINABLE MINING

As a global metals business working across the aluminium and copper value chains with operations in 10 countries, sustainability is at the core of Hindalco's operations.

Hindalco's global operations necessitate a holistic and well-rounded approach to sustainability that encompasses a variety of areas, like sustainable mining practices, energy conservation, recycling, environment-friendly disposal of industrial wastes, safety practices, socio-economic development of the communities around our mining locations and empowerment of our employees.

At Hindalco, we envision a more **Resilient, Responsible and Reliable** future and the Sustainable Mining Charter is aimed at accelerating our shift towards sustainability-focused operations.

The Sustainable Mining Charter has been developed through an in-depth participatory process. With the aid of extensive consultations and inputs, review of publications by industry bodies and policymakers, and benchmarking of global best practices, the Sustainable Mining Charter reflects ground realities and a collective consensus on addressing the challenges of achieving sustainability in mining operations.

This comprehensive document transcends the limitations of the existing linear approaches to sustainability through a set of actionable frameworks and case studies to support the design and implementation of sustainable mining practices, with a strong focus on execution roadmaps and governance across mines.

The Sustainable Mining Charter provides a holistic framework to accelerate the shift from compliance focused operations to sustainability focused operations and become future ready to meet the rising demand of metals and minerals.

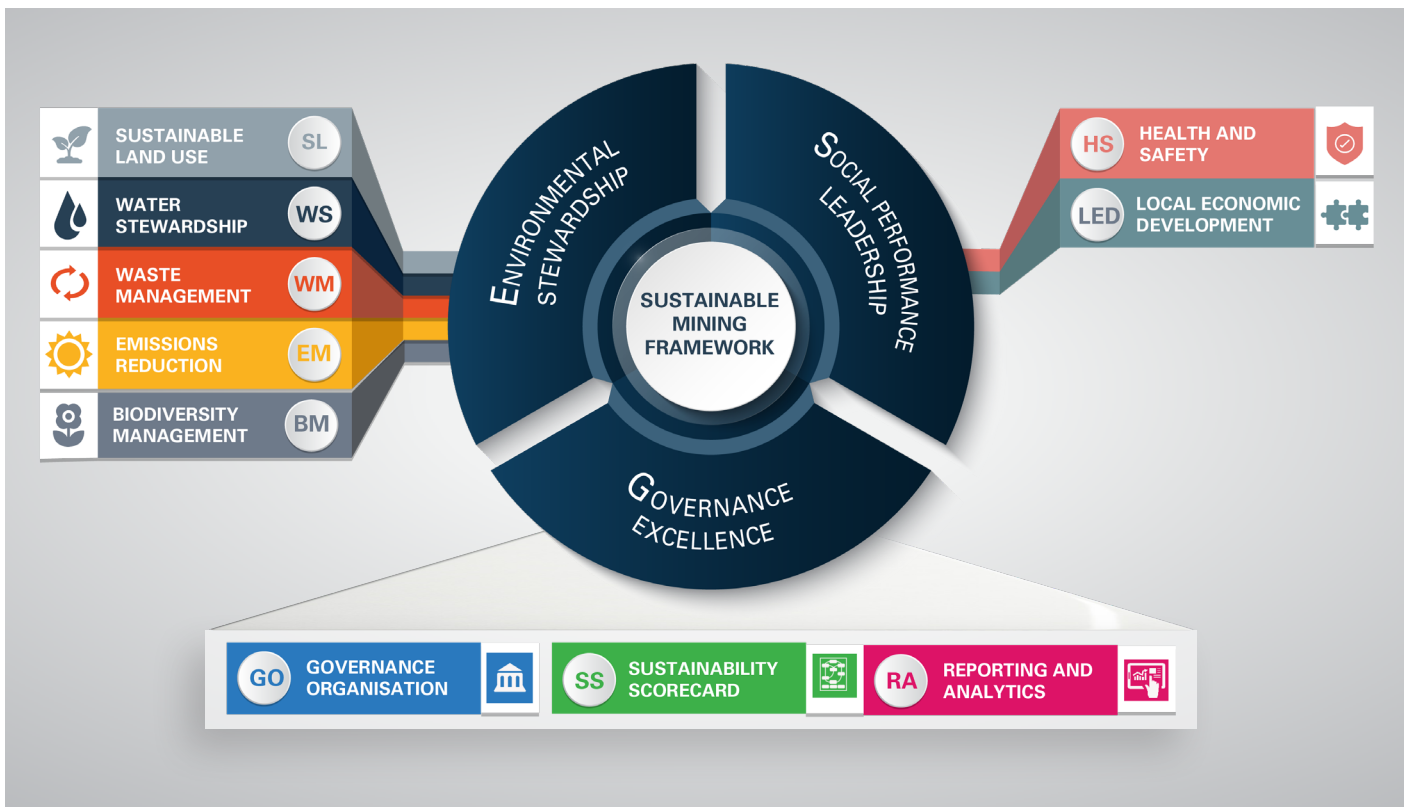
SUSTAINABLE MINING FRAMEWORK

The Sustainable Mining Charter presents a systems view of the mining ecosystem. By identifying and understanding the interconnectedness between different components, the Charter identifies seven thematic (focus) areas, actions across which, will create a positive impact on the environment and the society.

Our **Sustainable Mining Framework** is based on the fundamental principles of **Environmental Stewardship**, focusing on avoiding, minimizing,

mitigating and offsetting environment impact of mining operations and **Social Performance Leadership**, focusing on enhancing resilience of communities we operate within. Coupled with a **strong governance mechanism**, which provides guidance on designing, executing and monitoring sustainability interventions, and reporting sustainability performance, our framework provides a holistic approach for achieving sustainability across the mining operations.

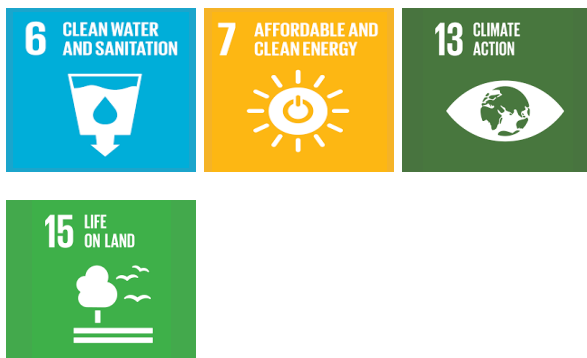
Figure 1. Sustainable Mining Framework





Although the actions based on the Charter can have an impact on almost all SDGs, they can significantly contribute towards the below SDGs:

Environmental sustainability goals



Social inclusion goals



Sustainable economic development goals



DELIVERING SUSTAINABILITY ACROSS THE THEMATIC AREAS

The seven thematic areas capture vital environmental and societal impacts of mining operations; actions across these seven areas provide a holistic approach to building sustainable mining operations.

The Charter outlines objectives (aspirational end states) for each thematic area, aiming to act as the north star for our teams and challenge us to innovate. The Charter provides actionable frameworks across mine lifecycle to guide actions, identifies challenges and proposes risk mitigation strategies. It also suggests key performance indicators, which mine teams can incorporate to measure critical sustainability parameters while sharing relevant and practical case studies and best practices from Hindalco and other global mining companies.

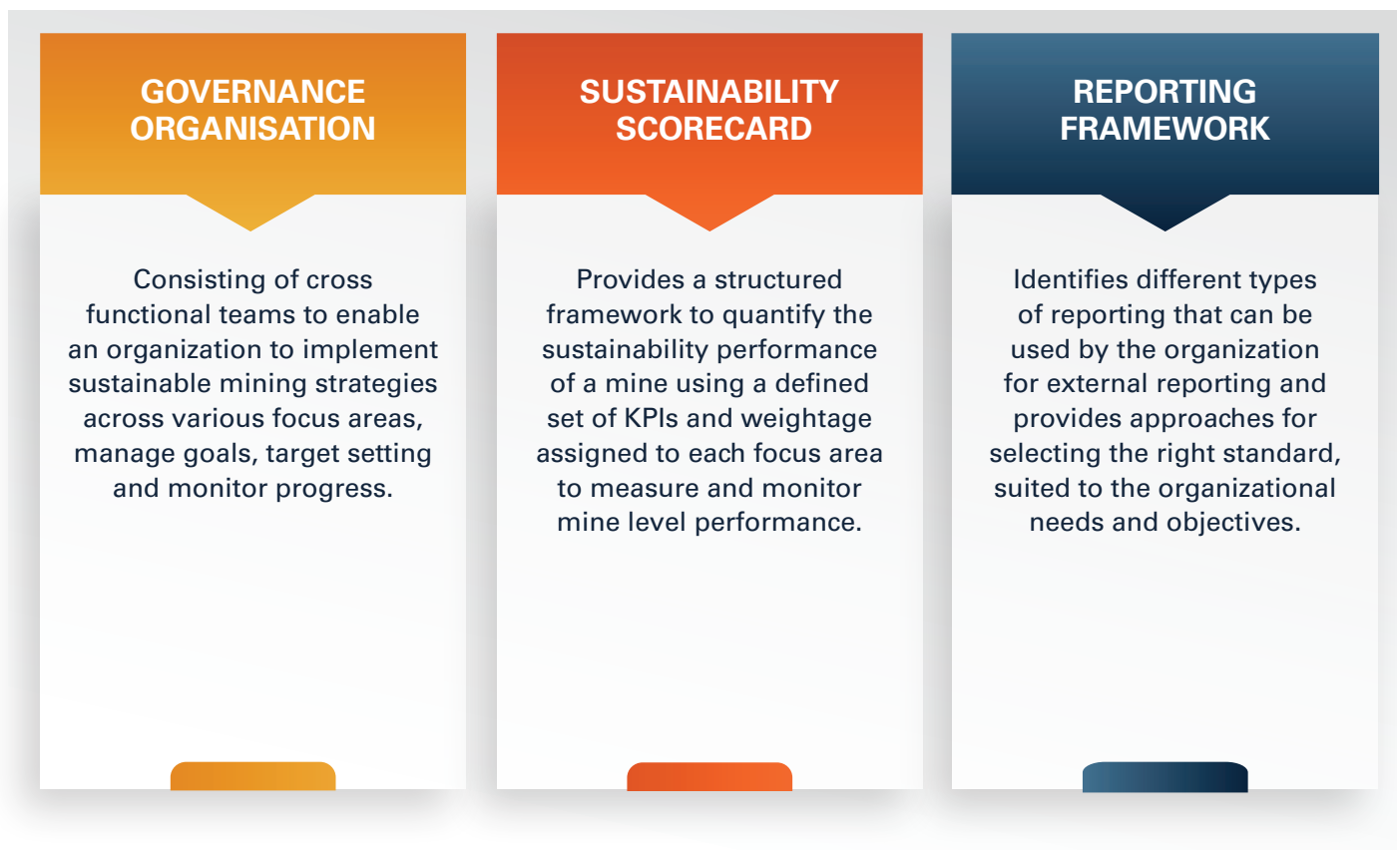
	OBJECTIVES
 SUSTAINABLE LAND USE	<ul style="list-style-type: none"> / Ensure growth of local environmental and social infrastructure through effective conservation, restoration, rehabilitation & resettlement and responsible mine closure practices / Minimize risk to natural resources, biodiversity, livelihood, socio-cultural and natural heritage
 WATER USE	<ul style="list-style-type: none"> / Rethink and redesign mining activities to avoid and minimize impact on watershed / Conserve, restore and equitably share water resources with stakeholders in order to maintain positive water balance in the watershed
 WASTE MANAGEMENT	<ul style="list-style-type: none"> / Manage waste responsibly and go beyond compliance to reduce, reuse, recycle, recover and ensure safe disposal of waste / Transform towards a circular economy and create value out of waste
 EMISSIONS REDUCTION	<ul style="list-style-type: none"> / Become carbon positive by adopting low-carbon growth strategy / Ensure a healthy and safe environment by balancing the impact of mining operation of air quality and climate change
 BIODIVERSITY MANAGEMENT	<ul style="list-style-type: none"> / Strive for No-Net-Loss of biodiversity by avoiding, minimizing, restoring and if necessary, offsetting residual impacts on biodiversity
 HEALTH & SAFETY	<ul style="list-style-type: none"> / Achieve 'zero harm' through institutionalizing systems, controls and standards / Ensure safe environment for mine workers and communities with focus on employee well being
 COMMUNITY DEVELOPMENT	<ul style="list-style-type: none"> / Develop an integrated, equitable and sustainable growth model that creates synergistic and symbiotic socio-economic value for the community

GOVERNANCE EXCELLENCE TO DRIVE IMPLEMENTATION

Actions to improve sustainability performance across different focus areas are anchored by a strong Governance mechanism, which will enhance efficiency, participation, transparency, accountability and foster continuous improvement.

The Charter defines a three-tiered Governance Organisation, which will be able to provide guidance on and ensure implementation of sustainability interventions, and a Sustainability Dashboard, which can be used to measure overall mine level sustainability performance across the seven thematic areas.

At Hindalco, we believe in transparency in reporting our sustainability performance, which is reflected by our public disclosures through standards such as Dow Jones Sustainability Index (DJSI). Recognizing the importance of public reporting the Charter defines a Reporting Framework, which can be used by mine teams to understand different reporting standards and ensure alignment with standards being followed by the organization.

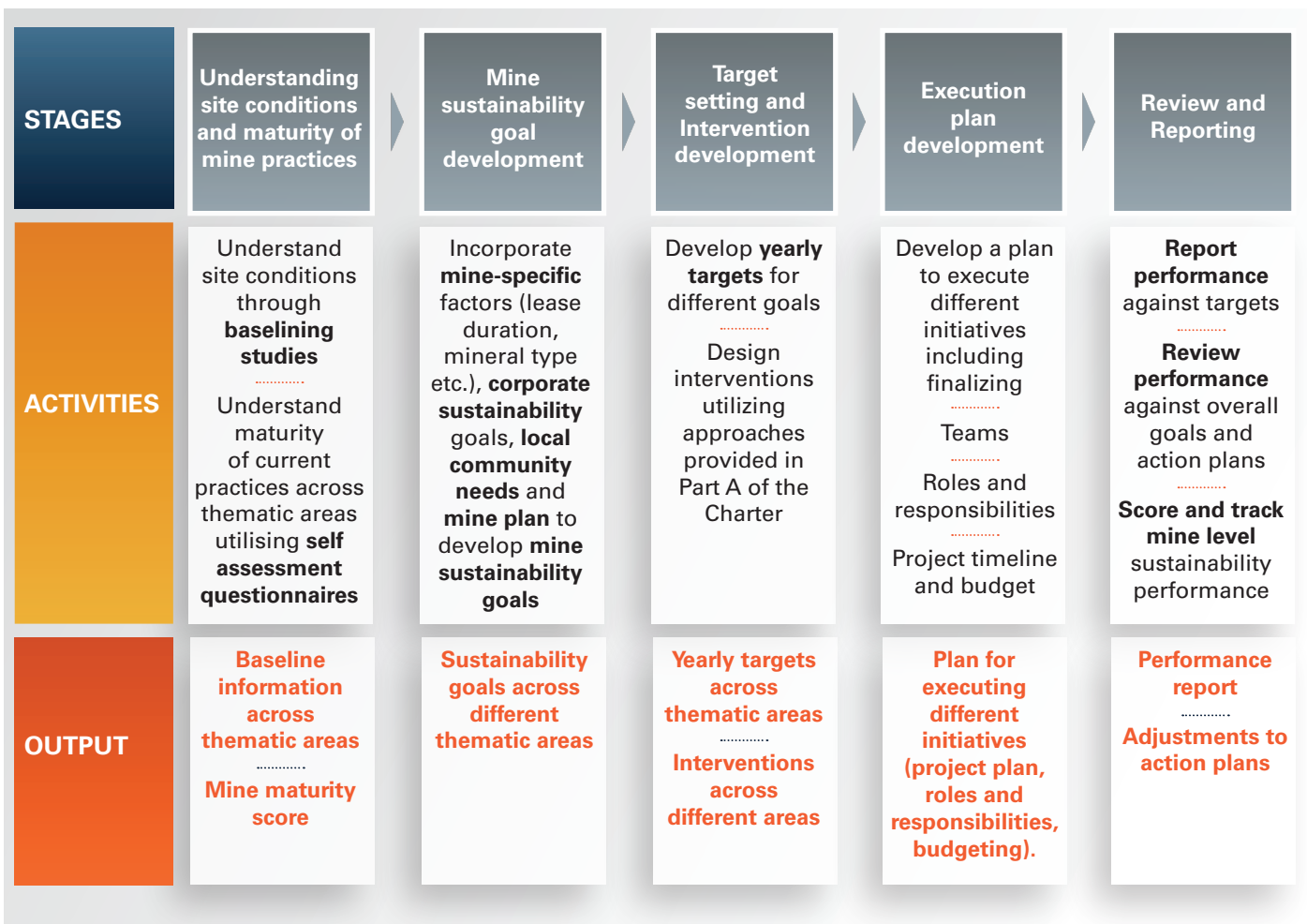


MINE-LEVEL SUSTAINABILITY IMPLEMENTATION ROADMAP

Success of guidelines and frameworks provided in Charter is dependent on effective implementation at mine site level. The Charter thus provides a mine level sustainability implementation roadmap.

The **Sustainability implementation Roadmap** provides guidance to mine team on developing mine sustainability goals aligned with corporate sustainability goals; designing and implementing sustainability interventions; and reporting performance.

It also provides guidance on incorporating mine specific factors such as the stage of the mine in its lifecycle, type of mineral and extraction methodology and land ownership, to name a few, while defining goals and designing interventions thus allowing each mine to prioritise issues and design solutions, which are best suited to its requirement.



WAY FORWARD

For us at Hindalco, growth ties in with sustainability. Through our Sustainable Mining Charter, we are trying to transform mining to become a force for adding value to businesses, the environment and communities.

We envision this Charter to advance a shared understanding of socially, economically and environmentally responsible areas that proposes a common platform for disseminating best practices and establishing benchmarks within the mining industry in India.

We will continuously attempt to share our learnings with the broader mining community to develop a nation-centric approach to sustainable mining in India.

In case of any queries on the Charter, please write to anoma.basu@adityabirla.com



ABOUT HINDALCO INDUSTRIES LIMITED

Hindalco Industries Limited [HIL] is the metals flagship company of the Aditya Birla Group. An \$18 billion metals powerhouse, Hindalco is the world's largest aluminium company by revenues, and a major player in copper. It is also one of Asia's largest producers of primary aluminium.



Guided by its purpose of building a greener, stronger, smarter world, Hindalco provides innovative solutions for a sustainable planet. Its wholly-owned subsidiary Novelis Inc. is the world's largest producer of aluminium beverage can stock and the largest recycler of used beverage cans (UBCs). The Company operates several bauxite and coal mines in India for captive consumption in its aluminium business.

Hindalco's copper facility in India comprises a world-class copper smelter, downstream facilities, a fertiliser plant and a captive jetty. The copper smelter is among the world's largest custom smelters at a single location.

Hindalco's global footprint spans 47 manufacturing units across 10 countries.

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