ECO EDGE

Integrating Sustainability in Value Chains of Companies

Apraava Energy's Value Chain Partner

Central Coalfields Limited

Assessment Report 2024

Disclaimer

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THANK YOU FOR APPLYING TO THE ECO EDGE CERTIFICATION

This document presents the summary observations during the assessment of your organisation by the team of assessors and Eco Edge team. We believe it is essential for businesses to know how it is progressing in achieving excellence in sustainability performance. Such an external perspective allows the entity to know how it measures the various performance indicators, and attempts to improve through appropriate action, thereby reaping consequent business benefits.

The overall assessment is based on more than 70 indicators, conducted for OEM as well as its upstream and downstream partners, across five focus areas: General, Decarbonization, Circularity, Health & Safety, and Human Rights. Assessment was done as desk assessment of the questionnaires. Capacity building sessions were organized, addressing each focus area, providing clarity on queries and help in filling the questionnaire. The assessment was conducted by third-party assessors remotely. These assessments also served as instructional opportunities, allowing VCPs to benefit from seasoned assessors' inputs. The findings and guidance from assessments are formally presented in this report.

We encourage your organisation to use this Gap Report as a pointer to your sustainability performance, work on the various strengths and opportunities to make yourself a more efficient and hence sustainable business entity. For this goal, and even otherwise, please feel free to seek the help and professional services of the CII-ITC Centre of Excellence for Sustainable Development.

Please feel free to contact us for any further clarification.

Ms. Seema Arora
Deputy Director General

About Eco Edge

- The CII Eco Edge program integrates sustainability in the value chains of companies, including MSMEs.
- It assesses sourcing companies and their Value Chain Partners (VCPs) across Human Rights, Circularity, Health & Safety, Decarbonization, and sector-specific indicators.
- Eco Edge supports sustainable value chains through an internally developed framework, implemented via a SaaS-based tool.
- This program supports companies in managing Scope 3 emissions, building a network of sustainable vendors, and adapting to the evolving global regulatory landscape for value chain sustainability.

The program portfolio comprises the following components:

- **Capacity Building Programs**: Tailored sessions are conducted to enhance the awareness and skills of value chain participants on sustainability. These sessions cover regulations, technical concepts, and sourcing company requirements. Dedicated programs for procurement and ESG teams aim to integrate sustainability into procurement decisions.

- **Sustainability Assessments**: The program supports sourcing companies in assessing their value chain partners (VCPs) on ESG parameters. It helps identify high-risk VCPs needing support, highlights top performers on specific KPIs, and provides insights for setting improvement targets.

- **Maturity-Based Certification**: Certifications are awarded to sourcing companies and VCPs meeting defined performance thresholds. The certification levels—**Eco Edge Emerging, Eco Edge Progressive,** and **Eco Edge Trailblazer**—reflect varying degrees of commitment to sustainability integration.

A. Central Coalfields Limited Profile

Apraava Energy Upstream VCP

Ranchi, Jharkhand

Sector: Coal and Mine

Products: Coal
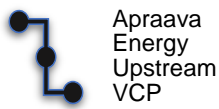
The assessment was done for FY 2024-25.

B. Sustainability Dashboard

Renewable Energy Portfolio: 0.09%

Recycled water in operations: 170 Lakh KL

Optimized Transportation: 36 electric vehicle deployed

Policies available: Environmental Policy, POSH Policy, Code of Conduct Policy, Whistle Blower Policy, Cyber security policy

Management systems available: ISO 14001:2015 & ISO 45001:2018

Employee safety
• LTIFR: 0

Compliance & complaints
• No. of non-compliance/fines paid: 0
• Instances of data breaches/code of conduct violations: 0
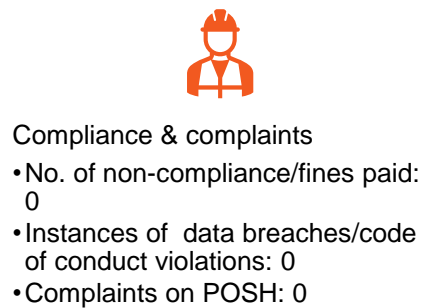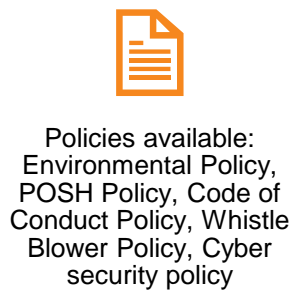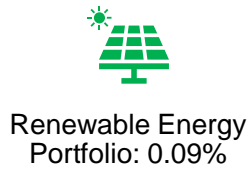• Complaints on POSH: 0

Figure 1: Sustainability Dashboard

C. BRSR Core Dashboard

The Eco Edge framework is aligned with BRSR Core. The following dashboard is designed to enable Value Chain Partners (VCPs) to effectively prepare for forthcoming BRSR compliance requirements.

> BRSR Core is a subset of the Business Responsibility and Sustainability Report (BRSR) mandated by SEBI (Securities and Exchange Board of India) for the top 1000 (by market capitalization) listed companies. It comprises a set of Key Performance Indicators (KPIs) under nine ESG attributes.

Table 1: BRSR Core Alignment Dashboard

BRSR Core Attribute	Parameter	Data Availability
Green-house Gas (GHG) footprint	*Total Scope 1 emissions*	
	Total Scope 2 emissions	
	GHG Emission Intensity (Scope 1 +2)	
Water Footprint	*Total water consumption*	
	Water consumption intensity	
	Water Discharge by destination and levels of Treatment	
Energy footprint	*Total energy consumed*	
	% of the energy consumed from renewable sources	
	Energy intensity	
Embracing circularity – details related to waste management by the entity	*Total waste generated*	
	Waste intensity	
	Each category of waste generated, total waste recovered through recycling, re-using or other recovery operations	
	For each category of waste generated, total waste disposed of by nature of disposal method	
Enhancing Employee Wellbeing and Safety	*Spending on measures towards the wellbeing of employees and workers – cost incurred as a % of the total revenue of the company*	
	Details of safety-related incidents for employees and workers (including contract workforce e.g. workers in the company's construction sites)	
Enabling Gender Diversity in Business	*Gross wages paid to females as % of wages paid*	
	Complaints on POSH	
Enabling Inclusive Development	*Input material sourced from the following sources as % of total purchases – Directly sourced from MSMEs/ small producers and from within India*	

	Job creation in smaller towns – Wages paid to persons employed in smaller towns (permanent or nonpermanent /on contract) as % of total wage cost	
Fairness in Engaging with Customers and Suppliers	*Instances involving loss/breach of data of customers as a percentage of total data breaches or cyber security events*	

Legend:

	Data Available
	Data not available

D. Central Coalfields Limited Performance Analysis

Overall Score	46.48 points out of 100

FINAL SCORE
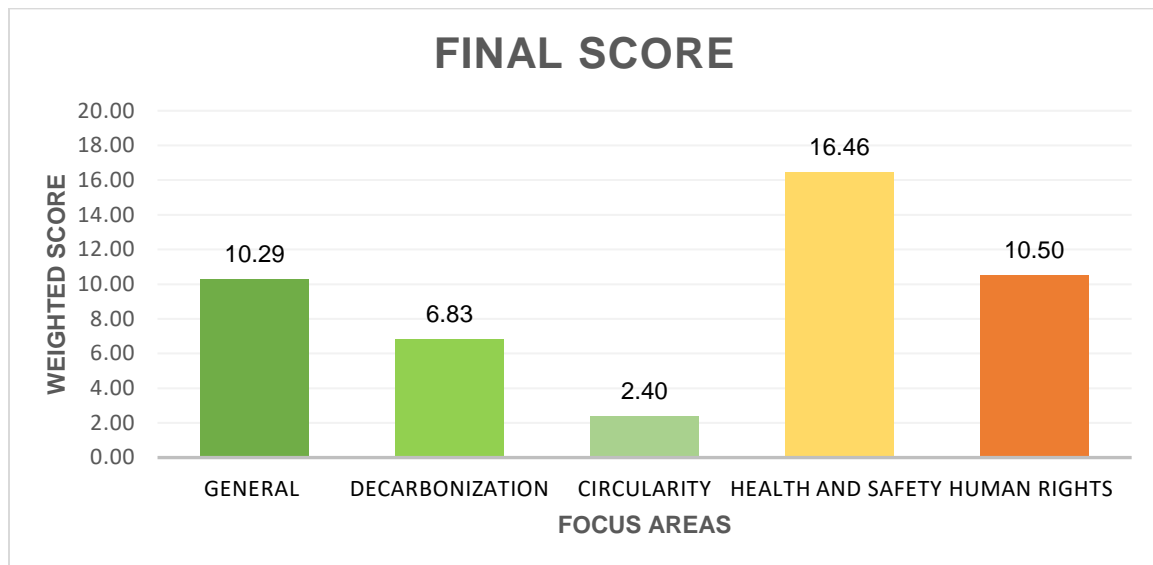
Figure 2: CCL Eco Edge Score

Central Coalfields Limited (CCL) has achieved a total score of 46.48 out of 100 indicating average performance. The organisation's performance in various focus areas is reflected in the achieved scores out of 20: Decarbonization (10.29), Circularity (6.83), Health & Safety (16.46), and Human Rights (10.50). The performance in Health & Safety is good, demonstrating the high level of commitment of the organisation towards its employees & workers health & well-being.

General: Figure 3 below highlights the sub focus area wise score of General. The organisation performed well in the General Section, demonstrating policies on various sustainability parameters. CCL also provides capacity building for their employees on topics such as energy management, environmental restoration, procurement, and soil reclamation. Additional topics like waste management and water management can also be included in these programs. Moreover, these trainings can be effectively extended to workers through similar capacity-building initiatives. While a sustainability committee is in place, there is scope to enhance investments in R&D, as well as financial and infrastructural support for initiatives related to circularity.
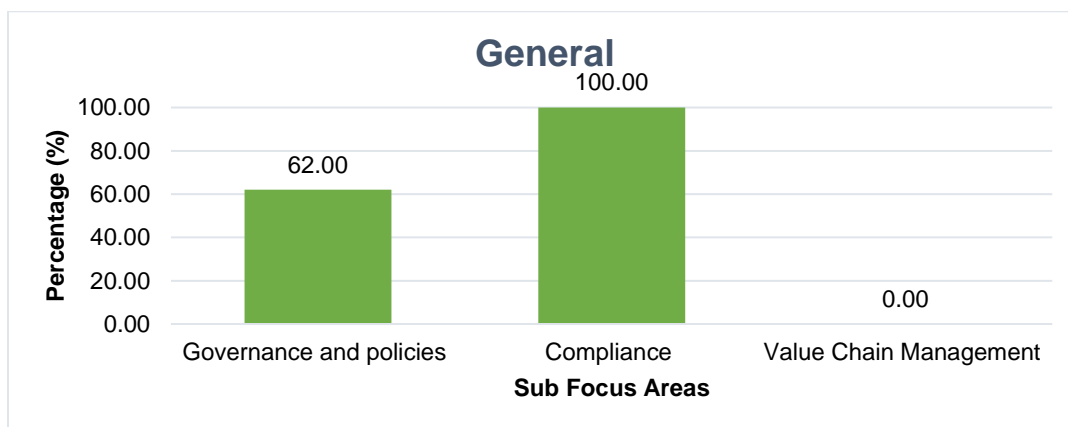
Figure 3: Score Achieved in General Sub-Focus Areas

Decarbonization: The sub focus area wise scores achieved in Decarbonisation are presented in figure 4 below. CCL monitors its energy and fuel consumption data but can enhance decarbonization efforts by also monitoring water consumption, calculating Scope emissions from all mining activities, and set quantified GHG reduction targets. The organisation treats 170 lakh KL of water annually through Effluent Treatment Plants at all workshops, and this treated water is utilized by local communities. As part of its net-zero initiative, the organisation is transitioning its fleet to electric vehicles, with 36 electric vehicles already in use. To reduce emissions, a 1.25 MWp rooftop solar panel has been installed at CCL, while a 24 MW land-mounted solar plant is in the final stages of commissioning.
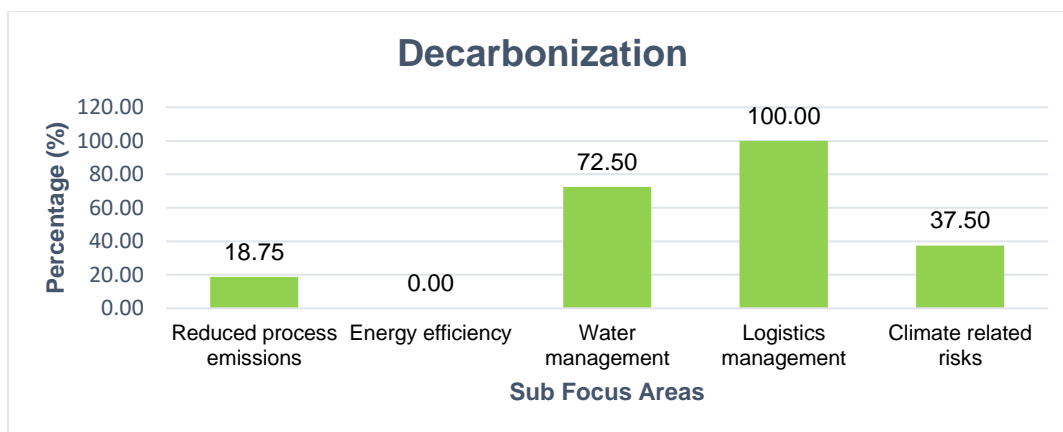
Figure 4: Score Achieved in Decarbonization Sub-Focus Areas

Circularity: Figure 5 provides focus area wise scores within Circularity. The organisation monitors waste generation through manual tracking but no information on segregation, diversion and disposal of the generated waste to ensure waste management in line with circular economy principles.
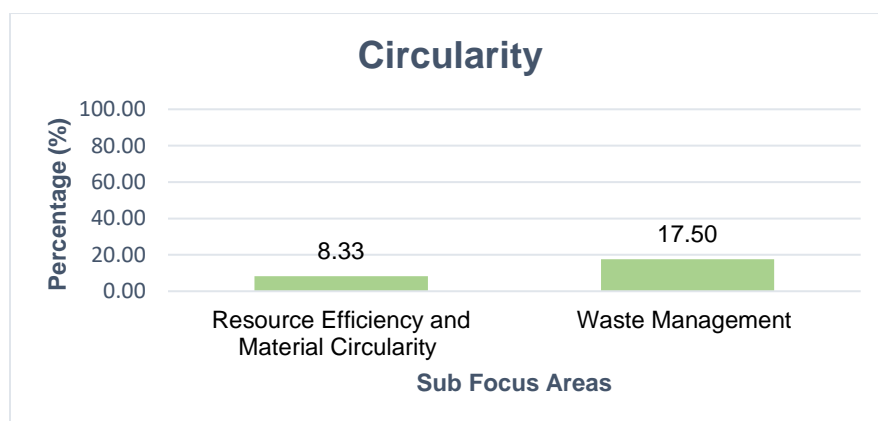
Figure 5: Score Achieved in Circularity Sub-Focus Areas

To enhance sustainability, CCL can conduct Life Cycle Analysis (LCA) of their products. Publicly committing to eliminating single-use plastics (SUP) with defined targets and obtaining third-party verification of environmental data would strengthen credibility and align with global waste management standards.

Human Rights: The sub focus area wise scores achieved in Human Rights are presented in figure 6 below. Efforts toward ethical practices in human rights are evident; however, the organisation lacks a comprehensive human rights policy covering areas such as child labour, equal opportunity, freedom of association,

and minimum wages. The absence of information on female workforce representation and inclusivity for differently abled individuals highlights the need for focused diversity and inclusion strategies.

Figure 6: Score Achieved in Human Rights Sub-Focus Areas

Health and safety: The organisation demonstrates fair performance in health and safety, conducting both internal and external audits monthly. Moreover, CCL offer healthcare, family welfare, and sports facilities to support the mental well-being of employees. To strengthen their approach, a structured Safety Management Plan (SMP) has been implemented across all opencast and underground mines, designed by considering all activities and the associated hazards to effectively identify and evaluate health and safety risks within the organisation. Also, the introduction of electronic detonators for controlled blasting in opencast mines has enhanced worker safety.

E. Apraava Energy Value Chain Partner (VCP) Key Parameter Benchmarks

Figure 7 below provides insights into best practices analysed from the assessment of 16 VCPs. These best practices can serve as benchmarks for peer VCPs to follow.

Renewable Energy Portfolio
- **Best Practice**: 25%
- **Company Performance**: 0.09%

Recycled water in operations
- **Best Practice**: 35.81%

Waste Diversion:
- **Best Practice**: 99.34%

Resolution of health & safety complaints:
- **Best Practice**: 100%
- **Company Performance**: 100%

Women representation in the workforce*
- **Best Practice**:
  - Top management - 25%
  - Middle management - 16.6%
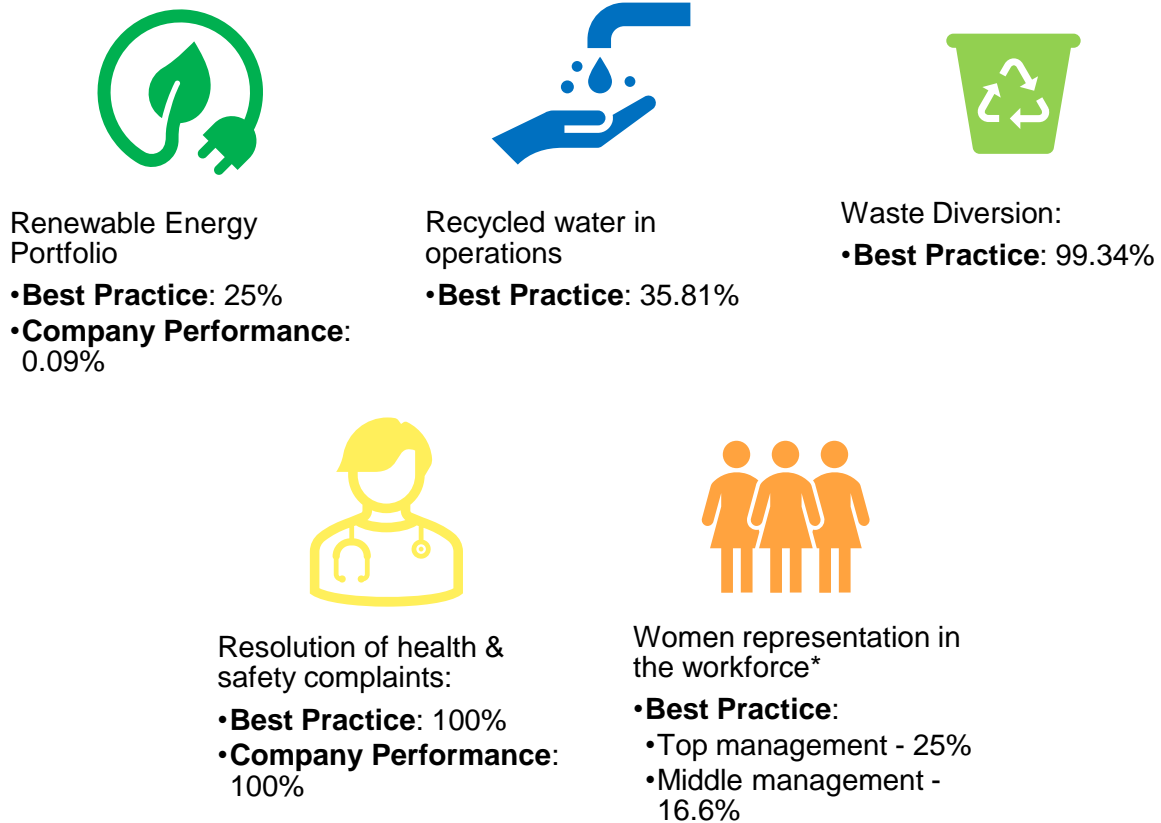
Figure 7: Peer Benchmarking

*Best practice is from different VCPs

F. Summary: Gaps Identified

General
- Insufficient allocation of resources towards circularity initiatives.
- Absence of supplier code of conduct.

Decarbonization
- Scope emissions have not been calculated.
- Absence of monitoring water consumption data.
- Green building certification not in place.
- Absence of identification of climate related risks.
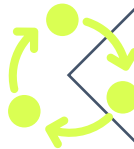
Circularity
- No LCA is conducted for products.
- Lacks a formal policy to phase out or ban single-use plastics.
- Absence of waste segregation and its diversion.

Health & Safety
- Near miss frequency rates are not tracked.

Human Rights
- Human rights policy covering forced labour, freedom of association, minimum wages etc. not in place.
- Insufficient information on women representation in workforce.

Figure 8: Gaps Identified Summary

G. Gap Assessment

	General	Score	10.29

a. Sub focus area   *Governance and policies*

Gap identified	Although the organisation has allocated 62.81Cr for decarbonization efforts to reduce emission, there is insufficient information regarding the allocation of resources—such as R&D, financial, and infrastructural support—for initiatives related to circularity.
Recommended action	As the organisation has allocated resource for the decarbonization and health and safety issues, it is equally important to prioritize finances, and infrastructural support for circularity initiatives in the budget to become a sustainable organisation.
Potential benefits of recommendation	The above recommendation can actively enhance sustainability objectives by: • making a positive environmental impact • regulatory compliance • mitigating risk • enhancing stakeholder trust • competitive advantage

b. Sub focus area   *Governance and Policies*

Gap identified	The organisation lacks the following ISO certification: ISO 50001:2018- Energy Management System, ISO 20400:2017- Sustainable Procurement Guidance, SA8000:2014- Social Accountability and ISO 26000- Social Responsibility.
Recommended action	It is advised that the organisation proactively aligns itself with the above-mentioned standards. It helps organisation to develop and improve gradually. For e.g. ISO 50001:2018 Energy Management System - Establishes a framework for organisations to develop, implement, and continuously improve energy management practices. It focuses on enhancing energy efficiency, reducing energy consumption, and optimizing energy performance. ISO 26000 Social Responsibility - Provides guidelines for integrating social responsibility into organisational strategies, covering areas such as human rights, labour practices, the environment, and community involvement.
Potential benefits of recommendation	• These management systems help to address regulatory demands in a systematic and cost-effective manner. • Updated certifications and alignment with recognized standards position the organisation as a leader in sustainability, attracting business opportunities and partnerships.

c.   Sub focus area   Governance and Policies

Gap identified	Employees are not motivated or provided with any incentives to incorporate sustainability considerations into their daily decision-making processes.
Recommended action	It is important to incentivise employees through regular trainings and targets that is linked to remuneration or performance appraisal.
Potential benefits of recommendation	This will help to improvise in integrating sustainability to their work decisions.

d.   Sub focus area   Value chain management

Gap identified	The organisation does not have a supplier code of conduct for Value Chain partners.

Recommended action	• CoC be made mandatory for all subsidiaries including value chain partners ideally by incorporating it into contractual agreements.
	• Ensure 100% participation in the CoC training program for all stakeholders within the next 2-3 years
	  a. If large-scale in-person training is challenging, introduce an e-module version for employees with intranet access.
	  b. For other stakeholders, continue offline training.
	• An annual refresher training on the CoC for all employees, workers, and consultants.

Potential benefits of recommendation	- E-module has a one-time development cost, minimal ongoing implementation costs. - Reduces potential non-compliance costs significantly. Strengthens company reputation, building trust with customers, partners, and investors

	Decarbonization	**Score**	**6.83**

a. *Sub focus area*	*Decarbonize through reduced process emissions*
Gap identified	The organisation has been collecting energy and fuel consumption data, but scope 1 and 2 emissions are not calculated. There is also lack of quantified Greenhouse Gas (GHG) reduction targets.
Recommended action	The organisation can analyze the GHG inventory to pinpoint high-emission areas, prioritize reduction efforts, and implement specific measures for overall emission reduction. This can be achieved using the following steps: • Assessment and Baseline measurement • Developing Realistic Targets: Set ambitious yet attainable GHG reduction targets that align with the organisation's sustainability objectives. These targets can be based on the baseline measurements, scientific evidence, industry benchmarks, and regulatory requirements (if applicable). • Implementing Reduction Strategies • Monitoring and Reporting Progress

Potential benefits of recommendation	Setting clear GHG reduction targets and defining priorities are important steps in achieving your organisational greenhouse gas footprint reduction.

b. Sub focus area	*Water Management*

Gap identified	The organisation treats consumed water through ETP but has insufficient oversight regarding the monitoring of water usage.
Recommended action	The organisation could improve water management by quantifying the amount of water being utilized.
Potential benefits of recommendation	• Gain insight into its excessive water consumption. • Implementation of water reduction measures. • This leads to significant cost savings. • Enhance resource efficiency. • Reduce environmental impact and support sustainability goals by promoting responsible water management.

c. Sub focus area	*Decarbonize through energy efficiency*

Gap identified	The organisation does not have green building certification
Recommended action	The organisation can pursue green building certification to reduce its environmental impact and enhance credibility.

Potential benefits of recommendation	Upfront costs of green building certification are offset by long-term financial, environmental, and reputational benefits • Green buildings are energy efficient and thus also have higher property value. • Lowers GHG emissions and energy bills leading to cost benefits. • Green building certification enhances reputation, attracting customers, investors, and talent focused on sustainability. • Green building certification helps businesses comply with strict environmental regulations, reducing the risk of fines. • Further, renewable energy offers numerous benefits, including environmental protection by reducing carbon emissions and air pollution, lowers energy bills and leads to energy independence.

d. Sub focus area	*Climate-related risks*
Gap identified	Climate-related risks are yet to be identified, assessed, or considered as part of the organisation's risk management process.
Recommended action	• Assign responsibility to a cross-functional team to lead climate risk assessment. • Conduct initial screening of physical (e.g., extreme weather) and transition (e.g., policy, fuel cost) climate risks.

- Provide basic training to internal teams on climate risk types and methodologies.
- Integrate key findings into operational reviews and risk registers.

Best Practice: Ørsted implemented the TCFD framework to identify and assess physical and transition climate risks.

Potential benefits of recommendation	Improves readiness for climate-related disruptions and enables informed planning for long-term resilience.
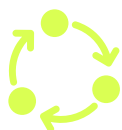
	Circularity **Score** **2.40**

a. Sub focus area	*Resource Efficiency and Material Circularity*
Gaps identified	There is a lack of formalized policy or procedure to ban single-use plastics (SUP) within its office premises and at coal mines.
Recommended action	• The organisation may develop annual plans and set targets to eliminate the use of single-use plastics (SUP) within their operations and office premises. Eventually, CCL can extend these efforts to collaborate with their supply chain as well. • The organisation could arrange for a third-party evaluation, examination, and certification of its Single-Use Plastics (SUP) practices. Best Practice: Infosys implemented a no single-use plastic policy across its office premises, including pantries and food courts. The company replaced plastic items such as cutlery, straws, cups, and plates with sustainable alternatives like steel, glass, and compostable materials. Additionally, Infosys conducted internal awareness campaigns and staff training to promote long-term behavioural change.
Potential benefits of recommendation	• Regulatory compliance • Environmental impact reduction

- Enhanced brand reputation

b. *Sub focus area*   *Waste management*

Gap identified	As per the information available, the total waste, including that from office premises and mines are not effectively diverted for recycling or reuse before disposal.
Recommended action	- The organisation could implement a structured waste management system by doing waste segregation practices from mines to office premises. - This would ensure that all generated waste is properly sorted and diverted for recycling or reuse before disposal. - Additionally, conducting awareness programs for employees can help promote responsible waste disposal practices and reinforce a culture of sustainability within the organisation.
Potential benefits of recommendation	Implementing a structured waste management system will: - enhance resource efficiency and ensure compliance with environmental regulations - minimizes environmental impact - encourages the principles of a circular economy. - improves stakeholder trust

c. *Sub focus area*   *Resource Efficiency and Material Circularity*

Gaps identified	The organisation has not conducted Life Cycle Analysis (LCA) for its coal mines.
Recommended action	The organisation is suggested to plan LCA for its coal mines. ISO 14040 and ISO 14044 can be adopted to carry out LCA study. Some basic steps would include: • Defining the objective of the process • Defining the scope of LCA, cradle to grave/ gate to grave etc. • Identifying resources used and emissions for each stage within the scope and quantifying them. • Identify stages where the environmental impact can be minimised
Potential benefits of recommendation	• Helps identify where resource efficiency can be brought in and thus lead to cost savings. • Optimizes value chain operations by providing a broad view of environmental trade-off options, and helping with decision-making

	Health and Safety	**Score**	**16.46**

a. *Sub focus area*	*Operations & Safety*

Gap identified	The organisation does not track the near misses.
Recommended action	The frequency of workplace incidents and near miss with the loss working hours due to it can be recorded.
Potential benefits of recommendation	- Helps to prevent a severe injury, fatality, or damage. - Improves worker safety. - Enhances organisation's safety culture. - Demonstrate commitment towards well-being of their employees.

| | **Human Rights** | **Score** | **10.50** |

a. Sub focus area *Equal Opportunity*

Gap identified	As per the information available, the organisation has low female representation in its workforce highlighting a gender diversity gap. Additionally, CCL have not implemented any measures or infrastructure to accommodate differently abled individuals.
Recommended action	Formulate a strategic roadmap to: • improve the representation of women across all organisational levels • aim to foster a work environment that embraces diversity. To achieve these objectives, company is suggested to develop programs and practices that prioritize: • Equal opportunity across all aspects of employment, including pay equity • Inclusive hiring practices • Leadership development programs for women • Safe reporting mechanisms • Work-life balance

	• Identify roles for which differently abled individuals can be hired and create advertising/hiring procedures to promote the same.
	• Enhance infrastructure to facilitate easier movement for employees with disabilities.
Potential benefits of recommendation	This helps organisation bringing in a range of viewpoints, backgrounds, and concepts that can result in:
	• enhanced problem-solving.
	• better decision-making.
	• heightened creativity.
	• nurtures a collaborative, receptive, and adaptable culture.
	Incorporating individuals with disabilities can contribute to adhering to the Rights of Persons with Disabilities Act, 2016, fostering greater inclusivity and accessibility

b. Sub focus area	*Awareness on Human rights*

Gap identified	• No process in place for identifying
	  a. the key stakeholders of the organisation
	  b. salient human rights issues faced by the organisation.
	• The policies in place are based on general understanding of the sector.

Recommended action	Establish a formal stakeholder engagement process that includes regular activities such as: • Identification of key stakeholders

- Engagement with key stakeholders
- Review and resolution of feedback/input from stakeholders, including concerns related to human rights

Potential benefits of recommendation	A formal process to identify and engage with stakeholders helps: - identify and mitigate potential risks. - Make better and informed business- decisions and process development/ improvements. - Build trust and stronger relationship with the stakeholders. - Build better support for future initiatives. A human rights risk assessment process will further help ensure compliance, mitigate risks, enhance reputation, improve stakeholder relationship and thus support long term sustainability.

c. Sub focus area	*Awareness on Human rights*
Gap identified	Absence of relevant human rights policy.
Recommended action	The organisation could prepare a human rights policy covering areas like: - Forced labour - Right to freedom of association - Right to collective bargaining - Elimination of excessive working hours - Right to minimum wage

Potential benefits of recommendation	- Enable employees to join or establish trade unions or associations, fostering unity and collective representation among the workforces. - Facilitates mutually beneficial agreements on wages, working conditions, and benefits, fostering a fair and collaborative work environment. - Boosts productivity, employee loyalty, and enhances the organisation's reputation as an ethical employer.

Annexure I: Scoring Methodology

a. Focus Area

The organisation is graded across the five focus areas shown below:

General	Decarbonization	Circularity	Health & Safety	Human Rights

Each question per focus area is out of 100 marks. The questions contain a mix of objective and subjective types. The assessments were conducted based on the information provided in the completed questionnaire, supplemented by pertinent supporting documents.

The scores for each focus area were scaled down on a 100-point scale to determine the final score.

b. Final Score

An equal weightage of 20% was assigned to each focus area. Consequently, only 20% of the score from each focus area was summed to calculate the final assessment score.

Table 2: Central Coalfields Final Score

Central Coalfields Limited Final Score Card	
Focus Areas	**Weighted Score (20%)**
General	10.29
Decarbonization	6.83
Circularity	2.40
Health & Safety	16.46
Human Rights	10.50
Total (Out of 100)	**46.48**

CII-ITC Centre of Excellence for Sustainable Development

The CII Centre of Excellence for Sustainable Development (CESD), now in its 20th year, drives sustainable, environmental, inclusive and climate-friendly transformation among stakeholders. It is the ecosystem creator for sustainable development in India and builds collaborative initiatives for enhancing actions; designs data-driven digital tools and frameworks for capacity development and advocates for policy reforms to advance responsible business practices.

CESD works towards bringing local and global macro challenges to the centerstage; building policy consensus on critical issues; strengthening stakeholders' awareness and representation on policy & regulatory reforms and enabling actions that positively impact the environment, nature and communities.

With a vision to drive transformation towards sustainable development, CESD continues to play a focal role in Government-Industry dialogues on national regulations; articulating stakeholders' discourse on global policies; putting forth Indian Industry's stand on macro-economic issues and accentuating the need for sustainable and inclusive transformation.

CESD focuses on six transformational pathways: Advancing Creation of a Circular Economy; Facilitating an Enabling Ecosystem for ESG Reporting; Accelerating Nature Positive Actions; Enhancing Solutions for Clean Air; Building Climate Resilience and Low-Carbon Economy and Fostering Dialogues, Engagements & Knowledge Exchange.

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