



SUSTAINABILITY REPORT 2024

MESSAGE FROM THE CEO

GRI 2-22

The year 2024 was marked by a series of operational challenges and global geopolitical changes. More than ever, we had to put our resilience and agility in making decisions into practice.

Despite the global economic slowdown and volatility in North American and European markets, we managed to remain committed to operational excellence and sustainability, maintaining our position as a benchmark in the silicon metal industry.

Operationally speaking, 2024 was a year of stabilization following the investments made in recent years. Upon full commissioning of our upgraded furnaces, we faced challenges typical of large-scale industrial projects. However, we successfully overcame them through solutions developed internally by our engineering and operations teams. Our ability to adapt and innovate allowed us to meet our production and efficiency targets, even in the face of global logistics instability affecting the sector.

Regarding sustainability, we have made significant strides in advancing our Environmental, Social and Governance (ESG) strategy. We have reinforced our commitment to the energy transition and emissions reduction, remaining a pioneer in the use of charcoal as a biobased reductant in

silicon metal production. This approach not only reduces our carbon footprint, but also strengthens our position in a market that increasingly values low-impact products. In 2024, all our dust collection filters became fully operational – this is an atmospheric emissions control technology that ensures even greater control of our environmental impact. We also advanced in certifying our carbon footprint, which is now audited under international standard ISO 14067, enhancing our transparency and credibility with stakeholders.

LIASA has continued to invest in the development of its human capital. Once again, we were recognized with Great Place to Work (GPTW) certification, reflecting our commitment to a healthy, safe and inclusive work environment. Gender inclusion remains one of our priorities and saw notable progress this year, with an increase in the number of women on our team, especially in industrial operations, moving us closer to our goal of reaching 15% female representation by 2025.

Socially, the “Ligas da Vida” program remains our primary driver of positive impact in the communities where we operate. In 2024, we worked on revitalizing the project’s educational approach, expanding its reach and impact among children and young people in Pirapora, Minas Gerais.



**FERNANDO
CARAM PATRUS**
CEO

Looking ahead, we know that challenges remain, but we are firmly focused on our long-term vision. Global environmental regulations are constantly evolving, and strategic markets such as Europe are advancing legislation that favors products with a lower carbon footprint, such as CBAM.* We believe this movement will bring new opportunities for LIASA and strengthen our competitive edge.

Our journey so far is the result of the tireless work of our employees, the trust of our customers and the commitment of our partners. We will remain focused on innovation, sustainability and operational excellence, so that LIASA continues to grow sustainably and competitively on the global stage.

*The Carbon Border Adjustment Mechanism (CBAM), is a European Union policy designed to ensure that imported products comply with the same environmental standards applied within the European Union.

ABOUT THIS REPORT

GRI 2-3

GRI 2-5

We are very proud to present LIASA's Sustainability Report for the third consecutive year. In the following pages, we have compiled information about our nearly six-decade-long history, guided by the mission to create a positive impact on people and the planet.

Based on the Global Reporting Initiative (GRI) standard, this document presents our operations, initiatives, achievements and challenges for the period ranging from January 1 to December 31, 2024.

The topics covered were selected based on the most relevant themes (material topics) for LIASA and its stakeholders. Both the list of topics and a description of the process used to define them can be found in the **Material Topics** section.

The financial data presented in this report was audited by KPMG Brazil. The report was developed with contributions from leaders of the company's main departments and the ESG Committee, which was established three years ago. The Committee meets every 45 days and includes members of senior leadership and key internal stakeholders. This year, we made progress in obtaining external certifications



for non-financial information, further strengthening our credibility with the market and our stakeholders. In addition to the certifications already obtained, such as ISO 14001, ISO 14064 - GHG Protocol and Great Place to Work (GPTW), we also achieved ISO 14067 certification, which sets guidelines and requirements for measuring the carbon footprint of products and services. Along the same lines, we are also advancing in implementing regulatory and market-driven requirements such as the Carbon Disclosure Project (CDP) and CBAM.

We understand that sustainability is an ongoing journey, and this report reflects our commitment to ESG best practices. In the coming cycles, we plan to continue evolving while transparently reporting our progress and lessons learned along the way.

ABOUT LIASA



ABOUT LIASA

GRI 2-1

GRI 2-6

Fifty-nine years ago, in the municipality of Pirapora, in the northern region of Minas Gerais state, **mining and metallurgical engineer**, entrepreneur, professor and researcher José Patrus de Sousa developed an innovative method to reduce kyanite and quartz, transforming them into an aluminum-silicon alloy. This marked the beginning of Ligas de Alumínio S.A. – LIASA.

Today, LIASA is one of the largest producers of silicon metal in South America and the first in the sector to incorporate environmental practices throughout its production chain, including the use of charcoal and other clean and renewable energy sources. The company operates sustainably across its entire production chain.

Through these initiatives, LIASA reaffirms its essence and its commitment to the ESG agenda and **Green Silicon**.

LIASA GROUP

The LIASA Group is composed of several companies created to support long-term planning and help achieve the strategic goals established for the business.



LIGAS DE ALUMÍNIO S.A. – LIASA



LIASA NORTH AMERICA (LNA)

–based in the United States, LNA is LIASA's partner in the commercialization of its products.



COMEL – LIASA's energy trading company.



LIASA FLORESTAS – a holding company that brings together forestry companies that produce wood and biobased reductants.

PURPOSE

To supply silicon metal (Green Silicon) and its derivatives as strategic products that contribute to building a more sustainable life.

VALUES

Value life and the environment

Care for people's well-being and development

Act with integrity in all relationships

Be a team that makes things happen

Operate with excellence

Deliver on commitments

Grow and evolve together

TIMELINE

LIASA is founded by **José Patrus de Sousa**, a mining and metallurgical engineer, professor at Minas Gerais Federal University (UFMG), businessman and entrepreneur.

1966
1972
1975

Start of silicon metal production, which becomes the company's flagship product.

1980

Furnace II – construction of the second furnace, using Norwegian technology.

1988

LIASA becomes the third largest producer of silicon metal in the world. In the same year, the company builds **Furnaces III and IV.**

2003

Modernization to increase installed production capacity of **Furnace III.**

2004

Modernization to increase installed production capacity of **Furnace IV.**

Furnace I – start of ferrosilicon production, a product that is exported to Norway in the same year. This furnace was also built using Norwegian technology. At the time of delivery, the Norwegian representatives doubted the feasibility of using charcoal as a biobased reductant in the process. Until then, furnaces used coal – a fossil fuel that is more expensive and non-renewable. The Norwegian experts had to witness firsthand the effectiveness of this technology developed by LIASA, which remains a revolutionary innovation in the industry to this day.

Modernization to increase installed production capacity of **Furnace II**.

2005

Modernization to increase installed production capacity of **Furnace I**.

2008

A year marked by several milestones: Launch of LIASA's plant modernization plan; expansion of the company's renewable energy strategy by establishing subsidiaries that promote forestry; completion of solar energy generation projects; registration of the "**Green Silicon**" concept in Europe, now the identity of LIASA's product; and attainment of new certifications and recognitions.

2022

Completion of the plant modernization plan: Installation of dust collection filters to reduce particulate emissions and upgrades to the furnaces, increasing production capacity.

In addition, LIASA made significant progress on its ESG agenda and became self-sufficient in both energy and wood supply.

2023

2024

Technological advancements and sustainability: All dust collection filters operated at full capacity throughout the year, marking a significant improvement in LIASA's environmental management.

Completion of furnace modernization, ensuring greater operational stability, energy efficiency and optimized production chain.

Improvement of the carbon inventory, with the company's first carbon footprint calculation in accordance with the **ISO 14067** standard, reinforcing the company's climate transparency and governance.

OUR BUSINESS

GRI 2-1

We operate in the metallurgical sector, transforming milky quartz into silicon metal and ferrosilicon, while also generating **silica fume** as a byproduct.

01

OPERATIONS

At LIASA, our operations go beyond the production of silicon metal. We also maintain in-house production and support a network of strategic input suppliers – especially biobased reductants, electric power and quartz – areas in which we invest continuously. Learn more in **Green Silicon**.

02

PROCESS CONTROL

All management practices follow global quality standards, with a focus on employee safety, operational efficiency, environmental protection and product quality.

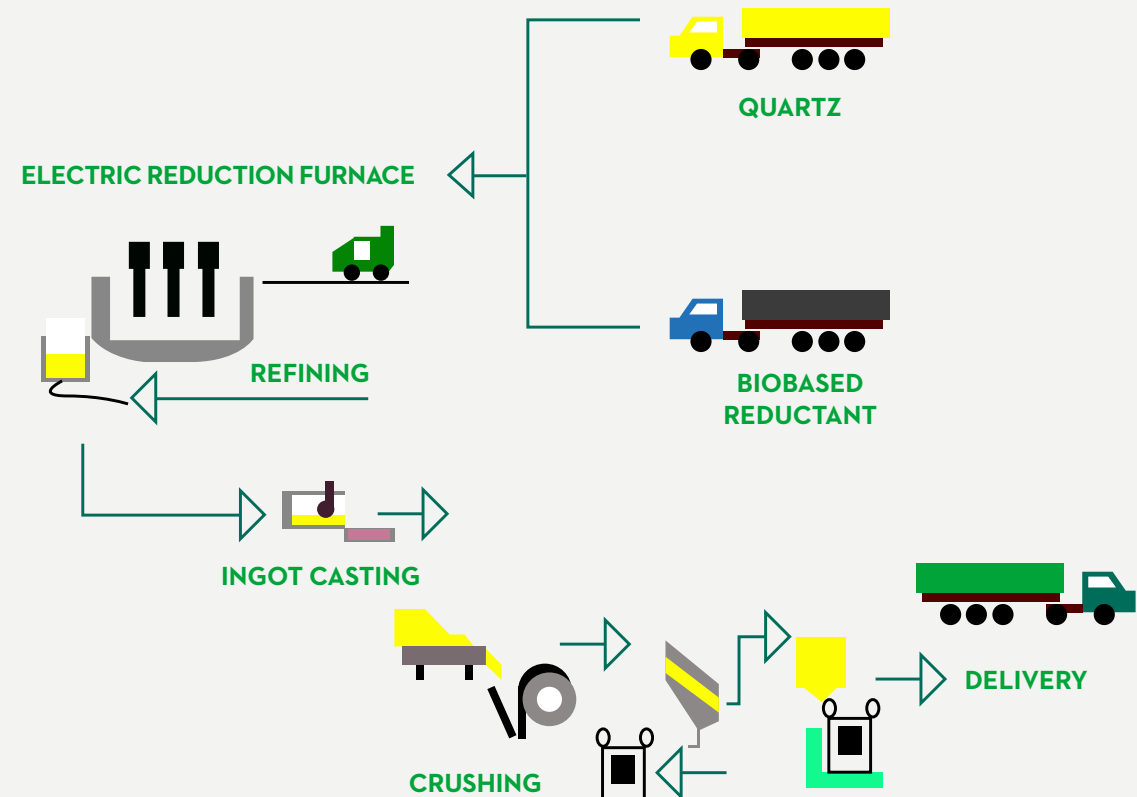
03

QUALITY CONTROL

Implemented throughout every stage of the production chain. Our laboratory facilities ensure that our products meet the technical specifications required by our customers. Learn more in **Focus on Quality**.

Silicon is a key material used in products related to advanced and sustainable technologies. Today, over 10,000 products are based on silicon, especially in the industrial and medical grade silicone, metal alloys, solar panels, electric vehicle batteries and microprocessor industries.

OUR PRODUCTION PROCESS



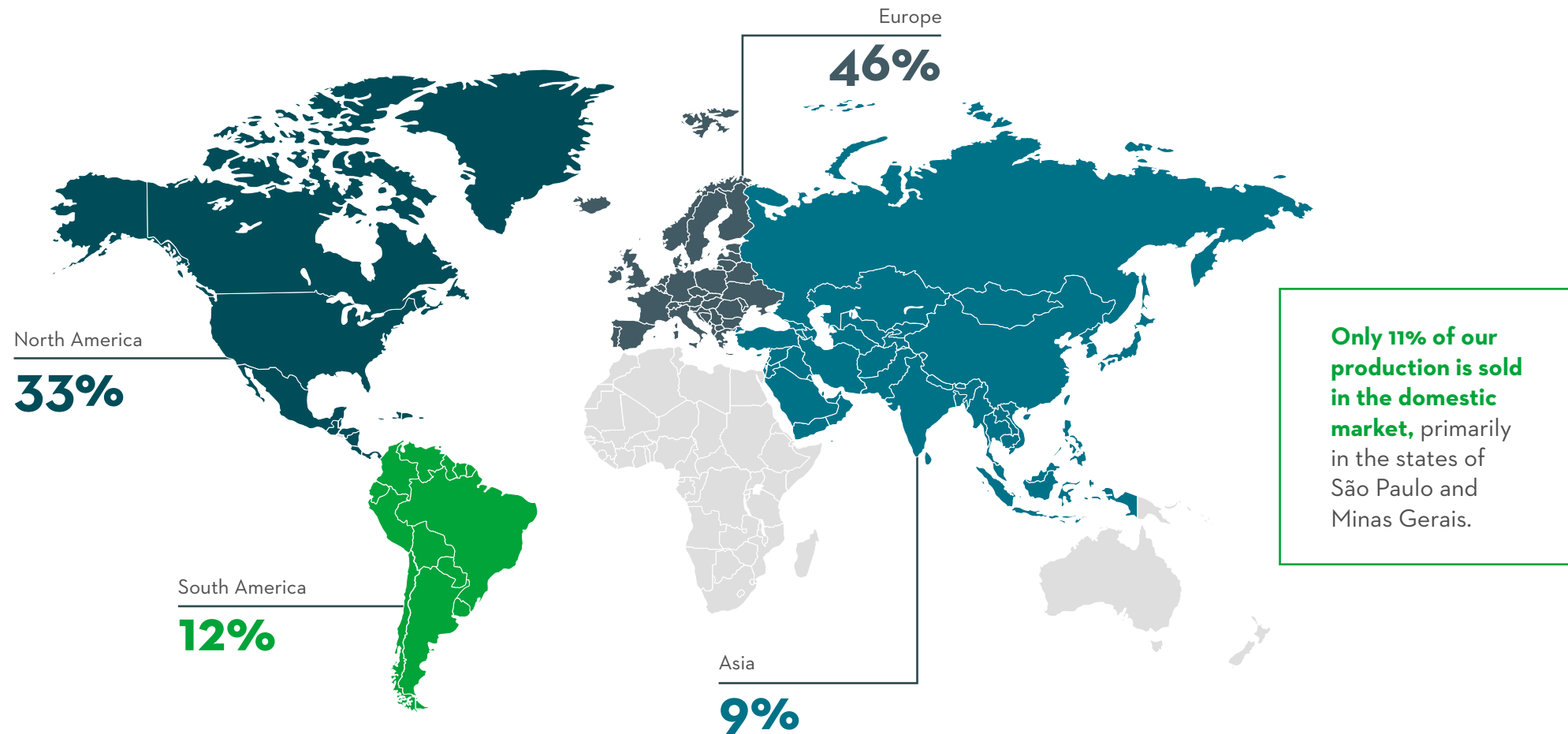
LIASA AROUND THE WORLD

GRI 2-1

LIASA currently operates four electric reduction furnaces at its production facility, dedicated to the manufacturing of silicon metal.

Silicon metal is a key raw material in the production of polysilicon (used for solar panels and semiconductor chips), silicones, aluminum alloys and, in the electric vehicle industry, it is found in lithium-ion batteries.

The company operates predominantly in international markets. About 90% of its production is exported to Europe, North America and Asia, distributed as follows:



LIASA'S MARKET SHARE



1.8%
Global market share



7%*
market share

*Excluding China, which is not included in the company's analysis due to its dominant global market share.

FOCUS ON QUALITY, PRODUCT MANAGEMENT AND CUSTOMER SATISFACTION

LS-02

Operating with excellence is one of the core values that guide our actions and strategies. In the market in which we operate, this means meeting and anticipating customer needs and making decisions swiftly to deliver a high-quality product that integrates best sustainability practices from start to finish.

It is worth noting that, in cases of internal deviations resulting in customer complaints, the process is thoroughly evaluated and follows a non-compliance handling procedure.

In 2024, we revamped our customer satisfaction survey tools and parameters and improved the monitoring of satisfaction indicators, applying continuous improvement to the process.

QUALITY CONTROL

LIASA maintains a Quality Management System that implements effective controls to ensure full compliance with the conditions specified by its customers.

After-sales support, carried out jointly by the technical and industrial teams, ensures product quality by resolving potential issues quickly and promoting continuous improvement.

To measure the system's effectiveness, the company generates a Customer Complaint Report and monitors actions that can generate positive impacts on both customer and internal processes – fostering improvements in areas such as efficiency, logistics and packaging.

In 2024, LIASA did not receive any customer complaints.

Customer satisfaction score – 2024:

91.75





GREEN SILICON



GREEN SILICON

GRI 2-6

GRI 2-25

We were born with green DNA. Since the very beginning of our operations, we have upheld a strong commitment to sustainability, people and the community.

Over the past three years, these actions have been structured into our ESG strategy, which includes investments in process efficiency and initiatives across the supply chain. We also established the ESG Committee (see more under Governance), which is composed of senior leadership and key internal stakeholders who form the ESG Working Group. This structure has accelerated the implementation of actions related to the topic.

Our production chain relies on four strategic inputs: biobased reductant, electric power, quartz and electrodes. The first three are primarily sourced in the Pirapora region, Minas Gerais. Together with our industrial plant, this local sourcing creates new development opportunities for the area.

We are located within the largest solar power complex in Latin America. Since 2023, we have become 100% self-sufficient with self-generated solar energy. Our generation and consumption exceed **120 MW per month**.



As a point of reference, the amount of energy we generate would be enough to **supply a city of approximately 450,000 residents, such as Montes Claros in Minas Gerais or Santos in São Paulo.**

Our biobased reductant production is also regional. We are currently self-sufficient for 50% of our monthly demand (50,000 m³), sourced from our own renewable forests, which cover approximately 19,000 hectares. The remaining 50% is purchased from local producers.

As for quartz, our supply also comes from local, environmentally responsible providers. We currently operate three owned mining sites that supply more than 100,000 tons per year.

The concept of Green Silicon represents LIASA's commitment to sustainability across the entire value chain. From the use of renewable raw materials, such as charcoal from planted forests, to energy self-sufficiency through solar power, every step of our production is designed to minimize environmental impact and value people. The result is a silicon metal with a low carbon footprint, which is a key input for clean technologies such as solar panels, electric vehicle batteries, microprocessors and other solutions essential to the transition toward a low-carbon economy.

The Green Silicon concept stands as a clear demonstration of LIASA's environmental responsibility, serving as a true sustainability credential. The Green Silicon trademark had already been registered in Europe and, in 2024, we obtained registration in the United States.

OUR GREEN SILICON



An energy-intensive industry fully powered by solar energy and fueled by a renewable reductant (biobased reductant).



Negative carbon balance (considering emissions, sequestration and storage).



Biobased reductant sourced from our own planted forests or from local producers committed to sustainable forest management.



Support for the circular economy, with full reuse of production byproducts, most of which are recovered and sold for reuse in other processes.

A FULLY SUSTAINABLE VALUE CHAIN

LIASA's product feeds a downstream value chain that is essential to the planet's sustainable development, including the solar panel industry, chips, microprocessors and electric vehicle batteries.



AWARDS & RECOGNITIONS

The year 2024 was marked by several recognitions related to the sustainability of our operations. These achievements help illustrate why we are proud of have chosen a path that may not be the easiest, but clearly reflects our commitment to the long-term resilience of our business.

Among the key recognitions received, LIASA's Green Silicon case, with a focus on low-carbon solutions, was selected as one of the best in Minas Gerais and chosen for presentation at the 29th UN Climate Change Conference (COP29), held in Baku, Azerbaijan, in November 2024.

We also celebrated our recertification as a Great Place to Work (GPTW), which recognizes organizations with a culture of trust, high performance and innovation.

In terms of ISO certifications, in addition to the recertification of ISO 14064 (focused on greenhouse gas emissions management), we also achieved ISO 14067 certification, attesting to our ability to calculate the carbon footprint across the entire product life cycle.

Check out our main certifications, awards and recognitions:

ISO 14001: certifies organizations committed to managing the environmental impacts of their activities; maintained since 2022.

ISO 14064 and Gold certification in the Brazilian GHG Protocol Program: attest to our practice of sequestering 0.95 tons of carbon per ton of silicon produced.

ISO 14067: obtained in 2024, it defines the requirements for companies to quantify the carbon footprint at each stage of the product life cycle.

ISO 9001: the most widely recognized quality certification required by national and international markets; maintained since 1996.

EcoVadis: Gold Medal, awarded in 2023 and again in 2024. This is one of the world's most trusted sustainability rating systems, placing LIASA among the top 3% of companies in its industry.

GPTW Brasil: recertified in 2024, with 80% of employees considering the company a great place to work.



ESG STRATEGY

GRI 3-1

LIASA's material topics not only define the main subjects covered in this report – they also serve as the pillars of our business strategy. Aligned with principles of the ESG agenda, the company began a comprehensive review of its practices and processes in 2022, with the establishment of the ESG Committee, which has been working with the support of a specialized consulting firm.

Over the past three years, LIASA's Executive Committee and shareholders have actively participated in the entire ESG strategy development process, including workshops to set targets and meetings to deliberate on and monitor results.

The actions defined by the Committee are part of the company's strategic planning, which establishes goals and commitments and makes it clear that, in addition to economic and financial performance, LIASA is committed to regional socioeconomic development, respect for local culture, environmental responsibility, occupational health and safety and to generating value not only for shareholders, but also for customers, employees, communities, suppliers and other business partners.

Learn more in the [Governance section](#).

MATERIALITY

How LIASA defined its material topics:

01

Interviews with seven company leaders, including the CEO, COO, Chief Administrative, Financial and ESG Director, as well as managers from the Industrial, Procurement, Commercial, Forestry and Environmental areas.

02

ESG maturity, risk, and opportunity assessments.

03

Analysis of industry and internal documents.

04

Identification and prioritization of positive and negative, actual and potential impacts on the economy, the environment and people.

05

Definition and prioritization of material topics.



MATERIAL TOPICS

GRI 3-2

LIASA currently prioritizes 15 material topics, grouped into three strategic pillars. These are also aligned with the United Nations (UN) 2030 Agenda, also known as the Sustainable Development Goals (SDGs). These strategic pillars structure the following chapters of this report, covering the topics most relevant to LIASA and its stakeholders.

STRATEGIC PILLAR

MATERIAL TOPICS

RELATED SDGS

RESPONSIBILITY

Commitments that protect the environment

Air quality



Renewable energy



Climate change



Water and effluents



Waste & tailings management



Forest management



DIGNITY

Commitments that value people

Community relations and social responsibility



Occupational health & safety



Worker well-being and dignity at work



Responsible sourcing



Diversity and equal opportunity



COMPETITIVENESS

Commitments that drive our business forward

Ethics & compliance



Governance



Innovation & patents



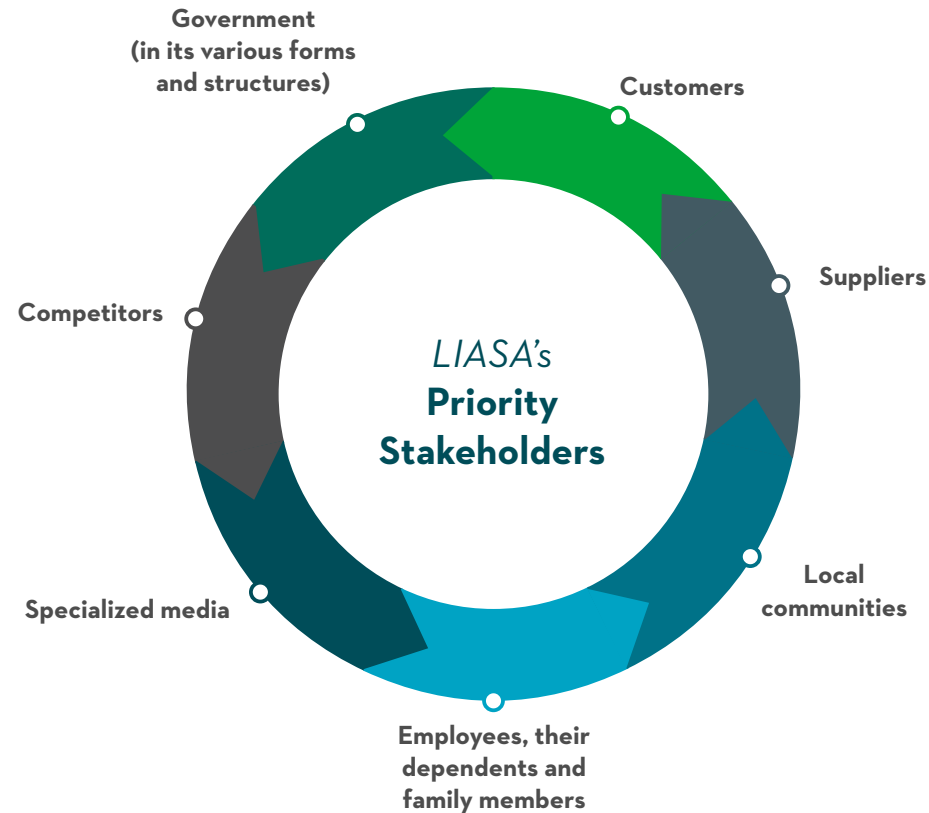
Customer satisfaction and product quality



STAKEHOLDER ENGAGEMENT

GRI 2-29

LIASA's stakeholder relationship management – both internal and external – is guided by transparency, dialogue and respect, which directly contribute to risk mitigation and problem solving.



The mapping of stakeholders and decisions regarding the engagement and dialogue strategies are defined by the Communications Committee. It includes representatives from several departments – Health and Safety, Environment and Forestry, Production, Human Resources, Raw Materials, Laboratory and Supplies – and is responsible for tactical communication planning, including the establishment of goals and initiatives.

For external stakeholders, LIASA maintains several communication channels, such as its **website**, website (via the Contact Us portal) and satisfaction surveys, mainly with customers, as well as its **LinkedIn** profile. Whenever possible, LIASA also takes part in industry events and partners with initiatives led by public authorities, fostering interaction with other stakeholders.

Learn more about engagement initiatives in the **Social** section.



COMPETITIVENESS

COMMITMENTS THAT DRIVE OUR BUSINESS FORWARD

GOVERNANCE

GRI 2-9

LIASA has been making steady progress in its governance model, supporting its planned strategies and actions with transparency and ethics at every level.

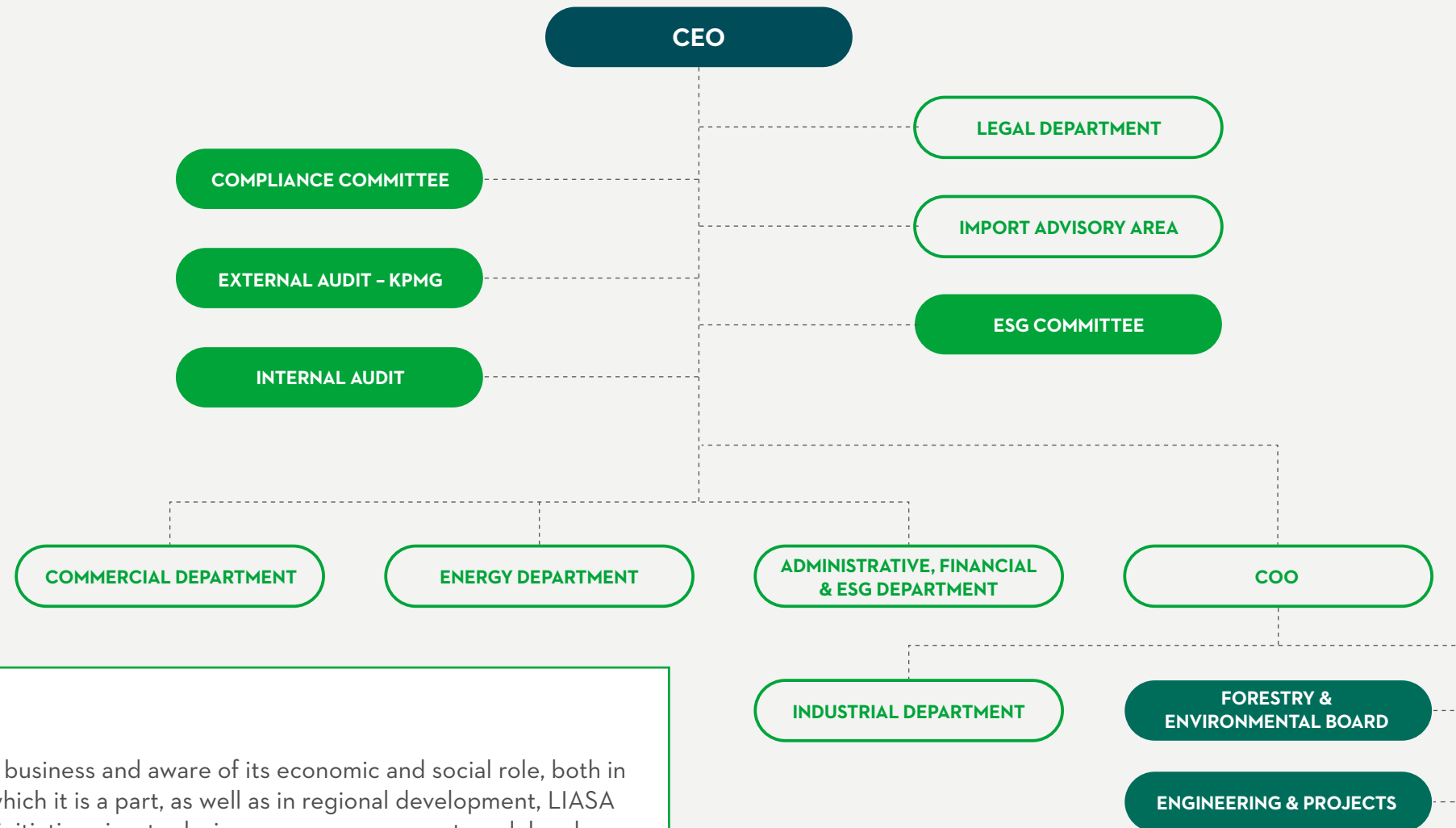
Currently, the company adopts internal control mechanisms and collective decision-making processes and undergoes annual financial and accounting audits conducted by an international consulting firm.

These efforts, which are disclosed and used to evaluate the company's performance, are added to its **Certifications**, further strengthening and increasing transparency in its management.

SUCCESSION PLAN

Committed to the long-term continuity of its business and aware of its economic and social role, both in the supply chain and in the communities of which it is a part, as well as in regional development, LIASA has been structuring a succession plan. This initiative aims to design a new management model and propose the company's governance policy.

ORGANIZATIONAL STRUCTURE



SHARED MANAGEMENT

LIASA adopts a shared management model through committees that enhance security, agility and proximity in decision making. These committees manage and assign responsibilities for actions related to the company's main impacts (economic, environmental and social).

The committees follow a fixed meeting schedule and can also be convened at any time, if needed. The highest governance body is always kept informed and, where necessary, involved in discussions on strategic matters.

- ▶ **Executive Committee**
- ▶ **People and Management Committee**
- ▶ **ESG Committee**
- ▶ **Compliance Committee**
- ▶ **Occupational Health and Safety (OHS) Committee**
- ▶ **Communication Committee**



Executive Committee

A decision-making body for strategic matters, including those related to assets, budgeting and risk management; it meets on a monthly basis. The committee is composed of internal leaders (C-level, departments and management) and chaired by the CEO.

The company does not yet have a Board of Directors, and the shareholders hold executive positions such as CEO and COO.

In addition to the shareholders, the Executive Committee includes officers appointed according to the organizational structure.

People and Management Committee

It evaluates and calibrates performance across the organization and monitors people management matters.

It meets annually to review and calibrate performance evaluations and monthly, as part of the Executive Committee, to address standing topics and specific agendas. The People and Management team also holds weekly meetings to monitor organizational climate and

address topics such as ethics, operations, internal and institutional communication, health and safety and the Quality and Environmental Management System.

ESG Committee

It monitors and decides on the action plan and required investments related to ESG. This group meets every 45 days and is chaired by the CEO.

Compliance Committee

Activated on demand whenever necessary, via the available channels (Ethics Channel for external stakeholders and Internal Ombudsman for employees).

OHS Committee

It is focused on analyzing Occupational Health and Safety indicators, including accidents, risks, actions and investigations. It decides on and recommends necessary investments to permanently mitigate risks. It is chaired by the Administrative and Financial

Director and includes the participation of the Chief Industrial Officer. Meetings are held monthly.

Communication Committee

Its goal is to share institutional information and, most importantly, gather insights from the front lines to identify communication and positioning opportunities. The group is made up of representatives from all areas of the company and is chaired by the Administrative and Financial Director. Meetings are held monthly.

In order to support management and decision making, there is also the ESG Working Group:

ESG Working Group

It deliberates and oversees the actions and goals of the ESG strategic plan at meetings every two weeks.

Participants include representatives from the Legal, Environmental, Management System, Internal Communication, People and Management and New Business teams. The group is chaired by the Administrative and Financial Director.



COMPENSATION AND EVALUATION OF KEY EXECUTIVES

GRI 2-19

GRI 2-20

The compensation policy for members of the Executive Committee and Executive Board is defined by the shareholders. The committee is responsible for establishing and assessing management and budgetary targets for the purposes of development management, meritocracy and bonuses.

At LIASA, sustainability performance is also considered, with objectives related to ESG pillars integrated into the company's strategic plan.

RISK MANAGEMENT

GRI 2-16

Senior leadership is informed in real time by strategic areas about business concerns, associated risks, criticality levels, analyses, solutions and other relevant points.

When the matters are not urgent or require further analysis before a solution can be proposed, they are reported during Executive Committee meetings.

ETHICS AND ANTI-CORRUPTION PRACTICES

GRI 2-23

Fighting corruption, fostering respectful and ethical relationships, and maintaining integrity are commitments made by LIASA in all its interactions. These principles are set forth in the **Code of Ethics, Conduct and Responsibilities**, as well as the **Anti-Corruption Policy**.

In addition, we align our responsible business conduct commitments with various internationally recognized intergovernmental instruments. Examples include:

- ▶ **International Labor Organization (ILO) Conventions:** We adhere to Conventions Nos. 29, 130, 138, 182, Po29 and R203, which address issues such as the eradication of forced and child labor, as well as the elimination of all forms of discrimination in the workplace.
- ▶ **Universal Declaration of Human Rights:** We reinforce our commitment to human rights by promoting sociocultural activities that foster culture, sports and human development in the communities we are part of and among our workforce.
- ▶ **American Convention on Human Rights:** We support the principles set out in this convention and incorporate them into our corporate policies and practices.
- ▶ **UN Global Compact:** As a participant in the UN Global Compact, we align our operations and strategies with the 10 universally accepted principles in the areas of human rights, labor, the environment and anti-corruption.



In our relationships with business partners, LIASA's policies are presented as conditions for entering into contracts and commercial agreements. Regarding due diligence procedures, we comply with the Brazilian laws, in particular Law 12846 of 2013 (Anti-Corruption Act), Law 8666 of 1993 (Public Procurement Act), and Law 8429 of 1992 (Administrative Misconduct Act).

TRAINED PERSONNEL

All employees undergo internal training on ethics, integrity and anti-corruption, during which the company's commitments and practices are clearly explained. In addition, through various social and cultural projects, LIASA promotes the values underlying these policies on a daily basis in the workplace.

ANTI-CORRUPTION

GRI 205-2

Our processes and procedures related to anti-corruption are conducted annually and are aligned with best market practices.

2023							2024				
Communication of policies and procedures and training courses by job category and region		Number of employees	Communication about anti-corruption policies		Received anti-corruption training		Number of employees	Communication about anti-corruption policies		Received anti-corruption training	
			No.	%	No.	%		No.	%	No.	%
SOUTHEAST	Officer/CEO	6	6	100%	6	100%	6	6	100%	6	100%
	Manager	16	16	100%	16	100%	16	16	100%	16	100%
	Coordinator / consultant	22	22	100%	22	100%	19	19	100%	19	100%
	Technician/Analyst/ Supervisor	242	242	100%	242	100%	236	236	100%	236	100%
	Trainee	4	4	100%	4	100%	3	3	100%	3	100%
	Operational	630	630	100%	630	100%	610	610	100%	610	100%
	Interns	7	7	100%	7	100%	4	4	100%	4	100%
	Apprentices	40	40	100%	40	100%	37	37	100%	37	100%
Total		851	967	100%	967	100%	931	931	100%	931	100%

Note: The company operates exclusively in Brazil's Southeast region. The figures below refer to training on the Code of Ethics and Conduct and the Anti-Corruption Policy.



Governance body members

2024

Total number of governance body members, being: 6 officers and one manager	22
Total number of trained governance body members	22
Percentage informed	100%

Employees

2024

Total number of direct employees	890
Total number of employees trained, broken down as follows: 236 technicians/analysts/supervisors, 3 trainees, 610 operational employees	890
Percentage informed	100%

The anti-corruption procedures and policies have been communicated to 100% of LIASA's business partners and suppliers, who have committed to informing and training their teams on the company's standards of conduct.

Partners and suppliers

2024

Total number of business partners	468
Total number of business partners informed	468
Percentage informed	100%

CONFIRMED CASES OF CORRUPTION AND MEASURES TAKEN

GRI 205-3

In 2024, no risks were identified related to bribery, kickbacks, fraud, extortion, collusion or money laundering; the offering or receipt of gifts, loans, commissions, rewards or other advantages as an inducement to act dishonestly, illegally or in breach of trust; embezzlement, influence peddling, abuse of office, illicit enrichment, concealment or obstruction of justice.

UNFAIR COMPETITION

GRI 206-1

In 2024, no legal actions were filed regarding unfair competition, trusts, or monopoly practices. To prevent unfair competition, we maintain integrity and transparency in our purchasing and sales procedures.

2022 2023 2024

Total number of confirmed cases of corruption	0	0	0
Nature of confirmed cases of corruption	N/A	N/A	N/A
Other comments	N/A	N/A	N/A
Total number of confirmed cases resulting in employee dismissal or disciplinary action	0	0	0
Details			
Total number of confirmed cases resulting in contract termination or non-renewal with business partners	N/A	N/A	N/A
Details			
Number of legal proceedings related to corruption filed against the organization or its employees	0	0	0
Details, including outcomes of such cases	N/A	N/A	N/A

COMPLIANCE

GRI 2-26

The monitoring, measurement and reporting of corporate risks are responsibilities of the Compliance Committee, which is also tasked with drafting recommendations during preliminary investigations and inquiries into potential violations.

In addition, internal audits support the identification of possible concerns and are expected to provide comprehensive, independent and objective assessments.

WHISTLEBLOWING AND ACTIVE LISTENING

We value active listening, which is why we provide institutional channels to receive, identify, analyze and respond to complaints and other issues that may be raised by both internal and external stakeholders.

We also strive to maintain close relationships and open dialogue with employees, opinion leaders, and the community through the following permanent channels and practices integrated into our calendar:

- ▶ **Compliance Committee** (see section **Compliance**): In particular, through the Ethics Channel and the Ombudsman Channel.
- ▶ **Communication Committee** (see section **Shared Management**)
- ▶ **Café com Prosa (Coffee and Conversation)**: a recurring meeting between employees and the Administrative, Financial and ESG Department to discuss day-to-day company matters. It is held every two months, and participants are selected through a combination of random draws and nominations from factory departments.





WHISTLEBLOWING

GRI 2-26

LIASA has implemented mechanisms to monitor and ensure the effective handling of complaints and reports:

OMBUDSMAN CHANNEL

This channel is intended specifically for employees to report violations of LIASA's Code of Conduct, internal policies, or applicable laws.

intranet.liasa.com

ouvidoria@liasa.com.br

In 2024, no cases were reported through the Ombudsman Channel.

ETHICS CHANNEL

Reports may be submitted anonymously or not, at the discretion of the whistleblower.

All reports are reviewed by the Compliance Committee and communicated to the managers of the relevant departments for investigation. Other departments may be involved confidentially and with due care.

In 2024, five cases were reported and properly addressed internally.



INTERNAL AUDIT

Responsible for monitoring the handling of complaints and reports, ensuring the effectiveness of corrective and preventive measures adopted. The audit team follows up on response processes and verifies the implementation of improvement measures.

To assess the effectiveness of how complaints are handled, we monitor indicators such as average response time and case resolution rate. In 2024, all reports submitted via the Ethics Channel received timely responses. We continue to improve our processes to ensure efficient handling of all reports, strengthening our culture of integrity and transparency.



DIGNITY

COMMITMENTS THAT VALUE PEOPLE

SOCIAL

By generating local jobs and income, LIASA drives the economy of the micro-region of Pirapora, in Minas Gerais, playing a key role in the entire supply chain. Aware of its responsibility to identify and mitigate potential negative impacts that may arise from its business activities, the company works in partnership with local institutions and with the State and Municipal Governments to discuss projects and matters relevant to both the community and the company.

JOB GENERATION

GRI 2-7

GRI 2-8

LIASA is a regional leader in job creation in Pirapora and neighboring municipalities, accounting for over 3,000 jobs across its direct and indirect workforce – equivalent to around 20% of all employment in the region.



TOTAL NUMBER OF EMPLOYEES AT LIASA AS OF DECEMBER 2024*

	2022					2023					2024				
Total employees by employment contract and gender	Male	Female	Not declared	Other (gender as self-identified by employees)	Total	Male	Female	Not declared	Other (gender as self-identified by employees)	Total	Male	Female	Not declared	Other (gender as self-identified by employees)	Total
Permanent in-house employees	712	69			781	856	85			941	819	86			905
Temporary in-house employees	23	7			30					0					0
Total	735	76	0	0	811	856	85	0	0	941	819	86	0	0	905

*Data gathered from the headcount reports of December 2022 / 2023 / 2024, disregarding employee fluctuations throughout the year. Interns and young apprentices are not included.



In terms of direct employment throughout 2024, the company had 920 professionals, including 830 men and 90 women. For activities beyond its core expertise – typically involving maintenance, assembly, engineering and logistics services – LIASA chooses to work with third-party contractors.

The modernization of the industrial complex, which peaked in 2023, led to the creation of hundreds of new jobs. Even so, in 2024, with the ongoing operation of furnaces and dust collection filters, LIASA relied on the strategic support of service providers to ensure the quality of its operations and products – a total of 905 third-party workers were hired in 2024.

In 2024, LIASA was once again recertified by the Great Place to Work Brazil methodology, with 80% of its employees rating it as a great place to work.

EMPLOYEE HIRING

GRI 401-1

2022						2023						2024					
Geographic Distribution	Gender	Age group				Hiring rate by gender and region	Age group				Hiring rate by gender and region	Age group				Hiring rate by gender and region	
		<30	30-50	>50	Total		<30	30-50	>50	Total		<30	30-50	>50	Total		
SOUTHEAST	Men	32	55	7	94	76%	59	125	7	191	155%	41	73	0	114	90%	
	Women	8	20	1	29	24%	6	21	3	30	24%	7	6	0	13	10%	
	Subtotal	40	75	8	123	100%	65	146	10	221	180%	48	79	0	127	100%	
Hiring rate by age group		33%	61%	7%	100%		53%	119%	8%	100%		38%	62%	0%	100%		

TURNOVER

GRI 401-1

2022						2023						2024					
Geographic distribution	Gender	Age group				Hiring rate by gender and region	Age group				Hiring rate by gender and region	Age group				Hiring rate by gender and region	
		<30	30-50	>50	Total		<30	30-50	>50	Total		<30	30-50	>50	Total		
SOUTHEAST	Men	19	55	7	81	11%	22	71	17	110	19%	39	101	26	166	20%	
	Women	3	16	0	19	3%	2	14	2	18	3%	3	13	1	17	20%	
	Subtotal	22	71	7	100	14%	24	85	19	128	22%	42	114	27	183	18%	
Turnover by age group		22%	71%	7%	100%		24%	85%	19%	100%		23%	62%	15%	100%		

WORKER WELL-BEING AND DIGNITY AT WORK

LIASA's people management policy seeks to provide a continuous experience of skill and behavior development, while also promoting shared values in a cooperative, team-oriented environment, always aligned with our employee journey.

Whether for direct or third-party professionals, the company is committed to eradicating all forms of discrimination in the workplace, as well as any practices involving forced or child labor.

UNION RELATIONS

GRI 2-30

LIASA operates in compliance with the conventions of the International Labor Organization (ILO) in managing matters such as forced labor, contracted healthcare services, minimum age for employment, and the eradication of child labor. The company also works closely with local and regional unions. All direct employees (100%) are covered by collective bargaining agreements, and the company adheres to the parameters established by the World Health Organization in all labor relations.



COMPENSATION & BENEFITS

GRI 401-2

For LIASA, caring for its employees means offering compensation and benefits that are appropriate for their roles and deliverables, and in line with other companies in the sector. To stay current, the company regularly assesses market best practices and does not differentiate between the base salaries received by men and women.

In addition to the legally mandated benefits, direct employees – whether full-time, temporary, or part-time – have access to the following comprehensive package of benefits:



Life insurance



Health and dental insurance



Pension fund



Childcare allowance



Gym membership

PARENTAL LEAVE

GRI 401-3

		2021	2022	2023	2024
Total number of employees eligible for maternity / paternity leave	Men	634	712	856	819
	Women	44	69	85	86
Total number of employees who took maternity / paternity leave	Men	24	32	21	37
	Women	4	0	0	2
Total number of employees who returned to work during the reporting period after maternity / paternity leave	Men	24	32	21	37
	Women	2	0	0	2
Return rate (no. of employees who returned from leave divided by the no. of employees who took leave)	Men	100%	100%	100%	100%
	Women	50%	0%	0%	100%
Total number of employees who returned from maternity / paternity leave and remained employed 12 months after returning	Men	24	32	21	37
	Women	1	0	0	0
Retention rate (no. of employees who remained 12 months after leave divided by the no. of employees who returned during the previous period)	Men		100%	100%	100%
	Women		0%	0%	0%

DEVELOPMENT, TRAINING AND EDUCATION

GRI 404-1

GRI 404-2

Based on continuous analysis of operational gaps, LIASA’s training management team offers an annually updated training program to ensure that employee skills remain aligned with business needs.

In 2024, LIASA delivered technical, behavioral and leadership training programs tailored to each employee’s career level, with a focus on operational sustainability and workplace safety. Some of the training courses offered during the year included:

- 

Metallurgical Thermodynamics - Modeling of Metallurgical Processes
- 

Environmental Legal Requirements
- 

SUMMIT - KPMG

AVERAGE TRAINING HOURS PER YEAR, PER EMPLOYEE

GRI 404-1

		2021	2022	2023	2024
Administrative / Technicians	Men	53	7	30	19
	Women	11	8	9	19
Specialists	Men	13	3	4	0
	Women	18	11	1	90
Operational	Men	15	23	37	25
	Women	3	9	31	25
Strategic / Tactical	Men	33	17	9	15
	Women	12	6	2	15
Interns / Apprentices	Men	20	4	3	0
	Women	8	8	0	0
Total	Men	18	19	33	24
	Women	8	8	12	22

In addition to in-house training, LIASA invests in partnerships with renowned institutions to further employee development. In 2024, 31 employees graduated from the Technical Metallurgy course offered in partnership with training organization SENAI/MG, with 80% of the tuition subsidized by LIASA. Following the same model, two new groups of employees began Technical Administration and Occupational Safety courses last year, both also partially subsidized. Graduation is expected in September 2025.

PERFORMANCE ASSESSMENT

GRI 404-3

As for 2024, LIASA improved its assessment processes, defining clear criteria and goals to encourage employee self-development.

		2021		2022		2023		2024					
		2021	2022	2023	2024	Total number of employees by category and gender	Number of employees who received performance assessments	Total number of employees by category and gender	Number of employees who received performance assessments	Total number of employees by category and gender	Number of employees who received performance assessments	Total number of employees by category and gender	Number of employees who received performance assessments
Administrative / Technicians	Men	100%	100%	88%	100%	32	32	83	83	190	168	132	132
	Women	100%	100%	86%	100%	28	28	42	42	44	38	41	41
	Subtotal	100%	100%	88%	100%	60	60	125	125	234	206	173	173
Specialists	Men	100%	100%	100%	0%	34	34	34	34	8	8	0	0
	Women	100%	100%	75%	100%	3	3	3	3	4	3	3	3
	Subtotal	100%	100%	92%	100%	37	37	37	37	12	11	3	3
Operational	Men	40%	77%	67%	71%	541	217	486	374	603	406	638	451
	Women	16%	12%	4%	40%	19	3	25	3	27	1	35	14
	Subtotal	39%	74%	65%	69%	560	220	511	377	630	407	673	465
Strategic / Tactical	Men	100%	100%	91%	100%	69	69	83	83	34	31	27	27
	Women	100%	100%	90%	100%	8	8	10	10	10	9	9	9
	Subtotal	100%	100%	91%	100%	77	77	93	93	44	40	36	36
Intern / Young Citizen	Men	0%	0%	0%	0%	16	0	17	0	26	0	1	0
	Women	0%	0%	0%	0%	23	0	28	0	21	0	7	0
	Subtotal	0%	0%	0%	0%	39	0	45	0	47	0	8	0
Total	Men	51%	82%	71%	76%	692	352	703	574	861	613	798	610
	Women	52%	54%	48%	71%	81	42	108	58	106	51	95	67
	Subtotal	51%	78%	69%	76%	773	394	811	632	967	664	893	677

EMPLOYEE ENGAGEMENT

GRI 2-29

In order to strengthen the relationship between the company and its internal stakeholders, LIASA has active and structured communication channels in place to ensure that information reaches employees quickly and clearly, regardless of their location.

Throughout the year, these channels are used to carry out internal campaigns on various health and safety topics, such as vaccination, disease prevention, blood donation, mental and emotional health and safe and responsible driving, among others. The programs includes talks, educational actions and distribution of informational materials.

Every two months, the Chief Administrative, Financial and ESG Director meets with randomly selected employees and others nominated by the operations teams for an informal conversation about daily life at the company. This initiative, called **Café com Prosa (Coffee and Conversation)**, provides a space for dialogue, the presentation of questions and suggestions and for strengthening the bond between the company and its employees.



Additionally, LIASA maintains an annual calendar of internal initiatives focused on health, occupational safety, the environment, leisure, quality of life, culture and sports. Examples include the truco (a card game) and soccer championships organized for employees, as well as events held to celebrate dates such as International Women's Day, Mother's Day, Labor Day, the Arraial LIASA festival, SIPATMA, Pink October and Blue November.

RECOGNITION

Since 2021, LIASA has held gatherings to recognize and thank employees who have been with the company for 10, 15, 20, 25 years or more.

END OF THE EMPLOYEE JOURNEY

GRI 404-2

LIASA supports employees throughout every stage of their journey with the company, including the final stage. A structured offboarding process ensures that employees receive clear information about their rights and potential future opportunities. Especially for long-standing professionals, additional practices include guidance and support for job placement, if the employee so desires.

DIVERSITY AND EQUAL OPPORTUNITY

As a signatory to the UN Global Compact, LIASA is committed to the Sustainable Development Goals (SDGs) and promotes diversity and equal opportunities for professional growth, regardless of race, religious belief, gender, age or sexual orientation.

In 2024, women accounted for 10.5% of LIASA's workforce, an increase of 0.6% compared to 2023.



Among employees, the topic is addressed during the company's annual week dedicated to fighting discrimination and harassment, and is also included in mandatory onboarding training for 100% of new employees and contractors. Together with the company's governance structure, the commitment to diversity is formalized in specific guidelines, such as the Code of Ethics and the Board Regulatory Instruction 6 (Awareness, Prevention and Response to Harassment and Discrimination) and is closely monitored by the Compliance Committee, which is responsible for investigating any complaints related to the issue that may arise.

Thanks to this set of initiatives, LIASA stands out as a reference in diversity and as a driver of change in its region.

GRI 406-1

In 2024, LIASA's Ethics Channel received five reports of discrimination within the company. After thorough investigations in accordance with Compliance protocols, and the adoption of appropriate measures when necessary, all five cases were considered closed at the end of the year.

PERCENTAGE OF EMPLOYEES BY JOB CATEGORY

GRI 405-1

	2022						2023						2024					
	Age group			Gender		Total	Age group			Gender		Total	Age group			Gender		Total
	<30	30-50	>50	Female	Male		<30	30-50	>50	Female	Male		<30	30-50	>50	Female	Male	
Officer/CEO			6	2	4	6			6	2	4	6	0	1	6	2	5	7
Manager / general manager		8	8	2	14	16		10	6	2	14	16	0	11	5	2	14	16
Coordinator / consultant		19	4	5	18	23		15	7	7	15	22	0	15	5	7	13	20
Technicians / analysts / supervisors	15	195	74	43	241	284	34	167	41	48	194	242	14	124	38	44	132	176
Trainee	1				1	1	4			1	3	4	1	2	0	1	2	3
Operational	51	354	76	24	457	481	109	435	86	27	603	630	113	481	79	35	638	673
Interns	5	1		5	1	6	7			5	2	7	8	0	0	7	1	8
Apprentices	34			19	15	34	40			16	24	40	37	0	0	10	27	37
Percentage	12%	68%	20%	12%	88%	851	20%	65%	15%	11%	89%	967	18%	68%	14%	11%	89%	940

PERCENTAGE OF INDIVIDUALS WHO ARE MEMBERS OF THE ORGANIZATION’S GOVERNANCE BODIES

GRI 405-1

	2024					
	Age group			Gender		Total
	<30	30-50	>50	Female	Male	
Members of Committees	0	11	10	4	17	21
Percentage	0%	52%	48%	19%	81%	



PERCENTAGE OF NEW EMPLOYEES BY JOB CATEGORY

GRI 405-1

	2024					
	Age group			Gender		Total
	<30	30-50	>50	Female	Male	
Officer/CEO	0	0	0	0	0	0
Manager / general manager	0	0	0	0	0	0
Team leader	1	1	0	0	2	2
Coordinator / consultant	0	1	0	0	1	1
Technicians / analysts / supervisors	4	2	0	1	5	6
Trainee	0	0	0	0	0	0
Operational	34	58	3	10	85	95
Interns	3	0	0	3	0	3
Apprentices	36	0	0	10	26	36
Total	78	62	3	24	119	143
Percentage	55%	43%	2%	17%	83%	100%

Note: Data sourced from the BI/HR report. Figures for the governance body are included under directors, due to overlapping roles. Interns and young apprentices are also included in this calculation.

OCCUPATIONAL HEALTH & SAFETY

GRI 403-1

Health and safety are core values at LIASA – without them, any good results would be meaningless. The company operates an Occupational Health and Safety Management System that covers 100% of its employees, both direct employees and contractors, across operational and administrative areas. The system brings together a range of initiatives:

- ▶ **Identification and assessment of occupational risks;**
- ▶ **Implementation of control measures to eliminate or reduce risks;**
- ▶ **Monitoring of workers' health;**
- ▶ **Training and awareness campaigns on health and safety;**
- ▶ **Ongoing investments in equipment upgrades, maintenance and replacement;**
- ▶ **Continuous reassessment of safety policies and procedures to optimize risk prevention in both planned and unplanned activities.**

MANAGEMENT

GRI 403-8

SYSTEMS

LIASA's Occupational Health and Safety Management System is audited both internally and externally to ensure compliance with the standards and guidelines on which it is based: the Brazilian Ministry of Labor Regulatory Standards (NRs 1 to 37) and the Brazilian Fire Department Technical Instructions (ITs 1 to 30).





WHETHER THE ORGANIZATION HAS IMPLEMENTED AN OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT SYSTEM BASED ON LEGAL REQUIREMENTS AND/OR RECOGNIZED STANDARDS/GUIDELINES

GRI 403-8

	2022		2023		2024	
	Direct employees	Indirect employees	Direct employees	Indirect employees	Direct employees	Indirect employees
Total number of workers	673	767	878	800	794	294
Total number of workers covered by a system	673	767	878	800	794	294
Percentage of workers covered by a system	100%	100%	100%	100%	100%	100%
Total number of workers covered by a system that was audited internally	673	767	878	800	794	294
Percentage of workers covered by a system that was audited internally	100%	100%	100%	100%	100%	100%
Total number of workers covered by a system that was certified by an external party	673	767	878	800	794	294
Percentage of workers covered by a system that was certified by an external party	100%	100%	100%	100%	100%	100%

RISK IDENTIFICATION AND ASSESSMENT

GRI 403-2

By working proactively to identify risks and implement control measures, LIASA conducts cross-sector audits carried out by engineers, technicians and other professionals with extensive experience in occupational health and safety.

The company has a risk matrix in place that determines the severity, frequency and likelihood of identified risks. Together with the audit findings, this matrix serves as the basis for the OHS Committee to apply the hierarchy of controls to the most significant risks to the business:

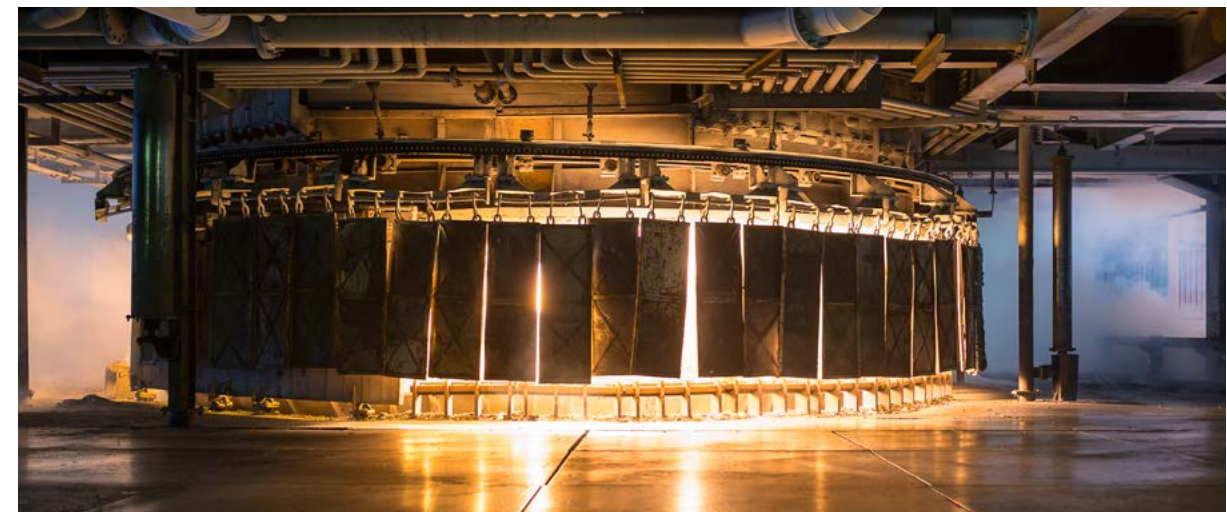
- ▶ **Elimination of the hazard at the source whenever possible;**
- ▶ **Replacement of hazardous materials or processes with safer alternatives;**
- ▶ **Implementation of physical barriers or workplace modifications, such as lockouts, to reduce workers' exposure to risk;**
- ▶ **Creation and improvement of safety procedures, training and policies;**
- ▶ **Provision of appropriate and regularly updated personal protective equipment (PPE) to ensure worker protection.**

RISK LEVEL CLASSIFICATION

GRI 403-7

As a metallurgical company, LIASA is classified as Risk Level IV, according to the Brazilian Ministry of Labor's regulatory standards and the National Classification of Economic Activities (Classificação Nacional de Atividades Econômicas – CNAE). These risks are inherent to companies operating in this sector.

Identified risks are addressed in safety training sessions, especially those related to the Ministry of Labor's Regulatory Standards. In addition, LIASA structures its activity flow around the prioritization of employee well-being and development, recognizing occupational health and safety as key to process continuity.



JOINT RESPONSIBILITY

GRI 403-4

LIASA emphasizes that occupational health and safety are the result of a collective effort, with each professional being jointly responsible for their own physical integrity and that of their colleagues. The company offers several ways for employees to actively contribute to the development of occupational health and safety (OHS). Examples include:



The PDCA cycle (Plan-Do-Check-Act) is applied to promote the continuous improvement of the OHS system. In practice, employees participate in the Kaizen Program, in which they are encouraged to identify potential risks and propose solutions to enhance safety and efficiency in the workplace, and in the 5S Program, in which they play an active role in applying principles of organization, cleanliness and standardization of the workplace.



Employees have representatives on the Health and Safety Committees, executive committees and other working groups on the topic, ensuring their concerns are heard.



Employees are invited to test new personal protective equipment (PPE), verifying its suitability for the risks involved in their activities.



Employees can report risk situations related to their work through the Ombudsman Channel, which allows for anonymity; during Daily Safety Dialogues; directly to their department supervisor; by contacting members of the Workplace Health and Safety Specialist Service (known by its Portuguese initials, SEMST); or by speaking with the HR team.



Employees are trained in risk management and identification tools, such as Work Permits and Job Safety Analysis. Throughout the year, they also undergo regular training and refresher courses, following both the company's internal calendar and the requirements set forth in the Ministry of Labor's Regulatory Standards.



All employees are informed of their right to refuse work when faced with an imminent risk identified during the performance of a task. LIASA guarantees that no retaliation will occur for exercising this right and that corrective measures will be taken to eliminate the identified risk.

LIASA also recognizes that safety is intrinsically linked to principles such as respect, equality and equity. For this reason, in 2024, 100% of our safety personnel also received training in human rights.



ACCIDENT AND HARASSMENT PREVENTION

GRI 403-4

LIASA maintains an Accident and Harassment Prevention Commission (known by its Portuguese initials, CIPA). Elected in accordance with the guidelines of Brazilian Ministry of Labor Regulatory Standard O5, CIPA represents employees' interests in processes such as identifying hazards and risks; assessing workplace conditions; drafting and monitoring preventive action plans; and developing Occupational Health and Safety programs.

OCCUPATIONAL HEALTH SERVICES

GRI 403-2

LIASA also operates a robust Occupational Health Service (OHS), which is responsible for implementing programs to prevent accidents and occupational illnesses, including awareness campaigns. The OHS monitors health risks on multiple fronts:



Ergonomic Workplace Analysis



Risk Management Program



Hearing Conservation Program



Occupational Risk Management



Respiratory Protection Program



Occupational Health Medical Control Program (known by its Portuguese initials, PCMSO)



Daily Safety Dialogues

The service includes comprehensive medical care infrastructure, comprising an ambulance equipped for rapid response and emergency care, and a medical center located in an easily accessible area for all employees. This medical center is staffed with an occupational physician, a nurse, an ergonomics specialist, and safety technicians.

The medical center is responsible for monitoring employee health during pre-employment, periodic and return-to-work medical exams, during which it is possible to identify health issues that may or may not be work related. This data, along with other health records, is stored in dedicated systems that are regularly audited to ensure data integrity. Access is restricted to the Occupational Health team, in full compliance with the Brazilian General Data Protection Law (LGPD).

QUALITY OF LIFE AND WELL-BEING

GRI 403-6

LIASA also operates a robust Occupational Health Service (OHS), which is responsible for implementing programs to prevent accidents and occupational illnesses, including awareness campaigns. The OHS monitors health risks on multiple fronts:



Partnerships with local clinics and hospitals to provide medical and health services for employees;



Health insurance plans that cover medical appointments, exams, hospitalizations and treatments for employees and their dependents;



Telemedicine service to facilitate access to medical appointments and health guidance, especially for employees in remote locations;



Well-being programs that include physical activities, health lectures, vaccination campaigns, access to psychological support services, workshops on nutrition and physical exercise, among others;



Internal health campaigns carried out throughout the year to raise awareness about vaccination, cancer prevention, blood donation, breastfeeding, hearing health, psychosocial well-being and more.



PROMOTION OF SPORTS ACTIVITIES

LIASA also maintains a Sports Center located in Pirapora. The Center has 1,650 members and features sports courts, a soccer field, a swimming pool and other recreational facilities available to employees and their families. The Sports Center is also accessible to non-employees through the purchase of guest passes.



RESPONSIBLE SOURCING

GRI 204-1

GRI 2-6

One of LIASA's contributions to the development of the regional economy is the hiring of local suppliers, fostering the generation of indirect jobs, encouraging entrepreneurship and driving social transformation both in the municipality of Pirapora and in the neighboring cities of Buritizeiro and Várzea da Palma.

In 2024, R\$290 million was allocated to local suppliers, accounting for 30% of the total supplier expenditure for the year, a 64% increase over 2023.

Local procurement is strengthened by the fact that, among the four strategic inputs used by LIASA - biobased reductant, electricity, quartz and electrodes - only the latter is imported:

- ▶ **The company is located within the largest solar power complex in Latin America and, in 2023, it became 100% self-sufficient through its own solar energy generation.**
- ▶ **LIASA is already self-sufficient in 50% of its biobased reductants consumption, thanks to over 19,000 hectares of renewable forests managed in the region. The remaining 50% is purchased from local producers.**
- ▶ **Quartz is sourced locally. In addition, LIASA operates three of its own mines, which together yield over 100,000 tons per year and rely on local service providers.**



VALUE CHAIN IMPACT MANAGEMENT

In managing its value chain, LIASA identifies the most significant impacts in the downstream segment (end users of the company's products), as improper waste disposal practices by these parties can potentially affect the environment. Mitigation in this case involves requiring specific documentation – such as environmental permits and registration with the Brazilian Institute of Environment and Renewable Natural Resources (IBAMA) – to ensure that partners operate legally and in compliance.

As for waste generated in the upstream segment (material extraction), LIASA's internal system clearly states that suppliers are responsible for managing their own waste.



INTEGRITY IN THE SUPPLY CHAIN

[GRI 205-2](#)
[GRI 308-1](#)
[GRI 308-2](#)
[GRI 414-1](#)
[GRI 414-2](#)

LIASA is aware of the potential negative impacts and human rights violations associated with its value chain, particularly in the sourcing of quartz and charcoal. Therefore, in 2024, the company began to apply stricter oversight regarding supplier compliance with environmental, integrity and human rights requirements, reinforcing the practices outlined in its Sustainable Procurement Policy, which is shared with suppliers and includes all company guidelines.

- ▶ Suppliers must complete a detailed Social and Environmental Questionnaire that enables LIASA to assess the impact of their operations and identify potential risks and irregularities in environmental, regulatory and labor matters;
- ▶ Quartz and charcoal suppliers must submit valid labor, environmental, tax and mining documentation, ensuring their operations comply with applicable legislation;
- ▶ Suppliers must also provide official certificates and declarations issued by government agencies, confirming the absence of labor irregularities such as child labor or compulsory labor;

- ▶ All partners must hold a valid business license, demonstrating their compliance with regulatory authorities;
- ▶ Supplier contracts contain restrictive clauses that explicitly prohibit the use of forced labor, with penalties in case of non-compliance;
- ▶ Partnerships with LIASA require suppliers to respect freedom of association.

To ensure integrity in its supply chain, LIASA partners with environmental and labor oversight agencies to identify possible cases of non-compliance. Additionally, the company has its own monitoring process, which includes internal and external audits and on-site inspections of suppliers to identify potentially degrading labor practices.

LIASA also promotes the adoption of best practices among its suppliers, encouraging actions such as land restoration; sustainable use of resources; adoption of clean technologies; and strengthened integrity in management practices.

100%

of new suppliers contracted in 2024 were selected based on environmental and social criteria;

100%

of suppliers and business partners were informed in 2024 about LIASA's anti-corruption policies and procedures and committed to training their employees on the company's standards;

100%

of employees, including third-party workers, were trained in human rights policies and procedures in 2024.

Among the 50 suppliers deemed critical based on environmental criteria, none were suspended in 2024 due to impact assessments.

COMMUNITY RELATIONS AND SOCIAL RESPONSIBILITY

GRI 413-1

LIASA is part of the Pirapora industrial hub and is one of the largest employers in the region. The company is aware of this responsibility and conducts ongoing social and environmental mapping of the area and, since 2020, has been a member of the Northern Companies Management Committee, which includes representatives from the local government. This forum promotes joint efforts between businesses and the municipality to develop projects that benefit the region.

100% of LIASA's operations have implemented community engagement initiatives, impact assessments and local development programs, always respecting local culture, the environment and community safety.



57,500 people
Estimated population in 2024



Average monthly wage
of formal workers:
2 minimum wages



Municipal Human Development Index
score (most recent data from 2010):
0.731, classified as **HIGH**

Source: <https://cidades.ibge.gov.br/brasil/mg/pirapora/panorama>

CHANNELS FOR FEEDBACK

GRI 2-25

GRI 413-2

The company actively participates in local discussions and maintains open communication channels for the population via phone (+55 38 3749-6700), email (liasa@liasa.com.br), the “Contact Us” section on its website, and a complaint form available at the Pirapora factory gate. LIASA did not receive any complaints from the community through any of these channels in 2024.

DIRECT AND INDIRECT POSITIVE IMPACTS ON THE COMMUNITY

GRI 2-25

GRI 413-2

GRI 203-1

GRI 203-2

Through its close relationship with the community, LIASA strives to act as a driver of local development in Pirapora and the surrounding region. In 2024, this effort translated into several initiatives, including:



Collection of approximately
R\$6 million in tax payments

PARTNERSHIPS WITH LOCAL INSTITUTIONS

- ▶ Support for the Rotary Club Pirapora Praia in organizing a community event;
- ▶ Support for the Minas Gerais Military Police to renovate training rooms at the academy and repair police vehicles;
- ▶ Support for the Civil Police through equipment donations for maintenance of their facilities;
- ▶ Sponsorship of the Navy run organized by the São Francisco River Police Station;
- ▶ Support for the Federal Institute of Northern Minas in hosting the 2024 National Science and Technology Week.

DONATIONS

- ▶ Donation of food and personal hygiene products collected during the Internal Week for the Prevention of Workplace Accidents and Environmental Awareness (known by its Portuguese initials, SIPATMA) to the Pirapora Nursing Home and the Buritizeiro Home for the Elderly.
- ▶ Donation of quartz fines for the revitalization of public roads in Pirapora and Buritizeiro and for rural roads around the company's forest operations.
- ▶ Donation of wood and quartz fines to the Association for the Protection and Assistance of Convicts (APAC) in Pirapora.

SUPPORT FOR THE DEVELOPMENT OF THE LOCAL ECONOMY

- ▶ In Pirapora, partnerships with the Association of Recyclable Material Collectors of Cidade Jardim (ASCARPI) and the Cooperative of Recyclable Material Collectors (COPRARTE), which collect paper and plastic from the industry for recycling;
- ▶ In Buritizeiro, partnership with the local Association of Recyclable Material Collectors;
- ▶ Technological and economic development driven by the company's positive results, benefiting the local supply chain across various sectors, from the supply of materials to food services, hospitality, and other services;
- ▶ Partnership with beekeepers, who are invited to use areas provided by LIASA Florestas for honey production; in 2024, approximately 2,000 kilograms of honey were produced through this initiative;
- ▶ Partnership with the Brazilian National Service for Industrial Training (SENAI) to offer technical courses that train skilled workers not only for LIASA but also for other companies in the region.

EDUCATION FOR THE FUTURE

GRI 203-1

GRI 203-2

LIASA believes that education is a key pillar for full regional development, enabling sustainability and autonomy in the social transformations initiated today. To this end, the company invests in its own initiatives and in partnerships, such as the Outro Norte Environmental Education Project, developed in collaboration with the local water and sewage utility, SAAE, which had reached 10,000 public school students by the end of 2024.



LIGAS DA VIDA

Launched in August 2022, the Ligas da Vida program fosters the holistic development of children and adolescents aged seven to 17 through activities such as theater, capoeira, sports, music, percussion, literature, academic tutoring and vegetable gardening.

These activities take place outside regular school hours at the LIASA Sports Center, where the children receive meals prepared with food grown in the project's own vegetable garden. The program also includes regular educational sessions with monitors and teachers who assist students with schoolwork and reinforce their learning. In 2024, the program featured:

- ▶ **Theatrical performances;**
- ▶ **Short films produced by the students;**
- ▶ **The launch of *Poemas e Poesias Ligas da Vida*, a book compiling the students' work in literature classes;**
- ▶ **The Ligas da Vida Choir.**

In 2024, LIASA committed to taking Ligas da Vida to a new level of quality by hiring Professor Edson Costa – who has a PhD and master's in Communication Sciences/Journalism from the University of São Paulo, with a Bachelor's degree in Language and a teaching degree in Educommunication from the same institution – to lead the program's educational restructuring.



LIGAS IN 2024

72 students participated in the project

6 Ligas da Vida students passed the entrance exam for the Federal Institute of Northern Minas Gerais and will begin their classes in 2025

To see and experience what Ligas da Vida was like at LIASA in 2024, click [here](#)

RESPONSIBILITY

COMMITMENTS THAT PROTECT THE ENVIRONMENT

ENVIRONMENT

To operate with excellence and value life and the environment, LIASA is committed to sustainable practices. In concrete terms, this means managing water resources responsibly, proactively reducing greenhouse gas emissions, strengthening input circularity, and striving to mitigate the potential negative impacts of its operations, among other initiatives.

In this context, innovation has always been a driving force for the company. LIASA remains the only company in the world producing Green Silicon, and it continues to invest in the modernization of its manufacturing plant. In 2024, these efforts culminated in the consolidation of the new furnaces and dust removal filters.

RENEWABLE ENERGY

GRI 302-1

Since 2023, all the electricity consumed by the company has come from solar sources. The solar panels themselves use metallurgical-grade silicon metal, thus creating a feedback loop within the sustainability value chain. The use of local energy sources not only supports the company's sustainability goals but also fosters economic and social development in the region of Pirapora, Minas Gerais, which hosts one of the largest solar energy production parks in Latin America.

Having secured self-sufficiency in energy generation, LIASA continues to pursue improvements in energy efficiency and reductions in operational costs. The company recognizes the competitive importance of the issue by setting individual performance targets for managers.



| In 2024, LIASA consumed 3,380,259 GJ of electricity.

CLIMATE CHANGE

GRI 305-1

GRI 305-2

GRI 305-5

The use of renewable energy sources (solar and biobased reductants) and investments in the modernization of its industrial facilities to increase operational efficiency are examples of how LIASA has been working to contribute to mitigating climate change.

In addition, the company provides an important ecosystem service through LIASA Florestas: during photosynthesis, the eucalyptus plantations absorb more carbon dioxide than is generated by industrial processes. Therefore, LIASA makes a long-term contribution to climate regulation.

In 2024, the company's planted forests and native vegetation areas removed approximately 507,084.53 metric tons of CO₂ equivalent (tCO₂e) from the atmosphere. This figure represents 23% more than the total emitted by industrial operations. Our forests are also responsible for sequestering 4,461,265.07 tCO₂e – carbon stored in tree trunks, branches, seeds, roots, decomposing organic matter and both organic and mineral soil components.

DIRECT GREENHOUSE GAS (GHG) EMISSIONS, IN METRIC TONS OF CO₂E (SCOPE 1)

GRI 305-1

	2021	2022	2023	2024
Stationary combustion	14,064.84	14,766.97	15,065.02	18.61
Mobile combustion	303.92	355.80	857.92	956.63
Fugitive emissions	92.90	194.50	460.35	250.70
Industrial processes			14,459.15	39,609.15
Agricultural activities	160.33	1,435.34	717.64	115.47
Land use changes	0.00	0.00	0.00	0.00
Solid waste	0.00	0.00	0.00	0.00
Effluents	0.00	0.00	0.00	0.00
Total Scope 1	14,621.99	16,752.61	31,560.08	40,950.56
Biogenic CO₂ emissions	283,573.46	286,759.23	291,742.88	370,591.34

Note 1: Regarding the categories of industrial processes and stationary combustion, the main reason for variations in emissions is that in 2023, the consumption of wood and charcoal – used as reducing agents – was accounted for under stationary combustion. In 2024, these inputs, which are part of the industrial process and provide carbon for the production of silicon metal, were reclassified accordingly.

Note 2: LIASA follows the GHG Protocol reporting schedule. In 2023, after three consecutive years preparing its greenhouse gas inventory, the company achieved the Gold Certification of the GHG Protocol, a program that encourages Brazilian companies to publicly disclose, quantify and manage their GHG emissions using a globally recognized methodology.

Note 3: Other greenhouse gases not covered by the Kyoto Protocol but measured by LIASA: HCFC-22, with emissions of 23.94 metric tons of CO₂e.

DIRECT GREENHOUSE GAS (GHG) EMISSIONS, IN METRIC TONS OF CO₂E (SCOPE 2)

GRI 305-2

	2021	2022	2023	2024
Electricity (location-based)	34,455.06	27,839.44	26,677.53	51,149.37
Electricity (market-based)	4,126.00	1,141.42	0.00	6.83

CARBON REMOVAL AND REDUCTION

GRI 305-5

	2021	2022	2023	2024
Carbon removal through planted forests and native vegetation	211,566.23	323,712.91	465,395.05	507,084.73
Electricity (market-based)	4,126.00	1,141.42	0.00	6.83
Total emissions and carbon balance				
Total Scope 1 and 2 (market-based)	18,752.98	17,894.02	31,560.07	92,099.93
Scope 1 and 2 (market-based) – Removals	-162,484.19	-279,120.86	-407,157.33	-466,127.34
Scope 1 and 2 (location-based) – Removals	-192,813.25	-305,818.89	-433,834.98	-414,984.80

TRANSPARENCY IN MANAGEMENT

LIASA recognizes that climate change is an issue whose importance goes beyond the company's own operations. Therefore, in addition to addressing atmospheric emissions at every level of stakeholder engagement, it also invests in transparency to disclose increasingly reliable information:



In 2024, the company was certified under ISO 14067:2018 criteria, once again demonstrating – through an internationally recognized methodology – the carbon footprint of its silicon metal.

For every ton of silicon metal it produces, LIASA removes more CO₂ than it emits.



In early 2025, the company completed its Greenhouse Gas Emissions Inventory, which was audited by an external firm to ensure data reliability.



In 2024, for the second consecutive year, we earned the Gold Certification in the Brazilian GHG Protocol Program, which establishes internationally recognized methodologies for companies to quantify, manage and disclose their greenhouse gas (GHG) emissions.



LIASA presented its low-carbon initiatives at the 29th UN Climate Change Conference (COP29), held in Baku, Azerbaijan, as part of the portfolio of success cases selected by the state of Minas Gerais.

Looking ahead, the company is exploring participation in the CDP (formerly known as the Carbon Disclosure Project), as well as the inclusion of Scope 3 – indirect GHG emissions – in its Greenhouse Gas Emissions Inventory.

AIR QUALITY

In 2024, LIASA fully consolidated the continuous operation of its dust collection filters across the industrial site. In addition to contributing to the reduction of GHG emissions, these systems are also responsible for retaining other particulate matter, thereby ensuring better air quality for surrounding communities.



WATER AND EFFLUENTS

GRI 303-1

Our Integrated Management Policy promotes actions aimed at preserving water resources, minimizing waste, optimizing processes, and raising employee awareness about the impacts of resource scarcity.

As part of this process, the company has developed its own indicator to monitor water consumption, the progress of which is shared monthly with key stakeholders. Since 2015, it has also maintained a Water Resources Consumption Reduction Program (known by its Portuguese initials, PRCRH), which identifies and evaluates potential impacts related to water management, promotes actions to reduce waste and reports its results annually to environmental authorities.



WATER WITHDRAWAL

GRI 303-3

Water is part of various industrial processes at LIASA: cooling of the silicon metal production furnaces, quartz washing, humidification of transportation paths and charcoal, among others. For its use, the company maintains a valid water use permit granted by government agencies.

All the water used in the production chain is recirculated: from the moment it enters the plant, the water becomes part of a closed-loop system, in which industrial liquid effluents from various departments are conveyed to a Treatment Plant. After this process, the effluent is recirculated. Therefore, LIASA's water withdrawals serve only to offset any process losses, especially those occurring during furnace cooling.

WATER WITHDRAWAL (IN MEGALITERS)

		2022	2023	2024
		All areas		
Surface water	Freshwater (total dissolved solids ≤1,000 mg/l)	422,174	508,843	621,432
Third-party sources (supply companies)	Freshwater (total dissolved solids ≤1,000 mg/l)	7,261	6,706	6,945
Total water withdrawal	Grand total	429,435	515,549	628,377

Note: LIASA does not withdraw water from water-stressed areas. The discharged volume refers exclusively to sanitary wastewater generated at the site, which is collected and sent to the Municipal Wastewater Treatment Plant, operated by the Water and Sewage Autonomous Service of Pirapora, Minas Gerais.

WATER CONSUMPTION AND DISCHARGE

GRI 303-2 GRI 303-4 GRI 303-5

Thanks to this water closed-loop system, LIASA does not discharge any industrial effluent into streams, rivers or lakes. Sanitary wastewater, on the other hand, is not managed by the company itself, but is sent to the Municipal Wastewater Treatment Plant (ETE), operated by Pirapora's water and sewage utility (SAAE).

Nevertheless, LIASA conducts biannual monitoring of inputs and outputs at the Water Treatment Plants (ETAs) and Wastewater Treatment Plant (ETE), in accordance with the standards and regulations established by applicable legislation and the conditions set out in the industry's environmental licensing.

The water recirculated in the industrial process also complies with the specific quality standards of COPAM/CERH Regulatory Resolution 8 of 2022, with compliance verified by technical reports issued by a reputable company contracted to perform the analyses.



WATER DISCHARGE (IN MEGALITERS)

		2022	2023	2024
		All areas		
Freshwater (total dissolved solids ≤1,000 mg/l)		23.63	45.20	38.43
Grand total		23.63	45.20	38.43

Note: Only water is discharged. Effluents are not discharged in water-stressed areas. Only sanitary wastewater generated at the site is collected and sent to the Municipal Wastewater Treatment Plant, operated by the Water and Sewage Autonomous Service of Pirapora, Minas Gerais.

WATER CONSUMPTION (IN MEGALITERS)

		2022	2023	2024
		All areas		
Water withdrawal		429,435	515,549	628,377
Water discharge		23.63	45.20	38.43
Consumption		405,805	470,351	589,947



WASTE MANAGEMENT

LIASA contributes to strengthening the circular economy by striving to keep products, components and materials at their highest level of utility and value. This commitment begins with the selection of inputs used in production and extends to the reuse of industrial process waste both within the company and in other sectors, supported by the company's Solid Waste Management Program.

STRATEGIC INPUTS

As a reference in silicon metal production, LIASA bases its operations on strategic inputs that ensure efficiency, sustainability and competitiveness. These include quartz, charcoal, electricity from renewable sources and prebaked carbon electrodes.

Quartz is the main mineral raw material used in the production of silicon metal and is essential for the reduction reaction. In addition to quartz, LIASA adopts circular economy practices by reusing byproducts generated internally. These include filter dust collected during the crushing stage, silicon fines and contaminated material separated from the slag phase. These materials are reused in the company's production processes, contributing to waste reduction and increased operational efficiency.

Charcoal is used as a biobased reductant in the production chain. LIASA was a pioneer in adopting 100% charcoal as a reductant, standing out for its commitment to sustainability. Through the operations of LIASA Florestas, the company aims to ensure the long-term self-sufficiency of this resource, contributing to environmental preservation and the socioeconomic development of the Pirapora region in Minas Gerais.

Electricity, in turn, comes from renewable sources, reinforcing the company's stance in favor of a clean, low-impact energy matrix. This strategic choice ensures more sustainable production in line with global demands for environmental responsibility.

Another essential input is the prebaked carbon electrodes, which are indispensable in electric reduction furnaces, providing greater efficiency in conducting electric current and ensuring stability in the thermal process of silicon metal production.

Through these inputs, LIASA reaffirms its commitment to innovation, sustainability and operational excellence, consolidating its position as one of the industry leaders.

CIRCULARITY BEYOND THE PLANT

GRI 306-1

GRI 306-2

In addition to producing ferrosilicon and silicon metal from secondary sources, LIASA's process generates other products and byproducts that are used for different purposes:

- ▶ The fines extracted from production are sold or donated to the community;
- ▶ The fines from silicon chips are recycled or reused in agriculture and the ceramics industry;
- ▶ Quartz fines are used in the production of blocks and paving stones for rural and urban paving;
- ▶ Charcoal fines are used in the steel and cement industries; the latter also receives silica fume, which is used to improve cement strength.



SOLID WASTE MANAGEMENT PROGRAM (PGRS)

GRI 306-1

GRI 306-2

GRI 306-3

Structured in accordance with the Brazilian National Policy on Solid Waste, the Solid Waste Management Program (known by its Portuguese initials, PGRS) conducts diagnostics of waste management at LIASA, its potential impacts, and defines how waste must be sorted, handled, stored and disposed of by category.

Waste is disposed of in a designated area for temporary storage and, depending on its type and in compliance with applicable regulations, it is sent to specialized companies responsible for its treatment, recovery, recycling or final disposal.

Additionally, LIASA invests in raising employees’ environmental awareness regarding the PGRS stages, through training and awareness campaigns. As a result, the company maintains an effective waste sorting process, encouraging employees to segregate waste properly at the source. This enables significant donations of discarded materials to waste pickers’ associations and cooperatives in the cities of Pirapora and Buritizeiro, generating income and social development for the community.

Daily weighing and a specific indicator, updated monthly, are used to measure the PGRS’s performance.

WASTE GENERATED (IN METRIC TONS) BY WASTE COMPOSITION

	2022	2023	2024	
Hazardous waste (Class I)	120.05	66.10	74.52	Waste contaminated with oil, healthcare service waste and chemical products
Non-hazardous waste (Class II)	71,147.13	69,008.17	70,737.35	Waste from the production chain
Non-Inert (Class II A)	45,524.30	33,785.45	31,378.72	Used big bags, slag, quartz fines, insulation materials, general waste, recyclables and metal scrap
Inert (Class II B)	25,622.83	35,222.72	39,304.72	Rubber, wood residues, construction debris, charcoal fines, chip fines, plastic and glass
Total	71,267.18	69,074.27	70,811.87	

WASTE GENERATED (IN METRIC TONS) BY WASTE COMPOSITION

	2021	2022	2023	2024
Total waste generated	99,513.85	71,267.18	69,074.27	70,737.35
Total waste sent for recovery and disposal	94,050.86	67,306.01	68,821.92	70,753.03

WASTE NOT SENT FOR DISPOSAL BY WASTE COMPOSITION AND RECOVERY OPERATIONS

GRI 306-4

	2022	2023	2024
	Recovery outside the organization	Recovery outside the organization	Recovery outside the organization
Hazardous waste (Class I)	20.12	64.12	70.18
Preparation for reuse	3.98	0.16	0
Recycling	16.14		
Other recovery operations		63.97	70.18
Non-hazardous waste (Class II)	65,490.54	68,757.80	70,682.85
Preparation for reuse	62,098.04	21,300.98	34,273.75
Recycling	3,145.32	8,204.24	10,376.74
Other recovery operations	247.18	39,252.58	26,032.36
Total	65,510.66	68,821.92	70,753.03

Note: The company operates exclusively in the Southeast region. The figures below refer to training on the Code of Ethics and Conduct and the Anti-Corruption Policy.

WASTE SENT FOR DISPOSAL BY WASTE COMPOSITION AND RECOVERY OPERATIONS

GRI 306-5

	2022	2023	2024
	Disposal outside the organization	Disposal outside the organization	Disposal outside the organization
Hazardous waste (Class I)	94.22	1.98	4.34
Incineration (with energy recovery)	69.74	1.94	2.82
Incineration (without energy recovery)	24.48	0.04	1.52
Landfilling		0.00	0.00
Other disposal operations		0.00	0.00
Non-hazardous waste (Class II)	1,701.13	250.37	250.37
Incineration (with energy recovery)	8.80	0.00	0.00
Incineration (without energy recovery)		0.00	0.00
Landfilling	1,691.31	250.37	250.37
Other disposal operations	1.02	0.00	0.00
Total	1,795.35	252.35	252.35

Note: There are no internal disposal methods within the company. The information is based on daily weighing controls of waste intended for commercialization.



RESPONSIBLE FOREST MANAGEMENT

GRI 304-1

GRI 304-2

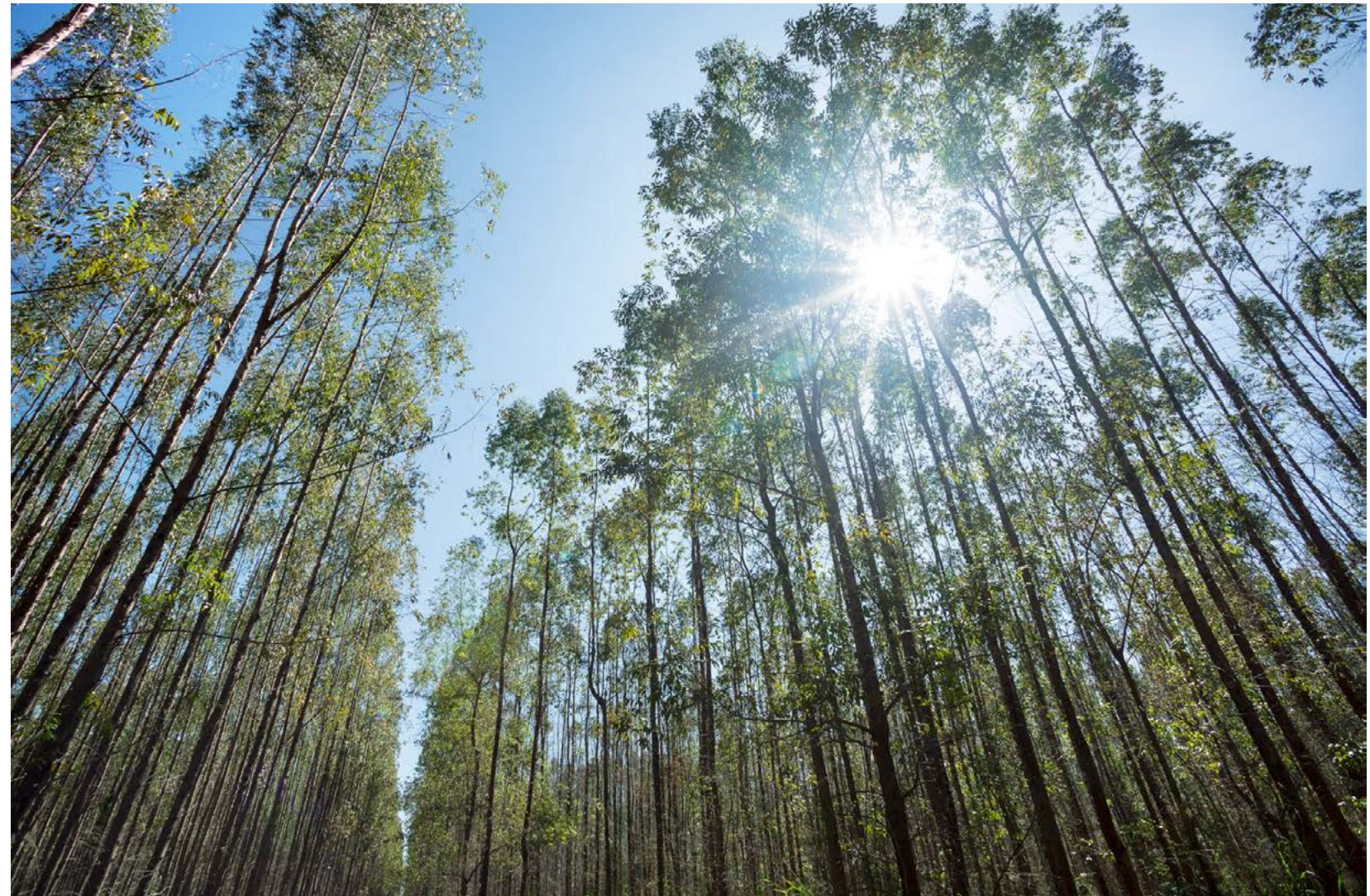
GRI 304-3

GRI 304-4

The conservation of native forests and the preservation of biodiversity are ongoing activities on LIASA's rural properties. Forest management is guided by the principles of the UN Global Compact and, in practice, carried out in accordance with the Internal Integrated Management Policy, the Environmental Monitoring Program and the Environmental Control Plan.

Intended for the production of charcoal – a biobased reductant – planted forests also play an important role in carbon removal from the atmosphere and contribute to the protection of ecosystems and biodiversity. Currently, LIASA maintains 49,326.19 hectares of legal reserve and/or permanent preservation areas.

At the same time, the company acknowledges that forestry operations may be associated with potential impacts. Accordingly, mitigation, containment and monitoring measures are undertaken to prevent them, prioritizing the maintenance of natural ecosystem balance and the conservation of water resources, thereby ensuring the quality of protected areas.



OWNED, LEASED OR MANAGED OPERATIONAL UNITS LOCATED WITHIN OR ADJACENT TO PROTECTED AREAS AND AREAS OF HIGH BIODIVERSITY VALUE OUTSIDE PROTECTED AREAS

GRI 304-1

2024

	Geographical location	Are the surface or underground areas owned, leased or managed by the organization?	Describe their position in relation to the environmental protection area or the area of high biodiversity value located outside environmental protection areas	Size of the operational unit in km² (or another unit, if appropriate);	Biodiversity value characterized by the attributes of environmental protection areas or high biodiversity value located outside protected areas	Biodiversity value characterized by the attributes of environmental protection areas or high biodiversity value located outside protected areas	Biodiversity value characterized by the attributes of environmental protection areas or high biodiversity value located outside protected areas
1	Bocaiúva - MG	Owned	High biodiversity value area (within)	Production	1,715.22	Terrestrial ecosystem	Permanent Preservation Areas and Legal Reserve
2	Bonito de Minas - MG	Owned	High biodiversity value area (within)	Production	2,993.13	Terrestrial ecosystem	Permanent Preservation Areas and Legal Reserve
3	Buritzeiro - MG	Owned	High biodiversity value area (within)	Production	24,692.95	Terrestrial ecosystem	Permanent Preservation Areas and Legal Reserve
4	Chapada do Norte - MG	Owned	High biodiversity value area (within)	Production	1,270.93	Terrestrial ecosystem	Permanent Preservation Areas and Legal Reserve
5	Curvelo - MG	Owned	High biodiversity value area (within)	Production	924.40	Terrestrial ecosystem	Permanent Preservation Areas and Legal Reserve
6	Diamantina - MG	Owned	High biodiversity value area (within)	Production	92.99	Terrestrial ecosystem	Permanent Preservation Areas and Legal Reserve
7	Gouveia - MG	Owned	High biodiversity value area (within)	Production	1,570.88	Terrestrial ecosystem	Permanent Preservation Areas and Legal Reserve
8	Grão Mogol - MG	Owned	High biodiversity value area (within)	Production	3,808.69	Terrestrial ecosystem	Permanent Preservation Areas and Legal Reserve
9	Itacarambi - MG	Owned	High biodiversity value area (within)	Production	448.10	Terrestrial ecosystem	Permanent Preservation Areas and Legal Reserve
10	João Pinheiro - MG	Owned	High biodiversity value area (within)	Production	4,888.72	Terrestrial ecosystem	Permanent Preservation Areas and Legal Reserve
11	José Gonçalves de Minas - MG	Owned	High biodiversity value area (within)	Production	3,848.18	Terrestrial ecosystem	Permanent Preservation Areas and Legal Reserve
12	Minas Novas - MG	Owned	High biodiversity value area (within)	Production	406.16	Terrestrial ecosystem	Permanent Preservation Areas and Legal Reserve
13	São Gonçalo do Abaeté - MG	Owned	High biodiversity value area (within)	Production	2,188.00	Terrestrial ecosystem	Permanent Preservation Areas and Legal Reserve
14	Serro - MG	Owned	High biodiversity value area (within)	Production	324.18	Terrestrial ecosystem	Permanent Preservation Areas and Legal Reserve
15	Turmalina - MG	Owned	High biodiversity value area (within)	Production	153.65	Terrestrial ecosystem	Permanent Preservation Areas and Legal Reserve

TOTAL NUMBER OF SPECIES INCLUDED ON THE IUCN RED LIST OF THREATENED SPECIES AND NATIONAL CONSERVATION LISTS WITH HABITATS IN AREAS AFFECTED BY THE ORGANIZATION’S OPERATIONS, BROKEN DOWN BY EXTINCTION RISK LEVEL

GRI 304-4

2024	
Critically endangered: 3	<i>Panthera onca</i> - Jaguar <i>Tayassu pecari</i> - White-lipped peccary <i>Tayassuidae</i> - Peccaries (family)
Endangered: 7	<i>Crax fasciolata</i> - Bare-faced curassow <i>Leopardus tigrinus</i> - Nothern tiger cat <i>Ozotoceros bezoarticus</i> - Pampas deer <i>Phylloscartes roquettei</i> - Minas Gerais tyrannulet <i>Priodontes maximus</i> - Giant armadillo <i>Sylvilagus brasiliensis</i> - Tapeti, forest cottontail <i>Tapirus terrestris</i> - Lowland tapir
Vulnerable: 11	<i>Ara ararauna</i> - Blue-and-yellow macaw <i>Chrysocyon brachyurus</i> - Maned wolf <i>Crypturellus zabele</i> - Yellow-legged tinamou <i>Leopardus pardalis</i> - Ocelot <i>Lycalopex vetulus</i> - Hoary fox <i>Myrmecophaga tridactyla</i> - Giant anteater <i>Pecari tajacu</i> - Collared peccary <i>Platalea ajaja</i> - Roseate spoonbill <i>Puma concolor</i> - Cougar or Mountain lion <i>Puma yagouaroundi</i> - Jaguarundi
Near threatened: 8	<i>Alipiopsitta xanthops</i> - Yellow-faced parrot <i>Alouatta caraya</i> - Black howler monkey <i>Amazona aestiva</i> - Blue-fronted amazon <i>Charitospiza eucosma</i> - Coal-crested finch <i>Neothraupis fasciata</i> - Shrike-like tanager <i>Penelope superciliaris</i> - Rusty-margined guan <i>Rhea americana</i> - Greater rhea <i>Sylvilagus brasiliensis</i> - Tapeti, forest cottontail
Least concern	Data not classified
Total	29

Committed to enhancing its biodiversity conservation practices, LIASA has invested in research to generate Environmental Impact Studies and Environmental Control Reports to identify the organization’s quantitative and qualitative impacts on the environment. The work supported the development of internal programs aimed at maximizing positive impacts and mitigating potential negative ones. Several of these initiatives are mentioned and detailed throughout this report.

- Flora Monitoring Program
- Fauna Monitoring Program
- Social Communication Program
- Water Resources Monitoring Program
- Solid Waste Management Program (PGRS)
- Soil and Water Conservation Program
- Agricultural Equipment and Vehicle Maintenance Program
- Forest Fire Prevention and Control Program
- Environmental Education Program



GRI CONTENT INDEX

GRI STANDARD	CONTENT	PAGES	INFORMATION OR REASON FOR OMISSION	UN GLOBAL COMPACT	SDGS
GRI 2: General Disclosures 2021					
GRI 2: General Disclosures 2021	The organization and its reporting practices				
	2-1 Details of the organization	5	Ligas de Alumínio S.A. (LIASA) is a privately held corporation.	-	-
	2-2 Entities included in the organization's sustainability reporting	5	Ligas de Alumínio S.A (LIASA) Industry and Administrative Headquarters. LIASA has subsidiaries COMEL (Comercializadora de Energia LIASA) and LNA (LIASA North America), as well as several properties and forestlands as branches, as well as LIASA Florestas.	-	-
	2-3 Reporting period, frequency and point of contact	3		-	-
	2-4 Restatements of information		No reformulation was made for this reporting period.	-	-
	2-5 External assurance	3	This third LIASA Sustainability Report has not been submitted for external assurance, but we have included externally verified financial and emissions data.	-	-
	Activities and workers				
	2-6 Activities, value chain and other business relationships	8, 9, 12, 45		-	-
	2-7 Employees	29		6	8
	2-8 Workers who are not employees	29		6	8
	Governance				
	2-9 Governance structure and composition	19-21		-	-
	2-10 Nomination and selection for the highest governance body		Choices are made based on the organizational structure and its respective officers, taking into account the skills and opinions of stakeholders (internal and external customers, shareholders).	-	-
	2-11 Chair of the highest governance body		Currently, governance is being implemented and is in transition and succession, where shareholders and members of the board of directors hold executive positions such as CEO, COO, Chief Legal Officer and Commercial Advisor.	-	-
	2-12 Role of the highest governance body in overseeing the management of impacts		All statements of values, mission, strategies, policies and objectives are proposed by the relevant technical management areas, coordinated by the ESG Working Group, evaluated and approved by the ESG Committee and communicated and managed by the Executive Committee. The decision-making process is very fluid and agile.	-	-
	2-13 Delegation of responsibility for impact management	22		-	-



GRI STANDARD	CONTENT	PAGES	INFORMATION OR REASON FOR OMISSION	UN GLOBAL COMPACT	SDGS
GRI 2: General Disclosures 2021	2-14 Role of the highest governance body for sustainability reporting	22		-	-
	2-15 Conflicts of interest		The instruments used and formalized to ensure governance and organizational integrity include: Multidisciplinary Decision-Making Committees: Forums responsible for strategic decisions and alignment of different areas of the organization. Management Indicators: Made available to all stakeholders and executives with complete transparency, allowing for continuous and efficient monitoring. External Audit: Performed by one of the Big Four companies, ensuring credibility and impartiality in the evaluation of processes and results (KPMG) Delegation of Authority (DoA): Structured organizationally, promoting self-control and mitigation of possible deviations at different hierarchical levels.	-	-
	2-16 Raising critical concerns	22		-	-
	2-17 Collective knowledge of the highest governance body		Throughout 2024, ESG Committees were held for updates and deliberations on the established goals, with specific knowledge from experts being contributed to each item in our program.	-	-
	2-18 Evaluation of the Performance of the highest governance body	22		-	-
	2-19 Remuneration policies	22		-	-
	2-20 Processes for determining remuneration	22		-	-
	2-21 Ratio of annual total compensation		Not disclosed as it is confidential information.	-	-
	Strategy, policies and practices				
	2-22 Statement on sustainable development strategy	2		-	-
	2-23 Policy commitments	23		10	16
	2-24 Integration of policy commitments	23		-	-
	2-25 Processes to remedy negative impacts	12, 47		-	-
	2-26 Mechanisms for advice and raising concerns	26, 27		10	16
	2-27 Compliance with laws and regulations		LIASA understands that all cases involving potential non-compliance must be addressed with caution and seriousness. However, for better organization and control, the company defines as significant those cases in which a situation, process, product or system is proven and definitively found to be non-compliant with established requirements, with a critical impact on the company's performance, purpose and values, as well as those involving penalties exceeding R\$1,000,000. - The fines known to LIASA were, in part, duly contested (pending review) and are therefore not yet considered final. Fines of low value, for which contesting would result in costs exceeding the fine itself (such as traffic fines), were settled.	-	-



GRI STANDARD	CONTENT	PAGES	INFORMATION OR REASON FOR OMISSION	UN GLOBAL COMPACT	SDGS
GRI 2: General Disclosures 2021	2-28 Membership in associations		ABRAFE: Brazilian Association of Ferrosilicon and Silicon Metal Producers. ABRACE: Brazilian Association of Large Industrial Energy Consumers and Free Consumers. AMIF: Minas Gerais Association of the Forest Industry. FIEMG: Federation of Industries of the State of Minas Gerais FIESP: Federation of Industries of the State of São Paulo.	-	-
	Stakeholder engagement				
	2-29 Approach to stakeholder engagement	17, 35		-	-
	2-30 Collective bargaining agreements		100% of employees are covered by collective bargaining agreements.		-
GRI 3: 2021 Material Topics					
GRI 3: 2021 Material Topics	3-1 Material topic definition process	15		-	-
	3-2 List of material topics	16		-	-
Governance					
GRI 2: General Disclosures 2021	2-9 Governance structure and composition	62		-	-
Ethics & compliance					
GRI 3: 2021 Material Topics	3-3 Management of material topics	23		-	-
GRI 205: Anticorruption 2016	205-1 Operations assessed for corruption-related risks		The operations were not assessed in relation to the issue, but are subject to monitoring.	-	-
	205-2 Communication and training on anti-corruption policies and procedures	23, 24, 25, 45		10	16
	205-3 Confirmed cases of corruption and measures taken	25		10	16
GRI 206: Unfair competition 2016	206-1 Legal actions for anti-competitive behavior, anti-trust and monopoly practices	25		10	8, 16, 17
Renewable energy					
GRI 2: General Disclosures 2021	3-3 Management of material topics	52		-	-
GRI 302: Energy 2016	302-1 Energy consumption within the organization			7, 8	7, 8, 12, 13
	302-2 Energy consumption outside the organization			8	7, 8, 12, 13
	302-3 Energy intensity			8	7, 8, 12, 13
	302-4 Reducing energy consumption			8	7, 8, 12, 13
	302-5 Reductions in energy requirements of products and services			-	-



GRI STANDARD	CONTENT	PAGES	INFORMATION OR REASON FOR OMISSION	UN GLOBAL COMPACT	SDGS
Water and effluents					
GRI 3: 2021 Material Topics	3-3 Management of material topics	55		-	-
GRI 303: Water 2018	303-1 Interactions with water as a shared resource	55		7, 8	6
	303-2 Management of impacts related to water discharge	56		7, 8	6
	303-3 Water withdrawal	56		8	6
	303-4 Water discharge	56		8	3, 6, 12, 14
	303-5 Water consumption	56		8	6
Forest management					
GRI 3: 2021 Material Topics	3-3 Management of material topics	61		-	-
GRI 304: Biodiversity 2016	304-1 Owned, leased or managed operational units located within or adjacent to protected areas and areas of high biodiversity value outside protected areas	62		7	13, 15
	304-2 Significant impacts of activities, products and services on biodiversity	61, 63		7	13, 15
	304-3 Protected or restored habitats		The organization does not have any permanent protection areas and/or restored areas that have undergone any type of repair.	-	-
	304-4 Species included in the Red List of Threatened Species and national conservation lists with habitats in areas affected by the company's operations	63		7	13, 15
Climate change					
GRI 3: 2021 Material Topics	3-3 Management of material topics	53		-	-
GRI 305: Emissions 2016	305-1 Greenhouse Gas (GHG) emissions, direct (Scope 1)			7, 8	3, 12, 13, 14, 15
	305-2 GHG emissions, indirect GHG from purchased energy (Scope 2)			7, 8	3, 12, 13, 14, 15
	305-3 Other Greenhouse Gas (GHG) emissions, indirect (Scope 3)			7, 8	3, 12, 13, 14, 15
	305-4 GHG emissions intensity		Internal information under review due to the new calculation method.	8	14, 15
	305-5 GHG emissions reductions			-	-
	305-6 Emissions of ozone-depleting substances (ODS)		Other greenhouse gases not covered by the Kyoto Protocol with emissions: HCFC-22, with emissions of 23.94 metric tons of CO2e.	8	14, 15
	305-7 NOx, SOx, and other significant atmospheric emissions			-	-
	Air quality				
GRI 3: Material Topics	3-3 Management of material topics	54		-	-
Waste & tailings management					
GRI 3: 2021 Material Topics	3-3 Management of material topics	58		-	-



GRI STANDARD	CONTENT	PAGES	INFORMATION OR REASON FOR OMISSION	UN GLOBAL COMPACT	SDGS
GRI 3901: Materials 2016	301-2 Virgin or recycled input materials used		The production of primary silicon metal uses non-recycled input materials of both plant and mineral origin. Byproducts of this production process (rich slag, silicon fines, silica fume, refractory scrap, electrode scrap and others) are reprocessed and transformed either into products within our own portfolio or into byproducts incorporated into the value chains of other industries. The main outputs include: silicon metal and ferrosilicon, with 100% of the silicon recovered through the melting of secondary sources such as crusher dust, silicon fines, rich slag and off-spec products; processed slag, 100% produced from rich slag; bagged silica fume, 100% collected from the silicon production process; and various types of scrap, with 100% of the materials generated in the plant sorted and segregated.	-	-
	306-1 Waste generation and significant impacts related to waste	58, 59		-	-
GRI 306: Waste 2020	306-2 Management of significant impacts related to waste	58, 59		-	-
	306-3 Waste generated	59		8	3, 6, 12, 14, 15
	306-4 Waste not sent for final disposal	60		8	3, 6, 12, 14, 15
	306-5 Waste sent for final disposal	60		8	3, 6, 12, 14, 15
Responsible sourcing					
GRI 3: 2021 Material Topics	3-3 Management of material topics	45		-	-
GRI 204: Procurement practices 2016	204-1 Proportion of spending on local suppliers	45		-	12
GRI 308: Supplier environmental assessment 2016	308-1 New suppliers selected based on environmental criteria	45		8	-
	308-2 Negative environmental impacts in the supply chain and actions taken	45		8	-
GRI 414: Supplier social assessment 2016	414-1 New suppliers selected based on social criteria	45		2	5, 8, 16
	414-2 Negative social impacts in the supply chain and actions taken	45		2	5, 8, 16
Occupational health & safety					
GRI 3: 2021 Material Topics	3-3 Management of material topics	39		-	-
GRI 403: Occupational Health & Safety 2018	403-1 Occupational health and safety management system	39		-	8
	403-2 Hazard identification, risk assessment and incident investigation	41		-	8
	403-3 Occupational health services	43		-	3,8
	403-4 Worker participation, consultation, and communication on occupational health and safety	42		-	8



GRI STANDARD	CONTENT	PAGES	INFORMATION OR REASON FOR OMISSION	UN GLOBAL COMPACT	SDGS
GRI 403: Occupational Health & Safety 2018	403-5 Worker training on occupational health and safety		Worker training programs are defined based on the identification of hazards and risks associated with the activities to be performed, whether routine or non-routine. After this identification, some training programs also require medical clearance with specific exams to ensure that workers are fit to perform them. The training content meets the minimum regulatory requirements according to the equipment, machinery or activities to be performed. For training programs without a defined frequency in applicable regulations, the organization establishes the schedule based on its training matrix and the criticality of the equipment or activity.	-	8
	403-6 Promotion of worker health	44		-	8
	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	41		-	8
	403-8 Workers covered by an occupational health and safety management system	40		-	8
	403-9 Work-related injuries			-	8
	403-10 Work-related ill health		In 2024, there were no fatalities or cases of serious work-related health problems.	-	3
Occupational health & safety					
GRI 3: 2021 Material Topics	3-3 Management of material topics	29, 35		-	-
GRI 401: Employment 2016	401-1 New employee hires and employee turnover	30		6	5, 8
	401-2 Benefits provided to full-time employees that are not provided to temporary or parttime employees	32		6	5, 8
	401-3 Parental leave	32		6	5, 8
GRI 404: Training and education 2016	404-1 Average hours of training per year, per employee	33		6	4, 5, 8
	404-2 Programs for upgrading employee skills and transition assistance programs	33, 36		6	4, 5, 8
	404-3 Percentage of employees receiving regular performance and career development reviews	34		6	4, 5, 8
Diversity and equal opportunity					
GRI 3: Material Topics	3-3 Management of material topics	36		-	-
GRI 405: Diversity and Equal Opportunity 2016	405-1 Diversity of governance bodies and employees	37		6	5, 8
	405-2 Ratio of basic salary and remuneration of women to men		There is no wage gap between women and men.	6	5, 8, 16
GRI 406: Non-discrimination 2016	406-1 Incidents of discrimination and corrective actions taken	36		6	5, 8, 16

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Community relations and social responsibility					
"GRI 3: 2021 Material Topics"	3-3 Management of material topics	47		-	-
GRI 203: Indirect Economic Impacts	203-1 Infrastructure investments and services supported	48, 49, 50		-	-
	203-2 Significant indirect economic impacts	48, 49, 50			
GRI 413: Local communities 2016	413-1 Operations with local community engagement, impact assessments and development programs	47		1	-
	413-2 Operations with significant actual or potential negative impacts on local communities		We have not observed any negative impacts on surrounding communities.		
Customer satisfaction and product quality					
"GRI 3: 2021 Material Topics"	3-3 Management of material topics	5		-	-
Proprietary indicator LS-02	Customer satisfaction score	5		2	5, 8, 16
Proprietary indicator LS-03	% of complaints responded to/total received	5		2	5, 8, 16

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Telephones (+55 31) 3249 2000 | (+55 38) 3749 6700

COORDINATION

Ionara Pontes

Chief Administrative, Financial & ESG Officer

Adriana Fonseca

Communication and Social Responsibility Coordinator

GRI CONSULTING

Ferso ESG

EDITORIAL AND GRAPHIC DESIGN

BH Press Comunicação

Mariana Coelho

Writer

Dulcemar da Costa

Editor

Marcella Fronterota, Gabriel Rocha and Cláudia Daniel

Design

PHOTOGRAPHY

LIASA Archives

Hitech Vídeo Produtora

Ronan Rocha

Photographer

