



INTEGRATED REPORT (ESG)

2021

Message from the **CEO**

GRI (102-14)

Developing the future is what drives us every day. This is the inspiration that guides our way of working and has been shaping the solutions we have offered society for 80 years as one of the main paper and sustainable packaging industrial companies in Brazil, embracing and engaging with the lives of people and the planet.

If we were to delve further into this subject, we'd find that very few Brazilian companies have reached such longevity, a matter of immense pride for us. But longevity is not our sole reason for satisfaction. By fulfilling the dream of the pioneers who settled mid-western Santa Catarina in the early 1940s emerged in a landscape of valleys and mountains, we built an industry linked with nature, one for future generations, which today delivers to society 100% recyclable products manufactured from renewable natural resources. Through integrated production, our own

forest assets and self-generated energy, Irani feels one with nature, fully a part of it.

In line with our relentless endeavor to reach higher levels of transparency and reliability, for the second consecutive year we adopted the principles and methodology of the International Integrated Reporting Council (IIRC). The objective is to present our back story to the various stakeholders of how we are generating value on different fronts – such as governance, economic performance and socio-environmental programs.

Hence, even in the face of continuing challenges arising from the Covid-19 pandemic and reflected in the global economy, we registered important accomplishments throughout 2021. Among them is the recognition of Irani among the Best in Management®, recognition given by the National

Developing the future is what drives us every day. This is the inspiration that guides our way of working and has been shaping the solutions we have offered society for 80 years.

Sérgio Luiz Cotrim Ribas
Chief Executive Officer

transforming people's lives



Throughout the year, our ongoing concern about the development and well-being of people was combined with the conviction that we must preserve natural resources to ensure the continuity of life.

Quality Foundation (FNQ) to organizations that stand out not only for the quality of management and increased competitiveness, but also for generating value for society through sustainable and constructive actions.

We also won the Transparency Trophy, awarded by the National Association of Executives (ANEFAC) and the Institute of Accounting, Actuarial and Financial Research Foundation (FIECAFI) of the University of São Paulo (USP). For the first time, we entered the ranking of TOP Open Corps, where 100 Open Startups indicates the leading brands in open innovation with startups in Brazil, entering the TOP 5 Pulp and Paper category. And, among other acknowledgements, for the second year in a row we won the Certificate and the Green Energy Seal - Bioelectricity, from the União da Indústria de Cana-de-Açúcar (Sugarcane Industry Union), for the actions in the Packaging SP unit in Indaiatuba.

At the same time, Irani became the only representative of the packaging segment to be included in the IGPTW B3 portfolio, an index created by the Brazilian stock exchange at the end of 2021 in partnership with the global Great Place to Work® (GPTW) consultancy, a list of companies that invest in the work environment, valuing relationships between

people and the development of employees. Also noteworthy was the mark of 87% in the employee satisfaction index obtained through the GPTW Survey, being recognized yet again as one of the best industrial companies in which to work in Brazil in 2021.

In addition, as part of the extension of benefits guaranteed to workers, we entered the Citizen Company program, which allows the expansion of maternity and paternity leave beyond the periods already guaranteed. Another decisive step was joining the Conscious Capitalism global movement that encourages the adoption of sustainable and humanized management, connecting business with purpose and generating positive impacts for society.

In parallel, for the first time we participated in the Humanized Companies Research project that measures the perception of stakeholders about the human and organizational development of companies, based on concepts such as ethics, diversity, innovation and sustainability. With more than 1,400 respondents, including managers, employees, customers, partners and representatives of society, we reached level A on the list, a stage of maturity higher than that of the market in which we operate. Aside from this, Irani has become a

signatory to the LGBTI+ Business and Rights Forum, fostering efforts to expand the value of diversity not only within the organization, but also throughout society.

In search of enhancing rapprochement with our employees, we launched the “Speak with Sérgio” program: this is a meeting featuring interaction and direct contact of our staff with Irani’s CEO, during which important company issues are discussed. In 2021, we ran nine such encounters, with 330 participants.

Throughout the year, our ongoing concern about the development and well-being of people was combined with the conviction that we must preserve natural resources to ensure the continuity of life. Among other achievements, this movement resulted in the increase of carbon credit sales, reaching 155,000 tons, with revenues exceeding R\$ 1.7 million. The result strengthens the historical position of Irani, the second paper and pulp industry in the world to obtain carbon credits from the Kyoto Protocol (in 2006). At the same time, we became signatories of the Sustainable Development Goals (SDGs) Movement in Rio Grande do Sul – in the previous year, we had already adopted this measure in Santa Catarina.

Another Irani principle is that sustainability cannot exist without innovation, as one is inseparable from the other. These two vectors, interwoven in our activities, come together in initiatives such as Embalei, an online store of recycled packaging for retail, delivery and e-commerce purposes, which we launched in 2021. In addition to promoting environmental preservation, the online marketing of these efficient and innovative products, made from renewable and biodegradable sources, contributes to social development by boosting the local economy through materials recycling processes.

For Irani, investing in innovation also includes prospecting, selecting and supporting the development and acceleration of startups with high growth potential, which act in synergy with our business model. This support for the projects is through Irani Ventures, a Corporate Venture Capital (CVC) vehicle that we launched in August 2021. In alignment with the Company's innovation strategy, in partnership with Grow+ we also promoted the second edition of Irani Labs throughout the year, a project that seeks to identify innovative and sustainable solutions on behalf of all of society.

Attentive to social causes, in 2021 we launched Brazil's first paper packaging product with antimicrobial technology, which has the property of deactivating viruses, bacteria and fungi, even the Covid-19 virus. In the context of the health crisis that is punishing the planet, we continued the Corrente do Bem (Good Current) campaign, donating R\$ 1.2 million in materials and equipment to fight the pandemic.

Also notable was the first Irani Investor Day, organized in 2021. The program aims to bolster our relations with investors, and was held in a completely digital environment, broadcast over the Company's YouTube channel and in which I had the honor of participating along with our entire team of executives. During the year, we also continued the initiatives that make up the Gaia Platform, seeking to expand Irani's competitiveness and production capacity, as well as the energy sufficiency of its units. For this, we make investments of great positive environmental impact and with an internal rate of return (IRR) higher than the Company's cost of capital.

Closing out our achievements in 2021, we set a number of economic records: our net sales reached R\$ 1.6 billion, 56% higher than the previous year; our net profit was R\$ 285.3 million, 207% higher than the previous year; and our ROIC (Return on Invested Capital) was one of the highest in the industry worldwide, reaching 24.5% per year and generating superior value for our shareholders.

Management excellence and continuous investments in technology, innovation, and sustainability keep us in step with the desires of society. All this demonstrates that, from a remote village in Santa Catarina's mid-west region, extending out to the world over the past eight decades, Irani has become an industrial and economic powerhouse that does not shirk its responsibilities. Our business extends well beyond just manufacturing paper and packaging products; it now translates into the persistent pursuit of sowing relationships and reaping prosperity in favor of the lives of people and the planet. After all, developing the future is what drives us every single day.

Enjoy your reading!

There is no sustainability without innovation, since one is inseparable from the other.

supporting development

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Our business
model

Social and
relationship
capital

Financial
capital

Human
capital

Intellectual
capital

Manufacturing
capital

Natural
capital

About the
report





Our business **model**

Irani | 80 years of history

Business profile

Our strategic intention

Capital main results



(102-1)

Irani | 80 years of history

Irani reaches its 80th birthday, manufacturing 100% recyclable products from renewable natural resources. This position is the result of the connection we seek to establish with nature at all stages of our production process, from the raw materials to the end product, which implies the generation of positive impacts with the surrounding communities and the environment.

(102-2) We are one of Brazil's leading companies in the paper for packaging and corrugated cardboard packaging segments. Through integrated production, our own forests and self-generated energy, we manufacture paper for packagings, corrugated board boxes and pine, gum rosin and turpentine resins.

However, **our business goes beyond just product manufacturing, and translates into the relentless pursuit of sowing relationships to reap prosperity.**

For eight decades we have embraced and packaged life, encompassing items that enhance people's everyday lives. Always driven by the certainty that, together, we develop the future. In the upcoming years, we want to continue planning, modeling and involving life, of people and of the planet.



Watch Irani's
80th anniversary
celebration video [here](#)



Business profile

(102-2 and 102-3) Irani Papel e Embalagem S.A.'s business consists of three segments, which operate independently, in a harmonious and integrated manner. We seek to optimize the use of pine planted forests through their multipurpose, paper recycling and business verticalization.



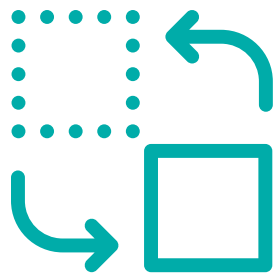
Sustainable Packaging Segment: produces corrugated cardboard boxes and sheets, both light and heavy, at two industrial units – Packaging SC Campina da Alegria and Packaging SP Indaiatuba.



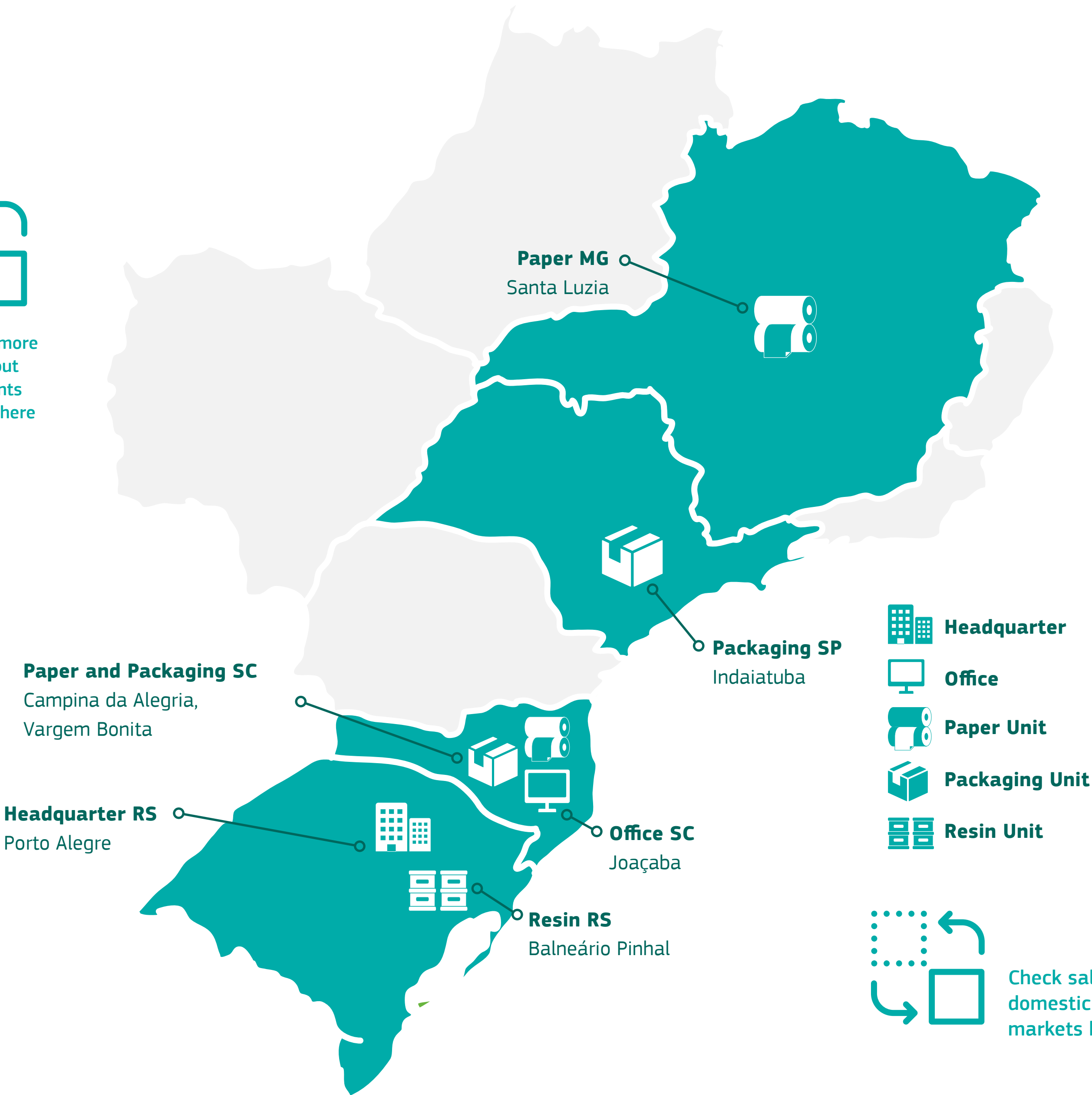
Sustainable Packaging Paper Segment: produces low and high weight Kraft paper and recycled paper for the foreign and domestic markets, most of which are transferred for conversion by the Sustainable Packaging Segment units. It has a factory with four paper machines located in Vargem Bonita – SC (Paper SC Campina da Alegria) and a factory with a paper machine in Santa Luzia - MG (Paper MG Santa Luzia).



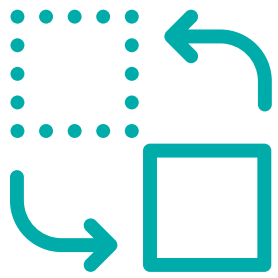
RS Forestry and Sustainable Resins Segment: sells wood, gum rosin and turpentine. The products are industrialized from forest assets owned by the Company and purchases from third parties. The Resina RS Balneário Pinhal business unit, with an industrial plant located in Balneário Pinhal in Rio Grande do Sul, uses natural resin from the pine forest to produce gum rosin and turpentine (intended mainly for the export market). The substances are used to make varnishes, paints, soaps, glues and adhesives, among other items..



Check out more details about the segments of activity here



- Headquarter**
- Office**
- Paper Unit**
- Packaging Unit**
- Resin Unit**



Check sales to the domestic and foreign markets here.

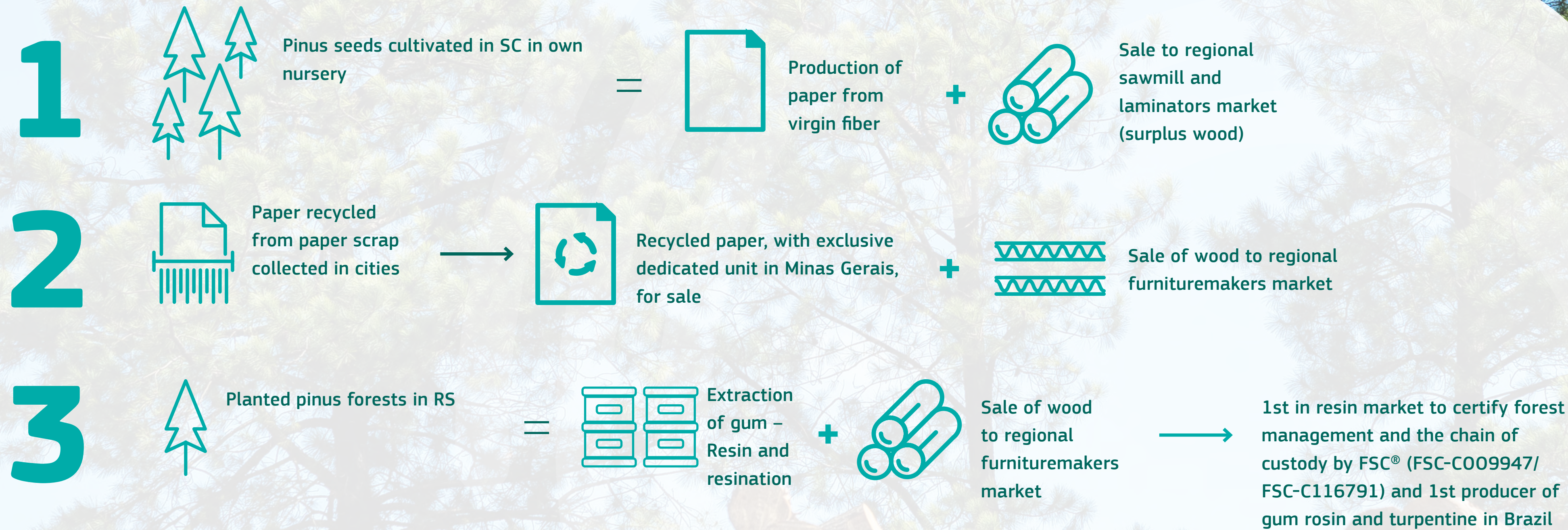
(102-45)

Subsidiaries

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

- **Habitasul Florestal S.A.:** with 5,900 hectares of land, of which 3,900 hectares are planted in pine in Rio Grande do Sul, resin supplier to the Irani Papel e Embalagem S.A. Resin unit; also supplies wood to clients in the region.
- **HGE – Geração de Energia Sustentável S.A.:** non-operational.
- **Iraflor Comércio de Madeiras Ltda.:** is responsible for the administration and commercialization of timber and forests for the parent company Irani Papel e Embalagem S.A. and for the market.
- **Irani Soluções Para E-commerce:** conducts marketing operations through digital platforms of 100% recyclable and biodegradable packaging, produced with recycled raw materials.
- **Irani Ventures Ltda.:** is a Corporate Venture Capital (CVC) vehicle for prospecting, selection, investments and acceleration of startups that have high growth potential and act in synergy with our business model.





Watch our video of the production process only portuguese.

Our Strategic **Intention**

(102-16, 102-26)

In 2021, Irani revised its Strategic Intention based on the guidelines of the Strategic Plan prepared for the 2021-2030 cycle, with the approval of the Executive Board and the Board of Directors. During the review process, the following purpose was added to the Company’s Strategic Intention:

Transforming people’s lives with sustainable attitudes and solutions

This is the purpose that inspires and drives us, every day, to build the company we want to be in 2030.



Mission

Build valuable relationships to generate prosperity.



Vision

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 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, which are essential for building valuable relationships.



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



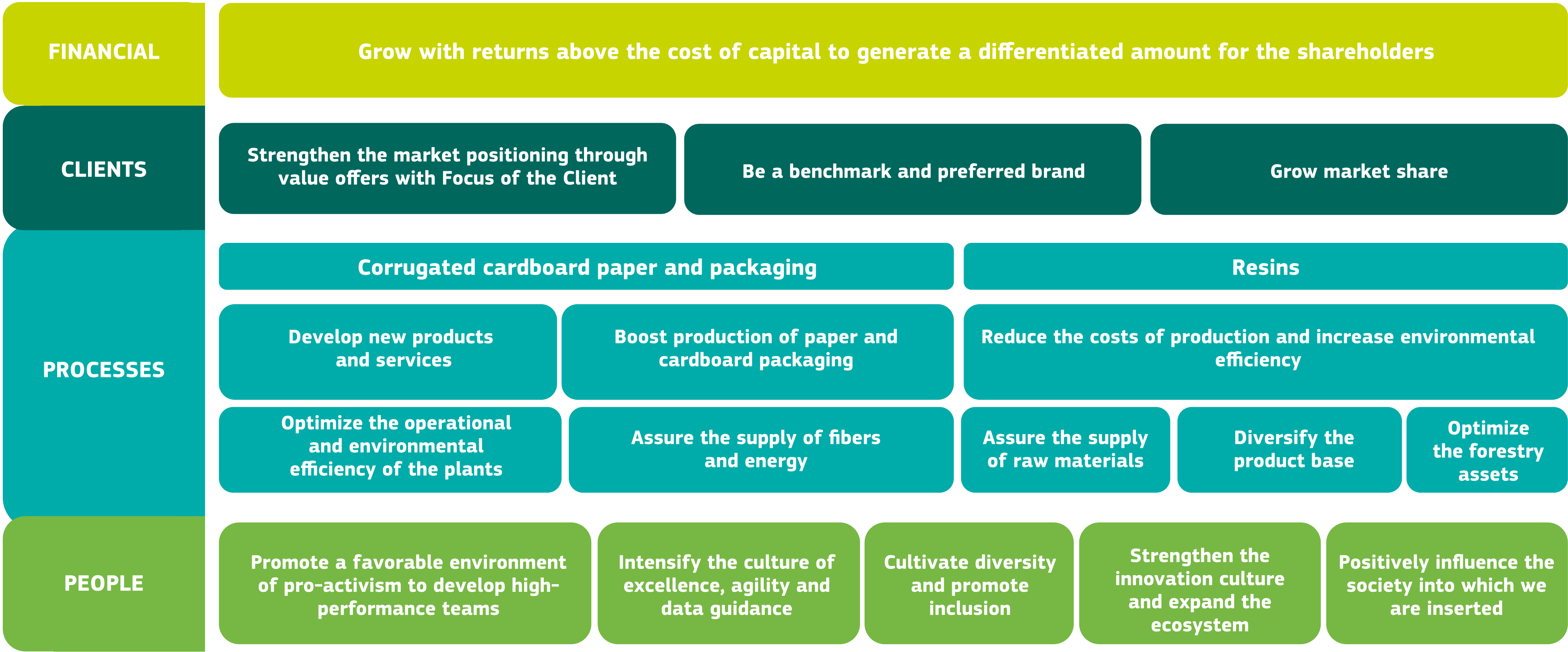
Focus of the client
We understand the challenges of our clients and work together, with agility and excellence, for the sake of prosperity.



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

transforming

We used the Balanced Scorecard (BSC) methodology to prepare our Strategic Map, aligning the strategic objectives according to four perspectives: Financial; Clients; Processes; and People and Culture.



From the Strategic Map, we list the main challenges and uncertainties for the 2021-2030 cycle in each of the perspectives, as can be seen below.

Financial Perspective

- Reduce the cost of debt (Kd) via new issues;
- Keep the leverage/rating/term of the debt/cash balance in line with the Financial Management Policy during the execution of the Gaia Platform;
- Equalize third-party capital (debt) and own capital (equity);
- Ensure the availability of funds for future growth;
- Maintain the return on invested capital above the average cost of capital;
- Maximize market value and shareholder returns.

Client Perspective

- Develop new services/products that really add value in the relationship with clients;
- Risk of impact on customers' operations due to new waves of Covid-19 infection or other viruses;
- Increase products that can replace less sustainable raw materials, such as plastic, capturing this increased demand.

Process Perspective Paper for Sustainable Packaging

- Implement the projects for the profitability and expansion of the Gaia Platform within the stipulated deadlines and budgets;
- Dependence on only one machine for the production of low-weight papers;
- Monitor the entry of better quality recycled and white paper in the low-weight segment, implying increased market competition;
- Monitor the migration of players from the printing and writing market to the paper for packaging market, which may lead to increase in supply in the market.

Perspective Processes Sustainable Packaging

- Sell the additional volume provided by Gaia II to the Packaging SC unit without reducing the profitability of the business;
- Maintaining profitability amid a challenging macroeconomic scenario for the coming years;
- Increase market consolidation, generating greater competitiveness;
- Monitor the investments to expand competitor capacities, boosting the supply of products in the market.

Processes Perspective

Sustainable Resins

- Reduce costs and unproductive times related to equipment obsolescence and outdated industrial technology;
- Develop a loyal supply chain and support the formalization of the supply chain players;
- Increase the intelligence about the gum rosin and turpentine market and make more assertive price and demand forecasts;
- Expand the options for the flow of production through various ports and logistical models.

People and Culture Perspective

- Compete for talents with less hierarchical, more innovative, competitive and quicker companies in people management practices;
- Train women to assume roles similar to those of men in the operation and leadership of the teams, in view of the fact that, as an organization with an industry profile, the workforce is predominantly male;
- Consolidate the culture of innovation and broaden the implementation of new ideas due to the need to raise the level of conceptual and strategic understanding about innovation - and to measure the results through the execution of internal ideas;
- Increase investments in RD&I between the areas, since there is no innovation investment budget determined by the Company;
- Expand the performance with innovative ecosystems, exploring connections and investments through Corporate Venture Capital in this field to strengthen the open innovation strategy.

Our strategic objectives feature annual targets, which extend until the end of the Strategic Planning cycle.
For the period ended in 2021, we achieved the following results:

**FINANCIAL PERSPECTIVE
IMPACTED CAPITAL:**



Objective	Indicator	2021 results	Target met?
Grow with a return above the cost of capital to generate differentiated value to shareholders	ROIC	24.5%	Yes
	TSR	34.6%	No
	ROE	29.5%	Yes
	ROL	56.0%	Yes
	EBITDA margin	31.2%	Yes
	Corporate Rating (S&P, Fitch, Moody´s)	brAA	Yes

**CLIENT PERSPECTIVE
IMPACTED CAPITAL:**



Objective	Indicator	2021 results	Target met?
Strengthen market position through Focus of the Client value offerings.	% of direct sales packaging	53.4%	No
	Revenue from products for new uses and new services	0.29%	Yes
Being a benchmark and preferred brand	Client Satisfaction	70%	Yes
To raise market share through organic growth and associations.	Paper market share (%)	5.3%	Yes
	Packaging market share (%)	3.8%	Yes

**PROCESSES PERSPECTIVE
PAPER AND PACKAGING – IMPACTED CAPITAL:**



Objective	Indicator	2021 results	Target met?
Ensure the supply of fiber and energy	% of wood from own areas and partnerships	93%	Yes
	Pulp Production - (Thousand tons/year)	89	Yes
	% own shavings	8.0%	Yes
	% own energy production	50.7 %	Yes
Optimize the operational and environmental efficiency of the plants	Packaging productivity per capita (m²/employee)	506.0	Yes
	Paper productivity per capita (Ton/employee)	334.8	Yes
	Water use/Ton of finished product	10.21	Yes
	Generation of waste/Ton of finished product	0.50	Yes
	Balance of GHG emissions and removals (Ton of CO2eq)	-41.596	Yes
	Non-hazardous waste sent to landfill (Ton)	24,185	Yes
	Environmental legal requirements met	85.3%	Yes
Increase the production of paper and packaging from expansion projects and the application of technology	Increase in Annual Packaging Production (Thousand Tons)	158	Yes
	Increase in Annual Paper Production (Thousand Tons)	297	Yes
New products and services	Revenue from products for new uses and new services	0.29%	Yes

PROCESSES PERSPECTIVE | RESIN
IMPACTED CAPITAL:



Objective	Indicator	2021 results	Target met?
Reduce production costs and increase productivity and environmental efficiency	Production of gum rosin and turpentine (Ton/shift)	36.5	Yes
	Ton finished product/Ton raw material	82.3%	Yes
	Environmental legal requirements met	79.7%	Yes
Ensure the supply of raw materials	Percentage of own gum	20.0%	Yes
	Percentage of loyal suppliers	84%	Yes
Optimize the forest asset	Increase Average Annual Increase (IMA) wood (m ³ / ha*year)	21.3	Yes
	Resin/hectare production increase	2.1	Yes
Diversify product base	% billing new products	0%	N/A, effective target starts in 2025

PERSPECTIVE PEOPLE AND CULTURE
IMPACTED CAPITAL:



Objective	Indicator	2021 results	Target met?
Promote a favorable environment for the development of high-performance teams	Climate Survey	87	Yes
Intensify culture of excellence, agility and data orientation	MEG Assessment (FNQ)	670.75	Yes
	Maturity index in Industry 4.0 ACATECH	1	Yes
Cultivate diversity and promote inclusion	Exame diversity maturity assessment	Starts in 2022	N/A
Strengthen the culture of innovation and expand the ecosystem	PNI innovation index	4	Yes
Positively impact the ecosystem in which we are inserted	Corporate Sustainability Index (ISE) B3	55.36	No

We finalized the Strategy by showing the Irani that we want to be in 2030



Growing with through
a differentiated
generation of value
for shareholders



Optimized
capital
structure



Self-sufficient in
renewable energy
generation



Among the best
companies to
work for in Brazil



Market
benchmark
company

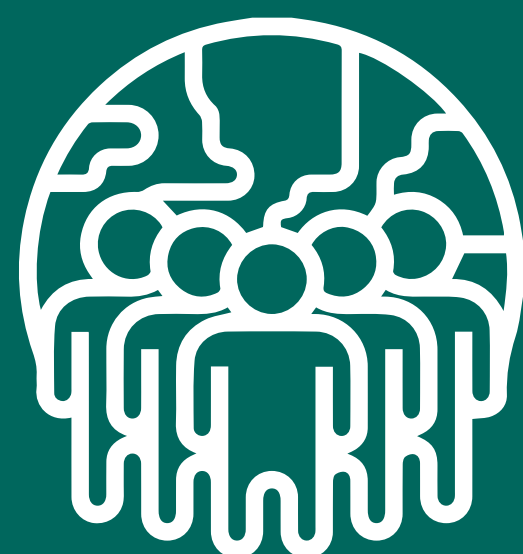


Innovative,
diversified and
inclusive

This report contains the material topics identified by the stakeholders to guide our sustainability strategies, which, when translated into actions, generate value over time. The topics are aligned with our Strategic Planning, contributing to the achievement of our mission to “Generate Value Relationships” in its essence for the higher purpose of “Transforming people’s lives with sustainable attitudes and solutions.” We present the results in a series of management practices, such as:

- Entry into B3’s Novo Mercado, which led to the improvement of the Company’s governance and generated even more reliability for shareholders and investors;
- Focus of the Client Program to promote the prosperity and innovation of our customers;
- Climate research to improve personnel management and generate personal and professional development;
- Socio-environmental projects in the communities surrounding our units, promoting sustainable development and obtaining recognition through awards conferred by governments and society;
- Development of the Suppliers Irani and Urban Forest programs, for the development of partnerships with suppliers and generation of value in the production chain.

generate value



**We added
to society**

**R\$ 962
million,**

of which:

**R\$ 338
million**

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

**R\$ 227
million**

was reinvested
in our businesses

**R\$ 206
million**

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

**R\$ 120
million**

to other groups,
distributed among
service providers
and other sectors

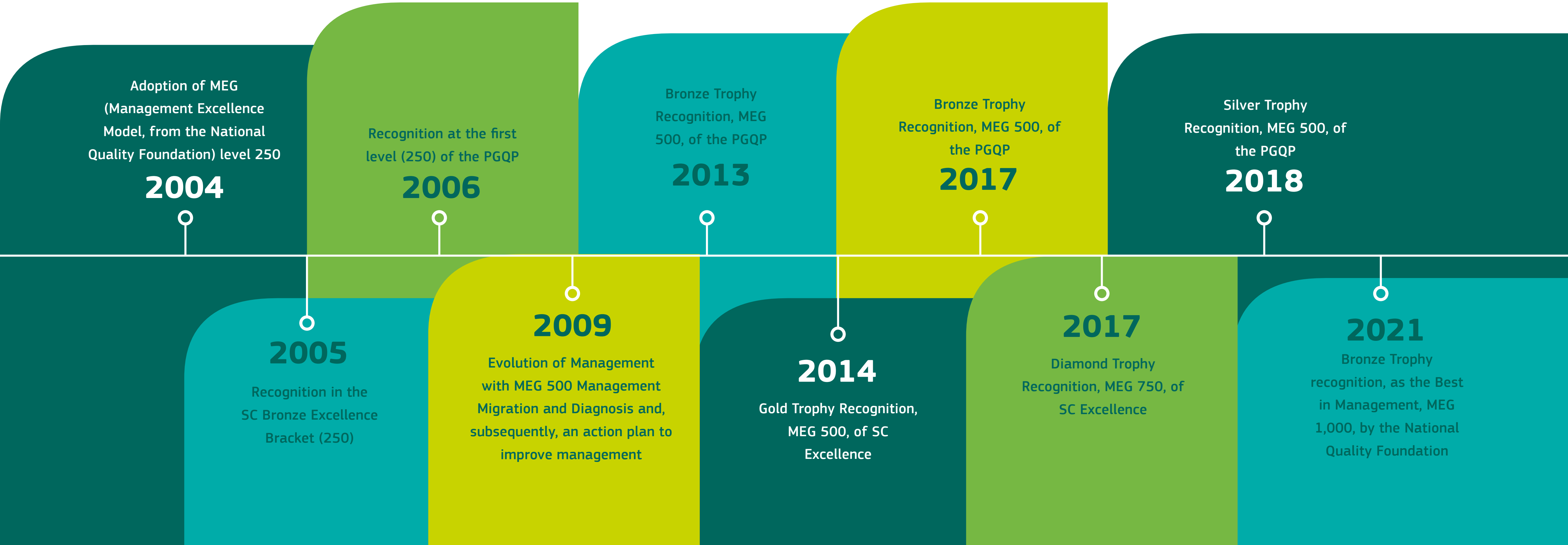
**R\$ 71
million**

to shareholders,
distributed in the
form of dividends or
interest on equity (IoE)

Search for excellence in management

The concern with the pursuit of excellence has always guided Irani’s activities. Among the milestones of our trajectory are the implementation of quality and environmental certifications.

Learn more about other initiatives adopted over time, as well as awards and recognitions achieved by the Company:



Capital **main results**



Social and Relationship

We are the only company in the packaging segment to be part of the **IGPTWB3 portfolio**.

Anefac, together with Fipecafi, certified Irani as the winner of the **25th Transparency Trophy**. The Company is among the most transparent in Brazil for the quality of its financial statements in 2020.

Adherence to the **Conscious Capitalism Institute**.

First participation in the Humanized Companies survey, reaching **“Rating A”**.

First **Irani Investor Day**.

We registered and handled **61** submissions regarding the Code of Ethics issues, of which three were doubts related to compliance, **44** were behavioral, **13** were internal processes, and one was related to other matters.

Creation of the **Internal Controls Area**, to ensure the efficiency of information, minimize risks and protect assets, in addition to ensuring the accuracy of records, promoting operational efficiency and encouraging adherence to policies, rules, regulations and laws.

First Recognition Initiative in **Good Sustainability Practices** of Suppliers and Service Providers.

We led the Corrente do Bem program, with more than **R\$ 590,000** donated to help fight the pandemic in 2021.

We have earmarked more than **R\$ 2.5 million** for projects in the fields of culture, environmental education and sports through federal tax incentive laws, in addition to contributions to Childhood and Adolescence Funds and the Elderly Fund.

More than **400 hours** of volunteer work promoted by the six Volunteer Groups.

We reached **70%** of the NPS General Index in the Customer Satisfaction Survey, with **52%** of clients rating us with the maximum score.



Finance

Net Operating Revenue **R\$ 1,605,834 thousand**, **56.0%** higher than in 2020.

Adjusted EBITDA **R\$ 493,921 thousand**, **118.7%** higher than in 2020.

Net Debt/Adjusted EBITDA – reduction from 1.07 in 2020 to **0.78** in 2021.

Net Income **R\$ 285,313 thousand**, **207.6%** higher than in 2020.

24.5% ROIC (Return on Invested Capital).

Buyback Program: the Company repurchased **2,790,000** shares, which represents a total of 33.95%.



Human

We launched the **Speak with Sérgio** initiative, promoting the interaction of employees with the Chief Executive Officer, totaling nine events and 330 participants.

More than **37 hours** of training per employee, and for women, the average was more than 44 hours.

R\$ 237 thousand in education subsidies.

R\$ 1,240 thousand invested in training and development.

More than **R\$ 37 million** invested in employee benefits.

We reached **87%** of employee satisfaction through the GPTW Survey, being recognized as one of the best industrial companies to work for in Brazil.

64% of the Supera (Overcome) Program indicators at the surpass level.

We adhere to the **Citizen Company program**, which allows the expansion of maternity and paternity leave beyond the period already guaranteed.

We have become signatories to the **LGBTI+ Business and Rights Forum**, promoting efforts to make Irani's 10 Commitments to LGBTI+ Rights a reality, providing benefits to society.

89.69 accident severity rate.

11.07 accident with time off rate.

780 hours of training in Regulatory Standards.

Investments of **R\$ 2.3 million** in improvements for Health and Safety.



Intellectual

48 innovation projects and initiatives in the four Technology Platforms, of which **21** are in the development phase, **11** in the research phase, nine in implementation and seven in the idea creation format.

Production of the first **antiviral, antibacterial and antifungal** paper in Brazil.

We streamline the implementation of external partnerships for hiring startups through the **Fast-Track** process.

Second edition of **Irani Labs**.

Structuring **Irani Ventures** for investments in startups.

We held **Irani Ventures' first Demoday** with startups selected by the accelerator and vehicle manager, Grow+, obtaining the participation of 40 projects, of which six were selected.

236 ideas submitted to the Ideas Program, 76 implemented.

Recognition of **92** ideas with financial contributions, totaling **R\$ 27 thousand**.

Creation of **new robots** with task automation (chatbot and virtual assistants), as well as expansion of the scope of action of existing robots.

Digitizing manual processes via Qualitor.



Manufacturing

Launch of the **Embalei**, our online store for recycled packaging.

Maintenance of **33,899.48 hectares** of land, of which **82.4%** are in Santa Catarina and **17.6%** in Rio Grande do Sul.

1.4% increase in the packaging sales volume.

7% reduction in paper sales volume.

11,4% increase in gum rosin and turpentine sales volume.

65 productivity records.

More than **50%** of self-generated energy.

64.26% renewable energy consumption.

R\$ 308,580 thousand Invested in the Gaia Platform, as well as the launch of the second cycle.

100% of the business certified ISO 9001, ISO 14064 and FSC® (FSC-C009947/ FSC-C020437/ FSC-C116791).

100% of the Packaging Business ISO 14001 certified.



Natural

More than **R\$ 10 million** invested in environmental management initiatives and processes.

More than **239 hours** dedicated to environmental education, benefiting more than 3,000 people.

42% of the territory destined for nature conservation.

7% reduction in the specific use of raw water.

7% increase in raw effluent generation.

Collection of more than **R\$ 1.7 million** in the sale of carbon credits.

98% of raw materials from renewable sources.

Increase to **9.45%** of waste sent to the landfill due to the quality and quantity of impurities present in the paper scrap resulting from the pandemic circumstances.

The Company is a signatory to the SC and RS **SDGs**.

Our ESG commitments

In line with the UN global agenda for sustainable development, we have six ESG commitments with a view to achieving them by 2030. These commitments are included in our Strategy and challenge our teams to seek innovative solutions for the business and also the optimization of operational processes.



1



OCCUPATIONAL SAFETY

Zero lost-time accidents

2



DIVERSITY

40% of women in the Company workforce

50% of women in management

3



WATER

Reduce specific use of water by **30%**

4



ENERGY

100% of renewable energy in all businesses by 2025

Self-sufficiency in renewable energy by 2025

5



WASTE

Zero disposal of non-hazardous waste in landfills

6



CLIMATE CHANGE

Increase the difference between emissions and removal of GHGs by **20%**

search for sustainable solutions

Our capitals

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



Social and Relationship

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



Financial

These are our economic-financial management practices.



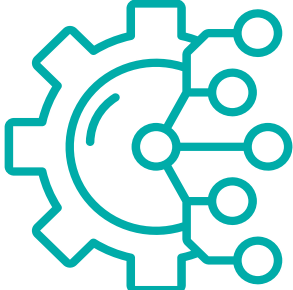
Human

Consisting of our employees and their skills, enhanced by structuring programs for hiring, integration, training, development, motivation, care and recognition of people.



Intellectual

Composed of the reputation of the Irani brand and image, built based on the Valid Companies focus of the client concept, generating perceived value through the ability to develop new innovative products and services.



Manufacturing

It is our physical and biological structures, distributed across four Brazilian states, that are focused on delivering quality products manufactured with rational use of natural resources.



Natural

It is how we take care of 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**

Governance

Ethics and integrity

Stakeholder relations



Governance



GRI 103-1, 103-2, 103-3, 102-18, 102-19, 102-20, 102-21, 102-22, 102- 23, 102-24, 102-25, 102-26, 102-27, 102-28, 102-29, 102-30, 102-31, 102-32, 102-33, 102- 34, 102-35, 102-37, 102-38, 102-39
ISE



RANI3

RANI
B3 LISTED NM

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
- IGPTWB3** Index GPTW B3



Our governance structure is based on transparency, social and environmental responsibility, ethics, courage, cordiality, innovation and pioneering. We are driven by the search for best practices in relations with our shareholders and other stakeholders.

(102-18)

Corporate Structure

On December 31, 2021, our share capital was R\$ 566,894,847.81, divided into 256,720,235 shares, of which 100% were common shares (RANI3. Share price at R\$6.90 on 31.12.2021).

As at December 31

Shareholders	Shares common	%	Total shares	%
Irani Participações S.A.	98,723,887	38.46%	98,723,887	38.46%
Habitasul Des. Imobiliários S.A.	26,852,260	10.46%	26,852,260	10.46%
Cia Habitasul de Participações	21,077,100	8.21%	21,077,100	8.21%
Treasury shares	5,166,116	2.01%	5,166,116	2.01%
Shares owned by the administrators	1,677,507	0.65%	1,677,507	0.65%
Free float shares	103,223,365	40.21%	103,223,365	40.21%
Total shares	256,720,235	100%	256,720,235	100%

(102-18.A and 102-18.B)

Governance Structure



Segment:

The Company joined the Novo Mercado segment in 2020. It has been listed on the B3 (formerly Bovespa) since 1977.



(102-25)

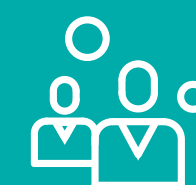
Tag along:

100% common shares.



(102-25) Dividend distribution:

25% of net income adjusted according to Dividend Policy and Payment of Interest on Equity. The Company will distribute additional dividends, based on the annual Financial Statements, in the amount of 50% of the annual net income for the year, calculated in accordance with articles 22 to 29 of the Bylaws. Dividends and/or Interest on Equity already distributed are deducted, provided that, at the end of that year, the indicator of operating leverage Net Debt/EBITDA has an index equal to or less than 2.5 times.



(102-22 and 102-24)

Board of Directors:

It is composed of five members elected by the General Meeting, with a unified term of two years, reelection being admitted, 40% being independent members, with representation of the shareholders (controlling block). They perform a non-executive function.



(102-23) Executive Board:

five members elected by the Board of Directors. The positions of CEO and Chairman of the Board may not be accumulated by a single person. They serve a unified two-year term.



Annual calendar

of events: annual disclosure since 2011.

(102-18, 102-19, 102-20, 102-22, 102-29, 102-30, 102-31)

General Shareholders Meeting

Respecting the Bylaws and the Corporations Law, they are called by ordinary or extraordinary convocation, at Irani’s headquarters, in Porto Alegre (RS), with the following attributions:

Deliberative function: approves management’s accounts and decides on the election of directors and the allocation of results and dividends.

Ordinary: examines, discusses and votes on the financial statements, the allocation of of results for the previous year, the distribution of dividends and the election of the members of the Board of Directors. It occurs in the first four months of each year.

Extraordinary: convened whenever necessary to deliberate on relevant topics, respecting the company’s Bylaws.

Board of Directors

Discusses monthly strategic topics, such as Corporate Policies, market relations, investments and risks inherent to our businesses. The Board of Directors is responsible for the regular evaluation of our management practices, recognized and widely disclosed in the Financial Statements (quarterly and annually). Its attributions are laid out in article 12 of the Bylaws, among them: deliberative function, election of the Executive Board, supervision of the Executive Board’s management, attribution of the Executive Board’s remuneration, summoning of general meetings.

Executive Board

Responsible for providing guidelines and validating the Company’s strategic intention, policies, goals, and other economic and socio-environmental topics. With the support of its teams, it implements decisions arising from projects, budget reviews, prioritization of needs and implementation of control and organizational modifications, respecting the attributions set forth in article 14 of the Bylaws, including: executive function, representation of the Company before the market and stakeholders and responsibility for the financial statements



Audit Committee (linked to the Executive Board)

Non-statutory advisory body linked to the Board of Directors, reporting directly to it through its coordinator, at least quarterly. Among its duties are: to supervise the quality and integrity of financial reports and the process of preparing the financial statements, monitor the quality and integrity of the information (as well as the measurements disclosed), evaluate the monitoring, by the Company, of the laws, standards and regulations applicable to it and the involvement of the Board of Directors.

People Committee (linked to the Executive Board)

A non-statutory body linked to the Board of Directors, which reports directly to it through its coordinator, at least quarterly. It has advisory attributions in the deliberations regarding good remuneration policies, people management and the development of competencies of our employees and top management.

Strategy Committee (linked to the Executive Board)

Advisory body linked to the Board of Directors, reporting directly to it through its coordinator, at least quarterly. Among its attributions are: stimulating strategic thinking within the Board of Directors, advising the Board of Directors in the process of defining the Company's strategic guidelines and monitoring the Company's strategic projects, supporting management in execution, and reporting material facts to the Board of Directors.

**People
Management
Committee
(linked to the
Executive
Board)**

Composed by the Joint Board, managers and coordinators, its main attributions are strategic alignment, monitoring results, initiatives and actions to improve the organizational climate, in addition to contributing to the evaluation of the policies and practices of people management, goals and indicators. It meets every six months.

(102-18 b.)

**Innovation
Committee
(linked to the
Executive Board)**

It consists of a strategic group that reports to the Board of Directors, and is formed by the Board, business managers, and teams involved in the planning of RD&I projects. It meets every six months. Its role is to be a driver of results and our innovation strategy.

(102-18 b.)

**Sustainability
Committee
(linked to the
Executive Board)**

Composed of the executive board, business and corporate managers, it is responsible for ensuring the evolution and the strategic alignment of the topic within the Company, providing guidance and follow-up of investments, projects and initiatives. It meets every six months.

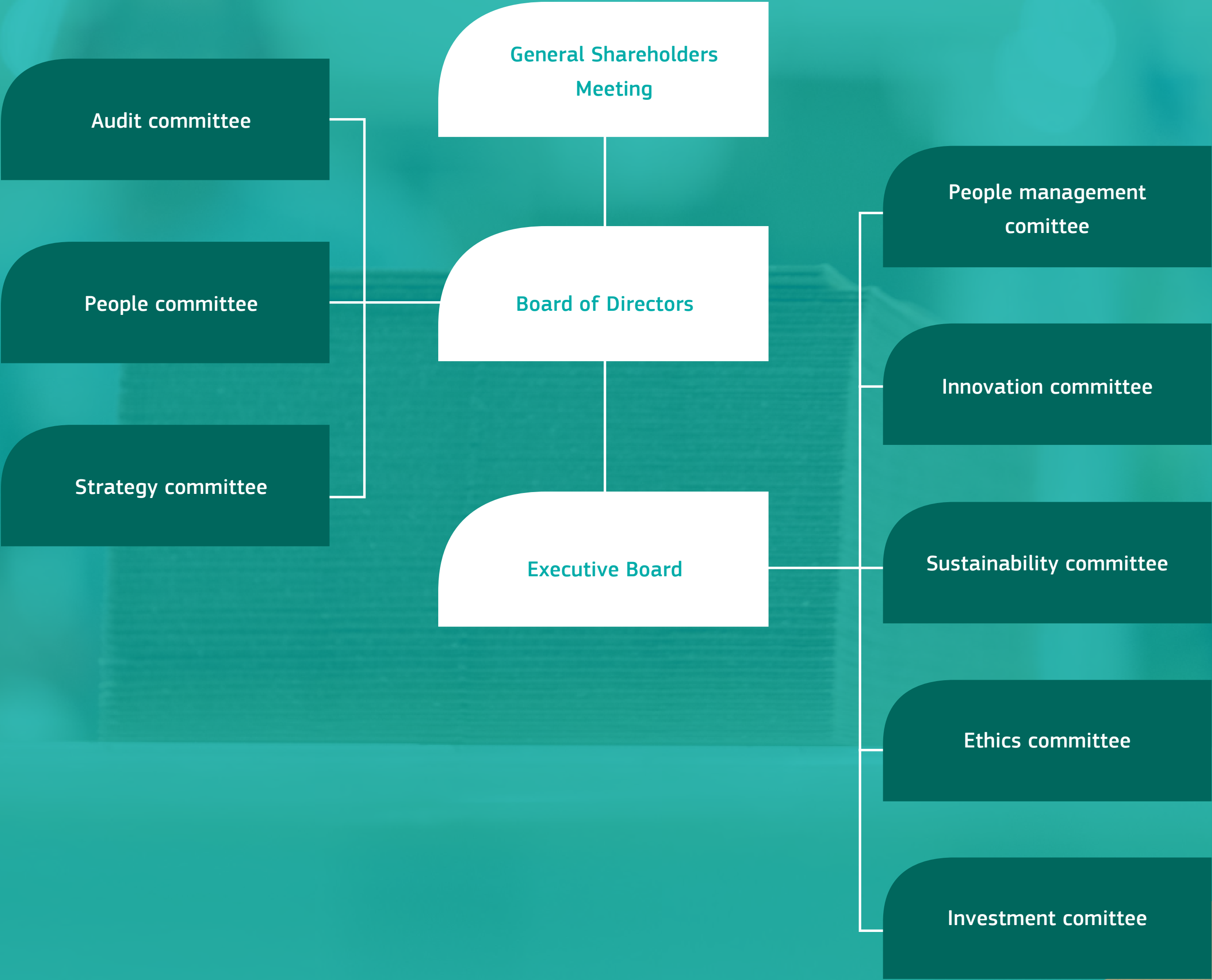
**Ethics
Committee
(linked to the
Executive
Board)**

The Committee meets ordinarily every two months, and extraordinarily at any time, and has a deliberative function. Among its attributions are: to watch over the fulfillment of the company's code of ethics and values, identify situations that are contrary to the provisions of the Code of Ethical Conduct and promote the Company's values.

**Investment
Committee
(linked to the
Executive
Board)**

Composed of the Collegiate Board, managers of strategic projects, supplies, financial and planning and management, its main attributions are the approval and monitoring of the project portfolio, evaluation and authorization of investments, risk management of projects and evaluation of their execution, ensuring the proper use of human and financial resources. It meets monthly.

(102-18, 102-19, 102-20, 102-22, 102-29, 102-30, 102-31)



COMPOSITION OF THE BOARD OF DIRECTORS



PÉRICLES PEREIRA DRUCK
Chairman



EURITO DE FREITAS DRUCK
Vice-Chairman



PAULO SÉRGIO VIANA MALLMANN
Member



PAULO ISERHARD
Independent Member



ROBERTO FALDINI
Independent Member

COMPOSITION OF THE EXECUTIVE BOARD



SÉRGIO LUIZ COTRIM RIBAS
Chief Executive Officer



ODIVAN CARLOS CARGNIN
Administration, Finance and IR Officer



FABIANO ALVES DE OLIVEIRA
People, Strategy and Management Officer



LINDOMAR LIMA DE SOUZA
Packaging Business Officer



HENRIQUE ZUGMAN
Paper and Forestry Businesses Officer

(102-13, 102-21a, 102-27)
With economic and socio-environmental knowledge, according to their areas of experience, the members of the Board of Directors, Executive Board, and Committees improve by constantly participating in outside events, class associations and representative entities.



(102-35, 102-36)

Compensation of the Board of Directors and the Board of Executive Officers

Each compensation element plays a short- and long-term role. We seek to align the interests of the managers and the shareholders by stipulating guidelines to be observed regarding the remuneration of the members of the Board of Directors and the Executive Board.

On the remuneration of the members of the Board of Executive Officers

The fixed compensation of the members of the Board of Executive Officers will be defined based on (i) the experience of the elected member and (ii) a market survey to be conducted annually.

The members of the Board of Executive Officers will receive short-term variable compensation (quarterly bonus). The short-term variable remuneration, which may amount to up to 12 fixed monthly remuneration, will be paid quarterly and is pegged to the Company's economic and financial performance indicators, such as: net income, EBITDA, free cash flow, ROE, ROIC, in addition to individual performance, among others, pursuant to annual approval by the Board of Directors.

On the remuneration of the members of the Board of Directors

The Chairman of the Board of Directors shall be entitled to an annual remuneration, paid in the same terms, at least 10% higher than that of the Company's Chief Executive Officer, which includes fixed remuneration, a short- and long-term variable, as well as the same benefits attributed to the Chief Executive Officer.

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

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

The Chairman and the Vice-Chairman of the Board of Directors will receive short-term variable compensation (quarterly bonus). The short-term variable remuneration, which may be equivalent to up to 12 monthly fixed remunerations, will be paid quarterly and will be linked to the Company's economic and financial performance indicators, such as: net income, EBITDA, free cash flow, ROE, ROIC, in addition to individual performance, among others, as approved annually by the Board of Directors.

(102-35, 102-36)

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 in Committees and/or other advisory bodies of the Company, based on their experience and time of dedication. Members of the Advisory Committees shall not receive variable compensation or benefits.



LEARN MORE

(102-36) 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, [clicking here](#)

Supera Program

The Supera 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 the culture of results and self-development.

Applicable to the Board of Directors and all Irani employees, the results program establishes annual variable compensation ranges based on the targets that have been met. The competency program monitors the development of employees throughout the year. These assessments cover items that capture a broad view of sustainability linked to the culture excellence indicator.

Upside Program

All members of the Board of Executive Officers and Board of All members of the Executive Board and the Board of Directors may have long-term variable remuneration (upside and/or profit-sharing as foreseen in the company's bylaws). Such variable remuneration is based on the theoretical value of the stock shares in the year of their implementation and in the planned future, which assigns remuneration to each participant based on a theoretical quantity of shares, and will be paid after observing a blackout period. Its objective is to bolster the retention of executives and directors and align interests with those of shareholders in creating value for the business in a sustainable and long-term manner. Long-term variable compensation will be equivalent to up to 80% of the annual compensation, including fixed and variable compensation, and will be linked to the variation in the value of the Company's shares.

The Reference Form contains information about conflicts of interest, cross-participation in management bodies, cross-shareholding control with suppliers and other stakeholders, the existence of a majority shareholder and disclosure of information about stakeholders. We also make information available regarding significant shareholding interests (greater than 5%) down to the individual level. There is no shareholders' agreement currently in force.

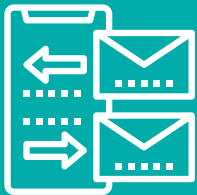


Communication with the market

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.

Sustainability Policy

To generate value for our stakeholders, we have a formalized Sustainability Policy, reviewed and approved by the Executive Board. We commit to:



1

Ensuring customer satisfaction by offering products and services with a focus of the client philosophy.

2

Using resources sustainably, preserving the environment, reducing environmental impacts and promoting the economy and low carbon.

3

Promoting the health and wellness of employees through the prevention of occupational health-related injuries and disease.

4

Ensuring respect for diversity, inclusion of people with disabilities and the absence of child, forced or slave-like labor.

5

Promoting social investments and encouraging volunteer activities through initiatives in the fields of education, sport, citizenship, environmental preservation, culture and income generation in the neighboring communities.

6

Ensuring raw materials supply in accordance with best forest management practices, in a sustainable manner and with undivided respect for the environment.

7

Aligning our actions with the global agenda proposed by the United Nations (UN) Sustainable Development Goals (SDGs) and voluntary commitments.

8

Ensuring adequate and transparent governance practices and results that promote sustainable business growth and profitability.

9

Ensuring an integrated management system that assures continuous improvement and compliance with applicable legal requirements and other requisites.

10

Adopting measures and strategies to mitigate and adapt to climate change through projects such as Clean Development Mechanisms and the reduction of Greenhouse Gas Emissions.

Ethics and integrity



GRI 103-1, 103-2, 103-3, 102-16 and 102-17
ISE

(102-17 and 102-25) Integrity is one of Irani’s inseparable values. In consonance with this value, we launched our Integrity Program in 2017. Composed of eight policies and the Code of Ethical Conduct, it buttresses the need for compliance with the Company’s standards, applicable laws and regulations. It also consolidates our ethical behavior and relationship practices and guidelines, covering all hierarchical levels.

The Ethics Committee is composed of six (6) members, of which five (5) are fixed seats and one (1) rotating.



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

The fixed seats are intended for (i) the Chief Executive Officer, (ii) the Director of Personnel, Strategy and Management, (iii) the People 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. The Internal Audit Department is in charge of the communication analysis process but does not have voting rights in the cases under deliberation. At the discretion of the Coordinator of the Ethics Committee and/or the Chief Executive Officer, other persons may be called in to contribute to the discussion and decision-making.

The Ethics Committee’s roles are to oversee, promote and disclose the conduct presented in the Code of Ethical Conduct, in addition to training and guiding the managers and employees.



(102-17.a.II)) We also make communication channels available for our relationship audiences to send information and requests for clarification of doubts and concerns regarding ethical issues related to the Company. These are:

- **On our website** www.canaldeetica.com.br/irani
- **On our hotline: 0800 300 4499, 24 hours a day, 7 days a week.**

The communications received are classified by the company hired to manage the Ethics Channel, which categorizes them according to their type, as shown in the following table:

In the last year, we received 61 communications, of which three were related to doubts about compliance with the Code, 44 were about behavioral issues, 13 related to internal processes and one regarding to other matters. Of this total, 15 persons revealed their identities and 43 remained anonymous. Retaliation against complainants is banned and the content is treated in a secret and confidential manner. All inquiries directed to the Committee were answered and those whose authors identified themselves received appropriate responses. In 2021, we continued to publish our integrity messages, which aim to address the topics of the Integrity Program and the Code of Ethical Conduct in a simple and objective manner. In addition, the Ethics Committee defined the

implementation of an external ethics channel, which will be implemented in 2022, designed to further improve the governance of the ethics channel. In 2022, an external ethics channel will be set up.

Compliance

In order to make the precautionary principle viable, we have adopted all economically feasible measures aligned with our strategic intention and with the financial and sustainability policies. The actions are approved by the Board of Directors and the Executive Board.

We also are guided by ABNT ISO 31000:2018 and the Committee of Sponsoring Organizations of the

Treadway Commission - Enterprise Risk Management Framework (COSO-ERM) to define our risk management. It comprises the stages of identification, analysis, evaluation, treatment, monitoring and communication.

In 2021, we revised our Risk Management Policy, including the responsibilities of internal controls and the hazard probability matrix.

1. Identification

Our leaders support process analysis to identify gaps in internal controls that may lead to risk factors for our businesses.

Classification	Communication subject
Behavioral and work environment	Related to situations that compromise or may compromise compliance with our Values and Code of Ethical Conduct. These manifestations will be followed up and processed by the People Development area. Accusations involving Managers will be handled by the Officer of the business area and/or office involved, together with the People Development area. Expressions involving executive officers will be handled by the Chief Executive Officer. Manifestations involving the Chief Executive Officer and members of the Senior Management, with the exception of executive officers, will be handled by the Chairman of the Board of Directors.
Consultations	Queries related to compliance with the Code of Ethical Conduct, Company Rules or other clarifications about actions or decisions that may conflict with the Company’s values. These doubts will be clarified by the Ethics Committee.
Business Integrity	Denunciations of situations related to fraud, non-compliance with Laws and Company Rules. These concerns will be investigated by the Internal Audit area.
Use and/or misappropriation of assets	Manifestations of situations related to theft, robbery or deviation of materials. These allegations will be investigated by the Internal Audit area.
Others	Others related to situations that do not fall under any of the previous possibilities. They will be analyzed by the coordinator of the Ethics Committee and addressed for handling by the People Development area, Internal Audit, the Ethics Committee and/or another area of the Company, as the case may be.

(102-15) The main risks identified in our businesses are:

Risk	Definition	Forms of mitigation
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 the long-term strategic plan, evaluating different scenarios, permitting effective responses to the event. The increase in competition is also monitored based on a market scenario analysis. We observe the growth capacity of the competitors and the current capacity of the sector in Brazil and in the world to make decisions during the course of the Strategic Planning process.
Finance	Risks associated with the Company's financial management. These are the Risks whose materialization results in financial losses to the Company, subdivided into three categories: (I) Market Risks: arise from the possibility of losses that may be caused by changes in the behavior of interest rates, exchange rates, stock prices and the prices of commodities and/ or other products acquired and/or sold by the Company; (II) Credit Risks: defined as the possibility of losses resulting from the uncertainty as to the receipt of amounts agreed upon with customers of products sold on credit by the Company; and (III) Liquidity Risks: possibility of losses resulting from the inability to carry out a transaction in a reasonable time and without significant loss of value. Or the possibility of lack of resources to honor the commitments assumed due to the mismatch between financial assets and liabilities.	Monitoring of securities pending receipt.
Compliance	Risks of legal or regulatory sanctions, financial or reputational losses that the Company may suffer as a result of failure to comply with the legislation. It considers both the laws applicable to the sector in which it operates and the general ones (environmental, labor, civil, and tax/fiscal), as well as the regulations applicable to it, internal regulations, Code of Ethical Conduct and/or internal Policies.	We use software to monitor the applicable legal environmental requirements, following up on the validity periods of the environmental licenses granted by the appropriate agencies, among other mechanisms. We also apply and disseminate policies aimed at reusing solid waste and reducing effluent generation.
Operational	Resulting from inconsistency and inadequate management of people, machinery and equipment, information systems, processing and control of operations, as well as failures in the management of resources and internal controls. It also contemplates frauds that make the exercise of the Company's activities improper, or risks related to the Company's infrastructure that affect operational efficiency and the effective and efficient use of resources.	We monitor impacts such as loss of productivity and damage to assets through controls that pay attention to the condition of equipment and facilities, maintaining preventive and predictive maintenance and performing emergency management against fire in industrial units and forests. For client relationships and to meet their needs, we instituted a process involving careful analysis of finished product quality and Client-Focused after-sales technical follow-ups. We have improved how we relate to people, instituting controls to anticipate and assure the health and safety of our employees in the execution of their activities, constantly evaluating their effectiveness.






2. Analysis

We classify the gaps identified in the previous stage, defining the steps needed for the assessment.




























3. Evaluation

(102-15, 102-29, 102-30)

Using a tool that details the risk factors, we classify their impacts on the businesses if they materialize.

Impact Type	Description	Capital
Operational	Production shutdown	
Occupational	Harm to the health and safety of direct employees or outsourced workers	
Environmental	Possible damage to the environment	
Image/Reputation	Compromising the image of Irani with the stakeholders	
Finance	Loss of monetary or financial advantage opportunities	

Next, we check internal history and controls to measure the likelihood of risk factors actually occurring. We also evaluate the applicable controls and requirements, by type (preventive, detective or reactive), response required (monitoring, mitigation or tolerance) and frequency of occurrence. Finally, we compile an opinion of recommendations and qualitative weightings of the risk manager’s analysis. In all, there are 69 risks assessed. In the following table, we present those that most impact our businesses:

Main Risks	Impacted Capital
Increase in interest rates	 
Non-compliance with financing contract clauses (covenants)	 
Outbreaks, Epidemics and Pandemics	   
Environmental liabilities	   
LGPD non-compliance	  
Failure to obtain or renew environmental permits and authorizations	   
Political and economic instability	   
Lack of financial liquidity (default)	 
Unfavorable exchange rate variation	 

4. Treatment

Once an evaluation is conducted, we draw up action plans based on the control analysis and interpretation of the most critical and relevant points.

5. Monitoring

Periodically, we evaluate the effectiveness and execution of the action plans outlined and conduct audits to validate the controls in place.

6. Risk communication

(102-15, 102-30) The Audit and Risk Management area produces annual reports that reflect the progress of the work carried out during the year. With the support of the risk managers, the content of this work is presented to the Executive Board for deliberation and development of action plans.

We established the Compliance area in 2020. Merged with the Legal department, the sector formalized our commitment to develop and disseminate the compliance culture through training and awareness campaigns. This area is responsible for the analysis and evaluation of the laws and regulations applicable to our businesses, risk management and internal controls. The report is sent to the Executive Board. The Risk Management

area has been part of Compliance department since 2020.

In 2020, the Internal Audit area, which previously reported to the CEO, began reporting to the Audit Committee. Thus, it further expanded its work autonomy. Additionally, the Internal Audit reports to the Board of Directors regarding compliance and performance of activities.

In 2020, it took on the challenge of presenting a risk review proposal to the Executive Board. The area also resumed the evaluation and monitoring of the

identified hazards reports. To accomplish this task, Unifica, a project developed by the Risk Management and Internal Controls, Continuous Improvement and Quality and Environment and Internal Audit areas, was put into practice.

The Internal Controls area was implemented in 2021. Its function is to ensure information efficiency, minimize risks, protect assets, assure the accuracy of records, promote operational efficiency and encourage adherence to policies, rules, regulations and laws. In the same year, we identified new controls and reviewed existing ones to evaluate and enhance the

effectiveness of the risk management, control and governance processes.

For 2022, we are committed to validating and updating them together with the risk managers. It will be a key step in determining whether they are working as expected and whether they are capable of managing the risks the Company may face in its daily operations.

The work will continue in 2023, when the controls to assess the efficiency of the internal control system will be tested. The ultimate goal is to improve operations, financial reporting and compliance.

Stakeholder relations



GRI 103-1, 103-2, 103-3, 102-6, 102-9, 102-10, 102-11, 204-1, 308-1, 308-2, 414-1, 414-2, 416-1, 416-2
ISE



Employees



Communities



Suppliers



Government and society



Shareholders



Clients

(102-40, 102-42)

We prioritize the establishment of valuable relationships with the following stakeholders, seeking mutual benefits:



Adherence to the Conscious Capitalism Movement

Conscious Capitalism is a global movement created by Raj Sisodia and John Mackey that seeks to transform the way business is conducted, encouraging the promotion by companies of sustainable, humanized and conscious practices.

Alongside the Instituto Capitalismo Consciente do Brasil (ICCB), a non-governmental organization that promotes Conscious Capitalism in Brazil, we are part of an active mobilization front for the creation of a branch 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 more attentive and aware, contributing effectively to a sustainable future and stimulating new companies to invest in a more humanized management.



Participation in the 3rd edition of Humanized Research

Humanized Research is broad and encompasses all stakeholders, generating a diagnosis in four dimensions: brand reputation, management principles, organizational culture and narratives. It allows us to measure the perception of the various stakeholders and the quality of our relations with them. It also reveals the stage of maturity of the management and consolidated values – in addition to those that can be re-signified. The survey also represents an important tool for companies that, like Irani, have joined the Conscious Capitalism Movement, aiming to transform how it decides on investments and does business in Brazil.

In Irani's first participation in the survey, we had 1,414 respondents: 773 employees, 124 Company leaders, 146 clients, 205 representatives of

the society and 166 partners. This meaningful involvement conferred the survey a confidence rating of 95%.

The project generates a grade that expresses the quality of an organization's relations with its stakeholders. Thus, it involves leaders, employees, clients and partners, along with representatives of society and environmental causes. The upgraded rating, therefore, expresses our human and organizational development across multiple aspects, reflecting concepts such as transparency, ethics, diversity, innovation and sustainability. The classification has 11 evolutionary levels (AAA, AA, A, BBB, BB, B, CCC, CC, C, D and E); the first level ("AAA") means more developed and the last level ("E") less developed.



Irani's rating is level A, considered high, and reflects a stage of maturity above the market average, with healthy relations and guidance to continuously improve the generation of value for stakeholders.

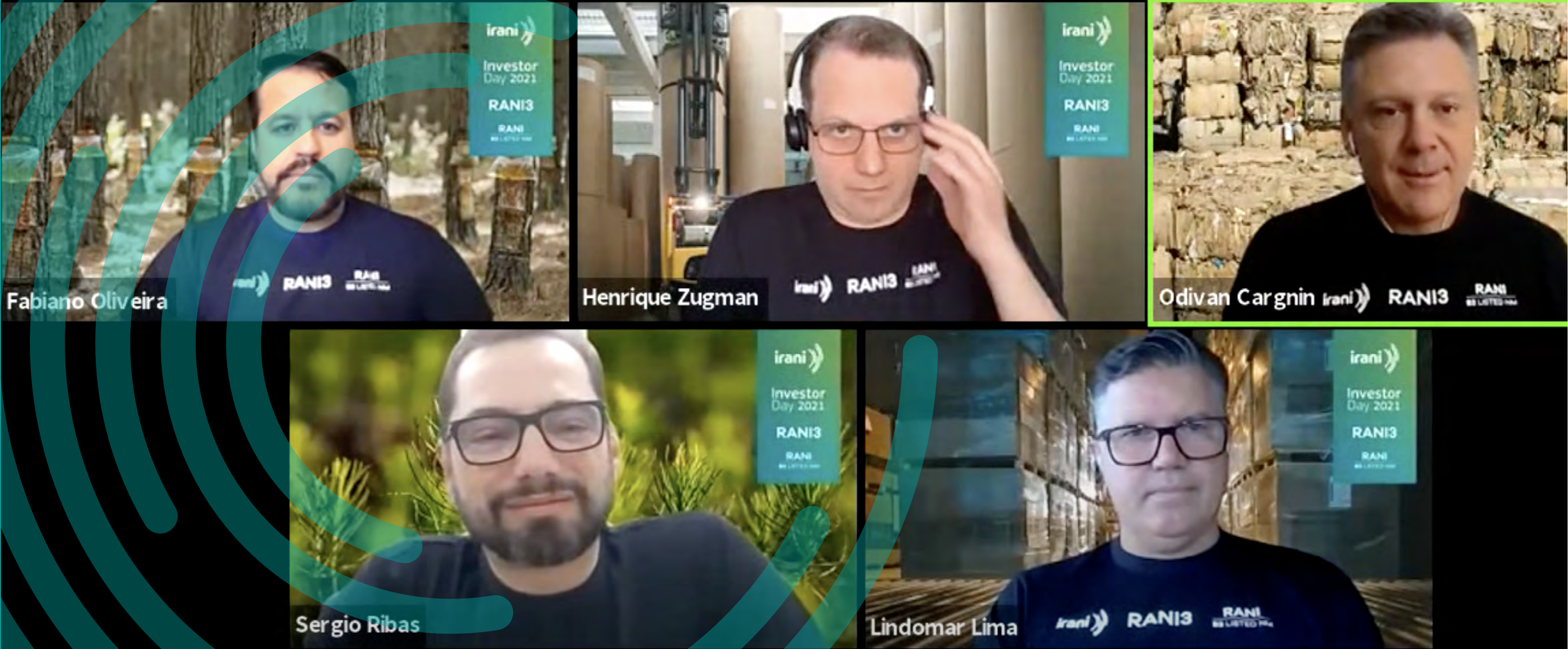
conscious capitalism

Irani Investor Day 2021

We organized our first Irani Investor Day in 2021. The event was all-digital, with simultaneous interpretation during the Zoom meeting. Chief Executive Officer Sérgio Ribas and the full executive team were present for the Investor Day event. The Portuguese language broadcast was also carried on Irani’s official YouTube channel, @IraniOficial.



Watch our video of the Irani Investor Day 2021.



Clients

(103-1 and 103-2) In addition to ensuring the supply of various product lines and seeking innovation with real economic impacts for the entire production chain, it is in the close relationship with the customer that the excellence of our business comes to fruition. This focus of the client concept guides us throughout the production process. To deliver customized solutions, we count on RD&I, which carries out tests based on the best technologies and partnerships, involving specialized teaching and research institutions and professionals with expertise in all stages of the process. Much more than just a service that we offer, we strive to better understand our clients and create tailored solutions together with them.

We believe in creating value when we add our experience to the wisdom of those who do business with us. Hence, through partnerships and co-creation, we transform our relationships into prosperous ongoing relations.

In 2021, we remained focused on ensuring the supply of the historical average volume practiced by our current clients, always guided by transparency and further bolstering relations based on partnership and trust.

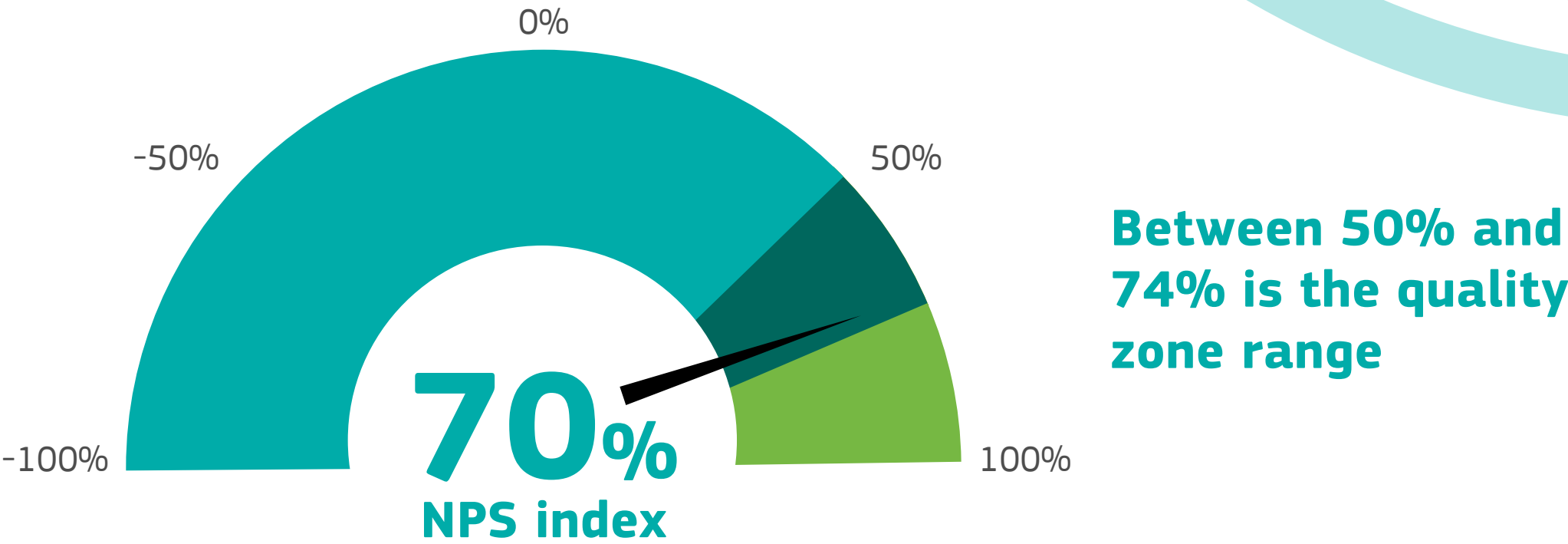
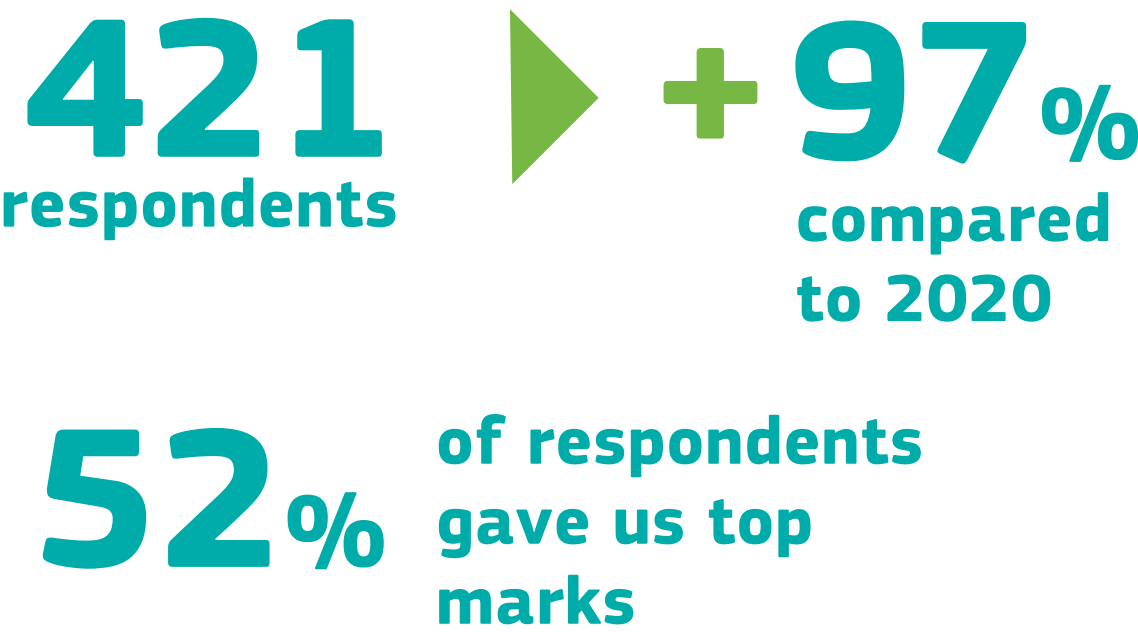
(102-43 and 102-44) We conduct a Customer Satisfaction Survey each year. The objective is to measure perceptions, ascertain aspects that are well positioned and those that present opportunities for improvement. Based on the results, we direct our efforts to continuously improve client relations.

In 2021, we changed the research methodology to the 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 adopted foresees zero interference with the respondent, as no participation of an Irani representative is required. Clients receive the link to access the survey via email.

According to the NPS methodology, customers who give grades from 0 to 6 are considered “detractors,” while ratings between 7 and 8 are “neutral” and grades 9 and 10 indicate “promoters.” In the case of detractors, a new question is asked, asking them to suggest points of improvement. For all respondents, there is a free field for add comments and suggestions, praise, or criticism. The value of the NPS is the subtraction of the percentage of detractors from that of the promoters.

General results



Paper Business

(102-6) Main clients: food segment, light and heavy sacks, bags, among others.

Domestic market: Amazonas, Bahia, Ceará, Federal District, 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 and São Paulo.	73% NPS index
External market: South Africa, Germany, Saudi Arabia, Argentina, Bolivia, Chile, China, Colombia, Israel, Kuwait, Mexico, Pakistan, Paraguay, Peru, Portugal, Dominican Republic, Singapore, Turkey and Uruguay.	63% NPS index

Resin Business

- (102-6) Main clients:**
- **Gum rosin:** 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.	75% NPS index
External market: South Africa, Germany, Canada, Chile, China, Spain, United States, France, Netherlands, Hong Kong, India, Ireland, Japan, Mexico, Peru, Portugal and Turkey.	41% NPS index

Packaging Business

(102-6) Main customers: cartonboard, meatpacking, food, chemicals, plastics and beverages segments.

Domestic market: Amazonas, Bahia, Ceará, Federal District, 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 and São Paulo.	72% NPS index
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Government and society

(102-13) Our relationship with governments and social entities representative of society also occurs through our leaders when they join outside committees and sit on boards. 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)
- American Chamber of Commerce/Brazil (Amcham)
- Centro das Indústrias do Rio Grande do Sul (Rio Grande do Sul Industries Center-CIERGS)
- Irani / Chapecó River 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-Ibá)
- Instituto Brasileiro de Avaliações e Perícias de Engenharia (Brazilian Institute of Engineering Evaluations and Appraisals-IBAPE)
- Instituto Euvaldo Lodi (Euvaldo Lodi Institute-IEL)
- Movimento Catarinense pela Excelência – Excelência SC (Santa Catalina Excellence Movement)
- 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-Sinpesc)
- 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-Sinpapel)
- 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-Sintipel)
- 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

(103-2, 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 also is used in the analysis and prioritizing of partnerships, in relationship strategies and in directing social investments or community service activities.

(413-1) Currently, 100% of the cities in which we are located run development programs in the local community. The actions seek to develop children and youths through initiatives focused on education, environment, citizenship and sports, as well as eventual support for initiatives in line with this guideline.

	Priority Attention	Timely Attention
Santa Catarina	Irani, Ponte Serrada, Joaçaba, Herval d 'Oeste, Luzerna, Catanduvas, Concordia, Vila Campina da Alegria and the head offices in the municipality of Vargem Bonita	Freshwater
São Paulo	Indaiatuba	Salto
Rio Grande do Sul	Vila Bojuru (São José do Norte), Balneário Pinhal, Cidreira	Porto Alegre, São José do Norte, Tavares, Osório, Mostardas, Santo Antônio da Patrulha
Minas Gerais	Santa Luzia	Belo Horizonte

community development



(103-1, 103-2 and 103-3) Irani's social investments are designed to meet the strategic objective of positively influencing society to build value relationships and generate prosperity for all stakeholders impacted by the Company's businesses.

In 2021, volunteer groups from our business units dedicated more than 400 hours to initiatives that offered community well-being and the development of skills of the employees involved in the programs. The activities encompassed solidarity movements, workshops, reforms of public spaces and blood donation campaigns.

In 2021, more than R\$ 2.5 million was earmarked for projects in the fields of culture, environmental education and sports. The contribution occurred through federal tax incentive laws and via Childhood-Adolescence and Elderly Funds. The donation of funds through the Social Investment Committees of the business units totaled about R\$ 10,000, contributing to community organizations in the environs with a focus on cultural and socio-environmental actions.

The Company also strives to establish solid partnerships for the development of projects in the

fields of citizenship, socio-environmental education, culture and sports. In 2021, R\$ 150,000 of our own resources were invested in initiatives such as:

- **Outstanding Student Project:** aims to encourage the five best students of E.E.B. Galeazzo Paganelli in Campina da Alegria (SC), to continue their studies and prepare for the National High School (Enem) and college entrance exams. The work offers pedagogical guidance and scholarships.
- **Partnership with the Junior Achievement Association** in the states of SC, RS and MG, stimulating entrepreneurialism in young people from public and private schools.
- **Volleyball** initiation centers in partnership with the Joaçabense Volleyball Association (AJOV), sharing online sports techniques for approximately 300 students.
- **Broto do Galho Project**, which aims to promote sustainable development in the community of Campina da Alegria in the municipality of Vargem Bonita, Santa Catarina, through a crafts group. The industrial waste project is designed to stimulate

social integration and the generation of income for its participants.

- **Choir directed by a conductor** serving the community of Campina da Alegria and nearby regions. The choir's activities were held online throughout 2021, including the production of special videos for Irani's internal campaigns, such as Sipat and the fight against Covid-19.

In 2022, we will continue efforts on behalf of a new socio-environmental impact assessment cycle in the surrounding communities.

Corrente do bem (chain of good)

Since the beginning of the pandemic, we have continued to support our own initiatives, and those in partnership with other organizations, to assist in combating the transmission of Covid-19 in the regions where we operate. Investments in this regard have reached, so far, about R\$ 1.2 million.

In 2021, we supported Instituto Cultural Floresta in Rio Grande do Sul, donating funds for the purchase of two respirators for the Hospital da Brigada Militar de Porto Alegre.

We made new donations of materials – such as gloves, gel alcohol, aprons, basic items hampers, disposable gloves, masks, oximeters, respirators, thermometers and rapid tests – in Santa Catarina and Rio Grande do Sul.

We also joined the United for Vaccine movement through donations of materials that assist in the inoculation process in more than 20 Santa Catarina cities.

Awards and recognition

The awards and recognitions we received throughout 2021 further inspire us to pursue initiatives that promote sustainability, excellence and appreciation of people.



LEARN MORE

Access the list of all acknowledgements here



Suppliers

(103-1) Annually, our relationships with suppliers and service providers are strengthened in terms of ethical behavior, transparency, enhanced focus and, always, more open to dialogue. Consequently, we have entered into successful and long-term partnerships. Every day, through best practices, we underscore the significance of these initiatives, promoting expanded, real and relevant interfaces for all.

In 2021, we launched the Good Practices in Sustainability Recognition Initiative for Suppliers and Service Providers. We believe that, together, we can amplify our positive impact on the world. The objective is to share knowledge that strengthens the network around this central theme and encourages the entire production chain to develop progressively more sustainable actions.



One such case involving a purchasing group was recognized – and the ceremony can be watched on our YouTube channel: @IraniOficial (Only Portuguese)



RECONHECIMENTO
EM BOAS PRÁTICAS
DE SUSTENTABILIDADE
2023 | FORNECEDORES

Underpinned by our ethical values, we have been intensifying our undertaking to be an organization committed to life, building value relationships to generate prosperity. This calling represents the Irani way of being, and it is becoming even more evident when it comes to the formalization of contracts. In an effort to further strengthen value relationships, our contracts contain key clauses related to socio-environmental and human rights aspects, always in legal compliance with the value chain’s relevant workplace conditions. Regarding contract formalization, included are commitment and responsibility clauses, such as no slave and/ or child labor in operations, in addition to aspects related to LGPD and ethical conduct rules. The legal department is responsible for assuring compliance with the clauses.

(102-12) The adoption of the Management Excellence Model (MEG), international certifications such as FSC®, ISO 14001 and the GRI Standards indicators, monitored and described in this Report, promote the elevation of the level of our processes with regard to socio-environmental aspects linked to the evaluation of suppliers and service providers. We applied this internal work

methodology to our supplies risk and process controls management. Furthermore, we are signatories of the Global and Business Compact for Integrity and Against Corruption, ratifying our commitment to ethics and human rights.

Validating our commitment to the value chain, for over a decade we have monitored several internal indicators to measure and manage the performance of the Supplies sector in acquisitions from suppliers with contracts. Among them are the Irani Supplier and Urban Forest metrics. The former indicates the percentage of purchases from suppliers through long-term contracts. In 2020, the indicators stood at 61.43% and, in 2021, 63.13%. The Urban Forest indicator, for its part, measures the percentage of purchases of paper scraps from suppliers with contracts. In 2020, the result was 83.5% and, in 2021, 76.76%. This decline was due to the market instability resulting from the pandemic. On the other hand, we expanded the portfolio of new suppliers, enabling the formalization of contracts for the new cycle.

Our activity in materials management is realized when we have high inventory accuracy, with reduced waiting time between the delivery of the desired item

or emergency procurement. Through an ERP system, we ensure the inventory of warehouse items, enabling a unified view of the stocks held at all industrial units. Thus, we have widened our materials planning knowledge, analyzing reserves and forecasting demands. To this end, we have developed a planned and sustainable supply cycle, ensuring the availability of the materials the Company requires and reinforcing our relations with suppliers. In order to improve cargo handling at our facilities, as well as nurturing the quality of the transport service providers, in 2021 we initiated development of an upgrade focused on the loading and unloading processes at all units, and in 2022, we will kick-off this project.

Irani’s suppliers are selected considering global, technical and legal criteria, in addition to observance of the Company’s internal regulations. Whenever possible, and to stimulate local economic development and the construction of regional partnerships, we prioritize suppliers from communities neighboring our facilities. In 2021, due to the Gaia Platform, we experienced higher demand for large import operations, adjusting our percentage downward although maintaining the historic proportionality of local purchases.

	2019	2020	2021
(204-1) Total purchased from local suppliers (R\$ million)	188,931	191,730	234,907
Percentage of total purchases made by the Company (%)	23.61	23.39	18.73%

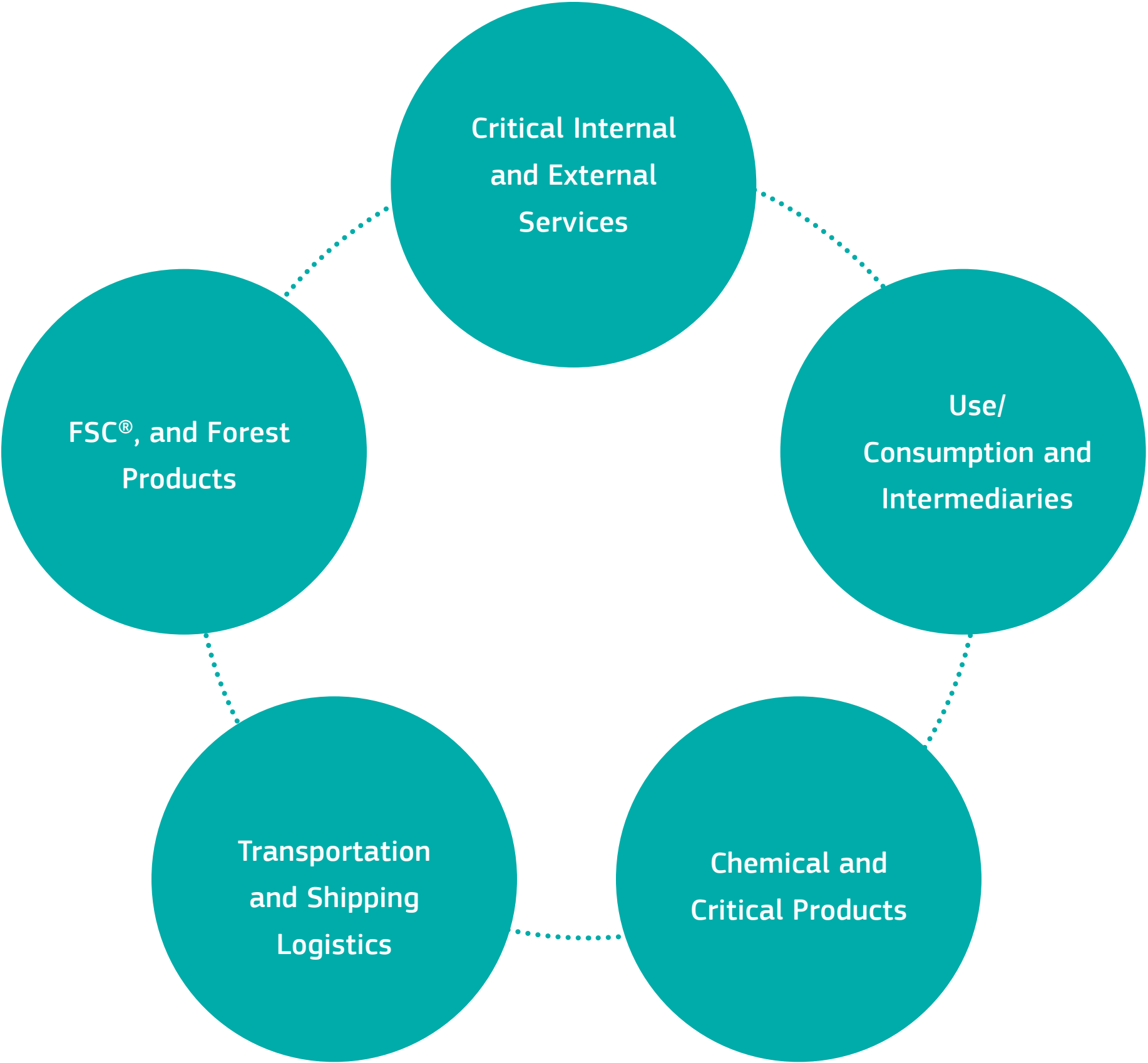
NOTE: In 2019, we unified how we interpret “surrounding communities” to reflect the increase in the index as calculated.

At the same time, we enhanced the circular economy by improving the corrugated cardboard scrap reverse logistics process. In 2021, we obtained a return of 6,403.2 tons, equivalent to 6.72% of the total, a volume higher than the target established for the period.



(102-9)

We have more than 13,000 suppliers and service providers actively registered on our Supply Chain, segmented according to the guidelines and requirements of FSC®, ISO 9001 and ISO 14001 standards. They are divided into five groups:



The contracts feature stages of systematic identification, qualification, selection and evaluation, considering the criticality of the products and services and their impacts on our businesses.

In 2021, we improved the execution of processes in our specialist tool. The objective is to make the information it supplies even more agile, transparent, secure and traceable.

Strengthening our relationship with requesters and suppliers, we promote the total interaction of the process, providing continuous upgrades.

Prices are quoted within the purchasing portal, including follow-ups and approvals, contract management, documentation, performance evaluations and financial information.

(103-2, 103-3 and 308-2) We apply the evaluation that measures the Supplier Performance Index for the five purchasing groups. Measured from 0 to 100 points, this assessment is a way to stimulate the constant improvement of our suppliers/service providers. Thus, we go beyond mere legal compliance, encouraging best management practices. The composition of this item aggregates issues such as meeting technical specifications, quality of products, services and the commercial relationship, in addition to the effectiveness of the communication process.

As a result of the previous year’s commitment, the improvements proposed through the study to redefine/expand our purchasing groups were implemented in 2021. In addition to digitizing the process, concluded in 2020, we reformulated each group’s evaluation criteria. Furthermore, we refined the concepts and improved how we distribute to them, confirming Irani’s commitment to a more agile culture. By unifying the communication channel, we ensure the historical record remain transparent and guarantee that reliable results are obtained

NUMBER OF SUPPLIERS AND SERVICE PROVIDERS EVALUATED

	2019	2020	2021
Critical services providers	188	178	174
Critical and chemical products	109	114	81
Transportation services (shipping logistics)	30	32	33
FSC® and forest products	221	221	193
Materials for use and consumption and intermediaries	80	79	49
General	618	607	520

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

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

Between 60 and 79.99 points: qualification conditional to the opening of a noncompliance 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:

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.

SUPPLIER PERFORMANCE INDEX (IDF)

	2019	2020	2021
Critical services providers	93.13	94.41	94.67
Critical and chemical products	95.89	96.69	95.57
Transportation services (shipping logistics)	90.72	98.30	98.48
FSC® and forest products	91.30	93.49	89.69
Materials for use and consumption and intermediaries.	93.01	91.02	98.35
Geral	92.79	95.48	95.38

Note: with the restructuring carried out in the IDF mentioned above, some suppliers migrated from groups according to the specification of their supply.





Social e Relationship Capital **Challenges and future commitments**

Implementation of an outside ethics channel in 2022, aiming to further improve the governance of the Ethics Channel.



Inclusion of ESG Indicators in the Executive Bonus in 2022.



Consultancy for the improvement of risks related to climate change, as well as developments in the CDP (Carbon Disclosure Project).



Periodic training on the content of the Code of Ethics at least every two years.



Validate and update, in 2022, together with the risk managers, the new controls identified by the Internal Controls process.



By 2023, we will conduct control tests to assess the efficiency of the internal control system, with the ultimate goal of improving operations, financial reporting and compliance.

Carry out the first Recognition of Good Practices in Sustainability for our customers in 2022, and promote the second edition for suppliers and service providers in 2023.



Stimulate Volunteer group actions.



Socio-environmental impact assessment in the surrounding communities in 2022.



Achieve B Certification by 2023.



Structure the cardboard scrap supply chain to improve supply stability.



Implement a Anticipation Portal for our suppliers, allowing them to consult the settled and open invoices and to simulate and make early payments.

Financial **capital**

Performance and
economic growth



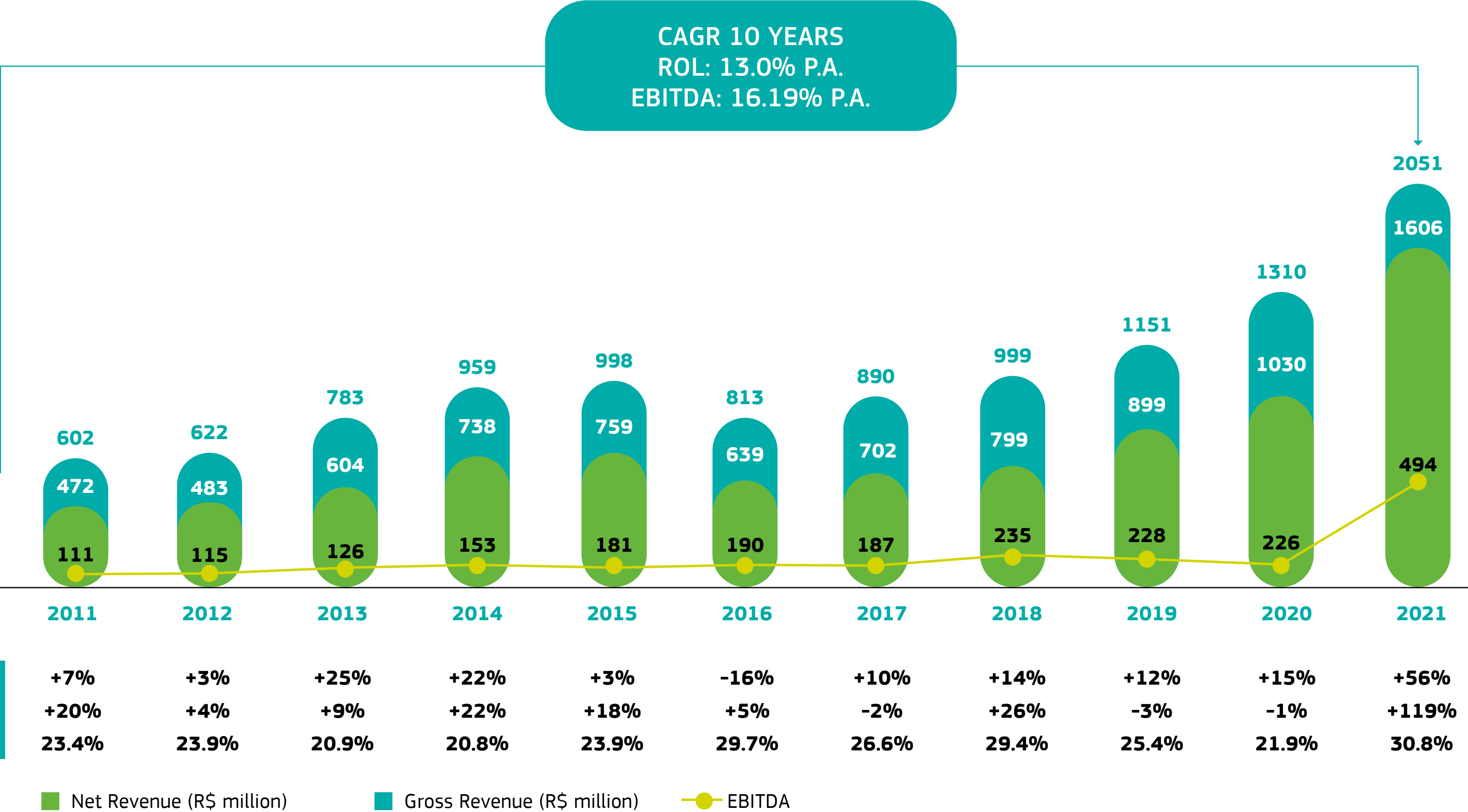
Performance and economic growth



GRI 103-1, 103-2, 103-3, 201-2, 201-3, 201-4
ISE

Our Net Revenue has been recording upward average annual growth, of 13% in the last 10 years, as does Adjusted EBITDA, whose average annual increase was 16.1%. In the period, this indicator jumped from R\$ 110,536 thousand in 2011, with a margin of 23.4%, to R\$ 493,921 thousand in 2021, with a margin of 30.8%.

ROL
EBITDA
EBITDA Margin



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

	12/31/2021	12/31/2020
ASSETS	2,365,300	1,814,117
Current	958,723	771,598
Non-current	1,406,577	1,042,519
LIABILITIES AND NET EQUITY	2,365,300	1,814,117
Current	344,609	277,356
Non-current	1,063,253	750,601
Net equity	957,438	786,160

(102-7) CONSOLIDATED INCOME STATEMENTS FOR THE YEARS ENDED DECEMBER 31
(IN THOUSANDS OF REAIS)

	12/31/2021	12/31/2020
Net Sales Revenue	1,605,834	1,029,605
Change in fair value of the biological assets	43,849	18,374
Cost of products sold	(1,017,659)	(722,663)
Gross Profit	632,024	325,316
Operating Revenues (Expenses)	(196,200)	(159,801)
Income before financial results and taxes	435,824	165,515
Net financial revenues (expenses)	(45,611)	(55,601)
Operating profit before tax effects	390,213	109,914
Net income for the year	285,313	92,761

(103-2, 103-3) On the [Investor Relations website](#), our full annual financial statements, encompassing the Explanatory Notes, the Independent Auditors’ report and the Management Report are available. The preparation of these documents respect the Corporations Law and its amendments, and the rules established by the Brazilian Securities and Exchange Commission (CVM).

The earnings results were published on February 24, 2022 in the large circulation newspapers in which we publish our corporate acts, as well as on the CVM and B3 websites.

Main economic-financial indicators

According to the Brazilian Paper Packaging Association (Empapel), the shipment in tons of corrugated cardboard in 2021 registered growth of 4.3% in comparison with 2020.

The increased use of paper packaging for the food sector, e-commerce, delivery and for exports created a favorable environment for the corrugated cardboard and paper packaging sector.

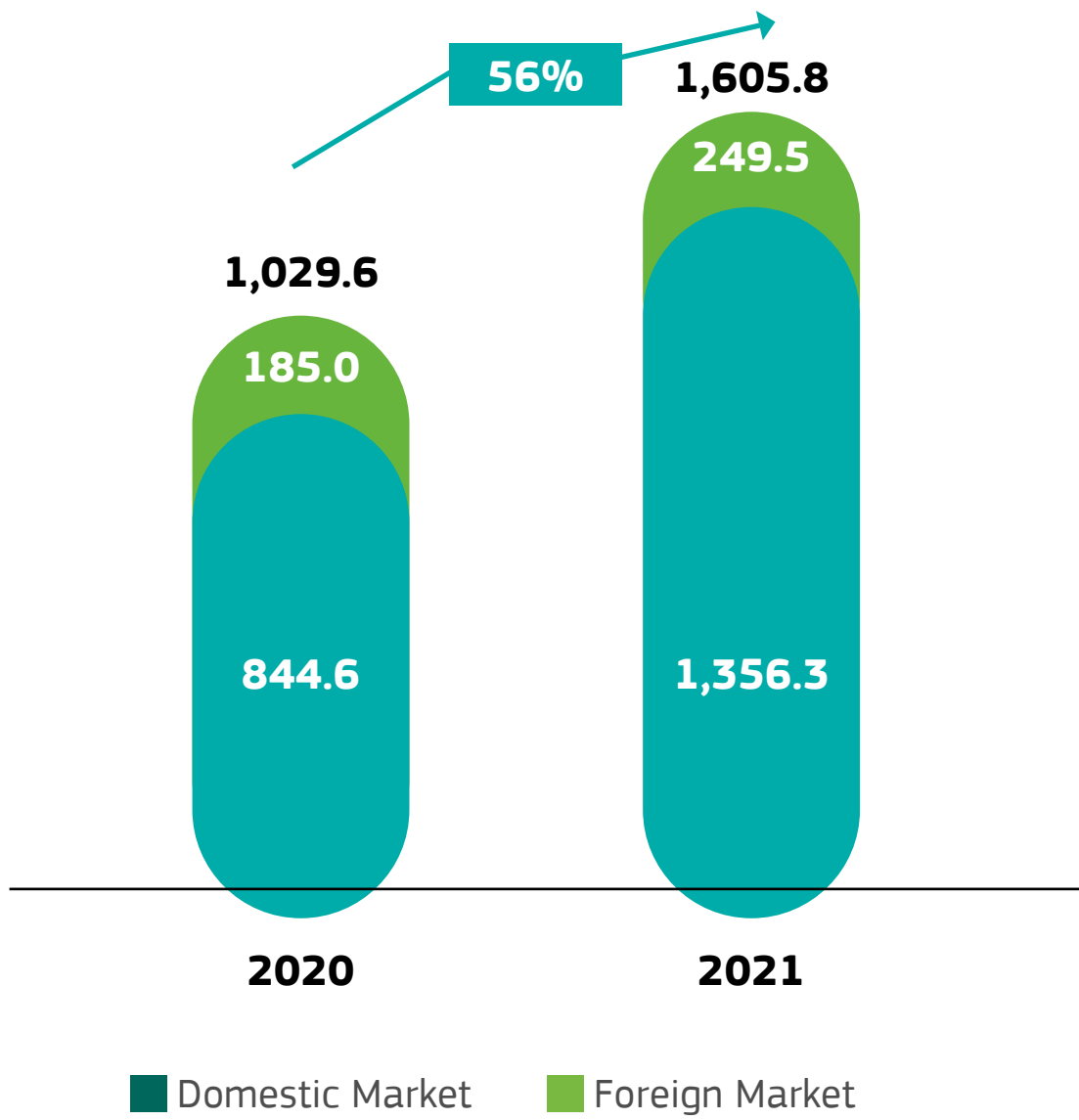
MAIN INDICATORS - CONSOLIDATED	2021	2020	Var, 2021/2020
Net Sales Revenue	1,605,834	1,029,605	56.0%
Domestic Market	1,356,318	844,560	60.6%
Foreign Market	249,516	185,045	34.8%
Gross Profit (inclusive *)	632,024	325,316	94.3%
(*) Change in Fair Value of the Biological Assets	43,849	18,374	138.6%
Gross Margin	39.4%	31.6%	7.8p,p,
Operating Income before Taxes and Interest	390,213	109,914	255.0%
Operating Margin	24.3%	10.7%	13.6p,p,
Net Profit	285,313	92,761	207.6%
Net Margin	17.8%	9.0%	8.8p,p,
Adjusted EBITDA ¹	493,921	225,881	118.7%
Adjusted EBITDA Margin	30.8%	21.9%	8.9p,p,
Net debt (R\$ million)	386.5	242.0	59.7%
Net Debt/Adjusted EBITDA(x)	0.78	1.07	-27.1%
Operational Data (t)			
Sustainable Packaging (Corrugated Cardboard)			
Production/Sales	157,549	155,438	1.4%
Sustainable paper for packaging			
Production	297,188	293,271	1.3%
Sales	126,056	135,610	-7.0%
Domestic Market	109,157	105,935	3.0%
Foreign Market	16,899	29,675	-43.1%
Sustainable Resins (Gum Rosin and Turpentine)			
Production	15,450	14,608	5.8%
Sales	15,529	13,942	11.4%
Domestic Market	441	498	-11.4%
Foreign Market	15,088	13,444	12.2%

1 1 EBITDA (earnings before interest, taxes, depreciation, amortization and depletion) see chapter in this management report,

Net Operating Revenue

Our net revenue reached R\$ 1,605,834 thousand in 2021, an increase of 56% compared to 2020. The numbers reflect the good performance of sales and prices in the segments in which the Company operates, especially the significant increase in the values of all segments in comparison with the previous year.

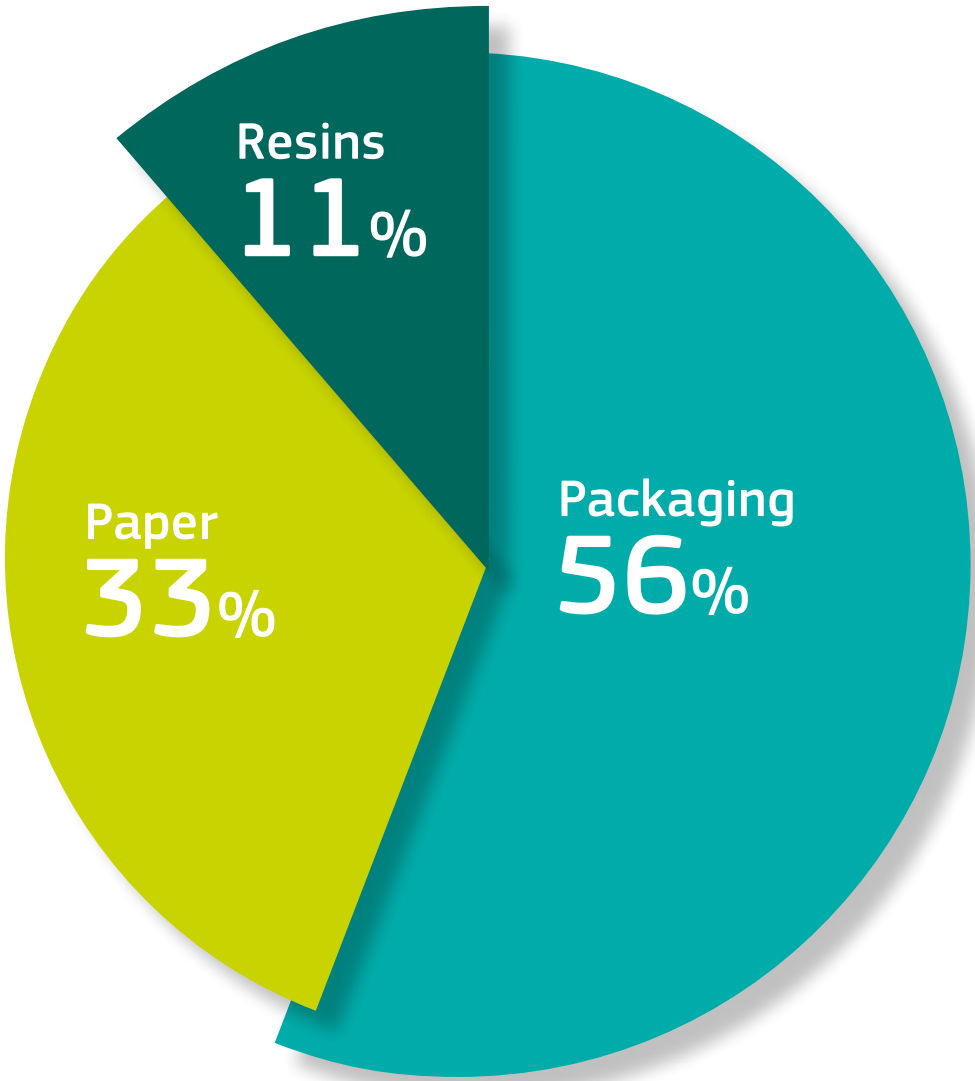
NET REVENUE (R\$ MILLION)



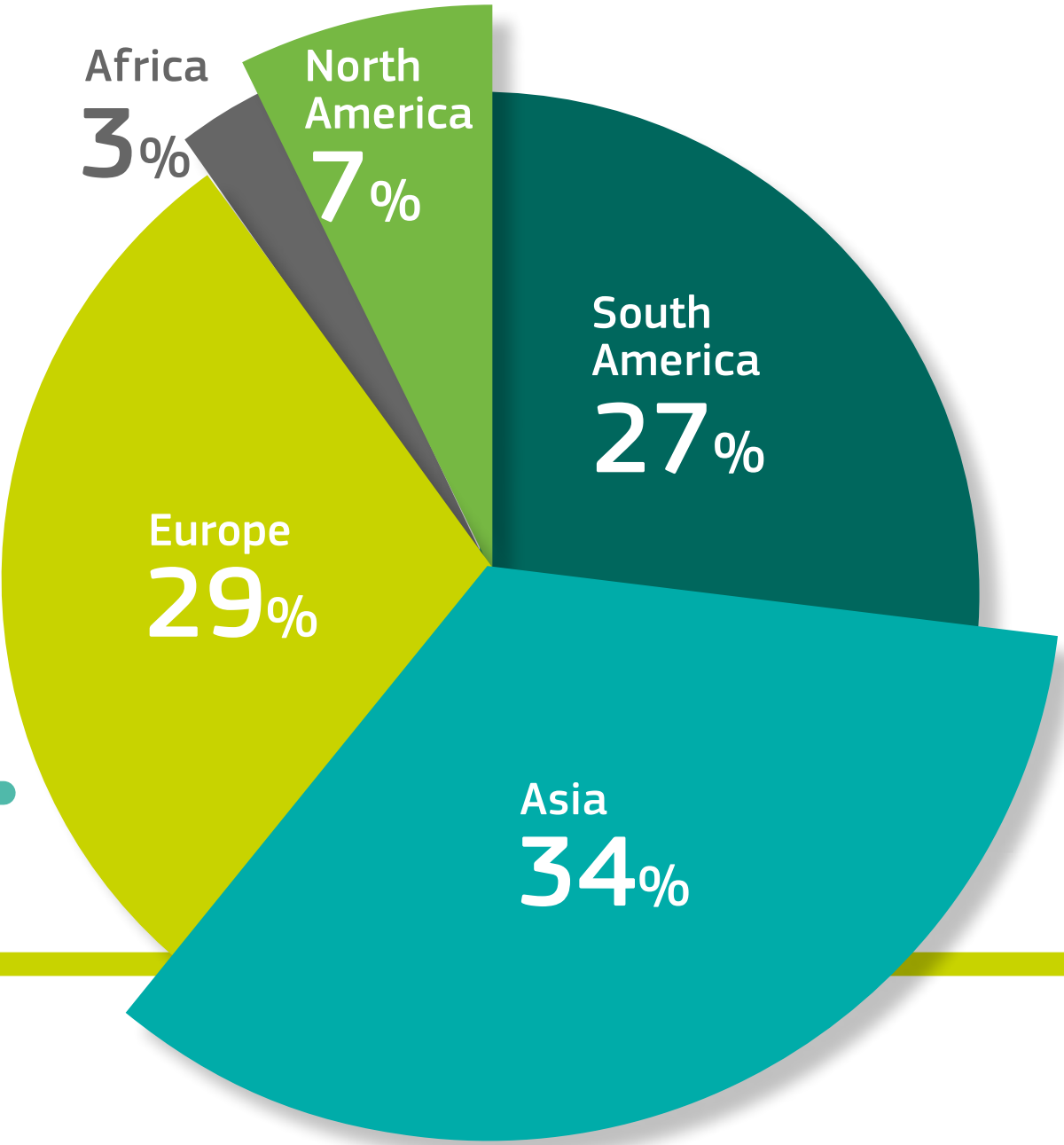
SHARE PER MARKET

	2020	2021
Domestic Market	82%	84%
Foreign Market	18%	16%

NET REVENUE BY SEGMENT (2021)



NET REVENUE - FOREIGN MARKET 2021



growth

Assessment of Fair Value of the Biological Assets (Forests)

As of 2010, the Company began to periodically measure the fair value of its biological assets (forests) pursuant to CPC 29/IAS 41. This variation had an effect on the Company’s result for 2021, as shown below:

EFFECTS OF THE VARIATIONS IN THE FAIR VALUE OF THE BIOLOGICAL ASSETS

R\$ thousand	2021	2020
Change in fair value of the biological assets	43,849	18,374
Depletion of the fair value of the biological assets	15,454	(6,002)

As of 2010, as determined in CPC 29/IAS 41, we have measured the fair value of the biological assets (forests) on a regular basis. The variation of this value and its depletion is recognized in the Cost of Goods Sold (COGS) line item. With this accounting determination, we were able to more accurately assess the market value of our forests, improving our Financial Statements.



Net Income

In 2021, net income was R\$ 285,313 thousand in profit compared to R\$ 92,761 thousand profit in the same period of the previous year. In this year, the amount of R\$ 25,197 thousand was recognized referring to the non-incurrence of IRPJ and CSLL on the SELIC rate in the repetition of undue payments, which contributed to the growth of the net income presented.

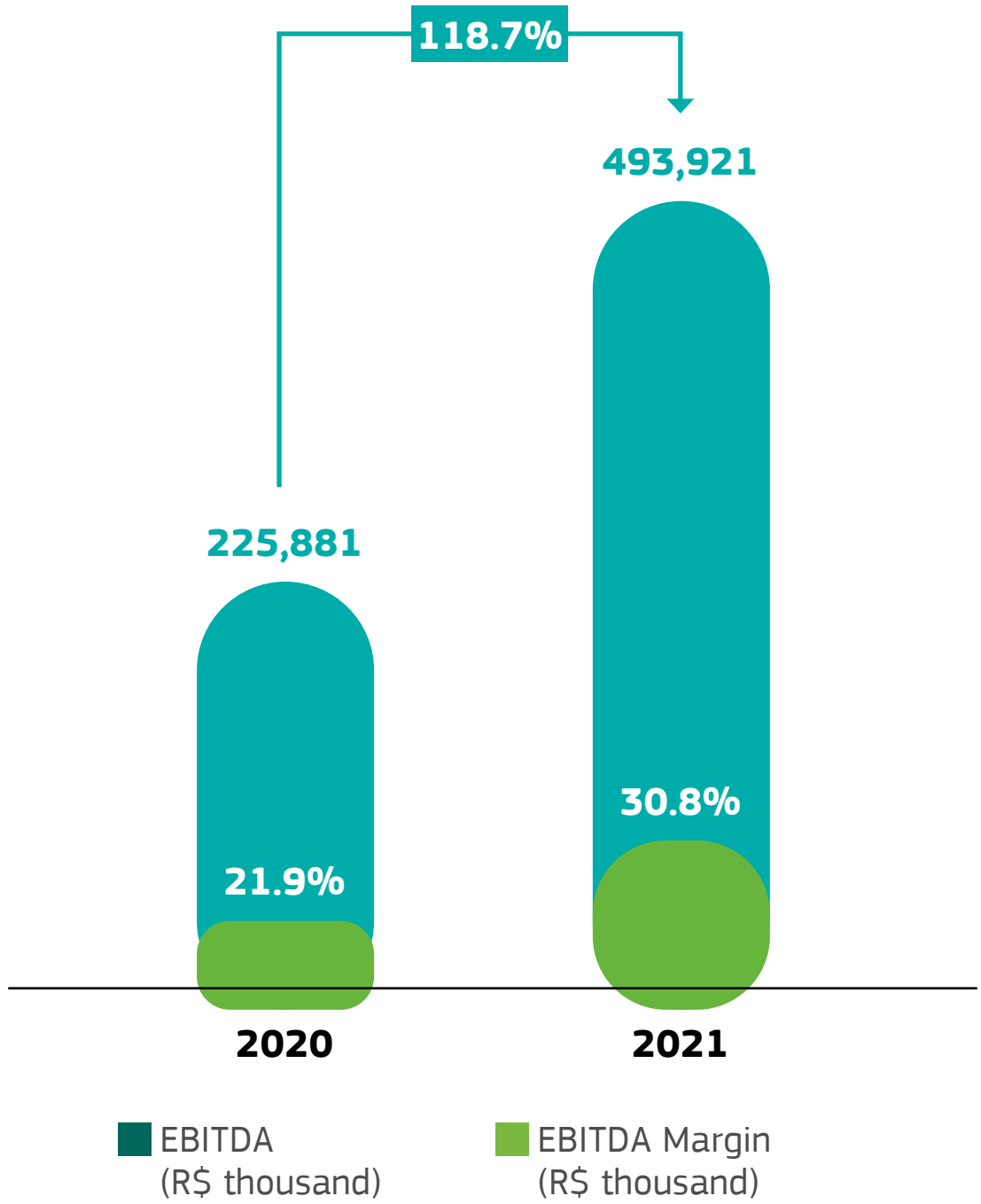


OPERATING CASH GENERATION (ADJUSTED EBITDA)

Consolidated (R\$ thousand)	2021	2020	Var. 2021/2020
Net Profit	285,313	92,761	207.6%
Current and deferred income and social contribution taxes	104,900	17,153	511.6%
Depletion	21,991	11,772	86.8%
Depreciation and amortization	70,453	65,464	7.6%
Financial Result	45,611	55,601	-18.0%
EBITDA	528,268	242,751	117.6%
EBITDA margin	32.9%	23.6%	9.3p,p,
<i>Adjustments according to CVM Inst. 527/12</i>			
Change in fair value of the biological assets ¹	(43,849)	(18,374)	138.6%
Non-Recurring Events ²	(4,530)	(8,581)	-47.2%
Management profit sharing ³	14,032	10,085	39.1%
Adjusted EBITDA	493,921	225,881	118.7%
Adjusted EBITDA Margin	30.8%	21.9%	8.9p,p,

¹ Change in the fair value of the biological assets, because it does not mean a reduction in cash in the period.
² Non-recurring events in 2021 (R\$ 4,530 thousand) refers to (R\$ 2,165 thousand) from the sale of assets of a discontinued operation, (R\$ 2,365 thousand) of credit deriving from lawsuit regarding abusive interest rates SP - Judiciary Bonds.
³ Management's Profit-sharing: The amount of R\$14,032 thousand refers to the provision for the officers' profit-sharing in the Company's results.

Operating cash generation, measured by the Adjusted EBITDA of the operation, totaled R\$ 493,921 thousand in 2021, with a margin of 30.8% and 118.7% higher than 2020, calculated at R\$ 225,881 thousand. The increase of 8.9 percentage points in the margin was mainly due to the Company's good performance in all segments, especially the price increase in 2021, compared to the previous year.



Financial Result

In 2021, the financial income, excluding the exchange variation, was negative in R\$ 43,926 thousand, against R\$ 54,961 thousand in 2020. The decrease in 2021 compared to 2020 was mainly due to the lower average net debt level in the year and the lower interest rate.

The exchange rate variation was negative by R\$ 1,685 thousand in 2021 compared to a negative R\$ 640 thousand in 2020. The negative exchange variation in 2021 was due to the devaluation of the real against the dollar, its impact on trade accounts receivable and the balance of foreign currency-denominated debt.

R\$ thousand	2020	2021	Var. 2020/2021
Financial Revenues	28,253	53,261	88.5%
Financial Expenses	(83,854)	(98,872)	-17.9%
Financial Result	(55,601)	(45,611)	18.0%
Net exchange variation	(640)	(1,685)	-163.2%
Financial Result without exchange variation	(54,961)	(43,926)	20.1%

Net Debt

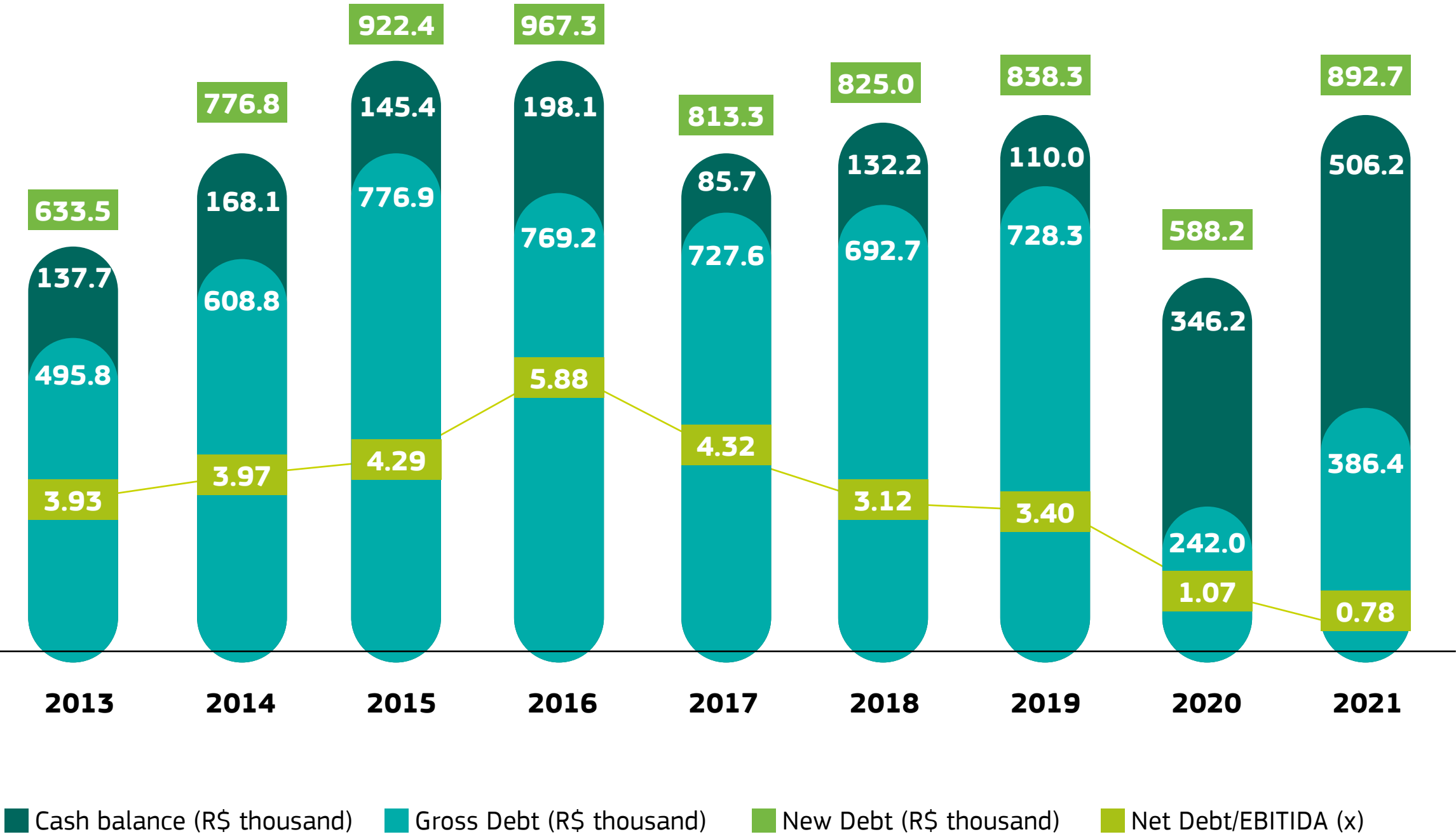
Our consolidated gross debt totaled R\$ 892,740 thousand in 2021, with 90% maturing in the long term. The variation of the indicator was influenced by the raising of funds of the 4th Issue of Green Debentures in 1Q21 in the amount of R\$ 60,000 thousand and the partial entry of the resources of Finame Direto with BNDES in 4Q21, amounting to R\$ 236,517 thousand.

Thus, our consolidated net debt in 2021 totaled R\$ 386,472 thousand, compared to R\$ 242,015 thousand in 2020. The net debt/EBITDA ratio was 0.78 times at the end of 2021, compared to 1.07 times at the end of 2020.

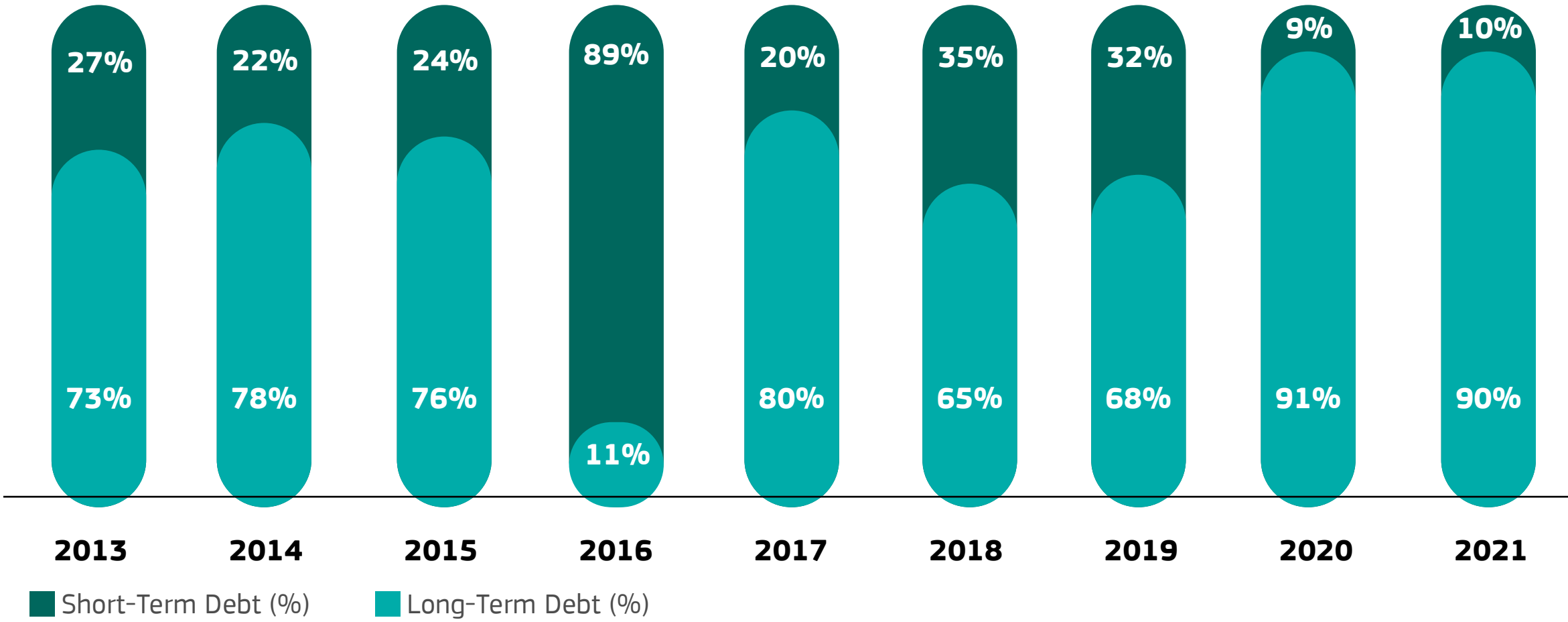
The improvement in the indicator is due to the 118.7% increase in the annual EBITDA compared to the 59.7% growth in net debt, due to the negative free cash flow in the period, caused mainly by the Gaia Platform investment disbursements.



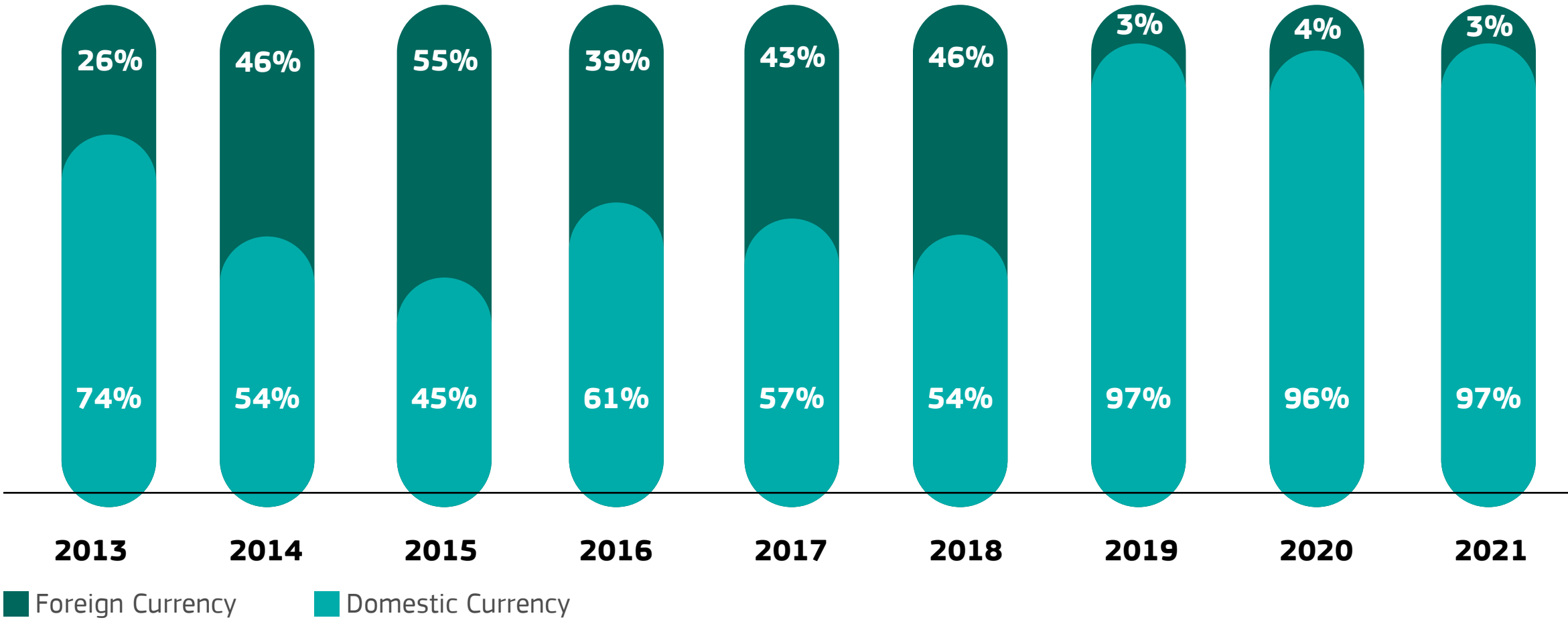
DEBT AND NET DEBT/EBITDA



GROSS DEBT PROFILE



COMPOSITION OF THE GROSS DEBT





Credit Rating

In 2021, S&P Global Rating raised Irani’s long-term issuer credit rating from ‘brA’ to ‘brAA’ on the Brazil National Scale. The ratings attributed to the Issues of Green Debentures (3rd Public Issue and 4th Private Issue) were also raised, from ‘brA+’ to ‘brAA+’. According to the agency, the issuer rating’s stable outlook indicates the expectation that Irani will continue to increase cash generation in the coming years, with higher profitability and strengthening of its credit metrics. In addition, there is expectation that the Company will remain insulated with respect to refinancing risks at the controlling group level.

2021 Share Buyback Program

Irani’s Board of Directors approved the 2021 Share Buyback Program, which became effective on October 1, 2021 and expires on March 31, 2023. The acquisition limit is up to 8,216,880 (eight million, two hundred and sixteen thousand, eight hundred and eighty) common shares, representing 7.76% of the total common shares issued by the Company in circulation. The Program aims to maximize the generation of value for shareholders through the efficient management of the Company’s capital structure. On December 31, 2021, Irani repurchased the amount of 2,790,000 shares, representing a total of 33.95% in the execution of the Program.

alignment

Green Debentures

In 2021, the Company issued new Green Debentures, with private placement in the amount of R\$ 60 million. The funds raised were earmarked for the execution of investments for meeting corporate goals in the normal course of the Company’s business, linked to certain ICMA categories and environmental benefits.

Our Green Debentures issues received an Independent Second Opinion, issued by SITAWI Finanças de Bem. The report certifies that the uses of the debenture issue funds are aligned with Irani’s strategy and that the operation offers environmental benefits, thus contributing to sustainable development and the transition to a low carbon economy.

Cash Flow

In 2021, the Adjusted Free Cash Flow was R\$ 290,411 thousand, an increase of 95.5% compared to the R\$ 148,580 thousand recorded in 2020. Besides the strong operational cash generation, the lower interest payments contributed positively to this increase.

Free Cash Flow	2021	2020
Adjusted EBITDA	493,921	225,881
(-) Capex ¹	(395,561)	(72,731)
(-) Interest paid/received	(42,834)	(68,598)
(-) Income Tax and CSLL (cash)	(85,653)	(21,098)
(+/-) Working capital	5,047	40,837
(-) Dividends + IoE	(89,933)	(16,544)
(-) Share buyback	(18,565)	-
(+/-) Others	5,640	26,345
Free Cash Flow	(127,938)	114,092
Dividends + IoE	89,933	16,544
Stock buyback	18,565	-
Gaia platform	307,993	2,112
Expansion Projects	1,858	15,832
Adjusted Free Cash Flow ²	290,411	148,580
Adjusted FCL Yield ³	16.3%	16.0%

¹ Considers the disbursement of R\$ 5,965 thousand of fixed interest in 4Q21 and 2021 related to the financing of the Gaia Platform investments

² Excluded dividends, IoE and Repurchase of shares, Gaia Platform and Expansion Projects

³ Yield - Adjusted FCL divided by average market value in the UDM

Return On Invested Capital (Roic)

Return on Invested Capital (ROIC) was 24.5% in the last 12 months. The increase was a substantial 11.9 percentage points over the 12 months ended December 31, 2020. It was due to the Adjusted Operating Flow increase, mainly because of the higher Adjusted EBITDA, above the rise in Invested Capital. It is the Company’s largest historical ROIC, and

demonstrates the commitment to generate consistent returns above the cost of capital (WACC). Our ROIC is a benchmark in the sustainable packaging industry in Brazil and abroad. This is strongly related to the Company’s long-standing ESG practices, which contribute to superior financial performance, and demonstrate the strength of ESG as a secular trend driving our economic results.

ROIC (R\$ thousand) - UDM ¹	4Q21	3Q21	4Q20
Total Assets	2,083,547	1,945,752	1,692,836
(-) Total Liabilities (ex-debt)	(482,848)	(463,995)	(414,771)
Construction work in progress	(201,851)	(118,103)	(34,243)
Invested Capital	1,398,849	1,363,654	1,243,822
(-) Adjustment CPC 29 ²	(81,116)	(76,372)	(56,727)
Adjusted Invested Capital	1,317,733	1,287,282	1,187,095
Adjusted EBITDA	493,921	422,166	225,881
(-) Capex Maintenance	(85,710)	(70,100)	(54,787)
(-) Income Tax and CSLL (cash)	(85,653)	(66,253)	(21,098)
Operating Cash Flow	322,558	285,813	149,996
ROIC ³	24.5%	22.2%	12.6%

¹ Média dos saldos patrimoniais dos 4 últimos trimestres (Últimos Doze Meses)
² Diferencial do valor justo ativos biológicos menos Impostos Diferidos do Valor justo dos ativos biológicos
³ ROIC (Últimos Doze Meses): Fluxo de Caixa Operacional Ajustado / Capital Investido Ajustado

(201-1) Direct economic value generated and distributed

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

	12/31/2021	%	12/31/2020	%
1. Revenue	2,081,879		1,339,135	
2. Inputs acquired from third parties	1,124,731		723,291	
3. Gross added value (1-2)	957,148		615,844	
4. Depreciation, amortization and depletion	92,444		77,236	
5. Biological asset fair value variation	43,849		18,374	
6. Net added value produced by the entity (3-4-5)	908,553		556,982	
7. Added value received through transfers	53,261		28,253	
8. Total added value to distribute (6 +7)	961,814		585,235	
9. Distribution of Added Value				
9.1) Personnel	205,752	21.39%	179,891	30.74%
9.2) Taxes, fees and contributions	338,309	35.17%	199,752	34.13%
9.3) Remuneration of third-party capital	105,904	11.01%	90,675	15.49%
9.4) Remuneration of own capital	297,817	30.96%	104,832	17.91%

Note: information on social investments is presented in the chapter “Surrounding communities”, page 49.



Financial Capital **Opportunities and future commitments**

Maintain cash resources for immediate liquidity of at least R\$ 150 million.



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



Achieve a capital structure composed of 30% to 50% of own capital, and 70% to 50% of third-party capital.



Maximize, by 2023, the generation of value for shareholders through the efficient management of the Company's capital structure through the Share Buyback Program.



Human capital

We added to society
Gender and diversity equality
Decent work and development of people
Occupational health and safety



(103-2, 103-3) People are at the heart of all of Irani’s strategies. And so they will remain, underpinning our position as one of the Best Companies to Work for in the country. We promote a culture marked by the pro-activism of people aligned with the cultural practices encouraged by the Great Place to Work® institution. Here, employees do not undergo change: they drive the changes while plunging into a profound journey of personal and professional improvement. This process is based on five structuring programs:

programa
gerã

programa
cuida

programa
cresce

programa
motiva

programa
superã

In 2021, we continued the development of an organizational culture, bolstering our values.

We conducted the GPTW Climate Survey online, with the participation of 75% of employees and leaders. Based on the results, we used the 3CS tools to describe the data and prepare action plans. Our index reached an average of 87%, considering five dimensions.

Words that imbue our employees with the most pride:

benefits
values
Irani
environment
team
quality
trust
place
climate
respect

Gender and diversity equality



GRI 103-1, 103-2, 103-3, 405-1, 405-2 ISE



programa **gera** **The Gera (Generate) Program**

It monitors the full professional cycle of our employees, including the processes of attraction, engagement and the monitoring of their trajectory in the Company. Thus, we work on cultural alignment and the empowerment of people to take the lead in fashioning their own careers.

The team of analysts that conducts the selection processes is comprised of in-house staff or with the support of outside consultants. Our process is accompanied by online steps, from application to admission, which allows our feedback to the participants to be more transparent and speedier.

For Irani, finding people who have values aligned with those of the Company leads to greater success and better adaptation to the organizational culture. We empower our managers to conduct quality screening interviews. This includes training with mock interview practice, so that they can be sure of their choices.

We continued our initiatives to develop young talents through mandatory and non-mandatory internship programs in technical, administrative and production areas. We intend to reassess the structure of this program, realigning practices and reviewing indicators, such as retention of young talents.

	2019	2020	2021
Vacancies filled by internal recruitment	68.09%	53.00%	67.47%

We also continued the My Apprenticeship program, an initiative that is specifically designed for young apprentices in all units. Based on a training plan focused on skills related to the labor market, the participants are introduced to such topics as entrepreneurial behavior, self-knowledge, communication, teamwork, creativity and innovation and emotional intelligence, establishing a chain of learning, training and growth.

Our employee onboarding process is aligned with the “hire and welcome” pillar, one of the nine practices encouraged by the GPTW® certification program. In addition to standardizing the materials, ensuring that all units present the same content, this alignment demonstrates our appreciation for the new hires and welcomes them, offering an informational kit focusing on the company’s products and a salutation letter from the CEO. We have trained a cadre of internal facilitators on the importance of first contact with the new employee. They receive guidance on how to prepare a warm welcome, using techniques and language appropriate to each participant’s profile.

At the end of each welcome process, we assess the degree of satisfaction of each of the new employees. In 2021, the satisfaction assessment was 83%.

We also use an online integration model, with content available in EAD, through our SuccessFactors platform. It features virtual meetings with facilitators and moments to clarify doubts. These events let employees and managers align with one another and customize actions for each position. Irani also is involved in the delivery of electronic equipment, proper chairs and a welcome kit in the homes of new colleagues.

The initiatives for the inclusion of employees with disabilities continued in 2021. There were actions such as raising awareness and preparing the teams that are involved with these professionals, helping them to better understand the aspects of the disability of the colleague who is being integrated and for the person to be able to develop his or her full potential. The result of these practices has a direct impact on the work environment, ensuring mutual learning experiences.

(103-2) Following the most significant and innovative business movements. Toward this end, we are further bolstering internal practices related to diversity in order to promote a work environment that welcomes, integrates and respects differences.



(103-2) For us, diversity is everything that distinguishes 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.

In 2021, Irani became a signatory to the **Citizen Company Program**, which enables the extension of maternity and paternity leave beyond the period already guaranteed. Through the initiative, employees have more time to enjoy the arrival of their children, whether biological or adopted, strengthening family ties and reinforcing our values of caring for people.

With maternity and paternity leave, employees gain more time to enjoy the arrival of their children, whether biological or adopted, strengthening family ties and strengthening our values of caring for people.

Inspired by the World Cultural Diversity Day celebrated on May 21, 2021, we sponsored an encounter, **“Meeting with Diversity: an inclusive culture brings more results.”** It proposed a reflection on the need to create an environment of security and equity so that development is constant for those whose work and lives are based on the theme of diversity. We programmed the following topics: Gender Diversity, with Marcia Baena, vice president of Burger King Brasil; Person with Disability, with Aneliz Silva, recruiter at XP Inc. and Inclusion and Diversity specialist; LGBTQIA+, with Jean Ícaro, Trainer and Diversity and Inclusion Consultant; and Color and Race, with Andreza Rocha, CEO of Afroya Tech Hub. Joining the Meeting, available to in-house and outside audiences, were 122 simultaneous participants through Zoom, totaling 255 views on YouTube and 21 new subscribers to our channel.

We believe in the importance of promoting equal opportunities and fair treatment to all people, regardless of their sexual orientation and gender identity. It also means that we reject discriminatory practices and their implications for people’s lives, for business activities and for society. Hence, we became **signatories to the Companies and LGBT+ Rights Forum**, a guideline under which we join efforts so that the 10 Company Commitments to LGBTI+ Rights become reality and can be beneficial to society as a whole.

Further progressing this topic in 2021, we promoted initiatives such as:

- Strengthening EAD Content on diversity.
- Internal campaigns to raise awareness of the subject, with emphasis on LGBTQI+ pride and racial consciousness, in addition to campaigns on dates such as International Disability Day, Women’s Day and Black Awareness Day.
- Closely working with the leadership and the personnel selection team, in order to boost the number of women in the company – which is also a management indicator.

For the next cycle, we will strengthen the Diversity theme as presented to the external public, with the dissemination of our practices and constant preparation of the in-house team.

REMOTE AND HYBRID WORK

In this sense, we reach the areas of the Industrial Units, as long as the activity is compatible and aligned with management.

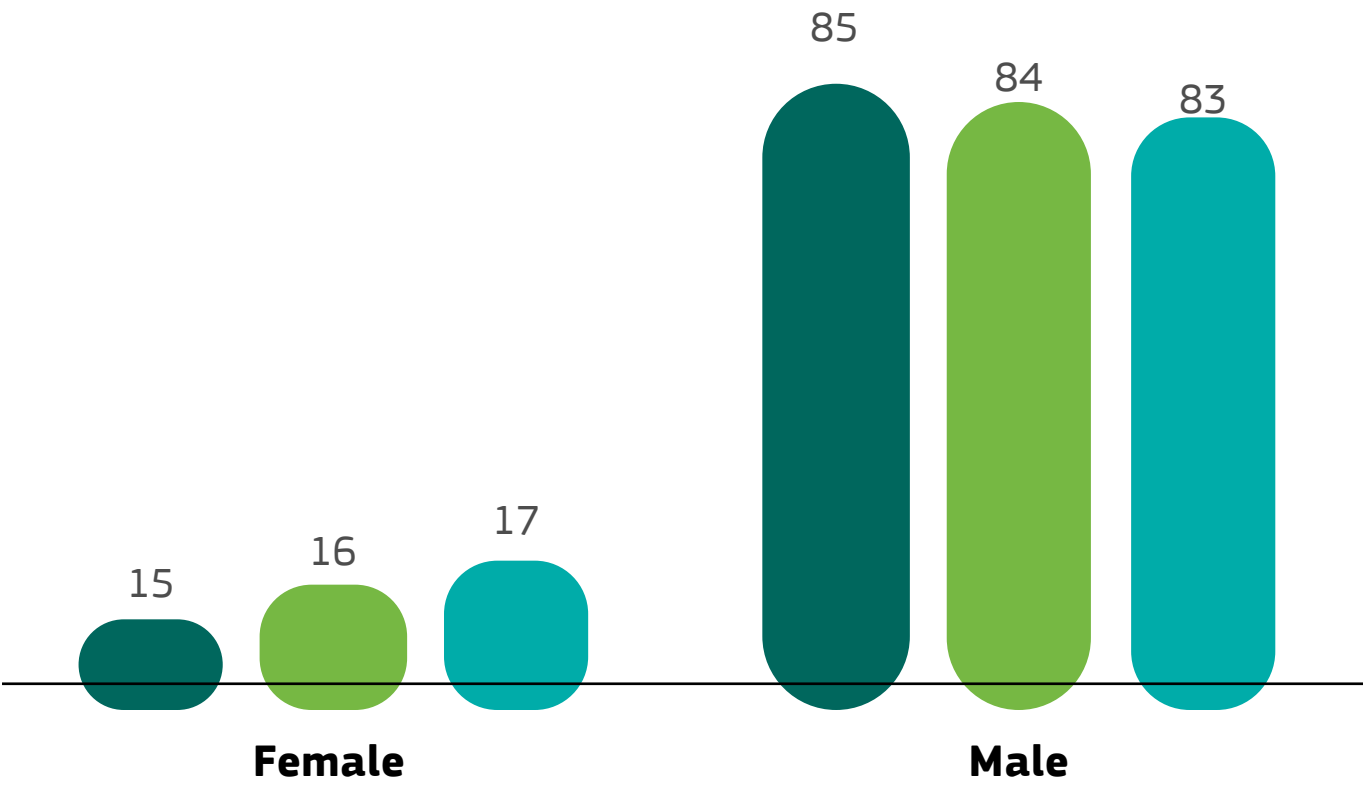
We provide specific training to support our workforce, mainly related to employee health, safety and ergonomics. The initiatives are included in the Learning Platform on the Employee Website and are mandatory for the continuity of this type of work environment. In addition, we published a remote work manual on the platform, presenting the Company’s orientation and guidelines for the model.

To control working hours, in 2022 we are implementing, a flexible time and attendance system, as well as access for the employee to make his or her own time adjustments.

Labor force demographic information

(102-8.f) The information presented here was extracted from our ERP system, with a base date of 12/31/2021. We consider all Irani branches and subsidiaries to be important operational units, because they are equally representative for the group, adopting the policies and strategies that seek the development and growth of people.

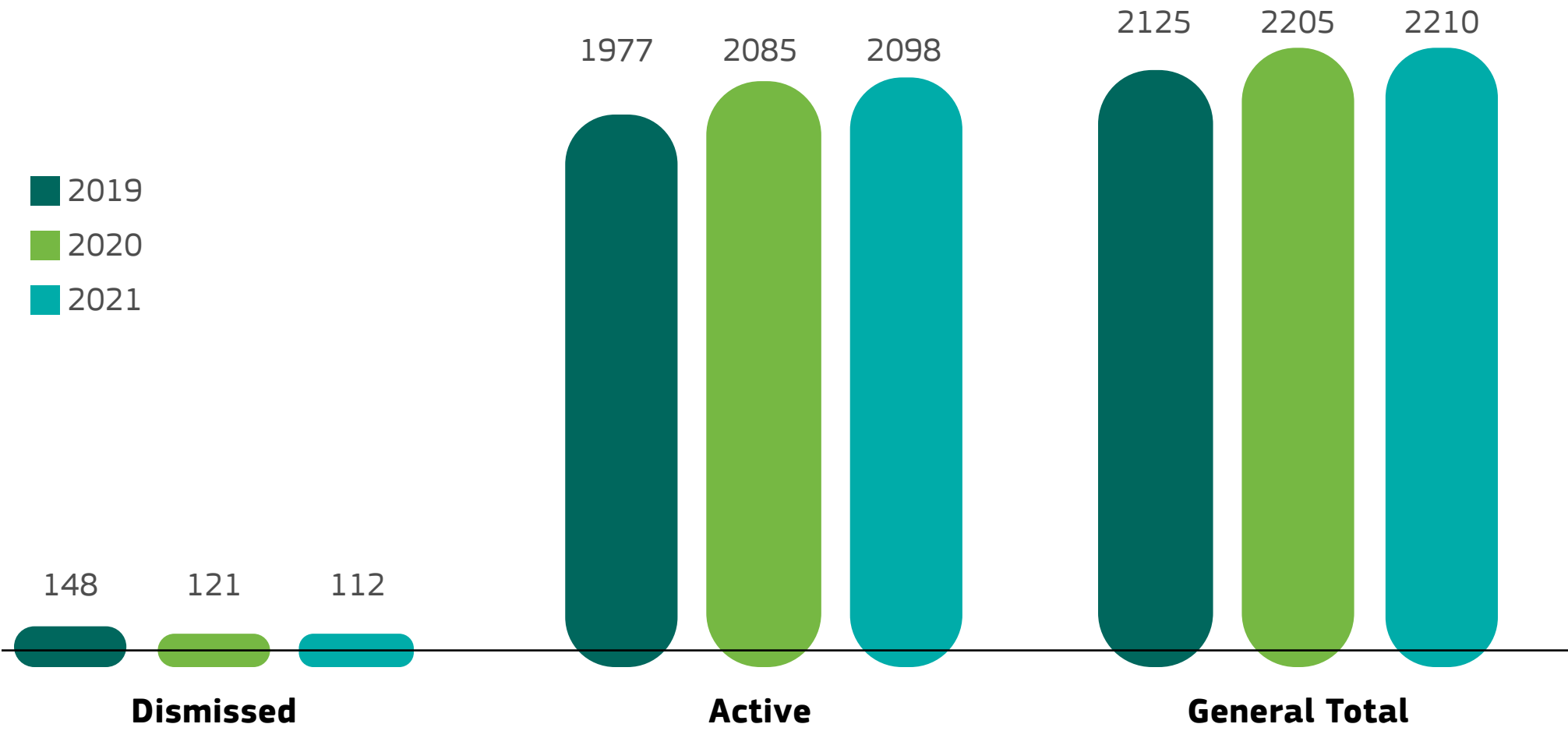
(405-1.I) PERCENTAGE OF ACTIVE EMPLOYEES BY GENDER



(102-8.C) HIRING REGIMEN

	2019		2020		2021	
	Male	Female	Male	Female	Male	Female
Half time	11	21	25	42	10	14
Full time	1,787	306	1,817	322	1,823	363

(102-7.a.i) TOTAL NUMBER OF EMPLOYEES



(102-8.a) EMPLOYEES BY EMPLOYMENT CONTRACT AND GENDER

	2019		2020		2021	
	Female	Male	Female	Male	Female	Male
CLT - Indefinite period	297	1,773	297	1,773	351	1,805
CLT - Young apprentices	21	11	21	11	14	10
CLT - Fixed period	9	8	9	8	12	12
Statutory	0	6	0	6		6
Grand Total	327	1,798	327	1,798	377	1,833

(102-41.A) ACTIVE EMPLOYEES COVERED BY COLLECTIVE BARGAINING AGREEMENTS

	2019	2020	2021
Collective Bargaining Agreements	91.25%	92.42%	98.62%
Pro-labore	0.28%	0.29%	0.29%
Minimum wage	1.51%	7.29%	1.10%

(405-1.III) PERCENTAGE OF EMPLOYEES BY JOB CATEGORY

	2019	2020	2021
Management	7%	6%	7%
Administrative	22%	24%	25%
Operational	71%	70%	69%

(401-1.A) NEW HIRES OF EMPLOYEES BY AGE GROUP AND GENDER

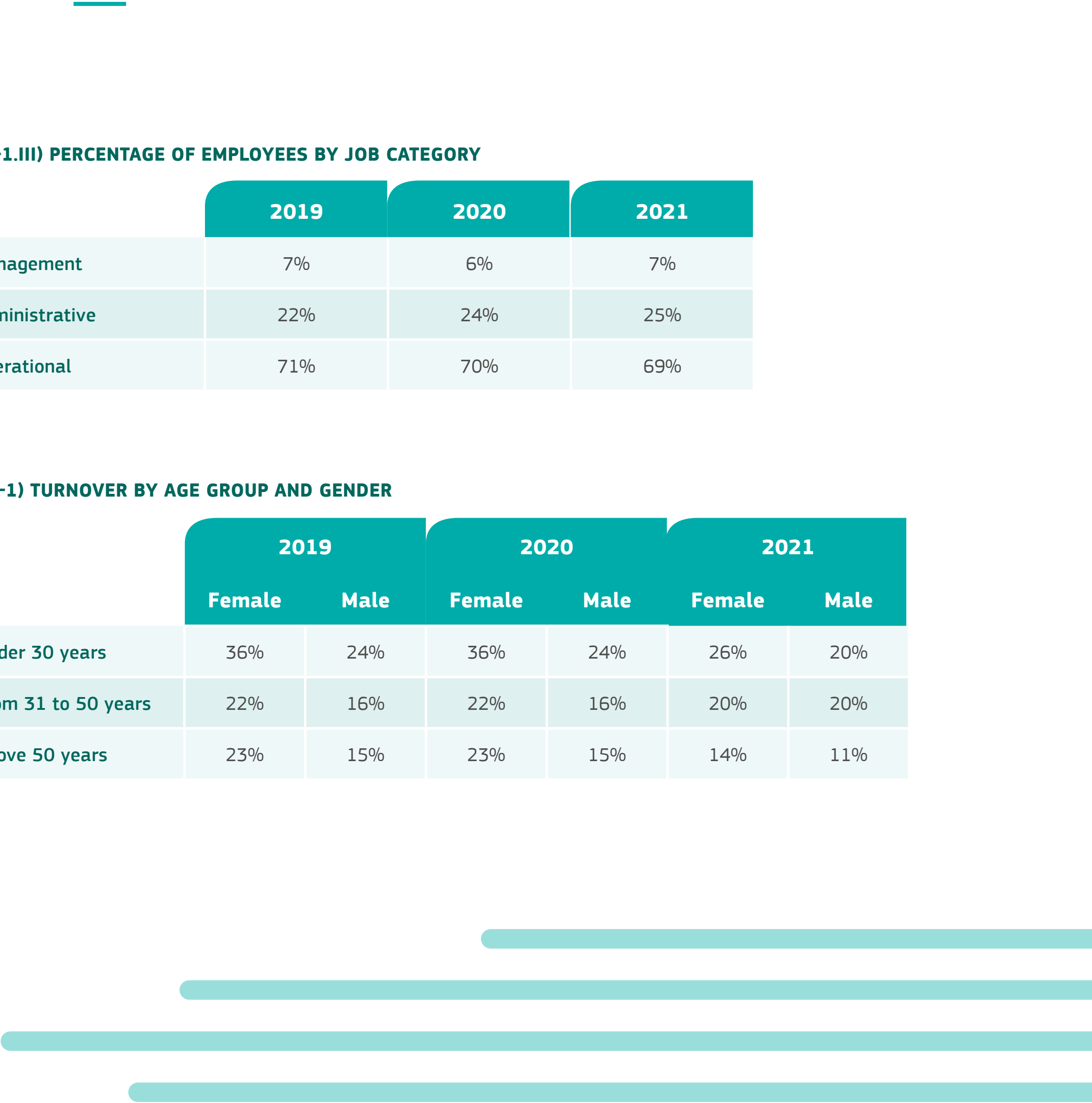
	2019		2020		2021	
	Female	Male	Female	Male	Female	Male
Under 30 years	17%	50%	17%	50%	17.27%	41.82%
From 31 to 50 years	0%	1%	0%	1%	0.30%	3.64%
Above 50 years	9%	22%	9%	22%	11.82%	25.15%

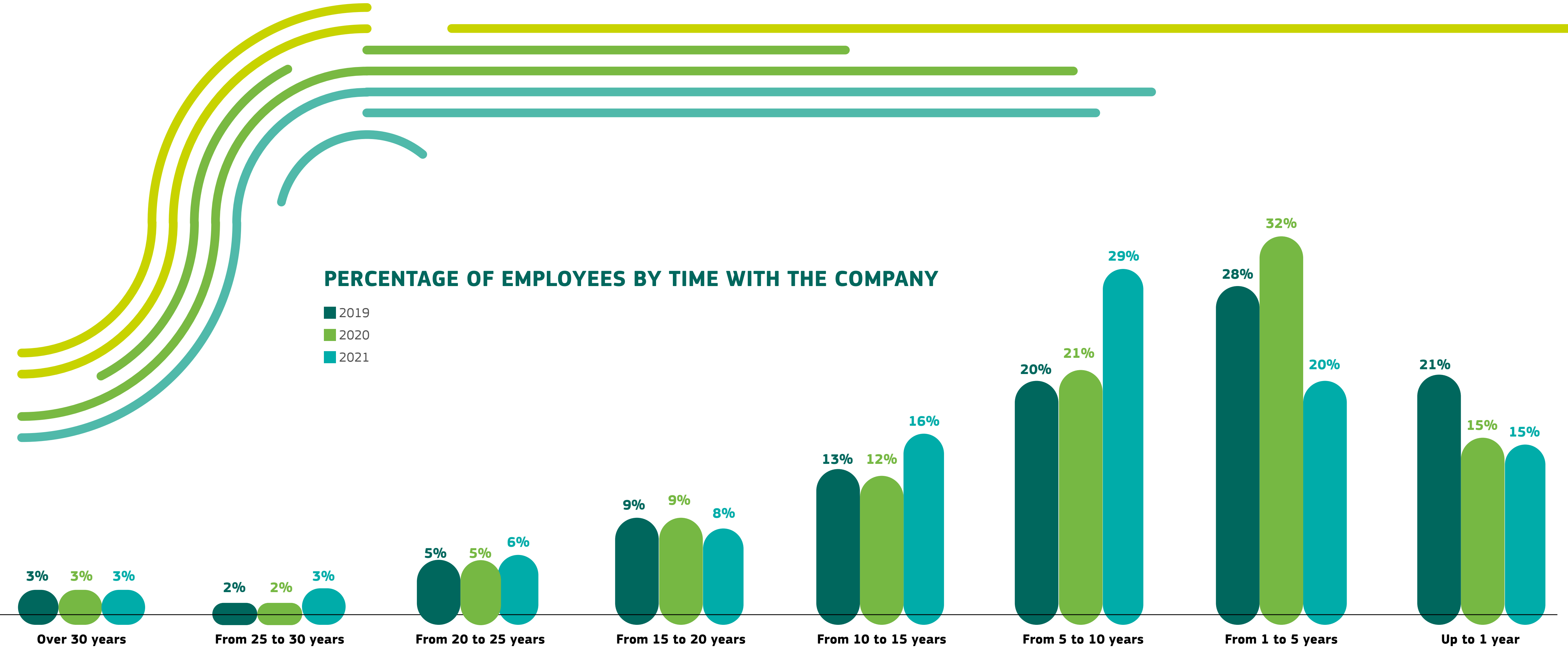
(401-1) TURNOVER BY AGE GROUP AND GENDER

	2019		2020		2021	
	Female	Male	Female	Male	Female	Male
Under 30 years	36%	24%	36%	24%	26%	20%
From 31 to 50 years	22%	16%	22%	16%	20%	20%
Above 50 years	23%	15%	23%	15%	14%	11%

(405-1.II) PERCENTAGE OF EMPLOYEES BY AGE GROUP

	2019	2020	2021
Up to 30 years old	39.25%	39.44%	37.42%
From 31 to 50 years	48.66%	48.82%	50.77%
Above 50 years	12.09%	11.74%	11.81%





Demographic information stratified by business units

(102-8.B, 102-8.C) EMPLOYEES BY BUSINESS UNIT AND GENDER

	2019		2020		2021	
	Men	Women	Men	Women	Men	Women
Office RS – Porto Alegre	19	18	19	18	21	28
Office SC – Joaçaba	86	52	86	52	97	64
Paper SC - Campina da Alegria	652	70	652	70	703	108
Paper MG – Santa Luzia	131	16	131	16	151	21
Packaging SC – Campina da Alegria	249	33	249	33	260	43
Packaging SP – Indaiatuba	326	48	326	48	358	44
Resin RS – Balneário Pinhal	42	14	42	14	58	19
Subsidiaries	172	39	172	39	185	50

(401-1.B) TURNOVER PER BUSINESS UNIT

	2019	2020	2021
Office RS – Porto Alegre	1.1%	1.39%	0.97%
Office SC – Joaçaba	0.8%	0.57%	0.45%
Paper SC – Campina da Alegria	0.6%	0.72%	1.33%
Paper MG – Santa Luzia	0.9%	0.42%	1.25%
Packaging SC – Campina da Alegria	1.5%	1.38%	1.23%
Packaging SP – Indaiatuba	1.0%	0.79%	1.18%
Resin RS – Balneário Pinhal	0.9%	0.54%	0.82%
Subsidiaries	1.8%	1.94%	3.42%



Compensation and benefits

(102-7) We ended 2021 with 2,210 employees, and 112 (5.07%) were on leave. Of the total, 99.73% are hired under the CLT (labor laws) and 0.27% have pro-labore. In the breakdown of the table, 98.69% are covered by collective bargaining agreements.

(103-2 and 103-3) With the support of specialist consultants, we are able to evaluate the Company’s regional practices and positions to guide our compensation and fringe benefit packages.

99.73%
of our employees are hired under CLT regime

(202-1) The average of the lowest wages practiced was equivalent to 0.41 of the minimum wage in force in Brazil on December 31, 2021 for men and 0.63 for women. In relation to the total number of employees, 16.15% received the category’s floor wage.

(102-38 and 102-39) Proportionally, the highest-paid individual in the Organization receives 29.08 salaries more than the average of the other employees. For the preparation of this data, the total annual remuneration was as follows: base salary + 13th salary + vacation pay. This same individual had a salary increase of 3.99%, while the average of the other employees increased 12.93%.

TOTAL PAYROLL VALUE (IN R\$ MILLION)

2019	2020	2021
135	138	154

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

	2019		2020		2021	
	Men	Women	Men	Women	Men	Women
Management	1	0.77	1	0.83	1	0.85
Administrative	1	0.88	1	0.83	1	0.86
Operational	1	0.76	1	0.78	1	0.71

Note: for the presentation of this information, we consider only the average of the base salary paid per job category. Men and women performing the same job in the Company receive the same wage. On average, men earn more by being the majority at all levels, impacting the highest leadership wages.

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

	2019	2020	2021
Meals	12,047	11,065	13,597
Transportation	8,541	8,043	10,704
Life insurance	340	312	331
Health insurance	14,568	11,135	12,314
School Supplies and Day Care	68	130	180
Home Office	*	310	589
Gympass	*	44	250
TOTAL	35,496	31,039	37,967

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

Parental leave

(401-3.a) All employees are entitled to maternity/paternity leave upon presentation of supporting documentation. The information presented below is based on the number of direct employees active on 12/31/2021.

	Men	Women	Grand Total
(401-3.b) Total number of employees who took maternity/paternity leave, broken down by gender.	66	16	82
(401-3.c) Total number of employees who returned to work after taking maternity/paternity leave, broken down by gender.	66	16	82
(401-3.d) Total number of employees who returned to work after taking maternity/paternity leave and remained employed 12 months after returning to work, broken down by gender.	59	11	70



Decent work and development of people



GRI 103-1, 103-2, 103-3, 102-8, 102-36, 102-37, 401-1, 401-2, 401-3, 404-1, 404-2, 404-3, 405-1, 405-2
ISE

programa **cresce** Cresce (Grow) Program

(103-2) The Cresce (Grow) Program comprises actions to train and develop people aligned with the Company’s strategies. The goal is to stimulate the constant qualification of employees – both for their personal and professional growth – focusing on the demands of the areas and the following competencies:

- **Life, First of All:** ability to take care of oneself and others, prioritizing the life, health and safety of all.
- **Leadership:** ability to engage and influence people to achieve differentiated and sustainable results, with simplicity, humility and balance.
- **Communication:** ability to convey ideas, guidelines and opinions, clearly and assertively, using the means of communication available and appropriate to each audience. Here we seek to stimulate active listening and understanding of what is being communicated.
- **Excellence Culture:** attitude oriented to ensure excellence and continuous improvement of products, processes and services.
- **Teamwork:** ability to combine everyone’s efforts to achieve results through engagement and the sum of different profiles within the company.
- **Focus of the Client:** ability to understand and anticipate client needs. Empathy is developed and effective actions are taken to solve client demands. The result is an increase in value and loyalty relationships.
- **Self-Development:** commitment of each to the continuous quest for personal and professional development, using the different means of access to learning – internal and external. It means being the protagonist of one’s own career.
- **Innovation:** ability to act creatively, generating and implementing successful ideas in processes, products and service delivery.

competencies

education

Irani Corporate Education

This is our way of improving how we capture knowledge, making it accessible, available and easy to understand. Segmented in three schools and their respective strategic focuses, our Corporate Education dives deeper into the subjects experienced in the Company through various teaching methodologies. The culture of continuous learning and career pro-activism is thereby stimulated.



At the same time, it strengthens our roots and technical bases, striving for excellence.



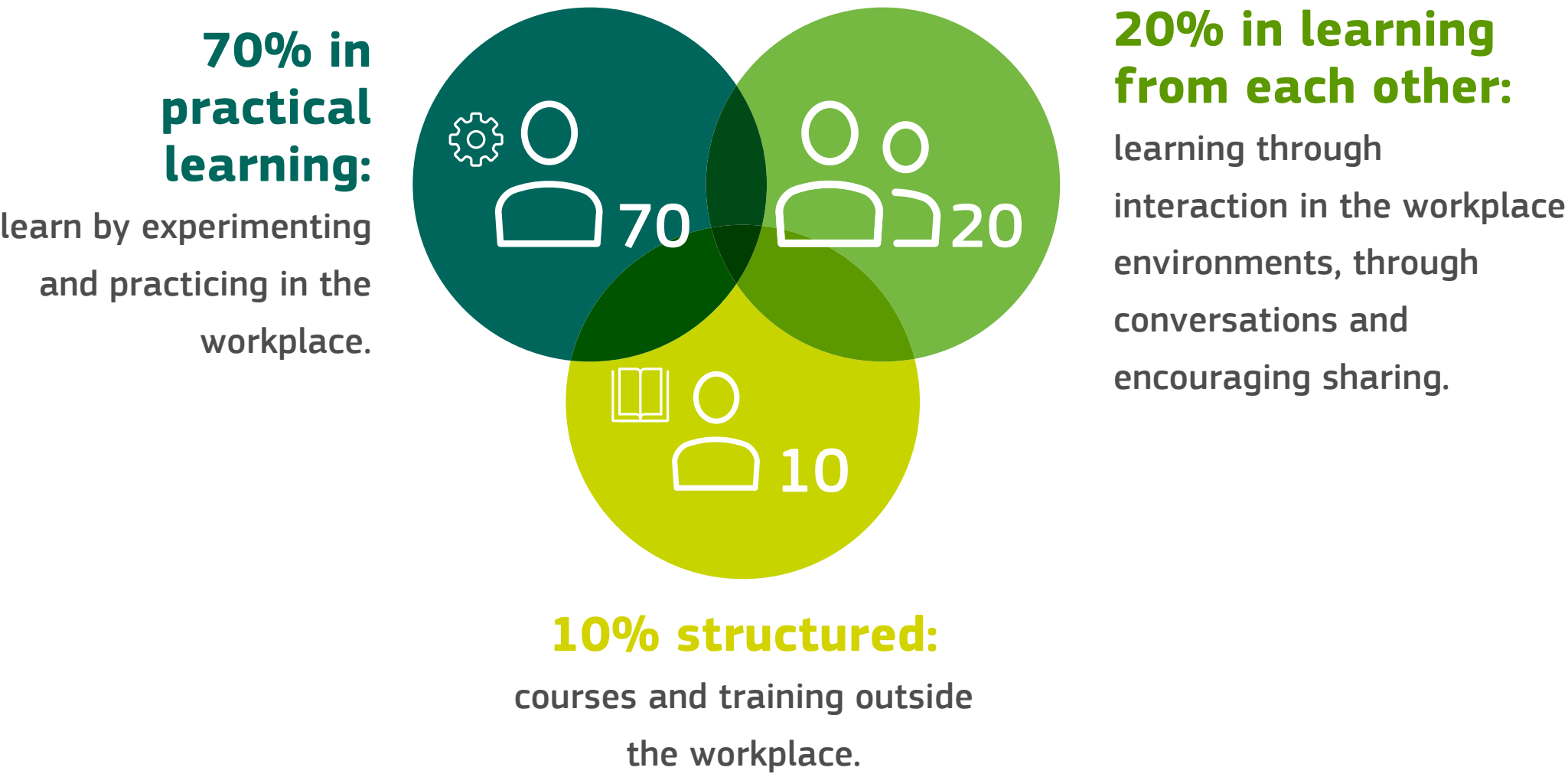
It urges “thinking and doing” as a strategy to embrace the future.



It encourages one’s own leadership qualities, leading us into the future.

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

(103-3) The Executive Board evaluates the results of this initiative and is advised by a specialist committee regarding the development of educational solutions appropriate to our business strategy.



In 2021, we were highly focused on the courses available on our Distance Education Platform. We care about the safety of our employees, especially because of the pandemic, but without neglecting staff training actions.

(404-1) AVERAGE HOURS OF TRAINING PER JOB CATEGORY

Hierarchy level	2019			2020			2021		
	Total class hours	No. of employees	Average hours of training	Total class hours	No. of employees	Average hours of training	Total class hours	No. of employees	Average hours of training
Management	9,350	138	68	6,747	144	47	8,045.9	137	58.7
Administrative	15,071	476	32	14,074	554	25	21,098.1	566	37.3
Operational	35,460	1,511	23	47,958	1,547	31	51,718.2	1,431	36.1
TOTAL	59,881	2,125	28	68,778	2,245	34	80,862.2	2,134	37.8

(404-1) AVERAGE HOURS OF TRAINING PER GENDER

	2019			2020			2021		
	Total class hours	No. of employees	Average hours of training	Total class hours	No. of employees	Average hours of training	Total class hours	No. of employees	Average hours of training
Women	9,191	327	28	14,807	388	38	16,713.86	377	44.33
Men	50,690	1,798	28	53,972	1,857	29	64,148.36	1,757	36.31

INVESTMENTS (IN R\$ THOUSAND)

	2019	2020	2021
Investment capacity-building and development	1,231	1,240	1,225
Incentives to education through grants	283	243	237

To strengthen the learning culture, in 2021 we designed new training processes in the EAD format. We offer 40 online courses on the Education Platform and conduct 100% online Leadership Development classes. In addition, to reinforce career pro-activism, we promoted the first edition of the Self-Development Day.

Encouraging reading

We have a physical library, in Vargem Bonita (SC), featuring a broad collection available to any employee. For the other units, the collection is made available through remittances of books and journals.



programa

motiva

**Motiva
(Motivate)
Program**

(102-43, 102-44) Initiative for the management of the organizational climate. In the program, we put together a set of actions designed to provide a stimulating and motivating work environment, so that people can develop their potential to the maximum. We believe this type of stimulus contributes to the creation of each employee's identity with the organization, as well as their shared responsibility with the growth of Irani.

The Program's main tool is organizational climate research. Applied annually as of 2021 and based on the Great Place to Work® methodology, it indicates the level of satisfaction of our teams in relation to various aspects of their work. For example, interpersonal relationships, communication, leadership style, development opportunities, recognition, company image, compensation, and health and safety are evaluated.

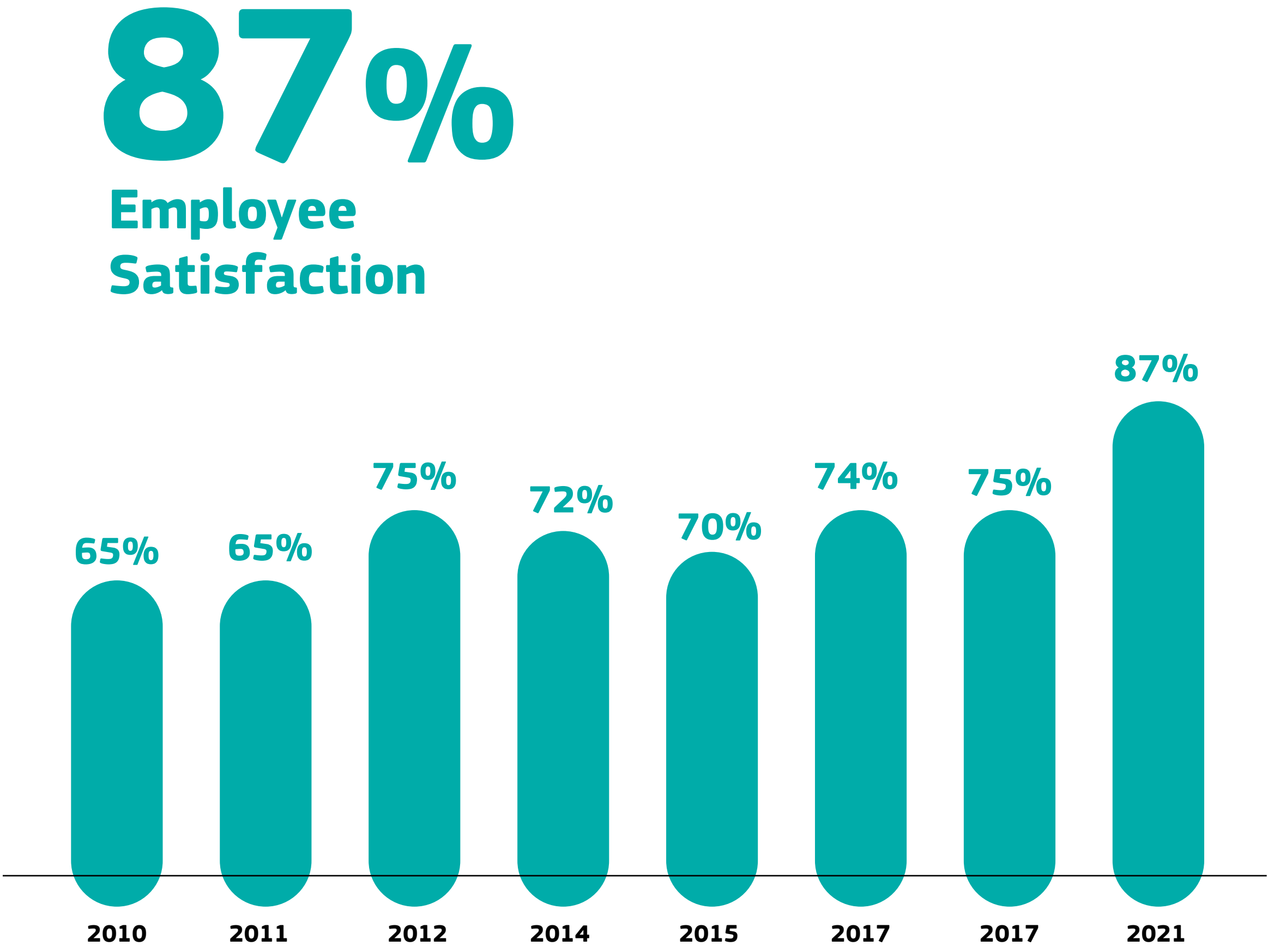
In the 2021 survey, Employee Satisfaction stood at 87%. This was a significant figure, even in the face of the challenges posed by the pandemic.

From the diagnosis, Irani's leaders develop corporate and unit action plans for all areas. For each improvement

opportunity identified, ways to achieve the desired results are outlined. We also have climate management support groups set up in all business units – they act as spokespersons for the employees and support the leadership in the execution of the action plans.

To maintain our employees engaged in building a better organizational climate, we continue implementing the #cultiveoclima campaign. This comprises a celebration of the commemorative dates for both the professionals who have continued to work face-to-face and those who have adopted the online work format.

Even with part of the teams in the home office model, it is important to point out that none of the Company's cultural practices were abandoned in 2021. Leaders and climate management support groups used great creativity to integrate people, strengthen the connection with corporate values and encourage team camaraderie. Examples are the annual tribute to the employees for time in the Company, the celebrations of Irani's and the collaborators' birthdays, end of year and retirement parties.



programa

supera

Supera
(Overcoming)
Program

A little more than ten years in existence, the Supera (Overcoming) Program underwent important changes as it matured and aligned with the needs of the Company. The most significant change was in 2020, divided into two axes: Skills and Results.

SUPERA SKILLS









Supera Competências (Skills) is a program that aims to stimulate the personal and professional development of employees, provides opportunities for self-knowledge, strengthens the feedback culture, fosters productivity, identifies talents and recognizes distinctive performances.

The skills assessments take place annually and are specific to each functional group:

Who evaluates?	
Leadership	Self-assessment Immediate superior Subordinates Peers
Administrative/ Commercial/Technical	Self-assessment Immediate superior Peers
Operational	Self-assessment Immediate superior

Organizational skills were also divided into functional groups:

COMPETENCIES:

Competencies	 Life, first	 Focus of the client	 Excellence culture	 Innovation	 Self-development	 Teamwork	 Communication	 Leadership
Operational	✓	✓	✓	✓	✓	✓		
Adm/Commercial	✓	✓	✓	✓	✓	✓	✓	
Leaders	✓	✓	✓	✓	✓		✓	✓

Irani’s Skills Assessment process occurs over two stages: Network Evaluation and Manager Evaluation. As a form of maintenance and follow-up, we conduct semi-annual feedback.

evolution

Network Evaluation

At Irani, the process is composed of self-evaluation, peer evaluation (defined by the employees) and the employees’ evaluation of their leaders. It is determined according to the group that each employee belongs to:

- **Leadership:** carries out self-assessment and evaluation of peers and subordinates.
- **Administrative/Commercial/Technical:** performs self-assessment and peer evaluation.
- **Operational:** performs self-assessment.
- **The results will serve as support for the next step:** the manager’s evaluation of his/her employee. In other words, the network evaluation enables the manager to visualize/understand the perceptions of the employee and of other colleagues or team members, providing him/her with information for analysis.

Manager Evaluation

It is the stage in which the manager evaluates the team’s employees. For support and as a guide, the manager draws on 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 steps in the evaluation strategy, because it determines each employees final result. The data contribute to the feedback meeting and the preparation/maintenance of the Individual Development Plan (IDP).

(404-3) PERCENTAGE OF EMPLOYEES WHO PARTICIPATE IN THE SUPERA PROGRAM

	2019			2020			2021		
	Men	Women	TOTAL	Men	Women	TOTAL	Men	Women	TOTAL
Management	5%	1%	6%	6%	1%	7%	5%	1%	6%
Administrative	21%	8%	29%	12%	8%	20%	16%	9%	25%
Operational	55%	1%	60%	63%	4%	67%	63%	6%	69%
TOTAL	82%	13%	94%	81%	13%	94%	84%	16%	100%

Note: retirees, young apprentices, trainees and new employees admitted after December 15 do not participate in the Program.

Supera results

Supera Results is based on the definition of goals at the beginning of the year and monthly follow-up verifies fulfillment of what was planned. The results achieved are consolidated, determining the final classification and the bonus range – which may be:

- 0% of salary if you don’t reach your goals.
- 50% of the salary if it falls within the incentive range.
- 100% of salary if you achieve the goals.
- 150% of the salary if it exceeds the expectations in relation to the goals.

We challenge our employees by setting goals that stimulate continuous development, focused on operational excellence and value creation. In 2021, there were 428 defined targets, of which 272 were exceeded and 62 were not met.

Occupational health and safety



GRI 103-1, 103-2, 103-3, 403-1, 403-2, 403-3, 403-4, 403-5, 403-6, 403-7, 403-8, 403-9, 403-10 ISE

programa **cuida** Cuida (Care) Program

(103-1, 103-2, 103-3, 403-1)

This is our commitment to life. The Cuida (Care) Program merges Irani's occupational health and safety systems and aims to ensure that working conditions are appropriate and safe for employees and service providers. To strengthen the Company's occupational health and safety culture, the actions unfold on the following fronts:



Legal assistance

At Irani, we make a commitment in the form of a value: **life, first of all.**

(103-1, 103-2, 403-1.a, 403-1.b, 403-8.a) Based on Ordinance No. 3.214/1978 (Regulatory Standards), the Cuida Program is the way we translate this value into a set of occupational health and safety management policies, procedures and practices. We offer suitable and safe conditions for the performance

of activities for all employees and service providers. They are submitted to work permits with risk analysis by our Specialized Safety Engineering and Occupational Medicine Service (NR4 - SESMT) team.

(403-1, 403-2.a.i) In all business units, our SESMT teams (Occupational Medicine + Occupational Safety) have more members than required under the NR4 guidelines. Together, SESMT professionals reach a total of 26 direct employees and seven service providers – including doctors and speech therapists.

Continuously trained in aspects related to health, occupational safety and wellness, the teams are dedicated to the fulfillment of approximately 5,700 requirements applicable to our businesses.



Legal assistance



Communications, programs and campaigns



Management



Standardization and Training



Recognition



Penalties

life, first

(403-3.a)



Communications, programs and campaigns

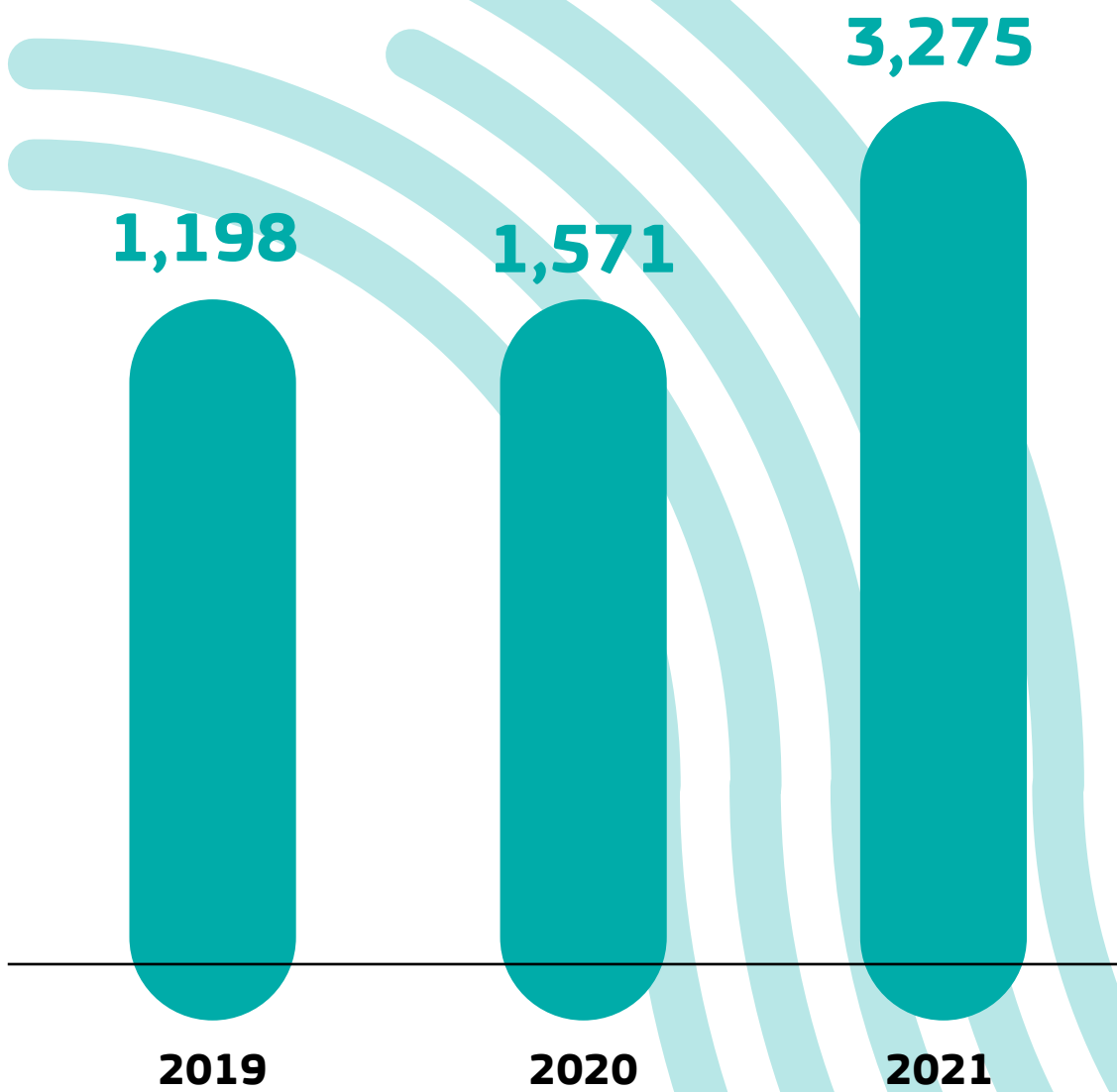
(403-3.a) Occupational health and safety content is covered at different times. Among them, integration of employees and service providers, periodic exams, dissemination of preventive campaigns, thematic meetings, Internal Work Accident Prevention Weeks (SIPATs) and the follow-up report records are stand outs. That is, there is a wide range of actions to make essential information available to all employees.

(403-6.b) In 2021, a number of Health and Safety Dialogues (DSS) and 17 in-company campaigns were organized. In addition, we reinforced the preventive campaigns being run by the Federal government and the Health Surveillance authorities in relation to Covid-19.

We also have other mechanisms in place to strengthen this culture, such as:

- **Medical and dental assistance plan:** extended to all direct employees and their dependents.
- **(403-6.b) Aptitudes according to special activities:** dedicated to employees who have some type of restriction for special work, such as height, confined space or operation of mobile equipment. We focused on rehabilitation, monitoring factors such as weight, blood glucose and blood pressure. In 2021, 51 people were diagnosed with arterial hypertension and ten with diabetes.
- **(403-6.b) Hyperdia:** collaborators diagnosed with hypertension and diabetes receive periodic follow-up as a preventive form of work leave.
- **Hearing conservation program:** we keep up-to-date reports on the exposure of our employees to noise in industrial environments. The necessary actions are defined in the Hearing Conservation Program, based on the assessments from the Environmental Risk Prevention Program.
- **Observation and Prevention Program (POP):** aims to prevent workplace accidents through behavioral approaches and dialogues. The health and safety teams are trained to offer guidance in a manner that is humanized and effective. In addition, members of management who sit on the Internal Commission for the Prevention of Accidents at Work (CIPA) receive annual training. The evolution of these approaches can be seen in the following graph:

OBSERVATION AND PREVENTION PROGRAM (POP):





Management

We use software for health and safety management purposes. Integrated with the company’s new ERP system and one of the best solutions available in Brazil, the tool allows for the complete management of occupational health, from admission to dismissal.

The software permits integrated management of occupational risks: physical, chemical, biological, ergonomic (for units that already prepare ergonomic reports), and from accidents/mechanical causes. The ERP is a key tool for the preparation of the Risk Management Program (RMP) and the Occupational Health and Medical Control Program. It is also an indispensable means for sending labor-related information to eSocial.

(403-4.a and 403-4.b) Formal committees represent employees and assist in the definition, implementation and monitoring of health and safety practices.

Communication	Representativity	Responsibility	Degree of autonomy for interruption of operations	Meeting frequency
Internal Accident Prevention Commission (CIPA)	As provided by law.	Conforme previsto em lei.	Respeita as disposições previstas na legislação. Os membros podem, a qualquer momento, interromper a operação em casos de apuração de condições ou comportamentos inseguros.	Monthly
Surplus vacancies are filled by professionals appointed by the Company.	As provided by law.	It respects the provisions foreseen in the legislation. Members may at any time interrupt an operation when unsafe conditions or behavior are determined.	Monthly	Monthly
Emergency brigade	100% of employees on all work shifts.	Identification of scenarios that can lead to occupational risk conditions and emergency care.	Total during callout for emergency occurrences.	Monthly
Ergonomics Committee	Occupational medicine and managers.	Management of TSE in the prevention of musculoskeletal diseases.	Full autonomy, according to the eventual need.	Monthly
Breakfast & Safety	Managers, occupational health and safety.	Macro discussion of aspects related to occupational safety and health.	Full autonomy, according to the eventual need.	Quarterly
Attestation Critical Analysis Committee	Managers, occupational health and safety.	Analysis of the main causes of leaves, to take necessary actions.	Full autonomy, according to the eventual need.	Monthly
NR10 - Electricity Safety in Installations and Services	Managers, occupational health and safety.		Full autonomy, according to the eventual need.	Bimonthly

(403-2.a.ii, 103-3) Monthly, the Executive Board monitors a dashboard displaying strategic health and safety indicators:

- **Number of lost-time workplace accidents**
- **Severity Rate**
- **Frequency rate**
- **% of CID-M certificates**
- **% legal compliance**
- **% of employees trained in regulatory standards (NRs)**
- **% of late periodic examinations**

The responsibility is to suggest improvements in relation to the topic, monitoring performance in order to eliminate accidents in the Company.

Health and safety indicators are monitored regularly by our SESMT teams on all sites:

(403-9)	2019	2020	2021
Number and frequency rate of fatalities as a result of work-related injuries	0	0	0
Severity rate ¹	235.15	79.75	89.69
Number and rate of injuries without lost time	32 accidents Rate: 7.26	29 Accidents Rate: 8.50	21 Accidents Rate: 6.12
Number and rate of lost time injuries	51 accidents Rate: 11.58	29 Accidents Rate: 8.50	38 Accidents Rate: 11.07
Number of man-hours worked	4,843,445h	3,410,670h	3,434,060
Main types of work-related injuries	Upper limbs	Upper limbs	Upper limbs

¹ The severity rate is calculated considering (HHT*1000000/number of accidents)

² Information on high consequence injuries is not available

(103-3, 403-1, 403-8.a.iii e 403-8.c) Internal and external audits and certifications such as ISO and FSC®, in addition to the licenses granted by the competent bodies, assure the effectiveness of the occupational health and safety management processes. The sum of these practices contributes to deepening the treatment of risks and the ways to mitigate them.

(403-4.a) This movement also aims to achieve ISO 45001 certification by 2024. At the same time, we continue to investigate accidents and qualify actions that have led to a reduction of the severity rate and the number of occurrences.

(403-8.a.i) Fulltime outsourced workers receive initial orientation, participate in the industrial units’ health and safety activities and are included in the occurrence reports.

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.

Irani has been working with this concept of Lives Changed since 2019, but 2021 was the first year in which we report this information. Lives Changed is a reference to accidents in which the effects are considered very serious and/or permanent. Since 2019, we have had 0 (zero) lives changed.

Fundamental tools such as PET - Special Work Permit, POP - Observation and Prevention Program, and the 5 Attitudes for Life, subsidize the prevention of accidents and contribute to our having zero lives changed, strengthening our purpose in relation to caring for the physical integrity of our direct and indirect employees.

QUANTITATIVE-LIVES CHANGEDS

2019	2020	2021
0	0	0



**Standardization
and Training**

(403-3.a, 403-5.a)

Since 2020, due to the pandemic, some regulatory standards training has been conducted in the hybrid model. The initiatives mix training on Irani’s Learning Platform (the theoretical part in the NR) with the practical part taught by qualified in-company instructors.

The training content is based upon the applicable regulatory standards, offered free of charge and occurring over the course of a regular working day, whenever possible. About 90% of the courses are conducted by our own teams. In 2021, 780 class hours were conducted by Irani’s technical instructors.



Recognition

During Sipat 2021, we formalized recognition of eight outstanding areas and employees. The employees were evaluated according to safety perception, safe behavior, preventive actions and mutual care. Regarding the criteria of the highlighted area, in addition to the low number of occurrences, the successfully applied health and safety actions were considered.



Penalties

Also 2021, we recorded behavioral deviations and applied appropriate disciplinary measures, pursuant to the Disciplinary Measures Matrix.

The health and safety culture has been consolidated through the implementation of several programs designed to reduce the severity rate (SR) while maintaining an SR (zero) vision in up to ten years. As for the Business Intelligence of indicators, there has been a change in the management monitoring strategy, which is still in the development phase.

In 2021, R\$ 2.3 million was invested for improvements to health and safety in all of Irani’s business units.



Covid-19 Contingency Plan

In 2021, the actions of the Contingency Plan against Covid-19 continued to be conducted by SESMT, in order to ensure the physical integrity of the employees and the community in general.

The training was adopted in the hybrid modality, i.e., the theoretical part via the Learning Platform, and the practical part with the presence of a technical instructor.

The Occupational Health area’s teams monitor employees affected by Covid-19, by telephone and/or chat applications. After compliance with the quarantine established in the Covid-19 Contingency Plan and the presentation of a negative test, the employee returns to his or her normal activity.

Daily, we accompanied the Covid-19 Bulletin. In the publication, quantitative information about staff who are actively infected, under observation or cured is disclosed to the managers. In 2021, the percentage of numbers of persons vaccinated in the units was included.

Covid-19 bulletin (updated on 12.30.2021)

	General	Campina da Alegria	Indaiatuba	Balneário Pinhal	Santa Luzia	Porto Alegre	Joaçaba
Confirmed Tested positive for Covid-19	579	338	102	49	51	12	27
Percentage Of positive tests in relation to the total number of employees	24.7%	28.5%	24.3%	14.2%	28.6%	20.6%	16.7%
On Leave Present symptoms and are in isolation	15	6	1	5	2	1	0
Cured Number released after testing positive	572	334	102	47	51	11	27
Active Confirmed, still in recovery	7	4	0	2	0	1	0
Percentage vaccinated 1st dose	97.6%	97.7%	99.2%	91.6%	100%	98.0%	100%
Percentage vaccinated 2nd dose	89.1%	89.5%	91.4%	76.4%	96.2%	90.9%	96.9%



Human Capital

Opportunities and future commitments

Strengthen the Diversity theme with the external public, by disseminating our practices and constantly updating the internal team on the topic.



Implement a flexible system for the employees to make their own adjustments to their working hours.



Strengthen the IDP/career outlook.



Schedule the 2nd Self-Development Journey edition and further strengthen the engagement of graduates from previously trained classes.



Review the Continuous Integration methodology.



Broaden the scope to other learning formats within the Company and strengthen communication.



Develop a Mentoring Program.

Implement Continuous Integration in the areas with the highest turnover.



Expand the design of online solutions, introducing relevant topics. Design learning solutions according to the business strategy.



Maintain and increase the Employee Satisfaction Index through continuing action plans and involvement, generating pro-activism.



Continue strengthening the health and safety culture and uninterrupted efforts to reduce the accident frequency and severity rates.



Consolidate the occupational safety and health programs already implemented.



Zero occupational accidents with lost time by 2030.



By 2030, have 40% of women in the Company's workforce and 50% in leadership positions.



Progress regarding Organizational Culture Management.



Intellectual **capital**

Innovation



Innovation



**GRI 103-1,
103-2,
103-3**

We value what is new. We understand that resilience, agility and permission to make mistakes while learning are essential for creating new solutions. Therefore, our strategic goal is to reinforce the culture of innovation and expand the ecosystem.

Tech Platforms

In order to maintain a Research, Development and Innovation (RD&I) portfolio, we operate through Technology Platforms. In practice, they are comprised of multidisciplinary teams organized in tactical and operational groups, which identify opportunities, plan and implement projects.

In 2021, 17 topics were prioritized for the development of RD&I projects, of which 48 projects were carried out by the four technological platforms: Forestry/Resin, Pulp and Paper, Corrugated and Environmental Cardboard and Energy.

Of the 48 innovation projects and initiatives in the four Technology Platforms, 21 are currently under development, followed by 11 in research, nine in implementation and seven in ideation.

All the projects involved internal efforts and open innovation partnerships with suppliers, universities, technology incubators, class entities, startups, government and research and innovation centers. The initiatives were approved and monitored by the Innovation Committee, composed of the Executive Board and business managers, and whose mission is to establish priority RD&I investment lines for our businesses. The Innovation Committee met twice during the year to monitor and direct the projects and initiatives generated by the Technology Platforms.

Through the Pulp and Paper Platform, we launched the first paper packaging featuring antimicrobial technology in Brazil, which inactivates viruses, bacteria and fungi. The packaging is almost 100% effective, even allowing the inactivation of the Covid-19 virus (SARS-CoV-2), which occurs up to five minutes after contact.

Developed in partnership with Nanox Tecnologia, a company specialized in intelligent materials, nanotechnology and antimicrobials, the paper uses silver microparticles that oxidize the outer layer of the microbe. Thus, an antiviral, antibacterial and antifungal protection barrier is created that makes it possible to eliminate 99.9% of SARS-CoV-2 from the surface of the packaging, as well as other viruses, bacteria and fungi.

To develop the new product, Irani's RD&I department conducted a series of tests in cooperation with Nanox Technology. The final stage was performed by a specialized company, Quasar Bio, a benchmark SARS-CoV-2 testing firm. They were carried out in the level 3 biosafety laboratory (NB3) run by the Institute of Biomedical Sciences at the University of São Paulo (USP).

development and innovation

Irani Labs

In 2021, we conducted four Proofs of Concept (PoC) tests to assay the solutions of the startups selected in the 1st edition of the Irani Labs program.

In the Forest Technologies PoC, we tested dendrometric measurement technology for forest planning and management, through artificial intelligence developed by the Katam Technologies startup.

In the second PoC – Scrap Collection and Management – we tested an online system of tracking, artificial intelligence, processing and machine learning for scrap developed by the TrashIn startup.

Another PoC concerns Waste Management. We tested the e-Terra Marketplace platform and the integrated management of waste management and disposal processes developed by the Aterra startup.

And, in the PoC for New Business Models, Products and Services, we tested the modeling and 3D printing of maintenance parts by the 3D Lopes startup.

To speed up the contracting of external partnerships, we developed a differentiated process for hiring startups, called Fast Track, which introduced a number of benefits. One of them was the reduction in the time for approval of PoC contract with startup, which was 62% lower. With this change, we obtained 100% satisfaction from startups regarding their relationships with Irani.

In addition, we launched the 2nd edition of Irani Labs. In line with the Company’s open innovation strategy, Irani Labs aims to identify innovative and sustainable solutions that contribute to the acceleration of its business model, in addition to boosting the projects and products of the selected startups. The initiative is the result of another partnership with Grow+, a startup accelerator and investment manager. In this edition of the Open Innovation Program for connecting with startups, we launched challenges in four themes: Industry 4.0, Packaging Design, Customer Experience and New Materials and Barriers.



Industry 4.0
We seek digital and technological solutions for the automation of our factories, including inventory digitalization, storage, management and manual operation of finished products and coils.



Packaging Design
We seek the creation of new technologies for the co-creation and virtual visualization of new packaging (open design).



Customer Experience
We seek technological solutions to improve customer service, relations and experience, making interactions more agile and standardized, without losing the human touch.



New Materials and Barriers
We seek to combine new materials that meet current consumption demands with new sources and types of sustainable raw materials for packaging solutions.

During the registration period, we had 739,317 hits and 4,417 clicks on social media publications. In all, there was participation from 11 Brazilian States and one region in Portugal. There were 140 registered startups, 11 finalists giving pitches on Demoday and eventually five winners demonstrating proof of concept to Irani.





Irani Ventures

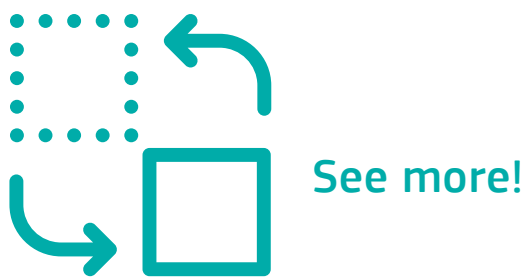
In August 2021, we launched Irani Ventures, our Corporate Venture Capital (CVC) vehicle. The goal is to accelerate and invest in innovative startups with high growth potential, aligned with Irani’s Investment Thesis for the next seven years. The Thesis is divided into New Materials and Barriers, Environment, Circular Economy, Social Innovation, Digital Platforms and Industry 4.0.

Over the next seven years, the Company will form a portfolio of up to 20 startups through initial investments that could reach R\$ 1 million per startup, in addition to offering an award-winning acceleration program.

In partnership with Grow+, an investment manager and startup accelerator, startups invested by Irani Ventures will have access to the 10-WeekLabs™ Acceleration Program. Through it, they will

participate in a process of immersion and leverage with intellectual capital, involving operational support, mentoring and networking. The support will assist in the growth and development of the activities and business of each of the startups.

We held Irani Ventures’ first Demoday with startups selected by the Grow+ accelerator and vehicle manager. The event was online, with transmission originating at the Tecnopuc technology park. The finalist startups, 40 in total, presented their pitches to Irani’s evaluation board, eight finalists among them. The evaluation board selected six startups for investment evaluation, whose business models will undergo a careful analysis, as well as their potential to receive financial and intellectual capital contributions. The factors evaluated include the stage, percentage of equity and valuation, among others.



Ranking 100 Open Startups

We entered the TOP Open Corps 2021 ranking, as leaders in open innovation with startups in Brazil. Additionally, we were recognized as TOP 5 Pulp and Paper.

In the segment, 19 corporations that practice open innovation with startups were identified, and Irani is among the five with the highest involvement with this type of innovation relationship model.

Held since 2016, the 100 Open Startups list is a point of reference for the market. The methodology uses objective criteria to recognize and reward the leading open innovation corporations with startups, as well as the most attractive startups for the corporate market.



Ranking Innovation Champions in the South

We also entered the 17th edition of Grupo Amanhã’s Campeões da Inovação no Sul (Innovation Champions of the South) Ranking. The Innovation Champions survey adopts the Innovation Management Index, a tool from the Global Innovation Management Institute (Gimi) methodology, applied by the IXL-Center, Cambridge (USA).

Gimi is a global non-profit organization created by a team of specialist innovation executives, academics and consultants. The group assists people, companies and regions to develop world-class innovation management skills based on global standards, metrics, test protocols and certifications.

Intellectual Property Policy

To protect the confidential information and knowledge generated within Irani and encourage the creation of disruptive innovations, we have implemented an Intellectual Property Policy (IPP). It consists of a set of guidelines that establish procedures on confidentiality, ownership and the transfer and licensing of technology. The IPP reinforces the importance of ensuring the privacy of confidential and strategic information, especially with regard to creations and research developed by the Company, either internally or in partnership with third parties. To expand our companywide knowledge of these guidelines, in 2021 we launched an online course on Corporate Education platform, available to all employees. In addition, we conducted awareness-raising sessions on the subject, involving managers and more than 560 employees, totaling 280 hours of training.

Innovate Ideas

In 2021, our ideas program turned nine. This journey only has been possible thanks to more mature management of the program. Over the years, we have sought adjustments in the way we conduct the initiative. In 2019, we gave the digital platform a makeover regarding how we view employees' initiatives. This involved establishing a governance process for the multidisciplinary evaluation of the ideas, enabling the generation and implementation of many more initiatives. Through the digital tool, it was possible to ensure greater accessibility and transparency in the program's dynamics – guaranteeing employees access to all the information about their ideas. For example, they can now find out what stage the idea has reached in the process, which evaluation stages it already has been through, who was in charge of evaluating the proposal and what are the reasons the idea has the potential to move forward or not.

The program currently has more than 6,360 ideas registered, 516 of which were implemented - representing a utilization of 8.11%. Through 2021, we have more than R\$ 8.7 million in operational/potential results with ideas, and we have contributed

more than R\$ 217 thousand in payments for ideas to employees. We have remunerated more than 170 ideas over the years and financially recognized 128 employees. After all, recognition is the best way to share results.

In 2021, 236 ideas were registered. We implemented 76 of them, of which 53 were qualitative and 23 quantitative. In the year, we broke the record for recognition of ideas and rewarded 92 ideas with financial contributions. Our operational/potential result in 2021 was R\$ 1.74 million, and we contributed R\$ 27,000 in recognition of our employees. We conducted leadership training in order to maintain alignment in the multidisciplinary evaluations. Several courses were taught, including a specific course on creativity, entitled Creative Confidence, taught on our corporate education platform. We conducted awareness campaigns to take the content and rules of the program to the employees. We completed two years of use of the digital tool and, to mark this moment, we released changes in the layout and usability of the platform. Through the Connected We Are Stronger campaign, we rewarded the employees



who, throughout the process, implemented and generated the highest number of ideas. The culture and innovation actions sustain the program and stimulate the search for new opportunities.

In 2022, the ideas program will celebrate its 10th year. Therefore, we are preparing a special campaign to commemorate and share the moment with the creators, who are the reason for this achievement in the first place.

Our digital transformation process provides more agility and autonomy, thus giving the supply team more time to serve the internal client.



Digital Transformation

In 2021, we continued the digital transformation process through the initiatives of the Autonomous Process Robotizations (RPA), Virtual Assistants and Chatbots with Artificial Intelligence, Machine Learning and Omnichannel. In addition, we invest in hyper-automation, using various types of technologies and innovations.

The digital optimization area has logged more than 343 monthly hours of execution for the Iara Bot, whose monthly work agenda was practically full.

Thus, it was necessary to implement two more robots, the Dito Bot and the FISBOT, which will meet the new demands foreseen for our business robotization (RPA).

Using chatbots and virtual assistants, we have enhanced the scope of virtual services through Sofia, our internal virtual assistant, aiding the Supply area with five separate conversation flows with end-users. This will provide more agility and autonomy, saving the supply team time to serve the internal customer.

Also regarding chatbots, we created Flora, a virtual assistant that helps Irani's external audience over WhatsApp, Facebook, Instagram and other websites. In this way, we improve the customer experience by providing information and support in a more agile and simple fashion, without the need for dependence on other departments.

We also created the Digital Process Automation (DPA) initiative as a Minimum Viable Product (MVP) for hyper-automation.

Through this initiative, we have digitalized traditional processes that were previously performed without this approach. We use a process management tool (BPM) for mobile and web devices. Thus, processes such as advance payments, payment requests, requests for stock inclusion or changes, whose solicitations and procedures used to occur via e-mail, Teams or telephone, are now performed by means of a digital process designed in accordance with their respective particularities and managed via the Qualitor tool.

All projects were executed using agile and innovative methodologies, enabling a continuous learning process that fosters value creation as of the first delivery with digital innovation.

virtual services



Intellectual Capital

Opportunities and future commitments

Consolidate the innovation culture.



Expand the implementation of new ideas.



Increase investments in RD&I.



Strengthen open innovation strategy.



Optimize through a digital workforce, with various robots, digital assistants, artificial intelligences, hyper-automation systems, and Industry 4.0 to help improve business performance.



manufacturing **capital**

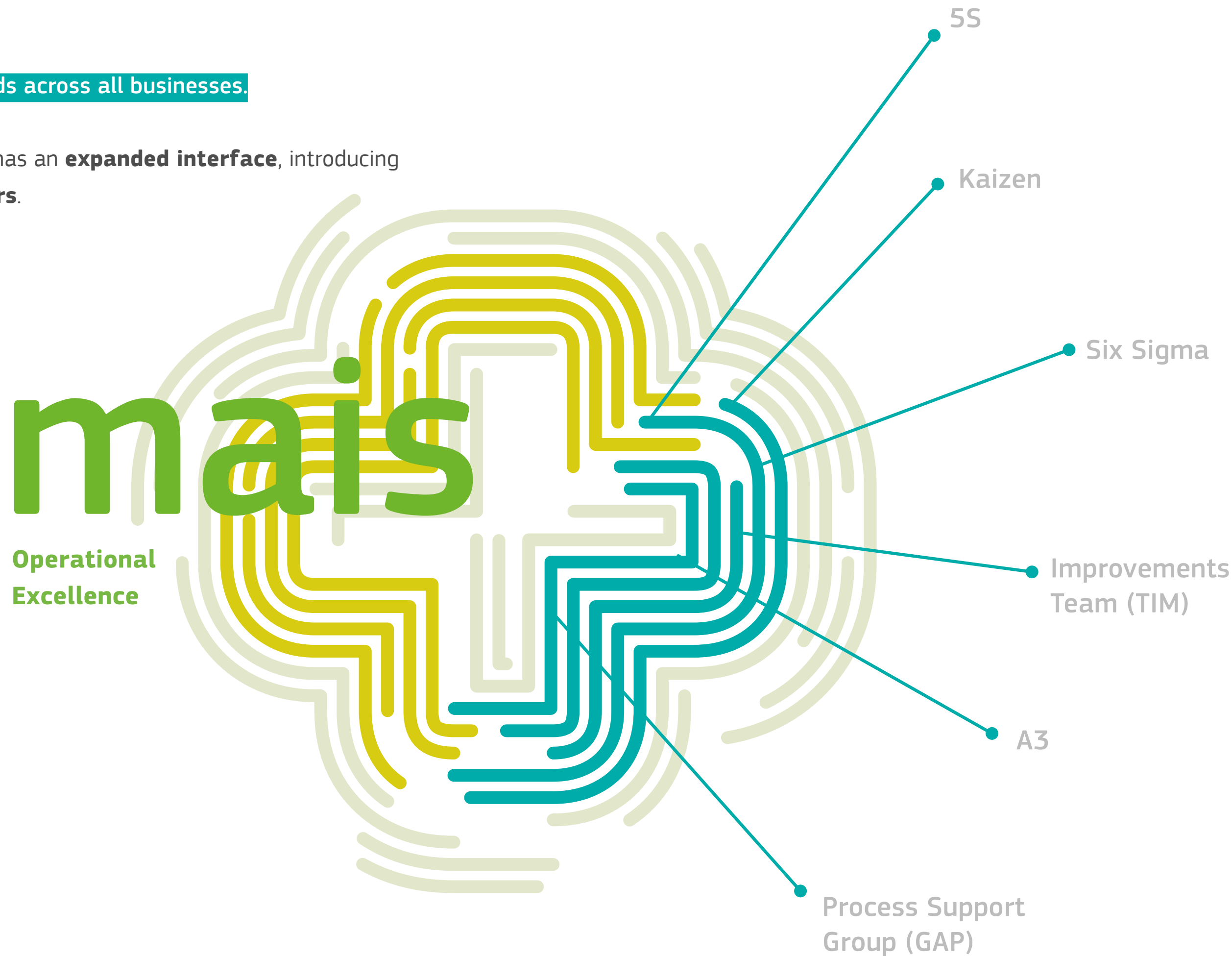
Forestry management, administration and productivity
Product quality and responsible and efficient production
Energy efficiency



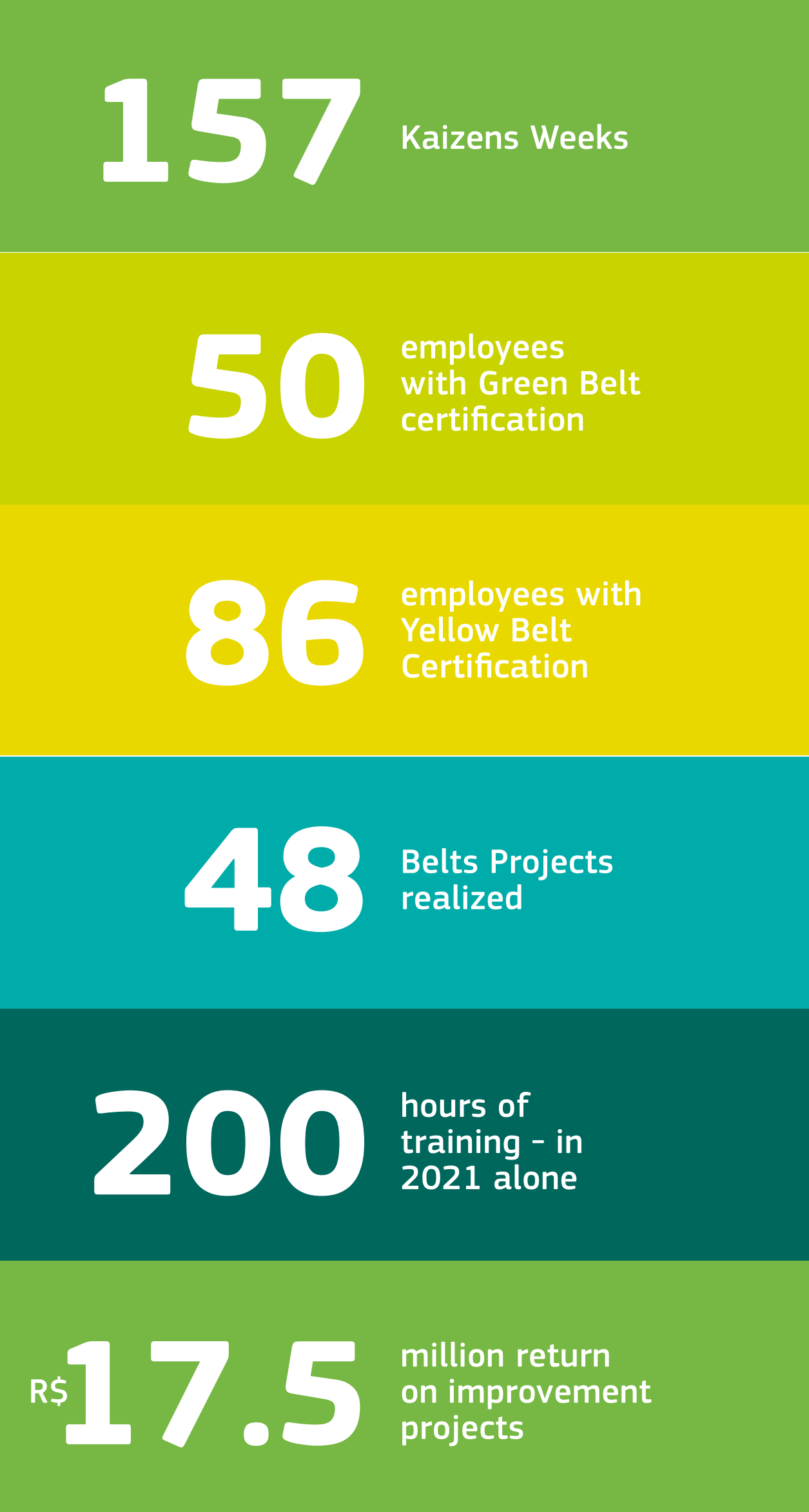
(103-1) The Mais (More) Program carries forward our pursuit of operational excellence. Its goal is to reduce waste and add value to processes, products and services, as well buttress the Lean culture and apply methods and tools for the constant improvement of deliveries.

In 2021, we set 65 productivity records across all businesses.

Our **Lean journey** began in 2010 and has an **expanded interface**, introducing the **Lean culture** also to our **customers**.



Throughout the program's 11 years, we have already achieved:



Launch of Embalei

In 2021, we launched Embalei, our online shop for recycled packaging for retail, delivery and e-commerce. Efficient and innovative, our products are developed from renewable and biodegradable sources. All of this favors the environment and social development, since we also drive the local economy through the process of recycling the materials.

People care increasingly about the impact of companies on their lives and on nature. In a society in which consumption has been given a new meaning, receiving groceries at home is no longer an impulse, but rather a necessity for many people. In this context, every attitude makes a difference to the creation of a more sustainable world.

Therefore, we invite all companies to engage with the customer as of the first point of contact with the brand. That is, the packaging. It is not enough to deliver practicality, but also good presentation and safety. We can go further by offering packaging made of recycled materials. Hence, the shopping experience of each consumer will be even better.



More information
can be found here

Forestry management, **administration and productivity**



GRI 103-1, 103-2, 103-3, 304-1, 304-2, 304-3, 304-4
SASB RR-FM-160, RR-FM-210, RR-PP-430 e RT-CP-430
ISE

(103-1, RR-PP-430 and RT-CP-430) Our forest operations obey sustainability practices that ensure the maintenance of FSC® certification for forest management in its entirety. The assumptions we follow are based on actions:

Environmentally sound

- 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 our relationship with the audiences of the locations where we operate.

Economically viable

- Construction of markets, with added value;
- Creation of equitable access to forest benefits;
- Guarantee of supply of wood and resin from renewable plantations.



KEY MANAGEMENT INDICATORS:



Quality of the operations



Production and quality of biomass



Monitoring of occupational health and safety requirements



Monitoring of environmental impacts



Engagement with stakeholders

(103-2) The planning of land use and forest operations at more detailed levels (taking into account sustainability aspects) ensures the maintenance of the preservation of natural areas. Interconnected, they form large biodiversity corridors. The maintenance of these areas is of great importance, as it ensures connectivity between animals and plants that go beyond the business limits. Thus, we ensure the conservation of the local ecosystem, introducing benefits not only to the environment, but also to local communities. Forest management indicators are maintained and critically analyzed in order to ensure compliance with the FSC® forest management standard and boost operational efficiencies.

(103-3) The critical analysis of indicators and environmental, social and operational monitoring ensure the effectiveness of our forest management and the maintenance of our forest management certification.

Altogether, we have 33,899.48 hectares of land, of which 82.4% is located in Santa Catarina and 17.6% in Rio Grande do Sul.



LEARN MORE
We published the Public Forest Management Summary of our areas in Rio Grande do Sul and Santa Catarina. The information is available here.

The Public Forestry Management Summary is a transparency instrument for our stakeholders, covering topics such as: forestry oversight, management and protection, biodiversity, monitoring and contact channels.





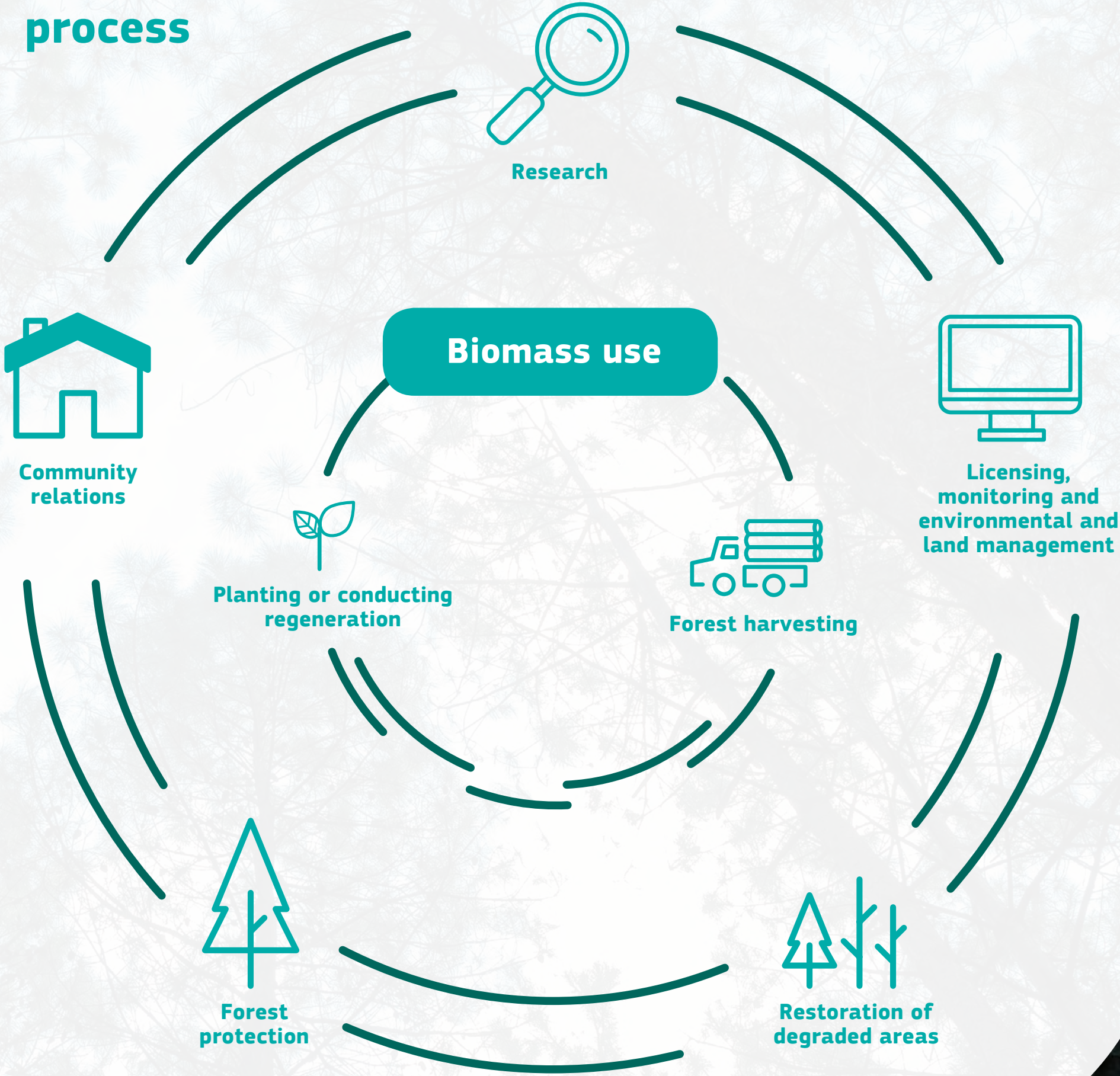
Our forests in Santa Catarina

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

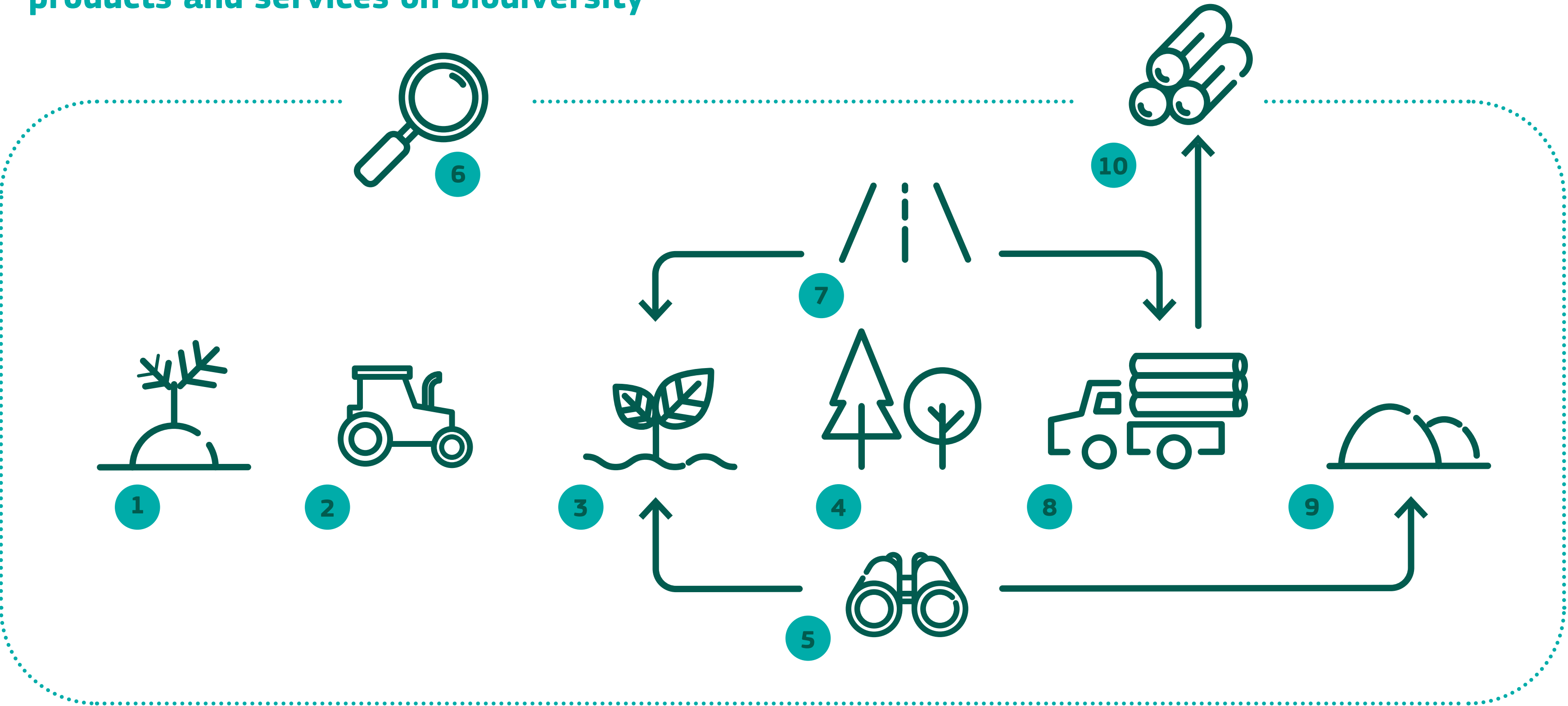
Of this total, 12,400 hectares are planted forest areas, of which 11,000 hectares are pine and 1,400 hectares are eucalyptus. About 1,800 hectares correspond to the area destined for infrastructure and a reservoir, among others.

(102-2) Pine reforestations are mostly carried out with the species Pinus taeda. The choice is due to the good adaptability of the species in the region in which the company operates, and also to the characteristics of the wood – an essential factor to guarantee a quality product in the Vargem Bonita plant (SC). Wood with potential to be sold is intended for rolling mills and sawmills in the region, helping drive the local economy. After harvesting the plantations, the remaining materials are fed into and processed by a mobile chipper, and then transported to the plant. Together with the eucalyptus biomass, this material feeds the steam and energy cogeneration boiler.

(304-2)
Forestry process



Main impacts of forest activities in Santa Catarina, products and services on biodiversity



1. SEEDLING PRODUCTION

In the forest nursery located near the Vargem Bonita plantation, pine and eucalyptus seedlings are produced for forest plantations. The seeds for the production of the seedlings display superior characteristics and are purchased from local suppliers. We also collect seeds from our own orchards. Cultivated over decades, they guarantee high quality seedlings. In addition, native forest species seedlings are produced, using seeds of their own parent trees. The seedlings are donated to the local community upon request, with the purpose of enriching and recovering areas intended for environmental preservation. We also make donations for events with environmental objectives and for internal environmental projects. In 2021, about 10,700 native seedlings were donated.

2. SOIL PREPARATION

After the process of harvesting the trees and chipping the remaining material in a given stand¹ is complete, the process of preparing the soil for a new planting cycle begins. In areas where the topography is flat or not very steep, the subsoiling process is carried out, which consists of operating a tractor equipped with a subsoiler implement. The process demarcates the planting lines according to a standard spacing pattern and opens furrows in the soil for planting seedlings. In areas where the terrain is steep, a hoeing process is carried out, by demarcating the planting lines and opening the holes by hand.

¹Stand – smallest management area unit.



3. PLANTING

Planting is conducted after the soil preparation stage. Pine tree planting occurs throughout the year. Eucalyptus trees usually are planted between the months of October and December, as the species is more vulnerable to cold weather. Planters and spacing markers between seedlings are used to standardize the measurements.

PLANTATIONS BY SPECIES (AMOUNTS IN HECTARES²)

Species	2019	2020	2021
Pinus	803.46	609.70	584.45
Eucalyptus	143.66	141.64	107.92
Total	947.12	751.34	692.37

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

4. FOREST MANAGEMENT

The optimal use of forest resources, in addition to the maintenance and conservation of native forests, ensures sustainable forest management for the business. The control of the wood wasp is incorporated into the routine and is carried out annually in pine plantations, from the fifth year of planting. The fight against leaf-cutting ants is conducted in a controlled fashion and within the

forest certification process criteria. Every six months, the stands are inspected to monitor the development of planting and assess the possible need for interventions, such as pest control, weed control, mortality or other adverse symptoms.

The aim of forest inventories is to monitor forest growth. The ongoing inventory is carried out every three years in all stands at all plantations. Pre-cutting is carried out in a period prior to the harvesting of trees and the objective is to ensure more accurate forest production information.

5. ASSET STRUCTURE AND SURVEILLANCE

The sector responsible for the monitoring and care of the farms has a team that carries out monthly monitoring of the areas through an ibutton system in places with greater vulnerability or a higher occurrence of damage. In the case of environmental damage, the Environmental Military Police (PMA) of Concordia are called in, who also provide support in patrols and environmental awareness actions. In 2021, a new fire detection and monitoring system was installed as part of the surveillance system. Four towers with long-range cameras with 360° rotation capability were allocated at strategic locations. Two are installed in Santa Catarina and two in Rio Grande do Sul.

The SC Forest Unit's Monitoring Room has all the necessary equipment, manned by operators 24 hours/day in periods of greatest risk. The objective is early detection of fires in the Company's forestlands and neighboring territory, in addition to more accurate monitoring of these areas.

Fire-fighting and emergency actions and procedures, implemented for many years, continue in force. The surveillance structure provides specific flame-retardant equipment and clothing, as well as a fire truck. Irani established an Emergency Brigade and mapped water abstraction points. In addition, it signed an agreement with the Irani Voluntary Fire Department and has an active annual training schedule. Such actions have guaranteed excellent fire combat results during outbreaks, and also in responding to emergencies.

	2019	2020	2021
Number of Fire Outbreaks	3	2	3
Burned Area (ha)	0	0	0

The Florestal SC Emergency Brigade conducts, at least, four practical-theoretical training simulations a year and is composed of 21 people.

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

Forestry research focuses on productivity and sustainability. In addition to the research carried out internally by our teams, we have partnerships with government agencies and research institutions, such as the Macaco Prego Program, with Embrapa Florestas. We also participated in the PPPIB – Cooperative Program on Potential Pine Productivity in Brazil, in partnership with the Institute for Forest Research and Studies (IPEF) and the Universidade do Estado de Santa Catarina (Udesc).

Operational quality control is implemented for all forestry activities. This ranges from the production of seedlings in the nursery to the final wood processing, including the production of paper. Controls ensure the standardization of operations and the continuous improvement of the processes.

In 2021, the Vargem Bonita (SC) SESMT unit started to fully manage the process of monitoring the health and safety aspects of our own and outsourced teams at Florestal SC. Every month, a monitoring checklist is completed, which assesses essential items for compliance with legally required procedures and standards, as well as the implementation of improvements that ensure greater safety in operations. Service providers' accounts are audited every six months, to assure compliance with the labor legislation.

7. ROAD MAINTENANCE

We have our own road maintenance and construction operational team in place since 2021. Roads are laid out in locations where trees will be harvested and wood transported. The road bases are reinforced, and they are widened by the distribution of new layers of gravel. In addition, drainage is installed, equipped with manholes and water escape outlets. Our forest road maintenance follows an annual schedule and aims to prevent the occurrence of environmental impacts, such as erosion and silting. Likewise, the idea is to maintain good trafficability conditions and access to all areas.

8. HARVESTING AND TRANSPORTATION

Forest harvesting and transport operations are conducted through service providers. Before operations begin, stand microplanning is completed, a stage designed to prevent potential negative impacts, ensure safe worker operational efficiency and higher production predictability. The pine tree management cycle is about 15 years, whereas for eucalyptus it is seven. All harvested timber is transported to the wood patio at the Campina da Alegria plant. In 2021, 535,122.40 tons of pine and eucalyptus wood were transported. In the patio, the wood undergoes a selection process that guarantees raw material for the plant's own consumption and logs for sale in the local market.

9. CHIP PRODUCTION FOR BIOMASS

After harvesting the trees on a stand, tree tips, branches and needles remain on the ground. The material is stacked on the edge of the stand, processed by a mobile chipper and transported in dump trucks to the wood patio. On site, the material is sent to the cogeneration boiler, which produces steam and energy for the Vargem Bonita (SC) industrial units. With the exception of transportation, the entire operation is carried out by our own team using our own machinery.

(102-7.v)

10. WOOD SALES

All wood that arrives daily at the patio goes through a selection process. Small logs with a diameter greater than 28cm have sale potential. These loglets are destined for sawmills and rolling mills, economically driving the local market. In 2021, 4,700 tons of logs were sold. Due to the increase in the internal consumption of this mix in the industrial process, there was a decrease in the sale of logs compared to previous years.



Our Forests in Rio Grande do Sul and Resin

(102-2 and 102-7.v) In Rio Grande do Sul, resin production is a way to anticipate revenues from *Pinus elliotti* forests in the Mustardas, Tavares and São José do Norte localities. This value chain generates direct and collaborative jobs, contributing to convincing people to remain and work in agricultural regions.

Our forest base totals 5,952.32 hectares, of which 3,986.19 hectares are dedicated to the effective planting of **Pinus elliotti**.

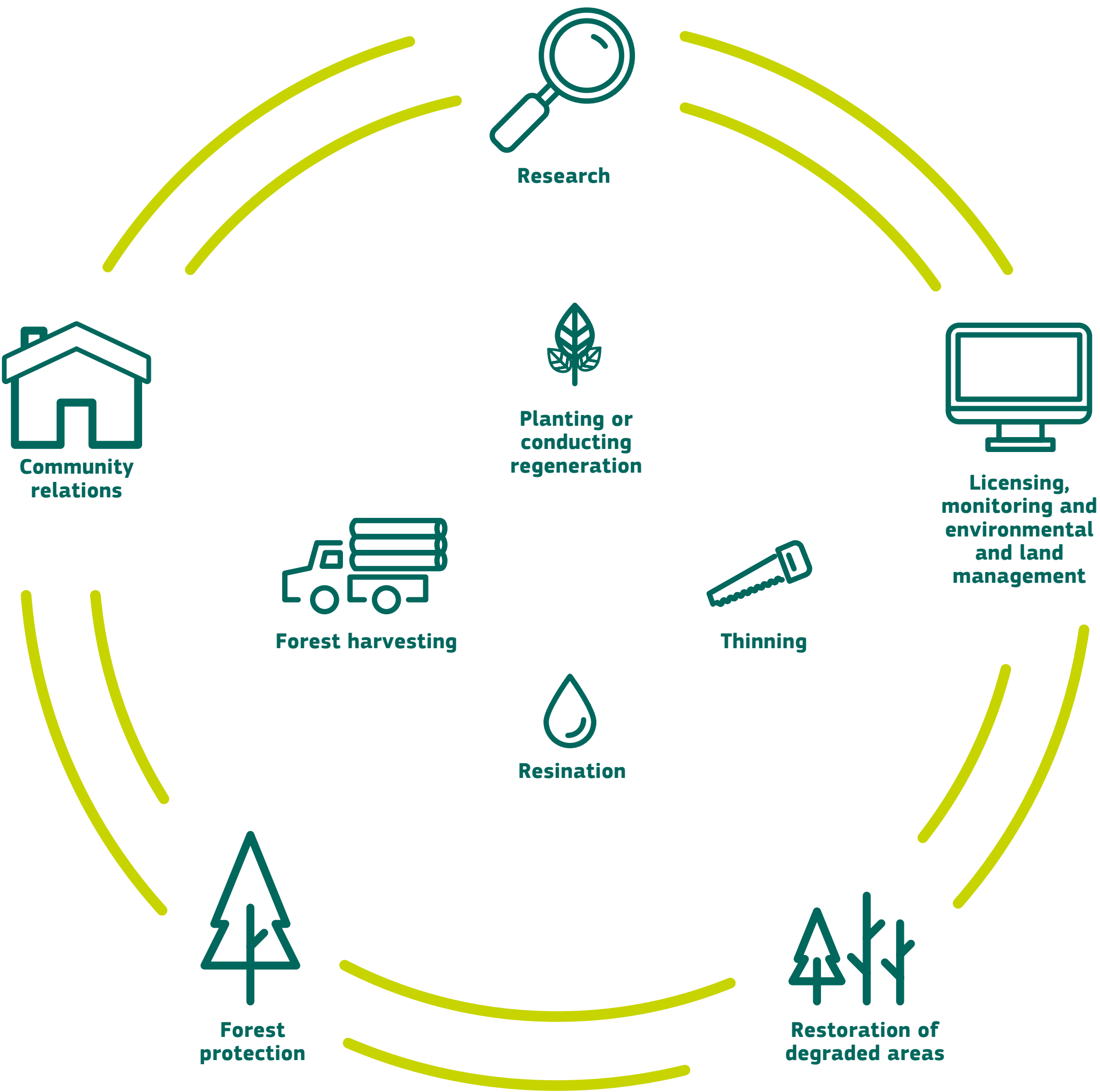
From pine trees we extract the gum-resin that is processed in the Resin RS – Balneário Pinhal unit, leading to gum rosin and turpentine products, featuring a wide variety of applications.

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

Certified under ISO 9001:2015 and ISO 14064:2006, Irani was the first company in this sector in Brazil and a pioneer in certifying forest management and chain of custody by the FSC® (FSC-C009947/FSC-C116791).

In a management cycle that lasts up to 21 years, we conducted four major steps: spontaneous regeneration and planting, resin production, processing and close cutting. In each of them, we comply with the guidelines of the certifications obtained and the Company’s own quality and excellence standards.

- **Regeneration:** we chose to spontaneously regenerate pine trees using a natural process. The planting option occurs only when there is a technical impediment with regard to quality or inadequate productivity. Or, when there is loss of an area. The total amount of wood removed through thinning in 2021 was 55,653 tons.
- **Resination:** manual activity in which we section the pine tree and carve grooves for gum-resin collection. This process can occur for up to eight years, followed by a 12-month tree de-stressing rest period. In the 2020/2021 harvest, 744,263





trees were resinated, allowing the collection of 1,825.27 tons of resin. The volume of own resins delivered corresponds to about 20.04% of the demand of the industrial unit. The remainder is purchased from small producers in the surrounding area and from the domestic market. Our Quality Resin Program establishes the purity of the product to suppliers, applying discounts or increases in the payments for this raw material based on the level reached during delivery. We ended 2021 with more than 134 tons of gum-resin received, always in compliance with the Program's guidelines.

- **Processing:** in the industrial unit, the gum-resin undergoes stages of malaxing, filtering, decanting, and distillation. In distillation, we can separate the

resin in gum rosin, which is solid, and in turpentine, which has liquid characteristics. In 2021, we optimized the efficiency of the unit, producing more than 3.8 tons/h of gum rosin and more than 770 kg/h of turpentine.

- **Close cutting:** this stage is carried out when the forest area completes approximately 21 years. The harvested timber is sold on the regional market in the form of logs and loglets. Wood logs supply sawmills and the loglets are transformed into MDP and MDF sheets by furniture makers. In 2021, we improved the organizational climate and started up the Mechanical Resinator pilot project in order to reduce forest production costs. In total, 36,506 drums were produced, totaling approximately 80% of the demand of the resin factory.

Product quality and responsible and efficient production



GRI 103-1, 103-2, 103-3, 301-1, 301-2 and 301-3
SASB RT-CP-250, RT-CP-410, RR-PP-430 and RT-CP-430
ISE

Paper

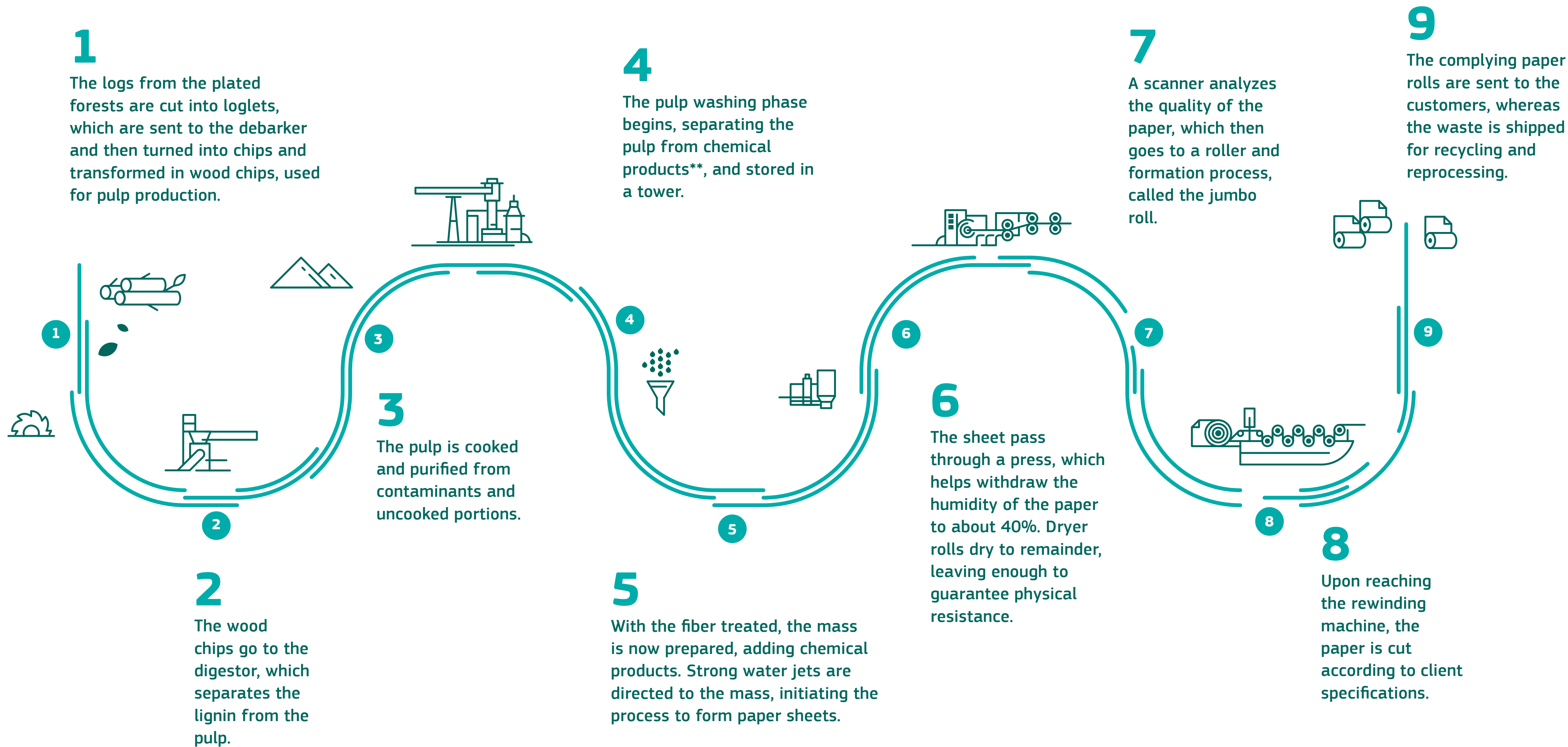
We are among the leading producers of paper for packaging in Brazil with a Quality Management System certified by ISO 9001:2015, inventory of greenhouse gases certified under ISO 14064:2006 and chain of custody certified by the FSC® (FSC-C009947).

(102-2 and 102-7.v) With weights ranging from 30g/m² to 200g/m², we offer virgin fiber papers suitable for production for rigid or flexible packaging. (416-2) Among the types offered is a special line of papers representing 25% of the products supplied. This paper line is comprised of the Fine Kraft, Fine

Kraft White, Flash Kraft, Flat Kraft and Flexi Kraft families. These papers can come into direct contact with food, because they are produced with inputs allowed by the positive list of Resolution RDC No. 88 of June 29, 2016 and approved in our internal ratification processes. They represent examples of legal care and good manufacturing practices that prevent physical, chemical or biological contamination of the product. In addition, constant assessments ensure that the products do not impact consumer health and safety. Furthermore, every two years we complete all the analyses set forth by RDC Resolutions No. 88 and RDC No. 90 and revalidate the ISEGA certification.



How our papers are produced



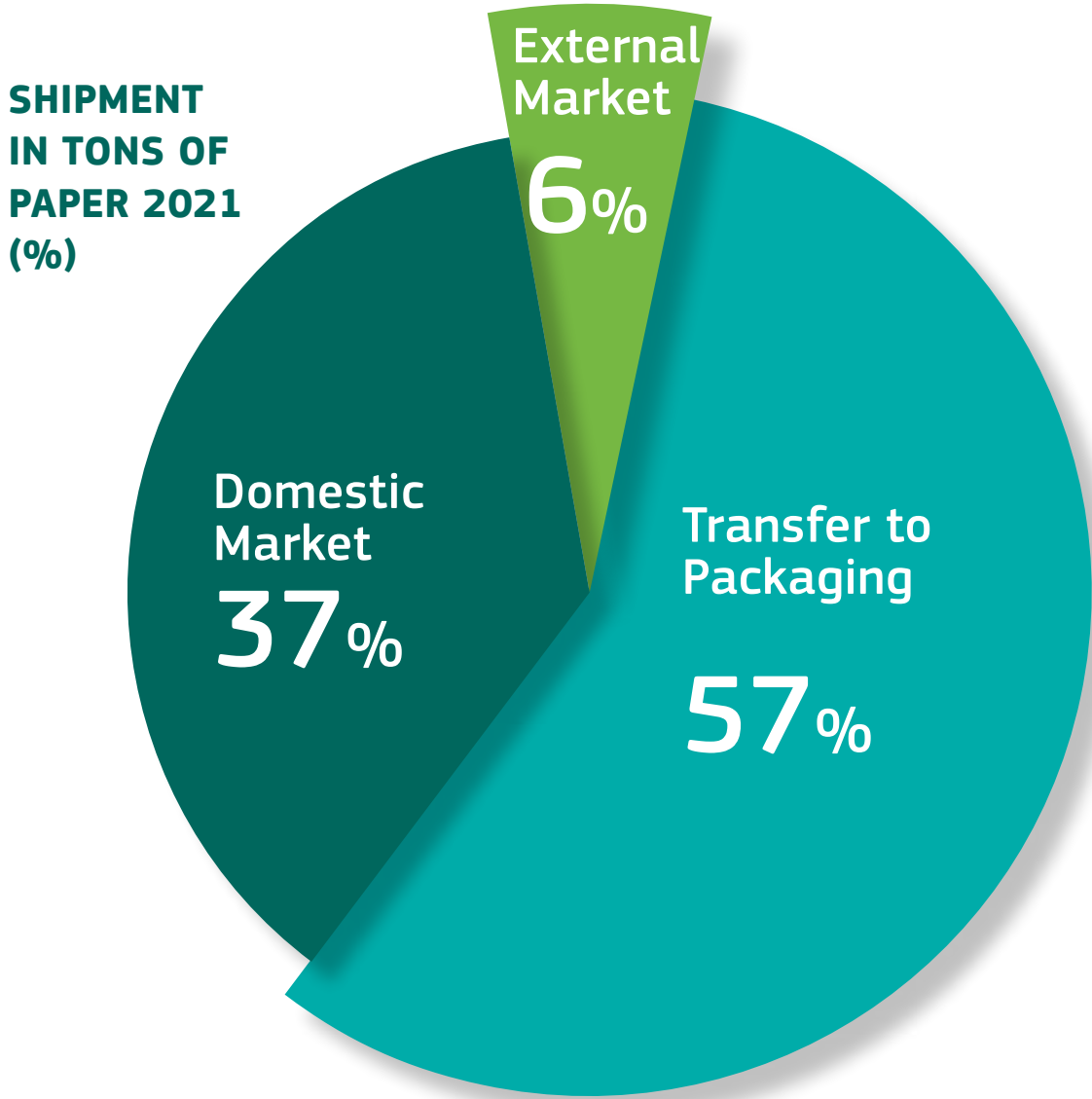
Watch our video of the production process (only Portuguese).



LEARN MORE
(416-1) More information about our paper products can be found here.

In 2021, the Paper business developed 28 new inputs, of which 12 were approved. In addition, 23 new papers were developed, of which 14 were approved. With a focus on operational efficiency and new solutions for the market, we have strengthened our relations in the field of research with national and international partners.

Our production totaled 297,187 tons, flat compared to 2020. Sales totaled 126,056 tons, down 7% over the previous year. As for internal transfers in 2021, 57% went to the SP Indaiatuba Packaging plant and 43% to the SC Campina da Alegria Packaging plant.



Packaging

We are among the main producers of packaging and corrugated cardboard sheets in Brazil. **(102-2 and 102-7.v)** We produce boxes and sheets of white and recycled Kraft paper with excellent performance and corrugated cardboard 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 the FSC® (FSC-C009947) certified chain of custody.

We remain firm in our commitment to the supply of ever-smaller weights and superior mechanical strength. Therefore, we made recent investments in infrastructure and industrial processes at the Packaging business units.

According to Empapel, in 2021 the packaging market grew 4.3% compared to 2020. In the same period, Irani’s market grew 1.4%. Our share in the packaging segment was 3.9%, while in 2020 the index was 4.1%. The volume of the SP Indaiatuba Packaging plant reached 70,341 tons of boxes and 21,928 tons of sheets in 2021. In 2020, there were 67,273 tons of boxes and 21,784 tons of sheets.

In 2021, the Packaging plant SC Campina da Alegria registered a sales volume of 54,041 tons of boxes and 11,238 tons of sheets. In 2020, there were 56,034 tons of boxes and 10,348 tons of sheets.

Focus of the client is the foundation of our product development. Thus, we develop customized packaging, making our Research & Development and Technical Assistance structure available to produce boxes that meet and optimize each client’s specific needs and logistics.

The full packaging development process is accompanied by a specialized team. We identify opportunities and propose solutions that ensure the best performance and efficiency of each product.

Our clients have been trained how to handle corrugated cardboard. Run by the R&DI area, the courses are taught to employees who work with cartonboard products and aims to contribute to client development and growth.

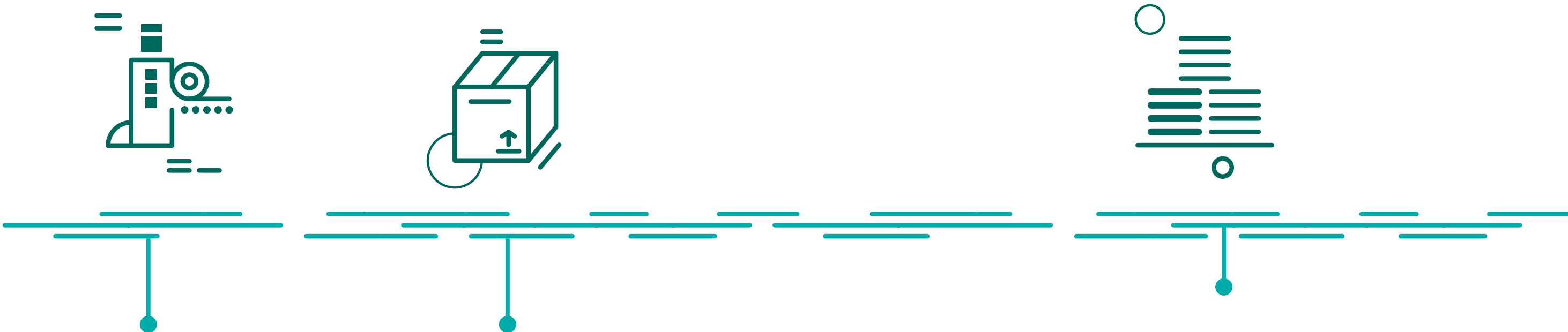
297 thousand tons of paper packaging were produced in 2021

How our packaging is produced

FOCUS OF THE CLIENT

This is the concept that guides our relationship. We put ourselves alongside our clients from start to finish, so that our company will be recognized as their preferred choice to offer innovative, distinctive and customized solutions, striving to reduce costs and deliver exceptional performance.

The papers, produced by Irani or purchased, are corrugated and placed in the ripple machine, which originates the sheets pursuant to the specifications of each client. This stage represents 70-80% of the steam consumed in the production process.



We offer the best solutions for client needs, evaluating the products to packaged, weight, measurements and the various logistical operations.

Based on this analysis, our team of packaging engineering team creates a prototype that is submitted for approval by the client before production starts. We seek to always create boxes that are lighter and more resistant, ensuring better performance and lower weights.

The sheets are palletized and have two distinct destinations:

Shipped to the end client in the cartonboard segment.

Undergo a conversion process to be creased, cut and printed to, then, be sent to our clients.

Our technical assistance team monitors all stages of the process, conducting development, preventive and corrective visits.



LEARN MORE
(416-1) More information about our packaging can be found here.

Gaia platform

Gaia symbolizes the Earth, nature. It is precisely this infinite and wise force, of which humanity is a part, from which our motivation to grow derives. Our robust expansion plan, with projects in developed between 2020 and 2024, is guided by a deep commitment to sustainable development in its three spheres: economic, social and environmental.

Consistently, in 2021, we continued the quest to fulfill the purpose of the Gaia Platform: expand competitiveness and production capacity, as well as achieve energy sufficiency. Toward this end, we invest in projects with high positive environmental impacts and with an internal rate of return (IRR) higher than the Company’s cost of capital.



LEARN MORE
(416-1) More information
about the Gaia Platform
can be found here.

1st Cycle | 2020 – 2023

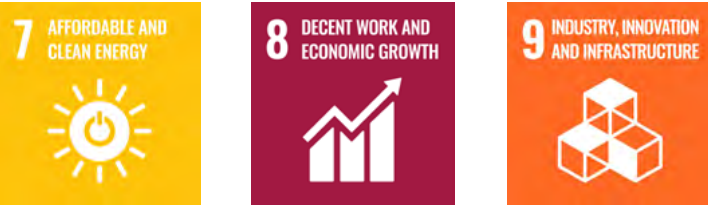
- Gaia I - Expansion of the Recovery of Chemicals and Utilities
- Gaia II - Packaging SC Expansion
- Gaia III - Reform MP#2
- Gaia IV - Cristo Rei Repowering
- Gaia V - São Luiz Rei Repowering

2nd Cycle | 2021 – 2024

- Gaia VI - Process Information Management System
- Gaia VII - ETE Expansion Phase 1
- Gaia VIII - New Cut and Crease Printer
- Gaia IX - Automation of the Intermediate Stock



Energy efficiency



GRI 103-1, 103-2, 103-3, 302-1, 302-2, 302-3, 302-4, 302-5
SASB RR-PP-130 and RT-CP-130
ISE

(103-1) Energy self-sufficiency is one of the main challenges for our businesses. Therefore, one of our strategic objectives is to secure the energy supply.

(103-2, 103-3, 302-1.a) In the Vargem Bonita (SC) units, where energy consumption by the processes is abundant, we have dedicated intense efforts in search of operational excellence and efficiency. One of the alternatives we have been working on is the use of biomass produced from forest waste. This material, currently sent to landfills, decomposes, emitting greenhouse gases such as methane and carbon dioxide. Since 2005, we have used a boiler for steam and energy generation from the burning of this biomass to supply the SC Paper and Packaging units.

The process was registered with the UN as the Irani Biomass Electricity Generation Project and validated as a Clean Development Mechanism (CDM). We operate a Small Hydroelectric Power Plant (SHP) and two Hydroelectric Power Plants (HGCs) in this same location, featuring automated control and remote operation, in addition to four other boilers for thermal power generation.

(103-3, 302-3, 302-4) In all business units, we seek more effective mechanisms, replacement of equipment and use of economical LED lightbulbs. We also carry out the necessary operational adjustments to reduce the consumption of electric energy or maintain suitable metrics.

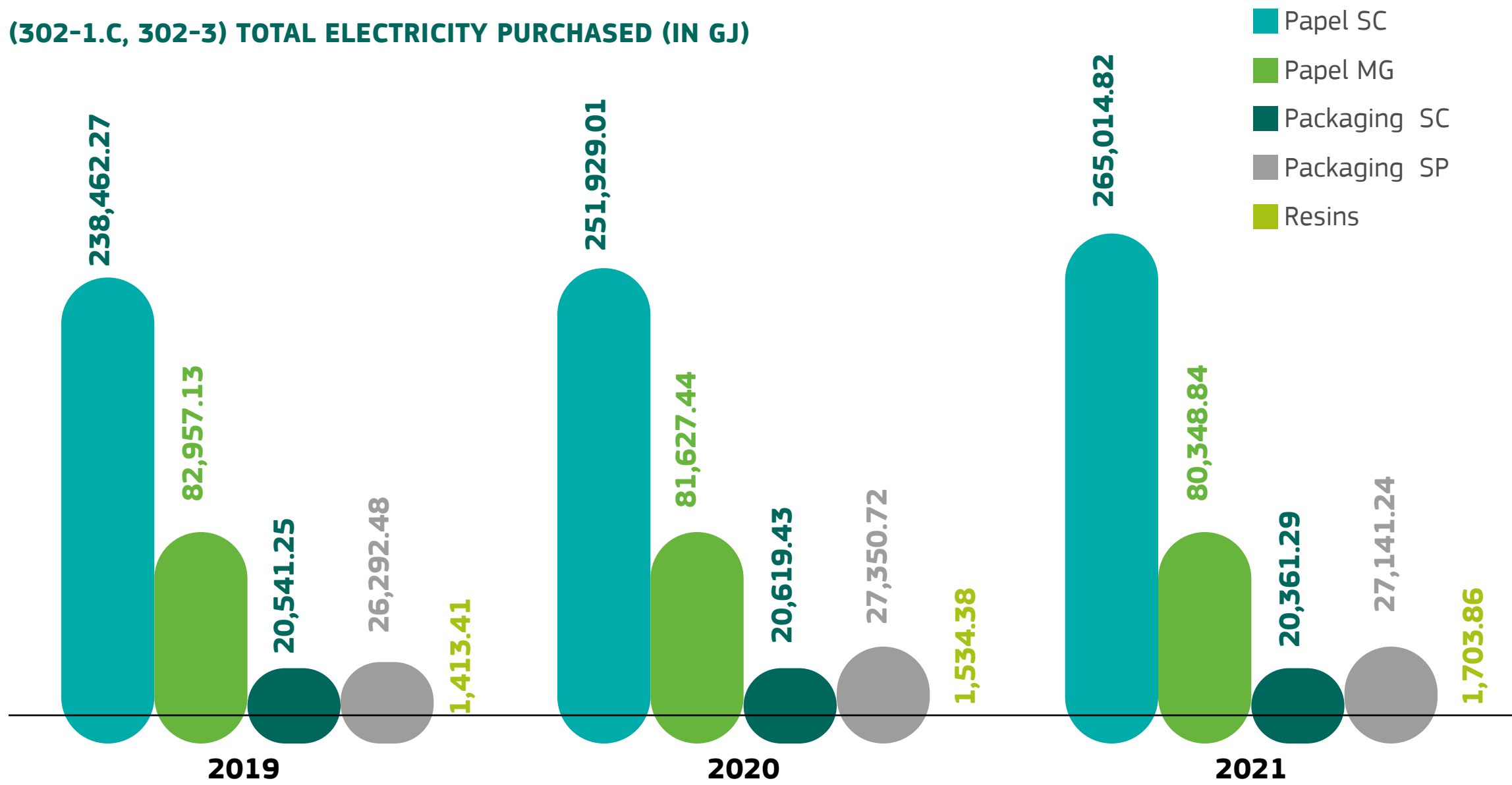
SPECIFIC ELECTRICITY CONSUMPTION (MWH) PER TON PRODUCED

Unit	Specific electricity consumption (MWh) per gross ton produced			Specific electricity consumption (MWh) per ton produced		
	2019	2020	2021	2019	2020	2021
Paper SC – Campina da Alegria	0.74	0.73	0.71	0.79	0.78	0.75
Paper MG – Santa Luzia	0.39	0.39	0.43	0.41	0.42	0.45
Packaging SC – Campina da Alegria	0.08	0.08	0.08	0.09	0.09	0.09
Packaging SP - Indaiatuba	0.08	0.08	0.07	0.08	0.08	0.08
Resin RS – Balneário Pinhal	0.03	0.03	0.03	0.03	0.03	0.03

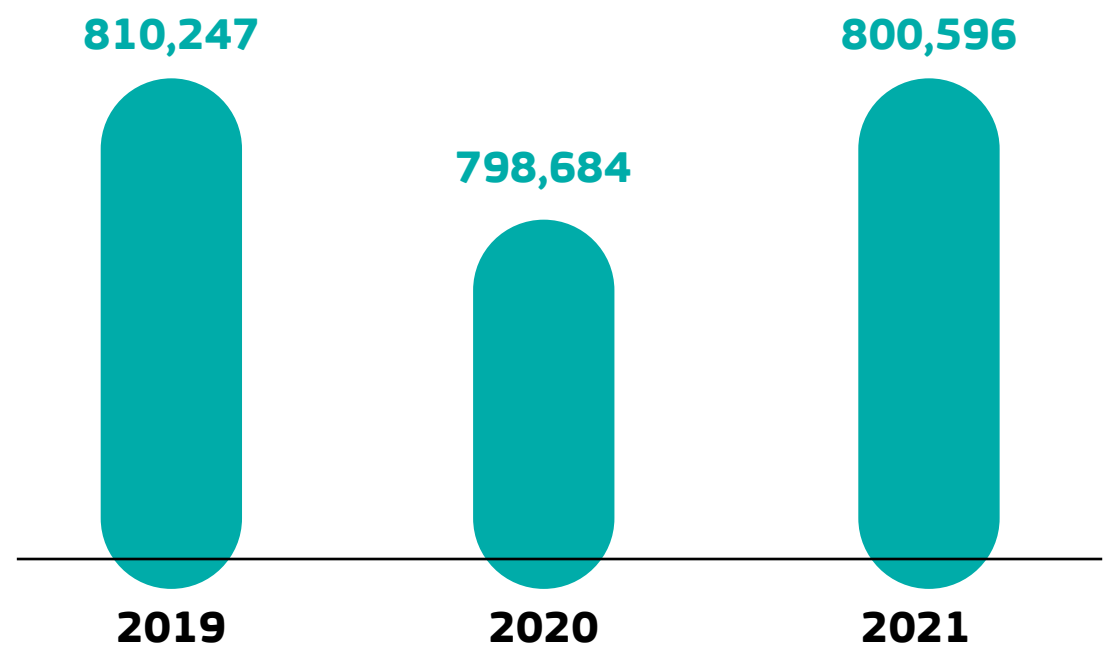
Note: The specific metric used to calculate the specific electricity consumption is gross production and net production. The ratio used refers to the energy consumed within the organization, as it does not have enough information to report energy consumed outside it.

(302-2 e) The total energy consumption inside and outside the organization in the form of steam, fuels and electricity was 7,124,591.83 GJ.

(302-1.C, 302-3) TOTAL ELECTRICITY PURCHASED (IN GJ)

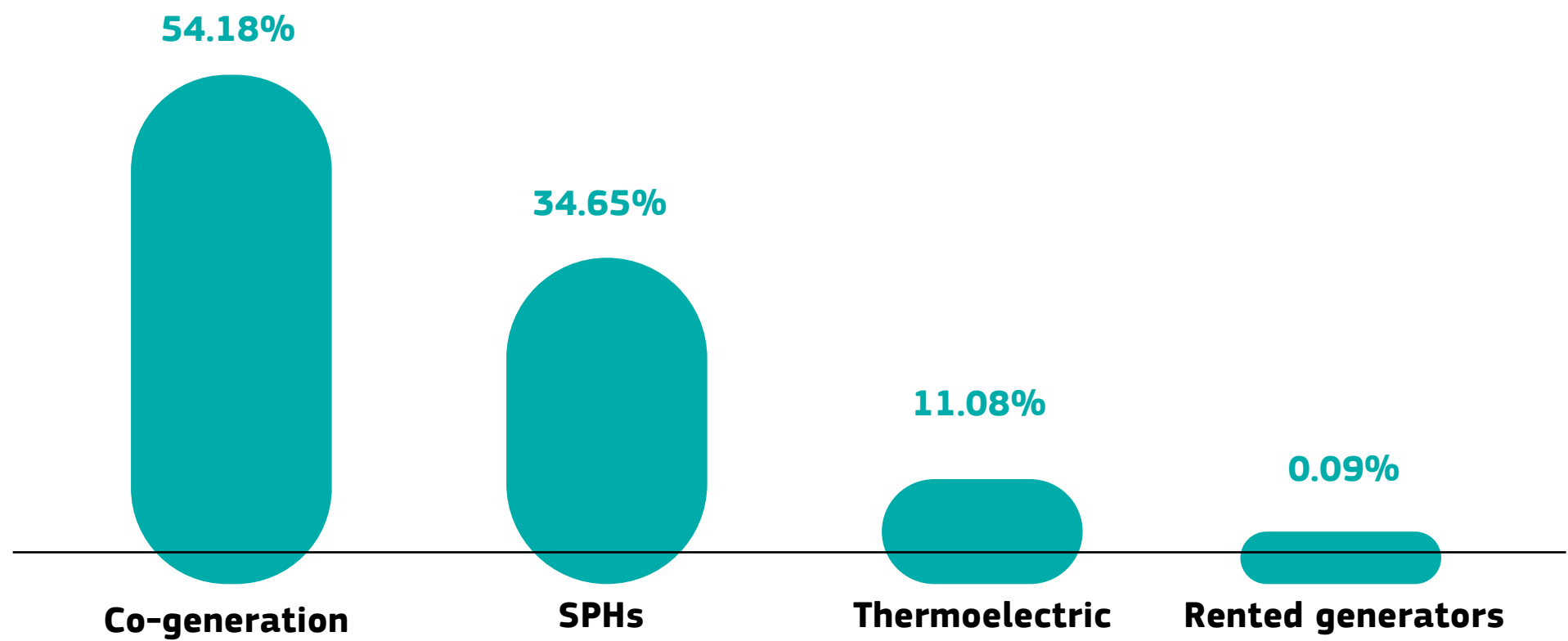


(RR-PP-130 E RT-CP-130) TOTAL ELECTRICITY CONSUMPTION IN GJ



Note: electricity consumption within the organization.

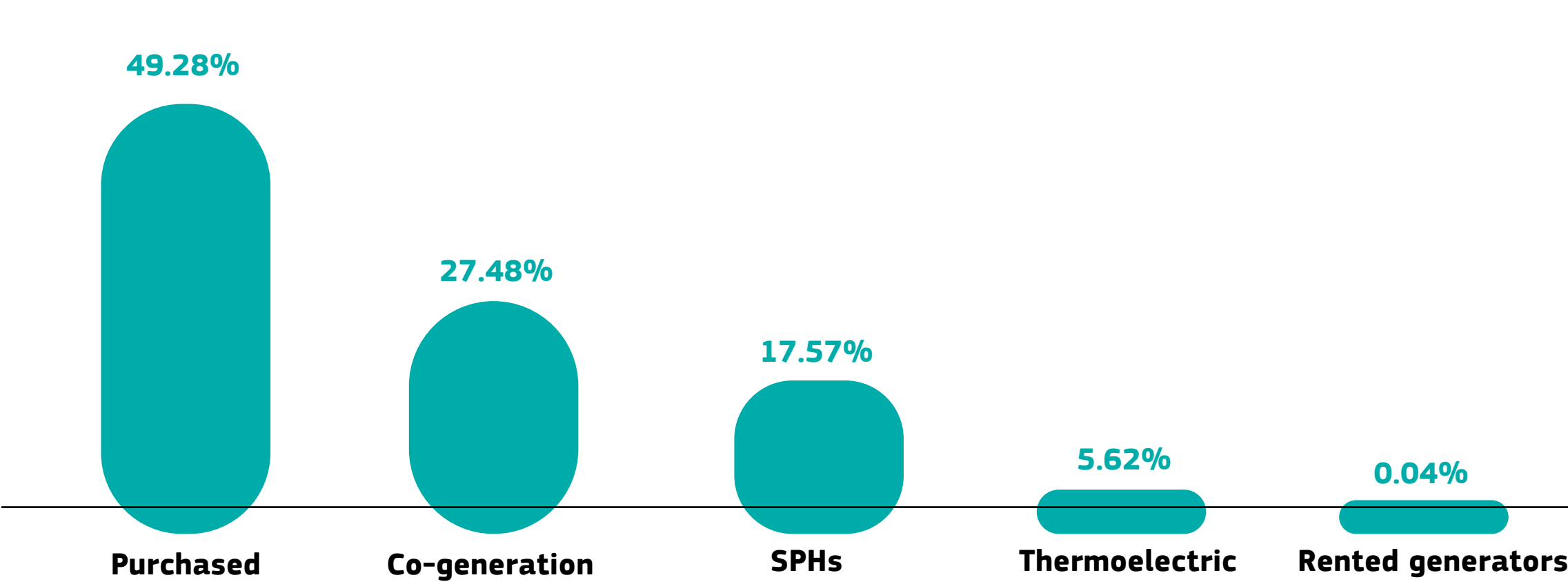
(RR-PP-130 E RT-CP-130) SELF-GENERATED ENERGY BY GENERATING SOURCE



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

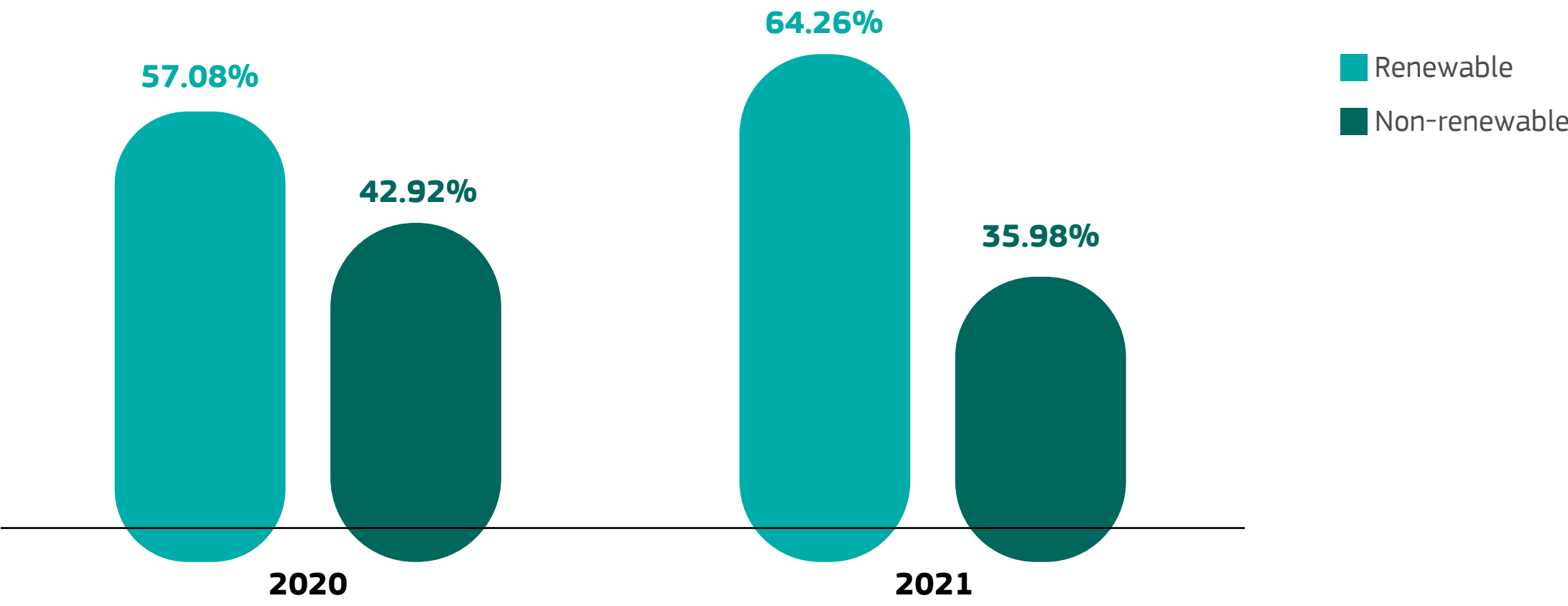


(RR-PP-130 AND RT-CP-130) PERCENTAGE OF ENERGY CONSUMED BY GENERATING SOURCE



Note: represents the purchase and self-generation of energy, considering all units, with 27% of the energy purchased coming from renewable sources.

(RR-PP-130 AND RT-CP-130) PERCENTAGE OF RENEWABLE ENERGY CONSUMED



The increase in renewable energy consumption is due to the acquisition of renewable incentive energy at the Minas Gerais Paper Unit.

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

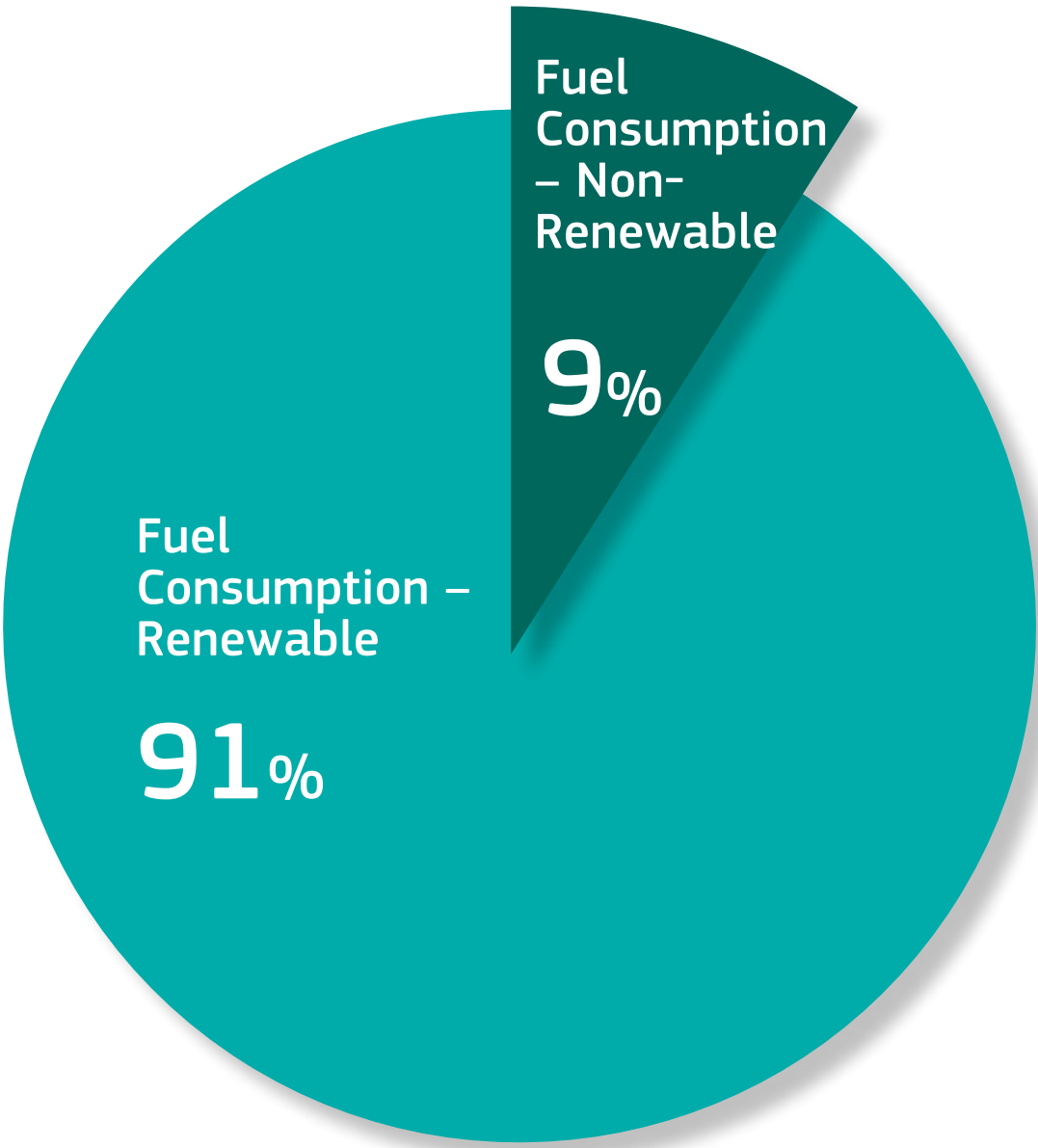
Unit	2019	2020	2021
Paper SC – Campina da Alegria	25,197.88	22,569.86	24,062.69
Paper MG – Santa Luzia	217,957.57	225,803.46	211,140.31
Packaging SC – Campina da Alegria	17,631.77	19,262.32	20,130.92
Packaging SP – Indaiatuba	54,106.27	57,504.34	60,357.11
TOTAL	338,237.19	325,139.98	315,691.02

Note: the Resin RS – Pinhal Spa unit does not use non-renewable fuel.

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

Unit	2019	2020	2021
Paper SC – Campina da Alegria	3,307,163.68	3,253,897.54	3,185,686.39
Resin RS – Balneário Pinhal	7,640.10	7,553.98	7,550.22
TOTAL	3,314,803.78	3,261,451.52	3,193,236.61

PERCENTAGE OF RENEWABLE FUEL CONSUMED (EM GJ)





(302-1.A) STEAM CONSUMPTION (IN GJ)

Unidade	2019	2020	2021
Papel SC – Campina da Alegria	2,484,159.20	2,580,999.84	2,499,623.16
Papel MG – Santa Luzia	195,451.72	203,151.19	186,721.72
Embalagem SC – Campina da Alegria	41,189.70	45,116.13	44,936.09
Embalagem SP – Indaiatuba	60,802.28	58,143.25	60,844.28
Resina RS – Balneário Pinhal	19,768.59	20,669.56	22,775.34
TOTAL	2,801,371.48	2,908,079.97	2,814,900.59

(302-2 E 302-1.F) ENERGY CONSUMPTION OUTSIDE THE ORGANIZATION

Fuel	Consumption (in l)			Consumption (in MJ)		
	2019	2020	2021	2019	2020	2021
Diesel	3,767,654.65	4,066,588.84	4,305,221.58	144,397.02	155,853.81	164,999.51
Gasoline	65,376.73	49,961.73	44,865.50	2,277.19	1,740.26	1,562.75
LPG Restaurant	20,404.30	15,667.00	14,675.00	1,003.12	770.22	721.45
TOTAL	3,853,435.68	4,132,217.57	4,364,762.08	147,677.33	158,364.28	167,283.71

Note: **(302-1.e)** the total energy consumption within Irani in the form of steam, fuels and electricity was 7,124,591.83 GJ. **(302-1.f)** The total energy consumption outside the organization was 158.36 GJ, according to scope 3 of the GHG inventory. **(302-1.g)** The conversion factors come from the Petrobras website.



Manufacturing Capital

Opportunities and future commitments

In 2022, we are continuing the challenging work of harvesting in forest partnership areas and expanding the forest base to meet the pulp production expansion projects.

Focus on cost and profitability management.

Continue seeking opportunities to boost productivity with operational efficiency gains.

Strengthen market positioning through Focus of the Client value offerings.

We plan to have 100% renewable energy in all the businesses by 2025.

Progress the development of new markets for paper manufactured at the MG Paper unit.

We plan to achieve self-sufficiency in renewable energy generation across all businesses by 2025.

Maintain Gaia Platform investments.

natural capital

Socio-environmental impacts and forms of mitigation

Water and effluents

Climate change and emissions

Waste management and circular economy

Voluntary certifications and commitments



Our responsibility for Natural Capital, as evidenced in the strategic map for the 2021-2030 cycle and in the Company's Sustainability Policy, keeps us current regarding legislation, monitored with the support of specific software. In addition, we assure that our quality and sustainability certifications are updated.

(103-2, 103-2, 102-11, 102-43, 416-1) 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.

Socio-environmental impacts and forms of mitigation



GRI 103-1, 103-2, 103-3, 102-12, 102-13, 102-41, 308-1, 308-2, 413-1, 413-2, 414,1 and 414-2
SASB RR-PP-120, RT-CP-120, RR-FM-160 and RR-FM-160
ISE

(103-2 e 103-3) 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.

(103-1 e 306-3) In 2021, no formal grievances or complaints related to environmental impacts were filed. There also were no relevant chemical product spills.

In 2021, we invested R\$ 10,313,406.56 in environmental management initiatives and processes. Our education practices with this focus totaled almost 239.5 hours of work, benefiting 3,297 people. Also, in 2021, an Environmental Management System course was launched on the learning platform, which also contributed to the increase in the number of people involved with the topic.

(103-2) The commitment to sustainability is pervasive throughout our business chain: it is born in the forests and concludes with our actions in the neighboring communities, promoting a cycle of prosperity and sustainability.



Biodiversity

(103-1 and 103-2) Forest management based on the pillars of sustainability ensures the perpetuation of our business. We have maintained the FSC® forest management certification since 2008, adopting environmental preservation practices and the prevention and monitoring of environmental and social impacts, in addition to optimizing forestry operations.

Biodiversity in SC forest areas

(304-3.a, RR-FM-160 and RR-FM-160) Native vegetation areas, such as APPs and Legal Reserve, represent 48% of the total land use in the Santa Catarina forest base.

(304-3) 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 accord remains in force.

(304-3) The Araucárias National Park (PNA), a federal conservation unit created in 2005 by federal decree and managed by an ICMBio Integrated Management Center

(NGI), is located in the municipalities of Passos Maia and Ponte Serrada, both in Santa Catarina. Irani owns two areas within the unit that have not yet been indemnified and remain under negotiation. Since the creation of the PNA, we have participated as a representative on the Advisory Board, helping in the construction of the Management Plan, in specific Working Groups (GTs) and in environmental preservation actions taken together with the Environmental Military Police (PMA).

The RPPN* Prof. Yara C. Nicoletti (IMA Ordinance No. 83/2018), located near Vila Campina da Alegria, encompasses 285 hectares of preserved native forest, characteristic of a Mixed Ombrophilous Forest. It contains plant species with threatened status, such as araucaria, xaxins and imbuías, among others. Research projects and environmental education actions have been carried out with the local community for some time. As in other areas, the reserve receives continuous monitoring from the surveillance team and has the support of the PMA to curb illegal actions.

(103-3) Fauna and flora monitoring is conducted periodically in the HCVAs and other Irani native vegetation areas. Such procedures are conducted by contracted specialists and generate indicators that evidence the levels of conservation in the areas. The information includes data and images that are used in environmental education activities.

***RPPN – Private Natural Heritage Reserve – conservation unit for sustainable use.**

High Conservation Value Areas (HCVAs) are environments featuring exceptional value attributes, and their preservation is fundamental from the environmental and social points of view. A description of the HCVA categories is contained in the ProForest Guide, and 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. These are environmental attributes found in two areas located in the municipalities of Irani and Vargem Bonita, and totaling about 3,150 hectares of well-preserved native vegetation. These areas, along with the Araucaria National Park (PNA) and other areas legally protected by Irani, form ecological corridors of great importance to the region's environmental preservation.



Fauna and flora monitoring conducted

Joint monitoring of groups of birds, mammals and flora is conducted every five years. Herpetofauna monitoring follows the same periodicity, but occurs independently. The field research stages, scheduled to start in 2021, were postponed to the beginning of 2022.

The last survey of mastofauna confirmed the occurrence of 31 large mammals. Avifauna identified 168 species, some on the conservation lists.

The last survey confirmed

31

large mammals

168

avifauna species

Group	Species	Common name (Eng)	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>	Bufo nidae toad	DD		EN
Amphibians	<i>Vitreorana uranoscopana</i>	Glass frog	LC		VU
Amphibians	<i>Hypsiboas curupi</i>	Yellow-spotted tree frog	LC	VU	EN

Red List of the International Union for Conservation of Nature - IUCN 2021.2
Red Book of Brazilian Fauna Endangered by ICMBio (2018)
Official List of Endangered Species of Fauna in the State of Santa Catarina (CONSEMA Resolution No. 002/2011)
DD - deficient data; LC - not at all worrying; NT - almost threatened/ VU - vulnerable; EN - in danger

Of the threatened amphibian species, those with restricted distribution in Araucaria Forest, such as *Ischnocnema henselii* (leaf frog) and *Trachycephalus dibernardoi* (casque-headed tree frog), are notable.

In the last flora monitoring, 44 families and 120 species were recorded. Some are threatened with extinction:

Scientific name	Common name	Conservation aspect
<i>Araucaria angustifolia (Bertol.) O. Kuntze</i>	Araucaria, Brazilian pine tree	*CR, **EN
<i>Butia eriospatha (Mart. ex Drude) Becc.</i>	Wooly butia palm	*VU**VU
<i>Cedrela fissilis Vell.</i>	Argentine Cedar	**VU
<i>Dicksonia sellowiana Hook.</i>	Xaxim	EN
<i>Porous Ocotea (Nees & Mart.) Barroso</i>	Imbuia	*CR, **EN
<i>Podocarpus lambertii Kl.</i>	Yellowwood pine	NT
<i>Quillaja brasiliensis (A.St.-Hil. & Tul.) Mart.</i>	Quillaja	EN

**Red List of Threatened Species. Version 2019-3 – (IUCN); ** MMA notice no. 443, December 17, 2014. CT – Critically threatened; NT – Nearly threatened; EN – Endangered; VU - Vulnerable*

(304-3.b) Irani supports and seeks partnerships with researchers and governmental and private institutions for the development of forestry studies.

Reintroduction of the
Vinaceous-breasted
parrot:

project of the Instituto Espaço Silvestre with the Araucárias National Park (PNA), in Santa Catarina, for the reintroduction of the species in the region.

Fauna and
flora monitoring

carried out by specialists, the operations occur every five years in our High Conservation Value Areas (HCVAs) and other native forest blocks. The objective is to demonstrate the maintenance or improvement of the attributes that characterize these areas.

Capuchin
monkey project

carried out in partnership with Embrapa Florestas, aims to study the species *Sapajus nigritus* (capuchin monkey) and its interactions with our planted and native forests. The objective of the project is to reduce the damage caused in commercial planting areas. The initiative is in the final stage, with the prospect of ending in 2022.

(304-3, RR-FM-160 AND RR-FM-160) HIGH CONSERVATION VALUE AREAS (HCVAS)

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	✓	✓
Creation of a private conservation unit	✓	
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.



LEARN MORE

(304-1.vi e 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 Pine tree are addressed in the Public Summary of Forest Management, available [here](#).

Biodiversity in RS forest areas

(304-1, 304-3) Our planted forests form mosaics with permanent preservation areas (APPs) and other natural areas. 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 Rio Grande do Sul, we remain with a total of 13.3 hectares of land with this characteristic.

Located in the bed of the Paurá Lagoon, 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 conversation 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.

(103-3, 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	<p>There is a gallery forest with characteristic species of the Dense Ombrophylous Forest, formed by Fig trees (Coussapoa microcarpa), Scutia bruxifolia, Sebastiania commersoniana, Psidium araca, Iodina rhombifolia, and Myrsine umbellata, which harbor orchids and bromeliads.</p> <p>Among the dunes is a species of wild fauna classified as endangered on the IUCN - World Union for Nature red list, the Tuco-tuco, a rodent belonging to the genus Ctenomys.</p>

biodiversity

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, pointing out:

Main threats to the HCVAs

- Operational damage
- Fires
- Illegal activities (hunting, fishing, extraction of native wood, invasion of domestic animals, etc.)
- Animal scaring

Monitoring actions

- Monitoring of fauna and flora
- Monitoramento das ocorrências socioambientais
- Community awareness

Protection measures

- Fencing of properties
- Forest firefighting program
- Surveillance of assets
- Microplanning of forestry activities
- Removal of exotic species
- Visual identification

Permanent preservation areas, legal reserves and other forest fragments of the company are also subject to management and monitoring measures. The goal is to curb illegal activities and promote the conservation of biodiversity. Among these measures are integrated forest production system and restoration actions, asset surveillance, and operational diligence.



LEARN MORE
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 [here](#).

Water and **effluents**



GRI 103-1, 103-2, 103-3, 303-1, 303-2, 303-3, 303-4, 303-5 and 306-1
SASB RR-PP-140 and RT-CP-140
ISE

(303-1, 303-3b, 303-3c, 303-4.c) We use fresh water in our production processes. Part of the water that supplies the Vargem Bonita (SC) units also is used for power generation in a Small Hydroelectric Power Plant (SHP) and two Hydroelectric Generation Plants (HGP).

(303-2) All water sources of our business units, except that 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.

Here, we prioritize actions that allow productivity gains coupled with usage reduction, alternatives for reuse, and circuit closure. **(103-1, 103-2 and 303-1)**. This is one of the fundamental strategies of our business, which, by its very nature, depends on the availability of water and other natural resources.

(103-2 and 303-1c) 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.

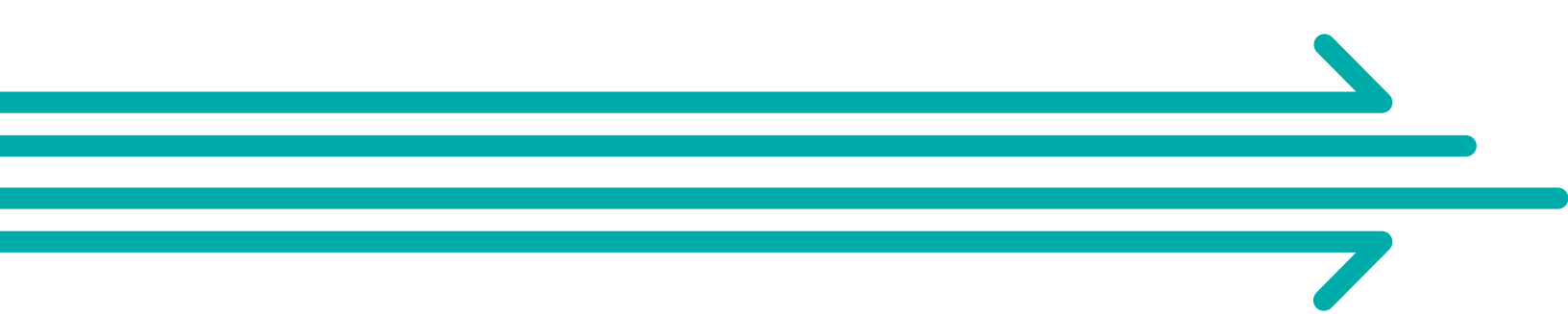


(303-3, RR-PP-140 AND RT-CP-140) TOTAL WATER WITHDRAWN BY SOURCE (IN MEGALITER)

Source	What it comprises	2019	2020	2021
Surface	River water captured for Paper and Packaging SC - Campina da Alegria and Paper MG - Santa Luzia units	4,902.47	5,335.31	4,905.75
Groundwater	Captured in wells for the Paper MG, Packaging SP - Indaiatuba, Packaging SP - Vila Maria and Resina RS - Balneário Pinhal units	123.72	153.45	183.92
Concessionaire	Water supplied by Casan, Sabesp and Corsan and Copasa to the Paper and Packaging SC - Campina da Alegria, Packaging SP - Vila Maria and Resina RS and Paper MG - Santa Luzia units, respectively	21.18	16.76	18.81
TOTAL		5,047.36	5,505.52	5,108.49

Note: **(303-3d)** the records presented come from daily flow meter readings.

All industrial units have water consumption usage targets defined from the historical analysis of the reduction of consumption and the production projection for each location. In 2021, there was a 7% reduction in the specific use of raw water.



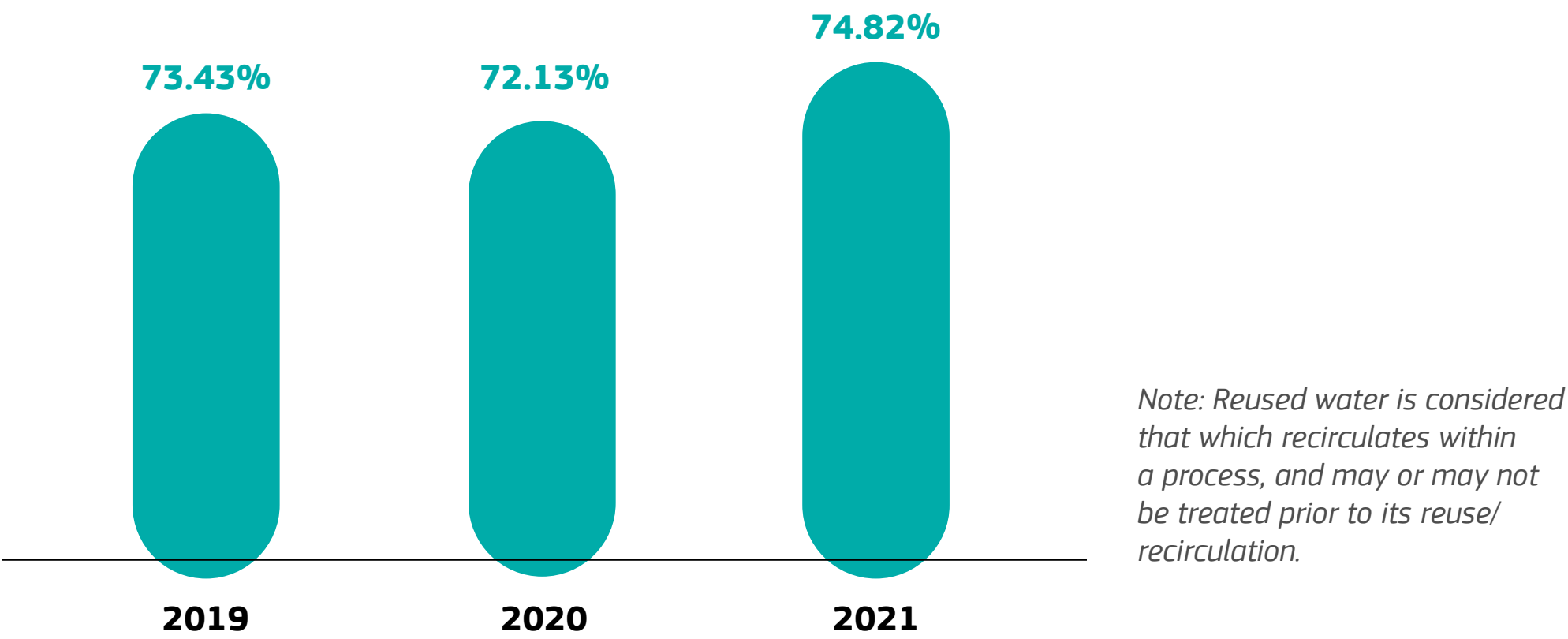
7%
was the reduction
in the specific use
of raw water

(303-3) SPECIFIC WATER USE (M³) PER TON PRODUCED

Unit	Specific water consumption (m³) per ton produced				Specific water use (m³) per ton produced		
	2019	2020	2021	GOAL 2021	2019	2020	2021
Paper SC – Campina da Alegria	18.87	20.60	18.14	18.87	20.13	21.96	19.18
Paper MG – Santa Luzia	3.28	3.37	5.43	2.70	3.46	3.57	5.77
Packaging SC – Campina da Alegria	0.28	0.26	0.28	0.28	0.32	0.29	0.32
Packaging SP – Indaiatuba	0.29	0.36	0.30	0.28	0.31	0.38	0.33
Resin RS – Balneário Pinhal	2.45	0.95	1.15	1.21	2.45	0.95	1.15
TOTAL	9.83	11.01	10.21	-	10.81	11.82	10.97

Notes: in the Paper MG - Santa Luzia unit, the target is calculated based on the volume of treated water consumed in the production process x net production, and not on the volume of water collected directly at the source. The less water consumed to produce a larger quantity of finished products, the more efficient the process is – and the better the use of natural resources.

(303-3) PERCENTAGE OF WATER REUSED IN THE SC PAPER – CAMPINA DA ALEGRIA UNIT



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.

(103-2 and 303-4b) 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, 303-5) 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 previous ichthyofauna (animals living in fresh water) monitoring campaign at this locality in 2015, we identified 646 specimens divided into nine species.

(103-3) We periodically and systematically carry out analyses in our own or outside laboratories – as long as they are recognized by environmental agencies. The reports are forwarded to the regulatory agency, as required by the environmental licenses and accompanying conditions.

(303-4) VOLUME OF EFFLUENTS GENERATED (IN MEGALITERS)

Unit	2019	2020	2021
Paper SC – Campina da Alegria	4,550.82	4,757.74	5,101.44
Paper MG – Santa Luzia	*	*	3.27
Packaging SC – Campina da Alegria	12.42	13.78	14.34
Packaging SP – Indaiatuba	10.94	11.87	11.53
Resin RS – Balneário Pinhal	5.70	5.32	6.51
TOTAL	4,581.88	4,788.71	5,137.10

Note: 2019 and 2020 are not applicable to the Paper MG – Santa Luzia unit, which has a closed circuit.

(103-3, 303-4d and RT-CP-140)

Environmental permits define the priority tests 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. Specific 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.

(306-1 AND 306-5) LEGAL EFFLUENT EMISSION DESTINATIONS AND PARAMETERS

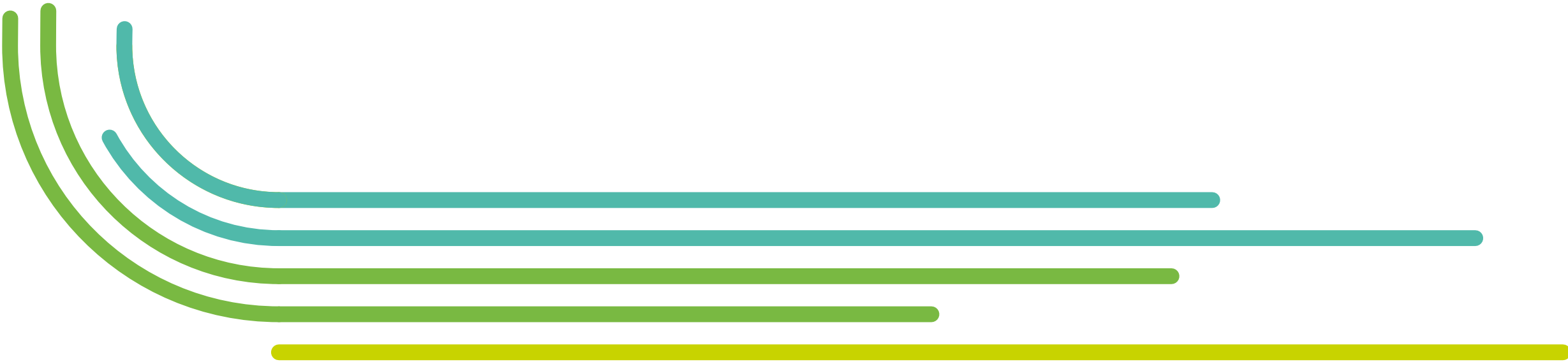
Unit	Destination	Treatment Method	Legal parameters
Paper SC – Campina da Alegria	Rio do Mato	Biological (prolonged aeration)	Conama Resolution No. 430/2011
Paper MG – Santa Luzia	Córrego Bicas	Sanitary: Industrial Biological: Physical Chemical / Biological	Joint Normative Deliberation COPAM/CERH-MG No. 1/2008
Packaging SC – Campina da Alegria	Rio do Mato	Biological (prolonged aeration)	CONAMA Resolution No. 430/2011
Packaging SP - Indaiatuba	City treatment station - ETE Mario Araldo Candello	Physical-chemical	State Decree No. 8468/1976, 19th article
Resin RS – Balneário Pinhal	Fertigation	Physical-chemical	Conama Resolution 420/2009

Note: Paper MG – Santa Luzia is not listed because it uses a closed circuit. The other units comply with the legal parameters established by Conama Resolution 430/2011. In none of the units is the effluent used by other organizations.

SPECIFIC EFFLUENT VOLUME (M³) PER TON PRODUCED

Unit	Specific effluent volume (m³) per ton produced			Specific effluent volume (m³) per ton produced		
	2019	2020	2021	2019	2020	2021
Paper SC – Campina da Alegria	18.04	18.70	19.46	19.24	19.93	20.57
Paper MG – Santa Luzia	*	*	0.06	*	*	0.07
Packaging SC – Campina da Alegria	0.18	0.19	0.19	0.21	0.21	0.22
Packaging SP – Indaiatuba	0.12	0.12	0.12	0.13	0.13	0.13
Resin RS – Balneário Pinhal	0.42	0.36	0.45	0.42	0.36	0.45
Total	8.95	9.58	10.27	9.60	10.28	11.03

Note. In 2019 and 2020, Paper MG used a closed circuit, with no generation of effluents.



7%
was the increase
in the volume
of raw effluent
generated in 2021

There was a 7% increase in the volume of raw effluent generated in 2021 due to the dirt in the scraps. This required greater use of water to purify and clean the raw material.



Climate change **and emissions**



GRI 103-1, 103-2, 103-3, 305-1, 305-2, 305-3, 305-4, 305-5, 305-6 and 305-7
SASB RR-PP-110, RT-CP-110, RR-PP-110, RT-CP-110 and RR-FM-450
ISE

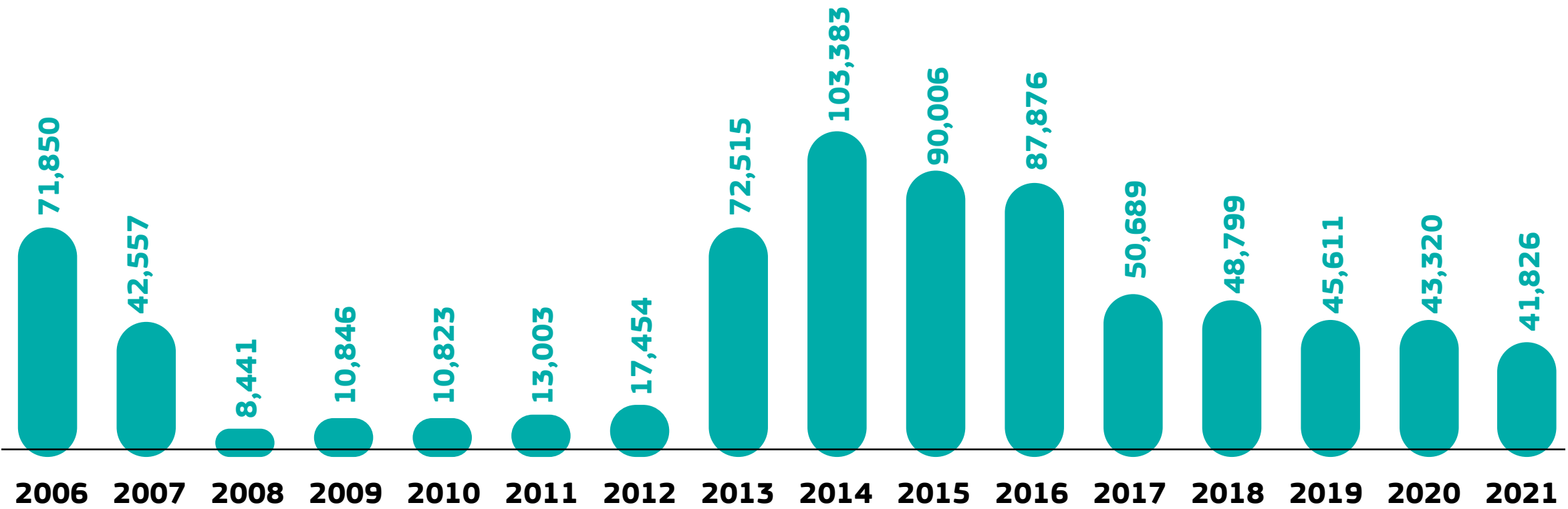
(103-2) We are a carbon positive company by nature. That means we capture more greenhouse gases from the atmosphere than we emit. **(103-1,103-3, 305-1.e)**. In addition to being guided by the guidelines of the GHG Protocol and the National Policy on Climate Change in scopes 1, 2 and 3, we were the first Brazilian company to certify a Greenhouse Gas Inventory (GHG) according to ISO 14064:2006.

(103-2, 305-1.f and 305-2.f) Our inventory identifies and quantifies the sources of greenhouse gas (GHG) emissions and our progress in this regard in the industrial units, forestry areas in Santa Catarina, offices and the Habitasul Florestal subsidiary.
(305-1b, 305-1.g, 305-2c, 305-3b) We consider, for calculation purposes, the carbon dioxide

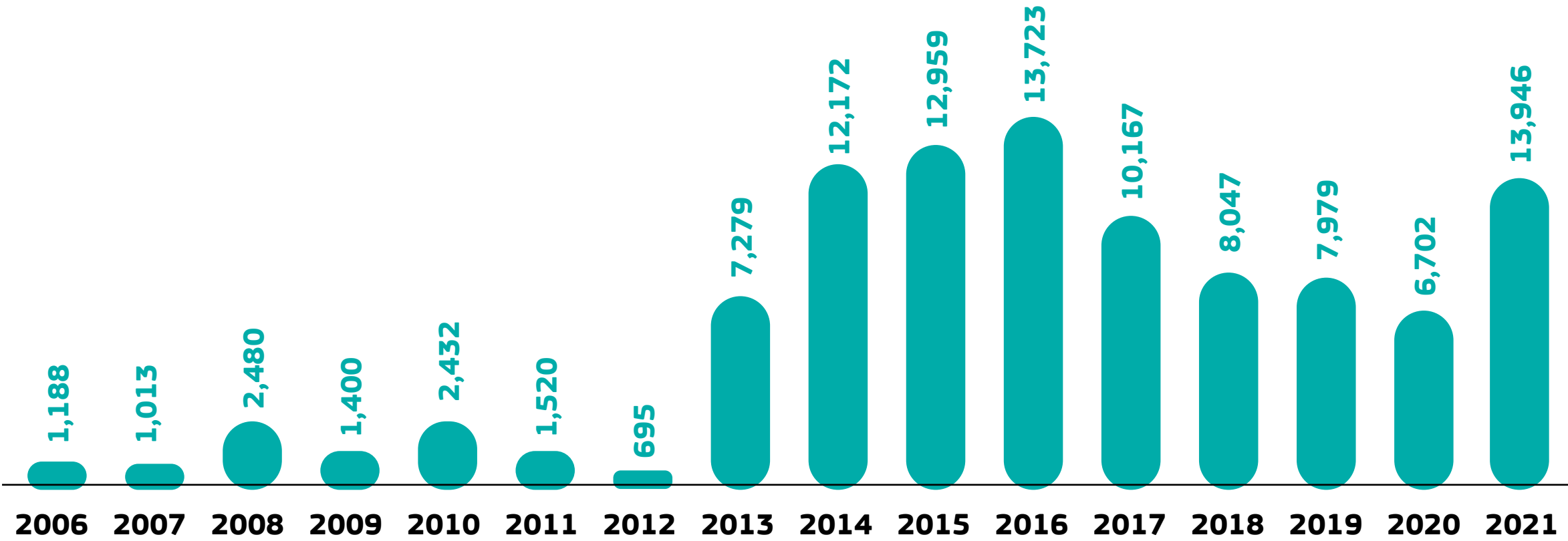
emissions (CO₂), methane (CH₄) and nitrous oxide (N₂O). Emissions from HFCs, PFCs, SF₆, NF₃ are not included because we do not use precursor substances of these gases in our industrial processes.

The base year used until 2013 was 2006, when we published our first greenhouse gas inventory. **(305-1d, 305-2d and 305-3d)** 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 been able to reduce emissions until the demobilization of the Vila Maria unit in 2019, maintaining the commitment to sustainability, process optimization and the continuous search for operational efficiency.

(305-1.A, RR-PP-110 AND RT-CP-110) SCOPE 1 – DIRECT GHG EMISSIONS (IN TONS OF CO2EQ)



(305-2) SCOPE 2 – INDIRECT EMISSIONS - ENERGY (IN TONS OF CO2EQ)

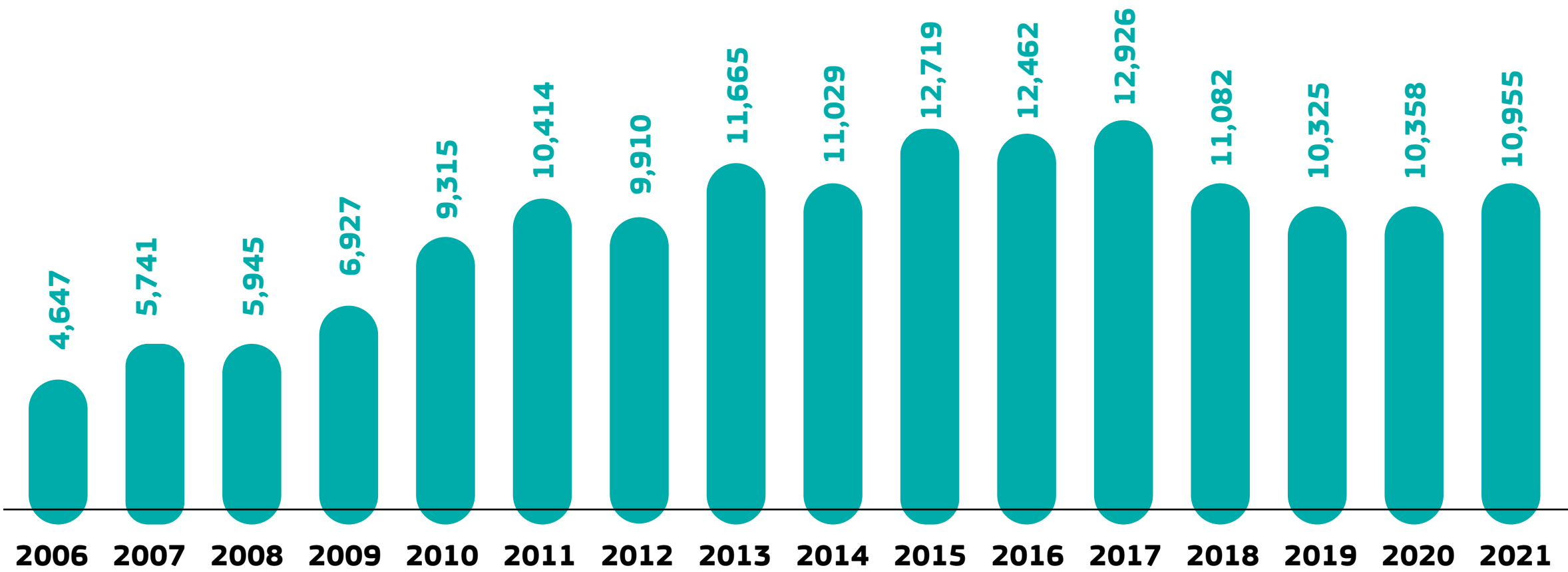


(305-2e, 305-2g) Note: the emission factors used for calculation purposes are made available by the Ministry of Science and Technology and compose the indirect emission calculation following ISO14064:2006 guidelines.

There was an increase in Indirect Emissions - Scope 2, due to the shortage of water, making it necessary to turn on thermoelectric power plants to generate energy. The movement increased the grid emission factor.

(305-2 and 305-3d) 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.

(305-2) SCOPE 3 SUMMARY - INDIRECT EMISSIONS - OTHER SOURCES (IN MGC02EQ)



(305-3f, 305-3g) 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.

(305-4C) DISTRIBUTION OF THE INDICES BASED ON THE OPERATING UNITS

Units	Base Year: 2006			Base Year: 2013		2021			
	Production	Emissions	Intensity	Intensity (1,2,3)	Intensity (1, 2)	Production	Emissions	Intensity (1,2,3)	Intensity (1, 2)
Paper SC – Campina da Alegria	172,201	64,127	0.37	0.07	0.06	262,156	27,388	0.12	0.11
Paper MG – Santa Luzia	-	-	-	0.72	0.69	52,219	18,006	0.35	0.29
Packaging SC – Campina da Alegria	30,998	4,454	0.14	0.03	0.03	74,185	2,430	0.04	0.04
Packaging SP – Indaiatuba	47,859	4,725	0.1	0.08	0.06	103,302	5,276	0.06	0.06
Resin RS – Balneário Pinhal	5,467	550	0.1	1.79	1.79	15,451	581	0.04	0.03

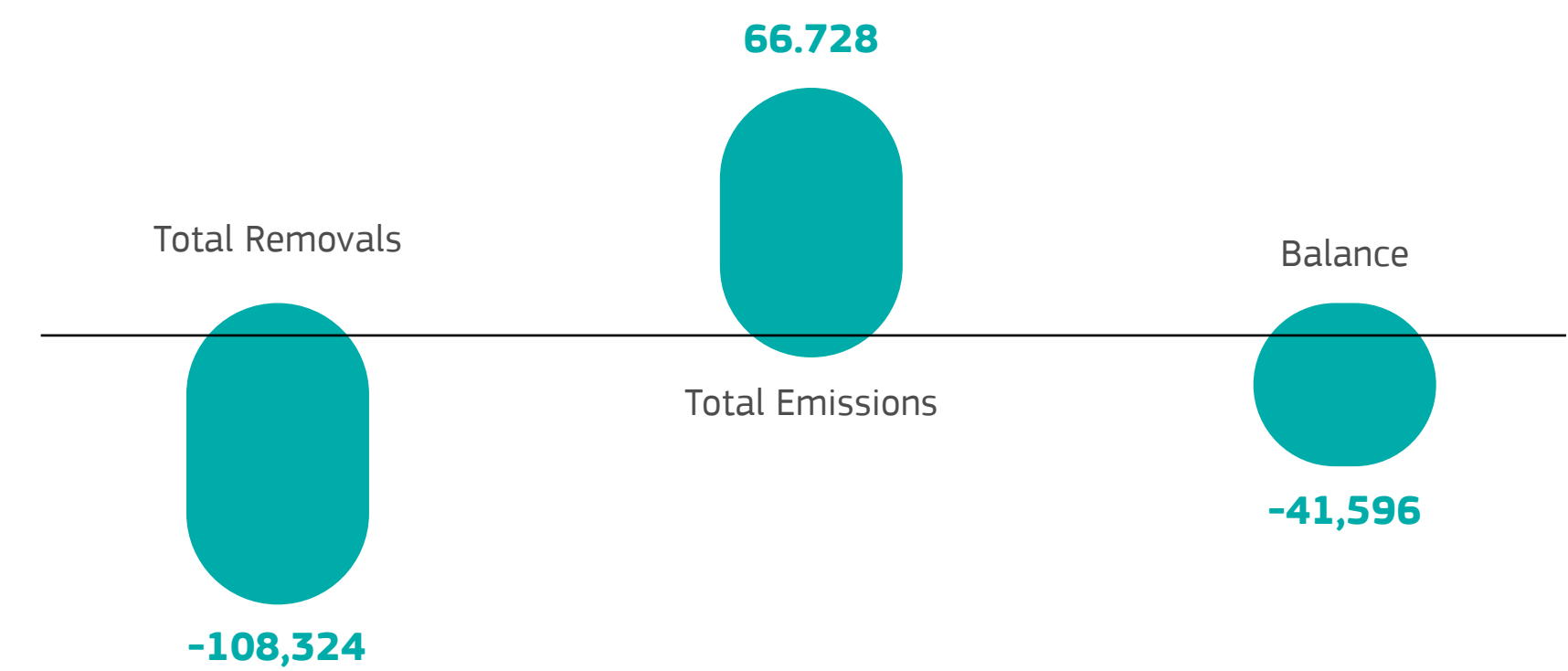
(305-4.a) Note: intensity reports the specific per unit, i.e., the emission divided by the gross output causes the intensity indicated for each operational unit

There were changes in the methodology for calculating removals in 2021. We hired the Federal University of Paraná (UFPR) to review the forest removal calculations, contemplating the pine and eucalyptus planted forests. In addition, a calculation model for native forests has been developed. The work was coordinated by Professor Carlos Roberto Sanquetta, forest

engineer, Ph.D. in Forest Management and Ecology from the United Graduate School of Agricultural Sciences, Japan. He has expertise in climate change and carbon sequestration and is a member of the Intergovernmental Panel on Climate Change and Roster of Experts of the UN Framework Convention on Climate Change. A full professor at UFPR, he is also coordinator of the

BIOFIX Center for Biomass and Carbon Research at UFPR. For the calculations, the methodology used was the one established in the greenhouse gas emission inventory guidelines published by the Intergovernmental Panel on Climate Change (IPCC). Registration data and the Company’s latest consolidated forest inventory, provided by Irani, were used.

TOTAL EMISSIONS, (ESCOPE 1, 2 AND 3), REMOVALS AND BALANCE (IN TONS OF CO₂EQ)



(305-1C AND 305-3C) EMISSIONS FROM BIOGENIC SOURCES (IN TONS OF CO₂EQ)

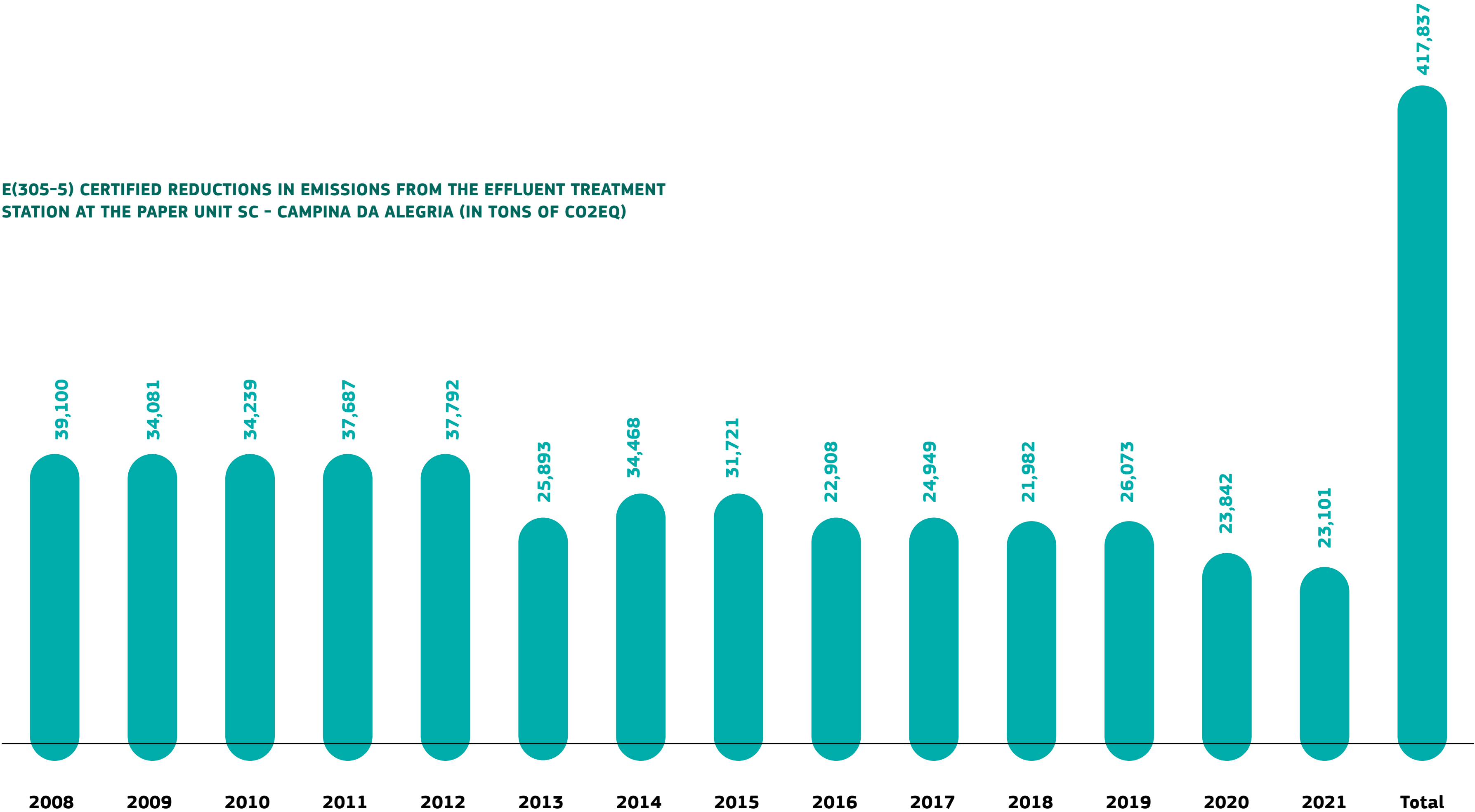
	2019	2020	2020
Biodiesel and gasoline – Scope 1	183.73	155.39	148.93
Ethanol – Scope 1	20.54	15.42	8.61
Biodiesel and gasoline - Scope 3	816.58	1,513.79	1,575.49
Black liquor – Scope 1	217,329.14	215,392.58	216,431.73
Biomass – Scope 1	734,332.84	719,131.01	704,619.49
Efluente Industrial – Scope 1	*	*	3,589.97
TOTAL	952,682.84	936,208.20	926,374.21



Clean Development Mechanism (CDM) of the Effluent Treatment Station

Approved by the MDL (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 2020, the project avoided the emission of 394,736 tons of GHG.

E(305-5) CERTIFIED REDUCTIONS IN EMISSIONS FROM THE EFFLUENT TREATMENT STATION AT THE PAPER UNIT SC - CAMPINA DA ALEGRIA (IN TONS OF CO2EQ)

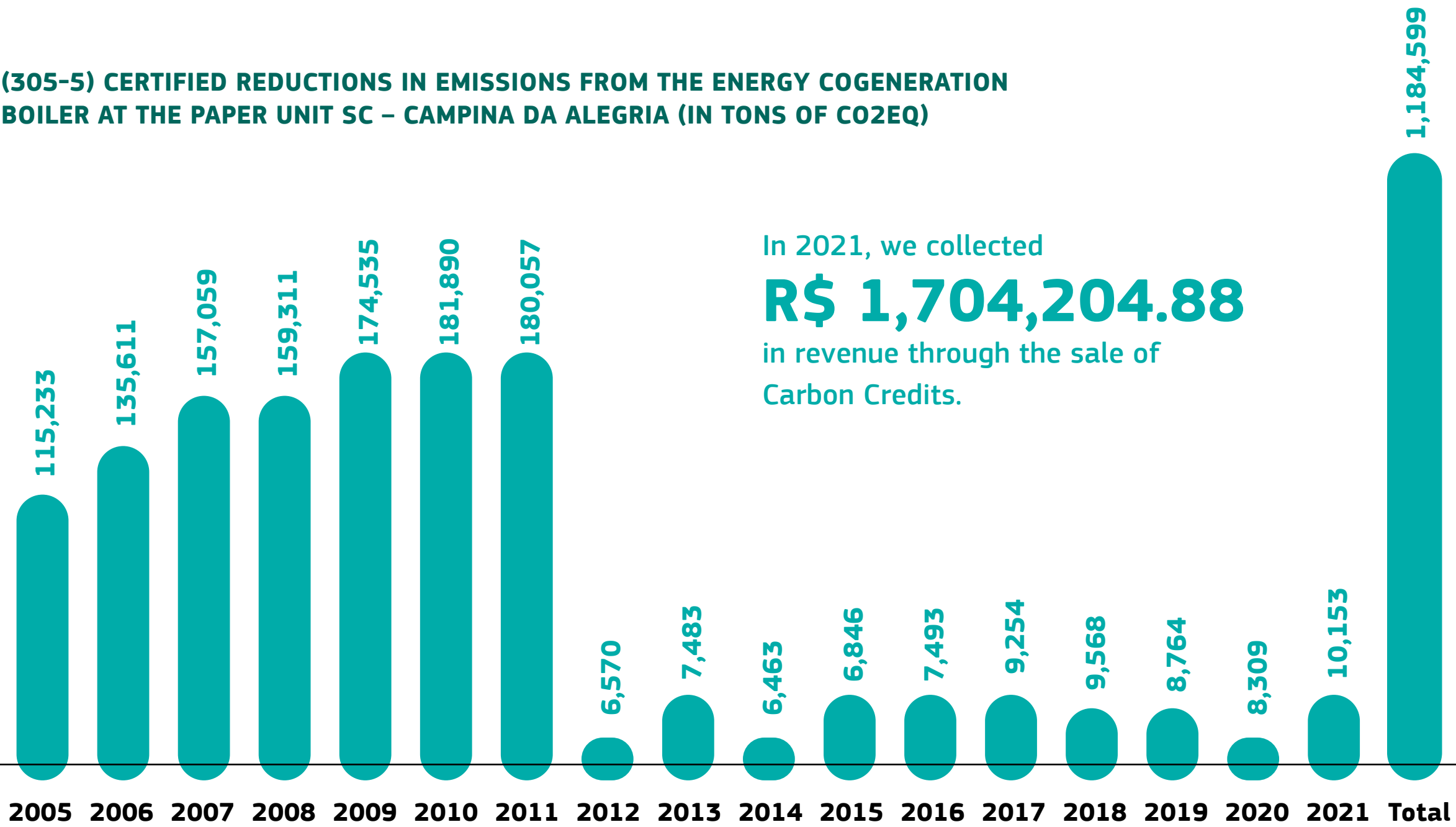


CDM Cogeneration Plant

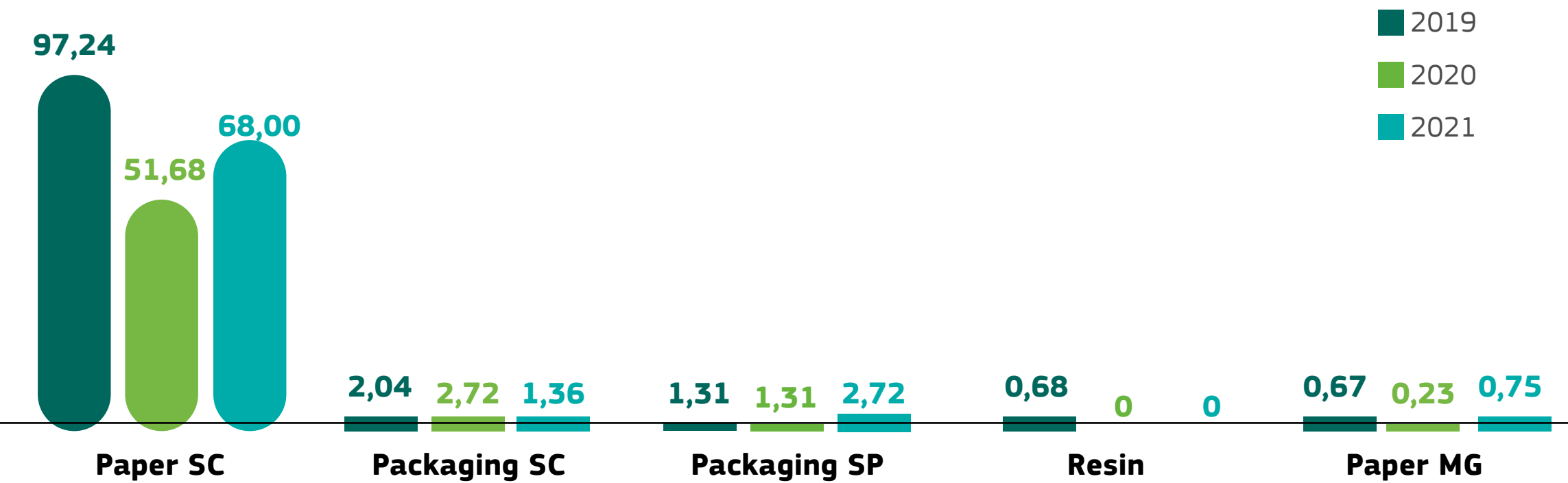
With this CDM, Irani was the first Brazilian pulp and paper company and the second in the world to have carbon credits issued under the Kyoto Protocol. The cogeneration boiler reduces greenhouse gas emissions, such as methane and carbon dioxide. Reducing emissions is possible thanks to the inputs used for the burning process. They come from forest-based

waste: biomass. With the CDM of the Cogeneration Plant, these residues are reused in order to avoid the process of decomposition in landfills – which leads to GHG emissions. In 2021, the boiler generated 61,110 MW of renewable energy based on forest residues. Between 2005 and 2021, the project avoided the emission of 1,184,599 tons of greenhouse gases.

(305-5) CERTIFIED REDUCTIONS IN EMISSIONS FROM THE ENERGY COGENERATION BOILER AT THE PAPER UNIT SC – CAMPINA DA ALEGRIA (IN TONS OF CO2EQ)

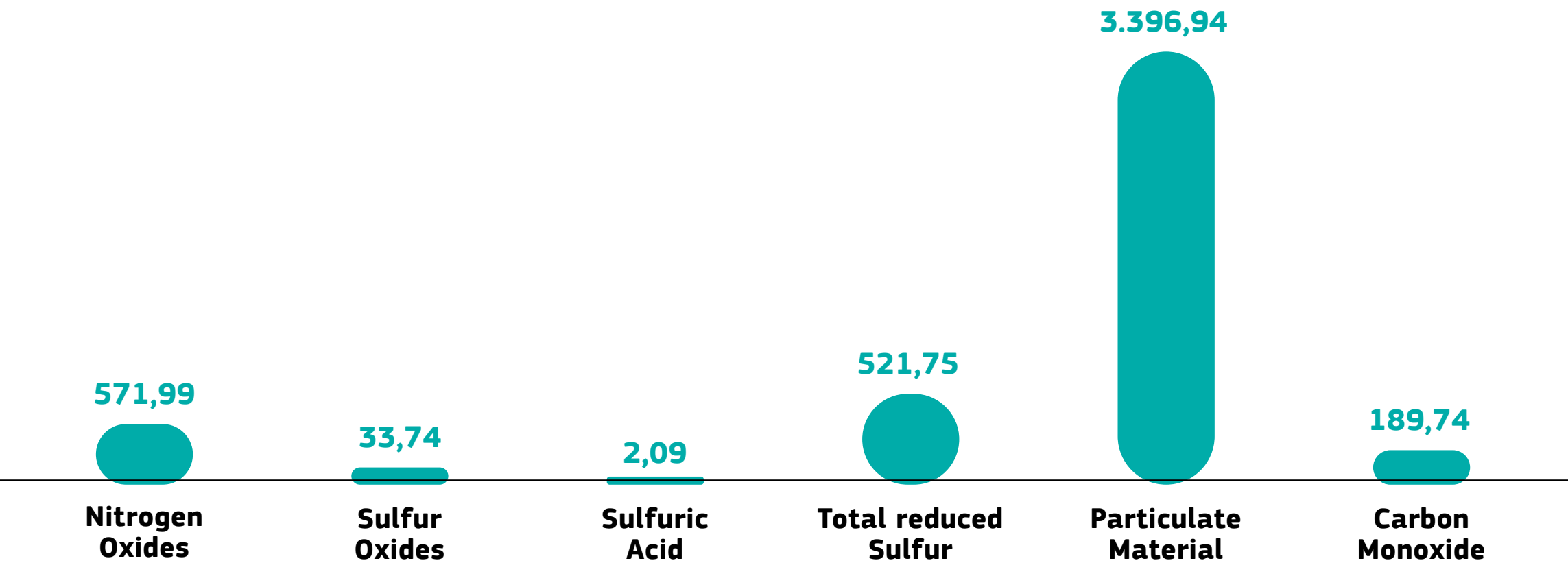


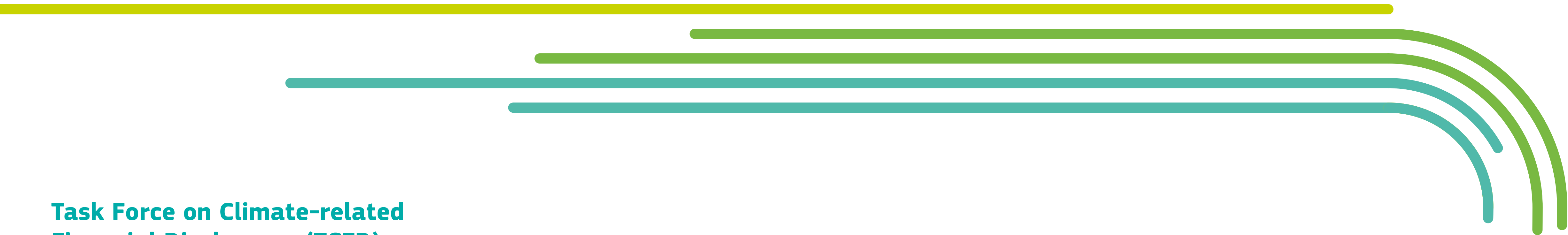
(305-6) EMISSIONS OF SUBSTANCES THAT DESTROY THE OZONE LAYER (IN TONS OF CO2EQ)



Note: the calculation can be made directly. Both the CML-IA and the ReCiPe methods use the equivalent CFC-11 substance with an ozone depletion impact indicator. The two methods present the characterization factor as 0.05 kg of CFC-11 eq for each kg of HCFC-22. We have not adopted the formula indicated by the GRI because we neither produce, import nor export ozone layer depleting substances. The data presented refer to emissions from the use of air-conditioning refrigeration gas.

(305-7, RR-PP-120 AND RT-CP-120) ATMOSPHERIC EMISSIONS (IN TONS/YEAR)





Task Force on Climate-related Financial Disclosures (TCFD)

The TCFD is a global coalition of 32 members of the G20 community from various sectors of the economy, led by the Financial Stability Board (FSB).

The TCFD encourages organizations to become aware of the physical, responsibility and transitional climate risks to which they are exposed. In addition, it proposes voluntary and consistent climate-related financial disclosures to ensure greater transparency for lenders, insurers and investors to make better business decisions.

In 2021, we continued to deepen discussions on the impact of climate change on our operations, with the following highlights:

- **Governance:** we defined a new commitment in our Sustainability Policy, which is: “Adopt measures and strategies for mitigation and adaptation to climate change through projects such as Clean Development Mechanisms and the reduction of Greenhouse Gas emissions.”
We improved Risk Management, improving our understanding of the risks related to climate change that were already listed and, furthermore, included new risks. The topic will be monitored by the Risk Management area and the impacted managers. In 2021, we identified the need to hire consultants to further advance the subject – the work will start in 2022.

- **Strategy:** we participated in the Climate Change Committee of the Brazilian Tree Institute (IBÁ) and used the preliminary analyses to prepare the Strategic Plan for the 2021/2030 cycle, which is beginning to be put into practice.
- **Risk management:** we assessed existing risks and identified the need to include a new risk related to water scarcity. The other risks related to the climate were already contemplated.
- **Goals and metrics:** we have set emission reduction and carbon credit generation goals. 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.



Waste management and circular economy



GRI 103-1, 103-2, 103-3, 306-2, 306-3, 306-4 and 306-5
SASB RT-CP-410, RT-CP-150
ISE

(103-1, 103-2 and 103-3) In our Strategic Map for the 2021-2030 cycle, we formalized the commitment to promoting the circular economy in the value chain. Our strategic goal is to optimize the operational and environmental efficiency of the plants. In line with the National Solid Waste Policy (Law No. 12.305/10), our teams are constantly evaluating industrial processes, capturing opportunities to reduce the consumption of materials and analysis of alterations to insert waste generated in new production chains. Thus, in addition to promoting the circular economy, we contribute to the generation of employment and income in the surrounding communities.

(103-2, 103-3) Consumption of raw materials and inputs has a significant impact on operating costs. Consequently, we value strict controls and periodic analyses, designed to discover alternatives for the reuse and recycling of materials. Accordingly, it is possible to reduce the volume of waste disposed of in licensed landfills and the significant environmental impacts. **Such efforts were rewarded in 2021, when 98% of our raw materials were derived from renewable sources.**



LEARN MORE
More information
on our circular
economy practices
is available here

(301-1 AND RT-CP-410) VOLUME OF RENEWABLE AND NON-RENEWABLE MATERIALS (TONS)

Unit	Total volume of materials used			Total volume of renewable materials			Total volume of non-renewable materials		
	2019	2020	2021	2019	2020	2021	2019	2020	2021
Paper SC – Campina da Alegria	668,658	687,408	695,662.49	655,019	673,046	678,968.44	13,639	14,362	16,694.05
Paper MG – Santa Luzia	66,400	65,335	59,266.25	65,359	64,304	58,144.52	1,041	1,031	1,121.73
Packaging SC – Campina da Alegria	71,578	76,810	76,312.02	71.064	76,089	75,616.61	514	720	695.41
Packaging SP – Indaiatuba	95,243	101,758	105,981.61	94,688	101,086	105,322.34	555	672	659.27
Resin RS – Balneário Pinhal	16,542	18,738	18,695.72	16,542	18,738	18,695.72	Not applicable	Not applicable	0.00
TOTAL	942,625	950,049	955,918.09	926,804	933,264	936,747.62	15,821	16,785	19,170.46

Note: Only the materials consumed in the production process are considered.

(301-1, 301-2, 301-3 AND RR-PP-430) PERCENTAGE OF RECYCLED MATERIALS USED IN THE PROCESS

Unit	2019	2020	2021
Paper SC – Campina da Alegria	22.07%	21.60%	23.11%
Paper MG – Santa Luzia	91.69%	91.63%	90.49%
Packaging SC – Campina da Alegria	92.99%	92.88%	94.62%
Packaging SP – Indaiatuba	87.12%	89.33%	94.48%

(301-1) SPECIFIC MATERIAL CONSUMPTION PER TON PRODUCED

Unit	Specific material consumption per ton produced			Specific material consumption per ton produced		
	2019	2020	2021	2019	2020	2021
Paper SC – Campina da Alegria	2.65	2.70	2.65	2.83	2.88	2.81
Paper MG – Santa Luzia	1.12	1.13	1.13	1.18	1.20	1.20
Packaging SC – Campina da Alegria	1.03	1.03	1.03	1.18	1.17	1.19
Packaging SP – Indaiatuba	1.02	1.03	1.03	1.09	1.10	1.11
Resin RS – Balneário Pinhal	1.21	1.28	1.21	1.21	1.28	1.21

Note: Only the materials consumed in the production process are considered.

(301-1, 301-2, 301-3, RT-CP-150 AND 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	24,271.72	246,255.89	9.86%
Paper MG – Santa Luzia	4,013.27	49,030.00	8.19%

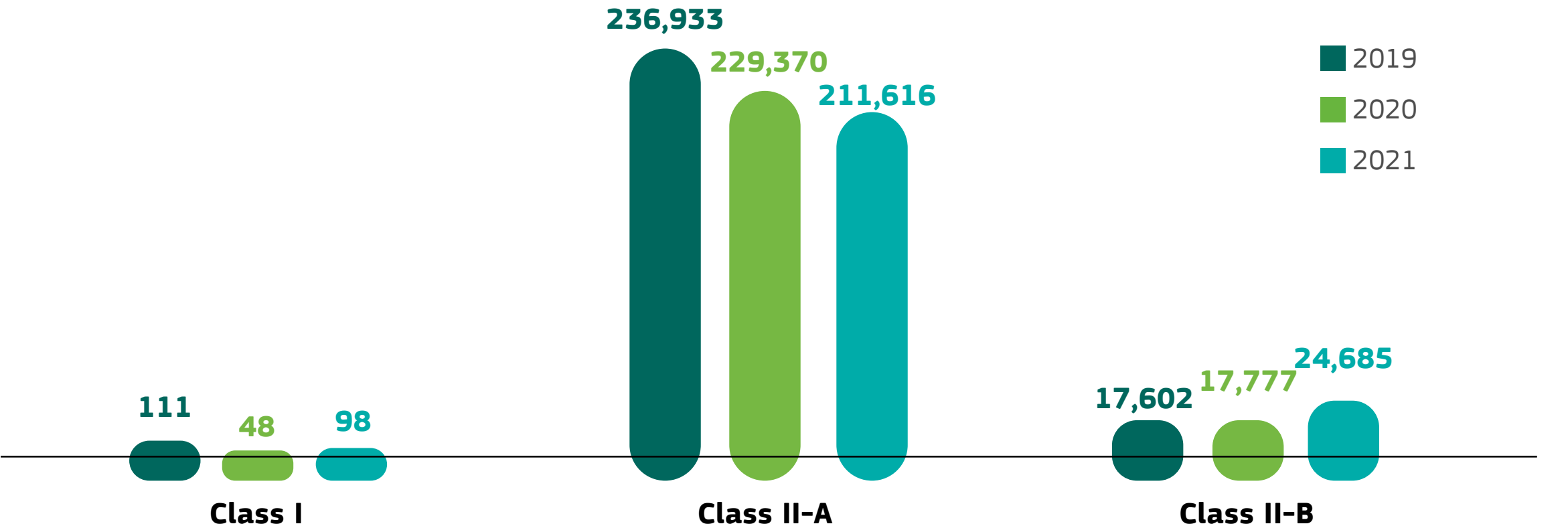
Note: we consider as recovered material a process tailings called *refile*, generated in the production of sheets and boxes by the packaging units. The control of the volume that returns to the industrial units for recovery is carried out by means of an invoice and stock movement from the SC Packaging unit to SC Paper, both located in Campina da Alegria and Vargem Bonita (SC).

(306-2) TOTAL WEIGHT OF WASTE (TONS)

Unit	2019	2020	2021
Paper SC – Campina da Alegria	223,942	215,880	204,548
Paper MG – Santa Luzia	7,604	7,573	7,578
Packaging SC – Campina da Alegria	9,490	10,304	10,354
Packaging SP – Indaiatuba	11,412	11,152	11,247
Resin RS – Balneário Pinhal	2,199	2,287	2,671
TOTAL	257,350	247,195	236,399

(103-2) 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.

(306-2) TOTAL WEIGHT OF WASTE BY TYPE (TONS)



(306-2, 306-4A, RT-CP-410 E RT-CP-150)
TOTAL WEIGHT OF WASTE BROKEN DOWN BY METHOD OF DISPOSAL (TONS)

Disposal method	Non-hazardous			Hazardous		
	2019	2020	2021	2019	2020	2021
Recycling	47,627.45	48,408.65	35,821.39	12.39	15.84	16.48
Reuse	81,326.33	73,909.52	67,916.40	0.00	0.14	0.00
Incineration	0.00	0.00	0.00	0.04	2.08	2.84
Blending	0.00	0.00	201.80	5.23	3.65	5.20
Composting	23,153.93	21,148.96	26,867.53	0.00	0.00	0.00
Recovery	84,357.42	83,232.34	81,240.24	0.00	0.00	0.00
Landfill	20,839.46	20,447.53	24,185.32	88.31	26.51	72.52
Depressurization	0,00	0,00	0,00	0,00	0,00	0.06
External treatment	0,00	0,00	67,50	0,00	0,00	1.37
TOTAL	257,304.59	247,147.00	236,300.18	106.05	48.22	98.47

Note: the total amount of hazardous waste (98.47 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 reduction of hazardous waste in 2021 is due to the improvement in classification and segregation for final disposal

(306-4) In compliance with current legislation, 100% of recycled or externally disposed waste is sent with a Waste Transportation Handling (MTR) document. The MTR is issued through the online control system of the Environmental Institute (IMA), and the State System for Online Solid Waste Management SIGOR (CETESB), ensuring that the material is only intended for duly licensed companies.

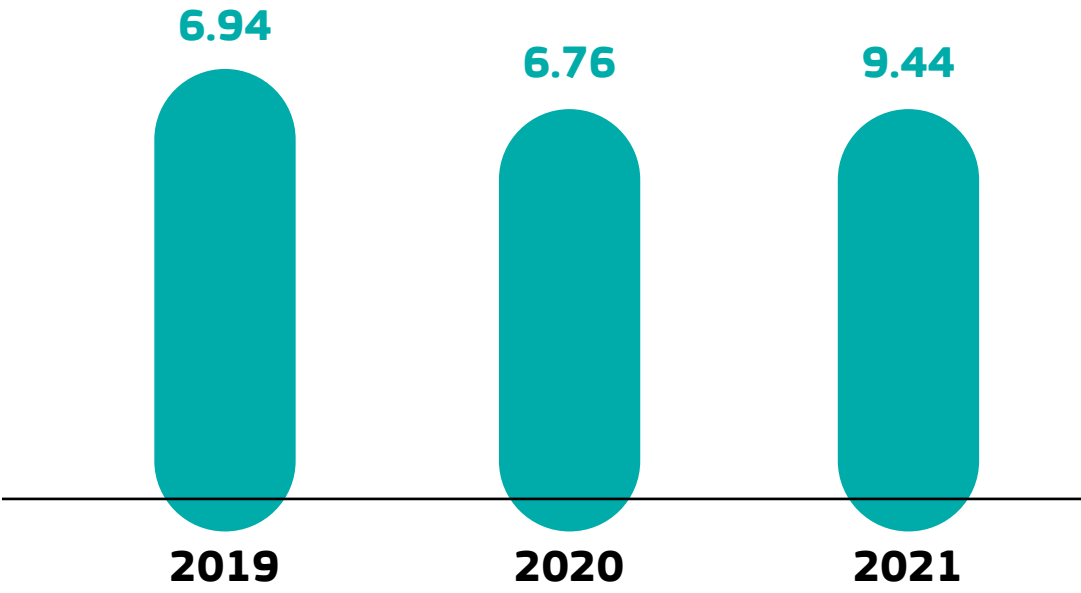
(102-12) Through the da Indústria Brasileira de Árvores (IBÁ) tree industry association, we are also part of a Coalition for Business Commitment for Recycling (CEMPRE). Via CEMPRE, we have sealed a sectoral agreement for the implementation of the reverse packaging logistics system in general.

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		
	2019	2020	2021	2019	2020	2021
Paper SC – Campina da Alegria	0.89	0.85	0.78	0.95	0.90	0.82
Paper MG – Santa Luzia	0.13	0.13	0.15	0.14	0.14	0.15
Packaging SC – Campina da Alegria	0.14	0.14	0.14	0.16	0.16	0.16
Packaging SP - Indaiatuba	0.12	0.11	0.11	0.13	0.12	0.12
Resin RS – Balneário Pinhal	0.16	0.16	0.17	0.16	0.16	0.17
TOTAL	0.50	0.49	0.47	0.54	0.53	0.50

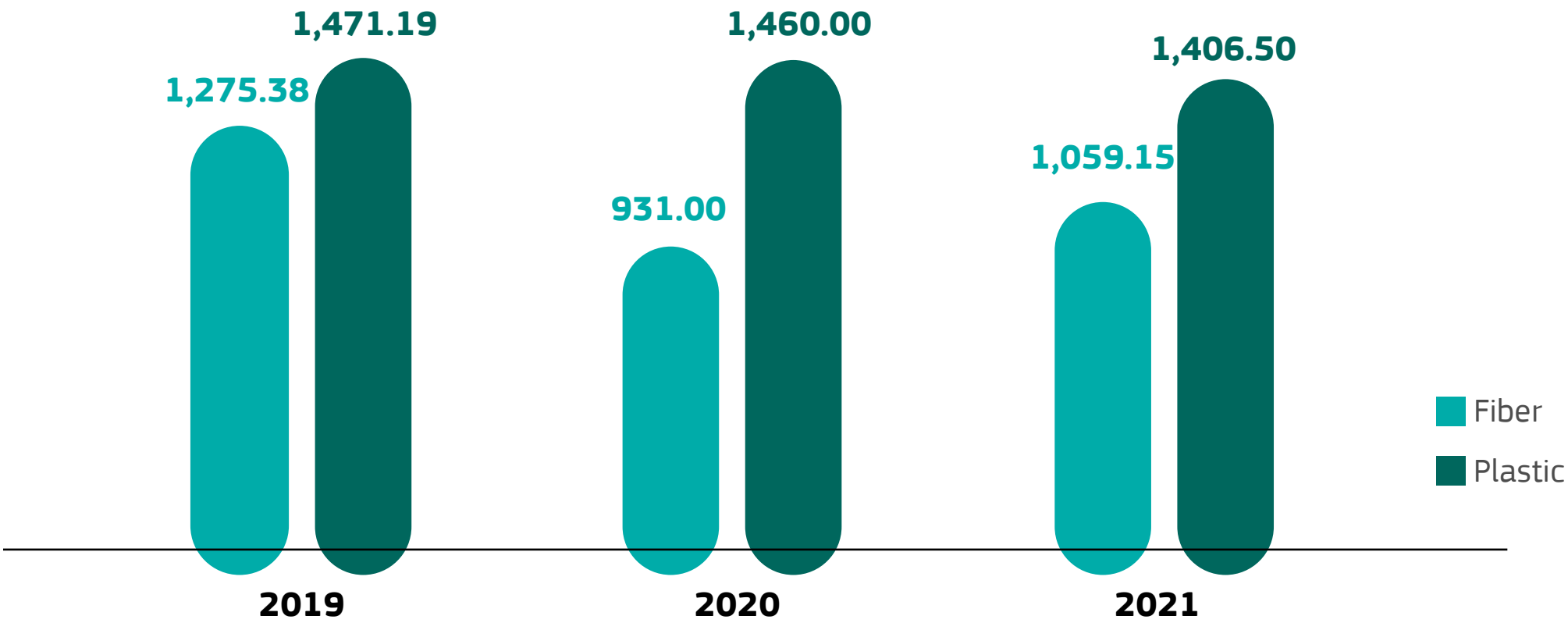
(306-4) As the Company’s largest waste generator, Paper SC – Campina da Alegria centralizes our efforts to encounter solutions aligned with the circular economy. The initiatives extended the life of our industrial landfill by four years (2018-2021). With this, it was possible to extend the investment of approximately R\$ 3 million for the construction of a new landfill.

PERCENTAGE OF WASTE SENT TO THE LANDFILL IN THE SC PAPER UNIT – CAMPINA DA ALEGRIA



Increase of 2.7 percentage points of waste sent to the landfill due to the quality and quantity of impurities present in the paper scrap.

(306-2) ANNUAL RECOVERY OF PAPER FIBERS AND PLASTIC (TONS)



Note: the number of contaminants has gradually increased over time, generating 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 pulp preparation have boosted efficiency and the use of fiber, reducing losses.



Voluntary certifications and commitments



GRI 103-1, 103-2, 103-3, ISE

(102-11) The certifications obtained stimulated the adoption of measures to deal with potential impacts. We continued the ongoing monitoring of legislation and requirements, in addition to identifying aspects and impacts, including defining controls to minimize these effects.

(102-43 and 416-1) Observing the Company’s strategic guidelines, we periodically reassess our internal procedures and update the mapping of environmental aspects and impacts in all business units.

	FSC® International certification that guarantees that the raw material used comes from a forest that is managed in an ecologically correct, socially fair and economically viable manner.	ISO 9001:2015 Quality management system, designed for organizations to improve their performance.	ISO 14064:2006 International standard certifying greenhouse gas inventories, voluntarily drawn up by organizations.	ISO 14001:2015 International standard that specifies the requirements for the creation of a management system for environmental protection and rapid response to changes, considering environmental aspects influenced by the organization and others that may be controlled by it.
Forestry and Paper Business	☑	☑	☑	
Packaging Business	☑	☑	☑	☑
Resin Business	☑	☑	☑	

Note: we are preparing all Irani businesses to obtain ISO 14001:2015 certification. The RS Resin Unit – Balneário Pinhal is in a more advanced position in terms of preparation, with internal audits being conducted.

In 2021, we also became signatories to the UN Sustainable Development Goals Movement in Rio Grande do Sul, an additional initiative to the Santa Catarina Movement, which we were instrumental in starting in 2020. Hence, we are committed to 17

objectives and 169 global action goals that should be achieved by 2030, mostly covering the environmental, economic and social dimensions of sustainable development, in an integrated and interrelated fashion. With the initiative, we set up study groups to

assess which SDGs take precedence and what goals we should consider for our businesses. The studies for the SDGs were completed in 2021. Throughout 2022, we will develop the actions as identified to improve our performance and revisit the prioritized SDGs.



Natural Capital

Opportunities and Future Commitments

Specific use
of water.



Zero sending non-
hazardous waste to
landfill by 2030.



A 5% reduction
in specific waste
generation 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.



ISO 14001 certification
of all business units
until 2030.

about the
report



ABOUT THE REPORT

Irani’s Integrated Report presents not only our way of doing business, but also our results from the last fiscal year. Likewise, we speak of future challenges and commitments. The subject matter covers the period from January 1 to December 31, 2021 in all units of Irani Papel e Embalagem S.A. and subsidiaries. Fully transparent, we demonstrate how our sustainability strategy unfolds into practices that reinforce our mission of building valuable relationships with employees, surrounding communities, clients, suppliers, shareholders, governments and society.

(102-32) A dedicated team of technicians worked on the preparation of the publication. They strived to produce a balanced and appropriate presentation of the material issues, as well as an explanation of our ability to create value. The publication has been reviewed and approved by the Executive Board, which recognizes the responsibility to ensure the integrity, completeness and systemic view of the information it contains.

All relevant materiality information has been disclosed, while omissions can be found in the GRI summary.

Integrated Report

This report follows the Integrated Reporting guidelines observing the International Framework (IR) technical guidelines, considering the six capitals:

- **Financial Capital**
- **Social and Relationship Capital**
- **Human Capital**
- **Intellectual Capital**
- **Manufacturing Capital**
- **Natural Capital**



(102-54)
Global Reporting Initiative (GRI)

This report was prepared based on the GRI Standards and demonstrates how we generate value in a sustainable manner.

Sustainable Development Goals (SDGs)

This report presents the main SDGs impacted by our businesses and how they relate to our priority strategies.

SUSTAINABLE DEVELOPMENT GOALS

1 NO POVERTY 	2 ZERO HUNGER 	3 GOOD HEALTH AND WELL-BEING 	4 QUALITY EDUCATION 	5 GENDER EQUALITY 	6 CLEAN WATER AND SANITATION
7 AFFORDABLE AND CLEAN ENERGY 	8 DECENT WORK AND ECONOMIC GROWTH 	9 INDUSTRY, INNOVATION AND INFRASTRUCTURE 	10 REDUCED INEQUALITIES 	11 SUSTAINABLE CITIES AND COMMUNITIES 	12 RESPONSIBLE CONSUMPTION AND PRODUCTION
13 CLIMATE ACTION 	14 LIFE BELOW WATER 	15 LIFE ON LAND 	16 PEACE, JUSTICE AND STRONG INSTITUTIONS 	17 PARTNERSHIPS FOR THE GOALS 	



SASB

Prepared according to SASB industrial standards with accounting metrics pursuant to the following standards:

- **SASB Application Guide**
- **RR-PP - Pulp and Paper Products**
- **RR-FM - Forest Management**
- **RT-CP - Containers and Packaging**

(102-46)

Definition of the material topics

In 2021, we reviewed the material topics covered by this publication under the guidance of the Sustainability area and with the approval of the Sustainability Committee.

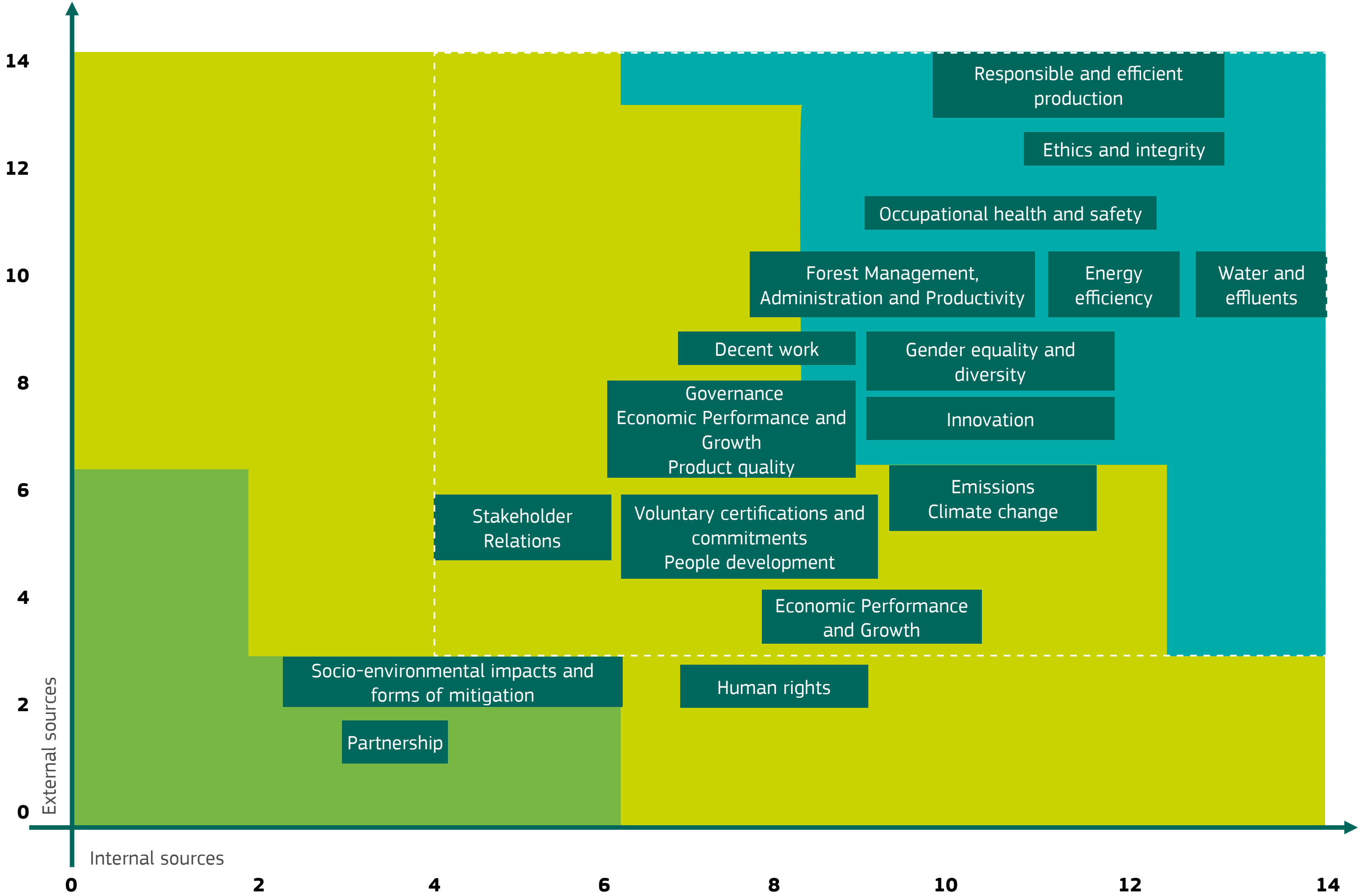
We checked whether the management practices adopted were aligned with the material issues mentioned by the stakeholders (see more on page 17), and thus contributed to improvements in organizational management.

Initially, we ascertained the stakeholders and the internal and external materials available for consultation that could provide us with significant information from the point of view of their expectations and influence.

Among the materials consulted, the following are notable: interview with the manager of the Accounting and Investor Relations area; Strategic Planning for the 2018-2027 cycle; results of the last social and environmental impact assessment cycle in the surrounding communities; results of the Result of

Customer Satisfaction Survey; UN's SDGs; B3's ISE questionnaire; commitments related to the pacts to which we are signatories; SABS methodology; and annual reports of competitor companies. There were no external consultations.

From the set of information internally and externally assessed, 33 topics emerged that were arranged in a matrix. From it, it was possible to extract the set of most relevant topics, considering internal and external stakeholders, which were filtered by the recurrence of the theme in the materials evaluated. Finally, the Sustainability Committee validated, in an ordinary meeting, a series of material topics, pointing out situations and areas in which we are agents that cause impacts or contribute to their occurrence.



(102-47)

The following are the material topics:

- Water and effluents
- Voluntary certifications and commitments
- Economic Performance and Growth
- People development
- Energy efficiency
- Emissions
- Ethics and integrity
- Waste management and circular economy
- Governance
- Gender equality and diversity
- Socio-environmental impacts and forms of mitigation
- Innovation
- Forest Management, Administration and Productivity
- Climate change
- Responsible and efficient production
- Product quality
- Stakeholder Relations
- Occupational health and safety
- Decent work

Low relevance Medium relevance High relevance

Analysis of adherence to international guidelines and standards :

Capital	Stakeholder	Material topic	SDG	GRI	SASB	ISE
Socioeconomic	All	Governance	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
		Ethics and Integrity	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
		Stakeholder relations	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
Financial	Shareholders	Performance and Economic Growth	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
Human	Employees	Health and Safety	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
		Decent work and Development of People	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
		Gender and diversity equality	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
Intellectual	Shareholders Employees and Clients	Innovation	<input checked="" type="checkbox"/>			
Manufacturing	Shareholder, Employees Government and Society	Responsible and efficient production	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
		Energy efficiency	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
		Forestry Management, Administration and Productivity	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
		Products quality	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Natural	Shareholder, Employees Government and Society	Socioenvironmental impacts and ways to combat them	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
		Water and Effluents	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
		Climate Change Emissions	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
		Volunteer certifications and commitments	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
		Waste management and circular economy	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

(102-55) Summary of contents of the GRI Standards

General Disclosures

Organization Profile

GRI	Disclosure	Page	Answer/Omission
102-1	Name of the organization	7	Irani Papel e Embalagem SA
102-2	Activities, brands, products and services	8	Kraft paper, corrugated cartonboard sheets and boxes, and resins.
102-3	Location of the headquarters	8	Office RS – Porto Alegre Avenida Carlos Gomes, 400 – 5th floor, Porto Alegre (RS) Zip Code 90010-030
102-4	Location of the operations	8, 9	Exclusively Brazilian Operation with offices in Joaçaba (SC) and Porto Alegre (RS) and industrial units in Vargem Bonita (SC), Indaiatuba (SP), Santa Luzia (MG) and Balneário Pinhal (RS)
102-5	Ownership and legal form		Publicly-held corporation, since 1977
102-6	Markets served	47	Domestic and international.
102-7	Size of the organization	59, 75, 79, 111, 112, 114, 116	
102-8	Information on employees and other workers	75, 78, 81	102-8. d does not apply.
102-9	Supply chain	53	Critical suppliers make up the five purchasing groups presented in the Report. The details are treated separately, according to the description of each group on the pages.
102-10	Significant changes to the organization and its supply chain		None.
102-11	Precautionary principle or approach	126, 149	
102-12	External initiatives	51, 147	
102-13	Participation in associations	48	

Strategy

GRI	Disclosure	Page	Answer/Omission
102-14	Statement of the Chief Executive Officer	2	
102-15	Key impacts, risks and opportunities	40, 41, 42	

Ethics and Integrity

GRI	Disclosure	Page	Answer/Omission
102-16	Values, principles, norms and standards of conduct	11, 38	
102-17	Mechanisms for ethics guidance and concerns	38, 39	

Governance

GRI	Disclosure	Page	Answer/Omission
102-18	Governance structure	27, 28, 29, 30, 31, 32	
102-19	Delegating authority	29, 32	
102-20	Responsibility at executive level for economic, environmental and social topics	29, 32	
102-21	Stakeholders consulted on economic, environmental and social topics	33	
102-22	Composition of the highest governance body and its committees	28, 29, 32	<p>The Board of Officers is the only body that performs executive functions. There are representatives of shareholders and the controlling family group of Irani on the Board of Directors.</p> <p>Advisory committees are non-statutory bodies. Social minorities do not have representatives in the highest governance body.</p> <p>Of the total number of chairs that make up the Board of Directors, Board of Officers and its committees:</p> <p>Gender: 91.31% men 8.69% women</p> <p>Age Bracket: 47,82% under 50 years old 52,18% over 50 years old</p> <p>Permanence of the members of the Board of Directors, the Board of Officers and its committees: 73.91% up to 5 years 26.09% more than 5 years</p>

102-23	Chairmanship of the highest governance body	28	
102-24	Appointment and selection of the highest governance body	28	The Company’s Board of Directors is composed of at least five (5) members and a maximum of nine (9) members, all elected and removable by the General Shareholders Meeting, with a unified mandate of a maximum of two (2) years, being allowed reelection. Of these, at least two (2) members or 20% (twenty percent), whichever is greater, shall be Independent Members, as defined in the Novo Mercado Regulation, and the characterization of those appointed to the Board of Directors as Independent Directors shall be resolved at the General Shareholders Meeting that elects them, being also considered as independent 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 Regulation, in the event that there is a controlling shareholder.
102-25	Conflicts of interest	28, 38	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 guidelines of each policy: Relationship with the Public Sector, Associations and Trade Unions – item 1.2 Relationship with Suppliers – items 2.3 and 2.7 Customer Relationship – item 3.2 Donations and Sponsorships – item 4.3, 4.5, 4.6 Hospitality, Gifts and Gifts – item 5.2, 5.3 Accounting Records – item 6.2, 6.3 Mergers, Acquisitions and Corporate Restructuring – item 7.2
102-26	Role of the highest governance body in establishing purpose, values and strategy	11	
102-27	Collective knowledge of the highest governance body	33	
102-28	Performance evaluation of the highest governance body		The performance of the Board of Directors is evaluated in-house annually by the Chairman of the Board of Directors. In order to improve the effectiveness of the Board of Directors, the Chairman of the Board of Directors forwards an evaluation questionnaire to the other members of the Board, who answer it individually and confidentially. Upon receipt of the evaluation questionnaires, the Chairman of the Board performs the tabulation of the evaluations and identifies opportunities for improvement for implementation.
102-29	Identification and management of economic, environmental and social impacts	29, 32, 41	The Executive Board is responsible for monitoring and validating the discussions and definitions related to risk management.
102-30	Effectiveness of the risk management processes	29, 32, 41, 42	The Board of Officers is the body responsible for assessing the effectiveness of risk management.
102-31	Review of economic, environmental and social topics	29, 32	The Sustainability Committee is responsible for reviewing the economic and socio-environmental topics linked to the business.

102-32	Role of the highest governance body in sustainability reporting	152	The Sustainability Committee is responsible for approving the content of this Report.
102-33	Communication of critical issues	26	Supported by the Executive Board, the Chief Executive Officer is responsible for reporting business-critical topics to the Board of Directors during monthly meetings.
102-34	Type and total number of critical issues	26	The reporting of critical concerns to the Board of Directors is inherent to the function of the Board of Officers and occurs, when necessary, at the monthly meeting.
102-35	Compensation policies	34, 35	
102-36	Process for determining compensation	34, 35, 81	The Company seeks a competitive remuneration practice in the market in which it operates, paying fixed wages compatible with the market average and seeking differentiation through more aggressive variable compensation programs. Fixed salaries are established based on regularly updated surveys and corrected by collective bargaining indices. Fixed wage evolution is based on growth within the Company's structure; that is, by promotion, always based on the employee's current and potential performance. Variable compensation is partially based on the Company's results and partly on the individual performance of each employee, evaluated by a specific performance management program.
102-37	Involvement of stakeholders in compensation	26, 81	We do consult stakeholders regarding the compensation strategy. We rely on outside consultants to conduct the process of evaluating positions and market salary research, who generate information to base the decision-making of the Board of Officers regarding the Company's compensation strategy.
102-38	Ratio of total annual compensation	79	
102-39	Percentage increase in annual total compensation ratio	79	

Stakeholder involvement

GRI	Disclosure	Page	Answer/Omission
102-40	Stakeholder groups list	43	
102-41	Collective bargaining agreements	76, 126	
102-42	Stakeholder identification and selection	43	
102-43	Approach to stakeholder engagement	46, 85, 126, 149	The approach foreseen in this indicator is intrinsic throughout the description of our way of managing each material topic.
102-44	Key topics and concerns raised	46, 85	Our leaders are responsible for managing the key topics and concerns of their direct stakeholder audiences.

Reporting practices

GRI	Disclosure	Page	Answer/Omission
102-45	Entities included in the consolidated financial statements	9	
102-46	Definition of report content and boundaries	153	
102-47	List of material topics	154	
102-48	Restatement of information		Indicated in the form of an explanatory note, when applicable.
102-49	Changes in reporting		There were none
102-50	Reporting period		January 1, 2021 to December 31, 2021.
102-51	Date of the most recent report		June 2021
102-52	Reporting cycle		Annual
102-53	Contact point for questions regarding the report		http://www.irani.com.br/ideias-em-acao/contato/ or by email sustentabilidade@irani.com.br
102-54	Claims of reporting in accordance with the GRI Standards	152	
102-55	GRI Content Index	156	
102-56	External assurance	170, 171, 172	

Material Topics

Economic performance

GRI	Disclosure	Page	Answer/Omission
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its boundary	58	
	103-2 The management approach and its components	58	
	103-3 Evaluation of the management approach	58	
GRI 201: Economic performance 2016	201-2 Financial implications and other risks and opportunities due to climate change		A study on the impact of climate change on our business is planned for the next strategic planning review 2021/2030.
	201-3 Defined benefit plan obligations and other retirement plans		Irani does not have pension plans for employees.
	201-4 Financial assistance received from government		There were none.

Purchasing practices

GRI	Disclosure	Page	Answer/Omission
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its boundary	51	
	103-2 The management approach and its components	53	The Company also studies the improvement of practices to meet this indicator.
	103-3 Evaluation of the management approach	53	
GRI 204: Purchasing practices 2016	204-1 Proportion of spending with local suppliers	52	

Materials

GRI	Disclosure	Page	Answer/Omission
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its boundary	114	
	103-2 Management approach and its components	114	
	103-3 Evaluation of the management approach	114	
GRI 301: Materials 2016	301-1 Materials used by weight or volume	145, 146	
	301-2 Recycled input materials used	145, 146	
	301-3 Reclaimed products and their packaging materials	145, 146	

Energy

GRI	Disclosure	Page	Answer/Omission
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its boundary	119	
	103-2 Management approach and its components	119	
	103-3 Evaluation of the management approach	119	
GRI 302: Energy 2016	302-1 Organization's internal energy consumption	119, 120, 122, 123	We do not sell electricity, heating, cooling or steam.
	302-2 Energy consumption outside the organization	120, 123	
	302-3 Energy intensity	119, 120	
	302-4 Reducing power consumption	119	
	302-5 Reduction in energy requirements of products and services		Not applicable to our businesses

Water and effluents

GRI	Disclosure	Page	Answer/Omission
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its boundary	133	
	103-2 Management approach and its components	133, 135	
	103-3 Evaluation of the management approach	133, 135	
GRI 303: Water and effluents 2018	303-1 Interactions with water as a shared resource	133	
	303-2 Impact management related to water discharge	133, 135	
	303-3 Water withdrawal	133, 134, 135	
	303-4 Water discharge	133, 135	
	303-5: Water consumption	135	

Biodiversity

GRI	Disclosure	Page	Answer/Omission
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its boundary	105	
	103-2 Management approach and its components	105, 106	
	103-3 Evaluation of the management approach	105, 106, 131	
GRI 304: Biodiversity 2016	304-1 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	130, 131	
	304-2 Significant impacts of activities, products and services on biodiversity	108, 130, 131	
	304-3 Habitats protected or restored	127, 129, 130, 131	
	304-4 IUCN Red List species and national conservation list species with habitats in areas affected by operations	131	

Emissions

GRI	Disclosure	Page	Answer/Omission
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its boundary	137	
	103-2 Management approach and its components	137	
	103-3 Evaluation of the management approach	137	
GRI 305: Emissions 2016	305-1 Direct (Scope 1) GHG emissions	137, 138, 140	
	305-2 Indirect (Scope 2) GHG emissions	137, 138	
	305-3 Other indirect (Scope 3) GHG emissions	137, 138, 140	
	305-4 GHG emissions intensity	139	
	305-5 Reduction of GHG emissions	141, 142	
	305-6 Emissions of substances that destroy the ozone layer	142	
	305-7 Nitrogen oxides (NOX), sulfur oxides (SOX) and other significant air emissions	142	

Effluents and waste

GRI	Disclosure	Page	Answer/Omission
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its boundary	133, 144	
	103-2 Management approach and its components	133, 144	
	103-3 Evaluation of the management approach	133, 135, 144	
GRI 306: Effluents and waste 2016	306-1 Total water discharge by quality and destination	136	
	306-2 Waste by type and disposal method	146, 147, 148	
	306-3 Significant spills	126	
	306-4 Transport of hazardous waste	147, 148	
	306-5 Water bodies affected by water discharges and/or runoff	136	

Supplier environmental assessment

GRI	Disclosure	Page	Answer/Omission
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its boundary	51	
	103-2 Management approach and its components	51	
	103-3 Evaluation of the management approach	51	
GRI 308: Evaluation Environmental Assessment 2016	308-1 New suppliers that were screened using environmental criteria	126	The monitoring performed does not include the percentage of total new suppliers. We evaluated the possibility of presenting this information in the next reporting cycles.
	308-2 Negative environmental impacts in the supply chain and actions taken		The Company evaluates the possibility of making the information available in the next reports.

Employment

GRI	Disclosure	Page	Answer/Omission
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its boundary	81	
	103-2 Management approach and its components	81	
	103-3 Evaluation of the management approach	81	
GRI 401: Employment 2016	401-1 New employee hires and employee turnover	76, 78	
	401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	79	All Irani industrial units and offices are considered important operating units. We don't have a retirement fund. In case of disability, the life insurance carrier analyzes cases of workplace accidents and may indemnify the employee if the complete documentation is properly presented and approved.

Occupational health and safety

GRI	Disclosure	Page	Answer/Omission
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its boundary	88	
	103-2 Management approach and its components	88	
	103-3 Evaluation of the management approach	88, 91	
GRI 403: Occupational health and safety 2018	403-1 Occupational health and safety management system	88, 91	
	403-2 Hazard identification, risk assessment and incident investigation	88, 91	
	403-3 Occupational health services	89, 92	
	403-4 Worker participation, consultation and communication on occupational health and safety	90, 91	
	403-5 Training of workers in occupational safety and health	92	
	403-6: Promotion of worker health	89	
	403-7 Prevention and mitigation of occupational health and safety and impacts directly linked by commercial relations		The Company assesses the possibility of improving management practices and reporting this indicator in the next reporting cycle.
	403-8 Workers covered by an occupational health and safety management system	88, 91	
	403-9 Work-related Injuries	91	
	403-10 Work-related health problems		The Company assesses the possibility of improving management practices and reporting this indicator in the next reporting cycle.

Training and education

GRI	Disclosure	Page	Answer/Omission
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its boundary	81	
	103-2 Management approach and its components	81	
	103-3 Evaluation of the management approach	81, 82	
GRI 404: Training and education 2016	404-1 Average hours of training per year per employee	83	
	404-2 Programs for updating employee skills and career transition assistance programs		We do not have end-of-career management programs.
	404-3 Percentage of employees receiving regular performance and career development reviews	87	

Diversity and equal opportunity

GRI	Disclosure	Page	Answer/Omission
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its boundary	72, 81	
	103-2 Management approach and its components	72, 81	
	103-3 Evaluation of the management approach	72, 81	
GRI 404: Training and education 2016	405-1 Diversity of governance bodies and employees	75, 76	The Board of Directors is composed of 5 men over the age of 50. Of these, 40% belong to the family group of the Company’s founders and 60% are specialists without family connections.
	405-2 Proportion of basic salary and remuneration for women and men	79	

Local communities

GRI	Disclosure	Page	Answer/Omission
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its boundary	50	
	103-2 Management approach and its components	49, 50	
	103-3 Evaluation of the management approach	50	
GRI 413: Local Communities 2016	413-1 Operations with local community engagement, impact assessments, and development programs	49	
	413-2 Operations with significant actual and potential negative impacts on local communities	126	

Supplier Social Evaluation

GRI	Divulgação	Página	Resposta/Omissão
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its boundary	51	
	103-2 Management approach and its components	51, 53	
	103-3 Evaluation of the management approach	51, 53	
GRI 414: Supplier Social Assessment 2016	414-1 New suppliers that were screened using social criteria		Information on actual and potential significant social impacts as well as the percentage of suppliers assessed is not available for reporting. The Company is evaluating making the disclosure
	414-2 Negative social impacts in the supply chain and actions taken		Information on actual and potential significant social impacts as well as the percentage of new suppliers assessed is not available for reporting purposes.
	414-3 Operations with significant actual and potential negative impacts on local communities		Information on actual and potential significant social impacts as well as the percentage of new suppliers assessed is not available for reporting purposes.

Consumer Health and Safety

GRI	Divulgação	Página	Resposta/Omissão
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its boundary	114	
	103-2 Management approach and its components	114	
	103-3 Evaluation of the management approach	114	
GRI 416: Consumer Health and Safety 2016	416-1 Assessment of health and safety impacts of products and services.	115, 117, 118, 126, 149	
	416-2 Incidents of non-compliance related to health and safety impacts of products and services.	114	There were none.

CREDITS

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Sérgio Luiz Cotrim Ribas

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Disclosure

May/2022

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Customers, shareholders, employees,
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(102-53) If you have any
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Limited assurance report issued by independent auditors

To the Board of Directors, Shareholders and Stakeholders
Irani Papel e Embalagem S/A.
Porto Alegre - RS

Introduction

We have been engaged by Irani Papel e Embalagem S/A. (Irani or “Company”) to apply limited assurance procedures on the sustainability information disclosed in 2021’s Integrated Report, related to the year ended December 31st, 2021.

Responsibilities of Irani’s Management

The Management of **Irani** is responsible for adequately preparing and presenting the sustainability information in the Integrated Report 2021 in accordance with CPC Guideline 09 – Integrated Report of CVM Resolution No. 14 of December 9, 2020 (Correlation to the Basic Conceptual Structure of Integrated Reporting, prepared by the International Integrated Reporting Council – IIRC) as well as the internal controls determined necessary to ensure this information is free from material misstatement, resulting from fraud or error.

Independent auditors’ responsibility

Our responsibility is to express a conclusion about the information in the Integrated Report 2021 based on a limited assurance engagement conducted in accordance with the Technical Communication (CT) 07/2012, approved by the Federal Accounting Council and prepared based on NBC TO 3000 (Assurance Work Other than Audit and Review), issued by the Federal Accounting Council - CFC, applicable to historical non-financial information.

These standards require compliance with ethical requirements, including independence ones, and the engagement is also conducted to provide limited assurance that the information disclosed in the Irani’s Integrated Report 2021, taken as a whole, is free from material misstatement.

KPMG Auditores Independentes (“KPMG”) applies Brazilian and international standards on quality control, and consequently maintains a comprehensive quality control system including documented policies and procedures related to compliance with ethical and professional standards, in addition to legal and applicable regulations. We comply with the comprehensive code of ethics including detailed independence requirements, established based on the ethical principles of integrity, objectivity, competence and professional care, confidentiality and professional behavior.



A limited assurance engagement conducted in accordance with the NBC TO 3000 (ISAE 3000) consists mainly of questions and interviews with the Management of Irani and other professionals of the Company involved in the preparation of the information disclosed in the Integrated Report 2021 and use of analytical procedures to obtain evidence that enables us to reach a limited assurance conclusion about the sustainability information taken as a whole. A limited assurance engagement also requires additional procedures when the independent auditor acknowledges issues which may lead them to believe that the information disclosed in the Integrated Report 2021 taken as a whole could present material misstatement.

The selected procedures were based on our understanding of the issues related to the compilation, materiality and presentation of the information disclosed in the Integrated Report 2021, on other engagement circumstances and also on our considerations regarding areas and processes associated with material sustainability information disclosed where relevant misstatement could exist. The procedures consisted of:

- (a) engagement planning: considering the material aspects for Irani's activities, the relevance of the information disclosed, the amount of quantitative and qualitative information and the operational systems and internal controls that served as a basis for preparation of the information in the Irani's Integrated Report 2021. This analysis defined the indicators to be checked in details;
- (b) understanding and analysis of disclosed information related to material aspects management;
- (c) analysis of preparation processes of the Integrated Report 2021 and its structure and content, based on the Principles of Content and Quality of the Standards for Sustainability Report of Global Reporting Initiative - GRI (GRI-Standards);
- (d) evaluation of non financial indicators selected:
 - understanding of the calculation methodology and procedures for the compilation of indicators through interviews with management responsible for data preparation;
 - application of analytical procedures regarding data and interviews for qualitative information and their correlation with indicators disclosed in the Integrated Report 2021;
 - analysis of evidence supporting the disclosed information;
- (e) analysis of whether the performance indicators omission and justification are reasonable to be accepted associated to aspects and topics defined as material in the materiality analysis of the Company;

We believe that the information, evidence and results we have obtained are sufficient and appropriate to provide a basis for our limited assurance conclusion.

Scope and limitations

The procedures applied to a limited assurance engagement are substantially less extensive than those applied to a reasonable assurance engagement. Therefore, we cannot provide reasonable assurance that we are aware of all the issues that would have been identified in a reasonable assurance engagement, which aims to issue an opinion. If we had conducted a reasonable assurance engagement, we may have identified other issues and possible misstatements within the information presented in the Integrated Report 2021.



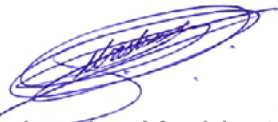
Nonfinancial data is subject to more inherent limitations than financial data, due to the nature and diversity of the methods used to determine, calculate or estimate these data. Qualitative interpretation of the data's materiality, relevance and accuracy are subject to individual assumptions and judgments. Additionally, we have not examined data related to prior periods, to evaluate the adequacy of policies, practices and sustainability performance, nor future projections.

Conclusion

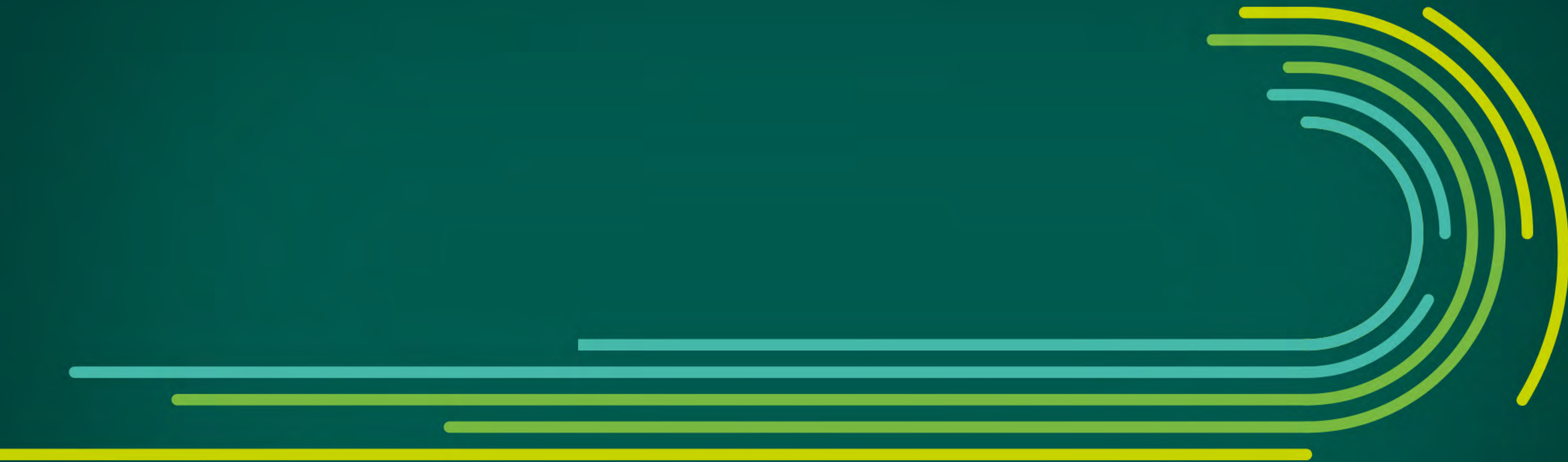
Based on the procedures carried out, described earlier in this report, we have not identified any relevant information that leads us to believe that the information in the Integrated Report 2021 of Irani is not fairly stated in all material aspects in accordance with CPC Guideline 09 – Integrated Report of CVM Resolution No. 14 of December 9, 2020 (Correlation to the Basic Conceptual Structure of Integrated Reporting, prepared by the International Integrated Reporting Council – IIRC), as well as its source records and files.

São Paulo, May 17th, 2022

KPMG Auditores Independentes Ltda
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