



INTEGRATED REPORT 2023 (ESG)

ELI DIAS
Paper MG Unit

AMANDA FORTUNATO
Paper MG Unit

CONTENT



ALESSANDRA HULLER
Forestry SC Unit

MESSAGE FROM THE PRESIDENT

From raw material to finished product there is a connection to nature. As an industry that produces 100% recyclable products from renewable natural resources, we strive for quality in the packaging of the most important objects in people's everyday lives.

As one of Brazil's leading companies in the packaging paper and corrugated packaging segments, we recognize that it is financial performance that underpins our ESG practices. In 2023, Irani's Re-IPO operation on the B3 completed a three-year cycle, allowing the company to implement a robust investment plan - the Gaia Platform - and generate a 200.7% return to shareholders. We were able to significantly increase the number of investors, which reached 80,000, demonstrating confidence in the results presented to the market.

The year was also dedicated to the continuous improvement of our governance systems, as reflected in the appointment of the first woman to the Board of Directors and the structuring of the Fiscal Council. Furthermore, for the second year running, Irani was included in the Corporate Sustainability Index (ISE), the Dividend Index (IDIV) and the B3 GPTW Index (IGPTW), as well as the Teva Women in Leadership Index.

In the field of environmental protection, our sustainable paper and packaging units in Santa Catarina were certified for good waste management by the Zero Waste Brazil Institute. The industrial plants in Campina da Alegria, in the municipality of Vargem Bonita, achieved a 93.38% waste diversion rate from landfills and received an "A" grade for good waste management practices. I would also

Sérgio Ribas
President and CEO.



like to highlight the improvement in our Forest CDP rating and the sustainability of our Water CDP and Climate Change CDP ratings, which demonstrate Irani's constant concern about the environmental impact of our activities.

Pesquisa Humanizadas, committed to ESG principles, recognized us as a company with a high level of quality in its relations with stakeholders, awarding us a "A" rating in 2023. We also invested more than R\$ 4.5 million in social projects and community funds, taking advantage of tax incentives. Through Private Social Investment, we placed R\$ 660,000 in partnerships for positive action in various sectors. At the same time, Irani's volunteer groups continued to be active in all business units, involving 25.79% of our employees in volunteer activities throughout the year.

On the topic of diversity, in 2023, Irani became a signatory to the UN Women's Women's Empowerment Principles (WEPs), reinforcing our commitment to gender equality. I would also like to highlight the launch of a talent pool

exclusively for people with disabilities, with the aim of making our workplaces truly inclusive.

Innovation is one of our values: it drives us to transform people's lives with sustainable attitudes and solutions. In 2023, we can highlight the special edition of Irani Labs focused on ESG, the Irani Labs B4B edition aimed at our customers, and significant investments in startups through Corporate Venture Capital (CVC) Irani Ventures.

Another very important initiative was the commissioning of the chemical recovery boiler at the Gaia I project, a measure aimed at increasing the company's production capacity and own power generation. In 2023, we increased water reuse in energy generation processes by 5.7% with the start-up of the recovery boiler.

Finally, we cannot forget to mention some of the recognitions we've received, such as the Bronze Trophy among the Best in Management nominated by the FNQ, the ANEFAC

Transparency Trophy for the third consecutive year, and finalists in Exame's Best of ESG 2023 award. We were also awarded the Innovative Workplaces 2023 seal by MIT Technology Review Brazil, highlighting our innovation in management, products/services, marketing and processes.

In the 2023 GPTW survey, we achieved 90% employee satisfaction and ranked 29th in the national ranking of the 150 Best Companies to Work For in Brazil. We are also ranked 2nd in Santa Catarina, 4th in Rio Grande do Sul, 12th in São Paulo and 11th in the GPTW Best Companies to Work For - 50+ ranking.

For more than eight decades, we have welcomed and nurtured life, always striving for financial equilibrium and guided by ethics and respect for people and nature. We want to continue to be the protagonists of a more prosperous and sustainable future.

Have a good read!

Sérgio Ribas,
President and CEO.



GRI 2-6

OUR BUSINESS MODEL

Irani

Business Profile

Our Strategic Intent

Striving for excellence in management

Main Capital Results 

ADAIR FERNANDES
Paper MG Unit



CAMILE MASCARENHAS
Paper SC Unit

IRANI

GRI 2-1

Irani manufactures 100% recyclable products from renewable natural resources. The process is the result of the connection we seek with nature at every stage of production – from the raw material to the final product. This means that we have a positive impact on the surrounding communities and the environment.

(2-2) We are one of Brazil's leading companies in the packaging paper and corrugated cardboard packaging segments. With integrated production, our own forests and self-generated energy, we manufacture packaging paper, corrugated cardboard sheets and boxes, pine, rosin and turpentine resins. But our business goes beyond manufacturing products: we constantly seek to sow relationships in order to reap prosperity.

For more than eight decades, we have been embracing and packaging life, carrying items that improve people's daily lives. The certainty that we are collectively shaping the future has always motivated us. Over the next few years, we want to continue planning, shaping and involving life. Of people, of the planet.

BUSINESS PROFILE

(2-1)

Irani Papel e Embalagem S.A.'s businesses are comprised of three segments, which operate independently, harmoniously, and in an integrated manner. We seek to optimize the use of planted pine forests by multipurposing them, recycling paper and verticalizing the business.



SUSTAINABLE PACKAGING SEGMENT

manufactures light and heavy corrugated cardboard boxes and sheets, with two industrial units: Packaging SC, in Campina da Alegria, and Packaging SP, in Indaiatuba.



SUSTAINABLE PACKAGING PAPER SEGMENT

produces low and high-grammage Kraft paper and recycled paper for the foreign and domestic markets, most of which is transferred at the Sustainable Packaging Segment units. They operate a facility in Vargem Bonita, home to four paper machines (Paper SC Campina da Alegria), and another plant in Santa Luzia, home to one paper machine (Paper MG Santa Luzia).



RS FORESTRY AND SUSTAINABLE RESINS SEGMENT

sells wood, rosin and turpentine. The products are manufactured from forest assets owned by the company and purchased from third parties. The Resin RS Balneário Pinhal business unit, with an industrial plant in Balneário Pinhal (RS), uses natural resin from the pine forest to produce rosin and turpentine. Mainly destined for the foreign market, the substances are used in the manufacture of varnishes, paints, soaps, glues and adhesives, among other items.

Click on the icons
to see each of
Irani's units.



Check out details
of the segments in
which we operate



GRI (2-2)

SUBSIDIARIES

Irani Papel e Embalagem S.A. has the following wholly-owned subsidiaries

Habitasul Florestal S.A.

Has a land base of 5,900 hectares, of which 3,900 are planted with pine in Rio Grande do Sul. It supplies resin to Irani Papel e Embalagem S.A.'s Resinas unit and wood to customers in the region.

Iraflor Comércio de Madeiras Ltda.

Is responsible for managing and selling wood and forests for the parent company Irani Papel e Embalagem S.A. and for the market.

HGE – Geração de Energia Sustentável S.A.

non-operational

Irani Soluções para E-commerce Ltda.

operates in packaging e-commerce where it seeks to provide sustainable packaging solutions to the market. During the year, its activities were closed, given the low demand at the moment

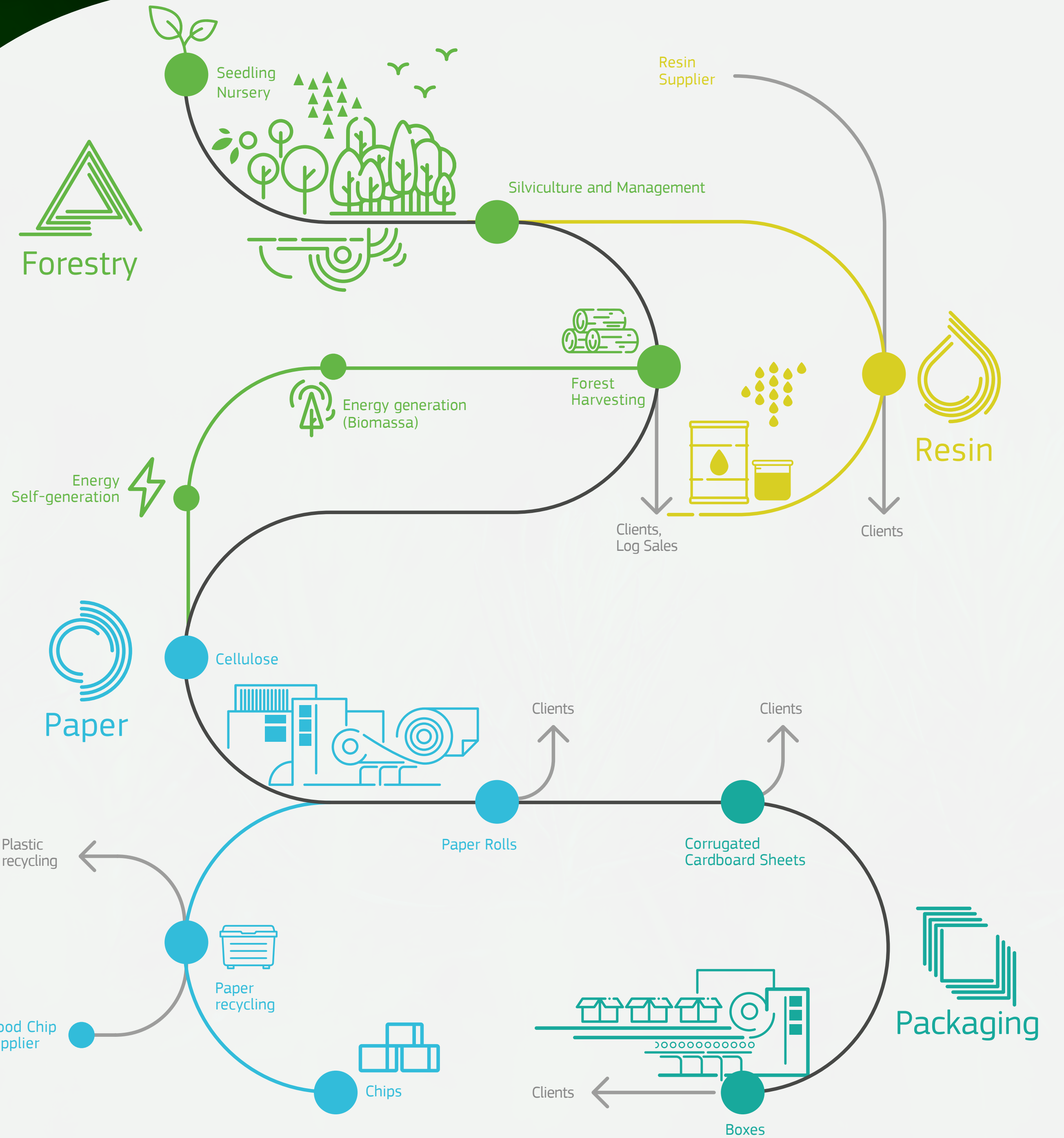
Irani Ventures Ltda.

A Corporate Venture Capital (CVC) vehicle for prospecting, selecting, investing in and accelerating startups that have high growth potential and work in synergy with our business model.



CLAYTON DA SILVA
Packaging SP Unit

Forestry



OUR STRATEGIC INTENT

(2-22)

In 2021, Irani revised its Strategic Intent based on the guidelines of the Strategic Plan drawn up for the 2021-2030 cycle, with the approval of the Executive Board and the Board of Directors. In the revision process, the following **purpose** was added to the Company's Strategic Intent:

Transforming people's lives with sustainable attitudes and solutions

It is our purpose, that which guides our attitudes and drives us to be the Iranivwe want to be in 2030

MISSION

Build valuable relationships to generate prosperity.

VISION

To be the best and most admired company in the businesses in which it operates.

VALUES



Life, first of all

We respect all the lives that make up our ecosystem. We seek balance and security in everything we do.



Sustainability

We work in balance, with proper governance, environmental, economic and social responsibilities



Protagonism

We make it happen. We have courage and we believe in autonomy and empowerment.



Diversity and Inclusion

We respect and welcome each individual. We value the power of differences.



Cordiality

We treat people with cordiality and respect, essential for building valuable relationships.



Integrity

We understand integrity and ethics as the foundation of everything we do.



Focus on the Client

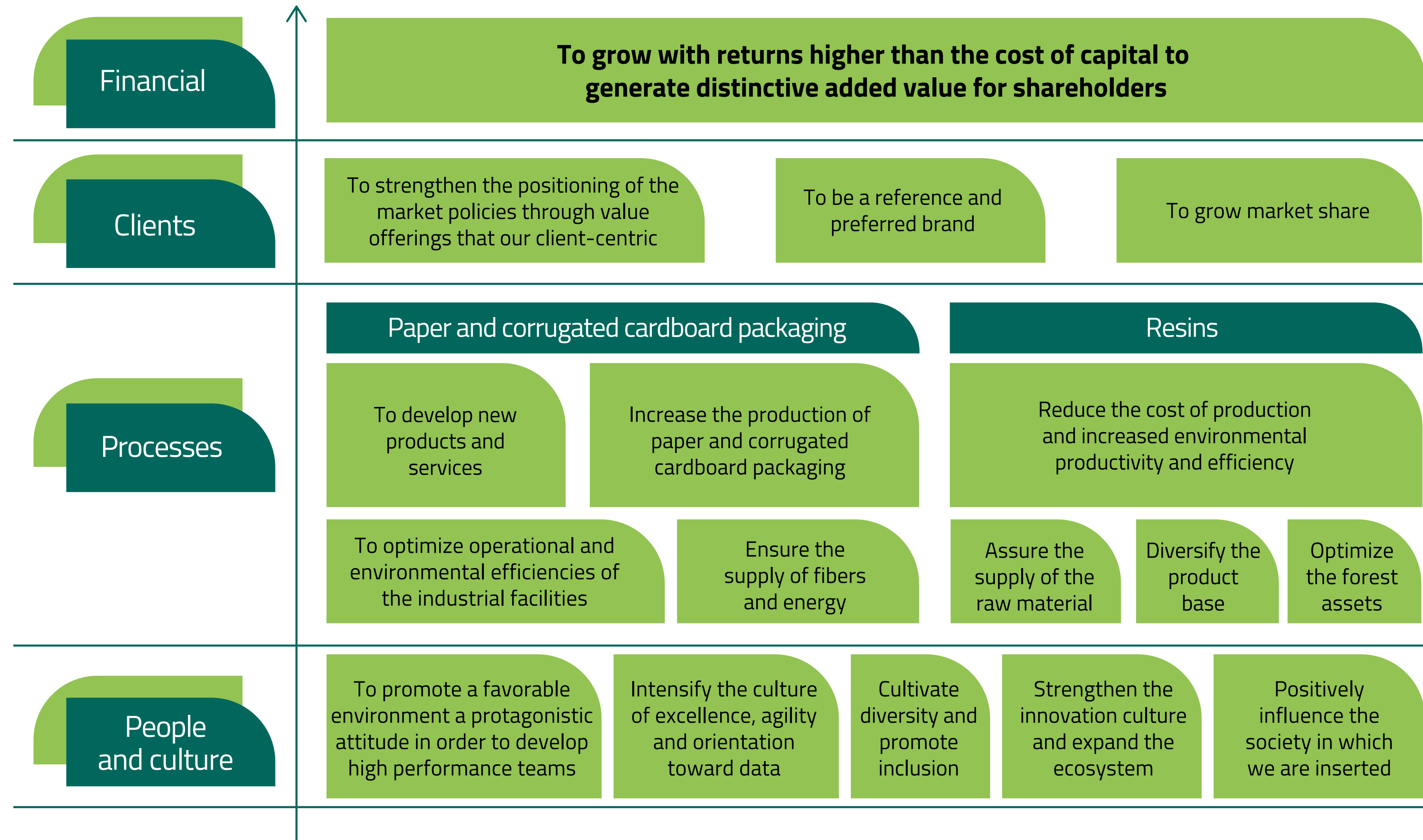
We understand the challenges of our clients and work together, with agility and excellence, for the sake of prosperity.



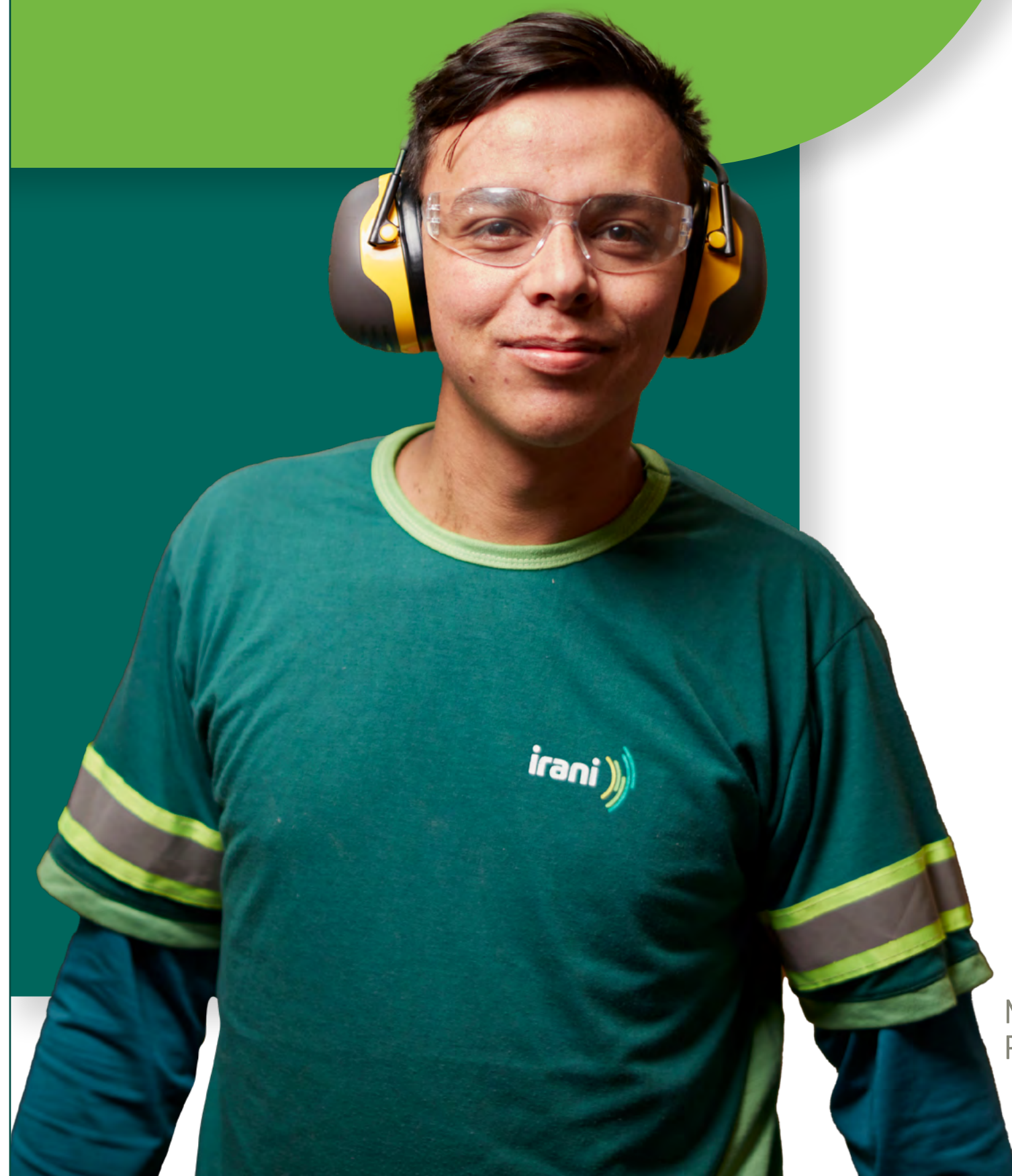
Innovation

We value the new. We understand that resilience, agility and permission to make mistakes are essential for creating new solutions.

We use the Balanced Scorecard (BSC) methodology to draw up our Strategy Map, aligning the strategic objectives according to four perspectives: Financial; Clients; Processes; and People and Culture.



Based on the Strategy Map, we have listed the main challenges and uncertainties for the 2021-2030 cycle in each of the perspectives.



FINANCIAL OUTLOOK

- Reduce the cost of debt (Kd) via new issues;
- Maintain leverage/rating/debt maturity/cash balance in line with the Financial Management Policy during the execution of the Gaia Platform;
- Equalize debt and equity capital;
- Guarantee the availability of resources for future growth;
- Maintain a return on invested capital above the average cost of capital;
- Maximize market value and shareholder return.

CLIENT PERSPECTIVE

- Developing new services/products that really add value to customer relations;
- Monitor the risk of impact on client operations due to new waves of Covid-19 infection or other viruses;
- Expand products that are able to replace less sustainable raw materials (such as plastic), capturing this increase in demand.

PROCESSES PERSPECTIVE | SUSTAINABLE PACKAGING PAPER

- Carry out the Gaia Platform's profitability and expansion projects within the stipulated deadlines and budgets;
- Avoiding dependence on just one machine to produce lightweight paper;
- Monitor the entry of better quality recycled and white papers into the lightweight segment, resulting in increased market competition;
- Monitor the migration of players from the printing and writing market to the packaging paper market – which could lead to an increase in supply in the market.

MATEUS BARBOSA
Paper SC Unit

PROCESSES PERSPECTIVE | SUSTAINABLE PACKAGING

- Sell the additional volume provided by Gaia II to the SC Packaging unit without reducing the profitability of the business;
- Maintain profitability in the midst of a challenging macroeconomic scenario for the coming years;
- Increase market consolidation, generating increased competitiveness;
- Monitor investments to expand competitors' capacities, increasing the supply of products on the market.

PROCESSES PERSPECTIVE | SUSTAINABLE RESINS

- Reduce costs and unproductive time related to equipment obsolescence and outdated industrial technology;
- Develop a chain of loyal suppliers and support the formalization of supply chain players;
- Increase intelligence about the rosin and turpentine markets and make more assertive price and demand forecasts;
- Increase the options for transporting production through various ports and logistics modes.

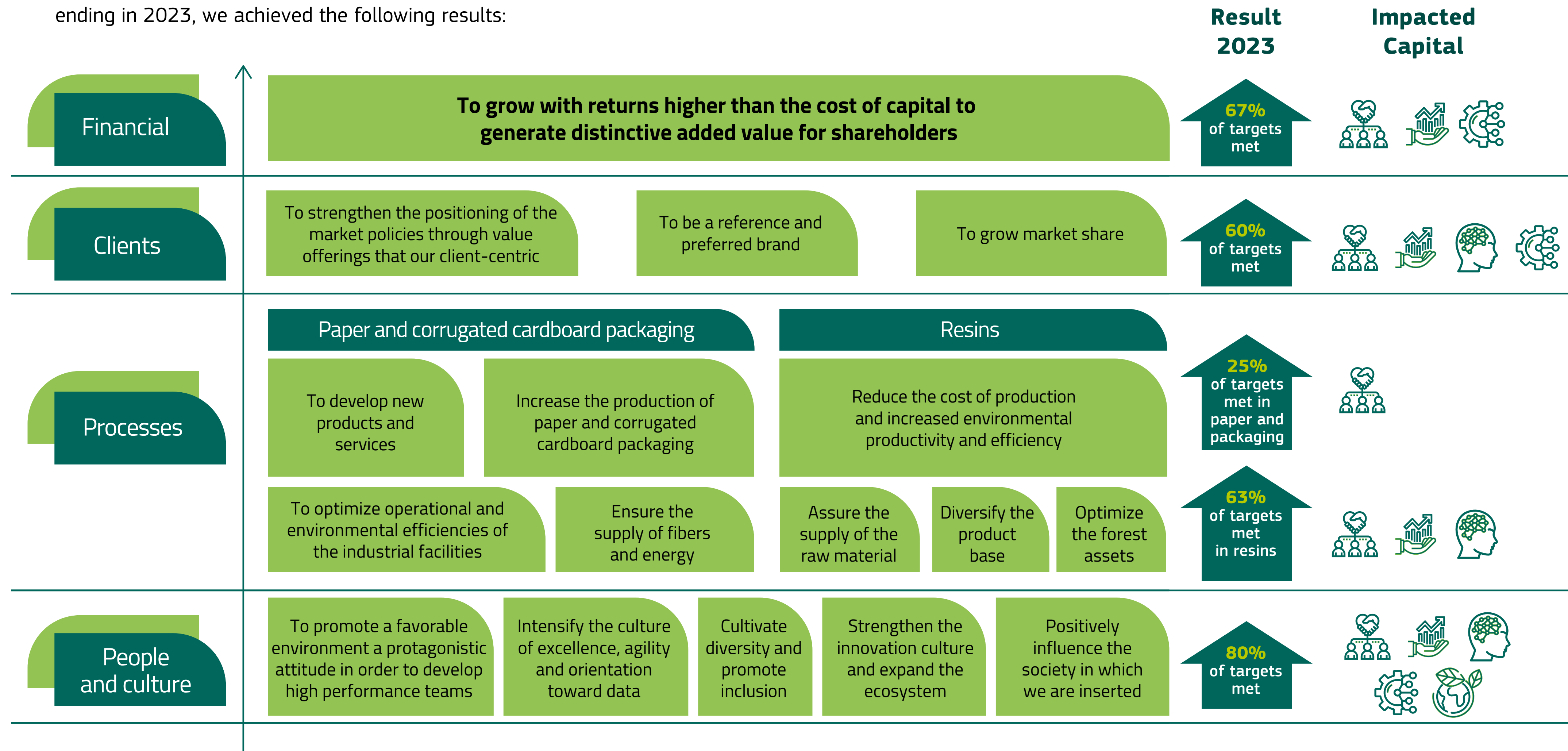
PEOPLE AND CULTURE PERSPECTIVE

- Compete for talent with companies that are less hierarchical, more innovative, competitive and faster in their people management practices;
- Train women to take on roles similar to those of men in the operation and leadership of teams, given that, as an organization with an industrial profile, the workforce is predominantly male;
- Consolidate the culture of innovation and expand the implementation of new ideas due to the need to raise the level of conceptual and strategic understanding of innovation. In addition, measure results through the implementation of internal ideas;
- Increase investments in RD&I across areas, since there is no budget for investment in innovation set by the company;
- Expand operations in innovative ecosystems, exploring connections and investments through Corporate Venture Capital in disruptive innovations to strengthen the open innovation strategy.

FRANCISCO DE CARVALHO
Packaging SP Unit



Irani's strategic objectives are broken down into annual targets, which can be extended until the end of each Strategic Planning cycle. For the period ending in 2023, we achieved the following results:



Finalizamos a Estratégia mostrando a Irani que queremos ser em 2030



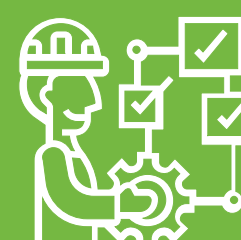
Growing with
a distinctive
generation of value
for shareholders



Optimized
capital
structure



Self-sufficiency in
the generation of
renewable energy.



Among the
best places to
work in Brazil



A market
benchmark



Innovative,
diverse and
inclusive

This Integrated Report contains the material issues listed by stakeholders that guide our sustainability strategies. Our Governance structure is based on establishing management practices that are aligned with the organization's Strategic Planning and which, translated into actions, generate value over time.

The themes are aligned with the Strategic Plan, which contributes to achieving our mission of “building valuable relationships to generate prosperity” in its essence for a greater purpose: “transforming people’s lives with sustainable attitudes and solutions.” Here is the breakdown of management practices:

- **Being listed on B3's Novo Mercado**, which has improved the company's governance and generated even more reliability for investors;
- **Customer Focus Program**, to promote the prosperity and innovation of our customers;
- **Climate survey**, to improve people management and generate personal and professional development for employees;
- **Socio-environmental projects in the communities surrounding our units**, promoting sustainable development and gaining recognition through awards from governments and society;
- **Development of the Irani Suppliers and Urban Forest programs** to develop partnerships with suppliers and generate value in the production chain;
- **Irani Labs and Irani Ventures program**, to accelerate startups and strengthen an innovative ecosystem.

GRI (201-1)

We added

R\$ **1,292**
million

to the
company,
of which



R\$ **372**
million

distributed in the form of municipal, state and federal taxes and contributions

R\$ **300**
million

reinvested in our own businesses

R\$ **262**
million

to employees, distributed in the form of remuneration, benefits and incentives

R\$ **264**
million

to other publics, distributed among service providers and other sectors

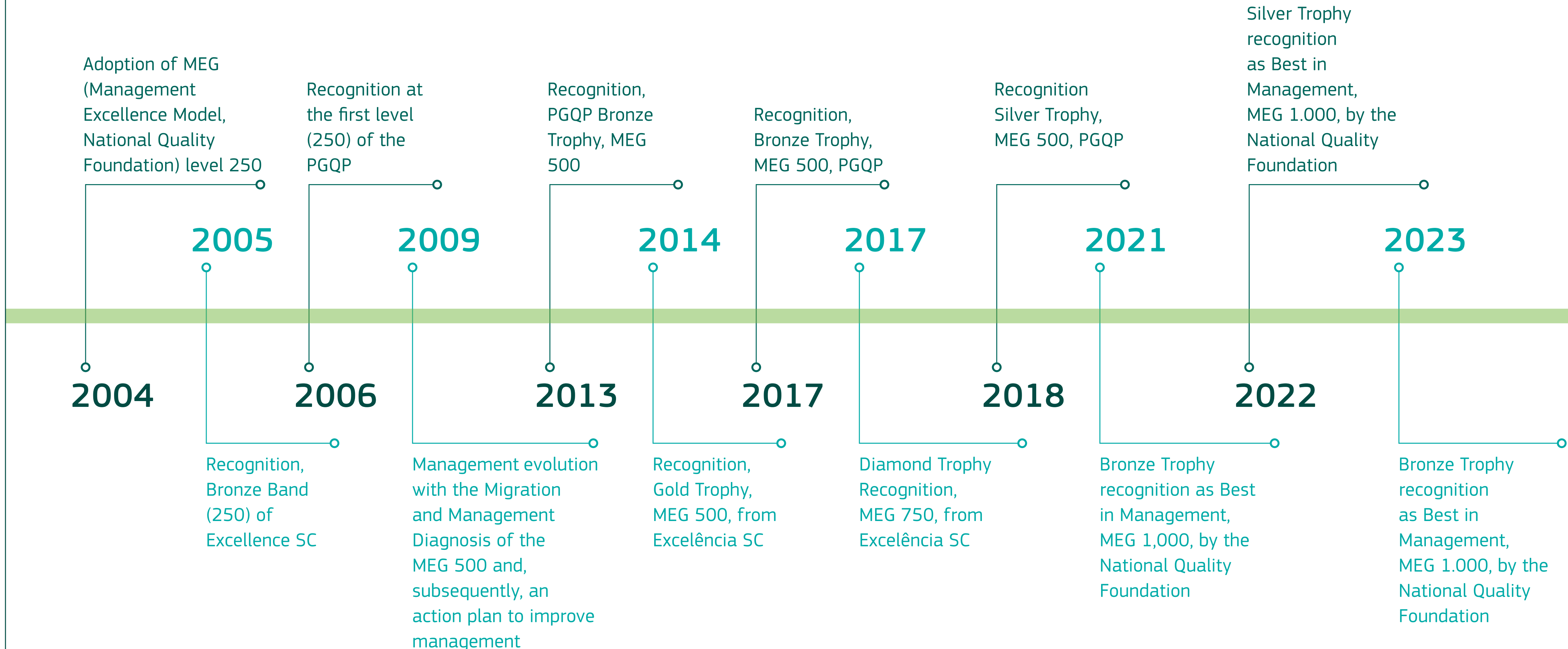
R\$ **94**
million

to shareholders, distributed in the form of dividends or interest on own capital (IOE)

STRIVING FOR EXCELLENCE IN MANAGEMENT

The pursuit of excellence has always guided Irani's activities. Among the milestones of our journey, we can highlight the implementation of quality and environmental certifications.

Find out more about other initiatives adopted over time, as well as awards and recognitions achieved by the company:



MAIN CAPITAL RESULTS

SOCIAL AND RELATIONSHIP

We are still the only packaging company in the IGPTWB3 portfolio;

For the second year in a row, we have been included in the B3 Dividend Index (IDIV B3), a select group of stocks with outstanding shareholder remuneration, and in the B3 Corporate Sustainability Index (ISE B3) portfolio, which brings together the best-rated companies in terms of governance and sustainability practices;

We continue to be the only company in the packaging segment in the IGPTW B3 portfolio;

For the third time in a row, we won the ANEFAC Transparency Award, ranking among the ten companies with the most transparent financial statements in the country in 2023, in the Net Revenue below R\$5 billion category;

We improved governance by establishing the Fiscal Council and including women on both the Board of Directors and the Fiscal Council.

We incorporated two more management nuclei related to Clients and Processes in order to improve the experience of clients and processes;

We registered and dealt with 126 manifestos on the Code of Ethics, of which 78 related to behavior and the work environment, 34 to business integrity, four consultations and ten on other miscellaneous matters;

We improved Risk Management, Internal Controls, Internal Auditing and Quality and Environmental Management, integrating them

into the Softexpert system and adding value to the Corporate Governance process;

We carried out our second cycle of multi-stakeholder Humanized Research, assessing brand reputation, management principles, organizational culture and narratives, and obtained an A rating, considered to be high and above the market;

We held our 3rd Irani Investor Day;

We obtained 84 in the General NPS Index in the Customer Satisfaction Survey, with 60% giving it the highest score;

25.79% of staff members were involved in volunteer activities;

We directed R\$4.5 million to municipal funds and projects in our surroundings, using Tax Incentive Laws;

We invested R\$660,000 in social projects and institutional donations via private social investment;

We are signatories to the Global and Business Pact for Integrity and Against Corruption, committed to ethics and human rights;

We earmarked more than R\$351 million for purchases from local suppliers, which represents more than 28% of the company's purchases.

FINANCIAL

We had R\$1,594,245 thousand in Net Operating Revenue, 5.5% lower than in 2022;

Adjusted EBITDA of R\$490,476 thousand, 8.8% lower than in 2022;

Net Profit of R\$383,434 thousand, 1.4% higher than in 2022;

We achieved 2.07x Net Debt/Adjusted EBITDA;

ROIC (Return on Invested Capital) of 16.6%;

We closed the share buyback program with the acquisition of 6,529,400 shares at an average price of R\$8.21;

Cash of R\$600,981 thousand and 96.6% of gross debt is classified as long-term, 99.6% of which is denominated in local currency.

NATURAL

More than R\$ 204 million invested in environmental management initiatives, improvements and processes;

More than 938 hours dedicated to environmental education, benefiting more than 3,300 people;

We set aside 42% of our territory for nature conservation;

We reduced the specific use of water per net ton produced by 1%;

We achieved 80.34% reuse of water in the Papel SC process;

We had a 1.9% increase in effluent generation per net ton;

98.2% of raw materials came from renewable sources;

We recorded a 28.4% reduction in non-hazardous waste sent to landfill;

We achieved a positive balance of 47,164 between emissions (Scope 1 and 2) and removals of Greenhouse Gases;

We reached 39,645 Carbon Credits (CERs) available for sale, with 30,419 CERs generated in 2023 by the CDM projects at the Effluent Treatment Plant and the Cogeneration Plant at the UN;

The company is a signatory of the SC and RS Sustainable Development Goals.

HUMAN

We achieved 90% employee satisfaction in the GPTW survey, ranking 29th in Brazil, 4th best company to work for in Rio Grande do Sul, 2nd best large company in Santa Catarina and 12th in São Paulo. In the Industry ranking, we were among the eight best companies to work for in Brazil;

We created a multidisciplinary working group in the Gera Accessibility program to improve the architectural review project for our factories;

We won the GPTW Best Companies to Work For - 50+ 2022 ranking for the first time, ranking 11th;

More than 73% of vacancies were filled by internal recruitment;

97% employee satisfaction with the onboarding process;

We became signatories to UN Women's Women's Empowerment Principles (WEPIs), committing ourselves to taking measures to increasingly promote gender equality in our workplace, marketplace and community;

We are signatories to the LGBTI+ Rights and Business Forum, promoting efforts to make Irani's 10 Commitments to LGBTI+ Rights a reality, bringing benefits to society;

We implemented the first talent bank for people with disabilities, which today has 27 registered CVs;

We invested R\$ 53,819 thousand in employee benefits;

We dedicated more than 46 hours of training per employee;

R\$ 2,349,000 was invested in training and development;

We invested R\$ 329,000 in education subsidies;

We achieved 73% of the Supera Resultado Program's indicators at the overachievement level and 16% at the objective level;

We provided 1,155 services to the mental health program through the Psicologia Viva platform;

A 20% reduction in the rate of serious accidents (rate 84.40);

22.8% reduction in the lost-time accident frequency rate (rate 6.17);

1 life was changed due to serious and/or permanent injuries;

More than 900 hours were dedicated to training in Regulatory Standards;

R\$ 13 million invested in health and safety improvements.

INTELLECTUAL

We had 283 ideas registered in the Ideas Program, of which 113 were implemented;

43 ideas were recognized with financial support, totaling R\$ 70,000.00 and with an operational/potential result of R\$ 3,600,000.00;

1,460 hours of training, promoting a culture of innovation;

56 active innovation projects and initiatives on the four Technology Platforms, eight of which are in the ideation phase, 18 in monitoring, 13 in research and 17 in development;

We have achieved more than R\$ 2,209,000 in expected net tax benefits, with 58 projects eligible for the Lei do Bem (Good Law);

R\$ 900,000 invested in the startup Mush, which develops innovative technologies to replace disposable and non-biodegradable materials with sustainable solutions based on agricultural waste;

We invested R\$ 1,500,000 in the startup growPack, which adopts a business model centered on sustainability, developing solutions that drive the transition to a circular economy based on biological principles, innovatively connecting plants and people;

We held the first Irani Labs ESG, in which we selected seven startups in five main areas: Waste, Climate Change, Sustainable Packaging, Diversity and Surrounding Communities and Improving Social Conditions in the Work of Waste Pickers;

We also held the first Irani Labs B4B (Business for Business), a special edition of our open innovation program with startups, with the aim of disseminating knowledge and advanced innovation practices to our customers;

We strengthened our presence in the TOP Open Corps 2023 ranking as leaders in open innovation with startups in Brazil. We were awarded TOP 3 in Pulp and Paper and TOP 10 in the Middle Market category;

We are one of the 20 best corporations for startups, in an unprecedented study promoted by the global consultancy The Bakery, in partnership with ABStartups (Brazilian Startups Association) and the Monking communications group;

We came 13th in the Champions of Innovation 2023 ranking, as one of the most innovative companies in the south of the country;

We became partners of Cubo Itaú and Instituto Caldeira, important ecosystems that drive innovation;

We were awarded the Innovative Workplaces 2023 seal by the Massachusetts Institute of Technology - MIT Technology Review Brazil;

51 processes were robotized, saving 2,217 hours per month and 26,604 hours per year;

We created our Data Lakehouse, which radically simplifies data infrastructure (Big Data) and accelerates innovation;

We created our first IPA - Intelligent Process Automation, which in practice is a combination of robots (RPA) with artificial intelligence, improving the customer and employee experience, expanding the potential for automation in the implementation of orders, saving 383 hours per month;

88% of employees have been trained in Information Security;

We developed a Disaster Recovery strategy, enabling the company to recover the use of critical systems and IT infrastructure as quickly as possible in the event of failures or threats;

We created the Information Security Master Plan (PDSI), which serves as a management tool designed to balance the execution of information security actions.

MANUFACTURING

We launched the Lean Mentors certification, which has approximately 18 employees certified as Black Belt. In total, 195 Yellow Belt and 50 Green Belt employees were trained;

We achieved 101 productivity records in all our businesses;

We maintained 33,826.55 hectares of land, 82.4% of which is in Santa Catarina and 17.6% in Rio Grande do Sul;

More than 15,000 hectares of conservation areas;

100% of the businesses have been ISO 9001, ISO 14064 and FSC® certified (FSC®-C009947/FSC®-C020437/FSC®-C116791);

100% of the Packaging Business certified to ISO 14001;

298,271 tons of paper produced, an increase of 1.6% compared to 2022, 60% of which was transferred to the packaging business;

120,200 tons of sustainable packaging paper sold, a reduction of 3.8% compared to 2022;

165,000 tons of sustainable packaging sold, an increase of 3.2% compared to 2022;

We reached 10,900 tons of sustainable resins, a reduction of 20.3% compared to 2022 due to the reduction in demand and the less favorable dynamics of this segment in the year;

R\$ 297.6 million was invested in land, buildings, equipment, intangibles and reforestation;

R\$ 321.2 million was invested in the Gaia Platform;

50% self-generated energy;

64% renewable energy consumption.

R\$ 231.2 million was invested in the Gaia Platform;

50% self-generated energy;

64% renewable energy consumption

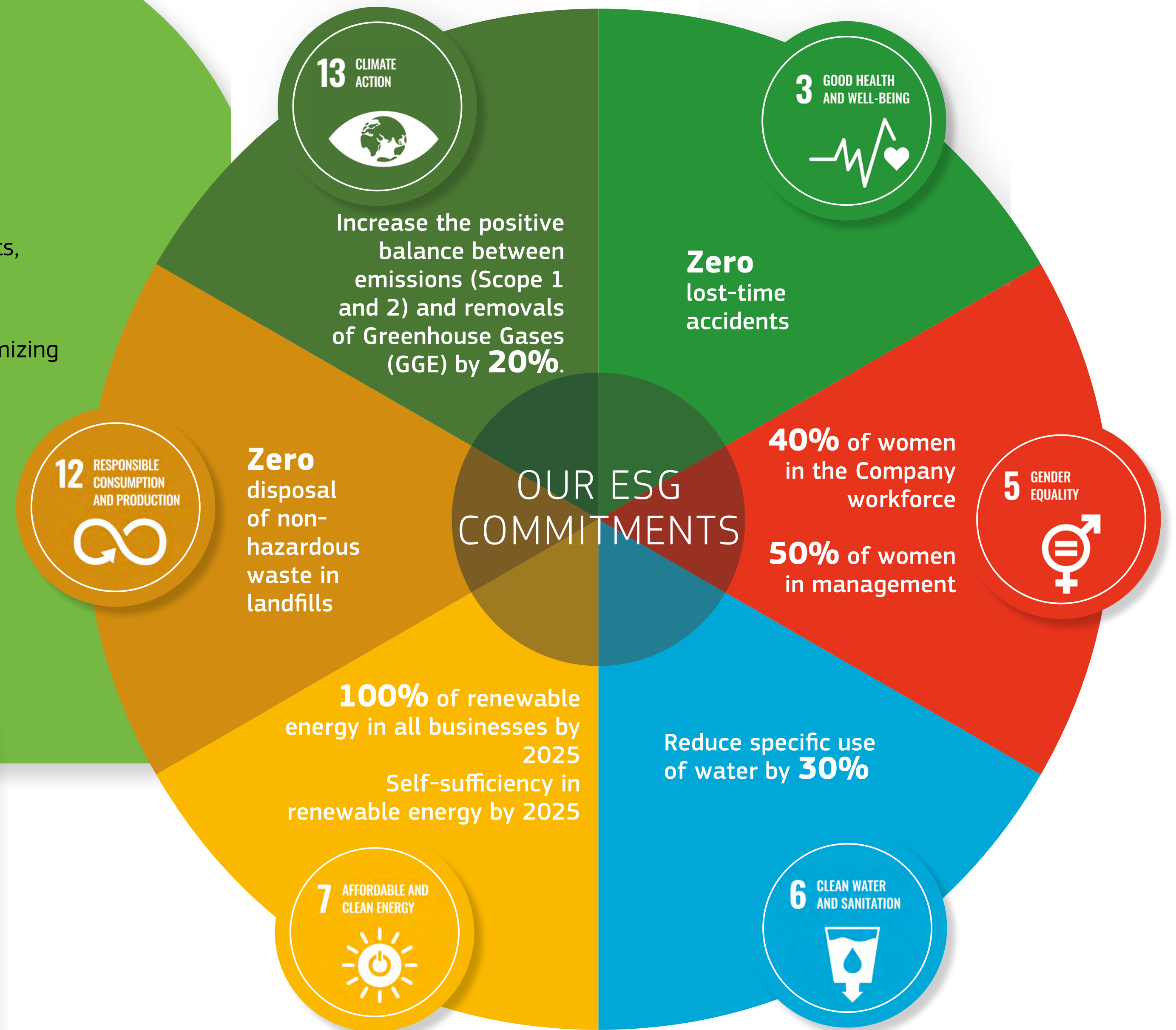
GRI (2-24)



OUR ESG COMMITMENTS




In line with the UN's global agenda for sustainable development, we have assumed six ESG commitments, with the aim of fulfilling them by 2030. They are included in our strategy and challenge teams to seek innovative solutions for the business, as well as optimizing operational processes.





MIRIELE FAVERO
Paper SC Unit



| SDG | Target | 2021 | 2022 | 2023 | 2030 | Performance in 2023 | What will we do by 2030? |
|---|---|------|------|------|------|--|--|
|  | Zero workplace accidents with time off work | 38 | 25 | 22 | 0 | <ul style="list-style-type: none"> Improvements were implemented to comply with regulatory standards. We launched 5 new health and safety programs, in addition to the 15 programs already in place. Promoted engagement in campaigns and educational actions that show a continuous effort to promote a culture of safety and health in the workplace. | <ul style="list-style-type: none"> Modernizing of the physical structures in the units through investments; Compliance and preparation of medical records for 100% of the regulatory standards applicable to our business units; Intensify educational campaigns and actions with the teams, fostering and multiplying the health and safety culture in an increasingly intense and assertive manner; ISO 45001 certification for our business units, with the aim of continuously optimizing organizational health and safety management processes. |
|  | 40% women in the workforce | 17% | 22% | 25% | 40% | <ul style="list-style-type: none"> Program “+ Delas na Operação,” which aims to provide opportunities for women to become professionals in the industrial area. As a result, we hired two female trainees for the Industrial Maintenance area, one of whom was hired as the company’s first female electrician; We created a working group made up of a multidisciplinary team under the Gera Accessibility program, which is discussing the architectural review project for our factories; We became signatories to the UN Women Women’s Empowerment Principles (WEPs). We are committed to acting to increasingly promote gender equality in our workplace, market and community; At the end of the first cycle of the “I value Diversity” project, a program for nominating minority groups in the company, we had a 6% rate of nominees.. | <ul style="list-style-type: none"> Keep at least 50% women in the final stages of selection processes; Open vacancies can be advertised affirmatively and exclusively by women; Implement a hidden selection process to reduce biases when choosing professionals; Implementation of the “+ Women in Operations” program in all business units; Target extended and evaluated in the performance program for leaders and top management. |

| SDG | Target | 2021 | 2022 | 2023 | 2030 | Performance in 2023 | What will we do by 2030? |
|---|--|---------------------------|---------------------------|---------------------------|-------------------------|---|---|
|  | 50% women in leadership positions | 17% | 19% | 21% | 50% | <ul style="list-style-type: none"> Empowering leaders was our focus, with initiatives to include the issue in the Lidera Program, a Plural Day with directors to strengthen (re)learning about the issue and the role of top leadership in the Diversity journey, as well as Mentoring with the CEO and other company directors to support development in relation to the issue; Defining strategies for maintaining and increasing the number of women in leadership in terms of recruitment and promotions. | <ul style="list-style-type: none"> To fill open leadership positions, a selection process will be carried out, ensuring at least 50% women in the final selection stage; Whenever there is a situation in which there is an immediate successor mapped out, direct promotion will be decided by the Board of Directors based on the behavioral assessment and technical criteria expected for the position; Open positions may be advertised affirmatively and exclusively for women; In order to meet the company's desired leadership profile, management skills will be prioritized when choosing the final candidates; Advanced mentoring for female leaders; Target extended and evaluated in the performance program for leaders and senior management. |
|  | Reduce water use by 30% per ton produced, compared to 2020 | 10.97 m ³ /ton | 10.65 m ³ /ton | 10.40 m ³ /ton | 8.3 m ³ /ton | <ul style="list-style-type: none"> Implementation of awareness actions, water reuse and circuit closure. | <ul style="list-style-type: none"> Continued investment in water reuse and circuit closure projects |
|  | To be self-sufficient in renewable energy generation* | 51% | 52% | 50% | 100%* | <ul style="list-style-type: none"> An increase in the purchase of energy, due to an accident at turbo generator 3 at the Papel SC plant, which resulted in a slight reduction in self-generation of energy and, consequently, in the availability of renewable energy. | <ul style="list-style-type: none"> Recovery boiler with power generator (GAIA I); Repowering of the CGHs (GAIA IV and V); Biomass boiler with power generator at Paper MG; Buying energy from an incentivized source; Studying alternative ways of producing renewable energy; |
| | Consume 100% renewable energy* | 64% | 67% | 64% | 100%* | | |

* Target for 2025

| SDG | Target | 2021 | 2022 | 2023 | 2030 | Performance in 2023 | What will we do by 2030? |
|---|--|--------------------------|--------------------------|--------------------------|--------------------------|---|--|
|  | <p>Zero non-hazardous waste sent to landfill</p> | <p>24,185 tons</p> | <p>17,445 tons</p> | <p>12,497 tons</p> | <p>0 Tons</p> | <ul style="list-style-type: none"> The significant reduction in the volume of non-hazardous waste sent to landfill was driven by the increase in production at the plastics recycling plant, the result of improvements made to the process. The purpose of the plant is to recover and bundle the plastic mix from the 05 recycled paper machine, located at Papel SC, and send it to recycling companies. | <ul style="list-style-type: none"> Sending braid strip waste for recycling (SC Paper); Discontinued operation of Broby kilns, eliminating generation of brick waste (Paper SC); Composting ETE sludge (Em-Packaging SP); Recycling of construction waste (Paper MG) and plastic bags (Resins); Burning in a boiler, disposing of plastic scraps to third parties (SC Paper); Optimization of segregation and collection of lower generation waste (all units). |
|  | <p>Increase the positive balance between emissions (Scope 1 and 2) and removals of Greenhouse Gases (GGE) by 20%.</p> | <p>41,596 tons CO2eq</p> | <p>14,047 tons CO2eq</p> | <p>47,163 tons CO2eq</p> | <p>63,183 tons CO2eq</p> | <ul style="list-style-type: none"> The company's scope 1 and 2 emissions fell by 3.77% compared to the previous year, with a notable reduction of 3.63% in direct emissions - scope 01; We defined the successional stage of 1,970 hectares of native forests in Santa Catarina, resulting in a significant contribution to annual removal of CO2e8,359 tons; Planted forests also showed a smaller variation in stock compared to the previous year, with the highlight being the forest base in Rio Grande do Sul, which remained positive and recorded an average increase of 38% in removals. The increase is attributed to the forest base not being reduced and the stock being maintained, resulting in the positive incorporation of carbon. | <ul style="list-style-type: none"> Increased energy efficiency in industrial plants; Reduction of non-hazardous waste going to landfill; Increasing the carbon reservoir by studying the carbon in the soil of our forestry base (native and planted); Increasing the forestry base. |

OUR CAPITALS

For us, creating value and achieving sustainable results is fundamental. It is about generating returns for shareholders, while always respecting the needs and expectations of customers, employees, suppliers, governments, the surrounding community and society. To achieve this goal, we have developed a series of capitals:

FRANCINI DA SILVA
Joaçaba SC Office



SOCIAL AND RELATIONSHIP

Reflects our governance practices, which translate into a transparent, ethical and honest way of relating to all stakeholders.

INTELLECTUAL

The reputation of the brand and the image of Irani, built on the concept of Valid Companies with a customer focus, generating value through the ability to develop innovative products and services.

FINANCIAL

Refers to our economic and financial management practices.

MANUFACTURING

Encompasses our physical and biological structures, spread across four Brazilian states. They are focused on delivering quality products, manufactured with a rational use of natural resources.

HUMAN

Is made up of our employees and their skills, enhanced by the structuring programs for hiring, integrating, training, developing, motivating, caring for and recognizing people.

NATURAL

Is how we care for renewable and non-renewable environmental resources, mainly water, air, land, forests and biodiversity. It is based on the best socio-environmental practices and has the appropriate certifications for each activity.

SOCIAL AND RELATIONSHIP CAPITAL

MARCIA SUTIL
Packaging SC Unit



GOVERNANCE

We are driven by the pursuit of the best relationship practices with our investors and other stakeholders. In 2023, the Company achieved two significant milestones: the election of the first woman to the Board of Directors and the establishment of the Fiscal Council. These steps are crucial for the evolution of the Company's Corporate Governance.

OUR GOVERNANCE STRUCTURE IS BASED ON SEVEN VALUES:

1. Transparency;
2. Social and environmental responsibility;
3. Ethics;
4. Courage;
5. Cordiality;
6. Innovation;
7. Pioneering spirit.



GRI 2-9, 2-10, 2-11, 2-12, 2-13, 2-14, 2-16, 2-17, 2-18, 2-19, 2-20, 2-23, 3-3
ISE

B3 INDEXES IN WHICH THE COMPANY IS INCLUDED

| | |
|------------------|---|
| IGC B3 | Differentiated Corporate Governance Stock Index Governance Stock Index |
| IGC-NM B3 | Corporate Governance Index - Novo Mercado |
| ITAG B3 | Differentiated Tag Along Stock Index |
| IBRA B3 | BM&FBOVESPA Broad Brazil Index |
| IMAT B3 | Basic Materials Index BM&FBOVESPA |
| SMLL B3 | Small Cap Index |
| IGCT B3 | Corporate Governance Trade Index |
| IGPTW B3 | B3 Great Place to Work Index |
| IAGRO B3 | B3 Agribusiness Index |
| ISE B3 | B3 Sustainable Company Index |
| IDIV B3 | B3 Dividends Index |

COMPANY STRUCTURE

On December 31, 2023, our share capital was R\$ 566,894,847.81, divided into 246,359,319 shares, of which 100% are common shares (ON: R\$ 8.05 each).

ON DECEMBER 31, 2023

| Shareholders | Common shares | % | Total shares | % |
|----------------------------------|--------------------|-------------|--------------------|-------------|
| Irani Participações S.A. | 101,760,520 | 41.31% | 101,760,520 | 41.31% |
| Habitasul Des. Imobiliários S.A. | 18,899,160 | 7.67% | 18,899,160 | 7.67% |
| Cia Habitasul de Participações | 11,492,067 | 4.66% | 11,492,067 | 4.66% |
| Treasury shares | 6,529,400 | 2.65% | 6,529,400 | 2.65% |
| Administrative shares | 1,208,935 | 0.49% | 1,208,935 | 0.49% |
| Free float | 106,469,237 | 43.22% | 106,469,237 | 43.22% |
| Total shares | 246,359,319 | 100% | 246,359,319 | 100% |



RENATA PAGANIN
Joaçaba SC Office



CLEBER DE SOUZA
Packaging SP Unit

SWAPS

On December 27, 2023, 3,036,633 (three million, thirty-six thousand, six hundred and thirty-three) shares of Irani Papel e Embalagem S.A., registered with CNPJ 92.791.243/0001-03, held by Companhia Habitasul de Participações S.A, were transferred in exchange for 29,214 (twenty-nine thousand, two hundred and fourteen) CIACOI shares held by Irani Participações S.A., with payment on this date of compensation by the Company to Irani Participações Ltda. for the difference in value of the assets, in the amount of R\$ 5.91 (five reais and ninety-one cents). As a result, the Company's new shareholding structure is as follows:

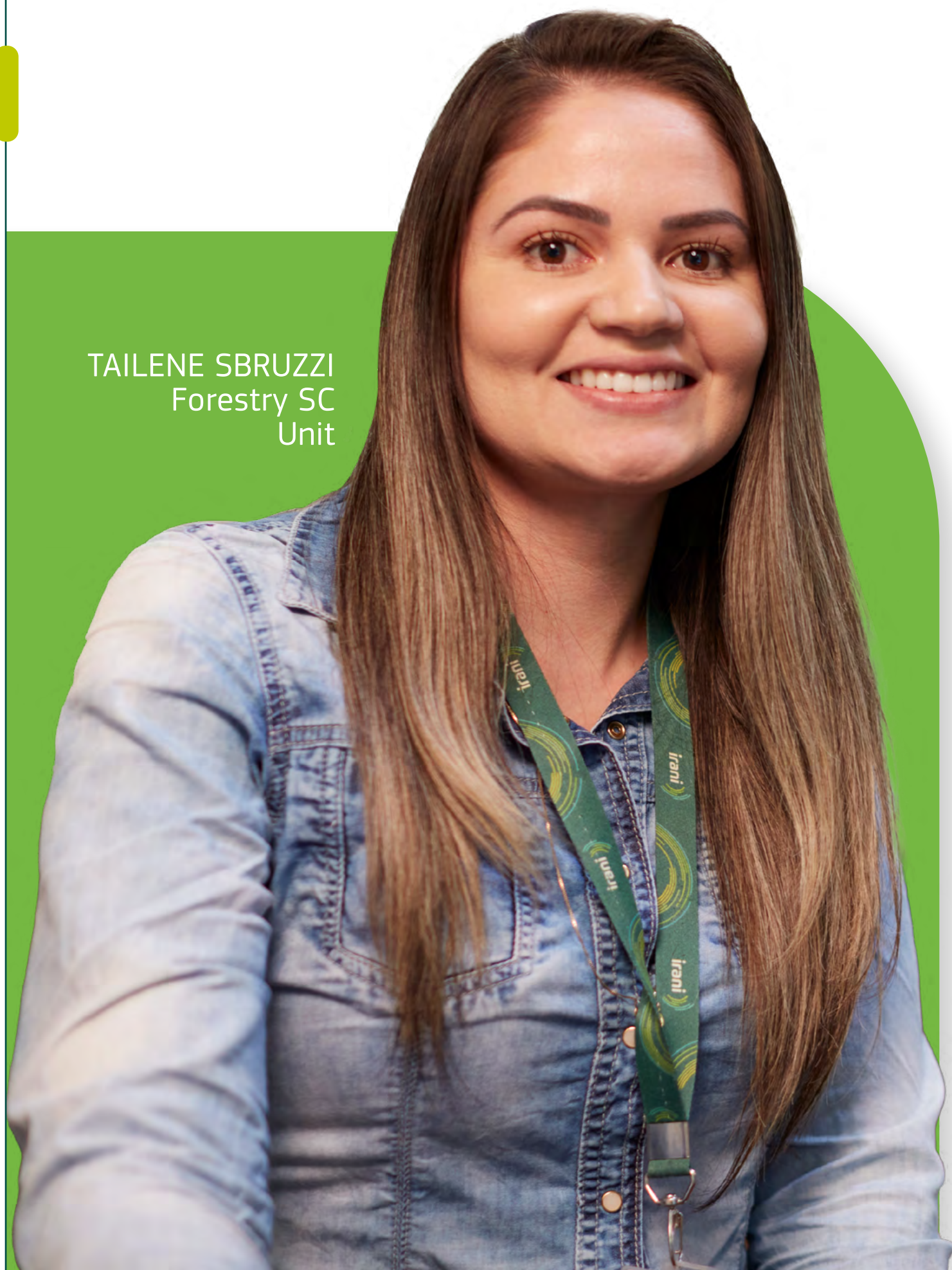
The transfers were made between companies with common corporate control. They were based on economic appraisal reports prepared independently by a specialized company. They did not entail any change in the company's assets and are in line with the company's strategic objective of rationalizing assets and optimizing its corporate structure.

| | ON/Total after exchange | Part. % Actual |
|-------------------|-------------------------|----------------|
| Irapar | 101,760,520 | 41.31% |
| HDI | 18,899,160 | 7.67% |
| CHP | 11,492,067 | 4.66% |
| Controlling group | 132,151,747 | 53.64% |

GOVERNANCE STRUCTURE

GRI 2-9 and 2-10

TAILENE SBRUZZI
Forestry SC
Unit



SEGMENT

The company joined the New Market in 2020. It had been listed on B3, formerly Bovespa, since 1977.



TAG ALONG:

100% common shares.



DISTRIBUTION
OF DIVIDENDS

25% of adjusted net income quarterly, per the Dividend and the Interest on Own Equity Policy. Additional dividends will be distributed, based on the annual Financial Statements, in the amount of 50% of the annual net profit for the year, calculated in accordance with articles 22 to 29 of the Bylaws, discounting the Dividends and/or Interest on Equity already distributed, provided that, at the end of the year, the operating leverage ratio Net Debt/EBITDA is equal to or less than 2.5.



BOARD OF
DIRECTORS

Composed of six members elected by the General Shareholders' Meeting, with a unified term of office of two years. Re-election is allowed. Three members are independent, with shareholder representation (controlling block). They have a non-executive function.



BOARD OF
EXECUTIVE
OFFICERS

Five members, elected by the Board of Directors. There is no combined position of CEO and Chairman of the Board. They serve a unified two-year term.

FISCAL
COUNCIL

Composed of three members and alternates in equal numbers, elected by the General Meeting, with a one-year term of office.



ANNUAL
CALENDAR OF
EVENTS

Published annually since 2011.

GENERAL SHAREHOLDERS' MEETING

In compliance with the Bylaws and the Brazilian Corporation Law, it is held by ordinary or extraordinary call at Irani's headquarters in Porto Alegre (state of Rio Grande do Sul), with the following attributions:

- **Deliberative function:** approves the directors' accounts and decides on the election of directors and the allocation of profits and dividends.
- **Ordinary:** examines, discusses and votes on the financial statements, the allocation of net profits for the previous year, the distribution of dividends and the election of members of the Board of Directors. It takes place in the first quarter of each year.
- **Extraordinary:** held whenever necessary to decide on relevant topics, in accordance with the Company's Bylaws.

BOARD OF DIRECTORS GRI 2-12

Discusses strategic issues on a monthly basis, such as corporate policies, relations with the market, investments and risks inherent to the business. It is responsible for the periodic assessment of management, which is recognized and widely disclosed in the quarterly and annual financial statements. Its duties are set out in article 12 of the Bylaws, such as: deliberative function, election of the Board of Executive Officers, supervision of the management of the Board of Executive Officers, allocation of the remuneration of the Board of Executive Officers and calling general meetings.

BOARD OF EXECUTIVE OFFICERS GRI 2-13

Provides guidelines and validates the company's strategic intent, aligning economic and socio-environmental policies and goals, among other aspects. With the support of the teams, it implements decisions arising from projects, reviews budgets, assesses the prioritization of needs and the implementation of controls and organizational changes. Always in line with the duties set out in article 14 of the Bylaws: executive function, representation of the Company before the market and stakeholders and responsibility for the financial statements.

FISCAL COUNCIL

This is the company's supervisory body, responsible for overseeing the actions of managers to ensure compliance with legal and statutory obligations. Matters are discussed quarterly or in special calls by the Chairman of the Fiscal Council. Made up of non-permanent members, they protect the company's interests, following laws, regulations and the guidelines of the bylaws and internal regulations. The responsibility of being a member of this group cannot be delegated. They are formed at the company's General Meeting or at the request of shareholders, in accordance with the law. Its activities are focused on the operations of the company, its subsidiaries and controlled companies, excluding other group companies.

AUDIT COMMITTEE

A non-statutory advisory body linked to the Board of Directors. It reports directly to the Board of Directors through its coordinator, at least quarterly. Its duties include: supervising the quality and integrity of the financial reports and the process of preparing the financial statements; monitoring the quality and integrity of the information (as well as the measurements disclosed); and evaluating the company's monitoring of the laws, rules and regulations applicable to it and the involvement of the Board of Directors.

ETHICS COMMITTEE GRI 2-16

Meets normally every two months and extraordinarily at any time, with a deliberative function. Its duties include ensuring compliance with the Company's Code of Ethics and Values, identifying situations contrary to the provisions of the Code of Ethical Conduct and promoting the Company's values.

PERSONNEL MANAGEMENT COMMITTEE

Made up of the Board of Executive Officers, managers and coordinators. Its main tasks are strategic alignment, monitoring results, initiatives and actions to improve the organizational climate, as well as contributing to the assessment of personnel management policies and practices, targets and indicators. It meets every six months.

STRATEGY AND ESG COMMITTEE GRI 2-14 and 2-17

an advisory body linked to the Board of Directors. It reports to the Board of Directors on a quarterly basis through its coordinator on an ordinary basis and on an extraordinary basis - when necessary, when convened by the coordinator, through the secretary.

Its duties include:

- **As Strategy Committee:** to stimulate strategic thinking within the scope of the Board of Directors; to advise the Board of Directors in the process of defining strategic guidelines; and to monitor strategic projects, supporting management in their execution and reporting relevant facts to the Board.
- **As ESG Committee:** to review the ESG policy and strategy and recommend its approval to the Board of Directors, considering best market practices and applicable laws and regulations. It must also monitor the ESG strategy and policy, including projects, proposals, initiatives, internal processes and organizational structures, as well as the company's social, environmental and governance commitments and indicators. The committee is also responsible for reporting to the Board of Directors, the Audit Committee or the Compliance area any situations with potential risk to image, reputation and/or assets related to ESG issues.

INVESTMENT COMMITTEE

Made up of the Executive Board, managers of strategic projects, procurement, finance and planning and management. Its main duties are to approve and monitor the project portfolio; evaluate and authorize investments; manage project risks; as well as evaluate their execution, ensuring the proper use of human and financial resources. It meets monthly.

INNOVATION COMMITTEE

Made up of a strategic group that reports to the Executive Board. It is made up of the Executive Board, business managers and teams involved in planning RD&I projects. It meets every six months. Its role is to foster the company's results and innovation strategy.

CRISTIANO BERTOLDO
Packaging SP Unit



MANAGEMENT CORE GROUPS

Since 2022, we have established Management Core Groups with the aim of fostering an environment where employees are protagonists and there is innovation and autonomy. The idea is for staff to create, propose and participate in solutions to Irani's strategic challenges, breaking down silos and reducing the impact of traditional hierarchies. Their aim is to:

- Promote thematic transversality;
- Enhance participatory management;
- Foster and encourage the participation of employees from all hierarchical levels;
- Facilitate strategic prioritization;
- Encourage teams to play a leading role;
- Balance demands among leadership levels and functional teams.

The core groups also have as their guiding principles Irani's raison d'être, values, mission, vision and strategic guidelines, as well as the code of ethics and current internal and external regulations.

The core groups, of about 30 people, consist mainly of non-leadership employees and leaders up to the position of coordinator, reporting to the Board of Executive Officers. Each group has a leader, a secretary, a technical representative, and members. This structure allows for the creation of working groups to support projects, plans, practices, and actions. Each member can participate in only one center. Meetings with the Executive Board were held every two months in 2023.

The core group members are chosen on a voluntary basis. If necessary, they are selected on the basis of tie-breaking criteria, namely: length of time in the company; a high score in the competency test; a proposal to contribute to the group; and diversity (units, areas, gender, ethnicity, generation). Members will participate for a minimum of one year and a maximum of two.

With strategic themes, the centers are organized and guided by the following objectives:



PEOPLE

Promote an environment conducive to a protagonist posture in order to develop high-performance teams.



SUSTAINABILITY

Cultivate and promote sustainability in all business units.



DIVERSITY

Cultivate diversity and promote inclusion.



INNOVATION

Strengthen the culture of innovation and expand the ecosystem.



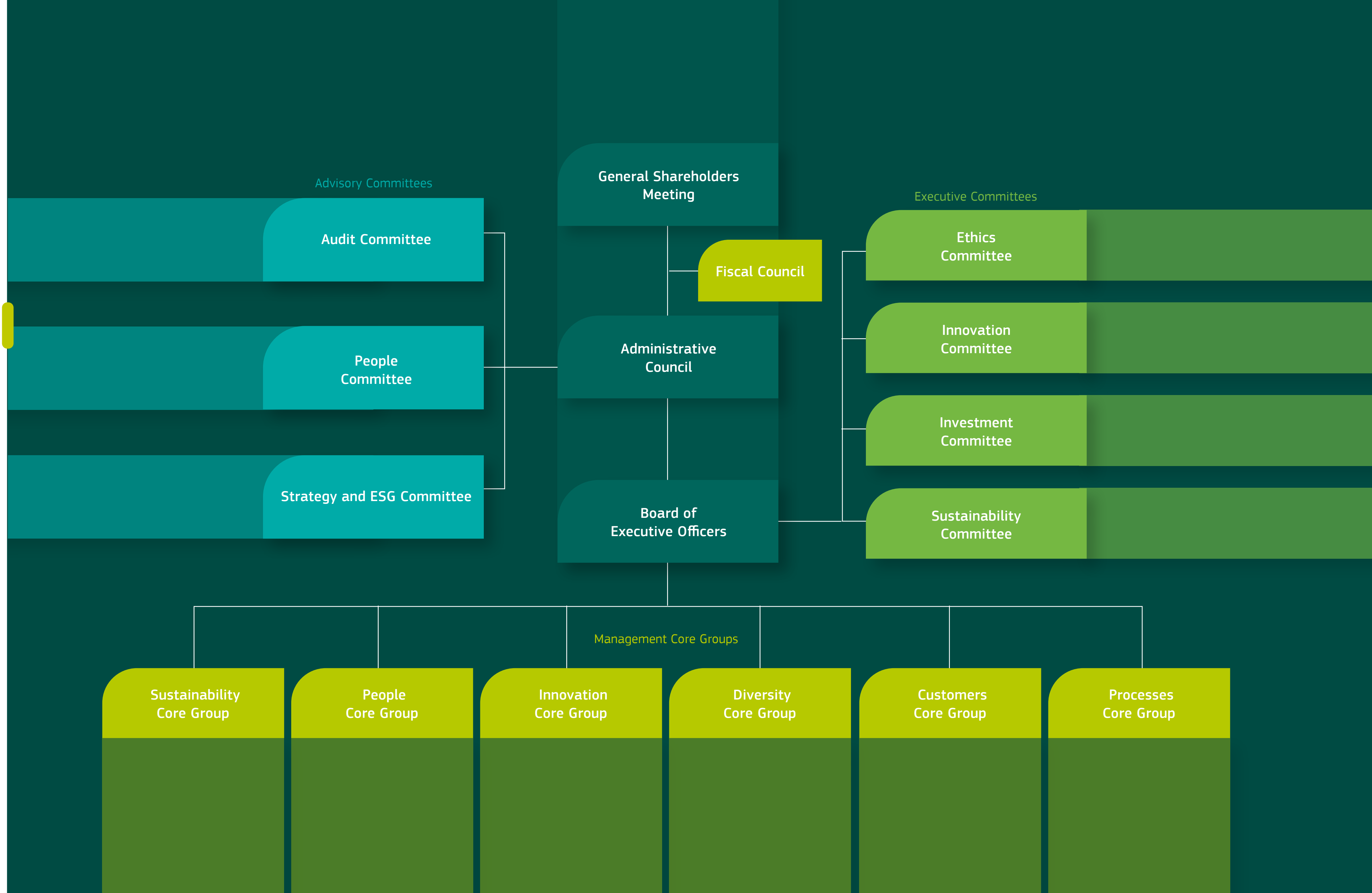
CUSTOMERS

Promote customer-focused actions, ensuring an excellent experience for those involved.



PROCESSES

Constantly improve processes and make them agile to minimize waste; always focus on operational excellence and adding value.



GRI 2-11

COMPOSITION OF THE BOARD OF DIRECTORS:

Chairman: Péricles Pereira Druck

Vice-Chairman: Paulo Iserhard

Member: Paulo Sérgio Viana Mallmann

Member: Carlos Fernando Couto de Oliveira Souto

Member: Maria Cristina Capocchi Ricciardi

Member: Roberto Faldini

GRI 2-11

COMPOSITION OF THE BOARD OF EXECUTIVE OFFICERS:

Chief Executive Officer: Sérgio Luiz Cotrim Ribas

Personnel, Strategy and Management Director: Fabiano Alves de Oliveira

Paper and Forestry Business Director: Henrique Zugman

Packaging Business Director: Lindomar Lima de Souza

Director of Administration, Finance and IR Officer: Odivan Carlos Cargnin

In 2023, the Fiscal Council was established and elected - another important milestone in the evolution of Corporate Governance. The Fiscal Council is the Company's supervisory body. Of a collegiate and non-permanent nature, it monitors and verifies the actions of the administrators and the fulfillment of their legal and statutory duties; safeguards the interests of the Company; and exercises the inherent attributes of its supervisory power in accordance with applicable legislation, the terms of the current bylaws, and the Internal Regulations.

COMPOSITION OF THE FISCAL COUNCIL:

Chairman: Rene Sanda

Fiscal Advisor: Rosângela Costa Süffert

Fiscal Advisor: Letícia Pedercini Issa

COMPOSITION OF
THE BOARD OF
DIRECTORS:



PÉRICLES PEREIRA DRUCK
Chairman



PAULO ISERHARD
Vice-Chairman



**MARIA CRISTINA
CAPOCCHI RICCIARDI**
Member



**CARLOS FERNANDO COUTO
DE OLIVEIRA SOUTO**
Member



**PAULO SÉRGIO
VIANA MALLMANN**
Member



**ROBERTO
FALDINI**
Member

COMPOSITION OF THE BOARD
OF EXECUTIVE OFFICERS



**SÉRGIO LUIZ
COTRIM RIBAS**
Chief Executive
Officer



ODIVAN CARLOS CARGNIN
Director of Administration,
Finance and IR Officer



**FABIANO ALVES
DE OLIVEIRA**
Personnel, Strategy
and Management
Director



**LINDOMAR LIMA
DE SOUZA**
Packaging
Business Director



HENRIQUE ZUGMAN
Paper and Forestry
Business Director

FISCAL COUNCIL



RENE SANDA
Chairman



**ROSÂNGELA
COSTA SÜFFERT**
Fiscal Advisor



**LETÍCIA
PEDERCINI ISSA**
Fiscal Advisor

The members of the Board of Directors, Executive Board and Committees continuously broaden their knowledge of economic and socio-environmental issues in accordance with their areas of expertise, by taking part in public events, professional associations and representative bodies.

GRI 2-19 and 2-20

COMPENSATION OF THE BOARD OF DIRECTORS AND EXECUTIVE BOARD

Each component of compensation has a short-term and long-term function. By establishing rules to be followed regarding the compensation of the members of the Board of Directors and the Executive Board, we aim to bring the interests of the managers and the shareholders into alignment.

GRI 2-19 and 2-20

ON THE COMPENSATION OF THE AUDIT BOARD

Compensation will be in accordance with paragraph 3 of article 162 of the Brazilian Corporation Law. The monthly compensation of the alternate member will only be due in the months in which he/she attends a duly convened meeting in which he/she has the right to vote, as a substitute for the sitting member. If the alternate director attends meetings without voting rights or is not called to any meeting in the month, the monthly remuneration will not be due.

The amount of the compensation will be equivalent to the amount paid to the other full members, proportional to the number of meetings attended with voting rights.

The members of the Audit Board will be reimbursed by the Company for travel, food and subsistence expenses necessary for the performance of their duties. The amount of the compensation will be defined by the Company, based on market values for each type of expense, and will be made upon presentation of tax receipts and other relevant documents, under the terms and within the time limits established by the Company.

GRI 2-19 and 2-20

ON THE COMPENSATION OF THE MEMBERS OF THE BOARD OF DIRECTORS

The Chairman of the Board of Directors will be entitled to an annual compensation, paid over the same periods, at least 10% higher than that of the CEO. This includes short- and long-term fixed and variable remuneration, as well as the same benefits attributed to the CEO.

The Vice-Chairman of the Board of Directors shall be entitled to an overall annual remuneration equivalent to 15% of the remuneration of the Chairman of the Board of Directors, including short- and long-term remuneration.

The President and Vice President of the Board of Directors will receive short-term variable remuneration - quarterly bonuses. The short-term variable remuneration, which may amount to up to 12 fixed monthly remunerations, will be paid quarterly and linked to economic and financial performance indicators of the Company, such as: net profit, EBITDA, free cash flow, ROE and ROIC, as well as individual performance, among others, as annually approved by the Board of Directors. They are also entitled to health, dental, life insurance benefits, and company car usage.

The fixed remuneration of the other members of the Board of Directors will be defined based on (i) best market practices, (ii) the experience of the elected member, and (iii) the dedication time of each councilor.

GRI 2-19 and 2-20

ON THE COMPENSATION OF THE MEMBERS OF THE STATUTORY EXECUTIVE BOARD

The fixed compensation will be defined on the basis of (i) the elected member's experience and (ii) a market survey carried out annually.

The members of the Statutory Executive Board will have short-term variable compensation, a quarterly bonus. The short-term variable compensation, which may be equivalent to up to 12 fixed monthly payments, will be paid quarterly and will be linked to the company's economic and financial performance indicators - including net profit, EBITDA, free cash flow, ROE and ROIC. Individual performance will also be taken into account, among other factors, as approved annually by the Board of Directors. The members of the Statutory Board are entitled to health insurance, dental plan, life insurance, and a company car.

GRI 2-19 and 2-20

COMPENSATION OF THE ADVISORY COMMITTEES

The fixed compensation of the members of the Advisory Committees is defined by the Board of Directors. Board members will receive additional compensation for their participation on Committees and/or other advisory bodies of the Company, based on their experience and time spent. Members of the Advisory Committees shall not receive variable compensation or benefits.

ADRIELLI PIRAN
Paper SC Unit



SUPERA PROGRAM

The program stimulates the development of employees through the development of skills and the achievement of results. The goal is to challenge and recognize employee performance as well as accelerate a culture of results and self-development.

The results program, which is applicable to the Board of Directors and all Irani employees, establishes annual variable compensation ranges based on the goals attained. Employee development is tracked annually by the competency program. These evaluations include questions that capture a comprehensive understanding of sustainability related to the culture excellence indicator.

UPSIDE PROGRAM

The members of the Statutory Executive Board and the Board of Directors may have long-term variable remuneration – upside and/or profit-sharing statutorily provided for. This remuneration is based on the theoretical value of the shares in the year of its implementation and in the planned future. It assigns each participant a remuneration based on a theoretical number of shares, and will be paid out after a lock-up period.

Its goal is to increase the retention of executives and directors and align their interests with those of shareholders in order to build long-term, sustainable value for the company. Long-term variable compensation, which will be based on changes in the value of the Company's shares, will be equivalent to up to 80% of the annual compensation, including fixed and variable compensation

O The Reference Form contains information regarding conflicts of interest, cross-shareholding in management bodies, cross-shareholding control with suppliers and other stakeholders, the existence of a majority shareholder and disclosure of information on stakeholders. We also make available information on material shareholding composition (greater than 5%) up to the individual. There is no shareholders' agreement in effect.

(2-19 and 2-20) Additional information about the compensation of executives and those charged with governance – including how this compensation is tied to our short-, medium- and long-term performance – is available on the Investor Relations website, [click here](#) and Reference Form Item 8.1.



MARCOS BUCCO,
Joaçaba SC Office



COMMUNICATION WITH THE MARKET

Our activities and results are communicated to the market through our official channels:



Investor Relations website,
available in Portuguese and English;



**Direct channel with the Investor
Relations Officer and the Investor
Relations team via e-mail**
ri@irani.com.br



Contact Us,
Tool on the IR website.



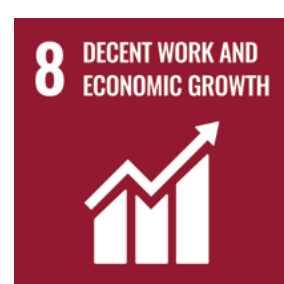
GRI 2-23

SUSTAINABILITY POLICY

To generate value for our stakeholders, we have a formal Sustainability Policy in place, reviewed and approved by the Executive Board. Following it, we commit to:



INTEGRITY



**GRI 2-16,
2-27, 3-3
ISE**

Integrity is one of Irani's inseparable values. Aligned to this value, the Company approved in 2008 its Code of Ethical Conduct and in 2017 the Integrity Program.

Integrity is one of Irani's inseparable values. In line with this value, we launched the Integrity Program in 2017. Consisting of seven policies and the Code of Ethical Conduct, it reinforces the need to comply with the Company's rules, legislation and applicable regulations. It also brings together our practices and guidelines for ethical behavior and relationships, covering all hierarchical levels.

Irani's Ethics Committee is composed of six members, five permanent and one rotating. The permanent seats are (i) for the CEO, (ii) the Director of Personnel, Strategy and Management, (iii) the Personnel Development Department, (iv) the Legal and Compliance Department, and (v) the Internal Audit Department. The rotating seat is reserved for the Area Director whose topic is under discussion.

Internal Audit Management is in charge of instructing the review process and has no voting rights on resolutions. At the discretion of the Ethics Committee Coordinator or the Chief Executive Officer, other persons may be called upon to contribute to the discussion and decision-making process.

THE ETHICS COMMITTEE SHALL:

- Ensure, promote and disseminate the conduct listed in the Code of Ethical Conduct;
- Identify situations contrary to the Code of Ethical Conduct;
- Issue ethical interpretations and/or guidance;
- Deliberate on the application of disciplinary sanctions;
- Train and guide the Senior Management, members of other management bodies and employees;
- Offer guidance on possible solutions for conflicts not foreseen in the Code of Ethical Conduct.

The contents of the entire Program, as well as the Code of Ethical Conduct and the seven policies, are available for consultation at here



Irani established a procedure for denunciations, the Ethics Channel, in 2022. The Company hired a specialized outside firm to manage the system, which was relaunched on April 11, 2022. It is an open resource, with anonymity assured, and is available to receive communications from employees, suppliers and other stakeholders.

A user can choose to make an anonymous or identified complaint. A protocol number is issued for both situations that can be used for follow-up contact or for requests for additional information. Retaliation against the complainant and anyone involved in the investigation process is strictly prohibited. All information will be kept confidential and treated with secrecy. Currently, the channel is managed by an independent and specialized company, ensuring full confidentiality.

GRI 2-26

Our contacts channels are:
Website

www.canaldeetica.com.br/irani

0 0800 300 4499,
24 hours per day,
7 days per week



Communications received are classified by the company contracted to manage the Ethics Channel according to their type:

| Classification | Subject of the Contact |
|--|--|
| Behavioral and working environment | Related to situations that compromise or may compromise compliance with our Values and Code of Ethical Conduct. These statements will be followed up and handled by the Personnel Development area. Manifestations involving managers will be handled by the head of the business area and/or office involved, together with the Personnel Development area. Cases involving statutory directors will be handled by the CEO. Those involving the CEO and members of the Senior Management, with the exception of the statutory Board of Directors, will be dealt with by the Chairman of the Board of Directors. |
| Queries | Related to compliance with the Code of Ethical Conduct, Company Rules or other clarifications on actions or decisions that may conflict with Irani's values. The queries will be clarified by the Ethics Committee. |
| Business Integrity | Reports of situations related to fraud, non-compliance with Laws and Company Rules. Such cases will be investigated by the Internal Audit area. |
| Improper use and/or misappropriation of Assets | Reports of situations related to theft, robbery or misappropriation of materials. These will be investigated by the Internal Audit area. |
| Others | Related to situations that do not fit into any of the previous categories. They will be analyzed by the coordinator of the Ethics Committee and sent to the Personnel Development area, Internal Audit, the Ethics Committee and/or another Company department, as the case may be. |

GRI 2-16

In 2023

126
communications
were registered;
of which

78
were related to behavioral and
workplace environment

34
to business integrity

10
to other subjects

4
were consultations

Irani ensures that each situation is appropriately treated without any conflicts of interest. The Ethics Committee Coordinator, who is also the Legal and Compliance Manager, is responsible for the internal management of the Channel. The Personnel Development Sector handles behavioral and work environment communications and cases, while the Ethics Committee fields queries. Internal Audit investigates reports related to business integrity and the use or misappropriation of assets. The coordinator of the Ethics Committee analyzes other issues, which are then addressed by the appropriate department, such as Personnel Development, Internal Audit, or the Ethics Committee, and/or another department, as appropriate.

We continued to send “integrity messages,” which aim to address the topics of the Integrity Program and the Code of Ethical Conduct in a simple and objective manner. We unceasingly trained the employees of outsourced service providers who enter the company’s areas.

We also repeatedly disseminated the Code of Ethical Conduct to customers, suppliers and society. We preserved the inclusion of a clause in contracts with suppliers regarding the disclosure and knowledge of the Code and the Integrity Program by contracted suppliers, including one regarding the prohibition of corruption.

Moreover, we included a clause in contracts with suppliers concerning the disclosure and knowledge of the Code of Ethical Conduct and the Integrity Program by outsourced suppliers. Additionally, we revised the clause prohibiting corruption.

During our Integrity Week, we celebrated the 15th anniversary of the Code of Ethical Conduct with the themes “History of Ethics at Irani and Habitasul.” We included lectures on workplace harassment for our leaders, titled “The Importance of Careful Interactions to Prevent Harassment?” and “Identifying and Combating Harassment.”

COMPLIANCE

To make the precautionary principle viable, we take all economically feasible measures that align with our Strategic Intent and financial and Sustainability policies. The Board of Directors and the Executive Board approve all such actions.

(2-27) In 2023, the Company did not receive or make payments for any material non-compliance with the law.

We are also guided by ABNT ISO 31000:2018 and The Committee of Sponsoring Organizations of the Treadway Commission - Enterprise Risk Management Framework (COSO-ERM) for the definition of our risk management. It comprises the steps of identification, analysis, assessment, treatment, monitoring and reporting.

Risk Management at Irani consists of a structured process that helps prevent, detect, respond to and communicate risks (coordinated actions). The idea is to ensure that the company's objectives and activities are pursued and carried out within acceptable limits of exposure to risks.

We use the three-line management model. These guidelines provide direction and strengthen comprehension of risk management and control by defining roles and responsibilities and enhancing the effectiveness of risk management and controls. Each line plays a distinct role in Irani:

1ST LINE (RISK MANAGERS)

RESPONSIBLE for defining the risks facing **MANAGEMENT** and maintaining effective controls to prevent the risks from occurring.

2ND LINE (COMPLIANCE):

SUPPORT in implementing effective risk management and internal control practices, **MONITORING** risks and non-compliance with applicable laws and regulations.

3RD LINE (INTERNAL AUDIT):

PROVIDE assessments on the effectiveness of governance, risk management, and internal controls.

In 2023, we reviewed our Risk Management Policy, and we considered improvements in the methodology.

1. IDENTIFICATION

Our leaders analyze processes to identify gaps in internal controls that could lead to business risks. They also identify risks and implement necessary internal controls. The identified risks are mapped with the Risk Classification, Risk Factors, Impacts, Risk Treatment, and the name of the Risk Manager..

2. CLASSIFICATION

The risks identified in our businesses are classified as follows::

| Risk Category | Risk Subcategory | Definition | Ways of Mitigating |
|---------------|------------------|---|---|
| Financial | Financial | Risks associated with the company's financial management are those whose materialization results in losses of financial resources. They are subdivided into three categories: (I) Market Risks: arising from the possibility of losses that may be caused by changes in the behavior of interest rates, exchange rates, share prices and commodity prices; (II) Credit Risks: defined as the possibility of loss resulting from the uncertainty of receiving amounts agreed with customers for products sold on credit; and (III) Liquidity Risks: possibility of loss arising from the inability to carry out a transaction within a reasonable time and without significant loss of value. Or the possibility of lack of funds to honor the commitments undertaken due to a mismatch between financial assets and liabilities. | Monitoring of outstanding receivables. Market risks (arising from the inability to respond effectively to unfavorable fluctuations, liquidity of domestic currency and changes in monetary policy to encourage and regulate the heating up of the country's economy) are monitored and define the scenarios of impact of exchange and interest rate variation. The risk of not obtaining financial resources at accessible costs, resulting in financial losses, delays or interruptions of strategic projects for the Company is monitored by mechanisms that ensure the necessary guarantees for raising funds. |






| Risk Category | Risk Subcategory | Definition | Ways of Mitigating |
|---------------|------------------|---|--|
| Non-Financial | Strategic | Risks whose materialization results in losses to the Company and that are associated with strategic decisions to achieve business objectives and/or arising from its lack of capacity or ability to protect itself from or adapt to changes in the governmental, market or regulatory environment. | Periodically, we prepare a long-term strategic plan with the evaluation of various scenarios, allowing for effective responses to the event. The market scenario analysis also tracks the rise in competition. During the Strategic Planning process, we observe competitors' growth capacity and the sector's current capacity in Brazil and around the world to make decisions. |
| | Compliance | Risks of legal or regulatory sanctions, financial loss or loss of reputation that the Company may suffer as a result of failure to comply with the law. Considers both the laws applicable to the sector in which it operates and the general laws (environmental, labor, civil and tax), as well as the regulations applicable to it, internal regulations, Code of Ethical Conduct and/or internal policies | We use software that enables the monitoring of applicable legal environmental requirements, the follow-up of the validity periods of environmental licenses granted by the appropriate agencies, among other mechanisms. We also apply and disseminate policies aimed at reusing solid waste and reducing the generation of effluents. |
| | Operational | Risks resulting from the lack of consistency and suitability of personnel management, machinery and equipment, information systems, processing and control of operations, as well as failures in the management of resources and internal controls. It also considers frauds that impair the Company's operations or risks related to the Company's infrastructure that could impact operational efficiency and the effective and efficient use of resources. | We keep track of impacts like lost productivity and damage to assets through a mix of preventive and predictive maintenance controls that keep an eye on the condition of equipment and facilities, as well as emergency management against fire in industrial units and forests. To ensure a strong relationship with our customers and meet their needs, we carefully analyze the quality of our finished products and provide follow-up technical support with a customer focus. We have improved and enhanced our relationship with people by instituting controls to ensure the health and safety of employees when performing their duties and regularly assessing their effectiveness |

3. RISK EVALUATION AND REVISION

The Company’s risks are revised and evaluated annually.

We evaluate them in their inherent and residual aspects, observing the perspectives of probability and impact. This is based on the level of existing controls capable of mitigating the risks and on historical records of their occurrence.

The impacts on business – if they materialize – are classified as:

| Type of Impact | Description | Capital |
|------------------|--|---|
| Operational | Production shutdown |  |
| Occupational | Damage to the health and safety of direct employees or service providers |  |
| Environmental | Possible damage to the environment |  |
| Image/Reputation | Tarnishing IRANI's image with stakeholders |  |
| Financial | Loss of monetary or financial advantage opportunities |  |

The correlation between the impact and probability perspectives shows the degree of criticality in the company’s Risk Map. It is categorized as low (green), medium (yellow), significant (orange) and high (red).

Significant or high risks are considered to be in the priority action zone. They must have a formalized action plan in order to treat the risk, and for those that do not require treatment, the justification must be formalized.

In 2023, 81 risks were identified, mapped, assessed and monitored by the business units. Below are the most significant ones for the business:

Main Risks

Impacted Capital

Increase in interest rates



Non-compliance with clauses in financing contracts (covenants)



Cyber attacks



Outbreaks, epidemics and pandemics



Environmental liabilities



Non-compliance with LGPD



Failure to obtain or renew environmental licenses and permits



Political and economic instability



Lack of financial liquidity (default)



Unfavorable exchange rate variation



4. TREATMENT

It includes the responses to Mitigate, Share, Tolerate or Eliminate the Risk. Once the Risk Assessment has been conducted, action plans are drawn up based on the control analysis and interpretation of the most critical and relevant points.

The action plans result in the implementation, improvement or correction of our Internal Controls.

5. MONITORING

We regularly assess the effectiveness and implementation of risk and incident action plans, as well as the efficiency of internal controls, on a cyclical and ongoing basis. This enables proactive action in response to potential new risks or changes in the potential of existing risks, or in response to specific events.



SOCIAL AND RELATIONSHIP CAPITAL



FINANCIAL CAPITAL



HUMAN CAPITAL



INTELLECTUAL CAPITAL



MANUFACTURING CAPITAL



NATURAL CAPITAL



EZEQUIEL PAVELISKY
Packaging SC Unit

6. RISK COMMUNICATION

Irani communicates information on risk management as often as necessary to the Company's internal stakeholders. Likewise, it is disclosed annually to senior management through the Risk Map and the Risk List.

We migrated the Risk Management tool from the SAP system to SoftExpert in 2023. This made the process more robust and resulted in greater integration and synergy between the Risk Management, Internal Controls, Internal Audit, and Quality and Environmental Management areas. It also added value to the Corporate Governance process.

One of the highlights in 2023 was the revision **Risk Management Policy and Procedure** of the considering improvements to the methodology as well as the creation of manuals and flowcharts for the process.

We also continued the review of risks, a process begun in 2022. We validated and reviewed the Internal Controls with the Risk Managers and linked them to the new management system. A new review of the Company's risk and control information was started at the end of the same year.

We map existing indicators of the most critical business risks.

In the same year, we conducted a Control Self-Assessment to evaluate the effectiveness of internal controls by the respective Risk Managers. We also started formalizing control descriptions to support testing next year.

With the Risk Managers, we assessed the inherent risks and complemented the residual assessment. Senior management was informed of all findings.

We worked together with Irani's Projects team to improve our Risk Management by developing and validating the Project Risk Management Procedure.

Additionally, in 2023, we initiated a project to review the company's access profiles in SAP, demonstrating our dedication to governance.

PRIVACY AND DATA PROTECTION

In order to ensure the right to privacy and the protection of personal data, in 2021 we began the implementation of the General Data Protection Law (Law 13.709/2018) in the Company. Between 2021 and 2022, we proceeded to organize the internal structure, mapping the flow of personal data circulating in the company.

In 2022, Irani released its Personal Data Privacy Policy, a document that establishes how the company will tackle personal information. The document is available on Irani's institutional website, accessible via the "Privacy Policy" link. We also have a contact form available on our website for any requests from data subjects.

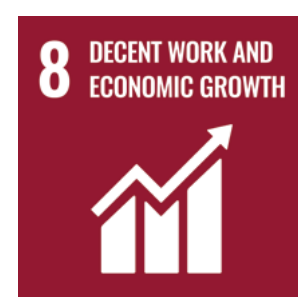
In 2023, we migrated the management of the LGPD to a new system, OneTrust. In the same year, we maintained the company's processes, fully reviewing all mapped processes involving personal data.

Various actions were implemented to encourage the strengthening of the privacy culture, including the creation of a podcast called "LGPDCast," the establishment of an internal portal dedicated to privacy and awareness training.

91%

**of employees
have undergone
training regarding
LGPD.**

STAKEHOLDER RELATIONS



**GRI 2-8, 2-28,
2-29, 3-3,
204-1, 413-1
ISE**

GRI 2-29 In pursuit of mutual benefits, we prioritize building valuable relationships with the following groups:



CONSCIOUS CAPITALISM MOVEMENT

Global initiative created by Raj Sisodia and John Mackey. It seeks to transform the way business is conducted, encouraging the promotion of sustainable, humanized, and conscious practices in companies.

Alongside the Instituto Capitalismo Consciente do Brasil (ICCB), a Non-Governmental Organization (NGO) that promotes Conscious Capitalism in Brazil, we are part of an active mobilization front for the creation of a chapter of this movement in Santa Catarina. Together, we will connect businesses with purposes and generate a positive impact for society. We want to be increasingly attentive and aware, contributing effectively to a sustainable future and encouraging new companies to invest in a more humanized management.



GRI (2-29)

HUMANIZED SURVEY

In 2023, we carried out our second cycle of the Humanized Survey. The tool is important for companies that, like Irani, have joined the Conscious Capitalism movement, seeking to transform the way they make investments and do business in Brazil.

Wide-ranging and open to all our stakeholders, the Survey generated a comprehensive diagnosis in four dimensions:

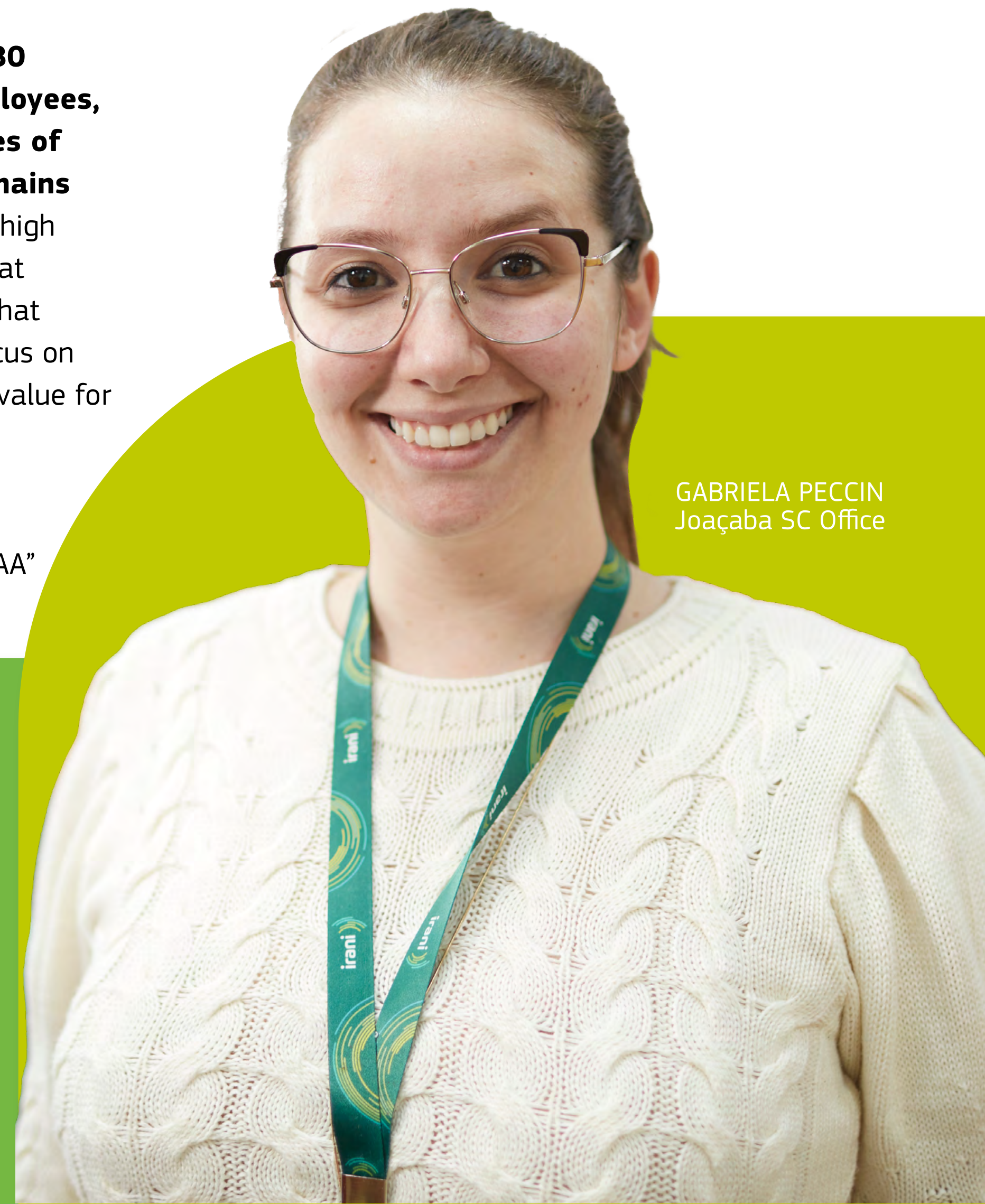
1. **Brand reputation;**
2. **Management principles;**
3. **Organizational culture;**
4. **4Narratives.**

Using this information, we measured how different audiences perceive us and the quality of our relationships. This helped us understand our management maturity stage and our consolidated values, as well as those that may need redefining.

The survey, which included over 1,080 respondents such as managers, employees, clients, partners, and representatives of society, revealed that the rating remains at an A level. This rating is considered high and reflects a level of maturity above that of the market. The survey also showed that there are healthy relationships and a focus on continually improving the generation of value for stakeholders.

The scale has 11 evolutionary stages, ranging from “E” (least developed) to “AAA” (most developed).

The survey revealed that the rating remains at an A level.



GABRIELA PECCIN
Joaçaba SC Office

Agradecemos a sua participação



IRANI INVESTOR DAY 2023

In 2023, we hosted Irani Investor Day. The event was hybrid: simultaneous translation into English and sign language via Zoom. It was also broadcast in Portuguese via Irani's YouTube channel (@IraniOficial). Some analysts took part in person. The Investor Day was attended by the CEO, Sérgio Ribas, and the full executive team, including the Chairman of the Board of Directors, Péricles Pereira Druck. .

Watch the
full event on
YouTube: 

MARKET MANAGEMENT AND CLIENT RELATIONS

Irani is recognized for its quality and variety of products, as well as its client-centric approach. The company is committed to innovation and economic impact throughout the production chain, emphasizing close relationships and co-creation of solutions.

Our specialized departments, such as Packaging Engineering, Research and Development, Continuous Improvement and Technical Assistance, together with the Sales team, guarantee the development of customized solutions.

The concept of “Customer Focus” is not just an idea, but rather a strategy incorporated into every stage of the production process.

The synergy between Irani’s expertise and that of its customers is seen as the key to offering truly innovative solutions.

We conduct a Customer Satisfaction Survey each year. Thus, it is possible to assess aspects that generate value and others that can be improved. We set targets to reach the largest possible number of participants and others for action plans, to quickly and assertively address the problem points identified.

For the third year in a row, in 2023, we used the research methodology Net Promoter Score (NPS), which assesses the degree of customer satisfaction and loyalty, to a single question:

“On a scale of 0 to 10, how likely are you to refer Irani to someone you like?”

The methodology not only eliminates interference for the respondent but also offers a more pleasant experience for customers. They can participate via email or even WhatsApp. NPS uses a higher metric than other surveys and measures not only satisfaction but also customer loyalty. The results are categorized as follows:

- **Detractors (ratings 0-6):** representing dissatisfied customers who are unlikely to recommend Irani.
- **Neutrals (rating 7 or 8):** indicating satisfied customers, but without expressive enthusiasm.
- **Promoters (rating 9 or 10):** reflecting extremely satisfied customers who are highly likely to recommend Irani.

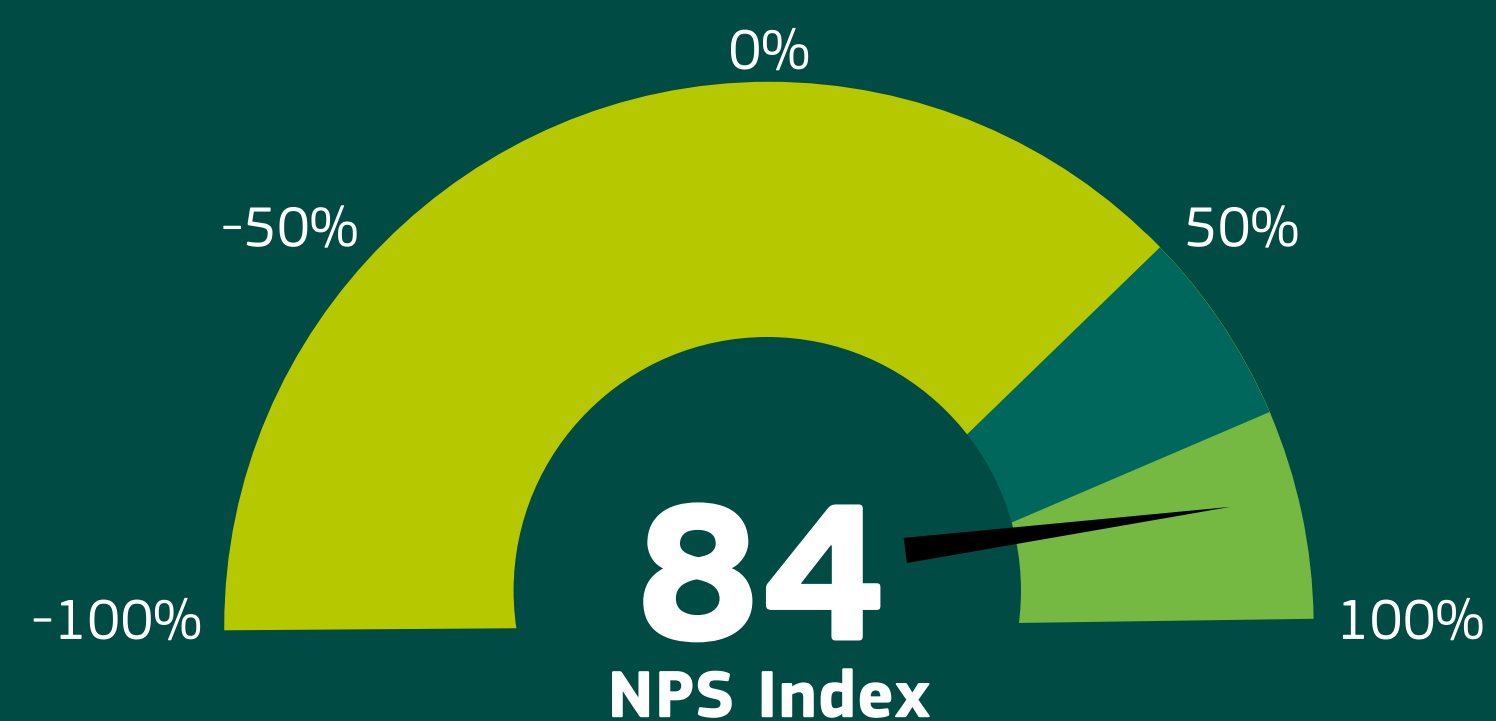
In the case of detractors, an additional element is included: asking them to suggest points of improvement. For all respondents, there is a blank area where they can write additional comments and suggestions, praise or criticism. The NPS value calculation is the subtraction of the percentage of detractors from that of the promoters.

In 2023, Irani continued in the Zone of Excellence, the highest in the methodology, with an NPS score of 84.

GENERAL RESULTS:

604 ▶ **+30%**
respondents over 2022

60%
of respondents gave the maximum score



The excellence zone range is between 75 and 100



TIAGO DUARTE
Porto Alegre RS
Office

PAPER BUSINESS

Main clients: food segment, light and heavy sacks, bags, among others.

Domestic market: Amazonas, Bahia, Ceará, Distrito Federal, Espírito Santo, Goiás, Mato Grosso do Sul, Minas Gerais, Pernambuco, Paraná, Rio de Janeiro, Rio Grande do Norte, Rio Grande do Sul, Rondônia, Santa Catarina, São Paulo and Sergipe. **92 NPS Index**

Foreign market: South Africa, Germany, Saudi Arabia, Argentina, Bolivia, Chile, China, Colombia, United Arab Emirates, USA, Kuwait, Mexico, Pakistan, Paraguay, Peru, Poland Portugal, Sweden, Trinidad and Tobago, Turkey and Uruguay. **60 NPS Index**



RESIN BUSINESS

Main clients

- **Pitch:** producers of printing inks, glues for paper and hair removal wax.
- **Turpentine:** Producers of solvents in paints and coatings, dyes, waxes, camphor pine oil, soaps, greases, insecticides, sealants and perfume fixers.

Domestic market: Bahia, Rio Grande do Sul and Santa Catarina. **100 NPS Index**

Foreign market: Belgium, Canada, Chile, France, Germany, India, Japan, China, Mexico, Pakistan, Peru, Portugal, Spain, South Africa, Turkey, the Netherlands, the United States, and India. **45 NPS Index**

PACKAGING BUSINESS

Main customers: carton board, meatpacking, food, chemical, plastic, and beverage industries.

Domestic market: Acre, Amazonas, Bahia, Ceará, Distrito Federal, Espírito Santo, Goiás, Maranhão, Mato Grosso, Mato Grosso do Sul, Minas Gerais, Pará, Paraíba, Paraná, Pernambuco, Paraná, Rio de Janeiro, Rio Grande do Norte, Rio Grande do Sul, Rondônia, Santa Catarina and São Paulo. **85 NPS Index**

GOVERNMENT AND SOCIETY

(2-28)

Our relationship with governments and entities representative of society also occurs through our leaders when they join outside committees and sit on boards and professional associations. It also occurs when they contribute to projects and actions developed in organizations such as:

- Associação Brasileira das Companhias Abertas (Brazilian Publicly Traded Companies Association-Abrasca)
- Associação Brasileira de Embalagem (Brazilian Packaging Association-ABRE)
- Associação Brasileira de Embalagens de Papel (Brazilian Association of Paper Packaging-Empapel)
- Associação Brasileira de Recursos Humanos/RS (Brazilian Association of Human Resources/RS-ABRH/RS)
- Associação Brasileira Técnica de Celulose e Papel (Brazilian Technical Pulp and Paper Association-ABTCP)
- Associação Catarinense das Empresas Florestais (Santa Catarina Business Association-ACR)
- Associação Comercial e Industrial do Oeste Catarinense (Western Santa Catarina Commercial and Industrial Association-ACIOC)
- Associação de Pais e Amigos dos Excepcionais (Association of Parents and Friends of Children with Disabilities-APAE) of the municipalities of Joaçaba, Vargem Bonita and Concordia, in Santa Catarina
- Associação dos Resinadores do Brasil (Resin Producers Association of Brazil-ARESB)
- Associação Empresarial de Santa Luzia (Santa Luzia Business Association-AESL)
- Associação Gaúcha de Empresas Florestais (Gaúcha Forest Companies Association-Ageflor)
- Capitalismo Consciente (Conscientious Capitalism)
- American Chamber of Commerce/Brazil (Amcham)
- Centro das Indústrias do Rio Grande do Sul (Rio Grande do Sul Industries Center-CIERGS)
- Comitê de Bacia Hidrográfica do Rio Irani / Chapecó (Irani / Chapecó River Hydrographic Basin Committee)
- Conselho Estadual do Meio Ambiente (State Environmental Council -CONSEMA)
- Federação das Associações Comerciais e de Serviços do Rio Grande do Sul (Federation of Trade and Services Associations of Rio Grande do Sul - Federasul)
- Federação das Indústrias do Estado de Santa Catarina (Industry Federation of Santa Catarina-FIESC)
- Fundação Centro Tecnológico de Produção Industrial – CETEPI de Joaçaba (SC) (Industrial Production Technological Center Foundation Cetepi of Joaçaba (SC))
- Indústria Brasileira de Árvores (Brazilian Tree Industry-IBA)
- Instituto Brasileiro de Avaliações e Perícias de Engenharia (Brazilian Institute of Engineering Evaluations and Appraisals-IBAPE)
- Instituto Euvaldo Lodi (Euvaldo Lodi Institute-IEL)
- Junior Achievement Santa Catarina
- Movimento Catarinense pela Excelência – Excelência SC (Santa Catalina Excellence Movement)
- Movimento Nacional ODS Santa Catarina e Rio Grande Sul (National SDG Movement Santa Catarina and Rio Grande Sul)
- Ordem dos Advogados do Brasil de Santa Catarina (Brazilian Bar Association of Santa Catarina-OAB-SC)
- Secretaria de Desenvolvimento Sustentável de Santa Catarina (Secretariat of Sustainable Development of Santa Catarina-SDS)
- Sindicato das Indústrias de Marcenarias, serrarias, carpintarias e tanoarias de Caxias do Sul (Union of the Manufacturing Industries, sawmills, carpentry and tanneries of Caxias do Sul-Sindimadeira RS)
- Sindicato da Indústria do Papelão do Estado de São Paulo (Cardboard Industry Union of the State of São Paulo-Sinpesp)
- Sindicato das Indústrias de Celulose e Papel de Santa Catarina (Union of Pulp and Paper Industries of Santa Catarina-Sinpesca)
- Sindicato das Indústrias de Celulose, Papel e Papelão do Estado de Minas Gerais (Union of the Pulp, Paper and Cardboard Industries of the State of Minas Gerais-Sinpaper)
- Sindicato das Indústrias de Papel, Papelão e Cortiça do Rio Grande do Sul (Union of Paper, Cardboard and Cork Industries of Rio Grande do Sul -Sinpasul)
- Sindicato dos Trabalhadores da Indústria de Papel e Papelão em Santa Luzia (Union of Workers in the Paper and Cardboard Industry in Santa Luzia-Sintipapel)
- Sindicato dos Trabalhadores nas Indústrias de Artefatos de Papel Papelão Cortiça em Joaçaba e Região (Union of Workers in the Cork Paper Artifacts Industries in Joaçaba and the Region-SITIAPAPEL)
- Sindicato dos Trabalhadores nas Indústrias de Papel, Papelão e Cortiça de São Paulo, ABCDM, Osasco, Taboão da Serra e Região (Union of Workers in the Paper, Cardboard and Cork Industries of São Paulo, ABCDM, Osasco, Taboão da Serra and Region-Sintrapel)
- Sindicato dos Trabalhadores Rurais de Osório (Union of Rural Workers of Osório-SITRROSO)
- Subcomitê Poderoso-Vermelho - Comitê de Bacia Hidrográfica do Rio das Velhas (Powerful-Red Subcommittee - Rio das Velhas River Basin Committee)
- Young Presidents' Organization (YPO)

SURROUNDING COMMUNITY

GRI 413-1

Our definition of the surrounding community comprises those municipalities where the Company's business units are located and where most of the employees reside. The definition is also used in the analysis and prioritization of partnerships, in relationship strategies, and in directing social investments or community service activities.

All cities where we operate have local community development programs aimed at developing children and young people through initiatives focused on education, the environment, citizenship, and sports. We also support specific projects that align with these guidelines.

| | Priority Attention | Timely Attention |
|-------------------|--|---|
| Santa Catarina | Irani, Ponte Serrada, Joaçaba, Herval d'Oeste, Luzerna, Catanduvas, Concórdia, Vila Campina da Alegria and the head offices in the municipality of Vargem Bonita | Água Doce |
| São Paulo | Indaiatuba | Salto |
| Minas Gerais | Santa Luzia | Belo Horizonte |
| Rio Grande do Sul | Vila do Bujuru (São José do Norte) and Balneário Pinhal | Porto Alegre, São José do Norte, Tavares, Mostardas |

For Irani, a company that **generates value** is one that, in addition to producing results for customers, is able to **contribute in a significant way to the world**. One that generates a **positive impact** on people's lives and brings **prosperity to the communities**. It also operates as an **agent of change** capable of **transforming relationships into prosperous relationships**.

Since 2020, Irani has been running the **Transforma Program**, which gives people the knowledge and strategic support they need to create opportunities through five vectors that create value and transform lives..

program —————
transforma



The strategic goal of Irani's social investments is to help the surrounding communities develop. The intention is to generate prosperity for all people impacted by the Company's businesses.

Within the scope of private social investment, we aim to establish strong partnerships for the development of citizenship, socio-environmental education, culture, sports, and social inclusion projects. In 2023, we invested some R\$ 136,000 in projects such as:

- Partnership with the Junior Achievement Association in Santa Catarina, Rio Grande do Sul and Minas Gerais, encouraging entrepreneurship for public and private school youths.

- Volleyball initiation centers in partnership with the Joaçabense Volleyball Association (AJOV), sharing sports techniques online for about 300 students.
- Broto do Galho Project, with a productive handicraft core group working with industrial waste in the Campina da Alegria community, generating productive occupation and extra income.
- Choir for the community of Campina da Alegria and surrounding areas, with classes conducted by a conductor and the production of special videos for the Company's internal campaigns.

Volunteer groups continue to be active in all our business units, fostering opportunities to improve skills and community development. In 2023, 25.79% from across the company were involved in volunteering.

Irani's institutional donations totaled R\$524,000, contributing to various initiatives in the fields of health, culture and leisure, welfare activities and citizenship. We also earmarked a series of contributions via the Tax Incentive Laws that totaled more than R\$ 4.5 million, as follows:

Funds for children and adolescents in the following municipalities:

- Água Doce
- Campos Novos
- Catanduvas
- Concórdia
- Erval Velho
- Herval d'Oeste
- Irani
- Joaçaba
- Luzerna
- Ponte Serrada
- Vargem Bonita

AWARDS AND RECOGNITION

The awards and recognitions we received over the course of 2022 further inspire us to pursue initiatives that promote sustainability, excellence and appreciation of people. Access the list of all acknowledgements at [here](#).



Sports Law:

- Associação Argos - Pequenos Grandes Mestres- (Argos Association - Little Great Masters)
- Associação Concordeense de Futsal - Concórdia Mais Futsal - 2ª Edição (Concordian Futsal Association - Concórdia More Futsal - 2nd Edition)
- Associação de Pais e Amigos do Voleibol - APAV - Formando Atletas e Cidadãos - Voleibol Concórdia - Edição 2 (Parents and Friends of Volleyball Association - APAV - Training Athletes and Citizens - Concórdia Volleyball - Edition 2)
- Associação Desportiva e Cultural - ADRECHA - Geração Handebol (Sports and Cultural Association - ADRECHA - Handball Generation)
- Associação Joaçaba Esporte e Cultura - AJEC - Escolinhas Joaçaba Futsal Ano 2 (Joaçaba Sports and Culture Association - AJEC - Joaçaba Futsal Schools Year 2)
- Associação Joaçabense de Voleibol (AJOV) - A Busca por Novos Talentos Continua - Quarta Edição (Joaçabense Volleyball Association (AJOV) - The Search for New Talent Continues - Fourth Edition)
- Instituto CrêSer - Karatê Kid (CrêSer Institute - Karate Kid)
- Instituto CrêSer - EnvelheSer em Movimento (CrêSer Institute - Aging in Motion)

Culture Incentive Law:

- Cia Experimental - Cia Experimental Dança e Arte (Experimental Company - Experimental Dance and Art Company)
- Cia Lamparina - Mostra de Teatro Popular em Santa Luzia (Lamparina Company - Santa Luzia Popular Theater Show)
- Instituto de Embalagens - Linho "Um olhar global sobre o Design de Embalagens" (Packaging Institute - Linen "A global look at packaging design")
- Instituto Humaniza - Sabe o Lixo? Virou Arte! (Humanizing Institute - Do you know what garbage is? It's become art!)
- Instituto Nanquin - Tear dos Saberes (Nanquin Institute - Weaving Knowledge)
- La Mela Publicidade, Promoção e Representação - Bienal do Lixo 2024 (La Mela Publicity, Promotion e Representation - Biennial of Trash 2024)
- Sociedade de Cultura Artística de Joaçaba Herval D'Oeste - SCAJHO - Oficinas de Arte - Ano II (Joaçaba Herval D'Oeste Artistic Culture Society - SCAJHO - Art Workshops - Year II)
- STR Estrutura para Filmes e Eventos - Palco da Reciclagem - A Arte de Reciclar Contando Histórias (STR Structure for Films and Events - Recycling Stage - The Art of Recycling Telling Stories)
- Associação Notas para Vida - Notas para Vida (Notes for Life Association - Notes for Life)

Our action plans are linked to the Social and Environmental Impact Assessment cycles in the surrounding communities of Santa Catarina and Rio Grande do Sul. We achieve this through initiatives such as environmental education activities and stakeholder relations. These initiatives include cultural and educational projects, as well as a new communication channel with the surrounding Rio Grande do Sul community through a biannual digital newsletter.

SUPPLIERS

Learn more about the
winning initiatives by
clicking here

Together with our suppliers and service providers, we seek to maximize our positive impact on the world, valuing relationships based on ethics, transparency, and open dialogue.

The approach aims to achieve successful bilateral achievements and long-term mutual strengthening. Our practices of excellence support the commitment to create bonds that promote expanded, real, and relevant interfaces for all involved.

In 2021, we launched the Good Practices in Sustainability Recognition Initiative for Suppliers and Service Providers. In 2022, we started preparing the 2023 edition, and a panel of invited external evaluators judged the cases submitted on the basis of the Recognition notice.

The best cases in each category were highlighted in an online event, with the active participation of Irani's internal and external public. The intention was to recognize and share valuable experiences to strengthen our network around the theme. We seek to encourage not

only our company, but the entire production chain to adopt sustainable practices, promoting a broader positive impact. .

To further our mission of building valuable relationships that generate prosperity, our contracts include clauses related to social, environmental, and human rights considerations. These clauses ensure legal compliance and appropriate working conditions throughout our value chain. Our commitment to responsibility is also evident in our operations, which are free from slave and child labor, and in our respect for aspects related to LGPD and ethical conduct standards. The Legal Department conducts an analysis of the applicability of clauses to contracts based on our Integrity Program, reaffirming our responsibility to life.

For over a decade, we have adopted the Management Excellence Model (MEG), as well as achieving international certifications such as FSC®, ISO 14001, ISO 9001 and the GRI

Standards indicators. We are signatories to the Global and Business Pact for Integrity and Against Corruption, committed to ethics and human rights. Practices like these raise the bar for social and environmental processes, reflected in careful assessments of suppliers and service providers.

We constantly monitor and adjust based on a number of internal indicators designed to measure and manage the actions of the Procurement sector. The work involves purchases from suppliers with contracts and, among them, are the Irani Supplier and the Urban Forest metrics.

In the case of Fornecedor Irani (Irani Supplier), where the percentage is indicated by the total purchases from suppliers under long-term contracts, we had a result of 62.63% in 2022. In 2023, we saw a positive increase, reaching 63.62%. The figures reflect our ongoing commitment to stability and sustainability in long-term contractual relationships with suppliers.

Urban Forestry measures the percentage of chip purchases from suppliers with contracts. In 2022, it reached 82.97%. This performance has speeded up and strengthened partnerships with suppliers, as well as expanded the portfolio to include new wood chip suppliers, reflected in the 89.49% achieved in 2023. The efforts demonstrated our ongoing commitment to sustainable contractual relations, long-term prosperity and balance between stakeholders.

By developing a planned and sustainable supply cycle, we guarantee the supply of materials needed by Irani. And at the same time, we bolster solid relationships with our suppliers.

Our main responsibility is to ensure the accuracy of materials management and reduce waiting time for delivery of desired items or emergency acquisitions. This ongoing effort reflects our daily commitment to improving operational practices.

The process utilizes an ERP system to ensure a detailed inventory of items stored in warehouses, providing a comprehensive and unified view of stock across all industrial units. Our knowledge is applied to anticipate material needs by analyzing existing reserves and forecasting future demands. This proactive and technological approach optimizes operational efficiency and promotes sustainable practices in the supply chain.

We shared a comprehensive analysis in 2021 on a multi-sector basis, launching an improvement project focused on improving the loading and unloading process at all units. In 2023, we completed fine-tuning and demand forecasting in all the shared scenarios.

We also expanded the capacities that needed attention for the Go Live phase, which is scheduled for 2024. The focus is on improving the efficiency of loading and unloading

operations, improving the quality of work of transportation service providers. Such an effort is aimed at raising operational performance and providing superior working conditions, in line with our standards of excellence.

Our suppliers are selected based on global, technical and legal criteria in addition to the Company's internal regulations. Assuming a pro-active attitude in our operations, we promote local development and establish regional partnerships, prioritizing suppliers from the surrounding communities.

In 2022, we maintained our approach and maintained the equivalence of our percentage, even though we carried out major projects that resulted in a significant increase in spending, especially on machinery. Despite these challenges, we achieved remarkable results, reaching 18%.

With the improvement of the scenario, in 2023 we presented a result of 28.92%. The variation was influenced by the successful completion of large-scale strategic projects, contributing to a reduction in the volume of spending outside of neighboring communities. The change reflects our constant adaptation to market dynamics and specific project demands, while reaffirming our commitment to sustainable practices and regional development in an ethical, transparent and prosperity-generating manner.

We contributed to the circular economy by promoting the reverse logistics of corrugated cardboard scraps. In 2023, the volume of trimmings returned by customers to the production process was 7,497 tons, equivalent to 24.95% – higher than the target for the period. Figures like these demonstrate the positive impact of responsible waste management and reinforce the ongoing commitment to sustainability and the circular economy.

The multisectoral action shared with the Registration sector has led to a careful and precise review of our active supplier base. We currently have more than 9,000 suppliers and service providers with active registrations in the Supply Chain. This extensive network is carefully segmented according to the guidelines and requirements of the FSC®, ISO 9001 and ISO 14001 standards, and is distributed into five distinct groups:

- Critical service providers
- Critical products and chemicals
- Transportation services (shipping logistics)
- FSC® and forest products
- Raw materials, consumables and intermediates

As we are committed to maintaining a high standard of quality in our contracts, we have established a comprehensive systemic process for identifying, qualifying, selecting and evaluating suppliers. We carefully assess the criticality of products and services, as well as their impact on the business.

| | 2021 | 2022 | 2023 |
|---|---------|---------|---------|
| (204-1) Total purchased from local suppliers (R\$ million) | 234,907 | 312,104 | 351,007 |
| Percentage of total purchases made by the Company (%) | 18.73% | 18.22% | 28.92% |

(2-8) We also monitor the entry of outsourced workers to our units, as a fundamental way of guaranteeing safety, the quality of services and the sustainability of operations. We thus safeguard Irani's main value, First and foremost, Life.

| | 2021 | 2022 | 2023 |
|--|-------|-------|-------|
| Monthly average of outsourced workers | 1,157 | 1,311 | 1,444 |

In 2023, we upgraded our specialized procurement tools, introducing a more agile and traceable interface for approving purchases and contracts. The initiative delivers greater speed, transparency, security and more data traceability.

For 2024, our challenge is to evolve the IDF Supplier Performance Index. We will focus on ESG issues in the supply chain and strengthen relationships with requesters and suppliers. Our goal is to facilitate continuous improvement by enabling full interaction throughout the process. This commitment demonstrates our dedication to sustainable practices and our pursuit of excellence in the supply chain.

We apply the evaluation that measures the Supplier Performance Index for the five purchasing groups. Following a scale of 0-100 points, the assessment encourages the continuous improvement of suppliers/service providers. Thus, we are able to go beyond established legal compliance, encouraging better management practices. This item's composition combines issues like meeting technical requirements, the caliber of the provided goods and services, the nature of the business connection, as well as the efficiency of the communication process..

Suppliers

+ 9,000
suppliers with
active registrati

+ 3,200
in active
relationships in 2023

+ R\$ 1.2 billion
In purchase volume
(spend)



MATHEUS FELIX
Paper MG Unit



NUMBER OF SUPPLIERS AND SERVICE PROVIDERS EVALUATED

| | 2021 | 2022 | 2023 |
|---|------------|------------|------------|
| Critical services providers | 209 | 238 | 267 |
| Critical and chemical products | 81 | 82 | 73 |
| Transportation services (shipping logistics) | 34 | 42 | 32 |
| FSC® and forest products | 193 | 250 | 228 |
| Materials for use and consumption and intermediaries. | 49 | 39 | 22 |
| General | 555 | 647 | 618 |

Note: The same supplier can be evaluated in different groups, depending on the supply portfolio.

The supplier/service provider receives a notification of the outcome of the evaluation, and some measures may be required, depending on the score:

**BELOW
60 POINTS**

Registration is canceled and contracting or purchases are not possible. Requalification can be requested from the moment the supplier/service provider meets the applicable requirements and presents an action plan approved by Irani's supply or forestry manager, depending on the type of service provided.

**BETWEEN 60
AND 79.99
POINTS**

Qualification conditional to the opening of a non-compliance form (RNC). Irani must receive a cause analysis of the problems pointed out and present a corrective action plan. The effectiveness of this plan is verified by the Purchasing Intelligence area every six months for the provision of services and annually for the supply of products.

**BETWEEN
80 AND 100
POINTS**

Automatic qualification. In this category are records of suppliers and service providers that seek us out for a joint analysis of improvement opportunities to enhance their practices. These records demonstrate the importance of this process for the supplier.



NATHALI NUNES
Porto Alegre RS Office

SUPPLIER PERFORMANCE INDEX (IDF)

| | 2021 | 2022 | 2023 |
|---|-------|-------|-------|
| Critical services providers | 94.67 | 94.92 | 95.71 |
| Critical and chemical products | 95.57 | 97.92 | 97.56 |
| Transportation services (shipping logistics) | 98.48 | 97.42 | 96.12 |
| FSC® and forest products | 89.69 | 91.73 | 91.55 |
| Materials for use and consumption and intermediaries. | 98.35 | 95.63 | 96.86 |
| General | 95.38 | 95.30 | 95.10 |

SOCIAL AND RELATIONSHIP CAPITAL



OPPORTUNITIES AND FUTURE COMMITMENTS

Organize periodic training on the content of the Code of Ethics (at least every two years).

- Continuously monitor risks and keep the company risk map updated;
- Encourage actions by volunteer groups;

Improve communication with the surrounding communities;

- Start of testing internal controls for the company's main risks. In 2024, we will test 10 risks;
- Implement B Certification by 2024;

Structuring the cardboard waste supply chain with greater supply stability;

- Prepare for the third edition for suppliers and service providers, which will take place in 2025;
- Further development of the IDF supplier assessment.

CRISTIANO SEABRA
Porto Alegre RS Office

FINANCIAL CAPITAL

Economic Performance



ECONOMIC PERFORMANCE

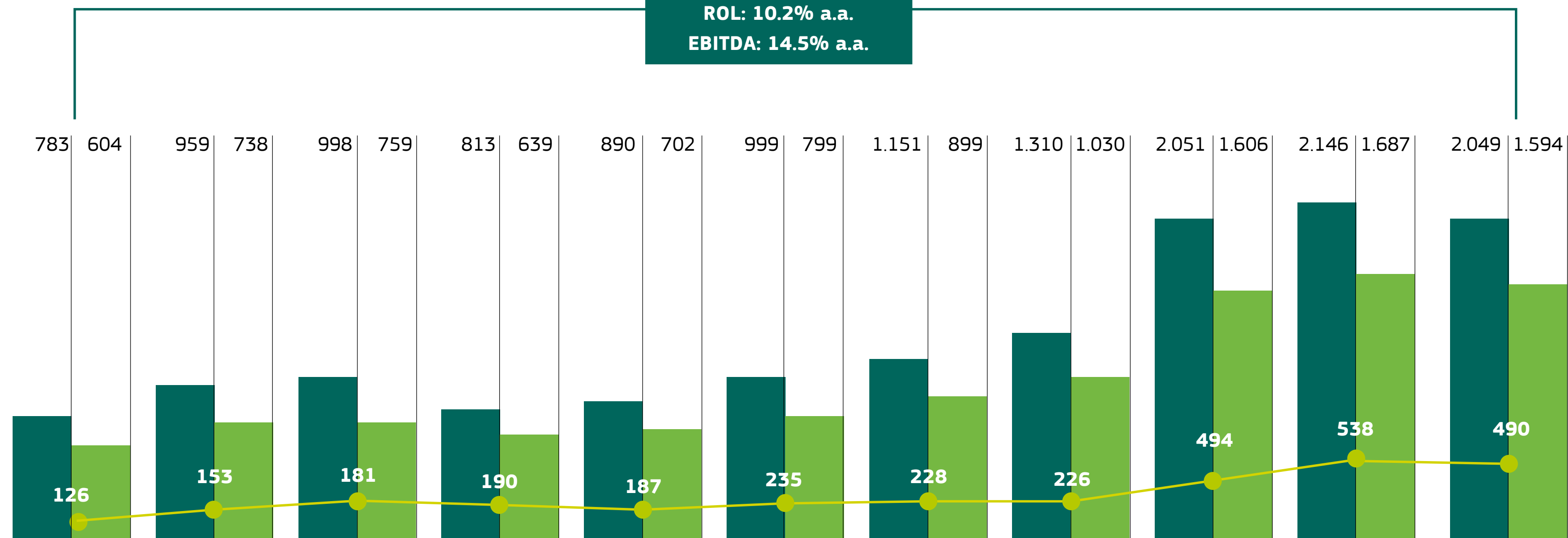


GRI 3-3,
201-1,
201-2, 201-4
ISE

Our net revenue has seen an average annual increase of 10.2% over the last ten years, and Adjusted EBITDA has seen an average annual growth of 14.5%. In the period, this latter indicator rose from R\$ 126,210 thousand in 2013, with a margin of 20.9%, to R\$ 490,476 thousand in 2023, presenting a margin of 30.8%.

NET REVENUE (R\$ MILLION)

CAGR 10 YEARS
ROL: 10.2% a.a.
EBITDA: 14.5% a.a.



| | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
|---------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| △ ROL | +25% | +22% | +3% | -16% | +10% | +14% | +12% | +15% | +56% | +5% | - 6% |
| △ EBITDA | +9% | +22% | +18% | +5% | -2% | +26% | -3% | -1% | +119% | +9% | - 9% |
| EBITDA Margin | 20.9% | 20.8% | 23.9% | 29.7% | 26.6% | 29.4% | 25.4% | 21.9% | 30.8% | 31.9% | 30.8% |

■ Gross Revenue (R\$ million) ■ Net Revenue (R\$ million) — EBITDA (R\$ million)

BALANCE SHEETS (CONSOLIDATED AS OF
DECEMBER 31, IN THOUSANDS OF REAIS)

| | 12/31/2023 | 12/31/2022 |
|---|------------------|------------------|
| ASSETS | 3.467.066 | 3.515.338 |
| Current | 1,134,869 | 1,505,181 |
| Non-current | 2,332,197 | 2,010,157 |
| LIABILITIES AND NET EQUITY | 3,467,066 | 3,515,338 |
| Current | 302,837 | 577,460 |
| Non-current | 1,884,525 | 1,812,793 |
| Shareholders' equity | 1,279,704 | 1,125,085 |

CONSOLIDATED INCOME STATEMENTS FOR THE YEARS ENDED DECEMBER 31
(IN THOUSANDS OF REAIS)

| | 12/31/2023 | 12/31/2022 |
|---|------------------|------------------|
| Net Sales Revenue | 1,594,245 | 1,686,666 |
| Change in fair value of biological assets | 71,620 | 139,003 |
| Cost of goods sold | (979,267) | (1,017,597) |
| Gross Profit | 686,598 | 808,072 |
| Operating Income (Expenses) | (135,185) | (228,209) |
| Profit before financial income and taxes | 551,413 | 579,863 |
| Net financial income (expenses) | (45,574) | (61,503) |
| Operating profit before tax effects | 505,839 | 518,360 |
| Current income tax and social contribution | (111,505) | (110,346) |
| Deferred income tax and social contribution | (10,900) | (29,804) |
| Net profit for the year | 383,434 | 378,210 |

The full annual financial statements are available on our Investor Relations website. They include the explanatory notes, the Independent Auditors' Report and the Management Report, The Brazilian Corporation Law and its amendments, as well as the rules established by the Brazilian Securities and Exchange Commission (CVM), guide the preparation of these documents.

The results were announced on February 23, 2024 in widely-circulated newspapers, wherein we presented our corporate acts. The same information is also available on the CVM and B3 websites.

(201-2) The financial implications and other risks and opportunities due to climate change are available in the CDP - Climate Change in the Risks and Opportunities section at [here](#).



MAIN ECONOMIC AND FINANCIAL INDICATORS

Globally, the year 2023 marked significant economic challenges and changes. After the impact of the Covid-19 pandemic, worldwide economies sought to recover but faced new adversities.

Although some regions reported recovery, economic growth slowed down compared to previous years due to political uncertainties and the lingering effects of the health crisis.

In 2023, inflation was a major concern for many economies due to a significant rise in consumer price indices. The rising costs of food, energy, and other essential goods and services contributed to this scenario, making it challenging to maintain price stability.

In response, many central banks chose to raise interest rates. This restrictive monetary policy aimed to contain inflationary pressures, but it

also slowed down economic growth in some economies, sparking concerns about a possible slowdown in consumption and investment.

During the year, there was a positive increase in investments in sustainability initiatives and companies committed to environmental, social, and governance (ESG) criteria. Investors acknowledged the significance of addressing issues such as climate change, social justice, and corporate transparency, which led to a shift towards more responsible business models.

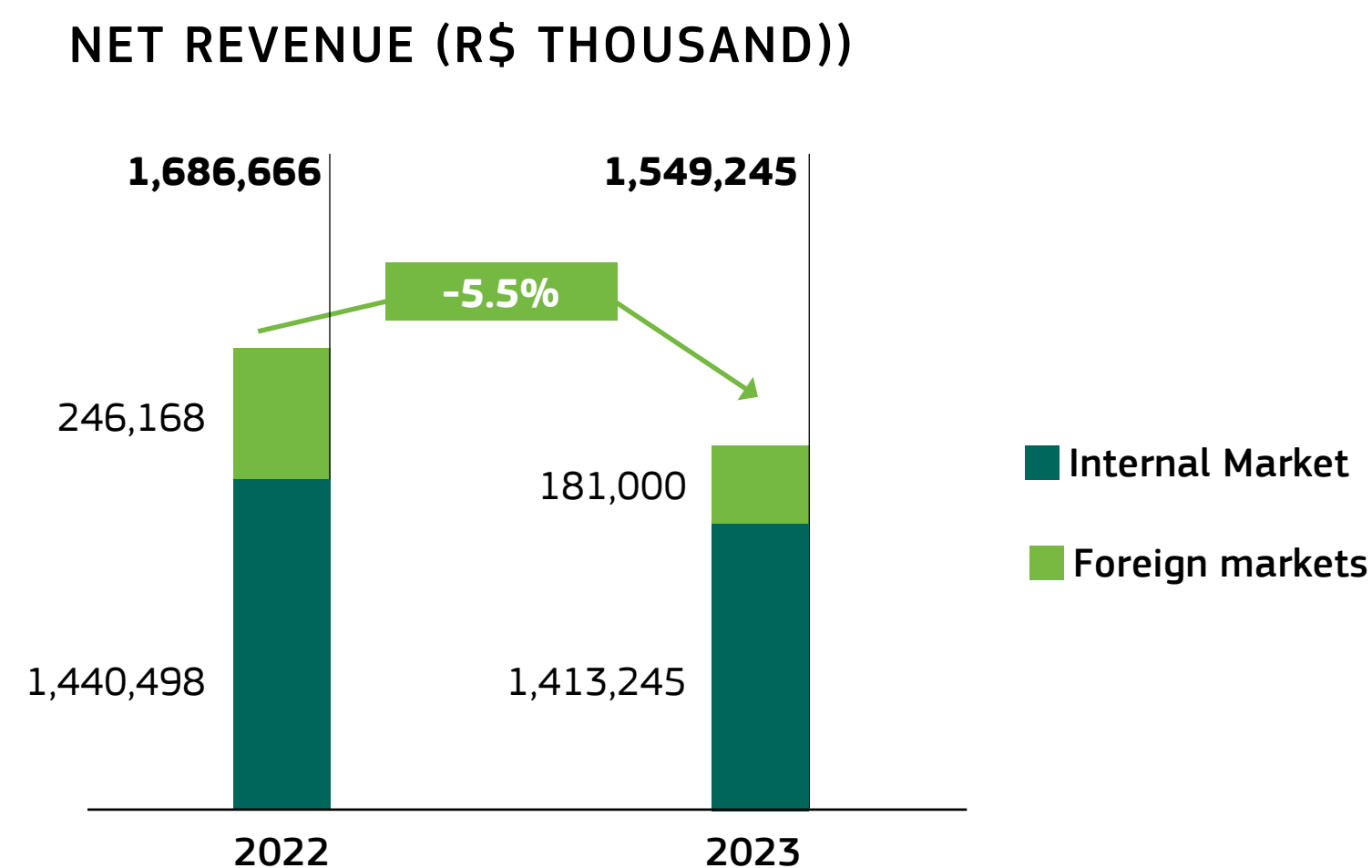
The period was challenging and dynamic for the global economy. Post-pandemic recovery, inflationary pressures, and geopolitical uncertainties shaped the landscape. It is crucial to closely monitor these indicators and respond in an agile and effective way to emerging challenges as economies continue to adapt and evolve.

| MAIN INDICATORS - CONSOLIDATED | 2023 | 2022 | Var. 2023/2022 |
|---|--------------|--------------|-----------------|
| Economic and Financial (R\$ thousand) | | | |
| Net Sales Revenue | 1,594,245 | 1,686,666 | -5.5% |
| Internal Market | 1,413,245 | 1,440,498 | -1.9% |
| Foreign Market | 181,000 | 246,168 | -26.5% |
| Gross Profit (inclusive*) | 686,598 | 808,072 | -15.0% |
| (*) Change in Fair Value of Biological Assets | 71,620 | 139,003 | -48.5% |
| Gross Margin | 43.1% | 47.9% | -4.8p.p. |
| Operating Profit before Taxes and Stakes | 505,839 | 518,360 | -2.4% |
| Operating Margin | 31.7% | 30.7% | 1.0p.p. |
| Net Profit | 383,434 | 378,210 | 1.4% |
| Net Margin | 24.1% | 22.4% | 1.7p.p. |
| Adjusted EBITDA ¹ | 490,476 | 537,988 | -8.8% |
| Adjusted EBITDA margin | 30.8% | 31.9% | -1.1p.p. |
| Net Debt | 1,017,684 | 741,920 | 37.2% |
| Net Debt/Adjusted EBITDA ^(x) | 2.07 | 1.38 | 50.0% |
| Operational Data (t) | | | |
| Sustainable Packaging (Corrugated Cardboard) | | | |
| Production/Sales | 164,989 | 159,840 | 3.2% |
| Sustainable Packaging Paper (Paper) | | | |
| Production | 298,271 | 293,556 | 1.6% |
| Sales | 120,191 | 124,880 | -3.8% |
| Internal Market | 96,696 | 107,460 | -10.0% |
| Foreign Market | 23,495 | 17,420 | 34.9% |
| Sustainable Resins (Pitch and Turpentine) | | | |
| Production | 11,981 | 13,732 | -12.8% |
| Sales | 10,915 | 13,700 | -20.3% |
| Internal Market | 270 | 350 | -22.9% |
| Foreign Market | 10,645 | 13,350 | -20.3% |

¹EBITDA (earnings before interest, taxes, depreciation, amortization and depletion)

NET SALES REVENUE

Our net revenue reached R\$ 1,594,245 thousand in 2023, a decline of 5.5% compared to 2022. This was mainly due to the reduction in volume and prices in the Sustainable Packaging Paper (Paper) and Sustainable Resins (Pitch and Turpentine) segments.



REPRESENTATIVENESS BY MARKET

| | 2022 | 2023 |
|-----------------|------|------|
| Internal Market | 85% | 89% |
| Foreign markets | 15% | 11% |

VALUATION OF THE FAIR VALUE OF BIOLOGICAL ASSETS (FORESTS)

Irani measures the fair value of its biological assets (forests) periodically, as determined by CPC 29/IAS 41. The variation had an effect on the Company's 2023 result, as shown below:

EFFECTS OF CHANGES IN THE FAIR VALUE OF BIOLOGICAL ASSETS

| R\$ thousand | 2023 | 2022 |
|--|---------|----------|
| Changes in the fair value of biological assets | 71,620 | 139,003 |
| Depletion of the fair value of biological assets | (8,772) | (24,191) |

The change in the fair value of biological assets was positive in 2023, mainly due to forest growth. However, it was lower than in 2022, the result of the stability of wood prices and the increase in the discount rate used to calculate fair value.

The change in the fair value of biological assets, as well as their depletion, is recognized in the Cost of Goods Sold (COGS). The accounting determination allows for a more accurate assessment of the market value of the company's forests, making its financial statements more consistent.

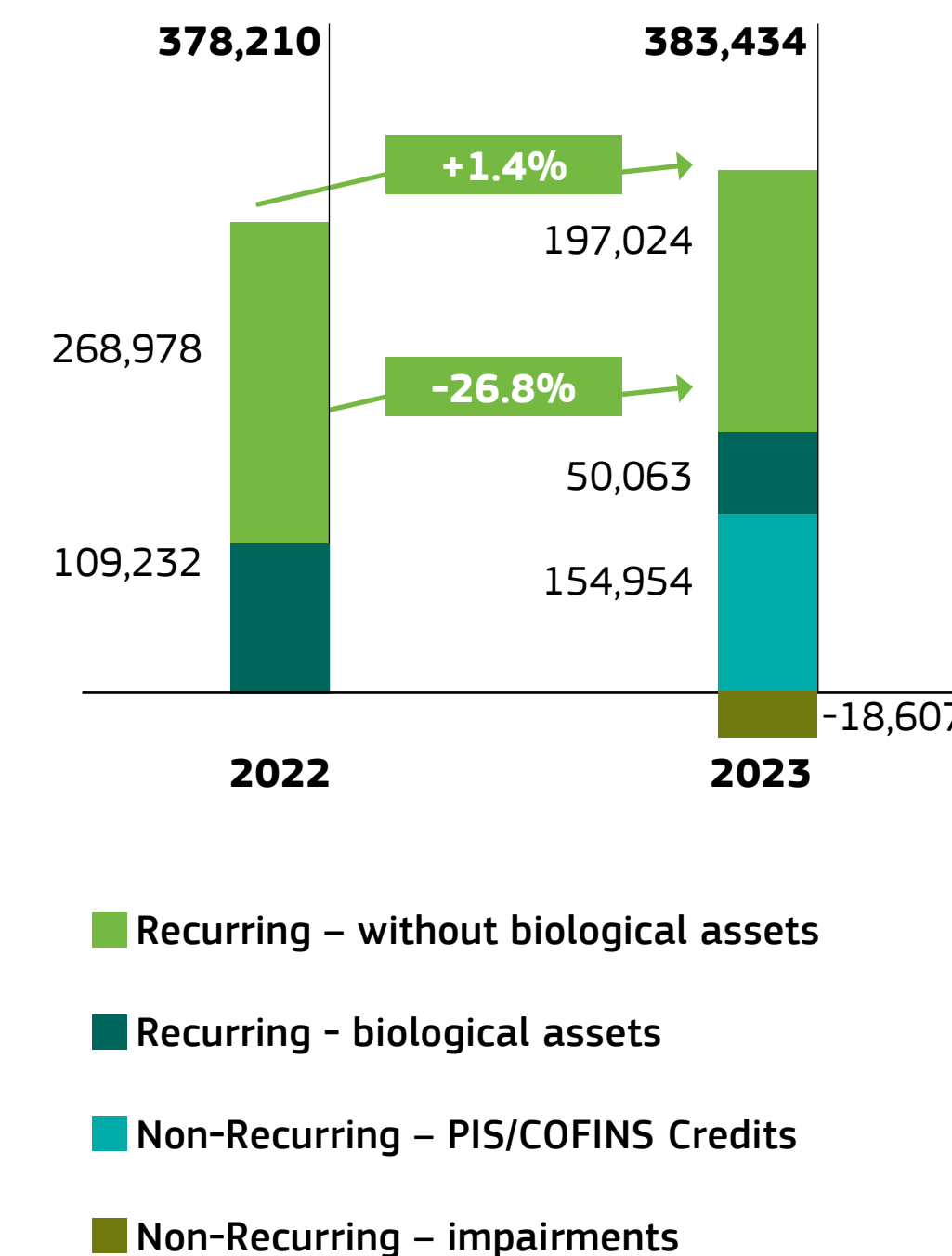
NET PROFIT

In 2023, net income increased compared to 2022, reaching R\$ 383,434 thousand. Compared to the R\$ 378,210 thousand recorded previously, this represents growth of 1.4%.

The increase was mainly influenced by the recognition of PIS and COFINS credits on wood chip acquisitions, totaling a net amount of R\$ 154,954 thousand. On the other hand, there was a negative impact due to the reduction in the fair value of biological assets, which amounted to R\$ 139,003 thousand in 2022 (R\$ 109,232 thousand net) and R\$ 71,620 thousand in 2023 (R\$ 50,063 thousand net).

In addition, net income was affected by the reduction of R\$ 67,383 thousand (R\$ 59,169 thousand net) compared to the previous year and by the recognition of impairment of investment properties, fixed assets and assets held for sale, together with the respective regularization costs, totaling R\$ 28,192 thousand (R\$ 18,607 thousand net). These factors impacted operating profit before tax effects and, consequently, net profit for the year.

NET PROFIT (R\$ THOUSAND)



OPERATING CASH GENERATION (ADJUSTED EBITDA)

| Consolidated (R\$ thousand) | 2023 | 2022 | Var. 2023/2022 |
|--|----------------|----------------|-------------------|
| Net Profit | 383,434 | 378,210 | 1.4% |
| Current and deferred income tax and social contribution | 122,405 | 140,150 | -12.7% |
| Depletion | 17,761 | 32,521 | -45.4% |
| Depreciation and Amortization | 94,845 | 70,507 | 34.5% |
| Financial Results | 45,574 | 61,503 | -25.9% |
| EBITDA | 664,019 | 682,891 | -2.8% |
| EBITDA Margin | 41.7% | 40.5% | 1.2p.p. |
| Adjustments pursuant to Resol.CVM 156/22 | | | |
| Change in Fair Value of Biological Assets ⁽¹⁾ | (71,620) | (139,003) | -48.5% |
| Non-recurring Events ⁽²⁾ | (118,391) | (21,352) | 454.5% |
| Directors' participation ⁽³⁾ | 16,468 | 15,452 | 6.6% |
| Adjusted EBITDA | 490,476 | 537,988 | -8.8% |
| Adjusted EBITDA Margin | 30.8% | 31.9% | -1.1p.p. |

¹ Variation in the fair value of biological assets, as they do not represent cash generation in the period.

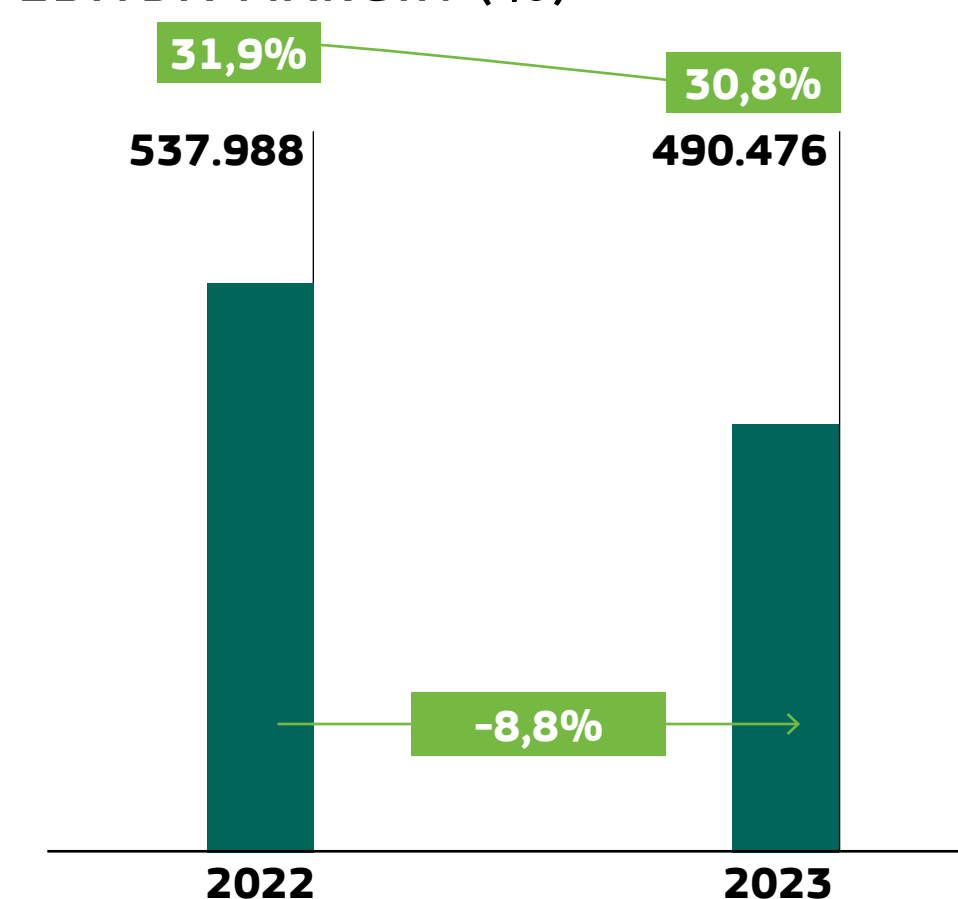
² Non-recurring Events: the amount of (R\$ 118,391 thousand) refers to (R\$ 3,870 thousand) reversal of INSS Contingency - Substitutive Cont, (R\$ 142,713 thousand) PIS and COFINS credit on purchases of shavings, (R\$ 934 thousand) provision for impairment of fixed assets, (R\$ 16,053 thousand) provision for impairment of investment property.

COFINS credit on chip acquisitions, R\$ 934 thousand provision for impairment of fixed assets, R\$ 16,058 thousand provision for impairment of investment property, R\$ 8,645 thousand provision for regularization of land held for investment and R\$2,555 thousand provision for impairment of held for sale.

³ Management Share: the amount of R\$ 16,468 thousand refers to the provision for management share in the Company's results.

Operating cash generation, measured by adjusted EBITDA, totaled R\$ 490,476 thousand in 2023, with a margin of 30.8% and 8.8% lower than in 2022, when it totaled R\$ 537,988 thousand.

ADJUSTED EBITDA (R\$ THOUSAND) AND ADJUSTED EBITDA MARGIN (%)



■ Adjusted EBITDA (R\$ thousand)
■ Adjusted EBITDA Margin (%)

FINANCIAL RESULT

In 2023, the financial result was negative by R\$ 45,574 thousand, compared to R\$ 61,053 thousand in 2022:

- The positive impact of recognizing the correction of PIS and COFINS credits on the acquisition of shavings, in the amount of R\$ 62,865 thousand;
- The reduction in the basic interest rate (Selic), which has a positive impact on the average cost of debt;
- The increase in net debt, mainly due to disbursements for investments in the Gaia Platform.

NET DEBT

Net debt reached R\$ 1,017,684 thousand in 2023, an increase of 37.2%, or R\$ 275,764 thousand, compared to 2022, due to the negative free cash flow in the period, mainly caused by the disbursements of investments in the Gaia Platform. On the same comparative basis, gross debt decreased by 9.6% mostly deriving from **liability management**.

The average cost of debt over the last 12 months – as of December 31, 2023 – was 14.2% per year (equivalent to CDI + 1.1%),

The cost considers interest and fixed guarantees related to the financing of Gaia Platform investments.

The net debt/Adjusted EBITDA ratio was 2.07x in 2023, compared to 1.38x in 2022. The indicator considers the Company's **Financial Management Policy**, that sets a target of 2.5x.

Considering lease liabilities as a result of the effects of CPC06 (R2) (IFRS16), net debt increased by R\$ 24,226 thousand, resulting in a net debt/Adjusted EBITDA ratio of 2.12x.

| R\$ thousand | 2023 | 2022 | Var 2022/2023 |
|---|-----------------|-----------------|------------------|
| Financial Income | 193,113 | 102,825 | 87.81% |
| Financial Expenses | (238,687) | (164,328) | -45.25% |
| Financial Result | (45,574) | (61,503) | +25.90% |
| Net exchange variation | (640) | (3,103) | -79.37% |
| Financial Result without exchange variation | (44,934) | (58,400) | +23.06% |

CREDIT RATING

On **May 10, 2023**, S&P Global Ratings reviewed the Company's credit ratings and debenture issues, maintaining the long-term issuer credit rating of "brAA" on the Brazil National Scale, **awarded on July 5, 2021**.

According to the agency, the stable outlook of the issuer rating indicates its expectation that Irani will maintain a strong performance, with gradual growth in revenue and EBITDA, benefiting from the operational improvements of the Gaia Platform. The "brAA+" rating, assigned on July 5, 2021, was also maintained for the 4th Private Issue of Green Debentures.

On October 31, 2023, S&P Global Ratings conducted a quarterly monitoring of the ratings of the 1st and 2nd Series of the CRAs of the 194th Issue of Eco Securitizadora linked and backed by Irani's 5th Private Issue of Green Debentures. The "brAA (sf)" rating was maintained, **awarded on September 26, 2022**.

SHARE BUYBACK PROGRAM 2022

In 2022, the Company's Board of Directors approved the 2022 Share Buyback Program, which came into effect in August 2022, ending in February 2024.

The Program was limited to the acquisition of 9,833,806 common shares, representing 10% of the Company's total outstanding common shares. The objective was to maximize the generation of value for shareholders through efficient management of Irani's capital structure.

By 2023, the Company had repurchased 6,529,400 shares, representing 66.40% of the program executed, at a value of R\$ 53,616 thousand, including trading costs, equivalent to an average price per repurchased share of R\$ 8.21.

In February 2024, the Board of Directors approved the closure of the Program and the cancellation of the 6,529,400 shares that had been repurchased and were held in treasury, thus reducing the share capital to 246,359,319 (two hundred and forty-six million, three hundred and fifty-nine thousand, three hundred and nineteen) shares in 2023, became 239,829,919 (two hundred and thirty-nine million, eight hundred and twenty-nine thousand, nine hundred and nineteen nine) shares after the cancellation.

The Share Buyback Program was in effect from August 2022 until February 2024.

GREEN DEBENTURES

The company has two green debenture issues as detailed below. The issues received an Independent Second Opinion, issued by ERM NINT

The opinion states that the use of the proceeds from the issues aligns with Irani's strategy and provides environmental benefits. This allows for a contribution to sustainable development and the transition to a low-carbon economy.

| Issue | 4th Issue (RANI14) | 5th Issue |
|---------------------------------|--|--|
| Type | Simple, Private, Non-Convertible, with Real Guarantee | Simple, Private, Non-Convertible, Unsecured |
| Series | Single | 2 Series |
| Principal Issued (R\$ thousand) | R\$ 60,000 | 1st Series - R\$ 486,307 2nd Series - R\$ 233,693 |
| Outstanding (R\$ thousand) | R\$ 60,000 | 1st Series - R\$ 486,307 2ª Série - R\$ 233,693 |
| Issue Date | 03/03/2021 | 08/15/2022 |
| Duration | 12/15/2029 | 1st Series - 08/12/2027 2nd Series - 08/13/2029 |
| Total Term | 8.8 years | 1st Series - 5 years 2nd Series - 7 years |
| Coupon | IPCA + 5.50% p,a, | 1st Series - CDI + 1.40% p,a, 2nd Series - CDI + 1.75% a,a, |
| Interest Payment | IPCA capitalized, 5.50% Semiannual | Semiannual |
| Green Seal | Sitawi (NINT) | NINT |
| Rating | S&P Global Ratings: br AA+ | S&P Global Ratings: br AA (sf) |
| Observation | In December 2021, the company entered into a derivative financial instrument (swap), swapping the remuneration of the issue from IPCA + 5.5% per year, to CDI + 0.71% per year | Backing for the issue and public distribution of agribusiness receivables certificates (CRAs) of the 1st and 2nd series of the 194th issue of Eco Securitizadora |

FREE CASH FLOW

In 2023, Adjusted Free Cash Flow was R\$ 265,881 thousand, a reduction of 21.3% compared to the R\$ 337,867 thousand recorded in 2022. Working capital contributed positively, reflecting the offsetting of taxes due to the recognition of PIS and COFINS credits on past purchases of wood chips.

On the negative side, there was a reduction in EBITDA and higher interest payments, due to higher net debt and a reduction in interest and fixed guarantees relating to the Gaia Platform investments

The Free Cash Flow Yield was 11.4% in 2023, a reduction of 7.4 p.p. compared to 2022, due to (i) the 21.3% reduction in Adjusted Free Cash Flow and (ii) the 29.5% increase in the company's average market value during this period.

| Free Cash Flow | 2023 | 2022 |
|--|------------------|------------------|
| Adjusted EBITDA | 490,476 | 537,988 |
| (-) Capex ⁽¹⁾ | (369,261) | (544,689) |
| (-)Interest paid/received | (109,739) | (11,361) |
| (-)Income tax and CSLL (cash) | (108,266) | (102,446) |
| (+/-)Working capital | 67,721 | (10,538) |
| (-) Dividends + interest on own capital | (205,734) | (158,786) |
| (-) Share buybacks | (41,974) | (46,471) |
| (+/-) Other | 31,258 | 28,496 |
| Free Cash Flow | (245,519) | (307,807) |
| Dividends + interest on own capital | 205,734 | 158,786 |
| Share buyback | 41,974 | 46,471 |
| Gaia Platform ⁽¹⁾ | 263,434 | 440,339 |
| Expansion Projects | 258 | 78 |
| Adjusted Free Cash Flow⁽²⁾ | 265,881 | 337,867 |
| FCL adjusted Yield⁽³⁾ | 11.4% | 18.8% |

⁽¹⁾ Considers the disbursement of interest and fixed guarantees relating to the financing of the Platform's investments.

⁽²⁾ Gaia of R\$ 3,477 thousand in 4Q23, R\$ 7,722 thousand in 3Q23, R\$10,120 thousand in 4Q22, R\$37,457 thousand in 2022 and R\$ 32,183 thousand in 2023.

⁽³⁾ Excluding dividends, interest on capital and share buy-backs, Gaia Platform and Expansion Projects.

⁽³⁾ Yield – Adjusted FCL divided by the average market value in UDM,

RETURN ON INVESTED CAPITAL (ROIC)

The Return on Invested Capital (ROIC) was 16.6% in the last 12 months, a reduction of 6.4 p.p. compared to the 12 months ended December 31, 2022, The reduction recorded in the comparisons was due to the increase in Adjusted Invested Capital.

The natural effect during the ramp-up of Gaia Platform Investments is that the Capex completed is immediately added to the Adjusted Invested Capital, while the returns generated by the Projects gradually impact the Adjusted Operating Cash Flow.

High levels of ROIC demonstrate a commitment to generating consistent returns above the cost of capital (WACC). The business model is based on the secular trend of the circular economy and low carbon impact business, which sustains differentiated levels of ROIC.

| ROIC (R\$ thousand) – UDM ⁽¹⁾ | 2023 | 2022 |
|---|------------------|------------------|
| Total Assets | 3,321,468 | 2,689,926 |
| (-) Total Liabilities (ex-debt) | (595,522) | (533,924) |
| (-) Works in progress | (514,937) | (580,687) |
| Invested Capital | 2,211,008 | 1,575,316 |
| (-) CPC 29 adjustment ⁽²⁾ | (214,875) | (132,556) |
| Adjusted Invested Capital | 1,996,134 | 1,442,760 |
| Adjusted EBITDA | 490,476 | 537,988 |
| (-) Capex Maintenance | (105,569) | (104,272) |
| (-) Income tax and CSLL (cash) ⁽³⁾ | (52,864) | (102,446) |
| Adjusted Operating Cash Flow | 332,044 | 331,270 |
| ROIC⁽⁴⁾ | 16.6% | 23.0% |

⁽¹⁾ Average of the equity balances of the last 4 quarters (Last Twelve Months)

⁽²⁾ Differential of fair value of biological assets minus Deferred Taxes of Fair Value of Biological Assets

⁽³⁾ Excludes Income Tax and Social Contribution on Net Income (Cash) non-recurring of R\$ 55,402 thousand in 3Q22 derived from the recognition of PIS and COFINS credit on acquisitions of assets in 2Q23.

⁽⁴⁾ ROIC (Last Twelve Months): Adjusted Operating Cash Flow / Adjusted Invested Capital

(201-1)
**DIRECT ECONOMIC
VALUE GENERATED
AND DISTRIBUTED**

The values relating to the wealth we generate and their distribution among the parties that contributed to their generation (such as employees, government, financiers and shareholders) are presented as follows:

| | 31/12/2023 | % | 31/12/2022 | % |
|---|------------|--------|------------|--------|
| 1. Revenue | 2,229,652 | | 2,658,582 | |
| 2. Inputs purchased from third parties | 1,089,893 | | 1,630,799 | |
| 3. Gross value added (1-2) | 1,139,759 | | 1,027,783 | |
| 4. Depreciation, amortization and depletion | 112,606 | | 103,028 | |
| 5. Biological asset change in fair value | (71,620) | | (139,003) | |
| 6. Net added value produced by the entity (3-4-5) | 1,098,773 | | 1,063,758 | |
| 7. Value added received in transfer | 193,113 | | 102,825 | |
| 8. Total added value to be distributed (6+7) | 1,291,886 | | 1,166,583 | |
| 9. Distribution of Value Added | | | | |
| 9.1) Staff | 262,019 | 20.28% | 234,154 | 20.07% |
| 9.2) Taxes, fees and contributions | 372,444 | 28.83% | 352,734 | 30.24% |
| 9.3) Remuneration of third-party capital | 247,231 | 19.14% | 172,519 | 14.79% |
| 9.4) Return on equity | 393,724 | 30.48% | 391,724 | 33.58% |
| 9.5) Other | 16,468 | 1.27% | 15,452 | 1.32% |

Note: information on social investments is presented in the chapter "Our commitment to the development of the surrounding communities."

(201-4)

TAX INCENTIVES (GOVERNMENT SUBSIDY)

STATE OF MINAS GERAIS:

Presumed Credit: The State of Minas Gerais grants presumed ICMS credit as its main benefit, resulting in the effective payment of 2% of the value of the outgoing operations of the products manufactured by the Company. The effect on operating profit before tax effects in 2023 was R\$7,022 thousand.

STATE OF SANTA CATARINA:

PRODEC - Programa de Desenvolvimento da Empresa Catarinense (Santa Catarina Company Development Program), with the aim of supporting expansion projects aimed at increasing the Company's production capacity and energy sufficiency, which are being implemented in the State of Santa Catarina (Gaia Platform).

Features:

- Deferral for payment of 70% of the increase in NORMAL ICMS calculated on the average generated in the period from July 2020 to June 2021;
- Amount of up to R\$743,059 thousand;
- Payment period for each deferred installment (grace period): 48 months;
- Interest rate: 0% p.a.;
- Monetary restatement: 50% of the index used to restate state taxes;
- Benefit period: up to 15 years.

The benefit is calculated on a monthly basis, with the requirement of maintaining good standing with the state being fully met.

No charges will be levied on the value of the incentives at contractual rates. The benefit is valid for 19 years (15 years of use and a 4-year grace period), starting in June 2023 and ending in May 2038, or up to the limit of R\$743,059,000 in deferred ICMS. Up to December 31, 2023, the company had R\$ 366 thousand of deferred ICMS recorded in liabilities, net of the government subsidy of R\$ 229 thousand.

It is important to note that this is not a tax credit, but rather financing of a NORMAL ICMS increase at 0% interest. The actual amounts financed depend on the increase in production capacity of the projects as well as future market conditions.

FINANCIAL CAPITAL



FUTURE OPPORTUNITIES AND COMMITMENTS

Capturing the returns from the closed projects of the Gaia Platform;

- To grow with a return above the cost of capital in order to generate differentiated value for shareholders;
- Maintain cash resources for immediate liquidity of at least R\$ 300 million;
- Maintain a capital structure made up of 30% to 50% own capital and 70% to 50% third-party capital;

Maintain a “target” operating leverage ratio (Net Debt/Adjusted EBITDA) of 2.5x, which represents an adequate capital structure, with the possibility of a higher ratio of up to 3.5x in post-investment periods;

- Keep the rating at a high level, demonstrating credit quality;
- Evaluate and mature a new investment cycle after the Gaia Platform.

HUMAN CAPITAL

Diversidade e Inclusão

Desenvolvimento de Pessoas

Saúde e Segurança



EZEQUIEL PEREIRA
Forestry SC Unit

People are at the heart of all Irani's strategies. And they will remain so, bolstering our position as one of the Best Companies to Work For.

We encourage human capital to play a leading role, in line with the cultural practices encouraged by Great Place to Work® (GPTW). At Irani, employees don't just undergo change; they are their own captains of it; they enhance their personal and professional journeys and strengthen the building of prosperous relationships.

To this end, we have fostered an environment comprised of employees who are engaged with the company's strategy and results and who, above all, are proud to work for Irani. The process relies on five structuring programs:

program **gerã** program **cuida** program **cresce**

program **motiva** program **superã**

Human capital is strongly advocated for to assume a leadership position, in accordance with the cultural norms and values promoted by Great Place to Work®. At Irani, employees actively participate in and direct change, thereby enriching their personal and professional trajectories and fostering the development of mutually beneficial connections.

We continued to work on developing the organizational culture, strengthening our values with the motto #ClimateProtagonists. We carried out the GPTW Climate Survey online, with 88% of employees and leaders taking part. Based on the results, we used the 3CS methodology, founded on the principles of andragogy, to detail the data and draw up action plans with the participation of the teams and the Climate Management Group.

Our satisfaction rate has reached an average of 90%.

We considered the five GPTW dimensions that nurture the relationship of trust between people and the work environment:

1. Credibility
2. Respect
3. Pride
4. Camaraderie
5. Impartiality



ALAN SILVA
Paper SC Unit

DIVERSITY AND INCLUSION



**GRI 2-7, 2-21,
2-30, 3-3,
202-1, 401-1,
401-2, 401-3,
405-1, 405-2
ISE**



We observe the professional cycle of employees at Irani, from the stages of attraction and engagement through to monitoring each person’s career path. This enables us to define our cultural alignment and empower people to take the lead in their own careers.

The team of analysts who conduct the selection processes is either in-house or supported by external consultants. The work is accompanied by online stages, from application to admission, which ensure greater transparency and faster feedback to the participants.

Finding professionals whose values are aligned with the company’s translates into greater chances of success since they will be able to adapt more easily to our organizational culture. That’s why we train our recruitment team to conduct quality selection interviews.

This also means paying attention to diversity. We understand that beliefs, prejudices and stereotypes form unconscious biases that impact decision-making. Raising awareness promotes and favors more effective and confident decisions, positively impacting the relationship between employees, processes and the company’s sustainability.

The issue is so important to Irani that we created “Gera Diversidade” (Generate Diversity), a front of the program that establishes actions based on respect for equal opportunities, regardless of gender, age, ethnicity, religion, nationality, marital status, sexual orientation and disabilities of any kind.

| | 2021 | 2022 | 2023 |
|--|--------|--------|--------|
| (401-1) Vacancies filled by internal recruitments | 67.47% | 67.23% | 73.17% |

We continued our initiatives to develop young talent with a mandatory and non-mandatory internship program in technical, administrative and production areas. We implemented one at the Indaiatuba unit.

This is the + Delas na Operação (Women in Operations) program, which aims to promote gender equality and provide professional training for women in the industrial sector. They are part of the Maria Luiza Project, named after Maria Luiza Soares Fontes, Brazil's first female electrical and mechanical engineer. As a result, two trainees were hired for the unit's industrial maintenance area. One was contracted as the unit's first electrician.

We also continued the Meu Aprendizado program, a young apprentice initiative. Based on a training plan focused on skills related to the job market, the young people establish a chain of learning, training and growth. To this end, they develop in subjects such as:

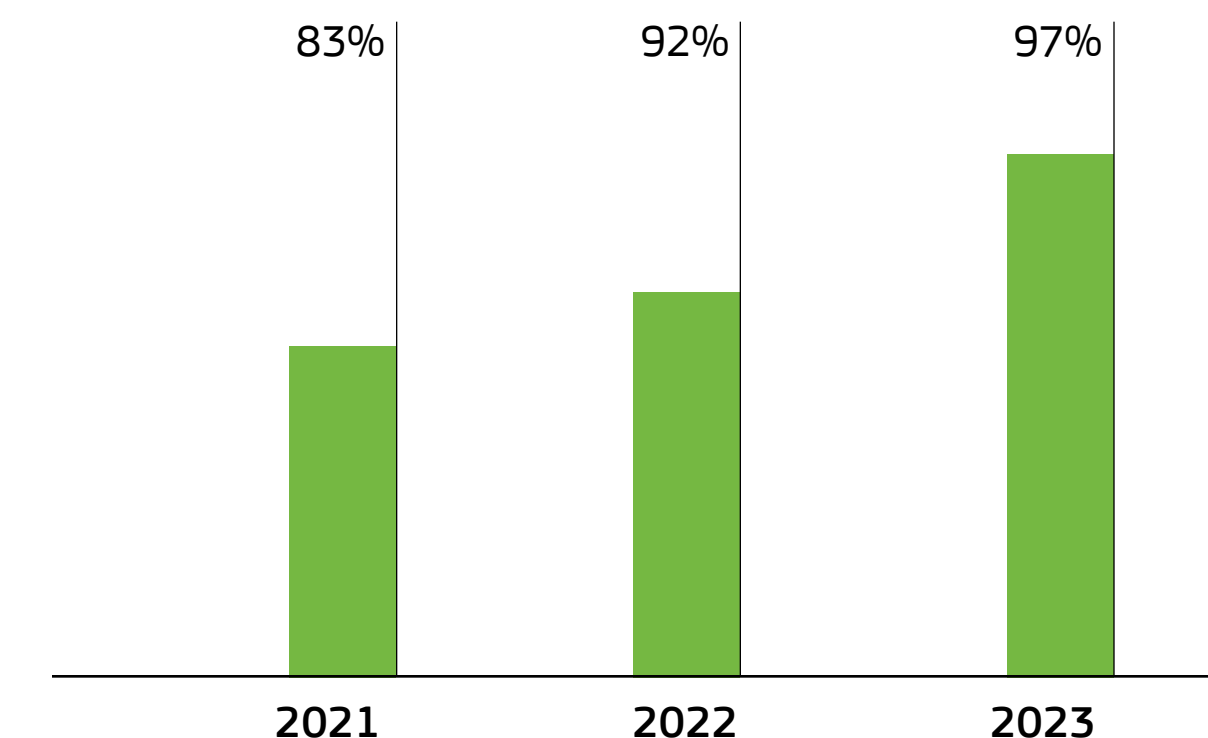
- Corporate behavior
- Self-awareness
- Communication skills
- Teamwork
- Creativity and innovation
- Emotional intelligence

The employee integration process is aligned with the "hire and receive" pillar, one of the nine practices encouraged by the GPTW®. The materials are standardized so that all units have the same content, adding value to the welcome given to new hires.

Everyone receives a welcome kit with a letter signed by the CEO. In addition, we have a team of internal facilitators trained in the importance of the first contact with the new employee.

At the end of each integration, we assess the level of satisfaction of each new employee.

% OF SATISFACTION



We also offer online integration, with content available in distance learning through the SuccessFactors platform. Along with the welcome kit, Irani delivers electronic equipment and the tools needed for remote work.

There are also virtual meetings with the facilitators and time to clarify any doubts. Such events allow for an alignment with managers so that personalized training schedules can be drawn up for each position.

Another inclusion initiative is that of employees with disabilities, which continued in 2023. There were joint actions with the diversity center: conversation circles held at all units, with more than 100 participants, for instance. The main objective is to stimulate dialog on the subject. There is no predefined theme for the conversations, which take place organically and aim to reach and raise awareness among as many people as possible.

We also can highlight a training program open to employees as part of the “Leader of Yourself” development process. The initiative was conducted through the “Respect: a meeting

point” webinar, addressing “what we need to know about the topic of Diversity and its relationship with unconscious biases and the allied person.”

We have established a working group comprising a multidisciplinary team from the Gera Acessibilidade Program, which is actively discussing the architectural review project for our factories with the aim of promoting accessibility in our spaces. With the support of outside consultants, we have identified opportunities to improve environments and make space accessible, guaranteeing fundamental rights such as the right to come and go and the right to work safely and autonomously.

We follow the most significant and innovative business movements. In this sense, we are further improving internal practices related to diversity in order to promote a workplace that welcomes, integrates and respects differences.

For us, diversity is everything that differentiates one person from another: gender, age, nationality, color, ethnicity, religion, marital

status, sexual orientation and disabilities of any kind. It is synonymous with plurality, an elementary characteristic of what is collective and of life in society. We are present in four states of one of the most multicultural countries in the world and we recognize that this is one of our strengths.

Since 2021, we have been part of the Citizen Company Program, which makes it possible to extend maternity and paternity leave beyond the period already guaranteed. Employees gain more time to enjoy the arrival of their children, whether biological or adopted, strengthening family ties and reinforcing our values of caring for people. We have also developed training for new fathers. Called “Father, a presence of love and protection,” 259 employees have taken part since it was established, of whom 102 in 2023 alone.

Inspired by World Day for Cultural Diversity, celebrated on May 21, we have been promoting “Encounter with Diversity” for three years. These are online meetings held on YouTube and open to anyone interested.

In 2023, the theme was “Celebrating singularities, valuing differences.” The panels covered topics such as protagonism, public commitments, gender and happiness. Through the initiative, employees were able to share their stories, connecting experiences.

The meetings, which are also supported by speakers, help to promote reflection and raise awareness of the issue. Available to internal and external audiences, the 2023 edition had 394 simultaneous participants via Zoom, totaling 342 views on YouTube and generating 27 new subscribers to the channel.

We reinforce the importance of promoting equal opportunities and fair treatment for all people, regardless of sexual orientation and gender identity. This means that we reject discriminatory practices.

We reaffirmed our commitment to the Forum on Companies and LGBTI+ Rights, a guideline through which we join forces so that the 10 Company Commitments to LGBTI+ Rights become a reality and bring benefits to society. In 2022, we created our first LGBTI+ talent pool, which today has 278 registered CVs.

In 2023, we became signatories to the UN Women Women’s Empowerment Principles (WEPs). In making this commitment, we pledge to act to increasingly promote gender equality in our workplace, marketplace and community. We recognize that we need to work together in all areas to ensure the promotion of a truly inclusive, safe and productive workplace.

We implemented the first talent bank for people with disabilities, which today has 27 registered CVs.

We completed the first cycle of the “I Value Diversity” project. The initiative seeks to promote the inclusion of minority groups in the company and works through nominations. With each nomination, employees score points. The highest scorers are rewarded with training that can be extended to their dependents.

The aim is to engage everyone through affirmative action so that we can become an increasingly diverse and inclusive company. In this first cycle, 6% of those nominated were successful.

Empowering leaders was also our focus, with initiatives to include the topic in the Lidera (Lead) Program, a Plural Day with directors to strengthen (re)learning about the topic and the role of senior leadership in the Diversity journey as well as mentoring with the CEO and other company directors to support development in relation to the topic.

We carried out the second Plural Census, which seeks to hear the voice of all employees in relation to diversity and inclusion. The initiative was attended by 939 respondents, with a favorability rate of 82.62%.

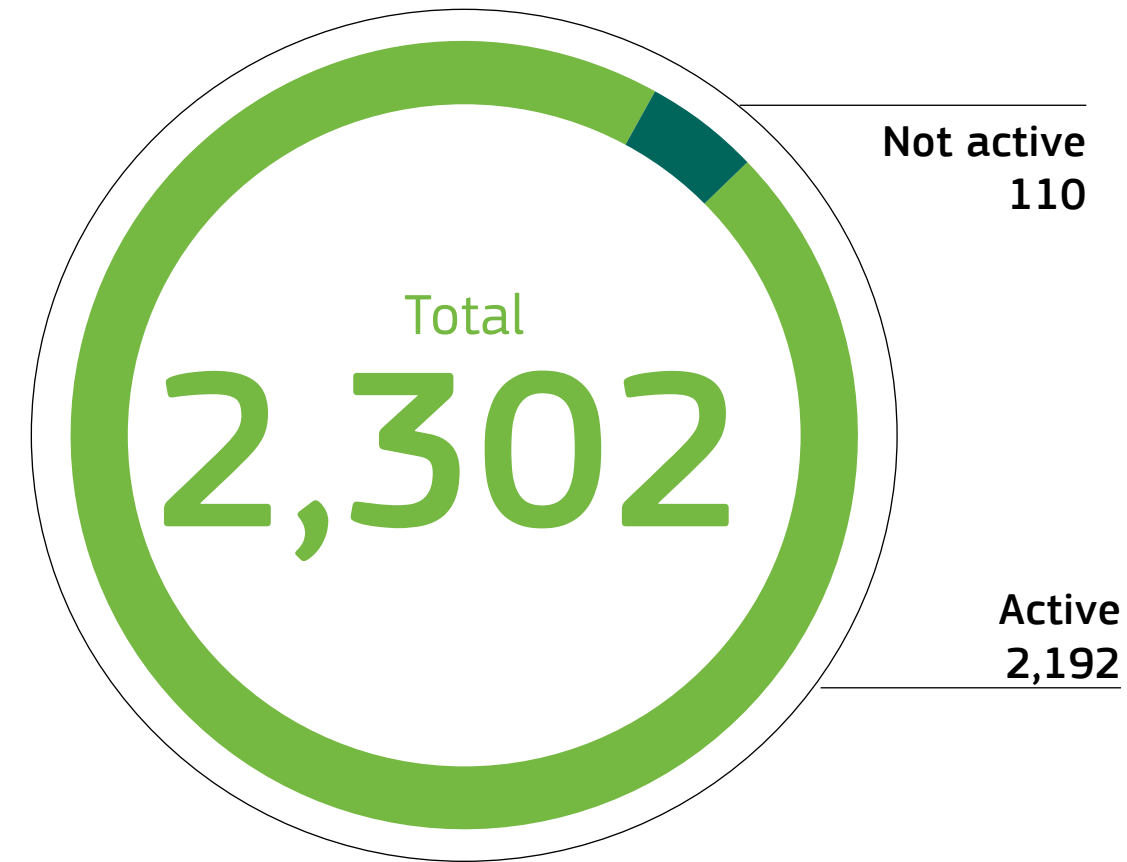
In keeping with this theme, we have promoted initiatives such as:

- Creation of a Diversity Booklet;
- Expansion of “+ Delas na Operação” to more units;
- Strengthening Irani’s diversity policies with the external public, by publicizing our practices and constantly preparing the internal team.

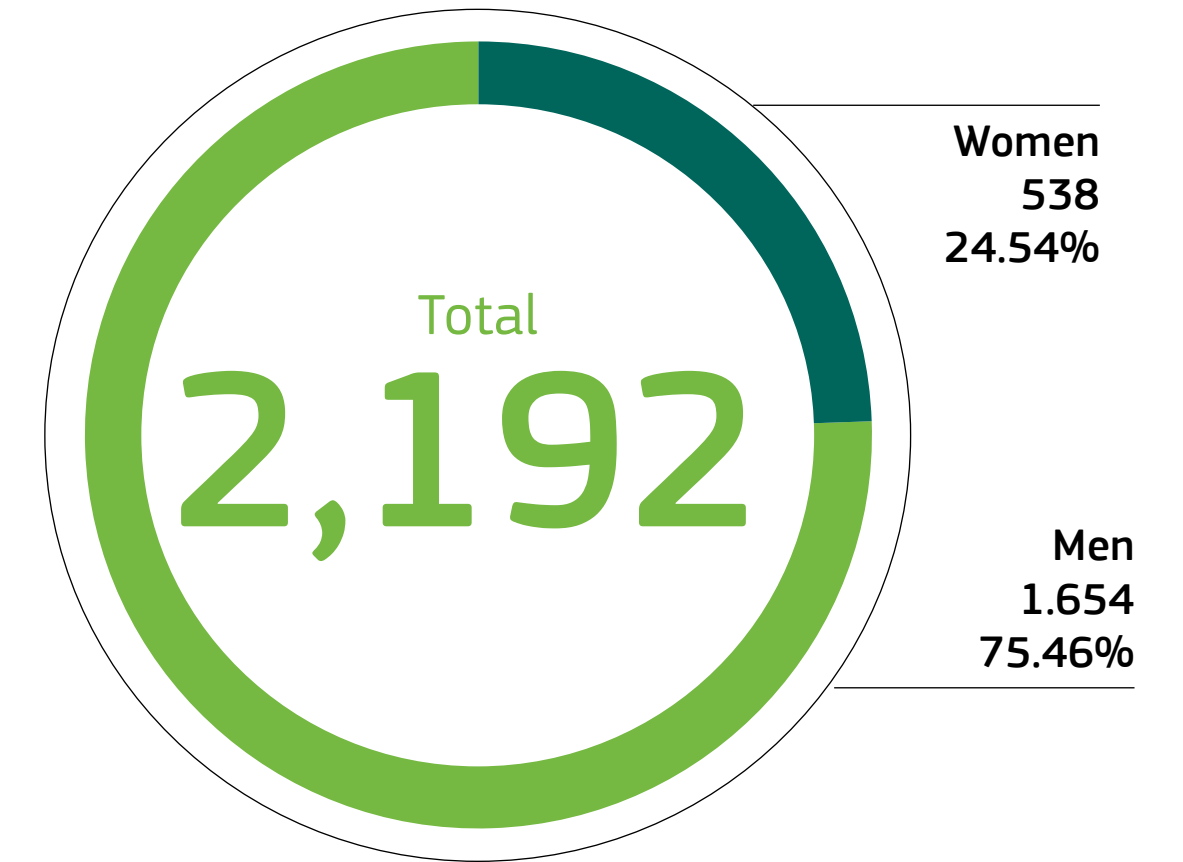
STAFF DEMOGRAPHIC INFORMATION

(2-7) The information presented was extracted from our ERP system, with a base date of 12/31/2023. We consider all of Irani's branches and subsidiaries to be important operating units, as they are equally representative of the group, adopting policies and strategies that seek to develop and help people grow.

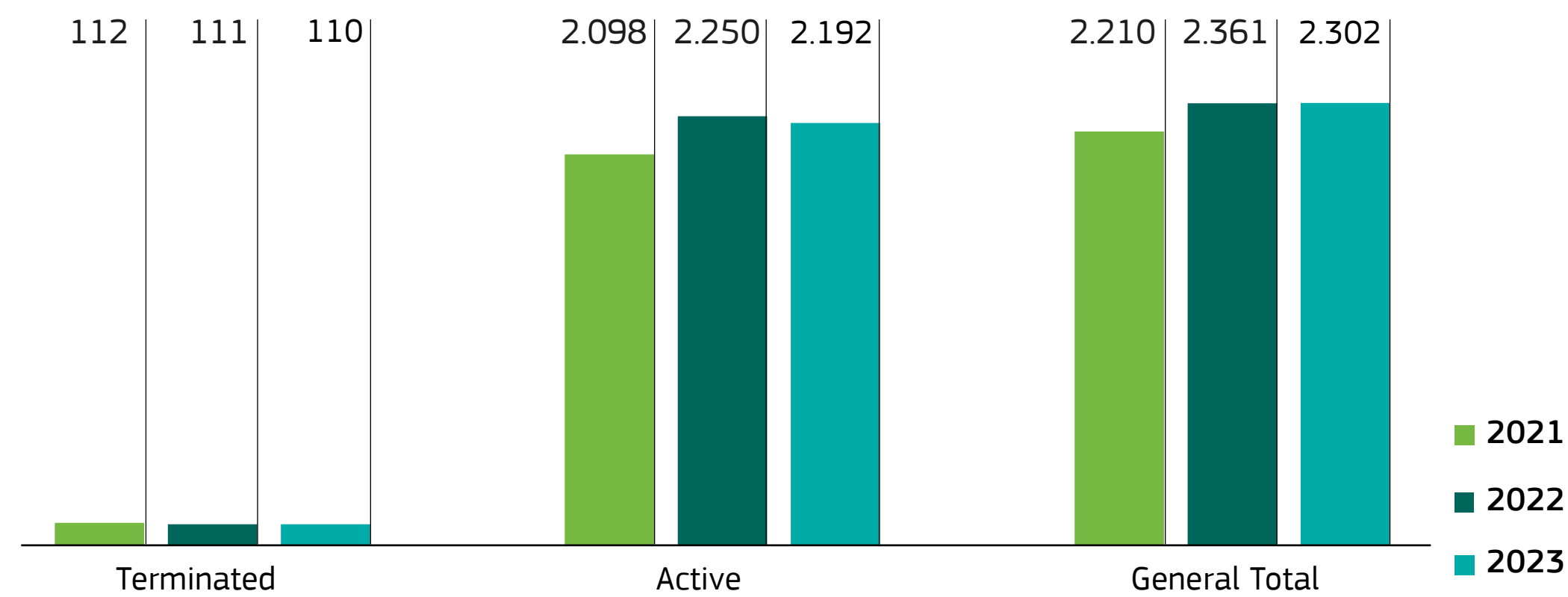
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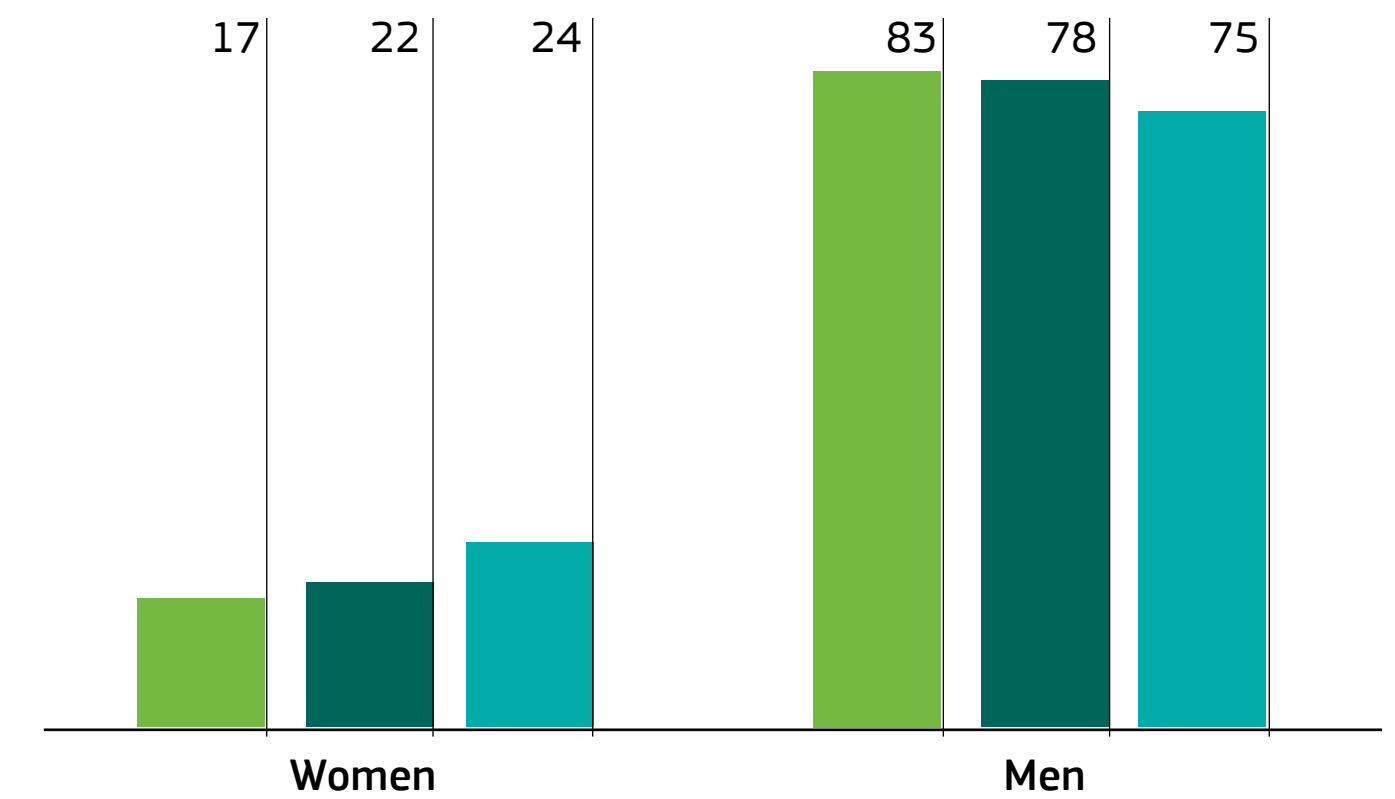
(405-1) PERCENTAGE OF ACTIVE EMPLOYEES BY GENDER



(2-7) TOTAL NUMBER OF EMPLOYEES



(405-1) PERCENTAGE OF ACTIVE EMPLOYEES BY GENDER



(2-7) HIRING REGIMEN

| | 2021 | | 2022 | | 2023 | |
|--------------|------------|--------------|------------|--------------|------------|--------------|
| | Women | Men | Women | Men | Women | Men |
| Parttime | 14 | 10 | 14 | 10 | 35 | 11 |
| Fulltime | 363 | 1,823 | 363 | 1,823 | 532 | 1,724 |
| Total | 377 | 1.833 | 377 | 1.833 | 567 | 1.735 |

(2-30) ACTIVE EMPLOYEES COVERED BY COLLECTIVE BARGAINING AGREEMENTS

| | 2021 | 2022 | 2023 |
|--------------------|--------|--------|--------|
| Collective Accords | 98.62% | 96.53% | 98.72% |
| Pró-Labore | 0.29% | 0.22% | 0.23% |
| Minimum wage | 1.10% | 324% | 1.05% |

(2-7) EMPLOYEES BY WORK CONTRACT AND GENDER

| | 2021 | | 2022 | | 2023 | |
|---------------------------|------------|--------------|------------|--------------|------------|--------------|
| | Feminino | Masculino | Feminino | Masculino | Feminino | Masculino |
| CLT - Indefinite period | 351 | 1,805 | 447 | 1,795 | 519 | 1713 |
| CLT - Young apprentices | 14 | 10 | 52 | 24 | 35 | 11 |
| CLT - Fixed-term contract | 12 | 12 | 18 | 20 | 13 | 6 |
| Statutory | | 6 | 0 | 5 | 0 | 5 |
| Total | 377 | 1,833 | 517 | 1,844 | 567 | 1,735 |



MARIA DE LOURDES
Paper MG Unit

(401-1) NEW HIRES BY AGE GROUP AND GENDER

| | 2021 | | 2022 | | 2023 | |
|--------------------|--------|--------|-------|-------|-------|-------|
| | Women | Men | Women | Men | Women | Men |
| Up to 30 years old | 17.3% | 41.8% | 27.7% | 35.9% | 29.0% | 31.1% |
| 31-50 years old | 11.80% | 25.20% | 15.0% | 19.8% | 17.2% | 21.3% |
| Over 50 | 0.30% | 3.60% | 0.0% | 1.5% | 0.6% | 0.9% |

(405-1) PERCENTAGE OF EMPLOYEES BY AGE GROUP

| | 2021 | 2022 | 2023 |
|--------------------|-------|-------|-------|
| Up to 30 years old | 37.4% | 38.8% | 36.6% |
| 31-50 years old | 50.8% | 50.5% | 51.9% |
| Over 50 | 11.8% | 10.7% | 11.5% |

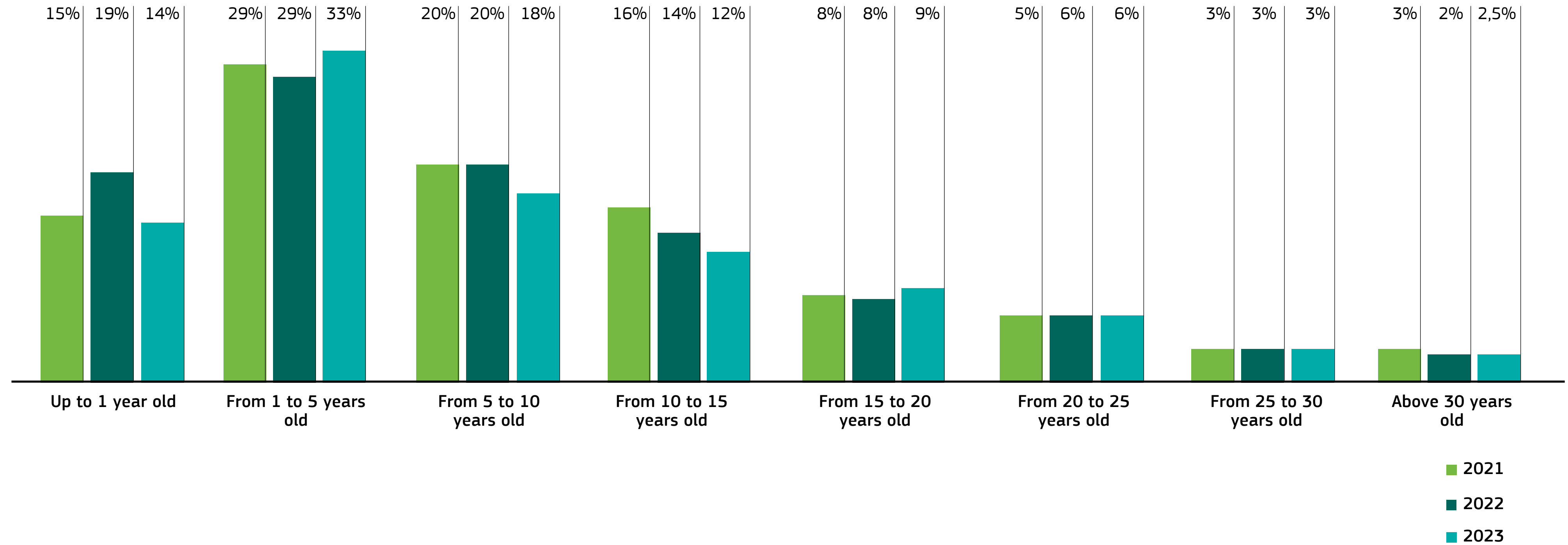
(405-1) PERCENTAGE OF EMPLOYEES BY JOB CATEGORY

| | 2021 | 2022 | 2023 |
|----------------|------|------|------|
| Leadership | 7% | 7% | 8% |
| Administrative | 25% | 28% | 26% |
| Operational | 69% | 65% | 66% |

(401-1) TURNOVER BY AGE GROUP AND GENDER

| | 2021 | | 2022 | | 2023 | |
|--------------------|-------|-----|-------|-----|-------|-----|
| | Women | Men | Women | Men | Women | Men |
| Up to 30 years old | 26% | 20% | 15% | 22% | 22% | 29% |
| 31-50 years old | 20% | 20% | 20% | 12% | 17% | 15% |
| Over 50 | 14% | 11% | 13% | 16% | 15% | 15% |

PERCENTAGE OF EMPLOYEES BY LENGTH OF SERVICE IN THE COMPANY



DEMOGRAPHIC INFORMATION STRATIFIED BY BUSINESS UNIT

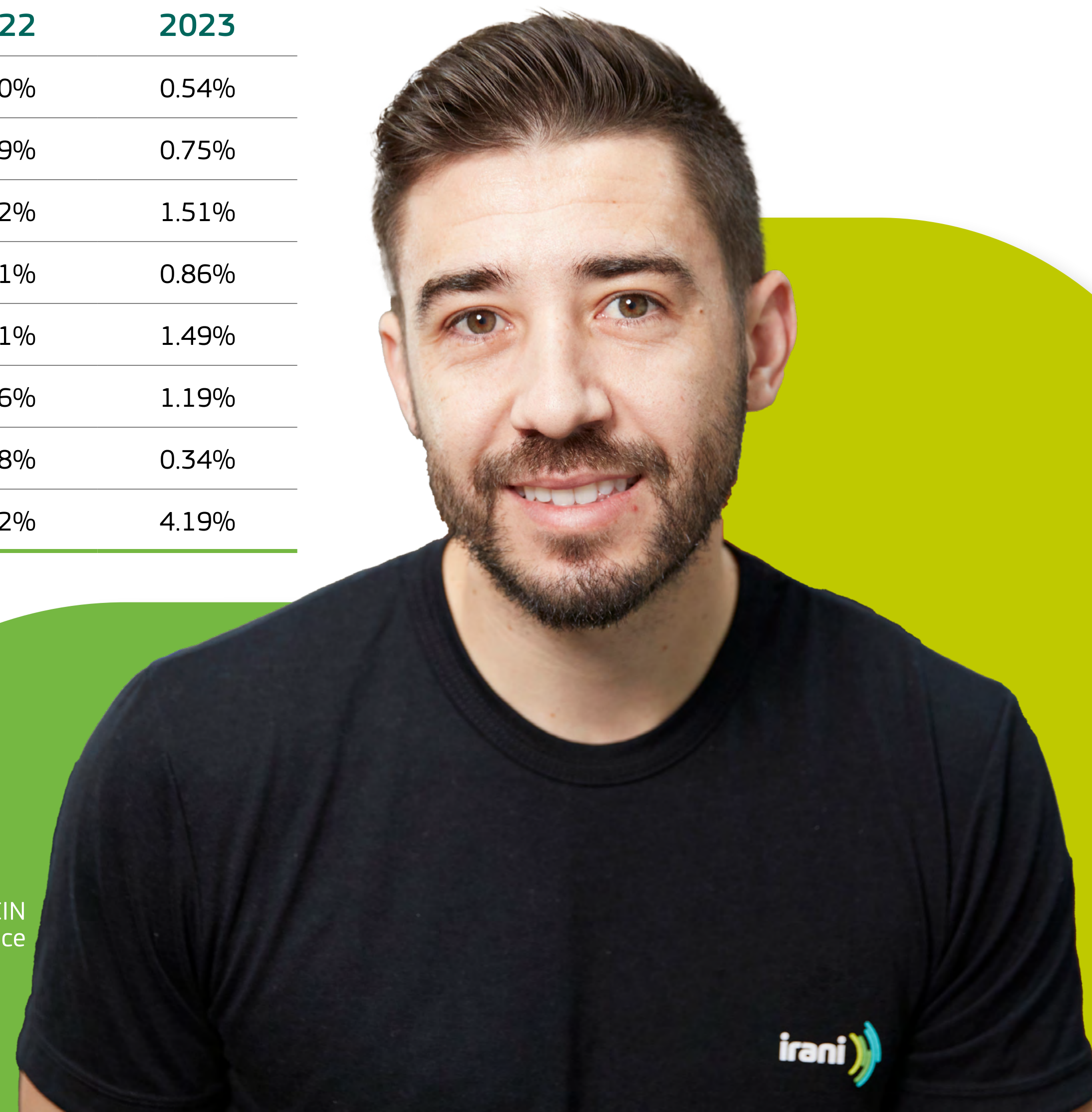
(2-7) EMPLOYEES BY BUSINESS UNIT AND GENDER

| | 2021 | | 2022 | | 2023 | |
|-----------------------------------|------------|--------------|------------|--------------|------------|--------------|
| | Women | Men | Women | Men | Women | Men |
| Office RS – Porto Alegre | 28 | 21 | 28 | 21 | 31 | 20 |
| Office SC – Joaçaba | 64 | 97 | 82 | 106 | 81 | 110 |
| Paper SC – Campina da Alegria | 108 | 703 | 141 | 722 | 145 | 684 |
| Paper MG – Santa Luzia | 21 | 151 | 29 | 158 | 32 | 149 |
| Packaging SC – Campina da Alegria | 43 | 260 | 81 | 271 | 98 | 260 |
| Packaging SP – Indaiatuba | 44 | 358 | 72 | 344 | 88 | 322 |
| Resin RS – Balneário Pinhal | 19 | 58 | 19 | 57 | 22 | 56 |
| Subsidiaries | 50 | 185 | 65 | 165 | 92 | 190 |
| Total | 377 | 1,833 | 517 | 1,844 | 589 | 1,791 |

(401-1) AVERAGE ANNUAL TURNOVER PER BUSINESS UNIT

| | 2021 | 2022 | 2023 |
|-----------------------------------|-------|-------|-------|
| Escritório RS – Porto Alegre | 0.97% | 1.20% | 0.54% |
| Escritório SC – Joaçaba | 0.45% | 0.49% | 0.75% |
| Papel SC – Campina da Alegria | 1.33% | 0.92% | 1.51% |
| Papel MG – Santa Luzia | 1.25% | 1.01% | 0.86% |
| Embalagem SC – Campina da Alegria | 1.23% | 1.21% | 1.49% |
| Embalagem SP – Indaiatuba | 1.18% | 0.96% | 1.19% |
| Resina RS – Balneário Pinhal | 0.82% | 1.38% | 0.34% |
| Controladas | 3.42% | 3.72% | 4.19% |

LEONARDO FACCIN
Joaçaba SC Office



REMUNERATION AND BENEFITS

We ended 2023 with 2,302 employees on staff, 110 of whom, or 4.78%, are on leave. Of the total number of employees, 99.78% are contracted under the CLT regime and 0.22% are pro-labore. 98.74% of the workforce is covered by collective bargaining agreements.

With the support of a specialized consultancy, we evaluated the Company's regional practices and positions to guide our remuneration and benefit offers.

(202-1) The average of the lowest salaries is 1.28 for both men and women of the minimum wage in force in Brazil on December 31, 2023. In relation to the total workforce, 18.59% receive the minimum wage.

(2-21) Proportionately, the highest paid individual in the organization receives 35.74 salaries more than the average of the other employees. To calculate this figure, total annual remuneration was taken to be the following: base salary + 13th salary + vacation pay. This same individual had a salary increase of 11.08% between 2022 and 2023, while the average for other employees increased by 7.66%.

(405-2) PROPORTION OF WAGES PAID TO MEN AND WOMEN

| | 2021 | | 2022 | | 2023 | |
|-----------------------|-------|------|-------|------|-------|------|
| | Women | Men | Women | Men | Women | Men |
| Leadership | 1 | 0.85 | 1 | 0.85 | 1 | 0.82 |
| Administrative | 1 | 0.86 | 1 | 0.81 | 1 | 0.75 |
| Operational | 1 | 0.71 | 1 | 0.69 | 1 | 0.69 |

Note: for the presentation of this information we have only considered the average basic salary paid by job category. Men and women working in the same position in the company receive the same salary. On average, men earn more because they are the majority at all levels, impacting on the higher leadership salaries.

TOTAL PAYROLL (IN R\$ MILLION)

| 2021 | 2022 | 2023 |
|------|------|------|
| 154 | 180 | 220 |

(401-2) BENEFITS GRANTED TO EMPLOYEES (IN R\$ THOUSAND)

| | 2021 | 2022 | 2023 |
|-------------------------------|---------------|---------------|---------------|
| Food | 13,597 | 16,591 | 19,583 |
| Transportation | 10,704 | 11,851 | 13,519 |
| Life insurance | 331 | 388 | 643 |
| Health insurance | 12,314 | 14,674 | 18,474 |
| School supplies and childcare | 180 | 262 | 382 |
| Home office | 589 | 764 | 890 |
| Gympass | 250 | 284 | 330 |
| TOTAL | 37.967 | 44.814 | 53.819 |

Notes: food considers the sum of the amounts invested in employee meals and basic food baskets. All benefits are offered to full-time and part-time direct employees, regardless of the type of contract.



GRI 401-3

PARENTAL LEAVE

All employees are entitled to maternity/paternity leave on presentation of supporting documentation. The following information is based on the number of direct employees active on 12/31/2023. All employees are entitled to maternity/paternity leave on presentation of supporting documentation. The following information is based on the number of direct employees active on 12/31/2023.

| | women | Men | Total |
|--|-------|-----|-------|
| Total number of employees who took maternity/paternity leave, broken down by gender. | 27 | 74 | 101 |
| Total number of employees who returned to work after taking maternity/paternity leave, broken down by gender. | 27 | 74 | 101 |
| Total number of employees who returned to work after taking maternity/paternity leave and remained employed 12 months after their return to work, broken down by gender. | 19 | 72 | 91 |

PEOPLE DEVELOPMENT



**GRI 3-3, 404-1,
404-2, 404-3
ISE**

GRI 404-2

programa
cresce

The Growth Program consists of promoting employee training and development actions in line with the company's strategies, stimulating a culture of learning. To this end, we create spaces and solutions for constant training and knowledge sharing. Our guiding principles are the following organizational capabilities:

» Life, first of all: the ability to take care of oneself and others, prioritizing life, health and safety for all.

- **Client-centric:** we seek to understand and anticipate the customer's needs and carry out effective actions with the aim of resolving/solving their demands, generating valuable relationships and loyalty.
- **Culture of excellence:** an attitude geared towards ensuring excellence and continuous improvement in our products, processes and services.

- **Innovation:** the ability to act creatively, generating and implementing successful ideas in processes, products and service delivery.
- **Self-development:** the commitment of each individual in the continuous search for personal and professional development, through different means of access to learning – internal and external – becoming the protagonist of their own careers.
- **Teamwork:** the ability to combine everyone's efforts to achieve results through the engagement and combination of different profiles within the company.
- **Communication:** the ability to convey ideas, guidelines and opinions clearly and assertively, using the means of communication available and appropriate for each audience. Active listening and the ability to understand what is being communicated.
- **Leadership:** the ability to involve and influence people to achieve differentiated and sustainable results, with simplicity, humility and balance.

GRI 404-2

IRANI CORPORATE EDUCATION

It is our way of improving the acquisition of knowledge and making it accessible, available and easy to understand. Segmented into three schools and their respective strategic focal points, Irani Corporate Education delves deeper into the themes experienced at the Company through different teaching methodologies. We thus encourage a culture of continuous learning and career leadership.



escola itec

It strengthens our roots and technical bases so that, side by side, we can strive for excellence.



escola dna

It instigates our “thinking and doing” as a strategy for embracing the future.



escola lidera

It encourages leadership in everyone to take the lead in the future.

We focus on adult learning, bringing teaching methodologies in line with each demand. The premise is to work on training and development actions, focusing on the 70-20-10 learning experience.

70% of learning in practice:
learning by experimenting and practicing in the workplace.



20% of learning from others:
learning through interaction in environments, in conversations and by encouraging sharing

10% in a structured manner:
courses and training outside the workplace.

The Executive Board evaluates the results of the initiative and hworks with a Thematic Committee to develop educational solutions in line with the business strategy.

We encourage a learning culture in which everyone can lead their own development, respecting their own time and needs, by taking part in training and development activities. These include the Lidera Journey, the Mentoring Program and the Self-Development Journey. In addition, there is participation in projects and working groups, team development days, distance learning platform courses, on-demand coaching processes and on-the-job actions.

In 2023, to strengthen the learning culture, we intensified the design of new training courses in distance learning and hybrid formats. We offered 86 courses on the distance learning platform – including free courses, technical and regulatory training – as well as integration for employees working from home.

In 2023, the Lidera Journey focused on training leaders in the essential pillars of the GPTW methodology. Through people and based on the creation of bonds of trust, these leaders must be able to create an excellent working environment and achieve incredible results. Another important topic addressed was career dialogues, a need reinforced in the GPTW 2022 satisfaction survey.

In total, there were 3,373.5 hours of development, considering all levels of leadership. We met our objective of including, developing skills and encouraging employees to take the lead and lead themselves, in all positions.

The Lidera Journey achieved an overall satisfaction level within the zone of excellence, with an NPS of 87%.



LETICIA BUCCO
Paper SC Unit

We maintained our “open door” approach, through the Self-Leadership pillar, expanding the themes and increasing the number of people impacted by the repertoire worked on, reaching 446.5 hours and 244 employees. And, with the aim of reinforcing career leadership, we promoted the 3rd edition of the Self-Development Journey, covering three topics with the best ratings in the last two editions, with Professional of the Future, Affectivity and Effectiveness and Influence without Authority

The Lidera Journey achieved an overall satisfaction level within the zone of excellence, with an NPS of 87%.

PROFESSIONAL OF THE FUTURE, AFFECTIVITY AND EFFECTIVENESS, AND INFLUENCE WITHOUT AUTHORITY

We also held the 2nd cycle of the Growing Together Mentoring program, which encourages the personal and professional development of employees, promoting a connection between the company, the values and the social relationships of mentors and mentees. In this second edition, we had 29 mentors and 51 mentees.

(404-1) AVERAGE TRAINING HOURS PER JOB CATEGORY

| Hierarchical level | 2021 | | | 2022 | | | 2023 | | |
|--------------------|-----------------|------------------|------------------------|------------------|------------------|------------------------|------------------|------------------|------------------------|
| | Total workload | No. of employees | Average training hours | Total workload | No. of employees | Average training hours | Total workload | No. of employees | Average training hours |
| Leadership | 8,045.9 | 137 | 58.7 | 10,387.43 | 174 | 59.70 | 12,359.8 | 179 | 69.05 |
| Administrative | 21,098.1 | 566 | 37.3 | 26,774.57 | 687 | 38.97 | 29,405.6 | 628 | 46.82 |
| Operational | 51,718.2 | 1431 | 36.1 | 48,392.03 | 1442 | 33.56 | 66,700.8 | 1533 | 43.51 |
| TOTAL | 80,862.2 | 2134 | 37.8 | 85,554.03 | 2,303 | 37.2 | 108,46.40 | 2,340 | 46.35 |

(404-1) AVERAGE HOURS OF TRAINING BY GENDER

| | 2021 | | | 2022 | | | 2023 | | |
|-------|----------------|------------------|------------------------|----------------|------------------|------------------------|----------------|------------------|------------------------|
| | Total workload | No. of employees | Average training hours | Total workload | No. of employees | Average training hours | Total workload | No. of employees | Average training hours |
| Women | 16,713.86 | 377 | 44.33 | 18,626.32 | 514 | 36.24 | 27,965.80 | 595 | 47.00 |
| Men | 64,148.36 | 1757 | 36.31 | 66,927.71 | 1789 | 37.41 | 80,401.13 | 1745 | 46.08 |



FERNANDO
MANTOVANI
Packaging SP
Unit

INVESTMENTS (IN R\$ THOUSAND)

| | 2021 | 2022 | 2023 |
|--|-------|-------|--------------|
| Investment in training and development | 1,225 | 1,597 | 2,349,392.43 |
| Incentives for education through subsidies | 237 | 311 | 329,431.54 |

READING INCENTIVES

We have two physical libraries. One is in Vargem Bonita (SC) and the other in Porto Alegre (RS). Both host rich collections available to our employees.

programa motiva

This motivational program seeks to manage the organizational climate through personnel management practices. The aim is to strengthen employee engagement by structuring actions that create a stimulating and motivating work environment so that they develop their potential to the maximum.

We believe that initiatives like this help to create an identity between employees and the Organization as well as shared responsibility for Irani's growth. We are proud to have people at the center of our strategy. We therefore focus on effective action plans so that we can constantly improve and strengthen these relationships of trust.

Motiva's main tool is the organizational climate survey, which we have been conducting since 2010 with significant progress. We have run ten cycles of the Climate Survey, with the aim of sharing opinions, connecting purposes and leading the future!

Since 2015, we have carried out the survey according to the GPTW methodology and from 2021 onwards we will do it annually, analyzing the level of satisfaction of the teams in relation to various aspects of their work:

- Interpersonal relationships
- Communication skills
- Leadership style
- Development opportunities
- Recognition
- Company image
- Remuneration
- Health
- Security

In the 2023 GPTW survey, we achieved **90% employee satisfaction**. For the first time ever, we came in 29th in the national ranking of the 150 Best Companies to Work For in Brazil. The consultancy's listing in the Brazil category included 5,317 participants, including 3,868 certified companies and 150 award winners. We were also recognized in the state rankings in the group of large companies **in Santa Catarina, where we came 2nd**, and **in Rio Grande do Sul, where we came 4th**.

The methodology proposes that a culture of trust, effective leadership, purpose and aligned values generate an environment conducive to each person being able to perform at their best.

In the Industry Ranking, we appeared among the **8 best places to work in Brazil, according to GPTW**. The jump compared to 2022, when we were in 20th place, was 12 positions. In addition, in the São Paulo ranking, we came in 12th **for the first time**. Another unprecedented achievement was being included in the GPTW Best Companies to Work For - 50+ 2022 ranking, in 11th place.

Recognition like this is the result of structured and consistent actions, even more important in a year of great challenges. These achievements reinforce the company's commitment to care, always thinking about a healthy and positive working environment.

CLIMATE SURVEY

Irani's leaders use the Climate Survey diagnosis for the construction of corporate and unit action plans in all areas. Ways of improving are outlined for each enhancement opportunity identified. We also have climate management support groups in all the business units – they act as spokespeople for the employees and support the leaders in implementing the action plans.

We continue to focus on building an increasingly better organizational climate. Our motto, #ProtagonistasdoClima, is aligned with strategic planning, as well as the practice of the value “protagonism.” After all, we believe in people's autonomy and empowerment.

Some of the teams are still working from home, but none of the cultural practices have stopped since the pandemic. Leadership and climate management support groups continue to seek creative ways to integrate people, reinforce the connection with corporate values and encourage team camaraderie.

Some examples of this are the annual tribute to employees for their time at the company, the celebrations for Irani's and employees' birthdays, the end-of-year parties and the tributes to graduates.

NATALIA SILVA
Resin RS Unit



programa
superã





























Supera Competências is an assessment program that aims to stimulate employees' personal and professional development. It does this by providing opportunities for self-knowledge, strengthening the feedback culture, stimulating high performance, identifying talent and recognizing outstanding performance.

With more than ten years of existence, the program is constantly evolving, keeping pace with the company's maturity. We encourage our employees to take a leading role in their learning so that they can experience their own development.

Assessments and competencies are specific to each functional group:

- Leadership
- Administrative and
- Operational.

Organizational competencies have also been divided by functional group:

| Competencies |  Life, first and foremost |  Client-centric |  Excellence culture |  Innovation |  Self-Development |  Trabalho em equipe |  Communication |  Leadership |
|-----------------|--|--|--|--|--|--|---|--|
| Operational |  |  |  |  |  |  | | |
| Adm/ Commercial |  |  |  |  |  |  |  | |
| Leadership |  |  |  |  |  | |  |  |

The cycle of skills assessments is annual and takes place in two stages: **Network Assessment** and **Manager Assessment**. As a form of maintenance and follow-up, we conduct six-monthly feedback sessions, where we also encourage the revision of the Individual Development Plan (IDP) and Career Aspiration, which aims to enable employees to take a deeper look at their career path in the company.

NETWORK EVALUATION

At Irani, the process consists of self-evaluation, peer evaluation (defined by the employees) and evaluation by the employees of their leaders. It takes place according to the group each employee is part of:

- **Leadership:** conducts self-assessment, evaluates peers and their leadership.
- **Administrative/Commercial:** conducts self-assessment, evaluates peers and their leadership.
- **Operational:** conducts self-assessment and evaluates its leadership.

This type of evaluation allows the manager to understand the employee's perceptions and those of other colleagues or the team. The results serve as support for the next stage.

MANAGER EVALUATION

This is the stage in which the manager evaluates the team's employees. As a support and guide, it makes use of the results of the network assessment, the employee's goals and the records of the previous six-monthly feedback.

This is one of the most important stages in the appraisal process, as it reinforces the culture

of feedback, stimulating yet another space for dialogue between leader and led, where the degree of evolution of each employee's skills can be worked on. Based on this information, it is suggested that Individual Development Plans (IDPs) be drawn up to monitor and maintain the development of competencies by the employee and manager.

(404-3) PERCENTAGE OF EMPLOYEES PARTICIPATING IN THE SUPER SKILLS PROGRA

| | 2021 | | | 2022 | | | 2023 | | |
|-----------------------|--------------|--------------|---------------|--------------|--------------|---------------|--------------|--------------|---------------|
| | Men | Wom. | TOTAL | Men | Wom. | TOTAL | Men | Wom. | TOTAL |
| Leaders | 5.3% | 1.2% | 6.6% | 7.0% | 1.5% | 8.6% | 6.4% | 1.8% | 8.2% |
| Administrative | 15.6% | 9.1% | 24.7% | 15.5% | 10.0% | 25.5% | 13.9% | 11.1% | 25.0% |
| Operational | 62.7% | 6.0% | 68.7% | 60.6% | 5.2% | 65.9% | 56.1% | 10.7% | 66.8% |
| TOTAL | 83.7% | 16.3% | 100.0% | 83.2% | 16.8% | 100.0% | 76.5% | 23.5% | 100.0% |

Note: Employees on leave, young apprentices and trainees do not take part in the program



EMERSON DA SILVA
Paper MG Unit

SUPERA RESULTS

It is based on setting targets for the year and conducting monthly monitoring of compliance with what has been planned. Each year, the results achieved are consolidated, determining the final ranking and bonus band - which can be:

- **0% of salary if targets are not met;**
- **50% of salary if in the incentive range;**
- **100% of salary if targets are met;**
- **150% of salary if target expectations are exceeded.**

We challenge our employees by setting targets that encourage continuous development, with a focus on operational excellence and value creation. In 2023, we had 509 targets set, of which 373 were exceeded and 82 met.

In 2023, we set 509 goals,
out of which 373 were
exceeded and 82 were
achieved



**GRI 3-3, 403-1,
403-2, 403-3,
403-4, 403-5,
403-6, 403-7,
403-8, 403-9,
403-10
ISE**

HEALTH AND SAFETY

GRI 403-1

programa **cuida**

It's our commitment to life. The Cuida Program (Take Care) is part of Irani's occupational health and safety system and aims to ensure that working conditions are suitable and safe for employees and service providers. In order to strengthen the Company's occupational health and safety culture, the following actions are deployed:



Legal Assistance



Communication programs and campaigns



Management



Standardization and Training



Recognition



Penalties



ALAN DE MELO
Resin RS Unit



Legal Assistance

We made a commitment in the form of a value: **Life, first of all.**

(403-1 and 403-8) Based on Ordinance No. 3.214/1978 (Regulatory Standards), the Cuida Program is the way we translate this value into a set of policies, procedures and management practices for occupational health and safety. We offer suitable and safe conditions for the activities of all employees and service providers. They are subjected to work permits with risk analysis by our Specialized Service in Safety Engineering and Occupational Medicine (NR4 - SESMT) team.

(403-1 and 403-2) In all the business units, our SESMT (Occupational Medicine + Occupational Safety) teams have more than the NR4 requirements. Together, the SESMT professionals number 38 direct employees and seven service providers - including

doctors and speech therapists. **(403-5)** Continuously trained in aspects related to health, occupational safety and well-being, the teams are dedicated to complying with approximately 5,700 requirements applicable to our businesses.



Communication programs and campaigns

(403-4) Occupational health and safety content is covered at different moments. These include the integration of employees and service providers, periodic examinations, the dissemination of preventive campaigns, themed meetings, Internal Workplace Accident Prevention Weeks (SIPATs) and follow-up reports. In other words, there is a wide range of actions to make essential information available to employees.

(403-6, 403-7 and 403-10) In 2023, several Health and Safety Dialogues (HSSD) were run weekly, and 12 internal campaigns.

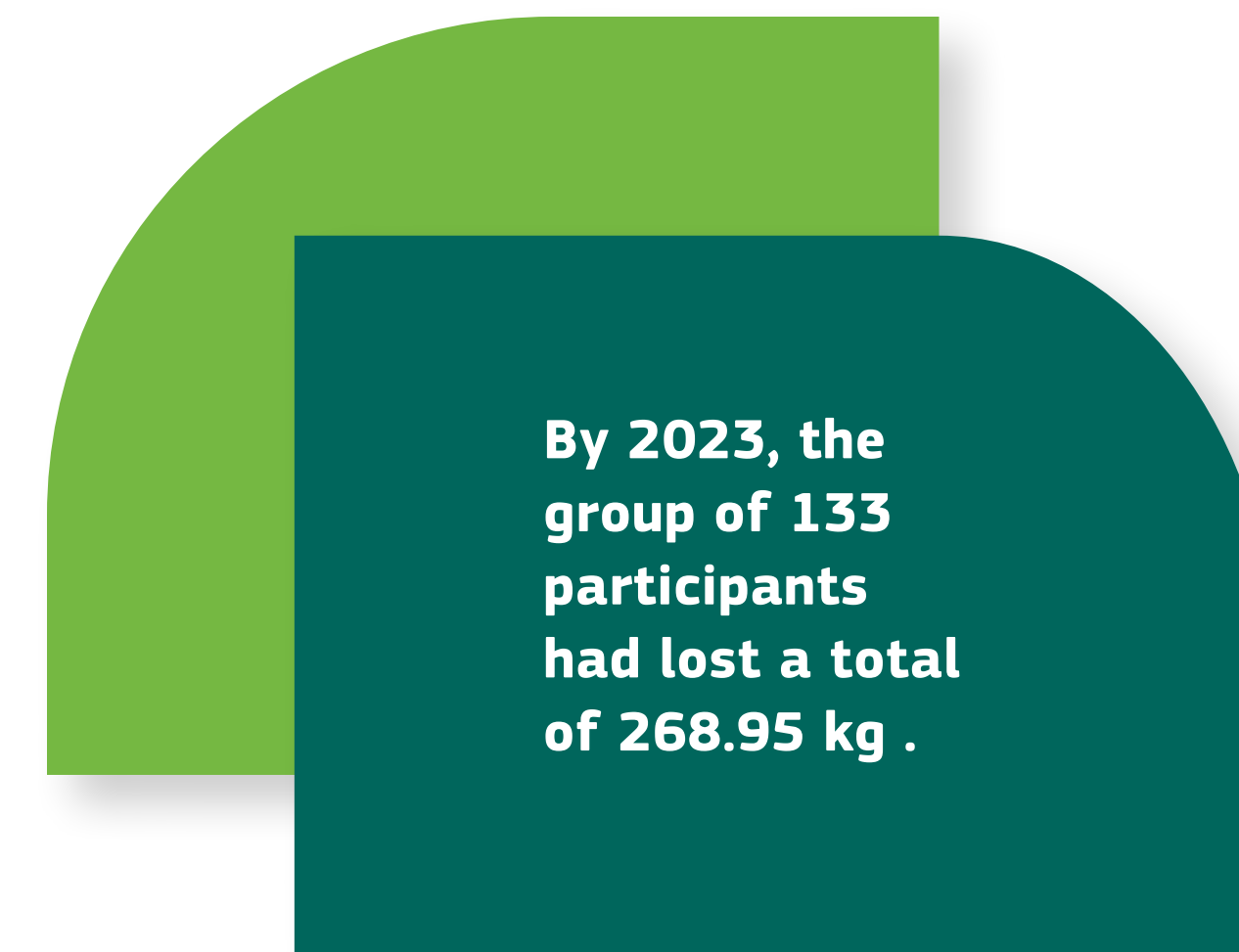
We also use other mechanisms to strengthen this culture, such as:

- **Medical and dental insurance:** extended to all direct employees and their dependents.
- **Aptitudes according to special activities:** a policy aimed at employees who have some kind of restriction for special jobs, such as working at heights, in confined spaces or operating mobile equipment. We focus on rehabilitation, monitoring factors such as weight, blood glucose and blood pressure. In 2023, 117 people were diagnosed and monitored for hypertension and 24 for diabetes.

- **Hiperdia:** employees diagnosed with hypertension and diabetes receive regular monitoring as a way of preventing absence from work.
- **Hearing Conservation Program:** we keep up-to-date reports on employees' exposure to noise in industrial environments. The necessary actions are defined in the Hearing Conservation Program, according to the assessments made in the Risk Management Program (PGR).
- **Mental Health Program:** Irani provides access to specialized mental health care through the Psicologia Viva platform. The program puts all interested employees in touch with a team of psychologists. The aim is to provide ongoing support to treat and/or improve mental health conditions, personal development and self-knowledge. In 2023, more than 1,155 consultations were recorded.

- **Oral Health Program:** Voluntary participation. The initiative aims to promote the oral health of employees through dental consultations at our units in Rio Grande do Sul. The program is run by specialized professionals who provide diagnosis, treatment and guidance on the subject. In 2023, 217 people benefited.
- **Observation and Prevention Program (POP):** the aim is to prevent accidents at work through behavioral approaches and dialogues. The health and safety teams are trained to offer guidance in a humanized and effective fashion. In addition, management members of the Internal Commission for the Prevention of Accidents at Work (CIPA) receive annual training. Behavioral approaches have contributed to the company's safety culture, with a reduction in deviations and potential incidents at our units.

| | 2021 | 2022 | 2023 |
|------------|-------|-------|-------|
| Approaches | 1,571 | 3,275 | 2,965 |



- **Nutritional Attention:** a nutrition program implemented in 2021 to provide a better quality of life for employees who are overweight, obese or with clinical indications for health problems such as hypertension and diabetes. It is also open to those with the aim of to gain weight in a healthy manner.
- **A Espera:** the expectant mother program monitors pregnant women and parents-to-be who work in our units. Bimonthly meetings train on a variety of subjects related to the care of the newborn up to the first months of life. In 2023, 30 pregnant women were active in the program and 48 parents-to-be.



RUBIA SANTOS
Paper MG Unit

The “Your Attitude Deserves BIS”
program recognized more than
240 employees in 2023.

- **Your Attitude Deserves BIS:** this attitude recognition program has been run annually since 2020. Its aim is to recognize the employee and the area that stand out in terms of occupational health and safety, noticed throughout the year - whether through actions or results in health and safety indicators. In 2023, the program recognized more than 240 employees.
- **TOP Management Program:** launched in 2023, it recognizes managers who contribute to the multiplication of health and safety in the units for their employees. This takes place through evaluations of health and safety criteria - and the managers who score the highest are recognized, 11 of them in 2023.
- **Excellent CIPA Member:** run since 2020 it recognizes CIPA members who stand out for their preventive actions, striving to improve the workplace. CIPA members have pre-established targets, with a specific score for each case. The CIPA member who achieves the highest score is recognized at the regular monthly meeting. In 2023, more than 48 CIPA members were recognized for their good results.

- **Gympass Physical Health:** available to employees since 2019, Gympass is a corporate platform focused on quality of life, health and well-being, allowing access to thousands of gyms, studios and live classes, which allows users to practice physical activity according to their routines. There are a variety of different modalities that employees can choose from to achieve their physical activity goals. In 2023, we had 415 employees active in the program and 120 active dependents.
- **Outstanding Employee and Area Program:** has been held annually since 2020, with the aim of recognizing employees and areas that have excelled in health and safety at work throughout the year, either through actions or results in specific indicators. The selection is made by an evaluation committee, which carefully analyzes the evidence before the official announcement. For the outstanding area, the criteria include: no accidents at work, a low number of behavioral deviations, implementation of safety improvements and

engagement in health and safety programs. For the outstanding employee, the criteria include: a safety record, involvement as a firefighter or team leader, and at least one year's work at the company, among other predetermined requirements. In 2023, 9 areas of excellence and 12 employees were recognized.

- **Outstanding Firefighter:** the brigade program was implemented in 2021. Run on a monthly basis to recognize the member of the emergency brigade who meets the action targets set during the monthly meetings. The actions involve carrying out the preventive system checklist, helping with monthly training sessions and campaigns and seeking to multiply the knowledge acquired. In 2023, more than 50 brigade members were recognized.
- **Health Circuit:** the Health Circuit, implemented in 2021, is an annual program designed to provide direct and indirect employees with information on health in general. It is organized with a wide range

of topics over five days, based on dynamic activities, information, games and challenges that provoke curiosity, creating an experience for participants that raises awareness both inside and outside the company. In 2023, more than 2,000 people benefited.

- **Coffee with Safety:** this special breakfast meeting is held every four months, with an agenda tailored to the needs of each unit. The topics can range from routines implemented in the area of occupational health and safety, safety with machinery and equipment, diagnosis of the safety culture, demonstrations of indicators and alignment for decision-making and presentation of programs and their results.
- **Take Safety Home:** the aim of this program (Safety in the Home) is to provide, through preventive actions and the delivery of visual material, guidance and safety tips so that employees can apply the company's health and safety culture in their homes, multiplying its routines in their daily lives with their families.



Management

(403-1)

In 2023, we continued to improve the occupational health and safety management process, with the SOC software integrated with other personnel department processes. The feature allows for the management of periodic admission exams, risk changes, dismissal exams and the entry of certificates.

(403-2) With the software, it is possible to conduct integrated management of occupational risks: physical, chemical, biological, ergonomic (for units that already have ergonomic reports) and accident/mechanical. ERP is a fundamental tool for drawing up the Risk Management Program (PGR) and the Occupational Health and Medical Control Program.

(403-4) Formal committees represent employees and help define, implement and monitor health and safety practices.

| Committee | Representativeness | Responsibility | Degree of autonomy to interrupt operations | Meeting frequency |
|---|---|---|---|-------------------|
| Internal Accident Prevention Commission (CIPA) | As provided by law. Surplus vacancies are filled by professionals appointed by the Company. | As provided by law. | It complies with the provisions of the law. Members may, at any time, stop the operation in the event of unsafe conditions or behavior. | Monthly |
| Emergency brigade | 100% of employees on all shifts. | Identification of scenarios that could lead to occupational risk conditions and emergency assistance. | Total during emergency response. | Monthly |
| Ergonomics Committee | Occupational medicine and managers. | AEP management in the prevention of musculoskeletal disorders. | Full autonomy, as required. | Monthly |
| Safety Breakfast | Managers, occupational health and safety. | Macro discussion of aspects related to health and safety at work. | Full autonomy, as required. | Quarterly |
| Committee for the Critical Analysis of Certificates | Managers, occupational health and safety. | Analysis of the main causes of absenteeism in order to take the necessary action. | Full autonomy, as required. | Monthly |
| NR10 Committee - Safety in Electrical Installations and Services | Managers, occupational health and safety. | Assist in implementing management tools for the topic. | Full autonomy, as required. | Every two months |

(403-1) The Executive Board monitors the strategic **health and safety indicators on a monthly basis:**

- Number of occupational accidents with and without lost time
- Severity rate
- Frequency rate
- % legal compliance

They are responsible for suggesting improvements in this field and monitoring performance in order to bring the company's accidents to zero.

Health and safety indicators are monitored periodically by the SESMT teams at all units:

| (403-9) | 2021 | 2022 | 2023 |
|---|----------------------------|----------------------------|----------------------------|
| Number and rate of fatalities as a result of work-related injuries | 0 | 0 | 0 |
| Severity rate¹ | 85.61 | 105.50 | 84.40 |
| Number and rate of lost-time injuries | 21 Accidents Rate: 8.50 | 17 Accidents Rate: 6.12 | 21 Accidents Rate: 8.50 |
| Number and rate of lost-time injuries | 38 Accidents Rate: 8.50 | 25 Accidents Rate: 7.99 | 22 Accidents Rate: 6.17 |
| Number of man-hours worked | 3,434,060h | 3,128,217h | 3,566,429h |
| Main types of work-related injury | Upper limbs | Upper limbs | Lower limbs |

¹ The severity rate is calculated considering $(HHT \cdot 1000000 / \text{number of accidents})$

² Information on high consequence injuries is not available

LIVES CHANGED

The quantitative indicator conceptualized as **Lives Changed** is related to the effects caused by accidents at work, considering very serious and/or permanent injuries. The concept has been developed at Irani since 2019, but 2021 was the first year this information was reported. In 2023, we recorded one changed life.

Some tools have been fundamental in this regard. These include the PET (Special Work Permit); the POP (Observation and Prevention Program); health and safety campaigns; field safety inspections; training and qualification of employees and the technical team of in-house instructors; and the 5 Attitudes for Life. The efforts all support accident prevention and help us to change zero lives, strengthening our purpose of caring for the physical integrity of direct and indirect employees.

(403-9) NUMBER OF LIVES CHANGED

| 2021 | 2022 | 2023 |
|------|------|------|
| 0 | 0 | 1 |

(403-1 and 403-8) To guarantee the effectiveness of our occupational health and safety management processes, we rely on internal and external audits and certifications such as ISO and FSC® – in addition to the licenses granted by the competent bodies. All of these practices contribute to in-depth treatment of risks and ways of mitigating them.

(403-1) The movement is also aiming for ISO 45001 certification by 2024. At the same time, we continue to investigate accidents and qualify actions that have led to a reduction in the severity rate and the number of incidents.

(403-8) Regular and non-regular outsourced workers receive initial onboarding. They take part in the health and safety activities carried out at the industrial units and are covered by the occurrence records



Standardization and Training

(403-3 and 403-5)

Since 2020, we have used an interactive training platform for Regulatory Standards. Through it, we develop the necessary skills, pursuant to each activity, promoting the insertion of employees into the technological platform.

The applicable standards guide the content of the training courses, which are held free of charge and during working hours. Around 90% of the courses are conducted by our own teams. In 2023, more than 900 class hours were taught by Irani's technical instructors.



Recognition

During Sipat 2023, we formally recognized eight outstanding areas and employees. The professionals were assessed according to their perception of safety, safe behavior, preventive actions and mutual care. Regarding the criteria for the outstanding area, the health and safety actions successfully applied were taken into account, as well as the low number of incidents.



Penalties

In 2023, we recorded behavioral deviations and applied appropriate disciplinary measures, in accordance with Irani's Disciplinary Measures Matrix.

The health and safety culture has been consolidated with the implementation of various programs that seek to reduce the severity rate (TG), maintaining a vision of TG (zero) within ten years.

(403-7) In 2023, R\$ 13 million was invested in health and safety improvements at all the business units.



SIBELE SILVA
Paper MG Unit

HUMAN CAPITAL



FUTURE OPPORTUNITIES AND COMMITMENTS

- Strengthen the vision for the IDP/ Career;
- Run the 3rd edition of the Self-Development Day and strengthen the engagement of the trained groups;
- Broaden the focus on other learning formats within the company and strengthen communication;
- Run the 2nd class of the Mentoring Initiative - Growing Together;
- Review the method used for Continuous Integration and expand it to more units;
- Implement Continuous Integration in areas with higher turnover;
- Expand the design of online and hybrid solutions, bringing in relevant topics; Design learning solutions in line with the business strategy;
- Maintain and increase the employee satisfaction index by maintaining action plans and involvement, generating a spirit of protagonism;
- Strengthen the learning culture;
- By 2030, have 40% women in the company's workforce and 50% in the leadership. Evolve in the management of organizational culture;
- Maintain the strengthening of the health and safety culture and the continuous search for a reduction in accident frequency and severity rates;
- Implement three new health and safety programs by 2024 and consolidate those already in place;
- Certify all units to ISO 45.001 by 2030, starting with the Resinas unit in 2024;
- Zero lost-time accidents by 2030.



INTELLECTUAL CAPITAL

Innovation

Information Security



SAMARA ZARPELON
Joaçaba SC Office



GRI 3-3

INNOVATION

Irani understands that resilience, agility and learning from mistakes are crucial elements in the innovation process. Therefore, the company has set a strategic objective of creating an environment that fosters creativity and the emergence of new ideas, tests new technologies, and invests in innovative solutions. In doing so, the company promotes economic growth and enhances the productivity of the entire ecosystem surrounding it.

Irani understands that resilience, agility and learning from mistakes are crucial elements in the innovation process.



PAULO MARTINS
Paper SC Unit

INNOVATION CULTURE

INOVA IDEIAS

In 2023, the Inova Ideias program demonstrated an accelerated pace in generating, developing, and implementing initiatives, showcasing the progress of the company's management maturity. Aligned with the ESG strategic guidelines and the Sustainable Development Goals, the program included proposals related to safety, waste management, and reducing water and energy consumption.

Designed for the 2023 cycle, the campaign's theme was "Innovation is Simple and Uncomplicated" and focused on the transformative power of simplicity. We are dedicated to stimulating the generation of well-structured ideas and achieving significant milestones in creating, implementing, and achieving results. We reinstated the Culture Actions indicator, provided training and capacity

building for employees to better understand everyday concepts and opportunities, and encouraged incremental innovation.

The program received over 6,859 ideas, of which 683 were implemented (174 quantitative and 504 qualitative). This resulted in a success rate of 9.96%. By 2023, the operational and potential results exceeded R\$ 13 million, with over R\$ 292,000 paid out to employees.

In the 11 years of Inova Ideias, more than 306 ideas have been financially recognized, acknowledging the contributions of over 200 of the company's professionals. Irani reaffirms its belief in recognition as the most effective way to engage employees in achieving results.

In 2023, there were:

283 ideas submitted

113 implemented:

87 qualitative

26 quantitative



FERNANDO DA CRUZ
Packaging SP Unit

The year was marked by a record in the generation of monthly ideas, broadening the potential for taking advantage of opportunities.

The operating/potential result reached **R\$ 3.6 million**, with an investment of **R\$ 70,000** in **43 recognized ideas**. The program's awareness-raising sessions were held online, improving employees' knowledge.

As for culture actions, in 2023 more than 1,460 hours of training were carried out involving 716 employees.

For the first time, the MG Paper unit won the Innovative Leadership award: for Braulio Romancini, manager, and Raphael Souto, coordinator. The unit recorded the creation of 93 ideas, 39 of which were implemented, including 15 that were paid. Employees received a total of R\$ 14,000 in rewards, while the financial impact (operational/potential) generated reached R\$ 1.4 million, demonstrating the effectiveness of the leader-led relationship.

As for culture actions, in 2023 more than 1,460 hours of training were carried out involving 716 employees. The program is ongoing, reaching 100% of professionals with access to the digital platform.

Each employee who submits an idea receives educational support at every stage – from registration to implementation – involving a multidisciplinary team and is fully monitored by managers. Furthermore, the process strengthens relationships between leaders and those they lead, thus promoting a culture of innovation.

INNOVATION MANAGEMENT

TECHNOLOGICAL PLATFORMS

In order to establish a competitive portfolio of Research, Development, and Innovation (RD&I), we operate through four Technological Platforms:

- Forestry and Resin;
- Pulp and Paper;
- Corrugated Cardboard;
- Environmental and Energy.

These are multidisciplinary teams, organized into tactical and operational groups, which identify opportunities, plan and implement projects.

In 2023, we prioritized 17 themes for the development of RD&I projects, and we have 56 active projects. Of these, eight are in the ideation stage, 18 in monitoring, 13 in research and 17 in development. We have also implemented eight projects that are already active in the company.

The Platforms look at business challenges as opportunities to shape the future of the organization. In this sense, some projects stand out:

- **Environmental and Energy Platform:** we carried out studies to improve soil carbon analysis in forests, including quantification of carbon in the soil and in woody necromass.
- **Pulp and Paper Platform:** we focused on expanding our portfolio with new developments, such as papers for the plasterboard market and papers with new technologies that especially increase mechanical resistance properties.
- **Forestry and Resin Platform:** we expanded our research into topics such as forestry management, with the implementation of fertigation systems in our plant nursery. As a result, plant growth has been reduced by half and production has increased. In addition, we have developed improved seed production for better genetic gains.

- **Corrugated Cardboard Platform:** we have improved the quality of our products, especially with the development of a new glue for resin boxes. The material provides superior characteristics and properties, as well as the development of new cardboard boxes, increasing our competitiveness in the market.

We also held a MasterClass with each Platform in order to boost the development of projects and teams. The main objective was to share content and innovation methodologies, strengthening teams and stimulating collective creativity. These experiences contribute to the advancement of projects and the improvement of skills.

THE GOOD LAW

Irani has mapped 58 projects eligible for the Good Law. The number is 57% higher than in 2022, providing an expected net benefit of R\$ 2,209,606.40. The Good Law establishes tax incentives for companies that invest in research and development activities in technological innovation.

In 2023, we doubled the number of employees participating in Research, Development and Innovation projects, as well as significantly increasing the areas involved in mapped and eligible projects. We also formed three classes of workshops to strengthen knowledge about the concepts and procedures of the Law.

The Good Law establishes tax incentives for companies that invest in research and development activities in technological innovation.



IVAN BISCAIA
Paper SC Unit

CORPORATE VENTURE CAPITAL



IRANI VENTURES

We support impact businesses through Irani Ventures, our Corporate Venture Capital (CVC) vehicle. Irani Ventures invests in and accelerates startups that align with our values and business model. It is managed by Grow+. We invested R\$ 1.5 million in growPack, a startup that adopts a business model centered on sustainability. They develop solutions that drive the transition to a circular economy based on biological principles, connecting plants and people.

The company creates sustainable packaging technologies throughout the product life cycle using waste from local agriculture, such as corn straw, to produce a biomaterial for packaging through regenerative, circular, and

exclusive technologies. These solutions are fully compostable, resulting in a 50% reduction in CO2 emissions and 80% less water consumption compared to traditional cardboard packaging.

The investments are a significant advancement in our culture of innovation and our relationship with the open innovation ecosystem, in accordance with our Sustainability Policy. We are constantly seeking ways to use resources sustainably, minimize environmental impacts, and promote the circular economy.

An additional initiative was the investment of R\$ 900,000 in the startup Mush, which develops innovative technologies to replace disposable and non-biodegradable materials with sustainable solutions based on agricultural waste. The company has already been recognized as one of the most innovative projects by MIT and cited in the United Nations Development Program in this category.

Mush's solution can transform bark, bagasse, sawdust, and other waste into raw materials for packaging that are 100% compostable, biodegradable, durable, thermally insulated, acoustically absorbent, and unique in appearance. This solution generates a positive impact on the planet, helps combat global warming, captures CO2, and focuses on zero waste, biodegradability, and composting purposes in domestic conditions. Through Irani Ventures, in October we sponsored and spoke at the 7th edition of Corporate Venture in Brasil, organized by the Brazilian Trade and Investment Promotion Agency (ApexBrasil) and Global Corporate Venturing (GCV). One of the world's largest events on Corporate Venture Capital, the initiative presented news to stimulate the development of the Brazilian venture capital industry and ecosystem through the expansion of CVC funds. In addition to various encounters, business meetings, presentations, panels and opportunities to share experiences between Brazilian and foreign companies in the sector, the highlight was the presentation of the Irani Ventures case story.

OPEN INNOVATION

IRANI LABS

In 2023, we built and nurtured even more connections with the innovation ecosystem through two special editions of Irani Labs. At Irani Labs ESG, held in partnership with Quintessa, an impact startup accelerator, we selected seven startups across five main themes: Waste, Climate Change, Sustainable Packaging, Diversity and Surrounding Communities, and Improving Social Conditions in the Work of Waste Pickers. The results of the Proof of Concepts and the implementation plan for the solutions were presented at an in-person event with program partners at Cubo Itaú, in São Paulo.

- **Waste:** With the startups Nbot and Tamoios, we tested equipment that generates nanobubbles, infusing gases into water to improve effluent treatment systems, and tubes with cellulose biocomposites.
- **Climate Change:** With the startups Bioflore and Quanticum, we implemented a platform

to monitor carbon stock and biodiversity, and a solution for potential agronomic and environmental mapping based on natural earth nanoparticles.

- **Sustainable Packaging:** Through the startups Magma and Nathural Chemical, we developed papers with repulpable, waterproof, recyclable, biodegradable, and compostable barriers for packaging.
- **Diversity and Surrounding Communities:** Through Se Candidate Mulher, we tested a platform that prepares women for the Company's selection processes.
- **Improving Social Conditions in the Work of Waste Pickers:** Startups in this last theme were able to participate in a business acceleration journey through Intensive Learning with external mentors.

We also put on the **Irani Labs B4B** (Business for Business) event. This was a special edition



of our open innovation program with startups, designed to disseminate advanced innovation knowledge and practices to our customers. The program has directed its efforts towards establishing partnerships with startups that offer solutions aligned with the strategic needs of Irani's partner companies, while also seeking to support the development of Proof of Concept (PoC).

Together with our customers Nobelpack, Antilhas and Printbag, we approached innovative market startups, such as a Virtual Assistant designed to assist operators and maintainers using AI and complete solutions to help companies better manage their purchasing, inventory and distribution. In this way, we promote the development and growth of the participating startups and solve challenges for our clients. This commitment translates into tangible results, with 100% of the startups involved expressing a positive outlook for continuity in the relationships established during the program.

RANKING 100 OPEN STARTUPS

We strengthened our presence in the TOP Open Corps 2023 Ranking as leaders in open innovation with startups in Brazil. We were awarded TOP 3 Pulp and Paper and TOP 10 in the Middle Market category.

Held since 2016, the 100 Open Startups Ranking focuses on promoting and generating business between companies and startups. The methodology uses objective criteria to recognize and reward the leading corporations in open innovation, as well as the most attractive startups for the corporate market.

MELHORES CORPORAÇÕES PARA STARTUPS

In 2023, our corporation was recognized as one of the top 20 startups in a study conducted by The Bakery, a global consultancy, in partnership with ABStartups (Brazilian Startups Association) and the Monking communication group. The ranking was based on four evaluation criteria: Strategy, Infrastructure, Operations, and Reputation, as well as success stories and open innovation results.

SOUTH SUMMIT

In 2023, we participated in the South Summit, a global innovation conference that originated in Spain a decade ago. This event serves as a platform for connecting various players in the ecosystem, with the goal of generating and catalyzing business opportunities.

The South Summit arrived in Porto Alegre through a partnership between the State Government of Rio Grande do Sul and 4all - Hub de Tecnologia, driven by a movement that united the public sector, entrepreneurs, and universities. Our directors participated in the event as panelists, reaffirming our position as a leading innovator in the country.

At the South Summit, we promoted waste management and the circular economy. Over 500 cardboard garbage cans were distributed throughout the space in conjunction with cleantech company Trashin. This initiative allowed for the proper collection and recycling of waste.

RIO INNOVATION WEEK

Collaborating within innovative ecosystems and forging new connections enables us to broaden and fortify our open innovation strategy. This approach facilitates the creation of sustainable and competitive solutions that generate value.

For instance, we presented a case study in partnership with Trashin at the 1st International Congress of Open Innovation Cases during Rio Innovation Week. We are sharing our experience to inspire more people and companies to collaborate towards a more sustainable future.





CHAMPIONS OF INNOVATION 2023

There can be no sustainability without innovation. Therefore, we strive to establish a culture of originality, improving our ability to act creatively and enhance processes, products, and service delivery.

This orientation is ingrained in our DNA. Our commitment to innovation has yielded significant results, as we have once again been recognized as one of the most innovative companies in southern Brazil. This time, we ranked 13th in the AMANHÃ Group's ranking, developed in partnership with the global innovation consultancy IXL-Center from Cambridge, USA. This demonstrates our year-over-year evolution.

STARTUP SUMMIT

We are motivated by the daily challenge of innovation.

This applies not only to our products and services, but also to our search for new ways to positively impact people's lives and the environment.

Our team closely followed the events of the Startup Summit held in Florianópolis. In addition, Trashin, a startup accelerated by Irani Ventures, partnered with Irani to manage the event's waste by providing 500 cardboard bins for collection. Actions like this demonstrate our commitment to the innovation ecosystem and help us connect with new ideas and solutions.

CUBO ITAÚ AND INSTITUTO CALDEIRA

We are partners in two important ecosystems that drive innovation. This gives us a closer relationship with startups and innovative organizations. Initiatives like this help us accelerate the generation of new ideas and solutions for a more sustainable future.

- **Cubo Itaú** (São Paulo) – an international community that connects the best solutions to build great innovation cases for the market; it is considered the largest innovation ecosystem in Latin America.
- **Instituto Caldeira** (Porto Alegre) – an innovation hub that promotes the connection between large companies, startups, universities and public authorities, generating a transformative movement to foster the technology and innovation ecosystem.



RAYSSA DE SOUZA
Paper MG Unit

INNOVATIVE WORKPLACES

Innovation is one of our values and motivates us to positively impact people's lives through sustainable attitudes and solutions. These efforts were highlighted with the award of the Innovative Workplaces 2023 seal of approval by the Massachusetts Institute of Technology - MIT Technology Review Brazil.

The award assesses companies' innovation from four perspectives: management, products/services, marketing and processes. This recognition demonstrates that we are on the right path, inspiring us even more to develop innovative and sustainable solutions.

THE TOWN FESTIVAL

In partnership with iFood, we promoted a circular economy initiative at The Town festival in São Paulo. Irani recycled more than 35 tons of corrugated cardboard, collected by Coopercaps, the cooperative responsible for sorting recyclable waste at the event.

The paper wastes were recycled and transformed into 271,000 delivery bags. The bags were distributed free of charge to 88 restaurants in São Paulo. This collaboration, the result of initiatives promoted through Irani Labs ESG, is key to highlighting Irani's commitment to sustainability and the circular economy.

In partnership with iFood, we promoted a circular economy initiative at The Town festival in São Paulo. Irani recycled more than 35 tons of corrugated cardboard.

DIGITAL OPTIMIZATION

In the context of hyper-automation, our robotization strategy (RPA) has increased the number of automated processes from 35 to 51, resulting in a total of 50 active RPAs and saving 2,217 hours per month and 26,604 hours per year. Repetitive tasks that were previously performed by individuals are now being staged by robots, freeing up time for employees to focus on projects that require human skills and add more value to the business.

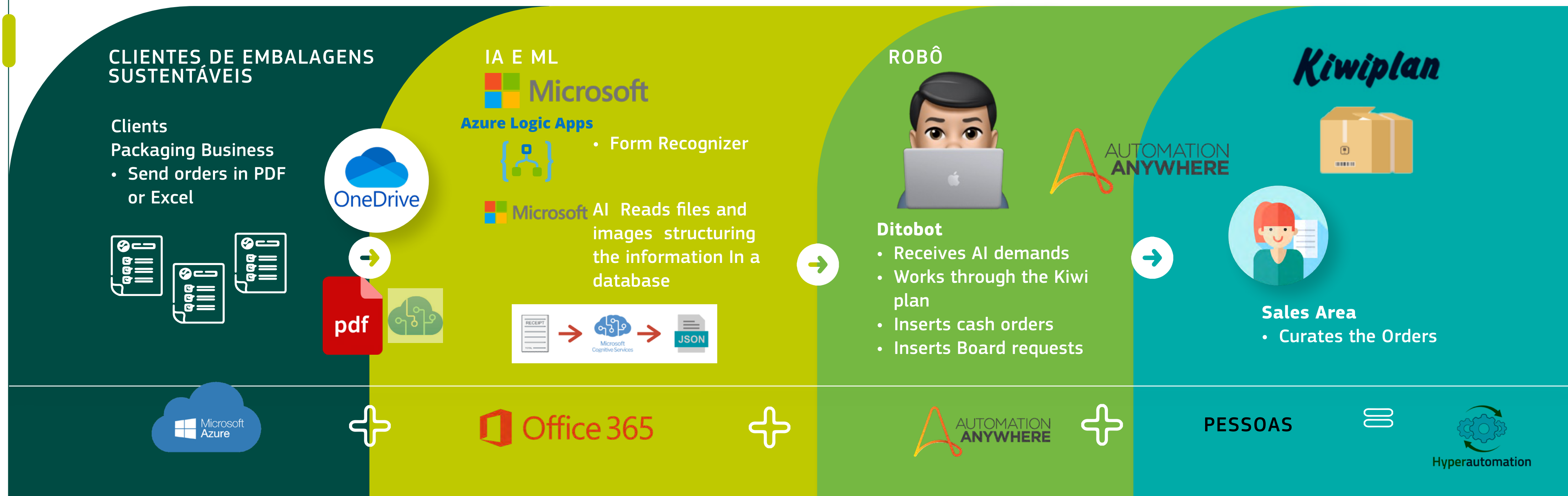
In the context of AI, in 2023 we created our first IPA - Intelligent Process Automation, a combination of robots (RPA) with artificial intelligence. The process helps improve the customer and employee experience, expanding the potential for automation in order fulfillment and saving 383 hours per month.

To explore the potential of AI, we partnered with consulting firm Gartner to hold workshops. We conducted five meetings, including an exclusive session for the leaders of Irani and Habitasul, and four open and practical workshops to train

people and promote AI literacy. A total of 474 participants attended.

Our Data Lakehouse simplifies data infrastructure and enables data-driven thinking. We delivered four Analytics for the Controllershship, Maintenance, Market Intelligence, and Supply areas.

We collaborated with Kunumi startup to create an artificial intelligence system using machine learning. By using statistical techniques such as Pearson's correlation, we predicted the trend in chip prices.



INFORMATION SECURITY



GRI 3-3
ISE

In 2022, Irani created an Information Security (IS) department responsible for protecting the information and data circulating on the network, minimizing threats, and ensuring business continuity. The initiative enabled the creation of policies and methodologies based on five fundamental characteristics: confidentiality, integrity, availability, authenticity, and legality.

At the same time, we enabled the implementation of the Security Operations Center (SOC), with a dedicated team 24 hours a day, seven days a week. The platform seeks ways to improve the company's defense posture and prevent future cyber-attacks.

To protect business operations, we have also developed a Disaster Recovery strategy. The intention is to enable the company to recover the use of critical systems and IT infrastructure as quickly as possible in the event of failures or threats.

In 2023, the IS area promoted an important awareness campaign. In partnership with a major educational institution,

Irani encouraged information security through training on the platform used by the company, reaching more than 88% of trained employees. Face-to-face training sessions were also held at the units, as well as online meetings with industry partners and monthly newsletters on the company's official communication channels, such as emails, internal social networks and televisions at the units.

Also in 2023, the Information Security Master Plan (PDSI) was developed, which serves as a management tool to guide the sector's actions within Irani. The plan makes it possible to justify the resources applied, minimize waste, guarantee control, apply efforts to what is considered most relevant and, ultimately, improve the effectiveness of the work.

These and other initiatives undertaken by the IS department demonstrate the significance of planning and implementing company-wide measures to mitigate risks and create contingency plans. In 2024, we will continue to leverage new projects to protect the company's systems and information from any external actions that could cause harm.

INTELLECTUAL CAPITAL



FUTURE OPPORTUNITIES AND COMMITMENTS

Consolidate the culture of open innovation and intrapreneurship;

- Testing new technologies and possibilities for generating spin-offs, as well as new businesses through partnerships;
- Strengthen the Corporate Venture Capital (CPC) strategy;
- Increase investment in Research, Development and Innovation (RD&I) projects;
- Optimize business performance through a digital workforce, with robots, digital assistants, artificial intelligence and hyper-automation systems;
- Continue the process of improving the Information Security area.



MANUFACTURING CAPITAL

Forest Management

Product and Market Management

Energy 



ELIANE PELEGRINI
Packaging SP Unit

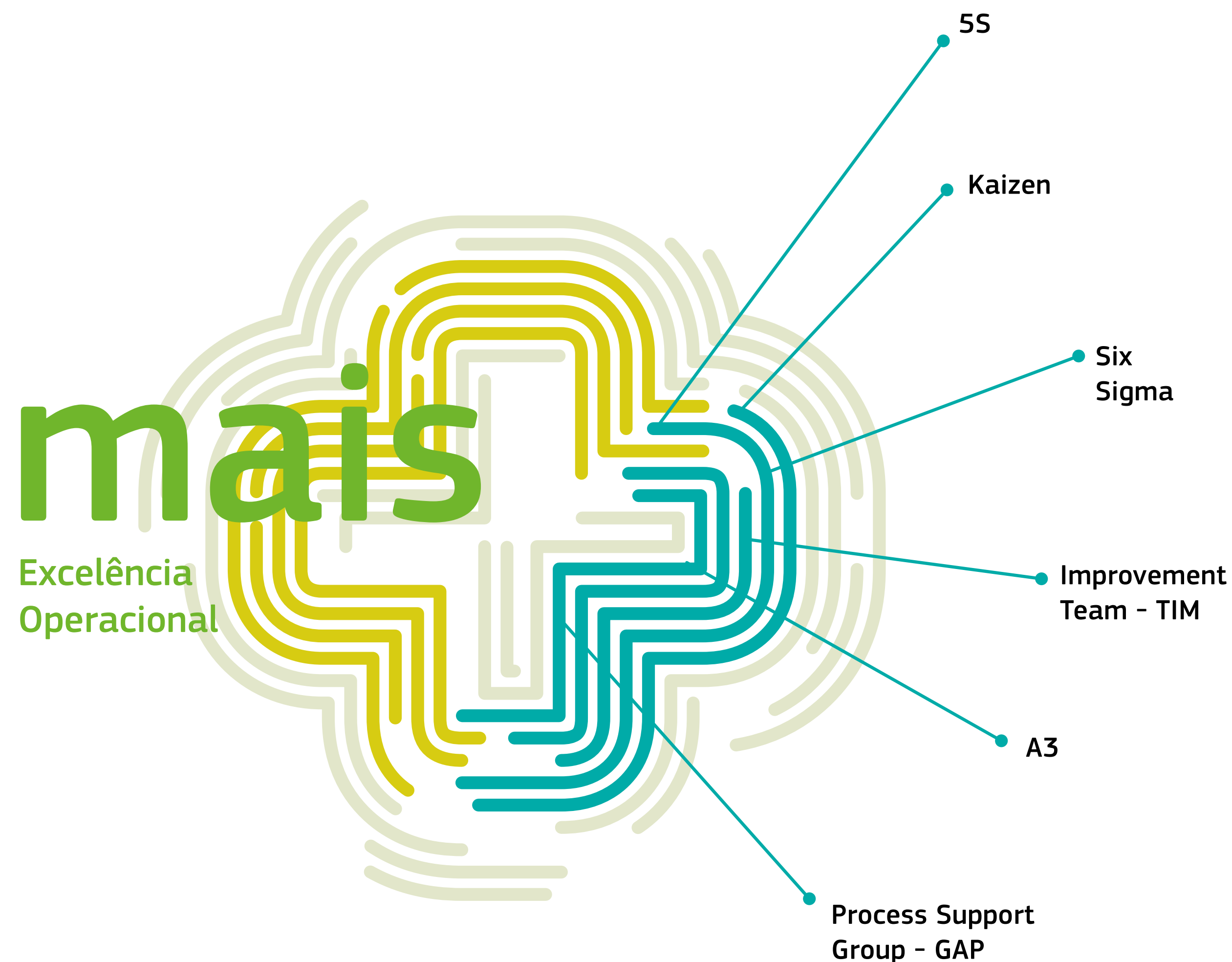
The **Mais (More) Program** structures Irani's continuous improvement practices in the search for operational excellence by reducing waste. It focuses on adding value to processes, products and services. The practice operates on three main fronts: Method and Management, Strengthening the Lean Culture and Performance.

The company's **Lean journey** began in 2010. Since then, we have organized more than 170 Kaizen Weeks and captured around R\$ 17.2 million in return on improvement projects.

Employee development involves the **Lean Development Trail**, a learning journey that covers Lean and Six Sigma content. Entry to the trail is through the training of **Lean Facilitators**, with 195 employees holding Yellow Belt certification.

The next stage is the training of **Lean Maintainers**, with 50 employees holding Green Belt certification. In 2023, we launched the **Lean Mentors** certification, which includes 18 employees with Black Belt certification.

We also intensified the company's **expanded interface** by holding eight Kaizens on our clients premises, sharing the Lean philosophy and its tools. The aim is to spread the **Lean culture** and **operational excellence**. As a result, we set 101 productivity records in all our businesses.



FOREST MANAGEMENT



**GRI 3-3, 304-1,
304-2
SASB RR-PP-430,
RT-CP-430
ISE**

(RR-PP-430 and RT-CP-430) Irani's maintenance of the FSC® forest management certificate for all its forests guarantees that operations follow assumptions based on sustainable practices:

ENVIRONMENTALLY APPROPRIATE

- Protection and conservation of High Conservation Value Areas (HCVAs);
- Adoption of best practices for identifying, controlling, minimizing and mitigating environmental impacts;
- Biodiversity conservation.

SOCIALLY BENEFICIAL

- Respect for workers' rights;
- Respect for local communities;
- Dialogue and strengthening of our relationship with the public in the places where we operate.

ECONOMICALLY VIABLE

- Building markets, adding value;
- Creating equitable access to forest benefits;
- Guaranteed supply of wood and resin from renewable plantations



Forestry operations and land use are developed on the basis of micro-planning, considering specific items for each area. The premise is always to value socio-environmental aspects and operational efficiency, in compliance with the forest certification standards.

Forest mosaics that form between planted forests and native forests result from the planning process. This creates biodiversity corridors for native species, ensuring connectivity between environmental preservation areas and shelter and food for animals. Another important point is the perpetuation of various species of flora with environmental and social importance, such as the Araucaria tree.

Social and biodiversity monitoring, as well as operational indicators, are critically analyzed each month. The aim of these measures is to guarantee high performance in forest management based on actions that provide innovation, continuous improvement and sustainability in the forestry business.

In all, the area comprises 33,823.65 hectares of land, 82% located in Santa Catarina and 18% in Rio Grande do Sul.

In all

33,823.65
hectares

82%
in Santa
Catarina

18%

in Rio
Grande
do Sul.



Quality of operations



Biomass production and quality



Monitoring Occupational Health and Safety requirements



Monitoring environmental impacts



Stakeholder engagement

Resumo Público de Manejo Florestal é um instrumento de transparência, dirigido a nossos públicos de relacionamento, que abrange temas como: gestão, manejo e proteção florestal, biodiversidade, monitoramentos e canais de contato.

We have published a Public Forest Management Summary for our areas in Rio Grande do Sul and Santa Catarina. The information is available here.



GRI 304-1

OUR FORESTS IN SANTA CATARINA

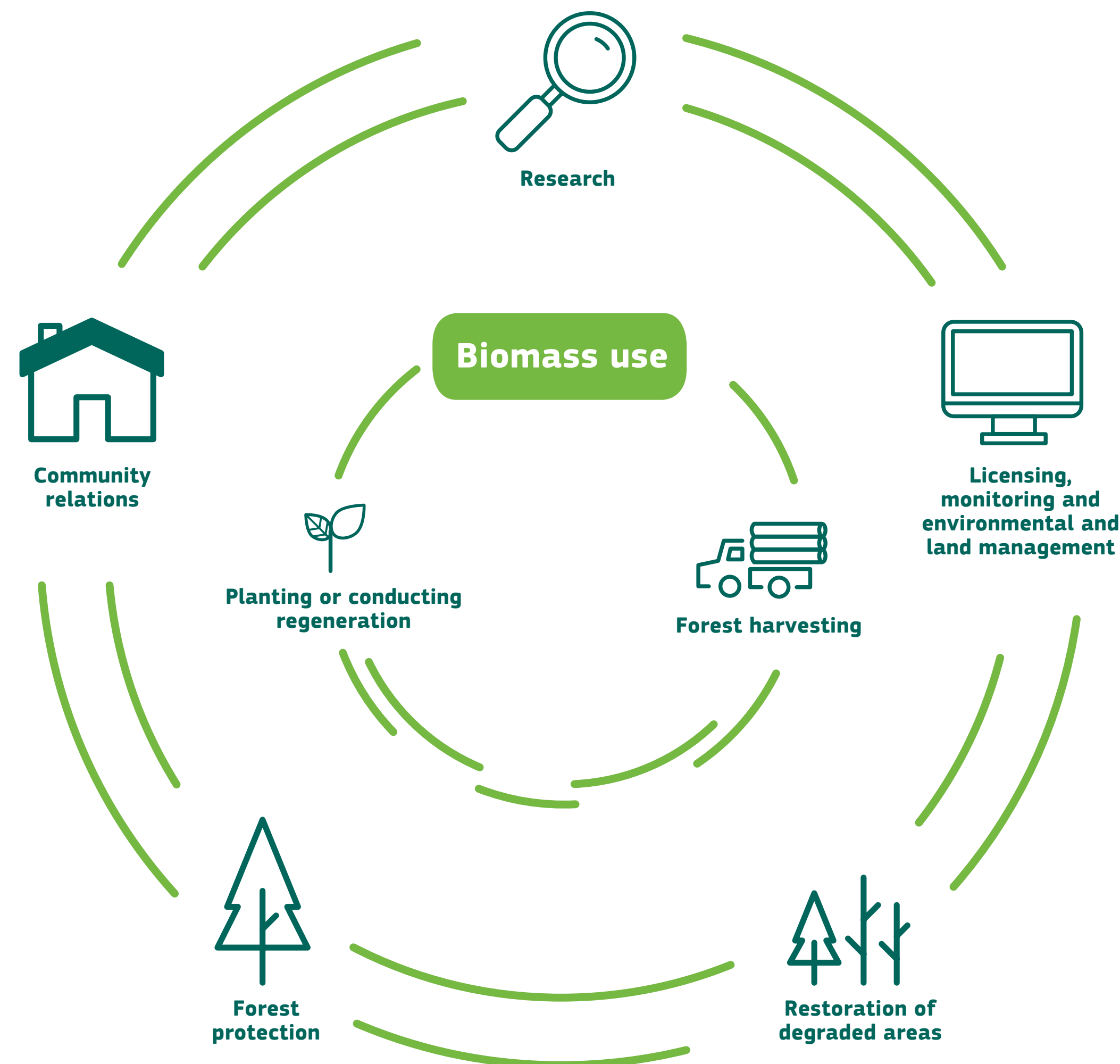
Our forestry base in Santa Catarina covers 27,900 hectares. It is distributed among the municipalities of Água Doce, Catanduvas, Vargem Bonita, Ponte Serrada and Irani.

Of this total, 12,400 hectares are planted forests, of which 11,200 hectares are pine and 1,200 hectares eucalyptus. Around 13,700 hectares correspond to conservation areas and 1,800 hectares to the area destined for infrastructure and reservoirs, among others.

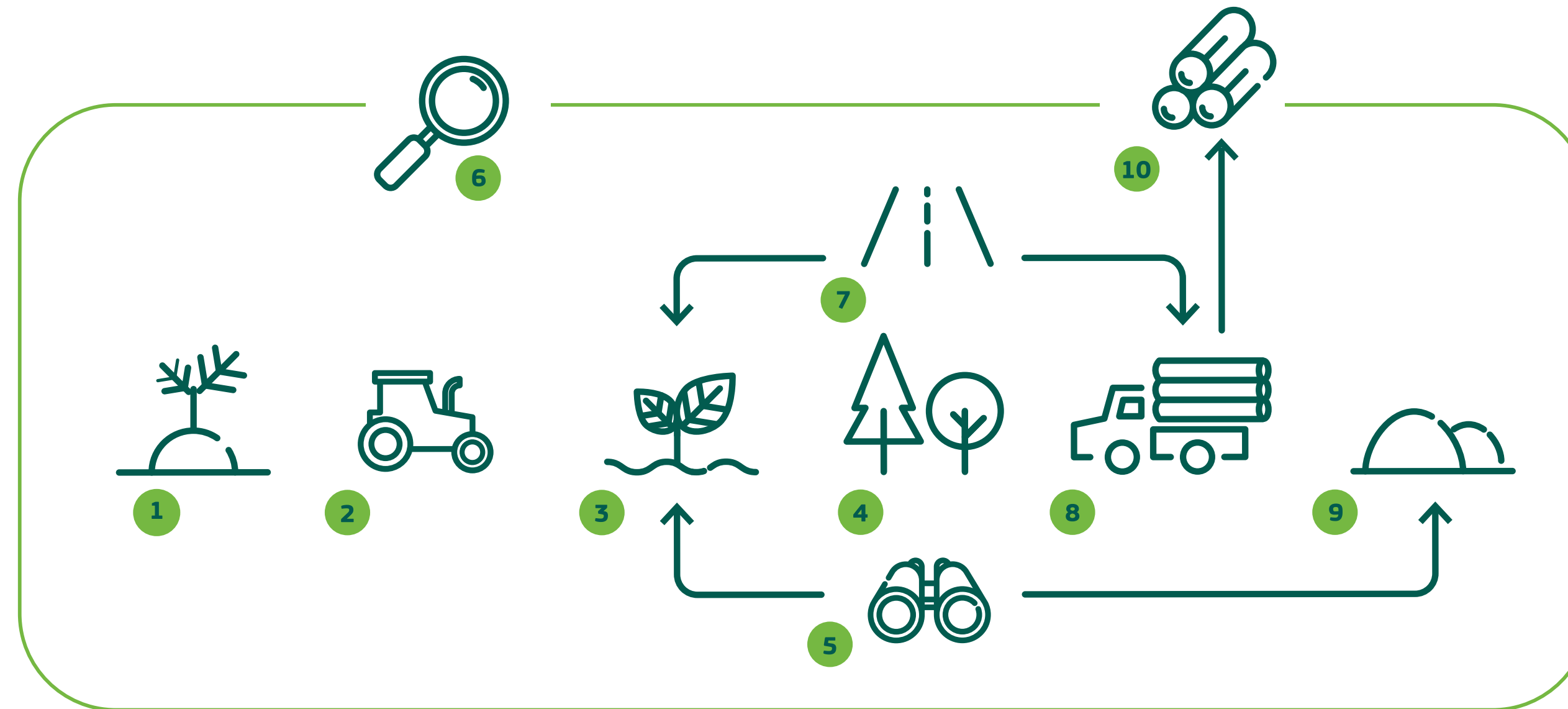
Pinus taeda is the predominant species used in reforestation. This choice is due to the species' good adaptability in the region where the company operates, as well as the characteristics of the wood – an essential factor in guaranteeing a quality end product. All the wood harvested is sent to the mill in Vargem Bonita (SC).

After harvesting the plantations, the spare material is accumulated and processed by a mobile chipper, and then transported to the factory. Together with the eucalyptus biomass, the material feeds the steam and energy cogeneration boiler.

(304-2) FOREST PROCESS



Main impacts of Santa Catarina’s forestry activities, products and services on biodiversity



1. SEEDLING PRODUCTION

The pine and eucalyptus seedlings that comprise the reforestation are produced in Irani’s own forestry nursery in Santa Catarina, located next to the Vargem Bonita mill. The seeds used to produce the seedlings are purchased from nationally recognized suppliers, who guarantee high quality and optimum germination percentages, and are also collected from Irani’s own orchards, which

have been managed and supported for years in order to ensure the best seedling quality and adaptability.

The nursery contains an area for the production of native forest seedlings. Cultivation aims to guarantee the availability of seedlings for use in internal enrichment and recovery projects, while also providing support

for restoration actions and environmental events promoted by the local community.

The nursery currently cultivates some 40 species. In 2023, approximately 8,600 native seedlings were donated.

2. SOIL PREPARATION

Soil preparation represents the start of a new forest management cycle for an area. It begins after the chipping stage of the spare material from the previous harvest cycle. An agricultural tractor is used with an implement called a subsoiler.

Attached to the back of the vehicle, the device’s function is to open furrows in the ground for planting seedlings. In areas where the terrain is flat, soil preparation is mechanized. On the other hand, in steep terrain, the rows are prepared and marked out for planting by manual tilling.

3. PLANTING

The planting stage takes place after the soil has been prepared and follows specific procedures for pine and eucalyptus, depending on the characteristics of each species. Due to its adaptability and resistance to cold, pine is planted throughout the year. Eucalyptus, on the other hand, is less resistant to cold and is planted between October and December. For both species, the standard spacing is 2.5 meters between the planting row and 2 meters between the seedlings in the row.

PLANTING PER SPECIES (AMOUNTS IN HECTARES²)

| | 2021 | 2022 | 2023 |
|-------------------|---------------|----------------|---------------|
| Pinus | 584.45 | 888,80 | 544.43 |
| Eucalyptus | 107.92 | 155.17 | 121.26 |
| Total | 692.37 | 1043.97 | 665.69 |

² Hectare – unit of measurement used to measure area; corresponds to 10,000 square meters.

4. FOREST MANAGEMENT

Sustainable forest management guarantees the conservation of native forests and the optimal use of forest resources. Every year, we control the wood wasps found in pine plantations that are more than five years old. The fight against leaf-cutting ants and the application of agrochemicals are carried out in a controlled manner, following monitoring and analysis standards in accordance with the forest certification process.

A monthly inspection is conducted on all plots that are in the process of being formed. The aim is to monitor the development of the plantation and assess any need for intervention – such as pest control, competition, mortality or other adverse symptoms.

Forest growth is monitored using forest inventories. Every three years, a continuous forest inventory (CFI) is carried out on all plots older than five years for pine, and three years for eucalyptus. A pre-cut forest inventory is also carried out in forests that are close to and scheduled for harvesting. The aim is to ensure more assertive forestry production information.

5. PROPERTY STRUCTURE AND SURVEILLANCE

The sector responsible for monitoring and overseeing the farms relies on a team that monitors the areas on a monthly basis. For this purpose, the ibotton system is used in places with greater vulnerability or a higher incidence of accidents. In the case of environmental accidents, the Environmental Military Police (PMA) of Concórdia provide assistance, as well as support in patrols and environmental awareness actions.

We also use a fire detection and surveillance monitoring system. A total of four towers equipped with long-range 360° cameras have been placed at strategic points. Two of them are located in Santa Catarina and two in Rio Grande do Sul.

The Monitoring Room at the Santa Catarina Forestry Unit contains all the necessary equipment, which is monitored by operators 24 hours a day. The idea is to detect fires in and around the company’s forestry base at an early stage and respond quickly, as well as to monitor these areas more closely.

Long-standing firefighting and emergency actions and procedures are also in place. The surveillance structure provides specific flame-retardant equipment and clothing, as well as a fire truck.

Irani has set up an Emergency Brigade and mapped out water collection points. Furthermore, it entered into an agreement with the Irani Volunteer Fire Brigade, with a yearly training schedule.

Florestal SC's Emergency Brigade carries out at least four practical and theoretical training sessions a year and is formed of more than 20 individuals.

These actions have ensured excellent performance in fighting fires and responding to emergencies.

6. RESEARCH, QUALITY CONTROL, HEALTH, SAFETY AND THE ENVIRONMENT

Forestry research focuses on productivity and sustainability. We maintain partnerships with government agencies and research institutions, while also developing studies in-house with our own specialized team.

We participate in the PPPIB (Cooperative Program on Potential Pinus Productivity in Brazil), in partnership with the Institute of Forestry Research and Studies (IPEF) and the Santa Catarina State University (Udesc). Throughout 2023, we continued the Wild Boar Project, a partnership with Embrapa Suínos in Concórdia.

All forestry operational activities are subject to quality control, a specific sector designed to

maintain quality standards in operations and continuously improve processes. In addition to operational monitoring, safety issues are also assessed and critically analyzed by the teams on a monthly basis. Items for compliance with safety standards and internal procedures are assessed by the SESMT team in order to maintain compliance with the forest management certification standard.

7. ROAD MAINTENANCE

Operated by an in-house team, the action aims to ensure that the roads are passable for the flow of forestry production and access to farms and places of need. In projects where forest harvesting will take place, the works, graveling, and construction of drains and water outlets follow a detailed operational plan and are monitored throughout the operation period. For maintenance, the operation follows an annual plan, based on a survey of critical points and the need for access.

| | 2021 | 2022 | 2023 |
|------------------------------|------|------|------|
| No. of Fire Outbreaks | 3 | 0 | 1 |
| Burned Area (ha) | 0 | 0 | 0 |

8. HARVESTING AND TRANSPORTATION

All harvested plots undergo micro-planning before harvesting and transportation operations. This is important to prevent impacts, ensure efficiency, worker safety and assertive production.

Harvesting and transportation operations are conducted by an outsourced team and rely on high-performance machinery. The pine management cycle is about 15 years, while the eucalyptus management cycle is seven. All the wood harvested is transported to the Campina da Alegria's mill's wood.

In 2023, 756,497 tons of pine and eucalyptus wood were transported. At the yard, the wood undergoes an assortment selection, which guarantees raw material for the mill's own consumption and logs for sale on the local market.

9. WOOD CHIP PRODUCTION FOR BIOMASS

After the trees have been harvested from the woodlot, there are scraps of tree tips, branches and acicles left over. The material is stacked at the edge of the woodlot, chipped by a mobile chopper and transported in dump trucks to the wood yard. Subsequently, we transport the material to the cogeneration boiler, which generates steam and energy for the industrial units in Vargem Bonita (SC). With the exception of transportation, the entire operation is handled by our own staff and machinery.

10. TIMBER TRADING

The harvested wood is sent to the yard at the Vargem Bonita (SC) mill. After a selection based on the size of the assortment, logs with a diameter of more than 28cm, also called logs, are destined for sale to sawmills and rolling mills in the region where the company operates. In 2022, 5,900 tons of logs were sold to the local market.



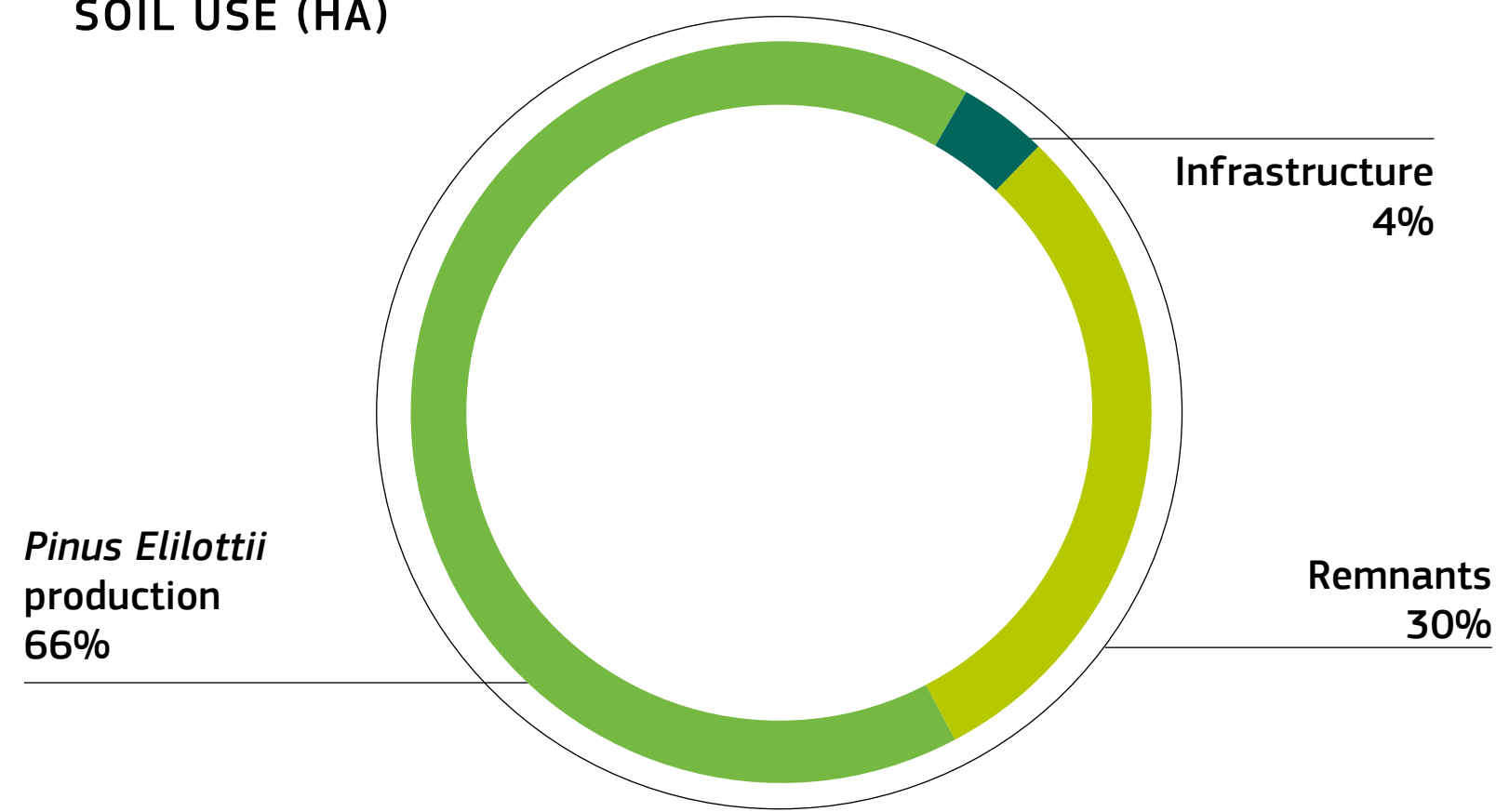
GRI 304-1

OUR FORESTS IN RIO GRANDE DO SUL AND RESIN

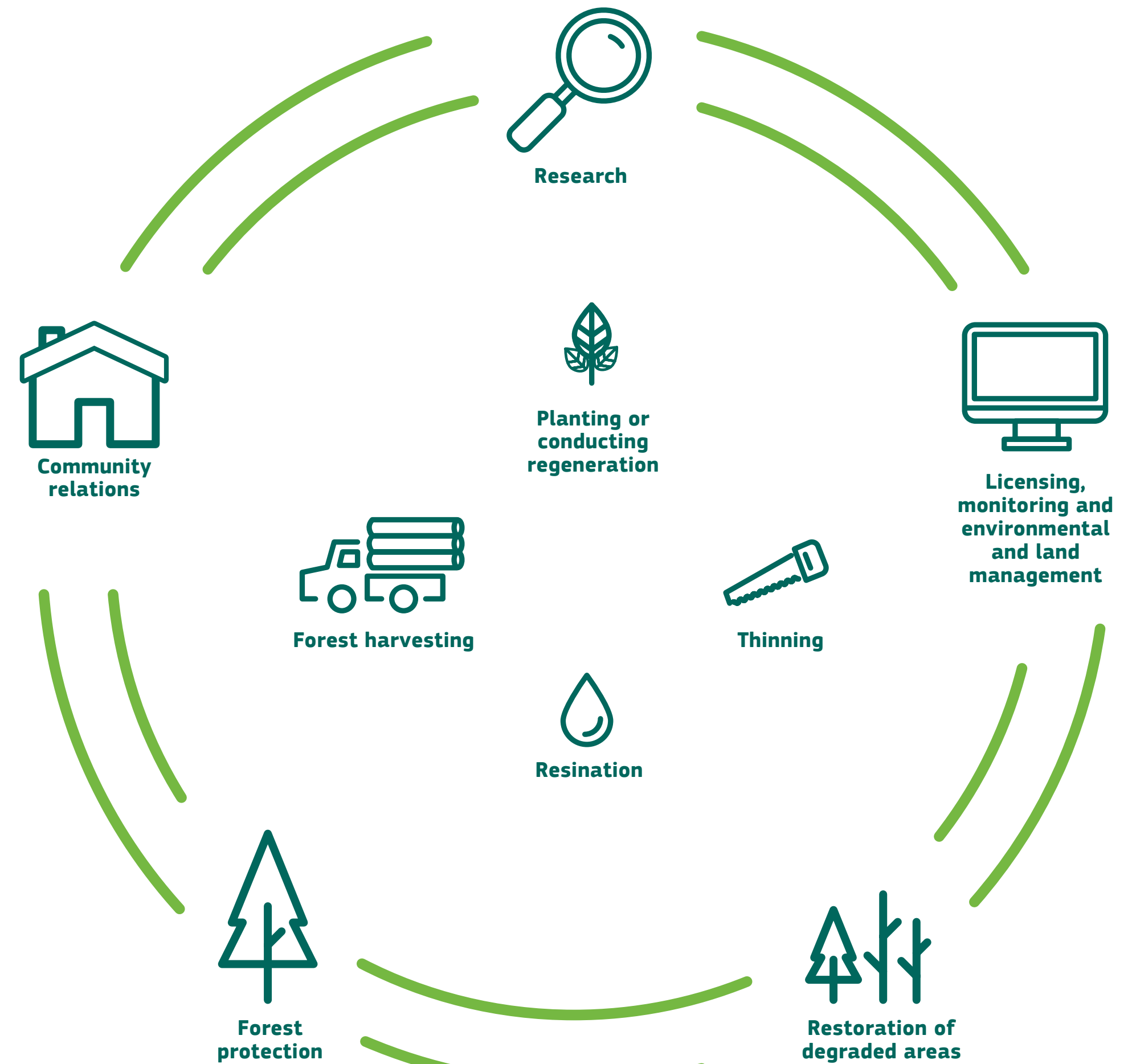
In Rio Grande do Sul, resin extraction is a means of anticipating income from *Pinus elliotti* forests in the towns of Mostardas, Tavares and São José do Norte. This value chain generates direct jobs and helps local people remain in the countryside.

Our forestry base covers a total of 5,926.55 hectares, of which 3,912.22 are dedicated to the effective planting of *Pinus elliotti*.

SOIL USE (HA)



Remnants: sandy field, wet field, dry field, recovery, native vegetation, water, dune fixer.



We extract resin gum from pine, which is processed at the Resin RS unit in Balneário Pinhal, giving rise to rosin and turpentine, products with great versatility of application.

Solid in nature, rosin is packaged and recommended for use in products such as glues, adhesives, soaps, enamels, electrical insulators, chewing gum, waxes and expectorants. Turpentine is a liquid product stored in tanks and is suitable as a solvent in paints and varnishes, the manufacture of dyes, waxes, disinfectants (pine oil), camphor, soaps, insecticidal greases, sealants and perfume fixatives.

Certified to ISO 9001:2015 and ISO 14064:2006, Irani also has earned Forest Management and Chain of Custody (CoC) seals from the FSC® system (FSC®-C116791/ FSC®-C009947).

In a management cycle that lasts up to 21 years, we carry out four major stages: spontaneous regeneration and planting, resin harvesting, processing and clear-cutting. In each of these stages, we respect the guidelines of the certifications we have obtained and the company's standards of quality and excellence.



- **Planting:** starting in 2023, we will begin renewing the forest by planting *Pinus Elliottii* in at least 50% of the available clear-cut area. The initiative arose from the need to find genetically improved individuals to boost our productivity and meet the demand for gum resin and wood.
- **Regeneration:** in cases where planting is not feasible, we opt for spontaneous regeneration of pine trees in a natural way. This is chosen when there is an impediment for technical reasons in terms of quality and inadequate productivity. The total amount of wood removed by thinning and clear-cutting in 2023 was 42,786.58 tons.
- **Resination:** a manual activity based on dividing the pine tree into faces and opening the grooves to collect the gum resin. The process can take up to eight years, followed by a 12-month rest period for the tree. In the 2022/2023 harvest, 1,300,878 trees were resinated in the Bojuru region, which enabled 3,593.50 tons of resin to be collected.

The volume of own resin delivered corresponds to 24.04% of the industrial unit's demand, taking into account resin from the Balneário Pinhal and Bojuru forests. The rest is bought from small producers in the surrounding area and on the domestic market.

Irani's Quality Resin Program establishes the degree of purity of the resin for suppliers, applying a discount or increase in the payment for this raw material depending on the level reached upon delivery. We ended 2023 with 14,449.387 tons of gum resin received, always in compliance with the Program's guidelines.

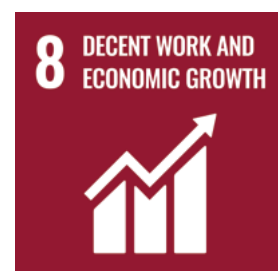
- **Processing:** In the industrial unit, the gum resin goes through the stages of malaxation, filtering, decantation and distillation. In distillation, we separate the resin into rosin, which is solid, and turpentine, which has liquid characteristics.

In 2022, the chemical industry processing of rosin and turpentine underwent modernization. The plant has become cleaner, more organized and more efficient. As a result, working conditions have also improved. In addition, it innovated in the system of hydrocarbon emissions to the environment with a gas treatment plant never before seen in Brazil, aimed at environmental compliance, in accordance with Fepam's guidelines.

- **Close-cutting:** This stage is carried out when the forest area is around 21 years old. The harvested wood is sold on the regional market in the form of logs and loglets. The logs are used to supply sawmills and the loglets are turned into MDP and MDF boards for the furniture industry.

In 2021, the barrel-making activity was prioritized. In 2023, 35,659 were produced, which represents 100% of the resin plant's demand.

PRODUCT AND MARKET MANAGEMENT



**GRI 3-3
ISE**

PAPER

Irani is notable as one of the leading manufacturers of packaging paper in Brazil. The company is recognized for the quality of its products and excellence in customer service.

We have developed market-centric management practices. Our Quality Management System is certified in accordance with ISO 9001:2015, while ISO 14064:2006 certification offers the status of a Carbon Positive company, granted in an annual audit of our Greenhouse Gas inventory. In addition, our chain of custody, which covers the social, economic and environmental pillars, is FSC® certified (FSC®-C009947).

We offer a wide variety of papers. Weights range from 30g/m² to 200g/m² and are ideal for producing rigid or flexible packaging. (416-2) Among all our product families, the Fine

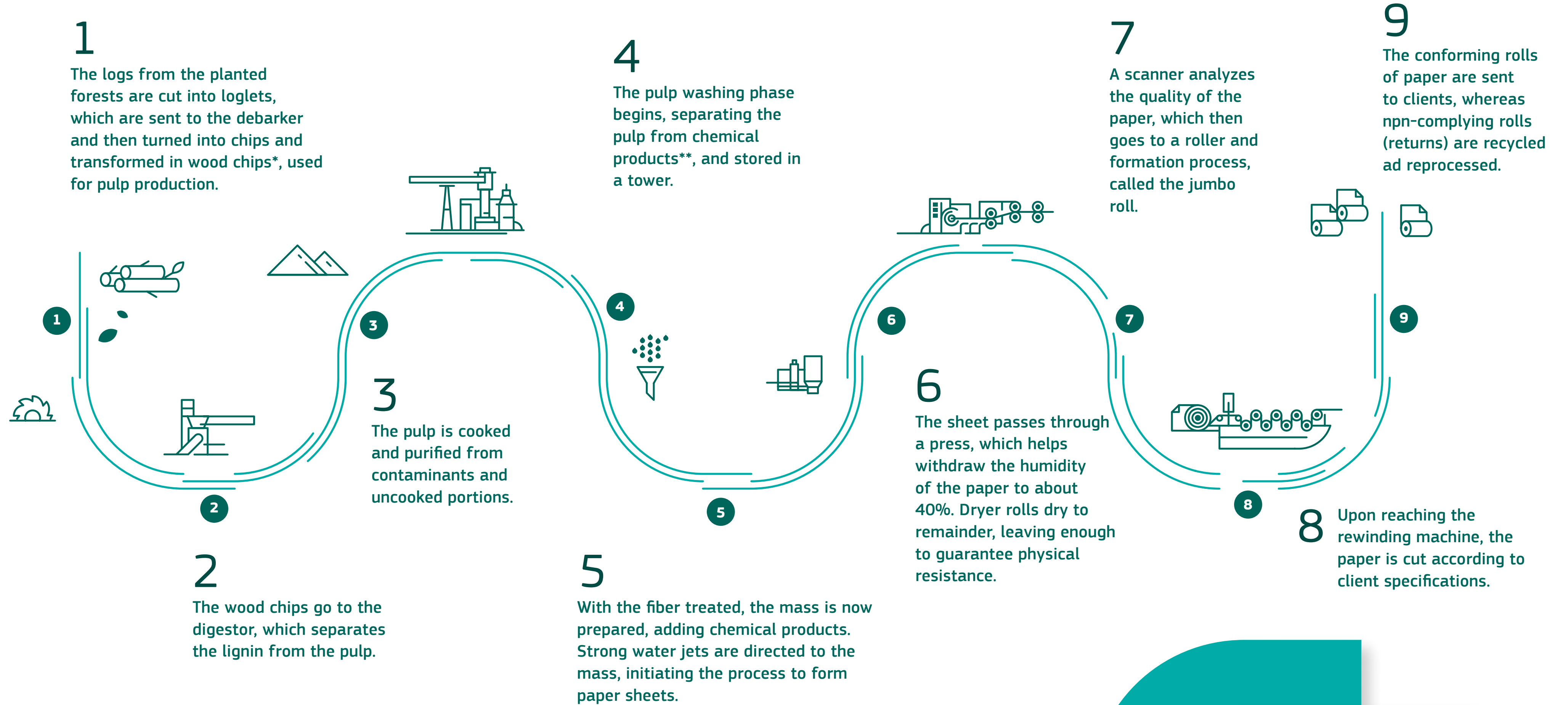
Kraft, Fine Kraft White, Flash Kraft, Flat Kraft and Flexi Kraft lines stand out, as they are designed to come into direct contact with food..

Their production uses inputs permitted by the positive list in Resolution (RDC) No. 88 of June 29, 2016, approved through our careful in-house certification processes. By complying with legal regulations and good manufacturing practices, we prevent the products from suffering any kind of physical, chemical or biological contamination.

We also conduct regular assessments to ensure that the products do not compromise the health and safety of consumers. Every two years, we undertake analyses in accordance with RDC No. 88 and RDC No. 90, revalidating the ISEGA certification. This ongoing commitment underscores our relentless pursuit of excellence in the quality and safety of the paper we produce.



HOW OUR PAPERS ARE PRODUCED



More information
about Irani's
papers can be
found here.



The Paper Unit innovated significantly by developing 30 new input projects and approving 10 new paper developments for the market in 2023. Our quest for innovative solutions strengthens research partnerships in order to deliver products and services that exceed customer needs and expectations.

In 2023, we face a 3.9% reduction in turnover compared to 2022. Challenges arose due to the greater supply of paper on the domestic market by other players, who ceased exports and expanded domestic sales. We adopted a strategy of reducing duplex core sales to the market and increasing paper production for our packaging plants. In the foreign market, we saw greater offers of paper from other countries, increasing the competitiveness of the sector.



PACKAGING

We are among the leading producers of corrugated cardboard packaging and sheets in Brazil. We produce boxes and sheets of white and recycled Kraft paper with excellent performance, as well as corrugated sheets in single and double waves. We have an environmental management system and follow strict quality control processes. All of these procedures are certified to ISO 9001:2015, ISO 14064:2006 and ISO 14001:2015 standards, as well as Chain of Custody (CoC) certified by the FSC® (FSC®-C009947).

Our technical assistance team monitors the process at all stages, making client visits for development, preventive and corrective purposes.

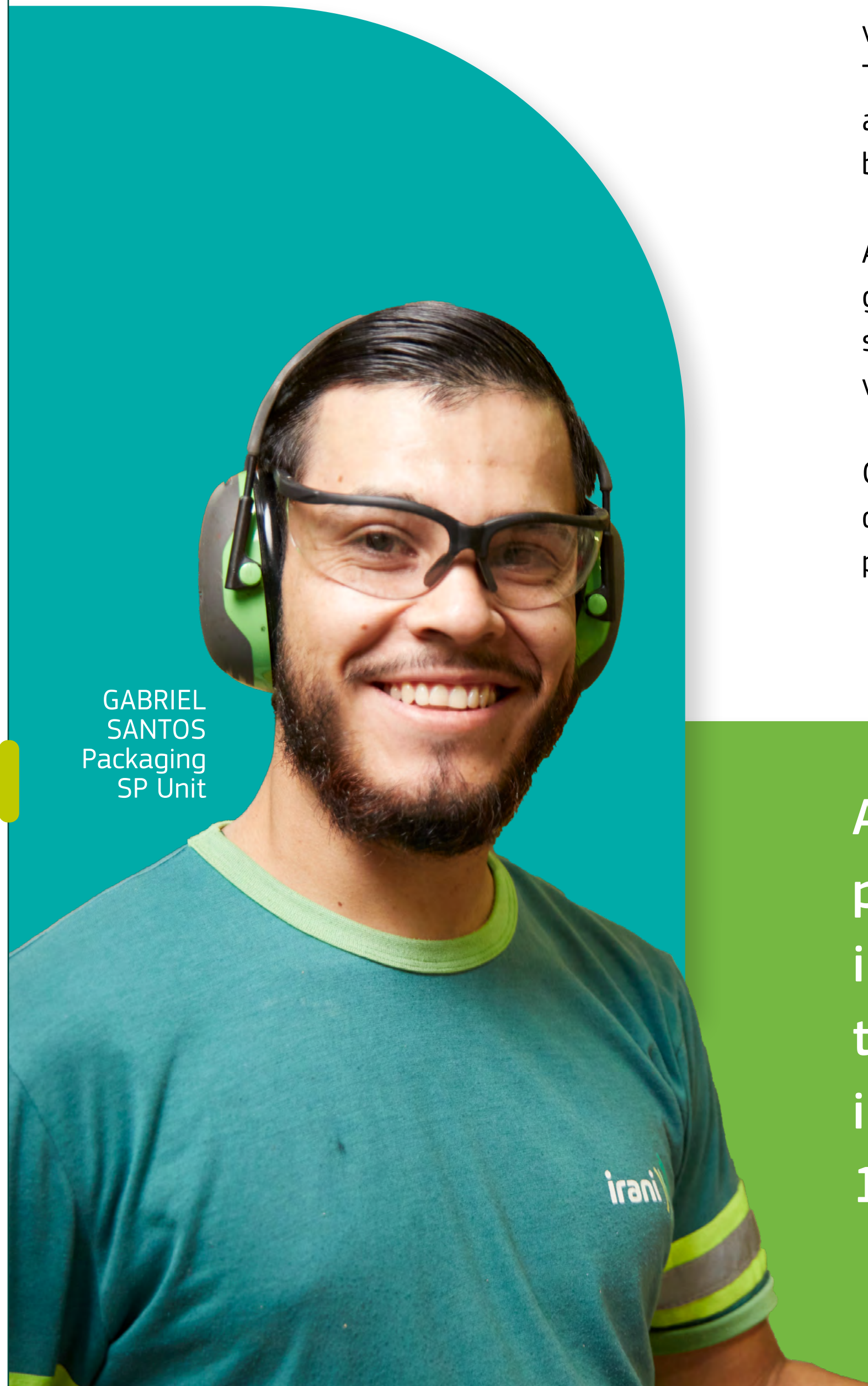
HOW OUR PACKAGING IS PRODUCED

CUSTOMER FOCUS

This is the concept that guides our relationship. We put ourselves alongside the client from start to finish so that our company will be recognized as their preferred choice in the offer of innovative, distinctive and personalized solutions that seek to reduce costs along with exceptional performance.

The papers, produced by Irani or purchased, are corrugated in the corrugated board machine that produces sheets according to the specifications of each client. This stage corresponds to between 70-80% of the steam that is consumed in the production process.





GABRIEL
SANTOS
Packaging
SP Unit

Irani goes to great lengths to offer ever smaller weights with superior mechanical resistance. This is why we have invested in infrastructure and industrial processes at our Packaging business units.

According to Empapel, the packaging market grew by 0.7% in 2023 compared to 2022. In the same period, Irani's market increased by 3.2%, with sales of 164,990 tons of packaging.

Client-centricity is the basis of Irani's product development. Which is why we offer customized packaging.

We serve different market segments with sustainable packaging designed for each customer, produced with recycled raw materials and 100% recyclable. We also have a robust Research & Development and Technical Assistance structure to meet the needs and preferences of different audiences.

In addition, Irani's customers receive training on how to handle corrugated cardboard. Taught by the R&DI area, the courses are aimed at employees who work with corrugated cardboard and are intended to help develop these customers.

According to Empapel, the packaging market grew by 0.7% in 2023 compared to 2022. In the same period, Irani's market increased by 3.2%, with sales of 164,990 tons of packaging.

More information
about Irani's
packaging can
be found here





GAIA PLATFORM

Gaia symbolizes the Earth, nature. It is from this infinite and wise force, of which humanity is a part, that our motivation to grow comes. To this end, Irani's expansion plan, with projects under development between 2020 and 2024, is guided by its commitment to sustainable development in its three spheres: economic, social and environmental.

In 2023, we continued to fulfill the purpose of the Gaia Platform: to increase competitiveness and production capacity, as well as energy sufficiency. As a result, we made a series of investments with a positive environmental impacts and an internal rate of return (IRR) higher than the company's cost of capital.

1st Cycle | 2020 - 2023

Gaia I - Chemicals and Utilities Recovery Expansion

Gaia II - SC Packaging Expansion

Gaia III - MP#2

Gaia IV - Cristo Rei Repowering

Gaia V - São Luiz Repowering

2nd Cycle | 2020 - 2024

Gaia VI - Information Process Management System

Gaia VII - ETE Expansion Phase 1

Gaia VIII - New Cutting and Folding Printer

Gaia IX - Automation of the Intermediary Stock

Gaia X - New FFG Dual Slotter

More information
about Irani's
packaging can be
found here



ENERGIA



**GRI 3-3, 302-1,
302-2, 302-3,
SASB RR-PP-130
e RT-CP-130
ISE**

Self-sufficiency in energy is one of the main challenges for Irani's businesses. Hence, one of the company's strategic objectives is to ensure energy supply.

(302-1) At the Vargem Bonita (SC) units, where energy consumption in the processes is abundant, we have concentrated our efforts in the search for operational efficiency. One of the alternatives we are exploring is the use of biomass from forestry waste. The material, previously deposited in landfills, decomposed, emitting greenhouse gases. Since 2005, we have had a boiler to generate steam and energy from burning this biomass to supply the SC Paper and Packaging units. The process was registered with the United Nations (UN) as the Irani Biomass Electricity Generation Project and validated as a Clean Development Mechanism (CDM). At the same unit, we have three Hydroelectric Generating Plants (CGHs) with automated control and remote operation - as well as another four boilers for generating thermal energy.

At the Paper SC unit, we completed the Gaia I project, which is part of the Gaia Platform, a project to modernize the unit and make it energy self-sufficient. This was followed by the start-up of the Chemical Recovery Boiler. The boiler is responsible for burning black liquor, a by-product generated by cooking the chips for pulp production. The aim is chemical recovery and the collection, treatment and burning of Non-Condensable Gases (NCG). The benefits achieved in the process are the recovery of chemical compounds such as caustic soda, which returns to the process; the generation of energy through the high-pressure steam resulting from combustion; and the non-release of NCG gases into the atmosphere.

This achievement was a very important milestone in 2023, placing Irani on a new level of energy efficiency.



ROGER OLIVEIRA
Resin RS Unit

(302-3) In all business units, we are searching for more effective mechanisms. We also make the necessary operational adjustments to reduce electricity consumption or maintain adequate levels.

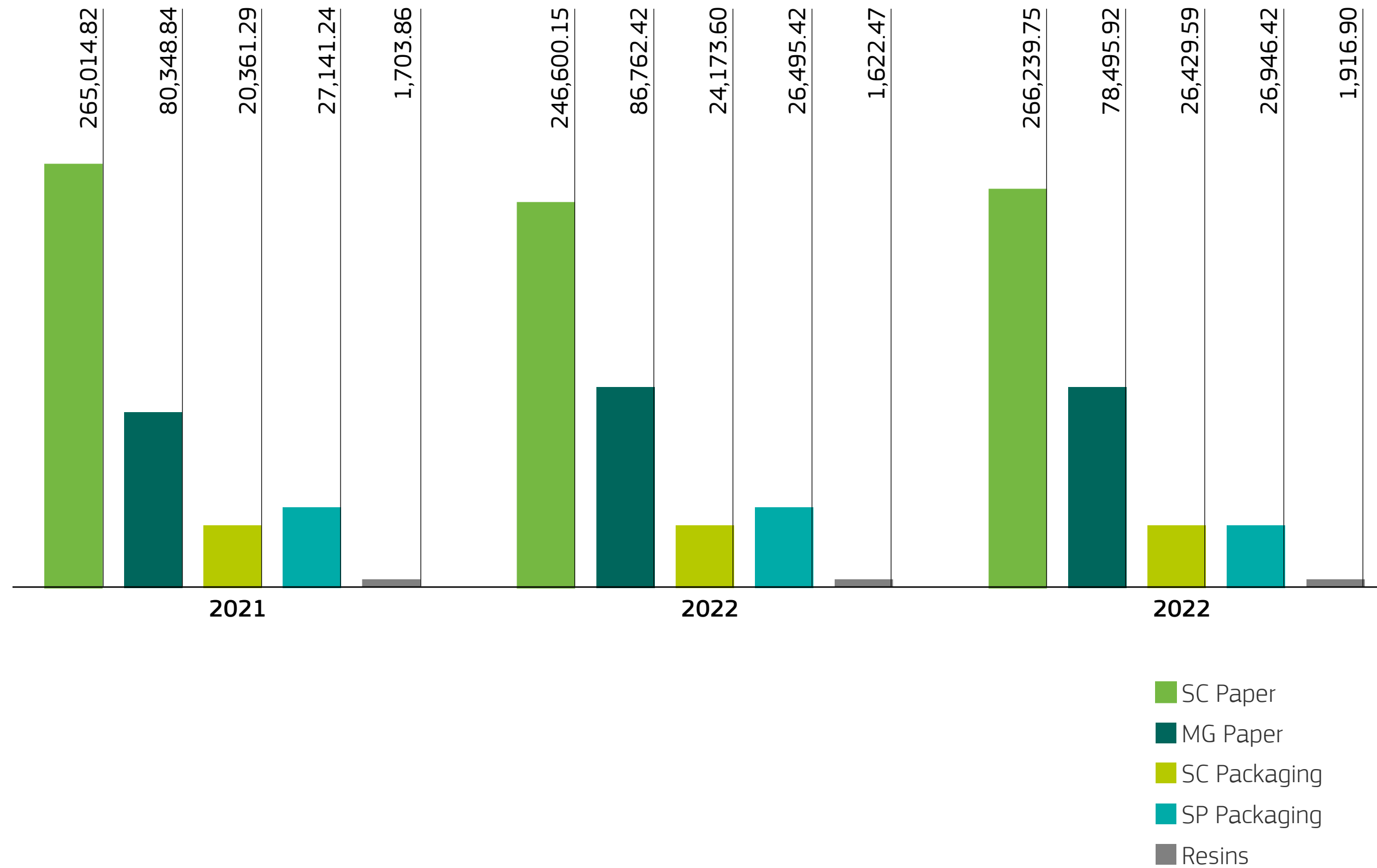
(302-3) SPECIFIC ELECTRICITY CONSUMPTION (IN MWH) PER TON PRODUCED

| UNITS | Specific / gross production | | | Specific / net production | | |
|---|-----------------------------|-------|-------|---------------------------|-------|-------|
| | 2021 | 2022 | 2023 | 2021 | 2022 | 2023 |
| SC Paper Unit – Campina da Alegria | 0.711 | 0.729 | 0.721 | 0.752 | 0.774 | 0.765 |
| MG Paper Unit – Santa Luzia | 0.427 | 0.410 | 0.377 | 0.454 | 0.435 | 0.398 |
| SC Packaging Unit – Campina da Alegria | 0.076 | 0.081 | 0.075 | 0.088 | 0.093 | 0.086 |
| SP Packaging Unit – Indaiatuba | 0.073 | 0.076 | 0.091 | 0.079 | 0.081 | 0.097 |
| RS Resin Unit – Balneário Pinhal | 0.031 | 0.033 | 0.044 | 0.031 | 0.033 | 0.045 |

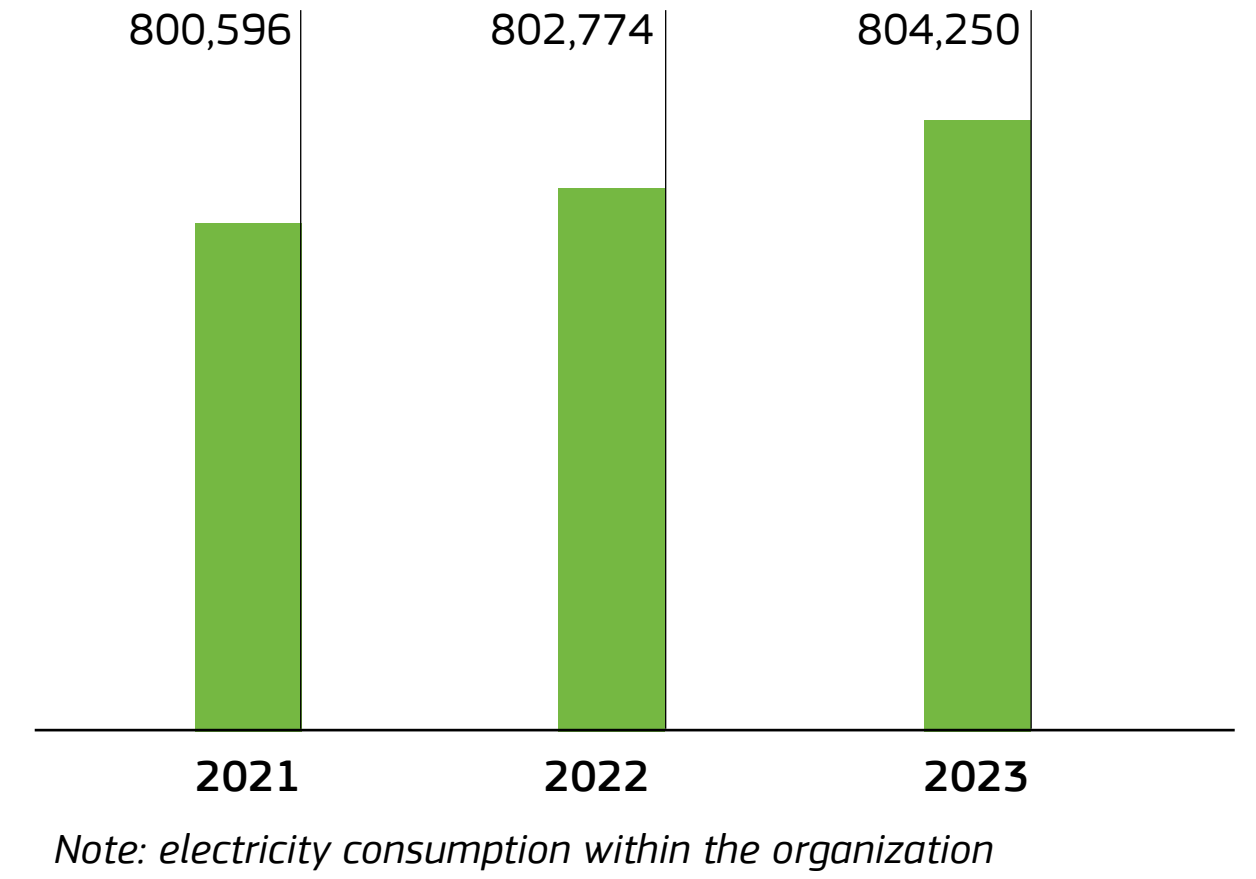
Note: the metric used to calculate specific electricity consumption is gross production and net production. The ratio used refers to energy consumed within the Organization, as it does not have sufficient information to report energy consumed outside it.

(302-1 and 302-2) Total energy consumption, inside and outside the organization, in the form of steam, fuels and electricity was 6,550,222.89 GJ.

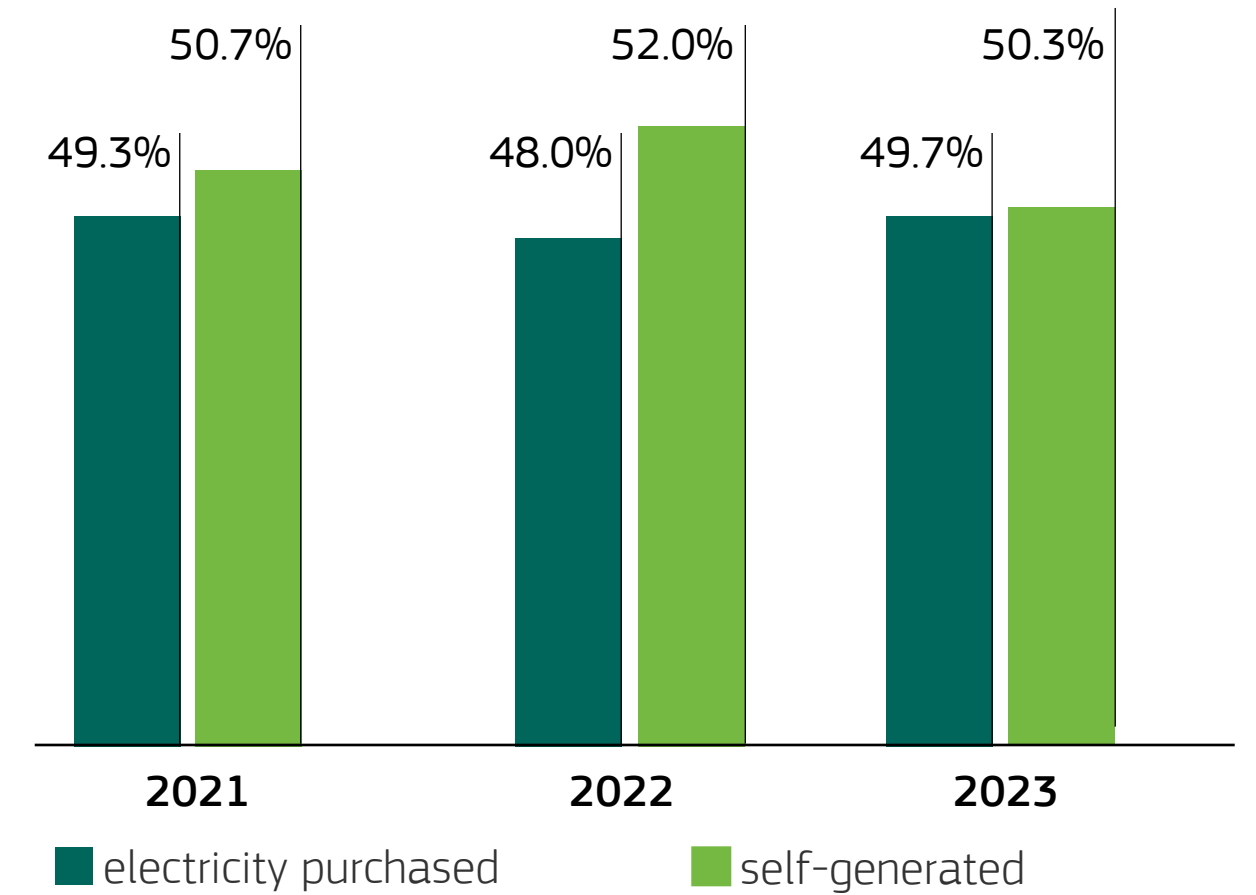
(302-1) TOTAL ELECTRICITY PURCHASE (IN GJ)



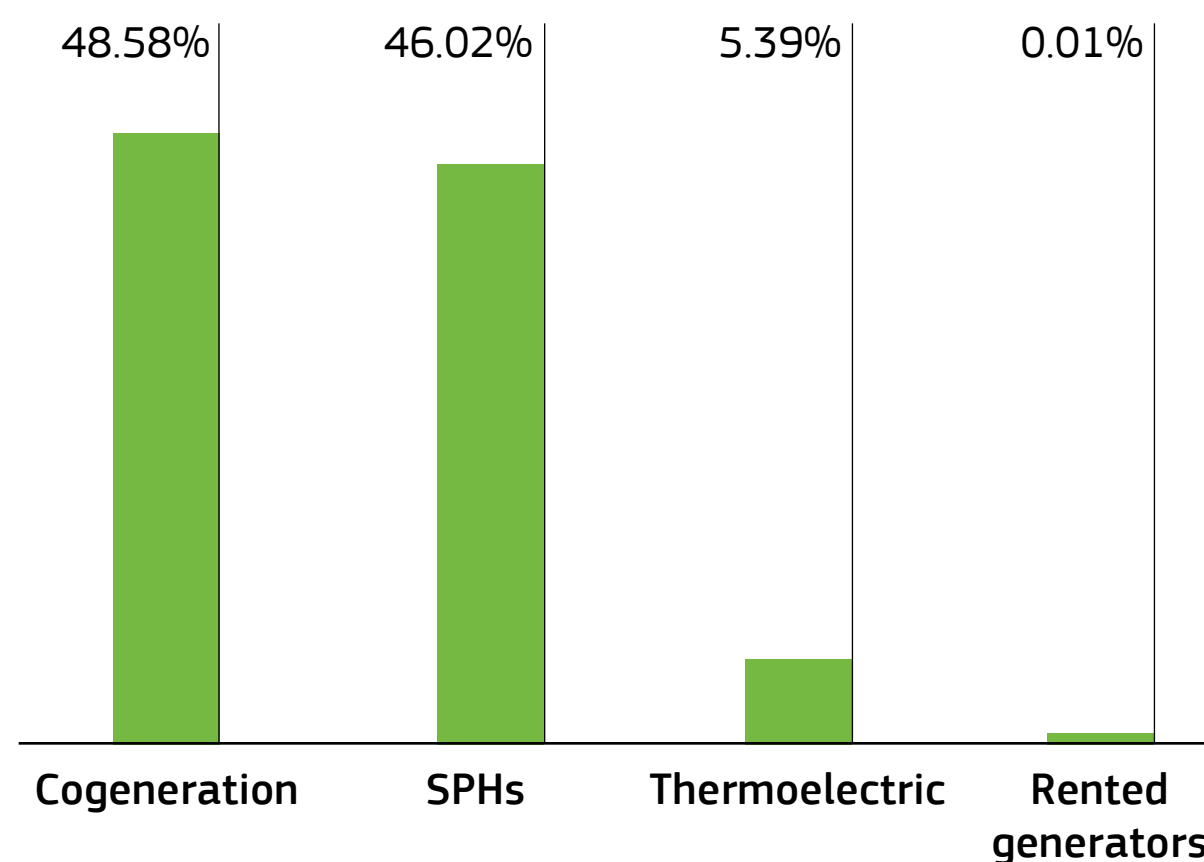
(GRI 302-1, RR-PP-130 AND RT-CP-130) TOTAL CONSUMPTION OF ELECTRICITY (IN GJ)



TOTAL PURCHASED AND SELF-GENERATED

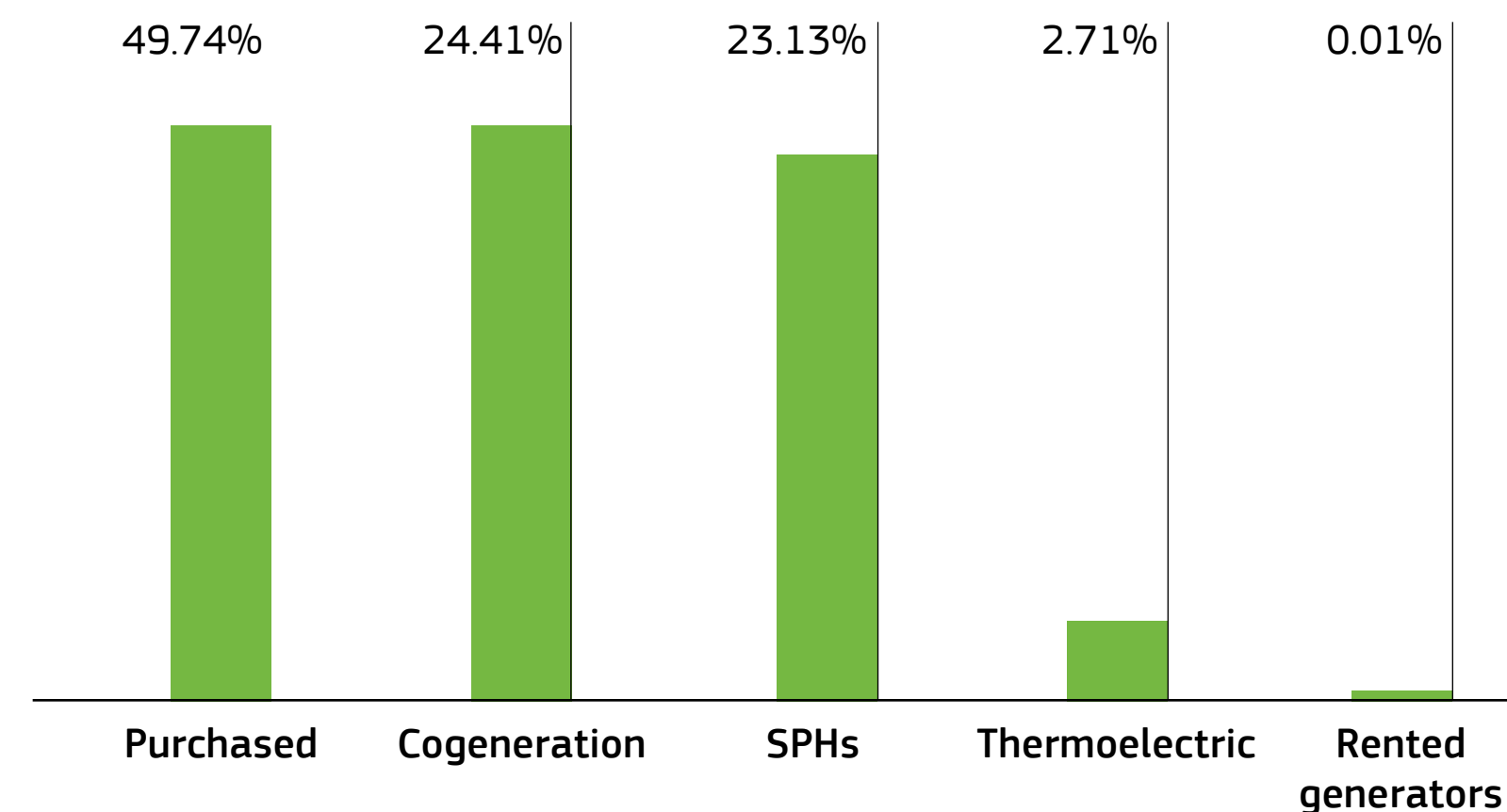


(RR-PP-130 AND RT-CP-130) PERCENTAGE OF SELF-GENERATED ENERGY BY SOURCE



Note: self-generation of energy for the SC Paper – Campina da Alegria unit

(RR-PP-130 AND RT-CP-130) PERCENTAGE OF ENERGY CONSUMED BY GENERATING SOURCE



Note: represents the purchase and self-generation of energy, considering all units, with 25% of the energy purchased from renewable sources.

(302-1) NON-RENEWABLE FUEL CONSUMPTION (IN GJ)

| Unidade | 2021 | 2022 | 2023 |
|--|-------------------|-------------------|-------------------|
| SC Paper Unit – Campina da Alegria | 24,062.69 | 39,294.11 | 65,609.68 |
| MG Paper Unit – Santa Luzia | 211,140.31 | 219,387.19 | 184,142.50 |
| SC Packaging Unit – Campina da Alegria | 20,130.92 | 17,084.31 | 9,772.80 |
| SP Packaging Unit – Indaiatuba | 60,357.11 | 58,339.06 | 54,494.66 |
| TOTAL | 315,691.02 | 334,104.67 | 314,019.65 |

Note: the Resina RS Unit - Balneário Pinhal does not use non-renewable fuel..

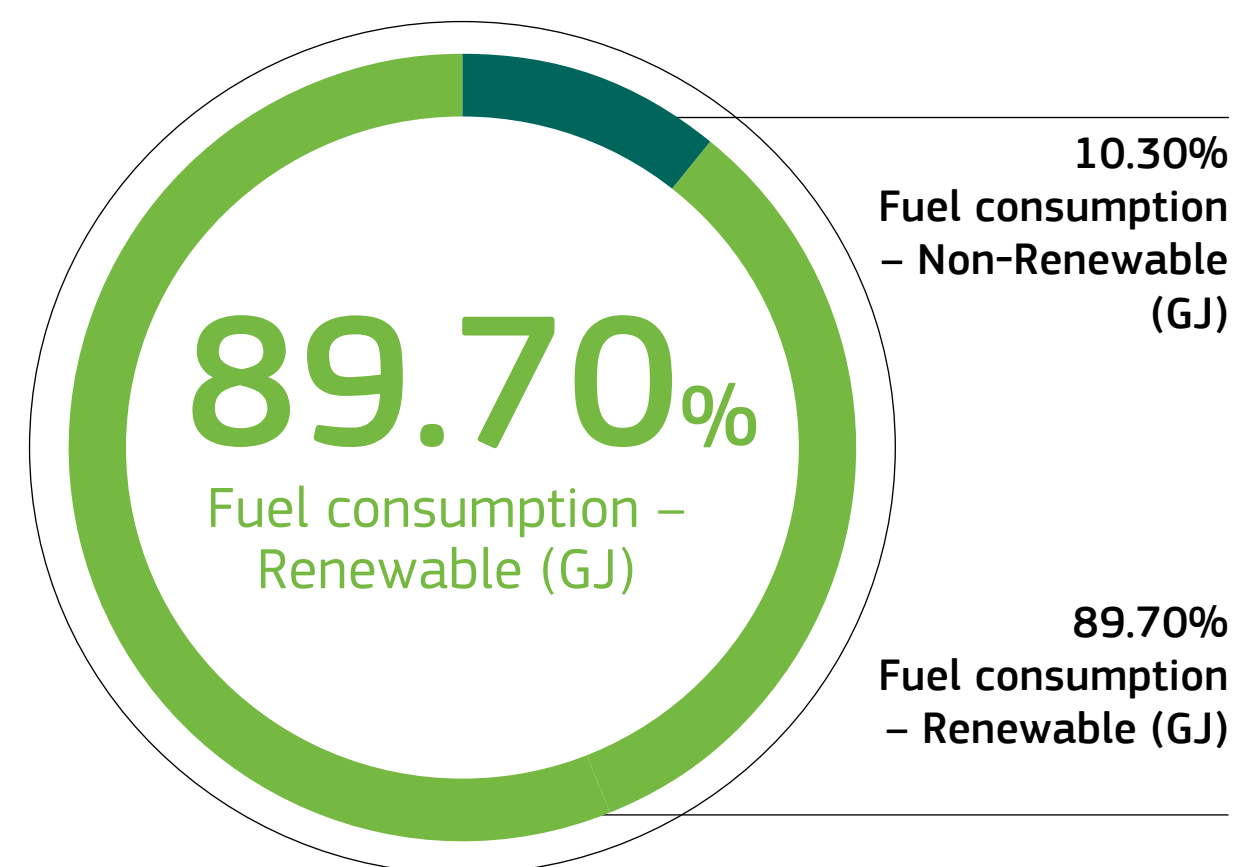
(302-1) RENEWABLE FUEL CONSUMPTION (IN GJ)

| Unit | 2021 | 2022 | 2023 |
|------------------------------------|---------------------|---------------------|---------------------|
| SC Paper Unit – Campina da Alegria | 3,185,686.39 | 3,033,908.24 | 2,728,302.37 |
| RS Resin Unit – Balneário Pinhal | 7,550.22 | 7,070.85 | 7,002.74 |
| TOTAL | 3,193,236.61 | 3,040,979.09 | 2,735,305.11 |

(302-1) STEAM CONSUMPTION (IN GJ)

| Unit | 2021 | 2022 | 2023 |
|--|---------------------|---------------------|---------------------|
| SC Paper Unit – Campina da Alegria | 2,499,623.16 | 2,416,645.20 | 2,398,696.22 |
| MG Paper Unit – Santa Luzia | 186,721.72 | 191,763.35 | 174,698.51 |
| SC Packaging Unit – Campina da Alegria | 44,936.09 | 39,371.69 | 44,692.27 |
| SP Packaging Unit – Indaiatuba | 60,844.28 | 58,747.51 | 58,242.28 |
| RS Resin Unit – Balneário Pinhal | 22,775.34 | 21,876.48 | 20,190.59 |
| TOTAL | 2,814,900.59 | 2,728,404.22 | 2,696,519.87 |

PERCENTAGE OF FUEL CONSUMED THAT IS RENEWABLE AND NON-RENEWABLE



(302-2) ENERGY CONSUMPTION OUTSIDE THE ORGANIZATION

| Fuel | Consumption (in l) | | | Consumption (in MJ) | | |
|----------------|---------------------|---------------------|---------------------|---------------------|---------------|---------------|
| | 2021 | 2022 | 2023 | 2021 | 2022 | 2023 |
| Diesel | 4,305,221.58 | 3,289,153.73 | 3,375,597.03 | 164.99 | 126.05 | 129.37 |
| Gasoline | 44,865.50 | 48,018.79 | 47,735.21 | 1.56 | 1.67 | 1.66 |
| LNG Restaurant | 14,675.00 | 17,804.60 | 15,849.30 | 0.721 | 0.875 | 0.779 |
| TOTAL | 4,364,762.08 | 3,354,977.12 | 3,349,181.54 | 167.28 | 128.60 | 131.81 |

Note: **(302-1)** Irani's total energy consumption in the form of steam, fuel and electricity was 6,906,490.29 GJ. **(302-2)** Total energy consumption outside the organization was 131.82 GJ, according to scope 3 of the GHG inventory. **(302-1)** The conversion factors come from the Petrobras website.

MANUFACTURING CAPITAL



FUTURE OPPORTUNITIES AND COMMITMENTS

Continue harvesting in partnership areas and increase the forestry base in order to meet pulp production expansion projects;

- Take advantage of opportunities to increase productivity with operational efficiency;
- Use 100% renewable energy in all businesses by 2025;
- Achieve self-sufficiency in renewable energy generation in all businesses by 2025;

Maintain focus on cost management and profitability;

- Strengthen market positioning with value offers with Customer Focus;
- Advance with the development of new markets for the paper manufactured at the MG Paper unit;
- Preserve investments in the Gaia Platform

NATURAL CAPITAL



KAUÃ DA SILVA
Paper SC Unit



Irani recognizes the importance of minimizing the damage caused to Natural Capital. A benchmark company in quality and integrity, it monitors the current legislation by means of specialized software, and has a specific policy in place to maintain the continuity of natural resources. The Company's strategic map for the 2021-2030 cycle shows its commitment to climate stability.

Because we are a renewable forest-based industry, the interaction of the processes with the environment is a fundamental factor for the prosperity of our businesses. We constantly seek opportunities for improvement that reflect on operational effectiveness, sustainable management of Natural Capital and new business creation. Always, of course, focused on circular economy strategies.

All of Irani's business units apply a structured Environmental Management process. Actions and projects oriented to the mitigation and reduction of environmental impacts are developed, meeting the guidelines of ISO

14001 and of our Sustainability Policy. We also have established a Social Management process, managing social aspects and impacts through research into the surrounding communities and the Sustainability Policy guidelines.

In 2023, we received no formal complaints or grievances about environmental impacts. We also registered no incidents involving chemical spills.

Throughout the year, we invested R\$ 204,358,964.88 in initiatives, improvements, environmental management processes and projects of an environmental nature. Our education practices with this focus totaled almost 938 hours of work, benefiting 3,364 people.

The commitment to sustainability is pervasive throughout the Irani business chain: it is born in the forests and concludes with our actions in the neighboring communities, prompting a cycle of prosperity and sustainability.

Throughout the year, we invested R\$ 204,358,964.88 in initiatives, improvements, environmental management processes and projects of an environmental nature. Our education practices with this focus totaled almost 938 hours of work, benefiting 3,364 people.

CDP

The CDP (Carbon Disclosure Project) is an international non-profit organization that works with companies and cities to disclose their greenhouse gas emissions and manage their environmental impacts. We participate in one of the programs each year:

These programs aim not only to disseminate information, but also to create incentives for companies and governments to adopt more sustainable and resilient practices in relation to water, forests and climate change.

| Rating | 2022 | 2023 |
|--------------------|------|------|
| CDP Water | B- | B- |
| CDP Forest | D | B- |
| CDP Climate Change | B | B |

CDP WATER

This program focuses on water management by companies, encouraging the disclosure of information on water use, management and impacts. It helps companies understand and mitigate water-related risks.

CDP FOREST

CDP Forest focuses on the preservation and sustainable management of forests. It encourages companies to disclose information about their forest-related practices, including deforestation and responsible supply chain management.

CDP CLIMATE CHANGE

This program is the best known and most widely adopted. It asks companies to disclose their greenhouse gas emissions and their reduction strategies. CDP Climate Change helps companies understand and manage climate risks, as well as promoting the transition to a low-carbon economy.





**GRI 3-3, 304-1,
304-2, 304-3,
304-4, 413-2
SASB RR-PP-120,
RT-CP-120,
RR-FM-160 e
RR-FM-160
ISE**

BIODIVERSITY

Obtained in 2008, the FSC® (Forest Stewardship Council®) Forest Management certification recognizes Irani as a company whose forests are managed responsibly. Its operations are guided by environmental preservation practices, respecting workers and communities and by the guarantee of a forestry management program based on efficiency.



BIODIVERSITY IN SANTA CATARINA FOREST AREAS

(304-3, RR-FM-160 and RR-FM-160) The native vegetation areas, such as Permanent Preservation Areas and Legal Reserves, represent 48% of the total land use in the Santa Catarina forest base. All are important for the formation of biodiversity corridors.

(2-25, 304-3 and 413-2) In 2011, together with the Public Prosecutor's Office of Santa Catarina (MPSC) and the Environmental Institute (IMA), a Conduct Adjustment Accord (TAC) was signed to regularize permanent preservation areas. The areas included in the TAC are continuously monitored and the pact remains in force.

ARAUCÁRIAS NATIONAL PARK (PNA)

Founded in 2005, the Araucárias National Park (PNA), an integrated conservation unit located in the municipalities of Passos Maia and Ponte Serrada (state of Santa Catarina), back up directly against some Irani areas. In two of them, the limits of the Park cross the border with the Company's areas.

These areas have not yet been compensated and are still under negotiation. It is worth noting, however, that Irani has participated on the Advisory Board of the PNA since its creation in 2010, sitting on Working Groups (WGs), active in environmental preservation actions alongside the Environmental Military Police (PMA) and in the development and revision of the Management Plan.

STATE PRIVATE RPPN PROF. YARA C. NICOLETTI

Recognized in 2018, the State RPPN Prof. Yara C. Nicoletti, located in the municipality of Vargem Bonita, State of Santa Catarina (SC), is now owned by Irani. Its function is to protect 285 hectares of Atlantic Forest (Mixed Ombrophylous Forest), where several endangered species live.

The Company also offers an ecological tour option on the Xaxins Trail. There are a large number of plants of the species that lends its name to the site. The guided tour covers 2.3 km, during which visitors observe springs, streams, native vegetation, small animals and the lush beauty of the Atlantic Forest. Biodiversity surveys and research projects are also carried out in the reserve.

HIGH CONSERVATION VALUE AREAS (HCVAS)

High Conservation Value Areas (HCVAs) have values considered exceptional or critical for species diversity, maintenance of threatened ecosystems, promotion of ecosystem services, and community values. The evaluation of these attributes is part of the certification process applied under the FSC® forest management guidelines.

The Company carried out this process and identified attributes of types 1, 2 and 3. The environmental attributes were observed in two areas that total about 3,150 hectares of well-preserved native vegetation, located in the municipalities of Irani (SC) and Vargem Bonita (SC). These areas, together with the Araucárias National Park (PNA) and other locations legally protected by Irani, form ecological corridors of great importance for environmental preservation in the region.

Fauna and flora monitoring is conducted in the HCVAs and other native vegetation areas belonging to Irani. Such procedures are carried out periodically by contracted specialists and generate indicators that evidence the levels of conservation and maintenance of the local biodiversity.

FAUNA AND FLORA MONITORING

The monitoring of the groups of birds, mammals and flora is undertaken jointly every five years. The surveillance of herpetofauna follows the same frequency, but separately. For this last one the stages began in 2023 and will continue through the first 6 months of 2024.

(304-4) Until the most recent mammal survey, 31 large mammals had been identified. So far, the avifauna survey has identified 168 species, some of which are listed on conservation lists.



| Group | Species | Common name | IUCN | ICMBio | CONSEMA |
|------------|-----------------------------------|--------------------------|------|--------|---------|
| Mammals | <i>Mazama americana</i> | Red brocket deer | DD | - | EN |
| Mammals | <i>Pecari tajacu</i> | Collared peccary | LC | - | VU |
| Mammals | <i>Leopardus pardalis</i> | Ocelot | LC | LC | EN |
| Mammals | <i>Puma concolor</i> | Puma | LC | VU | VU |
| Mammals | <i>Puma yagouarondi</i> | Jaguarundi | LC | VU | - |
| Mammals | <i>Leopardus guttulus</i> | Southern tigrina | VU | VU | - |
| Mammals | <i>Alouatta guariba clamitans</i> | Southern brown howler | LC | VU | VU |
| Mammals | <i>Cuniculus paca</i> | Lowland paca | LC | - | VU |
| Mammals | <i>Leopardus wiedii</i> | Margay | NT | VU | - |
| Birds | <i>Tinamus solitarius</i> | Solitary tinamou | NT | - | VU |
| Birds | <i>Triclaria malachitacea</i> | Blue-bellied parrot | NT | - | VU |
| Birds | <i>Pyroderus scutatus</i> | Red-ruffed fruitcrow | LC | - | EN |
| Birds | <i>Sporophila melanogaster</i> | Black-bellied seedeater | NT | VU | VU |
| Amphibians | <i>Melanophryniscus simplex</i> | Bufoidea toad | DD | - | EN |
| Amphibians | <i>Vitreorana uranoscopana</i> | Glass frog | LC | - | VU |
| Amphibians | <i>Hypsiboas curupi</i> | Yellow-spotted tree frog | LC | VU | EN |

International: Official List Union for Conservation of Nature (IUCN) version 2022-2;

National: Red Book of the Brazilian Fauna Threatened with Extinction (ICMBio, 2018)/MMA Ordinance No. 148, June 7, 2022;

State (SC): Official List of Species of Fauna Threatened with Extinction in the State of Santa Catarina (CONSEMA Resolution No. 002/2011)

Where: EN - Endangered; VU - Vulnerable; NT - Near threatened; LC - Secure or of low concern; DD - Data Deficient.

Started in 2023, the herpetofauna monitoring cycle has shown positive and relevant results. In the case of amphibians, those with a distribution restricted to araucaria forests stand out, such as *Ischnocnema henselii* (leaf frog) and *Trachycephalus dibernardoii*.

(304-4) In the last flora monitoring, 44 families and 120 species were recorded. Some are threatened with extinction:

| Scientific name | Common name | IUCN | National | Etatel (SC) |
|-------------------------------|--------------------------------|------|----------|-------------|
| <i>Araucaria angustifolia</i> | Araucaria, Brazilian pine tree | CR | EN | CR |
| <i>Butia eriospatha</i> | Wooly butia palm | VU | VU | CR |
| <i>Cedrela fissilis</i> | Argentine Cedar | VU | VU | - |
| <i>Dicksonia sellowiana</i> | Xaxim | - | EN | CR |
| <i>Inga lentiscifolia</i> | Ingá | VU | NT | - |
| <i>Myrcianthes pungens</i> | Guaviyu | EN | - | - |
| <i>Myrciaria cuspidata</i> | Camboim | VU | LC | - |
| <i>Ocotea porosa</i> | Imbuia | VU | EN | CR |
| <i>Podocarpus lambertii</i> | Yellowwood pine | NT | LC | EN |
| <i>Podocarpus sellowii</i> | Podocarpus | EN | LC | - |
| <i>Quillaja lancifolia</i> | Quillaja | - | EN | - |

International: Official List Union for Conservation of Nature (IUCN) version 2022-2;

National: Red Book of the Brazilian Fauna Threatened with Extinction (ICMBio, 2018)/MMA Ordinance No. 148, June 7, 2022;

State (SC): Official List of Species of Fauna Threatened with Extinction in the State of Santa Catarina (CONSEMA Resolution No. no. 51/2014)

Where: CR – Critically endangered; VU - Vulnerable; NT - Near threatened; LC - Secure or of low concern;

(304-3) Irani supports and seeks partnerships with researchers and governmental and private institutions for the development of forestry studies. Here are some examples:

- **Reintroduction of the Vinaceous-breasted parrot:** project of the Espaço Silvestre Institute with the Araucárias National Park (PNA), in Santa Catarina, in defense of the reintroduction of the species in the region.
- **Wild Boar Project:** carried out in partnership with Embrapa Suínos, it was restarted in 2022, and its objective is to expand the studies on the wild boar population and carry out health monitoring in Irani's Santa Catarina forest areas.
- **Capuchin Monkey Project:** carried out in partnership with Embrapa Florestas, it aims to study the species *Sapajus nigritus* (Capuchin monkey) and its interactions with Irani's planted and native forests. The objective of the project is to reduce the damage caused in commercial plantation areas.
- **Fauna and flora monitoring:** carried out by specialists in the area, the project is conducted every five years in the High Conservation Value Areas (AAVCs) and other native forest blocks. The goal is to demonstrate the maintenance or improvement of the attributes that characterize these areas.

(304-3, RR-FM-160 AND RR-FM-160) HIGH CONSERVATION VALUE AREAS (AAVCS)


| Location | Area (in hectares) | Evaluation result |
|--------------------|--------------------|--|
| Vargem Bonita (SC) | 1,441.34 | <ul style="list-style-type: none"> • The presence of imperiled species of birds, mammals and flora in highly endangered categories; • Sections of remnants in good conservation stage; • Large remnants (over 1,000 hectares), given the extremely fragmented region; • Legal Reserve Area registered and preserved. |
| Irani (SC) | 1,708.66 | |
| TOTAL | 3,150.00 | |

(304-3) PROTECTION AND MONITORING MEASURES IN HIGH CONSERVATION VALUE AREAS (HCVAS)

| | Vargem Bonita (SC) | Irani (SC) |
|---|--------------------|------------|
| Environmental education | | |
| Asset Surveillance (monitoring with ibuttons) | | ✓ |
| Mastofauna Survey | | ✓ |
| Birdlife Survey | | ✓ |
| Herpetofauna survey | | ✓ |
| Flora survey | | ✓ |
| Control of invasive exotic species | ✓ | ✓ |
| Firebreak maintenance | ✓ | ✓ |
| Road erosion control | ✓ | ✓ |
| Environmental impact assessment | ✓ | ✓ |
| Creation of an RPPN in part of the area | ✓ | |

Note: firebreaks are strips of unplanted land that make it difficult for forest fires to spread.



(304-1 and 304-2) Additional information on HCVAs, such as stages, partnerships established with a focus on protection and restoration and impacts in relation to the introduction of Pinus are addressed in the Public Summary of Forest Management, available here 

LUCIANE CORREA
Porto Alegre RS
Office

BIODIVERSITY IN THE RIO GRANDE DO SUL FOREST

(304-1 and 304-3) Irani's planted forests form mosaics with Permanent Preservation Areas (APPs) and other natural settings. None of them are located in or adjacent to protected areas. .

(304-1, RR-FM-160 and RR-FM-160) We used the ProForest Guide classification and FSC® Certification guidelines to determine High Conservation Value Areas (HCVAs). After the purchase and sale agreement of the forest areas in Cidreira and Balneário Pinhal, in the state of Rio Grande do Sul (RS), we retain a total of 13.3 hectares of land with this characteristic.

Located in the Paurá Lagoon bed, in the rural area of the municipality of São José do Norte (RS), the area presents four HCVA attributes. Among them, we can highlight the high presence and conservation of biodiversity. The area includes native dune-fixing restinga vegetation of great regional importance and representativeness.

(304-4) Biennially, we monitor the site's biodiversity. We accompany the fauna during the four seasons of the year, and the flora in the spring, in order to understand the environmental dynamics of these areas and the impacts of the operations. (304-2) Using a matrix of aspects and impacts, we map the effects of our activities on fauna, soil, flora, water resources and surrounding communities,

assessing the social and environmental impacts that may occur in the forestry operations.

(304-2). Measures such as management effectiveness monitoring are applied in HCVAs. The intent is to ensure the maintenance and improvement of the identified values, consolidate their conservation and perpetuate their benefits.


| HCVA | Location | Area Description |
|---------------------------------|-------------------|--|
| Bojuru Lake and Restinga Forest | São José do Norte | There is a gallery forest with characteristic species of the Dense Ombrophylous Forest, formed by fig trees (<i>Coussapoa microcarpa</i>), boxleaf scutia (<i>Scutia bruxifolia</i>), white Sebastiania commersoniana, araçás (<i>Psidium araca</i>), three pointed cancorosa (<i>Iodina rhombifolia</i>), and Myrsine (<i>Myrsine umbellate</i>), which harbor orchids and bromeliads. Among the dunes is a species of wild fauna classified as vulnerable on the World Union for Nature red list (ICUN) is the Tuco-tuco, a rodent belonging to the genus <i>Ctenomys</i> . |



The partnership instituted with the Rio Grande do Sul government, through the RS Biodiversity project, allowed the Rapid Ecological Assessment (REA) in one of these locations. It indicated the following:

Permanent preservation areas, legal reserves and other forest fragments of the company are also subject to management and monitoring measures. Among these measures are the integrated forest production system and restoration actions, asset surveillance and operational diligence. The goal is to curb illegal activities and promote the conservation of biodiversity.



In the Public Summary of Forest Management, we provide more information about the biodiversity in our forest areas on the coast of Rio Grande do Sul, accessible through these link. 

JEHAN VANZ
Paper SC Unit

WATER AND EFFLUENTS



**GRI 303-1,
303-2, 303-3,
303-4
SASB RR-PP-140
e RT-CP-140
ISE**

The water used in Irani's production processes is fresh water. In the Vargem Bonita (SC) units, water is also used for power generation in three Hydroelectric Generating Plants (CGHs).

(303-1) All water sources of our business units, except from the concessionaire, are licensed by the appropriate agency, ensuring there is no significant impact on the respective bodies of water due to the volume abstracted. Opportunities for gains in operational efficiency are constantly under evaluation.

(303-1) Opportunities for operational efficiency gains are constantly being assessed. Here, the priority is actions that enable productivity gains combined with reduced use, alternatives for reuse and closing circuits. This is one of the fundamental strategies of the company's

business, which essentially depends on the availability of water and other natural resources.

(303-1) We also participate in a Water Basin Committee that involves various sectors of society, established to define guidelines that ensure the conservation of springs, headwaters and local biodiversity.

The water used in Irani's production processes is fresh water.



FABIANO NUNES
Paper MG Unit

(303-3, RR-PP-140 AND RT-CP-140)
TOTAL WATER WITHDRAWN BY SOURCE (IN MEGALITER)

| Source | What it comprises | 2021 | 2022 | 2023 |
|----------------|--|-----------------|-----------------|-----------------|
| Surface | River water captured for Paper and Packaging SC - Campina da Alegria and Paper MG - Santa Luzia units | 4,905.75 | 4,763.48 | 4,750.13 |
| Groundwater | Captured in wells for the Paper MG, Packaging SP - Indaiatuba, Packaging SP - Vila Maria and Resina RS - Balneário Pinhal units | 183.92 | 209.06 | 207.80 |
| Concessionaire | Water supplied by Casan, Sabesp and Corsan and Copasa to the Paper and Packaging SC - Campina da Alegria and Resin RS and Paper MG - Santa Luzia, respectively | 18.81 | 34.36 | 26.60 |
| TOTAL | | 5,505.52 | 5,108.49 | 5,006.91 |

Note: **(303-3)** the records presented come from daily flow meter readings.

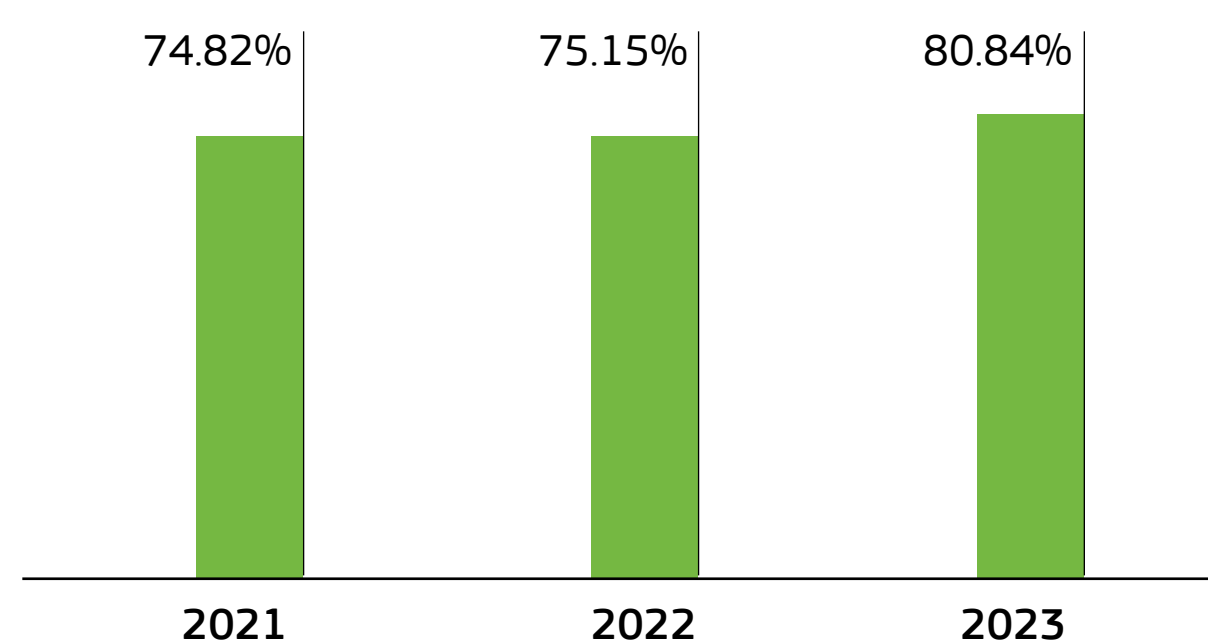
It is worth noting that, in 2023, there was a 1.03% reduction per net won in specific raw water use and a 0.45% reduction in water collected from springs.

All the industrial units have water consumption targets defined from the historical analysis of the reduction of consumption and the production projection for each location.

(303-3) SPECIFIC WATER CONSUMPTION (M³) PER TON PRODUCED

| Unit | Specific water consumption (m ³) per ton produced | | | Specific water consumption (m ³) per ton produced | | |
|-----------------------------------|---|-------------|-------------|---|--------------|--------------|
| | 2021 | 2022 | 2023 | 2021 | 2022 | 2023 |
| Paper SC – Campina da Alegria | 18.14 | 17.98 | 17.59 | 19.18 | 19.09 | 18.68 |
| Paper MG – Santa Luzia | 5.43 | 6.53 | 6.33 | 5.77 | 6.93 | 6.67 |
| Packaging SC – Campina da Alegria | 0.276 | 0.255 | 0.201 | 0.319 | 0.294 | 0.229 |
| Packaging SP – Indaiatuba | 0.30 | 0.37 | 0.40 | 0.33 | 0.39 | 0.43 |
| Resin RS – Balneário Pinhal | 1.15 | 1.40 | 1.57 | 1.15 | 1.41 | 1.57 |
| TOTAL | 10.21 | 9.92 | 9.80 | 10.97 | 10.65 | 10.54 |

(303-3) PERCENTAGE OF WATER REUSED AT THE PAPER SC - CAMPINA DA ALEGRIA UNIT



Note: Reused water is considered that which “recirculates” within a process, and may or may not be treated prior to its reuse/recirculation.

Paper SC – Campina da Alegria is the Company’s largest water consumer. Therefore, this is the unit we work the hardest to achieve more efficient use solutions.

Water is reused between our energy generation systems. In 2023, we increased the percentage by 5.7% in processes compared to the previous year. This increase in reused water was made possible by the start-up of

the recovery boiler, which accounts for 36% of total water recirculation at the SC Paper unit.

(303-2 and 303-4) Effluents from production processes, equipment cleaning, tank drains and cooling water are treated for the removal of solid materials and stabilization of dissolved organic matter before water is returned to its source, into a freshwater course.

(303-2, 303-4) All water bodies affected by the discharges or runoff of water from the Company's effluent treatment come from freshwater sources and are not located in environmental protection areas. In the Bonita Vargem Units (SC), the water bodies affected by the discharges or runoff of the effluent treatment water are 22m wide and 70.2km long.

The biodiversity value was not measured. However, in the ichthyofauna (animals living in fresh water) monitoring campaign at this locality in 2023, we identified 425 specimens divided into eight species.

(303-2) We periodically and systematically monitor the effluent, sending raw and treated samples to be analyzed by external laboratories recognized by environmental agencies. The reports are forwarded to the regulatory environmental agency, as determined by environmental licenses and their conditions.

(303-4) VOLUME OF EFFLUENT GENERATED (IN MEGALITERS)

| Unit | 2021 | 2022 | 2023 |
|-----------------------------------|-----------------|-----------------|-----------------|
| Paper SC – Campina da Alegria | 5,101.44 | 4,797.47 | 4,999.75 |
| Paper MG- Santa Luzia | 3.27 | 289.77 | 227.49 |
| Packaging SC – Campina da Alegria | 14.34 | 11.62 | 12.68 |
| Packaging SP – Indaiatuba | 11.53 | 10.78 | 15.68 |
| Resin RS – Balneário Pinhal | 6.51 | 7.04 | 7.24 |
| TOTAL | 5,137.10 | 5,116.68 | 5,250.17 |

(303-2 and RT-CP-140) Environmental permits define the priority substances of the treated effluent and the quality of the receiving water resource, including the parameters that must be monitored. Limits are based on region-specific environmental legislation exclusive to each region.

(303-2) Explicit parameters also orient the monitoring of the quality of the effluent generated. We systematically conduct internal laboratory analyses. There were no incidents of non-compliance associated with permits, standards or water quality regulations.

| Unit | Destination | Treatment Method | Legal Parameters |
|-----------------------------------|---|--|---|
| Paper SC – Campina da Alegria | Rio do Mato | Biological (prolonged aeration) | Conama Resolution 430/2011 and Consema 181/2021 and FATMA 017/02 |
| Paper MG- Santa Luzia | Córrego Bicas | Sanitary: Biological Industrial: Physical Chemical / Biological | Joint Normative Resolution COPAM/CERH-MG No. 1/2008 |
| Packaging SC – Campina da Alegria | Rio do Mato | Biological (prolonged aeration) | Conama Resolution 430/2011 and Consema 181/2021 and FATMA 017/02 |
| Packaging SP – Indaiatuba | City treatment station - ETE Mario Araldo Candello | Physical-chemical | State Decree No. 8468/1976, article 19 |
| Resin RS – Balneário Pinhal | Fertigation | Physical-chemical | Conama Resolution 420/2009 |

Note: In none of the units is the effluent used by other organizations..

SPECIFIC EFFLUENT VOLUME (M³) PER TON PRODUCED

| Unit | Specific volume of effluent (m ³) per gross ton produced | | | Specific volume of effluent (m ³) per net ton produced | | |
|-----------------------------------|---|--------------|--------------|---|--------------|--------------|
| | 2021 | 2022 | 2023 | 2021 | 2022 | 2023 |
| Paper SC – Campina da Alegria | 19.46 | 18.97 | 19.35 | 20.57 | 20.14 | 20.54 |
| Paper MG- Santa Luzia | 0.06 | 4.93 | 3.94 | 0.07 | 5.23 | 4.15 |
| Packaging SC – Campina da Alegria | 0.19 | 0.140 | 0.130 | 0.22 | 0.162 | 0.149 |
| Packaging SP – Indaiatuba | 0.12 | 0.11 | 0.19 | 0.13 | 0.12 | 0.20 |
| Resin RS – Balneário Pinhal | 0.45 | 0.51 | 0.60 | 0.45 | 0.52 | 0.61 |
| Total | 10.27 | 10.14 | 10.32 | 11.03 | 10.89 | 11.10 |

WASTE MANAGEMENT



**GRI 301-1,
301-2, 301-3,
306-2, 306-3,
306-4 e
306-5
SASB RT-
CP-410,
RT-CP-150
ISE**

(306-2) In our Strategic Map for the 2021-2030 cycle, we formalized our commitment to promoting the circular economy in the value chain. The goal is to optimize the operational and environmental efficiency of the plants. Aligned with the National Solid Waste Policy (Law 12.305/10), the company's teams constantly evaluate industrial processes, capturing opportunities to reduce consumption of materials and analyzing alternatives for inserting the waste generated into new production chains. Besides promoting the circular economy, we contribute to the generation of jobs and income in the surrounding communities.

(306-1 e 306-2) Consumption of raw materials and inputs has a significant impact on operating costs, so we prioritize strict controls and periodic analyses to identify alternatives for the reuse and recycling of materials. This helps us reduce the volume of waste disposed of in licensed landfills and the associated environmental impacts. Our efforts were rewarded in 2023, when 80.5% of our raw materials were sourced from renewable sources. This made it possible to reduce the volume of waste disposed of in licensed landfills and the significant environmental impacts. These efforts paid off in 2023, when 98.16% of the company's raw materials came from renewable sources.

IRANI UNITS IN SC RECEIVE ZERO WASTE CERTIFICATION

The distinction was awarded by the Lixo Zero Brasil Institute, an organization that represents the Zero Waste International Alliance in Brazil

In 2023, the sustainable paper and packaging units in Santa Catarina received certification for proper waste management from the Instituto Lixo Zero Brasil (ILZB), an autonomous civil society organization. The industrial plants achieved a 93.4% rate of waste diverted from landfill and an A grade in good waste management practices. For the ILZB, Zero Waste is an ethical, economic, efficient and visionary goal to guide people to change their lifestyles and practices to emulate sustainable natural cycles, where all discarded materials are designed to become resources for others to use, fostering and strengthening the circular economy.



MONICA ALVES
Paper MG Unit

More information
about Irani's circular
economy practices is
available at here



(301-1 E RT-CP-410) VOLUME OF RENEWABLE AND NON-RENEWABLE MATERIALS (IN TONS)

| Unit | Total volume of materials used | | | Total volume of renewable materials | | | Total volume of non-renewable materials | | |
|-----------------------------------|--------------------------------|-------------------|-------------------|-------------------------------------|-------------------|-------------------|---|------------------|------------------|
| | 2021 | 2022 | 2023 | 2021 | 2022 | 2023 | 2021 | 2022 | 2023 |
| Paper SC – Campina da Alegria | 695,662.49 | 658,125.37 | 667,037.03 | 678,968.44 | 641,658.87 | 652,117.87 | 16,694.05 | 16,466.50 | 14,919.16 |
| Paper MG – Santa Luzia | 59,266.25 | 66,862.41 | 64,944.62 | 58,144.52 | 65,15.91 | 63,971.88 | 1,121.73 | 1,246.50 | 972.74 |
| Packaging SC – Campina da Alegria | 76,312.02 | 85,422.21 | 101,097.61 | 75,616.61 | 84,630.89 | 100,317.41 | 695.41 | 791.33 | 780.20 |
| Packaging SP – Indaiatuba | 105,981.61 | 98,860.95 | 91,317.64 | 105,322.34 | 98,174.17 | 90,719.46 | 659.27 | 686.79 | 598.18 |
| Resin RS – Balneário Pinhal | 18,695.72 | 16,351.47 | 14,478.88 | 18,695.72 | 16,351.47 | 14,478.88 | 0.0 | 0.00 | 0.00 |
| TOTAL | 955,918.09 | 925,622.42 | 938,875.78 | 936,747.62 | 906,431.30 | 921,605.50 | 19,170.60 | 19,191.12 | 17,270.28 |

Note: Only the materials consumed in the production process are considered.

(301-2 E RR-PP-430) PERCENTAGE OF RECYCLED MATERIALS USED IN THE PROCESS

| Unit | 2021 | 2022 | 2023 |
|-----------------------------------|--------|--------|--------|
| Paper SC – Campina da Alegria | 23.11% | 22.26% | 25.55% |
| Paper MG – Santa Luzia | 90.49% | 85.35% | 97.78% |
| Packaging SC – Campina da Alegria | 94.62% | 95.57% | 98.54% |
| Packaging SP – Indaiatuba | 94.48% | 90.16% | 91.21% |

(301-1) SPECIFIC MATERIAL CONSUMPTION PER TON PRODUCED

| Unidade | Specific material consumption per gross ton produced | | | Specific material consumption per net ton produced | | |
|-----------------------------------|--|------|------|--|------|------|
| | 2021 | 2022 | 2023 | 2021 | 2022 | 2023 |
| Paper SC – Campina da Alegria | 2.65 | 2.60 | 2.58 | 2.81 | 2.76 | 2.74 |
| Paper MG – Santa Luzia | 1.13 | 1.14 | 1.21 | 1.20 | 1.21 | 1.18 |
| Packaging SC – Campina da Alegria | 1.03 | 1.03 | 1.03 | 1.19 | 1.19 | 1.18 |
| Packaging SP – Indaiatuba | 1.03 | 1.03 | 1.11 | 1.11 | 1.09 | 1.19 |
| Resin RS – Balneário Pinhal | 1.21 | 1.19 | 1.21 | 1.21 | 1.20 | 1.21 |

Note: Only the materials consumed in the production process are considered.

(301-3, RT-CP-150 E RR-PP-430) RECOVERED MATERIALS USED IN THE PROCESS (TONS)

| Unit | Recovered material | Total Sold | Percentage of materials recovered by the production process |
|-------------------------------|--------------------|------------|---|
| Paper SC – Campina da Alegria | 19,936.20 | 241,230.64 | 8.26% |
| Paper MG – Santa Luzia | 6,385.74 | 55,549.27 | 11.50% |

Note: we consider as recovered material a process tailings called refile, generated in the production of sheets and boxes by the packaging units. The control of the volume that returns to the industrial units for recovery is carried out by means of an invoice and stock movement from the SC Packaging unit to SC Paper, located in Campina da Alegria and Vargem Bonita (SC).

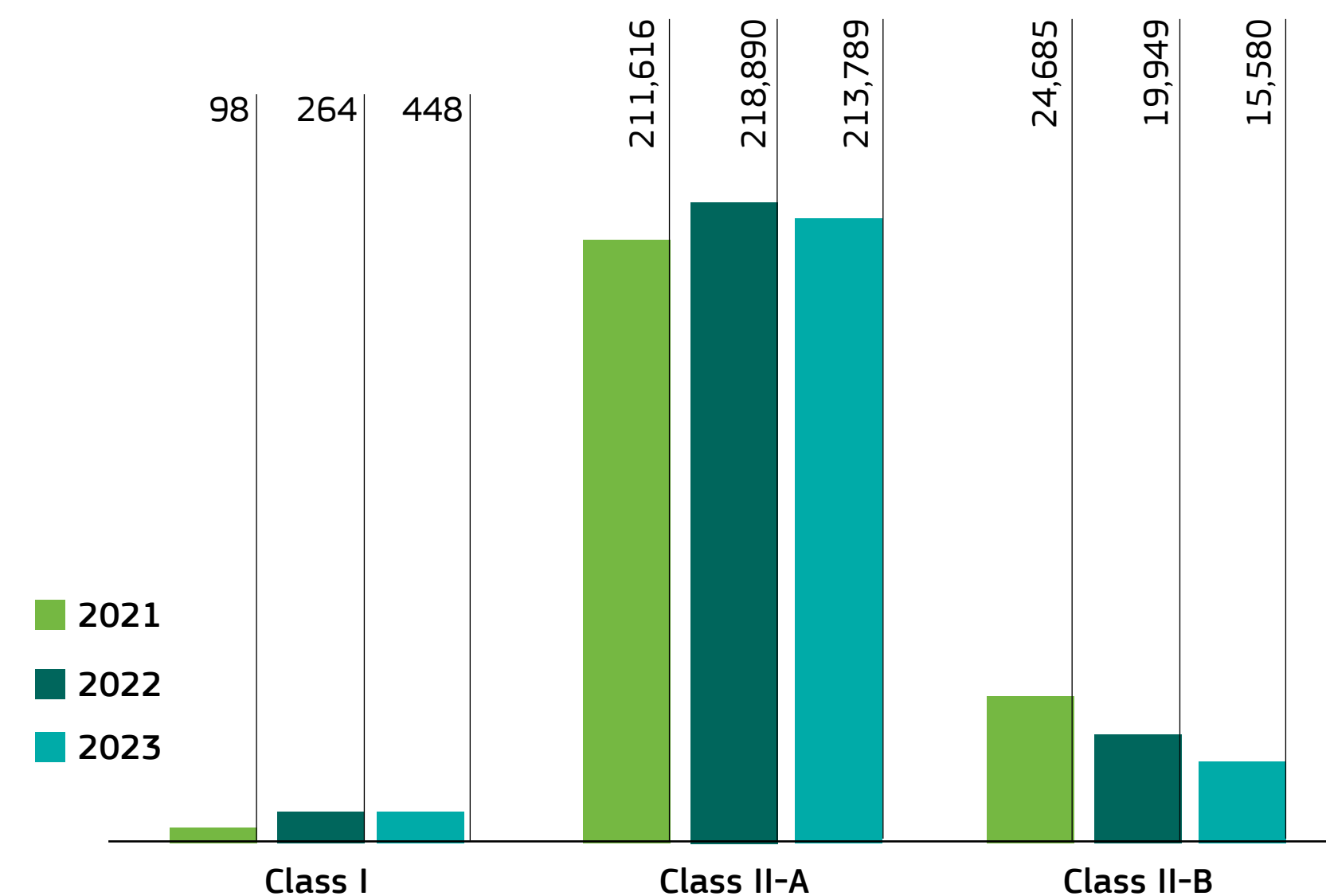
(306-3) TOTAL WEIGHT OF WASTE (TONS)

| Unit | 2021 | 2022 | 2023 |
|-----------------------------------|----------------|----------------|----------------|
| Paper SC – Campina da Alegria | 204,548 | 204,891 | 195,739 |
| Paper MG – Santa Luzia | 7,578 | 8,553 | 7,326 |
| Packaging SC – Campina da Alegria | 10,354 | 11,458 | 13,146 |
| Packaging SP – Indaiatuba | 11,247 | 11,598 | 11,357 |
| Resin RS – Balneário Pinhal | 2,671 | 2,602 | 2,250 |
| TOTAL | 236,399 | 239,102 | 229,818 |

In 2023, we had a reduction of almost **3%** in the total weight of waste compared to 2022.

(306-1 e 306-2) The collection and storage of our waste complies with procedures aligned with NBR 10,004/2004, classified as Class I (hazardous), Class II-A (non-inert) and Class II-B (inert), avoiding contamination.

(306-3) TOTAL WEIGHT OF WASTE BY TYPE (TONS)



(306-3, 306-4, 306-5, RT-CP-410 E RT-CP-150)
TOTAL WEIGHT OF WASTE BROKEN DOWN BY METHOD OF DISPOSAL (TONS)

| Disposal Method | Não perigosos | | | Perigosos | | |
|--------------------------------|-------------------|------------------|-------------------|--------------|---------------|---------------|
| | 2021 | 2022 | 2023 | 2021 | 2022 | 2023 |
| Recycling | 35,821.39 | 36,705.93 | 38,361.45 | 16.8 | 11.00 | 16.35 |
| Reuse | 67,91.40 | 84,028.63 | 102,157.80 | 0.00 | 0.00 | 0.00 |
| (306-5) Incineration | 0.00 | 0.00 | 0.00 | 2.84 | 0.89 | 0.00 |
| Blending | 201.80 | 3,719.81 | 3,819.59 | 5.20 | 3.95 | 6.61 |
| Composting | 26,867.53 | 24,328.12 | 4,065.84 | 0.00 | 2.16 | 0.00 |
| Recovery | 81,240.24 | 72,492.94 | 68,308.28 | 72.52 | 245.01 | 4.18 |
| (306-5) Landfill | 24,185.32 | 17,464.54 | 12,542.23 | 0.06 | 0.00 | 417.69 |
| Depressurization | 0.00 | 0.00 | 0.00 | 1.37 | 0.62 | 0.10 |
| External treatment | 67.50 | 98.71 | 117.28 | 98.47 | 263.63 | 1.06 |
| TOTAL | 236,300.10 | 23,838.68 | 229,372.12 | 98,47 | 263,63 | 445.99 |

Note: the total amount of hazardous waste (445.99 tons) was transported and treated in duly licensed companies. There were no imports or exports of hazardous waste. Hence, there was no percentage of international transport.

The increase in the amount of Class I waste, compared to the year 2022, is due to the cleaning of a tank in the Chemical Recovery sector, where the waste in question was characterized as hazardous, thus being sent to an external Class I landfill.

(306-2) In compliance with the current legislation, 100% of the waste recycled or destined externally is sent with a Waste Transportation Movement Document (MTR). The MTR is issued in the online control system of Environmental Institute (IMA) and the State System for Online Solid Waste Management SIGOR (CETESB), ensuring that the material is destined only for duly licensed companies.

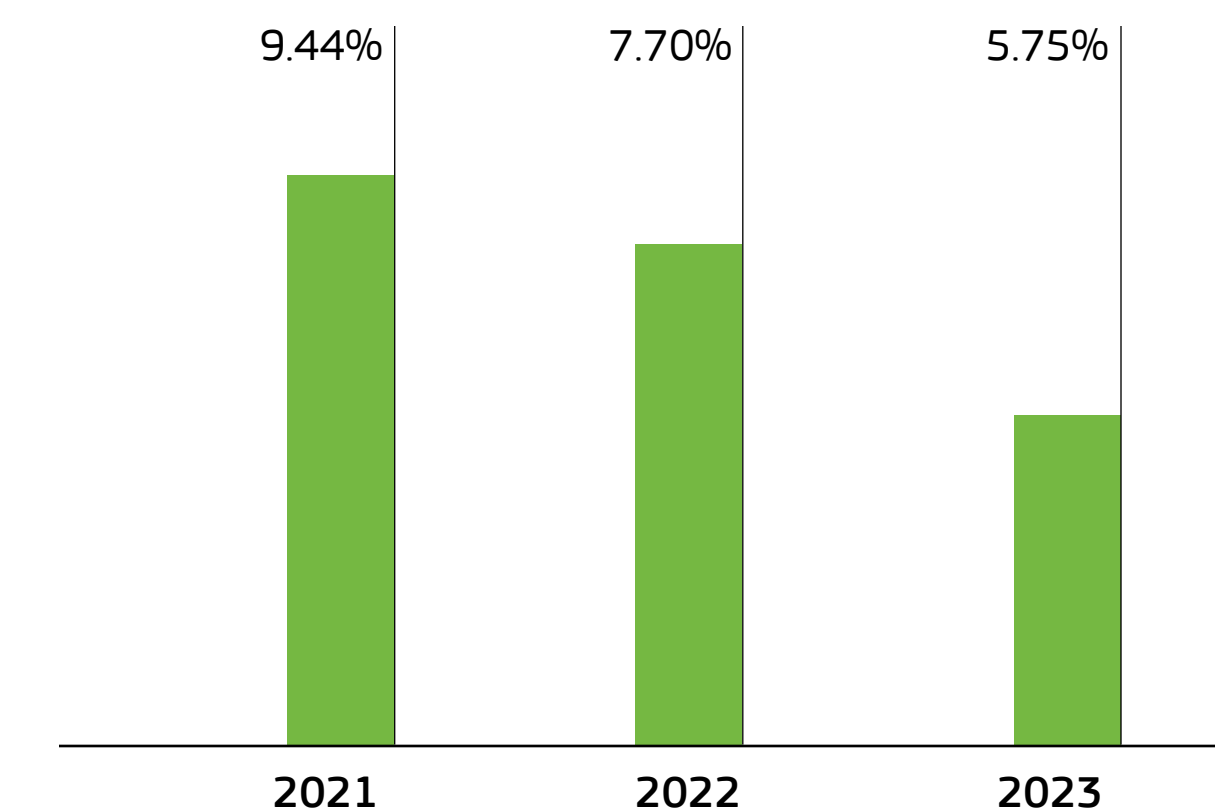
(306-2) Through the Indústria Brasileira de Árvores (IBÁ) tree industry association, we are also part of a Coalition for Business Commitment for Recycling (CEMPRE). Via CEMPRE, we have entered into a sectoral agreement for the implementation of the reverse packaging logistics system in general.

SPECIFIC VOLUME OF WASTE GENERATED PER TON PRODUCED

| Unit | Specific volume of waste generated per gross ton produced | | | Specific volume of waste generated per net ton produced | | |
|-----------------------------------|---|-------------|-------------|---|-------------|-------------|
| | 2021 | 2022 | 2023 | 2021 | 2022 | 2023 |
| Paper SC – Campina da Alegria | 0.78 | 0.81 | 0.76 | 0.82 | 0.86 | 0.80 |
| Paper MG – Santa Luzia | 0.15 | 0.15 | 0.13 | 0.15 | 0.15 | 0.13 |
| Packaging SC – Campina da Alegria | 0.14 | 0.14 | 0.13 | 0.16 | 0.16 | 0.15 |
| Packaging SP – Indaiatuba | 0.11 | 0.12 | 0.14 | 0.12 | 0.13 | 0.15 |
| Resin RS – Balneário Pinhal | 0.17 | 0.19 | 0.19 | 0.17 | 0.19 | 0.19 |
| TOTAL | 0.47 | 0.47 | 0.45 | 0.50 | 0.51 | 0.49 |

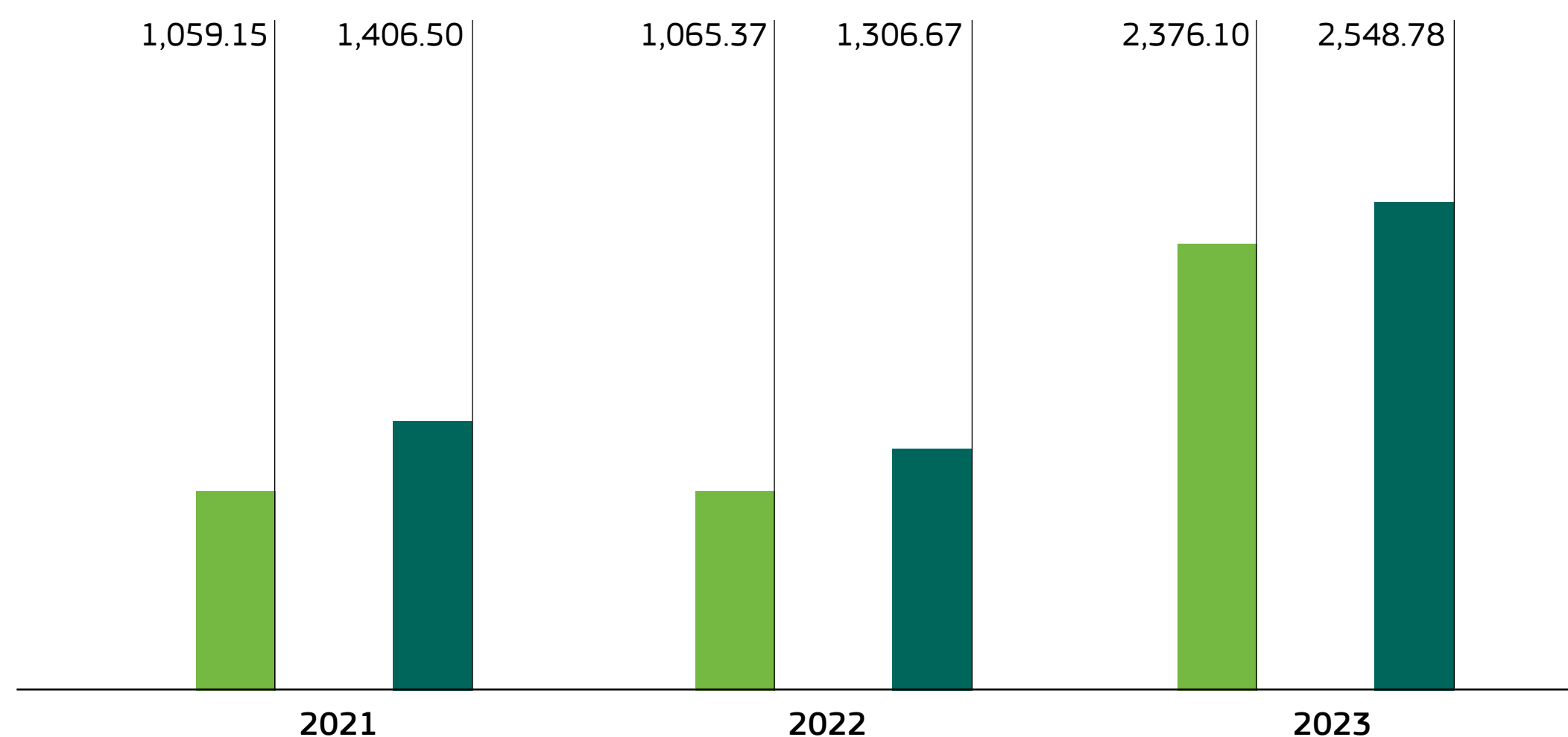
(306-1) As the Company’s largest waste generator, Paper SC – Campina da Alegria centralizes its efforts to encounter solutions aligned with the circular economy. The initiatives extended the life of our industrial landfill by six years (2018-2023). With this, it was possible to extend the investment of approximately R\$ 3 million for the construction of a new landfill.

(306-5) PERCENTAGE OF WASTE SENT TO THE LANDFILL IN THE SC PAPER UNIT – CAMPINA DA ALEGRIA



In 2023, there was a reduction of 25.3% in the percentage of waste sent to the industrial landfill at the SC Paper Unit, when compared to the previous year

(306-4) ANNUAL RECOVERY OF PAPER FIBERS AND PLASTIC (TONS)



■ Fiber
■ Plastic

Note: the number of contaminants has gradually increased over time, generating a greater volume of plastic scrap. Consequently, the amount of plastic recovered also increased. Adjustments in the process and constant maintenance of the equipment used for paper pulp preparation have boosted efficiency and the use of fiber, reducing losses.

In 2023, we made a change to the layout of the recycling plant, which made it possible to absorb more of the plastic removed in the disaggregator - the equipment that separates the plastic from the shavings. As a result, we recovered more plastic in order to send it to third parties to use as raw material, instead of sending it to the industrial landfill.



EDNALDO DE SOUZA
Paper MG Unit

CLIMATE CHANGE AND AIR QUALITY



**GRI 3-3, 305-1,
305-2, 305-3,
305-4, 305-5,
305-6 e 305-7
SASB RR-PP-110,
RT-CP-110,
RR-PP-120,
RT-CP-120
ISE**

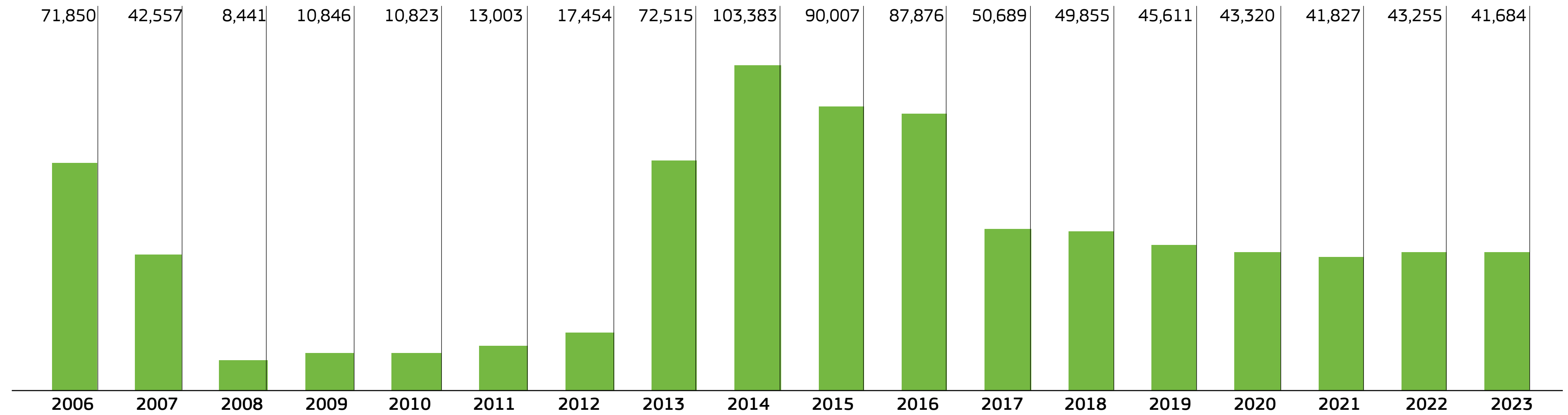
Irani has a positive carbon balance. This means that its conserved and planted native forest areas capture more than enough CO₂e to offset industrial emissions (103-1,103-3, 305-1.e). The company follows the guidelines of the GHG Protocol and the National Climate Change Policy. In fact, Irani is the first Brazilian company to certify a Greenhouse Gas (GHG) Inventory in accordance with ISO 14064:2006.

Irani has a positive carbon balance. This means that its conserved and planted native forest areas capture more than enough CO₂e to offset industrial emissions. The company follows the guidelines of the GHG Protocol and the National Climate Change Policy. In fact, Irani was the first Brazilian company to certify a Greenhouse Gas (GHG) Inventory in accordance with ISO 14064:2006.

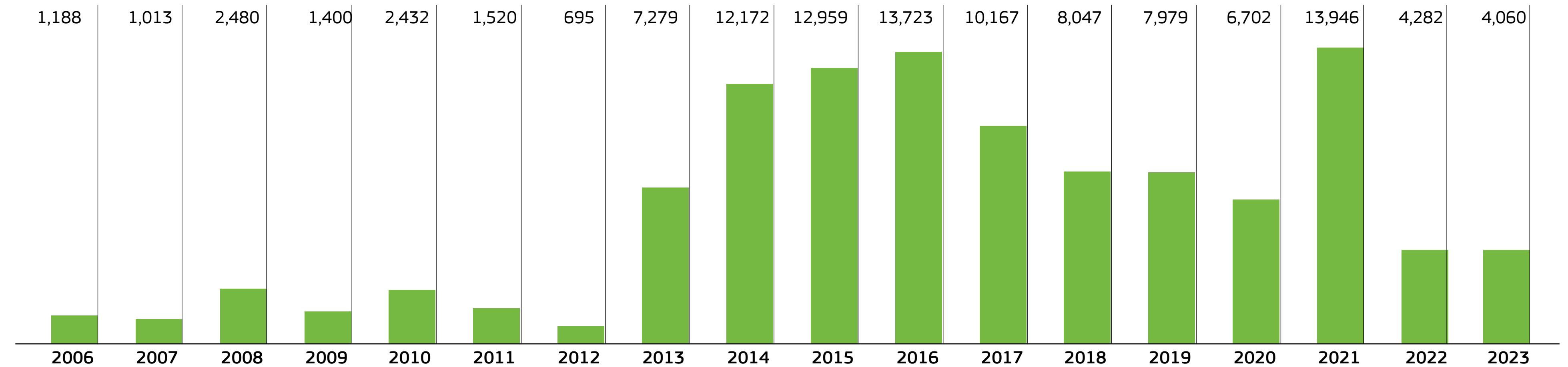
(305-1 and 305-2) Irani's inventory identifies and quantifies the sources of GHG emissions. In this respect, the company's progress in its industrial units and forestry areas, as well as in the subsidiary Habitasul Florestal, is noteworthy. **(305-1, 305-2, 305-3)** For the purposes of calculation, we consider emissions of carbon dioxide (CO₂), methane (CH₄) and nitrous oxide (N₂O). Emissions from HFCs, PFCs, SF₆ and NF₃ are not taken into account because we do not use precursors of these gases in industrial processes.

The base year used until 2013 was 2006, when we published our first inventory of greenhouse gases. **(305-1, 305-2 and 305-3)**. In 2013, due to the acquisition of Indústria de Papelão Ondulado São Roberto, with two industrial units, the inventoried emissions were higher. Since then, we have managed to reduce emissions until the demobilization of the Vila Maria unit in 2019, maintaining our commitment to sustainability, process optimization and the continuous pursuit of operational efficiency.

(305-1, RR-PP-110 E RT-CP-110) SCOPE 1 - DIRECT GHG EMISSIONS (IN TONS OF CO₂EQ)



(305-2) SCOPE 2 - INDIRECT EMISSIONS - ENERGY (IN TONS OF CO₂EQ)

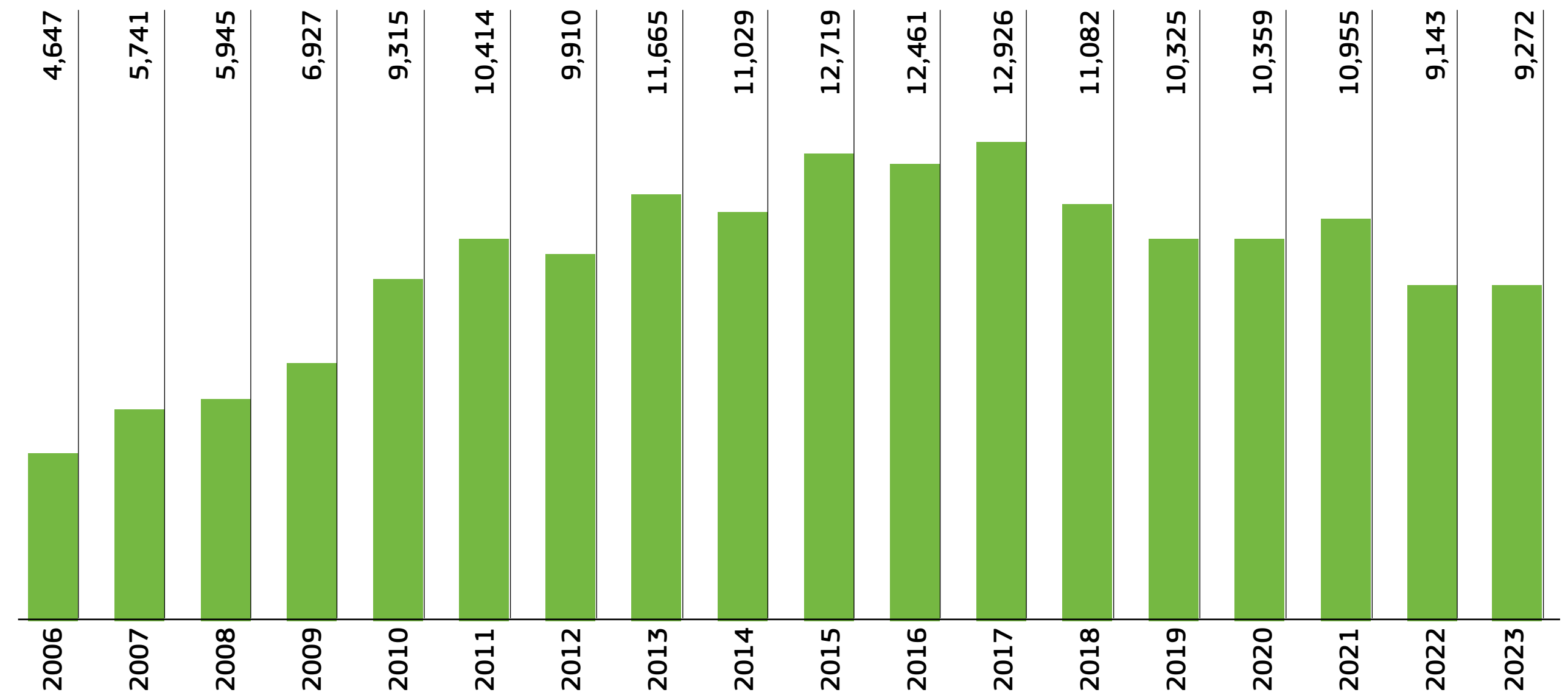


(305-2) Note: the emission factors used for calculation purposes are made available by the Ministry of Science and Technology and compose the indirect emission calculation following ISO14064:2006 guidelines.

The reduction occurred because of the increase in clean energy added to the National Interconnected System (SIN), which reduced the average CO2 emission factors. Another initiative of the company in this regard was the acquisition of Renewable Energy Certificates (I-RECs) for the Packaging SP industrial unit. From this movement, we seek to contribute to the increase in the production of renewable energy in Brazil and mitigate the company's emissions related to scope 2.

(305-3) Note: Scope 3 upward evolution has been observed since the base year with the number of activities in each year. Because it is a good management practice and we are dedicated to the improvement of our Inventory, we chose to include new sources, even if this scope does not require such accountability.

(305-3) SUMMARY OF SCOPE 3 - INDIRECT EMISSIONS - OTHER SOURCES (IN TCO₂E)



(305-3) Note: the IPCC 2006 Guidelines are considered as the source of the emission factors used and the global warming potential rates, following ISO 14064:2006 guidelines.

(305-4) DISTRIBUTION OF THE INDICES BASED ON THE OPERATING UNITS (SCOPE 1, 2 AND 3)

| INDUSTRIAL UNITS | Base Year: 2006 | | | Base Year:: 2013 | | | 2023 | | |
|------------------|-----------------|-----------|-----------|------------------|-----------|-----------|----------------|-----------|-----------|
| | Net production | Emissions | Intensity | Net production | Emissions | Intensity | Net production | Emissions | Intensity |
| PAPEL SC | 172,201 | 64.127 | 0.37 | 203,688.04 | 13,262.82 | 0.07 | 243,450 | 25,574 | 0.11 |
| EMBALAGEM SC | 30,998 | 4,454 | 0.14 | 63,811.65 | 1,570.42 | 0.02 | 85,370 | 1,751 | 0.02 |
| EMBALAGEM SP | 47,859 | 4,725 | 0.10 | 73,243.72 | 5,798.40 | 0.08 | 77,037 | 4,667 | 0.06 |
| RESINA RS | 5,467 | 550 | 0.10 | 7,911.32 | 14,126.47 | 1.79 | 11,953 | 725 | 0.06 |
| PAPEL MG | - | - | - | 42,910.15 | 15,231.41 | 0.35 | 54,822 | 15,418 | 0.28 |

(305-4) Note: intensity reports the specific per unit, i.e., the emission divided by the gross output causes the intensity indicated for each operational unit.

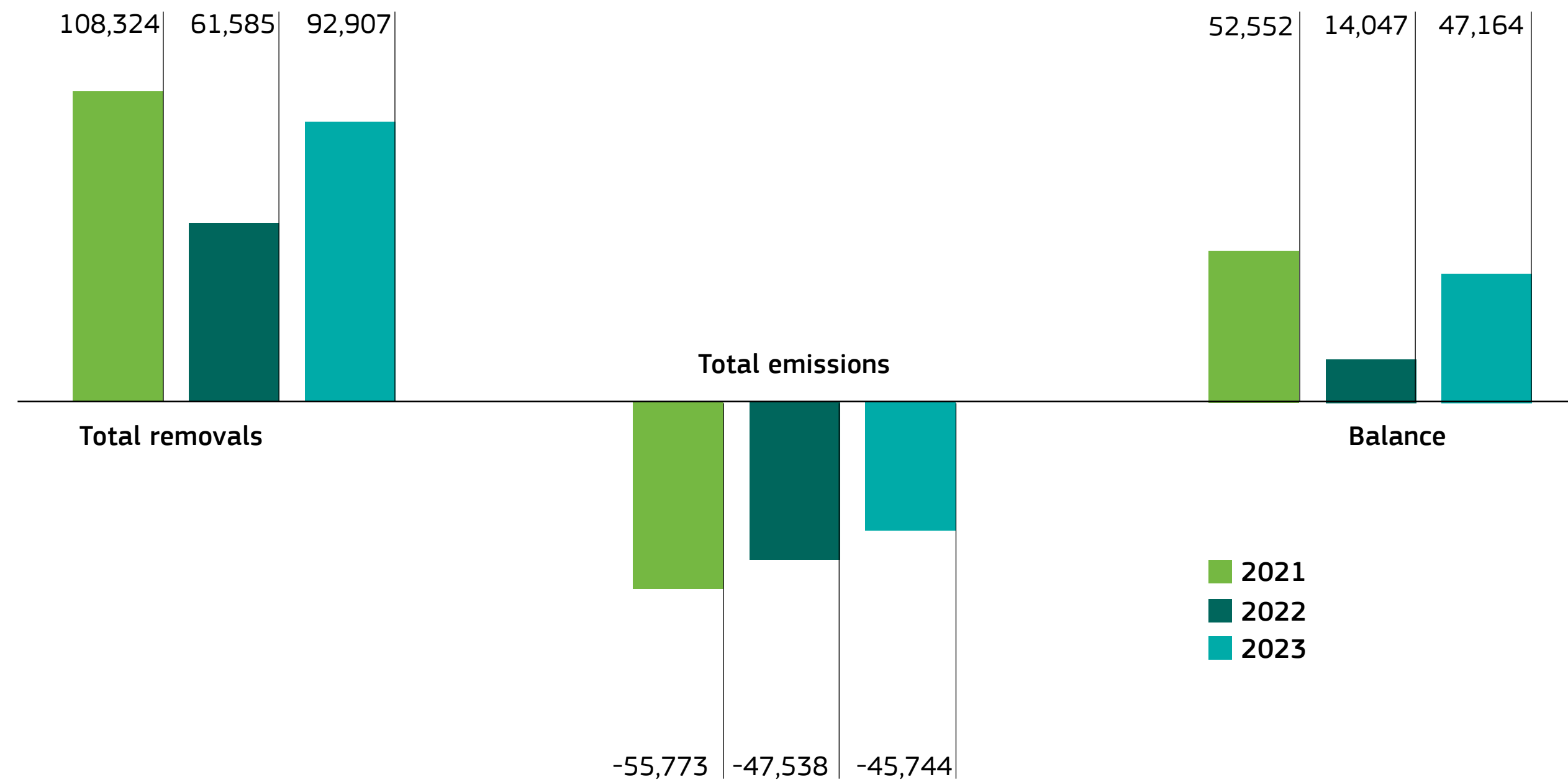
Annual carbon removals are attributed to the planted pine and eucalyptus forests and native forests in Santa Catarina and the planted forests in Rio Grande do Sul.

In 2023, net carbon removals totaled 92,907 tCO₂e. Compared to the previous year, removals increased by 51%. The increase is primarily the result of the incorporation of 1,970 hectares of native forests in Santa Catarina, whose

successional stages were defined during the period, and the non-reduction of stock and planted area of pine in Rio Grande do Sul. In addition, we saw a significant increase in our total carbon stock (standing timber), which reached 10,493,211.6 tCO₂e - an increase of 10% compared to 2022, distributed over 32,700 hectares.

In Santa Catarina, the activity of extracting wood for pulp production results in a considerable difference. This process means that planted forests are considered biogenic, with low levels of removal, depending on silvicultural planning. In other words, we are constantly planting new stock while harvesting old stock.

(305-5) TOTAL EMISSIONS, REMOVALS AND BALANCE (IN TONS OF CO2EQ), CONSIDERING SCOPES 1 AND 2, IN LINE WITH OUR ESG COMMITMENT CYCLE 2021-2030.



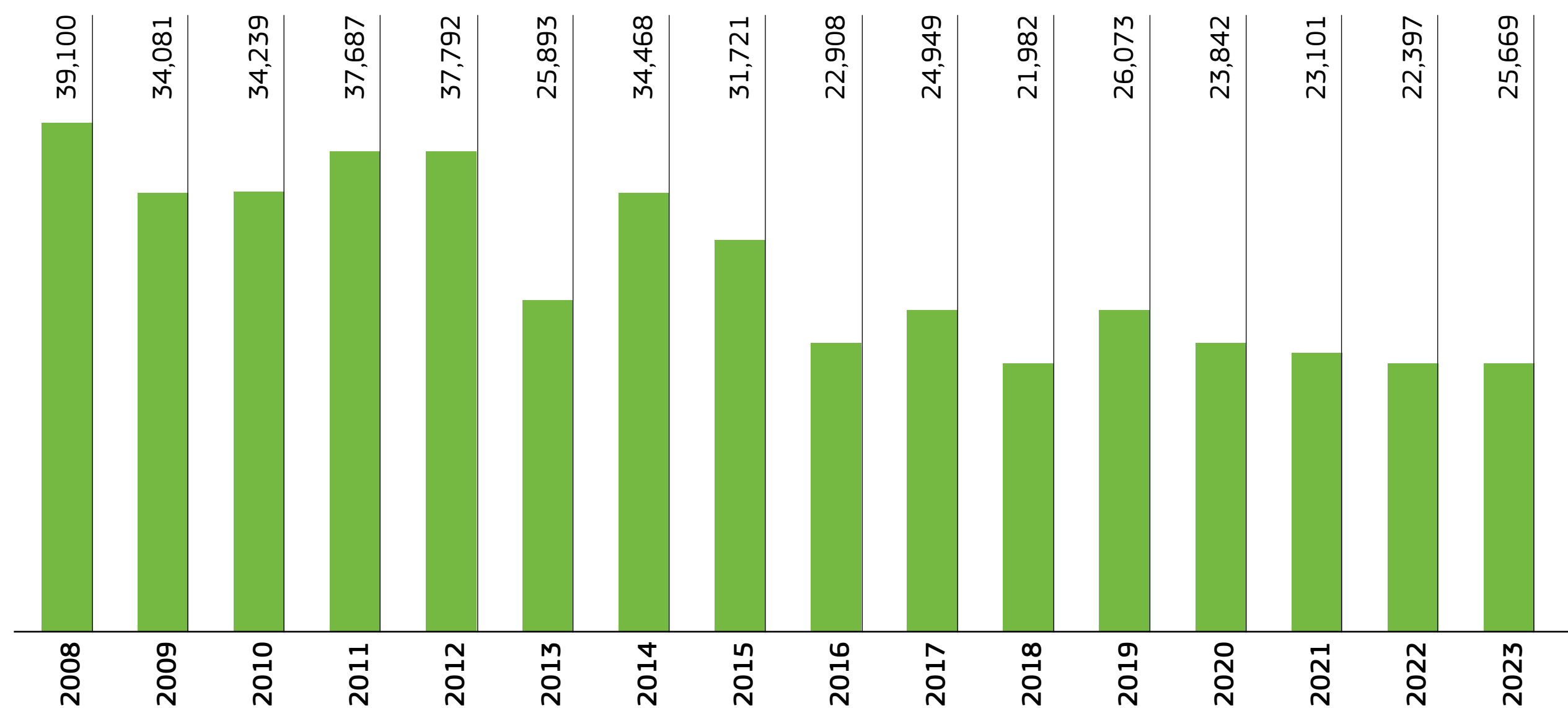
(305-1 E 305-3) EMISSIONS FROM BIOGENIC SOURCES (IN TONS OF CO2EQ)

| Biogenic Sources | |
|----------------------------------|-------------------|
| Activity | GHG (Mg CO2) |
| Biodiesel and Gasoline - Scope 1 | 277.45 |
| Ethanol - Scope 1 | 6.18 |
| Biodiesel and Gasoline - Scope 3 | 1,160.34 |
| Black Liquor - Scope 1 | 203,350.32 |
| Biomass- Scope 1 | 606,544.33 |
| Industrial Effluent - Scope 01 | 1,673.56 |
| Total: | 813,012.18 |

(305-5) CLEAN DEVELOPMENT MECHANISM (CDM) FOR THE EFFLUENT TREATMENT STATION

Approved by the CDM (Clean Development Mechanism) Executive Council in 2008, this mechanism became the first in the world to be fully aerobic. The initiative covers the modernization of the treatment system, replacing anaerobic degradation (without oxygen) with aerobic degradation (with oxygen) of organic matter. This avoids the emission of methane, a greenhouse gas (GHG) that causes global warming. Between 2008 and 2023, the project avoided the emission of 465,903 of GHG. Thus, that means there are 22,548 carbon credits (CERs) available for sale.

(305-5) CERTIFIED REDUCTIONS IN EMISSIONS FROM THE EFFLUENT TREATMENT STATION AT THE PAPER UNIT SC - CAMPINA DA ALEGRIA (IN TONS OF CO2EQ)



MARCIA
DA SILVA
Paper
MG Unit

Between 2008 and 2023, the project avoided the emission of **465.903** of GHG

GRI 305-5

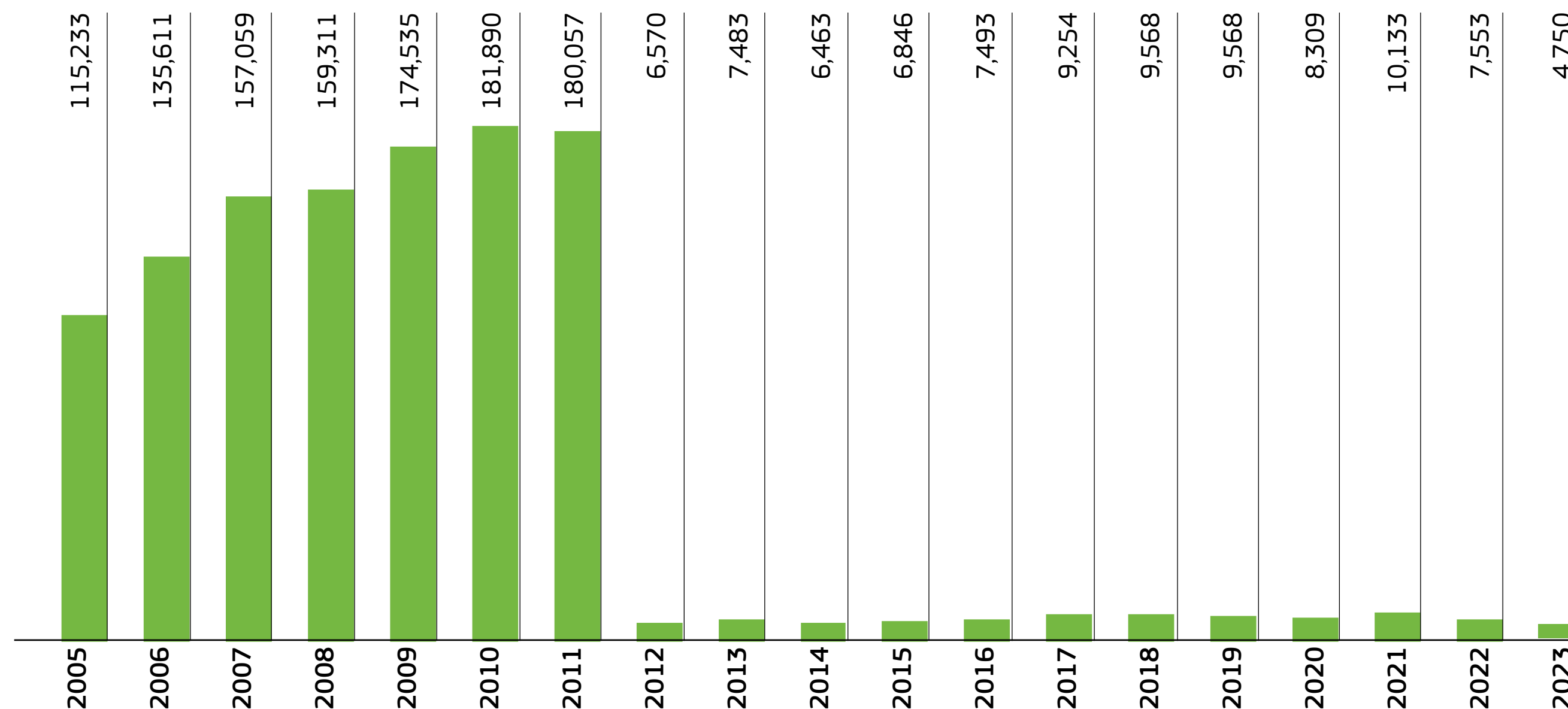
CEM CO-GENERATION PLANT

With this CEM (clean energy mechanism), Irani was the first Brazilian pulp and paper company and the second in the world to have carbon credits issued under the Kyoto Protocol.

The cogeneration boiler reduces greenhouse gas emissions, such as methane and carbon dioxide. The reduction in emissions is possible thanks to the inputs used for the process firing. They come from forest-based waste, biomass. With the Cogeneration Plant CEM, this waste is reused in order to avoid the process of decomposition in landfills - which leads to GHG emissions.

In 2023, the boiler generated 54,541 MW of renewable energy from forest waste. Between 2005 and 2023, the project avoided the emission of 1,196,882 tons of GHG, with 17,097 CER credits available for sale.

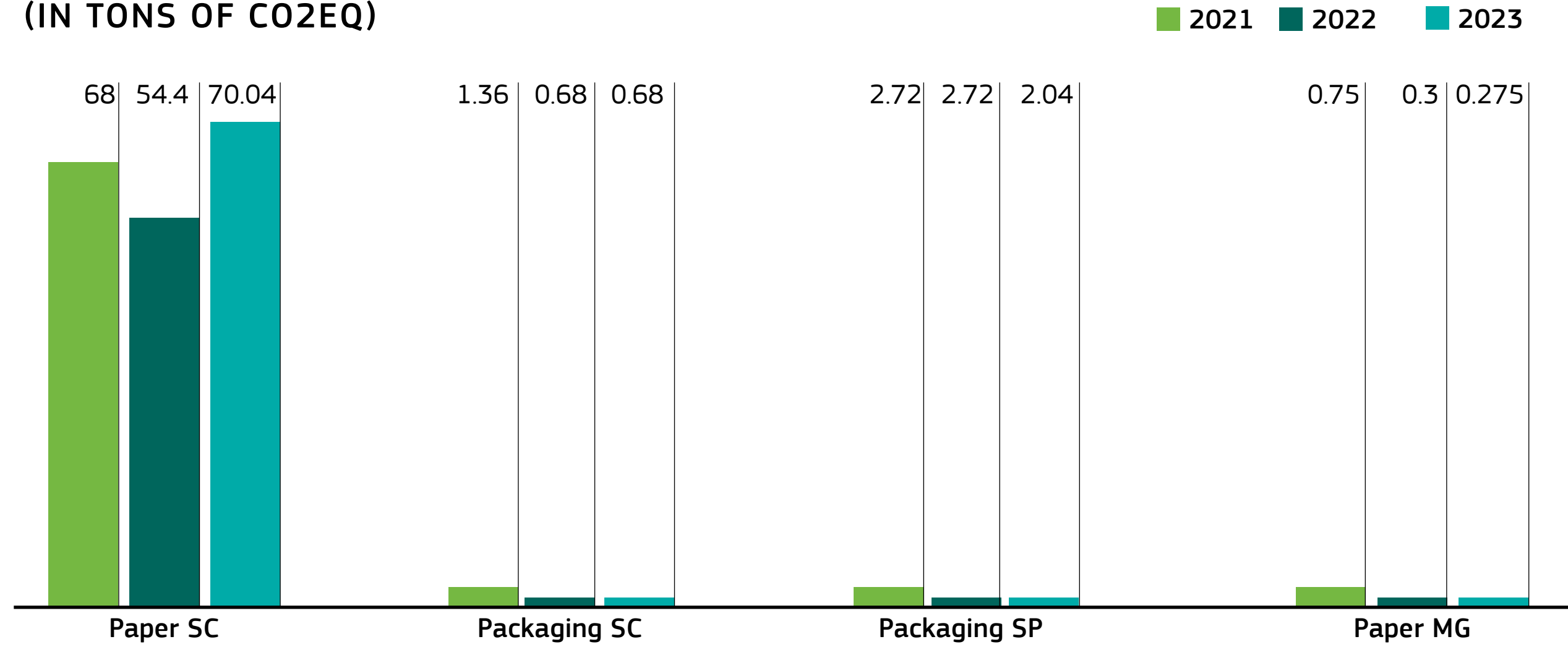
(305-5) CERTIFIED REDUCTIONS IN EMISSIONS FROM THE ENERGY CO-GENERATION BOILER AT THE PAPER UNIT SC – CAMPINA DA ALEGRIA (IN TONS OF CO₂EQ)



Note: The methodology changed in 2012, as the project's second credit period began. During this period the CER discount calculation for carriers over 200 km had not yet been consolidated, so the value of the CERs included in the 2012 report was altered, reducing the value.

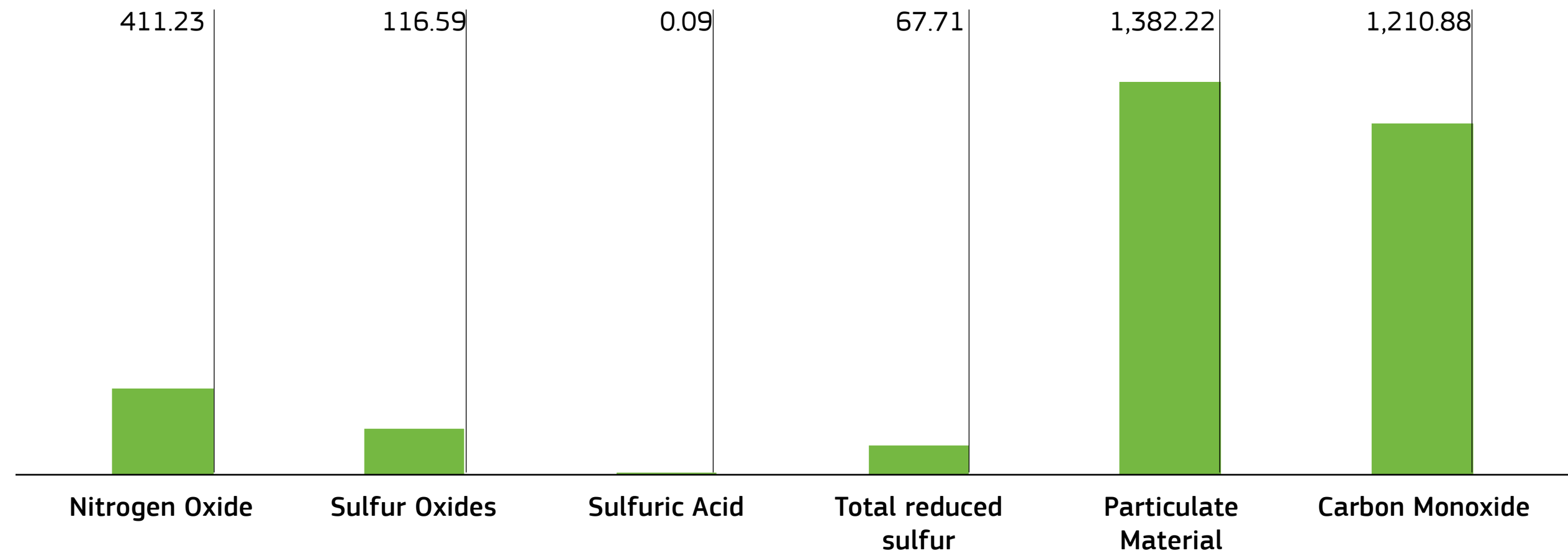
1,196,882 since the startup
CERs of the project

**(305-6) EMISSIONS OF OZONE-DEPLETING SUBSTANCES
(IN TONS OF CO2EQ)**



Note: the calculation can be done directly. Both the CML-IA and ReCiPe methods use the CFC-11 equivalent substance as an ozone depletion impact indicator. Both methods present the characterization factor as 0.05 kg of CFC-11 eq for each kg of HCFC-22. We did not adopt the formula indicated by the GRI because we do not produce, import or export ozone depleting substances. The data presented refer to emissions from the use of air-conditioning refrigeration gas.

(305-7, RR-PP-120 E RT-CP-120) ATMOSPHERIC EMISSIONS (IN TONS/YEAR)



TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES (TCFD) E CARBON DISCLOSURE PROJECT (CDP)

The TCFD is a global coalition of 32 members of the G20 community from various sectors of the economy, headed up by the Financial Stability Board (FSB). From 2024, we will begin the transition from TCFD to IFRS S1 and S2.

The goal is to encourage organizations to understand the physical liability and transition climate risks to which they are exposed. In addition, TCFD proposes voluntary and consistent climate-related financial disclosures to ensure greater transparency for lenders, insurers and investors in order to make better business decisions.

For its part, the Carbon Disclosure Project (CDP) is a non-profit organization set up to create a relationship between shareholders and companies focused on business opportunities arising from global warming.

Through CDP, investors, interested companies and other stakeholders can request that a specific

company disclose its environmental information via the organization's website.

Although participation is often requested, companies also have the option of joining voluntarily. In addition, participation in the CDP provides organizations with a valuable opportunity for self-assessment and analysis of areas for development in relation to their environmental impacts.

Since 2010, Irani has been responding to the CDP Climate Change Questionnaire, compiling the actions already implemented and identifying opportunities related to the document. This approach has allowed us to advance in its CDP Climate score over time. In 2023, we maintained our score at a "B" rating. For 2024, we have set ourselves the goal of achieving an even stronger position on the subject and raising the Company's level of governance.

In 2023, we conducted a climate scenario analysis study. These are systemic outlines of potential futures for the global climate, based on various trajectories of greenhouse gas emissions and anthropogenic influences, as well as natural variability in the climate system.

The projections are made using computer climate models, taking into account a wide range of variables. These include human activities, changes in land cover and physical, chemical and biological processes. These scenarios provide a fundamental basis for strategic planning and adaptive and mitigating decision-making at both government and business levels. This enables more effective preparation for the expected impacts of climate change.

Our analysis of climate scenarios was conducted using models employed by the Intergovernmental Panel on Climate Change (IPCC), together with a specific platform made available by INPE (National Institute for Space Research). These models consider different scenarios of global greenhouse gas emissions to predict the possible behavioral patterns of meteorological variables such as temperature, precipitation, wind intensity and relative humidity.

We adopted two different global GHG emissions scenarios: Representative Concentration Pathways (RCPs) 4.5 and 8.5. The first represents an intermediate greenhouse gas concentration scenario, measured in parts per million (ppm) in the atmosphere, while the second represents the

worst-case scenario (with 650 ppm and 1000 ppm). These scenarios were applied to two different climate projection models: HadGEM2-ES (The Hadley Global Environmental Model - Earth System) and MIROC5 (Model for Interdisciplinary Research on Climate).

In line with the climate change agenda, in 2023 we developed the Strategic Decarbonization Plan. The main objective is to detail and widely disseminate the company's actions and progress in this area.

The document presents data from the beginning of our commitment to producing a GHG inventory, in 2004, to future emissions projections up to 2030. The projections take into account the opportunities identified and the projects approved and under implementation at our industrial units, thus outlining our decarbonization path.

CARBON IN THE SOIL

Recognizing the significant contribution of soils in sequestering and storing carbon, Irani adopted an innovative approach in 2023 by starting soil carbon studies in its planted pine and eucalyptus forests in Santa Catarina.

In partnership with the Paraná Forest Research Foundation (FUPEF), these studies aim to inventory carbon stocks and estimate carbon dioxide removals in these forest plantations. Given the complexity of the investigations, we plan to extend these studies to 2024, ensuring that the results are quantified and monitored over time to ensure consistent and reliable data.

In addition, Irani began similar studies in 2023 to assess the stock and removal of carbon in the soil in its native forests in Santa Catarina. The studies, in partnership with the company Quanticum, will continue in 2024, making it possible to monitor and follow the evolution of carbon sequestration and stock from the soil over time.

Irani is a pioneer in the forestry sector in implementing the nanotechnology methodology in native forest soils to measure carbon stocks. With the aim of measuring the total stock and the annual increase in carbon due to the preservation of approximately 14,000 hectares of native forests in Santa Catarina, the technique used in the project is completely geared towards tropical soils.

The executive summary of the plan is available on our institutional website.



This approach identifies nanoparticles, known as clay minerals, present in the soil. Although the basic characteristics of the soil, such as content, texture and granulometry, may remain constant, variation in clay types or nanoparticles can significantly impact the land's natural aptitude for storing carbon, retaining water, mitigating the risk of erosion, and influencing the effectiveness of agricultural inputs and plant productivity.

The methodology for mapping natural soil nanoparticles using magnetic analysis has been patented in Brazil and is in the process of being patented in other countries. It has received recognition from internationally important institutions, such as the Brazilian Society of Soil Science (SBCS), and has won seven innovation awards, including recognition in the forestry sector, with backing from the Ministry of Agriculture, Embrapa Floresta and the Malinovski Group. The initiative reinforces Irani's commitment to leadership in sustainability and innovation in the sector.

CLIMATE CHANGE COMMITTEE

We take part in the Climate Change Committee of the Brazilian Tree Industry (IBÁ). It defines strategies to promote inventories of greenhouse gas emissions, carbon removal by forests and the development of climate change policies, market mechanisms and economic instruments. We also work to defend the sector in international (especially Climate COPs) and domestic consultations.

TARGETS AND METRICS

We have set emission reduction and carbon credit generation goals for the 2021-2030 at 20%. The metrics for quantifying greenhouse gas emissions are based on international standards developed by the International Organization for Standardization (ISO 14.064) and the World Resources Institute (WRI). They contemplate all Direct Emissions (Scope 1) and Indirect Emissions by Energy

Consumption (Scope 2), in addition to Indirect Emissions by other Sources (Scope 3). For the Clean Development Mechanism (CDM) projects, we followed the methodologies of the United Nations Framework Convention on Climate Change, also known as UNFCCC. The financial metrics will be prepared for the next 2021/2030 Strategic Planning cycle.

NATURAL CAPITAL



OPPORTUNITIES AND FUTURE COMMITMENTS

Reduce specific water use by 30% by 2030.



Zero delivery of non-hazardous waste to landfill by 2030.



Reduce specific waste generation by 5% by 2030.



Generate 460,000 tons of UN-certified carbon credits by 2030.

Increase the balance of the difference between GHG emissions and removals by 20% by 2030.



To be ISO 14001 certified in all business units by 2030.



Develop a methodology to quantify the annual carbon stock and removals in the native forests of the Rio Grande do Sul forest base in 2024;

Migrate to disclosures based on IFRS S1 and S2 in 2025;



Develop a decarbonization target according to the SBTi (Science Based Targets initiative) methodology, in line with limiting global warming to 1.5°C in 2024.



ABOUT THE REPORT

GISELE ESTEVES
Porto Alegre RS Office

ABOUT THE REPORT

Irani's Integrated Report demonstrates how we conduct business. We present our performance for the past fiscal year while discussing future challenges and commitments. The report is transparent and highlights our efforts to achieve our goals.

(2-29) In a transparent manner, we show how the sustainability strategy unfolds in practices that reinforce our mission to build valuable relationships with customers, employees, communities, suppliers, the government, investors, business partners and society. **(2-3)** The material covers the period from January 1 to December 31, 2023 at all Irani Papel e Embalagem S.A. units and subsidiaries.

A dedicated team of technicians worked on the publication to provide a balanced and appropriate presentation of the material topics and an explanation of our ability to create value. This publication has been reviewed and approved by the Board of Directors in accordance with Accounting Pronouncements

Committee (CPC) No. 09, the Integrated Reporting Framework of the IFRS Foundation and the GRI Standards. We recognize our responsibility to ensure the integrity, completeness and systemic vision of the information contained herein.

We have disclosed all relevant materiality information, and any omissions can be found in the GRI summary.



INTEGRATED REPORT

This report follows the International Framework (IR) technical guidelines and orientations, considering six capitals:

- Finance
- Social and Relationship
- Human
- Intellectual
- Manufacturing
- Natural



GLOBAL REPORTING INITIATIVE (GRI)

This report was developed based on the GRI Standards and shows how we generate value in a sustainable manner.

SUSTAINABLE DEVELOPMENT GOALS



SUSTAINABLE DEVELOPMENT GOALS (SDG)

The report presents the main SDGs impacted by our businesses and how they relate to our priority strategies.



SASB

Developed in accordance with SASB industry standards with accounting metrics in line with regulations:

- Guia de Aplicação SASB
- RR-PP - Pulp and Paper Products
- RR-FM - Forest Management
- RT-CP - Containers and Packaging

GRI 3-1

DEFINITION OF THE MATERIAL TOPICS

In 2002, our Sustainability department, with the approval of the Board of Directors, reviewed the material topics covered in this publication. The aim was to ensure that our management practices align with the material topics identified by our stakeholders (see more on page XX) and to encourage improvements in our organizational management.

Initially, we analyzed the stakeholders and consulted the internal and external materials available to gather relevant information regarding their expectations and influences.

Among the materials consulted were:

- Planejamento Estratégico para o Ciclo 2021-2030;
- Avaliação de Impacto Socioambiental nas Comunidades no Entorno de SC e RS 2022;
- Strategic Planning for the 2021-2030 Cycle;
- Socio-environmental Impact Assessment in the Communities Surrounding SC and RS 2022;
- GPTW Climate Survey 2022;
- Customer Satisfaction Survey 2022;
- Humanized Research 2021;
- Research with Startups 2022;
- Risk Matrix;
- UN SDGs;
- Commitments relating to the pacts to which we are signatories;
- ISE B3, CDP, TCFD, SABS questionnaires;
- FNQ MEG assessment;
- Annual reports from companies in the sector.

Based on the information collected, we identified 36 themes and organized them in a matrix. We then extracted the most significant topics, considering both internal and external stakeholders, and filtered them by their recurrence in the evaluated materials. Finally, during a regular meeting, the Board of Directors approved a set of material topics, emphasizing situations and areas where we are responsible for or contributing to impacts.

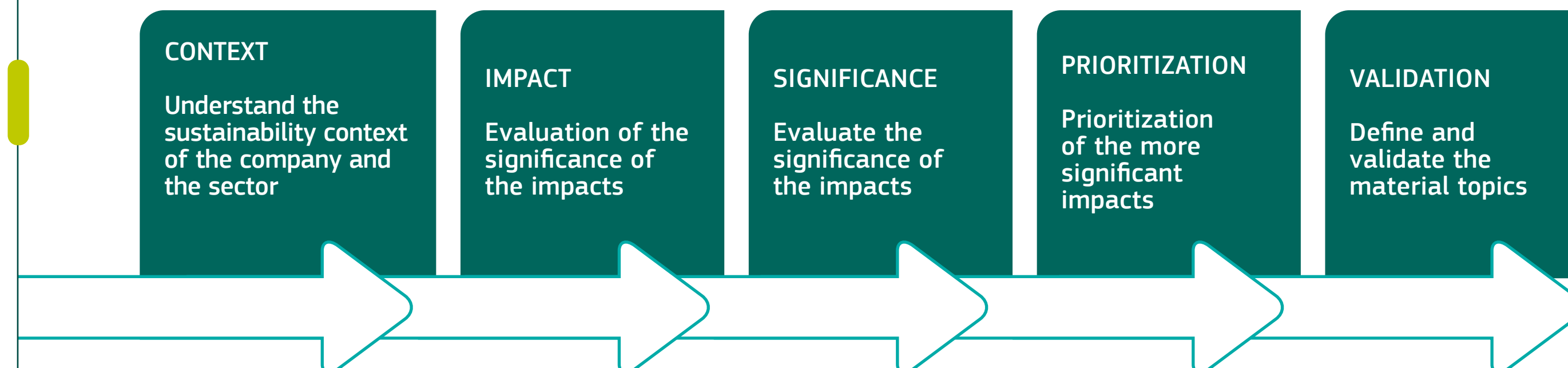
Below are the material topics:



Legend

- 1 Water and effluents**
- 5 stakeholder relations**
- 9 Economic Performance**
- 10 Personnel Development**
- 12 Diversity and Inclusion**
- 13 Energy**
- 18 Product Management**
- 19 Waste Management**
- 24 Governance**
- 26 Innovation**
- 27 Integrity**
- 29 Climate Change**
- 37 Health and Safety**
- 2 Biodiversity**
- 16 Market Management**
- 22 Forest Management**
- 39 Data Safety**

Usado pela Irani:



ANÁLISE DE ADERÊNCIA ÀS DIRETRIZES E PADRÕES INTERNACIONAIS:

| Capital | Stakeholder | (3-2) Material topic | SDG | GRI | SASB | ISE | CDP | MEG |
|-------------------------|--|-------------------------------|-----|-----|------|-----|-----|-----|
| Social and Relationship | All | Governance | ✓ | ✓ | | ✓ | ✓ | ✓ |
| | | Integrity | ✓ | ✓ | | ✓ | | ✓ |
| | | Stakeholder Relations | ✓ | ✓ | | ✓ | ✓ | ✓ |
| Financial | Investors | Economic Performance | ✓ | ✓ | | ✓ | ✓ | ✓ |
| Human | Employees and Community | Diversity and Inclusion | ✓ | ✓ | | ✓ | | ✓ |
| | | People Development | ✓ | ✓ | | ✓ | | ✓ |
| | | Health and Safety | ✓ | ✓ | | ✓ | | ✓ |
| Intellectual | Investors, Employees, Clients and Business Partners | Innovation | ✓ | | | | | ✓ |
| | | Data Safety | | | | ✓ | | ✓ |
| Manufacturing | Investors, Customers, Employees, Community, Suppliers, Governments and Society | Forest Management | ✓ | | | | ✓ | ✓ |
| | | Product and Market Management | ✓ | ✓ | ✓ | ✓ | | ✓ |
| | | Energy | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Natural | Investors, Employees, Community, Governments | Biodiversity | ✓ | ✓ | | | | ✓ |
| | | Water and effluents | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| | | Waste Management | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| | | Climate Change | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |

GRI CONTENT SUMMARY

Irani Papel e Embalagem reported the information cited in this GRI Content Index for the period from January 1, 2023, to December 31, 2023, based on GRI Standards.

GENERAL CONTENTS

| GRI Standards | Content | Location | Response/Omission |
|-----------------------------------|--|-------------|--|
| GRI 2 General Contents 2021 | 2-1 Details of the organization | 6 e 7 | Irani Papel e Embalagem S.A. |
| | 2-2 Entities included in the organization's sustainability | 6 e 8 | Irani Papel e Embalagem S.A. and subsidiaries |
| | 2-3 Reporting period, frequency and contact point | | January 1, 2023, to December 31, 2023, Annual publication frequency, contact point http://www.irani.com.br/ideias-em-acao/contato/ or by email sustentabilidade@irani.com.br . |
| | 2-4 Restatements of information | | Starting from this edition, we use the GRI 2021 indicators. |
| | 2-5 External verification | 211 | |
| | 2-6 Activities, value chain and other business relationships | 5 | |
| | 2-7 Employees | 94, 95 e 98 | |
| | 2-8 Non-employee workers | 67 | |

| GRI Standards | Content | Location | Response/Omission |
|-----------------------------------|--|----------|--|
| GRI 2 General Contents 2021 | 2-9 Governance structure and its composition | 29 e 32 | <p>The Board of Directors is the only body that exercises an executive function. On the Board of Directors, there are representatives of shareholders and of Irani's controlling family group.</p> <p>Advisory committees are non-statutory bodies and social minorities have no representatives on the highest governance body.</p> <p>Of the total number of seats that make up the Board of Directors, Executive Board and its committees:</p> <p>Gender: 87.5% men 12.5% women</p> <p>Age group: 50% over 60 50% under 60</p> <p>Permanence of members of the Board of Directors, Executive Board and their committees: 79.16% up to 5 years 20.83% more than 5 years</p> |
| | 2-10 Appointment and selection for the highest governance body | 29 e 32 | <p>The Company's Board of Directors will be made up of a minimum of 5 (five) and a maximum of 9 (nine) members, elected and removable by the General Meeting, with a unified term of office of 2 (two) years, with re-election permitted. Of these, at least 2 (two) members or 20% (twenty percent), whichever is greater, must be Independent Directors, as defined in the Novo Mercado Regulations, and the characterization of the nominees to the Board of Directors as Independent Directors must be decided at the General Meeting that elects them, and the member(s) of the Board of Directors elected through the option provided for in Article 141, §§ 4 and 5 of Law 6,404/76 and Article 17, § 3 of the Novo Mercado Regulations, in the event of there being a controlling shareholder, shall also be considered independent.</p> |

| GRI Standards | Content | Location | Response/Omission |
|--|--|-----------------|---|
| | 2-11 Chairman of the highest governance body | 29 e 38 | |
| | 2-12 Role played by the highest governance body in supervising the management of impacts | 29 e 33 | |
| | 2-13 Delegation of responsibility for impact manageme | 29 e 33 | |
| | 2-14 Role played by the highest governance body in sustainability reporting | 29 e 34 | |
| GRI 2 General Contents 2021 | 2-15 Conflicts of interest | | <p>Our definition of conflict of interest is set out in the Integrity Program glossary, available to all stakeholders on the Company's website, and the types of conflict of interest are listed in the guidelines for each policy:</p> <p>Relations with the Public Sector, Associations and Trade Unions - item 1.2</p> <p>Relations with Suppliers - items 2.3 and 2.7</p> <p>Customer Relations - item 3.2</p> <p>Donations and Sponsorships - items 4.3, 4.5, 4.6</p> <p>Hospitality, Gifts and Presents - item 5.2, 5.3</p> <p>Accounting Records - item 6.2, 6.3</p> <p>Mergers, Acquisitions and Corporate Restructuring - item 7.2</p> |
| | 2-16 Communication of crucial concerns | 29, 34, 45 e 47 | |
| | 2-17 Collective knowledge of the highest governance body | 29 e 34 | |

| GRI Standards | Content | Location | Response/Omission |
|-----------------------------------|---|-----------------|--|
| GRI 2 General Contents 2021 | 2-18 Evaluation of the performance of the highest governance body | 29 e 34 | The performance of the Board of Directors is evaluated annually internally by the Chairman of the Board of Directors. In order to improve the effectiveness of the Board of Directors, its chairman sends an evaluation questionnaire to the other members of the Board, who answer it individually and confidentially. After receiving the evaluation questionnaires, the Chairman of the Board tabulates the evaluations and identifies opportunities for improvement for implementation. |
| | 2-19 Remuneration policies | 29, 40, 41 e 42 | |
| | 2-20 Processes for determining remuneration | 29, 40, 41 e 42 | The Company seeks a competitive remuneration practice in the market in which it operates, paying fixed salaries compatible with the market median and seeking differentiation through more aggressive variable remuneration programs. Fixed salaries are established on the basis of surveys which are updated periodically and adjusted by the collective bargaining agreement indices. Fixed salary progression is achieved through growth within the company's structure - in other words, through promotions, always based on the employee's current performance and potential. based on the employee's current performance and potential. Variable remuneration is made up partly of the company's results and partly of the individual performance of each employee, assessed by a specific performance management program. |
| | 2-21 Proportion of total annual remuneration | 90 e 100 | |
| | 2-22 Statement on sustainable development strategy | 10 | |
| | 2-23 Policy commitments | 29 e 44 | |
| | 2-24 Incorporation of policy commitments | 23 | |
| | 2-25 Processes to remedy negative impacts | 164 | |

| GRI Standards | Content | Location | Response/Omission |
|-----------------------------------|---|--------------|---|
| GRI 2 General Contents 2021 | 2-26 Mechanisms for advice and raising concerns | 46 | |
| | 2-27 Compliance with laws and regulations | 48 | The company defines material non-compliances as those that: (i) Have a claim value above R\$1,000,000.00 (one million reais); (ii) May generate an image risk; and (iii) May have an impact on investors' decisions. |
| | 2-28 Participation in associations | 55 e 61 | |
| | 2-29 Approach to stakeholder engagement | 55, 56 e 196 | |
| | 2-30 Collective bargaining agreements | 90 e 95 | |

MATERIAL TOPICS

| GRI Standards | Content | Location | Response/Omission |
|----------------------------------|--|--|-------------------|
| GRI 3 Material Issues 2021 | 3-1 Process for defining material issues | 197 | |
| | 3-2 List of material topics | 199 | |
| | 3-3 Management of material topics | 29, 45, 55, 73, 90, 102, 112, 123, 134, 138, 148, 154, 163, 171 e 183 | |

ECONOMIC PERFORMANCE

| GRI Standards | Content | Location | Response/Omission |
|----------------------|---|-------------|---|
| GRI 201: Economic | 201-1 Direct economic value generated and distributed | 16, 73 e 85 | |
| | 201-2 Financial implications and other risks and opportunities due to climate change | 73 e 75 | |
| GRI 201: Economic | 201-3 Defined benefit plan obligations and other retirement plans Irani has no pension plans for employees. | | Irani does not offer pension plans for employees. |
| | 201-4 Financial assistance received from the government | 73 e 86 | |

PURCHASING PRACTICES

| GRI Standards | Content | Location | Response/Omission |
|--|---|----------|-------------------|
| GRI 204: Purchasing Practices 2016 | 204-1 Proportion of spending with local suppliers | 55 e 67 | |

MATERIALS

| GRI Standards | Content | Location | Response/Omission |
|----------------------------|---|----------------|-------------------|
| GRI 301: Materials 2016 | 301-1 Materials used, broken down by weight or volume | 176, 177 e 178 | |
| | 301-2 Raw materials or recycled materials used | 176 e 177 | |
| | 301-3 Reused products and their packaging | 176 e 178 | |

| ENERGY | | | |
|-------------------------|--|------------------------|--|
| GRI Standards | Content | Location | Response/Omission |
| GRI 302: Energy 2016 | 302-1 Energy consumption within the organization | 154, 156, 157 e 158 | We do not sell electricity, heating, cooling or steam. |
| | 302-2 Energy consumption outside the organization | 154, 156 e 158 | |
| | 302-3 Energy intensity | 154 e 155 | |
| | 302-4 Reduction in energy consumption | | There was no reduction in absolute consumption. |
| | 302-5 Reduction in energy requirements for products and services | | Not applicable to our business. |

| WATER AND WASTEWATER | | | |
|---|---|----------------|---|
| GRI Standards | Content | Location | Response/Omission |
| GRI 303: Water and Wastewater 2018 | 303-1 Interactions with water as a shared resource | 171 | |
| | 303-2 Management of impacts related to water disposal | 171, 173 e 174 | |
| | 303-3 Water abstraction | 171, 172 e 173 | |
| | 303-4 Water disposal | 171, 173 e 174 | |
| | 303-5 Water consumption | | Due to the complexity of the paper production process, it is not possible to measure the consumption of water used by the organization that is no longer available for use by the ecosystem or the local community. |

| BIODIVERSITY | | | |
|----------------------------------|---|----------------------------------|-------------------|
| GRI Standards | Content | Location | Response/Omission |
| GRI 304: Biodiversity 2016 | 304-1 Operational units owned, leased or managed within or adjacent to environmental protection areas and areas of high biodiversity value located outside environmental protection areas | 138, 140, 145, 163, 168 e 169 | |
| | 304-2 Significant impacts of activities, products and services on biodiversity | 138, 140, 163, 168 e 169 | |
| | 304-3 Habitats protected or restored | 163, 164, 167, 168 e 169 | |
| | 304-4 Species included on the IUCN Red List and national conservation lists with habitats in areas affected by the organization's operations | 163, 164, 165, 167 e 169 | |
| EMISSIONS | | | |
| GRI Standards | Content | Location | Response/Omission |
| GRI 305: Emissions 2016 | 305-1 Direct emissions (Scope 1) of greenhouse gases (GHG) | 183, 184 e 187 | |
| | 305-2 Indirect emissions (Scope 2) of greenhouse gases (GHG) from energy purchases | 183 e 184 | |
| | 305-3 Other indirect emissions (Scope 3) of greenhouse gases (GHG) | 183, 185 e 187 | |
| | 305-4 Intensity of greenhouse gas (GHG) emissions | 183 e 186 | |
| | 305-5 Reduction of greenhouse gas (GHG) emissions | 183, 187, 188 e 189 | |

| | | | |
|-----------------------------------|--|-----------|--|
| GRI 305: Emissões 2016 | 305-6 Emissions of substances that deplete the ozone layer | 183 e 190 | |
| | 305-7 Emissions of nitrogen oxides (NOx), sulphur oxides (SOx) and other significant atmospheric emissions | 183 e 190 | |

WASTE

| GRI Standards | Content | Location | Response/Omission |
|--------------------------------|--|-----------------|--------------------------|
| GRI 306: Waste 2020 | 306-1 Generation of waste and significant impacts related to waste | 176, 179 e 181 | |
| | 306-2 Management of significant impacts related to waste | 176, 179 e 180 | |
| | 306-3 Waste generated | 176, 179 e 180 | |
| | 306-4 Waste not destined for final disposal | 176, 180 e 182 | |
| | 306-5 Waste destined for final disposal | 176, 180 e 181 | |

EMPLOYMENT

| GRI Standards | Content | Location | Response/Omission |
|---|---|-----------------|---|
| GRI 401: Employment 2016 | 401-1 New hires and employee turnover | 90, 96 e 99 | |
| | 401-2 Benefits provided to full-time employees that are not offered to temporary or part-time employees | 90 e 101 | All of Irani's industrial units and offices are considered major operating units. We do not have a retirement fund. In the event of disability, life insurance analyzes cases of accidents at work and may compensate the employee if the complete documentation is properly presented and approved. |
| | 401-3 Maternity/paternity leave | 90 e 101 | |

OCCUPATIONAL HEALTH AND SAFETY

| GRI Standards | Content | Location | Response/Omission |
|---|--|-----------------------------|---|
| GRI 403: Occupational health and safety 2018 | 403-1 Occupational health and safety management system | 112, 113, 117, 118 e 119 | |
| | 403-2 Hazard identification, risk assessment and incident investigation | 112, 113 e 117 | |
| | 403-3 Occupational health services | 112 e 119 | |
| | 403-4 Worker participation, consultation and communication with workers regarding occupational health and safety | 112, 113 e 117 | |
| GRI 403: Saúde e segurança ocupacional 2018 | 403-5 Worker training in occupational health and safety | 112, 113 e 119 | |
| | 403-6 Worker health promotion | 112 e 113 | |
| | 403-7 Prevention and mitigation of occupational health and safety impacts directly linked to business relations | 112, 113 e 120 | The company is evaluating the possibility of improving management practices and reporting on this indicator in the next reporting cycle |
| | 403-8 Workers covered by an occupational health and safety management system | 112, 113 e 119 | |
| | 403-9 Accidents at work | 112, 118 e 119 | |
| | 403-10 Occupational diseases | 112 e 113 | |

TRAINING AND EDUCATION

| GRI Standards | Content | Location | Response/Omission |
|--|---|-----------|---|
| GRI 404: Training and education 2016 | 404-1 Average hours of training per year, per employee | 102 e 105 | |
| | 404-2 Programs for improving employee skills and career transition assistance We have no end-of-career management programs. | 102 e 103 | We do not have end-of-career management programs. |
| | 404-3 Percentage of employees who receive regular performance and career development evaluations | 102 e 110 | |

GRI DISCLOSURE PAGE RESPONSE/OMISSION

| GRI Standards | Content | Location | Response/Omission |
|---|---|-------------|---|
| GRI 405: Diversity and Equal Opportunity 2016 | 405-1 Diversity of governance bodies and employees and employees | 90, 94 e 96 | The Board of Directors is made up of five men and one woman over the age of 50. Of these, 33% belong to the family group of the company's founders and 67% are specialists with no parental ties. |
| | 405-2 Proportion of basic salary and remuneration for women and men | 90 e 100 | |

LOCAL COMMUNITIES

| GRI Standards | Content | Location | Response/Omission |
|--|---|-----------|-------------------|
| GRI 413: Local Communities 2016 | 413-1 Operations with local community engagement, impact assessments and development programs | 55 e 62 | |
| | 413-2 Operations with significant actual or potential negative impacts on local communities | 163 e 164 | |



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Independent auditors' limited assurance report on the non-financial information included in the 2023 Integrated Report

(A free translation of the original report in Portuguese, containing the Assurance Report)

To the Board of Directors, Shareholders and Directors of
Irani Papel e Embalagem S.A.
Porto Alegre - RS

Introduction

We were engaged by Irani Papel e Embalagem S.A. (the "Company" or "Irani") to present our limited assurance report on the non-financial information included in the Irani's "Integrated Report 2023" for the year ended December 31, 2023.

Our limited assurance does not extend to prior period information or to any other information disclosed together with the 2023 Integrated Report, including any images, audio files or merged videos.

Responsibilities of the Management of Irani Papel e Embalagem S.A.

The Management of Irani Papel e Embalagem S.A. is responsible for:

- select and set proper criteria for preparing the information included in the 2023 Integrated Report;
- preparing information in accordance with the criteria and guidelines of the *Global Reporting Initiative (GRI – Standards)* and *CPC 09 Guidelines – Integrated Reporting* related to the Basic Conceptual Framework of the Integrated Reporting, prepared by the *International Integrated Reporting Council (IIRC)*;
- design, implement and maintain internal controls over the information relevant to the preparation of the information included in the 2023 Integrated Report that is free from material misstatement, whether due to fraud or error.

Responsibility of independent auditors

Our responsibility is to express a conclusion on the non-financial information included in the 2023 Integrated Report, based on the limited assurance engagements conducted in accordance with Technical Communication CTO 07/2022 and NBC TO 3000 – Assurance Engagements Other than Audits or Reviews issued by CFC, which is equivalent to isAE 3000 – *Assurance engagements other than audits or reviews of historical financial information*, issued by the *International Auditing and Assurance Standards Board (IAASB)*. These standards require that the auditor comply with ethical, independence and other responsibilities related to them, including the application of the Brazilian Standard on Quality Control (NBC PA 01), and therefore the maintenance of a comprehensive quality control



system, including documented policies and procedures for compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Moreover, those standards require that the work be planned and performed to obtain limited assurance that the non-financial information included in the 2023 Integrated Report taken as a whole is free from material misstatement.

A limited assurance engagement conducted in accordance with NBC TO 3000 (ISAE 3000) basically consists of inquiring the management of Irani and other Irani professionals who are involved in the preparation of the information and applying analytical procedures to obtain evidence that enables us to reach a limited assurance conclusion on the information taken as a whole. A limited assurance engagement also requires additional procedures to be applied when the independent auditor gets to know about issues that lead him to believe that the information disclosed in the 2023 Integrated Report, taken as a whole, may have material misstatements.

The selected procedures are based on our understanding of the issues related to the compilation, materiality and presentation of the information included in the 2023 Integrated Report, of other circumstances of the engagement, and of our consideration about the areas and processes associated with the material information disclosed in the 2023 Integrated Report, in which material misstatements could exist. The procedures consisted of, among others:

- a. planning the engagement, considering the relevance, the amount of quantitative and qualitative information, as well as the operating and internal control systems that supported the preparation of the information included in the 2023 Integrated Report;
- b. understanding the calculation method and procedures followed for compiling indicators by inquiring the managers in charge of gathering information;
- c. applying analytical procedures to quantitative information and inquiring about qualitative information and its correlation with the indicators disclosed in the information included in the 2023 Integrated Report;
- d. when non-financial data correlate with financial indicators, these indicators are cross-checked against financial statements and/or accounting records.

The limited assurance engagements also covered compliance with the guidelines and criteria of the *Global Reporting Initiative (GRI – Standards)* framework, and of CPC 09 – Integrated Reporting, related to the Basic Conceptual Framework for Integrated Reporting, prepared by the *International Integrated Reporting Council (IIRC)* applicable to the preparation of information included in the 2023 Integrated Report.

We believe that the evidence we have obtained from our work is sufficient and appropriate to provide a basis for our limited conclusion.

Scope and limitations

The procedures applied in a limited assurance engagement vary in terms of nature and timing and are smaller to the extent than in a reasonable assurance engagement. Therefore, the security level obtained from a limited assurance engagement is substantially lower than that obtained if a reasonable assurance engagement had been carried out. If we had carried out a reasonable assurance engagement, we could have found other issues



and possible misstatements that may exist in the information included in the 2023 Integrated Report. Accordingly, we do not express an opinion on that information.

Non-financial data are subject to more inherent limitations than financial data, given the nature and diversity of the methods used to determine, calculate or estimate this data. Qualitative interpretations of materiality, relevance and accuracy of data are subject to individual assumptions and judgments. Moreover, we did not carry out any work on data informed for prior periods, or about future projections and goals.

The preparation and presentation of sustainability indicators and integrated reporting followed the criteria set by the *Global Reporting Initiative (GRI – Standards)* and *cpc 09 – Integrated Reporting* related to the Basic Conceptual Framework for Integrated Reporting, prepared by the *International Integrated Reporting Council (IIRC)* therefore, they do not have the purpose of ensuring compliance with social, economic, environmental or engineering laws and regulations. However, those standards provide for the presentation and disclosure of possible violations to these regulations when significant sanctions or fines are imposed. Our assurance report should be read and understood accordingly, which is part of the criteria set by the *Global Reporting Initiative (GRI – Standards)* and by *CPC 09 – Integrated Reporting*, related to the Basic Conceptual Framework for Integrated Reporting, prepared by the *International Integrated Reporting Council (IIRC)*.

Conclusion

According to the procedures applied by our team and described on this report and the evidence we obtained, nothing came to our attention that causes us to believe that the non-financial information included in the 2023 Integrated Report for the year ended December 31, 2023 of Irani Papel e Embalagens S.A. have not been prepared, in all material respects, according to the criteria and guidelines of the Global Reporting Initiative – GRI (GRI – Standards) and CPC 09 – Integrated Reporting.

São Paulo, April 29, 2024

KPMG Auditores Independentes Ltda.
CRC 2SP-014428/O-6
Original report in portuguese signed by

Luis Claudio de Oliveira Guerreiro
Accountant CRC RJ-093679/O-1



GLÁUCIA MACHADO
Packaging SP Unit

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