

# 2021 Annual Report





## Central to our story in 2021

People are essential to Maringá Group. It is only with people who are motivated to explore their own potential that we can manage to continue developing our business and values of integrity, excellence, learning, collaboration and respect.

All of our employees, from all areas of operation, form a part of this complex and harmonious machine that is Maringá Group. They keep our business going and lead it forward, using their talent, experience and knowledge. Over the course of this report, we would like to introduce you to some of these people who represent our culture of resilience and our vision of sustainability.



**Claudinei Rodrigues (Cadu)**

**Bio-reductant Production Coordinator**  
Maringá Ferro-Liga

“

The construction of rectangular furnaces was an enormous step forward, not only for the company, but also for the community and the environment. The reduction in gas emission levels made the UPR (Bio-reductant Production Unit) a much more pleasant place to work and the new furnaces significantly improved the employees' safety and ergonomics.”



**Renatta Giraldi**

**Communication, Social Responsibility, Diversity and Inclusion Supervisor**

“

In 2021, we started our journey towards a more diverse and inclusive culture in Maringá Group, gaining a better understanding of the breadth of these issues and the importance of offering everyone the same opportunities. We also exercised our corporate citizenship by supporting projects aligned with our values with the communities in which we are present.”



**Paulo Augusto**

**Industrial Manager**  
Usina Jacarezinho and Maringá Energia

“

We have invested in advanced technology to start the operations of Maringá Energia, cooperating for the growth of the Group and providing greater efficiency, safety in the plant's processes, and comfort for the operators. Furthermore, through renewable energy and a reduction in the emission of gases, we are contributing to a better planet. I am proud to be part of this team that has spared nothing in its efforts to get the project up and running!”



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Capote Hydroelectric Power Station



MEIOSI - Canaã Farm

# About the Report

In this Annual Maringá Group Report 2021, we present the economic, financial and socio-economic results of the companies that form São Eutiquiano Participações S.A. holding company (Maringá Group). The content of the publication relates to the period ranging from January 1 to December 31, 2021.

**GRI 102-1, GRI 102-5, 102-45, 102-50**

This is our first Annual Report to adopt the *Global Reporting Initiative* (GRI) standards, using the Core Option methodology for sustainability reporting. The GRI is an international organization that helps companies, governments and other institutions understand and communicate the impact businesses have on critical sustainability issues. By following the GRI standards, we will be presenting indicators that demonstrate the economic, environmental and social impacts of Maringá Group. In this report, we have compiled reliable, relevant and standardized information to allow our stakeholders to evaluate opportunities and risks based upon these impacts. This is an important step forward that reflects our commitment to transparency in relation to the different publics with whom we operate. **GRI 102-54**

By defining the content and standards presented in this report we have sought to align ourselves with the priority material topics defined in 2021, based upon the Group's materiality matrix. We have 37 people drawn from our different teams responsible for fulfilling and validating the responses to the indicators in accordance with the GRI standards.

To develop this report, a specialist consultancy also conducted interviews with 12 members of our senior management

Doubts, suggestions and comments concerning the content of the 2021 Annual Report should be sent by *e-mail* to

[ri@grupomaringa.com.br](mailto:ri@grupomaringa.com.br). **GRI 102-53**



# 2021 Highlights

## Steel



**98.8** K tons

of manganese ferroalloy produced in 2021, positioning us amongst the market leaders



**32,1** K tons

bio-reductant production



### Ferroalloy

largest manganese ferroalloy manufacturer in South America



**50.1** MWh per year

Electricity Generation



**111.6** K tons

of alloy

## Maringá Group



**R\$ 1,853.4**

million in revenue +69.9%



EBITDA of **R\$ 841.6**

million +125.2%



EBITDA Margin of **52.8%**

+33.4%



ROE of **56.1%**

+51.2%



Current Liquidity of **2.5**

+23.7%



Current Liquidity of **0.06**

Net Debt / EBITDA -90.6%

Variation in relation to 2020

## Sugar-energy



**167,893** tons

sugar produced



**44** MWh per year

energy sold to third parties



**2,000** days

in August

without accidents involving days off work at the Usina Jacarezinho



**94,699** m<sup>3</sup>

of ethanol produced



**R\$ 80** million

Emissions of CRA seven year deadline



**2.4** million tons

of sugarcane processed



### Sugar and Ethanol

Elected Best in the Sugar and Ethanol Sector by "Exame" magazine in 2020



**75,543** CBios

traded in our first year of sales, equal to 528,801 trees in terms of carbon capturing



**85.1** TCH



# Message from the Board of Directors

## MARINGÁ GROUP IN 2021

The excellent performance of Maringá Group in 2021 occurred at a particularly special moment in Group's history: it's 10 year anniversary. The Group was created in January 2012, with the conclusion of negotiations between the shareholders of 'Companhia Melhoramentos do Norte do Paraná' (CMNP), an enduring company, with decades of success behind it. This realignment of the interests of each equity block with the resulting spin-off of operational activities occurred at a difficult time for business in Brazil, meaning the new Administration was already starting with an enormous responsibility. Maringá Group was originally constituted with the incorporation, by the holding company São Eutiquiano Participações S.A., of Companhia Canavieira de Jacarezinho, Companhia Agrícola Usina Jacarezinho and Maringá Ferro Liga S.A.. The 2021 results are grounded in a decade of hard work together with our employees and business partners, strict capital discipline, the adoption of a professional and meritocratic management

model, and governance that adheres to best practices, with a board of directors made up primarily of independent members.

2021 started with expectations of better performance than that achieved in the previous year, driven by a potentially more positive scenario, mainly due to the advances noted in the treatment of patients suffering from SARS-CoV-2. Little was yet known about the illness in 2020, which had already turned to a pandemic. Special mention should be made of the large-scale mobilization of the science community focused on research and the production of vaccines, of the financial support for those in difficulty, and of the loans provided for companies affected by the drop in sales. The companies sought to increase the assistance provided to their workforces, and implemented new ways of serving their clients.

Other countries adopted similar policies and managed to bring their economies back up to speed in 2021. The international community, however, is still experiencing the disorganization

of the global production chains, which has meant a scarcity of products everywhere and rising inflation throughout the world. The great monetary expansion resulting from government assistance programs has also fed this inflationary climate. Another consequence has been the realignment of the prices of numerous international currencies, significantly altering the relations of exchange rates.

Within this challenging scenario, the Brazilian economy has managed to recover the losses felt in 2020, and it is expected that the GDP will return to 2019 levels or even grow marginally. Despite the high inflation that we have experienced due to the abovementioned reasons, the accelerated increase in the basic interest rate by the monetary authorities, and the still high rate of unemployment, 2021 saw a resilient economy with a great capacity for recovery. As a large manufacturer of agricultural and industrial commodities, the country benefited from the strong devaluation of the Real and registered record volumes and amounts in international operations.

## MARINGÁ GROUP'S PERFORMANCE IN 2021

Since its foundation, Maringá Group's holding company, São Eutiquiano Participações S.A., has controlled commodities manufacturers (raw and refined white sugar, anhydrous and hydrous ethanol, and manganese alloys), developing its

business plans with a focus on the best ways of dealing with the price volatility of its products. The markets offer different forms of protection against price fluctuations and we have always used these mechanisms with the necessary prudence. But these operations only contribute to proving the financial sustainability that we wish to be associated with the success we achieved in facing the enormous challenge of maintaining low production costs.

Another way of establishing greater predictability is to diversify revenues coming from products with less price volatility. As such, as soon as the Management had recognized that the Group was prepared to speed up its investments, whilst still keeping its capital discipline, it decided to diversify into products with less volatile prices. Along these lines, the first investment chosen was the implementation of co-generation of electricity using sugarcane biomass, with operations beginning in April 2021, following an investment of R\$ 70 million for an installed capacity of 25 MW, the majority of which is to be sold on the free energy market. The performance of Maringá Energia Ltda. has been better than was forecasted, with development of the capacity expansion project already under way.

Also in the area of manganese alloy manufacturing, there are numerous projects being implemented aiming at reducing costs based upon better efficiency and



the achievement of economies of scale through increased production. We have continued investing in our aim to incorporate manganese deposits into our assets as a means of guaranteeing our future supplies. The recent creation of Mineração Moema Ltda. is a strong step towards achieving this, and initial studies suggest that the outlook is good for accessing deposits containing high volumes of our main raw-material. Over the course of 2022, we concluded the implementation of modern and efficient bio-reductant production furnaces that meet all the environmental requirements and follow our ESG values. We have invested in the repowering of our second largest electric alloy production furnace, with the adoption of new processing technologies, aiming to make the operation more economic whilst also increasing production. Other electric furnaces will be repowered from 2023 onwards. We expect to be producing 20% more manganese alloys by 2024. A sintering unit is being installed and this will allow us to improve the mix of ores in our furnaces, with the resulting reduction of raw materials costs. We are also at an advanced stage in the studies aiming to make us self-sufficient in electricity from renewable sources, through the expansion of our current SHPPs and implementation of a self-production system wind generator.

Our companies have been strongly committed to the ESG (Environmental, Social and Governance) agenda since we came into existence, when we instituted a Board of Directors made up of four members, three of whom have to be independent. We have also sought to create an environment of trust, fraternity and integration amongst our 1,871 employees and their families, meaning everyone is welcomed and the individuality of each one is respected. We have always looked to work together with the communities where our manufacturing units are installed to support them in all their needs. Our environmental agenda is highly ambitious and we are investing in the reduction of the carbon footprint created by our products in the ferro-alloy chain and in our sugar-energy business.

Our initiatives designed to minimize the effects of SARS-CoV-2 were wide-reaching, seeking to protect not only our employees and their families, through specific prevention programs, but also the communities where our companies are located. The seriousness of the pandemic encouraged the companies to mobilize themselves to support society through the assignment of financial and human resources, as a means of complementing the efforts made by the Government.

In 2021, the Group's consolidated Net Revenue reached R\$1,595 million, evidencing that

we have become part of a select niche of large Brazilian business organizations that are sustainable in the long-term, financially sound, and operationally efficient.

The financial statements of São Eutiquiano S.A. show a Net Book Equity of R\$ 575 million, a rise of 90% on the previous year. There was a significant reduction in financial liabilities. The Net Debt Ratio on the consolidated Adjusted EBITDA reached 0.06 against 0.64 in 2020. Over the last 10 years, the Net Book Equity evolved to an average annual rate of 11%. The consolidated net income in 2021 was R\$ 496 million and the cash generation measured by the Adjusted EBITDA in the same period reached R\$ 842 million. Our financial strategy follows a capital structure that adheres to the characteristics of our business through a reduction of the net indebtedness and prolongation of bank debts. The cash availability at the present moment in time is sufficient to meet all of our short-term commitments.

The coming decade will present big new challenges for our companies that will be faced whilst continuing to pursue the best management standards, incorporating innovations, training our employees to an even higher level, and investing in improving our production processes. It is also essential that we maintain our strong financial position and capital discipline.

## STEEL BUSINESS (MARINGÁ FERRO-LIGA)

Maringá Ferro-Liga improved its operational performance significantly in 2021, despite the enormous challenges faced both in terms of our own electricity generation at our SHPPs being affected by the lack of rainfall, and in relation to the difficulties experienced in the supply area brought about by problems experienced by our suppliers. Being the largest manufacturer of manganese ferroalloys in the country, the company poured every effort into meeting the needs of its clients who were also affected by supply chain problems. To be able to meet our clients' needs, we started importing alloys. In the chart below, it can be seen that the 5% increase in proprietary production was insufficient to meet the demand, meaning that another 10,000t of alloys had to be imported.

Our energy production was lower than expected, as was that of bio-reductant. The latter was affected by the work done to replace circular furnaces with more efficient and environmentally more neutral rectangular ones. In 2021, we concluded the implementation of these furnaces and the production of bio-reductant will return to previous levels.

The Net Revenue practically doubled during 2021 fiscal year in view of the rise of



international prices and the stability of the US dollar at high levels throughout the period.

The net income and the Adjusted EBITDA grew in the region of 200%.

The most probable scenario for 2022 is for international manganese ore prices to drop and for the US dollar to be more volatile. Managing to repeat the impressive results of 2021 is enormously challenging, and the administration is implementing a series of initiatives to improve the efficiency of the manufacturing processes and reduce production costs.

### SUGAR-ENERGY BUSINESS (USINA, CANAVIEIRA JACAREZINHO AND MARINGÁ ENERGIA)

The last year has been extremely turbulent for companies in the sugar-energy sector. On the one hand there has been a favorable scenario that has kept international sugar prices at high levels whilst ethanol has been more highly appreciated in the market due to the sharp rise in the price of oil. On the other hand, unfavorable weather patterns, characterized by a lack of rainfall and the occurrence of frosts, have caused a reduction in the volume and quality of sugarcane, and consequently in the production of sugar and ethanol. According to Conab, the amount of sugarcane collected during the 21/22 harvest in the Center-South region was 521 million tons, compared to 603

million the previous harvest, a drop of 16%. The impact of these factors on the performance of the sector ended up being positive thanks to the rise in prices. In general, Brazilian mills managed to recover their profitability levels and achieved better financial solidity indicators.

Maringá Group's sugar-energy indicators set out below show a profitable harvest. Despite the smaller amount produced, Net Revenue grew 22% against the previous year. Consolidated Net Revenue rose 111% against 2020, being affected not only by the global scenario, but also by the significant investments that have been made over recent years.

The energy co-generation business (Maringá Energia Ltda.) started operations in April 2021 and it has been obtaining better than expected results. Plans to expand the operation are under evaluation and should take concrete form for the 2023/24 harvest.

The growth of 57% in the sugar-energy Adjusted EBITDA allowed for a reduction of the overall indebtedness concerning this area, thus strengthening its financial solidity. The Net Debt to Adjusted EBITDA ratio was reduced to 0.8%.

### FINAL COMMENTS

At the end of a year that was so turbulent for society both in Brazil and internationally, Maringá Group's Management celebrates

the outstanding performance achieved by its companies, which allowed the Group to become a member of a select group of large, solid and productive companies.

By looking at the Brazilian and international scenarios, we can see that 2022 carries some important challenges. The outlook for economic growth is modest, with high inflation, high interest rates, a continuing health pandemic, unemployment that, although dropping, is still high, and the upcoming elections, all of which suggests a period of high volatility in the markets. On the international stage, the perspectives of reasonable global economic growth are set against the extreme geopolitical tension resulting from the crisis in the Ukraine, high and wide-spread inflation, rising interest rates, and the continued SARS-CoV-2 pandemic.

Despite these challenging scenarios, Maringá Group's Administration is confident that good performance will be achieved in its different businesses.

Just as in previous years, Maringá Group was supported by its Suppliers, Integrated Producers, Investors, Advisors and Consultants, to all of whom we are eternally grateful. Special thanks should go to our Employees and their families, who have always remained confident and shown the strength to continue

fighting to achieve their goals, be they individual or collective.

The Members of the Board of Directors were called upon enormously in 2021 and consistently provided strategic guidance to our managers, making them extremely deserving of thanks from the entire organization.

The Shareholders have full faith in the Group's Management and will continue supporting the strategy of maintaining our profile of a solid and productive group of companies.

**Nelson M. Graça**

Chairman of the Board of Directors

**Guilherme Dale**

Board Member

**Henrique Luz**

Board Member

**Marconi Vianna**

Board Member





# Message from the Executive Board

2021 was an exceptional year for Maringá Group, in the strict sense of the word. It was a year with fantastic operational performance provided a favorable scenario of market and economic conditions, allowing us to achieve excellent results. The national record production of steel, the high exchange rate on the dollar, and the enormous demand from clients in the area of steel manufacturing were just some of the factors that made 2021 a year of opportunities for us.

There were obstacles. But neither the drought nor the frost prevented our sugar-energy business unit from hitting the planned agricultural targets and achieving excellent results. We processed 2.4 million tons of sugarcane, with a production mix moderately leaning towards sugar, but with a 7% increase in ethanol production when compared to the previous harvest, with the highlight being anhydrous ethanol, which reached 65,095 m<sup>3</sup>.

Usina Jacarezinho underwent a great transformation to start the activities of Maringá Energia. A new high-pressure boiler was

installed, preparing the plant for large-scale electricity generation using sugarcane bagasse, sufficient to supply the plant's operations, and generate an average surplus of 10 MW to be traded on the free market. As well as adding one more product to our portfolio, the electricity generated from a renewable source forms part of our strategy to bring products with high-profitability and greater predictability into our results. It should be said that the exportation of energy will be tripled by 2023, based upon the investments being made in 2022. This, however, is not the only sustainable form of energy being envisioned by the Group, which is planning the production of biogas drawn from vinasse and filter cake over the next five years.

We have produced our own bio-reductant at Maringá Ferro-Liga, using our own eucalyptus forests, which reduces the carbon footprint of our alloys. This year, one of our bio-reductant production units was modernized with new furnaces, which, as well as improving working conditions and efficiency, eliminates the emission of methane and its odors due to the adoption of special burners.

Our commercial know-how allowed us to deal with disruptions to the ore supply chain. Strategically located in the Southeastern region of Brazil, we are the largest manganese alloy manufacturer in South America, this being an essential material for the production of steel. Furthermore, in 2021, we were more than ever our clients' first choice. We have remained committed to keeping our clients happy in the context of a booming market, seeking reliable suppliers, providing top-quality raw materials and working in accordance with social and environmental regulations.

We have invested in the verticalization of our activities to ensure our continuity and competitive standing. We have tackled our productivity bottlenecks, be this in relation to land use, raw-material sources, or use of technology, for example. We have invested heavily in automation of our systems and in the adoption of artificial intelligence in the industrial area, which has provided us with predictability and operational security.

We have managed to map out the path we will be taking over the coming years, whilst also recognizing that the future is far from being inert. Rather, it is vibrant, full of possibilities waiting to be explored. We believe in the solid bases we have constructed thus far and remain confident of our next steps. **GRI 102-14**

**Roberto Mesquita**  
CEO of Sugar-Energy

**Claudio Horta**  
CEO - Steel

**Condurme Aizzo**  
Operations Director Sugar-Energy

**Eduardo Lambiasi**  
Corporate Director

**Luis Pessoa**  
Commercial and Supply Chain  
Director - Steel

**Rodrigo Junqueira**  
Industrial Director - Steel



# About us

“

The company is experiencing transparent growth, appreciating people, innovating processes and prioritizing clients. I'm proud to be a part of this.”

**Carlos Junior**  
Auto Electrician



# Maringá Group

## About us

In this chapter, we will be talking a little about our history, evolution, businesses and governance, categorized as follows:

- Maringá Group
- Where we are
- Our Values
- Our Business
  - Steel
  - Sugar-Energy
- Value Creation
- Associations and External Initiatives
- Corporate Governance
- Governance Structure

We are a Brazilian business group operating in the steel industry and sugar-energy sectors. We produce manganese ferroalloys, sugarcane, sugar, ethanol and electricity, contributing to the manufacture of steel and foods, and the enrichment of Brazil's renewable energy matrix, essential elements for the sustainable development of the country and the rest of the world.

Maringá Group was founded in 2012 with the merger of the 'Usina Jacarezinho' power plant, 'Canavieira de Jacarezinho' and 'Maringá Ferro-Liga'. Later, Maringá Energia was founded in 2018. But our story precedes these brands, since we have 75 years of experience and tradition. **GRI 102-1**

The seeds were planted in 1925, with the foundation of the *Companhia de Terras Norte do*

*Paraná*, using British capital. Acquired in 1944 by a group of Brazilian businessmen, the '*Cia. de Terras Norte do Paraná*', the future '*Companhia Melhoramentos Norte do Paraná*', founded the '*Usina Jacarezinho*' power plant in 1946, in the state of Paraná, and '*Cimento Maringá*', the current *Maringá Ferro-Liga*, in the state of São Paulo.

In 1954, the generation of renewable electricity started at a number of Hydropower Generation Centers (HGCs), implemented and operated by Maringá Ferro-Liga. Operations based upon the sustainability of the business - when this term was still not widely-understood - continued with the bio-reductant production using eucalyptus from our own reforestation program, in 1954, and the obtaining of the ISO 9001 certification at the end of the 1990s, for production of manganese alloys, and in 2000 for the production of sugar and ethanol.

In 2012, a contemporary governance model was adopted, with professional management. We have a culture that involves continually striving for quality and respect for the environment and people. The results of these efforts have culminated in recognition including:

- Usina Jacarezinho: considered to be the best company in the Sugar and Ethanol sector in 2020 in the *Ranking* of the Largest and Best in the Agro-Sector, awarded by the "Exame" magazine; awarded the '*MasterCana Social*' in the Environment Category in 2021;
- Maringá Ferro-Liga: the largest manganese ferroalloy manufacturer in South America;
- Grupo Maringá: considered to be the 5<sup>th</sup> largest company in the Sugar and Ethanol sector, in 2018, in the '*Valor 1,000*'.

**GRI 102-2**



Steel



Maringá Ferro-Liga

Sugar-Energy



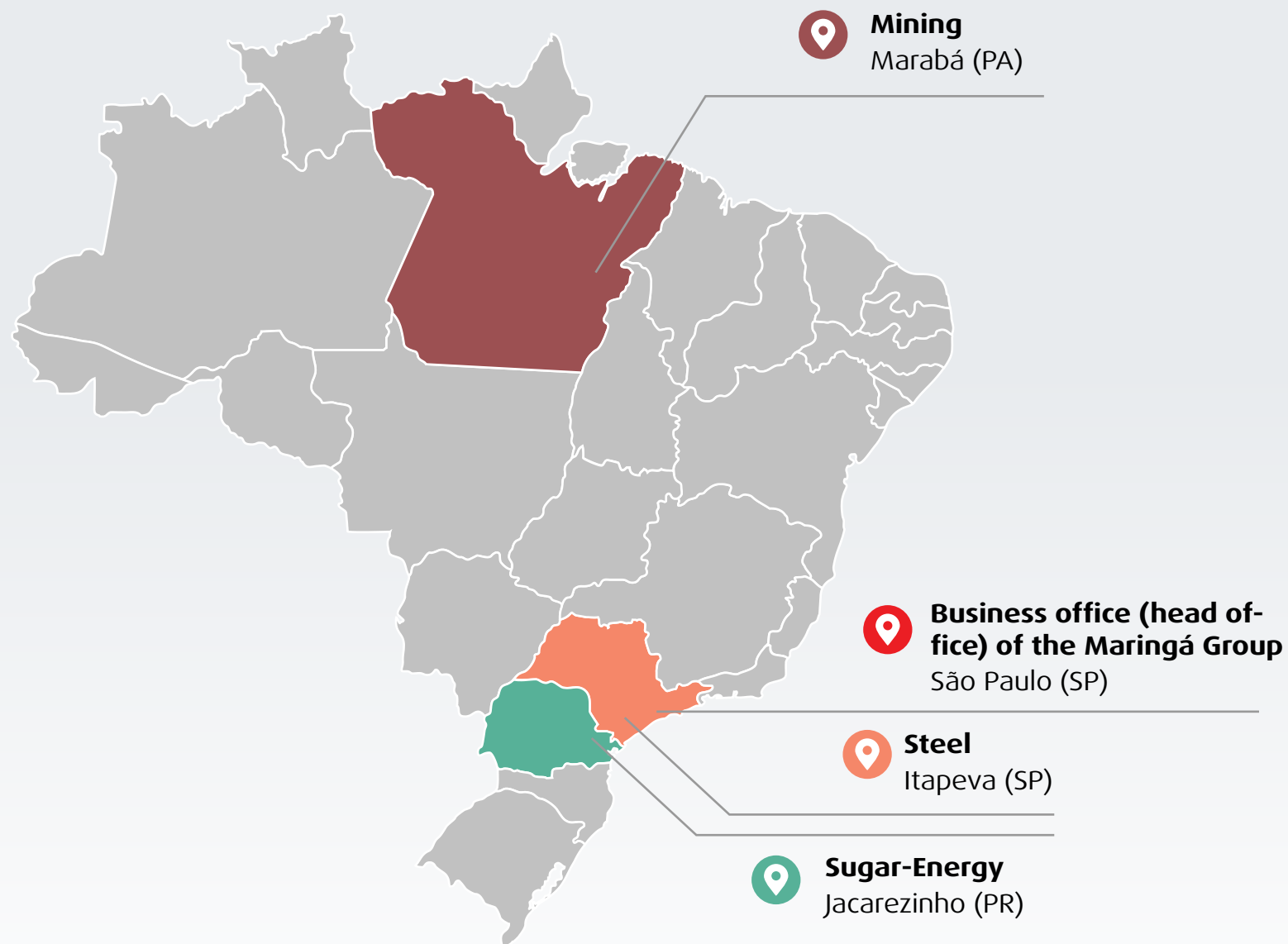
Usina Jacarezinho



Maringá Energia



## Where we are GRI 102-3, 102-4, 102-7, 102-10



# Our values

GRI 102-16



**Operational**



**Learning**



**Integrity**



**Collaboration**



**Respect**



Find out more about **Our Values, Mission and Vision**



# Our business

GRI 102-6

## Steel

Maringá Ferro-Liga is South America's **largest producer of manganese ferroalloy**, the essential raw-material for the manufacture of steel, according to the International Manganese Institute (IMnI) Manganese ferroalloys, distributed throughout the domestic and international markets, contribute to the reduction of the undesirable content of sulfur and oxygen in steel, thereby improving its mechanical properties, such as resistance and malleability.

### 40 years

experience in the steel industry segment

### Production capacity of

### 100,000

tons/year of ferro-silico-manganese and high-carbon ferro-manganese.

### 100%

of electricity used is drawn from renewable sources

## Strategic location

we are the only manufacturer of manganese ferroalloys in the state of São Paulo, where we are served by an extensive rail system, ensuring easy access to the national steel industry network and the main ports serving the Southeast.

## Our products

GRI 102-2

Ferro-Silico-Manganese: used mainly in the production of carbon steel, standard steel sheets, and rebars, amongst other products.

High-Carbon Ferro-Manganese: used mainly for the production of critical, surface steel sheets and high-carbon long steel, and widely used in the automotive and white goods industries.



High Carbon Alloy



# Our steel production



## Eucalyptus farms

We have 5,000 hectares of reforested wood distributed across 38 properties. We have another **5,000 hectares** of preserved native forest.



## Bio-reductant

We produce more than **30,000 tons of bio-reductant per year** at four production units.



## Raw materials

Certified suppliers, as well as manganese ore from our own quarry.



## Reduction in an Electric Furnace

We have five furnaces with an **installed capacity of 56.2 MVA.**



## Electricity

Our **six hydroelectric generation centers** have the capacity to produce more than 11.2 MW per year.



## Crude alloy



## Crushing



## Quality Control and Dispatch

We control all stages of production in modern analysis laboratories. We dispatch products to the domestic and international markets.



# Sugar-Energy

In 2021, we celebrated our 75<sup>th</sup> year working in the sugar-energy sector. Our tradition and experience are the differentials in our operations, which form an integral part of the Usina Jacarezinho, Canavieira Jacarezinho and Maringá Energia companies. With head offices in Jacarezinho (PR), together they produce foods and energy for the domestic market and for exportation.

## Our products GRI 102-2

### Anhydrous ethanol

Used as an ecological additive in a mix with gasoline.

and can be used in the production of other types of sugar.

### Hydrous ethanol

This can be used in isolation or mixed in any proportion with gasoline flexible fuel vehicles.

### White sugar

With a controlled color, this product is used in the industrialization processes of products such as beverages, candies and other foods.

### Raw sugar

Almost the color of honey, this product is intended for exportation

### Electricity

Produced from the sugarcane biomass.



## Copersucar highlights

### Largest sugar and ethanol supply company in the world

4.9 million tons of sugar and 10.3 billion liters of ethanol from the 2021-2022 harvest.

### 'Company of the Year' in the 'Valor 1,000' Annual Report 2021,

### Winner in the Bioenergy and Overseas Trade categories

in the 'Agribusiness Annual Report' (2021), published by the Editora Globo publisher's "Global Rural" magazine

### Record revenue

of R\$ 75.1 billion in the 2021-2022 harvest

### Net revenue 2x higher than the previous period

R\$ 781 million in the 2021-2022 harvest

## Copersucar: a strategic partner

Since 1968, we have had a strategic partnership with Copersucar, a global sugar and ethanol supplier, which has integrated logistics throughout the business chain. It is responsible for the trading of all the sugar and ethanol produced at the Usina Jacarezinho. As well as commercial and logistics intelligence, the company provides other competitive advantages, including optimization of costs with gains of scale and the raising of financial resources. We have a close and aligned relationship with all of Copersucar's different sectors, in which we are not only cooperative members, but also equity shareholders.

Tc2 sugarcane conveyor belt





# Our Sugar Energy Production



## Canavial

Sugarcane is grown on approximately **30,000** hectares of our own lands and lands belonging to our partners, which boosts local development. Around 400 producers make up our network of confidence.



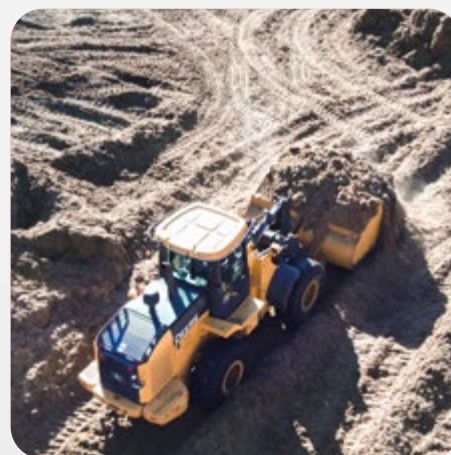
## Cane milling

We have the capacity to mill more than **2.5 million** tons of sugarcane per year.



## Ethanol

Daily production capacity of up to **900 m<sup>3</sup>** of ethanol



## Milled cane bagasse

Capacity to obtain **651,000** tons of cane bagasse per year.



## Maringá Energia

Installed energy co-generation capacity of **25 MW** using sugarcane biomass.



## Sugar

Daily production capacity of up to **25,000** sacks of sugar

## Transmission Line

**10 MW** intended for the free energy market.



## Industrial park

**10 MW** intended for proprietary use.





Boiler

## Maringá Energia

In April 2021, we started the operations of Maringá Energia, a company focused on the co-generation of clean energy using sugarcane bagasse arising from the activities of the Usina Jacarezinho.

Maringá Energia structure was installed at the plant with a transmission line extending to the Copel (Companhia Paranaense de Energia) substation in Andirá (PR). It has an installed capacity of 25 MW, of which 10 MW is used for its own needs and 10 MW is traded on the electricity free energy market. We are making investments intended to increase the surplus sales to 32 MW by 2023.

Maringá Energia received support of approximately R\$ 70 million, with R\$ 30 million coming from the Group's own funds and R\$ 40 million in the form of a loan from the National Bank for Economic and Social Development (BNDES), through the intermediation of Finem (*Financiamento a Empreendimentos*), and the Clima Fund, one of the instruments under the National Policy for Climate Change, connected to the Ministry of the Environment. The Fund is intended to support projects or studies focused on the mitigation of climate change.



# Value creation



## CLIENTS

We deliver products with a high standard of quality, meeting our clients' different and demanding requirements, and always seeking to meet their expectations of safety, fairness and reliability. By doing so, we are seeking to be an important and reliable link in our clients' production and generation of value.



## EMPLOYEES

We directly employ more than 1,800 people, who contribute to the local community. Furthermore, through training, study scholarships, performance evaluation and other actions designed to manage talents, we are constantly seeking to develop our personnel with the aim of improving efficiency and results, whilst also increasing their opportunities for professional and personal growth.



## INVESTORS

By advancing efficient, ethical and transparent operations in our business, we attract banks and other investors to participate in the different investments made by the Group.



## SUPPLIERS

We are served by almost 4,000 materials and services suppliers, also contributing to the development of their businesses, as well as indirectly generating employment.



## COMMUNITIES

As well as providing employment opportunities, we are one of the groups that most contributes to the economies and development of the communities in which we are present. We currently operate four social projects, whilst we also make donations that benefit more than 1,889 people.



Source: Statement of Added Value (page 63).



## Participation of the Maringá Group in associations and external initiatives

GRI 102-12, 102-13

### **ABRACE** – Associação Brasileira de Grandes Consumidores Industriais de Energia e de Consumidores Livres

This is one of the longest established associations in the energy sector, using studies and technical documents to defend the importance of energy at competitive prices for the development of the manufacturing sector in Brazil. Through Maringá Ferro-Liga, we have been members since 2015.

### **ABRAFE** – Associação Brasileira dos Produtores de Ferroligas e Silício Metálico

This association brings together the leading Brazilian ferroalloy and silicon metal manufacturing industrial groups, which together contribute to the sustainable development of Brazil. Our steel business has been a member since 1983, and our Industrial Director, Rodrigo Junqueira, has been the Vice-President of the association since 2019.

### **ABRAMAN** – Associação Brasileira de Manutenção e Gestão de Ativos

This is a non-profit organization founded with the intention of promoting and developing asset maintenance and management professionals through the improvement of knowledge, standards and practices. Through our steel business, we have been members since 2017.

### **EPA CERTIFICATION** – *Environmental Protection Agency*

Required for the exportation of ethanol to the US, this certification attests that the fuel complies with all the requirements relating to the reduction of greenhouse gas (GHG) emissions.

### **COMDEMA** – Conselho Municipal de Defesa do Meio Ambiente

This is a local environmental management body that brings together public organs, companies, politicians and organizations to find solutions for the rational use of natural resources and recuperation of environmental damages.

### **HALAL CERTIFICATE N° ALV.JO.2104.2038.BRA**

Sugar production has been certified for its compliance with Islamic laws and standards since 2018.

### **FSSC22000** – *Food Safety System Certification*

Our white sugar production has been certified since 2018, ensuring the safety of the foods.

### **FNQ** – Fundação Nacional da Qualidade

Usina Jacarezinho, representing Maringá Group, has been affiliated with the FNQ since 2017, a foundation focused on the development of the culture of excellence and good management practices.

### **IMni** – *International Manganese Institute*

Maringá Ferro-Liga has been adhering to this entity's codes of conduct since 2017, committing itself, amongst other things, to respecting the concept of sustainability and implementing its ongoing efforts to exercising best market practices and standards in the areas of safety, health and the environment. It is also committed to conducting its business and operations in such a way as to support the positive image of the manganese industry.

### **RENOVABIO**

In 2020, we were certified as part of the National Biofuels Program, being granted a license to issue and trade Decarbonization Credits (CBIOs). (Find out more on [page 37](#))

### **SIF** – Sociedade de Investigações Florestais (Federal University of Viçosa)

This is a partnership established between the Federal University of Viçosa (UFV) and Brazil's leading forestry companies, seeking to provide support for the development of studies and professional qualification, through projects of a scientific, economic and socio-environmental nature. Maringá Ferro-Liga has been a partner of the SIF since 2018 and, in 2019, our Forestry Manager was elected President of the society's Audit Committee.



# Corporate Governance

When Maringá Group was founded, in 2012, a contemporary governance model was adopted, with professional management and independent board members. We have built a structure that ensures the alignment of strategic objectives and decisions, aiming for corporate responsibility and efficiency, as well as ethics and transparency. Within our structure, decisions are taken with the necessary agility to efficiently implement our actions.

Maringá Group's Board of Directors is the main decision-making body, composed of four members, three of whom are independent. With different and relevant expertise, they have been recruited from amongst experienced business professionals with advanced strategic visions. Three committees provide advisory services to the Board: the People, the Audit Risks and Compliance and the Mining Committee.

To ensure the Group's strategic planning and execution, as well as identify and develop new opportunities, our Governance Structure involves the Executive Board, composed of the

boards responsible for Sugar-Energy Operations, Steel Operations, Corporate Administrative-Financial Matters, and the Commercial Area and Supply Chain. Together they provide support for the Executive Board, and those responsible for Corporate Management and Business Unit Management.

The Corporate Management areas include: Controllership, Strategy and Management, Financial, Procurement, HR, Communication and IT, which aim to provide efficiency and ongoing improvement within the management model followed by the Group's companies. The Business Unit Management departments (Steel and Sugar-Energy), meanwhile, work to guarantee operational excellence and development of the teams.

The governance structure also involves Working Groups, made up of business managers and business units, aiming to explore strategic issues in different contexts relating to Maringá Group. Five Working Groups were active in 2021: *Compliance*, Sustainability, Energy, Diversity and Inclusion, and LGPD.

José Ricardo Rezende,  
Engineering Consultant

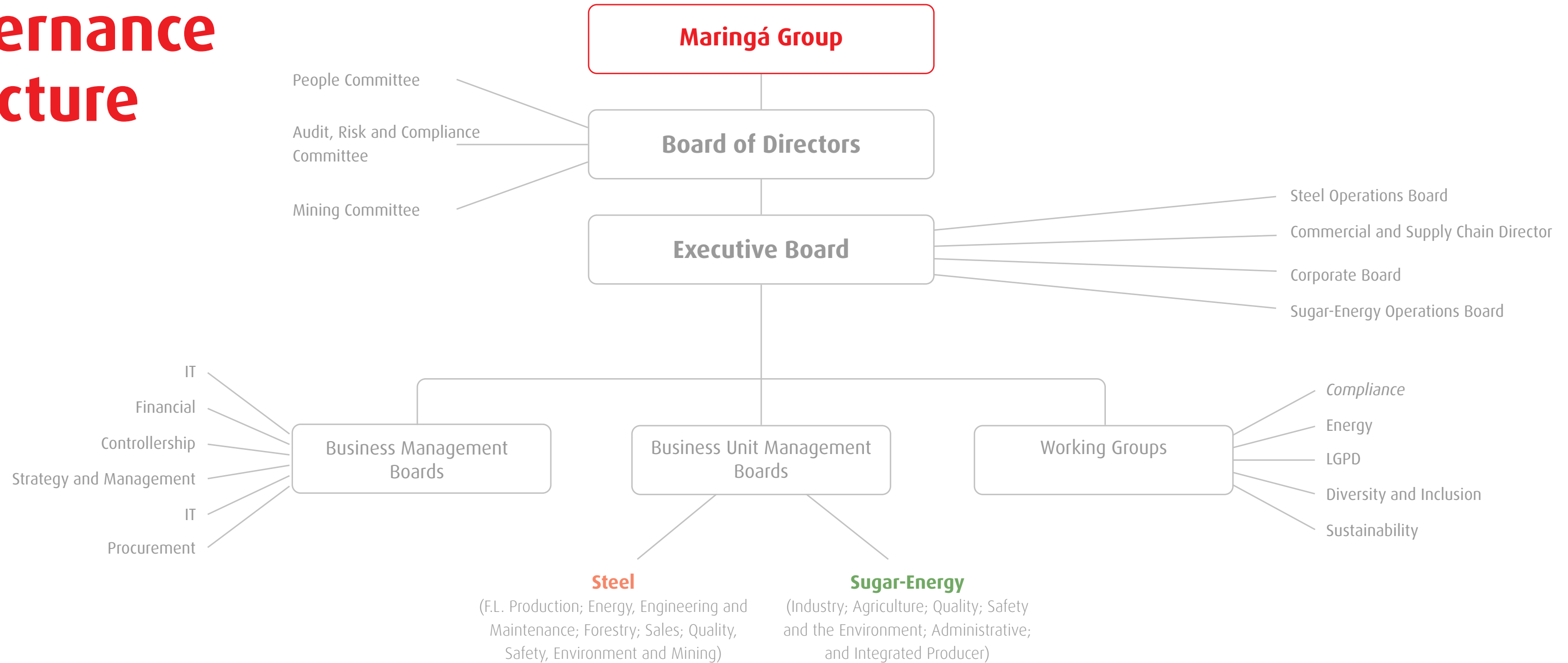
Emmanuel Fernandes,  
Project Analyst





# Governance Structure

GRI 102-18





# Sustainability strategy

“

The strategy which Maringá Group has pursued over the years allows it to coordinate and direct its business and its efforts in an intelligent and positive manner, appreciating people, modernizing processes and maintaining its competitive standing in terms of cost and quality, always paying great attention to integrity and risks”.

Júlia Lima  
Procurements Coordinator



# Sustainability strategy

In this chapter we will be looking more closely at how we work to ensure sustainability in our strategy and some of the efforts we make in relation to ethics, integrity, innovation and excellence, highlighted in the following topics:

- Strategic Management
- Materiality Matrix
- Priority Material Topics
- Ethics and Integrity
- Risk Management
- Investment, Innovation and Technology

## Strategic management

For our strategy to succeed, our management team seeks to ensure the connection between planning and execution, through the alignment and development of personnel. In 2017, we developed our first more structured strategic plan, with support from a specialist consultancy. From that point on, we have been updating our strategy and its effects in different areas on an annual basis.

In 2021, with the strategic perspective of 2022 to 2026, we focused on two aspects: our investment plan and the strengthening of sustainability in our strategy. We discussed the existing investment opportunities with a view to improving processes, expanding capacity, and renewable energy in the steel and sugar and energy areas. The second point considered was the construction of the materiality matrix, followed by the definition of the priority material topics, in a process that involved the participation of all the Group's main stakeholders and leaders.

In 2022, we continued our efforts in this area, with implementation of the 'Sustainable Strategy - ESG in practice', with the aim of developing the sustainability of Maringá Group's

strategy along two lines: (i) for our activities to contribute to serving the priority material topics for the main stakeholders, with a focus on the impacts inherent to the business; and (ii) our management processes and practices allow the strategy to involve a clear macro and micro connection, exploring synergies between businesses, departments and people.

In relation to the Governance of the issue of Sustainability, the Board of Directors develops and guides the strategies for the various businesses in line with sustainable development, the Executive Board and the Management Boards constantly update and connect planning and execution, the Sustainability Working Group helps define targets and integrate the strategy into

the business culture, and the Strategy and Management Office seeks to ensure harmony between strategy, processes and personnel, as well as the integration amongst the Group's businesses.

We have continued moving forward with our intention of aligning people with the understanding and execution of our strategy, providing greater space for our employees to participate and be heard in each of the businesses' monthly strategy meetings. At these meetings, the senior management discuss the most important actions, critical points and all that has been learned for evolution of the strategy and the level of business and processes.

**In 2022, through the 'Sustainability Strategy - ESG in practice' project, we defined our sustainability agenda.**



# Materiality Matrix

Sustainability is an essential element in the DNA of the Maringá Group. It starts with the products we trade, which are fundamental to the economic and social development of society. Our means of production stand out due to their sound use of renewable resources and we have always sought to have a positive social impact on the communities in which we are present. All these elements have been clearly present in our strategy since 2017. Even so, in 2021 we took another step forward with the construction of our Materiality Matrix, highlighting the Priority Topics that will direct our strategy and communication with our stakeholders.

Through an internal study and benchmarking, we were able to identify a list of topics considered to be of most importance in terms of what they impact and how they are impacted by the organization. These topics were prioritized in the Sustainability Study, sent out to nine groups of stakeholders: suppliers, service providers, employees,

producers, banks and investors, clients, unions, associations, organizations and representatives of communities where we have operations, as well as the senior management.

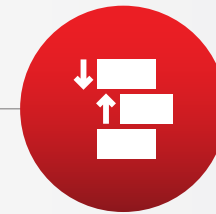
Once this material had been analyzed and prioritized, the 10 Priority Material Topics for Sustainability were defined, in line with the best practices of corporate sustainability. **GRI 102-40, 102-42, 102-43**

## Construction of the Matrix and Definition of the Priority Material Topics



### Identification

Mapping of the publics and list of impacts caused by the organization



### Prioritization

Surveying the stakeholders' perceptions



### Analysis

Analysis of the results and drafting of the matrix



### Definition
















Analysis and prioritization of the topics with the Senior Management

Based upon Benchmarking and stakeholders' perceptions, we developed the Materiality Matrix. Using this, the 10 Priority Material Topics were defined at the 1<sup>st</sup> Sustainability Workshop, in December 2021, to be included in Maringá Group's 2022-2026 Strategic Planning.





# Priority Material Topics GRI 103-1, 102-44, 102-47

Material topic	SDGs	Scope	Page
 <b>Ethics, Integrity and Human Rights</b>	 	Respect our Code of Conduct, which is aligned with our values; guarantee the integrity and transparency of our relations; and ensure that all conditions relating to human rights are practiced and monitored.	26, 45, 53
 <b>Personnel Development, Diversity and Inclusion</b>		Promote development (employee attraction, retention, training and careers), and guarantee diversity and inclusion at all levels of the organization.	30, 49, 53
 <b>Health and Safety</b>	 	Adopt the best practices in health and safety at work; support continued improvements in the management of safety and reduction of accidents and injuries; and guarantee decent working conditions in the value chain.	54, 55, 56, 57, 58, 59
 <b>Energy efficiency</b>	 	Manage resources and monitor energy use, promoting actions that improve it; privilege solutions and technologies based upon renewable energies; and promote development and research for energy efficiency.	28, 33, 39
 <b>Customer Relations and Satisfaction</b>	  	Clearly and transparently communicate the products and processes; raise awareness concerning socio-environmental issues; and relax and diversify production to meet clients' needs.	18, 44
 <b>Climate change</b>		Establish a strategy for combating climate change; undertake actions for the company to mitigate the negative impacts of its activities; guarantee a reduction in the direct and indirect emission of greenhouse (GHG) and other polluting gases; and promote initiatives for the offsetting of GHG emissions.	32, 34, 37
 <b>Innovation and Technology</b>	 	Encourage and ensure innovative practices for the businesses; guarantee data privacy and security; and seek solutions that raise the possibility of the efficient use of our resources.	28, 39
 <b>Sustainable agricultural and forestry practices</b>	 	Manage the productivity and balance of the use of the land and other natural resources; preserve the quality of the land; and control the use of fertilizers, herbicides and other agrochemicals.	32, 34, 36
 <b>Location development and impact on the community</b>	  	Support the development of local communities and monitor the potential impacts in the regions near the company; and encourage the generation of positive impacts on the community.	45
 <b>Sustainable supply chain</b>	   	Promote the training and selection of suppliers based upon economic and socio-environmental criteria; and guarantee responsible practices in the supply chain.	44

# Ethics and Integrity

GRI 103-2, 103-3 | 205

For Maringá Group, ethics is a value that is utterly indispensable in the business world and an essential condition for the sustainable growth of the Group and its partners. As such, we believe that it is essential for there to be a genuine commitment to the balance of the relations maintained in the exercising of professional activities at every level.

To guide the Group's actions in its relationship with all the stakeholders, we have a Code of Conduct which embraces all of the principles and values that the Group defends and practices. By listening to our internal public, we have been able to identify the need to update this document, created in 2018, and to strengthen the ombudsman, both in terms of access and powers. In 2021, the Compliance Working Group prepared a proposal for this

**We provide an ombudsman channel that guarantees the anonymity and confidentiality of the information**

redrafting, making the channel more impartial and professional. The plan, to be executed in 2022, includes the contracting of a specialist outsourced company, with the aim of making the process more streamlined and reliable.

We have made an ombudsman channel available on our website which receives messages containing complaints, doubts and accusations relating to environmental, social, human or business matters, including actual or suspected violations of the Code of Conduct. For those not wishing to identify themselves, anonymity and confidentiality are guaranteed. The cases are assessed and conducted by the Compliance Group with periodic reports being sent to the Board of Directors and the Executive Board.



**Everaldo Licorini**  
Extraction and Utilities Supervisor

## Complaint mechanisms GRI 103-2

Complaints	2019	2020	2021
Number of complaints identified by the mechanism	7	10	12
Number of complaints addressed	7	10	12
Number of complaints resolved	5	9	5
Number of complaints registered prior to the period covered by the report and resolved over the course of this period	0	2	0

<sup>1</sup> Health; Internal Relations; Complaints about specific areas; Honesty; Sexual Harassment: Benefit Providers; Senior Management.

<sup>2</sup> By May 2022, another six complaints from 2021 had been resolved along with one more dating from 2020.



# Risk management GRI 102-11, 103-2, 103-3 | 206

We map and monitor Maringá Group's risks in the environmental, social, economic and operational dimensions. In our Strategic Planning, the main risks are assessed at the business units on an annual basis, with action plans that involve those responsible for the processes, and supervision by the Audit, Risks and Compliance Committee, which provides support to the Board of Directors on this issue.

In 2019, with support from the specialist consultancy, we performed a wide-reaching analysis of the Maringá Group's risks. We analyzed the most highly critical processes and identified around 200 points requiring attention. In 2020, the risk mitigation action plan was established together with our managers, who are consulted from time to time about the evolution of the handling of each risk.

The external auditing of the financial statements, which is performed annually, also includes a risk evaluation. A great step forward was taken in 2021, since this was the first fiscal

year that we performed an internal audit on this topic involving specialists. The focus was on four issues prioritized by the Audit, Risks and Compliance Committee, that involve processes considered to be more critical, such as payroll and benefits; procurement; and labor, tax and legal compliance.

We concluded the first cycle of the internal audit, relating to the 1<sup>st</sup> semester of 2021, with 96 processes having been analyzed and the action plan created in 2020 having been updated. We confirmed that 88% of the recommendations made in 2019 concerning the prioritized topics had been executed or had had actions defined. In 2022, we will undertake the second cycle of the internal audit, which will allow us to evaluate the handling of the recommendations from the first cycle.

For new employees to be properly integrated, we also provide them with training in the Code of Conduct. Furthermore, in the Leadership Development Program, to be implemented in

2022, we will be starting an Ethics and Integrity course for the ongoing development of our leaders in these topics that are so fundamental to our strategy and sustainability.

We wholeheartedly believe in compliance with the law and good market practices in all our commercial operations. We monitor those court actions relating to all the companies within the Group, and any possible problems and opportunities for improvement are reported directly to the Board of Directors. We have no court actions filed against our businesses due to unfair competition, or trust or monopoly practices. **GRI 206-1**

## **INFORMATION SECURITY**

**GRI 103-2, 103-3 | 418**

The information which we make available concerning our clients, suppliers, employees and third parties are managed in accordance with our Code of Conduct and our Security of Information and Privacy Policy. These policies are also presented and adhered to by third

parties who need access to our systems, accompanied by the respective Confidentiality Agreement.

The granting of access to our systems and network data has to be approved by the managers before being registered in the service desk system.

Over the course of 2021, a working group dedicated to the implementation of the adaptations required by the General Data Protection Law (LGPD) made significant progress in the identification and classification of personal data, handling, protection, risk analysis and adjustment of the plan for protection of data. We also sought to raise employees' awareness on this issue through specific presentations at meetings and events, bulletins and training sessions.

In 2021, there were no records of leaks, violations or loss of client data during the period. **GRI 418-1**



Slag processing

## Investment, Innovation and Technology

In our continual quest to increase operational and administrative productivity and efficiency, investment in innovation and technology is essential. Identified in our materiality matrix as an important topic requiring close monitoring, this is a priority issue within our sustainability strategy. As such, we are committed to developing people so that they are constantly aware of the opportunities that can provide us with a competitive differential.

Optimizing the use of the systems and seeking new solutions for automation, management, data analysis and digital security are the main strategic objectives in the area of Information Technology (IT).

We are continually seeking opportunities for automation that provide our operations with greater standardization and stability. In our steel operations, the Mistral system, implemented in 2021, allows for automated control of the reduction furnaces, with a view to cutting down on losses and making production more stable.

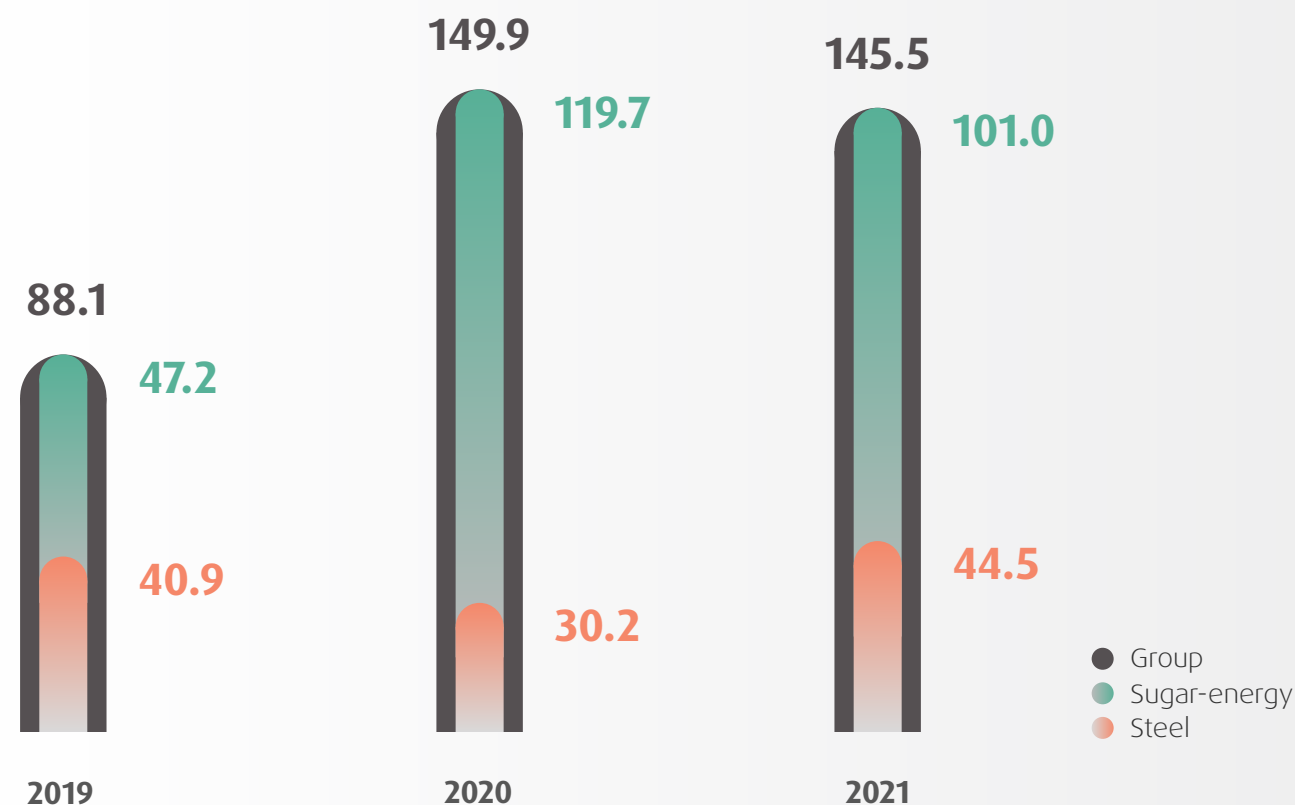
The systems do not dispense with an operator, who assumes a more analytical role in relation to the process, via a control panel, which needs adjusting whenever unexpected variants are noted in the system. In the sugar-energy area, since 2018, our management system has involved artificial intelligence to optimize the process according to the established standards, avoiding losses and extensive interruptions.

Another highlight was the advance of Business Intelligence (BI), which was implemented in a number of the Group's different areas (including those responsible for commercial, financial, agricultural and supply chain matters) in 2021. With access to customized panels, the specialists from each area will find it easier to perform analyses using data, thus streamlining the decision-making process, optimizing processes and locating opportunities.

In 2022, the Group's IT area plans to continue the BI project, with

## CapEx

in R\$ millions



development of a platform that makes use of artificial intelligence to perform analyses of the data pertaining to our companies, but also of other current information, such as that concerning finances, the climate, and market analysis, as well as projects that aim to improve the security of the information and optimization of the processes undertaken by the Group's different departments.

One important investment made in the steel area was the replacement of circular furnaces with rectangular ones for the production of our bio-reductant which, in addition to guaranteeing a more efficient process, has reduced the amount of smoke produced, this benefiting the environment, employees and local community. In 2021, 35% of the furnaces were replaced by these more modern versions, which allow materials to be loaded and unloaded using equipment. The mechanized process and artificial intelligence employed by the rectangular furnaces has meant that workers are now less exposed to the coal furnaces and the whole process is orchestrated far more efficiently. Find out more about the advantages of this replacement on [page 32](#).

In the agricultural area in 2021, we invested heavily in machines, inputs and training. In the effort to increase the structure of our own

harvest, reducing our dependence on third parties, in 2021, we acquired a harvester and two tractors. In 2021, our agricultural side also benefited from the investments made in previous years, such as in GPS and a system that monitors the entire harvesting fleet and has proven to be an important tool in offering support for the team, providing greater productivity and energy efficiency, with savings on fuel and machine maintenance. We have

also intensified studies for the adoption and implementation of organo-mineral fertilization, including composting using a filter cake, poultry litter and an extension of vinasse, in an effort to optimize costs and implement more sustainable alternatives.

In terms of a partnership and open innovation, our team is in constant contact and has a good relationship with the Canavieira Technology

Harvester





Center (CTC) and universities, to ensure that we always remain up to date and in search of new solutions for better planning and cultivation of crops, and better control of pests and diseases. As a means of expanding the agricultural operations, we invested R\$ 7 million in nutrition feedstock in 2021. The nutrition we provide for the sugarcane is based on macro and micro-nutrients. This has contributed to tackling the drought and frost in the region, since a healthier plant is more resistant to climate variations. In 2021, the drones, used since 2020 to study pests and diseases, assumed an additional function when they started spraying pest control and plant growth materials.

The Usina Jacarezinho laboratories also received investments in equipment such as saccharimeters and a tilted probe, thereby making the process more reliable and streamlined. In the sugar-energy industrial area, the standout investment in 2021 was the new, more efficient high-pressure boiler. In addition to the boiler, we also acquired a turbine, reducer and generator, meaning we were able to begin the operations at Maringá Energia, providing electricity, not only for the Usina Jacarezinho, but also for sale on the free market. With relatively less consumption of sugarcane bagasse, the new boiler enables us

to sell the surplus bagasse, thereby positively contributing to the Group's earnings.

The closure of the water cycle at the Usina Jacarezinho was another project, implemented in 2021, that had a positive socio-environmental impact, with less loss through evaporation, since the steam now returns to the process by spraying the cooling towers. As a result, we have seen a significant reduction in the collection of water from the river, to 1.5m<sup>3</sup> per ton.

We also acquired one more filter press, designed to collect the so-called "filter cake" which is a byproduct of the industrial process that can be used as an organic fertilizer, thus adding to our good environmental practices.

At the same plant, we constructed a new 20,000 ton-capacity storage unit, meaning we are no longer dependent upon outside storage. Furthermore, construction of another 35,000 ton-capacity storage facility is being built in 2022.



## Program of Excellence (PEX)

Since 2015, the Program of Excellence (Pex) has been committed to training and developing innovation leaders, with adoption of a methodology for the Group's project management based on best market practices such as techniques for ongoing improvement, mentoring and performance reports.

Over the six years the Program has been in operation, we have concluded 87 projects, 11 of which were in 2021, and trained 155 people, performing an essential role in the development of strategic skills for Maringá Group, including project management, structured thinking, collaboration and leadership.



# Environment

“

Sustainability has been a determining factor for Maringá Group in its decision-making for the development of enterprises and projects, since we understand that a company is only sustainable when it seeks to establish a balance between producing and caring for the environment, providing a better quality of life for its employees and society.”

**Sodário Rodrigues**  
Environmental Analyst



## Environment

In this chapter we will be sharing the efforts and impacts connected to our care for the environment, highlighted in the following topics:

- Environmental Management
- Sustainable agricultural and forestry practices
  - Land Use
- Climate Change
- Energy Efficiency

# Environmental Management

GRI 103-2, 103-3 | 307

Sustainability and respect for the environment are an integral part of Maringá Group's strategy. Care for the environment has been included in our mission, vision and the integrated policy of our management system. Because of this, we closely monitor the indicators relating to legal compliance, environmental activity planning, relationship and social action plans, and our social responsibility project, amongst others, always striving for continued improvement and sustainable development. **GRI 102-11**

Each unit has a Solid Waste Management plan, covering all sectors. This plan guides the correct separation, collection, transportation, storage and final destination of the Group's waste. The recyclable products are screened, before being sent to companies holding the proper operating licenses. The non-recyclable materials are sent to a controlled landfill.

In our steel business, we manufacture ferroalloy, incorporating important elements of sustainability, this being a crucial differential

in the market, an advantage that is obtained through the use of our own bio-reductant (charcoal). Furthermore, 35% of our circular furnaces designed for production of bio-reductant were replaced with more modern models in 2021, involving burners that reduce the amount of smoke produced, in turn reducing any possible impacts on society and the environment. **GRI 102-11**

In 2021, we underwent eight inspections by the state authority (two concerning the monitoring of the samples from the furnace chimneys, one concerning the impossibility of monitoring of samples from the chimney serving Maringá FPU's burner, one concerning the monitoring of the process at Maringá FPU, one concerning the disposal of the waste from the firewood used at the Butiá FPU in a Permanent Conservation Area (PCA) and the storage of eucalyptus bark, and three concerning the plant's weighing operations and decanting system). No monetary sanctions, however, were issued as a result of the inspections. The inspection



To celebrate World Environment Day (June 5), Maringá Group organized an *on-line* meeting entitled "ESG: from theory to practice". A member of the Board of Directors, Henrique Luz, the Corporate Director, Eduardo Lambiasi, and Unit Directors Condurme Aizzo and Rodrigo Junqueira, spoke about the importance of good sustainability practices and the actions the Group takes to strengthen its sustainability indicators.



reports that led to these notifications related to the ferroalloy production unit and to the bio-reductant production units.

In the sugar-energy area, we seek to sustainably optimize our manufacturing processes and encourage the intelligent use of natural resources, from the planting phase through to the waste.

The ethanol, produced from sugarcane, is considered to be a fuel that produces far fewer carbon emissions than fossil fuels. This is a product that therefore provides positive sustainability attributes. Furthermore, as part of our own harvesting system, we no longer burn the stubble and we encourage our partners to adopt the same good practice, even though the practice is still permitted in the state of Paraná.

The waste from our production becomes by-products, which we reuse in our manufacturing processes as biomass. The cane bagasse, for example, is burned in the boiler, creating steam that powers the turbine and activates the generator, thereby producing electricity. Even the ashes resulting from these boilers are reused for fertilization and enrichment of the soil. The vinasse, meanwhile, a by-product of the distillation for production of ethanol, is used in the sugarcane plantations.

Nitrogen is added to the potassium-rich liquid and is used for irrigating the fields, since this is a more sustainable process in relation to its impact on the soil, since it means a reduction of chemical fertilizers, whilst also making the whole process economically more viable.

At the beginning of the sugar production process, a by-product called “cake”, a material rich in phosphorus, is extracted from the silt that collects in the harvester. In 2021, we installed a composting structure making use of this cake, which, in 2022, will receive additional nutrients such as gypsum and limestone to further improve the fertilization of the plantations.

#### **DAM SAFETY GRI 102-11**

As a monitored risk, our water dams all have Emergency Plans. The dams are constructed from concrete, following thorough technical inspection and evaluation plans, with a view to establishing the highest standards of construction safety. We have entered into a partnership with a well-renowned external company for drafting of the expert report. For extreme situations that could require contingency actions, we have developed an Emergency Action Plan (EAP), ratified by the Civil Defense Force, to guide the work of our employees and the river-dwelling population, in the event of an emergency situation.



Barra Hydroelectric Power Plant



# Sustainable agricultural and forestry practices

GRI 103-2, 103-3|304, 304-2, 304-3

Care for the environment forms part of the policy and mission of the Maringá Group, which adopts a set of agricultural and forestry techniques and practices designed to preserve the quality of the earth in its businesses.

Maringá Group conserves more than 7,000 hectares of native forest, 5,000 of which is located in São Paulo and 2,085 in Paraná. In the riparian forest of the Paranapanema River, in the region of Jacarezinho (PR), 120,000 seedlings of native species have been planted since 2012.

Located in the region of Itapeva (SP), we maintain 5,000 hectares of conserved forest, part of a Legal Reserve and Permanent Conservation Area (PCA), an area that is bigger than that required by law. In 2021 alone, five hectares were planted with seedlings native to the region, such as ipê, aroeira, angico, caroba and others.

We grow eucalyptus trees on another 5,000 hectares of forest area, with the resulting products being used by Maringá Ferro-Liga; it is estimated that there are nine million trees on this plantation. Using the wood harvested from this reforestation, we manage to produce around 70% of the bio-reductant (charcoal) necessary for the process that transforms the iron ore into alloy. In 2021, 32.1 tons of bio-reductant was produced. Through our forestry area, we have dedicated time and financial resources into investigating ways of increasing the productivity of the eucalyptus forest. In partnership with the Brazilian Association of Ferroalloy and Silico Metal Producers (Abrate) and the Federal University of Viçosa, we are studying varieties of species that grow more quickly or producer higher density wood.

In Jacarezinho (PR) we conserve an area covering 2,000 hectares and, since 2012, we have been committed to the reforestation of 60 hectares on the banks of the Paranapanema River, in a region that is now a Permanent Conservation Area (PCA), with more than 120,000 native seedlings on the plantation. Every year, we perform educational actions together with the school communities. In 2021, due to the pandemic, the action

was undertaken with our employees and representatives of governmental organs.

All of our operational units are currently to be found in rural areas, registered with the Environmental Rural Register (CAR), a national, and obligatory, public register, that

allows for the environmental information concerning these properties to be compiled in order to create a database for environmental monitoring, control and planning, ensuring that no deforestation occurs in the native areas defined by law within the grounds of each one of these units.



Application of vinasse



## Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas<sup>1</sup> - 2021 **GRI 304-1**

Name of the area <sup>2</sup>	Geographic location	Subsurface and underground land that may be owned, leased, or managed by the organization	Type of operation	Size of operational unit in hectares
Farms in Itambaracá	Itambaracá (PR)	Leased areas (partnerships)	Agricultural Production	42.96
Farms in Ibirarema	Ibirarema (SP)	Leased areas (partnerships)	Agricultural Production	795.41
Jacarezinho Farm	Jacarezinho (PR)	Proprietary and partner areas	Office/industrial and agricultural production	10,311.74
Farms in Cambará	Cambará (PR)	Leased Farms (partnerships)	Agricultural Production	830.26
Farm in Chavantes	Chavantes (SP)	Leased Farms (partnerships)	Agricultural Production	96.90
Farms in Salto Grande	Salto Grande (SP)	Leased areas (partnerships)	Agricultural Production	162.24
Farms in Santo Antônio da Platina	Santo Antônio da Platina (PR)	Leased areas (partnerships)	Agricultural Production	964.75
Farms in Ourinhos	Ourinhos (SP)	Leased areas (partnerships)	Agricultural Production	1,610.10

1. Data relating to the sugar-energy operations of the Maringá Group. Data for steel manufacture are unavailable.

2. All are in areas adjacent to PCAs that appear on conservation lists, having average levels of biodiversity and low biodiversity values.

Analysis of the period shows that the actions and care taken during 2021 and the preceding years were positive, since there was no damage observed in the managed areas. The factors that underpinned the success of the results were: good management of the organization and the work of the agricultural department in maintaining the areas of vegetation and tracks bordering these areas; duty teams duly trained in the principles of fire fighting; inspections performed in the company's management areas and actions designed to correct any non-compliance; the handling of people using the roads on the properties; distribution of warning signs at strategic points and dissemination of *spot* on the local radio stations. The supervision has a measurable objective for monitoring the actions planned in relation to environmental care with positive results.



## Mechanized Harvesting on the São João Farm



## Land use

The Group is committed to the rational use of the land in the areas and this commitment is to be found in the set of agronomic practices aimed at maintaining and improving the productive potential of the agricultural land. Conservationist planning has been adopted for each sphere of production, through the systematization of areas, leasing of lands, crop rotation, level planting and the use of mulch, resulting in the mitigation of erosive processes. We also apply a moderate amount of chemicals, always prioritizing the use of organic elements to fight pests and fertilize the land, amongst other actions aimed at environmental conservation and maintaining the balance of the ecosystem.

In the areas where the mill's sugarcane crops are planted, approximately 99% of the harvest is mechanized and, in 2021, we brought forward our plans to put an end to the burning of cane in the state of Paraná. In the state of São Paulo, this practice has been adopted since 2014. As such, the stubble from the cane stays in the fields, thereby contributing to the improvement of the physical, chemical and biological conditions of the earth.

We have a project focused on raising public awareness over the prevention and combating of fires, which involves the distribution of pamphlets on buses, by means of our social media vehicles, on billboards and through radio advertising. We also make a compliance hotline available on the WhatsApp platform, allowing the community to inform us whenever they come across wildfires. We also have our own fire department, ready around the clock and positioned at strategic points, in order to monitor the plantations, Permanent Conservation Areas (PCAs) and Legal Reserves. Whenever a fire starts, we are prepared to fight it quickly and efficiently.

Fire prevention is important to avoid damage to the environment and to people. As well as damaging nature and the Group's businesses, these events have financial impacts due to the loss of productivity.

**99%** of the sugarcane harvest is mechanized, without burning



# Climate change

GRI 103-2, 103-3 | 305

Climate change is an issue affecting the whole of humanity, which is calling for urgent measures on the part of governments, companies and individuals. Maringá Group is aware of both its responsibility to reduce the emission of greenhouse gases (GHGs) and the importance of knowing how to mitigate the problems created by a more extreme and unpredictable climate in its businesses and communities.

In 2021, we concluded our first inventory of the emission of greenhouse gases (GHGs). This document identifies and measures the Group's emissions sources.

The steel business uses bio-reductant for the production of ferroalloys. By doing so, we collaborate by using fewer non-renewable materials, such as coke, consequently meaning we also contribute to the reduced generation of greenhouse gases. We have air pollution systems installed in our electric furnaces, with

sampling sites that are monitored annually, ensuring emissions control in accordance with the inspection authorities' regulations. In the production of bio-reductant we have also invested in innovative technologies designed to control emissions, such as gas burners, to mitigate the impacts caused by wood burning. Our planted forests and reforestation actions collaborate in the form of carbon capturing.

The monitoring of the emissions of particulate matter and gases at the ferroalloy manufacturing unit is performed by accredited laboratories, as required by the resolution enacted by the São Paulo State Environmental Department and presented annually to the Environmental Company of the State of São Paulo.

In the area of sugar-energy, 2021 saw the start of our electricity co-generation system through the use of a biomass-driven (sugarcane bagasse) thermoelectric power plant.

The emissions are monitored and assessed by Copersucar indicators and by the Renovabio program. We are committed to controlling, monitoring and reducing the GHG emissions in our manufacturing processes and in the operation of vehicles and machines, in order

to reduce the use of fossil fuels. We have also eliminated the process of burning the stubble after harvest and we have invested heavily to avoid and combat fires.

In 2021, we concluded our first inventory of greenhouse gas emissions (GHGs).

## RENOVABIO CERTIFICATION

The RenovaBio Program is an initiative developed by the Ministry of Mines and Energy to promote the inclusion of biofuels in the Brazilian energy matrix. Renovabio prioritizes and values the use of ethanol as one of the means of achieving the targets defined for the country under the Paris Agreement.

The Usina Jacarezinho was certified in 2020, allowing the trading of decarbonization credits (CBIOs). In 2021, we

traded 75,543 CBIOs, equal to the impact of 528,801 trees in terms of carbon capturing.

In 2022, the company will be undergoing the Renovabio recertification process, with the aim of improving our efficiency grade. The program is extremely thorough and demanding, covering important points and guiding us towards being increasingly sustainable in our good agricultural and industrial practices.



## Emissions - Steel

Direct emissions of greenhouse gases (Scope 1) (t CO <sub>2</sub> equivalent) GRI 305-1	2019	2020	2021
Generation of electricity, heat or steam	59,914	87,515	103,619
Transportation of materials, products, waste, employees and passengers	957	871	1,023
<b>Total gross emissions of CO<sub>2</sub></b>	<b>60,871</b>	<b>88,386</b>	<b>104,643</b>

The increase in the amount of Scope 1 emissions is due to the increase of salable production over the years (2019: 90,095 tons; 2020: 91,125 tons; 2021: 98.786 tons).

### Biogenic emissions of CO<sub>2</sub> (t CO<sub>2</sub> equivalent)

	92,095	85,621	81,271
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### Indirect emissions (Scope 2) arising from the acquisition of energy (t CO<sub>2</sub> equivalent) GRI 305-2

	18,285	16,331	37,141 <sup>1</sup>
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N.B.<sup>1</sup>: Materially, the increase in 2021, for both steel and sugar-energy operations, is a result of the alteration of the emission factor informed by SIN, since in 2021 it was: 0.1264; and in 2020: 0.0617. Maringá Group has adopted the location-based approach, this being that traditionally adopted by the PBGHGP (Greenhouse Gas Protocol Brazilian Program) for Scope 2 calculations, which involves using the average amount of emissions for the generation of electricity making up the National Interconnected Grid (SIN).

### Intensity of emissions of greenhouse gases GRI 305-4

Total GHG emissions (t CO <sub>2</sub> equivalent)	79,156	104,717	141,784
Intensity of emissions of greenhouse gases	0.94	1.06	1.44

N.B.: The intensity of emissions was greater in 2021, since a lower quantity of bio-reductant (charcoal) was produced compared to previous years. This was due to the demobilization of the circular furnaces at Maringá FPU for the construction of new rectangular furnaces, allowing for reduced charcoal production. Consequently, more mineral coke and oil were used to meet demands, leading to more gas emissions compared to previous years.

## Emissions - sugar-energy

Direct emissions of greenhouse gases (Scope 1) (t CO <sub>2</sub> equivalent) GRI 305-1	2019	2020	2021
Generation of electricity, heat or steam	7,227	7,295	9,475
Physical-chemical processing	14	18	39
Transportation of materials, products, waste, employees and passengers	19,813	18,528	18,363
Industrial Processes and Agricultural Activities	96,584	74,739	77,471
Fugitive emissions	130	198	219
<b>Total gross emissions of CO<sub>2</sub></b>	<b>123,768</b>	<b>100,777</b>	<b>105,567</b>

### Biogenic emissions of CO<sub>2</sub> (t CO<sub>2</sub> equivalent)

	372,535	367,821	488,597
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N.B.: There was a 39% increase in the consumption of biomass in 2021 due to Maringá Energia entering into operation.

### Indirect emissions (Scope 2) arising from the acquisition of energy (t CO<sub>2</sub> equivalent) GRI 305-2

	250	140	289 <sup>1</sup>
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### Intensity of emissions of greenhouse gases GRI 305-4

Total GHG emissions (t CO <sub>2</sub> equivalent)	124,017	100,918	105,855
Intensity of emissions of greenhouse gases	0.05	0.04	0.04

### Reduction of GHG emissions (t CO<sub>2</sub> equivalent) GRI 305-5

Reductions arising from direct emissions (Scope 1)	(22,990)	5,427
Reductions arising from indirect emissions due to the acquisition of energy (Scope 2)	(109)	149
<b>Total reduction of GHG emissions</b>	<b>(23,100)</b>	<b>5,576</b>

N.B.: the company does not have data from 2018 to evidence the reductions in relation to 2019. From 2019 to 2020 there was a reduction and from 2020 to 2021 there was an increase in emissions (-5,384.80 t CO<sub>2</sub> equivalent) due to two conditions: a mix of production and the consumption of sugarcane bagasse of 135,328 tons, used in the boiler for the production of energy, in the Group's new operation.



# Energy efficiency

GRI 103-2, 103-3 | 302

Considering the likely worsening scenario of climate change over the coming years, with increasingly extreme and less predictable weather, it is strategic for Maringá Group to have a clean and renewable energy matrix, drawn from various sources, whilst also striving for increasingly more autonomy and efficiency in relation to energy. In both our businesses, we use clean energy: in the steel business, it is drawn from hydro-sources, and in the sugar-energy business, from sugarcane bagasse. We also have a long-term agreement to obtain electricity from renewable sources.

In our steel business, we have six proprietary Hydro-electric Generation Centers (HGCs), responsible for around 18% of the energy used in the operations of Maringá Ferro-Liga (11.43 MW), at a lower than market-price cost. Electricity is responsible for around 26% of the costs in relation to the total amount of inputs for the ferroalloy production process.

By 2025, we plan to invest R\$ 50 million in increasing the capacity of our HGCs, in order to be less dependent on the market for our energy supply and thus reduce costs.

Being aware that droughts have a negative effect on the performance of our HGCs, as has been the case in recent years, we are looking for partners in the area of wind and photovoltaic energy generation projects.

In the ferroalloy manufacture furnaces, the implementation in 2020 of a software for the optimization of operations and preparation of cargo, also led to good energy efficiency results in 2021.

Maringá Ferro-Liga, together with the Brazilian Association of Large Industrial Energy Consumers and Free Consumers (Abrace), has undertaken studies and projects to achieve gains in energy efficiency, including the adoption of LED lighting at the factory and the acquisition of high-efficiency electric motors, thereby enabling a lower consumption of electricity. In 2022, amongst other actions, we plan on continuing with this replacement project, by implementing more efficient light bulbs, motors and compressors.

As part of this strategy to try out different energy sources, our stand-out project has been the co-generation of energy using sugarcane

at the Usina Jacarezinho by Marangá Energia, which began operations in 2021. With a capacity of 25 MW, it supplies 10 MW, for the mill's needs and another MW, to be exported and offered on the free energy market. To get an idea, Maringá Energia would be able to supply energy sufficient to fulfill the needs of a town of 33,000 inhabitants. For this operation, a new boiler, along with the turbine, reducer and generator were installed at the Jacarezinho plant in Paraná state. With greater efficiency in its use of steam, it requires less consumption of sugarcane bagasse, meaning the surplus bagasse can be sold.

Maringá Energia has a specialist team that implements preventative plans and periodically analyzes the structural projects and the short-term actions that are to be implemented, whilst also supporting the energy performance optimization initiatives, including them in a group of industrial projects at the Usina Jacarezinho. Amongst other projects implemented in 2021, the following initiatives are worthy of special mention:

- Installation of a steam pressure alleviation valve, to reduce the specific generation of steam in the boiler;
- Alteration of the loop on the steam control valves to improve the production of steam in the boiler, whilst using the same amount of fuel.

The adoption of automation processes in the field is another initiative designed to improve energy efficiency, since it allows us to monitor and evaluate expenses related to fuel and energy. With an online system, implemented by Solinftec in 2020, we are now able to remotely monitor the fleet of harvesting machines on the plantation, 24 hours per day.



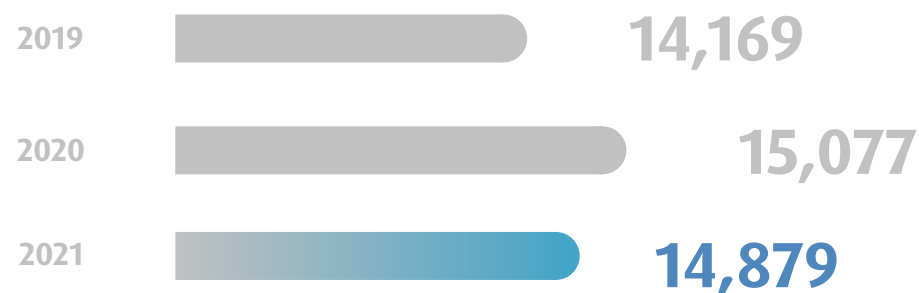


**STEEL**

## Total fuel consumption from non-renewable sources (Gj)

GRI 302-1

Diesel - Heavy Vehicle Fleets



### Total fuel consumption from renewable sources (Gj) GRI 302-1

	2019	2020	2021
Corredeira do Capote HGC	33,271	28,422	30,168
Salto da Barra HGC	38,664	36,436	35,122
Santa Maria HGC	53,330	43,142	47,722
São José HGC	20,340	17,485	17,687
Cachoeira da Poço Preto I HGC	49,363	59,414	49,730
<b>Total</b>	<b>194,968</b>	<b>184,899</b>	<b>180,429</b>

N.B.: In 2019, our energy generation was negatively affected by the drought, and in 2020 and 2021 it got worse with the continued lack of rainfall

### Energy consumed (Gj) GRI 302-1

Electricity (purchased)	1,145,750	1,422,112	1,223,024
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### Energy consumption outside of the organization (Gj) GRI 302-2

	798,581	762,266	787,996
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### Energy sold (Gj) GRI 302-1

	2019	2020	2021
Electricity	245,732	444,866	165,355

N.B.: At the end of 2019 and the beginning of 2020, production was halted in two furnaces, resulting in the sale of the surplus energy. Furthermore, we had accumulated previous amounts with the CCEE (Electricity Trading Chamber), which, due to non-compliance with the energy market, had stopped receiving revenue, meaning this transaction was performed in 2020.

### Total energy consumed (Gj) GRI 302-1

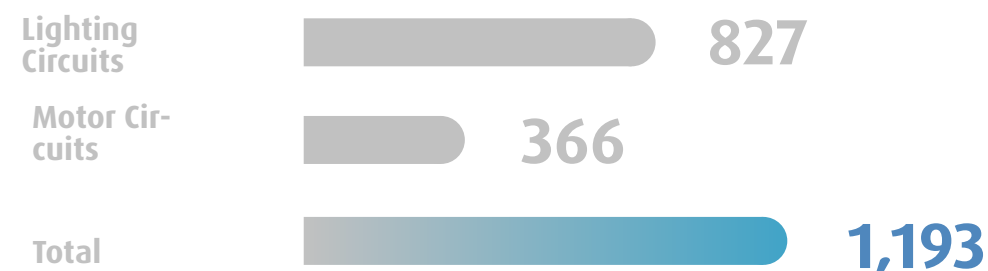
Fuels from non-renewable sources	14,169	15,077	14,879
Fuels from renewable sources	194,968	184,899	180,429
Energy consumed	1,145,750	1,422,112	1,223,024
Energy sold	245,732	444,866	165,355
<b>Total</b>	<b>1,109,155</b>	<b>1,177,222</b>	<b>1,252,977</b>

### Energy intensity (total consumption of energy/MWh generated in the period) GRI 302-3

Within the organization	10.53	9.95	10.12
Outside the organization	7.58	6.44	6.37
<b>Total</b>	<b>18.11</b>	<b>16.4</b>	<b>16.49</b>

1. The types of energy included in the energy intensity ratios within the organization reported above are restricted to fuels and electricity. Except for electricity which is not included in the calculations outside the organization.
2. The metric defined was 'tons of alloy'.

## Reductions in energy consumption achieved as a result of conservation and efficiency initiatives (Gj) in 2021 GRI 302-4



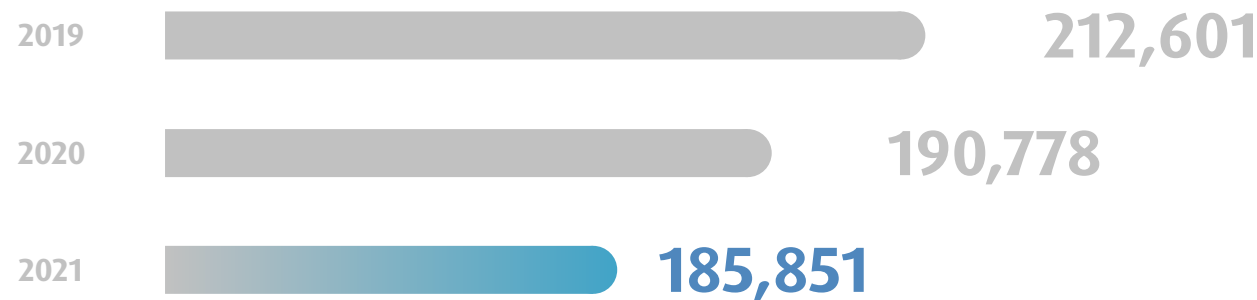




**SUGAR-ENERGY**

### Total fuel consumption from non-renewable sources (GJ) **GRI 302-1**

Diesel - Harvesting Structure



Total fuel consumption from renewable sources (GJ) <b>GRI 302-1</b>	2019	2020	2021
Biomass	1,348,750	1,289,708	1,125,151

Energy consumed (GJ) <b>GRI 302-1</b>	2019	2020	2021
Electricity (purchased)	11,970	8,174	8,218

Energy sold (GJ) <b>GRI 302-1</b>	2019	2020	2021
Electricity	-	-	1,069,993 <sup>1</sup>

1. There was no exportation in the preceding years.

Energy consumed outside the organization (GJ) <b>GRI 302-2</b>	2019	2020	2021
Diesel - Sugarcane conveyor belt	52,103	50,352	50,567

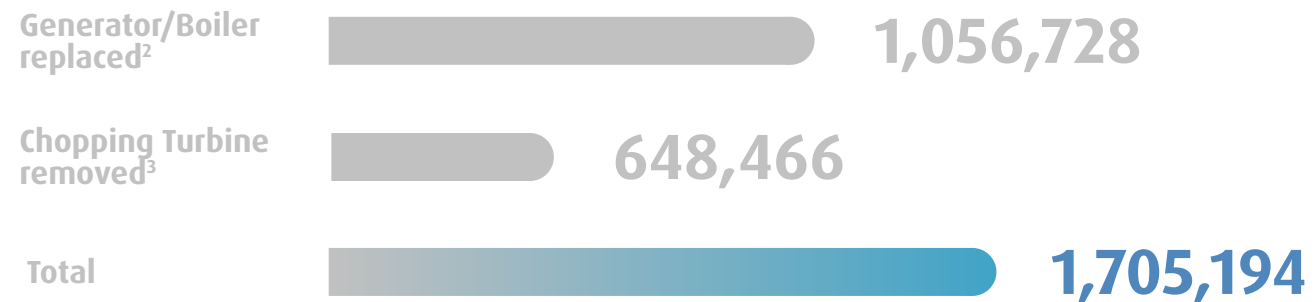
Total energy consumed (GJ) <b>GRI 302-1</b>	2019	2020	2021*
Fuels from non-renewable sources	212,601	190,778	185,851
Fuels from renewable sources	1,348,750	1,289,708	1,125,151
Energy consumed	11,970	8,174	8,218
Energy sold	0.00	0.00	1,069,993
<b>Total</b>	<b>1,573,321</b>	<b>1,488,660</b>	<b>249,227</b>

\* Maringá Energia only started operations in 2021, meaning there is no comparison with previous years available.

Energy intensity <sup>1</sup> <b>GRI 302-3</b>	2019	2020	2021
Within the organization	0.60	0.59	0.10
Outside the organization	0.02	0.02	0.02
<b>Total for the Organization</b>	<b>0.62</b>	<b>0.61</b>	<b>0.12</b>

1. The metric defined was 'sugarcane milling'.

### Reductions in energy consumption achieved as a result of conservation and efficiency initiatives (GJ) in 2021 **GRI 302-4**



1. The types of energy included in the energy intensity ratios within the organization reported above are restricted to fuels and electricity. The metric defined was 'tons of sugarcane'.
2. In 2020, the boiler produced 2.08 tons of steam per ton of bagasse. The new boiler installed produces 2.3 tons of steam per ton of bagasse. The turbo-generators produce 1MW, consuming 11 t of steam. The new turbo-generator installed consumes 6 t of steam.
3. The withdrawal from operation of the Chopping Turbine, due to the increase of chopped cane.



# Social

“

The producers from the region are small property holders, and with our technical and financial support they can manage to implement sugarcane crops using sustainable practices that generate economic prosperity in the region. We work untiringly to cement these partnerships that are so essential to our business.”

**Flavio Alvarenga**

Agricultural Production Suppliers Supervisor





# Social

In this chapter we discuss some of our efforts and social impacts, with special mention going to the following topics:

- Customer Relations and Satisfaction
- A Sustainable Supply Chain
- Local Development and Impact on the Community

## Customer Relations and Satisfaction

Maringá Group is committed to client satisfaction. We are constantly investing in new technologies and the development of efficient inputs. We have a structure that allows us to make our production more flexible and deliver top-quality products. Furthermore, we maintain a close relationship with our clients, ensuring long-lasting relations with a high level of satisfaction.

### STEEL

Every year, we undertake a measuring process to monitor the satisfaction of our clients in three areas (Product Quality, Deliveries and Service) and two sub-levels for each one (level of satisfaction and level of importance). The study is sent out to all our clients and production units in the domestic market.

Since the implementation of the Client Satisfaction quality policy, we have kept satisfaction above the target of 90%. From 2020 to 2021, there was a drop from 93% to 90% due to the high demand from the market and our limited production capacity, which

affected our ability to make deliveries more flexible and absorb a higher volume of sales to be able to meet our clients' demands in 2021.

### SUGAR-ENERGY

A number of different projects have been developed focusing on the satisfaction of Copersucar clients. The client satisfaction research questionnaire is sent to Copersucar every year. We are assessed by the Planning, Sustainability, Quality and Invoicing sectors. The measurement of client satisfaction in 2021 was 96.7%, an improvement on the 2019 figure, which was 83%. Actions focused on improved achievement of product specification parameters were implemented, together with work relating to the computerization of certain activities forming part of the product dispatch and timely return stage, in relation to the analysis of acceptance and handling of client complaints.

We are the only Copercucar mill certified in Halal management and meeting Islamic requirements, which also involves certain

good manufacturing practices, meaning we have been receiving a lot of positive attention globally.

### Food safety GRI 103-2, 103-3 | 416

Aware of our responsibility to the health of those consuming the sugar that we produce, we provide annual training for our employees in the area of procedures and good practices, especially those that work directly with ensuring that our mills maintain their certifications. We host a number of different activities, such as the Food Safety Week, audits, and inspections under the Pre-requisites Program, aiming to evolve in terms of our culture of food quality and safety and gauge the efficacy of our integrated management system.



# Sustainable supply chain

GRI 102-9, 103-2, 103-3 | 308 | 414

We are proud of the thorough process we employ for choosing our input and raw material suppliers and the close relationship we have with them. Throughout the entire ratification process, all of the Group's suppliers are required to send in documentation relating to the type of supply and relationship they have with us. This documentation is analyzed and, depending upon the type of commercial relationship, is periodically evaluated. In addition to the analysis performed during the ratification process, we also include specific clauses addressing social issues in our agreements and codes of conduct.

In our selection of iron ore suppliers for Maringá Ferro-Liga, we require all environmental licenses and the different documents relating to the relevant government bodies, such as the Brazilian Environmental Institute and Renewable Natural Resources (IBAMA), and the Ministry for the Environment. We also make visits to the exploration areas to inspect the sites and check that the process is being conducted properly. This process greatly limits our supplier

options, but being in compliance with Brazilian environmental legislation is non-negotiable for Maringá Group. As well as the manganese ore suppliers and freight contracting, which involve the greatest volumes, Maringá Ferro-Liga also contracts suppliers of other raw materials, inputs, services in general, MRO (maintenance, repairs and operations), food, etc. The process of registration, documentation validation, and ratification is performed through our suppliers portal. **GRI 102-9**

At the end of 2019, we contracted a company specialized in the management of third parties to support us in our operations, aiming to ensure that none of our suppliers fail to deliver the proper documentation, or find themselves in arrears regarding their labor liabilities.

For the Usina Jacarezinho, the suppliers involved in the production of white sugar undergo a rigorous ratification process, in line with the FSSC 22000 certification, that guarantees the safety of the foods we produce. The suppliers need to meet the specifications required, with

presentation of expert reports, certificates, licenses and declarations, as well as complete a questionnaire, classifying their service level proving them to be eligible to perform the supply service or not. They are also evaluated following each purchase and undergo annual audits.

We have 400 sugar cane producers, who form part of our network of Integrated Producers (PIC), and are responsible for the provision of 1.5 million tons of sugarcane. Despite the importance of this matter, we are fully aware of our commitment to sustainable development and require that as part of the agreement, the suppliers present their Rural Environmental Registration (CAR), to prevent planting in legal reserves and ensure the good practices that are further reinforced in personalized agreements and training sessions. In 2021, 100% of our new producers (12) were contracted based upon these environmental criteria, thanks to ongoing work that the company has been performing since 2018.





# Local development and impact on the community

GRI 103-2, 103-3 | 203, 413, 413-1

We pay close attention to the communities located near our Itapeva (SP) and Jacarezinho (PR) plants, mainly because many of our employees live and play a large part in them. We operate a number of social and cultural projects that have a positive impact on the people, using our own funds and through support from the Cultural Incentive Law, and we have been making donations of sugar and ethanol to entities in the community of Jacarezinho (PR) for more than ten years.

During the pandemic, Maringá Ferro-Liga donated two mechanical respirators to the Santa Casa de Itapeva General Hospital. The equipment was donated to help treat patients suffering serious cases of Covid-19 in the hospital's Intensive Care Unit (ICU).

The planning of the Social Responsibility Department is performed annually, with the aim of supporting projects that are aligned with the company's values, considering the most pressing demands (at that moment in time) facing the communities with which we are in contact through different channels of interaction.

## Projects supported GRI 203-1

### Guri Project

Considered to be the most extensive socio-cultural program in Brazil, the Guri Project offers extracurricular courses to children and adolescents aged between 6 and 18, in areas such as music for beginners, instrument repair, choir practice, music technology, plucked string instruments, rubbed strings, wind instruments, keyboards and percussion.

**Locations:** Ourinhos (SP), Itapeva (SP)  
588 participants

**Sum invested in 2021:** R\$ 200,000

### Registros do Amanhã

This project is an initiative providing extracurricular audiovisual workshops for young people aged between 13 and 17, focusing on issues such as the emotions, cognition, and creativity of young people in primary or secondary schools. The project aims to encourage professional training in the audiovisual sector.

A partnership with 'Goal Projects' and the Itapeva Town Council.

**Location:** Itapeva (SP)

100 participants

**Sum invested in 2021:** R\$ 229,000

### Bom de Nota, Bom de Dança

Through ballet and urban dance classes, this initiative (which translates as 'Good Grades, Good Dance'), encourages the students' personal development, by developing artistic and cultural expression and encouraging them to overcome the challenges they face. The project is grounded in cooperation, respect and solidarity, applied at school, at home and the project itself.

**Location:** Jacarezinho (PR)

140 participants

**Sum invested in 2021:** R\$ 182,000 (hiring of professionals, purchasing of uniforms and meals for the students).

## Some donations made in 2021

- Donation of an analytical balance to the Dr. Demétrio Azevedo State Technical School (Etec), in Itapeva (SP). This device is important for the students to be able to participate in practical chemical analysis classes in the school's laboratories;
- Usina Jacarezinho Clothing Campaign: 200 bed covers, 300 basic food hampers and a ton of clothes, including coats and shoes, were donated to the town's Social Welfare Center (Creas), to be distributed to families in situations of social vulnerability registered with the municipality's social welfare programs.
- In May 2021, with the drop in temperature, employees from Maringá Ferro-Liga, in Itapeva (SP), organized themselves to help the local community. Around 230kg of socks, bedding and clothing were collected and delivered to the town council for distribution to local institutions.



Registros do Amanhã



# People



We have been noting a significant advance in the maturity of Health and Safety within Maringá Group in recent years. Different actions have been performed with the aim of improving management, the handling of risks, leadership and other important initiatives for the development of personnel.”

**Audrei Pattete**  
Safety at Work Supervisor



# Our People

Find out more about our employees:

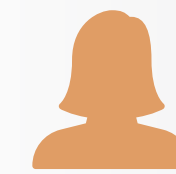
## People

In this chapter we will be presenting the efforts we have made and the impacts we have had with regard to the People with whom we have a relationship, especially relating to the following topics:

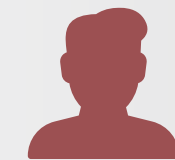
- Our People
- Personnel Development
- Diversity and Inclusion
- Fighting Covid-19
- Better Health for our Employees
- Safety at Work
- Accident Prevention Management
- Caring for our People

Maringá Group understands its responsibility as one of the most important sources of employment in the regions where we conduct our operations. As such, we value each and every one of our more than 1,800 employees, since they are multipliers of the Group's ethical values and principles, which ultimately have a positive effect on all the neighboring communities. We invest in training and qualifications to assist our employees develop their different talents, whilst paying special attention to health and safety, adopting a firm approach to risk management and rigid control in order to prevent accidents and occupational illnesses.

**GRI 403-1**



**Women**  
**13.0%**  
239

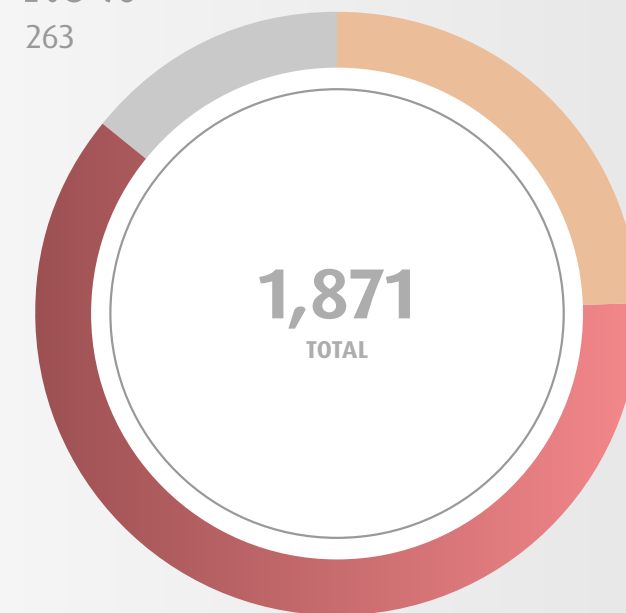


**Men**  
**87.0%**  
1,632

**> 50 years old**  
**14.0%**  
263

**< 30 years old**  
**24.7%**  
462

**30 to 50**  
**61.3%**  
1,146





# Personnel development

If our most important asset lies in our people, the care we show to our employees needs to be present in various areas, including continued development. And so that everyone can achieve their potential, we seek to offer the conditions for them to do so, through processes, systems and specific actions.

Assertive recruitment is the first step in this careful process, with the aim of bringing in people to the Group who are willing to align themselves with our culture and values, as well as contribute with new ideas and solutions and grow together with the Group. **GRI 103-2, 103-3 | 401**

Learning and excellence are two of the Group's values that are intrinsically connected to each other. We understand that developing our employees' skills is essential to ensuring better performance and preparing successors. In 2021, even within the context of the pandemic and a change in the model of in-person training, 1,654 training sessions were conducted involving 2,055 employees, whilst each

employee was permitted to participate in more than one session. The 'Leaders University', offering general training for managers and leaders, also continued its operations, with 57 participants in 2021.

The Group always aims to take full advantage of its internal human resources and considers employees' records to establish succession and make promotions internally. In 2021, not taking into account temporary hirings, we saw more promotions (289) than admissions (239). Considering all the employees, 17.4% were promoted in 2021.

In relation to remuneration, every position receives a salary that has been agreed upon according to the activity performed and market values, without any discrimination of gender or any other type. To ensure this, we constantly investigate salaries to be able to monitor our position within the market and ensure that our talents' remunerations are fair and up-to-date. **GRI 103-2, 103-3 | 202**

In 2021, we managed to make advances in our management performance project. With support from the IT department, all of the Individual Development Plans (IDP) started being processed and monitored using a specific system, as a means of facilitating the monitoring of the evolution of the actions implemented by each employee. Based upon this plan, employees are offered study scholarships and internal and external training courses, in accordance with our Educational Support and Training and Development policies. In 2021, we also concluded the 360° Management Performance process for all those at management level within Maringá Group. **GRI 404-2**

Our Talent Management Policy is focused on the development of people and is aligned with our business strategy. With this as the focus, we use tools such as remuneration policies, 180° and 360° management performance, recruitment and selection, '9box' evaluation, succession plans, obligatory internal and external training, and general development programs. The results of this virtuous circle of development are measured using strategic indicators. **GRI 103-2, 103-3 | 401, 404**

Amongst the different indicators monitored by the Human Resources department, one point of special attention is the turnover of employees, which was greater in 2021 when compared to other years. We are currently conducting a study to improve our employee retention and will be planning actions based upon the evaluations drawn from the Engagement Study, as well as other market research.

At the end of 2021, we performed an Engagement Study, which involved the participation of 95% of all eligible employees, meaning more than 1,600 individuals from different hierarchical levels.



## TRAINING

### Average number of employee training hours by employment category GRI 404-1

	2019	2020	2021
Middle Management	25.64	24.93	14.67
Coordination	35.63	17.00	27.38
Supervision	90.25	49.02	66.68
Leaders	40.61	32.57	25.32
Operational Staff	23.42	15.16	16.56
Administrative Staff	17.10	13.10	14.37
<b>Total</b>	<b>25.30</b>	<b>16.72</b>	<b>18.03</b>

### Average number of employee training hours by employment category GRI 404-1

	2019	2020	2021
Apprentices	-	8	1.8
Trainees	13	-	4
<b>Total</b>	<b>4.33</b>	<b>8</b>	<b>2.17</b>

N.B.: In 2020, due to the pandemic, there was a significant reduction in the number of training hours in general, mainly due to the fact that the majority of our workforce works at operational level which largely depends upon an in-person training model. Even so, by adapting our processes, we were able to slightly recover this situation in 2021.

## PERFORMANCE EVALUATION

### Employees receiving performance analyses by job category<sup>1</sup> GRI 404-3

	2019			2020			2021		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Coordination	16.67	-	<b>12.50</b>	50.00	100.00	<b>62.50</b>	20.00	-	<b>15.38</b>
Supervision	106.25	137.50	<b>112.50</b>	33.33	27.27	<b>31.82</b>	25.00	25.00	<b>25.00</b>
Leaders	78.82	50.00	<b>76.34</b>	4.94	37.50	<b>7.87</b>	21.35	10.00	<b>20.20</b>
Operational Staff	41.44	26.73	<b>40.37</b>	1.54	2.78	<b>1.63</b>	19.32	18.40	<b>19.25</b>
Administrative Staff	42.34	34.29	<b>39.23</b>	28.70	27.27	<b>28.18</b>	24.59	22.09	<b>23.56</b>
<b>Total</b>	<b>44.84</b>	<b>34.92</b>	<b>43.75</b>	<b>4.51</b>	<b>14.87</b>	<b>5.63</b>	<b>19.95</b>	<b>19.49</b>	<b>19.89</b>

<sup>1</sup> Information unavailable on the Board of Directors, Executive Board, apprentices and trainees.

N.B.: In line with our Management Performance policy, operational positions at entry level (the majority of those occupying positions in this segment) are not eligible for formal Performance Evaluation within the system. Furthermore, there is a mandatory interval of at least six months between promotion or admission and the application of the Performance Evaluation, which explains any possible variations.



Hugo Nazareno  
HR Operations Analyst



## EMPLOYMENT AND TURNOVER

### Contracted employees, by age group GRI 401-1

	2019		2020		2021	
	Nr.	Rate	Nr.	Rate	Nr.	Rate
Under 30	154	0.46	180	0.44	212	0.46
30 to 50	166	0.15	154	0.14	169	0.15
Over 50	20	0.07	35	0.12	16	0.06
<b>Total</b>	<b>340</b>	<b>0.20</b>	<b>369</b>	<b>0.20</b>	<b>397</b>	<b>0.21</b>

### Employees hired, by gender GRI 401-1

	2019		2020		2021	
	Nr.	Rate	Nr.	Rate	Nr.	Rate
Men	307	0.20	332	0.21	328	0.20
Women	33	0.17	37	0.19	69	0.29
<b>Total</b>	<b>340</b>	<b>0.20</b>	<b>369</b>	<b>0.20</b>	<b>397</b>	<b>0.21</b>

### Employees who left the company, by age group GRI 401-1

	2019		2020		2021	
	Nr.	Rate	Nr.	Rate	Nr.	Rate
Under 30	26	0.08	24	0.06	56	0.12
30 to 50	30	0.03	27	0.02	44	0.04
Over 50	1	0.003	5	0.02	4	0.02
<b>Total</b>	<b>57</b>	<b>0.03</b>	<b>56</b>	<b>0.03</b>	<b>104</b>	<b>0.06</b>

### Employees who left the company, by gender GRI 401-1

	2019		2020		2021	
	Nr.	Rate	Nr.	Rate	Nr.	Rate
Men	50	0.03	48	0.03	91	0.06
Women	7	0.04	8	0.04	13	0.05
<b>Total</b>	<b>57</b>	<b>0.03</b>	<b>56</b>	<b>0.03</b>	<b>104</b>	<b>0.06</b>

### Parental leave GRI 401-3

		2019	2020	2021
		Employees who were entitled to parental leave	Men	1,546
	Women	190	196	239
Employees who took leave	Men	43	53	34
	Women	6	4	4
Employees who returned to work, during the reporting period, after parental leave ended	Men	43	53	34
	Women	6	4	4
Employees who returned to work after parental leave ended and who were still employed 12 months after their return to work	Men	43	53	34
	Women	6	4	4
Rate of return	Men	1	1	1
	Women	1	1	1
Retention rate	Men	1	1	1
	Women	1	1	1

There was a total retention rate (100%) of employees who took paternity and maternity leave.



# Other indicators

## People

### Collaborators by type of employment contract and gender GRI 102-8

Type of agreement	2019			2020			2021		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Permanent	1,543	190	<b>1,733</b>	1,611	196	<b>1,807</b>	1,628	237	<b>1,865</b>
Temporary	3	-	<b>3</b>	1	-	<b>1</b>	4	2	<b>6</b>
<b>Total</b>	<b>1,546</b>	<b>190</b>	<b>1,736</b>	<b>1,612</b>	<b>196</b>	<b>1,808</b>	<b>1,632</b>	<b>239</b>	<b>1,871</b>

### Employees by type of employment contract and region GRI 102-8

Region	2019			2020			2021		
	Permanent	Temporary	Total	Permanent	Temporary	Total	Permanent	Temporary	Total
Sugar-energy (Jacarezinho/PR) - South	3	1,142	<b>1,145</b>	1	1,182	<b>1,183</b>	5	1,219	<b>1,224</b>
Steel (Itapeva/SP) - Southeast	-	577	<b>577</b>	-	612	<b>612</b>	-	588	<b>588</b>
Mining (Marabá/PA) - North	-	-	-	-	-	-	1	43	<b>44</b>
Corporate (São Paulo/SP) - Southeast	-	14	<b>14</b>	-	13	<b>13</b>	-	15	<b>15</b>
<b>Total</b>	<b>3</b>	<b>1,733</b>	<b>1,736</b>	<b>1</b>	<b>1,807</b>	<b>1,808</b>	<b>6</b>	<b>1,865</b>	<b>1,871</b>

### Employees by type of employment GRI 102-8

	2019			2020			2021		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Full time	1,543	184	<b>1,727</b>	1,612	189	<b>1,801</b>	1,629	230	<b>1,859</b>
Part time	3	6	<b>9</b>	-	7	<b>7</b>	3	9	<b>12</b>
<b>Total</b>	<b>1,546</b>	<b>190</b>	<b>1,736</b>	<b>1,612</b>	<b>196</b>	<b>1,808</b>	<b>1,632</b>	<b>239</b>	<b>1,871</b>

### Employees by age group GRI 102-8

	2019	2020	2021
Under 30	336	409	462
30 to 50	1,108	1,114	1,146
Over 50	292	285	263
<b>Total</b>	<b>1,736</b>	<b>1,808</b>	<b>1,871</b>



**Employees by employment category and gender. GRI 102-8**

	2019			2020			2021		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Middle Management	13	1	14	13	1	14	14	1	15
Coordination	6	2	8	6	2	8	10	3	13
Supervision	32	8	40	33	11	44	32	12	44
Leaders	85	8	93	81	8	89	89	10	99
Operational Staff	1,296	101	1,397	1,363	108	1,471	1,361	125	1,486
Administrative Staff	111	70	181	115	66	181	122	86	208
<b>Total</b>	<b>1,543</b>	<b>190</b>	<b>1,733</b>	<b>1,611</b>	<b>196</b>	<b>1,807</b>	<b>1,628</b>	<b>237</b>	<b>1,865</b>

**Employees by employment category and gender GRI 102- 8**

	2019			2020			2021		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Apprentices	2	-	2	1	-	1	3	2	5
Trainees	1	-	1	-	-	-	1	-	1
<b>Total</b>	<b>3</b>	<b>-</b>	<b>3</b>	<b>1</b>	<b>-</b>	<b>1</b>	<b>4</b>	<b>2</b>	<b>6</b>

**Individual participating in governing bodies. GRI 102-8**

	2019	2020	2021
Members of the governing bodies	12	12	15

**Permanent employees, by region**

**GRI 401-1**

	2019		2020		2021	
	Nr.	Rate	Nr.	Rate	Nr.	Rate
Sugar-energy (Jacarezinho/PR) - South	196	0.17	194	0.16	127	0.10
Steel (Itapeva/SP) - Southeast	144	0.25	174	0.28	223	0.38
Mining (Marabá/PA) - North	-	-	-	-	46	1.05
Corporate (São Paulo/SP) - Southeast	-	-	1.00	0.08	1	0.07
<b>Total</b>	<b>340</b>	<b>0.20</b>	<b>369</b>	<b>0.20</b>	<b>397</b>	<b>0.21</b>

**Employees who left the company, by region<sup>12</sup> GRI 401-1**

	2019		2020		2021	
	Nr.	Rate	Nr.	Rate	Nr.	Rate
Sugar-energy (Jacarezinho/PR) - South	27	0.02	32	0.03	64	0.05
Steel (Itapeva/SP) - Southeast	30	0.05	24	0.04	39	0.07
Mining (Marabá/PA) - North	0	0	0	0	0	0
Corporate (São Paulo/SP) - Southeast	0	0	0	0	1	0.07
<b>Total</b>	<b>57</b>	<b>0.03</b>	<b>56</b>	<b>0.03</b>	<b>104</b>	<b>0.06</b>

<sup>1</sup> Rate of voluntary resignations = Total number of employees who resigned/Full-time average for the year

<sup>2</sup> Effective average for the year: represents the length of time each employee is available according to the working hours stipulated in their employment agreement. For example, an employment agreement stipulating 44 hours per week represents a full-time agreement, whilst an employment agreement stipulating 22 hours per week (part time) represents half of a full-time agreement.

Due to the characteristics of the business and the aim of monitoring the reasons why we are losing employees, it was more useful for us to define the Rate of Resignations as the methodology employed. In the sugar-energy area, employees left their jobs at the end of the harvest period due to the end of operations, whilst in the steel business, the resignations from the RPU (Reducer Production Units) were of most interest in terms of monitoring.

## Diversity and Inclusion

GRI 103-2, 103,3 | 405, 405-2



Josimar Custódio  
Cleaning Assistant

Expanding diversity amongst the workforce is a priority for Maringá Group, which is why the issue has been included in our strategic planning. Forming teams with different characteristics and providing an environment that is accepting of everyone as they are opens up space for innovation, productivity and creativity. We have been increasing our efforts in this area since 2020, and in 2021 we started a Diversity and Inclusion Working Group, with principles guided by our Code of Conduct. The members act as multipliers who take the issues discussed at the meetings back to their different areas.

One of the initiatives in 2021 was to carry out a Diversity Census amongst employees, the results of which have helped us to prioritize the opportunities related to this issue. Amongst other actions, we provided training for our senior management on the issues of Inclusive Leadership and Unconscious Bias, and held conversation circles involving men and women to discuss the issue of “Sexual and Moral Harassment in the Work Environment”, which allowed people to provide examples that could be discussed and guided with the support of a psychologist.

We are also working with gender equality, aware that we need to increase the presence of women in the Group as well as amongst the leadership and in positions traditionally occupied by men. In 2021 we took a small step forward, with a 2% rise in the number of women employed by the group, who now occupy 12.8% of the positions. Some actions designed for the inclusion of women operate in the medium and long-term, considering that many of the Group’s positions are operational and there is an entire historical context and a complete shift in the paradigms that needs to be tackled.

We understand that incorporating diversity into the Group goes far beyond hiring people with different profiles. We face the challenge of incorporating the issue into the very culture of our companies. A specialist consultancy is assisting us with this work and, in 2021, it provided training for our management, as mentioned above. In November 2021, the Working Group also staged a campaign designed to highlight anti-racist behavior, involving talks and banners distributed across a number of channels.

In 2022, we intend to expand these development actions in all departments, with this involving increased investment in the issue. We will be forming minority groups, to listen to their demands and seek solutions. As part of the

campaigns, we intend to focus on priority topics, such as gender equality and the race issue. Finally, we also intend to develop Diversity and Inclusion indicators and investigate whether it is possible to establish targets for the future.



In 2021, we started a Diversity and Inclusion Working Group, guided by our Code of Conduct



Occupational Healthcare Team  
(Wanda, Luciana, Rósinéia and Larissa)

## Combating Covid-19

The Covid-19 pandemic continued on into 2021 and required us to keep up our efforts to reduce the risk of contamination amongst employees. Our team of doctors and nurses, who have a close relationship with those working throughout the Group, continued to fully dedicate themselves to working to minimize the impacts of the pandemic on the health of our employees. We established the practice of contacting those of our employees suffering from Covid-19 on a daily basis, as a means of monitoring their symptoms and providing health care advice.

We adopted a 'home office' system of working for our administrative departments. A large part of Maringá Group's functions, however, require on-site work, as is the case with operational activities. We therefore have a very rigid policy, that includes procedures for sterilizing the spaces and maintaining distance between people, in addition to basic care measures, such as wearing masks and using alcohol gel on one's hands. If an employee shows any signs of the illness, they are required to immediately isolate themselves, and this is also the case if any family members with whom they reside are diagnosed with the illness. In the event of suspected contamination, Covid-19 detection tests are performed in accredited laboratories.



The company offers its employees transportation in the form of private buses, however we also offer another option involving traveling to the work location by private car and receiving financial reimbursement to cover the fuel costs.

Our campaigns designed to raise awareness and encourage vaccination against Covid-19 are considered to have been successful, since 100% of the Group's employees were vaccinated in 2021.

Due to the global health crisis, we became concerned over the mental health of our employees and, in response to this, we have included online psychology consultations in our benefits packages, free of charge for the first five sessions. There was a great demand for this service and it was highly praised by those employees who participated. We will be taking this feedback into account in assessing whether the service can continue to be offered on a permanent basis.

To mitigate the impact of our employees' social isolation when working from home, we once again started up the 'Coffee and a Chat' initiative, but this time online, bringing together employees for a relaxed conversation on subjects that can go beyond work-related matters. In 2021, we discussed issues such as mental health, wellbeing and women's participation in the work market. Providing a healthy and safe environment is a priority for Maringá Group.



# Better Employee Health

GRI 403-3, 403-6, 403-10

## 1,635

employees and their families vaccinated against flu

We have occupational health care teams at our business units, which include specialist occupational doctors and an infirmary. The Usina Jacarezinho also has two ambulances ready to provide services to the employees.

This team is responsible for performing exams when employees enter and leave the company, as well as periodically during their period of employment. The team also monitors those workers involved in high-risk activities, with regular blood pressure and alcohol-level tests, and also manages health campaigns designed to help with the prevention and reduction of work-related musculoskeletal disorders (WRMD), amongst others, focused on preventing work-related illnesses. Another function of the occupational health care team is to provide reactive services (first aid), in response to possible incidents, as well as outpatient services.

## 100%

of the Group's employees were vaccinated against Covid-19 in 2021

### ANTI-SMOKING CAMPAIGN

Whilst still working to tackle Covid-19, the health care team continued promoting better-health programs. One of these was the anti-smoking campaign, which, since 2020, has managed to help 27 out of a total of 29 participants at the Usina Jacarezinho stop this habit. At Maringá Ferro-Liga the program is still under way. The initiative, proposed by the Ministry of Health, involves talks, discussions and, in some cases, interventions with medication.

## 27

employees at the Usina Jacarezinho stopped smoking as a result of the anti-smoking campaign

### 'VIVA MAIS' CAMPAIGN

The 'Viva Mais' campaign, at the Jacarezinho unit, provides ongoing encouragement to pursue physical activities and eat more healthily. The employees have access to resources such as advice from a nutritionist, membership to a gym, and encouragement to take part in activities monitored by physical education professionals. By following a three-month plan, 24 participants managed to lose a total of 66 kg in 2021.

## 24

Participants lost a total of 66 kg



# Safety at Work

GRI 103-2, 103-3 | 403, 403-1

Health and safety are material topics that have been identified in the company’s materiality investigation, meaning that this is a priority issue in relation to the Maringá Group’s stakeholders. Recognizing this, we understand that we need to raise our management of health and safety at work to the highest level.

In 2019, Maringá Ferro-Liga implemented the ISO 45001 Occupational Health and Safety Management System. Since then, internal and external audits have been undertaken to ensure compliance with the certification requirements and evolution in the promotion of the health and safety of our employees and third parties, aligned with the organization’s strategic planning.

At the Usina Jacarezinho, we map the risks inherent in the processes which our employees need to be protected from. As such, we have established strong standards for each activity that puts them at risk. Our health and safety management system involves safety

audits (designed to verify both ourselves and third parties), an inspection checklist covering machines, vehicles, trucks, operations permissions for activities involving risks, incident investigations, incident investigations concerning vehicles, qualitative and quantitative assessments of environmental risks, studies of dangers and risks, expert reports on Work Environment Conditions, management of CIPA and CIPATR, and an emergency team, amongst others. The legal requirements are based upon Regulatory Norms (RNs) and the ISO 45001 regulation.

As a result of these efforts, October marked two years without any accidents involving time off work at Maringá, whilst August marked 2,000 days without any accidents involving time off work at the Usina Jacarezinha.



## R\$ 4.36 million

invested by the Group in Occupational Health & Safety in 2021

## ISO 45,001: 2019

At Maringá Ferro-Liga, we are certified with the Occupational Health and Safety Management international regulation, created to prevent work-related injuries and accidents and to provide safe and healthy work spaces

2,000 days

## without accidents involving time off work

at the Jacarezinho/PR unit

## Yellow May

We have implemented this road safety campaign at all our units





Daily Safety Discussions (DSD) within the Inputs Sector

## Accident prevention management

**GRI 403-2, 403-7**

Maringá Group has adopted the Hazard Survey and Risk Assessment (LPAAR in the Portuguese acronym) as its main tool for identifying hazards, evaluating risks and establishing control measures aimed at eliminating and/or reducing risks to acceptable levels. This tool guides the implementation of high standards in Health and Safety, behavioral tools in work routines, and investments in physical structures such as engineering controls, thus making the workplace that much safer. Presentation of the documentation that proves compliance with the Health and Safety Legal Requirements is necessary for workers employed by partner companies.

As part of the LPAAR, we analyze the risk according to its seriousness, frequency and prevention measures. Once the impact of the risk has been established, the proper ways of addressing it are implemented, with priority going to critical and substantial risks. This process

involves investments, that initially go towards implementing means of eliminating the risks, and replacing and implementing new engineering controls and administrative measures, and adopting Personal Protective Equipment (PPE). We are committed to creating a healthy environment, with the ability to foresee emergencies and establish the means to promptly handle them.

We also assess activities at the worksite itself, monitoring the routine operations and maintenance work, and suggesting any safety measures that should be implemented. These actions are outlined in the 'Operating Procedures' (OP), 'Safety Service Orders' (SSOs) and 'Safety Manuals', whilst we use the 'Work Permit' for non-routine operations. We have implemented a process of mitigation of risks through the identification of hazards, performed by the employees themselves. This information is included in management spreadsheets.

Following this, measures are proposed for the elimination and reduction of risks and these are monitored through until the situation has been resolved.

The organization encourages its workers to take an active role in reporting situations they experience on a daily basis and which could become a possible incident. The reports are subdivided into the levels of risk: near-accidents; incidents with material damages; improper behavior; positive approaches to safety, participation and evaluation of Daily Safety Dialogs (DSD); and emergency, amongst others. The employees are also supported by the Safety at Work team, an ombudsman channel that receives complaints, suggestions and accusations, that can be submitted anonymously, or posted, in writing, in suggestion boxes at the front gates of the plants.



# Caring for our People

GRI 403-4, 403-5

Discussions with the workers are performed as part of studies during Health and Safety at Work promotion campaigns, as well as during engagement studies, through the receipt of proactive reports, during Daily Safety Discussions (DSDs), during the presentations and meetings of the Internal Accident Prevention Commission (CIPA/CIPATR), within the department

commissions, at the monthly Safety Meetings, and within the Leadership Academy. The workers are consulted every day about the conditions in the workplace, during the interventions for the drafting of the Work Permit, delivery of the PPE, training and simulations.

All the members of the steel business' senior management meet with the Health and Safety Commissions from each department (Production, Quality, Maintenance, Energy, Engineering, Forestry) at least once a month . The Management Commission meets every week, with this meeting involving all the managers and the Industrial Management Board.

A worker's first training session occurs when they first join the company, or in other words, training starts straightaway. At this time, the normative requirements of a collective nature are addressed, for example, the policy of consequences and care for safe travel around the company's properties, amongst other issues, as well as the obligatory requirements of the specific business unit where they will be working.

A worker's first training session occurs when they first join the company, or in other words, training starts straightaway

## Steel

The Occupational Health and Safety Management System was implemented in 2019 and has since proven its efficiency in ensuring the workers' health and physical safety. As the first certification cycle drew to a close (2020), the steel business reported its lowest accident rates ever, beating all previous records. From then on, the target has been to consolidate and improve the indicators even more, reducing the frequency rates and levels of seriousness of the accidents.

The incidents registered over recent years concern defects in systemic and behavioral obstacles. The company is continually investing in actions focused on remedying these types of conditions, encouraging the active participation of all in paying attention to behaviors.

### Accidents at Work GRI 403-9

	2019	2020	2021
Number of hours worked	1,509,786.79	1,483,130.28	1,507,775.16
Number of fatalities as a result of work-related injury	0	0	0
Rate of fatalities as a result of work-related injuries	0	0	0
Number of serious work-related injuries (excluding deaths)	14.00	1.00	2.00
Rate of serious work-related injuries (excluding deaths)	9.27	0.67	1.33
Number of recorded work-related injuries (including deaths)	14.00	1.00	2.00
Rate of recorded work-related injuries (including deaths)	9.27	0.67	1.33

## Sugar-energy

In 2021, there was an increase in the number of incidents, compared to 2020, mainly due to accidents in the cutting and squeezing processes. Upon investigating this, we noted that procedures had been disobeyed and tools had been misused in the performance of the activities. Due to this situation, we developed

a safety campaign, and implemented it throughout the company, focusing on hand care and the importance of using PPE and the proper tools. We also reevaluated work procedures and implemented safety measures.

### Accidents at Work GRI 403-9

	2019	2020	2021
Number of hours worked	2,532,647.24	2,479,259.11	2,571,846.41
Number of fatalities as a result of work-related injuries	0	0	0
Rate of fatalities as a result of work-related injuries	0	0	0
Number of serious work-related injuries (excluding deaths)	5.00	2.00	7.00
Rate of serious work-related injuries (excluding deaths)	1.97	0.81	2.72
Number of recorded work-related injuries (including deaths)	5.00	2.00	7.00
Rate of recorded work-related injuries (including deaths)	1.97	0.81	2.72



José Junior  
Occupational Safety  
Technician

Ricardo Alves  
Welder



# Performance

“

It is highly gratifying to see the good results that Maringá Group has had over recent years, during the extremely complex period of economic crisis that Brazil and the rest of the world has been experiencing. We have expanded our business portfolio with Maringá Energia and made advances in our financial operations, with a focus on diversifying and optimizing results. The Group has been managing its capital responsibly, auspiciously and assertively, thereby ensuring good financial performance.

**Pâmela Pimentel**  
Financial Analyst





## 'Valor 1000' annual report

Maringá Group was recognized in four of the eight indicators used to determine the Best Companies in the Sugar and Ethanol Sector. We took first place in Interest Coverage; fifth in Asset Turnover; seventh in Profitability; and eighth in Sustainable Growth.



EBITDA of **R\$ 841.6**  
million

# Our results

GRI 103-2, 103-3 | 201, 201-1

2021 was notable in the history of the Maringá Group for our strong performance, since there was a high demand for our products both here in Brazil and elsewhere in the world. In a market that is extremely favorable for commodities, including those that we produce, we are in a position to take advantage of this positive wave thanks to the ongoing improvement of management and processes, as well as the investments made over recent years. The high exchange rate has contributed to the positive scenario, both in the steel and sugar-energy industries.

The production of steel in Brazil reached historic levels, which affected the Group due to the rising price of ferro-alloy on the international market during this period. In the sugar-energy sector, our manufacture of ethanol increased, with 95 million liters produced, the main product in this area being anhydrous ethanol. We took full advantage of our product mix, which allows us to focus our production more on ethanol or more on sugar, taking into consideration price parity.

However, if on the one hand we had a market context that was favorable to our business, on the other, we were unfortunately only able to adapt ourselves to the high level of demand for which we were prepared. Over recent years, the Group

has fully dedicated itself to operational efficiency, investing in personnel development, control of processes and technology, and striving for product and client diversification. Our efficient governance structure allows us to make important decisions quickly and pro-actively, whilst the business areas are becoming more collaborative and working intensively together, showing themselves to be fully integrated.

But this does not mean that we did not face obstacles in 2021. On the contrary, there were a lot. In the steel business, we faced supply disruptions and increased prices for certain inputs and raw materials, such as manganese and metal cokes, both domestically and globally.

Also in 2020, we realized that there was an enormous demand for alloys once industrial activities were back in operation, and we found it very difficult to meet this demand. We had structured an operation in advance that planned for the importation and resale of alloy, and we were able to meet the needs of 10% of the market with these resales. We believed that the majority of companies would not have sufficient structure to be able to perform these importation and we were proven correct in this understanding. This sales operation, the fruit of our

market intelligence, increased our gross revenue by R\$ 15.8 million.

In the sugar-energy agricultural area, we achieved excellent results, despite climate problems involving drought and frost, as well as wildfires. We did not experience losses, although the Center-West region saw a drop in milling of 13% in relation to the 20/21 harvest. We can attribute the positive result to the reasonable rainfall and good agricultural management, the result of extensive investment made over recent years in technology and personnel development.

Maringá Energia began operations in April 2021, not only to meet the demands of Usina Jacare-zinho, but also to export energy as of June, an operation that had an EBITDA of R\$ 38.8 million in 2021. This sum is more than half the entire investment (approximately R\$ 70 million) made by the company, the Group and the National Bank for Economic and Social Development (BNDES).



Our financial statements can be found at [site](#).

**MARINGÁ GROUP**

	2019	2020	2021
Cash Generation <sup>1</sup> (R\$ thousands)	213,535	341,393	687,169
Funds (R\$ thousands)	135,559	181,846	430,904

1. Generation of Operational Cash prior to Financial Results, Income Tax and Social Contributions

**STEEL**

	2019	2020	2021
Alloy Production (thousands of tons)	84.0	94.8	98.8
Bio-reductant Production (thousands of tons)	41.3	38.7	32.1
Amount of Alloy Sold (thousands of tons)	82.5	98.6	111.6
Alloy Unit Cost (R\$/t)	3.1	2.9	4.0
Net Margin (%)	15.2	21.5	34.2
Net Profit (R\$ thousands)	57,153	106,977	330,037

**SUGAR-ENERGY**

	2019	2020	2021
Milled Sugar (millions of tons)	2,616.3	2,526.3	2,425.2
Sugar Production (thousands of tons)	132.4	191.7	167.9
Ethanol Production (millions of LITERS)	130.0	88.7	94.7
ATR (%)	93.1	93.9	93.5
Net Margin (%)	12.8	19.3	29.0
Net Profit (R\$ thousands)	47,067	85,918	182,882

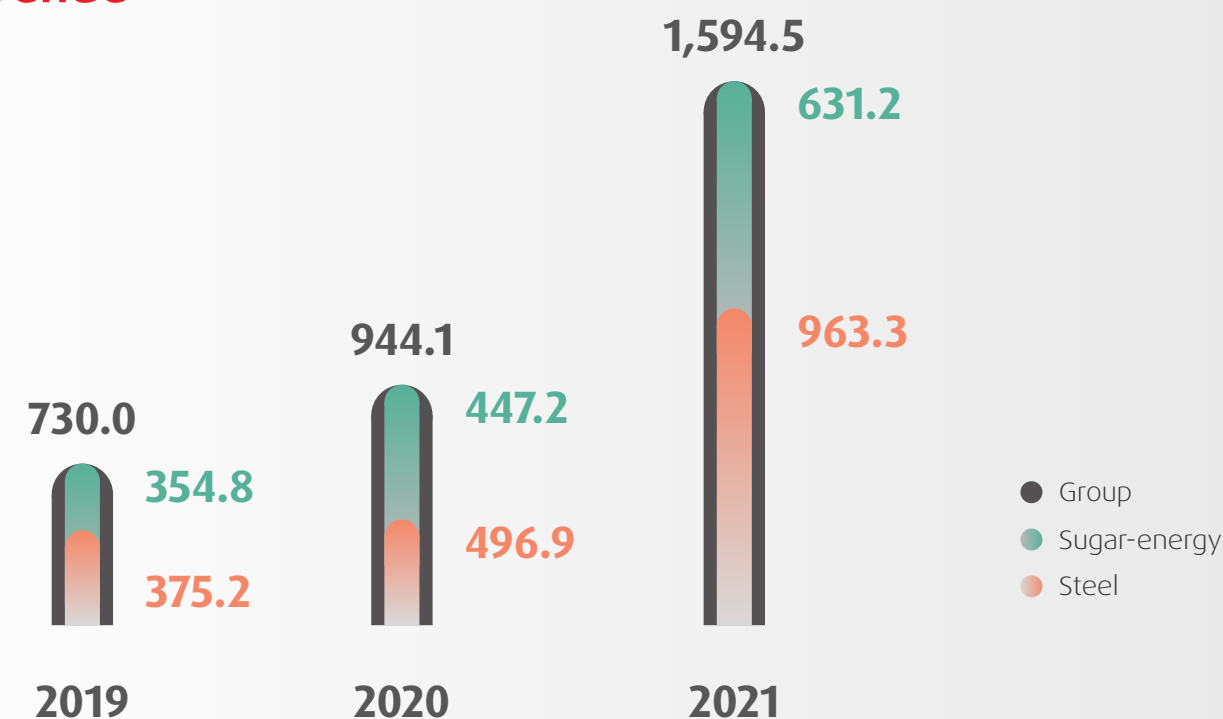
In 2021, we achieved 0.06 in the net debt to EBITDA ratio, the best ever in our history.

We also managed to improve our sugar-energy debt profile, through rescheduling, with a diversified debt portfolio, which, allied to our minimum cash policy, eliminates, with surplus, any possible risk of rollover. We have 20% of the debt in capitals market operations, which requires constant communication with the investor and strong governance, which has had very positive effects for the Group.

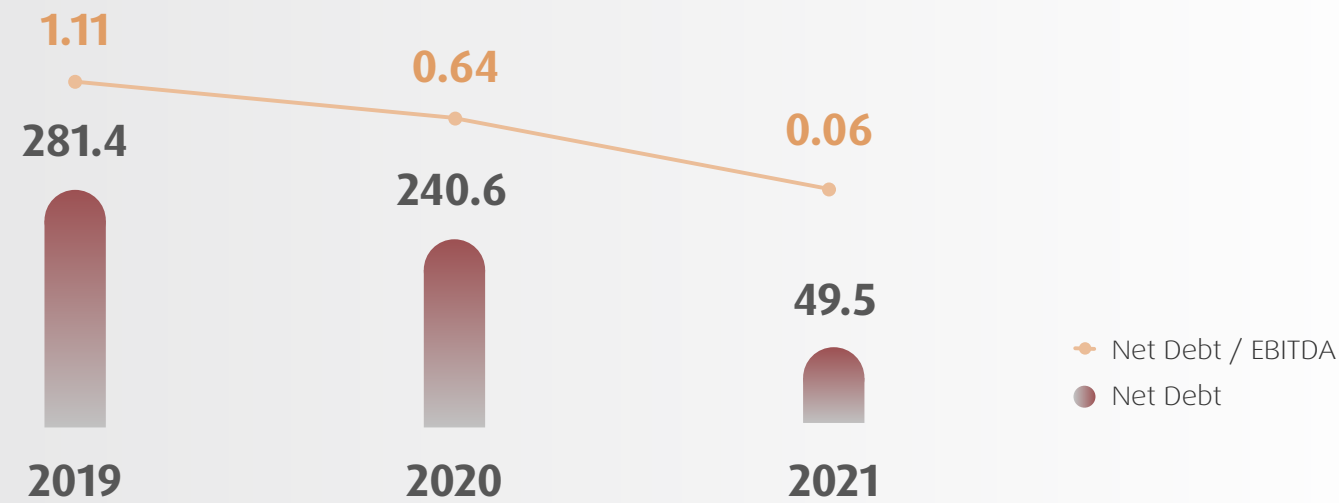
Another highlight was the improvement of the derivatives policy, which allowed us to fix the prices of sugar and energy, as well as future foreign currency exchanges, through NFDs, these being important elements to be able to attribute greater predictability to our results. Actions focused in improving our Hedge policy will be structured over the course of 2022.

**Net Revenue**

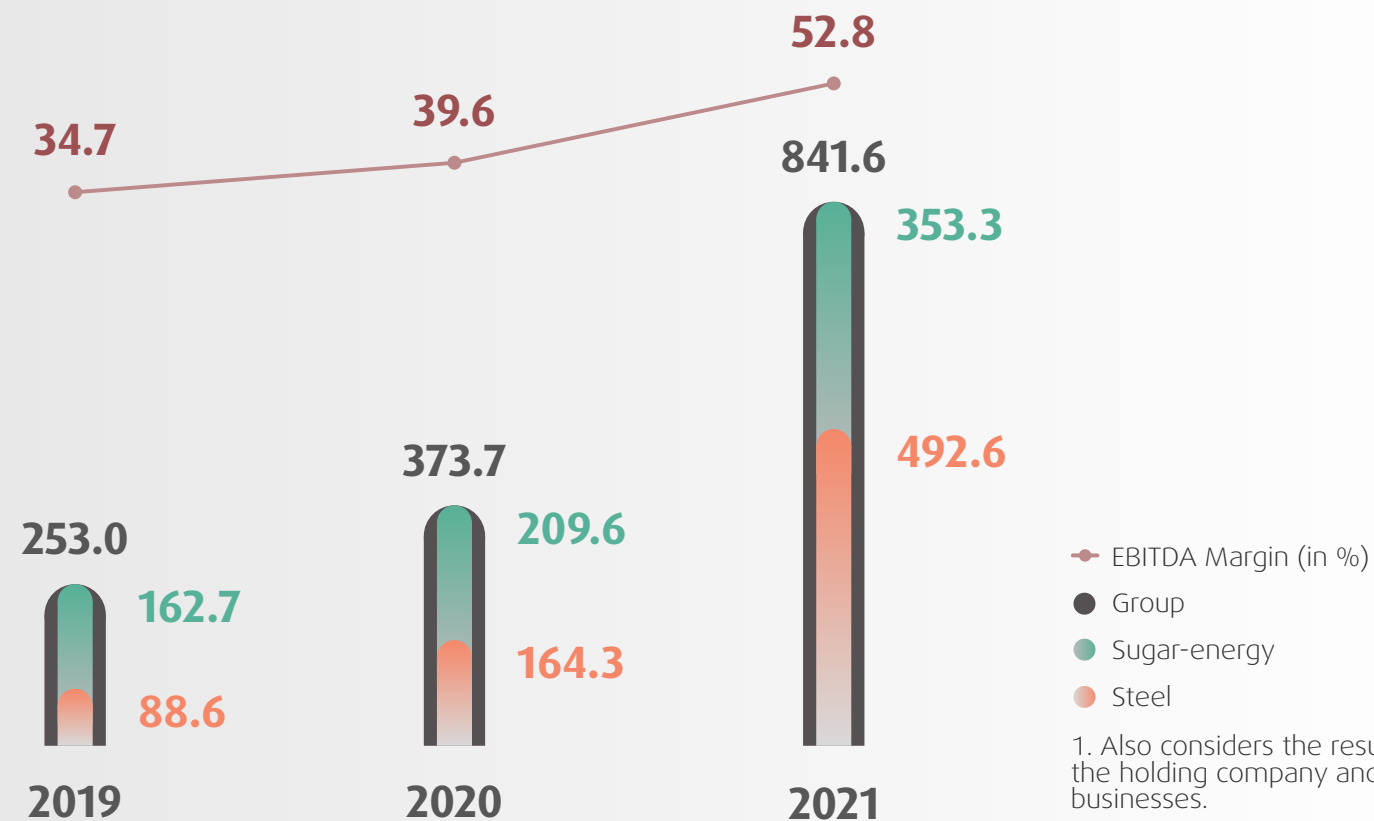
R\$ millions



## Net Debt (R\$ millions) and Net Debt/ EBITDA



## EBITDA<sup>1</sup> (R\$ millions) and EBITDA margin (%)



1. Also considers the results of the holding company and other businesses.

## AVS (thousands of Reais) GRI 201-1

	2019	2020	2021
Revenue	1,899,524	1,150,589	873,446
Inputs Acquired from Third Parties	(903,214)	(639,371)	(500,761)
<b>Gross Added Value</b>	<b>996,310</b>	<b>511,218</b>	<b>372,685</b>
Depreciation, amortization and depletion	(98,218)	(74,980)	(74,535)
<b>Net added value produced by the Company</b>	<b>898,092</b>	<b>436,238</b>	<b>298,150</b>
Transferred added value	66,648	34,382	17,549
<b>Total Added Value to be Distributed</b>	<b>964,740</b>	<b>470,620</b>	<b>315,699</b>
<b>Distribution of added value</b>	<b>(964,740)</b>	<b>(470,620)</b>	<b>(315,699)</b>
Personnel	(123,140)	(107,166)	(102,006)
Taxes, charges and contributions	(229,016)	(74,642)	(40,878)
Remuneration of third-party capital	(116,716)	(102,173)	(79,901)
Remuneration of net equity	(495,868)	(186,640)	(92,914)



Sheila França  
Boiler Assistant



# GRI content index



Manganese ore chip smelter for X-ray analysis





# GRI content index

GRI 102-55

## General disclosures

GRI Standards	Content	Page/URL	Omission	SDGs
<b>GRI 101: Foundation 2016</b>				
GRI 101 has no Content				
<b>Organizational profile</b>				
	<b>102-1</b> Name of the organization	04, 11		
	<b>102-2</b> Activities, brands, products and services	11, 13, 15		
	<b>102-3</b> Location of headquarters	12		
	<b>102-4</b> Location of operations	12		
	<b>102-5</b> Ownership and legal form	04		
	<b>102-6</b> Markets served	13		
<b>GRI 102: General disclosures 2016</b>	<b>102-7</b> Scale of the organization	12		
	<b>102-8</b> Information on employees and other workers	52, 53		8, 10
	<b>102-9</b> Supply chain	45		
	<b>102-10</b> Significant changes to the organization and its supply chain	12		
	<b>102-11</b> Precautionary principle or approach	32, 33		
	<b>102-12</b> External initiatives	19		
	<b>102-13</b> Membership of associations	19		
<b>Strategy</b>				
GRI 102: General disclosures 2016	<b>102-14</b> Statement from senior decision-maker	09		



GRI Standards	Content	Page/URL	Omission	SDGs
<b>Ethics and integrity</b>				
GRI 102: General disclosures 2016	102-16 Values, principles, standards and norms of behavior	12		16
<b>Governance</b>				
GRI 102: General disclosures 2016	102-18 Governance structure	21		
<b>Stakeholder engagement</b>				
	102-40 List of stakeholder groups	24		
GRI 102: General disclosures 2016	102-41 Collective bargaining agreements	In 2021, the percentage of employees represented through collective bargaining agreements dropped from 100% (the same as in previous years) to 97.65%, due to the hiring of new employees for our Mining business.		8
	102-42 Identifying and selecting stakeholders	40		
	102-43 Approach to stakeholder engagement	43		
	102-44 Key topics and concerns raised	25		
<b>Reporting practices</b>				
	102-45 Entities included in the consolidated financial statements	04		
	102-46 Defining report content and topic boundaries	03		
	102-47 List of material topics	25		
	102-48 Restatements of information	N/A		
	102-49 Changes to the report	N/A		
GRI 102: General disclosures 2016	102-50 Reporting period	January to December 2021		
	102-51 Date of most recent report	2020 (although the 2021 AR is the first to adopt GRI Standards)		
	102-52 Reporting cycle	Annual		
	102-53 Contact point for questions regarding the report	04		
	102-54 Claims of reporting in accordance with the GRI Standards	This report was prepared in accordance with GRI "Essential" Standards		
	102-55 GRI content index	66		
	102-56 External assurance	N/A		



## Material topics

GRI Standards	Content	Page/URL	Omission	SDGs
<b>Economic performance</b>				
	<b>103-1</b> Explanation of the material topic and its boundary	25		
<b>GRI 103: Management approach 2016</b>	<b>103-2</b> The management approach and its components	26		
	<b>103-3</b> Evaluation of the management approach	26		
<b>GRI 201: Economic performance 2016</b>	<b>201-1</b> Direct economic value generated and distributed	62, 64		8, 9
<b>Presence in the market</b>				
	<b>103-1</b> Explanation of the material topic and its boundary	25		
<b>GRI 103: Management approach 2016</b>	<b>103-2</b> The management approach and its components	26, 49		
	<b>103-3</b> Evaluation of the management approach			
<b>Indirect economic impacts</b>				
	<b>103-1</b> Explanation of the material topic and its boundary	25		
<b>GRI 103: Management approach 2016</b>	<b>103-2</b> The management approach and its components	26, 46		
	<b>103-3</b> Evaluation of the management approach	46		
<b>GRI 203: Indirect economic impacts 2016</b>	<b>203-1</b> Infrastructure investments and services supported	46		5, 9, 11
<b>Anti-corruption</b>				
	<b>103-1</b> Explanation of the material topic and its boundary	25		
<b>GRI 103: Management approach 2016</b>	<b>103-2</b> The management approach and its components	26		
	<b>103-3</b> Evaluation of the management approach	26		



GRI Standards	Content	Page/URL	Omission	SDGs
	<b>205-1</b> Operations assessed in terms of the risks relating to corruption	The internal audit evaluated all the main operations in relation to general risks, including corruption risks. Furthermore, our Code of Conduct recognizes and makes contingency plans for this aspect of corruption, and we have an Ombudsman channel in order to receive reports relating to situations that could breach our ethics, as well as cases of corruption and disrespect.		16
<b>GRI 205: Anti-corruption 2016</b>	<b>205-2</b> Communication and training on anti-corruption policies and procedures		Information not available As part of the implementation of the Code of Conduct, we worked to communicate and train the Maringá Group's employees concerning aspects of ethics, as well as aspects of ethics focused on the Senior Management. In 2022, ongoing training on aspects of Ethics and Compliance will be developed for the Senior Management.	16
	<b>205-3</b> Confirmed incidents of corruption and actions taken	There were no confirmed cases of corruption in 2021.		16
<b>Anti-competitive behavior</b>				
	<b>103-1</b> Explanation of the material topic and its boundary	25		
<b>GRI 103: Management approach 2016</b>	<b>103-2</b> The management approach and its components	26, 27		
	<b>103-3</b> Evaluation of the management approach	27		
<b>GRI 206: Anti-competitive behavior 2016</b>	<b>206-1</b> Legal actions regarding anti-competitive behavior, violations of anti-trust and monopoly	27		16
<b>Energy</b>				
	<b>103-1</b> Explanation of the material topic and its boundary	25		
<b>GRI 103: Management approach 2016</b>	<b>103-2</b> The management approach and its components	26		
	<b>103-3</b> Evaluation of the management approach	26, 39		
	<b>302-1</b> Energy consumption within the organization	40, 41		7, 8, 12, 13
<b>GRI 302: Energy 2016</b>	<b>302-2</b> Energy consumption outside the organization	40, 41		7, 8, 12, 13
	<b>302-3</b> Energy intensity	41, 41		7, 8, 12, 13
	<b>302-4</b> Reduction of energy consumption	41, 41		7, 8, 12, 13



GRI Standards	Content	Page/URL	Omission	SDGs
<b>Biodiversity</b>				
<b>GRI 103: Management approach 2016</b>	<b>103-1</b> Explanation of the material topic and its boundary	25		
	<b>103-2</b> The management approach and its components	26, 34		
	<b>103-3</b> Evaluation of the management approach	34		
<b>GRI 304: Biodiversity 2016</b>	<b>304-1</b> Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	35		6, 14, 15
	<b>304-2</b> Significant impacts of activities, products, and services on biodiversity	The nature of significant direct and indirect impacts on biodiversity relates to the construction or use of manufacturing plants, mines, and the transport infrastructure; Pollution (introduction of substances that do not naturally occur in the habitat from point and non-point sources)		6, 14, 15
	<b>304-3</b> Habitats protected or restored	34		6, 14, 15
	<b>304-4</b> Red List species and national conservation list species with habitats in areas affected by the operations of the organization	During the period reported there was no evidence of any event involving animals in the region, nor did Maringá Group identify any animals that are included in the IUCN Red List or the national conservation list.		6, 14, 15
<b>Emissions</b>				
<b>GRI 103: Management approach 2016</b>	<b>103-1</b> Explanation of the material topic and its boundary	25		
	<b>103-2</b> The management approach and its components	26, 37		
	<b>103-3</b> Evaluation of the management approach	37		
<b>GRI 305: Emissions 2016</b>	<b>305-1</b> Direct (Scope 1) greenhouse gas (GHG) emissions	38		3, 12, 13, 14, 15
	<b>305-2</b> Indirect (Scope 2) greenhouse gas (GHG) emissions	38		3, 12, 13, 14, 15
	<b>305-4</b> Intensity of greenhouse gas (GHG) emissions	38		13, 14, 15
	<b>305-5</b> Reduction of greenhouse gas (GHG) emissions	38	Information not available in relation to the steel business	13, 14, 15



GRI Standards	Content	Page/URL	Omission	SDGs
<b>Environmental compliance</b>				
<b>GRI 103: Management approach 2016</b>	<b>103-1</b> Explanation of the material topic and its boundary	25		
	<b>103-2</b> The management approach and its components	26, 32		
	<b>103-3</b> Evaluation of the management approach	32		
<b>GRI 307: Environmental compliance 2016</b>	<b>307-1</b> Non-compliance with environmental laws and regulations	In 2021, Maringá Group did not receive any notifications regarding environmental infractions due to non-compliance with laws and/or environmental regulations.		16
<b>Supplier environmental assessment</b>				
<b>GRI 103: Management approach 2016</b>	<b>103-1</b> Explanation of the material topic and its boundary	25		
	<b>103-2</b> The management approach and its components	26, 44		
	<b>103-3</b> Evaluation of the management approach	44		
<b>GRI 308: Supplier environmental assessment 2016</b>	<b>308-1</b> New suppliers selected following consideration of environmental criteria	In 2021, the percentage of new suppliers contracted based upon environmental criteria was 1.07%.		
	<b>308-2</b> Negative environmental impacts in the supply chain and actions taken	The content of this indicator (number of suppliers assessed for environmental impacts) relating to both business units, amounts to a total of 294 suppliers, with 30 being contracted by the steel business and 264 by the sugar-energy business. No suppliers which cause either real or potential environmental impacts were identified in any of the units.		
<b>Employment</b>				
<b>GRI 103: Management approach 2016</b>	<b>103-1</b> Explanation of the material topic and its boundary	25		
	<b>103-2</b> The management approach and its components	26, 48		
	<b>103-3</b> Evaluation of the management approach	48		
<b>GRI 401: 2016 employment</b>	<b>401-1</b> New hirings and employee turnover	50, 52		5, 8, 10
	<b>401-3</b> Parental leave	50		5, 8



GRI Standards	Content	Page/URL	Omission	SDGs	
<b>Occupational Health &amp; Safety</b>					
<b>GRI 103: Management approach 2016</b>	<b>103-1</b> Explanation of the material topic and its boundary	25			
	<b>103-2</b> The management approach and its components	26, 56			
	<b>103-3</b> Evaluation of the management approach	56			
<b>GRI 403: Occupational health and safety 2019</b>	<b>403-1</b> Occupational health and safety management system	47, 56		8	
	<b>403-2</b> Hazard identification, risk assessment and incident investigation	57		3, 8	
	<b>403-3</b> Occupational health services	55		3, 8	
	<b>403-4</b> Worker participation, consultation, and communication on occupational health and safety	58		8, 16	
	<b>403-5</b> Training for workers in occupational health and safety	58		8	
	<b>403-6</b> Promotion of worker health	55		3	
	<b>403-7</b> Prevention and mitigation of impacts on the health and safety of the work directly tied to business relations	57		8	
	<b>403-8</b> Workers covered by an occupational health and safety management system	100% of employees are covered by an occupational health and safety management system based upon legal requirements and/or recognized standards/directives, which has been audited internally; workers who are not employed, but whose activities and/or location of work is/are covered by the organization have not been included due to the fact that we do not have access to their data.			8
	<b>403-9</b> Work-related injuries	58, 59			3, 8, 57, 16
	<b>403-10</b> Work-related illnesses	For the implementation of technical programs focused on workers' health, the data are compiled by means of definition of Homogeneous Exposure Groups (HEGs), whereby we select those groups whose work presents the same type and period of exposure, and characteristics, as that of any agent liable to suffer work-related illnesses. Following definition of the HEGs, quantitative and/or qualitative evaluation methodologies are applied, and a hierarchy of risks is implemented as a means of mitigating or eliminating exposure.			



GRI Standards	Content	Page/URL	Omission	SDGs
<b>Training and education</b>				
<b>GRI 103: Management approach 2016</b>	<b>103-1</b> Explanation of the material topic and its boundary	25		
	<b>103-2</b> The management approach and its components	26, 48		
	<b>103-3</b> Evaluation of the management approach	48		
<b>GRI 404: Training and education 2016</b>	<b>404-1</b> Average hours of training per year per employee	49		4, 5, 8, 10
	<b>404-2</b> Programs for the improvement of employees' skills and career development assistance	48		8
	<b>404-3</b> Percentage of employees who receive regular performance and career development reviews	49		5, 8, 57, 10
<b>Diversity and equal opportunity</b>				
<b>GRI 103: Management approach 2016</b>	<b>103-1</b> Explanation of the material topic and its boundary	25		
	<b>103-2</b> The management approach and its components	26, 53		
	<b>103-3</b> Evaluation of the management approach	53		
	<b>405-2</b> Ratio of the basic salary and remuneration received by women and that received by men		Information not available	5, 8, 57, 10
<b>Local communities</b>				
<b>GRI 103: Management approach 2016</b>	<b>103-1</b> Explanation of the material topic and its boundary	25		
	<b>103-2</b> The management approach and its components	26, 45		
	<b>103-3</b> Evaluation of the management approach	45		
<b>GRI 413: Local communities 2016</b>	<b>413-1</b> Operations with local community engagement, impact assessments, and development programs	45		





GRI Standards	Content	Page/URL	Omission	SDGs
<b>Social assessment of suppliers</b>				
<b>GRI 103: Management approach 2016</b>	<b>103-1</b> Explanation of the material topic and its boundary	25		
	<b>103-2</b> The management approach and its components	26, 44		
	<b>103-3</b> Evaluation of the management approach	44		
<b>GRI 414: Social assessment of suppliers 2016</b>	<b>414-1</b> New suppliers selected following consideration of social criteria	None selected		5, 8, 57, 16
	<b>414-2</b> Negative social impacts in the supply chain and actions taken	Across its supply chain, the company did not identify any negative impact in the suppliers' social area. We did not identify any negative social impact involving our suppliers and nor did we receive any accusations, whilst nor did we have to terminate any contracts as a result of social issues. Maringá Group does not monitor the social impact of new suppliers, and there are still no scheduled plans to start such monitoring.		
<b>Client health and safety</b>				
<b>GRI 103: Management approach 2016</b>	<b>103-1</b> Explanation of the material topic and its boundary	25		
	<b>103-2</b> The management approach and its components	26, 43		
	<b>103-3</b> Evaluation of the management approach	43		
<b>GRI 416: Consumer health and safety 2016</b>	<b>416-1</b> Assessment of the health and safety impacts of product and service categories	As a means of understanding what improvements can be made, health and safety assessments are made in 100% of the leading product and service categories.		
	<b>416-2</b> Incidents of non-compliance concerning the health and safety impacts of products and services	There were no complaints which occasioned fines or notifications, nor any relating to issues considered non-critical for health safety, or in other words, without the occurrence of physical, chemical or biological dangers in our final product or involving non-compliance with legislation.		16



GRI Standards	Content	Page/URL	Omission	SDGs
<b>Marketing and labeling</b>				
<b>GRI 103: Management approach 2016</b>	<b>103-1</b> Explanation of the material topic and its boundary	External Communication is managed by the Corporate Communication area, which forms part of the Human Resources department. We monitor performance using tools made available by the networks themselves, following which we then develop monthly reports.		
	<b>103-2</b> The management approach and its components			
	<b>103-3</b> Evaluation of the management approach			
<b>GRI 417: Marketing and labeling 2016</b>	<b>417-1</b> Requirements for product and service information and labeling	In the steel business, the label provides information mainly related to the substances contained in the products and which could have some sort of environmental or social impact. It also provides guidance on the safe use of the product or service. In the sugar-energy area, 100% of our white crystal sugar fulfills the demands relating to labeling.		12
	<b>417-2</b> Incidents of noncompliance concerning the information and labeling of products and services	Maringá Group experienced no incidents of noncompliance.		16
	<b>417-3</b> Incidents of noncompliance concerning the communication of <i>marketing</i>	Maringá Group has never received any negative return concerning the activities it has communicated about relations with the community, the environment, or information already distributed concerning the business.		16
<b>Client Privacy</b>				
<b>GRI 103: Management approach 2016</b>	<b>103-1</b> Explanation of the material topic and its boundary	25		
	<b>103-2</b> The management approach and its components	26, 27		
	<b>103-3</b> Evaluation of the management approach	27		
<b>GRI 418: Client Privacy 2016</b>	<b>418-1</b> Substantiated complaints concerning breaches of customer privacy and losses of customer data	27		16



# Credits

## Coordination | Strategy and Management Office

Adriano Bertoldo, Denis Campos, Gabriele Rodrigues, Mayara Antoniollo, Sidnei Santos and Talita Rodrigues

## Editorial Staff

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## Materiality matrix

rpt estratégia - grupo report

## Consultancy on GRI standards, content, layout and design

rpt sustentabilidade - grupo report

## Revision | Executive and Communication Board

Condurme Aizzo, Eduardo Lambiasi, Luis Pessoa, Rodrigo Junqueira and Renatta Giraldi

## Photography

Cravo Junior, Denis Campos, Gabriele Rodrigues, Matheus Vieira, Ronaldo Couto, Talita Velozo and the Maringá Group's archive. Cover: Employee Leandro Oliveira

Report approved by the Board of Directors on 06/30/2022

## Social Media | Maringá Group



Arch of Furnace V

