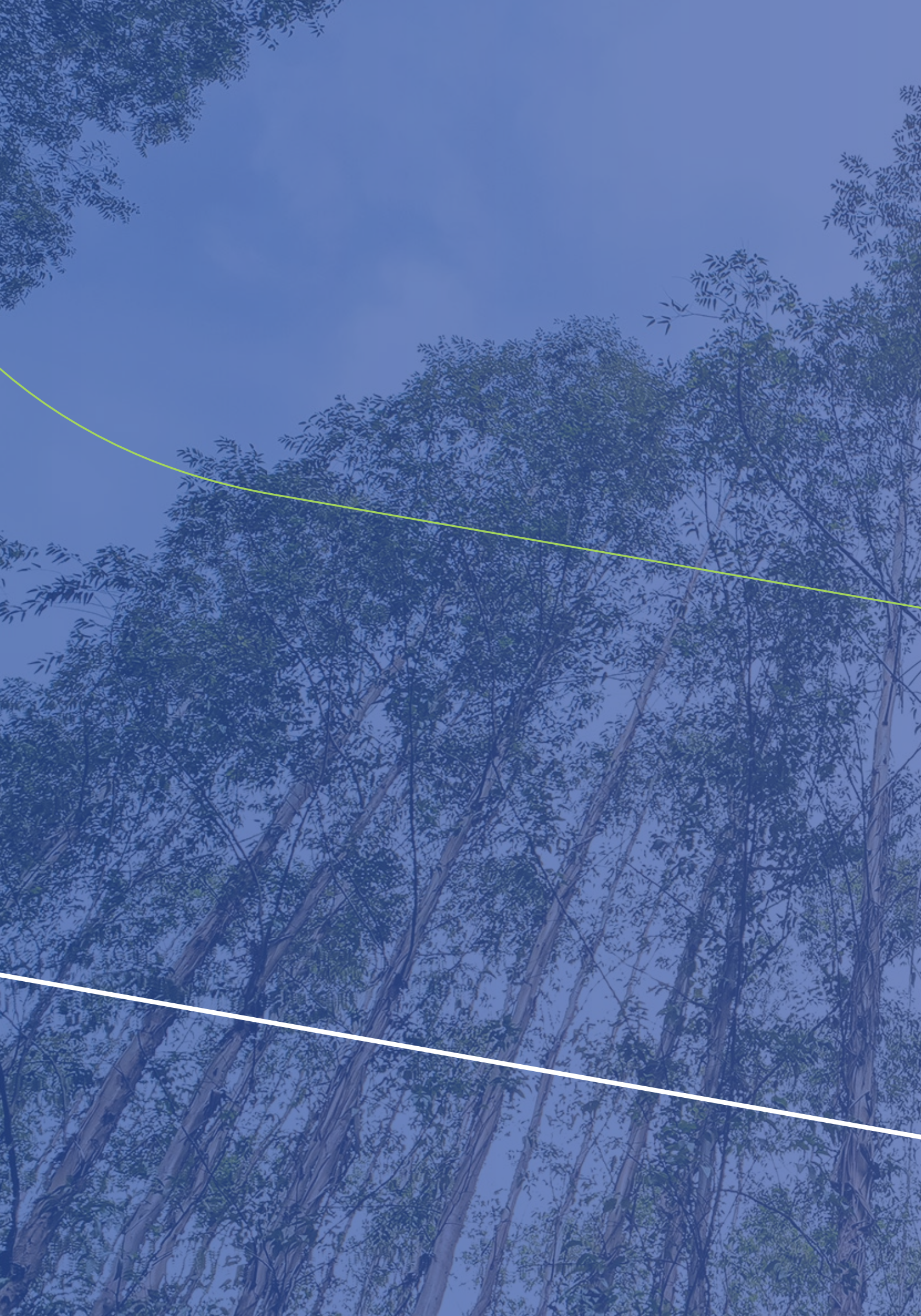


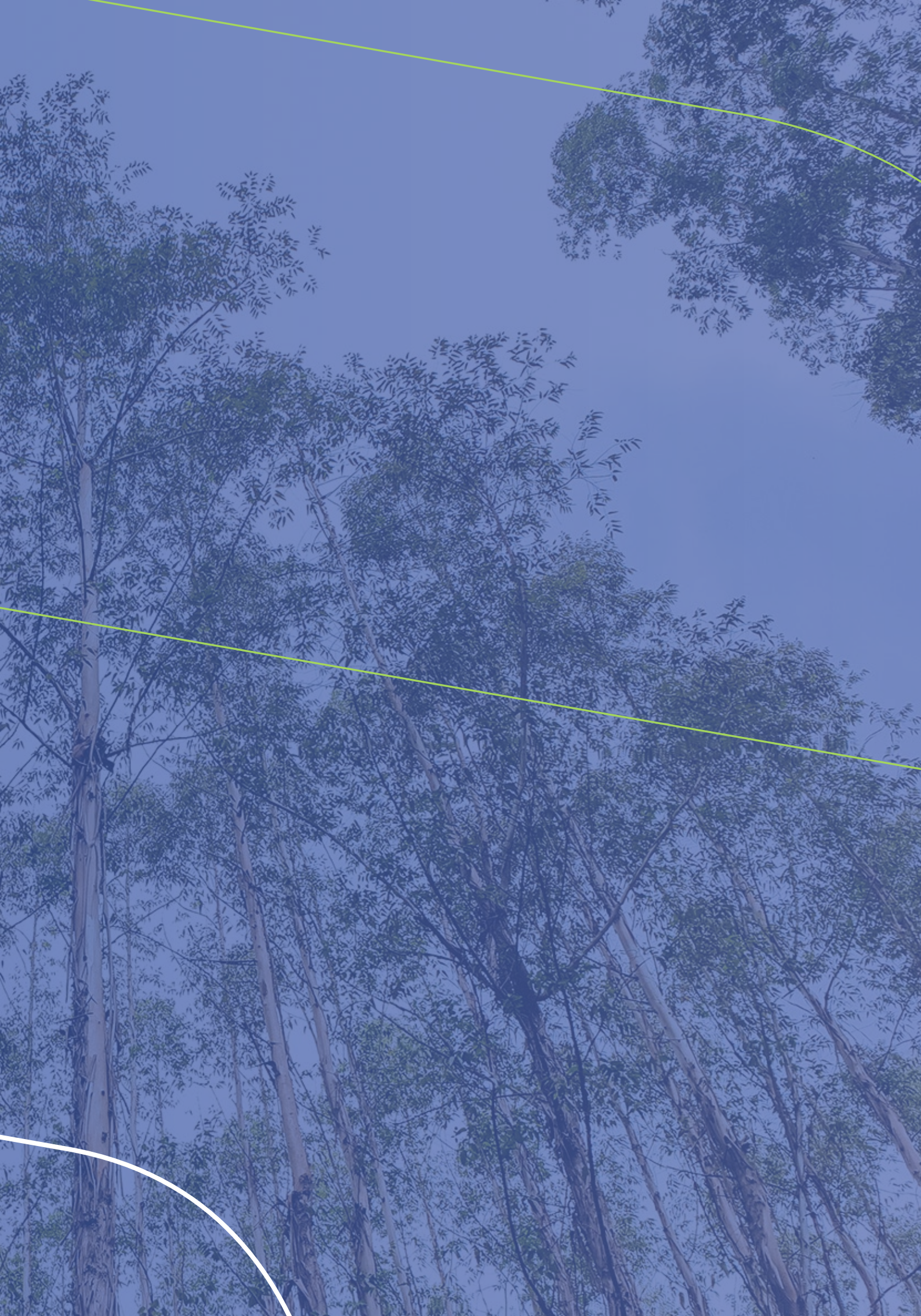


Bracell

Sustainability
Report

2021





Contents

About this report	6
Message from the executive vice president	8
Sustainability strategy	12
Materiality	14
Stakeholder engagement	17
About Bracell	18
Products and applications	24
Bracell value chain	26
Strategy and performance	28
Project Star	32
Governance	40
Sustainability governance	42
Ethics, compliance and anti-corruption	46
Risk management	50
People and culture	52
Diversity and inclusion	54
Training and development	60
Occupational health and safety	62
Social inclusion	70
Bracell Social	72
Volunteering	82
Relationship with the surrounding communities	84



Responsible production	90
Forestry operations	92
Mill operations	100
Certifications	102
Human rights	104
Water and effluents	106
Waste	112
Logistics	114
Suppliers	116
Biodiversity and landscapes	120
Conservation of biodiversity	122
Monitoring biodiversity	128
Climate	134
Managing GHG emissions	136
Energy	142
GRI Content Summary	146
SASB Table of Contents	160
Assurance statement	162





About this report

We are pleased to present our **2021 Sustainability Report**. In this report, we describe our commitments, policies, initiatives and results throughout the year. The report is structured so that readers can link its contents to our main source of guidance in managing environmental, social and governance topics: the Bracell Sustainability Strategy.

Each chapter covers one of the six pillars in our strategy. The opening chapter provides an overview of the company which highlights completion of Project Star, the expansion of our mill in Lençóis Paulista, São Paulo, southeastern Brazil. At the end of the report, we provide supplementary information and references to the reporting frameworks we used in creating the 2021 Sustainability Report.

As part of our commitment to transparency and the continuous improvement of our reporting practices, the information compiled in this report addresses the economic, environmental, social and governance topics viewed as material by Bracell's key stakeholders, most notably employees, suppliers, communities, customers and government agencies. The list of topics was produced in a materiality assessment in early 2022.

This report has been prepared in accordance with the Global Reporting Initiative (GRI) Standards 2021. It also describes the progress we have achieved on our commitments in support of the United Nations (UN) Sustainable Development Goals (SDGs). In addition, this report serves as our Communication on Progress (COP)



to the United Nations Global Compact, to which we are a signatory.

A more detailed version of our disclosures within each of these frameworks and commitments can be found on the Bracell Disclosures Hub.

Throughout the report, topics that are described in further detail in our Disclosures Hub are signposted by the icon:



Clicking on them will direct the reader to the Disclosures Hub website.

This edition of the **Bracell Sustainability Report** is for the period from January 01, 2021 to December 31, 2021, and includes our operations in the states of São Paulo, Bahia and Mato Grosso do Sul (Bracell SP Celulose Ltda. and Bracell Bahia Specialty Cellulose S.A.). **GRI 2-1, 2-2, 2-3**

We recognize that sustainability is a shared journey and welcome any critiques, questions and feedback. To contact Bracell, please send your message by email to faleconosco@bracell.com (Bahia operations) or faleconoscosp@bracell.com (São Paulo and Mato Grosso do Sul operations). **GRI 2-3**

Thank you for your interest in this publication. We hope you find it useful and inspiring.





Message from the executive vice president

GRI 2-22

2021 will go down in the history books as a year of record-breaking achievements for Bracell. Most notable is the completion of Project Star - the largest private investment in São Paulo state in the last 20 years - which significantly expands our Lençóis Paulista (SP) operations to make us the world's largest and most sustainable producer of dissolving pulp. The mill has two new flexible lines which can alternate between the production of kraft and dissolving pulp. This has raised the annual production capacity of our São Paulo and Bahia plants to up to 2 million metric tons of dissolving pulp and 3 million metric tons of kraft pulp.

Our new generation pulp mill in Lençóis Paulista (São Paulo state) is also our greenest facility. We generate energy by burning the organic matter in black liquor [a sub product of the process] in the largest and cleanest recovery boiler in the world. This process meets the mill's energy demands and allows us to feed back into the national grid an energy surplus in the

order of 150 to 180 MW. This green energy can meet the fuel requirements of 750,000 homes, or some three million people. We are also pioneers in replacing natural gas and fuel oil in our lime kilns with biogas produced from processing wood residues. This not only reduces drastically our GHG emissions, but also avoids the production of solid waste, in line with modern circular economy principles. The result is a process that is free of fossil fuel.

On September 9, 2021, we produced the first pulp sheet, two days after activating the new lines at our new São Paulo facility. On November 26, we made our first pulp shipment at the STS 14A terminal in the Port of Santos (São Paulo state), another milestone for the country's logistics infrastructure. The vessel, carrying 58 thousand metric tons, set off on its voyage to the Chinese cities of Qingdao and Changshu. Beginning in July, the terminal's works were completed in a record five months, just one year after signing the contract in November

“In 2021, we achieved significant progress in our commitment to sustainable production and biodiversity. We structured our One for One Commitment, launched in the first quarter of 2022, under which we will conserve thousands of hectares of native forest in the Caatinga, Atlanta Forest and Cerrado biomes.”



Per Lindblom, executive vice president of Bracell

2020. The operation boosts the local and regional economy, creating upwards of 550 direct and outsourced jobs in Santos (São Paulo state) and the cities our logistical route crosses.

In 2021, we achieved significant progress in our commitment to sustainable production and biodiversity. We structured our One for One Commitment, launched in the first quarter of 2022, under which we will conserve thousands of hectares of native forest in the Caatinga, Atlanta Forest and Cerrado biomes. For each hectare of forest planted, Bracell will fund the conservation of a hectare of native forest, and intends to achieve this proportion by 2025 by partnering with governments and other institutions. We will support the conservation of public land and the rehabilitation of disturbed land, forest fire prevention and response, the fight against poaching and capturing wild animals and the illegal deforestation and theft of native tree species.

Under our commitment to protect biodiversity, in the last 15 years we have been monitoring more than 600 fauna and flora species in our Cerrado, Atlantic Forest and Caatinga landholdings in São Paulo and Bahia. Through this painstaking process, we spotted more than 40 endangered species in our forested areas.

Our climate action goes above and beyond: we are a climate friendly company, with an emissions inventory of -5,334,303 tCO₂e in 2021. This means our forests sequester more carbon than our operations emit.

We also launched our long-term Sustainability Strategy and Vision during the year. Comprised of six pillars – Responsible Production, Climate, Biodiversity and Landscapes, People and Culture, Social Inclusion and Governance. This is a joint endeavor between the company's key leaders and a strategic driver that connects



ESG matters (environmental, social and governance) to our business. In addition to the Sustainability Committee, comprised of leaders from our strategic business and operations practices, we benchmark our performance against these guidelines through Sustainability Strategy ambassadors, who lead the monitoring of Bracell's Sustainability Roadmap.

To ensure the correct and relevant direction of our Sustainability Strategy and Vision, we have updated Bracell's materiality matrix, with the support of our core stakeholders. This identified 11 topics as being of crucial and strategic importance to the company's sustainability management. We have provided our main results for 2021 in our Sustainability Report.

As a part of our preparations for the future, we also bolstered the importance of valuing, empowering and training our teams. Our growth in recent years means that it is essential to establish transparent and trusting relations, inspiring a purpose-

driven approach and nurturing a diverse and inclusive workplace, in order for our team to unleash its full potential. Created in 2020, Bracell's Diversity Committee made progress in discussing key race and gender topics. In Bahia, we set up the focus group for people with disabilities and the gender affinities group, holding co-creation workshops and sessions with their leaders to form pacts for inclusive management.

Reinforcing our commitment to the topic, we are signatories to the Women's Empowerment Principles (WEPs) of the United Nations (UN) and are committed to promoting female empowerment, both within and outside our company. We are also signatories to the UN Global Compact and have a responsibility to meet its 10 principles - which cover Human Rights, Labor Rights, Environmental Protection, and the Fight Against Corruption – in managing our activities and operations.

We are aware that it is also our duty to help create positive social and

environmental value in our communities. In this regard, Bracell has continued implementing its private social investment initiatives. In 2021, we directly supported more than 100 thousand people in Bahia and São Paulo, helping bolster initiatives promoting education, women's empowerment and local community well-being, the latter through health, citizenship and cultural services.

These are only a few of the highlights from our sustainability journey in 2021, an ongoing endeavor to instill sustainability in Bracell's business strategy. We acknowledge the importance of our stakeholders in this process, especially our employees, who can take the credit for all the achievements we have made this year. Being the world's largest producer of dissolving pulp is an important feat. Doing it sustainably is our legacy and our contribution for future generations. We hope you find this report useful and informative.

Per Lindblom
executive vice president of Bracell



Sustainability Strategy

GRI 2-22

Our Sustainability Vision and Sustainability Strategy are guiding principles that inform our decisions and actions in building the future we aspire to create.

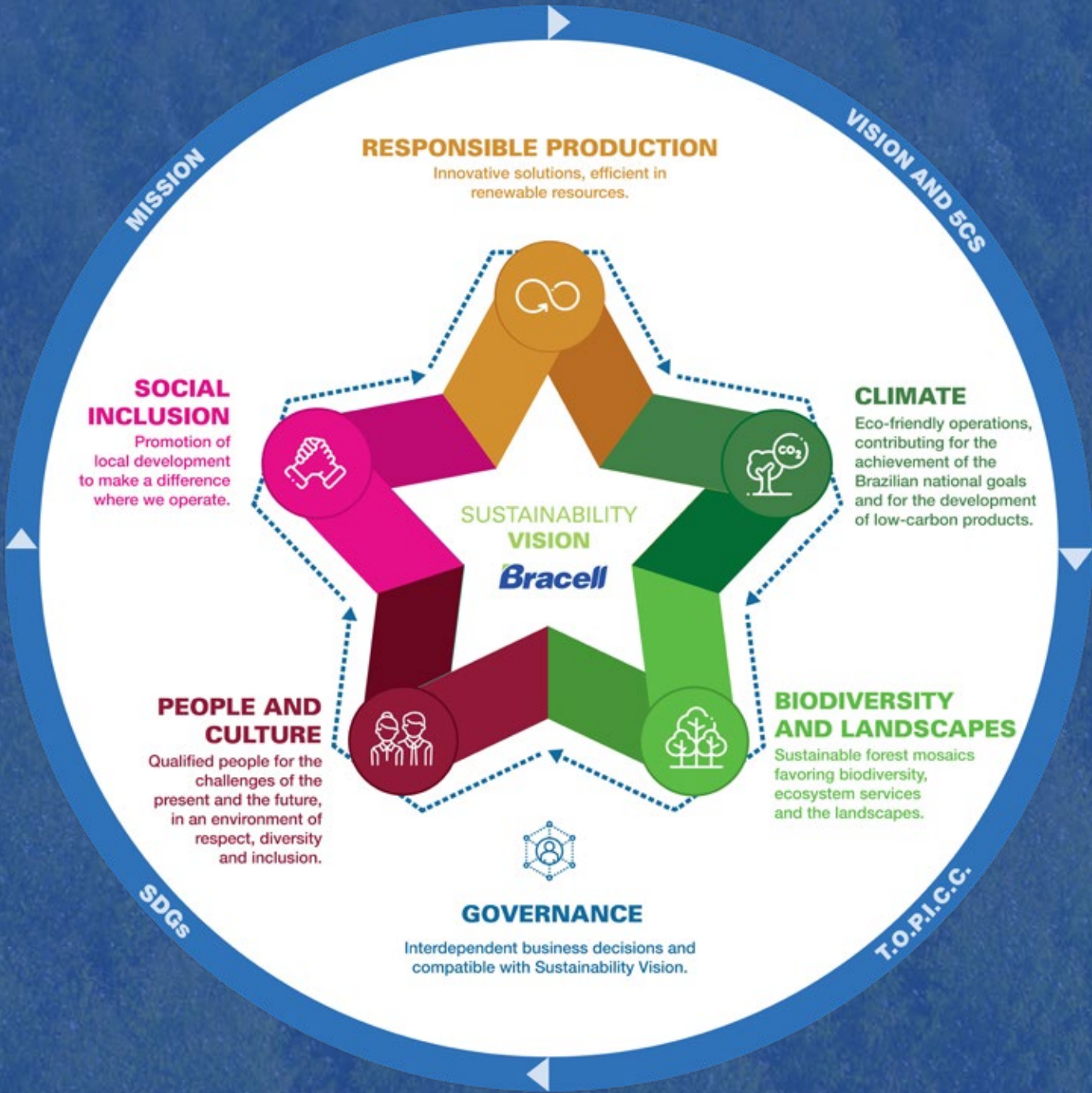
Bracell's Sustainability Vision and Sustainability Strategy were launched in 2021 following a collaborative development effort involving our highest governance bodies and key leadership personnel. The Sustainability Strategy has been mapped to our materiality matrix, a list of material topics identified through a survey of internal and external stakeholders in 2022 (read more about our materiality process on [page 14](#)).

SUSTAINABILITY VISION

Bracell is committed to being a sustainable business in the circular bioeconomy. We aim to revolutionize the forest-based pulp industry and remain at its forefront, while providing diversified products from responsibly managed, renewable plantations. We believe in creating shared value as well as building impactful and long-lasting partnerships, so we may continuously do good for our communities, country, climate, customers and company.

Sustainability Strategy

Our Sustainability Strategy addresses six main areas, namely: responsible production; climate; governance; biodiversity and landscapes; people and culture; and social inclusion.





Materiality

GRI 3-1, 3-2

In early 2022, we carried out an exercise to update our materiality matrix. The assessment was structured into three steps:

- We reviewed industry and company documentation on sustainability and benchmarked our performance against industry peers.
- We conducted a quantitative and qualitative survey of our leadership team and key stakeholders (employees, suppliers, communities, customers and government agencies) through both interviews and survey forms. [GRI 2-29](#)
- Out of the topics rated as most material, our leadership team selected 11 to include in our new materiality matrix.

Material topics

Bracell's Sustainability Strategy Pillar	Material topic	GRI disclosure	SASB contents	SDG ¹	Global Compact ²
People & culture	Valuing our human capital	404-1, 404-2, 404-3		4, 5, 8, 10	6
	Employee wellness, health and safety	403-1, 403-2, 403-3, 403-4, 403-5, 403-6, 403-8, 403-9, 403-10		3, 8, 12, 16	
	Diversity, inclusion & equality	2-7, 2-8, 405-1, 405-2, 406-1		3, 5, 8, 10	6
Climate	Energy efficiency	302-1, 302-2, 302-3, 302-4, 302-5	RR-PP-130a.1	7, 8, 12, 13	7, 8, 9
	Climate change	201-2, 305-1, 305-2, 305-3, 305-4, 305-5	RR-PP-110a.1, RR-PP-110a.2	3, 12, 13, 14, 15	7, 8, 9

Biodiversity and landscapes	Biodiversity	304-1, 304-2, 304-3, 304-4		6, 14, 15	8
Responsible production³	Screening suppliers using social and environmental criteria	308-1, 308-2, 408-1, 409-1, 414-1, 414-2	RR-PP-430a.1	5, 8, 12, 16	2, 4, 5, 8
	Water stewardship: water and effluents	303-1, 303-2, 303-3, 303-4, 303-5	RR-PP-140a., RR-PP-140a.2	6, 12	7, 8
	Human rights in the value chain	410-1, 412-1			1
Governance	Compliance, ethical conduct, integrity and transparency	2-27, 205-1, 205-2, 205-3, 206-1		12,16	8, 10
Social inclusion	Community engagement	411-1, 413-1, 413-2		1, 2	1

¹ SDGs we support through our material topics, by GRI disclosure.

² Global Compact Principles we uphold as a signatory by addressing our material topics, by GRI disclosure.

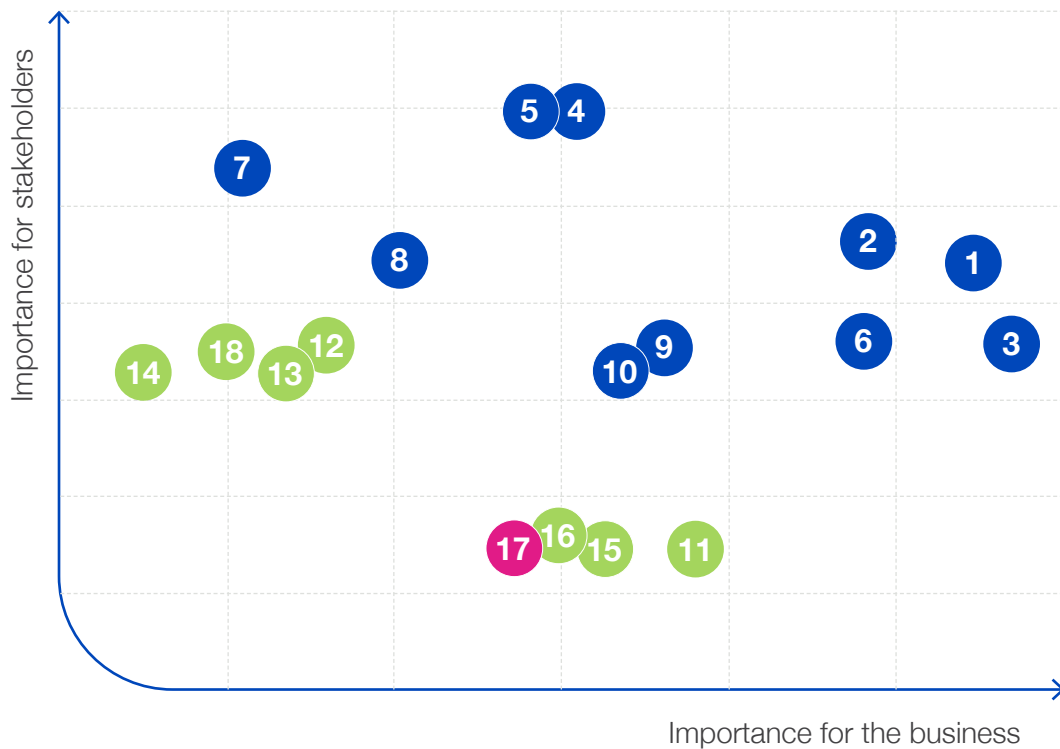
³ Although stakeholders have not identified this topic as being material, we continue to report on waste management given the relevance of this topic. This report and the Bracell Disclosures Hub therefore includes GRI disclosures 306-2, 306-3, 306-4, 306-5 and a corresponding description of our approach to waste management.





Materiality matrix

- 1 Diversity, inclusion & equality
- 2 Compliance, ethical conduct, integrity and transparency
- 3 Biodiversity
- 4 Climate change
- 5 Water stewardship: water and effluents
- 6 Employee wellness, health and safety
- 7 Energy efficiency
- 8 Screening suppliers using social and environmental criteria
- 9 Human rights in the value chain
- 10 Community engagement
- 11 Economic performance and growth
- 12 Anti-corruption practices
- 13 Innovation, R&D, technology and new products
- 14 Forestry certification
- 15 Improvement of governance practices
- 16 Job creation and employee development
- 17 Valuing our human capital
- 18 Customer satisfaction, impacts and product quality



- Material topic
- Non-material topic
- Topic promoted to material

Stakeholder engagement

Stakeholder engagement is managed primarily by our Institutional Relations function, which works to advance local and regional development through strategic partnerships with governments and private organizations. We engage and interact on an ongoing basis with our strategic stakeholders.

These have been prioritized through an assessment of their impact and influence, which has informed stakeholder-specific engagement recommendations. **GRI 2-29**

**READ MORE AT OUR
DISCLOSURES HUB:**


[GRI 2-29 Approach to stakeholder engagement](#)





1 About Bracell





At Bracell, the largest dissolving pulp producer in the world, we practice continuous improvement to remain one of best-managed, sustainably resourced operations in the industry, creating value for the Community, Country, Climate, Customer and Company.

Bracell is a Brazilian-based company founded in April 2019, with operations in Bahia, Mato Grosso do Sul and São Paulo. We are a member of Royal Golden Eagle (RGE), a global resource-based industrial group headquartered in Singapore.

RGE Group began operating in Brazil in 2003 with the acquisition of BSC (Bahia Specialty Cellulose) and Copener Florestal, in the northeastern state of Bahia. In August 2018, the group further expanded its Brazilian operations with the acquisition of Lwarcel Celulose, in São Paulo, southeastern Brazil.

MISSION

Improving lives by developing resources sustainably.

VISION

To be one of the largest dissolving pulp producers in the world, with the best management, fully committed to the sustainable use of natural resources. Our aim is to consistently create value for the Community, Country, Climate, Customer and the Company. GRI 2-23

CORE VALUES

We believe that in order to fulfill our mission, and achieve our vision for the future, our leadership team and employees must adhere to a set of Core Values known as T.O.P.I.C.C..



T

We are aligned by our common purpose and work together as a **Complementary team**



O

We take **Ownership** to achieve outstanding results and seek value at all times



P

We develop our **People** to grow with us



I

We act with **Integrity** at all times



C

We understand our **Customers** and deliver best value to them



C

We act with zero complacency and always strive for **Continuous improvement**



Learn more about Bracell:
<https://www.bracell.com/en/institutional/about-us/>





2021 at a glance

GRI 2-6

Mills*



- 1 in Camaçari (state of Bahia)
- 1 in Lençóis Paulista (state of São Paulo)**

Production capacity



- 3 million metric tons of kraft pulp per year
- 2 million metric tons of dissolving pulp per year

Certified, planted eucalyptus forests



- 35 cities in the state of Bahia (along the Northern coast and in the Agreste region)
- 108 cities in the Midwest of the state of São Paulo
- 6 cities in the state of Mato Grosso do Sul

Nurseries (80 million seedlings per year)

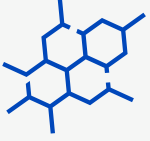


- 1 in Entre Rios (state of Bahia)
- 1 in Inhambupe (state of Bahia)
- 2 in Lençóis Paulista (state of São Paulo)
- 1 in Borebi (state of São Paulo) – third party

* Each locally headquartered. GRI 2-1

** Expanded in 2021 with two new flexible lines that can alternate between the production of dissolving and kraft pulp in response to market demand.

R&D laboratories



- 4 in forestry R&D – 3 in the state of Bahia and 1 in the state of São Paulo
- 2 in industrial R&D – 1 in the state of Bahia and 1 in the state of São Paulo

Offices



- 1 in São Paulo (state of São Paulo)
- 1 in Lençóis Paulista (state of São Paulo)
- 1 in Camaçari (state of Bahia)
- 1 in Alagoinhas (state of Bahia)
- 1 in Singapura (Asia)

Commercial offices



Asia

Europe

Note: Bracell operates a trading business in the US.

Logistics



- 1 truck and rail terminal in Pederneiras (state of São Paulo)
- 3 terminals at the Port of Santos (state of São Paulo): 2 managed by Bracell and 1 operated by a third-party company
- 1 terminal at the Port of Salvador (state of Bahia)

Distribution Centers – specialty pulp



US

Europe

China

Exports in 2021

GRI 2-6

BAHIA

Destination	Share of sales
Asia	64%
United States	30%
Europe	3%
Other*	3%
Total	100%

SÃO PAULO

Destination	Share of sales
Asia	70%
Domestic market (Brazil)	16%
Europe	12%
Other	2%
Total	100%

* Includes 1% of sales for the domestic market (Brazil).



Products and applications

GRI 2-6

Bracell pulp is sold in Brazil, the Americas, Asia, and Europe, and is used to manufacture everyday items for people around the world. These are some of its applications.

Bleached eucalyptus kraft pulp, used to manufacture:



- Printing and writing paper
- Toilet paper and paper towels
- Filter paper
- Self-adhesive paper, tapes and packaging

Rayon-grade dissolving pulp, for the manufacture of:



- Viscose and Lyocell fibers used in fabrics and nonwovens
- Viscose filaments used in delicate fabrics such as women's underwear
- Wet wipes
- Cosmetic masks
- Cellophane packaging films
- Viscose pads for household and industrial cleaning applications

Specialty-grade dissolving pulp, used to manufacture:



- Cellulose acetate flakes (cigarette filters, textile filament yarns and fibers for nonwovens)
- Pharmaceutical and food products (produced from microcrystalline cellulose)
- Printing inks, specialty inks, enamels and cosmetics (produced from nitrocellulose)
- Industrial filament used to produce tire reinforcement
- Cellulose ethers and artificial sausage casings (specialty applications)





Bracell value chain



Climate-positive operations: in 2021, Bracell captured more carbon than it emitted, removing 5,334,303 tCO₂e from the atmosphere with its operations.



At the end of 2021, the total conserved area was 56% of the area of eucalyptus plantations.



Click on the pillar icons to learn about Bracell's value chain.

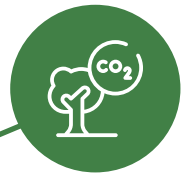
BIODIVERSITY AND LANDSCAPES



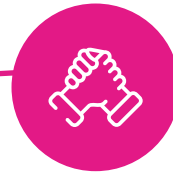
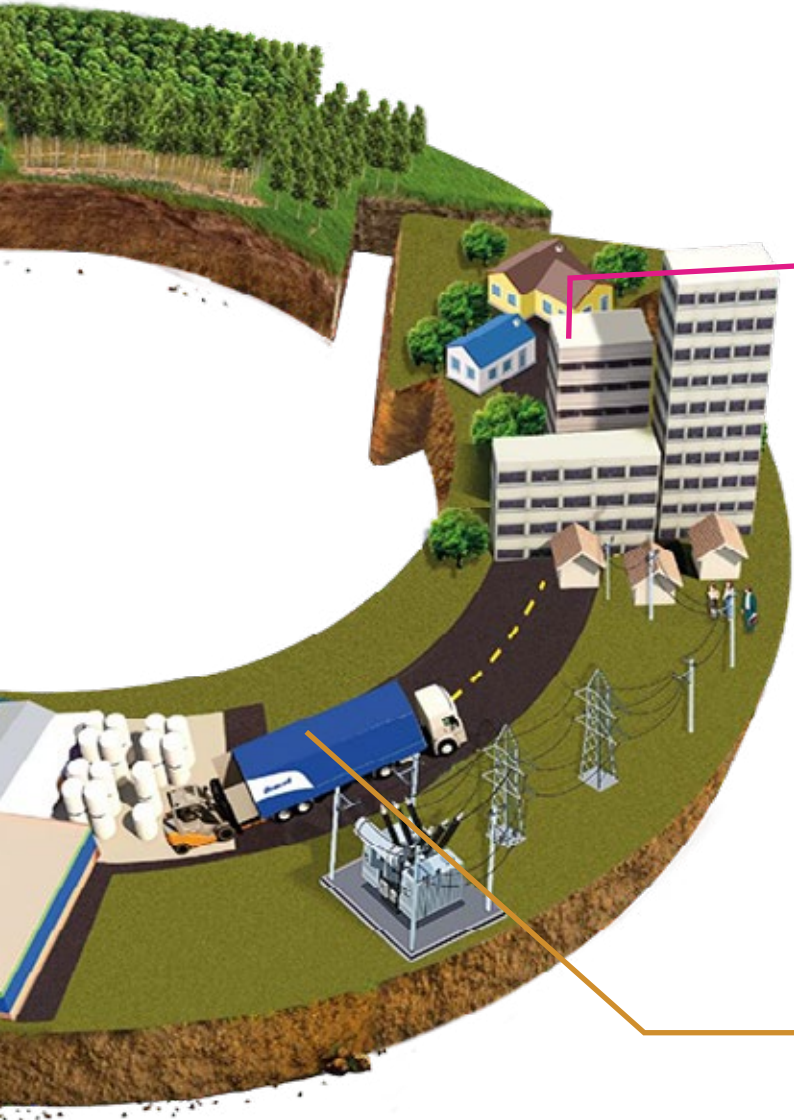
GOVERNANCE

PEOPLE AND CULTURE





CLIMATE



SOCIAL INCLUSION



RESPONSIBLE PRODUCTION



Strategy and performance

Bracell's corporate strategy is based on an Integrated Management Policy under which we commit to implement best practices around quality, the environment and health and safety, in a way that is responsive to the needs of customers, employees, communities, suppliers and society.

In practice, this means we strive to attain high standards of excellence in producing our end products, and seek continuous improvement in environmental and social performance, anchored in our T.O.P.I.C.C. core values. Innovation and operational efficiency are additional cross-cutting principles that guide our approach to doing business. [GRI 2-23](#)

In 2021 we completed the construction of two new flexible kraft and dissolving pulp lines at our mill in Lençóis Paulista (state of São Paulo), which use state-of-the-art technology to significantly enhance environmental efficiency in the production process (read more in Project Star, [page 32](#)).

In 2021 we delivered our estimated production output while achieving our strongest quality and operational safety performance in the last six years.

Bracell has also implemented changes to the organizational structure to increase operational efficiency by expanding forestry operations in the state of Mato Grosso do Sul. Bracell plans to invest in pulpwood logistics management and infrastructure including new haul roads and offices.

To ensure we deliver high-quality products to our customers, Bracell seeks to attract talents who are both highly skilled and

committed to continuous improvement. We offer our employees opportunities to develop their skills in a competitive and challenging environment (read more in People and culture, on [page 52](#)). **GRI 404-2**

In 2021 we also made progress in our initiatives to engage with communities surrounding our operations. Through Bracell Social, our private social investment program, we invested more than R\$ 4.1 million in initiatives that benefited approximately 100,000 people (read more in Social inclusion, on [page 70](#)). **GRI 203-1, 413-1**





2021 highlights



4,726 direct employees. At our Lençóis Paulista (SP) mill alone, we hired 705 direct employees and 527 outsourced workers in 2021. **GRI 2-7 e 2-8**



Launch of the **Sustainability Vision and Strategy**, after a process involving the company's most senior governance and strategic leaders. **GRI 2-22**



With the startup of our two new flexible lines—which can produce both dissolving and kraft pulp—**Bracell has become the largest dissolving pulp producer in the world by installed capacity.**



The plant at Lençóis Paulista is **self-sufficient in energy generation** for the production of pulp, with excess generation of circa 150 to 180 MW, enough to meet the demand of approximately 3 million people or 750,000 homes.



Climate-positive operations: in 2021, Bracell captured more carbon than has emitted, removing 5,334,303 tCO₂e from the atmosphere with its operations.



We invested more than **R\$ 4.1 million in social programs** that have benefited approximately 100,000 people. **GRI 203-1**



Meetings focusing on gender and were conducted by **Bracell's Diversity Committee**, composed of representatives from all operations. **GRI 3-3(405)**





Project Star

Largest and Greenest: the two new flexible lines at our Lençóis Paulista plant, which began operation in 2021, have made Bracell the world's largest producer of dissolving pulp by installed capacity.

In 2021 Bracell reached an important production capacity milestone with the completion of Project Star, one of the largest private investments in the state of São Paulo in the last 20 years.

The project has expanded our production capacity in Brazil to 3 million metric tons of kraft pulp and 2 million metric tons of dissolving pulp per year, which we market in Brazil and globally.

More than 36,000 contractors were employed in building the mill from 2019 to June 2022. In 2021 alone, Bracell employed 14,551 contractors through Project Star. **GRI 2-7, 2-8**

With the two new flexible lines—which can produce both dissolving and kraft pulp—Bracell has become the largest dissolving pulp producer in the world by installed capacity. The mill produced its first pulp sheet of the new flexible lines in September 2021, a milestone for the company as first production began in the fourth quarter of the year.

Bracell is also an industry leader when it comes to investment in technology to provide sustainability differentiators.

As part of the expansion at our Lençóis Paulista (SP) site, Bracell has also invested in expanding its forestry operations—all fully compliant with sustainable management standards—to increase production of pulpwood (read more about our forestry operations on [page 92](#)).



LARGEST AND GREENEST

On November 05, 2021, Bracell organized an internal ceremony to launch the new pulp lines at the Lençóis Paulista (SP) mill, in an event that brought together employees, partners, executives and RGE senior executives. During the ceremony, executives highlighted the scale of the project and its Largest and Greenest concept—as the biggest and most sustainable pulp mill in the world. The two new flexible lines were built with the best technologies on the market and the most innovative in the sector. GRI 2-24

A third-party assessment commissioned by Bracell confirmed that the Lençóis Paulista mill meets best available technology standards as described in the European Commission's "Best Available Techniques (BAT) Reference Document for the Production of Pulp, Paper and Board, 2015". The review compared its BAT findings with the mill's future pulp lines when in normal operation.

November 2021 also saw an important logistics milestone: our first pulp shipment from the STS 14A terminal at the Port of Santos (SP)—a total of 58,000 metric tons bound for the cities of Qingdao and Changshu, in China. This terminal will strategically provide added outbound pulp shipping capacity to accommodate our higher production capacity.





02

Star Project

Stand-out features of the two new flexible lines in Lençóis Paulista (state of São Paulo)



Click on each number to know the stand-out features of the Bracell factory.



06

04

07

03

08

05

09

01

10



Investing in infrastructure

GRI 203-1

In 2021 Bracell established strategic partnerships with government agencies and private organizations in Lençóis Paulista and maintained regular interaction with other stakeholders. As part of this process, we invested in improving local infrastructure and provided capacity building and training to local and regional workers. Some of our initiatives during the year included:

- COVID-19 prevention and impact mitigation initiatives, including the donation of 10 ventilators, 41,000 facemasks, 250 safety goggles, 30,000 gloves and 10,000 aprons, among other items;
- Renovation of the COVID-19 emergency care ward at Hospital Nossa Senhora da Piedade, a 521.80 square-meter ward with an ICU and 12 beds;
- New equipment for the local fire department;
- Renovation of the Monte Azul health clinic;
- Renovation of a sports court and hospital in Macatuba (SP), a town adjacent to Lençóis Paulista;
- Renovation of the Civil Police, Military Police and Municipal Guard stations.



Health and safety within Project Star

In 2021, we maintained the health and safety program developed specifically for Project Star, with a focus on contractors.

GRI 403-1

As the expansion project at our São Paulo site progressed amid the COVID-19 pandemic, we implemented a set of health protocols in line with recommendations from the World Health Organization (WHO) and the Brazilian Ministry of Health (read more on health and safety on [page 62](#)). In addition, we maintained an active communication network providing health information and advice via WhatsApp,

radio broadcasts and bulletin boards, and provided telephone numbers to report pandemic-related health incidents.

Bracell has also maintained an annual agenda of activities including health campaigns on STDs/HIV, respiratory diseases, vaccination, breast and prostate cancer prevention, and other topics. **GRI 403-6**

The Project Star Safety Committee organized regular safety meetings and further improved the Emergency Response Plan (PAE) for this operation.

During integration, contractors attended health and safety training organized by Bracell and administered by a specialist third-party firm. They also attended training on Brazilian safety regulations (NR-18), provided by their employers. **GRI 403-5**

Star Bem program

Bracell's Star Bem program provides contractors with guidance and support in developing interpersonal and life skills. In a partnership with the Industrial Social Service (SES), the program organized daily training and instruction activities, both in person and via recorded videos transmitted on online platforms and on TV sets at Project Star's Social Center, addressing topics such as gender violence, tips on healthy living, managing conflicts, behavioral safety, financial education, among other topics (learn more about the program on [page 81](#)). **GRI 403-6**





2 Governance



Interdependent business decisions consistent with our Sustainability Vision.

Each business within the Royal Golden Eagle (RGE) Group holding company of which Bracell is a subsidiary, has its own management systems and controls to ensure compliance with local laws and regulations. Business-specific key performance indicators are compiled on an annual basis to inform decision-making.

RGE has an Executive Management Board composed of key executives, while business groups have their own CEOs, management teams and boards of directors. Members of RGE's Executive Management Board are assigned to specific businesses to provide supervision. Top executives meet quarterly with RGE's Executive Management Board to report on business performance and other corporate matters. [GRI 2-10](#)

Bracell's corporate governance model encourages interdependent decision-

making. The model is aligned with our mission and vision, our T. O. P. I. C. C. core values, and our code of conduct. It also reinforces our sustainability guidelines and our philosophy of creating value for the Community, Country, Climate, Customers, and Company. [GRI 2-23](#)

Governance is an overarching pillar of our Sustainability Strategy, cutting across each of the other pillars (read more on [page 12](#)). It spans our corporate governance and internal communication programs, and strategic social and environmental decision-making.

Bracell's key leadership personnel meet every four months to discuss company performance, provide inputs into our Sustainability Report, and approve the report. [GRI 2-14](#)

OUR STRATEGIC LEADERSHIP TEAM AT BRACELL IS COMPOSED OF THE FOLLOWING MEMBERS:

[GRI 2-9](#)

RGE director and executive vice president of Bracell: [Per Lindblom](#)¹ [GRI 2-11](#)

Senior vice president: **Pedro Stefanini**²

Managing director, Bracell Bahia: **Guilherme Araújo**

Controller, based in Singapore: **Josh Lim**

Chief Operating Officer (COO): **Clinton Clive Van Vught**

¹ Bracell does not have the position of CEO. The senior executive leadership role is RGE Director and executive vice president. All leadership members hold executive positions and none of them are independent.

² Remained in office until June 15, 2022.

READ MORE AT OUR DISCLOSURES HUB:

[GRI 2-10 Nominating and selecting the highest governance body](#)





Sustainability governance

GRI 2-23

At Bracell we are committed to the sustainable development of our operations and to upholding high standards of conduct among our employees, customers, partners and surrounding communities.

Bracell's operations are managed in line with the standards set by the International Finance Corporation (IFC), the largest global development institution focused on the private sector in developing countries, with the ten principles of the United Nations (UN) Global Compact, the UN Women's Empowerment Principles, and standards such as ISO 9001, ISO 14001 and Cerflor/PEFC ([click here and read more](#)).

We also follow the Equator Principles in managing social and environmental risks in our projects, as well as the standards published by the International Labor Organization (ILO).



READ MORE AT OUR DISCLOSURES HUB:

[GRI 2-15 Conflicts of interest](#)

[GRI 2-16 Communication of critical concerns](#)

[GRI 2-17 Collective knowledge of highest governance body](#)

[GRI 2-18 Evaluation of the performance of the highest governance body](#)



Bracell's sustainability governance bodies include our:

Steering Committee

This committee, comprising members of our senior leadership team, is responsible for strategic decision-making at Bracell. [GRI 2-12](#)

Sustainability Committee (São Paulo and Bahia)

This is composed of members from strategic areas of the company's business and operations and has no independent members. No independent members. The Sustainability Committee provides recommendations to senior management on addressing the environmental, social and governance topics under Bracell's Sustainability Strategy at the operational level. The Committee manages social and environmental risks and opportunities, monitors performance against environmental, social and governance criteria, and oversees execution of our Sustainability Strategy and progress on strategic goals. It also provides investment recommendations and guidance on building an increasingly ethical, virtuous, competitive, and socially and environmentally responsible organization. [GRI 2-13, 2-17](#)

Crisis Committee

A crisis committee may be set up in response to emergencies, helping to mitigate operational, reputational, social and environmental risks to the business. For our Bahia operations, the crisis committee may be set up at one of two organizational levels depending on how the crisis escalates, as outlined in the Prevention and Crisis Management Manual. In our São Paulo operations, a crisis committee is composed of key leadership personnel as relevant to the crisis situation. [GRI 2-16](#)

Sustainability Strategy Ambassadors

For each pillar in our Sustainability Strategy, our operations in São Paulo and Bahia have key personnel responsible for strategy planning within the programs and targets under our Sustainability Roadmap. We have organized workshops with these personnel to present the strategic goals for each pillar, the relevant programs and specific targets, and to assign roles and responsibilities. [GRI 2-24](#)



Social and environmental commitments

GRI 2-23

UN Global Compact

As a signatory of the Global Compact, Bracell is committed to its 10 Principles on Human Rights, Labor Rights, Environmental Protection and Anti-Corruption. Our material topics are also mapped to the Sustainable Development Goals (SDGs) and the 2030 Agenda (read more on [page 14](#)).

Women's Empowerment Principles (WEPs)

Bracell is a signatory of the Women's Empowerment Principles (WEPs), a set of guidelines for businesses on promoting gender equality and women's empowerment at the workplace, in the job market and in communities. Launched by UN Women and the Global Compact, the WEPs are informed by international labor and human rights standards and grounded in the recognition that businesses have a stake in, and a responsibility for, women's empowerment.

This is among the strategic goals within our People and Culture pillar and is integral to our approach to people management. We have adapted our policies and created new ones to provide an egalitarian work environment for both men and women. (learn more on [page 54](#)). This topic also connects to the Social Inclusion pillar as our commitment to gender equality and women empowerment extends to the communities where we operate and interact (read more on [page 70](#)).

At Bracell we strive to be responsible producers, protect the environment, respect human rights, develop the communities where we operate and provide a safe, healthy and productive work environment for all our employees. Learn more about the principles that guide our way of doing business in our Sustainability Policy, which draws guidance from the RGE Forestry, Fiber, Pulp & Paper Sustainability Framework and is available on our [website](#). GRI 2-23

Brazilian Business Council for Sustainable Development (CEBDS) GRI 2-28

In 2021, Bracell joined the Brazilian Business Council for Sustainable Development (CEBDS), and we are currently a member of the thematic chambers on Climate & Energy and Biodiversity. CEBDS is a not-for-profit civil association that promotes sustainable development through advocacy in government and civil society and represents Brazil at the World Business Council for Sustainable Development (WBCSD).

READ MORE AT OUR DISCLOSURES HUB:

[GRI 2-22 Statement on sustainable development strategy \(Contribution to the Global Compact's Ten Principles\)](#)

[GRI 2-28 Membership associations](#)





Ethics, compliance and anti-corruption

GRI 3-3(205)

Bracell's code of conduct is aligned with our mission, vision and our T.O.P.I.C.C. core values.

It reflects our commitment to upholding globally recognized standards of ethics in our processes and practices, and to nurturing ethical mindsets among our employees, suppliers and clients, and in our relations with stakeholders.

It articulates expectations on ethical conduct in matters such as conflicts of interest, competition, procurement, confidentiality and cybersecurity, bullying, harassment and violence, personal information, privacy and security, and sustainability. **GRI 2-15**

At Bracell, 100% of employees receive the code of conduct at the time of integration, right after admission. They also receive training on integrity, anti-bribery and anti-corruption.

All members of the senior leadership team attend regular training on ethics and integrity, including training on the code of conduct. RGE Group published an internal policy on anti-corruption in 2021 and will provide leadership training on the policy in 2022. **GRI 205-2**



Read our code of conduct at

<https://www.bracell.com/en/institutional/governance-and-certification/>



BRACELL ESCUTA

GRI 2-26

At Bracell we encourage ethical mindsets and behaviors. We promote respect for people, the environment, organizations, and applicable laws and regulations. To help ensure compliance with the law and our own policies and code of conduct, we provide a channel, called Bracell Escuta, through which employees, suppliers, communities and other stakeholders can confidentially and anonymously report any misconduct and noncompliance. Reports are investigated by an internal audit team, which reports directly to senior management at Bracell and RGE.

Bracell Escuta:

bracell_escuta@bracell.com

0800 006 6012 (state of Bahia)

0800 033 3384 (state of São Paulo and state of Mato Grosso do Sul)



Anti-corruption

GRI 3-3(205)

Bracell operates in strict accordance with the RGE Group global anti-corruption policy, and its principles and procedures for ensuring compliance with applicable anti-corruption laws, including Brazilian laws.

Bracell's compliance culture stresses, among other things, that any failure to comply with these laws can result in civil and criminal liability both for the RGE Group and for the individual involved, as well as significant reputational damage for RGE Group and Bracell.

All our operations are assessed on anti-corruption. The primary bribery and corruption risks that could arise in the course of business activities at RGE Group and its affiliates, including Bracell, relate to conflicts of interest between business partners, interactions with government officials, gifts and hospitality, sponsorship and donations, hiring, facilitation payments, and doctoring accounting, financial and tax information.

GRI 205-1

Employees in senior positions, or who are responsible for conducting business partner due diligence, receive additional, personalized training on RGE's business partner due diligence process.

In addition, all business partners receive a copy of our Procurement Code of Ethics.

GRI 205-2

READ MORE ABOUT GOVERNANCE AT BRACELL AT OUR DISCLOSURES HUB:

[GRI 2-12 Role of the highest governance body in overseeing the management of impacts](#)

[GRI 2-13 Delegation of responsibility for managing impact](#)

[GRI 2-15 Conflicts of interest](#)

[GRI 2-27 Compliance with laws and regulations](#)

[GRI 205-2 Communication and training about anti-corruption policies and procedures](#)

[GRI 205-3 Confirmed incidents of corruption and actions taken](#)

[GRI 3-3 \(206\) Anti-competitive behavior](#)

[GRI 206-1 Legal actions for anti-competitive behavior, anti-trust, and monopoly practices](#)

[GRI 307-1 Non-compliance with environmental laws and regulations](#)

[GRI 419-1 Non-compliance with laws and regulations in the social and economic area](#)





Risk management

Business, operational, social and environmental risks are continuously monitored through our Risk Management Program (PGR).

The program, which uses internationally recognized methodologies, covers information management, training, equipment, use of technology, and emergency response (read more about the Crisis Committee on [page 43](#)).

Although the foremost goal in our risk management efforts is prevention, we have plans in place to mitigate and neutralize impacts and limit their extent, should they occur. This is supported by the following practices:

- **We regularly update our identified aspects and impacts in an exercise involving all our operations, in order to identify, prevent and mitigate any and all negative impacts;**
- **We conduct assessments to identify and map out social and environmental risks before initiating any operation;**
- **We assess our products on health, safety and environmental risks; GRI 416-1**
- **We regularly monitor the impacts from our operations and activities and implement immediate mitigation measures focused on minimizing impacts.**
GRI 2-13, 2-25



PRECAUTIONARY PRINCIPLE

Consistent with the precautionary principle¹, Bracell's approach to risk management includes measures to protect the environment and prevent adverse impacts on ecosystems in the locations where we operate. Bracell's Sustainability Strategy includes two pillars— Climate and Biodiversity & Landscapes — that are integral to our related programs and metrics, alongside our goal of creating positive environmental value in the short, medium and long term (read more about our Sustainability Strategy on [page 12](#)). GRI 2-23

¹ United Nations (UN) Rio Declaration on Environment and Development (1992), Principle 15: in order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.



3 People and culture





People with the skills for present and future challenges, working in a respectful, diverse and inclusive environment.

Bracell recognizes that developing, empowering and engaging our employees is crucial for sustainable growth and creating positive social and environmental value for the regions where we operate, and for our stakeholders.

A horizontal organizational culture encourages employees to share and seek advice and insights from their managers, supplementing the training they receive throughout the year. Both on the job, and through training, employees learn about Bracell's practices and procedures, and significant business and operational concerns (read more about training on [page 61](#)). Our **Complementary Teams** and **Ownership** values are embedded in our daily practices addressing strategic planning and priority social and environmental issues. **GRI 2-26**

Our recent implementation of SAP has enhanced our management of enterprise data and our people management practices. In addition, Bracell has worked in recent years to strengthen its organizational culture. As part of this, we have organized a range of activities designed to better instill our values, especially given the significant number of new hires in the last two years with the expansion of our operations.

In 2021 Bracell had a workforce of 4,726 employees, an increase of 26% on 2020. In terms of local hiring, in 2021, 100% of employees belonged to or lived in Bracell's areas of activity and influence. **GRI 2-7**



Diversity and inclusion

GRI 3-3(405)

As part of our Sustainability Strategy, and specifically the People & Culture pillar, we implement initiatives to promote diversity and inclusion, and have people management policies focused on women in leadership, and a program to build a culture of sustainability within the company.

Bracell's Sustainability Policy articulates our commitment to providing a safe, healthy and productive work environment for all employees. Bracell works to advance diversity in our workforce, including diversity of race, religion and gender, and takes a zero-tolerance approach to discrimination or abuse in any form. **GRI 3-3(406)**

We recognize that diversity is an important aspect of people management. As part of this, we have engaged in initiatives to help build a healthy, and egalitarian and

diverse workplace environment, where all employees have equal opportunity and can share experience across different professional profiles. Bracell takes a zero-tolerance approach to harassment, bullying and violence in the workplace, and takes corporate responsibility for protecting human rights and cultivating a work environment that is based on trust and mutual respect, in line with our code of conduct. In 2021 there were no reported incidents of discrimination within the company. **GRI 406-1**



Learn more about the commitments in our Sustainability Policy at <https://www.bracell.com/en/institutional/governance-and-certification/>





Our corporate Diversity Committee, created in 2020 and formalized in 2021, has representatives from all operations across the company. In its first year, the Diversity Committee's agenda focused on gaining insights to expand members' scope of vision. The committee held several meetings addressing race and gender topics.

As another highlight, in 2020 Bracell subscribed to the UN's Women's Empowerment Principles (WEPs) (read more on [page 44](#)). **GRI 2-23**

In 2021 our diversity initiatives in Bahia included:

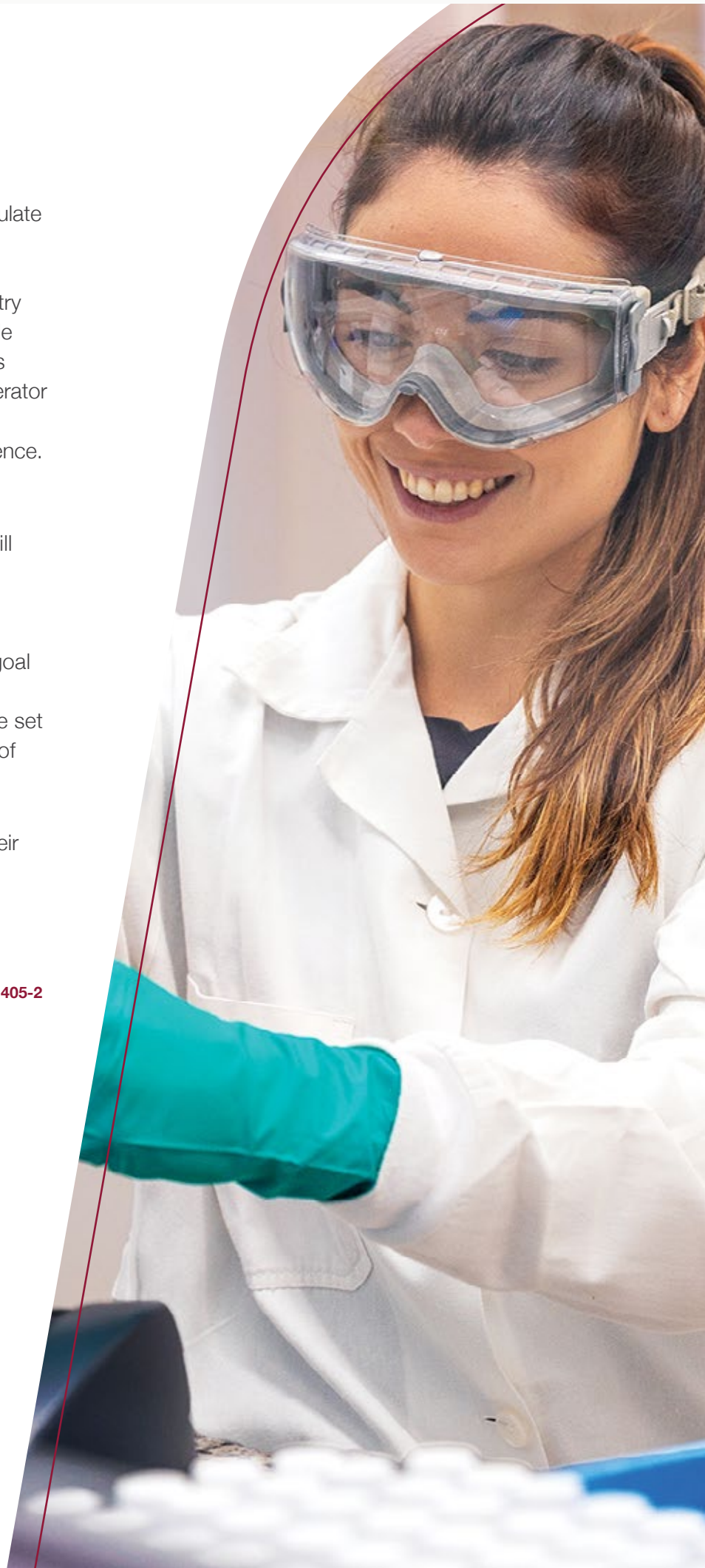
- PwD (people with disabilities) Discussion Groups: we held discussions with all PwDs in our forestry and mill operations to explore opportunities for greater inclusion in areas such as accessibility and development;
- *Troca de Saberes* ("Knowledge Exchange") - Diversity Edition: guest experts discussed issues related to diversity and inclusion, such as unconscious bias and the importance of ethnic and racial diversity and inclusion in organizations;
- Leadership training: in partnership with consulting firm Transcendemos, we organized workshops and co-creation sessions on diversity and inclusion, in which participants discussed issues related to gender, race, people with disabilities and LGBTQIAP+ themes, to help build a pact toward more inclusive management;
- New gender-focused affinity group: created to develop joint initiatives to help transform our internal culture.

We support *Grupo Mulheres do Brasil* ("Women of Brazil") and were awarded an Ethnic and Racial Diversity 2020-2021 seal of approval by the City of Salvador (state of Bahia).

At Bracell, closing the gender gap is addressed in regular meetings to formulate initiatives aiming to increase diversity in both operational and management positions. Across the board, our industry suffers from a shortage of skilled female workers for some job roles. To address this, we have created women-only operator courses and recruiting and selection processes designed for a female audience.

Bracell has pledged to increase the share of women in our forestry and mill operations in Bahia by 20% by 2025. In São Paulo our efforts have focused on completing the expansion and commissioning the mill. Our primary goal in 2021 was meeting our immediate demand for workers, and therefore we set no targets to increase the proportion of women in the workforce.

At Bracell, employee salaries reflect their roles and tasks, without any gender-based discrimination. For reasons of confidentiality, the company does not disclose salaries or the relationship between salaries of its employees. **GRI 405-2**





Workforce profile

4,726 direct employees



1,596 employees in our operations in Bahia

3,130 employees in our operations in São Paulo

By state and gender



WOMEN

357 in Bahia

530 in São Paulo



MEN

1,239 in Bahia

2,600 in São Paulo

By age group

1,001 under 30



3,229 30 to 50

496 over 50



**READ MORE AT OUR
DISCLOSURES HUB:**

[GRI 2-7](#) [Employees](#)

[GRI 2-8](#) [Workers who are not employees](#)

[GRI 405-1](#) [Diversity of governance bodies and employees](#)

[GRI 405-2](#) [Ratio of basic salary and remuneration of women to men](#)

[GRI 406-1](#) [Incidents of discrimination and corrective actions taken](#)





Training and development

GRI 3-3(404)

Bracell uses an individual performance review process to inform employee development efforts and investments and identify opportunities to improve performance.

Twice a year, employees receive performance and career development reviews through our Performance Review Program (PRP), in which they are assessed on three dimensions: behavioral, results and responsibilities. Performance reviews consider each employee's individual potential and performance in the year and provide inputs into their development plan for the next year, with practical advice addressing career development and business needs. In 2021, 93% of the employees of the São Paulo operations were evaluated in relation to their

performance and 97.44% of the employees of the Bracell operations in Bahia were evaluated in relation to their performance and career development. **GRI 404-3**

In addition, through our People Management and Recognition Program, we monitor the professional development of our workforce using tools such as Balanced Scorecard and our Profit-Sharing Program; employees receive annual cash rewards calculated based on the company's profits and the extent to which employees have met key performance indicators.



Training

Supporting employee development, in 2021 we provided online and in-person training throughout the year, with each manager responsible for supporting, advising and assisting their teams, and monitoring their post-training progress. All employees receive mandatory training with the number of training hours and content required for their roles.

In 2021, employees in our São Paulo operations received an average of 213 hours of training for men and 51 hours for women. In Bahia, training hours averaged 74 for men and 32 for women. Due to the scope of work, Operational and Wood Supply areas undergo more training hours, but there is less female representation among employees, which impacts the average number of training hours per gender in the Company. **GRI 404-1**

Bracell provides leadership training in both hard and soft skills to help build

collaborative teams that are aligned with our culture. Some of our key initiatives have included:

- **A newly structured education incentive policy;**
- **The newly created Bracell Learning Institute, to train key leadership personnel on hard and soft skills;**
- **Our Leadership Journey, a program designed to develop leaders who are able to engage, inspire and connect people to our T.O.P.I.C.C. values;**
- **Situational Leadership Training for all leadership personnel;**
- **Mill Manager Development with a focus on potential successors and operations positions.**

READ MORE AT OUR DISCLOSURES HUB:

[GRI 404-1 Average hours of training per year per employee](#)

[GRI 404-2 Programs for upgrading employee skills and transition assistance programs](#)

[GRI 404-3 Percentage of employees receiving regular performance and career development reviews](#)





Occupational health and safety

GRI 3-3(403)

We are committed to safeguarding the physical and mental integrity of our employees, and to applying best practices in employee recognition, assessment and occupational risk management.

All direct and third-party employees working on our premises are required to follow internal safety rules and legal requirements applicable to our operations. **GRI 403-8**







Health

GRI 403-6

Health initiatives are tracked through monthly reports and their impacts are measured the following year. Our health management practices promote employee well-being and health, in addition to preventing diseases, by providing individual and collective health support and advice, including periodic health checkups, annual health campaigns to raise awareness about sexually transmitted diseases (STDs), respiratory diseases, dengue fever, breast cancer (Pink October) and prostate cancer (Blue November), and flu vaccination campaigns.

In pursuit of the physical and mental well-being of our employees, we also carry out Challenge Bracell, a program aimed at improving quality of life, encouraging the healthy eating and the practice of regular physical activity.

Direct and outsourced employees undergo regular health checkups and, where necessary, are referred to specialist

physicians for further evaluation and care. Bracell provides health and dental insurance to all employees and their dependents, with country-wide coverage. **GRI 403-6** In 2021 we reported no cases of lost time due to work-related ill health. **GRI 403-10**

During the COVID-19 pandemic, respiratory diseases were treated as a specific (non-occupational) health risk as they have similar symptoms and are transmitted through close contact. The approach taken by the health team was to identify workers with flu-like symptoms, place them on immediate leave, and refer them for RT-PCR testing on the third day of symptoms. Employees who tested positive for COVID-19 were prescribed medication to manage their symptoms and instructed to quarantine. Employees were monitored on a daily basis via WhatsApp and, if their symptoms worsened, they were referred for specialist care and, if necessary, admission to a hospital. **GRI 403-1**



Also, as part of our health management practices, we provide employees with first-aid training to prepare them to respond to emergencies. The topics covered include vital signs, fainting, convulsions, burns, minor injuries, hemorrhages, intoxication (especially by pesticides), poisonous bites and stings (especially bee stings), dislocation, sprains,

bruises, fractures, splints, transport and cardiopulmonary resuscitation. Training instructors are members of the health team who have the required expertise in the relevant topics. Training is provided at no cost during working hours, and employees take a practical test at the end of the course. **GRI 403-5**





Occupational safety

Bracell has two occupational safety programs—*Comportamento Seguro* (“Safe Behavior”) and *Sempre Alerta* (“Always Alert”)—that cover all employees, including contractors. We also perform safety inspections to identify unsafe working conditions and behavior, inform continuous improvement, and strengthen our safety culture. As part of our contractor management procedures, we conduct six-monthly audits on compliance with applicable laws and regulations.

GRI 403-1, 403-8

In addition, all contractors in São Paulo are monitored using an enterprise document management system that ensures they are compliant with applicable legislation before the integration process. In Bahia, contractors are monitored by the Occupational Health & Safety department in coordination with the Security department, through a management system based on the procedure PR.SEG. 005/PR.SEG.F 005. **GRI 403-8**

In our São Paulo operations, Hazard Reports are issued for all employee roles and activities. Our Risk Management Program identifies risks and measures to control and prevent them (collective protection equipment, administrative measures, training and personal protective equipment). Risk assessments are carried out by a specialized firm using appropriate methods that are compliant with current legislation. **GRI 403-2**

All accidents and incidents occurring in our operations are documented and investigated using Root Cause Analysis. Occupational Safety Inspection Reports (RIST) are prepared on a regular basis by occupational safety employees for compliance with applicable regulations and for continuous improvement. In addition, all employees have a right to refuse to perform a given task if they feel unsafe, by completing the right-of-refusal field in the Work Clearance and *Sempre Alerta* form. In Bahia operations, employees also have access to the Prevention Card. **GRI 403-2**



To ensure employees use appropriate and safe procedures when performing their tasks, we administer Occupational Health & Safety (OHS) training to provide them with the theoretical and practical knowledge required to perform their tasks safely, minimizing the likelihood of workplace accidents occurring.

All employees receive plain-language training on the job. Training begins immediately after admission, when the employee begins the process of integration into the company, and covers 100% of the employees. **GRI 403-5**

Work-related injuries

GRI 403-9

In our São Paulo operations, we recorded 6 lost-time injuries involving direct employees, and 5 lost-time injuries involving contractors during the year. In Bahia there were no lost-time injuries involving direct employees or contractors. In both operations there were no fatalities.

SÃO PAULO		NUMBER OF INJURIES (INCLUDING FATALITIES)		INJURY RATES	
		Lost-time	No-lost time	Lost-time	No-lost time
Forestry	Employees	3	46	1.47	22.60
	Contractors	4	68	0.43	7.25
Mill	Employees	3	13	1.12	5.98
	Contractors	1	7	2.10	14.70

BAHIA		NUMBER OF INJURIES (INCLUDING FATALITIES)		INJURY RATES	
		Lost-time	No-lost time	Lost-time	No-lost time
Forestry	Employees	0	0	0.00	0.00
	Contractors	0	3	0.00	0.62
Mill	Employees	0	3	0.00	1.60
	Contractors	0	3	0.00	2.17

READ MORE AT OUR DISCLOSURES HUB:

[GRI 403-1 Occupational health and safety management system](#)

[GRI 403-2 Hazard identification, risk assessment, and incident investigation](#)

[GRI 403-3 Occupational health services](#)

[GRI 403-4 Worker participation, consultation, and communication on occupational health and safety](#)

[GRI 403-5 Worker training on occupational health and safety](#)

[GRI 403-6 Promotion of worker health](#)

[GRI 403-8 Workers covered by an occupational health and safety management system](#)

[GRI 403-9 Work-related injuries](#)

[GRI 403-10 Work-related ill health](#)





4 Social inclusion





Make a difference in the locations where we are present and contribute to local development.

Sustainability is a journey to be taken as a network, involving Bracell and strategic stakeholders. With this in mind, Bracell's Sustainability Strategy has a pillar whose goal is to involve local communities in social inclusion programs—Bracell Social and Volunteering, described below.



Bracell Social

GRI 3-3(203), 203-2

The company's social investments are made by Bracell Social. This program includes initiatives to contribute to community development and to mobilize and coordinate agents on behalf of geographies that are more inclusive and sustainable, where people are able to develop their skills and have opportunities for a better life.

This program reflects Bracell's commitment to carry out its activities in harmony with neighboring communities, respecting their habits, customs, and traditions, building an environment that fosters the development of relationships based on mutual trust. This requires that the company not use preconceived proposals or common "packages" or "formulas". Developing these programs requires the direct involvement of beneficiaries, the government, and other local partners. In this way, the company increases the possibility that these initiatives will deliver social transformation and encourages the sustainable development of each program. **GRI 413-1**



BRACELL SOCIAL

Bracell Social is supported by three pillars, the 3 Es:



Education



Empowerment



Enhancement



26

projects implemented in 2021



Over

R\$ 4.1 million invested



More than

100,000 people benefited



Over

R\$ 10 million in income generated for participants





Education

Education is a priority for Bracell social investments. This pillar has projects and initiatives that reach children and adults in diverse locations and has contributed to lifting the Basic Education Development Index (IDEB). It also helps mobilize the population towards attitudes that favor the environment and better quality of life in their communities.

The Education pillar has the following goals:

- Strengthen basic education - especially by working with public education systems to offer continued education for school teachers and managers, and for government administration technical teams.
- Promote environmental citizenship, making diverse players aware of the importance of sustainable development and themes such as waste disposal, recycling and reuse, conservation of native forests, etc.



Main projects in 2021

GRI 203-2, 413-1

Continuing education

Focuses on professional qualification of public system managers and educators, helping strengthen the Municipal Continued Education Policy - a permanent process to improve the knowledge and practices required for educators to perform their activities. This includes continued qualification of educators and education department technical teams, sociopolitical mobilization, and knowledge

production and management. It invests in the continued training of education professionals, as per the National Education Plan (PNE), providing students qualified and up-to-date education to prepare them for current challenges. As a result, the municipalities in Bahia covered by the initiative have shown increasing rates of learning. Learn more about the project by [clicking here](#).



9

municipalities benefited



263

participating schools



2,407

education professionals impacted



1,909

people participated in project livestreams



20,205

students benefited



Eco-community

Trains people in the communities to work as eco-agents (environmental facilitators) in their territories, with a particular focus on proper waste disposal and environmental conservation. Participant activities include training meetings, ecological gymkhanas, and recycling workshops. They also get support for implementing socioenvironmental projects in the communities. This initiative impacted the Bahia municipalities of Itanagra, Entre Rios and Alagoinhas, with 66 eco-agents involved in training activities for over 260 people in the communities in 2021. Activities included workshops and group planting efforts.

Generation + Environment

The Generation + Environment project was created in July 2021 to train people to be eco-agents (environmental facilitators) in their communities. Eco-agents are trained to develop socioenvironmental projects aligned with the 2030 Agenda and Sustainable Development Goals. With actions to encourage citizen participation, engagement in collective causes and waste reuse workshop, it has been possible to disseminate important social technologies, such as evapotranspiration cesspits (fossa bananeira) and rainwater capture systems.

LIDERAJOVEM [YOUTHLEADERSHIP] INSTITUTE

Bracell is one of the sponsors of the LideraJovem Institute, a civil society organization that helps adolescents and youth in and around Lençóis Paulista (state of São Paulo) develop life projects and strengthen their leadership and protagonism competencies to prepare them for the job market and the broader challenges of life. In 2021 the Institute implemented five projects that directly benefited some 6,405 youth, and indirectly benefited approximately 70,000 individuals. It also trains adult facilitators in active methodologies to work with youth.

Empowerment

Developed for productive groups, entrepreneurs, and would-be entrepreneurs, the Empowerment pillar aims to provide training to encourage associativism and entrepreneurship, and strengthen certain productive activities, management, and trade, through trainings. In this way it contributes to promoting autonomy and income creation. In 2021 it supported the generation of over R\$ 10 million for program participants.

Here are some project highlights:

GRI 203-2, 413-1

Connection

This project helps social organizations develop management competencies to help them become sustainable, focusing on mobilizing and optimizing financial and human resources, thus strengthening civil society organizations. This initiative also promotes dialog across organizations to stimulate the exchange of knowledge, favoring the development of a collaborative network of local NGOs. In 2021, 29 participants in 18 organizations were trained.

Crescer+Juntos [“Grow+Together”]

Raises funds and provides mentoring to develop a culture of continuous quality improvement and increase the productivity and competitiveness of micro and small businesses in the Midwest of the state of Sao Paulo. Its focus is to strengthen local economies, drive socioeconomic environments suited to entrepreneurship and promote the addition of micro and small companies to the Bracell value chain. In 2021 the program trained 73 entrepreneurs from 20 small businesses. It also organized two business rounds with the participation of 176 local entrepreneurs.



Cultura.Rec

This program was created in 2021 to help strengthen and make more dynamic the cultural movements and manifestations in the so-called Recôncavo Baiano, mobilizing and strengthening youth and local cultural associations to work together, collaboratively. It also works to strengthen institutions, by training members in themes such as associativism, creating and registering social organizations, the regulatory framework for civil society organizations [Marco Regulatório de Organizações da Sociedade Civil (MROSC)], social project management, accounting, etc.

Dona Della [“Her Own Boss”]

The goal is to drive female financial independence and entrepreneurship with training and mentoring. The project rewarded five selected entrepreneurs with R\$ 10,000 and supported the organization of a collaborative network of women. A total of 162 participants from Lençóis Paulista and Macatuba, SP were benefited by the initiative. [Click here](#) to learn more about the project.

Fostering impactful businesses

We support some eight productive groups on the northern coast and interior of Bahia, providing them with technical support in the tax, administrative, accounting, and inter-institutional relations areas, enabling them to participate in bid documents and consolidate agreements to expand their business. The program also provides training in production and product shipment. In 2021 more than R\$ 107,000.00 was raised in public and private bids.

Women Farmers

This project strengthens individual and collective empowerment in the development of the links in the production chain, and the institutional strengthening of groups of family farmers to develop collaborative solutions that enable product advertising and sales, as well as funding via access to bid processes. The project's main activity is training women and youth in organic hydroponic farming, producing more productive foods and increased profitability.

Nós do Campo [“In the Field”]

A program to encourage family farming with activities that foster food security, job creation, income, and stronger networks. Around 850 people were impacted in 2021 – 680 in Bahia and 170 in São Paulo. In Bahia, the focus was on disseminating agroecology techniques to contribute to healthy nutrition and higher income from the sale of surplus farm output. In São Paulo, small farmers are trained in workshops on property management, crop planning, and planting techniques for fruits and legumes.

Oficina dos Sonhos [“Dream Workshop”]

The aim of this workshop is to encourage the development of artistic vocations using eucalyptus as the raw material and offering free courses in carpentry, design, and entrepreneurship. In 2021, 59 people from Lençóis Paulista and Macatuba, SP participated.

Pollinators

This program is a partnership between Bracell and the beekeepers and honey producers in the regions where the company operates in the states of Bahia and São Paulo. Its goal is to contribute to the development of bee keeping and promote the multiple use of eucalyptus forests. Bracell authorizes accredited beekeepers to set up hives on the company's farms. The bees use the flowering Eucalyptus and native plants to make honey and other beekeeping products, helping increase the income of participating beekeepers. In 2021, more than 330 beekeepers in both states participated, generating combined income of over R\$ 1 million.

Ponteira Sustentável [Sustainable Leftovers]

Each year this activity benefits associations and cooperatives in 62 communities in 16 municipalities in Bahia by donating eucalyptus waste left over from harvesting, which is used as an additional source of income and funds for those living in these communities. In 2021 we ran a pilot project to reorganize five associations in Cardeal da Silva, BA, focusing on associations for pickers, and productive inclusion of women.

WOMEN IN ACTION

One of our measures to promote female empowerment and income creation is our Women in Action Program, which has partnered with the quilombola community of Cangula, in Alagoinhas, BA. This initiative trained 27 women to make medicinal and artisanal toilet soap and received the Sustainable Management Practices award in the 13th edition of the Sustainable Bahia Industry Awards, sponsored by FIEB, the State of Bahia Federation of Industries. These women also received advice on how to deal with domestic violence, entrepreneurism, and matters of gender and race.

This project is part of our effort to foster high-impact businesses and has the support of the 2020 Afro-descendant Decade bid awarded by the government of Bahia through SEPRMI, the Department to Promote Racial Equality.

Women in Action is part of the Green Pharmacy initiative, which integrates the front for the improvement of impact businesses, promoting health and well-being by encouraging female empowerment, local development, social entrepreneurship and income generation, thus boosting the productive chain of medicinal and aromatic plants.



Enhancement

GRI 413-1

Developed to promote well-being and citizenship in the communities around our facilities, the Enhancement pillar provides people with free leisure, culture, health promotion, and citizenship activities.

Here are some highlights:

Increased Citizenship

This is a partnership with the municipal departments of cities and towns in Bahia close to Bracell operations. It offers the population vaccination, nutritional guidance, legal support, orientation for the job market, and environmental education workshops free of charge. In 2021 the Increased Citizenship program focused on instructions for preventing COVID-19, reaching 8,025 people in seven cities and towns.

[LEARN MORE ABOUT THE PROJECTS IN THE BRACELL SOCIAL PROGRAM AT THE DISCLOSURES HUB](#)



Bracell Alic Digital Arts Circuit

Working with the Lençóis Paulista, SP city government and Associação Lençoense de Incentivo à Cultura [The Lençóis Paulista Association to Incentive Culture] (ALIC), this initiative takes entertainment and culture to city residents, with digital cultural programs and live transmissions via the Adélia Lorenzetti Municipal Theater social networks. In 2021, the Bracell Alic Digital Arts Circuit offered 24 cultural attractions for an audience of close to 30,000 spectators.

Star Bem

To promote citizenship and ethics, and to mitigate the potential social impact of the company's expansion in Lençóis Paulista, Bracell created the *Star Bem* program to promote constant dialog on themes that different audiences find sensitive. In 2021 the company addressed two groups:

- Workers in our expansion projects: daily awareness raising on ethics and citizenship, and to develop socio-emotional competencies, permeated with a culture of peace, respect, and non-violence.
- Government agents and schools: measures to strengthen the network to protect children and adolescents, and training focused on addressing sexual abuse and child exploitation, prevention of drug and alcohol abuse, vigilance in social work, and to promote healthy habits and sustainable development.

Star Bem had 6,098 participants in 2021, 5,314 employees and 784 professionals in the system to ensure the rights of children and adolescents in Lençóis Paulista and Macatuba, SP. Since it was created in 2020 the program has already impacted over 11,000 people.

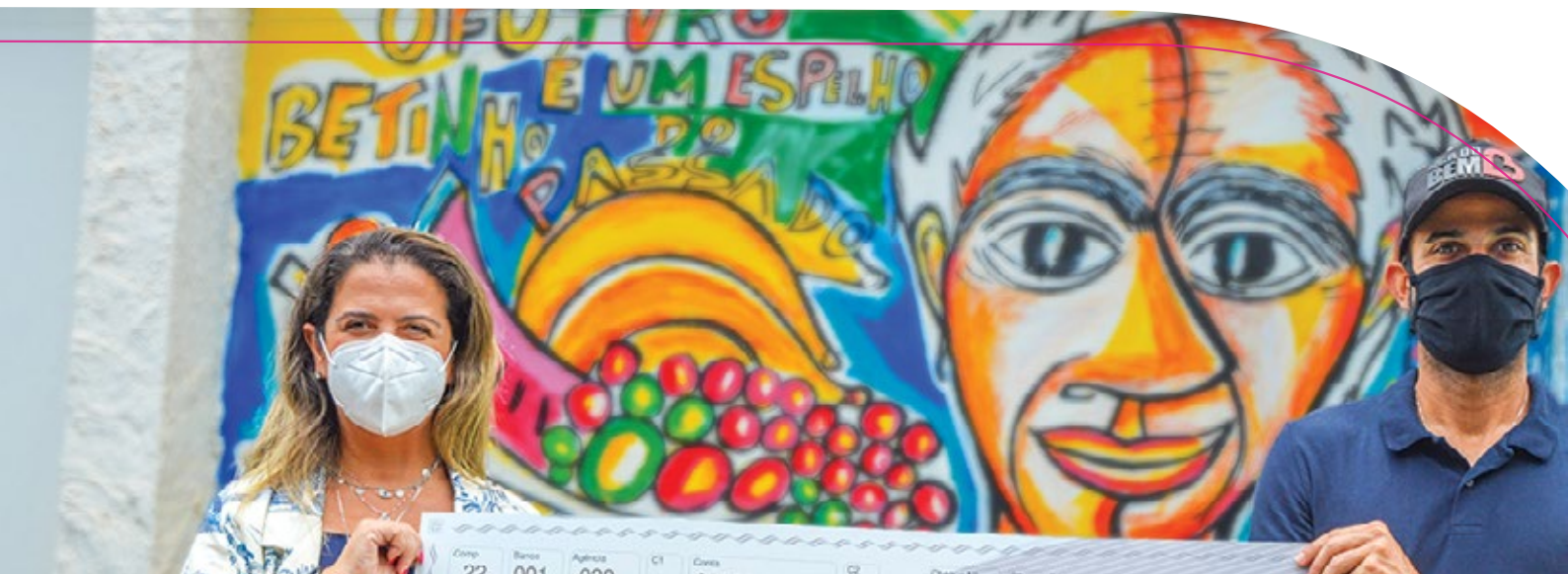


Volunteering

The Bracell Volunteer Program - Mãos Dadas (“Helping Hands”) - encourages workers to participate in activities and campaigns that benefit local communities.

In-person volunteer activities were suspended in 2021 due to COVID-19. However, basic grocery packages were donated, and Founder’s Day mobilized employees to sell food from the social projects supported by Bracell and other donated goods to collect funds sent to institutions and people severely impacted by the pandemic. As a form of recognition for the engagement of the team and the community, the company tripled the value of employee donations, reaching a final amount four times greater.

Founder’s Day in 2021 also had a global financial fund made up of 20% of the funds collected by all RGE group companies. Brazil and Indonesia benefited from this. This fund and the 3:1 matching fund (where the company put up R\$ 3 for every R\$ 1 collected by employees) enabled reaching an even larger number of households.



By the numbers:

R\$ 54,456.36



collected by employees

Collection of

R\$ 454,897.68



donated by Bracell to *Casa Abrigo Amorada* [Shelter] (SP), *Liga do Bem* ["League for Good"] (BA), and the *Tem Gente com Fome* ["People are Hungry"] campaign in SP and BA

R\$ 17,687.40



in income was generated for small entrepreneurs and production groups of Bracell social projects involved in the initiative

Over

1,750



grocery packages were donated

Some

7,100



people benefited



Relationship with the surrounding communities

GRI 3-3(413)

Bracell believes there is a direct connection between sustainable growth of the business and how it relates to the communities surrounding its operations.

Contributing to the social and economic development of the region and its communities is one of the raisons d'être of our business, and results in a partnership relationship and the creation of shared value.

All Bracell operations are involved in engagement activities, impact assessments, and development programs focused on the local community, including procedures and initiatives to promote continuous dialog and respect for the specificities of each region. Bracell has specific communication channels and actions to answer questions, log complaints, list the main community concerns, and map the points of interest and pain-points within each one of them. **GRI 2-26, 413-1**

Other engagement activities include:

GRI 2-26

- Registering communities and field visits to gather data;
- Impact zoning maps, with Bracell areas for planting, conservation, and development to help identify the company's activities in these areas;
- Map and grid of stakeholders, or people or groups who are directly or indirectly impacted by a project, and those who might have a stake in a project and/or are able to influence the outcome in a positive or negative way;
- Regular meetings with communities to foster initial and operating dialogs and keep all stakeholders informed about the company's forestry activities (planting, harvest, hauling and other activities performed in the community);
- Production of information material such as leaflets, digital cards, and other media distributed to the communities;
- Publicity of the Fale Conosco channel (read more on [page 87](#)) through the operational dialogue kit (folders with information on the forest cycle, campaign against forest fires and a public release of forestry management, besides keychains and caps).





Impacts from our operations

GRI 413-2

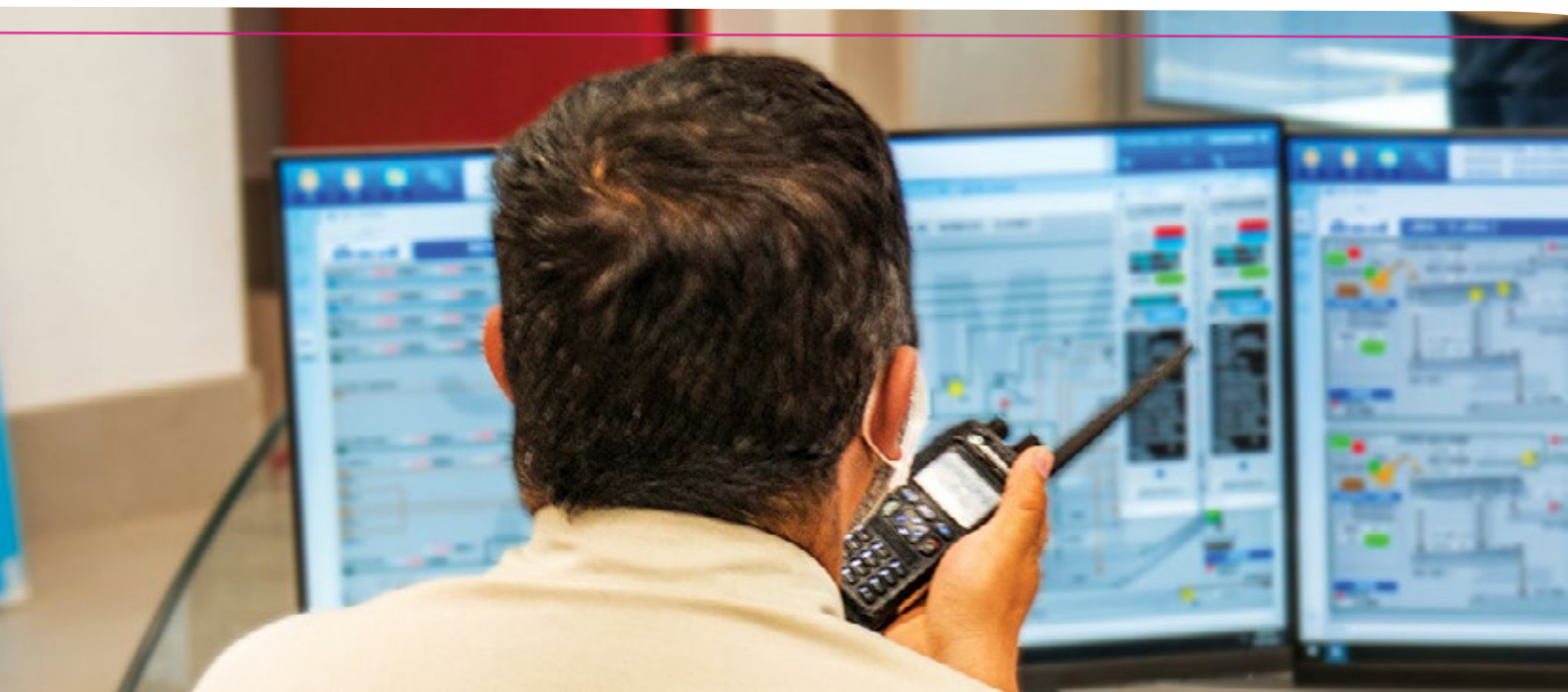
In Bracell's operations, risk identification, monitoring and management is a three-phase process: pre-operation, during operation and post-operation. Our goal in risk management is to prevent risks from materializing and, if they do occur, to implement mitigation measures in order to minimize impacts to the extent possible. Before new operations begin, such as new forestry operations, Bracell carries out a social and economic assessment in neighboring communities within a 500-meter radius, for example, in São Paulo's forestry operations. During this period, teams from the Community Relations department monitor these areas and pulpwood haulage routes on the ground.

With the commissioning of our two new flexible lines at our Lençóis Paulista (SP) site, we have expanded our forestry

operations in the region which has as one of its effects social demobilization, that is, the relocation of people to other locations. This procedure is carried out in compliance with International Finance Corporation (IFC) Performance Standard 5 – Land Acquisition and Involuntary Resettlement. Within this front, Bracell also manages and works to prevent and/or mitigate the social risks to which workers and their families may be exposed.

To minimize actual impacts on communities surrounding the mill, we use an approach that includes community mapping, advertising official communication channels, and managing and addressing community concerns.

Actual impacts on communities neighboring our forestry and mill operations



include: offensive odors, noise emissions from machinery and equipment, dust emissions from truck and machinery traffic in neighboring communities, and potential cases of speeding trucks. Potential impacts include: truck traffic, damage to or obstruction of local roads, power outages, vehicle accidents while using haul roads and firebreaks and other local roads, health risks from the use of pesticides, health risks from exposure to dust, and road degradation caused by heavy vehicles.

The actual and potential negative impacts from our forestry operations are listed and published in a forestry management plan available [here](#) (Bahia operations) and [here](#) (São Paulo operations). **GRI 413-2**

The number of complaints by type is available in the Disclosures Hub ([click here to see](#)).

**Grievance management:
GRI 413-2**

São Paulo



253

complaints received from local communities

Related to: suppliers, traffic (risk of accident), community demands regarding impacts of the operation such as movement of trucks, dust and damage to roads and access roads.

Bahia



100

complaints received from local communities

Related to: property damage, roads, dust precipitation, noise, contractors and traffic (accident risk).

CONTACT US

The channel for registering main community concerns is Fale Conosco [“Contact Us”], available for clarifying doubts, sending suggestions and compliments, and registering complaints. The communications are forwarded to the responsible areas for review, with a subsequent update about the conduct of each case. The handling and solutions of the cases are recorded. The channel is available at:

Bahia

0800 284 4747

faleconosco@bracell.com

São Paulo and Mato Grosso do Sul

0800 709 1490

faleconoscosp@bracell.com



Indigenous communities

GRI 3-3(411)

The Araribá indigenous community in Avaí (SP) is the only indigenous community within Bracell's area of influence. The community comprises four villages—Tereguá, Ekeruá, Kopenoti and Nimuendaju—with a population of approximately 600 people. In 2021 we had no forestry or harvesting operations on these properties and identified no impact from our operations on local communities. Potential impacts from the use of the municipal road near the property include: heavy vehicle traffic, potential cases of speeding trucks, noise, and dust. **GRI 411-1**

In 2021, during a meeting in the Araribá indigenous community, residents discussed the potential use by the community of a fishing spot in an area bordering Bracell's forestry property. An action plan was developed under which community residents will be registered and provided with safety training, and the trail leading to the spot will be cleared and signposted. Community access to the area has now been formalized and guaranteed, consistent with their customary rights (indigenous peoples are

entitled to the use of land and resources they have traditionally occupied or used). However, due to the worsening COVID-19 pandemic, the National Foundation for Indigenous Peoples (FUNAI) instructed the company to postpone fieldwork as part of the action plan until 2022.

READ MORE AT OUR DISCLOSURES HUB:

[**GRI 203-2** Significant indirect economic impacts](#)

[**GRI 3-3\(411\)** Rights of indigenous peoples](#)

[**GRI 411-1** Incidents of violations involving rights of indigenous peoples](#)

[**GRI 3-3\(413\)** Local communities](#)

[**GRI 413-1** Operations with local community engagement, impact assessments, and development programs](#)

[**GRI 413-2** Operations with significant actual or potential negative impacts on local communities](#)







5 Responsible production



Innovative and resource-efficient solutions

Bracell manages its operations to ensure they deliver high productivity and product quality, have a minimal socio-environmental footprint, achieve high operating efficiency, identify and mitigate risks, capture social and environmental opportunities, and create positive value. This includes respecting human rights, protecting the environment and supporting the development of local communities, while delivering shared long-term value, innovation, efficient and sustainable production operations, and high-quality products that meet customers' needs.

Within the Responsible Production pillar of our Sustainability Strategy, we implement initiatives focused on eco-efficiency, the circular economy, and supplier and supply chain management.

ENVIRONMENTAL ATTRIBUTES OF PULP

Pulp is the main component of plant cell walls and is present in several plants such as eucalyptus and pine trees, cotton and bamboo. The fibers are used as a raw material by several industries such as textiles, wet wipes, eyeglass frames, pharmaceuticals, and other manufactured goods (read more about Bracell pulp applications on [page 24](#)).

Bracell pulp is produced from certified planted Eucalyptus forests and offers a range of environmental benefits, including soil conservation and better air quality to help fight global warming, among other attributes. It is also a high-performing, cost-effective material compared to similar crude-oil based, nonrenewable raw materials. This provides the pulp industry with a strong environmental advantage in terms of sustainability.



Forestry operations

GRI 3-3(304)


Bracell uses good forestry management practices including minimum tillage, mosaics with eucalyptus and native forests, maintaining post-harvest residue (bark, branches and leaves), and integrated pest and disease management (IPDM). Other criteria we apply in our forestry operations include a commitment to not operate in protected areas or peatlands, and to locate eucalyptus plantations in areas that previously bore other crops, meaning they have already been affected by human activity. Bracell has a strict no deforestation and no burn policy, spanning the entire value chain. Biodiversity is a key pillar in our Sustainability Strategy (read more on [page 120](#)).

In 2021, Bracell had forestry operations in 35 cities in Bahia (north coast and Agreste region), 108 cities in midwestern São Paulo and 6 cities in Mato Grosso do Sul. Bracell also sources pulpwood from qualified producers whose forestry management practices are compliant with applicable laws and regulations and forestry certification requirements. **GRI 2-2, 2-6, 308-1**

Comprehensive land-use information is georeferenced and plotted on maps, including protected areas (PAs), Legal Reserves (LR), conservation areas (native vegetation in addition to PAs and LRs), infrastructure, water resources, and other uses, as well as eucalyptus forest areas. Areas of high cultural and social value are also mapped. Geoprocessing helps to improve plantation yields and harvesting productivity.

Eucalyptus plantations are monitored using satellites and drones to gather information about the terrain, potential deforestation and fires, and plantation performance. The monitoring system detects the geometry of the properties, performs detailed 3D inventories which reveal possible plantation gaps, maps areas that are hard to access, and identifies potential risks and impacts requiring immediate action.

Bracell's Forest Management System (FMS), implemented as part of our e-Forest project, integrates the end-to-end forestry management process including



property registration and forestry services, harvesting, and pulpwood haulage. Our Forestry Operations Development function helps to improve our overall forestry operations—including nurseries, harvesting, pulpwood haulage and haul roads—through mechanization and automation technologies, process improvements and professional development.

Through our integrated pest management program, Bracell seeks to maintain environmental balance by using natural pest control methods including genetic resistance and the use of natural predators. Chemical pest control is used as a last resort when other methods, either individually or in combination, prove ineffective. The use of fertilizers is also minimized by retaining harvesting residue at the former plantation site to increase organic matter in the soil.

WOOD TRANSPORT

In the São Paulo forestry operation, a 24-hour logistics center is integrated into the Forestry Management System (FMS), and monitors inbound and wood transport logistics.



HOW EUCALYPTUS IS GROWN

1. A detailed environmental assessment is conducted on the land that will host our eucalyptus plantations to ensure compliance with Brazil's Forest Code. Social and economic assessments are also carried out in neighboring communities to identify potential social risks and opportunities before planting begins.
2. We select clones that are adapted to local conditions to produce high-quality seedlings for eucalyptus plantations, the harvesting of which provides the sole raw material.
3. The eucalyptus seedlings grow in ideal conditions for development. The soil in the eucalyptus areas maintains its original levels of fertility and high levels of productivity.
4. Seedlings are planted and trees managed with special care to maintain environmental quality and the control of weeds, pests and diseases.
5. Trees mature within an average of seven years, when they are ready for harvest.
6. The pulp logs are sent from the farms to the mill, where they are used as raw material for pulp-making.
7. Forestry techniques coupled with native forest conservation provide a sustainable supply of pulpwood for our plants.





Forestry Partnership Program

Part of the pulpwood we process is supplied by partners through our Forestry Partnership Program. Bracell covers all the land use planning and plantation management costs, and its forestry partners provide the land on which to grow eucalyptus. In 2021, Bracell added 60% of forest partnership areas in the São Paulo operation, including Mato Grosso do Sul, and more than 18% of partnership areas in Bahia.

Eucalyptus growers are required to meet a number of prerequisites, which include producing valid title deeds and documentation for the properties. They are also required to agree that the pulpwood will only be harvested after six years. In

addition, suppliers are required to comply with environmental regulations, certification requirements and International Finance Corporation (IFC) principles. **GRI 308-1**

The Company also carries out the Cultive Eucalipto incentive program, through which it offers specialized technical assistance to partner producers. After joining the program, eucalyptus growers can opt into either the forestry partner or forestry support category, depending on their interest and profile.

Growers can request information and learn more about the program at www.cultiveeucalipto.com.br or by calling 0800 006 24 22.



Forestry planning

Our forestry planning is informed by analysis and scenario modeling to ensure an adequate and secure supply of pulpwood is available for our mills. Modeling exercises take account of potential operational, environmental, social and economic constraints. As part of the planning process, we assess the need for road improvements, measures to mitigate impacts on communities, and other risks and opportunities.

To ensure our forestry resources are used and managed efficiently, we compile quantitative and qualitative data on our eucalyptus plantations and continuously monitor yields, as measured in cubic meters produced per hectare per year (m³/ha/year).

In our Forestry Logistics operation, we modified the organizational structure to improve operating efficiency by segregating Forestry Logistics activities in São Paulo at year-end 2020 and expanding forestry operations in the state of Mato Grosso do Sul.





Nurseries

Bracell has a nursery production capacity of 80 million seedlings per year across five nurseries: two in Bahia — one in Entre Rios and the other in Inhambupe, with a production capacity of 35 million seedlings per year; and three in São Paulo — two in Lençóis Paulista (owned by the company) and a third-party nursery in Borebi, with a total annual production capacity of 45 million seedlings. In 2021, Bracell produced a total of 59,8 million seedlings (26.8 million in Bahia and 33 million in São Paulo). **GRI 2-1**

In the São Paulo operation, excess water from irrigation is reused in the nursery. When falling on the soil, it is directed through tubes into a tank and reused in

the final phase of seedling production. In Bahia, more than 70% of the volume of water returns to the system immediately through evapotranspiration. The water captured by the covering's gutter system is directed to a reservoir (cistern) made available to the fire brigade team for irrigation of eucalyptus crops. Water is also collected in wells, which is treated and made available for use and, when there is leftover, directed to the cistern for crop irrigation. It should be pointed out that all water used for the irrigation of the nursery, released through irrigators and sprinklers, is drained through a subterranean system that returns it to the water table. **GRI 3-3 (303)**

Fire prevention and response

Bracell has a number of programs focused on fire prevention and response. In our São Paulo operations, we launched an important process in 2021 to reformulate our governance system in this area, which is now fully operational in Bahia, and we made significant investments in technology. In the second half of 2022, an image-based fire detection system will cover the entire monitored area, including difficult-

to-access areas. The system's primary benefit is the ability to rapidly detect and promptly respond to fire outbreaks.

Bracell's flagship fire prevention initiative is Amigos da Floresta ("Friends of the Forest"), a program addressing the primary causes of forest fires, including arson and lack of farmer training in firefighting techniques.

Forestry R&D

Our Forestry Research & Development department conducts research on classical genetic improvement of eucalyptus and sustainable forest management technologies. The department also has a Forestry Extension function dedicated to transferring technology to our forestry operations. Our research efforts aim to maximize forestry yields and pulpwood quality while minimizing costs and environmental impacts.





Mill operations

Bracell invests in technologies and conducts wood testing in labs to ensure quality standards and meet client needs. It also conducts R&D studies focused on product innovation and efficiency gains in the manufacturing process.

During the manufacturing of specialty-grade dissolving pulp, Bracell's industrial production processes are developed with

the purpose of obtaining a significant level of pulp purity, with an alpha cellulose content of up to 98.5%.

Bracell also has the first pulp plant in Brazil that is connected to the National Interconnected System (NIS), through which it trades the energy produced in the pulp manufacturing process (more on [page 34](#)).

OPERATING EFFICIENCY AND CIRCULAR ECONOMY

The two new flexible lines at our São Paulo site:

- Generate green electricity and have been designed to use renewable fuels—a 440-kV GIS substation transforms and distributes clean electricity generated from eucalyptus biomass and black liquor.
- The surplus electricity is enough to supply power to approximately 3 million people or 750,000 homes.
- Bracell has one of the lowest water intensities in the industry and carries out tertiary effluent treatment at its São Paulo facilities. Approximately 95% of harvested rainwater is returned to the Tietê River as treated effluent.
- The recovery boilers at our plant in Bahia and São Paulo use black liquor as a renewable energy source.

Industrial R&D

Our Industrial Research and Development department works to improve productivity and excellence in product quality to meet customers needs across different pulp market segments. It uses best available laboratory and industrial technologies to test and identify optimal pulpwood feedstock and works to optimizes mill production and identify new product opportunities.

Our Industrial R&D department is committed to helping customers extract the best value from our products so they can enjoy all the benefits of Bracell's

CUSTOMER CENTRICITY

Nurturing a close relationship with our customers is essential to ensure we are fully aligned with their needs. For this reason, we periodically meet with customers, provide new samples, and apply testing methods to ensure our quality standards and technical attributes always meet customer expectations.

portfolio. The department holds regular technical meetings, provides samples and performs tests. Several classes of customized products have been developed through this collaborative approach.





Certifications

GRI 2-24

Bracell's operations are certified under Cerflor/PEFC, ISO 9001:2015 (mill operations in Bahia and São Paulo) and ISO 14001:2015 (mill operations in Bahia and São Paulo, and forestry operations in Bahia). Bracell's operations are audited for compliance with the Performance Standards of the International Finance Corporation (IFC) every six months. This is part of the due diligence as a condition of receiving project finance for the expansion in Lençóis Paulista (SP). External audits assess our management of socio-environmental topics, including risks and opportunities, and inform action plans for improvement, as necessary. **GRI 2-13**

Our operations in Bahia are also audited for Halal Certification, ensuring our manufacturing process complies with Islamic ethics, moral, and legal standards, and for Kosher Certification, ensuring our process quality control and safety comply with Orthodox Jewish dietary laws.







Human rights

GRI 3-3(412)

Respecting and protecting human rights are among the topics addressed in Bracell's Sustainability Policy and is monitored as part of our stakeholder management practices (learn more in community engagement on [page 70](#)). Our human rights practices are compliant with applicable laws and regulations and certification requirements. We conduct regular due diligence to identify, prevent, mitigate and measure actual and potential impacts from our operations, including impacts on human rights.

Our Bahia and São Paulo operations have each been subject to human rights reviews or human rights impact assessments—including the mills and forestry and logistics operations. **GRI 412-1**

Our Security department is committed to respecting and promoting human rights in all situations and across the value chain, including in respect of contractors, suppliers and neighboring communities. Security contractors are trained in human rights every two years, in accordance with Brazilian regulations. **GRI 3-3(409) e 410-1**

Our São Paulo operations undergo independent audits against the IFC Performance Standards twice a year, as a condition set by the banks providing funding for Project Star—an expansion of our Lençóis Paulista site. Social aspects are also monitored in communities surrounding our forestry operations, as part of a process to ensure that 100% of our pulpwood is traceable to a renewable source.

Child and forced labor

GRI 3-3(408), 3-3(409)

Bracell's Sustainability Policy expressly prohibits child and forced labor. The company is committed to respecting and supporting the Universal Declaration of Human Rights and providing a safe, healthy and productive work environment for all employees.

There have been no lawsuits brought against Bracell's operations for child labor or labor in degrading conditions and no lawsuits involving harassment of any kind in 2021. There have also been no reported actions of this nature in 2020 and 2019. In all contracts, Bracell provides for the obligation for the supplier to forward all documents referring to the contracts, in order to verify their compliance with tax, social security and labor issues. This verification is duly carried out and any irregularities may authorize the blocking of payments until they have been addressed. Bracell's contract management area is in constant contact with the legal department, which provides guidance when necessary.

GRI 408-1

READ MORE AT OUR DISCLOSURES HUB:

[GRI 308-1 New suppliers that were screened using environmental criteria](#)

[GRI 308-2 Negative environmental impacts in the supply chain and actions taken](#)

[GRI 408-1 Operations and suppliers at significant risk for incidents of child labor](#)

[GRI 409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labor](#)

[GRI 410-1 Security personnel trained in human rights policies or procedures](#)

[GRI 412-1 Operations that have been subject to human rights reviews or impact assessments](#)

[GRI 414-1 New suppliers that were screened using social criteria](#)

[GRI 414-2 Negative social impacts in the supply chain and actions taken](#)





Water and effluents

GRI 3-3(303)

Our commitment to water stewardship is expressed in our Sustainability Policy and delivered through our Water Monitoring Program. Other related requirements include the covenants under licenses issued by environmental regulators.

In addition to adopting monitoring and continuous improvement measures for the efficient use of water, the company works for the protection of springs and bodies of water in the areas where it operates, as well as for the recovery of native forest of legal reserves, permanent preservation areas (APP), as well as other conservation areas.

Water resources and their protected areas are identified using geoprocessing systems and then plotted on landuse maps for each forestry operation. In Bahia, our Monitoring Program measures a range of water quality parameters in 24 microbasins in the regions where we operate. This allows us to assess whether our forestry operations have caused any alterations to

water bodies and develop action plans to mitigate any impacts.

The demand for water abstraction for use in the company's forestry area focuses on the phases of seedling production, construction and maintenance of roads and maintenance and protection of the forest (for potential cases of application of agricultural pesticides, irrigation and firefighting).

For industrial consumption, targets are set based on the best practices available for the dissolving pulp production sector. They are established based on the water consumed in the production process and in the administrative areas, with sectoral limits established based on the capacity of the equipment and in compliance with the limits granted by the responsible body. Sectoral consumption is continuously monitored in the industrial management routine, focusing on the eco-efficient use of water resources.

Operations in Bahia

In Bahia, all water used in Bracell's forestry and mill operations is sourced from deep-cased wells owned by the company, or from surface water bodies under permits from the appropriate regulators. Both our mill and our forestry operations have flow meters to measure sector-specific consumption, for which we have set internal targets to ensure water resources in the region are used sustainably. Water intensity (difference between water capture

and release into treated effluents) in our Bahia operations is currently 4.99 m³ per metric ton of pulp produced. **GRI 303-1**

After it is consumed in the process, residual water is sent for primary treatment before it is pumped to a wastewater treatment system for secondary treatment, in which more than 97% of organic load is removed. The treated effluent is then discharged into the ocean. **GRI 303-2**

Operations in São Paulo

Water is sourced from six deep-cased wells owned by the company and from the Tietê River—which is 22 km from the mill—via a pipeline. Water from the Tietê River accounted for 65% of our total water withdrawals in 2021. Water intensity (difference between water capture and release into treated effluents) in our São Paulo operations was 5.07 m³ per metric ton of pulp in 2021. **GRI 303-1**

Effluents are discharged into the Tietê River following treatment. Bracell is the first company in the pulp industry in São Paulo to implement three-stage effluent treatment. The first stage removes fibers, the second treats organic matter and the third filters the effluent before it returns to the system. Approximately 95% of harvested rainwater is returned to the Tietê River as treated effluent. **GRI 303-2**



Participation in river basin committees

GRI 303-1

Bracell actively participates in forums and discussions on river basins with other companies in the regions where we operate, strategic stakeholders and river basin committee members. These discussions also address risks and opportunities.

We are members of the Recôncavo Norte and Inhambupe river basin committees in Bahia, and the Lençóis River Basin Management Committee (CGBH-RL) and Hydrographic Basin Monitoring and Modeling Program (PROMAB/IPEF), a cooperative program of the Institute of Forestry Research and Studies (IPEF), both in the state of São Paulo. In Bahia, Bracell has also actively participated in PROMAB, a watershed monitoring and modeling program for 25 years addressing one of its former river basins.

Water withdrawal, disposal and consumption

GRI 303-3, 303-4, 303-5

TYPES OF WATER SOURCES	VOLUME (m ³)	
	BAHIA	SÃO PAULO
Surface water	29,456.00	13,275,929.24
Groundwater	15,431,917.30	7,466,921.06
Seawater	0.00	0.00
Produced water	0.00	0.00
Utility water	0.00	0.00
Total by state	15,461,373.30	20,742,850.30
Total Bracel	36,204,223.60	

TYPES OF WATER DISPOSAL¹**VOLUME (m³)**

	BAHIA	SÃO PAULO
Surface water	312,800.00	15,745,505.07
Groundwater	0.00	0.00
Seawater	12,209,740.00	0.00
Produced water	0.00	0.00
Total by state	12,522,540.00	15,745,505.07
Total Bracell	28.268.045,07	

WATER CONSUMPTION²**VOLUME (m³)**

	BAHIA³	SÃO PAULO⁴
Consumption by state	3,251,633.30	4.997.345,23
Total Bracell	8,248,978.53	

¹ All destined effluent comes from industrial activities in Bahia and São Paulo. Forestry activities do not generate significant effluents.

² No water was consumed in areas with water stress.

³ Bahia's data were calculated based on the records of flowmeters for water consumption during the productive process, minus the total treated effluents and sent for secondary treatment and subsequent release into the ocean.

⁴ Water consumption in our São Paulo operation is calculated as the sum of all water withdrawals (surface and groundwater) less total wastewater treated and discharged into the Tietê River.



Spring rehabilitation

GRI 303-1

Bracell supports local communities that have been affected by illegal deforestation and whose sources of water supply have been reduced or depleted as a result. The Prata community in Entre Rios (BA) is one example. In this community we have worked with residents to rehabilitate the headwaters of one of the tributaries of the Subaúma River, one of the major rivers along the northern coast of Bahia, stretching 100 km in length.

More than 1,500 native seedlings have been planted in the area since 2014, helping to replenish the vegetation, especially in the headwater stretch. This will ensure an added water supply for the 82 families in the community, who currently rely on a water well.

Bracell has previously developed and implemented action plans in another 16 communities, raising awareness about the importance of environmental preservation through educational activities, and engaging the entire community in rehabilitating

riparian vegetation and springs. We also work with government agencies, education institutions and communities to map out areas requiring rehabilitation.

We are currently rehabilitating the headwaters of the Subaúma, Catu and Sauípe rivers in Bahia's north coast and Agreste region. Since 2017, more than 1,600 people have been engaged in the rehabilitation of 12 springs and riparian forests.

READ MORE AT OUR DISCLOSURES HUB:

[GRI 303-1 Interactions with water as a shared resource](#)

[GRI 303-2 Management of water discharge-related impacts](#)

[GRI 303-3 Water withdrawal](#)

[GRI 303-4 Water discharge](#)

[GRI 303-5 Water consumption](#)







Waste

GRI 3-3(306)

Bracell has management practices and uses technologies that contribute to minimizing waste generation. In addition, employee awareness raising, and training initiatives help to avoid improper waste segregation.

We strictly comply with Brazil's National Waste Management Policy (PNRS) through our internal waste management program (PGRS). The goal of the program is to reduce the production of waste materials and maximize recycling and/or reuse. We also have a Waste to Value Policy through which we work to reduce, reuse and recycle waste.

Bracell's industrial waste management process is focused on reducing the amount of waste generated in the process, reusing materials whenever possible and, otherwise, finding recycling alternatives through partners. Waste materials left over from this process are disposed of in an environmentally safe manner, depending on their hazard class.

In 2021 we identified no significant impact from waste materials in our operations.

At our São Paulo mill, the biomass boiler helps to eliminate pulpwood waste generated in the chipping process (eucalyptus biomass) by converting it into electricity (read more about renewable power generation on [page 14](#)). In Bahia, all non-biodegradable waste streams are transferred for storage in waste depots at our head offices in Alagoinhas and at our Quatis (Entre Rios) and Salgado (Inhambupe) farm properties. From there they are transferred for environmentally compliant disposal. **GRI 306-2**

Within a circular economy approach, the industrial operation in Bahia reprocesses lime mud in the lime furnace process itself. The bark and sawdust are used as biomass to generate power in partner companies, contributing to reduce and/or replace fossil fuel (natural gas). **GRI 306-2**

Waste generation

GRI 306-3

UPSTREAM (t)¹

WASTE COMPOSITION	BAHIA	SÃO PAULO
Hazardous waste	109.16	185.84
Non-hazardous waste	143,825.17	52,902.43
Total waste	143,934.33	53,088.27

¹ The amount of waste reported refers to forestry and industrial operations in each state.

READ MORE AT OUR DISCLOSURES HUB

[GRI 306-2 Management of significant waste-related impacts](#)

[GRI 306-3 Waste generated](#)

[GRI 306-4 Waste diverted from disposal](#)

[GRI 306-5 Waste directed to disposal](#)





Logistics

Outbound logistics from our plant in Lençóis Paulista (SP) is handled by trucks that haul the pulp to the intermodal terminal in Pederneiras (SP), from where it is transported by rail to the Port of Santos (SP), a journey of some 510 kilometers, before being loaded onto ships bound for the country of destination.

Bracell purchased 463 wagons in 2021 to carry out railway transportation of pulp from the Pederneiras Intermodal Terminal (SP) to the Port of Santos (SP). Each composition is composed of 67 wagons and transport a volume equivalent to 126 trucks. This means that Bracell contributes to the reduction of CO₂ emissions and the reduction of traffic accident risks. In Bahia, Bracell is responsible for the largest activity at the port of Salvador.

Investments in outbound logistics from our plant in Camaçari (BA) to the Port of Salvador are concentrated in four projects that are ongoing in 2022, all focused on improving these operations:

- Outfitting the product storage yard
- Increasing the number of weigh bridges, and renovating our offices
- Implementing a center for real-time fleet monitoring
- Implementing fatigue monitoring devices to manage driver health and safety



FLEET MONITORING

The fleet that ships pulp to the Port of Salvador (BA) is fully monitored and identified. A toll-free number (0800) can be used to report any irregularities. In São Paulo, Bracell's own trucks, which transport pulp from the plant in Lençóis Paulista to the Pederneiras Terminal, a route of approximately 36km, are also monitored. The vehicles also have a fatigue control system for the drivers, in order to avoid traffic accidents. All Company-hired drivers undergo training in safe, economical and productive driving, conducted by an institution specialized in training and qualifying drivers, before they start their activities at Bracell.





Suppliers

GRI 3-3 (414), 414-1

Suppliers are screened and onboarded in accordance with our code of conduct and Procurement Code of Ethics. These codes govern the relationship between Bracell and these stakeholders and set out requirements on ethical conduct, compliance, human rights, labor rights, the rights of children and adolescents, and anti-corruption legislation, as well as applicable socio-environmental standards.

Suppliers are monitored by our Contract Management System, a platform that stores contractual documents and ensures legally required documents have been submitted, including documents demonstrating compliance with labor, environmental, and workplace health and safety laws.

We also stimulate economic activity in the states where our operations are located to drive local development, and we seek to source locally for our forestry, manufacturing, and administrative activities.

In 2022, we will benchmark our operations against peers to identify best practices in screening critical suppliers on social and environmental aspects. As part of the benchmarking exercise, we will develop assessment concepts and criteria by which we will screen/assess current and future suppliers.

Main procurement categories

GRI 2-6

Forestry

Fuel (diesel), biomass, eucalyptus seedlings, fertilizer, herbicides, operating equipment (harvesters, trucks, tractors, and subsoilers), services such as forestry, soil monitoring, forest inventory, georeferencing, road construction and maintenance, pulpwood haulage, harvester maintenance services and replacement parts, heavy and light vehicle parts, and pulpwood.

Mill

Industrial inputs (such as caustic soda and sulfuric acid), manufacturing equipment, operational replacement parts (valves, pipes, bolts, hoses, flanges), trucks, services such as maintenance, civil construction, sheet metal work, and instrumentation.

Facilities and support

IT services and equipment, passenger transportation, meals, employee benefits, data filing, systems licenses, communication services, and sustainability consulting services.





Supplier social and environmental impact

Bracell selects suppliers based on social and environmental criteria, in accordance with the rules of the Purchasing Code of Ethics and the Sustainability Policy, both in compliance with legislation. This rule applies to new suppliers, hired in 2021. To ensure compliance with laws, rules and good practices of a socio-economic nature in the relationship with its suppliers, the company stipulates, in all its contracts, the mandatory verification of compliance with regard to tax, social security and labor issues. The occurrence of any irregularities may result in the blocking of payments until they are settled or even in the review of the business relationship, in accordance with the Bracell Purchasing Code. [GRI 308-1, 414-1](#)

All suppliers are assessed and depend on a minimum score to remain in the Bracell supply chain. Assessments can prevent hiring, allow the relationship to continue or end a deal. [GRI 308-2](#)

READ MORE AT OUR DISCLOSURES HUB

[GRI 308-1 New suppliers that were screened using environmental criteria](#)

[GRI 308-2 Negative environmental impacts in the supply chain and actions taken](#)

[GRI 408-1 Operations and suppliers at significant risk for incidents of child labor](#)

[GRI 409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labor](#)

[GRI 414-1 New suppliers that were screened using social criteria](#)

[GRI 414-2 Negative social impacts in the supply chain and actions taken](#)

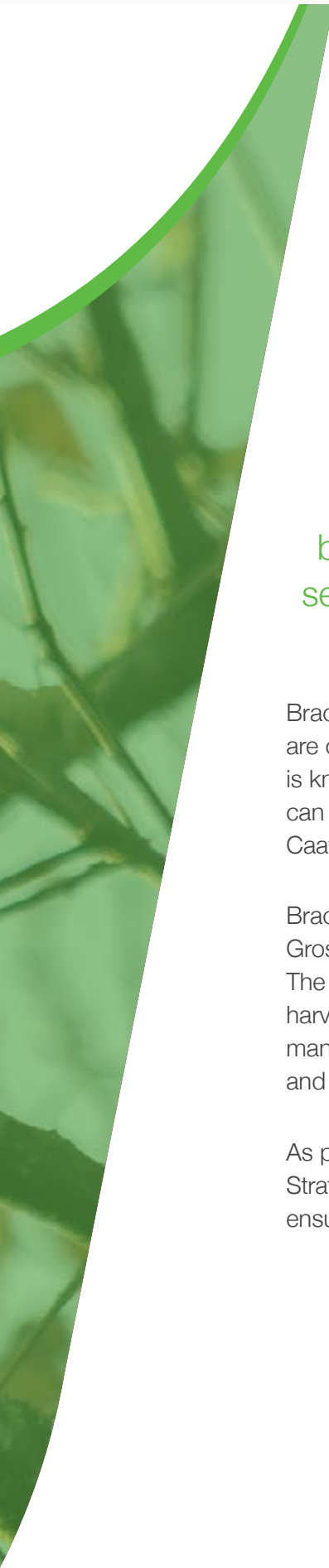




6 Biodiversity and landscapes

GRI 3-3(304)





Sustainable forest mosaics that support biodiversity, and ecosystem and landscape services, all compliant with applicable legislation.

Bracell's eucalyptus wood comes 100% from certified reforestation and are certified. Planting is done between corridors of native vegetation. This is known as the mosaic approach to forestry and ensures the eucalyptus can be sustainably planted in areas hosting Atlantic Forest, Cerrado and Caatinga formations.

Bracell has forestry operations in Bahia, São Paulo and Mato Grosso do Sul—the latter two managed by our São Paulo operation. The forestry operations include planting, forest maintenance, harvesting and pulpwood haulage. All forestry operations are managed in accordance with applicable legal requirements and guidelines on environmental preservation. **GRI 304-1**

As part of the Biodiversity and Landscapes pillar of our Sustainability Strategy, we have initiatives in place to develop sustainable landscapes and ensure compliance with applicable environmental laws and regulations.



Conservation of biodiversity

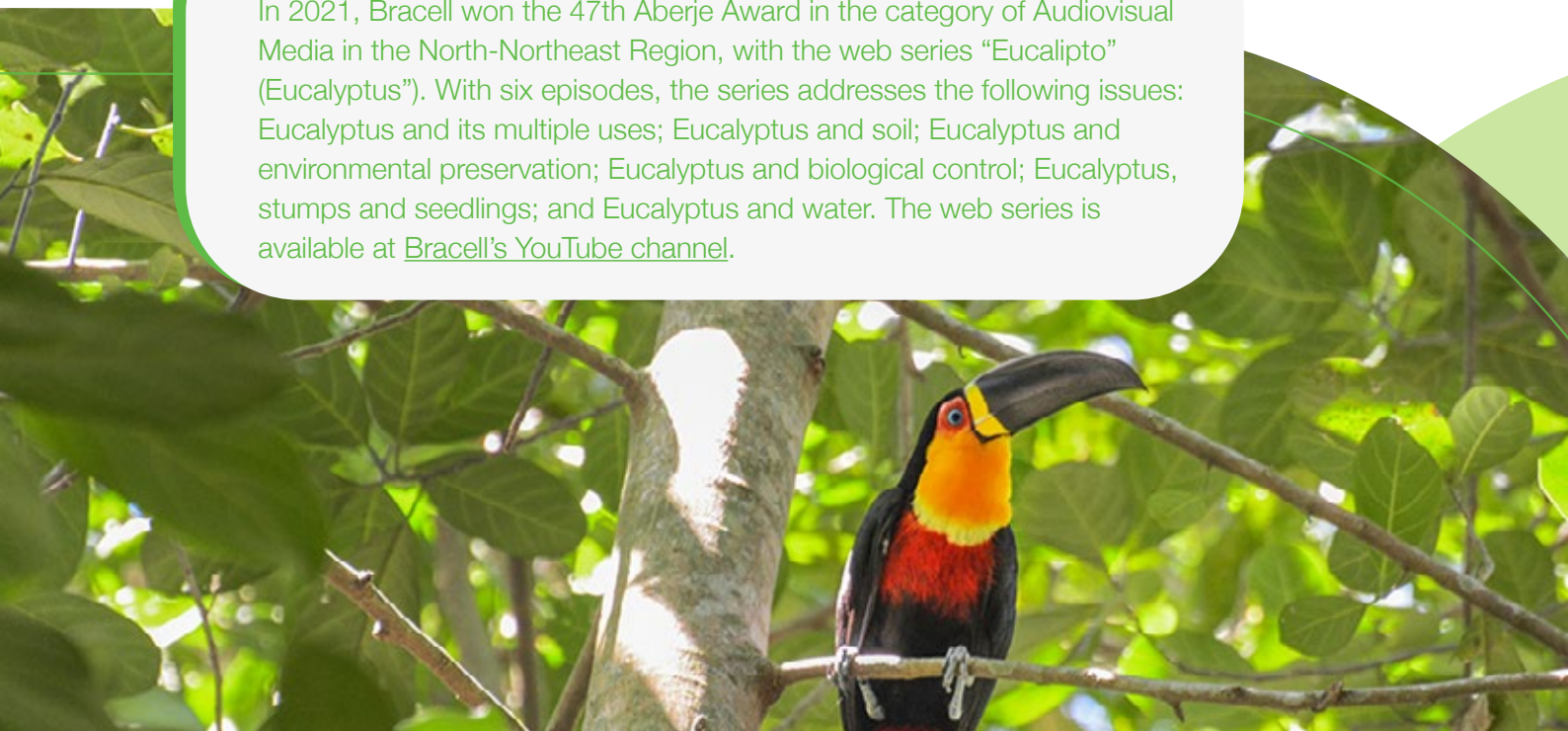
GRI 3-3(304)

At the end of 2021, the total area conserved by Bracell was equivalent to 56% of the area of our eucalyptus plantations. In Bahia, this percentage was 97%, in São Paulo, 40% and in Mato Grosso do Sul, 24%. In São Paulo, Bracell approved a recovery program to act under three models of activity: planting of native species in pasture areas, soil enrichment in areas in early stages of natural regeneration and elimination of exotic species. [GRI 304-1, 304-3](#)

In Bahia, Bracell has leased land adjacent to and within the North Coast protected area. The forestry operations we manage in São Paulo are located in 113 municipalities in the state of São Paulo and 6 municipalities in Mato Grosso do Sul. Two of the areas we manage contain Areas of High Conservation Value — on the Nova América farm, in Cabrália Paulista, and the Rio Verde farm in Bauru, both in the state of São Paulo. [GRI 304-1](#)

ABERJE AWARD

In 2021, Bracell won the 47th Aberje Award in the category of Audiovisual Media in the North-Northeast Region, with the web series “Eucalipto” (Eucalyptus”). With six episodes, the series addresses the following issues: Eucalyptus and its multiple uses; Eucalyptus and soil; Eucalyptus and environmental preservation; Eucalyptus and biological control; Eucalyptus, stumps and seedlings; and Eucalyptus and water. The web series is available at [Bracell’s YouTube channel](#).



Operations and protected areas

GRI 304-1

Plantation areas:



In São Paulo, Mato Grosso do Sul and Bahia.

Environmental conservation area:



At the end of 2021, the total area conserved by Bracell was equivalent to 56% of the area of our eucalyptus plantations.

97% in Bahia

40% in São Paulo

24% in Mato Grosso do Sul

BRACELL SIGNS MUTUAL COOPERATION AGREEMENT ON BIODIVERSITY



In 2021, we signed a mutual cooperation agreement with the Bahia State Environment Department to implement biodiversity initiatives in Atlantic Forest areas in the Subaé Canyons and in the Subaúma River basin. In São Paulo, Bracell has also signed an agreement to sponsor initiatives to protect more than 64,000 hectares of protected areas hosting Atlantic Forest and Cerrado formations, in a partnership with Fundação Florestal (an organization linked to the State Infrastructure and Environment Department).



COMMITMENT TO BIODIVERSITY

Associated with the Brazilian Business Council for Sustainable Development (CEBDS) since 2021, Bracell disclosed its actions related to the goals of the Brazilian Business Commitment to Biodiversity. Bracell is committed to:

- Biodiversity as a pillar of the Sustainability Strategy;
- Managing risks and preventing impacts on biodiversity;
- The promotion of biodiversity in the production chain;
- Carrying out R&D projects in biodiversity conservation;
- Monitoring fauna and flora;
- Disseminating biodiversity data;
- Disseminating knowledge on biodiversity;
- A biodiversity conservation and recovery plan;
- Conducting initiatives to promote biodiversity in partnership with stakeholders.

Bracell's commitments are published in [this link](#).

In 2021, the company signed the Business Movement for the Amazon, announced at the Climate Conference (COP26), on the need to conserve the largest tropical forest on the planet - the Amazon. The document is available at [this link](#).

BRACELL ONE TO ONE PROGRAM

In the first quarter of 2022, Bracell launched a program, called *Um para Um* (“One for One”). Through this program, for each hectare of planted eucalyptus, Bracell commits to conserving 1 hectare of native forest. The conserved areas will be in the Mata Atlântica, Cerrado and Caatinga biomes, located in the three states where Bracell operates (São Paulo, Mato Grosso do Sul and Bahia). The goal is part of the Company’s Sustainability Strategy and it is expected to be reached by the end of 2025.



COMMITMENT BRACELL
ONE FOR ONE

The commitment will increase Bracell’s conservation area, contributing to the preservation and promotion of biodiversity and ecosystemic services. If the Company expands the total area of planted eucalyptus after 2025, the conserved areas will be expanded as well, thus upkeeping the One for One Commitment.

ONE TO ONE PROGRAM INITIATIVES

- + **Support for the protection and improvement of protected areas**
- + **Wildlife conservation: development of a new bridge design for primates to safely cross roads**
- + **Assessment and recommendations on controlling invasive plant species causing impacts on biodiversity**
- + **Remote wildlife monitoring: using camera traps to identify species and monitor environmental quality indicators in protected areas**
- + **Building and maintaining firebreaks to prevent forest fires**
- + **Providing firefighting tools and equipment**
- + **Fire responder workshops involving neighboring properties and communities**
- + **Warning signs and environmental information**
- + **Planting native Atlantic Forest and Cerrado species on third-party land to support small and medium-sized local initiatives and/or non-government organizations**



Lontra Private Natural Heritage Reserve (RPPN)

GRI 304-3

Located between the Bahia Recôncavo and the north of the state, between the municipalities of Entre Rios and Itanagra, the Lontra Private Natural Heritage Reserve is considered the largest of Bahia's northern coast and Agreste, covering 1,377.33 hectares, with a perimeter of 14.4 km.

Since 2018 the area has been recognized by the United Nations Educational, Scientific and Cultural Organization (UNESCO) as a Frontier Area of the Atlantic Forest Biosphere.

This status requires meeting several criteria such as producing technical and scientific information that contributes to regional progress, as well as environmental

education initiatives. Biodiversity in Lontra is extremely important for scientific research of the wild flora and fauna, and to maintain native species, especially those endemic to the Atlantic Forest.

In 2020, it was also designated as a release area by the Aerial Wild Animal Release Program (ASAS) of the State of Bahia Institute for the Environment and Water Resources (INEMA), which catalogs areas for the release of wild animals that are donated or captured in high-risk areas so that they may be reintroduced to their natural habitats. On average, animals are released once a month.

In 2021, INEMA certified two new wild animal release areas, the Cachoeira

RPPNs managed by Bracell cover an area equivalent to 8,170 soccer pitches. Lontra is considered the heart of the northern Bahia coast wildlife corridor, covering 1,377 hectares.



Read more about Lontra and Bracell's environmental programs:
<https://www.bracell.com/en/sustainability/socio-environmental-responsibility/environmental-projects/>

READ MORE AT OUR DISCLOSURES HUB:

GRI 304-1 Operational sites owned, leased or managed in or adjacent to protected areas and areas of high biodiversity value outside protected areas

GRI 304-3 Habitats protected or restored



Project in Entre Rios, and the Sergipe Project in Jandaíra, both in areas belonging to Bracell.

By the end of 2021, 376 animals had been collected to be reintroduced to their natural habitat. Bracell has another RPPN, this one known as Pedra de São José, occupying 232 hectares. In addition 6,467 ha area of RPPN has already been registered with, and approved by, the environmental agency.

**FLORESTA SEMPRE VIVA
("LIVING FOREST") – LEARN
ABOUT BAHIA'S BIODIVERSITY**

Environmental conservation is an essential component of our activity. To measure and monitor conservation of the flora and fauna in Bahia, in 2021 we published a book titled *Floresta Viva* ("Living Forest"). Learn more about our programs and activities and view exclusive photos of the animals by downloading the book at <https://florestasempreviva.com.br/>.



Monitoring biodiversity

GRI 3-3(304)

Bracell periodically monitors the fauna and flora on farms hosting Cerrado, Atlantic Forest and Caatinga formations to assess biodiversity value based on species composition and richness, among other parameters, in study areas. Over time, additional properties will be monitored.

Monitoring work will be done using tools such as the Rural Environmental Register (CAR) and satellite imagery. Bracell has committed to protect these areas, rehabilitate any disturbed land, eradicate exotics, and protect and enhance biodiversity in the regions where we operate.

Our Biodiversity Monitoring Program follows principles and guidelines

recommended by researchers and in forestry management certification programs and helps to generate biodiversity data on aspects such as species, trophic levels and degree of conservation. This information supports the development of strategies to minimize potential adverse impacts from forestry management activities.

We also have mechanisms to identify endemic, rare, threatened, or endangered species in Areas of High Conservation Value to help protect communities' environmental and cultural values. On an annual basis, we review our operations' management plans and publish a summary version on the [Bracell website](#) describing the main sustainable management initiatives.

OLHO NO BICHO

Our field professionals often come into contact with animals. We encourage them to actively participate in identifying and documenting species via our *Olho no Bicho* (“Wildlife Sighting”) program. These have helped us increase our knowledge and understand the habits of the animals that inhabit Bracell’s forests.

Seasonal monitoring is currently in place in Turvinho, between Borebi (SP) and Iaras (SP); in Sossego II, between the municipalities of Avaí (SP) and Bauru (SP); and on the Nova América I and Ipiranga farm properties in Cabrália Paulista (SP), the Nova América II farm in Botucatu (SP), and Usina Paredão, in Oriente (SP). The Turvinho area and the Nova América I farm are located in the Middle Paranapanema Water Resource Management Unit, an area hosting the largest aquifer in the state of São Paulo.

Species identified during biodiversity monitoring are classified based on official protection lists, local laws and regulations, and scientific literature on degrees of threat, rareness, endemism, economic importance, species migration, and other parameters. The degree of threat is determined based on the Union for Conservation of Nature Red List of Threatened Species as well as national and state conservation lists. **GRI 304-4**





Monitoring species listed in the International Union for Conservation of Nature (IUCN) Red List and national conservation lists with habitats in areas affected by operations

GRI 304-4

BAHIA

CATEGORY	COUNT
International Union for Conservation of Nature (IUCN)	
Critically endangered	0
Endangered	5
Vulnerable	19
Near threatened	4
Least concern	0
Instituto Chico Mendes de Conservação da Biodiversidade (ICMBio)	
Critically endangered	0
Endangered	6
Vulnerable	12
Near threatened	11
Least concern	0



SÃO PAULO

CATEGORY

COUNT

International Union for Conservation of Nature (IUCN)

Critically endangered	0
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Endangered	3
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Vulnerable	6
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Near threatened	11
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Least concern	0
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Instituto Chico Mendes de Conservação da Biodiversidade (ICMBio)

Critically endangered	0
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Endangered	3
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Vulnerable	13
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Near threatened	0
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Least concern	0
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Managing impacts on biodiversity with a focus on prevention

GRI 304-2

Operational and pulpwood haulage logistics are the primary forestry activities with the potential to cause impact on biodiversity, especially roadkill. This impact is included in Bracell's matrix of aspects and impacts, but its significance has been rated as low. Forestry management also involves the use of diesel-fueled vehicles and machinery, which can cause air pollution. This equipment is systematically monitored in accordance with applicable regulations.

Bracell's risk matrix prohibits protected areas from being used for any forestry activities and stresses the importance of inspecting each area for nests, chicks and eggs before initiating forestry activities. Pesticides should only be used in native forest areas when strictly necessary and in accordance with the manufacturer's instructions. Any roadkill is reported using appropriate forms or by email. Hunting and trapping are prohibited on our forestry properties. Deforestation is also prohibited under our Sustainability Policy.

READ MORE AT OUR DISCLOSURES HUB:

[GRI 304-2 Significant impacts of activities, products, and services on biodiversity](#)

[GRI 304-4 IUCN Red List species and national conservation list species with habitats in areas affected by operations](#)





7 Climate

GRI 3-3(305)



Climate-positive operations that support national targets and the development of low-carbon products.

At Bracell we understand that reducing greenhouse gas (GHG) emissions, increasing the share of renewable energy in our operations, developing circular-bioeconomy solutions, and preserving biodiversity are all important areas of action in tackling climate change.

Our approach to climate change is aligned with the Paris Agreement's call for measures to limit global average temperature rise in this century to well below 2°C above pre-industrial levels, while pursuing efforts to limit the temperature rise to 1.5°C, significantly reducing the risks and impacts of climate change.

The Climate pillar of our Sustainability Strategy comprises a set of initiatives addressing climate issues, such as maintaining a climate-positive carbon balance, following developments and trends in environmental asset markets, and developing solutions for climate adaptation and resilience.

Bracell considers climate-change risks and opportunities in its strategic planning, and implements measures to ensure the medium- and long-term sustainability of the company and its operations and activities (read more about our environmental differentiators on the Bracell website and on [page 34](#)). **GRI 201-2**

READ MORE AT OUR DISCLOSURES HUB:

[GRI 201-2 Financial implications and other risks and opportunities due to climate change](#)





Managing GHG emissions

Bracell annually compiles greenhouse gas (GHG) emissions inventories using the methodology prescribed by the GHG Protocol and the UN Intergovernmental Panel on Climate Change (IPCC). These inventories then inform emissions reduction plans.

In 2021, Bracell carried out its first carbon inventory, jointly involving its two operations – Bahia and São Paulo – in the study. In 2020, the same study was carried out separately. In the carbon inventory, Scope 1, 2 and 3 emissions were accounted for, with their sources and respective amounts, in addition to carbon removals.

In 2021, Scope 1 emissions grew by 7.7% from 2020, due to the increase in production and the resulting increase in consumption of materials. This growth, however, was lower than CO₂ removal, of 34.2%.

Similar to the methodology established by the Intergovernmental Panel on Climate Change (IPCC), Scope 1 considers the variation of forest carbon stocks in a given

period of time as emissions or biogenic removals of soil use. Throughout 2021, the variations of Bracell's carbon stocks – including the gains due to the development of planted forests and native vegetation, minus the loss due to harvesting in planted forests – resulted in removals from the atmosphere, that is, forest carbon stocks increased in one year.

Biogenic emissions not associated to Bracell's forest carbon stock correspond to the use of renewable energy (Scope 1 – 2,352,640 tCO₂e), CO₂ emissions from fire outbreaks (Scope 1 – 149,723 tCO₂e) and renewable fuels in Scope 3 (8,368 tCO₂e). Fires happen mainly due to the dry period, which was more intense in 2021, in the state of São Paulo, both in planted forest areas and in native forest areas, generating CH₄ and N₂O emissions in the category of soil use change, even though the areas after the fire were not converted into other soil uses. In Bahia, there were no forms of alteration of soil use. It should be pointed out that Bracell does not deforest and only plants eucalyptus in anthropized areas.



Regarding Scope 2 emissions, resulting from electricity consumption, the values consider the emission factor of the Brazilian GRID, which increased in 2021, due to the dry period in the year, which made it necessary the availability of energy generated in thermoelectric plants in Brazil.

Scope 3 emissions consider activities carried out by third-party companies and are classified as: TD Downstream-Mobile traveled kilometer; TD Downstream -Port to port; Good and services bought-Mobile TKM; Goods and Services bought-Mobile traveled kilometer; Goods and services bought-Mobile fuel; Plant-Port-Mobile traveled kilometer; Air Travel; Waste Treatment; and Effluent Treatment. In the São Paulo operations, the largest volume of emissions occurred due to port to port sailing. Even though waterway

transportation is the modal with the least emission volume among other modals, the distances are intercontinental, and therefore significant. In Bahia, Scope 3 emissions mainly stem from movement of finished products (port to port and bought goods and services).

When it comes to biogenic emissions, the consumption of the various sources of power generation are included in the calculation. For each of the inputs, there are emission conversion factors published annually by the GHG Protocol Program. Most of Bracell's emission sources are stationary, as they are linked to the pulp production process in the mills of Bahia and São Paulo. Since much of the energy consumed in them is from a renewable source, the volume of emissions is reduced.



Carbon balance^{1,2}

GRI 305-1, 305-2, 305-3

IN tCO ₂ e	2019	2020	2021
Total emissions	276,910	342,384	636,549
Scope 1	273,999	339,032	365,172
Scope 2	2,911	3,332	35,283
Scope 3	Not accounted for	Not accounted for	236,094
Removals	-2,221,467	-4,401,975	-5,970,852
Balance	-1,944,557	-3,975,495	-5,334,303
Biogenic emissions	2,263,785	2,157,524	2,510,733

¹ The Balance calculation considers Scope 1 + Scope 2 + Scope 3.

² In compliance with the IPCC's parameters, Scope 1 does not consider biogenic emissions related to the natural carbon cycle. The amounts of total biogenic emissions correspond to the use of renewable energy (Scope 1 - 2,352,640 tCO₂e), fire outbreaks (Scope 1 - 149,724 tCO₂e) and Scope 3 (8,369 tCO₂e). Fires happen mainly due to the dry period, which was more intense in 2021, in the State of São Paulo.

FIRE PREVENTION AND FIRE FIGHTING

Bracell establishes partnerships focusing on fire prevention and fire fighting. In the São Paulo operations, in 2021, an important governance restructuring on the issue was kickstarted, aimed at aligning practices with those already in full force in Bahia. There was also significant investment in technology. As of the second semester of 2022, the company will begin operations in the detection system through imaging in the total monitored area, without distinction for areas of difficult access. The main advantage will be the promptness identifying the outbreak and fighting it. One outstanding initiative is the Amigos da Floresta (Friends of the Forest) program, aimed at preventing and combating forest fires caused by vandalism and lack of training by farmers to deal with burning techniques (read more about Bracell's fire prevention and fighting practices on [page 98](#)).

Bracell is in the process of expansion and began the start-up operation of the two new flexible lines at the Lençóis Paulista (SP) industrial site, built in the Project Star in September 2021. For this reason, as well as the increase in energy consumed during the year (read more on the [page 142](#)), there was an increase in the volume of greenhouse gas (GHG) emissions.

In 2021, total Bracell emissions were +636,549 tCO₂e, with biogenic removals (Scope 1) of -5,970,852 tCO₂e. Although there was an increase in the volume of GEE emissions, the company's carbon balance was -5,334,303 tCO₂e, which means that the company contributed in a positive way to the climate by removing more carbon from the atmosphere than emitting it, through its operations.

In addition, in 2021, Bracell's areas of planted and native forest add up to a carbon stock of 59,382,177 tCO₂e (42,674,511 tCO₂e of planted forest areas and 16,707,665 tCO₂e of native vegetation), that is, the company also contributed to the reduction of carbon concentration in the atmosphere, another positive impact for the climate.

READ MORE AT OUR DISCLOSURES HUB:

[GRI 305-1 Direct \(Scope 1\) GHG emissions](#)

[GRI 305-2 Energy indirect \(Scope 2\) GHG emissions](#)

[GRI 305-3 Other indirect \(Scope 3\) GHG emissions](#)

[GRI 305-4 GHG emissions intensity](#)

[GRI 305-5 Reduction of GHG emissions](#)





A climate-positive company



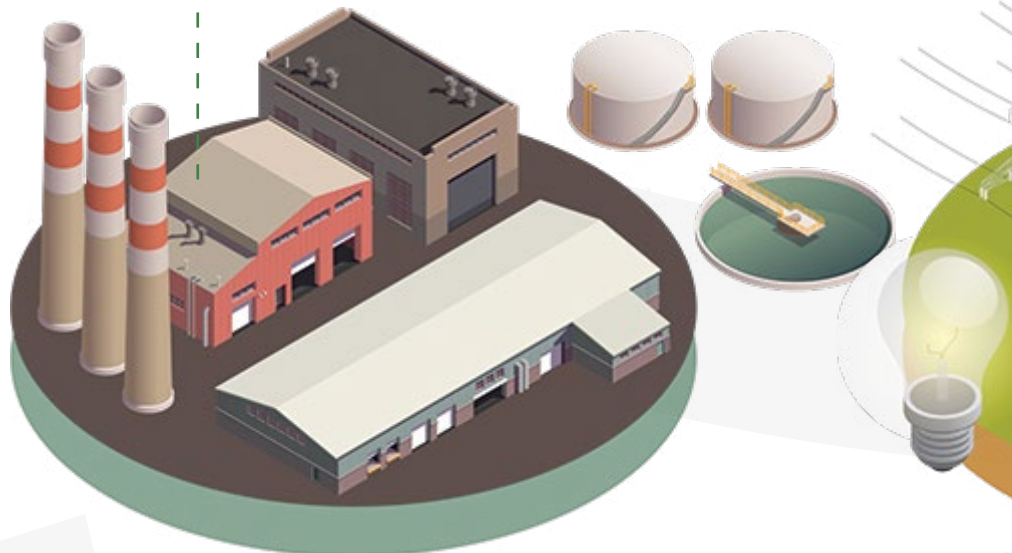
Click on the name of each scope to see its description

GREENHOUSE GAS (GHG) EMISSIONS

Bracell generated 636,549 tCO₂e in emissions in 2021, across Scopes 1, 2 and 3. In addition, we recorded 2,510,733 tCO₂e in biogenic emissions. Our forest areas sequestered 5,970,852 tCO₂e in the year. This means that we removed more carbon from the air than we emitted, with a carbon balance of -5,334,303 tCO₂e. See below.

INVENTORY

Bracell compiles greenhouse gas (GEE) emissions inventories for its operations on an annual basis. These inventories are prepared using the GHG Protocol methodology and guidelines issued by the UN Intergovernmental Panel on Climate Change (IPCC).







Energy

GRI 3-3 (302)

Bracell is energy self-sufficient. At both of our mills, in Bahia and São Paulo, recovery boilers produce steam that is fed to turbine-generator sets to generate electricity. We use electricity from the national grid only during plant shutdowns for maintenance, in our forest areas and at our nurseries. We also use fuels for machinery, generators, trucks, buses and light vehicles in our forestry operations.

Our new flexible lines in Lençóis Paulista (SP) have biomass-fueled boilers that use eucalyptus waste and other substances from the dissolving pulp production process, including black liquor, to generate renewable electricity. The new lines have been developed to operate without the

need for fossil fuels and to generate clean electricity for the national grid. The site's 440kV substation has an installed capacity of 409MW, enough to supply electricity to the mill and a surplus of approximately 150 to 180 MW that is sold to the national grid, enough to supply green, high-quality electricity to around 750,000 homes or approximately 3 million people (read more about the plant's innovative features on [page 34](#)).

Reducing energy intensity, improving energy efficiency and developing a low-carbon energy mix are some of the priorities in Bracell's energy strategy in order to reduce emissions.



At both of our sites, specialized teams develop strategies to minimize energy consumption, raise user awareness and optimize costs. Our São Paulo site has an Internal Energy Conservation Committee (CICE) that works to improve energy efficiency in our industrial processes.

Our mill in São Paulo generated 219,454 MWh from Line 01 and 306,135 MWh from Line 02, using steam produced by a recovery boiler and a fluidized bed boiler.





Energy consumption within the organization¹

(GRI 302-1)

In gigajoules

	2019	2020	2021
Bahia	1,544,623.20	1,577,624.40	1,561,586.40
São Paulo	639,171.36	657,466.56	1,914,365.66
Bracell	2,183,794.56	2,235,090.96	3,475,952.06

GENERATION OUTPUT	2019	2020	2021
Bahia	1,555,236.00	1,577,624.40	1,429,909.20
São Paulo	857,983.68	821,876.04	1,892,119.23
Bracell	2,413,219.68	2,399,500.44	3,322,028.43

PURCHASED ELECTRICITY	2019	2020	2021
Bahia	125,823.60	142,970.40	204,426.00
São Paulo	13,072.32	13,854.60	608,902.91
Bracell	138,895.92	156,825.00	813,328.91

ELECTRICITY SOLD	2019	2020	2021
Bahia	130,618.80	76,406.40	72,745.20
São Paulo	231,884.64	175,947.12	34,870.43
Bracell	362,503.44	252,353.52	107,615.63

¹ In 2020, Bracell reported its energy consumption in MWh and, as of this year, chose to present values in GJ, the most frequently adopted standard for reporting this disclosure. **GRI 2-4**



**READ MORE AT OUR
DISCLOSURES HUB:**

[GRI 302-2 Energy consumption
outside of the organization](#)

[GRI 302-3 Energy intensity](#)

[GRI 302-4 Reduction of energy
consumption](#)

[GRI 302-5 Reductions in
energy requirements of
products and services](#)





GRI Content Summary







STANDARD/ CONTENT	LOCATION	OMISSION	SDG	GLOBAL COMPACT
Declaration of use	This report was prepared in accordance with the Global Reporting Initiative (GRI) Standards 2021.			
GRI 1: Foundation 2021				
GRI 2: General Disclosures 2021				
The organization and its reporting practices				
2-1 Organizational details	7 , 22 , 98			
2-2 Entities included in the organization's sustainability reporting	Bracell SP Celulose Ltda. and Bracell Bahia Specialty Celulose S.A. Private companies, limited liability companies and corporations, respectively. See more on pages 7 and 92 .		3	
2-3 Reporting period, frequency and contact point	7			
2-4 Restatements of information	144			
2-5 External assurance	Bracell's 2021 Sustainability Report was assured by the consultancy SGS Brasil on July 19, 2022. See more on page 164 .			
Activities and workers				
2-6 Activities, value chain and other business relationships	22 , 23 , 24 , 92 , 117		3	
2-7 Employees	30 , 32 , 53			
2-8 Workers who are not employees	30 , 32		8, 10	

STANDARD/ CONTENT	LOCATION	OMISSION	SDG	GLOBAL COMPACT
Governance				
2-9 Governance structure and composition	41			
2-10 Nominating and selecting the highest governance body	41			
2-11 Chair of the highest governance body	41			
2-12 Role of the highest governance body in overseeing the management of impacts	43		16	
2-13 Delegation of responsibility for managing impacts	43 , 50		5, 16	
2-14 Role of the highest governance body in sustainability reporting	41		16	
2-15 Conflicts of interest	46		5, 16	
2-16 Communication of critical concerns	43		16	
2-17 Collective knowledge of highest governance body	43			
2-18 Evaluation of the performance of the highest governance body	Bracell Disclosures Hub			
2-19 Remuneration policies		Confidential information for strategic reasons		
2-20 Process to determine remuneration		Confidential information for strategic reasons	16	
2-21 Annual total compensation ratio		Confidential information for strategic reasons		



STANDARD/ CONTENT	LOCATION	OMISSION	SDG	GLOBAL COMPACT
Strategy, policies and practices				
2-22 Statement on sustainable development strategy	8 , 12 , 30			
2-23 Policy commitments	28 , 41 , 42 , 44 , 51 , 56			
2-24 Embedding policy commitments	43 , 102			
2-25 Processes to remediate negative impacts	50			
2-26 Mechanisms for seeking advice and raising concerns	47 , 53 , 84 , 85			
2-27 Compliance with laws and regulations	Bracell Disclosures Hub			
2-28 Membership associations	45		16	
Stakeholder Engagement				
2-29 Approach to stakeholder engagement	14 , 17			
2-30 Collective bargaining agreements	100% of Bracell's employees are covered by collective bargaining agreements.		8	
GRI 3: Material Topics 2021				
3-1 Process to determine material topics	14		17	
3-2 List of material topics	16			
Economic Performance				
GRI 201: Economic Performance 2016				
201-2 Financial implications and other risks and opportunities due to climate change	135		13	7

STANDARD/ CONTENT	LOCATION	OMISSION	SDG	GLOBAL COMPACT
Indirect Economic Impacts				
GRI 3: Material Topics 2021				
3-3 Management of material topics	72			
GRI 203: Indirect Economic Impacts 2016				
203-1 Infrastructure investments and services supported	29 , 37		5, 9, 11	
203-2 Significant indirect economic impacts	72 , 75 , 77		3, 8, 10	
Anti-Corruption				
GRI 3: Material Topics 2021				
3-3 Management of material topics	46 , 49			
GRI 205: Anti-Corruption 2016				
205-1 Operations assessed for risks related to corruption	49		16	10
205-2 Communication and training about anti-corruption policies and procedures	46 , 49		16	10
205-3 Confirmed incidents of corruption and actions taken	Bracell Disclosures Hub		16	10
Anti-Competitive Behavior				
GRI 3: Material Topics 2021				
3-3 Management of material topics	Bracell Disclosures Hub			
GRI 206: Anti-Competitive Behavior 2016				
206-1 Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	Bracell Disclosures Hub		16	
Energy				
GRI 3: Material Topics 2021				
3-3 Management of material topics	142			



STANDARD/ CONTENT	LOCATION	OMISSION	SDG	GLOBAL COMPACT
GRI 302: Energy 2016				
302-1 Energy consumption within the organization	144		7, 8, 12, 13	7, 8
302-2 Energy consumption outside of the organization	Bracell Disclosures Hub		7, 8, 12, 13	8
302-3 Energy intensity	Bracell Disclosures Hub		7, 8, 12, 13	8
302-4 Reduction of energy consumption	Bracell Disclosures Hub		7, 8, 12, 13	8, 9
302-5 Reductions in energy requirements of products and services	Bracell Disclosures Hub		7, 8, 12, 13	8, 9
Water and Effluents				
GRI 3: Material Topics 2021				
3-3 Management of material topics	34, 98, 106			
GRI 303: Water and Effluents 2018				
303-1 Interactions with water as a shared resource	107, 108, 110		6, 12	
303-2 Management of water discharge-related impacts	107		6	
303-3 Water withdrawal	108		6	7, 8
303-4 Water discharge	108		6	8
303-5 Water consumption	108		6	
Biodiversity				
GRI 3: Material Topics 2021				
3-3 Management of material topics	92, 120, 122, 128			

STANDARD/ CONTENT	LOCATION	OMISSION	SDG	GLOBAL COMPACT
GRI 304: Biodiversity 2016				
304-1 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	121 , 122 , 123		6, 14, 15	8
304-2 Significant impacts of activities, products, and services on biodiversity	133		6, 14, 15	8
304-3 Habitats protected or restored	122 , 126		6, 14, 15	8
304-4 IUCN Red List species and national conservation lists species with habitats in areas affected by operations	129 , 130		6, 14, 15	8
Emissions				
GRI 3: Material Topics 2021				
3-3 Management of material topics	34 , 35 , 134			
GRI 305: Emissions 2016				
305-1 Direct (Scope 1) GHG emissions	138		3, 12, 13, 14, 15	7, 8
305-2 Energy indirect (Scope 2) GHG emissions	138		3, 12, 13, 14, 15	7, 8
305-3 Other indirect (Scope 3) GHG emissions	138		3, 12, 13, 14, 15	7, 8



STANDARD/ CONTENT	LOCATION	OMISSION	SDG	GLOBAL COMPACT
305-4 GHG emissions intensity	Bracell Disclosures Hub		13, 14, 15	8
305-5 Reduction of GHG emissions	Bracell Disclosures Hub		13, 14, 15	8, 9
Waste				
GRI 3: Material Topics 2021				
3-3 Management of material topics	35, 112			
GRI 306: Waste 2020				
306-1 Waste generation and significant waste-related impacts	Bracell Disclosures Hub		3, 6, 11, 12	
306-2 Management of significant waste-related impacts	112		3, 6, 8, 11, 12	
306-3 Waste generated	113		3, 6, 11, 12, 15	
306-4 Waste diverted from disposal	Bracell Disclosures Hub		3, 11, 12	
306-5 Waste directed to disposal	Bracell Disclosures Hub		3, 6, 11, 12, 15	
Supplier Environmental Assessment				
GRI 3: Material Topics 2021				
3-3 Management of material topics	Bracell Disclosures Hub			

STANDARD/ CONTENT

LOCATION

OMISSION

SDG

GLOBAL
COMPACT**GRI 308: Supplier Environmental Assessment 2016**

308-1 New suppliers that were screened using environmental criteria [92](#), [96](#), [119](#)

308-2 Negative environmental impacts in the supply chain and actions taken [119](#)

Occupational Health and Safety**GRI 3: Material Topics 2021**

3-3 Management of material topics [62](#)

GRI 403: Occupational Health and Safety 2018

403-1 Occupational health and safety management system [38](#), [64](#), [67](#) 3, 8, 12

403-2 Hazard identification, risk assessment, and incident investigation [67](#) 3, 8, 12

403-3 Occupational health services [Bracell Disclosures Hub](#) 8

403-4 Worker participation, consultation, and communication on occupational health and safety [Bracell Disclosures Hub](#) 8, 16

403-5 Worker training on occupational health and safety [38](#), [65](#), [68](#) 8

403-6 Promotion of worker health [38](#), [39](#), [64](#) 3, 8, 12

403-8 Workers covered by an occupational health and safety management system [62](#), [67](#) 8

403-9 Work-related injuries [68](#) 3, 8, 12, 16

403-10 Work-related ill health [64](#) 3, 8, 16



STANDARD/ CONTENT	LOCATION	OMISSION	SDG	GLOBAL COMPACT
Training and Education				
GRI 3: Material Topics 2021				
3-3 Management of material topics	60			
GRI 404: Training and Education 2016				
404-1 Average hours of training per year per employee	61		4, 8	6
404-2 Programs for upgrading employee skills and transition assistance programs	29		8	
404-3 Percentage of employees receiving regular performance and career development reviews	60		5, 8, 10	6
Diversity and Equal Opportunity				
GRI 3: Material Topics 2021				
3-3 Management of material topics	30, 54			
GRI 405: Diversity and Equal Opportunity 2016				
405-1 Diversity of governance bodies and employees	Bracell Disclosures Hub		5, 8, 10	6
405-2 Ratio of basic salary and remuneration of women to men	57	For reasons of confidentiality, it does not disclose salaries or the relationship between salaries of its employees.	5, 8, 10	6

STANDARD/ CONTENT	LOCATION	OMISSION	SDG	GLOBAL COMPACT
Non-Discrimination				
GRI 3: Material Topics 2021				
3-3 Management of material topics	54			
GRI 406: Non-Discrimination 2016				
406-1 Incidents of discrimination and corrective actions taken	54		5, 8	6
Child labor				
GRI 3: Material Topics 2021				
3-3 Management of material topics				
GRI 408: Child Labor 2016				
408-1 Operations and suppliers at significant risk for incidents of child labor	105		5, 8, 16	5
Forced or Compulsory Labor				
GRI 3: Material Topics 2021				
3-3 Management of material topics	105			
GRI 409: Forced or Compulsory Labor 2016				
409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labor	Bracell Disclosures Hub		5, 8	4
Security Practices				
GRI 410: Security Practices 2016				
410-1 Security personnel trained in human rights policies or procedures	104			1



STANDARD/ CONTENT	LOCATION	OMISSION	SDG	GLOBAL COMPACT
Rights of Indigenous Peoples				
GRI 3: Material Topics 2021				
3-3 Management of material topics	88			
GRI 411: Rights of Indigenous Peoples 2016				
411-1 Incidents of violations involving rights of indigenous peoples	88		2	1
Human Rights Assement				
GRI 3: Material Topics 2021				
3-3 Management of material topics	104			
GRI 412: Human Rights Assement 2016				
412-1 Operations that have been subject to human rights reviews or impact assessments	104			1
Local Communities				
GRI 3: Material Topics 2021				
3-3 Management of material topics	84			
GRI 413: Local Communities 2016				
413-1 Operations with local community engagement, impact assessments, and development programs	29 , 72 , 75 , 77 , 80 , 84			1
413-2 Operations with significant actual and potential negative impacts on local communities	86 , 87		1, 2	1
Supplier Social Assement				
GRI 3: Material Topics 2021				
3-3 Management of material topics	116			

STANDARD/ CONTENT	LOCATION	OMISSION	SDG	GLOBAL COMPACT
GRI 414: Supplier Social Assessment 2016				
414-1 New suppliers that were screened using social criteria	116, 119		5, 8, 12, 16	2, 8
414-2 Negative social impacts in the supply chain and actions taken	Bracell Disclosures Hub		5, 8, 16	2, 8
Public Policy				
GRI 3: Material Topics 2021				
3-3 Management of material topics	74			
GRI 415: Public Policy 2016				
GRI 415: Public Policy 2016	Bracell Disclosures Hub		16	10



SASB Table of Contents

Pulp and paper sector

ACCOUNTING METRIC	LOCATION	ADHERENCE	COMPLEMENT
Topic: Water management - water and effluents			
RR-PP-140a.1: (1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	108 , 109	Complete	
RR-PP-140a.2: Description of water management risks and discussion of strategies and practices to mitigate those risks	110	Complete	
Topic: Energy efficiency			
RR-PP-130a.1: (1) Total energy consumed, (2) percentage grid electricity, (3) percentage from biomass, (4) percentage from other renewable energy	144	Complete	
Topic: Climate change			
RR-PP-110a.1: Gross global Scope 1 emissions	138	Complete	
RR-PP-110a.2: Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	136 , 137 , 139	Complete	
RR-PP-120a.1: Air emissions of the following pollutants: (1) NOx (excluding N2O), (2) SO2, (3) volatile organic compounds (VOCs), (4) particulate matter (PM), and (5) hazardous air pollutants (HAPs)	138	Partial	

ACCOUNTING METRIC**LOCATION****ADHERENCE****COMPLEMENT****Topic: Evaluation of suppliers based on socio-environmental aspects**

RR-PP-430a.1: Percentage of wood fiber sourced from (1) third-party certified forestlands and percentage to each standard and (2) meeting other fiber sourcing standards and percentage to each standard	100% of the product purchased by Bracell is certified by the global initiative Program for the Endorsement of Forest Certification (PEFC). In São Paulo, 65% of suppliers achieved the category of “certified” by the PEFC in conjunction with the Forest Certification seal (CERFLOR), from the National Institute of Metrology – INMETRO. In Bahia, this number reaches 60%. In the PEFC “controlled” category are 40% of the suppliers of operations in Bahia and 35% in São Paulo.	Complete	
RR-PP-140a.2: Amount of recycled and recovered fiber procured		Not applicable	

Topic: Activity metric

RR-PP-000.A: Cellulose production	<u>22</u> , <u>23</u>	Complete	
RR-PP-000.B: Paper production		Not applicable	Content referring to the paper sector only



Assurance Statement

Statement by SGS do Brasil Ltda. (SGS) regarding the sustainability activities provided in “Sustainability Report 2021” given to Bracell

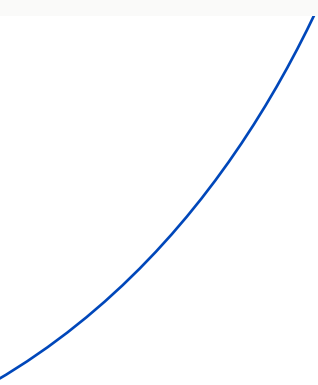
NATURE AND SCOPE OF ASSURANCE

The SGS was hired by BRACELL to carry out the third-party assurance of its Sustainability Report, which provides information for the year 2021 and that follows international guidelines for monitoring and reporting sustainability information, including the Global Reporting Initiative (GRI). The scope of assurance, based on the methodology for assurance sustainability reports from SGS, included the text and data related to GRI Standards 2021, current version of GRI.

The information provided in “SUSTAINABILITY REPORT 2021” and its presentation is a sole responsibility of BRACELL management structure. The SGS is not involved in the preparation of any material, including the in the said report, such as risk analysis, materiality tests and other critical issues that may affect severally the BRACELL business. We are liable for giving our opinion of the GRI disclosures

and their texting, data, charts, and statement within the assurance scope in order to keep the BRACELL stakeholders informed.

The SGS Group has developed a set of assurance protocols for Sustainability Communication based on the best practices provided in GRI Sustainability Reporting Standards, in its most up-to-date version of 2021, and the assurance standard International Standard on Assurance Engagements - ISAE3000. Such protocols offer different assurance levels depending on context and capacity of organization. This report was assured considering our protocols to assess the content authenticity and its alignment with the requirements of GRI Sustainability Reporting Standards 2021, Universal Standards (GRI 1_ Foundation 2021, GRI 2_ General Disclosures 2021, GRI 3_ Material Topics 2021) and the requirements of Topic Standards (GRI 200, GRI 300 and GRI 400) according to the material topics identified by BRACELL through the process described in this report.



The assurance process comprised (i) interviews with strategic employees involved in the process of compilation and preparation of the report, where disclosures, data and processes related to sustainability management and the collection of GRI disclosures were reviewed, (ii) review of the documentation presented by BRACELL and comparison with the information entered by the company in the report and (iii) evaluation of versions of this report for alignment with GRI standards and (iv) analysis of engagement activities with defined parties (stakeholders) and assessment of the form of sustainability as defined materials were and inserted in the context of the organization and in the content of this sustainability report. The accounting information of BRACELL contained and referenced in the “SUSTAINABILITY REPORT 2021” was not evaluated as part of this assurance process, but in a separate audit process.

IMPARTIALITY AND COMPETENCE STATEMENT

The SGS Group is global lead in inspection, analysis and verifications services, operating in more than 140 countries and rendering services that includes management

system certification, audits and trainings on quality, environmental, social and ethic segments, sustainability assurance reports and greenhouse gases verification. The SGS attests your independence against BRACELL stating that is exempt from interest conflict with the organization, their subsidiary and stakeholders.

The assurance team was composed according to members' expertise, experience and competence for this activity, the team is composed of:

- An Audit Lead on Sustainability Report Assurance, a Lead Auditor in Integrated Management Systems, Greenhouse Gas Verifer (GHG), Lead Auditor in the Renovabio Program.

ASSURANCE OPINION

Regarding the verification carried out in the methodology, processes and data presented by BRACELL, we are confident that the information and data contained in the “SUSTAINABILITY REPORT 2021” are reliable and a balanced representation of the sustainability activities developed by BRACELL in the base year 2021. The



assurance team has the opinion that the report can be used by the company's stakeholders as part of its company evaluation processes.

In our opinion, based on what was verified and on the materials presented by BRACELL, the content of the report fully meets the requirements of the GRI Standards, which are: apply the reporting principles, report the disclosures in GRI 2: General Disclosures 2021, determine material topics, report the disclosures in GRI 3: Material Topics 2021, report disclosures from the GRI Topic Standards for each material topic, provide reasons for omission for disclosures and requirements that the organization cannot comply with, publish a GRI content index, provide a statement of use and after publication notify GRI.

RECOMMENDATIONS, FINDINGS AND CONCLUSIONS OF ASSURANCE

- The Report of BRACELL, "SUSTAINABILITY REPORT 2021" is aligned with GRI Standards 2021, and also with the requirements of the Topic-specific Standards (GRI 200, GRI 300 and GRI 400).
- BRACELL presents its Report with 11 material themes, namely: "Valorization of human capital"; "Well-being, health and

safety of employees"; "Diversity, Inclusion and Equality"; "Energy efficiency"; "Climate change"; "Biodiversity"; "Evaluation of suppliers based on socio-environmental aspects"; "Water management: water and effluents"; "Human Rights in the Value Chain"; "Compliance, conduct, ethics, integrity and transparency"; and "Relationship with communities". In our view, the material topics reflect the impacts of BRACELL activities in a balanced manner and the report covers information on all topics considered as materials for the industry and stakeholders, according to GRI 3: Material Topics 2021.

- The clarity and details with which information related to water resource management (GRI 303), biodiversity (GRI 304), waste (GRI 306) and detailing of the value chain are presented is highlighted in the Sustainability Report 2021.
- It is also noteworthy the clarity with which information related to real and potential negative impacts on local communities is presented (GRI 413-2). The extension of development programs and support to local communities are based on Education, Empowerment and Being Well.
- As an opportunity for improvement there is the evolution of the management of material themes to propose goals related

to them. It was also verified as an opportunity to improve the more detailed presentation of actions related to the material theme "Evaluation of suppliers based on socio-environmental aspects".

- As for the partial publication of information related to disclosures, it has partially met the disclosures 403-9 - work-related injuries and

404-2 - programs for upgrading employee skills and transition assistance programs

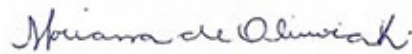
Finally, SGS believes in the importance of transparency and congratulates the company for the initiative of ensuring its report, as well as promoting sustainability in its actions and disseminating its code of conduct and compliance at all levels of the organization.

July 19, 2022

Executed by and on behalf of SGS.



Fabian Peres Gonçalves
Business Manager - Sustainability



Mariana de Oliveira Klein
Lead Auditor for Sustainability Report



Credits

General coordination

Bracell – Corporate Relations,
Communication and Sustainability Area

GRI Consulting, content, editorial coordination and design

Approach Comunicação

Photos

Bracell archive





Bracell