Welcome to your CDP Climate Change Questionnaire 2023

C0. Introduction

C0.1

(C0.1) Give a general description and introduction to your organization.

Vedanta Limited, a subsidiary of Vedanta Resources Limited, stands as a leading global conglomerate in the natural resources sector. With a diversified portfolio, the company's primary operations encompass zinc-lead-silver, iron ore, steel, copper, aluminum, power, nickel, and oil and gas. The company's portfolio consists of 9 out of 17 metals & minerals that will be required for the transition to a green economy and, whic play a significant role in the development of the country and in achieving India's energy and mineral independence.
In FY 2023, we have engaged a workforce of 87,513 employees and contractors; achieving a consolidated revenue of INR 1,45,404 crore, showcasing a 11% year-on-year (YoY) growth. Currently, our diverse portfolio encompasses divisions focused on exploration, asset development, extraction, processing, and value addition with an integrated production capacity comprising 8,451,828 metric tonnes per annum.

We are committed to integrating growth, value creation, and continuous improvement in all aspects of our operations including safety, social and environmental practices. Anchoring to the Paris Agreement, Vedanta has set an intermediate target of a 25% reduction in absolute emissions by 2030 (vis-à-vis 2020-21) and achieving net zero emissions by 2050. We also have short-term targets to decrease the GHG intensity of our metals businesses by 20% by FY2025 from a FY2021 baseline.

We have been taking several initiatives to support the transformation to a greener future. In FY23, we have made significant progress towards our goal of net zero carbon. With a commitment to plant 7 million trees by 2030, we were the first business entity from South Asia to join the World Economic Forum's 1 trillion trees program. Further, by 2030, our goal is to deploy/use 2.5 GW of Round-the-Clock (RTC) equivalent Renewable Energy. We have also implemented an innovative, market-leading EV policy to encourage our employees to transition to EVs, and we are on schedule to decarbonize our fleet of light motor vehicles by 2030 completely.

In FY 2022-23, we have implemented the following initiatives to accelerate the reduction in emissions:

a) By the end of FY 2023, Vedanta has signed 788 MW (RTC eq) renewable energy (RE) power delivery agreements (PDAs).
b) In FY 2023, we used ~78,000 tonnes of biomass in our operations, a ~4x increase over FY 2022 levels (18,000 tonnes), resulting in a 0.2% coal switch.
c) Internal Carbon Price (ICP) of 15 USD/ ton deployed for any project that has a budget of > INR 50 million or any project increasing GHG emissions by 0.5 million MT
d) Heavy-duty transportation vehicles have been transitioned to greener fuel using Battery Electric Vehicles (BEVs) and LNG-powered vehicles at HZL.

Our three-tier sustainability governance framework, supported by 15 communities of practice (COPs) maintains a constant oversight over all the ESG aspects including the implementation of climate strategy and related initiatives. Tier 1 comprises board level ESG committee, the Group Executive Committee is at tier 2, and the ESG Management Committee is at tier 3. The Energy and Climate COP advises the governance bodies on climate-related issues. This governance structure together enables effective performance monitoring across all levels. Our significant climate-related initiatives received several notable recognitions in FY 2022-23:
a. We were ranked 6th out of 216 companies globally and 2nd in Asia Pacific in the metal and mining sector of the S&P Global Corporate Sustainability Assessment 2022
b. Our ESG ratings improved in key rating indices like MSCI (from B to BB) and Sustainanlytics (44.3 to 39.6). Of note, was the strong scores awarded to the company's management practices around decarbonization and climate change.

Lastly, decarbonization & climate change features among the 20 issues that constitute the Group Risk Register. As a result this issue is monitored on a quarterly basis by the Group Risk Committee, in addition to the monitoring by the Group ExCo, ESG ManCom and Energy & Carbon CoP on a monthly basis and by the Board ESG Committee on a quarterly basis.

C0.2

(C0.2) State the start and end date of the year for which you are reporting data and indicate whether you will be providing emissions data for past reporting years.

Reporting year

Start date

April 1, 2022

End date

March 31, 2023

Indicate if you are providing emissions data for past reporting years

Yes

Select the number of past reporting years you will be providing Scope 1 emissions data for

5 years

Select the number of past reporting years you will be providing Scope 2 emissions data for

5 years

Select the number of past reporting years you will be providing Scope 3 emissions data for

2 years

C0.3

(C0.3) Select the countries/areas in which you operate.

Australia
India
Namibia
South Africa
United Arab Emirates

C0.4

(C0.4) Select the currency used for all financial information disclosed throughout your response.

INR

C0.5

(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your chosen approach for consolidating your GHG inventory.

Operational control

C-MM0.7

(C-MM0.7) Which part of the metals and mining value chain does your organization operate in?

Row 1

Mining

Silver
Iron ore
Nickel
Zinc
Lead

Processing metals

Aluminum
Alumina
Copper
Silver
Nickel

Zinc
Lead
Other ferrous metals, please specify
Steel and Ferro-chromite

C0.8

(C0.8) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?

Indicate whether you are able to provide a unique identifier for your organization	Provide your unique identifier
Yes, an ISIN code	INE205A01025

C1. Governance

C1.1

(C1.1) Is there board-level oversight of climate-related issues within your organization?

Yes

C1.1a

(C1.1a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for climate-related issues.

Position of individual or committee	Responsibilities for climate-related issues
Chief Executive Officer (CEO)	The Group CEO is an executive director on the Board and a member of the Board ESG Committee. The Group CEO plays a pivotal role in developing and overseeing the implementation of climate change mitigation and resilience measures across group companies. As a member of the Board-level ESG Committee and the chair of the Group Executive Committee (Group-ExCo), he oversees development of long term GHG reduction targets and implementation of high investment decarbonization projects along with other ESG projects. Under the leadership of G-CEO, following initiatives were undertaken during FY 2022-23: a. Completed the signing of RE Power-Distribution-Agreements for 788 MW. Additional 50 MW approved by the Board, taking the total to 838 MW. b. Completed review of 7-year rolling ESG business-plans for each of our businesses. These business plans include the BU-specific decarbonization roadmaps, until the year 2030. The business plans will help the company reduce its absolute GHG emissions by 25% by 2030 from a 2021 baseline, which is in alignment with the 2 degree SBTi scenario.

	c. Oversaw the publication of the 2nd TCFD report and disclosure of Group-wide Scope 3 emissions. d. Oversaw the improvement is the Group's ESG ratings across multiple globally-recognized ESG Rating platforms such as the S&P Corporate Sustainability Assessment (Ranked 6th Globally in Metal & Mining Companies and 2nd in Asia Pacific in Dow Jones Sustainability Index 2022), MSCI (Rated BB from B), and Sustainanlytics (Risk-level improvement from Severe to High). The Group's robust decarbonization strategy is one of the key reasons for the ratings improvement.
Board-level committee	Group ESG committee proactively monitors progress towards climate-related goals and commitments. This committee consists of the Group CEO, two independent and one non-independent directors who delegate the task of managing climate risk and reviewing, evaluating, and executing decisions made by the Vedanta Board on climate change targets and commitments. The Group Head - HSE& Sustainability and the Director - ESG, Carbon, and Social Performance are permanent invitees to this committee. This committee is advised by the ESG Management Committee (Man-Com), supported by energy & carbon community of practice (CoP) . The committee meets twice every year, and has following key responsibilities: • Review and recommend improvements to governance structures for carbon management • Advise the Board on sustainability policies and management systems, including climate and decarbonization • Oversee company's sustainability performance based on "Vedanta Sustainability Framework" • Ensure effective implementation of governance, advocacy, and public relation mechanisms related to ESG & Climate Change • Outline initiatives to establish a sustainability culture involving employees at all levels • Evaluate emerging sustainability and climate risks, guiding management on avoidance strategies for sustained growth • Advise the Board on fulfilling responsibilities according to law and international sustainability, climate change, and stakeholder governance standards. In FY2022-23, Sustainability and ESG Committee at the Board level carried out the following initiatives aligned with our 2025 Sustainability Goals: a. Business Plan meeting with all the BU's HSES head led by Group CEO Mr. Sunil Duggal and Non-Executive Director Ms. Priya Agarwal, where all the KPI's are tracked against the 9 Aims and will be reviewed every quarterly/half early basis. b. Transforming office (TO's) are held on a monthly basis, under this initiative, we have accelerated the efforts in Environment, Social and Governance aspects and review of all our projects and their progress. ESG Transformation Office was created which included 15 communities of practice from each aspect of sustainability. Communities of Practice included Carbon, Water, Waste, Biodiversity, Supply Chain, People, Communities (CSR),

	Communication, Safety and Health, Acquisitions, Expansions. Each Community is led by a senior leader in the concerned department and each community is driving sustainability initiatives in their community.
Other, please specify Group Executive Committee	The Group ExCo brings together the Geographical Business Scopes led by our Business CEOs and functional leadership at the Executive level, consolidating their efforts. They engage in discussions on vital Key Performance Indicators (KPIs) including GHG emissions, metals intensity, integration of renewable energy into operations, new product launches, and research and development (R&D) initiatives, in collaboration with the board. The Group ESG-Executive Committee (ESG-ExCo) and the ESG Management Committee (Man-Com) provide guidance to the Board ESG committee, meeting monthly to report progress to the full Executive Board.
Other, please specify ESG Management Committee (ESG ManCom)	The committee provides governance, strategic leadership, and execution support, overseeing the implementation of Vedanta's sustainability strategy, including the execution of the 2050 net zero roadmap, to ensure a clear focus and alignment. CEO and supported by the Group Environment, Health, and Safety (EHS) Head, the committee meets fortnightly to drive progress and make informed decisions.
Chief Sustainability Officer (CSO)	The CSO - also known as the Director - ESG, Carbon, Social Performance is a permanent invitee to the Board ESG committee and updates the Board committee on the progress made on the decarbonization plan for the Group. He also appraises the Board Committee on any future plans, emerging risks that may have an impact of the Group's Net Zero carbon commitments. Some of the key points of discussion have been on the: - Progress made on the deployment of renewable energy across our businesses - Detailing of the net-zero roadmap for the business; with emphasis on mid-term targets for 2030 - Key programs implemented to drive decarbonization across businesses - Disclosure updates related to TCFD, Sustainability Report, and BRSR
Other, please specify Group Head - HSE & Sustainability	The Group Head - HSE & Sustainability is a permanent invitee to the Board ESG committee and works with the Board Committee to set the agenda for the six-monthly meetings. He provides the Board with updates on topics related to health, safety & environment that have an overlap with the overall ESG agenda of the Group. He is also responsible for updating the Board Committee on the progress made on the action items that emerge from past committee meetings. Some of the key points of discussion have been on: - Safety performance across the Group - Compliance management system for environmental metrics - De-risking of tailing facilities - Plans and updates on improving the Group's ESG ratings

C1.1b

(C1.1b) Provide further details on the board's oversight of climate-related issues.

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Please explain
Scheduled – all meetings	Reviewing and guiding annual budgets Overseeing major capital expenditures Reviewing innovation/R&D priorities Overseeing and guiding employee incentives Reviewing and guiding strategy Overseeing and guiding the development of a transition plan Monitoring the implementation of a transition plan Overseeing and guiding scenario analysis Overseeing the setting of corporate targets Monitoring progress towards corporate targets Overseeing and guiding public policy engagement Overseeing value chain engagement Reviewing and guiding the risk management process	Board-Level ESG Committee meets twice a year to review all climate-related issues and present them to the Board. ESG committee is informed by Director - ESG, Carbon, and Social Performance on actions taken by company towards management of strategic long-term impacts of climate change, covering other important topics such as implementation of plans to reduce carbon footprint, adoption of green business model, reduction of GHG emissions, and understanding emerging risks associated with climate change, among others. The Committee is responsible for: • Reviewing and recommending improvements to governance structures for carbon management • Advising the Board on sustainability policies and management systems, including climate and decarbonization • Overseeing company's sustainability performance based on "Vedanta Sustainability Framework" • Ensuring effective implementation of governance, advocacy, and public relation mechanisms related to ESG & Climate Change • Outlining initiatives to establish a sustainability culture involving employees at all levels • Evaluating emerging sustainability and climate risks, guiding management on avoidance strategies for sustained growth • Advising the Board on fulfilling responsibilities according to law and international sustainability, climate change, and stakeholder governance standards. • Carbon footprint and fatalities integrated into various long-term incentive schemes wherein carbon footprint has 15% weightage in Business Performance (40% of total weightage)

C1.1d

(C1.1d) Does your organization have at least one board member with competence on climate-related issues?

	Board member(s) have competence on climate-related issues	Criteria used to assess competence of board member(s) on climate-related issues
Row 1	Yes	The Nomination and Remuneration Committee (NRC) at Vedanta is primarily focused on aligning the interests of Executive Directors and senior management to cultivate a sustainable performance culture within the organization. It ensures that the Board and senior management possess the appropriate blend of skills, experience, diversity, and independence to effectively carry out their responsibilities. To support Vedanta's sustainability objectives, a special training of ESG subjects (with a focus on climate change) was organized for the Board, to help them better incorporate these topics in their guidance to the company. In addition, an executive course called Sustainability 101 has been introduced, aiming to enhance the capacity and awareness of the top 100 executives regarding climate change and other sustainability aspects. This course covers important topics such as GHG emissions, net-zero concepts, climate change risks, and overall awareness. Our CEO, who serves as a member of the Board ESG Committee, has completed this training to ensure well-informed decision-making on climate-related matters at the board level. The CEO possesses the necessary expertise and has represented the company at national and international forums focused on climate change, providing strong leadership to the committee in making informed decisions on climate risks and other enterprise risks. Additionally, as part of continuing good governing practices, in FY 2022-23, Vedanta appointed a leading consultancy firm to conduct the Board Evaluation Process, ensuring transparency and independence through an online structured questionnaire. The evaluation results showcased a high level of commitment and engagement from the Board, its committees, and senior leadership.

C1.2

(C1.2) Provide the highest management-level position(s) or committee(s) with responsibility for climate-related issues.

Position or committee

Chief Executive Officer (CEO)

Climate-related responsibilities of this position

Managing annual budgets for climate mitigation activities
Managing major capital and/or operational expenditures related to low-carbon products or services (including R&D)
Managing climate-related acquisitions, mergers, and divestitures
Providing climate-related employee incentives
Developing a climate transition plan
Implementing a climate transition plan
Integrating climate-related issues into the strategy
Conducting climate-related scenario analysis
Setting climate-related corporate targets
Monitoring progress against climate-related corporate targets
Managing public policy engagement that may impact the climate
Managing value chain engagement on climate-related issues
Assessing climate-related risks and opportunities
Managing climate-related risks and opportunities

Coverage of responsibilities

Reporting line

Reports to the board directly

Frequency of reporting to the board on climate-related issues via this reporting line

Quarterly

Please explain

The CEO holds the highest management position in our company and carries the responsibility of making decisions pertaining to climate change. They possess the authority to approve budgets for capital expenditures (CAPEX) and operational expenditures (OPEX), as well as allocate necessary resources for the implementation of climate adaptation and mitigation actions.
At the board level (Tier 1), our CEO serves as a member of the Board of Directors and plays a crucial role in the Board-level ESG Committee. This committee provides guidance on important ESG matters and monitors Vedanta's progress towards achieving sustainability objectives.
Additionally, the CEO is a member of the Group Executive Committee (Tier 2), which convenes monthly to discuss the status of sustainability goals. The committee presents performance updates on sustainability objectives and future plans to the management representative of the executive sustainability committee, who reports to the Board-level ESG committee on a semi-annual basis.
To ensure effective program delivery, the Board Committee is supported by the ESG ManCom, chaired by the CEO. The ESG ManCom comprises senior executives and oversees various areas, including sustainability, health and safety, environment, community, and waste management.

C1.3

(C1.3) Do you provide incentives for the management of climate-related issues, including the attainment of targets?

	Provide incentives for the management of climate-related issues	Comment
Row 1	Yes	15% weightage in annual performance evaluation of our full-time employees is attributed to performance in sustainability-related KPIs, which include climate related metrics under the VSAP process. VSAP audits are inclusive of GHG reduction KPIs and implementation of energy and carbon standards, making management of carbon footprint a determinant of the executive compensation structure. Additionally, payout of the company's stock option scheme, includes performance of climate-related KPIs such as reduction in GHG intensity and absolute GHG emissions.

C1.3a

(C1.3a) Provide further details on the incentives provided for the management of climate-related issues (do not include the names of individuals).

Entitled to incentive

Chief Executive Officer (CEO)

Type of incentive

Monetary reward

Incentive(s)

Bonus - % of salary
Salary increase
Shares

Performance indicator(s)

Board approval of climate transition plan
Achievement of climate transition plan KPI
Progress towards a climate-related target
Achievement of a climate-related target
Implementation of an emissions reduction initiative
Reduction in absolute emissions
Reduction in emissions intensity
Energy efficiency improvement
Increased share of low-carbon energy in total energy consumption

Increased share of renewable energy in total energy consumption
Reduction in total energy consumption
Increased investment in low-carbon R&D
Increased share of revenue from low-carbon products or services in product or service portfolio
Increased engagement with suppliers on climate-related issues
Increased supplier compliance with a climate-related requirement
Company performance against a climate-related sustainability index (e.g., DJSI, CDP Climate Change score etc.)
Implementation of employee awareness campaign or training program on climate-related issues

Incentive plan(s) this incentive is linked to

Both Short-Term and Long-Term Incentive Plan

Further details of incentive(s)

For all senior executives, including the CEO, the company has in place both short-term and long-term incentives to drive performance. The incentives incorporate both business as well as ESG parameters, which are linked to business and individual performance.

The short-term incentives are aligned with the performance of companies in the VSAP audit. The audit examines the implementation and performance against the Vedanta Sustainability Framework, which includes climate-related standards and KPIs. A minimum score of 70% is required to be applicable to receive this part of the incentive. 15% of the overall performance scores are aligned to these sustainability factors.

The Long-Term-Incentive Plan balances executives' performance orientation and decisions to deliver on the short- term business outcomes with the long-term performance of the Company, both on financial and non-financial parameters. The Scheme rewards executives for their sustained contribution over the performance period of 3 years, in successful operation of the Company with wealth creation opportunities, encouraging high-growth performance.

To give prime importance to sustainable business delivery, ESG and Carbon footprint are part of additional parameters to measure business performance. To ensure that we operate sustainably in line with our motto of 'zero harm, zero waste and zero discharge', multiplier based on fatalities has also been included as a performance parameter for vesting.

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

Vedanta establishes a strong alignment between the CEO's objectives and the company's sustainability targets and transition goals through incentivization. This approach ensures that the CEO's goals are directly linked to the company's overarching targets, enabling an effective and efficient pursuit of carbon neutrality and sustainability. The incentives provided to the CEO for climate change-related goals create a dedicated focus on reducing greenhouse gas emissions, managing water resources, handling waste effectively, and optimizing energy management. By offering these incentives,

Vedanta motivates the CEO to take prompt action and encourages creative thinking in developing and implementing innovative solutions to meet the set targets.

Entitled to incentive

All employees

Type of incentive

Monetary reward

Incentive(s)

Bonus – set figure
Salary increase
Shares

Performance indicator(s)

Implementation of an emissions reduction initiative
Reduction in absolute emissions
Reduction in emissions intensity
Energy efficiency improvement
Increased share of low-carbon energy in total energy consumption
Increased share of renewable energy in total energy consumption
Reduction in total energy consumption
Increased share of revenue from low-carbon products or services in product or service portfolio

Incentive plan(s) this incentive is linked to

Both Short-Term and Long-Term Incentive Plan

Further details of incentive(s)

For all employees, the company has in place both short-term and long-term incentives to drive performance. The incentives incorporate both business as well as ESG parameters, which are linked to business and individual performance.

The short-term incentives are aligned with the performance of companies in the VSAP audit. The audit examines the implementation and performance against the Vedanta Sustainability Framework, which includes climate-related standards and KPIs. A minimum score of 70% is required to be applicable to receive this part of the incentive. 15% of the overall performance scores are aligned to these sustainability factors.

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To give prime importance to sustainable business delivery, ESG and Carbon footprint

are part of additional parameters to measure business performance. To ensure that we operate sustainably in line with our motto of ‘zero harm, zero waste and zero discharge’, multiplier based on fatalities has also been included as a performance parameter for vesting.

Explain how this incentive contributes to the implementation of your organization’s climate commitments and/or climate transition plan

Vedanta employs incentive programs to actively engage and motivate employees including CEO in contributing to the company's sustainability goals. By offering rewards to employees who actively participate in these objectives, Vedanta fosters greater engagement and commitment among its workforce. This approach encourages employees to take proactive measures to reduce their carbon footprint, enhance energy efficiency, and adopt sustainable practices. Monetary incentives stimulate innovation and creativity, motivating employees to develop greener solutions and processes. Furthermore, these climate change incentives cultivate a culture of responsibility and accountability, resulting in a positive impact on the company's environmental footprint and achieving climate change targets/commitments. Ensuring equal commitment and investment from all employees, this approach supports Vedanta in achieving its climate transition plan and reducing its overall climate change impact.

C2. Risks and opportunities

C2.1

(C2.1) Does your organization have a process for identifying, assessing, and responding to climate-related risks and opportunities?

Yes

C2.1a

(C2.1a) How does your organization define short-, medium- and long-term time horizons?

	From (years)	To (years)	Comment
Short-term	1	3	Short-term is defined as 1 - 3 years as the company has set an internal target of GHG emissions intensity reduction by 20% by FY 2025 from a 2021 baseline in its metals and mining business.
Medium-term	4	10	The medium-term horizon is established as a period of 4-11 years to align with India's first Nationally Determined Contribution, which sets a target to reduce the emissions intensity of the economy by 33-35% by 2030. Vedanta's absolute reduction targets of 25% by 2030, compared to the baseline of 2020-21, also conform to this timeframe
Long-term	11	25	Net Zero Emissions by 2050 or sooner are targeted as per our public commitment made in Oct 2021 adding to the India's pledge of becoming Net Zero Emissions country by 2070. The Net Zero roadmap

			established by Vedanta also lays out decarbonization strategies such as RE-based and hydrogen-based decarbonization across all BUs between 2030-2050, in line with our long-term horizons.

C2.1b

(C2.1b) How does your organization define substantive financial or strategic impact on your business?

For substantive climate change impacts, Vedanta developed an IPCC-based scenario of potential climate impacts to help Business Units estimate financial impacts, prioritize risks, taking into account the uncertainty related to these impacts. The analysis included different regions of operations and evaluated the prospects for increasing average temperature, rainfall variability and probability of climate impacts. For climate change regulation/ market risk, Vedanta has finalized a carbon pricing model that foresees possible future impact on operational cost for each Business. This will consider direct costs due to possibly new carbon pricing mechanisms.

(i) Definition of substantive financial impact:

The Group considers an impact equal to =>2.5 % of EBITDA as substantive financial impact. For FY2023, this number amounts to INR 8,810,250,000. EBITDA is a key performance indicator for the Group and is also a key metric used by the Group in assessing management's performance. We believe that at =>2.5%, this number can significantly alter the economic outcomes/ project decisions of our stakeholders.

(ii) Definition of substantive strategic impact:

a. Significant effect on the demand for our products caused by regulation, change of customer preferences, innovation or similar.

b. Significant effects on our stock prices caused by violation of regulation, litigation, local stakeholder conflicts or similar including reputational impact including notorious and prolonged diffusion in international media, very negative stakeholders' opinion of the company.

c. Significant effect on production plans caused by unexpected troubles such as the risk of sudden shutdown of BUs.

Additionally, Vedanta has a comprehensive matrix-based assessment to determine climate-related risks with the potential to have a substantive financial or strategic impact on our business. The matrix is a multiplication of likelihood of exposure/ impact and its probable severity for each risk identified. The risk classification matrix classifies climate change risks into 5 levels in the descending order of severity – Catastrophic (Score: 5), Serious (Score: 4), Moderate (Score: 3), Minor (Score: 2) and Negligible (Score: 1). Each level has associated probable impacts qualitatively defined and anything above a Moderate score could be considered a significant impact.

For example,

Inundation of mines due to excessive rainfall and failure of dewatering equipment. Excessive rainfall, driven by climate change, can often a rapid-event. It does not leave much time for immediate action and therefore can have a risk impact that ranges from moderate - serious. Based on an evaluation of this risk, mitigation plans against such an event are in place,

· Dewatering systems installed at all the mines and dewatering arrangements and stand by pumps installed at all sumps. Spare pumps in place for backup.

· Automation of dewatering pump systems to increase efficiency.
· Periodic identification done for high-risk surface and underground flooding zones.
· Systems being developed for dewatering and proper establishments of curtains around water bodies encountered underground.
· Initiatives to undertake hydrology study to identify possible water bodies.

C2.2

(C2.2) Describe your process(es) for identifying, assessing and responding to climate-related risks and opportunities.

Value chain stage(s) covered

Direct operations
Upstream
Downstream

Risk management process

Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment

More than once a year

Time horizon(s) covered

Short-term
Medium-term
Long-term

Description of process

Enterprise risk management serves as an integral part of business strategy to identify, assess and manage climate risks to our operations, communities, and the planet. Based on the risk assessment conducted by the company, we have adopted various strategies such as ICP, Renewable Energy,
recycling to mitigate these risks. Business-level review meetings, undertaken at least once every quarter, formally discuss risk management in short-, medium- and long-term time periods. Every business division of the Group has evolved its own risk matrix, which is reviewed by the Business Management Committee. In addition, business divisions have developed their own risk registers.

Identification, assessment and management of climate related risks:
We carried out an in-depth climate risk assessment and scenario analysis to comprehensively understand and analyse the risks and opportunities posed by climate change to our business. The findings of these studies are apending our carbon strategy and a roadmap to achieve Net Zero status by 2050.
• Physical risk assessment: As part of the physical risk assessment, acute risks arising out of increasing severity of extreme weather events and chronic risks resulting from longer-term changes in climate patterns were studied for 55 business locations. We studied the historical trends and future projections of various climate hazards such as

change in temperature, change in precipitation, floods, droughts, and cyclones to understand how the changing climate may impact our different business locations. Two climate change scenarios RCP 8.5 and RCP 4.5 were used for two time periods 2020 to 2039 and 2040 to 2059 extending over Vedanta's short, medium and long-time frames.
• Transition risk assessment: For our transition risk assessment, we used the Network for Greening the Financial System (NGFS) Scenarios developed in partnership with an academic consortium from the Potsdam Institute for Climate Impact Research (PIK), International Institute for Applied Systems Analysis (IIASA), University of Maryland (UMD), Climate Analytics (CA) and Eidgenössische Technische Hochschule Zürich (ETH).

Risk Matrix: We have a comprehensive matrix-based assessment to evaluate all business risks, including climate-related risks that may have a substantial financial or strategic influence on our business. The risk classification matrix categorizes (climate change) risks into five levels, arranged in descending order of severity: Catastrophic (Score: 5), Serious (Score: 4), Moderate (Score: 3), Minor (Score: 2), and Negligible (Score: 1). Each level is accompanied by qualitatively defined probable impacts, and any score above Moderate indicates a significant impact.

Management: The Audit & Risk Management Committee aids the Board in the risk management process by identifying and assessing any changes in risk exposure, reviewing risk control measures and approving remedial actions wherever appropriate. The Committee is, in turn, supported by the Group Risk Management Committee (GRMC), which helps it evaluate the design and operating effectiveness of the risk mitigation programme and the control systems. The Risk Management Committee meets at least four times annually to discuss risks and mitigation measures, review the robustness of our framework at the level of individual businesses and map the progress against actions planned for key risks. The GRMC comprises the Group Chief Executive Officer, Group Chief Financial Officer and Director-Management Assurance. The Group Head-Health, Safety, Environment & Sustainability is invited to attend these meetings. The GRMC discusses key events impacting the risk profile, relevant risks and uncertainties, emerging risks and progress against planned actions. Each business has developed its own risk matrix, which is reviewed by its respective management committee/ executive committee, chaired by its CEO. In addition, each business has developed its own risk register depending on the size of its operations and number of SBUs/ locations. Risks across these risk registers are aggregated and evaluated and the Group's principal risks are identified, and a response mechanism is formulated. This element is an important component of the overall internal control process from which the Board obtains assurance. The scope of work, authority and resources of the Management Assurance Services (MAS) are regularly reviewed by the Audit Committee. The responsibilities of MAS include recommending improvements in the control environment and reviewing compliance with our philosophy, policies and procedures.

We understand that there may be significant climate risk in our value-chain. We have started an engagement process with our critical suppliers to help them understand Vedanta's expectations when it comes to managing ESG topics, including climate

change. Our net-zero commitments require us to ensure that all our long-term, tier-1 suppliers set GHG reduction targets by FY2025 and align with Vedanta's commitments by 2030. Our supplier code of conduct requires us to evaluate the ESG risks (Including climate change) of critical suppliers. Our goal is to minimize any climate-related risks that may lie on our value-chain and we see this as a continuous process due to the evolving nature of this risk.

Additionally, risks in health, safety and environment (HSE) area and human rights are considered significant risks, given their potential to impact business continuity. While screening potential suppliers, we consider their performance on HSE and human rights by assessing them against set criteria that includes their commitment to HSE, along with necessary policies to support the commitment. We also consider the standards, roles and responsibilities of critical role holders. We also require our suppliers to declare their compliance with Modern Slavery Act. We engage third-party to conduct risk assessment of our suppliers on various aspects related to regulatory compliance and compliance with MSA (Modern Slavery Act)

C2.2a

(C2.2a) Which risk types are considered in your organization's climate-related risk assessments?

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	We conduct regular assessments of current regulations pertaining to the metals and mining industry and their implications for our financial and operational performance. During FY 2023, Vedanta has implemented internal carbon pricing of USD 15/TCO2e. This strategy aims to evaluate climate change risks by projecting potential impacts on the operating costs of each business unit. Operational costs will be taken into consideration during this assessment. Some significant climate-related regulatory risks that we consider include the implementation of Flue Gas Desulfurization (FGD) systems in coal-based thermal power plants, and Renewable Power Obligations. Moreover, country-specific carbon pricing policies, such as the carbon tax in South Africa and Renewable Energy Certificates (RECs) in India, will also have an impact on the profit margins of our businesses. Example: We are considering the imposition of carbon taxes in our climate risk evaluation. At our Zinc International business unit in South Africa we paid a carbon tax of INR 3,600,000 in FY 2023.
Emerging regulation	Relevant, always included	We anticipate forthcoming regulatory changes aimed at limiting or reducing greenhouse gas (GHG) emissions, and we have identified emerging regulations as one of the key climate-related transition risks. These changes have the potential to impact our company's operations by increasing costs for fossil fuels, imposing levies for emissions

		exceeding permitted levels, and adding administrative expenses for monitoring and reporting. For instance, the Carbon Border Adjustment Mechanism (CBAM) is a carbon-pricing system targeting imports into the European Union. Its purpose is to adjust the price of certain imported products based on the amount of CO2 emissions associated with them, aiming to equalize the carbon cost between EU products and these imports. If CBAM is applied to our aluminium products, we estimate a substantial increase in landed costs considering the current trends of EU Emissions Trading System (EUETS) European Union Allowance (EUA) prices. This regulation has the potential to impact 10%-20% of our exports. Key to mitigating the impact of this emerging regulation is to decrease the GHG intensity of our products in the short-term and lower our absolute GHG emissions in the mid-to-long-term. We have set an internal target to achieve a 25% absolute reduction in GHG emissions by FY 2030 compared to the baseline of 2021. Given that approximately 90% of Vedanta's energy is sourced from captive coal-based thermal power plants, any regulations aimed at reducing our GHG or air emissions can have a significant impact on our operating expenses. Additionally, India has committed to ensuring that 40% of the country's energy comes from renewable sources by 2030. To meet these future requirements, we are actively diversifying our energy portfolio by consistently including renewable energy sources. Furthermore, we have signed 788 MW (RTC) renewable energy (RE) power delivery agreements (PDAs). Implementation of these PDAs would result in RE power consumption in operations increasing to ~ 6,900 million units, thereby avoiding 6.6 million tCO 2e in the atmosphere per year. With this, we shall meet 32% of our RE target of using 2,500 MW of RE RTC (eq.) power by 2030. An RE Steering Committee has been set up to coordinate efforts between different business entities. Furthermore, we have introduced initiatives that include efficiency improvement in turbines and thermal operations, biomass cofiring in thermal power plants and procuring RE power at all our sites.
Technology	Relevant, sometimes included	Technology risk has been identified as one of the important climate change related risks for Vedanta. Risks associated with changes in technology are from lower-carbon, energy-efficient systems. Carbon emissions reduction has taken centre stage for steel and aluminium producers over the past few years as countries around the world look to reduce their carbon footprints throughout the next two to three decades to combat climate change. Interest in low-carbon aluminium products or green aluminium have moved "beyond just general interest" and almost all major Aluminium producers has

		introduced green aluminium products. Vedanta, catering to their sustainability conscious customers, have launched 2 green aluminium products Restora and Restora Ultra having GHG intensity 2.37 & 0.37 TCO2e respectively thereby becoming 1st company in Asia to launch green aluminium. Within the context of climate change, transition to lower emissions technology is inherent to our activities and is considered as part of our risk assessment. These are considered relevant and sometimes included in the risk assessment discussions in the Energy and Carbon CoP and COPs. Example: At Vedanta, we are engaging with technology partners through our Vedanta Spark 2.0 programme, to establish circular economy models in our metal and mining operations. We have also built a low carbon aluminium by recovering the metal component from the dross (by product/ waste) and utilizing the remaining non-metallic proportions in production of slag conditioner for steel processing. A pilot project is being implemented Hindustan Zinc's Dariba plant to recover metal residues enabled recovery of nearly 95% of the metal residues from copper dross, purification waste cake, antimony dust/slag and raw zinc oxide. Lastly, we continuously upgrade our smelter efficiencies so that our overall energy consumption is reduced, resulting in lowered GHG emissions. Our BALCO unit in FY2023, graphitized 100% of 110 pots leading to 22,897.84 GJ energy savings.
Legal	Relevant, always included	Legal risks are likely to increase as the value of loss and damage arising from climate change grows, these maybe translated through increase in carbon taxes or through other carbon pricing mechanisms. For instance, the Carbon Border Adjustment Mechanism (CBAM) is a carbon-pricing system for imports into the European Union. It is aimed at adjusting the price of certain imported products to the amount of CO2 emissions incorporated in them, in order to equalize the cost of carbon between EU products and these imports. (CBAM) will be applicable for our Aluminium as well as Iron & Steel business and if so, it may lead to increased compliance costs. While currently Vedanta does not have a large EU market, however, if the CBAM price comes into picture, and if our intensity remains the same then the landed cost of aluminium could nearly double for VAL. This is excluding the transportation and other import costs. This has a potential to increase our risk exposure due to decreased market access in EU market. However, as per our Net Zero commitment and strategy we aim to reduce the GHG intensity of our aluminium and iron & steel by more than 80% by 2050 thereby reducing impact of CBAM.
Market	Relevant, sometimes included	Aluminium: As per our scenario analysis, there is no apparent short-term risk in terms of reduced demand due to shift in consumer preferences. Even with a low carbon market transition, Aluminium demand is anticipated to grow across all low carbon future scenarios that we analysed. However, such strong growth projections and a

		continuous need for primary material make decarbonization of our aluminium business critical to the global response against climate change. In parallel, considering the demand for low-carbon aluminium already rising, we at Vedanta we have developed India's first low carbon "Green Aluminium". The carbon footprint of our product is lower than the global threshold. Zinc: We are one of the world's largest producers of zinc. The scenario analysis projects, zinc demand tied to low-carbon applications are set to grow across all scenarios: the more aggressive the world is in adopting renewables, the greater the demand for zinc. Zinc has multiple applications in the renewable energy and transportation sectors. One of the major uses of zinc in this context is the use of zinc to galvanize steel that is, in turn, used in low-carbon applications. For example, zinc coatings significantly extend the service life of wind turbines. Copper: Starting in FY22, we began producing low-carbon copper by recycling scrap copper. Copper is a critical metal for the green energy economy and we plan to increase the production of this low-carbon "green copper" nearly 3x in the short-term.
Reputation	Relevant, always included	The focus on decarbonizing portfolios by investors and financial institutions has heightened the reputational risks associated with climate change. Failing to meet investor expectations can lead to reputational damage, which can be observed through a decline in the company's ESG risk rating and may impact our access to finance. To address this, we have consistently been reviewing investor expectations and determining the necessary responses through various forums such as the Group Executive Committee (ExCo), Energy & Carbon Communities of Practice (CoP), Health, Safety, and Environment (HSE) ExCo, and the Risk Committee. Additionally, the ESG board sub-committee, Group ExCo, Carbon Forum, and other relevant CoPs identify and assess risks and opportunities pertaining to reputation. These measures help us actively manage and mitigate potential reputation-related risks while aligning with investor expectations. For example: Our transitional risk assessment projects impact from reputational risks is among the highest for oil and gas sector internationally and no major reputational risk domestically for our business in the short-term period.
Acute physical	Relevant, sometimes included	As part of the physical risk assessment, acute risks arising out of increasing severity of extreme weather events were studied for our 55 business locations. We studied the historical trends and future projections of various climate hazards such as change in temperature, change in precipitation, floods, droughts, and cyclones to understand how the changing climate may impact our different business locations. For future hazard trends, two future climate change scenarios based on IPCC Representative Concentration Pathways (RCPs) were used.

		Scenarios considered for analysis were RCP 8.5 and RCP 4.5. Considering the RCP 4.5 scenario, over the next decade, we understand that there would water scarcity at our BALCO and Cairn Oil and Gas units, and a high chance of flooding at our IOB units. Vedanta Aluminium in Lanjigarh and Jharsuguda already faces a cyclone risk, that will get accentuated in the future.
Chronic physical	Relevant, always included	Our physical risk assessment included chronic risks resulting from longer-term changes in climate patterns were studied for our 55 business locations. Example: As per the ensemble model RCP 8.5 there is a severe drought likelihood by 2040 for nearly all our Iron Ore business sites which are mostly located in Goa. To combat risks for rising temperature, we already have awareness campaigns for heat stress at our Zinc International Units and where we also stagger working hours during peak summer months, with complete stoppage during the hottest parts of the day. To manage water stress risk, we have set a target to have a sustainable sourcing model for water stressed areas by 2025. Vedanta Aluminium has also partnered with TÜV SÜD to turn net water positive by 2030.

C2.3

(C2.3) Have you identified any inherent climate-related risks with the potential to have a substantive financial or strategic impact on your business?

Yes

C2.3a

(C2.3a) Provide details of risks identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Risk 1

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Acute physical

Drought

Primary potential financial impact

Increased direct costs

Company-specific description

As per the water risk assessment based on WRI Aqueduct and Water Risk Tool, we understand that one basin of HZL namely Banas is exposed to a 'very high' water risk and therefore, would have an operational impact due to drought. This HZL's operational site represents 22% of revenue of Vedanta, and depends on large quantities of water used for processing the metals such as Zinc, Lead and Silver. The business has a consent to extract water free of cost up to 80 KLD through its captive water body. In an event of drought, we anticipate that the government will prevent the company from utilizing its own water resources for at least 6 months. To run the direct operations, business will have to procure water from alternative sources which would lead to increase in direct operating costs. The operation consumes 19,606,645 L of water annually and an increase in cost of water from alternative sources will have a significant impact on increasing directs costs up to 10% of revenue of HZL.

Time horizon

Medium-term

Likelihood

More likely than not

Magnitude of impact

Medium-high

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

2,800,035,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

The financial impact is due to increase in cost of water from alternate sources. The breakdown of financial impact on Vednata is calculated as per the below calculation:
a. Average cost of procuring water from existing sources (INR/M3): INR 10
b. Average cost of procuring water from alternate sources in an event of drought (INR/M3): INR 213/m3
c. Total water consumed/Year (M3) by the facility at risk: 26,667,000 M3
d. Risk Impact = 0.5 years
e. Water consumption during the risk period= c* d= 26,667,000* 0.5= 13,333,500 M3

Therefore, potential financial impact= (b-a) * e= (213-10) * 9,39,07,241= INR 2,800,035,000

Cost of response to risk

1,693,700,000

Description of response and explanation of cost calculation

The cost of response to risk includes annual cost of implementing water saving initiatives, i.e, Annual OPEX of Water & Wastewater (Rainwater harvesting, STP, ETP, RO, MEE, etc.) at the operational basin of HZL= INR (2.23+2.05+2.31+4.04+0.33+51.44+75.64+31.33) crore=INR 1,693,700,000
In FY 2023, this operating site has saved approximately 521,028 Liters of water from water saving initiatives.

Furthermore, to address this operational risk, we are consistently prioritizing the optimization of water recycling and reuse across all our operations to minimize the need for freshwater extraction. Additionally, we are actively involved in the development of rainwater harvesting systems to replenish our groundwater sources. Vedanta has set net water positivity by 2030 and would substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity by 2030. Furthermore, HZL has set a target to become a 5 Times Water Positive company by 2025, aiming to reduce freshwater consumption by 25% compared to the base year of 2020.

Comment

No additional comments

C2.4

(C2.4) Have you identified any climate-related opportunities with the potential to have a substantive financial or strategic impact on your business?

Yes

C2.4a

(C2.4a) Provide details of opportunities identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Opp1

Where in the value chain does the opportunity occur?

Downstream

Opportunity type

Products and services

Primary climate-related opportunity driver

Shift in consumer preferences

Primary potential financial impact

Increased revenues through access to new and emerging markets

Company-specific description

We have noticed a significant shift in customer preferences towards environmentally friendly and sustainable products at Vedanta. This change has created a growing demand for low-carbon and green alternatives, including products like aluminium, which play a crucial role in transitioning to a low-carbon economy. By capitalizing on our expertise and available resources, Vedanta can seize these opportunities while simultaneously reducing our carbon footprint.

In FY 2022, our company introduced India's first line of low-carbon aluminium, known as Restora and Restora Ultra. These innovative products have been specifically developed to cater to the needs of sustainability-conscious customers, primarily in Europe. We believe that the launch of Restora and Restora Ultra will not only meet the rising demand for green aluminium but help us mitigate the risk of penalties associated with the Carbon Border Adjustment Mechanism (CBAM) in the European market. This strategic move is expected to drive revenue growth for Vedanta.

Time horizon

Medium-term

Likelihood

About as likely as not

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

58,741,176.2

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

The potential financial impact has been calculated on the revenue generated from Restora and Restora Ultra:
a. Premium received on Green Metal ($/MT): $15/MT= INR (15* 82.1463)/MT = INR1,232.1945/MT
b. Production of Green metal (MT)=47,672MT
Therefore, potential financial impact: a*b= 1,232.1945*47,672= INR 58,741,176.20

Cost to realize opportunity

12,097,800,000

Strategy to realize opportunity and explanation of cost calculation

a. Investment made including purchase of ~5 billion units of RE power– INR 4,752,100,000
b. OPEX - in FY23 – INR 7,345,700,000
Therefore, Cost to realize opportunity = INR 4,752,100,000+ INR 7,345,700,000= INR 12,097,800,000
To capitalize on this opportunity, we have purchased ~5 billion units of RE power over the last two years in our Aluminium business. This has been utilized for production of Restora and Restora Ultra (low-carbon aluminium products). Our business achieved the highest-ever aluminium production at 2.29 million tonnes in FY 2023, which included 59 kt of green aluminium: Restora and Restora Ultra which generated 0.69% of the total revenue. Furthermore, we have reduced our GHG emission intensity by 8.3% compared to the FY 2021 baseline.

Comment

No additional comments

C3. Business Strategy

C3.1

(C3.1) Does your organization's strategy include a climate transition plan that aligns with a 1.5°C world?

Row 1

Climate transition plan

Yes, we have a climate transition plan which aligns with a 1.5°C world

Publicly available climate transition plan

Yes

Mechanism by which feedback is collected from shareholders on your climate transition plan

We have a different feedback mechanism in place

Description of feedback mechanism

Vedanta engages with its key institutional investors in periodic discussions via emails, telephonic conversation, face to face meetings to discuss our net zero and decarbonization strategy and the steps being taken by the business to address climate related transitional and physical risks. We also regularly engage with investor led organization such as CA100+ to discuss our progress in our climate strategy. Feedback and recommendations received from these interactions are discussed by internal governance bodies such as the energy and carbon Community of Practice (CoP), Group ExCo, ESG ManCom, and the ESG Committee of the Board. Subsequently, they inform further development of our climate strategy.

Frequency of feedback collection

More frequently than annually

Attach any relevant documents which detail your climate transition plan (optional)

Net Zero Plan Vedanta

TCFD Report_Vedanta FY 2023.pdf

Vedanta-Limited-Integrated-Annual-Report-202022-23-VF_compressed.pdf

TCFD-Report-FY23.pdf

C3.2

(C3.2) Does your organization use climate-related scenario analysis to inform its strategy?

	Use of climate-related scenario analysis to inform strategy
Row 1	Yes, qualitative and quantitative

C3.2a

(C3.2a) Provide details of your organization's use of climate-related scenario analysis.

Climate-related scenario	Scenario analysis coverage	Temperature alignment of scenario	Parameters, assumptions, analytical choices
Transition scenarios NGFS scenarios framework	Company-wide		Vedanta's transition risk analysis incorporates five distinct scenarios: i. Current Policies Scenario: This scenario assumes that existing climate policies remain unchanged, with no increase in their ambition level. ii. Nationally Determined Contributions (NDCs) Scenario: Under this scenario, India's pledged NDCs are fully implemented, enabling the achievement of energy and emissions targets by 2025 and 2030, respectively. iii. "Net Zero 2050" Scenario: In this scenario, global CO2 emissions reach net-zero by 2050. Additionally, countries such as China, the EU, Japan, and the United States of America, committed to specific net-zero targets in 2020, are assumed to successfully meet their goals. iv. Delayed Transition Scenario: The Delayed Transition scenario imposes a 2°C temperature target for 2100, allowing for temporary overshoot before eventual stabilization
Physical climate scenarios RCP 4.5	Company-wide		Vedanta utilized the RCP 4.5 scenario, as defined by the IPCC, as the baseline and optimistic projection for assessing the potential impacts of extreme temperature and precipitation changes. This analysis

			aimed to estimate the temperature and rainfall variations from the present to the future (until 2040), enabling the organization to enhance climate resilience in its operations and future endeavors. The World Bank Knowledge portal, housing the University of East Anglia Climate Research Unit data, served as the data source for this analysis. The model employed the global circulation model (CMIP5) Ensemble data as input, utilizing the standard deviation method to capture changes in temperature and precipitation from 2020 to 2040. RCP 4.5 represented the optimistic scenario, and the projected alterations in precipitation, including frequency, drought risk, and flood likelihood, were extracted for all of Vedanta's facilities under both scenarios. Assumptions and parameters used in the analysis: i. Optimal Scenario where emissions peak around mid-century at about 50% higher than 2000 levels and then decline rapidly over 30 years and then stabilize at half of 2000 levels by 2100. ii. CO2 concentration continues trend to about 520 ppm in 2070 and continues to increase over the next 30 years but more slowly. iii. Population and economic growth are moderate. iv. Total energy consumption is slightly higher, while oil consumption is constant through to 2100. Nuclear power and renewables play a greater role. v. Significantly, cropping and grassland area declines while reforestation increases the area of natural vegetation
Physical climate scenarios RCP 8.5	Company-wide		RCP 8.5, as defined by the IPCC, served as the baseline and optimistic scenario for projecting the most extreme temperature and precipitation variations impacting Vedanta's Businesses. We estimated the changes in temperature and rainfall from the present to the future (until 2040) to enhance our adaptation to climate change and integrate climate resilience into our operations and upcoming projects. For this analysis, we utilized data from the University of East Anglia Climate Research Unit available through the World Bank Knowledge portal. The analysis employed the global circulation model (CMIP5) Ensemble data as input and applied the standard deviation method to capture the anticipated changes in temperature and precipitation from 2020 to 2040. RCP 8.5 was specifically chosen to represent the "BAU" scenario

			characterized by significant physical climate risks. We extracted projected alterations in precipitation frequency, drought risk, and flood likelihood for all our facilities under both scenarios. Assumptions and parameters used in the analysis: i. 'BAU '- Business As Usual scenario in which emissions continue to increase rapidly through the early and mid-parts of the century. II. Concentrations of CO2 in the atmosphere accelerate and reach 950 ppm by 2100 and continue increasing for another 100 years. III. Population growth is high, reaching 12 billion by century's end. IV. This scenario is highly energy intensive with total consumption continuing to grow throughout the century reaching well over 3 times current levels. V. Oil use grows rapidly until 2070 after which it drops even more quickly. Coal provides the bulk of the large increase in energy consumption. VI. Land use continues current trends with crop and grass areas increasing and forest area decreasing
Transition scenarios IEA NZE 2050	Company-wide		This scenario foresees global CO2 emissions to be at a Net Zero in 2050. It is the case that in 2050 net negative emissions in some countries offset the positive emissions in other countries.

C3.2b

(C3.2b) Provide details of the focal questions your organization seeks to address by using climate-related scenario analysis, and summarize the results with respect to these questions.

Row 1

Focal questions

• How does climate change pose risk to Vedanta under different physical climate and transition risk scenarios?
• What are the impacts under the two scenarios and the associated financial implications to businesses?

Results of the climate-related scenario analysis with respect to the focal questions

Outcomes of physical risk assessment under RCP 4.5 and 8.5:
• BALCO will face increasing water shortages which will get severe in the long term and a medium risk of flooding.
• Cairn onshore locations currently are at a high-water scarcity risk with increasing

severity. The offshore sites are in cyclone prone areas, and heavy winds will increase at the Andhra Coast.
• ESL is at risk due to heavy rainfall in short periods of time.
• Heavy rainfall will be a key risk factor for IOB. There will also be a rise in maximum temperature in the long term
Outcomes of transition risk assessment:
Cairn Oil & Gas may face the below risks by 2050:
• Legal: There could be a national carbon price/ taxation on oil and gas. Bans or moratoria on certain types of new projects such as offshore drilling due high environmental impact.
• Market: Complete loss international market share. Reduced demand domestically. Fall in price of Oil and Gas impacting revenues
• Technology: Replaced by biofuels, low carbon hydrogen, other RE sources.
• Reputation: Domestic consumers move to EV. Shift in interest of the investors and decreased demand.
BALCO,VAL-J,ESL and IOB's risks include:
• Legal: No carbon price but increase in local and national reporting requirements
• Market: Loss of market share to competitors with greener products specifically on recycled steel. High dependency on coal/ grid electricity could also impact international import and demand
• Technology: Increased research and development (R&D) expenditures in new and alternative technologies such as EAF or for recycling technologies
• Reputation: No major reputational risk due to low carbon transition for iron and steel. Increased competition for natural resources. Investor pressure on reducing emissions.
Sterlite Copper and VZL·
• Legal: There is a possibility that the domestic carbon tax in South Africa would increase
• Market: Loss of market share to competitors
• Technology: Increased research and development (R&D) expenditures in new technologies as well shifting of energy sources
• Reputation: Increased competition for natural resources
TSPL
• Legal: Increased regulations on complying with emerging climate and emission levels. Exposure to litigation including non-compliance with reporting, negative impacts to climate change/ environment.
• Market: More RE providers in the grid
• Technology: May no longer be a key electricity option by 2050 due increase in RE technologies
• Reputation: No investor or government support until paired with CCUS

C3.3

(C3.3) Describe where and how climate-related risks and opportunities have influenced your strategy.

	Have climate-related risks and	Description of influence

	opportunities influenced your strategy in this area?	
Products and services	Yes	We have observed a shift in consumer preferences towards metals with lower carbon footprints, prompting us to explore methods for decarbonizing our products. As we transition to an economy with reduced greenhouse gas (GHG) emissions, climate risks and opportunities will have an impact on both the cost and demand for our goods. In this context, copper, silver, and zinc are projected to experience increased demand due to their essential role in electric motors, transmission lines, batteries, and solar panels. Conversely, our lead product is expected to face a decline in both demand and price, as lead-acid batteries become obsolete in the realm of electric vehicles. We launched our environmentally friendly aluminium products, "Restora" and "Restora Ultra," during FY 2022. These metals exhibit significantly lower GHG intensity compared to the global standards for low-carbon aluminium. Restora's GHG emission intensity, achieved through the utilization of renewable energy sources, is nearly half the global standard of 4 tCO2e per tonne of aluminium produced. Restora Ultra, on the other hand, boasts an almost negligible carbon footprint, as it is manufactured using reclaimed aluminum derived from dross—a by-product of aluminium production. To capitalize on this opportunity, we have purchased ~5 billion units of RE power over the last two years in our Aluminium business. This has been utilized for production of Restora and Restora Ultra (low-carbon aluminium products).
Supply chain and/or value chain	Evaluation in progress	Our strategic approach has been significantly shaped by climate-related risks and opportunities, primarily because a substantial portion of our operations is situated in regions vulnerable to the impacts of climate change. Furthermore, nearly 40% of our suppliers and value chain is also located in these high-risk areas (same state as our operations). We have established a set of criteria for selecting our suppliers, which encompasses various factors. These factors include compliance with our Supplier Code of Conduct, which incorporates assessments related to health, safety, and environment (HSE), risk evaluations, and

		adherence to human rights policies. With the refinement of our criteria, we anticipate developing and implementing concrete plans for engaging with our value chain in the long run. For instance, HZL actively promotes the establishment of local manufacturing units by its critical vendors in close proximity to our operations. This approach aims to mitigate transportation risks and minimize carbon emissions associated with the transportation of goods and materials.
Investment in R&D	Yes	At Vedanta, we recognize the significance of meeting current consumer demands for environmentally friendly products, particularly the growing interest in low-carbon aluminum or green aluminum. We understand that staying abreast of these evolving consumer preferences is essential for maintaining our market share. We have taken an aggressive approach to adopting new technologies and improving processes and standards. Among our peers in the aluminium value chain, we have emerged as a leader with one of the finest and best-in-class R&D setups. As explained in the Products and Services section, our low carbon aluminium products “Restora” and “Restora Ultra” were launched in FY 2022. We are committed to decarbonizing 100% of our LMV fleet by 2030 and 75% of the mining fleet by 2035. We deployed 11 EVs at HZL and 40 EVs at ESL. HZL has also signed an MoU with Sandvik AB to introduce battery-powered loaders and trucks in underground mining. This agreement will assist in reducing carbon emissions and negative impacts of the mine operations on the environment through the introduction of Sandvik’s battery electric TH550B trucks and LH518B loaders in underground mines. Additionally, in FY23, the company spent INR 5,200,000 on low-carbon R&D projects.
Operations	Yes	Vedanta has deployed a four-lever strategy to decrease our carbon footprint and achieve net-zero emissions. We will (I) increase the proportion of renewable energy, (ii) switch to low-carbon/low-carbon fuels, (iii) improve the energy efficiency of our operations and processes, and (iv) for the hard-to-abate residual emissions, purchase carbon offsets. Additionally, an internal carbon pricing has also been developed under which a shadow price for carbon for capital investment decisions has been implemented across our businesses. One of the major examples of decarbonization of our energy mix is the signing of

		the Power Distribution Agreement of 788 MW of RE RTC. An additional 50 MW has also been approved by the Board, taking the total to 838 MW. This represents 33.5% of the target of using/deploying 2,500 MW of RE RTC eq power by 2030, which will help lower our absolute GHG emissions by ~25%.

C3.4

(C3.4) Describe where and how climate-related risks and opportunities have influenced your financial planning.

	Financial planning elements that have been influenced	Description of influence
Row 1	Capital expenditures Liabilities	Developing and aligning our strategy with the conclusions derived from the climate risk assessment will cause an impact on our financial planning. The following points summarizes the impacts on our capital expenditures and liabilities due to climate related issues identified during our assessments. Capital Expenditure: • Investments in developing low-carbon solutions, piloting projects that enable reuse/ recycle of waste generated in operations and reclamation of flood-prone areas facing water risk. • Capital expenditure required to achieve our GHG emission targets and increasing renewable energy mix in our energy consumption portfolio. • Introduction of internal price on carbon into our capital expenditures approval process, with the aim to redirect investments towards clean technologies, lower-carbon solutions, and renewable energy projects across our operations and supply chain. Liabilities: • Provision for costs associated with restoration and rehabilitation of mining sites estimated annually based on mine closure plans, estimated discounted costs of dismantling, and removing these facilities and costs of restoration capitalized as and when the obligation to incur such costs arises.

C3.5

(C3.5) In your organization's financial accounting, do you identify spending/revenue that is aligned with your organization's climate transition?

	Identification of spending/revenue that is aligned with your organization's climate transition

Row 1	Yes, we identify alignment with our climate transition plan

C3.5a

(C3.5a) Quantify the percentage share of your spending/revenue that is aligned with your organization's climate transition.

Financial Metric

CAPEX

Type of alignment being reported for this financial metric

Alignment with our climate transition plan

Taxonomy under which information is being reported

Objective under which alignment is being reported

Amount of selected financial metric that is aligned in the reporting year (unit currency as selected in C0.4)

810,000,000

Percentage share of selected financial metric aligned in the reporting year (%)

0.8

Percentage share of selected financial metric planned to align in 2025 (%)

10.42

Percentage share of selected financial metric planned to align in 2030 (%)

16.66

Describe the methodology used to identify spending/revenue that is aligned

To solidify our climate commitments, Vedanta has increased its ambition by setting a target of becoming net zero by 2050 or sooner. In this direction, we aim to spend 5 billion USD over the next 10 years to accelerate transition to net zero operations. Our interim target is to reduce our absolute emissions by 25% by 2030.
Our targets are aligned with the national vision to decarbonize the Indian economy by 2070. They are also in line with our purpose of creating long-term value for our business and stakeholders and satisfies our vision to produce low-impact metals and minerals for Zero Harm, Zero Waste and Zero Discharge.

During FY 2023, we have invested INR 810,000,000 aligned with our low carbon transition plan. Hence, percentage invested in CAPEX aligned with low carbon transition= (810,000,000/100,793,510,100)*100= 0.80%

We anticipate spending USD 2000 million by 2025 for our climate transition plan.

Percentage share of CAPEX planned to align in 2025(%) = USD (2000 million/3920 million)*100= 51%

Furthermore, we have projected our total CAPEX USD 960 million in 2030 and planned to invest USD500milion to achieve our low carbon transition target.
Percentage share of CAPEX planned to align in 2030(%)= USD (5000million/9880 million)*100=50.6%

We have assumed the both climate-related Capex and Total Capex is calculated cumulatively for FY2030 numbers.

C4. Targets and performance

C4.1

(C4.1) Did you have an emissions target that was active in the reporting year?

Absolute target
Intensity target

C4.1a

(C4.1a) Provide details of your absolute emissions target(s) and progress made against those targets.

Target reference number

Abs 1

Is this a science-based target?

Yes, we consider this a science-based target, and we have committed to seek validation of this target by the Science Based Targets initiative in the next two years

Target ambition

2°C aligned

Year target was set

2021

Target coverage

Company-wide

Scope(s)

Scope 1
Scope 2

Scope 2 accounting method

Location-based

Scope 3 category(ies)

Base year

2020

Base year Scope 1 emissions covered by target (metric tons CO2e)

58,936,269

Base year Scope 2 emissions covered by target (metric tons CO2e)

1,314,932

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e)

Base year Scope 3, Other (upstream) emissions covered by target (metric tons CO2e)

Base year Scope 3, Other (downstream) emissions covered by target (metric tons CO2e)

Base year total Scope 3 emissions covered by target (metric tons CO2e)

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)

60,249,077

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1

100

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2

100

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target as % of total base year emissions in Scope 3, Category 1: Purchased goods and services (metric tons CO2e)

Base year Scope 3, Category 2: Capital goods emissions covered by target as % of total base year emissions in Scope 3, Category 2: Capital goods (metric tons CO2e)

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target as % of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

Base year Scope 3, Category 4: Upstream transportation and distribution covered by target as % of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e)

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target as % of total base year emissions in Scope 3, Category 5: Waste generated in operations (metric tons CO2e)

Base year Scope 3, Category 6: Business travel emissions covered by target as % of total base year emissions in Scope 3, Category 6: Business travel (metric tons CO2e)

Base year Scope 3, Category 7: Employee commuting covered by target as % of total base year emissions in Scope 3, Category 7: Employee commuting (metric tons CO2e)

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 8: Upstream leased assets (metric tons CO2e)

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target as % of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e)

Base year Scope 3, Category 10: Processing of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 10: Processing of sold products (metric tons CO2e)

Base year Scope 3, Category 11: Use of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 11: Use of sold products (metric tons CO2e)

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e)

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 13: Downstream leased assets (metric tons CO2e)

Base year Scope 3, Category 14: Franchises emissions covered by target as % of total base year emissions in Scope 3, Category 14: Franchises (metric tons CO2e)

Base year Scope 3, Category 15: Investments emissions covered by target as % of total base year emissions in Scope 3, Category 15: Investments (metric tons CO2e)

Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e)

Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e)

Base year total Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes

100

Target year

2030

Targeted reduction from base year (%)

25

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]

45,186,807.75

Scope 1 emissions in reporting year covered by target (metric tons CO2e)

57,175,390.47

Scope 2 emissions in reporting year covered by target (metric tons CO2e)

8,182,542.02

Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Other (upstream) emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Other (downstream) emissions in reporting year covered by target (metric tons CO2e)

Total Scope 3 emissions in reporting year covered by target (metric tons CO2e)

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)

65,357,932

Does this target cover any land-related emissions?

No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

% of target achieved relative to base year [auto-calculated]

-33.918229154

Target status in reporting year

Underway

Please explain target coverage and identify any exclusions

In FY22, we established our Net Zero 2050 commitment and roadmap, building upon our previous targets. Aligned with India's Nationally Determined Contribution (NDC) under the Paris Agreement, which aims to reduce the country's emissions intensity by 33-35% between 2005 and 2030, and our own Net Zero ambition by 2070, Vedanta has

set an intermediate goal of achieving a 25% absolute reduction in emissions by 2030 compared to 2020-21. This target encompasses Scopes 1 and 2 (location-based) emissions for all business units within the group.
We have used the following methodologies for collecting activity data and calculating emissions-
• American Petroleum Institute Compendium of Greenhouse Gas Emissions Methodologies
• For the Oil and Natural Gas Industry, 2009
• IPCC Guidelines for National Greenhouse Gas Inventories, 2006
• The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)
• The Greenhouse Gas Protocol: Scope 2 Guidance
• World Steel Association CO2 emissions data collection guidelines

Plan for achieving target, and progress made to the end of the reporting year

According to Vedanta's emissions trajectory, there is a projected increase in emissions until FY2025. However, significant reductions are expected thereafter as our emissions reduction initiatives, such as Renewable Energy Power Purchase Agreements (RE PPAs), come into effect in line with our Net Zero commitment and intermediate absolute reduction targets. To achieve absolute emissions reduction, we have taken the following actions in the short term:

Firstly, we are implementing measures to decarbonize and mitigate potential transition risks by transitioning to greener fuel sources. For instance, Vedanta Aluminium has signed a term sheet with GAIL (India) for the supply of natural gas/RLNG to the Lanjigarh Alumina Refinery. This shift will replace Heavy Furnace Oil (HFO)/Light Diesel Oil (LDO) consumption, potentially leading to a reduction of -99.9% in SOx emissions, -83% in NOx emissions, and a 30% decrease in CO2 emissions for the refinery operations.

Secondly, Vedanta aims to utilize 2.5 GW of Round-The-Clock Renewable Energy, equivalent to reducing absolute emissions by 25% by 2030 from a FY2021 baseline. We have already secured contracts for 788 MW of round-the-clock renewable energy, a significant step towards achieving our target and reducing our carbon footprint.

List the emissions reduction initiatives which contributed most to achieving this target

C4.1b

(C4.1b) Provide details of your emissions intensity target(s) and progress made against those target(s).

Target reference number

Int 1

Is this a science-based target?

Yes, we consider this a science-based target, and we have committed to seek validation of this target by the Science Based Targets initiative in the next two years

Target ambition

2°C aligned

Year target was set

2022

Target coverage

Other, please specify

Business Division as a proxy for Company-wide (see comments box for explanation)

Scope(s)

Scope 1

Scope 2

Scope 2 accounting method

Location-based

Scope 3 category(ies)

Intensity metric

Metric tons CO2e per metric ton of product

Base year

2021

Intensity figure in base year for Scope 1 (metric tons CO2e per unit of activity)

6.29

Intensity figure in base year for Scope 2 (metric tons CO2e per unit of activity)

0.16

Intensity figure in base year for Scope 3, Category 1: Purchased goods and services (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 2: Capital goods (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 5: Waste generated in operations (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 6: Business travel (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 7: Employee commuting (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 8: Upstream leased assets (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 10: Processing of sold products (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 11: Use of sold products (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 13: Downstream leased assets (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 14: Franchises (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 15: Investments (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Other (upstream) (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Other (downstream) (metric tons CO2e per unit of activity)

Intensity figure in base year for total Scope 3 (metric tons CO2e per unit of activity)

Intensity figure in base year for all selected Scopes (metric tons CO2e per unit of activity)

6.45

% of total base year emissions in Scope 1 covered by this Scope 1 intensity figure

76.6

% of total base year emissions in Scope 2 covered by this Scope 2 intensity figure

88.52

% of total base year emissions in Scope 3, Category 1: Purchased goods and services covered by this Scope 3, Category 1: Purchased goods and services intensity figure

% of total base year emissions in Scope 3, Category 2: Capital goods covered by this Scope 3, Category 2: Capital goods intensity figure

% of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) covered by this Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) intensity figure

% of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution covered by this Scope 3, Category 4: Upstream transportation and distribution intensity figure

% of total base year emissions in Scope 3, Category 5: Waste generated in operations covered by this Scope 3, Category 5: Waste generated in operations intensity figure

% of total base year emissions in Scope 3, Category 6: Business travel covered by this Scope 3, Category 6: Business travel intensity figure

% of total base year emissions in Scope 3, Category 7: Employee commuting covered by this Scope 3, Category 7: Employee commuting intensity figure

% of total base year emissions in Scope 3, Category 8: Upstream leased assets covered by this Scope 3, Category 8: Upstream leased assets intensity figure

% of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution covered by this Scope 3, Category 9: Downstream transportation and distribution intensity figure

% of total base year emissions in Scope 3, Category 10: Processing of sold products covered by this Scope 3, Category 10: Processing of sold products intensity figure

% of total base year emissions in Scope 3, Category 11: Use of sold products covered by this Scope 3, Category 11: Use of sold products intensity figure

% of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products covered by this Scope 3, Category 12: End-of-life treatment of sold products intensity figure

% of total base year emissions in Scope 3, Category 13: Downstream leased assets covered by this Scope 3, Category 13: Downstream leased assets intensity figure

% of total base year emissions in Scope 3, Category 14: Franchises covered by this Scope 3, Category 14: Franchises intensity figure

% of total base year emissions in Scope 3, Category 15: Investments covered by this Scope 3, Category 15: Investments intensity figure

% of total base year emissions in Scope 3, Other (upstream) covered by this Scope 3, Other (upstream) intensity figure

% of total base year emissions in Scope 3, Other (downstream) covered by this Scope 3, Other (downstream) intensity figure

% of total base year emissions in Scope 3 (in all Scope 3 categories) covered by this total Scope 3 intensity figure

% of total base year emissions in all selected Scopes covered by this intensity figure

76.86

Target year

2025

Targeted reduction from base year (%)

20

Intensity figure in target year for all selected Scopes (metric tons CO2e per unit of activity) [auto-calculated]

5.16

% change anticipated in absolute Scope 1+2 emissions

105

% change anticipated in absolute Scope 3 emissions

0

Intensity figure in reporting year for Scope 1 (metric tons CO2e per unit of activity)

5.2

Intensity figure in reporting year for Scope 2 (metric tons CO2e per unit of activity)

0.99

Intensity figure in reporting year for Scope 3, Category 1: Purchased goods and services (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 2: Capital goods (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 5: Waste generated in operations (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 6: Business travel (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 7: Employee commuting (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 8: Upstream leased assets (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 10: Processing of sold products (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 11: Use of sold products (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 13: Downstream leased assets (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 14: Franchises (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 15: Investments (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Other (upstream) (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Other (downstream) (metric tons CO2e per unit of activity)

Intensity figure in reporting year for total Scope 3 (metric tons CO2e per unit of activity)

Intensity figure in reporting year for all selected Scopes (metric tons CO2e per unit of activity)

6.19

Does this target cover any land-related emissions?

No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

% of target achieved relative to base year [auto-calculated]

20.1550387597

Target status in reporting year

Underway

Please explain target coverage and identify any exclusions

In alignment with our Net Zero commitment, we have set an intermediate target of reducing the greenhouse gas (GHG) intensity of our metals business by 20% compared to the baseline of FY2021. This target encompasses the following units: Aluminium, Alumina, Steel, and Copper. Since our products vary significantly, we do not employ a product-based normalization factor. Instead, we calculate the achieved reduction in GHG emissions by determining the business specific absolute GHG emissions reduction and dividing it by the GHG emissions that would have been emitted if we had operated at the intensity levels of the baseline year. Subsequently, we calculate a cumulative number for the entire group.

Plan for achieving target, and progress made to the end of the reporting year

We have introduced our environmentally friendly aluminium products, namely "Restora" and "Restora Ultra," which boast a significantly lower greenhouse gas (GHG) intensity compared to global standards for low-carbon aluminium in FY 2022. The production of Restora incorporates renewable energy, resulting in its GHG emission intensity being half the global standard of 4 tCO2e per tonne of aluminium produced. Our green aluminium brand, Restora Ultra, is created using aluminium reclaimed from dross, a by-product of the production process, thereby almost eliminating its carbon footprint. In FY2023, the sale of low-carbon aluminium generated approximately $150 million in revenue for us.

In FY 2023, we initiated a pilot project aimed at producing copper from recycled sources, which has contributed to a significant reduction in our carbon footprint. Additionally, Sterlite Copper successfully secured a 16MW renewable energy contract, further advancing our commitment to sustainable operations. As a result, we generated approximately US$25 million in revenue from the sale of environmentally friendly copper

List the emissions reduction initiatives which contributed most to achieving this target

C4.2

(C4.2) Did you have any other climate-related targets that were active in the reporting year?

Net-zero target(s)
Other climate-related target(s)

C4.2b

(C4.2b) Provide details of any other climate-related targets, including methane reduction targets.

Target reference number
Oth 1

Year target was set
2022

Target coverage
Company-wide

Target type: absolute or intensity
Absolute

Target type: category & Metric (target numerator if reporting an intensity target)
Energy consumption or efficiency
GJ

Target denominator (intensity targets only)

Base year
2022

Figure or percentage in base year
563,680,000

Target year
2025

Figure or percentage in target year
10,000,000

Figure or percentage in reporting year

571,352,235

% of target achieved relative to base year [auto-calculated]

-1.3856803569

Target status in reporting year

Underway

Is this target part of an emissions target?

This target is indirectly related to the emissions target.

Is this target part of an overarching initiative?

No, it's not part of an overarching initiative

Please explain target coverage and identify any exclusions

This target is across all the Vedanta's Business Units.

Plan for achieving target, and progress made to the end of the reporting year

Our commitment to the plan drives our efforts towards energy efficiency and process improvement, which are areas of keen focus. In the pursuit of these goals, we have undertaken some major projects in the aluminium sector that are expected to boost our efficiency levels. Some of these projects include:

• 100% Graphitisation with copper inserted collected bar (potential 1 million tCO2e/year)
• Vedanta pot controller implementation (potential 0.2 million tCO2e)
• Commissioning of TRT and BPRT at ESL (potential 82,000 tCO2e/year)
• Natural gas usage at Lanjigarh Alumina Refinery (potential 1,20,000 tCO2e/year)

During FY 2023, we have completed the following major energy efficiency projects at our sites:

• R&M of 1 unit of 600 MW at VAL Jharsuguda (3,70,000 tCO2e/year)
• VAL Lanjigarh Evaporation - 1 Calendria 1 and 2 tubes replacement (18,000 tCO2e/year)
• VAL Lanjigarh Boiler 2 junior APH replacement (16,000 tCO2e/year)
• ESL Fuel crushing index improvement (31,000 tCO2e/year)
• ESL LD gas recovery project completion (18,000 tCO2e/year)

List the actions which contributed most to achieving this target

C4.2c

(C4.2c) Provide details of your net-zero target(s).

Target reference number

NZ1

Target coverage

Company-wide

Absolute/intensity emission target(s) linked to this net-zero target

Abs1
Int1

Target year for achieving net zero

2050

Is this a science-based target?

Yes, we consider this a science-based target, and we have committed to seek validation of this target by the Science Based Targets initiative in the next two years

Please explain target coverage and identify any exclusions

To encompass the entirety of our business operations, our targets now cover 100%. As a testament to our unwavering dedication to addressing climate change, Vedanta has heightened its ambition by establishing a goal of achieving net zero emissions by 2050 or even earlier. In pursuit of this objective, we have committed to investing $5 billion over the next decade to expedite the transition towards net zero operations. These targets are in alignment with the national vision to decarbonize the Indian economy by 2070, while also reflecting our core purpose of generating sustainable value for our business and stakeholders. Furthermore, they align with our vision of producing metals and minerals with minimal environmental impact, upholding the principles of Zero Harm, Zero Waste, and Zero Discharge.

Do you intend to neutralize any unabated emissions with permanent carbon removals at the target year?

Yes

Planned milestones and/or near-term investments for neutralization at target year

Our climate strategy includes a well-defined plan that outlines the specific actions we will take to implement our strategy effectively. Moreover, it emphasizes the importance of aligning our financial capital allocation framework, social values with our overarching objective of reaching net zero emissions, following a pathway
consistent with limiting global temperature rise to 1.5 degrees Celsius. This includes addressing climate change and actively cultivating strong and genuine relationships with local, regional, and global stakeholders

As part of our organization's commitment to achieving Net Zero by 2050, we have established a comprehensive roadmap. To expedite our transition, we have allocated a budget of USD 5 billion by 2030. In line with this, we have defined intermediate targets for both absolute and intensity-based reductions. By 2025, we aim to reduce the GHG intensity (measured in tCO2e/MT) of our metals businesses by 20% compared to the baseline of FY2021. Concurrently, we are focusing on renewables, setting targets to plant 7 million trees by 2030 and deploy 2.5 GW of Round-the-Clock renewable power by the same year. Furthermore, we have planned to purchase offsets to address hard-to-abate GHG emissions in FY 2050. These targets underscore our commitment to sustainable practices and align with our overarching Net Zero goals.

Planned actions to mitigate emissions beyond your value chain (optional)

C4.3

(C4.3) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.

Yes

C4.3a

(C4.3a) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO2e savings.

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	19	175,204
To be implemented*	55	1,388,688
Implementation commenced*	30	463,265
Implemented*	124	418,951
Not to be implemented	4	456.86

C4.3b

(C4.3b) Provide details on the initiatives implemented in the reporting year in the table below.

Initiative category & Initiative type

Energy efficiency in production processes

Process optimization

Estimated annual CO2e savings (metric tonnes CO2e)

567,577.17

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 1

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

2,012,453,801

Investment required (unit currency – as specified in C0.4)

8,102,100,000

Payback period

1-3 years

Estimated lifetime of the initiative

3-5 years

Comment

C4.3c

(C4.3c) What methods do you use to drive investment in emissions reduction activities?

Method	Comment
Dedicated budget for energy efficiency	We continuously reassess our climate risk assessments, which in turn inform our climate budget, Intended Contributions Plans (ICP), and GHG emission reduction targets. Each year, our businesses undertake projects aimed at enhancing energy efficiency and reducing GHG emissions. These projects undergo rigorous evaluation based on their potential for energy savings and GHG reduction. Furthermore, we consider their contribution to cost optimization and production enhancement, assessing them using the payback period approach. All selected projects are integrated into the business unit (BU) business plan and allocated the necessary budget accordingly. This approach ensures that our efforts to improve sustainability and mitigate climate impact are aligned with our overall business objectives.
Internal price on carbon	Vedanta has adopted an Internal Carbon Price (ICP) of $15 per tonne of CO2e. This ICP is implemented for projects with budgets surpassing INR 50 million. Additionally, specific ICPs have been established for each Business Unit to accommodate their distinct requirements and circumstances. By incorporating the ICP into project evaluations and decision-making processes, Vedanta demonstrates its commitment to internalizing the cost of carbon emissions and promoting sustainable practices across its operations.
Internal incentives/recognition programs	Annual Performance Bonus of the management is based on a balanced scorecard of financial, operational, sustainability and strategic metrics. The safety and sustainability scorecards under the Vedanta Sustainability Assurance Program form an integral variable pay component, aimed at strengthening the links between executive remuneration and ESG. The aligned ESG measures in the performance scorecard of the CEO will also be cascaded to other senior leaders and the broader workforce, specifically to individual employees who have direct accountability for the achievement of ESG outcomes as part of their roles.

Compliance with regulatory requirements/standards	For our aluminium, iron and steel, and oil and gas businesses, we perceive legal and regulatory risk as significant at the end of the first NDC reporting period, i.e., till 2030. However, depending on the pace of policy and regulatory evolution, this can change post-2030. The zinc business is exposed to carbon prices in South Africa. Still, the exposure will remain limited, considering the allowances provided by the country, which are expected to persist till 2025. We do not perceive any policy or legal risk to the copper business from the low-carbon transition. The thermal power business will witness policy and legal risks and could adversely impact the business post-2035.

C4.5

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products?

Yes

C4.5a

(C4.5a) Provide details of your products and/or services that you classify as low-carbon products.

Level of aggregation

Product or service

Taxonomy used to classify product(s) or service(s) as low-carbon

No taxonomy used to classify product(s) or service(s) as low carbon

Type of product(s) or service(s)

Aluminum

Other, please specify

Low Carbon Aluminium, two products: Restora (using renewable energy) and Restora Ultra (using dross, by-product of production of alumnium)

Description of product(s) or service(s)

At Vedanta, we recognize the emerging opportunities driven by changing consumer preferences towards low-carbon metals. This awareness has guided our efforts to decarbonize our product portfolio. In FY 2022, we introduced our environmentally conscious Green Aluminium Products, namely "Restora" and "Restora Ultra," which boast GHG intensities well below global standards for low-carbon aluminium. The production of Restora utilizes renewable energy, resulting in its GHG emission intensity being below the global standard of 4 tCO2e per tonne of aluminium produced. Our green aluminium brand, Restora Ultra, is crafted from reclaimed aluminium obtained from dross, a by-product of the production process, resulting in an almost negligible

carbon footprint. In FY2023, the sale of low-carbon aluminium generated approximately $150 million in revenue for us. We are dedicated to meeting the demands of environmentally conscious consumers and continually striving to offer sustainable, low-impact metal solutions.

Have you estimated the avoided emissions of this low-carbon product(s) or service(s)

No

Methodology used to calculate avoided emissions

Life cycle stage(s) covered for the low-carbon product(s) or services(s)

Functional unit used

Reference product/service or baseline scenario used

Life cycle stage(s) covered for the reference product/service or baseline scenario

Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario

Explain your calculation of avoided emissions, including any assumptions

Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year

0.69

C5. Emissions methodology

C5.1

(C5.1) Is this your first year of reporting emissions data to CDP?

No

C5.1a

(C5.1a) Has your organization undergone any structural changes in the reporting year, or are any previous structural changes being accounted for in this disclosure of emissions data?

Row 1

Has there been a structural change?

No

C5.1b

(C5.1b) Has your emissions accounting methodology, boundary, and/or reporting year definition changed in the reporting year?

	Change(s) in methodology, boundary, and/or reporting year definition?
Row 1	No

C5.2

(C5.2) Provide your base year and base year emissions.

Scope 1

Base year start

April 1, 2020

Base year end

March 31, 2021

Base year emissions (metric tons CO2e)

58,936,269

Comment

The base year for our absolute emissions reduction targets is FY21 and hence we are considering the same year as base year for our inventory.

Scope 2 (location-based)

Base year start

April 1, 2020

Base year end

March 31, 2021

Base year emissions (metric tons CO2e)

1,314,932

Comment

The base year for our absolute emissions reduction targets is FY21 and hence we are considering the same year as base year for our inventory.

Scope 2 (market-based)

Base year start

April 1, 2020

Base year end

March 31, 2021

Base year emissions (metric tons CO2e)

0

Comment

Location-based result has been used as a proxy since a market-based figure cannot be calculated.

Scope 3 category 1: Purchased goods and services

Base year start

April 1, 2020

Base year end

March 31, 2021

Base year emissions (metric tons CO2e)

4,161,727

Comment

The base year for our emissions reduction targets is FY21 and on a group-level Vedanta has started reporting Scope 3 emissions since FY21, hence we are considering the same year as base year for our inventory. 5% of total emissions emissions from this category are taken directly from suppliers.

Scope 3 category 2: Capital goods

Base year start

April 1, 2020

Base year end

March 31, 2021

Base year emissions (metric tons CO2e)

0

Comment

Insignificant emissions

Scope 3 category 3: Fuel-and-energy-related activities (not included in Scope 1 or 2)

Base year start

April 1, 2020

Base year end

March 31, 2021

Base year emissions (metric tons CO2e)

2,146,367

Comment

The base year for our emissions reduction targets is FY21 and on a group-level Vedanta has started reporting Scope 3 emissions since FY21, hence we are considering the same year as base year for our inventory. 1% of total emissions emissions from this category are taken directly from suppliers.

Scope 3 category 4: Upstream transportation and distribution

Base year start

April 1, 2020

Base year end

March 31, 2021

Base year emissions (metric tons CO2e)

458,512

Comment

The base year for our emissions reduction targets is FY21 and on a group-level Vedanta has started reporting Scope 3 emissions since FY21, hence we are considering the same year as base year for our inventory.

Scope 3 category 5: Waste generated in operations

Base year start

April 1, 2020

Base year end

March 31, 2021

Base year emissions (metric tons CO2e)

445,290

Comment

The base year for our emissions reduction targets is FY21 and on a group-level Vedanta has started reporting Scope 3 emissions since FY21, hence we are considering the same year as base year for our inventory.

Scope 3 category 6: Business travel

Base year start

April 1, 2020

Base year end

March 31, 2021

Base year emissions (metric tons CO2e)

1,406

Comment

The base year for our emissions reduction targets is FY21 and on a group-level Vedanta has started reporting Scope 3 emissions since FY21, hence we are considering the same year as base year for our inventory.

Scope 3 category 7: Employee commuting

Base year start

April 1, 2020

Base year end

March 31, 2021

Base year emissions (metric tons CO2e)

12,101

Comment

The base year for our emissions reduction targets is FY21 and on a group-level Vedanta has started reporting Scope 3 emissions since FY21, hence we are considering the same year as base year for our inventory.

Scope 3 category 8: Upstream leased assets

Base year start

April 1, 2020

Base year end

March 31, 2021

Base year emissions (metric tons CO2e)

0

Comment

Insignificant emissions

Scope 3 category 9: Downstream transportation and distribution

Base year start

April 1, 2020

Base year end

March 31, 2021

Base year emissions (metric tons CO2e)

234,805

Comment

The base year for our emissions reduction targets is FY21 and on a group-level Vedanta has started reporting Scope 3 emissions since FY21, hence we are considering the same year as base year for our inventory.

Scope 3 category 10: Processing of sold products

Base year start

April 1, 2020

Base year end

March 31, 2021

Base year emissions (metric tons CO2e)

1,001,617

Comment

The base year for our emissions reduction targets is FY21 and on a group-level Vedanta has started reporting Scope 3 emissions since FY21, hence we are considering the same year as base year for our inventory. 5% of total emissions emissions from this category are taken directly from suppliers.

Scope 3 category 11: Use of sold products

Base year start

April 1, 2020

Base year end

March 31, 2021

Base year emissions (metric tons CO2e)

25,163,167

Comment

The base year for our emissions reduction targets is FY21 and on a group-level Vedanta has started reporting Scope 3 emissions since FY21, hence we are considering the same year as base year for our inventory.

Scope 3 category 12: End of life treatment of sold products

Base year start

April 1, 2020

Base year end

March 31, 2021

Base year emissions (metric tons CO2e)

2,692,971

Comment

The base year for our emissions reduction targets is FY21 and on a group-level Vedanta has started reporting Scope 3 emissions since FY21, hence we are considering the same year as base year for our inventory.

Scope 3 category 13: Downstream leased assets

Base year start

April 1, 2020

Base year end
March 31, 2021

Base year emissions (metric tons CO2e)
0

Comment
Not applicable

Scope 3 category 14: Franchises

Base year start
April 1, 2020

Base year end
March 31, 2021

Base year emissions (metric tons CO2e)
0

Comment
Not applicable

Scope 3 category 15: Investments

Base year start
April 1, 2020

Base year end
March 31, 2021

Base year emissions (metric tons CO2e)
0

Comment
Not applicable.

Scope 3: Other (upstream)

Base year start
April 1, 2020

Base year end
March 31, 2021

Base year emissions (metric tons CO2e)
0

Comment
Not applicable

Scope 3: Other (downstream)

Base year start
April 1, 2020

Base year end
March 31, 2021

Base year emissions (metric tons CO2e)
0

Comment
Not applicable

C5.3

(C5.3) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.

American Petroleum Institute Compendium of Greenhouse Gas Emissions Methodologies for the Oil and Natural Gas Industry, 2009
IPCC Guidelines for National Greenhouse Gas Inventories, 2006
The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)
The Greenhouse Gas Protocol: Scope 2 Guidance
The Greenhouse Gas Protocol: Corporate Value Chain (Scope 3) Standard
World Steel Association CO2 emissions data collection guidelines

C6. Emissions data

C6.1

(C6.1) What were your organization's gross global Scope 1 emissions in metric tons CO2e?

Reporting year

Gross global Scope 1 emissions (metric tons CO2e)
57,175,390.47

Start date
April 1, 2022

End date
March 31, 2023

Comment
FY23 Scope 1 emissions

Past year 1

Gross global Scope 1 emissions (metric tons CO2e)

59,486,747

Start date

April 1, 2021

End date

March 31, 2022

Comment

FY22 Scope 1 emissions

Past year 2

Gross global Scope 1 emissions (metric tons CO2e)

58,936,259

Start date

April 1, 2020

End date

March 31, 2021

Comment

FY21 Scope 1 emissions

Past year 3

Gross global Scope 1 emissions (metric tons CO2e)

57,482,868

Start date

April 1, 2019

End date

March 31, 2020

Comment

FY20 Scope 1 emissions

Past year 4

Gross global Scope 1 emissions (metric tons CO2e)

58,610,000

Start date

April 1, 2018

End date

March 31, 2019

Comment

FY19 Scope 1 emissions

Past year 5

Gross global Scope 1 emissions (metric tons CO2e)

51,100,000

Start date

April 1, 2017

End date

March 31, 2018

Comment

FY18 Scope 1 emissions

C6.2

(C6.2) Describe your organization's approach to reporting Scope 2 emissions.

Row 1

Scope 2, location-based

We are reporting a Scope 2, location-based figure

Scope 2, market-based

We have no operations where we are able to access electricity supplier emission factors or residual emissions factors and are unable to report a Scope 2, market-based figure

Comment

NA

C6.3

(C6.3) What were your organization's gross global Scope 2 emissions in metric tons CO2e?

Reporting year

Scope 2, location-based

8,182,542.02

Start date

April 1, 2022

End date

March 31, 2023

Comment

FY23 Scope 2 emissions

Past year 1

Scope 2, location-based

3,342,745

Start date

April 1, 2021

End date

March 31, 2022

Comment

FY22 Scope 2 emissions

Past year 2

Scope 2, location-based

1,312,818

Start date

April 1, 2020

End date

March 31, 2021

Comment

FY21 Scope 2 emissions

Past year 3

Scope 2, location-based

1,864,711

Start date

April 1, 2019

End date

March 31, 2020

Comment

FY20 Scope 2 emissions

Past year 4

Scope 2, location-based

3,510,000

Start date

April 1, 2018

End date

March 31, 2019

Comment

FY19 Scope 2 emissions

Past year 5

Scope 2, location-based
1,200,000

Start date
April 1, 2017

End date
March 31, 2018

Comment
FY18 Scope 2 emissions

C6.4

(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1, Scope 2 or Scope 3 emissions that are within your selected reporting boundary which are not included in your disclosure?

No

C6.5

(C6.5) Account for your organization's gross global Scope 3 emissions, disclosing and explaining any exclusions.

Purchased goods and services

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
5,441,919

Emissions calculation methodology
Spend-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
100

Please explain
Category 1 is most relevant for metal processing companies, to account for the extraction of raw materials, manufacturing, electricity generation consumed by upstream activities, land use change, and transportation of goods between suppliers. As majority of Vedanta - metal business units are into metal smelting and processing, the emission associated with the purchased of raw material (ore, intermediate products, chemicals and feedstock such as calcined coke) are major contributor. Research also indicates that Scope 3 category 1 "Purchased goods and services" are also very relevant to our sector, representing over 50% of value chain emissions for some companies (Greene,

2017:5).
At Vedanta group scope 3 - Category 1 is second largest contributor to our scope 3 inventory with over 15% of our Scope 3 emissions. As per Scope 3 standard GHG emissions from the Purchased Goods and Services are to be estimated by either of supplier specific method, average data, spend data or
hybrid. For Vedanta mass based (average method) is referred where GHG emissions are derived by taking the quantity of material and multiplying with the average emission factors. The supplier specific emission factors are referred if available otherwise average emission factors are referred for the calculation GHG emission estimation formula
GHG Emissions (t CO2) = Quantity of Material (t) * Emission Factor (t CO2/t)

Capital goods

Evaluation status

Not relevant, calculated

Emissions in reporting year (metric tons CO2e)

28,929

Emissions calculation methodology

Spend-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

For many of the BUs the emissions from capital goods are not very significant as compared to other scope 3 categories (based on Scope 3 materiality).

The capital goods are segregated into different categories such as construction, plant and machinery, transport, IT Systems, Furniture, etc. so that spend based method can be applied to the necessary calculation.

In addition, quantity of steel, cement, aluminum, etc. are monitored (if consumed as capital goods) so that mass-based method can be applied for calculation

Fuel-and-energy-related activities (not included in Scope 1 or 2)

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

2,543,743

Emissions calculation methodology

Fuel-based method
Distance-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

GHG emissions related to the extraction, production, and transportation of fuels and energy purchased or acquired by the reporting company in the reporting year, not already accounted for in Scope 1 or Scope 2. As Vedanta procures large amount of fuel (Coal, coke, Natural Gas, LPG, HSD, HFO and electricity (grid)) -the category would be relevant for the business. At Vedanta we have estimated upstream emission from fuel based on our consumption and have estimated emission from T&D loss due to purchased electricity.
At Vedanta group scope 3 - Category 3 is the third largest contributor to our scope 3 inventory with over 7% of our Scope 3 emissions.
As per Scope 3 standard– supplier specific and average data approach are to be used for GHG estimation.
Fuel Upstream –
Under this approach – the quantity of fuel consumption is multiplied with the emission factor (upstream) to derive GHG emissions.
GHG Emissions = Quantity of Fuel consumed (t) * Emission factor (t CO2/t)
Electricity T&D Loss
To estimate GHG emissions from T&D loss – the T&D loss for a company is estimated using the electricity consumption (metering point at company) and T&D loss for the power distribution company where the company is located.
Step 1 – Estimation of T&D Loss
T&D Loss (MWh) = (Electricity Consumption/(1-T&D Loss)) – Electricity Consumption
Step 2 – GHG Emissions Estimate
GHG Emissions = T&D Loss (MWh) * Emission factor (t CO2/MWh)
For electricity based on the location of the unit, the DISCOM specific T&D loss has been applied for GHG estimation

Upstream transportation and distribution

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

510,132

Emissions calculation methodology

Average data method
Fuel-based method
Distance-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

The approach adopted for the estimation of upstream GHG emissions is based on fuel method under which based on quantity of raw material, distance, type of truck (loading) and mileage the fuel consumption is estimated.
Road Transport Emissions
Step 1: Segregate the quantity of material basis supplier and location
Step 2 – Estimate Number of Trip
No of Trips = Total Quantity (t) * per trip loading (t)
Step 3 – Estimate total kms
Total kms = No of Trips x Distance of Supplier from facility
Step 4 – Estimate Diesel Consumption
Diesel Consumption = Total kms/ Vehicle mileage (KMPL)
Step 5 – Estimate GHG emissions
GHG Emissions = diesel consumption (kL) * Emission Factor (t CO2/kl)
Rail Transport Emissions
Step 1 - Segregate the quantity of material basis supplier and location
Step 2 – Estimate tonnage – kilometer for material
Tonnage – kilometer = Total Quantity (t) x Distance (km)
Step 3 - Calculate GHG Emissions
GHG Emissions = Tonnes-kilometers x Emission factor (kg CO2/t-km)

Sea Transport Emissions
Step 1 - Segregate the quantity of material basis supplier and location (Country and Port)
Step 2 – Estimate port to port distance (kilometers)
Step 3 – Estimate tonnage – kilometer for material
Tonnage – kilometer = Total Quantity (t) x Distance (km)
Step 4 - Calculate GHG Emissions
GHG Emissions = Tonnes-kilometers x Emission factor (kg CO2/t-km)
The activity data is collected from the logistics/Gate entry records maintained by each BU as part of their SAP/ERP system – where quantity of material, location of supplier, and transport details are available.
For the estimation of GHG emissions the following sources have been referred to:
• Vehicle mileage – The vehicle mileage is referred from ICCT – Publication on mileage of HDV Vehicles in India
• Distance: Distance between facility and supplier is measured/estimated by using Google Maps (not exact but from Supplier City location to Plant/manufacturing facility)
• Vehicle Loading – Vehicle loading from system (Gate Entry records) and in case it is not available average assumption of 25 T per trip is assumed for road transport
• Diesel Emission Factor – The emission factor for diesel consumption is referred from IPCC
• Sea Transport – The emission factor is referred from DEFRA and distance between port is estimated using Ports Distance Calculator

Waste generated in operations

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

39,610

Emissions calculation methodology

Waste-type-specific method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

The approach adopted for the estimation of emission associated with waste disposal are as follows:

• Depending on type of final disposal practices GHG emissions associated with processing are accounted (use of waste as alternate material in other industry is not accounted

• Depending on distance and loading GHG emissions associated with waste transport is accounted GHG Emissions = Waste Generation (t) * Emission factor (t CO2/t). The activity data is collected from the waste generation and disposal records maintained by BU (Environment Status reporting records)

For the estimation of GHG emissions the following sources have been referred to:

• Vehicle mileage – The vehicle mileage is referred from ICCT – Publication on mileage of HDV Vehicles in India

• Distance: Distance between facility and supplier is measured/estimated by using Google Maps (not exact but from Supplier City location to Plant/manufacturing facility)

• Vehicle Loading – Vehicle loading from system (Gate Entry records) and in case it is not available average assumption of 25 T per trip is assumed for road transport

• Diesel Emission Factor – The emission factor for diesel consumption is referred from IPCC

• Waste processing emission factors referred from – LCI Datasets or DEFRA

Business travel

Evaluation status

Not relevant, calculated

Emissions in reporting year (metric tons CO2e)

2,984

Emissions calculation methodology

Fuel-based method

Distance-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

The approach adopted for the estimation of emission associated with Business Commute is as follows:
• Based on the to and from information the distance is estimated using the google maps or flight radar.
• For each passenger depending on type of commute – the passenger km is derived
• The emission factors are referred for each type of commute (air and rail) and is multiplied with the activity data (passenger-km) to estimate GHG emissions
Step 1 – Collate booking information – From & To, Type of transport and distance
Step 2 - Calculate passenger-km
Step 3 – Calculate GHG emissions
GHG emissions = Passenger-km * emission factor (kg CO2/pax-km)
The activity data is collected from travel records maintained by individual business units.
For the estimation of GHG emissions the following sources are referred to:
• Distance: Distance between embarking station/airport to destination station/airport by using Google Maps
• Emission Factors: Shakti Sustainable Energy Foundation Publication on India Specific Road, Rail and Air Transport Emission factors

Employee commuting

Evaluation status

Not relevant, calculated

Emissions in reporting year (metric tons CO2e)

10,595

Emissions calculation methodology

Fuel-based method
Distance-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

The approach adopted for the estimation of emission associated with employee commuting are as follows:
• The BUs either maintain the kilometers or diesel consumption data in Bus or cabs (provided by company)
• If fuel consumption is directly available, the fuel consumption (activity data) is multiplied with emission factor to estimate GHG emissions
• And in case fuel consumption data is not available, the fuel consumption is estimated using the mileage assumption depending on type of vehicle and emission is subsequently estimated using the fuel emission factors
For the estimation of GHG emissions the following sources are referred to:
• Emission Factors: Shakti Sustainable Energy Foundation Publication on India Specific Road, Rail and Air Transport Emission factors
• Vehicle mileage – The vehicle mileage is referred from ICCT – Publication on mileage

of HDV Vehicles in India or based on publicly available information from Automobile Manufacturers

Upstream leased assets

Evaluation status

Not relevant, calculated

Emissions in reporting year (metric tons CO2e)

66

Emissions calculation methodology

Average data method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

Total electricity consumption multiplied with India grid emission factor.

Downstream transportation and distribution

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

580,432

Emissions calculation methodology

Average data method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

The approach adopted for the estimation of downstream GHG emissions is based on fuel method under which based on quantity of raw material, distance, type of truck (loading) and mileage the fuel consumption is estimated.
Road Transport Emissions
Step 1: Segregate the quantity of material basis supplier and location
Step 2 – Estimate Number of Trip
No of Trips = Total Quantity (t) * per trip loading (t)
Step 3 – Estimate total kms
Total kms = No of Trips x Distance of Supplier from facility
Step 4 – Estimate Diesel Consumption
Diesel Consumption = Total kms/ Vehicle mileage (KMPL)
Step 5 – Estimate GHG emissions
GHG Emissions = diesel consumption (kL) * Emission Factor (t CO2/kl)

Rail Transport Emissions
Step 1 - Segregate the quantity of material basis supplier and location
Step 2 – Estimate tonnage – kilometer for material
Tonnage – kilometer = Total Quantity (t) x Distance (km)
Step 3 - Calculate GHG Emissions
GHG Emissions = Tonnes-kilometers x Emission factor (kg CO2/t-km)
Sea Transport Emissions
Step 1 - Segregate the quantity of material basis supplier and location (Country and Port)
Step 2 – Estimate port to port distance (kilometers)
Step 3 – Estimate tonnage – kilometer for material
Tonnage – kilometer = Total Quantity (t) x Distance (km)
Step 4 - Calculate GHG Emissions
GHG Emissions = Tonnes-kilometers x Emission factor (kg CO2/t-km)
The activity data is collected from the logistics/Gate entry records maintained by each BU as part of their SAP/ERP system – where quantity of material, location of customers, and transport details are available.
For the estimation of GHG emissions the following sources are referred to:
• Vehicle mileage – The vehicle mileage is referred from ICCT – Publication on mileage =of HDV Vehicles in India
• Distance: Distance between facility and customer is measured/estimated by using Google Maps (not exact but from customer city location to Plant/manufacturing facility)
• Vehicle Loading – Vehicle loading from system (Gate Entry records) and in case it is not available average assumption of 25 T per trip is assumed for road transport
• Diesel Emission Factor – The emission factor for diesel consumption is referred from IPCC
• Sea Transport – The emission factor is referred from DEFRA and distance between port is estimated using Ports Distance Calculator

Processing of sold products

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

4,083,312

Emissions calculation methodology

Average product method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

The approach adopted for the estimation is Average-data method, which involves estimating emissions for processing of sold intermediate products based on average secondary data, such as average emissions per process or per product. At present for Vedanta – the category is applicable for VAB, VZI and Cairn Oil and Gas as they

produce intermediate products which are further processed into other products.
For the estimation of GHG emissions the following sources are referred to:
• Sustainability Reports of company -to collect information on Scope 1 and scope 2 emissions
• Research publication to refer the processing related emissions

Use of sold products

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

21,898,351

Emissions calculation methodology

Average product method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

Vedanta produces and sells crude oil and natural gas and coke, all of which release GHG emissions when consumed by end users. Emissions from the end use of these products by third parties are estimated for this category. At Vedanta group scope 3 - Category 11 is the largest contributor to our scope 3 inventory with over 75% of our Scope 3 emissions. As Vedanta is into upstream for Oil & Gas and sells crude oil/natural gas to midstream companies - further information on final usage is not accessible. The method recommended in the Scope 3 Guidance for 'direct use-phase' emissions calculations for 'Fuels and feedstocks' is used to calculate these emissions, with industry-average emissions factors applied to production volumes for oil & gas and coke to calculate overall emissions estimate for this category. Similarly for Natural Gas sold to the customers (other than sold to fertilizers) is assumed to undergo combustion. Also, for coke sold to the market - it is assumed that all coke will be used for reduction purpose and will result in CO2 emissions. All crude oil are assumed to be refined and combusted as diesel as a more conservative assumption (which will give higher estimate). The energy content of the crude oil volumes is used to estimate the corresponding quantity of diesel which would be produced, assuming that no fuel is 'lost' during the refining process.

End of life treatment of sold products

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

3,047,478

Emissions calculation methodology

Average product method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

Quantity of each type of product sold during the reporting year has been multiplied with respective emission factor for recycling. Since all our products, namely, zinc, lead and silver, are metals, end of life treatment has been considered to be recycling. Emission has been calculated using IPCC 2006 guidelines for zinc and lead and metal recycling emission factor for silver has been sourced from DEFRA.

Downstream leased assets

Evaluation status

Not relevant, explanation provided

Please explain

This category is not relevant to Vedanta as it does not have any leased assets.

Franchises

Evaluation status

Not relevant, explanation provided

Please explain

This category is not relevant as Vedanta does not have franchised operations.

Investments

Evaluation status

Not relevant, explanation provided

Please explain

This category is not relevant as Vedanta does not have any investments.

Other (upstream)

Evaluation status

Not relevant, explanation provided

Please explain

This category is not relevant as Vedanta does not have any other upstream.

Other (downstream)

Evaluation status

Not relevant, explanation provided

Please explain

This category is not relevant as Vedanta does not have any other downstream.

C6.5a

(C6.5a) Disclose or restate your Scope 3 emissions data for previous years.

Past year 1

Start date

April 1, 2021

End date

March 31, 2022

Scope 3: Purchased goods and services (metric tons CO2e)

4,988,940

Scope 3: Capital goods (metric tons CO2e)

0

Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

2,627,796

Scope 3: Upstream transportation and distribution (metric tons CO2e)

373,841

Scope 3: Waste generated in operations (metric tons CO2e)

38,623

Scope 3: Business travel (metric tons CO2e)

591

Scope 3: Employee commuting (metric tons CO2e)

11,804

Scope 3: Upstream leased assets (metric tons CO2e)

0

Scope 3: Downstream transportation and distribution (metric tons CO2e)

487,723

Scope 3: Processing of sold products (metric tons CO2e)

1,528,462

Scope 3: Use of sold products (metric tons CO2e)

24,468,876

Scope 3: End of life treatment of sold products (metric tons CO2e)

0

Scope 3: Downstream leased assets (metric tons CO2e)

0

Scope 3: Franchises (metric tons CO2e)

0

Scope 3: Investments (metric tons CO2e)

0

Scope 3: Other (upstream) (metric tons CO2e)

0

Scope 3: Other (downstream) (metric tons CO2e)

0

Comment

No additional comments

Past year 2

Start date

April 1, 2020

End date

March 31, 2021

Scope 3: Purchased goods and services (metric tons CO2e)

4,161,727

Scope 3: Capital goods (metric tons CO2e)

0

Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

2,146,367

Scope 3: Upstream transportation and distribution (metric tons CO2e)

458,512

Scope 3: Waste generated in operations (metric tons CO2e)

445,290

Scope 3: Business travel (metric tons CO2e)

1,406

Scope 3: Employee commuting (metric tons CO2e)

12,101

Scope 3: Upstream leased assets (metric tons CO2e)

0

Scope 3: Downstream transportation and distribution (metric tons CO2e)

234,805

Scope 3: Processing of sold products (metric tons CO2e)

1,001,617

Scope 3: Use of sold products (metric tons CO2e)

25,163,167

Scope 3: End of life treatment of sold products (metric tons CO2e)

0

Scope 3: Downstream leased assets (metric tons CO2e)

0

Scope 3: Franchises (metric tons CO2e)

0

Scope 3: Investments (metric tons CO2e)

0

Scope 3: Other (upstream) (metric tons CO2e)

0

Scope 3: Other (downstream) (metric tons CO2e)

0

Comment

No additional comments

C6.7

(C6.7) Are carbon dioxide emissions from biogenic carbon relevant to your organization?

No

C6.10

(C6.10) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO2e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.

Intensity figure

0.0000449

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)

65,357,932.49

Metric denominator

unit total revenue

Metric denominator: Unit total

1,454,040,000,000

Scope 2 figure used

Location-based

% change from previous year

5.96

Direction of change

Decreased

Reason(s) for change

Change in renewable energy consumption
Other emissions reduction activities

Please explain

In stage 1 (FY 2021-FY 2025), we plan to reduce to GHG intensity (tCO2e/tonne) of our metals businesses by 20% by FY 2025 (from a FY 2021) baseline. In FY 2023, the following emissions reduction and renewable energy initiatives were executed to achieve decrease in scope 1 & 2 intensity:
a. 92,000tCO2e reduction through recycled copper rod production
b. Commissioned 10 KWP Solar Plant at Cambay asset.
c. Total 71 convention light fittings replaced by LED lights in phased manner. Total energy saving achieved was 7,914 kWh/year at Cambay asset.
d. Total 7 AC units equipped with energy saving devices in phased manner. Total energy saving achieved was 15,987 kWh/year at Cambay asset.

C7. Emissions breakdowns

C7.1

(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type?

Yes

C7.1a

(C7.1a) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used greenhouse warming potential (GWP).

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
CO2	57,027,569	Other, please specify IPCC 2006

HFCs	860	Other, please specify IPCC 2006
Other, please specify CF4 emissions and C2F6 emissions	146,961.35	Other, please specify IPCC 2006

C7.2

(C7.2) Break down your total gross global Scope 1 emissions by country/area/region.

Country/area/region	Scope 1 emissions (metric tons CO2e)
India	57,054,088.91
South Africa	114,489
Australia	132
United Arab Emirates	6,680.56

C7.3

(C7.3) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.

By business division

C7.3a

(C7.3a) Break down your total gross global Scope 1 emissions by business division.

Business division	Scope 1 emissions (metric ton CO2e)
Aluminium	31,992,077
Copper (India/Australia)	34,822
Iron Ore	1,862,912
Oil & Gas	1,777,161
Port Business	2,301
Power Business	14,791,782
Steel	2,858,733
Zinc India (HZL)	3,444,672
Zinc International	114,489
Ferro Alloys	296,441

C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4

(C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4) Break down your organization's total gross global Scope 1 emissions by sector production activity in metric tons CO2e.

	Gross Scope 1 emissions, metric tons CO2e	Comment
Metals and mining production activities	40,606,447.34	No additional comments

C7.5

(C7.5) Break down your total gross global Scope 2 emissions by country/area/region.

Country/area/region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
India	7,929,278.81	0
South Africa	249,700	0
Australia	903	0
United Arab Emirates	2,660.21	0

C7.6

(C7.6) Indicate which gross global Scope 2 emissions breakdowns you are able to provide.

By business division

C7.6a

(C7.6a) Break down your total gross global Scope 2 emissions by business division.

Business division	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Aluminium	5,994,336	0
Copper (India/Australia)	85,262.71	0
Iron Ore	3,805	0
Oil & Gas	344,655	0
Port Business	7,588	0
Steel	249,986	0
Zinc India (HZL)	1,135,622	0
Zinc International	249,700	0

Ferro Alloys	106,915	0
Power Business	0	0

C7.7

(C7.7) Is your organization able to break down your emissions data for any of the subsidiaries included in your CDP response?

Yes

C7.7a

(C7.7a) Break down your gross Scope 1 and Scope 2 emissions by subsidiary.

Subsidiary name

Hindustan Zinc Ltd.

Primary activity

Precious metals & minerals mining

Select the unique identifier(s) you are able to provide for this subsidiary

Another unique identifier, please specify

CIN

ISIN code – bond

ISIN code – equity

CUSIP number

Ticker symbol

SEDOL code

LEI number

Other unique identifier

L27204RJ1966PLC001208

Scope 1 emissions (metric tons CO2e)

3,444,672

Scope 2, location-based emissions (metric tons CO2e)

1,135,622

Scope 2, market-based emissions (metric tons CO2e)
0

Comment
No additional comments

Subsidiary name
Zinc International

Primary activity
Precious metals & minerals mining

Select the unique identifier(s) you are able to provide for this subsidiary
No unique identifier

ISIN code – bond

ISIN code – equity

CUSIP number

Ticker symbol

SEDOL code

LEI number

Other unique identifier

Scope 1 emissions (metric tons CO2e)
114,489

Scope 2, location-based emissions (metric tons CO2e)
249,700

Scope 2, market-based emissions (metric tons CO2e)
0

Comment
No additional comments

Subsidiary name

Electrosteel Limited

Primary activity

Iron & steel

Select the unique identifier(s) you are able to provide for this subsidiary

Another unique identifier, please specify

CIN

ISIN code – bond

ISIN code – equity

CUSIP number

Ticker symbol

SEDOL code

LEI number

Other unique identifier

U27310JH2006PLC012663

Scope 1 emissions (metric tons CO2e)

2,858,733

Scope 2, location-based emissions (metric tons CO2e)

249,986

Scope 2, market-based emissions (metric tons CO2e)

0

Comment

No additional comments

Subsidiary name

Iron Ore India

Primary activity

Iron ore mining

Select the unique identifier(s) you are able to provide for this subsidiary

No unique identifier

ISIN code – bond

ISIN code – equity

CUSIP number

Ticker symbol

SEDOL code

LEI number

Other unique identifier

Scope 1 emissions (metric tons CO2e)

1,862,912

Scope 2, location-based emissions (metric tons CO2e)

3,805

Scope 2, market-based emissions (metric tons CO2e)

0

Comment

No additional comments

Subsidiary name

Copper India and Australia

Primary activity

Copper

Select the unique identifier(s) you are able to provide for this subsidiary

No unique identifier

ISIN code – bond

ISIN code – equity

CUSIP number

Ticker symbol

SEDOL code

LEI number

Other unique identifier

Scope 1 emissions (metric tons CO2e)

34,822

Scope 2, location-based emissions (metric tons CO2e)

89,937

Scope 2, market-based emissions (metric tons CO2e)

0

Comment

No additional comments

Subsidiary name

Cairn India

Primary activity

Oil & gas extraction

Select the unique identifier(s) you are able to provide for this subsidiary

No unique identifier

ISIN code – bond

ISIN code – equity

CUSIP number

Ticker symbol

SEDOL code

LEI number

Other unique identifier

Scope 1 emissions (metric tons CO2e)

1,777,161

Scope 2, location-based emissions (metric tons CO2e)

344,655

Scope 2, market-based emissions (metric tons CO2e)

0

Comment

No additional comments

Subsidiary name

Talwandi Sabo Power Limited

Primary activity

Electricity networks

Select the unique identifier(s) you are able to provide for this subsidiary

Another unique identifier, please specify

CIN

ISIN code – bond

ISIN code – equity

CUSIP number

Ticker symbol

SEDOL code

LEI number

Other unique identifier

U40101PB2007PLC031035

Scope 1 emissions (metric tons CO2e)

10,682,926.91

Scope 2, location-based emissions (metric tons CO2e)

0

Scope 2, market-based emissions (metric tons CO2e)

0

Comment

No additional comments

Subsidiary name

Ferro Alloys Corporation Ltd

Primary activity

Iron ore mining

Select the unique identifier(s) you are able to provide for this subsidiary

Another unique identifier, please specify

CIN

ISIN code – bond

ISIN code – equity

CUSIP number

Ticker symbol

SEDOL code

LEI number

Other unique identifier

U45201OR1955PLC008400

Scope 1 emissions (metric tons CO2e)

296,441

Scope 2, location-based emissions (metric tons CO2e)

106,915

Scope 2, market-based emissions (metric tons CO2e)

0

Comment

No additional comments

Subsidiary name

Vizag General Cargo Berth Pvt. Ltd.

Primary activity

Logistics - transport

Select the unique identifier(s) you are able to provide for this subsidiary

Another unique identifier, please specify

CIN

ISIN code – bond

ISIN code – equity

CUSIP number

Ticker symbol

SEDOL code

LEI number

Other unique identifier

U35100TN2010PTC075408

Scope 1 emissions (metric tons CO2e)

2,301

Scope 2, location-based emissions (metric tons CO2e)

7,588

Scope 2, market-based emissions (metric tons CO2e)

0

Comment

No additional comments

Subsidiary name

Vedanta Aluminium Ltd.

Primary activity

Aluminum

Select the unique identifier(s) you are able to provide for this subsidiary

No unique identifier

ISIN code – bond

ISIN code – equity

CUSIP number

Ticker symbol

SEDOL code

LEI number

Other unique identifier

Scope 1 emissions (metric tons CO2e)

36,100,931.81

Scope 2, location-based emissions (metric tons CO2e)

5,994,336

Scope 2, market-based emissions (metric tons CO2e)

0

Comment

No additional comments

C-CE7.7/C-CH7.7/C-CO7.7/C-MM7.7/C-OG7.7/C-ST7.7/C-TO7.7/C-TS7.7

(C-CE7.7/C-CH7.7/C-CO7.7/C-MM7.7/C-OG7.7/C-ST7.7/C-TO7.7/C-TS7.7) Break down your organization's total gross global Scope 2 emissions by sector production activity in metric tons CO2e.

	Scope 2, location-based, metric tons CO2e	Scope 2, market-based (if applicable), metric tons CO2e	Comment
Metals and mining production activities	7,837,887.29	0	No additional comments

C7.9

(C7.9) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?

Increased

C7.9a

(C7.9a) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined), and for each of them specify how your emissions compare to the previous year.

	Change in emissions (metric tons CO2e)	Direction of change in emissions	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	659,233	Increased	1.04	During FY 2022, our gross scope 1 & 2 emissions were 62,829,491 MTCO2e and gross scope 1 & 2 emission in FY 2023 were 65,357,932 MTCO2e. Hence, change in total emissions is 2,528,441 MTCO2e, ie., 4% increase in emission from last year. (2,528,441/62,829,491) *100= 4%. Increase in emission was also due to decrease in renewable energy consumption. In FY 2023, renewable energy consumption was 8,412,331 GJ which is lesser than FY 2022: 14,489,989 GJ. This decrease in renewable energy usage resulted in an increase in GHG emissions that can be calculated by multiplying the change in energy sourced (-6,077,659 GJ) by the emission factor(Total TC O2e/Total GJ=0.11). The emissions value (percentage) for each of these two individual factors can also be calculated using the same formula described in the guidance, above. In this example, the percentage change in emissions due to Change in Renewable energy consumption is: (659,233/62,829,491) * 100 = 1.04%.
Other emissions	387,773	Increased	0.61	During FY 2022, our gross scope 1 & 2 emissions were 62,829,491 MTCO2e and gross scope 1 & 2 emission in FY 2023 were

reduction activities				65,357,932 MTCO2e. Hence, change in total emissions is 2,528,441 MTCO2e, ie., 4% increase in emission from last year. (2,528,441/62,829,491) *100= 4%. In FY23 An estimated reduction of 274,428.66 metric tonnes of CO2e achieved due to emissions reduction activities. The GHG savings last year was 662,201 TCO2e. In this example, the percentage change in emissions due to 'Other emissions reduction activities) is (662,201-274,428)/ (62,829,491)*100=(387,773/62,829,491)*100=0 .61&
Divestment	0	No change	0	Not Applicable
Acquisitions	0	No change	0	Not Applicable
Mergers	0	No change	0	Not Applicable
Change in output	60,546,347.49	Increased	4.02	During FY 2022, our gross scope 1 & 2 emissions were 62,829,491 MTCO2e and gross scope 1 & 2 emission in FY 2023 were 65,357,932 MTCO2e. Hence, change in total emissions is 2,528,441 MTCO2e, ie., 4% increase in emission from last year. (2,528,441/62,829,491) *100= 4%.. There has been increase in 60,546,347.49 metric tonnes of CO 2e emissions due to 'Change in output', i.e., increase in production activities. In this example, the percentage change in emissions due to ' (Scope 1&2 2023- Scope 1&2 2022)/(Scope 1&2 2022)*100= ((6,53,57,932-62,829,491)/ 62,829,491) *100= 4.02%
Change in methodology	0	No change	0	Not Applicable
Change in boundary	0	No change	0	Not Applicable
Change in physical	0	No change	0	Not Applicable

operating conditions				
Unidentified	0	No change	0	Not Applicable
Other	0	No change	0	Not Applicable

C7.9b

(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Location-based

C8. Energy

C8.1

(C8.1) What percentage of your total operational spend in the reporting year was on energy?

More than 20% but less than or equal to 25%

C8.2

(C8.2) Select which energy-related activities your organization has undertaken.

	Indicate whether your organization undertook this energy-related activity in the reporting year
Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	No
Consumption of purchased or acquired steam	No
Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	Yes

C8.2a

(C8.2a) Report your organization's energy consumption totals (excluding feedstocks) in MWh.

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total (renewable and non-renewable) MWh
Consumption of fuel (excluding feedstock)	LHV (lower heating value)	278,283.51	144,941,027	145,219,310.51
Consumption of purchased or acquired electricity		1,354,457.64	11,431,168.85	12,785,626.49
Consumption of self-generated non-fuel renewable energy		704,017		704,017.34
Total energy consumption		2,336,758.49	156,372,195.85	158,708,954.34

C-MM8.2a

(C-MM8.2a) Report your organization's energy consumption totals (excluding feedstocks) for metals and mining production activities in MWh.

	Heating value	Total MWh
Consumption of fuel (excluding feedstocks)	LHV (lower heating value)	96,778,673.76
Consumption of purchased or acquired electricity		12,300,197.29
Consumption of self-generated non-fuel renewable energy		702,884.77
Total energy consumption		109,781,755.83

C8.2b

(C8.2b) Select the applications of your organization's consumption of fuel.

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	Yes
Consumption of fuel for the generation of heat	No
Consumption of fuel for the generation of steam	No

Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	No

C8.2c

(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.

Sustainable biomass

Heating value

LHV

Total fuel MWh consumed by the organization

278,198.51

MWh fuel consumed for self-generation of electricity

278,198.51

MWh fuel consumed for self-generation of heat

0

Comment

No additional comment

Other biomass

Heating value

LHV

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

Comment

No additional biomass

Other renewable fuels (e.g. renewable hydrogen)

Heating value

LHV

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

Comment

No additional biomass

Coal

Heating value

LHV

Total fuel MWh consumed by the organization

134,092,686.7

MWh fuel consumed for self-generation of electricity

134,092,686.7

MWh fuel consumed for self-generation of heat

0

Comment

No additional comment

Oil

Heating value

LHV

Total fuel MWh consumed by the organization

5,061,010

MWh fuel consumed for self-generation of electricity

5,061,010

MWh fuel consumed for self-generation of heat

0

Comment

No additional comment

Gas

Heating value

LHV

Total fuel MWh consumed by the organization

5,447,090

MWh fuel consumed for self-generation of electricity

5,447,090

MWh fuel consumed for self-generation of heat

0

Comment

No additional comment

Other non-renewable fuels (e.g. non-renewable hydrogen)

Heating value

LHV

Total fuel MWh consumed by the organization

126,445.27

MWh fuel consumed for self-generation of electricity

126,445.27

MWh fuel consumed for self-generation of heat

0

Comment

Other non-renewable fuels

Total fuel

Heating value

LHV

Total fuel MWh consumed by the organization

145,005,430.48

MWh fuel consumed for self-generation of electricity

145,005,430.48

MWh fuel consumed for self-generation of heat

0

Comment

No additional comment

C8.2d

(C8.2d) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed in the reporting year.

	Total Gross generation (MWh)	Generation that is consumed by the organization (MWh)	Gross generation from renewable sources (MWh)	Generation from renewable sources that is consumed by the organization (MWh)
Electricity	158,708,954.16	145,923,327.77	2,336,758.61	982,300.83

Heat	0	0	0	0
Steam	0	0	0	0
Cooling	0	0	0	0

C-MM8.2d

(C-MM8.2d) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed for metals and mining production activities.

	Total gross generation (MWh) inside metals and mining sector boundary	Generation that is consumed (MWh) inside metals and mining sector boundary
Electricity	152,719,272.42	109,532,549
Heat	0	0
Steam	0	0
Cooling	0	0

C8.2g

(C8.2g) Provide a breakdown by country/area of your non-fuel energy consumption in the reporting year.

Country/area

India

Consumption of purchased electricity (MWh)

14,895,359.04

Consumption of self-generated electricity (MWh)

68,215.97

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

14,963,575.01

Country/area

South Africa

Consumption of purchased electricity (MWh)

245,577.5

Consumption of self-generated electricity (MWh)

380,688.06

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

626,265.56

Country/area

Australia

Consumption of purchased electricity (MWh)

18,030

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

18,030

Country/area

United Arab Emirates

Consumption of purchased electricity (MWh)

5,197.22

Consumption of self-generated electricity (MWh)

36,621.94

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

41,819.16

C9. Additional metrics

C9.1

(C9.1) Provide any additional climate-related metrics relevant to your business.

Description
Waste

Metric value
18,423,236

Metric numerator
Metric Tonnes

Metric denominator (intensity metric only)
Not Applicable

% change from previous year
27.1

Direction of change
Decreased

Please explain
This represents High Volume Low Toxicity wastes such as Fly ash, Red mud, Jarosite, and slag. In FY 2023, waste generation has been decreased by 27.10% and HVLT utilization has been increased by 162% from last year.

Description
Energy usage

Metric value
571,352,235.3

Metric numerator
Energy usage in GJ

Metric denominator (intensity metric only)
Not Applicable

% change from previous year

1.76

Direction of change

Increased

Please explain

There has been 1.76% increase in energy usage due to year-on-year increase in production of the following:
a. 7% YoY increase in refined zinc-lead production.
b.10% YoY increase in silver production
c. 22% YoY increase in mined metal production at Gamsberg
d. 16% YoY increase in chrome ore production
e. 1% YoY increase in hot metal production

C-MM9.3a

(C-MM9.3a) Provide details on the commodities relevant to the mining production activities of your organization.

Output product

Zinc

Capacity, metric tons

2,801,831

Production, metric tons

839,051

Production, copper-equivalent units (metric tons)

956,270

Scope 1 emissions

760,781

Scope 2 emissions

383,958

Scope 2 emissions approach

Location-based

Pricing methodology for copper-equivalent figure

Copper equivalent has been calculated by multiplying the total production by the LME price on 31st March 2023 / LME price of copper on 31st March 2023

Comment

No additional information.

Output product

Iron ore

Capacity, metric tons

1,000,000

Production, metric tons

696,218

Production, copper-equivalent units (metric tons)

73,550

Scope 1 emissions

1,658,608

Scope 2 emissions

2,583.8

Scope 2 emissions approach

Location-based

Pricing methodology for copper-equivalent figure

Copper equivalent has been calculated by multiplying the total production by the LME price on 31st March 2023 / LME price of copper on 31st March 2023

Comment

No additional information.

Output product

Lead

Capacity, metric tons

2,498,169

Production, metric tons

223,038

Production, copper-equivalent units (metric tons)

57,250

Scope 1 emissions

135,720.92

Scope 2 emissions

28,197.65

Scope 2 emissions approach

Location-based

Pricing methodology for copper-equivalent figure

Copper equivalent has been calculated by multiplying the total production by the LME price on 31st March 2023 / LME price of copper on 31st March 2023

Comment

No additional information.

C-MM9.3b

(C-MM9.3b) Provide details on the commodities relevant to the metals production activities of your organization.

Output product

Aluminum

Capacity (metric tons)

2,000,000

Production (metric tons)

3,647,398

Annual production in copper-equivalent units (thousand tons)

462,910

Scope 1 emissions (metric tons CO2e)

1,845,992

Scope 2 emissions (metric tons CO2e)

22,443

Scope 2 emissions approach

Location-based

Pricing methodology for-copper equivalent figure

Copper equivalent has been calculated by multiplying the total production by the LME price on 31st March 2023 / LME price of copper on 31st March 2023

Comment

No additional information.

Output product

Alumina

Capacity (metric tons)

2,000,000

Production (metric tons)

3,647,398

Annual production in copper-equivalent units (thousand tons)

468,870

Scope 1 emissions (metric tons CO2e)

1,845,992

Scope 2 emissions (metric tons CO2e)

22,443

Scope 2 emissions approach

Location-based

Pricing methodology for-copper equivalent figure

Copper equivalent has been calculated by multiplying the total production by the LME price on 31st March 2023 / LME price of copper on 31st March 2023

Comment

No additional information.

Output product

Silver

Capacity (metric tons)

800

Production (metric tons)

714

Annual production in copper-equivalent units (thousand tons)

63,790

Scope 1 emissions (metric tons CO2e)

1,935.52

Scope 2 emissions (metric tons CO2e)

692.58

Scope 2 emissions approach

Location-based

Pricing methodology for-copper equivalent figure

Copper equivalent has been calculated by multiplying the total production by the LME price on 31st March 2023 / LME price of copper on 31st March 2023

Comment

No additional information.

Output product

Zinc

Capacity (metric tons)

913,000

Production (metric tons)

820,898

Annual production in copper-equivalent units (thousand tons)

355,870

Scope 1 emissions (metric tons CO2e)

2,798,380

Scope 2 emissions (metric tons CO2e)

1,001,347

Scope 2 emissions approach

Location-based

Pricing methodology for-copper equivalent figure

Copper equivalent has been calculated by multiplying the total production by the LME price on 31st March 2023 / LME price of copper on 31st March 2023

Comment

No additional information.

C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6

(C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6) Does your organization invest in research and development (R&D) of low-carbon products or services related to your sector activities?

	Investment in low-carbon R&D	Comment
Row 1	Yes	Vedanta is exploring greener business opportunities and development of a low carbon product portfolio.

C-MM9.6a

(C-MM9.6a) Provide details of your organization's investments in low-carbon R&D for metals and mining production activities over the last three years.

Technology area

Other, please specify

Waste Reprocessing

Stage of development in the reporting year

Pilot demonstration

Average % of total R&D investment over the last 3 years

100

R&D investment figure in the reporting year (unit currency as selected in C0.4) (optional)

120,400,000

Average % of total R&D investment planned over the next 5 years

20

Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan

All of our R&D in FY23 was around decarbonization of our operations. Some of the projects included:

1. Reduction of Unburnt Carbon in Boiler and improve the Boiler efficiency by means of Computational Fluid Dynamics

2. Reduction of Stub to carbon drop voltage Drop by modification in the cast iron melt

3.Optimization of Green Carbon Anode manufacturing process by Modelling and Simulation techniques for reduction in Electrical Resistivity of the anodes and reduce sp. Energy consumption.

4.Specialized alumina coating of anodes to reduce Net carbon consumption and reduce CO2 emission.

5.Support CCUS Govt of India Initiative-CSIR, Industry and Academics for Research & Pilot Plant for conversion of CO2 to SYN GAS. Other Industrial Partners are Tata Steel, JSW.

6.Support CCUS Govt of India Initiative-CSIR, Industry and Academics for Research & Pilot Plant for adsorption of CO2 by Red Mud and conversion of desorbed CO2 to nano carbon. Other Industrial Partner is Tata Steel

C10. Verification

C10.1

(C10.1) Indicate the verification/assurance status that applies to your reported emissions.

	Verification/assurance status
Scope 1	Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	Third-party verification or assurance process in place
Scope 3	Third-party verification or assurance process in place

C10.1a

(C10.1a) Provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements.

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Limited assurance

Attach the statement

EY_Vedanta Limited_CDP Climate Report 2023_260723.pdf

Page/ section reference
All

Relevant standard
ISAE3000

Proportion of reported emissions verified (%)
100

C10.1b

(C10.1b) Provide further details of the verification/assurance undertaken for your Scope 2 emissions and attach the relevant statements.

Scope 2 approach
Scope 2 location-based

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Limited assurance

Attach the statement

EY_Vedanta Limited_CDP Climate Report 2023_260723.pdf

Page/ section reference

All

Relevant standard

ISAE3000

Proportion of reported emissions verified (%)

100

C10.1c

(C10.1c) Provide further details of the verification/assurance undertaken for your Scope 3 emissions and attach the relevant statements.

Scope 3 category

Scope 3: Purchased goods and services
Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2)
Scope 3: Upstream transportation and distribution
Scope 3: Waste generated in operations
Scope 3: Business travel
Scope 3: Employee commuting
Scope 3: Upstream leased assets
Scope 3: Investments
Scope 3: Processing of sold products
Scope 3: Use of sold products
Scope 3: End-of-life treatment of sold products
Scope 3: Downstream leased assets

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

EY_Vedanta Limited_CDP Climate Report 2023_260723.pdf

Page/section reference

All

Relevant standard

ISAE3000

Proportion of reported emissions verified (%)

100

C10.2

(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?

Yes

C10.2a

(C10.2a) Which data points within your CDP disclosure have been verified, and which verification standards were used?

Disclosure module verification relates to	Data verified	Verification standard	Please explain
C4. Targets and performance	Progress against emissions reduction target	ISAE3000	Vedanta is committed to conducting external verification and assurance on our Scope 1 and 2 emissions on an annual basis. Our assurance process involves reviewing data from all our Business Units. For this purpose, we have adopted the widely recognized and CDP-approved assurance standard known as ISAE3000. This standard is the leading methodology employed by sustainability professionals worldwide for assurance engagements related to sustainability. As part of our assurance process, we have thoroughly reviewed data from all our Business Units. 1
C4. Targets and performance	Year on year emissions intensity figure	ISAE3000	Vedanta is committed to conducting external verification and assurance on our Scope 1 and 2 emissions on an annual basis. Our assurance process involves reviewing data from all our Business Units. For this purpose, we have adopted the widely recognized and CDP-approved assurance standard known as ISAE3000. This standard is the leading methodology employed by sustainability professionals worldwide for assurance engagements related to sustainability. As part of our assurance process, we have thoroughly reviewed data from all our Business Units. 1

C8. Energy	Energy consumption	ISAE3000	Vedanta is committed to conducting external verification and assurance on our energy consumption on an annual basis. Our assurance process involves reviewing data from all our Business Units. For this purpose, we have adopted the widely recognized and CDP-approved assurance standard known as ISAE3000. This standard is the leading methodology employed by sustainability professionals worldwide for assurance engagements related to sustainability. As part of our assurance process, we have thoroughly reviewed data from all our Business Units. 1
C4. Targets and performance	Emissions reduction activities	ISAE3000	Vedanta is committed to conducting external verification and assurance on our emissions reduction activities on an annual basis. Our assurance process involves reviewing data from all our Business Units. For this purpose, we have adopted the widely recognized and CDP-approved assurance standard known as ISAE3000. This standard is the leading methodology employed by sustainability professionals worldwide for assurance engagements related to sustainability. As part of our assurance process, we have thoroughly reviewed data from all our Business Units.

1EY_Vedanta Limited_CDP Climate Report 2023_260723.pdf

C11. Carbon pricing

C11.1

(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?

Yes

C11.1a

(C11.1a) Select the carbon pricing regulation(s) which impacts your operations.

South Africa carbon tax

C11.1c

(C11.1c) Complete the following table for each of the tax systems you are regulated by.

South Africa carbon tax

Period start date

April 1, 2022

Period end date

March 31, 2023

% of total Scope 1 emissions covered by tax

1.5

Total cost of tax paid

3,600,000

Comment

C11.1d

(C11.1d) What is your strategy for complying with the systems you are regulated by or anticipate being regulated by?

Currently, Vedanta's operations in India are not subject to any regulatory carbon pricing systems. However, we anticipate that such schemes may be implemented within the next three years. On the other hand, South African carbon tax is applicable to our operations in South African operation.

To proactively prepare for the potential future regulations on carbon pricing in India, Vedanta has adopted a shadow pricing approach. Shadow pricing is utilized when incorporating the climate change impact of a specific project into its investment-related decisions. As part of this approach, a theoretical price has been established for each tonne of CO2 emissions. This Internal Carbon Price, is applicable to all business units (BUs) and covers scope 1 and 2 emissions. Presently, the internal carbon price stands at INR 1,204.086 per metric tonne of CO2 equivalent (tCO2e).

C11.2

(C11.2) Has your organization canceled any project-based carbon credits within the reporting year?

No

C11.3

(C11.3) Does your organization use an internal price on carbon?

Yes

C11.3a

(C11.3a) Provide details of how your organization uses an internal price on carbon.

Type of internal carbon price

Shadow price

How the price is determined

Alignment with the price of a carbon tax

Objective(s) for implementing this internal carbon price

Change internal behavior
Drive energy efficiency
Drive low-carbon investment
Identify and seize low-carbon opportunities
Navigate GHG regulations
Stakeholder expectations
Stress test investments
Reduce supply chain emissions
Set a carbon offset budget

Scope(s) covered

Scope 1
Scope 2

Pricing approach used – spatial variance

Uniform

Pricing approach used – temporal variance

Evolutionary

Indicate how you expect the price to change over time

The carbon price is reviewed annually, allowing us to quantify GHG emissions and incorporate them into our business plans to enhance decision-making processes. We deployed our Internal Carbon Pricing strategy, in FY 2023. Through this strategy, we have introduced a shadow price into our capital expenditures approval process. The objective is to steer investments towards clean technologies, lower-carbon solutions, and renewable energy projects throughout our operations and supply chain. This enables us to mitigate climate risks, while also uncovering avenues to reduce our carbon footprint and manage associated.

Actual price(s) used – minimum (currency as specified in C0.4 per metric ton CO2e)

1,232.46

Actual price(s) used – maximum (currency as specified in C0.4 per metric ton CO2e)

1,232.46

Business decision-making processes this internal carbon price is applied to

Capital expenditure
Operations
Risk management

Mandatory enforcement of this internal carbon price within these business decision-making processes

Yes, for all decision-making processes

Explain how this internal carbon price has contributed to the implementation of your organization's climate commitments and/or climate transition plan

Vedanta has set an Internal Shadow Carbon Price (ICP) of INR 1,232.46 /tCO2e. This ICP will be continually reviewed on an annual basis, factoring in the decarbonization roadmaps of business units. ICP has been developed under which a shadow price for carbon for capital investment decisions has been implemented across our businesses. Furthermore, this ICP is applied to projects with budgets exceeding INR 50 million, and Business Unit-specific ICPs have also been established to cater to the unique needs of each unit.

C12. Engagement

C12.1

(C12.1) Do you engage with your value chain on climate-related issues?

Yes, our suppliers
Yes, our customers/clients
Yes, other partners in the value chain

C12.1a

(C12.1a) Provide details of your climate-related supplier engagement strategy.

Type of engagement

Information collection (understanding supplier behavior)

Details of engagement

Collect other climate related information at least annually from suppliers

% of suppliers by number

19.89

% total procurement spend (direct and indirect)

70

% of supplier-related Scope 3 emissions as reported in C6.5

100

Rationale for the coverage of your engagement

Our business relies heavily on suppliers. We are fully committed to engaging only with business partners who align with our company's values and supply chain management strategy. To ensure this alignment, we have developed a systematic approach to identify suppliers with potential sustainability risks. At Vedanta, we define risk as a combination of the likelihood of its occurrence and its potential severity, as outlined in our guidance note GN07 - Risk assessment. Based on this definition, we have categorized our suppliers according to their risk potential, both for themselves and for our business.

In FY 2022-23, out of a total of 5,525 suppliers, we identified 1099 suppliers who are critical to our business operations. We have initiated information collection with all our suppliers as they have a significant impact on our business.

Suppliers were classified as critical based on the following parameters:
• Suppliers who are prone to ESG risks or who have faced business disruption as a result ESG risks
• % volume of business with Vedanta
• % of procurement spends
• Criticality of Domain
• Sensitivity and Non-substitutability

By proactively assessing and managing supply chain risks, we strive to maintain the business continuity. Therefore, we had collected climate related risks and opportunities data from this category of suppliers.

Impact of engagement, including measures of success

We regularly undertake inspections and audits of all our key suppliers and problematic issues are communicated to the contractor. We undertake sustainability screening on ESG aspects including climate change for all new suppliers and contractors. This is followed up with induction sessions to familiarise them with our sustainability policies, standards and systems.

As an outcome of this engagement, we have seen increase in climate resilience, emission and non-renewable energy consumption management among our suppliers. In order to evaluate the success of this engagement: the percentage of the engaged suppliers with data on climate change.

Comment

No additional comments

C12.1b

(C12.1b) Give details of your climate-related engagement strategy with your customers.

Type of engagement & Details of engagement

Education/information sharing
Share information about your products and relevant certification schemes (i.e. Energy STAR)

% of customers by number

59

% of customer - related Scope 3 emissions as reported in C6.5

0

Please explain the rationale for selecting this group of customers and scope of engagement

We have engaged with our high revenue generating customers from two Business Units (BUs) namely, HZL and Vedanta Aluminium as they are significant to our business. In FY 2023, our total customers from these two BUs were 700 out which 411 customers were significant. Hence, we have engaged with 411 customers to understand their climate related targets and commitments.

Impact of engagement, including measures of success

During this customer engagement, we understood their climate related commitments and aligned with their demand we have taken the following steps:

Impact of Engagement: Launched products ; Measures of success: " Number of products launched"

a. Vedanta Aluminium: Looking at the increasing demand of green products in the market during the customer engagement session, this was seen as an opportunity, and we launched our own low carbon product named ‘Restora’ in FY22. With this, Vedanta Aluminium sets the precedent for the Company’s vision of producing green metals for a greener world. India’s first low carbon aluminium is branded under two product lines, Restora and Restora Ultra (ultra-low carbon aluminium). Restora (Low-Carbon Aluminium) is produced using renewable energy and has a carbon footprint that is almost half of the global threshold for green aluminium. Restora Ultra (Ultra Low-Carbon Aluminium) that is manufactured with aluminium recovered from dross (a by-product of the aluminium smelting process), has a near zero carbon footprint, which is amongst the lowest in the world. This is being made by collaborating with Runaya Refining and is a testament to our focus on ‘zero-waste’ through operational efficiencies and recovery from dross. Both product lines can be tailor-made into a wide array of products like Ingots, Billets, Primary Foundry Alloys and more, for any industry sector, customized to customer needs. Both products have been verified as low-carbon aluminium post assessment by an independent, global verification & assurance firm. With consumers becoming increasingly conscious of the provenance of the products they use.

b. HZL: In response to the customer interaction on their climate impact and commitment, HZL has developed two types of Value-Added Products (VAP)i.e., Continuous Galvanising Grade (CGG) and Hindustan Zinc Die Casting Alloy (HZDA). CGG can be used directly by HZL's customer without the need to convert it into alloy, thereby saving resource use- water, energy, and cost by up to 5-10%. Therefore, HZL has capitalized

on the opportunity, while mitigating the market demand risk and reducing ours and customers climate impact.

c. Copper: The copper business has also developed a low-carbon line of products, made from scrap copper. In FY23, nearly 30% of Cu production at Fujirah Gold was from scrap copper, saving nearly 5,00 TCO2e

C12.1d

(C12.1d) Give details of your climate-related engagement strategy with other partners in the value chain.

We engage with a wide range of stakeholders to foster and maintain enduring relationships with them, which also helps in shaping our understanding of our evolving operating environment.

Employee: Our employees are at the centre of all our operations; their collaborative skill and expertise are essential for our growth. To keep our people involved and motivated, we have been creating unique engagement programs for them. There are two well established major employee studies that help us gauge employee engagement – Great Place to Work (GPTW) and Kin centric Best Employer Study.
Communities: A harmonious relationship with the communities where we operate is key to our social license to operate. We are continuously developing and undertaking need-based community projects through community group meetings, public hearing, community needs/social impact assessment, grievance mechanisms, etc. In FY 2023, we have skilled 0.6 families and 11.74 women & children through our community engagement programme. Our net zero commitments include targets to help communities adapt to the impacts of climate change.
Collaboration with research organizations: We have established strategic partnerships with three esteemed research institutes: CSIR-National Metallurgical Laboratory in Jamshedpur, the Institute of Minerals and Materials Technology in Bhubaneswar, and the Jawaharlal Nehru Aluminium Research, Development & Design Centre in Nagpur. These collaborations aim to drive research and development efforts focused on extracting Rare Earth Elements (REE) from red mud, a waste product generated during the conversion of bauxite to alumina. We have also signed a long-term Memorandum of Understanding (MoU) with The Energy and Resources Institute (TERI) for a duration of 10 years. This partnership encompasses a comprehensive framework addressing various aspects of Environmental, Social, and Governance (ESG) concerns. It includes collaborative efforts in areas such as climate change mitigation and the transition to sustainable energy sources.
These collaborations reflect our commitment to sustainability, innovation and responsible practices. By working closely with these institutions, we aim to advance the extraction of REEs from red mud while also contributing to a holistic ESG framework that addresses critical challenges related to climate change and energy transition.
Collaboration with Industry: Vedanta Aluminum, as the leading producer of aluminum and value-added products in India, has established a dedicated Center of Excellence at its aluminum smelter located in Jharsuguda. This center serves as a collaborative platform for partnering with the Electric Vehicle (EV) industry, focusing on the development of innovative products, including crash-resistant alloys. It is actively exploring partnerships with start-ups and third-party experts. These collaborations aim to leverage their expertise and insights to develop

cutting-edge aluminum applications tailored to the needs of the EV and automotive industries of the future.

C12.2

(C12.2) Do your suppliers have to meet climate-related requirements as part of your organization's purchasing process?

Yes, climate-related requirements are included in our supplier contracts

C12.2a

(C12.2a) Provide details of the climate-related requirements that suppliers have to meet as part of your organization's purchasing process and the compliance mechanisms in place.

Climate-related requirement

Implementation of emissions reduction initiatives

Description of this climate related requirement

HZL has a structured Supply Chain Assessment system where ESG performance including climate change is assessed for all its critical tier 1 suppliers. Critical suppliers are assessed through desktop-based review of documents/site assessment as well as audited by third party annually.

The selection criterion for our key business partners through our Sustainable Supply Chain Questionnaire covers social and environmental aspect and, where necessary, ask business partners themselves to set reduction targets and encourage them to share targets on GHG emissions and improving resource utilization efficiency. HZL mutually collaborates with potential business partners on carbon-positive solutions to deliver benefits for both business and the environment. We also map our business partners against their performance on various compliance and ESG criteria, with release of vendor payments linked to compliance criteria, especially on climate related. Moreover, we motivate and persuade business partners to set targets in line with HZL targets.

% suppliers by procurement spend that have to comply with this climate-related requirement

4.25

% suppliers by procurement spend in compliance with this climate-related requirement

4.25

Mechanisms for monitoring compliance with this climate-related requirement

Certification
First-party verification
Grievance mechanism/Whistleblowing hotline
Supplier scorecard or rating

Response to supplier non-compliance with this climate-related requirement

Retain and engage

C12.3

(C12.3) Does your organization engage in activities that could either directly or indirectly influence policy, law, or regulation that may impact the climate?

Row 1

External engagement activities that could directly or indirectly influence policy, law, or regulation that may impact the climate

Yes, we engage directly with policy makers

Yes, our membership of/engagement with trade associations could influence policy, law, or regulation that may impact the climate

Does your organization have a public commitment or position statement to conduct your engagement activities in line with the goals of the Paris Agreement?

Yes

Attach commitment or position statement(s)

CII Climate Charter

CII-Climate-Charter-Signed2.pdf

Describe the process(es) your organization has in place to ensure that your external engagement activities are consistent with your climate commitments and/or climate transition plan

Vedanta and its subsidiaries actively participate in stakeholder discussions through industry bodies and trade associations.

Through active participation in sector-specific public consultations and collaborative partnerships in regional and national opinion-forming processes, we exert influence on decisions made by policy makers. Our primary goal is to take on a constructive role in shaping a regulatory framework for our organization, garnering dependable support from our Board members and collaborating with local governments, industry associations, and customers to develop policy briefs. By closely monitoring pertinent global and national topics, we remain vigilant in identifying government schemes, policies, and incentives that could have either positive or negative impacts. At Vedanta, our areas of focus encompass the environment, climate change, port development for trade enhancement, resource efficiency, marine pollution, biodiversity, and more.

For instance, Vedanta Spark has partnered with CII's Centre of Excellence for Innovation, Entrepreneurship & Startups to promote and accelerate start-ups using transformative and sustainable technologies, creating significant impact in collaboration with Vedanta group companies. The program has already involved 80 start-ups in over 120 projects to date.

During these engagements, we ensure that our perspectives align with our publicly available climate change commitments, which apply to all our group companies and subsidiaries. Our Executive Committee (ExCo) serves as the apex body for decision-making across the organization, including climate change matters. This committee ensures that our business units and sustainability teams have a comprehensive understanding of the Group's climate change and sustainability targets.

C12.3a

(C12.3a) On what policy, law, or regulation that may impact the climate has your organization been engaging directly with policy makers in the reporting year?

Specify the policy, law, or regulation on which your organization is engaging with policy makers

Renewable energy generation: Energy and electricity related regulations in India

Category of policy, law, or regulation that may impact the climate

Climate change mitigation

Focus area of policy, law, or regulation that may impact the climate

Renewable energy generation

Policy, law, or regulation geographic coverage

National

Country/area/region the policy, law, or regulation applies to

India

Your organization's position on the policy, law, or regulation

Support with no exceptions

Description of engagement with policy makers

Vedanta is part of CII CEO Forum for climate change, and Climate Action Charter We are engaging with regulators/policy makers for creating conducive environment for promotion of RE power through ease of framework for PPA signing.

Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation

Have you evaluated whether your organization's engagement on this policy, law, or regulation is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Please explain whether this policy, law or regulation is central to the achievement of your climate transition plan and, if so, how?

Not Applicable

C12.3b

(C12.3b) Provide details of the trade associations your organization is a member of, or engages with, which are likely to take a position on any policy, law or regulation that may impact the climate.

Trade association

Federation of Indian Chambers of Commerce & Industry (FICCI)

Is your organization's position on climate change policy consistent with theirs?

Consistent

Has your organization attempted to influence their position in the reporting year?

No, we did not attempt to influence their position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

We are working with ministry of mines for new framework/policy encouraging exploration and mining of minerals that are deep seated to reduce ecological impact.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

1,909,200

Describe the aim of your organization's funding

Membership and sponsorship.

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Confederation of Indian Industries (CII)

Is your organization's position on climate change policy consistent with theirs?

Consistent

Has your organization attempted to influence their position in the reporting year?

No, we did not attempt to influence their position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

We are working with regulators/policy makers for creating conducive environment for promotion of renewable energy through ease of contract framing of long term PPA's.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

4,674,600

Describe the aim of your organization's funding

Membership and sponsorship.

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

C12.4

(C12.4) Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Publication

In mainstream reports

Status

Complete

Attach the document

Vedanta-Limited-Integrated-Annual-Report-202022-23-VF_compressed.pdf

Page/Section reference

24, 50, 51 and 235

Content elements

Governance
Strategy
Emissions figures
Emission targets
Other metrics

Comment

Integrated Report FY 2023

Publication
In mainstream reports, incorporating the TCFD recommendations

Status
Complete

Attach the document
TCFD Report_Vedanta FY 2023.pdf

Page/Section reference
All

Content elements
Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets
Other metrics

Comment
TCFD Report

Publication
In voluntary sustainability report

Status
Underway – previous year attached

Attach the document
Sustainability Report 22.pdf

Page/Section reference
20-76

Content elements
Governance
Strategy
Emissions figures
Emission targets
Other metrics

Comment
Sustainability Report; FY23 report under development

C12.5

(C12.5) Indicate the collaborative frameworks, initiatives and/or commitments related to environmental issues for which you are a signatory/member.

	Environmental collaborative framework, initiative and/or commitment	Describe your organization's role within each framework, initiative and/or commitment
Row 1	Task Force on Climate-related Financial Disclosures (TCFD) UN Global Compact	As a signatory member of the UN Global Compact, we uphold its ten principles. To ensure adherence, we have integrated a performance matrix into all our strategic business functions, which is regularly reviewed at every level, to the board room. This enables us to align our operations with the principles of the UN Global Compact and drive sustainable practices throughout our organization. Additionally, we have embraced the Task Force on Climate-related Financial Disclosures (TCFD) framework as part of our commitment to sustainability. By aligning our reporting process with global best practices for climate reporting, we aim to effectively manage climate change risks and identify opportunities that contribute to our sustainability objectives. Implementing the TCFD framework allows us to enhance our understanding of climate-related impacts and make informed decisions to mitigate risks and drive sustainable growth.

C15. Biodiversity

C15.1

(C15.1) Is there board-level oversight and/or executive management-level responsibility for biodiversity-related issues within your organization?

	Board-level oversight and/or executive management-level responsibility for biodiversity-related issues	Description of oversight and objectives relating to biodiversity
Row 1	Yes, both board-level oversight and executive management-level responsibility	The Vedanta Board is at the apex of all decision making related to ESG and sustainability aspects across the Group. The Board has an oversight over biodiversity related policies, standards, and KPIs through ESG parameters. It through the ESG (earlier Sustainability) Sub-Committee and is proactively involved in monitoring the overall progress of the Group to achieve biodiversity related targets and commitments of the company. The Board ESG Committee formed by the Group CEO and two

		independent Directors and retains oversight on the implementation of our ESG vision which includes Biodiversity management. This critical body is delegated with the tasks of reviewing, evaluating, implementing all the decisions taken by the Vedanta Board on biodiversity matters. The committee is advised by the Group Executive Committee (Group-ExCo), the ESG Management Committee (Man-Com). The Group-ExCo is a high-level decision-making body of the company with the primary responsibility to execute the decisions made by the Board, allocate resources and report to the Board Committee on key biodiversity and overall sustainability risks and the actions being taken.

C15.2

(C15.2) Has your organization made a public commitment and/or endorsed any initiatives related to biodiversity?

	Indicate whether your organization made a public commitment or endorsed any initiatives related to biodiversity	Biodiversity-related public commitments	Initiatives endorsed
Row 1	Yes, we have made public commitments and publicly endorsed initiatives related to biodiversity	Commitment to No Net Loss Adoption of the mitigation hierarchy approach Commitment to respect legally designated protected areas Commitment to avoidance of negative impacts on threatened and protected species	SDG

C15.3

(C15.3) Does your organization assess the impacts and dependencies of its value chain on biodiversity?

Impacts on biodiversity

Indicate whether your organization undertakes this type of assessment

No, but we plan to within the next two years

Dependencies on biodiversity

Indicate whether your organization undertakes this type of assessment

No, but we plan to within the next two years

C15.4

(C15.4) Does your organization have activities located in or near to biodiversity-sensitive areas in the reporting year?

Yes

C15.4a

(C15.4a) Provide details of your organization's activities in the reporting year located in or near to biodiversity -sensitive areas.

Classification of biodiversity -sensitive area

Key Biodiversity Area (KBAs)

Country/area

India

Name of the biodiversity-sensitive area

Village-Siyaljori, Bhagabandh, Budhibinor, Alkusha, Dhandhabar, Bandhdih, Hutupahar, District: Bokaro, Jharkhand

Proximity

Up to 10 km

Briefly describe your organization's activities in the reporting year located in or near to the selected area

Integrated steel plant

Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity

Not assessed

Mitigation measures implemented within the selected area

Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented

Classification of biodiversity -sensitive area

Key Biodiversity Area (KBAs)

Country/area

India

Name of the biodiversity-sensitive area

Niruthadi State Forest

Proximity

Overlap

Briefly describe your organization's activities in the reporting year located in or near to the selected area

Mining

Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity

Yes, but mitigation measures have been implemented

Mitigation measures implemented within the selected area

Operational controls

Restoration

Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented

The site has a Biodiversity Management Plan that servers as the handbook for mitigating biodiversity impact. An additional risk study has been completed in FY23, basis of which new measures to reduce impact will be decided.

Classification of biodiversity -sensitive area

Key Biodiversity Area (KBAs)

Country/area

India

Name of the biodiversity-sensitive area

Niyamgiri reserve forest

Proximity

Up to 10 km

Briefly describe your organization's activities in the reporting year located in or near to the selected area

Manufacturing of calcinated alumina & CGPP for power

Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity

Yes, but mitigation measures have been implemented

Mitigation measures implemented within the selected area

Operational controls

Restoration

Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented

The site has a Biodiversity Management Plan that servers as the handbook for mitigating biodiversity impact. An additional risk study has been completed in FY23, basis of whichnew measures to reduce impact will be decided.

Classification of biodiversity -sensitive area

Key Biodiversity Area (KBAs)

Country/area

South Africa

Name of the biodiversity-sensitive area

Succulent Karoo Biodiversity Hotspot; Gamsberg Nature Reserve

Proximity

Up to 5 km

Briefly describe your organization's activities in the reporting year located in or near to the selected area

Extractive and processing: Underground Mining and Mining associated infrastructure

Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity

Yes, but mitigation measures have been implemented

Mitigation measures implemented within the selected area

Site selection
Project design
Physical controls
Operational controls
Restoration
Biodiversity offsets

Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented

VZI's environmental specialists worked closely with a wide range of experts, including those from the International Union for Conservation of Nature (IUCN) to design and implement a process to ensure the site's necessary protection, preservation and ultimate restoration. We followed the mitigation hierarchy to: Avoid – Found alternate locations for the waste pits, processing facilities, and access roads, Minimize – Fenced and demarcated sensitive areas, used HDPE lining in the tailings storage facility, and made provision to segregate waste rocks according to their leachability characteristics, Remedy – Translocated ~77,00 plants to be used in the concurrent rehabilitation of the area, Offset – Identified ~40,000 hectares of land with similar topographical features to

be used as an offset area to realize the No Net Loss objective of the project; this will be monitored by IUCN.

SOME 80,000 PLANTS AND 360,000 SEEDS WERE COLLECTED AND MOVED TO THE SPECIALISED FACILITIES OF THE KAROO DESERT NATIONAL BOTANICAL GARDEN.
The objective was that, once the mining ends and the area's surface is restored, these seeds can be replanted with the endemic species that were
removed from the site, saved and protected. Areas that are particularly sensitive have been fenced off, while operations have been designed to
limit and minimise any direct effects on the entire region. 15,000 hectares of land secured to undertake offset exercise.

C15.5

(C15.5) What actions has your organization taken in the reporting year to progress your biodiversity-related commitments?

	Have you taken any actions in the reporting period to progress your biodiversity-related commitments?	Type of action taken to progress biodiversity- related commitments
Row 1	Yes, we are taking actions to progress our biodiversity-related commitments	Land/water management Education & awareness

C15.6

(C15.6) Does your organization use biodiversity indicators to monitor performance across its activities?

	Does your organization use indicators to monitor biodiversity performance?	Indicators used to monitor biodiversity performance
Row 1	Yes, we use indicators	Pressure indicators Response indicators

C15.7

(C15.7) Have you published information about your organization's response to biodiversity-related issues for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Report type	Content elements	Attach the document and indicate where in the document the relevant biodiversity information is located
In mainstream financial reports	Content of biodiversity-related policies or commitments Governance	Integrated report 1

	Impacts on biodiversity	
In voluntary sustainability report or other voluntary communications	Content of biodiversity-related policies or commitments Governance Impacts on biodiversity Details on biodiversity indicators Biodiversity strategy	Sustainability Report [2]

[1]Vedanta-Limited-Integrated-Annual-Report-202022-23-VF_compressed.pdf

[2]Sustainability Report 22.pdf

C16. Signoff

C-FI

(C-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

C16.1

(C16.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	CEO	Chief Executive Officer (CEO)

SC. Supply chain module

SC0.0

(SC0.0) If you would like to do so, please provide a separate introduction to this module.

SC0.1

(SC0.1) What is your company's annual revenue for the stated reporting period?

	Annual Revenue
Row 1	

SC1.1

(SC1.1) Allocate your emissions to your customers listed below according to the goods or services you have sold them in this reporting period.

SC1.2

(SC1.2) Where published information has been used in completing SC1.1, please provide a reference(s).

SC1.3

(SC1.3) What are the challenges in allocating emissions to different customers, and what would help you to overcome these challenges?

Allocation challenges	Please explain what would help you overcome these challenges

SC1.4

(SC1.4) Do you plan to develop your capabilities to allocate emissions to your customers in the future?

SC2.1

(SC2.1) Please propose any mutually beneficial climate-related projects you could collaborate on with specific CDP Supply Chain members.

SC2.2

(SC2.2) Have requests or initiatives by CDP Supply Chain members prompted your organization to take organizational-level emissions reduction initiatives?

SC4.1

(SC4.1) Are you providing product level data for your organization's goods or services?

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

	I understand that my response will be shared with all requesting stakeholders	Response permission
Please select your submission options	Yes	Public

Please confirm below

I have read and accept the applicable Terms