

Aluminum to
transf ∞ rm



Additional Disclosures Supplement

to the 2023 Annual Report



Cintia Ribeiro da Silva Barros,
Mechanical Turner at Sorocaba (SP) facility

Contents

- About the report3
- About CBA4
- Increasingly digital and innovative5
- Governance best practices7
- Sustainable value chain 27
- Transforming lives 29
- Environmental protagonism 51
- Recycling is essential 83
- Robust financial governance 84
- Disclosures per net sales 85
- ANEEL Disclosures 87

Ventos do Piauí
wind complex

About this report

GRI 2-2. ENTITIES INCLUDED IN THE ORGANIZATION'S SUSTAINABILITY REPORTING

The entities included are:

- Corporate (SP)
- Aluminum Business: Mining Sites (Poços de Caldas-MG, Mirai-MG, Itamarati de Minas-MG), Alumínio (SP) plant, Itapissuma (PE) plant, Metalex (SP), Alux (SP), Sorocaba (SP) facility and Solutions and Services Centers (SP and RS)
- Energy Business: 16 wholly-owned hydroelectric power plants¹
- Niquelândia²

The entities not included (unless otherwise indicated in footnotes) are as follows:

- Barro Alto (GO) (operated by a third party)
- Rondon (PA) (under development)
- The Salto Pilão (SC), Canoas I (SP), Canoas II (PR), Machadinho (RS and SC), Campos Novos (SC) and Barra Grande (SC) hydroelectric power plants (joint ventures over which CBA does not have operational control)
- The Ventos do Piauí wind complex (over which CBA does not exercise operational control)

CBA also owns the *Legado Verdes do Cerrado* nature reserve, in Goiás, and is a co-founder of the *Legado das Águas* reserve, in the state of São Paulo. Both reserves

are managed by Reservas Votorantim. The disclosures including these operations are noted in footnotes.

Therefore, 99% of the Company's revenue is covered by the Annual Report, including environmental, social and governance disclosures.

The entities included in the organization's consolidated financial statements or equivalent documents are as follows:

- Companhia Brasileira de Alumínio (parent company, including the Mining Sites, Alumínio plant and wholly-owned power plants within the Energy Business)
- Alux do Brasil Indústria e Comércio Ltda.
- CBA Energia Participações S.A.
- CBA Itapissuma Ltda.
- CBA Machadinho Geração de Energia Ltda.
- L.C.G.S.P.E. Empreendimentos e Participações Ltda.
- Metalex Ltda.
- Santa Cruz Geração de Energia S.A.

In addition to these, CBA subsidiaries Baesa (Energética Barra Grande S.A.) and Campos Novos Energia S.A. are accounted for by the equity method. The assets of CBA investees Alunorte (Alumina do Norte S.A.) and Mineração Rio do Norte S.A. were reclassified as "non-current assets available for sale" in 2023, the latter being sold on December 1st, 2023.

In accordance with Brazilian accounting principles, entities controlled by CBA (using the accounting definition of control) are consolidated in the financial statements of the Company. Other investments are assessed and held as investments using the equity method of accounting.

GRI 2-3. REPORTING PERIOD, FREQUENCY AND CONTACT POINT

The period covered by this report is the fiscal year and the reporting frequency is annual. The reporting period is the same as the Company's financial statements. The 2022 Annual Report was published in March 2023.

If you have any questions, suggestions or comments about this Annual Report, the report team can be contacted by email to comunicacaocorpcba@cba.com.br.

GRI 2-5. EXTERNAL ASSURANCE

The Annual Report undergoes limited assurance by independent auditors not linked to CBA. This report has undergone limited assurance by Bureau Veritas.

Note: The limited assurance audit was conducted in accordance with Technical Communication CTO 01 - "Issuance of an Assurance Report related to Sustainability and Social Responsibility," issued by the Brazilian Federal Accounting Board (CFC) based on CFC Standard NBC TO 3000 - "Assurance Engagements Other than Audit and Review", which is equivalent to international standard ISAE 3000 - "Assurance engagements other than audits or reviews of historical financial information," issued by the International Auditing and Assurance Standards Board (IAASB).

1. CGH Rio Novo (SP) is non-operational.

2. This operation has been curtailed and is currently held for sale. The disclosures including this operation are flagged.



Alumínio (SP) plant

About CBA

GRI 2-1. ORGANIZATIONAL DETAILS

CBA is a publicly traded company, listed in an enhanced governance (*Novo Mercado*) segment of the Brazilian stock exchange, and a member of Brazilian conglomerate Votorantim S.A. The company has its headquarters and jurisdiction in the capital of the State of São Paulo, located at 105 Engenheiro Luís Carlos Berrini Avenue, 14th floor, suite 141, Cidade Monções, ZIP code 04571-900, and has operations in Brazil only.

GRI 2-6. ACTIVITIES, VALUE CHAIN AND OTHER BUSINESS RELATIONSHIPS

CBA is engaged in bauxite mining and production of aluminum and aluminum alloys. The Company's products are marketed to a wide range of customers in high-growth markets where aluminum consumption is expected to grow over the coming years, driven primarily by structural decarbonization trends. The Company also serves the chemicals industry, supplying hydrate to the coagulants segment and alumina to the glass and ceramics segment.

CBA's primary market is Brazil, accounting for approximately 90% of sales. Most of the Company's major customers are located within a radius of 500 km from its production facilities (for exports, the port from which products are shipped overseas is within this radius). CBA uses a third-party fleet to ship its products, with trucks being the primary mode of transport.

Supply chain

The Company currently has over 6,000 active suppliers across all segments of the supply chain, from small local suppliers to large industrial operations. CBA's contingent of suppliers includes contractors, feedstock suppliers, MRO (maintenance, repair, and operations) contractors, logistics suppliers, and CAPEX project contractors. The estimated monetary value of payments made to suppliers is approximately R\$ 6 billion per year. In terms of the geographic location of the Company's suppliers, 96% are in Brazil (79% in the Southeast, 8% in the South, 6% in the Northeast, 6% in the Midwest, and 1% in the North) and 4% are international suppliers, located across North America, Europe and Asia.

A software system called GEP has been implemented to increase automation and efficiency in classifying procurement team expenses. This tool uses artificial intelligence (AI) to group supplier spend data into predefined categories. Classifications can be enhanced and revised as well as connected to a cost drivers tool to create expense projections by category based on a combination of trend analysis, cost modeling, and price index projections.

Increasingly digital and innovative

GRI 3-3. MATERIAL TOPIC: INNOVATION, TECHNOLOGY, AND BUSINESS RESILIENCE

“Innovation, technology and business resilience” is a material topic that cuts across the aluminum value chain, as it affects the Company’s ability to positively impact the economy, the environment, and people.

CBA’s Technology team is responsible for assessing projects at the conceptual stage for technical and financial feasibility under the current circumstances. This team has conducted a number of studies toward the decarbonization of the aluminum value chain, including assessments on process efficiency and carbon capture; studies toward discontinuation of the use of tailings dams through approaches such as mobile beneficiation; and studies toward reducing water withdrawals through dry residue disposal project, which affects the latter two topics and enables the bauxite residue to be used in the production of cement (learn more in the [Annual Report](#)). In addition, the Company has established several collaborations with startups and universities, including innovation-focused doctoral programs.

CBA has a tool for monitoring and identifying technology trends, potential opportunities, risks, and recommended action. The overall innovation process is governed by an internal procedure outlining stakeholder responsibilities and the activities performed by the team.

The fixed Innovation & Digital Office team, in addition to managing the DigitALL program, this year designed the Company’s innovation architecture, which is an orchestrated approach to innovation movements guided by a set of innovation beliefs, such as intelligent operations and sourcing, sustainability, new products and solutions, and emerging models. This approach involves enterprise-wide exploration to identify high-impact improvements that can benefit the entire business.

To prevent or mitigate potential negative impacts, all high-level deliverables, their underlying levers and any barriers are assessed on a weekly basis. Supported by an action plan to address and remediate those impacts, these issues are discussed in Executive Board meetings to support problem-solving and the development of solutions for the relevant teams. To cascade positive impacts and replicate lessons learned to other work fronts, the key project outcomes, resulting market-share gains and margin improvements are shared across the organization.

The Market Development & Innovation (DMI) team is responsible for developing new aluminum solutions. The development process uses the design thinking approach, which comprises the following steps: brainstorming, analysis, ideation, prototyping, testing and scale-up. At each stage of the project, the solution is extensively discussed with the customer to understand their pain points and elicit their inputs. This approach supports close engagement with the customer and enables the team to deliver the best possible solutions using a co-creation approach.

Bruno Pereira Maciel,
Projects Consultant of the
Innovation & Digital Office

SASB IF-EU-550A.1. NUMBER OF INCIDENTS OF NON-COMPLIANCE WITH STANDARDS OR REGULATIONS ON PHYSICAL AND CYBER SECURITY

CBA-38. IT SECURITY/CYBERSECURITY GOVERNANCE

There were no instances of non-compliance with physical and cybersecurity standards or regulations applicable to electricity infrastructure that is owned or operated by the Company. Oversight of cybersecurity is conducted by CBA’s Information Security team, which includes a Chief Information Security Officer (CISO) and Chief Information Officer (CIO). This disclosure does not include Alux (SP), as this entity is currently not integrated into the group.

CBA-1.
INVESTMENTS IN TECHNOLOGY AND INNOVATION

Investments are focused on process upgrades and innovation and on the Company’s digital transformation, or CBA 4.0, with efforts in this area anticipated to expand in the coming years. Environmental investments were a total of over R\$ 49 million in 2023 and were channeled primarily to creating CBA’s Processing and Recycling Center and to dam safety improvements.



Investments by area (R\$ thousand)

	2020				2021				2022				2023			
	Capex	Upkeep	DT	Total	Capex	Upkeep	DT	Total	Capex	Upkeep	DT	Total	Capex	Upkeep	DT	Total
Technology and innovation	50,530	9,558	1,141	61,229	44,902	14,293	2,506	61,701	233,661	30,643	3,007	267,311	237,811	22,553	2,926	263,290
Environment	19,852	5,670	0	25,522	12,826	4,080	0	16,906	15,862	6,032	0	21,894	48,221	1,482	0	49,704
Safety	11,194	0	0	11,194	18,363	150	0	18,513	27,755	0	0	27,755	38,409	0	0	38,409

Note 1: This disclosure includes all CBA business units. DT refers to investments in research and development.
Note 2: Investments were substantially expanded in 2022, especially in strategic projects (Dry Residue Disposal, ReAl, Pot Room Upgrade, Liquor Purification). Investments also continued in digitalization and research and development programs.

Innovation and co-creation projects

	2020	2021	2022	2023
Total number of innovation projects	127 (26 generating revenue)	84 (22 generating revenue)	59 (31 generating revenue)	86 (35 generating revenue)
Number of co-creation projects (supply-side)	45	30	20	27
Number of market innovation projects (demand-side)	82	54	39	59

Note: The data above refer only to projects within the Market Development and Innovation department. CBA has a higher percentage of demand-side projects (69%), as a result of research in collaboration with customers. However, the Company continues to develop new markets and synergies, with 31% supply-side/R&D projects.

Investments in innovation and co-creation projects

	2020	2021	2022	2023
Investment in co-creation with customers (R\$ million)	3.6	4.2	6.2	5.9
Share of new projects in the Downstream business	9.4%	9.8%	10.8%	9.4%

Note: The scope of this disclosure includes the Downstream Business only (Alumínio and Itapissuma plants). In 2023, only the Alumínio (SP) plant had new co-creation projects.

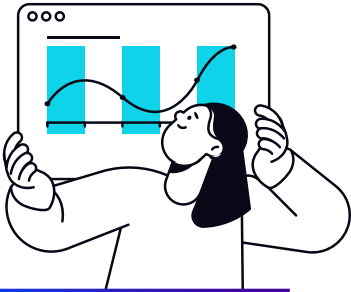
Governance best practices

GRI 2-9.
GOVERNANCE STRUCTURE
AND COMPOSITION

CBA-12.
BOARD AVERAGE TENURE

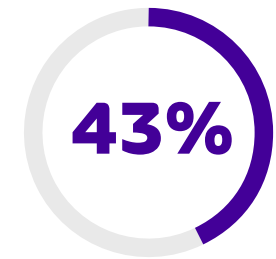
Board of Directors

	Member characteristics								CBA Committees memberships				Fields of expertise					
	Age	Nationality	Gender	Non-executive position	Independent member	Represents minority groups	Represents Controlling Shareholder	Board member in other organizations	Remuneration & People	Finance	Sustainability	Statutory Audit	Industry (Mining and Metals)	Sustainability/ESG	Innovation	Finance	Risks and/or Audit	Legal
Eduardo Borges de Andrade Filho	56	Brazilian	Male	•	•		•	•	•				•			•		
Franklin Lee Feder	72	American	Male	•	•		•	•			•		•	•		•		
Glaissy Peres Domingues	47	Brazilian	Female	•		•	•	•		•						•		•
José Roberto Ermírio de Moraes Filho	38	Brazilian	Male	•			•	•			•			•		•		
Luis Ermírio de Moraes	63	Brazilian	Male	•			•	•	•				•	•				
Ricardo Rodrigues de Carvalho	66	Brazilian	Male	•			•	•	•		•		•	•				
Sergio Ricardo Romani	64	Brazilian	Male	•	•		•	•				•				•	•	

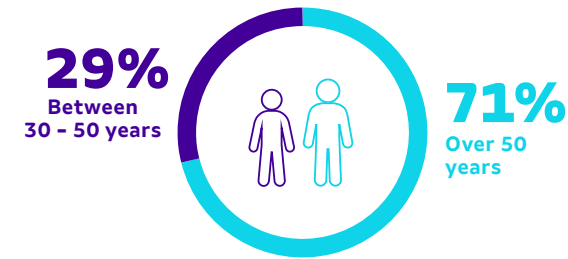


BOARD OF DIRECTORS GRI 2-9, CBA-12

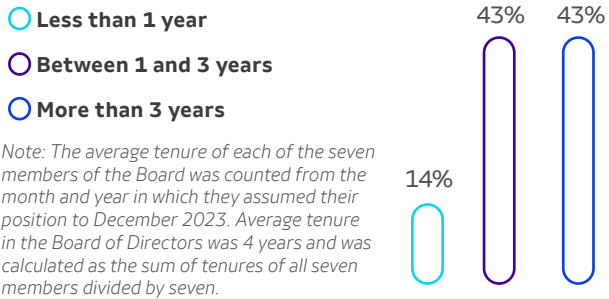
Independent Member



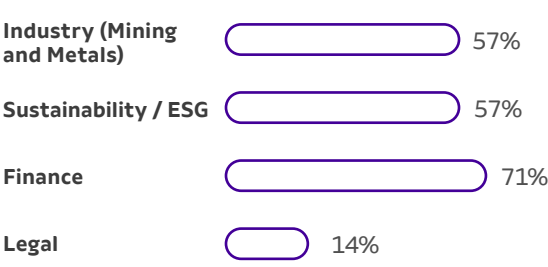
Age



Average tenure



Fields of expertise



Sustainability Committee

	Member characteristics										Fields of expertise					
	Age	Nationality	Gender	Non-executive position	Independent member	Represents minority groups	Represents Controlling Shareholder	Board member in other organizations	Member of CBA Board of Directors	Other roles and duties	Industry (Mining and Metals)	Sustainability/ ESG	Innovation	Finance	Risks and/or Audit	Legal
Franklin Lee Feder	72	American	Male	•	•		•	•	•		•	•		•		
Ricardo Rodrigues de Carvalho	66	Brazilian	Male	•			•	•	•		•	•				
José Roberto Ermírio de Moraes Filho	63	Brazilian	Male	•			•	•	•			•		•		
Sônia Aparecida Consiglio	56	Brazilian	Female		•	•				Member of the Board of Directors and Audit Committee and Chair of the ESG Committee at Vinci Partners; member of the Board of Directors at Ecorodovias; member of the ESG Committee at Citrosuco; vice-chair of the Board of Trustees at CDP; member of the Technical Board at Instituto Ekos Brasil; member of the Board of Trustees at Brasil Foundation. Sustainability instructor at the Brazilian Corporate Governance Institute (IBGC), FIA Business School and ABERJE. Columnist for Valor Investe and radio broadcaster NovaBrasil FM		•				



	Member characteristics										Fields of expertise					
	Age	Nationality	Gender	Non-executive position	Independent member	Represents minority groups	Represents Controlling Shareholder	Board member in other organizations	Member of CBA Board of Directors	Other roles and duties	Industry (Mining and Metals)	Sustainability/ ESG	Innovation	Finance	Risks and/or Audit	Legal
Statutory Audit Committee																
Sergio Ricardo Romani	64	Brazilian	Male		•		•	•	•						•	
José Ecio Pereira da Costa Júnior	72	Brazilian	Male		•					Coordinator of the Audit Committee at Citrosuco; member of the Board of Trustees at the Brazilian Institute of Financial Executives in Paraná (IBEF PR); member of the Compliance and Audit Committee at BRASKEM S.A.; member of the Audit Committee at Mobly S.A.					•	
Sérgio Citeroni	65	Brazilian	Male		•					Professor of Financial Management at the MBA Program of Getúlio Vargas Foundation (FGV); professor of Controllershship and Financial Management at FIPECAFI. Both classes are part of the Financial Statements Audit course					•	
Remuneration & People Committee																
Luis Ermírio de Moraes	63	Brazilian	Male	•			•	•	•		•	•				
Eduardo Borges de Andrade Filho	56	Brazilian	Male	•	•		•	•	•		•			•		
Ricardo Rodrigues de Carvalho	66	Brazilian	Male	•			•	•			•	•				
Gilberto Lara Nogueira	74	Brazilian	Male		•					Member of the People’s Remuneration Committee at Citrosuc		•				
João Zeferino Ferreira Velloso Filho	36	Brazilian	Male				•	•		Investment Manager at Votorantim S.A. Also a member of the Board of Directors at Hejoassu, the holding company of the Votorantim Group		•		•		
Finance Committee																
Glaisy Peres Domingues	47	Brazilian	Female			•	•	•	•					•		•
João Zeferino Ferreira Velloso Filho	36	Brazilian	Male				•	•		Investment Manager at Votorantim S.A. Also a member of the Board of Directors at Hejoassu, the holding company of the Votorantim Group		•		•		
Andrea Cristina Ruschmann	38	Brazilian	Female	•		•		•		Startup investor, venture capital fund manager for high-impact investments, and consultant on energy efficiency projects; member of the Board of Directors at Verene Energia (CDPQ Group); member of the Board of Trustees at Télós			•	•	•	

GRI 2-10.
NOMINATION AND SELECTION
OF THE HIGHEST GOVERNANCE BODY

At CBA, members of the Board of Directors (BoD) may be nominated by the Board or by any shareholder, in accordance with applicable regulations. The BoD’s management proposal in each meeting must address the following:

- (a) Each candidate to the position of member of the Board of Directors must adhere to the Nomination Policy.
- (b) As applicable, the reasons why which each candidate qualifies as an independent member, with proposals to reelect members made based on their individual assessments, when conducted.

Members of the Board of Directors must be appointed at a General Meeting.

Criteria for appointing members to the Board of Directors are as follows:

- Diversity of knowledge, experience, behaviors, cultural aspects, age group, and gender.
- Alignment with and commitment to CBA’s values and culture, its Code of Conduct, and internal policies.
- Personal integrity and impeccable reputation, and no previous debarment by the Brazilian Securities Commission (CVM).

- Not having held elective Executive or Legislative office in the past three years.
- Education background compatible with the responsibilities of the members of the Board of Directors.
- Professional experience and knowledge for the position to which they were appointed, with duties similar to those to be performed in their term as a Board member, or with a set of skills and experiences that are of interest to CBA at the time of appointment. Knowledge about sustainability practices is a plus.
- Familiarity with financial management and other areas of corporate administration, with the skills and experience required for the position.
- No conflict of interest with CBA.
- Time available for suitable dedication to the roles and responsibilities taken on, which goes beyond mere presence at Board meetings and prior reading of documents.

The Board of Directors meets at least seven times per year.

In relation to Committees advising the Board of Directors, the Sustainability and Remuneration & People Committees hold meetings on a quarterly basis. The Statutory Audit Committee holds meetings every two months and the Finance Committee at least nine times per year.

With the exception of the Statutory Audit Committee, whose composition is required to observe the *Novo Mercado* listing rules, other committees are composed of at least one member of the Board of Directors and may include external experts, members or non-members of the Board, all appointed and removable by the Board of Directors. Any member of the BoD or Executive Board may nominate candidates at least 15 business days before the BoD meeting that will determine the composition of a new committee. Proposals for Committees member reelection are based on individual performance assessments, if performed. The Board of Directors may nominate committee members at the first meeting following the Annual General Meeting.

[**CLICK HERE**](#)

Read CBA’s Policy for Appointing Members to the Board of Directors, Committees and Statutory Executive Board (Portuguese Only)

GRI 2-11.
CHAIR OF THE HIGHEST
GOVERNANCE BODY

At CBA, the Chair of the Board of Directors has no senior management role.

GRI 2-14.
HIGHEST GOVERNANCE BODY’S
ROLE IN SUSTAINABILITY REPORTING

In reviewing and approving each Annual Report, CBA’s Chief Sustainability, Safety and Environment Officer is responsible for overall project management and compiling the required data from the relevant departments. Each year, a multidisciplinary operational working group is created to prepare the report and its related materials. The report is reviewed by all governance bodies, including the Statutory Audit Committee

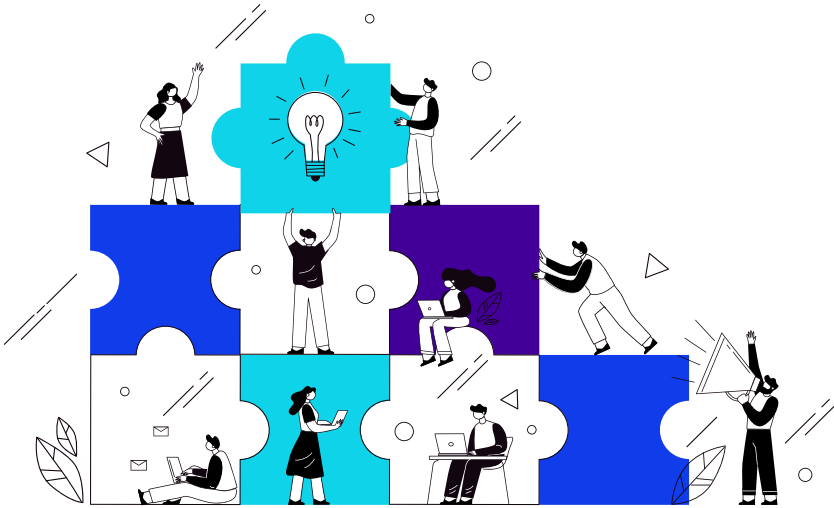
(CAE), which advises the Board of Directors (BoD) and evaluates the entire contents of the report. The Sustainability Committee oversees report execution, and the BoD approves the report structure.

GRI 2-16.
COMMUNICATING CRITICAL CONCERNS

TNFD

Critical concerns related to CBA are referred to the Board of Directors in ordinary meetings and, if necessary, in extraordinary meetings. The Sustainability Committee examines and facilitates discussion of ESG topics during meetings, including sustainability-related impacts and nature-related matters. Every year, the most significant topics requiring Board oversight are listed based on an agenda previously defined by Board members. During meetings, strategic matters are discussed separately from deliberative or information-only matters.

In addition, on a six-monthly basis, the Sustainability area submits related matters to the Board for consideration.



Communicating critical concerns to the Board of Directors

	2020	2021	2022	2023
Total number	7	11	15	21
Nature of concerns	Dams, financial matters	Dams, financial matters	Dams, financial matters, risks and sustainability matters	Dams, financial and audit matters, energy, risks, strategy, and sustainability matters (strategy, diversity, carbon market, etc.)

GRI 2-18.
EVALUATION OF THE PERFORMANCE OF THE HIGHEST GOVERNANCE BODY

CBA-13.
BOARD EFFECTIVENESS

Disclosures about the effectiveness of the Board of Directors

Attendance in meetings of the Board of Directors (BoD)	Average attendance in Board meetings (% BoD meetings)	100%
	Minimum required attendance for all members (%)	29%
Board Positions	Number of other positions held by members of the Board of Directors. This applies only to non-executive and independent directors, not to executive directors or employee representatives	6
	Number of non-executive/independent directors with 4 or fewer other positions	Eduardo Borges de Andrade Filho, Glaisy Peres Domingues, José Roberto Ermírio de Moraes Filho, Luis Ermírio de Moraes, Ricardo Rodrigues de Carvalho and Sergio Ricardo Romani
	Number of other positions held by non-executive/ independent directors, limited to:	Eduardo Borges de Andrade Filho (1), Franklin Lee Feder (7), Glaisy Peres Domingues (2), José Roberto Ermírio de Moraes Filho (3), Luis Ermírio de Moraes (4), Ricardo Rodrigues de Carvalho (2) and Sergio Ricardo Romani (2)
Evaluation of the Board	Independent evaluation of the performance of the members of the Board	The performance the Board and its members is evaluated every two years by an independent consultancy firm, and any opportunities for improvement are referred to the Board chairperson. The evaluation includes benchmarking on the composition and operation of the Board, online surveys about the Board’s operation, peer-to-peer assessments, self-assessments, and assessments of effectiveness on the basis of questionnaires and in-person interviews. These evaluations also cover members’ individual contributions, areas for development and personal traits. The effectiveness assessment produces recommendations on improving aspects such as Board composition, structure and organization, dynamics, communication, strategy and results, risk management, succession and development, and the role of the chairperson and governance secretary. Finally, development plans are prepared and followed up on by the evaluating consultancy.
Process for electing the Board	Describe the frequency of election of members of the Board of Directors and whether they are elected individually or as a group	The members of the Board are elected every two years, in accordance with the Company’s bylaws. The most recent election of members of the Board, during an Annual General Meeting held on 4/27/2023, elected members individually, and this has also been a practice for other Board elections.

Note 1: Average attendance at meetings of the Board of Directors was calculated based on the number of times each member was present at annual and extraordinary general meetings in 2023, divided by the total number of annual and extraordinary Board meetings. The 100% figure denotes that all members were in attendance at all Board meetings.

Note 2: Minimum required attendance was calculated by dividing the minimum number of attendances at Board meetings for the position not to be deemed vacant (2 attendances, under article 9(13) of the Board’s Charter) by the minimum number of annual general meetings (7 meetings), multiplied by 100.

Note 3: The number of other positions held by Board members applies only to non-executive and independent directors, not to executive directors or employee representatives.

GRI 2-19.
REMUNERATION POLICIES

The fixed remuneration of employees and members of governance bodies at CBA is based on the responsibilities of the position and individual experience. To determine individual remuneration, the Board may request assistance from a specialized consultancy. Fixed remuneration may, at the discretion of the Board, be revised annually for alignment with market practices, based on salary surveys in the Company’s industry.

CBA has the following remuneration components:

- Monthly fixed salary or management fees: the amount, based on market benchmarks, recognizes individual contributions, the responsibilities inherent in the position, and expertise and experience.
- Benefits: these supplement remuneration and may include life insurance, health and dental insurance, private pension plans, meal expenses, parking, and periodic training and courses.

Employees also receive variable remuneration, which includes profit sharing to reward employees for their performance against annual targets, on a scale of minimum, target and above expectations. Profit-sharing payments are made exclusively to members of the Executive Board within 12 months following the end of the relevant fiscal year. Executives also receive bonuses as part of their variable remuneration, in accordance with legal requirements, for outstanding performance during the period. In addition, executives

may participate in the Company’s long-term incentive program, as defined by the Board of Directors, to foster greater alignment between their interests and those of shareholders, ensuring continuous value creation, engaging management in the development and delivery of a consistent strategic plan, and attracting and retaining executives.

At the discretion of the Board and in exceptional cases, employees who leave the company or are terminated may receive post-employment benefits, such as personal insurance, health insurance, and private pension plans.

In addition to the remuneration received by members of the Board of Directors and its Committees, those that are also members of other governance bodies within the Company may, with approval, receive remuneration for multiple roles, within the limits established in applicable Company policies.

GRI 2-20.
PROCESS FOR DETERMINING
REMUNERATION

The remuneration of members of the Board of Directors is determined based on the Company’s Remuneration Policy and is approved in the General Meeting. The Remuneration & People Committee provides input in this process, supporting well substantiated decisions aligned with best practices as determined in benchmarking studies conducted by independent partner consultancies and approved by the Board of Directors. Voting on remuneration is documented in the records of the annual meetings.

Fernanda Ferreira Borges,
Strategic planning
consultant, Corporate
Office (SP)

[CLICK HERE](#)

Learn about CBA’s
Compensation Policy

GRI 2-23.
POLICY COMMITMENTS

During the year, the Company published and reviewed several key governance policies.

New policies:

- Document Management Policy
- Climate Change Policy
- Water Policy

Revised policies:

- Dividend Policy (Portuguese only)
- Financial Policy (Portuguese only)
- Insurance Policy
- Policy on Appointing Members of the Board of Directors, Committees and Statutory Boards (Portuguese only)
- Human Rights Policy
- Securities Trading Policy (Portuguese only)
- Material Facts Disclosures Policy (Portuguese only)
- Anti-corruption Policy
- Antitrust Compliance Policy (Portuguese only)
- Privacy Policy for Employees, Job Applicants, and Business Partners

A revision was also made of CBA’s Corporate Governance Handbook, which disseminates information among CBA employees about best practices and the Company’s corporate procedures. Topics covered in the manual include CBA’s corporate governance structure and approval workflows, the Company’s organizational structure and governance of subsidiaries, regulatory requirements, signing authority, powers and representation, and related party transactions.

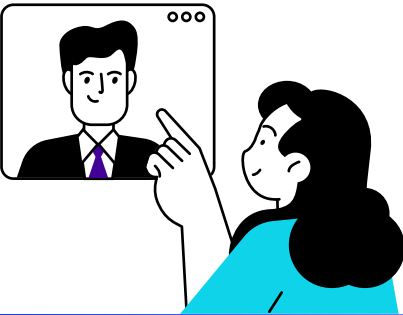
GRI 2-24.
EMBEDDING POLICY COMMITMENTS

CBA’s Compliance Program fosters a culture of compliance by providing training and strengthening communication channels, policies, and documents, while reinforcing integrity due diligence procedures for the Company. The Compliance team periodically reports on Program progress to the Executive Board, the Statutory Audit Committee, and the Board of Directors. These reports present the status of the department’s goals and work fronts, as well as key focus areas.

The Conduct Committee, another important forum for upholding ethical behavior among employees, comprises a diverse team, including active participation from the CEO. The aim of the Committee is to advance best practices in investigating reports received through the Ethics Hotline.

All board members, committee members, and executive officers receive training on the Company’s

Code of Conduct, Anti-Corruption Policy, and the Antitrust Compliance Policy. Other employees are trained in the Anti-Corruption Policy, Antitrust Compliance Policy, and Guidelines and Instructions on Dealing with Government Officials, depending on their exposure to risk in their activities. Policies and procedures have different approval levels, but all require approval from the Legal, Governance and Compliance Department.





GRI 2-27.
COMPLIANCE
WITH LAWS AND
REGULATIONS

The total number of non-compliance cases with laws and regulations decreased between 2022 and 2023, as well as the monetary value of fines.

for each case were deemed significant. The labor courts serve as an external benchmark, as these convictions signify non-compliance with laws and regulations.

under the São Paulo State Tax Regulation (RICMS/SP). All fine amounts from tax cases included in this context were included in this disclosure.

CBA-15.
ENVIRONMENTAL
VIOLATIONS

In terms of **labor** disputes, all payments resulting from the Company’s convictions in labor courts and the associated charges

Tax-related fines are any fines for non-compliance with tax regulations, such as alleged failure to meet tax obligations

There were no significant **environmental** or **civil** cases in the year.

Significant instances of non-compliance with laws and regulations

	2021				2022				2023			
	Environmental	Tax	Civil/ labor	Total	Environmental	Tax	Civil/ labor	Total	Environmental	Tax	Civil/ labor	Total
Instances for which fines were incurred	1	7	187	195	1	10	154	165	0	13	122	135
Instances for which non-monetary sanctions were incurred	0	0	0	0	0	0	0	0	0	0	0	0
Monetary value of fines for instances of non-compliance with laws and regulations (R\$)	57,120	392,514,002	17,922,156	410,493,278	15,000	28,318,334	15,507,777	43,841,111	0	17,780,855	15,278,160	33,059,015
Cumulative environmental liability at year-end (R\$)	0	0	0	0	0	0	0	0	0	0	0	0

Note: This indicator considers the cases in which the Company was deemed non-compliant with laws and regulations for each year.

GRI 2-28.
MEMBERSHIP OF ASSOCIATIONS

CBA is a member of the following organizations:

- São Paulo Environmental Agreement
- Aluminium Stewardship Initiative (ASI)
- American Chamber of Commerce (AmCham)
- Brazilian Coffee Industry Association (ABIC)
- Brazilian Pasteurized Dairy Industry Association (ABLV)
- Brazilian Association for Business Communications (ABERJE)
- Brazilian Packaging Association (ABRE)

- Brazilian Association for Photovoltaic Solar Power (ABSOLAR)
- Brazilian Automotive Engineering Association (AEA)
- Brazilian Aluminum Association (ABAL)
- Brazilian Association of Self Generators (ABIAPE)
- Brazilian Association of Wholesale and Free-Market Power Consumers (ABRACE)
- Brazilian Association of Aluminum Window and Door Manufacturers (AFEAL)
- Brazilian Association of Truck Equipment Manufacturers (ANFIR)

- River Basin Committees
 - Committee on Tributaries of the Preto and Paraibuna Rivers in Minas Gerais
 - Middle Paranapanema Watershed Committee (CBH-MP)
 - Paranapanema Watershed Committee (CBH-PP)
 - Ribeira de Iguape and Southern Coast Watershed Committee (CBH-RB)
 - Sorocaba and Middle Tietê Watershed Committee (CBH-SMT)
- State Board of Water Resources (CRH)
- Mata do Krambec Advisory Board
- Jurupará State Park Advisory Board (PEJU)
- Brazilian Business Council for Sustainable Development (CEBDS)
- Itupararanga Protected Area Management Board
- São Paulo State Industry Federation (FIESP)
- First Movers Coalition (FMC)
- Global Aluminium Foil Roller Initiative (ALUFOIL)
- International Aluminium Institute (IAI)
- Global Compact Network Brazil
- SAE Brazil



Employees at
Itapissuma (PE) plant



Eduardo Raupp,
Production operator,
Alux (SP) plant

CBA is also a member of the São Paulo State environmental regulator's (CETESB) Technical Chamber on Energy and Climate Change and of the Working Group on Tooling, both linked to the São Paulo Environment Agreement, where the Company supports the development of documents and policies.

In addition to its membership of organizations and associations, CBA regularly participates in national and international aluminum industry events, such as LME Week and the FMC Brazil In-Country Workshop, where the Company discusses the implementation of and

developments in regulations, self-regulations or public policies pertaining to its industry. On invitation from the UN Global Compact, the Company also participated in the SDGs in Brazil conference, Climate Week and COP 28 UAE. CBA attended the inaugural meeting of the Decarbonization and Energy Transition Working Group, within the Low Carbon Industry Technical Committee (CTIBC).

Through its affiliations with organizations such as CEBDS, AmCham, ABAL, and IBRAM, CBA contributes to discussions on various public policy issues and legislative developments, including the Carbon Market Bill and the Global Biodiversity Framework.

As part of its social agenda, CBA orchestrates structural social investments using a collaborative approach, mobilizing funds and organizing partnerships with communities, governments and other stakeholders to support local sustainable development and implement and improve government programs. Programs in partnership with the Votorantim Institute—such as the

Votorantim Youth Fund (VIA), the Partnership for Education (PVE), Public Management Support (AGP) and the Environmental Education Program (PEA) at Schools—directly contribute to enhancing government programs in the locations where the Company operates. For example, the PEA at Schools is designed to assist municipalities in preparing to align with the National Policy on Environmental Education (PNEA) and the National Common Curriculum (BNCC) over a two-year cycle. The program assists education departments in integrating environmental subjects into school curricula through innovative project-based teaching methodologies.


CLICK HERE
**Learn more about
these programs in
the Annual Report**



GRI 205-2.
COMMUNICATION AND TRAINING ON ANTI-CORRUPTION POLICIES AND PROCEDURES

Out of the Company’s active and inactive employees in 2023 (6,834), 94% were trained on the Code of Conduct. Excluding inactive employees, the training completion rate rises to 97%.

For Anti-corruption training, out of the 89 people identified as requiring training, 98% completed training.

Communication and training about anti-corruption policies and procedures

	2021		2022		2023	
	Total number	Percentage	Total number	Percentage	Total number	Percentage
Total workforce	5,811		6,991		6,834	
Employees who have been briefed on anti-corruption policies and practices	5,811	100%	6,991	100%	6,834	100%
Trained employees – Code of Conduct	NAv	NAv	6,296	90%	6,436	94%
Mapped employees – Anti-corruption	NAv		270		89	
Trained employees – Anti-corruption	4,279	74%	253	94%	87	98%
Total number of governance body members	NAv		12		13	
Governance body members who have been trained in anti-corruption policies and practices	NAv	NAv	11	92%	9	69%

Note 1: This disclosure is inclusive of employees from all businesses and operations, including Niquelândia (GO), Barro Alto (GO) and Legado Verdes do Cerrado (GO). Some data were first compiled in 2022 and are therefore not available for prior years.

Note 2: Code of Conduct training is provided to all Company employees, while Anti-corruption training is provided only to Board members, executives, general managers, managers, coordinators, consultants, and analysts in departments deemed to have a higher exposure to risk.

Note 3: Governance bodies include members of the Board of Directors (BoD) and Advisory Committees to the BoD.

Training and communication on anti-corruption, broken down by employee category

	Employees requiring training on the Code of Conduct and Anti-corruption	2023		
		Informed	Trained – Code of Conduct	Trained – Anti-corruption
Executive/CEO	Total number of employees within category	9		9
	Number of employees who have received communications/training	9	9	9
	Percentage of employees who have received communications/training	100%	100%	100%
Manager/General manager	Total number of employees within category	114		17
	Number of employees who have received communications/training	114	110	16
	Percentage of employees who have received communications/training	100%	96%	94%
Coordinator/Consultant	Total number of employees within category	273		22
	Number of employees who have received communications/training	273	269	22
	Percentage of employees who have received communications/training	100%	99%	100%
Technician/Analyst/ Supervisor	Total number of employees within category	807		41
	Number of employees who have received communications/training	807	788	40
	Percentage of employees who have received communications/training	100%	98%	98%
Operational	Total number of employees within category	5,363		NA
	Number of employees who have received communications/training	5,363	5,015	NA
	Percentage of employees who have received communications/training	100%	94%	NA
Apprentices	Total number of employees within category	131		NA
	Number of employees who have received communications/training	131	121	NA
	Percentage of employees who have received communications/training	100%	92%	NA
Interns	Total number of employees within category	125		NA
	Number of employees who have received communications/training	125	124	NA
	Percentage of employees who have received communications/training	100%	99%	NA
Total	Total number of employees within category	6,822		89
	Number of employees who have received communications/training	6,822	6,436	87
	Percentage of employees who have received communications/training	100%	94%	98%

Note 1: This disclosure is inclusive of employees from all businesses and operations, including Niquelândia (GO), Barro Alto (GO) and Legado Verdes do Cerrado (GO). Data by employee category was first compiled in 2023 and is therefore not available for prior years.

Note 2: Code of Conduct training is provided to all Company employees, including Apprentices and Interns, while Anti-corruption training is provided only to Board members, executives, general managers, managers, coordinators, consultants, and analysts in departments deemed to have a higher exposure to risk (not including Interns and Apprentices) For this reason, the data does not apply to some categories.



Training and communication on anti-corruption policies and practices for business partners, by type of business partner

	2023		
	Total number of business partners	Total number of trained business partners	Percentage of trained business partners
Suppliers (e-learning about the Supplier Code of Conduct)	183	117	64%
Contractors (training on Compliance and the Contractor Code of Conduct)	2,275	2,155	95%
Total business partners	2,458	2,272	92%

Note 1: Data on business partners was first reported in 2023; for this reason, no data is available for previous years.
Note 2: CBA has a Supplier Code of Conduct which suppliers must accept as part of the onboarding process. In 2023 the Company provided e-learning training to priority audiences designated by the Compliance, Procurement and Sustainability teams.

GRI 406-1.
INCIDENTS OF DISCRIMINATION
AND CORRECTIVE ACTIONS TAKEN

In 2023, the Ethics Hotline received reports of 17 instances of discrimination. Each report was investigated by the Human and Organizational Development (HOD) department, with support from the Audit team. CBA’s Conduct Committee is responsible for investigating and taking disciplinary action on reports received via its Ethics Hotline. The Committee is a multidisciplinary group of employees who discuss each case in detail to ensure their decisions are ethical and fair. Of the 17 reports, 7 were substantiated, involving 5 different cases that led to 3 dismissals and 2 warnings as corrective actions.

Compared to the previous year, there was an increase in reports, attributed to enhanced communication of the Ethics Line through various communication channels and seminars within the Company, as well as the creation of affinity groups. In addition, employees received training on the principles outlined in CBA’s Diversity Guide.


[CLICK HERE](#)
Read more about our
Ethics Hotline in the
Annual Report

Discrimination reports received via the
Ethics Hotline, by status

	2022	2023
Unsubstantiated	5	7
Substantiated	1	7
Insufficient data	0	3
Under investigation	0	0
Total	6	17

Note: This disclosure was first reported in 2022. For this reason, no data is available for previous years.

GRI 412-1.
OPERATIONS THAT HAVE
BEEN SUBJECT TO HUMAN RIGHTS
REVIEWS OR IMPACT ASSESSMENTS

In 2023, nine Aluminum Business operations underwent human rights assessments, representing 82% of total operations, with an expanded scope. Action plans from the previous due diligence exercise were also completed. No human rights impact assessments were conducted in the Energy Business. Human rights due diligence is conducted every two years, covering 23 related topics, including the right to life, decent working conditions,

equal pay, absence of human trafficking, slavery, forced and child labor, freedom from discrimination, freedom of expression and access to information, freedom of association and the right to unionize, and the right to an adequate standard of living. The due diligence process aligns with the United Nations Guiding Principles on Business and Human Rights and other relevant international instruments.


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Annual Report

Operations that have been subject to human rights reviews or impact assessments

	2020			2021			2022				2023		
	Aluminum Business	Nickel Business	Total	Aluminum Business	Nickel Business	Total	Aluminum Business	Nickel Business	Energy Business	Total	Negócio Alumínio	Energy Business	Total
Total number of operations	11	2	13	11	2	13	11	1	17	29	11	16	27
Total number of operations that have been subject to human rights reviews or human rights impact assessments	6			7			7	0	0	7	9	0	9
Percentage of operations that have been subject to human rights reviews or human rights impact assessments	46%			54%			64%	0%	0%	24%	82%	0%	33%

Note 1: The following Aluminum Business operations are included in this disclosure: Caxias do Sul (RS) Distribution Center and Solutions & Services Center, CBA mines in Itamarati de Minas (MG), Miraf (MG), Poços de Caldas (MG), and Barro Alto (GO), Alumínio (SP) plant, Sorocaba (SP) facility, Metalex (SP), Itapissuma (PE), Alux (SP) and Corporate Office (SP). In 2023, the Boa Vista power plant was no longer accounted for within the Energy Business.

Note 2: The due diligence process is conducted every two years in accordance with CBA's Human Rights Policy. The 2022 data are for the due diligence process conducted in 2021.

CBA-16.
HUMAN RIGHTS DUE
DILIGENCE PROCESS

The due diligence process, designed to proactively identify and assess potential impacts and risks related to human rights, consists of the following steps:

Identification of risks in the Company's operations	CBA conducts due diligence to identify potential risks within its operations. Any identified risks and impacts are addressed through action plans
Identification of risks in the value chain or other business-related activities	The due diligence process is conducted in two phases: the first involves an internal assessment, and the second involves an evaluation of external stakeholders, who are selected based on materiality
Periodic, systematic risk map reviews to identify potential issues	Due diligence is conducted every two years or whenever there are significant changes within the organization, as established in the Company's Human Rights Policy

Human rights risk groups covered by/identified in the due diligence process

	Description of the due diligence process
Direct employees	All groups are assessed during due diligence. In the first stage of the process, documentation analysis is conducted, followed by interviews which are defined by sampling
Contractors	
Local communities	

Note. There are no migrant workers or indigenous or traditional peoples in the areas where CBA operates.



CBA-17.
HUMAN RIGHTS MITIGATION & REMEDIATION

Actions to mitigate and remediate human rights risks

Processes in place to mitigate human rights risks	To mitigate and remediate risks identified in due diligence, CBA implements corporate measures in operational units addressing topics such as forced labor, human trafficking, child labor, freedom of association, collective bargaining, equal pay, discrimination, among other topics. Some of the actions already undertaken by the Company include: diversity targets linked to variable compensation for leadership positions, integration of the Code of Conduct into onboarding processes for employees and contractors, management of contracted companies to ensure regular labor documentation, health and safety campaigns and processes (e.g., right to refuse), holding dialogue forums with the community, and infrastructure improvements.
Number of locations with mitigation plans	4 – Alumínio (SP), Itapissuma (PE), Miraf (MG) mine and Corporate Office (SP), which deals with cross-cutting risks

GRI 412-2.
EMPLOYEE TRAINING ON HUMAN RIGHTS POLICIES OR PROCEDURES

Human rights is a cross-cutting topic at CBA. The Company has had a specific policy on human rights since 2022. Related content is included in various policies and procedures, such the Code of Conduct and ESG Track, which are currently used to provide

broader training on human rights. There are currently plans to develop specific human rights training in 2024. Across all training provided on this topic, 6,250 people completed training—equivalent to 95% of CBA’s active employees in 2023.

Employee training on human rights policies or procedures

	2021	2022	2023
Total number of hours in the reporting period devoted to training on policies or procedures concerning aspects of human rights that are relevant to operations	10,488	13,385	2,966
Total active workforce	5,590	6,362	6,584
Total number of employees who have been trained	3,037	5,466	1,483
Percentage of employees trained during the reporting period in policies or procedures concerning aspects of human rights that are relevant to operations	54%	86%	23%

Note 1: The data refers to the training conducted in the respective year, covering the Code of Conduct and ESG Track.
Note 2: In 2023, the number of trained individuals decreased significantly, as training was only provided to new employees, and the materials were launched in 2022 (resulting in a higher volume of training conducted).

GRI 412-3.
SIGNIFICANT INVESTMENT AGREEMENTS AND
CONTRACTS THAT INCLUDE HUMAN RIGHTS CLAUSES
OR THAT UNDERWENT HUMAN RIGHTS SCREENING

CBA and its subsidiaries signed 890 contracts with business partners in 2023. All contracts include human rights clauses, which are incorporated following an assessment of the supplier by the relevant department. Contract amendments, terms of closure and other instruments not involving the engagement of a supplier do not include human rights clauses due to their nature.

Total number and percentage of significant investment
agreements and contracts that include human rights clauses

	2020	2021	2022	2023
Total number of investment agreements and contracts	538	718	866	890
Total number of significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	280	335	423	447
Percentage of agreements and contracts that include human rights clauses	52%	47%	49%	50%

Note: CBA has no formal definition for “significant investment agreements”. Thus, all contracts signed during the reporting period have been included.

GRI 3-3.
MATERIAL TOPIC: RISK AND CRISIS MANAGEMENT

SUSTAINABILITY-RELATED RISKS AND
OPPORTUNITIES IN THE ORGANIZATION’S
BUSINESS MODEL AND VALUE CHAIN

CBA’s 2023 Risk Map identifies several sustainability-related risks. These risks undergo review and updates at least once a year, with their levels subject to change based on evolving circumstances. In December 2023, CBA had identified 157 risks.

Governance and compliance risks include fraud, corruption, unfair competition, harassment, and money laundering. Strategic risks include compliance with regulations, occupational health, recycling, dam safety, and energy. Operational risks include human rights, information security, sustainable sourcing, people (training, labor, social security, attracting and retaining talents), and mining. Socio-environmental risks include natural resource scarcity, biodiversity and land use, climate events, natural disasters, air emissions, community relations, waste management, compliance with regulations, responsible investment (ESG clauses), and carbon emissions.

From a market perspective, opportunities affecting the aluminum value chain include:

- Growing market demand for sustainable products.
- Incentives for innovation in developing lighter and more resource-efficient products, minimizing environmental impacts.
- Improved competitive advantage and differentiation from regional competitors.
- Certified low-carbon aluminum traded on the stock market, commanding a higher market value compared to uncertified aluminum (source: Fastmarkets).



Risks affecting the aluminum value chain include:

- Replacement of aluminum usage with substitute materials (which have lower carbon emissions in their production chain).
- Efforts to substitute multi-layer packaging with single-layer alternatives to optimize the material recycling process and value chain.
- Loss of competitiveness due to the advancement of the ESG agenda and technologies among competitors.
- Exposure to the creation or absence of regulations. An example of a new regulation is carbon taxation.

The financial and accounting impacts of sustainability-related risks and opportunities are currently being assessed.

[CLICK HERE](#)
Read more about risks and climate opportunities

GRI 3-3.
MATERIAL TOPIC: RISK
AND CRISIS MANAGEMENT

CBA-14.
RISK GOVERNANCE

The Company’s risk management framework follows the guidelines provided in recognized risk management standards, such as ISO 31000:2018 and COSO ERM (2017). CBA defines roles and responsibilities in risk management using the Institute of Internal Auditors’ (IIA’s) Three Lines Model 2020, encompassing business areas, risk specialists, and internal audit. This model facilitates coordination of activities and exchange of information.

Senior Management is responsible for delegating, guiding, and supervising enterprise activities and resource utilization. They are accountable to stakeholders for exercising integrity, leadership, and transparency. All lines of defense report to the Board of Directors. The 1st line roles (business roles) manage risks on a day-to-day basis, while the 2nd line roles (risk specialist roles) provide assistance to the 1st line roles in risk management, including expertise, support, oversight, and risk-related inquiries. These include Risk Management, Internal Controls, Compliance, Sustainability, Environment, Health and Safety, and Market Risks and Insurance.

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	Name and position	Hierarchy: who the person or committee reports to
Highest-ranking individual with dedicated responsibility for operational risk management (non-CEO)	Marcus Lanzelotti (Risk Governance Manager)	Marcos Montesani (Controllershship and Risk Management General Manager)
Highest-ranking individual responsible for monitoring and auditing operational risk management performance (non-CEO)	Emmanoel Soares (Internal Audit and Internal Controls General Manager)	Luciano Alves (CEO) and Statutory Audit Committee



Talita Queiroz
Constante,
Production
Supervisor,
Metalex (SP)

GRI 3-3. MATERIAL TOPIC: RISK AND CRISIS MANAGEMENT AND DAM SAFETY MANAGEMENT

Emergency preparedness and response

CBA has an integrated management system with established procedures and requirements for emergency preparedness, response, and management, outlining preventive actions and risk mitigation measures to address potential consequences (impacts/damage/failure) associated with risk events. These preventive actions are reviewed following any developments in the Company that could alter the nature or scale of risks of emergency incidents, and/or upon gaps in controls being identified. Action plans are tested and implemented in compliance with existing laws and best practices.

CBA seeks to implement Emergency Response Plans in collaboration with affected populations and organizations, including communities and local authorities.

Emergency preparedness and response is addressed and referenced in various Company policies such as the Integrated Management Policy, Code of Conduct, internal procedures, and public disclosures.

As part of the Company's Emergency Response Plan, training is provided to employees and contractors to ensure they are equipped to identify and mitigate risks. Furthermore, each site implements emergency preparedness measures in accordance with Company policies in order to manage impacts and safeguard ecosystems, habitats, species, and individuals, upholding CBA's values and commitments.



Mirai (MG) mining site

Sustainable value chain



GRI 3-3. MATERIAL TOPIC: TRANSPARENCY AND STAKEHOLDER ENGAGEMENT

ESG considerations guide CBA’s efforts to create value for all stakeholders with whom the Company interacts. Stakeholder engagement and relations should be a part of the Company’s operating model and be underpinned by its motto – “Aluminum solutions that transform lives,” and the ethical and guiding principles set out in its Code of Conduct and in the guidelines set out in its Stakeholder Engagement Policy.

GRI 204-1. PROPORTION OF SPENDING ON LOCALLY-BASED SUPPLIERS

In 2023, local suppliers accounted for 8% of total supplier spend. Suppliers spend data are managed within the Sustainable Procurement Program.

Percentage of the procurement budget that is spent on local suppliers

	2022	2023
Percentage of budget spent on local suppliers	9%	8%

Note 1: CBA’s Sustainable Procurement Program has been in the process of implementation since 2021; local supplier spend data were first compiled in early 2023. As a result, data prior to 2022 is not available.

Note 2: This disclosure considers all plants and businesses of CBA, including Niquelândia (GO), Barro Alto (GO), and Legado Verdes do Cerrado (GO) reserve. As local suppliers, those mapped in neighboring municipalities where CBA operates were considered. For the Itapissuma (PE) plant, municipalities within a 20 km radius were also considered.



GRI 407-1.
OPERATIONS AND SUPPLIERS IN
WHICH THE RIGHT TO FREEDOM
OF ASSOCIATION AND COLLECTIVE
BARGAINING MAY BE AT RISK

CBA’s supplier screening procedures identified no operations or suppliers in which workers’ rights to exercise freedom of association or collective bargaining may be violated or at significant risk of violation, or that are considered to have significant risk for incidents of child labor and/or forced or slave labor. CBA’s supplier

screening process is a way to mitigate risks, with all suppliers required to complete an Integrity Due Diligence (IDD) questionnaire and formally accept CBA’s policies, such as its Sustainable Procurement Policy and Supplier Code of Conduct. There are no Company practices or policies that could affect employees’ decisions to form or join a union, engage in collective bargaining, or participate in union activities, nor are there measures that hinder the freedom to exercise these rights.

In support of freedom of association and collective bargaining, CBA always approves any union’s request to approach employees to promote unionization. Typically, such requests are made via email or phone. The Company also has a Human Rights Policy that guarantees freedom of association and collective bargaining in all fields, in accordance with applicable local legislation.

CBA-18.
KPIS FOR SUPPLIER SCREENING

In 2023, CBA had 6,731 Tier 1 suppliers—or suppliers directly supplying goods, materials or services (including intellectual property and patents). Of this total, 200 are considered strategic suppliers.

Supplier screening program coverage and progress

	2022	2023
Total number of Tier 1 suppliers	4,698	6,731
Total number of significant Tier 1 suppliers	117	200
Percentage of total spending on significant Tier 1 suppliers	60%	56%
Total number of significant non-Tier 1 suppliers	NAv	NAv
Total number of significant suppliers (Tier 1 or otherwise)	117	200

Note: Prior to 2023, CBA did not monitor non-Tier 1 suppliers.

Transforming lives

Employee engagement

GRI 2-7.
EMPLOYEES

SASB EM-MM-000.B
TOTAL NUMBER OF EMPLOYEES, PERCENTAGE CONTRACTORS

In 2023, the Company had a workforce of 6,834 employees, of whom 67.7% were men, 16.8% were women, 14.8% did not disclose their gender, and 0.6% did not identify with either gender. There were no significant changes during the reporting period.



Natalia Gualberto Ribeiro
Loureiro and Jeferson
Delfino Dias da Silva,
Miraí (MG) Mining Site

Number of employees by gender identity

	2020			2021			2022			2023				
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Other	Not reported	Total
Total workforce	4,939	610	5,549	5,007	804	5,811	5,533	1,106	6,639	4,628	1,151	41	1,014	6,834
Number of permanent employees	4,860	564	5,424	4,928	754	5,682	5,493	1,069	6,562	4,628	1,151	41	1,014	6,834
Number of temporary employees	79	46	125	79	50	129	40	37	77	0	0	0	0	0
Number of full-time employees	4,939	610	5,549	5,007	804	5,811	5,533	1,106	6,639	4,628	1,151	41	1,014	6,834
Number of local employees	NAv	NAv	NAv	NAv	NAv	NAv	NAv	NAv	NAv	4,494	1,089	38	975	6,596

Note 1: This disclosure is inclusive of employees from all businesses and operations, including Niquelândia (GO), Barro Alto (GO) and Legado Verdes do Cerrado (GO).

Note 2: All employees work full time and there are no non-guaranteed hours employees, i.e. employees without a guaranteed minimum or fixed number of working hours per day, week or month.

Note 3: The number of local male and female employees, as well as the categories "Others" and "Not informed," began to be reported in 2023 due to the workforce re-registration, and therefore, the data is not available for previous years. The municipalities considered as local are the ones where CBA operates and their neighboring municipalities.

Note 4: Starting in 2023, the data now also includes the operational categories of Apprentices, Interns, and Trainees. Previous years remain unaltered.

Number of employees by region

		Number of employees	Number of permanent employees	Number of temporary employees	Number of full-time employees	Number of local employees
2020	Northeast	516	516	0	516	NAv
	Midwest	176	174	2	176	NAv
	Southeast	4,843	4,720	123	4,843	NAv
	South	14	14	0	14	NAv
	Total	5,549	5,424	125	5,549	NAv
2021	Northeast	524	524	0	0	NAv
	Midwest	185	166	19	0	NAv
	Southeast	5,083	4,973	110	0	NAv
	South	19	19	0	0	NAv
	Total	5,811	5,682	129	0	NAv
2022	Northeast	562	562	0	562	NAv
	Midwest	112	111	1	112	NAv
	Southeast	5,946	5,870	76	5,946	NAv
	South	19	19	0	19	NAv
	Total	6,639	6,562	77	6,639	NAv
2023	Northeast	582	582	0	582	577
	Midwest	169	169	0	169	160
	Southeast	6,064	6,055	09	6,064	5,846
	South	19	19	0	19	13
	Total	6,834	6,825	9	6,834	6,596

Note 1: This disclosure is inclusive of employees from all businesses and operations, including Niquelândia (GO), Barro Alto (GO) and Legado Verdes do Cerrado (GO). CBA has no operations in the North of Brazil.

Note 2: All employees work full time and there are no non-guaranteed hours employees, i.e. employees without a guaranteed minimum or fixed number of working hours per day, week or month.

Note 3: The number of local employees was first reported in 2023 and therefore data is not available for previous years. Local is defined as municipalities in which CBA has operations and adjacent municipalities.

Note 4: Starting in 2023, the data now also includes the operational categories of Apprentices, Interns, and Trainees. Previous years remain unaltered.

GRI 2-8.
WORKERS WHO ARE
NOT EMPLOYEES

SASB EM-MM-000.B
TOTAL NUMBER OF EMPLOYEES,
PERCENTAGE CONTRACTORS

In 2023, CBA had 1,787 fixed contractors. Strategic positions are filled with the assistance of a specialized consultancy, while other positions are filled through internal recruiting and selection.

SASB EM-MM-310A.2.
NUMBER AND DURATION OF
NON-TECHNICAL DELAYS

SASB EM-MM-210B.2.
NUMBER AND DURATION
OF STRIKES AND LOCKOUTS

There have been no strikes, lockouts or non-technical delays in CBA’s operations in the last three years.

Number of employees

	2020	2021	2022	2023
Total direct employees	5,549	5,811	6,639	6,834
Total number of fixed third-party employees	819	1,134	1,673	1,787
Total number of mobile third-party employees	954	1,240	1,641	2,182
Total number of contractors (fixed + mobile)	1,773	2,374	3,314	3,969
Total (employees + contractors)	6,368	6,945	8,312	8,621
Percent contractors	13%	16%	20%	21%

Note: This disclosure considers employees from all plants and businesses of CBA, including Niquelândia (GO), Barro Alto (GO), and Legado Verdes do Cerrado (GO) reserve.

GRI 202-2.
PROPORTION OF SENIOR MANAGEMENT HIRED FROM THE LOCAL COMMUNITY

Percentage of senior management that are hired from the local community

	2022	2023
Total members of senior management	15	16
Members of senior management hired from the local community	7	7
Proportion of senior management hired from the local community	47%	44%

Note 1: This disclosure is inclusive of employees from all businesses and operations, including Niquelândia (GO), Barro Alto (GO) and Legado Verdes do Cerrado (GO). Local is defined as municipalities in which CBA has operations and adjacent municipalities.

Note 2: Senior management includes general managers reporting directly to the CEO, executive officers and the CEO.

Note 3: This disclosure was first reported in 2022; for this reason, no data is available for prior years.



GRI 202-1.
RATIO OF STANDARD ENTRY LEVEL
WAGE BY GENDER COMPARED TO
LOCAL MINIMUM WAGE

All CBA employees receive wages exceeding the minimum legal wage.

Ratio of the entry level wage by gender to the minimum wage

	2020		2021		2022		2023	
	Male	Female	Male	Female	Male	Female	Male	Female
Entry-level wage (R\$)	1,207.80	1,207.80	1,207.80	1,555.40	1,342.00	1,342.00	1,427.80	1,427.80
Minimum wage (R\$)	1,045.00		1,100.00		1,212.00		1,302.00	
Ratio	1.16	1.16	1.10	1.41	1.11	1.11	1.10	1.10

Note 1: This disclosure is inclusive of employees from all businesses and operations, including Niquelândia (GO), Barro Alto (GO) and Legado Verdes do Cerrado (GO).
Note 2: The minimum wage used in the calculation is consistent with the minimum wage specified in collective bargaining agreements for each site.
Note 3: This disclosure does not include Interns and Apprentices.

Caster roll,
Alumínio (SP) plant

GRI 405-2.
RATIO OF BASIC SALARY
AND REMUNERATION
OF WOMEN TO MEN

At CBA there is no pay gap between men and women on a job-for-job basis (same position and seniority and no merit raises). Pay gaps can arise when comparing positions without factoring seniority and job tiers.



Ratio of basic salary and remuneration of women to men, by employee category

	Average tenure (years)	2021		2022		2023	
		Basic salary	Remuneration	Basic salary	Remuneration	Basic salary	Remuneration
Apprentices	-	1.0	1.0	1.0	1.0	1.0	1.0
Interns	< 1	NA	NA	1.0	1.0	1.0	1.0
	1 to 2	1.0	1.0	1.0	1.0	1.0	1.0
Operational	< 1	1.0	1.0	0.9	0.9	1.0	1.0
	1 to 2	1.0	1.0	1.0	1.0	0.9	0.9
	3 to 5	1.0	1.0	1.1	1.1	1.0	1.0
	6 to 10	1.0	0.9	1.0	1.0	0.9	0.9
	> 10	0.8	0.8	0.8	0.8	0.8	0.8
Professional	< 1	0.8	0.8	0.9	0.9	0.9	0.9
	1 to 2	1.0	1.0	1.0	1.0	1.0	1.0
	3 to 5	1.0	0.9	1.1	1.1	1.1	1.1
	6 to 10	1.0	1.0	1.0	1.0	1.1	1.1
	> 10	1.2	1.2	1.2	1.2	1.2	1.2
Leadership	< 1	NA	NA	0.8	0.8	1.3	1.3
	1 to 2	1.1	1.2	1.0	1.1	1.0	1.0
	3 to 5	1.6	2.2	1.2	1.4	1.1	1.1
	6 to 10	0.9	0.9	0.9	0.9	0.9	0.9
	> 10	0.9	0.8	0.9	0.8	1.0	1.0

Note 1: This disclosure is inclusive of employees from all businesses and operations, including Niquelândia (GO), Barro Alto (GO) and Legado Verdes do Cerrado (GO).
Note 2: The "Leadership" category includes Consultant II and III, Coordinators, Managers, General Managers, Executive Officers and CEO.
Note 3: This disclosure was first reported in 2021; for this reason, no data is available for 2020.



Employees of the Maintenance Management in the Asset Management sector, Alumínio (SP) plant

GRI 401-1.
NEW EMPLOYEE HIRES
AND EMPLOYEE TURNOVER

In 2023, 716 employees joined the Company. Of these, 74% were men and 26% were women. The 30–50 age group represented 55.3% of new hires, and 96% were in the Southeast of Brazil.

Total number and rate of new employee hires by gender

	2021		2022		2023	
	Total number of new hires	%	Total number of new hires	%	Total number of new hires	%
Male	633	68%	895	70%	532	74%
Female	304	32%	386	30%	184	26%
Total	937	100%	1,281	100%	716	100%

Note 1: This disclosure is inclusive of employees from all businesses and operations, including Niquelândia (GO), Barro Alto (GO) and Legado Verdes do Cerrado (GO).

Note 2: Rates were calculated based on the total number of employees hired; all employee categories are included.

Note 3: Beginning in the next reporting period, other gender identities will be included in this disclosure.

Total number and rate of new employee hires by age group

	2021		2022		2023	
	Total number of new hires	%	Total number of new hires	%	Total number of new hires	%
Under 30 years	319	34%	505	39%	396	55.3%
30 – 50 years	593	63%	739	58%	303	42.3%
Over 50 years	25	3%	37	3%	17	2.4%
Total	937	100%	1,281	100%	716	100%

Note 1: This disclosure is inclusive of employees from all businesses and operations, including Niquelândia (GO), Barro Alto (GO) and Legado Verdes do Cerrado (GO).

Note 2: Rates were calculated based on the total number of employees hired; all employee categories are included.



Total number and rate of new employee hires by region

	2021		2022		2023	
	Total number of new hires	%	Total number of new hires	%	Total number of new hires	%
Northeast	61	7%	72	6%	22	3%
Midwest	32	3%	14	1%	5	1%
Southeast	842	90%	1,191	93%	688	96%
South	2	0%	4	0%	1	0%
Total	937	100%	1,281	100%	716	100%

Note 1: This disclosure is inclusive of employees from all businesses and operations, including Niquelândia (GO), Barro Alto (GO) and Legado Verdes do Cerrado (GO).
Note 2: Rates were calculated based on the total number of employees hired; all employee categories are included.

CBA-32.
EMPLOYEE TURNOVER RATE

Total turnover

	2020	2021	2022	2023
Total employee turnover rate	6%	11%	11%	12%
Voluntary employee turnover rate	1%	4%	4%	5%

Note 1: This disclosure is inclusive of employees from all businesses and operations, including Niquelândia (GO), Barro Alto (GO) and Legado Verdes do Cerrado (GO).
Note 2: Rates were calculated based on the total number of employees at the end of the reporting period. The voluntary turnover rate includes all employees who chose to leave the Company.

CBA-40.
HIRING

Topics assessed during hiring

		2023
Assessment topic	Categories	Number of new hires
Age (age group)	Over 50 years	17
	30 to 50 years	303
	Under 30 years	396
Gender	Male	532
	Female	184
Hierarchical level	Senior management positions, defined as up to two levels below CEO or in comparable positions	1
	Intermediate management positions (manager positions)	7
	Junior (entry-level) management positions	19
Race	Black	79
	Brown	230
	Not reported	90
	Indigenous	4
	White	308
	Asian	5

Note 1: This disclosure is inclusive of employees from all businesses and operations, including Niquelândia (GO), Barro Alto (GO) and Legado Verdes do Cerrado (GO).
Note 2: Beginning in the next reporting period, other gender identities will be included in this disclosure.

Information about the percentages of positions filled by internal candidates and the average hiring cost per Full-Time Equivalent (FTE) is not available.

Samanta do Carmo Butieri, Production operator, Metalex (SP)





Larissa Lara Fernandes,
HOD analyst, Alumínio (SP) plant

GRI 405-1.
DIVERSITY OF GOVERNANCE
BODIES AND EMPLOYEES

In 2023, most women were in the Apprentices and Interns employee categories (60% and 51%, respectively), and 53% of employees self-identified as white and 39% as black and brown. All nine members of the Executive Board (100%) self-identify as white; six members of the Board of Directors (86%) self-identify as white and one (14%) chose not to respond.

Number of members in CBA governance bodies, by race, in 2023

	Asian	White	Black	Brown	Indigenous	Other	Not reported
Board of Directors	0	6	0	0	0	0	1
Executive Board	0	9	0	0	0	0	0
Total	0	15	0	0	0	0	1

Percentage of workforce by employee category, gender and age group

			Apprentices	Interns	Operational	Technician/ Analyst/ Supervisor	Coordinator/ Consultant	Manager/ General manager	Executive/CEO	Total	Governance bodies members
2020	Age group	<30	100%	99%	19%	16%	3%	0%	0%	21%	0%
		30-50	0%	1%	71%	74%	83%	84%	40%	69%	33%
		>50	0%	0%	10%	10%	14%	16%	60%	10%	67%
	Gender	Male	66%	35%	92%	73%	81%	85%	80%	88%	83%
		Female	34%	65%	8%	27%	19%	15%	20%	12%	17%
2021	Age group	<30	99%	98%	19%	16%	4%	0%	0%	20%	0%
		30-50	1%	2%	71%	76%	83%	86%	57%	70%	33%
		>50	0%	0%	11%	8%	14%	14%	43%	10%	67%
	Gender	Male	37%	46%	89%	69%	81%	84%	71%	85%	83%
		Female	63%	54%	11%	31%	19%	16%	29%	15%	17%
2022	Age group	<30	99%	94%	20%	17%	3%	1%	0%	22%	0%
		30-50	1%	6%	69%	74%	86%	84%	37%	67%	33%
		>50	0%	0%	11%	8%	12%	15%	63%	10%	67%
	Gender	Male	51%	57%	87%	64%	75%	82%	74%	82%	83%
		Female	49%	43%	13%	36%	25%	18%	26%	18%	17%
2023	Age group	<30	100%	93%	19%	16%	2%	0%	0%	21%	0%
		30-50	0%	7%	69%	75%	83%	82%	56%	68%	31%
		>50	0%	0%	12%	9%	15%	18%	44%	12%	69%
	Gender	Male	38.9%	43%	70%	59%	71%	75.4%	67%	67.7%	77%
		Female	59.5%	51%	12%	33%	22%	19.3%	22%	16.8%	23%
		Other	0.8%	4%	17%	7%	6%	4.4%	11%	0.6%	0%
		Not reported	0.8%	2%	1%	1%	1%	0.9%	0%	14.8%	0%

Note 1: This disclosure is inclusive of employees from all businesses and operations, including Niquelândia (GO), Barro Alto (GO) and Legado Verdes do Cerrado (GO).
Note 2: The “Other” and “Not informed” categories began to be reported in 2023. Therefore, the data were not presented in this way for previous years.
Note 3: Governance bodies include members of the Board of Directors (BoD) and Advisory Committees to the BoD.

Percentage of workforce by employee category and race

	2023					
	Asian	White	Indigenous	Brown	Black	Not reported
Executive/CEO	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%
Manager/General manager	1.8%	84.0%	0.0%	7.1%	0.0%	7.1%
Coordinator/Consultant	3.0%	68.2%	0.0%	14.6%	3.3%	10.9%
Technician/Analyst/Supervisor	0.9%	60.6%	0.1%	24.7%	6.5%	7.2%
Operational	0.6%	48.1%	0.2%	35.3%	9.3%	6.5%
Interns	1.0%	59.1%	1.7%	26.1%	10.4%	1.7%
Apprentices	0.0%	47.3%	0.0%	36.4%	11.6%	4.7%
Total	0.9%	52.6%	0.1%	30.8%	8.1%	7.5%

Note 1: This disclosure is inclusive of employees from all businesses and operations, including Niquelândia (GO), Barro Alto (GO) and Legado Verdes do Cerrado (GO).
Nota 2: Rates by race were first compiled in 2023, and are therefore not available for prior years.

Percentage of workforce by position type and race

	2023	
	Total workforce	Management positions
White	52.6%	68%
Black and brown	38.9%	21%
Not reported	7.5%	10%
Other	1.0%	1%

Note 1: This disclosure is inclusive of employees from all businesses and operations, including Niquelândia (GO), Barro Alto (GO) and Legado Verdes do Cerrado (GO).
Note 2: Total workforce indicates the percentage of employees of that race out of the workforce. The Management position column indicates employees in Junior, Middle and Senior Manager positions as a percentage out of total employees in management positions.

CBA-19.
WORKFORCE BREAKDOWN: GENDER

Women represent 17% of CBA's total workforce—43% are in management positions, and 33% are in senior management positions.

Share of women in the workforce

	2023
Share of women in the total workforce	17%
Share of women in management positions, including junior, intermediate and senior levels	14%
Share of women in junior (entry-level) management positions	12%
Share of women in senior management positions, defined as up to two levels below CEO or in comparable positions	33%
Share of women in management positions who are in revenue-generating positions	43%
Share of women in STEM (Science, Technology, Engineering and Mathematics)-related positions	26%

Note 1: This disclosure is inclusive of employees from all businesses and operations, including Niquelândia (GO), Barro Alto (GO) and Legado Verdes do Cerrado (GO).
Note 2: Management positions in revenue-generating functions include, for example, sales, and exclude support functions such as HOD, IT and Legal.

GRI 2-30.
COLLECTIVE BARGAINING AGREEMENTS

SASB EM-MM-310A.1.
PERCENTAGE OF ACTIVE WORKFORCE
COVERED UNDER COLLECTIVE
BARGAINING AGREEMENTS,
BROKEN DOWN BY BRAZILIAN
AND FOREIGN EMPLOYEES

All CBA employees, whether Brazilian or foreign, who are covered by collective bargaining agreements were included in 2023. Employees not covered by such agreements hold leadership positions, such as Coordinators, Managers, General Managers and Executive Officers are an exception stipulated in the agreement exempting them from the salary adjustment clause.

Percentage of employees covered by collective bargaining agreements,
by nationality

	2021	2022	2023
Brazilian	96%	96%	96%
Foreigner	100%	100%	100%
Total	96%	96%	96%

Note 1: This disclosure considers all CBA employees (except apprentices and interns), including Niquelândia (GO), Barro Alto (GO) and Legado Verdes do Cerrado (GO).
Note 2: Within the following 12 months, the Company plans to review its collective bargaining agreements with respect to the Profit Sharing Program and Database; both are applicable to all CBA operations.



GRI 3-3.
MATERIAL TOPIC:
HEALTH, SAFETY, AND QUALITY OF LIFE

CBA’s commitments within this topic are to:

- Provide safe and healthy working conditions to prevent occupational injuries and health issues.
- Comply with legal requirements and other standards.
- Implement measures to eliminate hazards and reduce risks.
- Set goals to enhance outcomes.
- Continuously improve the management system.
- Consult with and engage employees in health and safety matters.

The primary tools and processes used daily as part of the Company’s Health and Safety Management System are monitored, measured, and evaluated on an online platform. Periodically, the company conducts audits to assess the implementation of these tools on the ground, interviews employees, and monitors progress and application of safety protocols. Safety initiatives are also monitored on the ground alongside stakeholders, ensuring everyone is informed about process advancements and the effectiveness of proposed actions.

In 2023, CBA implemented a range of initiatives aimed at improving work environments and fostering employee safety (learn more in the [Annual Report](#)). Plans for 2024 include hosting the 12th Safety Workshop, advancing the topic of safe behavior, extending the Health and Safety Management System to other operations, developing leadership, technologies and supporting initiatives, and revising the Company’s Quality of Life Program.



GRI 403-1.
OCCUPATIONAL HEALTH AND
SAFETY MANAGEMENT SYSTEM

GRI 403-2.
HAZARD IDENTIFICATION,
RISK ASSESSMENT, AND
INCIDENT INVESTIGATIONS

GRI 403-4.
WORKER PARTICIPATION,
CONSULTATION, AND COMMUNICATION
ON OCCUPATIONAL HEALTH AND SAFETY

GRI 403-7.
PREVENTION AND MITIGATION
OF OCCUPATIONAL HEALTH
AND SAFETY IMPACTS DIRECTLY
LINKED BY BUSINESS RELATIONSHIPS

CBA has a management handbook that sets out guidelines for its Occupational Health and Safety Management System, in accordance with ISO 45001 (Occupational Health and Safety Management Systems). The Company also has an Integrated Management Policy that includes guidelines on occupational health & safety management. The system addresses both laws and regulations and industry best practices in health and safety, as well as guidance provided by Brazilian Regulatory Standard 1 (NR 1). These policies and guidelines are applied to all activities conducted within and outside the Company’s operations, and information about these policies is periodically communicated through campaigns and daily instruction provided to employees, contractors, and third parties. Audits and inspections are conducted regularly to ensure progress on safety is sustained.

The Company also convenes a Multidisciplinary Working Group monthly, comprising operations leaders, the management team, and representatives from the health and safety team, to monitor and define actions based on performance indicators such as medical consultations, occupational exams, medical absenteeism, individuals on sick leave, biological monitoring, and inclusion of people with disabilities.

Internal Accident Prevention Committees (CIPA) and Mining Internal Accident Prevention Committees (CIPAMIN) are established to participate in the risk assessment process in all operations where these committees are required under Regular Standard 5 (NR 5).

Each employee has a job description, role, and scope of work covered by defined processes and protocols, and undergoes safety induction training upon joining CBA, where they are informed about the main work-related hazards and risks, as well as key safety rules. All employees, both direct employees and contractors, are covered. Suppliers, in turn, are required to adhere to occupational health and safety requirements as part of their contractual obligations, in accordance with the Supplier Screening Management Standard (PG).

Health and safety risks and hazards are tracked using tools such as hazard identification matrixes and the Company's Hazard Identification and Risk Assessment Management Standard, which outline the main controls and actions required to mitigate or eliminate risks. Each operation has unique emergency preparedness arrangements, and guidelines for responding to these emergencies are established in the Company's Emergency Preparedness and Response Management Standard. Preliminary Risk Analyses (PRA) allow employees to identify risks and implement individual or collective control measures in the workplace.

The Company also has safety protocols that establish guidelines for addressing critical operation risks and managing environmental and occupational risks,

evaluating occupational environmental risks and their controls. Examples of the Company's risk management practices include Workplace Environment Reports (LTCAT), Ergonomics Reports, and regularly tracking developments in Brazilian safety regulations to identify new legal and other requirements applicable to the Company's operations.

Other safety tools include *Fale Fácil*, an easy-to-use channel for reporting and addressing unsafe conditions and behavior; and the Company's Duty of Refusal policy, which encourages and empowers employees to refuse to perform a task if risk mitigation measures have not been adequately implemented or if they feel unfit to perform the task.

Employees receive safety training through the Safe Behavior Program and other training to raise awareness about the importance of identifying risk situations and how to avoid them. Toolbox Talks are the primary method of safety communication in operations facilities.

Progress in reducing and preventing health risks is measured against targets in areas such as prevention of fatalities, investments in working conditions, and safe behavior and mental health programs. Every year, work plans are developed to meet these targets.

Procedures for investigating work-related injuries, health problems, illnesses, and incidents are outlined in the Company's Accident Communication and Investigation Management Standard. Reported injuries and incidents are investigated by a committee of representatives from the Safety department, the CIPA, and representatives from other CBA departments. This group convenes to determine the causes of the incident and agree on actions to be taken to prevent recurrence.

From left to right: Marina Garcia
and Barbara Carolini Oliveira
Ferreira, Employees at Alux (SP)



GRI 403-8.
EMPLOYEES COVERED BY AN OCCUPATIONAL
HEALTH AND SAFETY MANAGEMENT SYSTEM

Number and percentage of all employees and indirect workers who are covered by an occupational health and safety management system

	2021		2022		2023	
	Direct employees	Contractors	Direct employees	Contractors	Direct employees	Contractors
Total number	5,811	2,374	6,639	3,314	6,834	3,969
Individuals covered by an occupational health and safety management system	5,811	2,374	6,639	3,314	6,834	3,969
Percentage of individuals covered by an occupational health and safety management system	100%	100%	100%	100%	100%	100%
Number of employees who are covered by such a system that has been internally audited	5,811	2,374	6,639	3,314	6,834	3,269
Percentage of employees who are covered by such a system that has been internally audited	100%	100%	100%	100%	100%	100%
Number of employees who are covered by such a system that has been audited or certified by an external party	NAv	NAv	NAv	NAv	5,870	3,306
Percentage of employees who are covered by such a system that has been audited or certified by an external party	NAv	NAv	NAv	NAv	86%	83%

Note 1: This disclosure is inclusive of employees and contractors from all businesses and operations, including Niquelândia (GO), Barro Alto (GO) and Legado Verdes do Cerrado (GO).
Note 2: The figures on people covered by a system certified by an external party refer to employees at the Alumínio, Itapissuma, Metalex and mining operations, which are certified to ASI and/or ISO 45001). The data for 2022 have been restated as they did not include data for Energy Business operations. [GRI 2-4]

Health and safety investments (R\$)

	2021	2022	2023
Investments in machinery and equipment modifications	18,000,000	22,627,648	18,303,299
Investments in PPE	6,991,115	7,971,374	8,972,664
Other investments related do health and safety	NAv	800,000	3,582,857
Total	24,991,115	31,399,022	30,858,820

Note: Historical PPE investment figures have been restated. [GRI 2-4]

GRI 403-9.
WORK ACCIDENTS

SASB EM-MM-320A.1, IF-EU-320A.1.
1) MSHA ALL-INCIDENCE RATE,
2) FATALITY RATE,
3) NEAR MISS FREQUENCY
RATE (NMFR) AND
4) AVERAGE HOURS OF HEALTH,
SAFETY, AND EMERGENCY
RESPONSE TRAINING FOR
(A) FULL-TIME EMPLOYEES AND
(B) CONTRACT EMPLOYEES

GRI 403-10.
WORK-RELATED ILL HEALTH

In 2023, there was one case of work-related ill health involving a direct employee, affecting the employee’s shoulder area.

Work-related ill health involving direct employees and contractors

	2021	2022	2023
Number of fatalities as a result of work-related ill health	0	0	0
Number of cases of recordable work-related ill health	0	0	1

Note 1: This disclosure is inclusive of employees and contractors from all businesses and operations, including Niquelândia (GO), Barro Alto (GO) and Legado Verdes do Cerrado (GO).

Note 2: Disclosures are compiled in accordance with NR 7 – Occupational Health Program and CBA’s Health Policy.

CBA-21.
LOST-TIME INJURY FREQUENCY
RATE (LTIFR) AND TOTAL RECORDABLE
INJURY FREQUENCY RATE (TRIFR)

All employees receive training on issues such as safe behavior, interpretations, and regulatory compliance, in line with Brazilian legislation and regulatory standards. In addition, health professionals are trained in internal Occupational Health and Quality of Life standards as well as Pre-Hospital Care and First Aid.

In 2023, the main types of accidents were related to failures in risk assessment, behavioral lapses, unsafe conditions, failure to identify or acknowledge anomalies. On the other side, the main injuries were fractures, bruises, injuries, pinch-point injuries, dislocations, and burns.

The primary hazards reported in 2023 were related to poor housekeeping and trip hazards. The key actions taken in the year to mitigate hazards include improvements to working conditions, instructions on performing tasks, more frequent monitoring of tasks by leadership, routine safety campaigns and providing communications tools and channels to help employees identify and address unsafe situations at the workplace. A management system is in place to map hazards, risks, and the primary control measures for mitigation and/or elimination. Additional programs supporting these practices include Rudimentary Tasks and Anomalies, with investments made to ensure compliance with regulatory standards.

Performance indicators measure the effectiveness of the Occupational Health and Safety Management System and the outcomes of incident investigations. This information is shared with operational functions to support the smooth progress of activities.



Safety figures for direct employees

	2020			2021			2022				2023			
	Aluminum Business	Nickel Business	Total	Aluminum Business	Nickel Business	Total	Aluminum Business	Nickel Business	Energy Business	Total	Aluminum Business	Niquelândia plant	Energy Business	Total
Number of fatalities as a result of work-related injuries	0	0	0	0	0	0	1	0	0	1	0	0	0	0
Rate of fatalities as a result of work-related injuries	0	0	0	0	0	0	0.09	0	0	0.08	0	0	0	0
Number of high-consequence work-related injuries (excluding fatalities)	11	0	11	7	0	7	12	0	0	12	5	0	0	5
Rate of high-consequence work-related injuries (excluding fatalities) (LTIFR)	1.06	0	1.03	0.64	0	0.61	1.04	0	0	0.99	0.39	0	0	0.38
Number of recordable work-related injuries	22	0	22	12	0	12	17	0	0	17	15	1	0	16
Rate of recordable work-related injuries (TRIFR)	2.12	0	2.06	1.11	0	1.04	1.47	0	0	1.40	1.18	6.12	0	1.21
Number of hours worked	10,382,117	308,758	10,690,875	10,857,448	694,529	11,551,977	11,587,683	143,033	387,955	12,118,672	12,694,539	163,423	385,804	13,243,766
Lost days	209	0	209	127	0	127	209	0	0	209	89	0	0	89
Injury severity rate	20.13	0	19.55	11.70	0	10.99	18.04	0	0	17.25	7.01	0	0	6.72
Total frequency rate (lost-time and no-lost-time)	3.09			1.64			2.48				1.59			
Near miss frequency rate (NMFR)	NAv			NAv			2.81				4.53			
Average hours of health, safety, and emergency response training	NAv			NAv			NAv				6.03			

Note 1: This disclosure is inclusive of employees and contractors from all businesses and operations, including Niquelândia (GO), Barro Alto (GO) and Legado Verdes do Cerrado (GO), with the exception of the average number of hours of health and safety and emergency response training, which included 41,240 hours of training on Brazilian Regulatory Standards (NRs) and Permits to Work (PtW) delivered at the Alumínio plant (SP), the Sorocaba facility (SP) and at mining operations.

Note 2: The basis for rate calculation is 1,000,000 hours worked. Disclosures are compiled in accordance with NBR 14280. The injury frequency rate is based on reportable injuries, and “days lost” within the severity rate are measured in calendar days. This disclosure includes level IV and V injuries. The methodologies used drew guidance from the HSE Management Plan Management Standard.

Note 3: In 2023, the total frequency rate (lost-time and no-lost-time injuries) included both direct employees and contractors; the total frequency rate was 1.76 across the Company. This data was first reported in 2022; for this reason, no data is available for previous years.

Note 4: In 2023, the near miss frequency rate included all incidents reported in 2023 (300), involving both employees and contractors, as this data was not reported separately. This disclosure includes all personal incidents with a severity rating of 1 to 5, in accordance with CBA’s Accident and Incident Reporting and Investigation Standard, MS 016. The disclosure was calculated on the basis of 200,000 hours worked. This data was first reported in 2022; for this reason, no data is available for previous years.



Safety figures for contractors

	2020			2021			2022				2023			
	Aluminum Business	Nickel Business	Total	Aluminum Business	Nickel Business	Total	Aluminum Business	Nickel Business	Energy Business	Total	Aluminum Business	Niquelândia plant	Energy Business	Total
Number of fatalities as a result of work-related injuries	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rate of fatalities as a result of work-related injuries	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of high-consequence work-related injuries (excluding fatalities)	4	0	4	0	1	1	3	0	2	5	3	0	2	5
Rate of high-consequence work-related injuries (excluding fatalities) (LTIFR)	1.05	0	0.80	0	0.35	0.13	0.51	0	4.51	0.77	0.48	0	3.60	0.72
Number of recordable work-related injuries	13	0	13	7	2	9	8	0	0	8	9	0	1	10
Rate of recordable work-related injuries (TRIFR)	3.42	0	2.60	1.54	0.69	1.21	1.36	0	0	1.22	1.45	0	1.80	1.44
Number of hours worked	3,802,486	1,207,106	5,009,592	4,545,817	2,896,024	7,441,841	5,879,442	152,820	503,481	6,535,742	6,211,311	195,505	555,569	6,962,385
Lost days	60	0	60	0	3	3	28	0	34	62	46	0	14	60
Injury severity rate	15.78	0	11.98	0	1.04	0.40	4.76	0	67.53	9.49	7.41	0	25.20	8.62
Total frequency rate (lost-time and no-lost-time)	3.39			1.34			1.99				2.15			
Near miss frequency rate (NMFR)	NAv			NAv			2.81				4.53			

Note 1: This disclosure is inclusive of employees and contractors from all businesses and operations, including Niquelândia (GO), Barro Alto (GO) and Legado Verdes do Cerrado (GO).

Note 2: The basis for rate calculation is 1,000,000 hours worked. Disclosures are compiled in accordance with NBR 14280. The injury frequency rate is based on reportable injuries, and “days lost” within the severity rate are measured in calendar days. This disclosure includes level IV and V injuries. The methodologies used drew guidance from the HSE Management Plan Management Standard.

Note 3: In 2023, the total frequency rate (lost-time and no-lost-time injuries) included both direct employees and contractors; the total frequency rate was 1.76 across the Company. This data was first reported in 2022; for this reason, no data is available for previous years.

Note 4: In 2023, the near miss frequency rate included all incidents reported in 2023 (300), involving both employees and contractors, as this data was not reported separately. This disclosure includes all personal incidents with a severity rating of 1 to 5, in accordance with CBA's Accident and Incident Reporting and Investigation Standard, MS 016. The disclosure was calculated on the basis of 200,000 hours worked. This data was first reported in 2022; for this reason, no data is available for previous years.



GRI 401-2.
BENEFITS PROVIDED TO
EMPLOYEES THAT ARE NOT
PROVIDED TO TEMPORARY
OR PART-TIME EMPLOYEES

The benefits provided to CBA employees (both full-time and part-time) are determined by applicable laws and regulations and collective bargaining agreements, and may vary depending on individual needs and location.

The benefits available to employees include:

- Health insurance
- Dental insurance
- Childcare allowance and breast-feeding rooms
- Mobility
- Pension plan
- Employee Assistance Program
- Quality of Life Program
- Cafeteria/meal vouchers
- Grocery packages/grocery vouchers
- Group life insurance
- *Ser Família* Parental Support Program, offering healthcare, extended parental leave (180 days for primary caregivers and 30 days for secondary caregivers), and other benefits for employees and their families

- *Espaço Saúde* (“Health Space”) – A clinic for employees at the Alumínio plant (SP) and Corporate Office (SP), run in partnership with the Syrian-Lebanese Hospital
- Pharmacy discounts through partnerships
- Fitness benefits/Alumínio Athletic Association (SP) membership for employees in this location
- Education and language training grants
- Meal and travel expense reimbursement for business trips
- Executive health check-ups

- Christmas shopping vouchers
- Christmas hampers
- Christmas gifts
- Hybrid work arrangements
- Influenza vaccinations

The Company prioritizes hiring local labor by advertising vacancies in the regions where it operates and has various programs and partnerships with educational institutions for skills development.

CBA-29.
TRAINING AND DEVELOPMENT

Training and development

	2022	2023
Average hours of training and development per employees FTP (Full-Time Equivalent)	24	21
Average spending on training and development per employees FTP (Full-Time Equivalent) (R\$)	855	479

Note: This disclosure includes the Mining sites (MG), Barro Alto (GO), Alumínio (SP) plant, Sorocaba (SP) facility and Corporate Office (SP).

Employee development programs

Program designation and description:	Leadership Journey – focused on supervision	Leadership training on employee development (SELF)
Program objective/business benefits:	Improve leader development and management skills	Equitably manage employee development in line with CBA’s culture
Quantitative impact of business benefits (both monetary and non-monetary)	Employee engagement and improved management	Transparent implementation of employee development processes
Percentage of FTEs (Full-Time Equivalents) participating in the program	99% (more than 165 supervisors)	84.5% (400 leaders)



Community relations

CBA-10. SOCIAL INVESTMENTS

Total investments (R\$)

	2020	2021	2022	2023
Funded by CBA	1,093,438	4,018,727	5,752,091	4,562,780
Funded by Instituto Votorantim	1,263,000	0	0	0
CBA-funded as a regulatory requirement	0	0	128,984	160,000
Funding raised from the Votorantim Institute	147,000	704,487	2,041,787	2,885,681
Externally sourced	0	0	294,470	198,925
VSA COVID-19 Fund	5,200,000	450,000	0	0
CBA Match Funding for COVID-19 Response	2,100,000	636,892	0	0
Tax-deducted funds	600,000	0	516,590	1,858,351
Total investment	10,403,438	5,810,105	8,733,922	9,665,737

Note 1: The projects that are continuations of the initiatives started during the pandemic have been reallocated to other areas of investment.

Note 2: All operations with social investment in the year are included in this disclosure, including Barro Alto (GO), Niquelândia (GO), the Salto Pilão HPP and the Barra Grande HPP.

Dirce Bueno Oliveira,
participant of the
Empreende Mulher program

GRI 413-1.
OPERATIONS WITH LOCAL COMMUNITY ENGAGEMENT,
IMPACT ASSESSMENTS, AND DEVELOPMENT PROGRAMS

CBA-30.
LOCAL EMPLOYMENT

In 2023, CBA carried out 60 social investment initiatives in its communities. CBA defines its annual project portfolio based on its social agenda and a long-term social development plan for the areas where it operates. These are developed based on social and economic assessments indicating strengths and weaknesses, validated with local communities; the levers and commitments in the Company’s 2030 ESG Strategy; and the Company’s potential contribution to building a positive social legacy in the areas where it operates.

As part of its commitments related to this area, the Company:

- Actively supports public programs and sustainable development agendas.
- Seeks transparent communication with communities, valuing their local role and strengthening civil-society organizations.
- Prioritizes enabling initiatives that resonate with local strengths and are more likely to generate local interest and engagement.

- Establishes indicators, and tracks, evaluates, and communicates results of its initiatives.
- Guided by respect and transparency, assesses municipal needs, utilizes social investment to engage with the local community, and conducts human rights due diligence.
- Observes local laws and regulations and ensures prior, free, and informed consent as applicable.
- Monitors community relations, mitigating impacts in accordance with its crisis management policy.
- Supports local diversity initiatives whenever feasible.

CBA launched a training program for individuals without a high school diploma in partnership with other companies. This initiative involved collaborations with a specialized education provider and the Center for Metalworker Training and Education (CEPAM) in Alumínio (SP), with a goal of preparing participants to obtain their high school diploma and prepare for the National Youth and Adult Skills and Exam (ENCCEJA).



Michele Santos, Mirella Martins and Rayssa Gabriely, Participants of the Volunteering Challenge, Alumínio (SP) plant



Percentage of operations with implemented local community engagement, impact assessments, and/or development programs

	2020	2021	2022	2023
Total number of operations	13	13	32	32
Total operations with programs implemented	8	8	15	15
Percentage of operations with programs implemented	62%	62%	47%	47%
Total municipalities covered by operations with programs implemented	NAv	NAv	27	28
Percentage of development programs supported by community consultations	NAv	NAv	90%	93%

Note 1: All operations with social investments are covered by this disclosure, including Barro Alto, Salto Pilão HPP and Barra Grande HPP, which have reported on projects implemented during the year.

Note 2: Local community engagement programs cover the area of influence of the Company's operations.

Note 3: Data on the total number of municipalities covered by the programs and the percentage of programs that underwent community consultation processes are not available for 2022 and 2021.

Types of local community engagement, impact assessments, and development programs

	2020	2021	2022	2023
Local community development programs based on local communities' needs	NAv	NAv	59	60
Stakeholder engagement plans based on stakeholder mapping	NAv	NAv	1	1

Note 1: This disclosure includes all CBA operations that had social projects implemented.

Note 2: Data on development programs is not available for previous years.

GRI 413-2. OPERATIONS WITH SIGNIFICANT ACTUAL AND POTENTIAL NEGATIVE IMPACTS ON LOCAL COMMUNITIES

CBA has procedures in place for evaluating its social and environmental aspects and impacts across all its units and appropriate controls for monitoring identified impacts, with only the risk of dam rupture being considered a potentially significant impact, despite its low probability of occurrence. The Company also conducts noise and vibration monitoring around its

operations, meeting the parameters established by legislation. Additionally, it assesses the impacts of potential operation decommissioning and the economic dependency of communities for its social activities.

Dam risks are mapped, and emergency plans are made publicly available on the [Company's website](#).

Emergency plan drills are conducted annually involving the community and other stakeholders. Specifically, in the case of an emergency involving the Palmital (SP) Dam, an Enterprise Communication Plan (ECP) has been developed to establish guidelines for dialogue with the community and coordinated preparations among the industry, authorities, and the local population.

[CLICK HERE](#)
Read more about the initiatives on dams management



Environmental protagonism

SASB EM-MM-160A.1. DESCRIPTION OF ENVIRONMENTAL MANAGEMENT POLICIES AND PRACTICES FOR ACTIVE SITES

CBA has specific operational procedures and management standards aimed at standardizing activities and optimizing processes. Operational procedures define control measures to prevent leaks and spills and establish response procedures should they occur. General standards, in turn, outline methods for evaluating, identifying, investigating, and monitoring environmental aspects, classify incident levels, and designate the team responsible for the investigation to identify root causes and take necessary measures to address the issue and prevent recurrence.

The Company's Environmental Management Plan applies to the Aluminum and Energy businesses, with guidelines based on standards, laws, regulations, and specific codes on mergers and acquisitions, biodiversity and ecosystem services, environmental aspects and impacts, management of waste and co-products, water and effluents, air emissions, air quality, and compliance. To ensure compliance with the International Finance Corporation (IFC) Performance Standards, the Company has related policies and practices in place at the corporate level.

Performance Standard 1, on Assessment and Management of Environmental and Social Risks and Impacts, is addressed through ISO 14001 certification, the Aluminium Stewardship Initiative (ASI), and internal standards established in Aluminum Business operations to meet requirements relating to the environment, identification of risks and impacts, management programs, organizational capacity and competency, emergency preparedness and response, stakeholder engagement, and monitoring and review of social and environmental impacts.

To comply with Performance Standard 3, on Resource Efficiency and Pollution Prevention, CBA employs process practices and technologies to prevent environmental pollution in its furnaces, recovers process waste, ensures compliance with applicable regulations through the IUS Natura legislation system, and ensures all licenses and license covenants are met to continue its operations.

The Organization also assesses health and safety risks and impacts and proposes mitigation measures to align with Performance Standard 4, on Community Health, Safety, and Security.

CBA's corporate policies and practices align with Performance Standard 6, on Biodiversity Conservation and Sustainable Management of Living Natural Resources, including its requirements on using the mitigation hierarchy, preventing the accidental or deliberate introduction of exotic species, protecting and conserving biodiversity, maintaining benefits from ecosystem services, and promoting the sustainable management of natural resources by adopting practices that integrate both conservation needs and development priorities.



Regarding decommissioned operations, such as closed bauxite mines, the Company employs a continuous and progressive environmental rehabilitation process as mining advances to a new area, reclaiming the land for social and economic use. Each mine’s environmental rehabilitation plan is developed collaboratively with the surface landowner to agree on terms and sign the easement agreement.

Mine closure and environmental rehabilitation activities are outlined in specific work plans that are annually updated as additional areas are depleted. These plans also establish targets and performance indicators that are disclosed in reports and filed with environmental agencies. Environmental rehabilitation activities draw guidance from best environmental and social practices and technical standards, and typically include re-sloping of the land to integrate the terrain with the surrounding landscape, soil preparation and correction, planting, fertilization, and continued maintenance activities to ensure successful rehabilitation.

Prompt reclamation of the site to productive and/or ecosystem use post-mining is beneficial to the community and sustainable in the long term. CBA’s practice is to provision resources to fully address all stages of environmental rehabilitation and annually update its Memorandum of Expenses on Reclamation, Environmental Rehabilitation, and Forest Offsets, covering at least a five-year horizon.

CBA-22.
DISTURBED AND REHABILITATED LAND
AND SITES IDENTIFIED AS REQUIRING
DIVERSITY MANAGEMENT PLANS

In 2023, CBA mined bauxite from land previously utilized for a variety of land uses and, following the mining period, reclaimed the land to its original land use. The quantity of mined and naturally rehabilitated areas fluctuates due to variations in the natural

characteristics of ore bodies. The data exhibit a typical fluctuation from one period to another, influenced by the time it takes for each ore body to be exhausted, which varies based on the extent and depth of the ore deposits. CBA’s three mining operations (Miraí, Poços de Caldas, and Itamarati de Minas, all located in Minas Gerais) were identified as requiring a Biodiversity Management Plan; all three operations have such a plan in place.

Amount of disturbed or rehabilitated land (hectares)

	Miraí (MG)				Poços de Caldas (MG)				Itamarati de Minas (MG)			
	2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023
Total land disturbed and not yet rehabilitated at the start of the reporting period	29.07	35.52	22.12	23.16	55.32	34.25	11.53	14.59	0.00	0.00	0.00	0.00
Amount of land newly disturbed within the reporting period	21.42	28.75	37.82	47.60	3.26	12.92	12.63	14.45	0.00	0.00	0.00	0.00
Total amount of land newly rehabilitated within the reporting period	14.97	43.13	35.86	61.00	24.35	35.65	9.58	17.70	2.41	1.40	18.20	1.56
Total land disturbed and not yet rehabilitated at the end of the reporting period	35.52	21.14	24.08	9.76	34.23	11.53	14.58	11.34	0.00	0.00	0.00	0.00

Note: As this is a sectoral disclosure, it includes CBA’s mining operations only.

CBA-23.
RETURN ON ENVIRONMENTAL INVESTMENT

Financial data for enterprise-wide or
business-specific projects and programs (R\$)

	2020	2021	2022	2023
Capital expenditure	78,263,222	88,377,330	187,135,220	237,442,456
Operating expenses	42,449,125	49,607,465	92,515,894	74,506,133
Total expenditure (capital expenditure + operating expenses)	120,712,346	137,984,796	279,651,114	311,948,589
Economies (cost savings, revenue, tax incentives, etc.)	31,790,096	33,881,264	36,241,199	67,247,000

Note 1: This disclosure includes the Aluminum and Energy businesses. The economies considered in this disclosure are revenue streams from the sale of co-products and dross.
Note 2: Until 2022, the "Economies" data only included the Alumínio (SP) plant, and starting from 2023, it began to incorporate the data from Metalex (SP) and Itapissuma (PE) plant, hence the significant increase.

GRI 305-1.
DIRECT (SCOPE 1) GHG EMISSIONS

SASB EM-MM-110A.1, IF-EU-110A.1.
GROSS GLOBAL SCOPE 1 EMISSIONS,
PERCENTAGE COVERED UNDER
EMISSIONS-LIMITING REGULATIONS

Direct (Scope 1) GHG emissions

	2020		2021		2022		2023	
	thousand tCO ₂ e	% of scope	thousand tCO ₂ e	% of scope	thousand tCO ₂ e	% of scope	thousand tCO ₂ e	% of scope
Stationary combustion	284.7	27%	258.4	22%	283.7	21%	271.4	20%
Mobile combustion	15.3	1%	17.3	2%	20.4	2%	18.3	1%
Fugitive emissions	4.2	0%	4.7	0%	5.5	0%	5.9	1%
Industrial processes	759.6	71%	872.1	76%	1,046.2	77%	1,058.1	78%
Agricultural activities	0.1	0%	0.1	0%	0.1	0%	0.2	0%
Land-use change	NAv	NAv	NAv	NAv	1.4	0%	4.4	0%
Waste (solid waste + effluents)	0.0	0%	NAv	0%	0.0	0%	0.0	0%
Total scope 1 emissions	1,063.9	99%	1,152.6	100%	1,357.3	100%	1,358.3	100%
Biogenic CO ₂ emissions (Scope 1)	2.3	NAv	2.7	NAv	2.9	NAv	8.4	NAv
Biogenic CO ₂ removals (Scope 1)	11.9	NAv	4.2	NAv	1.5	NAv	0.5	NAv

Note 1: CBA's Sorocaba (SP) facility, Corporate Office (SP) and Caxias do Sul (RS) distribution center are not considered this disclosure as their emissions are negligible.
Note 2: All greenhouse gases are included in the calculation (CO₂, CH₄, N₂O, HFCs, PFCs, SF₆, and NF₃). The consolidation approach for emissions was operational control.

GRI 305-2.
ENERGY INDIRECT (SCOPE 2) GHG EMISSIONS

SASB IF-EU-110A.2.
GREENHOUSE GAS (GHG) EMISSIONS
ASSOCIATED WITH POWER DELIVERIES

Indirect (Scope 2) emissions - location approach*

Category	2020		2021		2022		2023	
	thousand tCO ₂ e	% of scope	thousand tCO ₂ e	% of scope	thousand tCO ₂ e	% of scope	thousand tCO ₂ e	% of scope
Electricity	333.4	97%	774.4	97%	264.2	95%	235.0	94%
Transmission and distribution losses	7.1	2%	18.2	2%	6.9	2%	7.1	3%
Purchased heating	5.2	1%	7.0	1%	6.8	2%	7.1	3%
Total scope 2 emissions (location-based)	345.6	100%	799.5	100%	277.9	100%	249.2	100%

Indirect (Scope 2) emissions - market-based approach*

Category	2020		2021		2022		2023	
	thousand tCO ₂ e	% of scope	thousand tCO ₂ e	% of scope	thousand tCO ₂ e	% of scope	thousand tCO ₂ e	% of scope
Electric energy	66.0	91%	0.0	0%	0.0	0%	0.0	0%
Transmission and distribution losses	1.3	2%	0,0	0%	0.0	0%	0.0	0%
Purchased heating	5.1	7%	7.0	100%	6.8	100%	7.1	100%
Total scope 2 emissions	72.4	100%	7.0	100%	6.8	100%	7.1	100%
Biogenic CO ₂ emissions (Scope 2)	266.2	NAv	369.5	NAv	397.8	NAv	416.3	NAv

* Note 1: CBA's Sorocaba (SP) facility, Corporate Office (SP) and Caxias do Sul (RS) distribution center are not considered this disclosure as their emissions are negligible.
Note 2: All greenhouse gases are included in the calculation (CO₂, CH₄, N₂O, HFCs, PFCs, SF₆, and NF₃). The consolidation approach for emissions was operational control.
Note 3: Specific emissions for energy supply are equal to zero.

GRI 305-3.
OTHER INDIRECT (SCOPE 3) GHG EMISSIONS

Indirect (Scope 3) GHG emissions

	2020		2021		2022		2023	
	thousand tCO ₂ e	% of scope	thousand tCO ₂ e	% of scope	thousand tCO ₂ e	% of scope	thousand tCO ₂ e	% of scope
Category 1 – Goods and services purchased	1,400.2	94%	2,052.2	85%	971.3	70%	917.1	68%
Category 3 – Fuel- and energy-related activities not included in Scope 1 or Scope 2	67.6	5%	36.9	2%	51.1	4%	48.5	4%
Category 4 – Transportation and distribution (upstream)	22.2	1%	79.7	3%	93.7	9%	144.2	11%
Category 6 – Business travel	NAv	NAv	0.1	0%	0.4	0%	0.4	0%
Category 9 – Transportation and distribution (downstream)	NAv	NAv	31.6	1%	42.0	3%	34.2	3%
Category 10 – Reprocessing of sold products	NAv	NAv	208.2	9%	191.1	14%	194.1	14%
Total scope 3 emissions	1,490.0	100%	2,408.7	100%	1,349.6	100%	1,338.5	100%
Biogenic CO ₂ emissions (Scope 3)	2.6	NAv	11.5	NAv	12.8	NAv	18.8	NAv

Note 1: CBA's Sorocaba (SP) facility, Corporate Office (SP) and Caxias do Sul (RS) distribution center are not considered this disclosure as their emissions are negligible.
Note 2: All greenhouse gases are included in the calculation (CO₂, CH₄, N₂O, HFCs, PFCs, SF₆, and NF₃). The consolidation approach for emissions was operational control.

GRI 305-5.
REDUCTION OF GHG EMISSIONS

CBA has been paying special attention to the procurement of ingots in the market, achieving a satisfactory reduction in the average carbon footprint of the ingots purchased year by year. Comparing to 2022, CBA achieved a reduction of 16,322.5 metric tons of carbon from the ingot purchase (specially from Alux and Itapissuma).

GRI 305-6.
EMISSIONS OF OZONE-DEPLETING SUBSTANCES (ODS)

R22 refrigerant gas (also known as HCFC22) is a permitted import with prior consent under the Montreal Protocol, although CBA does not produce, import or export ODSs. In 2023, CBA used a total of 1,386.7 kg of R22.

CBA-24.
PERFLUOROCARBONS EMISSIONS

PFC emissions

	2020	2021	2022	2023
PFC-14 (metric tons)	24.0	29.4	53.3	59.1
PFC-116 (metric tons)	1.6	1.9	3.5	3.9
Total PFC (metric tons)	25.6	31.3	56.8	63.0
PFC emissions intensity (kg PFC/metric ton of liquid aluminum)	0.08	0.10	0.16	0.19

Note: Only the Alumínio (SP) plant generates perfluorocarbon (PFC) emissions in the smelting stage. Issues involving raw material instability in the Smelters in 2023 resulted in anode effects, leading to higher PFC emissions.

GRI 305-7.
NITROGEN OXIDES (NOx), SULFUR OXIDES (SOx), AND OTHER SIGNIFICANT AIR EMISSIONS

SASB EM-MM-120A.1, IF-EU-120A.1.
NOx (EXCLUDING N2O), (3) SOx, PARTICULATE MATTER (PM10), LEAD (Pb), AND MERCURY (Hg)

TNFD

At the Alumínio (SP) plant, air emissions are reported annually in stack monitoring reports. Air emissions in CBA's Alux (SP), Metalex (SP) and Itapissuma (PE) operations are sampled every two years, following an established schedule. Data reported in 2023 is from the most recent sampling taken in 2022. The next sampling is scheduled for 2024.

Significant air emissions (metric tons)

	2020	2021	2022	2023
NOx	325	133	429	293
SOx	36	34	42	36
Persistent Organic Pollutants (POP)	0	0	0	0
Volatile Organic Compounds (VOCs)	8	0	13	13
Particulate Matter (PM)	938	995	1,119	1,071
Total fluoride	172	170	188	165

Note 1: This disclosure includes the Company's Alumínio (SP), Alux (SP), Itapissuma (PE) and Metalex (SP) operations. In the Energy business, the only input used to produce energy in hydroelectric dams is water. These operations therefore produce no significant amounts of air emissions reported within this disclosure. The Mirai, Poços de Caldas and Itamarati de Minas mines in Minas Gerais do not have large flue stacks and therefore do not generate significant air emissions. Some emissions, however, are generated by burning fuel in mobile equipment. For further information, refer to the energy consumption disclosures.

Note 2: Most information was compiled from sampling reports generated for each operation's emissions sources and equipment.

Note 3: CBA's operations are not monitored for hazardous air pollutants (HAP), mercury, lead and ammonia.

GRI 3-3.
MATERIAL TOPIC: RENEWABLE
ENERGY AND ENERGY EFFICIENCY

All CBA operations are supplied with renewable electricity generated by wholly or jointly owned facilities, or purchased electricity supported by renewable energy certificates, if or when necessary.

In all operations, vehicles and mobile equipment utilize fuels such as diesel, gasoline, ethanol, and LPG, with ongoing campaigns aimed at reducing consumption.

In **Mining** operations, the largest energy consumers are bauxite processing plants. Besides purchased electricity, some facilities have solar panels, such as the trailers used as support bases at the mine faces in Poços de Caldas (MG), and siren towers and instrumentation systems at the Mirai dam (MG).

At **Alumínio (SP), Metalex (SP), Alux (SP)** and **Itapissuma (PE)**, energy management is supported by a corporate ESG target for energy efficiency as an incentive for new projects

and process improvements. In addition to electricity, natural gas is another significant energy source in many processes. In these operations, natural gas consumption is monitored on a daily basis, and administrative and engineering measures are identified to optimize consumption, such as furnace and gas system upgrades and projects.

Within the **Energy Business**, energy consumption is minimal and is monitored through internal controls at the hydropower plants and Generation Operation Center (GOC). Electricity is supplied from Company-owned generation assets, generator sets, or the grid.

GRI 302-1.
ENERGY CONSUMPTION WITHIN THE ORGANIZATION

SASB EM-MM-130A.1.
(1) TOTAL ENERGY CONSUMED, (2) PERCENTAGE
GRID ELECTRICITY, (3) PERCENTAGE RENEWABLE

CBA-41.
ENERGY CONSUMPTION

Energy consumption within the organization, by source (thousand MWh)

	2020			2021			2022				2023		
	Aluminum Business	Nickel Business	Total	Aluminum Business	Nickel Business	Total	Aluminum Business	Nickel Business	Energy Business	Total	Aluminum Business	Energy Business	Total
Consumption of fuels from renewable sources	753	0	753	887	0	887	844	0	0	845	887	0	887
Electricity consumption (100% renewable)	5,391	9	5,401	6,118	8	6,127	6,318	6	40	6,365	6,219	56	6,275
Total consumption of renewable energy (fuel and electricity)	6,144	9	6,154	7,005	8	7,014	7,162	6	40	7,210	7,106	56	7,162
Consumption of fuels from non-renewable sources	1,399	2	1,401	1,429	3	1,433	1,623	4	1	1,628	1,582	1	1,583
Total energy consumption within the organization (renewable and non renewable)	7,543	12	7,554	8,435	12	8,446	8,786	10	42	8,838	8,687	58	8,745

Note 1: The inputs are the same as used for calculating CO2e emissions using the GHG Protocol tool. The conversion factors available each year were used.
Note 2: The Energy Business sold 2,040 Mwh of surplus electricity in 2022, and 4,310 MWh in 2023.



GRI 302-2.
ENERGY CONSUMPTION
OUTSIDE OF THE ORGANIZATION

Energy consumption outside the Company relates to electricity consumed by suppliers and business partners supporting the Company’s operations. Related emissions are described in scope 3 of CBA’s emissions inventory.

GRI 302-5.
REDUCTIONS IN ENERGY
REQUIREMENTS OF
PRODUCTS AND SERVICES

There were no reductions in energy requirements of products and services sold.

Energy consumption outside the organization (thousands of GJ)

	2022	2023
Activities related to fuel and energy not included in scopes 1 and 2	NAv	5,730
Transportation and distribution (upstream)	NAv	1,864,346
Business travel	NAv	6
Transportation and distribution (downstream)	23,251	501,971
Total consumption outside of the Organization	23,251	2,372,053

Note 1: In 2022, data was estimated based on the distance traveled by products sold by CBA to its customers. In 2023, Scope 3 inventory data was used as the basis for calculating the indicator, hence the increase in total energy consumed.

Note 2: Upstream considers emissions from the transportation of raw materials and productive inputs acquired by CBA. Downstream considers the transportation of CBA’s products to its customers.

SASB IF-EU-000.E.
TOTAL WHOLESALE ELECTRICITY PURCHASED

Total wholesale electricity purchased (MWh)

2020	2021	2022	2023
3,781,838	4,029,486	3,727,054	4,096,327



GRI 3-3.
MATERIAL TOPIC: BIODIVERSITY
AND ECOSYSTEM SERVICES

GRI 304-2.
SIGNIFICANT IMPACTS OF ACTIVITIES,
PRODUCTS, AND SERVICES ON BIODIVERSITY

CBA-37.
BIODIVERSITY RISK ASSESSMENT

The tangible and positive impacts from CBA's operations on biodiversity and ecosystem services include renewable energy, implementation of environmental protection programs, reforestation efforts, biodiversity preservation initiatives, and investments in conserving springs and native forests.

Conversely, negative impacts may include emissions, noise pollution, vegetation clearing, disruption of aquatic species migration, and degradation of soil, water, and air quality. The Company is committed to mitigating these risks and effectively managing any environmental incidents.

From an economic perspective, CBA contributes to the sustainability of the regions where it operates by enhancing land value, creating local income opportunities, and participating in carbon sequestration markets. On the social front, the Company seeks to disseminate technical knowledge, raise environmental awareness, and support the development of local communities.

CBA has implemented a range of measures to effectively manage biodiversity and ecosystem services. Protected areas are regularly monitored to ensure their health and preservation. In addition, the Company takes proactive prevention, monitoring, and control measures to ensure compliance with regulations and preserve biodiversity.

Employees also receive online training on related topics, such as Environmental and Mining Training and the ESG Track, accessible via the e-CBA platform.

In the Company's **Mining** operations, every stage of bauxite mining and processing is governed by a robust control and monitoring plan. Some significant positive impacts, whether direct or indirect, on biodiversity resulting from mining activities include the reclamation of mined land, increased diversity of fauna and flora species, reduction of invasive species, pests, and pathogens, and the establishment or expansion of wildlife corridors. Conversely, negative impacts may involve reductions in fauna and flora species (during the mining process), habitat loss and conversion, proliferation of invasive species, pests, and pathogens, and alterations in soil, water, and air quality. Creating a new mine face requires clearing vegetation and stripping overburden to access the underlying ore; however, CBA's mining operations also have positive impacts, with CBA rehabilitating mined land into the same or better condition than before it was mined. This process of environmental rehabilitation and ecological restoration is ongoing and progresses with the pace of mining activities. As part of offsets in connection with the Company's mining activities, CBA plants native species that form new forests in the region.

At the **Alumínio (SP) plant**, erosion regulation was identified as a potential positive impact. Potential negative impacts identified in assessments of ecosystem services include regulation of air quality, regional and local climate, water quality, and water purification and waste treatment. These same impacts were also identified at Metalex (SP), Alux (SP), and Itapissuma (PE). A Biodiversity and Protected Areas Action Plan has been developed that includes fauna and flora monitoring, biennial environmental assessments, environmental offsets for cleared vegetation, and a biodiversity-focused environmental education program.

At **Metalex (SP)**, two new facilities were added to the site in 2023—a scrap treatment line and a Processing and Recycling Center—and although both projects were developed in areas that were already paved, they nevertheless create certain impacts, such as noise. Similar to the Alumínio plant, Metalex conducts a biennial environmental assessment of surrounding vegetation to assess impacts on animal populations, native vegetation, and bioindication of environmental health.

At **Alux (SP)**, there was no habitat conversion or change in land use. Neither were any changes identified in ecological processes outside the natural range of variation.

In **Itapissuma (PE)**, a Fauna and Flora Assessment was conducted in 2020 and 2021. Most impacts are reversible provided appropriate preservation measures are taken. A review of the fauna and flora assessment is scheduled for 2024 to gather information to support decision-making regarding biodiversity conservation activities.



In the **Energy Business**, as in any hydroelectric project, dams are built to impound the water head required to generate electricity. These structures cause some impacts on fish populations; in order to minimize and mitigate these impacts, all related initiatives are ensured to be compliant with applicable legal requirements. Examples of these measures include the construction of fish ladders at all new dams, manual translocation, and fish population monitoring. During maintenance on some dam structures where there is a risk of fish becoming trapped, the Company engages a specialized firm to retrieve and then release trapped fish.

Biodiversity risk assessments at CBA use the methodology outlined in “The Corporate Ecosystem Services Review: Guidelines for identifying business risks and opportunities arising from ecosystem change,” published by the World Resources Institute (WRI). These assessments are carried out on operations owned by the Company, currently in the Poços de Caldas (MG), Zona da Mata (MG), Alumínio (SP), Metalex (SP), Alux (SP), Itapissuma (PE), and Energy Business operations. The ecosystem services assessment process considers risks related to biodiversity dependence and biodiversity impact.

Risk assessments are conducted using an Aspect and Impact Matrix that identifies and classifies impacts on biodiversity, informing control measures. CBA also has a Management Plan for the Morro Grande Private Natural Heritage Reserve (RPPN), under the responsibility of the Poços de Caldas (MG) mine operation, and conducts studies toward preventing and

minimizing impacts on biodiversity. These measures are part of a continuous effort to preserve flora and fauna and promote a culture of sustainability and environmental responsibility among employees and the local community.

Measures taken at each site are monitored using dedicated systems and indicators, ensuring compliance with operating license covenants. The Ecosystem Services Assessment spreadsheet evaluates the effectiveness of measures aimed at priority ecosystem services. Under the Company’s Biodiversity

and Protected Areas Action Plan, effectiveness assessments are required throughout execution of the plan. CBA’s Biodiversity Program, which monitors fauna and flora, uses indicators such as the percentage of vegetation cover, number of individuals per hectare, and number of regenerating individuals per area. In Mining operations, legal requirements related to biodiversity are managed using a dedicated software system. The Company also uses software for online management of key performance indicators (KPIs) related to strategic planning and environmental covenant management.



Legado Verdes do
Cerrado Reserve (GO)



Legado Verdes do
Cerrado Reserve (GO)

GRI 304-1. OPERATIONAL SITES OWNED, LEASED OR MANAGED IN OR ADJACENT TO PROTECTED AREAS AND AREAS OF HIGH BIODIVERSITY VALUE OUTSIDE PROTECTED AREAS

In 2023, the combined area of CBA's operational sites within or adjacent to protected areas and areas of high biodiversity value was 51.7 km².

CBA's **Mining** operations, including mine facilities and offices, are located in the cities of Poços de Caldas, Mirai, and Itamarati de Minas, all in Minas Gerais. The Poços de Caldas mine, with land owned and managed by CBA, hosts a 425 hectare Private Natural Heritage Reserve (RPPN) and protected area named RPPN Morro Grande, within a terrestrial ecosystem. While the Mirai mine lies outside the boundaries of protected areas, it has adjacent areas designated as protected areas and legal reserves. Similarly, the Itamarati de Minas mine is situated outside the boundaries of protected areas, yet it adjoins protected areas owned by CBA.

In 2002, CBA established the Boa Esperança and São Lourenço sustainable use reserves in the municipalities of Descoberto and Itamarati de Minas, both in Minas Gerais. Collectively, these areas cover 304 hectares and support over 200 species of fauna and flora, some of which are endangered, such as the jaguarundi, howler monkey, sassafras cinnamon, and Brazilian rosewood.

In **Alumínio**, São Paulo State, CBA operates its largest aluminum production facility. This facility is located on land owned, leased, and managed by CBA, adjacent to protected areas and legal reserves that are compliant with Brazilian laws and regulations.

The **Itapissuma** rolling mill (PE) is situated along Highway PE-035 in the state of Pernambuco, including both land owned and managed by CBA. The site is located adjacent to and within a protected area called Santa Cruz. The east side of the area is bounded by the Santa Cruz River, which traverses Itamaracá Island. The Santa Cruz estuary is one of the most important

coastal ecosystems in the state of Pernambuco, with its abundant biodiversity and primary and secondary productivity giving it high environmental, social and economic significance. In addition, fragments in the neighboring municipality of Igarassu are deemed priority areas for global bird conservation; these are located approximately 20km from the Itapissuma site.

Within the **Energy Business**, the França, Fumaça, Barra, Porto Raso, Alecrim, Serraria and Jurupará hydroelectric power plants are in the buffer area or inside the Jurupará State Park (SP), a protected area. They are also located adjacent to the Serra do Mar protected area, classified as a "Sustainable Use Conservation Unit". The Salto do Iporanga plant is nestled within the Carlos Botelho State Park, an area adjoining a protected area. The Itupararanga (SP) plant is located within the Itupararanga protected area and its reservoir is situated within a "Sustainable Use Conservation Unit."

Note: The Alux (SP) and Metalex (SP) operations are not situated within or adjacent to protected areas and areas of significant biodiversity outside of environmental protection areas.



Legado das
Águas Reserve
(SP), Reservas
Votorantim



GRI 304-4.
IUCN RED LIST SPECIES AND NATIONAL
CONSERVATION LIST SPECIES WITH HABITATS
IN AREAS AFFECTED BY OPERATIONS

Total number of IUCN Red List species and national conservation list species with habitats in areas affected by the operations of the organization, by level of extinction risk

	2023							
	Aluminum Business							Energy Business
	Alumínio plant	Alux	Itapissuma	Metalex	Mine – Mirai	Mine – Itamarati de Minas	Mine – Poços de Caldas	
Critically endangered	1	0	0	1	NAv	NAv	NAv	0
Endangered	5	0	0	1	NAv	NAv	NAv	10
Vulnerable	11	0	4	3	NAv	NAv	NAv	7
Near threatened	5	0	2	3	NAv	NAv	NAv	4
Least concern	314	0	0	116	NAv	NAv	NAv	0

Note 1: In 2023, the scope of this disclosure was revised and, for this reason, data from previous years are no longer available. The total is not presented to avoid duplicate species. [GRI 2-4]

Note 2: At the Alumínio plant (SP), fauna and flora sampling is conducted every two years. The data in this disclosure is from the most recent sampling taken in 2022. The next sampling is scheduled for 2024. Data for Metalex (SP) was taken from an Environmental Technical Report prepared in 2021, which will be revised in 2024. For Itapissuma (PE), data was compiled from a 2021 study that will be revised in 2024. No vegetation was cleared in Mining operations in 2023. For this reason, no surveys of national conservation list species were performed, and therefore this data is not available. Within the Energy Business, the data refer to the Salto do Rio Verdinho hydroelectric power plant (GO) and were obtained from wildlife reports. The Sobragi (MG) plant and the Paranapanema (SP) complex have no red-listed species. At the Juquiá (SP) and Sorocaba (SP) complexes, no wildlife sampling has yet been conducted and therefore no data is available.

SASB EM-MM-160A.3.
PERCENTAGE OF (1) PROVED AND
(2) PROBABLE RESERVES IN OR NEAR SITES
WITH PROTECTED CONSERVATION STATUS
OR ENDANGERED SPECIES HABITAT

SASB EM-MM-210A.1.
PERCENTAGE OF (1) PROVED
AND (2) PROBABLE RESERVES IN
OR NEAR AREAS OF CONFLICT

SASB EM-MM-210A.2.
PERCENTAGE OF (1) PROVED
AND (2) PROBABLE RESERVES IN
OR NEAR INDIGENOUS LAND

CBA is not aware of proved or probable reserves in Miraf (MG) or Barro Alto (GO) that are located in or near sites with protected conservation status or endangered species habitat, in areas of conflict, or in or near indigenous lands.

Information on proved or probable reserves has been compiled from an independent report developed in accordance with the JORC Code in 2012. The report, prepared by SRK Consultores do Brasil Ltda., provided estimates of mineral and ore reserves in CBA's bauxite deposits in Miraf and Barro Alto. Measured and indicated resources were converted into proven and probable resources by applying modifying factors related to the economic feasibility of the deposit, the mining methods and environmental factors, such as excluding reserves in areas containing native vegetation and protected areas.

Note 1: Reference for sites with protected conservation status: protected areas designated by the International Union for Conservation of Nature (IUCN) (categories I-VI); Ramsar Convention wetlands; UNESCO World Heritage sites; UNESCO MaB Program; European Union Natura 2000 Network; World Database on Protected Areas; mapped on ProtectedPlanet or meeting the IUCN definition of a protected area: "A protected area is a clearly defined geographical space, ecognized, dedicated and managed, through legal or other effective means, to achieve the long term conservation of nature with associated ecosystem services and cultural values." Reference for sites with endangered species habitat: IUCN Red List species classified as Critically Endangered (CR) or Endangered (EN). Reserves are considered close when they are within five kilometers of the boundary of an area of protected conservation status or endangered species habitat.

Note 2: Based on Interministerial Ordinance No. 60, dated 3/24/2015, which establishes administrative procedures governing the activities of the National Indian Foundation (FUNAI), the Palmares Cultural Foundation (FCP), the National Institute of Historic and Artistic Heritage (IPHAN), and the Ministry of Health, in environmental licensing processes at the Brazilian Institute of the Environment and Renewable Natural Resources (IBAMA), a standard buffer of 10 kilometers has been adopted for all facilities for the purpose of human rights to diligence, regardless of which state the facility is located in.

Note 3: Definition of conflict area: as defined in the Uppsala Conflict Data Program (UCDP), a conflict is deemed to be active if there are at least 25 battle-related deaths per calendar year in one of the conflict's dyads. Reserves are considered to be within or near an active conflict area if they are located in the same state as the active conflict.



Legado das Águas reserve,
Reservas Votorantim (SP)



Legado Verdes do
Cerrado Reserve (GO)

CBA-31.
BIODIVERSITY EXPOSURE & ASSESSMENT

Out of the 26 locations where the company operates, impact assessments on ecosystem services were conducted in 24 sites, representing 27,143 hectares assessed, which is nearly 100% of the operational area considered.

Assessment of operations to determine their level of exposure to biodiversity in areas used for operational activities, and potential impacts on that biodiversity, in 2023

Level	Number of locations	Area (hectares)
Number and total area of sites used for operational activities	26	27,266
Number and total area of sites in which the Company has performed biodiversity impact assessments in the last five years	24	27,143
Number and total area of sites assessed in the last five years that are near critical biodiversity	0	0
Number and total area of sites near critical biodiversity that have a biodiversity management plan	0	0

Note: This disclosure includes the following operations: Alumínio (SP), Mirai (MG), Itamarati de Minas (MG), Poços de Caldas (MG), Barro Alto (GO), Itapissuma (PE), Metalex (SP), Alux (SP), Sorocaba (SP), as well as hydropower operations Alecrim HPP, Barra HPP, Fumaça HPP, França HPP, Porto Raso HPP, Serraria HPP, Salto do Iporanga HPP, Itupararanga HPP, Jurupará HPP, Santa Helena MHPP, Votorantim MHPP, Sobragi HPP, Piraju HPP, Ourinhos HPP, Rio Verdinho HPP, within the Energy Business.



GRI 3-3.
MATERIAL TOPIC: WATER AND
WASTEWATER MANAGEMENT

GRI 303-1.
INTERACTIONS WITH WATER
AS A SHARED RESOURCE

GRI 303-2.
MANAGEMENT OF WATER
DISCHARGE RELATED IMPACTS

SASB IF-EU-140A.3.
DISCUSSION OF WATER MANAGEMENT
RISKS AND DESCRIPTION OF STRATEGIES
AND PRACTICES TO MITIGATE THOSE RISKS

CBA is committed to preserving natural resources, and helping to limit climate change. That is why CBA strives to reduce water usage at all stages of the production process.

CBA has a Water and Effluents Management Standard that applies to all operations. This standard outlines procedures for addressing water-related risks and assigns responsibilities to employees based on their roles and areas of operation. In addition, CBA has a specific procedure on communicating incidents. These programs reflect CBA’s commitment to water security and are regularly reviewed to incorporate new insights and improvement

opportunities, which are then shared through training provided to relevant audiences.

Some of CBA’s key water stewardship commitments include reducing water consumption, preventing pollution by managing associated risks, and conducting water balance assessments to identify losses and improvement opportunities within the system.

In **Mining** operations, water is sourced from surface water bodies such as rivers and streams, groundwater, and/or from utilities for human use. In Poços de Caldas (MG), water serves various purposes, including human consumption, equipment, machinery and facilities cleaning, and road dust suppression. Wastewater is discharged into the municipal collection system, with effluents from vehicle workshops undergoing treatment before disposal in a nearby reservoir. Water parameters are monitored monthly by an accredited laboratory.

At the Miraí (MG) mine, water is used for human consumption, general cleaning, and bauxite extraction and processing. All effluents undergo treatment, including: treatment at a wastewater treatment plant, separation in an oil and water separator, and further treatment in a water treatment plant to ensure compliance with environmental and legal standards before discharge. If water quality parameters deviate from regulatory requirements, the water is recirculated to the water treatment plant for further treatment.

The Itamarati de Minas (MG) mine, which is currently curtailed, generates only sanitary wastewater that is treated at a wastewater treatment plan. After treatment, the water is pumped to the reservoir.

Water supplied to CBA’s **Alumínio (SP)** plant is sourced from four river intakes and two wells near the plant. The system operates as a closed circuit, which means no effluents are discharged into the environment; instead, effluents are treated and reused within the plant. Quality specifications for treated water for reuse are defined depending on the requirements of the process where the water is consumed. Water is withdrawn for both domestic and industrial purposes.

Continuous improvements are made to the closed-loop system to enhance its efficiency. If water recycling treatment systems are not fully operational, the resulting increased water demand would have a significant negative impact on society. The more efficient the closed-loop system and the greater the utilization of recycled water, the more potable water is available to communities.

At **Metalex (SP)**, water is sourced from an artesian well and from the local utility, solely for human consumption. Wastewater is discharged in both the local sewer system and in an oil and water separation system. In 2023, Metalex set a water intensity target of 0.6 m³ per metric ton of billets produced. At year-end, 97% of the target had been met, at 0.64 m³/t of billets. Water consumption is monitored daily to identify opportunities for improvement.

Alux (SP) is located within an industrial park, with water intake and discharge managed by the park's facilities manager. Water is supplied to this site for both human consumption and industrial processes, where it is exclusively used for product cooling in a closed loop, without being incorporated into the final product. Consequently, this site does not generate industrial wastewater; sanitary wastewater is directed to an on-site wastewater treatment plant operated by the industrial park.

At the **Itapissuma** rolling mill (PE), water is sourced from two deep cased wells, treated, and used for human consumption, in the production process, and for services. Water consumption is measured daily by meters along the mains line to ensure greater control over consumption and losses, enabling a prompt response in case of leaks and other issues.

In CBA's **Energy business**, water is the primary input used in generating hydroelectric power; river water impounded by a dam is used to drive turbines to generate electricity. After flowing through the turbines, it is returned to the watercourses in the same quantity and quality.

Given the high reliance on electricity in the aluminum production process, water availability in the reservoirs poses a potential risk to the Energy Business. To prevent and manage this risk, the following initiatives are undertaken as part of the Company's Biodiversity and Water Resilience Plan:

- Reforestation of protected areas: this involves planting native trees and building fences around areas surrounding the hydroelectric reservoirs. Additionally, protected areas are regularly monitored to keep them free from any environmental risks, such as trespassing, deforestation, fires, and damage to property and the environment. In 2023, over R\$ 1 million was invested in measures across Goiás, Minas Gerais, São Paulo, and Paraná.
- Monthly meetings of the CBA's Water Resilience Committee: these meetings discuss proactive initiatives, projections, and studies to increase resilience and regenerate water resources, and to anticipate potential scenarios that could adversely affect CBA's operations and reservoirs users.

Juquiá (SP) Complex reservoir





GRI 303-3.
WATER
WITHDRAWAL

SASB EM-MM-140A.1./IF-EU-140A.1.
(1) TOTAL WATER WITHDRAWN AND (2) TOTAL WATER CONSUMED, PERCENTAGE
OF EACH IN REGIONS WITH HIGH OR EXTREMELY HIGH BASELINE WATER STRESS

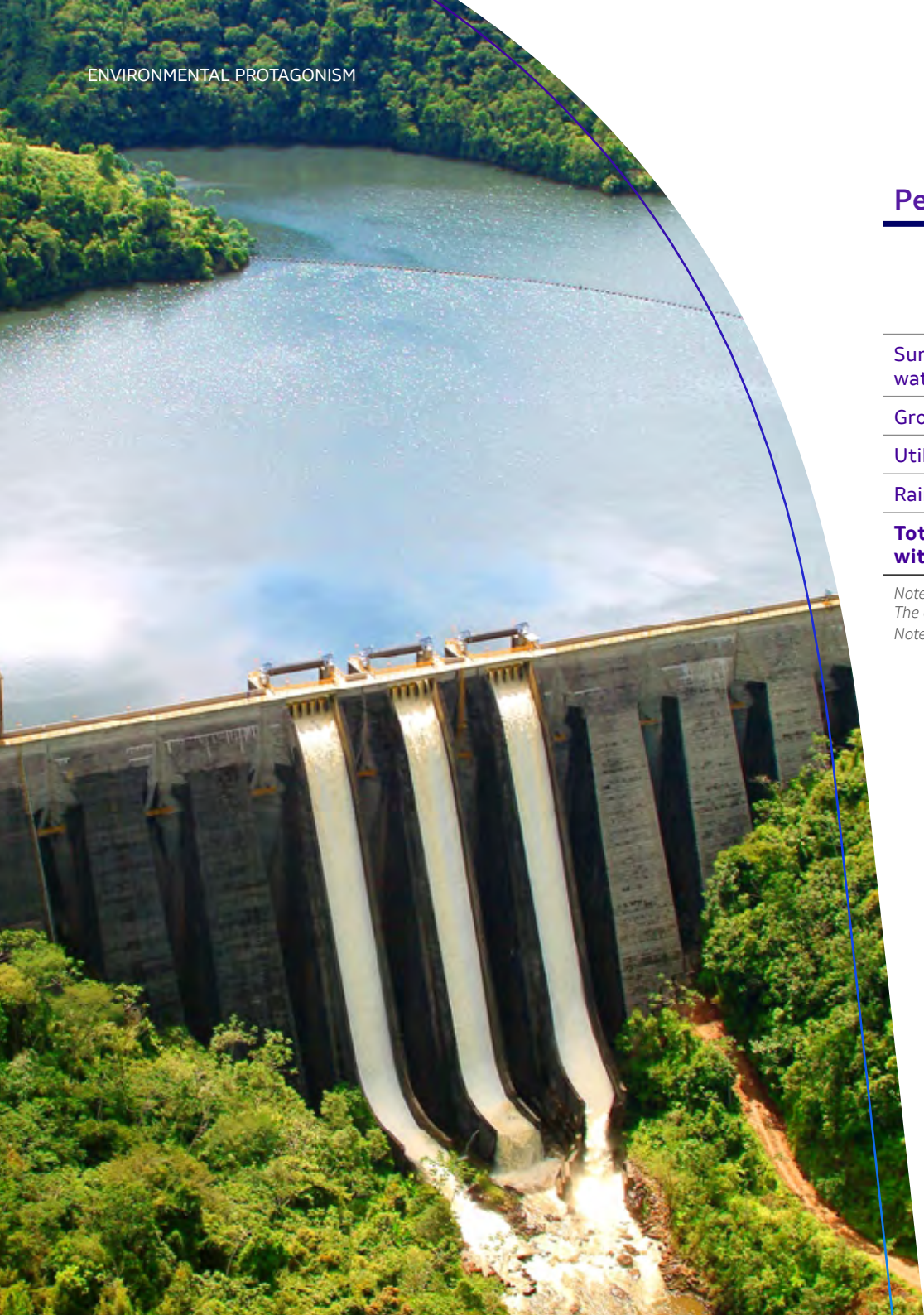
Water withdrawal, by source (ML)

		2020			2021			2022									2023						
		Aluminum Business	Nickel Business	Total	Aluminum Business	Nickel Business	Total	Aluminum Business			Nickel Business	Energy Business		Total			Aluminum Business			Energy Business	Total		
								Regular areas	Areas with water stress	Total		Regular areas	Regular areas	Total	Regular areas	Areas with water stress	Total	Regular areas	Areas with water stress	Total	Regular areas	Areas with water stress	Total
Surface water	Freshwater	2,130.5	117.3	2,247.8	1,931.7	111.9	2,043.6	1,837.7	0.0	1,837.7	109.0	7.1	7.1	1,953.9	0.0	1,953.9	1,657.5	0.0	1,657.5	12.1	1,669.6	0.0	1,669.6
	Other water	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	2,130.5	117.3	2,247.8	1,931.7	111.9	2,043.6	1,837.7	0.0	1,837.7	109.0	7.1	7.1	1,953.9	0.0	1,953.9	1,657.5	0.0	1,657.5	12.1	1,669.6	0.0	1,669.6
Groundwater	Freshwater	578.6	0.0	578.6	753.6	0.0	753.6	410.2	273.1	683.3	0.0	2.5	2.5	412.6	273.1	685.7	411.9	227.5	639.4	3.6	415.5	227.5	643.0
	Other water	0.0	0.0	0.0	0.0	0.0	0.0	9.1	0.0	9.1	0.0	0.0	0.0	9.1	0.0	9.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	578.6	0.0	578.6	753.6	0.0	753.6	419.3	273.1	692.4	0.0	2.5	2.5	421.7	273.1	694.8	411.9	227.5	639.4	3.6	415.5	227.5	643.0
Utility water	Freshwater	7.0	1.5	8.5	5.9	1.0	7.0	6.0	2.3	8.4	0.0	0.1	0.1	6.1	2.3	8.5	6.5	1.7	8.3	1.0	7.6	1.7	9.3
	Other water	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	7.0	1.5	8.5	5.9	1.0	7.0	6.0	2.3	8.4	0.0	0.1	0.1	6.1	2.3	8.5	6.5	1.7	8.3	1.0	7.6	1.7	9.3
Rainwater	Freshwater	0.0	18.7	18.7	0.0	10.1	10.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Other water	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	0.0	18.7	18.7	0.0	10.1	10.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	Freshwater	2,716.2	137.5	2,853.6	2,691.2	123.1	2,814.3	2,253.9	275.4	2,529.4	109.0	9.7	9.7	2,372.6	275.4	2,648.0	2,075.9	229.2	2,305.1	16.8	2,092.7	229.2	2,321.9
	Other water	0.0	0.0	0.0	0.0	0.0	0.0	9.1	0.0	9.1	0.0	0.0	0.0	9.1	0.0	9.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	2,716.2	137.5	2,853.6	2,691.2	123.1	2,814.3	2,263.0	275.4	2,538.5	109.0	9.7	9.7	2,381.7	275.4	2,657.2	2,075.9	229.2	2,305.1	16.8	2,092.7	229.2	2,321.9

Note 1: The first assessment to identify areas with water stress was carried out in 2022 using Aqueduct. Prior-year data is not available. The only areas with water stress identified in the assessment were within the Aluminum Business.

Note 2: CBA does not withdraw seawater or produced water (water produced in connection with the extraction, processing or use of any raw material).

Note 3: Freshwater is defined as water with total dissolved solids ≤1,000 mg/L, while other water is defined as water with total dissolved solids >1,000 mg/L.



Percentage of water withdrawals in regions with high water stress

	2020	2021	2022				2023		
			Aluminum Business	Nickel Business	Energy Business	Total	Aluminum Business	Energy Business	Total
Surface water	0%	0%	0%	0%	0%	0%	0%	0%	0%
Groundwater	0%	0%	39%	0%	0%	39%	36%	0%	35%
Utility water	0%	0%	28%	0%	0%	27%	21%	0%	19%
Rainwater	0%	0%	0%	0%	0%	0%	0%	0%	0%
Total water withdrawals	0%	0%	11%	0%	0%	10%	10%	0%	10%

Note 1: The first assessment to identify areas with water stress was carried out in 2022 using Aqeduct. Prior-year data is not available. The only areas with water stress identified in the assessment were within the Aluminum Business.

Note 2: CBA does not withdraw seawater or produced water (water produced in connection with the extraction, processing or use of any raw material).

Barra HPP (SP)



GRI 303-4.
WATER DISCHARGE

Water discharge, by source (ML)

		2020			2021			2022								2023						
		Aluminum Business	Nickel Business	Total	Aluminum Business	Nickel Business	Total	Aluminum Business			Nickel Business	Energy Business	Total CBA			Aluminum Business			Energy Business	Total		
								Regular areas	Areas with water stress	Total			Regular areas	Regular areas	Areas with water stress	Regular areas	Total	Regular areas		Areas with water stress	Total	Regular areas
Surface water	Freshwater	6,913.3	173.4	7,086.7	5,774.1	212.3	5,986.4	7,062.6	0.0	7,062.6	33.0	6.3	0.0	7,101.9	7,101.9	3,019.6	0.0	3,019.6	10.9	3,030.5	0.0	3,030.5
	Other water	0.0	0.0	0.0	147.0	0.0	147.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	6,913.3	173.4	7,086.7	5,921.1	212.3	6,133.5	7,062.6	0.0	7,062.6	33.0	6.3	0.0	7,101.9	7,101.9	3,019.6	0.0	3,019.6	10.9	3,030.5	0.0	3,030.5
Groundwater	Freshwater	0.0	0.0	0.0	0.0	0.0	0.0	0.0	167.7	167.7	0.0	2.6	167.7	2.6	170.3	0.0	165.1	165.1	3.3	3.3	165.1	168.4
	Other water	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	167.7	167.7	0.0	2.6	167.7	2.6	170.3	0.0	165.1	165.1	3.3	3.3	165.1	168.4
Utility-supplied water	Freshwater	5.5	46.9	52.4	4.6	32.6	37.2	6.3	0.1	6.4	0.0	0.0	0.1	6.3	6.4	7.0	0.1	7.1	0.9	7.9	0.1	8.0
	Other water	2.3	0.0	2.3	4.4	0.0	4.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	7.8	46.9	54.7	9.1	32.6	41.6	6.3	0.1	6.4	0.0	0.0	0.1	6.3	6.4	7.0	0.1	7.1	0.9	7.9	0.1	8.0
Total water discharge	Freshwater	6,918.8	220.3	7,139.1	5,778.7	244.9	6,023.6	7,068.8	167.8	7,236.6	33.0	9.0	167.8	7,110.8	7,278.5	3,026.6	165.2	3,191.8	15.1	3,041.7	165.2	3,206.9
	Other water	2.3	0.0	2.3	151.5	0.0	151.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Total	6,921.1	220.3	7,141.4	5,930.2	244.9	6,175.1	7,068.8	167.8	7,236.6	33.0	9.0	167.8	7,110.8	7,278.5	3,026.6	165.2	3,191.8	15.1	3,041.7	165.2	3,206.9

Note 1: Beginning in 2022, areas with water stress have been identified in a climate projection assessment using the Aqeduct tool. The only areas with water stress identified in the assessment were within the Aluminum Business.

Note 2: CBA does not discharge water into the sea.

Note 3: Freshwater is defined as water with total dissolved solids ≤1,000 mg/L, while other water is defined as water with total dissolved solids >1,000 mg/L.

GRI 303-5.
WATER CONSUMPTION

SASB EM-MM-140A.1. / IF-EU-140A.1.
TOTAL WATER WITHDRAWN AND TOTAL
WATER CONSUMED, PERCENTAGE OF EACH
IN REGIONS WITH HIGH OR EXTREMELY
HIGH BASELINE WATER STRESS

CBA-25.
FRESHWATER
CONSUMPTION

CBA-26.
WATER CONSUMPTION IN
WATER-STRESSED AREAS



Water consumption (ML)

	2020			2021			2022								2023						
							Aluminum Business			Nickel Business	Energy Business	Total			Aluminum Business			Energy Business	Total		
	Aluminum Business	Nickel Business	Total	Aluminum Business	Nickel Business	Total	Regular areas	Areas with water stress	Total	Regular areas	Regular areas	Regular areas	Areas with water stress	Total	Regular areas	Areas with water stress	Total	Regular areas	Regular areas	Areas with water stress	Total
Water withdrawal	2,716.2	137.5	2,853.6	2,691.2	123.1	2,814.3	2,263.0	275.4	2,538.5	109.0	9.7	2,381.7	275.4	2,657.2	2,075.9	229.2	2,305.1	16.8	2,092.7	229.2	2,321.9
Water discharge	6,921.1	220.3	7,141.4	5,930.2	244.9	6,175.1	7,068.8	167.8	7,236.6	33.0	9.0	7,110.8	167.8	7,278.6	3,026.6	165.2	3,191.8	15.1	3,041.7	165.2	3,206.9
Water consumption	-4,204.9	-82.8	-4,287.8	-3,239.0	-121.8	-3,360.8	-4,805.8	107.6	-4,698.1	76.0	0.7	-4,729.1	107.6	-4,621.4	-950.7	64.0	-886.7	1.7	-949.0	64.0	-885.0

Note 1: Beginning in 2022, areas with water stress have been identified in a climate projection assessment using the Aqueduct tool. The only areas with water stress identified in the assessment were within the Aluminum Business.

Note 2: Water consumption is calculated as water withdrawal less water discharge. At some sites, water discharge exceeds water withdrawals due to rainfall inputs into reservoirs and impoundments, which explains the negative figures for some sites. There were no changes in water storage volumes in CBA's operations in the year.



Net total consumption of freshwater, including data on freshwater withdrawal and consumption (million m³)

	2020	2021	2022	2023
A. Withdrawal: total municipal (or utility) supply	0.01	0.01	0.01	0.01
B. Withdrawal: surface freshwater	2.25	2.04	1.95	1.67
C. Withdrawal: groundwater	0.58	0.75	0.69	0.64
D. Discharge: water returned to its source with the same or better quality as the raw water withdrawn (applies to B and C only)	7.14	6.18	7.28	3.21
E. Total water consumption (A+B+C-D)	-4.31	-3.37	-4.62	-0.89

Note: Water consumption is calculated as water withdrawal less water discharge. At some sites, water discharge exceeds water withdrawals due to rainfall inputs into reservoirs and impoundments, which explains the negative figures for some sites and in the total figure.

Water consumption in water-stressed areas (million m³)

2022	2023
0.11	0.06

Note 1: Beginning in 2022, areas with water stress have been identified in a climate projection assessment using the Aqueduct tool. The only areas with water stress identified in the assessment were within the Aluminum Business.

SASB EM-MM-140A.2 / SASB IF-EU-140A.2.
NUMBER OF INCIDENTS OF NON-COMPLIANCE ASSOCIATED
WITH WATER QUALITY PERMITS, STANDARDS, AND REGULATIONS

In 2023, there were no confirmed incidents of non-compliance associated with water quality permits, standards, and regulations.

Number of incidents of non-compliance associated with water quality permits, standards, and regulations

2021	2022	2023
5	1	0

Note: There were five incidents of noncompliance in 2021 and one in 2022, all at the Alumínio (SP) plant due to its failure to declare water volumes outside permitted hours.



CBA-2.
WATER REUSED OR RECYCLED

Water reused or recycled after treatment

	2020	2021	2022	2023
Volume (thousand m³)	21,605.6	5,825.7	4,951.6	4,132.0
Water balance data (standard)				
Volume input into processes (thousand m³)	30,847.5	12,980.3	9,872.3	6,566.4
Volume reused in processes (thousand m³)	24,471.2	8,815.7	6,711.4	4,505.3
Water efficiency (%) (volume reused/ volume fed into the process)	79%	68%	68%	69%

Note: Alux (SP) has two cooling towers for recirculating water into the production process, but the water meter to measure recirculated water was only installed at year-end 2023, and therefore the water balance is still being compiled. The Itapissuma (PE) rolling mill has a cooling tower with no metering equipment, and therefore no metering data is available to report. This disclosure is not applicable to Energy Business power plants.

CBA-27.
BUSINESS IMPACTS OF WATER RELATED INCIDENTS

Water-related incidents with substantial impacts on costs/revenue (R\$)

2020	2021	2022	2023
0.00	0.00	0.00	0.00

Note: Substantial impacts are impacts exceeding US\$ 10,000.

Legado das Águas
Reserve (SP),
Reservas
Votorantim



GRI 3-3.
MATERIAL TOPIC: WASTE MANAGEMENT

GRI 306-1
WASTE GENERATION AND SIGNIFICANT WASTE-RELATED IMPACTS

GRI 306-2.
MANAGEMENT OF SIGNIFICANT WASTE-RELATED IMPACTS

SASB EM-MM-150A.10.
DESCRIPTION OF WASTE AND HAZARDOUS MATERIALS MANAGEMENT POLICIES AND PROCEDURES FOR ACTIVE AND INACTIVE OPERATIONS

All operations have a Waste Management Plan that is compliant with the Brazilian National Waste Management Policy. As part of this plan, an assessment is made of waste streams at the site and procedures are established for managing each waste stream, as well as an emergency response plan and waste reduction targets. Each operation is also required to identify and monitor waste-related risks using environmental aspect and impact spreadsheets, along with implementing corresponding control measures.

Waste management impacts vary across different operations and activities within CBA. Some examples of potential or actual negative impacts include: soil and water contamination resulting from improper storage, segregation, transportation, and disposal practices, as well as non-compliance with regulations by external partners, such as trucking or disposal companies.

In plants that handle scrap materials (Alumínio-SP, Metalex-SP, Alux-SP, and Itapissuma-PE), the primary risks relate to air emissions due to the presence of contaminated or unidentified materials. To mitigate these risks, scrap suppliers are required to meet a set of scrap specifications and incoming shipments are inspected against those specifications.

One example of a potential or actual positive impact is the development of new markets for waste materials, which helps reduce consumption of virgin raw materials. In addition, practices such as reusing internal waste, increased utilization of aluminum scrap, and ongoing research and development of co-products help to enhance environmental sustainability.

The waste generated at CBA is classified in accordance with NBR 10004, and some process wastes are periodically assessed by accredited laboratories.

Waste data is managed by digital systems that consolidate waste generation and disposal information. The Company’s co-products team strives for continuous improvement, and lessons learned are integrated into internal procedures and routines.

All areas where chemicals are handled are properly marked and provided with signage. The main chemical storage locations must be clearly identified and inventoried.

The approach to managing hazardous materials spans the entire lifecycle, from procurement through to disposal. Prior approval from the chemical laboratory and the Health, Safety, and Environment (HSE) department is required before purchasing any hazardous products.

Hazardous waste is stored in designated, access-restricted areas with properly identified bays to prevent contamination and ensure physical and biological integrity. Material safety data sheets must accompany stored waste to enable a prompt response in the event of a spill of any size. In addition, employees are trained and instructed on appropriate spill containment measures.

All waste suppliers and customers, other than aluminum scrap suppliers, undergo environmental assessments, including periodical site visits, audits and document reviews depending on the criticality of their activities. Every load sent for disposal is accompanied by a Waste Waybill in accordance with state regulations and the requirements of the relevant authorities.



GRI 306-4.
WASTE DIVERTED FROM DISPOSAL

SASB EM-MM-150A.8.
TOTAL WEIGHT OF HAZARDOUS WASTE RECYCLED

The volume of waste is directly linked to production volumes, as the bulk of waste materials are process waste. There were no changes in the process. At the **Alumínio (SP)** plant, waste volumes fluctuate with production volume and market conditions. At **Metalex (SP)**, some waste streams sent for disposal increased following the startup of a new process line.

Waste diverted from disposal, by recovery operation, on-site and off-site (metric tons)

	2020						2021					
	Aluminum Business		Nickel Business		Total		Aluminum Business		Nickel Business		Total	
	On-site	Off-site	On-site	Off-site	On-site	Off-site	On-site	Off-site	On-site	Off-site	On-site	Off-site
Hazardous waste (class I)												
Preparation for reuse	331	2,507	0	948	331	3,455	1,607	2,759	0	561	1,607	3,320
Recycling	0	1,473	0	12	0	1,485	0	1,533	0	13	0	1,546
Other recovery operations	0	549	0	1,801	0	2,349	0	594	0	0	0	595
Subtotal	331	4,529	0	2,760	331	7,289	1,607	4,886	0	574	1,607	5,460
Non-hazardous waste (class II)												
Preparation for reuse	17,196	30	0	0	17,196	30	15,551	73	0	0	15,551	73
Recycling	0	34,742	0	170	0	34,912	0	41,715	0	140	0	41,855
Other recovery operations	0	2,046	0	0	0	2,046	0	4,190	0	0	0	4,189
Subtotal	17,196	36,817	0	110	17,196	36,987	15,551	45,977	0	140	15,551	46,117
Total	61,802						68,735					



Waste diverted from disposal, by recovery operation, on-site and off-site (metric tons)

	2022								2023					
	Aluminum Business		Nickel Business		Energy Business		Total		Aluminum Business		Energy Business		Total	
	On-site	Off-site	On-site	Off-site	On-site	Off-site	On-site	Off-site	On-site	Off-site	On-site	Off-site	On-site	Off-site
Hazardous waste (class I)														
Preparation for reuse	1,636	2,895	0	0	0	2	1,636	2,897	1,250	48	0	0	1,250	48
Recycling	0	1,546	0	0	0	0	0	1,546	0	1,373	0	0	0	1,373
Other recovery operations	0	549	0	0	0	3	0	556	0	3,028	9	0	9	3,028
Subtotal	1,636	4,990	0	0	0	5	1,636	4,995	1,250	4,449	10	0	1,260	4,449
Non-hazardous waste (class II)														
Preparation for reuse	29,624	73	0	0	0	0	29,624	73	2,546	16	0	0	2,546	16
Recycling	0	40,458	0	0	0	0	0	40,458	0	65,655	12	0	12	65,655
Other recovery operations	1	2,964	0	0	0	0	1	2,964	0	11,793	30	0	30	11,793
Subtotal	29,625	43,495	0	0	0	0	29,625	43,495	2,546	77,464	42	0	2,588	77,464
Total	79,751								85,761					

GRI 306-5.
WASTE DIRECTED TO DISPOSAL

Waste directed to disposal, by composition and disposal operation, on-site and off-site (metric tons)

	2020						2021					
	Aluminum Business		Nickel Business		Total		Aluminum Business		Nickel Business		Total	
	On-site	Off-site	On-site	Off-site	On-site	Off-site	On-site	Off-site	On-site	Off-site	On-site	Off-site
Hazardous waste (class I)												
Incineration (with energy recovery)	0	874	0	0	0	874	0	1,090	0	561	0	1,651
Incineration (without energy recovery)	0	2	0	0	0	2	0	1	0	0	0	1
Landfilling	0	1	0	2	0	3	0	1	0	0	0	1
Other disposal operations	0	1,085	0	0	0	1,085	0	1,318	0	0	0	1,318
Subtotal	0	1,962	0	2	0	1,964	0	2,410	0	561	0	2,971
Non-hazardous waste (class II)												
Incineration (with energy recovery)	0	5,454	0	10	0	5,464	0	7,197	0	7	0	7,204
Incineration (without energy recovery)	0	0	0	0	0	0	0	0	0	0	0	0
Landfilling	26	309	28	190	54	499	19	382	16	24	35	406
Other disposal operations	1,192,485	0	0	0	1,192,485	0	1,367,224	22,397	0	0	1,367,224	22,397
Subtotal	1,192,511	5,763	28	200	1,192,539	5,963	1,367,243	29,976	16	31	1,367,259	30,007
Total	1,200,466						1,400,237					



Waste directed to disposal, by composition and disposal operation, on-site and off-site (metric tons)

	2022								2023					
	Aluminum Business		Nickel Business		Energy Business		Total		Aluminum Business		Energy Business		Total	
	On-site	Off-site	On-site	Off-site	On-site	Off-site	On-site	Off-site	On-site	Off-site	On-site	Off-site	On-site	Off-site
Hazardous waste (class I)														
Incineration (with energy recovery)	0	1,432	0	7	0	2	0	1,441	0	0	0	0	0	0
Incineration (without energy recovery)	0	1	0	0	0	0	0	1	0	0	0	0	0	1
Landfilling	0	14	0	0	0	0	0	14	0	2	0	1	0	3
Other disposal operations	0	2,239	0	3	0	24	0	2,265	0	1,720	0	11	0	1,731
Subtotal	0	3,686	0	10	0	26	0	3,722	0	1,722	0	12	0	1,734
Non-hazardous waste (class II)														
Incineration (with energy recovery)	0	15,476	0	0	0	0	0	15,476	0	3	0	0	0	3
Incineration (without energy recovery)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Landfilling	16	6,620	29	0	0	594	45	7,214	14	1,632	0	294	14	1,927
Other disposal operations	941,030	676,667	0	0	0	798	941,030	677,465	698,765	613,771	0	180	698,765	613,951
Subtotal	941,046	698,762	29	0	0	1,392	941,075	700,154	698,779	615,407	0	474	698,779	615,881
Total	1,644,951								1,316,394					

CBA-7.
SIGNIFICANT SPILLS

SASB EM-MM-150A.9.
TOTAL NUMBER OF SIGNIFICANT INCIDENTS ASSOCIATED WITH HAZARDOUS MATERIALS AND WASTE MANAGEMENT

CBA has an environmental management system with appropriate compliance controls and procedures, and a monitoring program for preventing and detecting spills and leaks, besides an incident communications guide.

In the last four years, there have been no significant incidents associated with hazardous material and waste management, and there have been no significant spills with impacts on the environment or risks to the production process. CBA’s operational sites monitor all incidents on a continuing basis for internal management purposes.

GRI 3.3.
MATERIAL TOPIC: DAM SAFETY MANAGEMENT AND RISK AND CRISIS MANAGEMENT

Potential negative impacts from deficient dam management include loss of life, degradation of water quality, riverbed siltation, alteration of river flow, landscape degradation, destruction of public and private facilities, loss of intangible heritage, loss of small farmer productivity, and constraints on water use. Currently, all dams owned by CBA are deemed to be low risk and are continuously monitored.

CBA-33.
EMERGENCY AND SPILL RESPONSE PLANS

The most recent version of the Company’s spill response plan, covering compliance controls and monitoring to prevent, detect and remediate spill incidents, is publicly available on the Company’s website.

Learn more about the emergency response plans in the links below (available only in Portuguese).

[Palmital](#)

[Itamarati de Minas](#)

[Miraí](#)

[Niquelândia](#)

Number of significant incidents associated with hazardous materials and waste management

2020	2021	2022	2023
0	0	0	0

Note 1: Since it's a sector disclosure, this data only includes the Aluminum Business operations.
Note 2: Incidents and spills with a severity potential rating of 4 or higher and classified as 4 or above are considered significant, requiring external communication, meaning those that result in impacts on the environment, employees, or interference with the production process. Communication with environmental agencies must also be carried out whenever required by legal requirements. In such cases, immediate communication with the relevant environmental authorities is mandatory. Small-scale spills (up to 5 liters) cannot be accounted for.



CBA-9.
CONTAMINATED SITES

Contaminated site management at CBA is designed so that all operations achieve the highest level of maturity, ensuring that any risks are promptly mitigated and any deviations are adequately addressed. CBA implements the most restrictive regulations applicable to each site, and works transparently with environmental agencies in remediating environmental liabilities in its operations. In 2023, the budget invested in contaminated site analyses, investigation and risk assessment was R\$ 941,986, relating to operations at Alumínio (SP) and Niquelândia (GO). The amounts vary year on year depending on activity schedules and execution.


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Read more about
these programs in
the Annual Report

Budget spent on contaminated sites (R\$)

	2021	2022	2023
Complete budget for contaminated site project	6,580,245	2,000,000	1,500,000
Budget executed in the year	4,869,201	1,740,070	941,986

Note: The indicator includes projects carried out at the Aluminum (SP) and in Niquelândia (GO) plants.





SASB EM-MM-540A.1.
TAILINGS STORAGE FACILITY INVENTORY

Tailings storage facility inventory

	2023			
1. Facility name	Palmital	Miraí	Itamarati de Minas	Jacuba
2. Location	Alumínio (SP), Brazil	Miraí (MG), Brazil	Itamarati de Minas (MG), Brazil	Niquelândia (GO), Brazil
3. Ownership status	Operated by CBA	Operated by CBA	Operated by CBA	Operated by CBA
4. Operational status	Active	Active	Active	Active
5. Construction method	Downstream	Single raise	Single raise	Centerline
6. Maximum permitted storage capacity (t)	~27.6 million dm³	~27.5 million m³	~11.4 million m³	~79 million m³
7. Current amount of tailings stored (t)	~24.6 million m³	~14.8 million m³	~11.1 million m³	~63.8 million m³
8. Consequence classification	Extreme	Extreme	Extreme	Extreme
9. Date of most recent independent technical review	December 2023	September 2023	September 2023	November 2023
10. Has the most recent independent technical review resulted in material findings?	Yes	Yes	Yes	Yes
If the answer to 10 is yes, provide a summary of material findings	Dam safety has been certified, with only a recommendation to continue routine inspection and preventive maintenance activities.	Dam safety has been certified, with only a recommendation to continue routine inspection and preventive maintenance activities.	Dam safety has been certified, with only a recommendation to continue routine inspection and preventive maintenance activities.	Dam safety has been certified, with only a recommendation to continue routine inspection and preventive maintenance activities.
11. If the answer to 10 is yes, indicate whether mitigation measures have been implemented	Yes	Yes	Yes	Yes
If the answer to 11 is yes, provide a summary of the relevant mitigation measures	Routine dam safety activities are managed via a Dam Management System and include fortnightly inspections, maintenance in good condition, monitoring, beach width control, and water removal.	Routine dam safety activities are managed via a Dam Management System and include fortnightly inspections, monitoring, clearing and pest control. Implementation of a 24/7 Geotechnical Monitoring Center.	Routine dam safety activities are managed via a Dam Management System and include fortnightly inspections, monitoring, clearing and pest control. Implementation of a 24/7 Geotechnical Monitoring Center.	Routine dam safety and maintenance activities are managed via a Data Management System and include fortnightly inspections, monitoring, clearing, pest control, and special measures, such as beach erosion control, restaking and cleaning hydraulic structures.
12. Is a site-specific Emergency Preparedness and Response Plan in place?	Yes	Yes	Yes	Yes

Note: As this is a sectoral disclosure, it includes CBA's Aluminum Business and Niquelândia (GO) operations only.



SASB EM-MM-540A.2.
SUMMARY OF TAILINGS MANAGEMENT
SYSTEMS AND GOVERNANCE STRUCTURE
USED TO MONITOR AND MAINTAIN THE
STABILITY OF TAILINGS STORAGE FACILITIES

CBA operates mining facilities with tailings dams in Miraf (MG) and Itamarati de Minas (MG), as well as bauxite residue dams at the Alumínio plant (SP) and in Niquelândia (GO). The Niquelândia operation has been curtailed since 2016. Prior to curtailment, residues were disposed of in the Jacuba dam. However, no residues have been disposed of in this dam since 2016.

An external consultancy firm inspects these dams every six months and issues reports and certificates on their condition and safety status. CBA has a stringent safety policy that includes biweekly monitoring of tailings and bauxite residue dams, field inspections, and monthly dam safety reports. In addition, semiannual field inspections are carried out to inform Regular Dam Safety Inspection Reports (RISR), and specialized firms are engaged for Periodic Dam Safety Reviews (PDSR). A Dam Governance Manual has also been developed, outlining roles and responsibilities within the organization.

SASB EM-MM-540A.3.
APPROACH TO DEVELOPMENT OF
EMERGENCY PREPAREDNESS AND
RESPONSE PLANS (EPRPS) FOR
TAILINGS STORAGE FACILITIES

Emergency Response Plans (ERPs) for tailings dams are reviewed annually and include dam breach drills and monthly siren tests to instruct the local community on how to respond to emergencies.

The ERP operates on two levels:

- **Internal:** involving CBA employees or specialized consultancies responsible for detecting, assessing, and classifying emergencies, making decisions, implementing corrective actions, alerting the population in the self-rescue zone, and notifying external agencies.
- **External:** involving the participation of external entities (public authorities and government agencies) in emergency response, through coordinated actions at the municipal, state, and/or federal levels.

CBA-28.
TAILINGS MANAGEMENT

CBA’s approach to managing the tailings storage facilities (TSFs) it owns or operates includes:

- Long-term tailings storage facilities plans
- Implementation of surveillance and monitoring systems to manage risks throughout all stages of the TSF lifecycle
- Emergency preparedness and response plans (EPRPs)
- Independent audits and assessments of tailings facility management
- Reports on failures at tailings storage facilities in the last four years

CBA-4.
VOLUME OF IMPOUNDED WATER REMOVED, BY SITE

Volume of impounded water removed, by site (m³)

	2020	2021	2022	2023
Alumínio (SP) (Palmital dam - residue)	541,273	317,994	499,268	640,270
Miraí (MG) (tailings)	2,527,140	2,231,427	5,126,843	3,019,475
Itamarati de Minas (MG) (tailings)	4,482,981	3,542,595	NAv	NAv
Niquelândia (GO) (Jacuba dam, residue)	1,307,543	1,267,000	1,267,000	1,267,000
Total	8,858,937	7,359,016	6,893,111	4,926,745

Note: As this is a sectoral disclosure, it includes CBA's Aluminum Business and Niquelândia (GO) operations only.



Palmital dam,
Alumínio (SP)

TNFD adoption

CBA drew guidance from the reporting methodology recommended by the Taskforce on Nature-related Financial Disclosures (TNFD) to expand on its sustainability disclosures. The table below provides details on CBA initiatives in line with these recommendations.


[CLICK HERE](#)

Learn more
about the CDP
Water Security


[CLICK HERE](#)

Learn more
about the CDP
Climate Change

Framework da TNFD

Governance	Strategy	Risk management	Metrics and targets
The organization’s governance around nature-related risks and opportunities	Actual and potential impacts of nature-related risks and opportunities on the organization’s businesses, strategy, and financial planning	How the organization identifies, assesses and manages nature-related risks	Metrics and targets used to assess and manage relevant nature-related risks and opportunities where such information is material
Annual Report: pages 47 ; 57-61 ; 72-73	Annual Report: pages 49-52 ; 120-154	Annual Report: pages 120-154	Annual Report: pages 22 ; 49-52 ; 124 ; 135 ; 139 ; 142 ; 145 ; 148 ; 151
Additional Disclosures Supplement: pages 07-11 ; 21-25	Additional Disclosures Supplement: pages 58-59 ; 64-65	Additional Disclosures Supplement: pages 24-25 ; 58-59 ; 64-65 ; 72	Additional Disclosures Supplement: pages 53-55 ; 60-63 ; 61-71 ; 73-76
CDP Climate Change: modules C1 and C15	CDP Climate Change: modules C3 and C15	CDP Climate Change: modules C2 and C15	CDP Climate Change: modules C4, C6 and C15
CDP Water Security: module W6	CDP Water Security: module W7	CDP Water Security: modules W3 and W4	CDP Water Security: modules W1, W5 and W10

Recycling is essential

GRI 3-3. MATERIAL TOPIC: CIRCULAR ALUMINUM

Producing molten aluminum from scrap significantly reduces greenhouse gas emissions and natural resource consumption compared to the production of liquid metal by the smelting process. Aluminum recycling also reduces waste generation in the production chain and creates new revenue streams from selling slag to external co-processors. It also creates opportunities for new recycling-focused businesses.

Negative impacts of the recycling process include increased consumption of natural gas and other inputs for reprocessing, challenges in ensuring that the economic benefits from scrap purchases are distributed equitably, the informal scrap market, and reputational risks from critical social or environmental events involving suppliers. These impacts are related to both CBA's activities and business relationships that are inherently connected to the aluminum recycling value chain. To mitigate these risks, in addition to implementing process improvements, CBA has structured a program for the inclusion of cooperatives as well as initiatives via the Sustainable Procurement Program and Compliance Program.

Billets,
Metalex (SP)

GRI 301-3. RECLAIMED PRODUCTS AND THEIR PACKAGING MATERIALS

In 2023, the Alumínio plant launched two initiatives to re-utilize the wooden packaging materials used for Downstream products, in partnership with customers and packaging suppliers. One initiative involves refurbishing crates, where the packaging supplier retrieves the crates at the customer's site and makes necessary repairs, allowing them to be reused in the Company's operations. The second initiative involves refurbishing boxes; the supplier adjusts the internal size so that CBA can re-utilize the boxes for products supplied to customers. Both initiatives have been validated for financial benefits, including via Competitiveness Management.

The percentage of reclaimed materials was 2% – 841 wooden parts were recovered out of a total of 53,241 parts.



Read more about
the Sustainable
Procurement Program
in the Annual Report



Read more about the
Compliance Program
in the Annual Report



Heitor Santos and Fábio do Nascimento Oliveira, employees at Corporate Office (SP)

Robust financial governance

CBA-6. PAYMENT OF MINING TAXES

In 2023, CBA paid R\$ 5.16 million in mining taxes, a year-on-year increase reflecting higher production volumes in Miraí (MG) and Poços de Caldas (MG).

Payment of mining taxes (R\$ million)

	2020	2021	2022	2023
Total mining taxes paid to the Brazilian Mining Agency	3.06	3.63	4.33	5.16

Note: Amounts paid to the Brazilian Mining Agency as Financial Compensation for Mineral Resource Exploitation (CFEM).

GRI 203-1. INFRASTRUCTURE INVESTMENTS AND SERVICES SUPPORTED

CBA’s strategy does not include direct infrastructure investments or support for services. However, the Company does invest in social impact initiatives in line with its Corporate Social Responsibility Policy, and in donations and sponsorship in accordance with its Donations and Sponsorship Policy.

Disclosures per net sales



HPP Ourinhos (SP)

Water withdrawal intensity (ML/R\$ million in sales)

	2020		2021		2022		2023	
	Amount	Intensity	Amount	Intensity	Amount	Intensity	Amount	Intensity
Freshwater withdrawals in areas without water stress (m³)	2,854	0.53	2,814	0.33	2,373	0.27	2,093	0.28
Freshwater withdrawals in areas with water stress (m³)	NAv	NAv	NAv	NAv	275	0.03	229	0.03
Total sales (R\$ million)	5,411		8,423		8,825		7,348	

Water consumption intensity (ML/R\$ million in sales)

	2020		2021		2022		2023	
	Amount	Intensity	Amount	Intensity	Amount	Intensity	Amount	Intensity
Freshwater consumption in areas without water stress (m³)	2,854	0.53	2,814	0.33	2,382	0.27	2,093	0.28
Total water consumption in areas with water stress (m³)	NAv	NAv	NAv	NAv	275	0.03	229	0.03
Total sales (R\$ million)	5,411		8,423		8,825		7,348	

Note: The intensity calculation considered water consumption as the total water withdrawal each year. Except in 2022, all water withdrawal was freshwater; which is why the data in both tables is the same.



GHG emissions intensity (tCO₂e/R\$ million in sales)

	2020		2021		2022		2023	
	Amount	Intensity	Amount	Intensity	Amount	Intensity	Amount	Intensity
Total scope 1 and 2 GHG emissions (tCO ₂ e)	1,136,497	210.03	1,165,596	138.38	1,363,708	154.53	1,365,381	185.82
Scope 1 GHG emissions (tCO ₂ e)	NAv	NAv	1,158,607	137.55	1,356,949	153.76	1,358,308	184.85
Scope 2 GHG emissions (tCO ₂ e)	NAv	NAv	6,989	0.83	6,759	0.77	7,072	0.96
Scope 3 GHG emissions (tCO ₂ e)	NAv	NAv	2,200,378	261.23	1,349,598	152.93	1,338,490	182.16
Total sales (R\$ million)	5,411		8,423		8,825		7,348	

Air emissions intensity (t/R\$ million in sales)

	2020		2021		2022		2023	
	Amount	Intensity	Amount	Intensity	Amount	Intensity	Amount	Intensity
Total air emissions (t)	1,479	0.27	1,332	0.16	1,791	0.2	1,578	0.21
Air emissions – NOx (t)	325	0.06	133	0.02	429	0.05	293	0.04
Air emissions – SOx (t)	36	0.01	34	0.00	42	0.00	36	0.00
Air emissions – VOC (t)	8	0.00	0	0.00	13	0.00	13	0.00
Air emissions – MP (t)	938	0.17	995	0.12	1,119	0.13	1,071	0.15
Total fluoride (t)	172	0.03	170	0.02	188	0.02	165	0.02
Total sales (R\$ million)	5,411		8,423		8,825		7,348	

Note: This disclosure includes the Company's Alumínio (SP), Alux (SP), Itapissuma (PE) and Metalex (SP) operations.

Waste intensity (t/R\$ million in sales)

	2020		2021		2022		2023	
	Amount	Intensity	Amount	Intensity	Amount	Intensity	Amount	Intensity
Total waste generated (t)	1,266,277	234.0	1,390,418	165.1	1,670,347	189.3	1,403,366	191.0
Hazardous waste generated (t)	9,679	1.8	9,540	1.1	10,342	1.2	7,429	1.0
Non-hazardous waste generated (t)	1,256,599	232.2	1,443,218	171.3	1,660,006	188.1	1,395,929	190.0
Total sales (R\$ million)	5,411		8,423		8,825		7,348	

Brazilian power sector regulator (ANEEL) disclosures

ANEEL 3.2. General dimension

ANEEL 3.2.3. RESPONSIBILITY TO STAKEHOLDERS

ANEEL Socio-Environmental Manual disclosures cover the 16 Energy operations (hydroelectric power plants – HPPs, small hydroelectric power plants – SHPPs, and micro hydroelectric power plants – MHPPs) over which CBA has operational control. Any exceptions are indicated in notes. Energy data was first reported in 2022, when CBA took over the direct management of its energy assets. However, historical data reported by Votorantim Energia (now Auren), which was previously responsible for operational control, has been retained.

The 117 employees and 161 third-party employees of the Energy Business are described on [pages 91 to 93](#).

França HPP (SP)





Stakeholders	Communication channels
Shareholders and investors	CBA shares are 67.9% owned by its controlling shareholders and 32.1% free float. CBA engages with shareholders through its Investor Relations (IR) department in periodic meetings with investors; events/webinars for individual (retail) investors; national and international conferences organized by banks such as JP Morgan, Santander and Itaú BBA; visits to the Alumínio (SP) plant; earnings calls; and the Company’s investor relations website.
Customers	Throughout 2023, the Energy Business conducted transactions with a total of 18 customers, 17 energy traders, and 2 consumers. The main communication channels are email and telephone.
Employees	The main communication methods include face-to-face and/or online meetings, internal communications, internal TV, physical bulletin boards, face-to-face interactions, Corporate Radar (newsletter), toolbox talks, and the internal Workplace tool.
Public organizations and programs	Interactions and communications with government agencies and programs are via letters, email, telephone calls, and face-to-face meetings. The government agencies and programs with which the Energy Business had the most frequent interactions were the following: National Electric Power Agency (ANEEL), National Grid Operator (ONS), Energy Trading Chamber (CCEE), Ministry of Mines and Energy (MME), São Paulo State Environmental Corporation (CETESB), Brazilian Institute for the Environment and Renewable Natural Resources (IBAMA), Goiás State Department of the Environment and Sustainable Development (SEMAD), Environmental Office (SUPRAM), and São Paulo Public Utility Regulator (ARSESP).
Business partners	CBA engages with suppliers through email communications and in-person and/or virtual meetings. Transactions with suppliers are processed exclusively via the SAP Ariba platform, and supplier onboarding is managed via the Linkana platform. The following online initiatives were also held: supplier workshops; climate change webinar; risk management webinar; diversity and inclusion webinar. CBA maintains constant communication and engagement with suppliers through its Sustainable Procurement Program.
Social, environmental and community organizations	The methods of communication with the social, environmental and community organizations with which Energy Business operations interact vary depending on each site’s communication needs, and are either through recipient-specific letters or local media. The organizations which each Energy Complex interacted in 2023 were: Sobragi (MG): SUPRAM, Environmental Department; Municipal Education Department, Municipal Civil Defense, Municipal Governments, Environmental Police, Fire Department/Military Police, Rio Preto and Paraibuna Tributary Watershed Committee, and State Institute of Forestry (IEF). Salto do Rio Verdinho (GO): Environmental Department; Education Department, Civil Defense, and Municipal Government of Itarumã, Goiás State Fire Department, State Environmental Agency (SEMAD), State Environmental Police, State Military Police, and Lower Paranaíba Tributary Watershed Committee. Juquiá (SP): Ribeira de Iguape and Southern Coast River Basin Committee (CBH-RB), CETESB, São Paulo State Forestry Foundation, and Civil Defense. Sorocaba (SP): CETESB, Municipal Civil Defense, São Paulo State Department of Water and Energy (DAEE), Sorocaba and Middle Tiete River Watershed Committee (CBH-SMT), and São Paulo State Forestry Foundation (FF). Paranapanema (SP): Municipal schools, São Paulo State Government, São Paulo State Public Prosecutors’ Office, Municipal Government, riparian producers, Rural Union, state, regional, and municipal civil defense authorities, Fire Department, Piraju Waste Pickers Association (ACLU), Federal Highway Police, CETESB, Federal Environmental Agency (IBAMA), DAEE, ANEEL, National Grid Operator (SIM), Upper Paranapanema and Middle Paranapanema Watershed Committees, Formal – Colonel Fernando and Lieutenant Joyce (State Civil Defense of Paraná), Formal – Sergeant Tais (State Civil Defense of São Paulo), Formal – Captain Maçal (Regional Civil Defense of Ourinhos), Formal – Captain Renó (Regional Civil Defense of Piraju), Formal – Lieutenant Moura (Municipal Civil Defense of Ourinhos), and Formal – João (Municipal Civil Defense of Piraju).



ANEEL 3.2.4.
OPERATIONAL AND PRODUCTIVITY DISCLOSURES

Operational performance and productivity

Technical data (inputs, production capacity, sales, losses)	2023				2022				2021			
	Generation output (GWh)	Substations (units)	Installed capacity (MW)	Transmission lines (Km)	Generation output (GWh)	Substations (units)	Installed capacity (MW)	Transmission lines (Km)	Generation output (GWh)	Substations (units)	Installed capacity (MW)	Transmission lines (Km)
Sobragi HPP	317	1	60	37	334	1	60	37	289	1	60	37
Salto do Rio Verdinho HPP	421	1	93	26	401	1	93	26	404	1	93	26
Ourinhos HPP	198	1	44	0	126	1	44	0	97	1	44	0
Piraju HPP	390	1	70	0	94	1	80	0	150	1	80	0
Rio Novo MHPP	0	1	1	0	0	1	1	0	1	1	1	0
Alecrim HPP	397	1	72	68	336	1	72	68	295	1	72	68
França HPP	143	1	30	46	120	1	30	46	90	1	30	46
Fumaça HPP	202	1	36	12	166	1	36	12	128	1	36	12
Barra HPP	226	1	40	10	170	1	40	10	134	1	40	10
Porto Raso HPP	157	1	28	10	130	1	28	10	107	1	28	10
Serraria HPP	131	1	24	7	114	1	24	7	100	1	24	7
Salto do Iporanga HPP	249	1	37	18	235	1	37	18	209	1	37	18
Itupararanga HPP	130	1	55	16	16	1	55	16	62	1	55	16
Santa Helena MHPP	6	1	2	7	0	1	2	7	4	1	2	7
Votorantim MHPP	6	1	3	3	0	1	3	3	5	1	3	3
Jurupará MHPP	0	1	7	45	0	1	7	45	0	1	7	45
Total	2,973	16	601	305	2,242	16	613	305	2,073	16	613	305

Note: Disclosures on purchased electricity, overall electrical losses, distribution systems, distribution transformers, Equivalent Outage Duration per Consumer (EOF), Equivalent Outage Frequency per Consumer, electricity sales per unit of installed capacity, electricity sold per employee, number of consumers per employee, and value added/GWh sold are not applicable to the Energy Business.

Aneel 3.3. Corporate governance dimension

ANEEL 3.3.1. CORPORATE GOVERNANCE DISCLOSURES

Corporate governance

Governance bodies	2023			2022			2021		
	Board of Directors	Executive Board	Total	Board of Directors	Executive Board	Total	Board of Directors	Executive Board	Total
No. of members receiving remuneration	7	9	16	6	9	15	3	7	10
Annual fixed remuneration (R\$)	4,298,667	10,479,215	14,777,882	2,941,167	10,139,678	13,080,845	1,385,000	6,455,540	7,840,540
Salary or management fees (R\$)	3,498,667	9,510,994	13,009,660	2,546,167	9,196,637	11,742,804	1,300,000	5,889,532	7,189,532
Direct and indirect benefits (R\$)	0	968,221	968,221	0	943,041	943,041	0	566,008	566,008
Participation in committees (R\$)	800,000	0	800,000	375,000	0	375,000	85,000	0	85,000
Other (R\$)	0	0	0	0	0	0	0	0	0
Variable remuneration (R\$)	0	19,011,225	19,011,225	0	19,350,694	19,350,694	0	10,843,473	10,843,473
Bonus (R\$)	0	0	0	0	0	0	0	1,240,000	1,240,000
Profit sharing (R\$)	0	5,956,198	5,956,198	0	5,213,961	5,213,961	0	6,048,605	6,048,605
Participation in meetings (R\$)	0	0	0	0	0	0	0	0	0
Commission (R\$)	0	0	0	0	0	0	0	0	0
Other (R\$)	0	13,055,027	13,055,027	0	14,136,733	14,136,733	0	3,554,868	3,554,868

Note 1: This disclosure does not include the Oversight Board as it does not apply to the Energy Business. Variable remuneration refers to long-term incentives paid.
Note 2: The variable remuneration data reported in 2022 were projections as provided in the 2021 Reference Form. The 2023 data in this report have been revised based on actual data. [\[GRI 2-4\]](#)

Aneel 3.4. Economic and financial dimension

Aneel 3.4.1. ECONOMIC AND FINANCIAL DISCLOSURES

Economic and financial data are reported on a consolidated basis in the “Robust financial governance” chapter of the 2023 CBA Annual Report.

Employees/employability/governance bodies

	2023															
	Sobragi HPP	Salto do Rio Verdinho HPP	Ourinhos HPP	Piraju HPP	Rio Novo MHPP	Alecrim HPP	França HPP	Fumaça HPP	Barra HPP	Porto Raso HPP	Serraria HPP	Salto do Iporanga HPP	Itupararanga HPP	Santa Helena MHPP	Votorantim MHPP	Jurupará MHPP
Total workforce	20	19	11	18	0	34	11	9	5	5	2	3	40	0	0	0
Number of contractors	22	19	9	11	0	20	11	6	7	6	5	5	44	0	0	0
Percentage of employees aged 30 or under	15%	37%	0%	6%	0%	18%	9%	0%	0%	20%	0%	0%	20%	0%	0%	0%
Percentage of employees aged 31 to 40	40%	37%	18%	11%	0%	26%	36%	56%	40%	40%	50%	67%	38%	0%	0%	0%
Percentage of employees aged 41 to 50	25%	16%	64%	50%	0%	29%	18%	22%	40%	20%	50%	0%	15%	0%	0%	0%
Percentage of employees over 50	20%	11%	18%	33%	0%	26%	36%	22%	20%	20%	0%	33%	28%	0%	0%	0%
Percentage of women out of total employees	15%	37%	9%	6%	0%	6%	0%	0%	20%	0%	0%	0%	13%	0%	0%	0%
Percentage of women in managerial positions out of total managerial positions	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Percentage of black female employees out of total employees	33%	43%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	40%	0%	0%	0%
Percentage of black male employees out of total employees	65%	67%	10%	29%	0%	41%	9%	33%	75%	20%	100%	67%	29%	0%	0%	0%
Percentage of black employees in management positions out of total management positions	100%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%
Percentage of interns	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Percentage of apprentices	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Number of employees with disabilities	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0

Aneel 3.5. Social and sectoral dimension

Aneel 3.5.1. INTERNAL SOCIAL DISCLOSURES – A) EMPLOYEES, EMPLOYABILITY AND GOVERNANCE BODIES



Employees/employability/governance bodies

	2022															
	Sobragi HPP	Salto do Rio Verdinho HPP	Ourinhos HPP	Piraju HPP	Rio Novo MHPP	Alecrim HPP	França HPP	Fumaça HPP	Barra HPP	Porto Raso HPP	Serraria HPP	Salto do Iporanga HPP	Itupararanga HPP	Santa Helena MHPP	Votorantim MHPP	Jurupará MHPP
Total workforce	17	20	12	22	0	33	11	9	5	5	2	5	43	0	0	0
Number of contractors	21	22	20	0	0	0	0	0	0	60	0	0	41	0	0	0
Percentage of employees aged 30 or under	6%	30%	8%	14%	0%	15%	9%	11%	0%	20%	0%	20%	26%	0%	0%	0%
Percentage of employees aged 31 to 40	41%	40%	25%	27%	0%	30%	27%	44%	40%	40%	50%	40%	30%	0%	0%	0%
Percentage of employees aged 41 to 50	29%	25%	50%	32%	0%	27%	27%	33%	40%	20%	50%	0%	16%	0%	0%	0%
Percentage of employees over 50	24%	5%	17%	27%	0%	27%	36%	11%	20%	20%	0%	40%	28%	0%	0%	0%
Percentage of women out of total employees	12%	45%	0%	9%	0%	6%	0%	0%	20%	0%	0%	0%	16%	0%	0%	0%
Percentage of women in managerial positions out of total managerial positions	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Percentage of black female employees out of total employees	NAv	NAv	NAv	NAv	NAv	NAv	NAv	NAv	NAv	NAv	NAv	NAv	NAv	NAv	NAv	NAv
Percentage of black male employees out of total employees	NAv	NAv	NAv	NAv	NAv	NAv	NAv	NAv	NAv	NAv	NAv	NAv	NAv	NAv	NAv	NAv
Percentage of black employees in management positions out of total management positions	NAv	NAv	NAv	NAv	NAv	NAv	NAv	NAv	NAv	NAv	NAv	NAv	NAv	NAv	NAv	NAv
Percentage of interns	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Percentage of apprentices	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Number of employees with disabilities	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0

Note: In 2022, data on male and female black employees was not available and was reported as 0%. However, it should have been reported as “not available” (NAv) and has been restated in this report. [\[GRI 2-4\]](#)



Employees/employability/governance bodies

	2021															
	Sobragi HPP	Salto do Rio Verdinho HPP	Ourinhos HPP	Piraju HPP	Rio Novo MHPP	Alecrim HPP	França HPP	Fumaça HPP	Barra HPP	Porto Raso HPP	Serraria HPP	Salto do Iporanga HPP	Itupararanga HPP	Santa Helena MHPP	Votorantim MHPP	Jurupará MHPP
Total workforce	25	21	13	22	0	43	15	14	7	5	3	8	31	0	0	0
Number of contractors	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Percentage of employees aged 30 or under	8%	29%	0%	9%	0%	12%	13%	7%	0%	20%	0%	25%	13%	0%	0%	0%
Percentage of employees aged 31 to 40	36%	43%	31%	27%	0%	30%	33%	36%	29%	40%	33%	38%	32%	0%	0%	0%
Percentage of employees aged 41 to 50	32%	24%	46%	41%	0%	30%	27%	43%	43%	20%	67%	0%	29%	0%	0%	0%
Percentage of employees over 50	24%	5%	23%	23%	0%	28%	27%	14%	29%	20%	0%	38%	26%	0%	0%	0%
Percentage of women out of total employees	4%	29%	0%	9%	0%	7%	7%	0%	14%	0%	0%	0%	23%	0%	0%	0%
Percentage of women in managerial positions out of total managerial positions	0%	10%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	6%	0%	0%	0%
Percentage of black female employees out of total employees	0%	14%	0%	0%	0%	7%	0%	0%	0%	0%	0%	0%	6%	0%	0%	0%
Percentage of black male employees out of total employees	36%	48%	8%	14%	0%	40%	7%	21%	71%	20%	100%	63%	23%	0%	0%	0%
Percentage of black employees in management positions out of total management positions	0%	5%	0%	0%	0%	0%	0%	0%	0%	0%	0%	13%	0%	0%	0%	0%
Percentage of interns	4%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	0%	0%	0%
Percentage of apprentices	4%	0%	0%	5%	0%	5%	0%	0%	0%	0%	33%	11%	0%	0%	0%	0%
Number of employees with disabilities	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0



ANEEL 3.5.2.
INTERNAL SOCIAL DISCLOSURES – E) HEALTH AND SAFETY

Occupational health and safety

	2023															
	Sobragi HPP	Salto do Rio Verdinho HPP	Ourinhos HPP	Piraju HPP	Rio Novo MHPP	Alecrim HPP	França HPP	Fumaça HPP	Barra HPP	Porto Raso HPP	Serraria HPP	Salto do Iporanga HPP	Itupararanga HPP	Santa Helena MHPP	Votorantim MHPP	Jurupará MHPP
Average overtime per employee per year	60	40	67	66	10	65	63	40	59	16	62	0	65	0	0	0
Total frequency rate for the period – employees	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0
Severity rate for the period – contractors	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23
Total frequency rate for the period – contractors	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	446
Severity rate for the period – employees	0	0	0	0	0	123	0	0	0	0	0	0	0	0	0	0
Total frequency rate for the period – workforce (employees and contractors)	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	23
Total severity rate for the period – workforce (employees and contractors)	0	0	0	0	0	123	0	0	0	0	0	0	0	0	0	446
Fatalities involving direct employees	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fatalities involving contractors	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



Occupational health and safety

	2022															
	Sobragi HPP	Salto do Rio Verdinho HPP	Ourinhos HPP	Piraju HPP	Rio Novo MHPP	Alecrim HPP	França HPP	Fumaça HPP	Barra HPP	Porto Raso HPP	Serraria HPP	Salto do Iporanga HPP	Itupararanga HPP	Santa Helena MHPP	Votorantim MHPP	Jurupará MHPP
Average overtime per employee per year	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total frequency rate for the period – employees	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Severity rate for the period – contractors	0	0	0	0	0	317	0	0	0	0	0	0	0	0	2,809	0
Total frequency rate for the period – contractors	0	0	0	0	0	29	0	0	0	0	0	0	0	0	14	0
Severity rate for the period – employees	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total frequency rate for the period – workforce (employees and contractors)	0	0	0	0	0	12	0	0	0	0	0	0	0	0	10	0
Total severity rate for the period – workforce (employees and contractors)	0	0	0	0	0	128	0	0	0	0	0	0	0	0	2,017	0
Fatalities involving direct employees	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fatalities involving contractors	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



Occupational health and safety

	2021															
	Sobragi HPP	Salto do Rio Verdinho HPP	Ourinhos HPP	Piraju HPP	Rio Novo MHPP	Alecrim HPP	França HPP	Fumaça HPP	Barra HPP	Porto Raso HPP	Serraria HPP	Salto do Iporanga HPP	Itupararanga HPP	Santa Helena MHPP	Votorantim MHPP	Jurupará MHPP
Average overtime per employee per year	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total frequency rate for the period – employees	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Severity rate for the period – contractors	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total frequency rate for the period – contractors	0	0	0	0	0	39	0	0	0	0	0	0	0	0	0	38
Severity rate for the period – employees	0	0	0	0	0	491	0	0	0	0	0	0	0	0	0	419
Total frequency rate for the period – workforce (employees and contractors)	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	38
Total severity rate for the period – workforce (employees and contractors)	0	0	0	0	0	156	0	0	0	0	0	0	0	0	0	419
Fatalities involving direct employees	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fatalities involving contractors	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

ANEEL 3.5.2.
INTERNAL SOCIAL DISCLOSURES – F) PROFESSIONAL DEVELOPMENT

Education levels – percentage of total employees

	2023							2022							2021						
	Primary education	Secondary education	Trade school	Higher education	Graduate (specialist, master's degree, PhD)	Amount invested in professional development and education	Average hours of training per year per employee	Primary education	Secondary education	Trade school	Higher education	Graduate (specialist, master's degree, PhD)	Amount invested in professional development and education	Average hours of training per year per employee	Primary education	Secondary education	Trade school	Higher education	Graduate (specialist, master's degree, PhD)	Amount invested in professional development and education	Average hours of training per year per employee
Sobragi HPP	NAv	NAv	60%	20%	20%	20%	84	NAv	NAv	NAv	NAv	NAv	8%	3	NAv	NAv	NAv	NAv	NAv	8%	3
Salto do Rio Verdinho HPP	NAv	NAv	58%	10%	32%	17%	236	NAv	NAv	NAv	NAv	NAv	8%	4	NAv	NAv	NAv	NAv	NAv	8%	4
Ourinhos HPP	NAv	NAv	70%	30%	NAv	6%	74	NAv	NAv	NAv	NAv	NAv	5%	5	NAv	NAv	NAv	NAv	NAv	5%	5
Piraju HPP	NAv	6%	52%	32%	10%	9%	74	NAv	NAv	NAv	NAv	NAv	9%	4	NAv	NAv	NAv	NAv	NAv	9%	4
Rio Novo MHPP	NAv	NAv	NAv	NAv	NAv	NAv	NAv	NAv	NAv	NAv	NAv	NAv	0%	0	NAv	NAv	NAv	NAv	NAv	0%	0
Alecrim HPP	4%	7%	68%	18%	4%	11%	55	NAv	NAv	NAv	NAv	NAv	19%	5	NAv	NAv	NAv	NAv	NAv	19%	5
França HPP	NAv	45%	45%	NAv	10%	4%	55	NAv	NAv	NAv	NAv	NAv	6%	5	NAv	NAv	NAv	NAv	NAv	6%	5
Fumaça HPP	NAv	NAv	88%	12%	NAv	3%	55	NAv	NAv	NAv	NAv	NAv	5%	6	NAv	NAv	NAv	NAv	NAv	5%	6
Barra HPP	NAv	NAv	100%	NAv	NAv	2%	55	NAv	NAv	NAv	NAv	NAv	3%	5	NAv	NAv	NAv	NAv	NAv	3%	5
Porto Raso HPP	NAv	NAv	60%	40%	NAv	2%	55	NAv	NAv	NAv	NAv	NAv	2%	2	NAv	NAv	NAv	NAv	NAv	2%	2
Serraria HPP	NAv	50%	50%	NAv	NAv	1%	55	NAv	NAv	NAv	NAv	NAv	1%	5	NAv	NAv	NAv	NAv	NAv	1%	5
Salto do Iporanga HPP	NAv	NAv	50%	NAv	50%	1%	55	NAv	NAv	NAv	NAv	NAv	3%	3	NAv	NAv	NAv	NAv	NAv	3%	3
Itupararanga HPP	NAv	3%	63%	20%	14%	25%	70	NAv	NAv	NAv	NAv	NAv	11%	4	NAv	NAv	NAv	NAv	NAv	11%	4
Santa Helena MHPP	NAv	NAv	NAv	NAv	NAv	NAv	NAv	NAv	NAv	NAv	NAv	NAv	0%	0	NAv	NAv	NAv	NAv	NAv	0%	0
Votorantim MHPP	NAv	NAv	NAv	NAv	NAv	NAv	NAv	NAv	NAv	NAv	NAv	NAv	0%	0	NAv	NAv	NAv	NAv	NAv	0%	0
Jurupará MHPP	NAv	NAv	NAv	NAv	NAv	NAv	NAv	NAv	NAv	NAv	NAv	NAv	0%	0	NAv	NAv	NAv	NAv	NAv	0%	0

Note: Data are not available on employees' education profiles (NAv).

ANEEL 3.5.2.
EXTERNAL SOCIAL
DISCLOSURES – COMMUNITIES

- **Consumers:** consumer-related disclosures are not applicable to the Energy business as its operations are limited to generation facilities.
- **Suppliers:** information about supplier management can be found in the “Sustainable supply chain” chapter of the 2023 CBA Annual Report.
- **Government and society:** information about dealings with governments and society can be found on pages 52 and 90 of this supplement.
- **Community:** key figures on communities are provided in this page.

ANEEL 3.5.3.
POWER-SECTOR DISCLOSURES

- **Research and development:** generation utilities classified as self producers are excluded from the requirement to invest in research and development and in energy efficiency, except in relation to revenue from electricity sales, as established in the ANEEL Research and Development Program Procedures (PROP&D).
- **Universalization and Energy Efficiency Program (PEE):** disclosures on universalization and access to energy and about the Company’s Energy Efficiency Program do not apply to the Energy business as its operations are limited to generation facilities.

Impacts on health and safety

	2023	2022	2021	2020
Total number of non-fatal injuries involving consumers	0	0	0	0
Total number of fatal injuries involving consumers	0	0	0	0
Legal proceedings resulting from accidents involving consumers – Overall Legal Proceedings	0	0	0	0
c) Low-income rate				
Number of customers/consumers paying low-income rates	NAv	NAv	NAv	NAv
Ratio of total customers/consumers paying low-income rates to total residential customers/consumers (%)	NAv	NAv	NAv	NAv
Revenue from sales to low-income residential sub-sector (R\$)	NAv	NAv	NAv	NAv
Total revenue from sales to low-income residential sub-sector out of total residential revenue (%)	NAv	NAv	NAv	NAv
Subsidy received (Eletrobrás) for low-income consumers (R\$)	NAv	NAv	NAv	NAv
d) Company engagement in social initiatives				
Funds allocated to education (R\$)	1,070,000	1,321,545	551,250	2,621
Funds allocated to healthcare and sanitation (R\$)	210,563	100,000	140,000	2,694
Funds allocated to culture (R\$)	0	0	0	100
Funds allocated to sports (R\$)	0	0	0	100
Other funds allocated to social initiatives (R\$)	203,999	200,632	115,000	10,397
Employees carrying out voluntary work in the community outside the Company/total employees (%)	NAvv	NAvv	14%	37%
Number of hours donated per month (employees released from normal working hours) by the Company for employee volunteer work	0	0	0	2
e) Company involvement in cultural, sports and other projects, etc. (Rouanet Act)				
Amount of funding allocated to the projects (R\$)	80,000	0	0	200
Amount of funding allocated to the largest project (R\$)	80,000	0	0	100

Note 1: The operations included in this disclosure are Itupararanga, França, Sobragi, Ourinhos and Salto do Rio Verdinho.
Note 2: Data on low-income rates are not applicable (NA) as CBA does not sell electricity directly to customers or consumers.

ANEEL 3.6. Environmental dimension

ANEEL 3.6.1.
ENVIRONMENTAL DISCLOSURES – WATER

Total water withdrawal (m³)

	2023					2022					2021				
	Municipal	Groundwater (well)	Surface water	Total water withdrawal	Water withdrawal per employee	Municipal	Groundwater (well)	Surface water	Total water withdrawal	Water withdrawal per employee	Municipal	Groundwater (well)	Surface water	Total water withdrawal	Water withdrawal per employee
Sobragi HPP	0	0	877.6	877.6	21.9	0	0	0	87.6	NAv	0	0	0	9	NAv
Salto do Rio Verdinho HPP	0	3,421.0	0	3,421.0	87.7	0	0	2,361.0	0	NAv	0	1,887.0	0	31,087.0	NAv
Ourinhos HPP	0	0	1,026.0	1,026.0	54	0	0	0	559.1	NAv	0	0	0	6	NAv
Piraju HPP	0	0	1,404.0	1,404.0	54	0	0	0	815.4	NAv	0	0	0	9	NAv
Rio Novo MHPP	0	0	216	216	54	0	0	305	0	NAv	0	0	0	2	NAv
Alecrim HPP	0	0	2,592.0	2,592.0	54	0	0	0	1,404.0	NAv	0	0	0	6	NAv
França HPP	0	0	1,404.0	1,404.0	54	0	0	0	810	NAv	0	0	0	4	NAv
Fumaça HPP	0	0	486	486	54	0	0	0	108	NAv	0	0	0	2	NAv
Barra HPP	0	0	540	540	54	0	0	0	216	NAv	0	0	0	2	NAv
Porto Raso HPP	0	0	540	540	54	0	0	0	162	NAv	0	0	0	2	NAv
Serraria HPP	0	0	378	378	54	0	0	0	108	NAv	0	0	0	2	NAv
Salto do Iporanga HPP	0	0	324	324	54	0	0	0	216	NAv	0	0	0	5	NAv
Itupararanga HPP	0	0	1,826.9	1,826.9	31.5	0	0	0	1,992.2	NAv	0	0	0	1	NAv
Santa Helena MHPP	0	0	324	324	54	0	0	0	134.1	NAv	569	0	0	570	NAv
Votorantim MHPP	1,020.0	0	0	1,020.0	127.5	0	89.4	0	0	NAv	0	0	0	2	NAv
Jurupará MHPP	0	0	378	378	54	0	0	0	268.3	NAv	569	1,887.0	0	31,724.0	NAv
Total	1,020.0	3,421.0	12,316.5	16,757.5	916.7	0	89.4	2,666.0	6,880.7	NAv	1,138.0	3,774.0	0	63,433.0	NAv

Note: The Energy Business first reported water withdrawal per employee in 2023, and therefore historical data is not available.

ANEEL 3.6.1.
ENVIRONMENTAL DISCLOSURES –
ENVIRONMENTAL EDUCATION

In 2023, CBA launched the Environmental Education Program (PEA) at Schools in the municipalities of Caçu (GO) (coverage area of HPP Salto do Rio Verdinho-GO) and Ibiúna (SP) (coverage area of HPP Itupararanga-SP), in partnership with the Votorantim Institute. These initiatives led to an increase in the number of beneficiaries within this disclosure. At the Ourinhos (SP) hydroelectric power plant, another initiative has provided environmental education

since 2012, involving students from local municipal schools and rural producers in the plant’s surrounding areas, including Ourinhos, Canitar, and Chavantes in São Paulo, and Ribeirão Claro and Jacarezinho in Paraná. Beyond these audiences, the Ourinhos PEA includes an “Open Doors” initiative that engages CBA employees, their families, and selected external parties in environmental education activities.

Environmental education – communities

	2023			2022			2021		
	Number of primary and secondary education schools benefited	Number of students benefited	Number of teachers trained	Number of primary and secondary education schools benefited	Number of students benefited	Number of teachers trained	Number of primary and secondary education schools benefited	Number of students benefited	Number of teachers trained
Sobragi HPP	0	0	0	0	0	0	1	400	0
Salto do Rio Verdinho HPP	1	103	4	0	0	0	0	0	0
Ourinhos HPP	13	906	0	16	1,210	0	3	389	0
Piraju HPP	0	0	0	0	0	0	0	0	0
Rio Novo MHPP	NAv	NAv	NAv	0	0	0	0	0	0
Alecrim HPP	0	0	0	0	0	0	0	0	0
França HPP	0	0	0	0	0	0	0	0	0
Fumaça HPP	0	0	0	0	0	0	0	0	0
Barra HPP	0	0	0	0	0	0	0	0	0
Porto Raso HPP	0	0	0	0	0	0	0	0	0
Serraria HPP	0	0	0	0	0	0	0	0	0
Salto do Iporanga HPP	0	0	0	0	0	0	0	0	0
Itupararanga HPP	4	230	18	0	0	0	0	0	0
Santa Helena MHPP	0	0	0	0	0	0	0	0	0
Votorantim MHPP	0	0	0	0	0	0	0	0	0
Jurupará MHPP	0	0	0	0	0	0	0	0	0
Total	18	1,239	22	16	1,210	0	4	789	0

Note: The Rio Novo MHPP (SP) was not included in this disclosure in 2023. During the reporting period, no technical or higher education institutions were included in the program.



ANEEL 3.6.1.
ENVIRONMENTAL DISCLOSURES – EFFLUENTS AND SOLIDS

Effluents and waste

	2023			2022			2021		
	Total water discharge (m³)	Quantity of solid waste generated (t)	PCB-contaminated waste (t)	Total water discharge (m³)	Quantity of solid waste generated (t)	PCB-contaminated waste (t)	Total water discharge (m³)	Quantity of solid waste generated (t)	PCB-contaminated waste (t)
Sobragi HPP	0	68.2	0	0	70.2	0	0	60.7	0
Salto do Rio Verdinho HPP	0	20.5	0	0	16.6	0	0	142	0
Ourinhos HPP	0	25.6	0	0	54	0	0	303.6	0
Piraju HPP	0	10.5	0	0	8.7	0	0	14.2	0
Rio Novo MHPP	0	0.1	0	0	1.4	0	0	0.2	0
Alecrim HPP	0	5.5	0	0	134.2	0	0	2.4	0
França HPP	0	2.2	0	0	0	0	0	29.8	0
Fumaça HPP	0	2.8	0	0	0.2	0	0	4.1	0
Barra HPP	0	3.1	0	0	0	0	0	50.9	0
Porto Raso HPP	0	2.2	0	0	77.4	0	0	6.5	0
Serraria HPP	0	1.8	0	0	174	0	0	0.8	0
Salto do Iporanga HPP	0	2.8	0	0	0	0	0	0.7	0
Itupararanga HPP	0	28.3	0	0	14.6	0	0	1,494.6	0
Santa Helena MHPP	0	27.1	0	0	0	0	0	0.7	0
Votorantim MHPP	0	176.3	0	0	132.7	0	0	1.6	0
Jurupará MHPP	0	100.5	0	0	487.2	0	0	25.9	0
Total	0	477	0	0	1,171	0	0	2,138.5	0

Note: The Rio Novo MHPP (SP) is not included in this disclosure in 2023.
Note 2: PCB (polychlorinated biphenyl) is a synthetic, fire-resistant insulating fluid, also known as Ascarel.



ANEEL 3.6.1.
ENVIRONMENTAL DISCLOSURES – EMISSIONS

Emissions

	2023		2022		2021	
	Annual volume of greenhouse gas (CO ₂ , CH ₄ , N ₂ O, HFC, PFC, SF ₆) emissions (tCO ₂ e)	Annual volume of ozone-depleting emissions (in metric tons of CFC equivalent)	Annual volume of greenhouse gas (CO ₂ , CH ₄ , N ₂ O, HFC, PFC, SF ₆) emissions (tCO ₂ e)	Annual volume of ozone-depleting emissions (in metric tons of CFC equivalent)	Annual volume of greenhouse gas (CO ₂ , CH ₄ , N ₂ O, HFC, PFC, SF ₆) emissions (tCO ₂ e)	Annual volume of ozone-depleting emissions (in metric tons of CFC equivalent)
Sobragi HPP	45.2	NAv	1,041.2	NAv	926.4	NAv
Salto do Rio Verdinho HPP	503.0	NAv	68.2	NAv	296.7	NAv
Ourinhos HPP	12.9	NAv	8.1	NAv	1,464.8	NAv
Piraju HPP	17.4	NAv	376.3	NAv	487.7	NAv
Rio Novo MHPP	0.0	NAv	0.0	NAv	26.8	NAv
Alecrim HPP	43.9	NAv	34.0	NAv	98.1	NAv
França HPP	17.4	NAv	12.2	NAv	23.6	NAv
Fumaça HPP	22.1	NAv	7.4	NAv	29.6	NAv
Barra HPP	25.8	NAv	6.7	NAv	41.0	NAv
Porto Raso HPP	16.9	NAv	7.5	NAv	23.8	NAv
Serraria HPP	13.6	NAv	2.6	NAv	18.5	NAv
Salto do Iporanga HPP	21.2	NAv	10.8	NAv	30.8	NAv
Itupararanga HPP	3,967.6	NAv	36.0	NAv	283.4	NAv
Santa Helena MHPP	2.1	NAv	2.1	NAv	15.7	NAv
Votorantim MHPP	1.5	NAv	1.4	NAv	10.5	NAv
Jurupará MHPP	4.2	NAv	34.0	NAv	34.8	NAv
Total	4,714.7	NAv	1,648.6	NAv	3,814.5	NAv

Note: In 2022, this disclosure included Scope 1 emissions only. Scope 2 emissions were nil, as CBA purchased renewable energy certificates (RECs) in the year, offsetting emissions within this scope in the inventory. Data on Scope 3 emissions is not compiled by plant.



ANEEL 3.6.1.

ENVIRONMENTAL DISCLOSURES – ENERGY

Total energy consumption by source (kWh)

	2023					2022				
	Hydro	Fossil fuels	Alternative sources	Total energy consumption	Electricity consumption per kWh distributed (sold)	Hydro	Fossil fuels	Alternative sources	Total energy consumption	Electricity consumption per kWh distributed (sold)
Sobragi HPP	0.0	0.0	0.0	1,272,195.0	0.0	0.0	0.0	0.0	1,255,094.0	0.0
Salto do Rio Verdinho HPP	0.0	1,367.0	0.0	1,921,059.1	0.0	0.0	798.0	0.0	1,790,366.0	0.0
Ourinhos HPP	0.0	0.0	0.0	1,676,676.0	0.0	0.0	0.0	0.0	1,084,327.0	0.0
Piraju HPP	0.0	113.0	0.0	3,526,130.3	0.0	0.0	598.0	0.0	1,537,672.2	0.0
Rio Novo MHPP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Alecrim HPP	0.0	662.0	0.0	1,495,134.0	0.0	0.0	285.0	0.0	2,505,645.0	0.0
França HPP	0.0	109.2	0.0	448,815.4	0.0	0.0	1,138.0	0.0	266,603.0	0.0
Fumaça HPP	0.0	344.0	0.0	123,363.0	0.0	0.0	1,093.0	0.0	87,193.0	0.0
Barra HPP	0.0	1,094.3	0.0	838,398.7	0.0	0.0	696.0	0.0	1,014,856.0	0.0
Porto Raso HPP	0.0	149.6	0.0	567,340.6	0.0	0.0	280.0	0.0	691,225.0	0.0
Serraria HPP	0.0	72.6	0.0	804,316.0	0.0	0.0	300.0	0.0	891,995.0	0.0
Salto do Iporanga HPP	0.0	2.0	0.0	623,117.0	0.0	0.0	400.0	0.0	729,804.0	0.0
Itupararanga HPP	0.0	0.0	0.0	1,651,181.2	0.0	0.0	0.0	0.0	0.0	0.0
Santa Helena MHPP	0.0	0.0	0.0	64,531.4	0.0	0.0	0.0	0.0	0.0	0.0
Votorantim MHPP	0.0	0.0	0.0	58,980.2	0.0	0.0	0.0	0.0	0.0	0.0
Jurupará MHPP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	0.0	3,913.7	0.0	15,071,238.0	0.0	0.0	5,588.0	0.0	11,854,780.2	0.0

Note 1: The Energy business does not report disclosures on fuel energy consumption in gigajoules, as consumption is tracked using a different metric.
Note 2: The Energy Business does not use energy from alternative sources and does not calculate electricity consumption per kWh sold, as it is not applicable.

ANEEL 3.6.1.
ENVIRONMENTAL DISCLOSURES – ELECTRICITY

Total electricity consumption (kWh)

	2023		2022		2021	
	Electricity consumption by generator units and auxiliaries	Total water consumption (m³/s) per kWh generated	Electricity consumption by generator units and auxiliaries	Total water consumption (m³/s) per kWh generated	Electricity consumption by generator units and auxiliaries	Total water consumption (m³/s) per kWh generated
Sobragi HPP	436,015.00	0.0013	439,402.00	0.0013	506,120.00	0.0013
Salto do Rio Verdinho HPP	907,437.00	0.0028	932,461.00	0.0028	1,776,045.00	0.0028
Ourinhos HPP	635,440.00	0.0105	507,341.00	0.0105	498,411.00	0.0105
Piraju HPP	1,003,747.00	0.0045	332,085.74	0.0045	879,082.00	0.0045
Rio Novo MHPP	0	0.0584	0	0.0584	2,280.00	0.0584
Alecrim HPP	585,850.00	0.0007	1,531,905.00	0.0007	566,200.00	0.0007
França HPP	448,346.26	0.0009	265,105.00	0.0009	288,181.00	0.0009
Fumaça HPP	123,019.00	0.0008	86,100.00	0.0008	111,880.00	0.0008
Barra HPP	322,352.00	0.001	768,294.00	0.001	409,792.00	0.001
Porto Raso HPP	186,775.00	0.0016	208,780.00	0.0016	298,250.00	0.0016
Serraria HPP	227,248.00	0.0023	236,155.00	0.0023	385,250.00	0.0023
Salto do Iporanga HPP	159,847.00	0.0005	158,045.00	0.0005	198,320.00	0.0005
Itupararanga HPP	0	0.0007	0	0.0007	0	0.0007
Santa Helena MHPP	0	0.0071	0	0.0071	0	0.0071
Votorantim MHPP	0	0.005	0	0.005	0	0.005
Jurupará MHPP	0	0.0009	0	0.0009	0	0.0009
Total	5,036,076.26	0.0991	5,465,673.74	0.0991	5,919,811.00	0.0991

Note: In 2022, the reporting scope was changed for alignment purposes. The energy consumption calculation includes general consumption for generator unit excitation.

