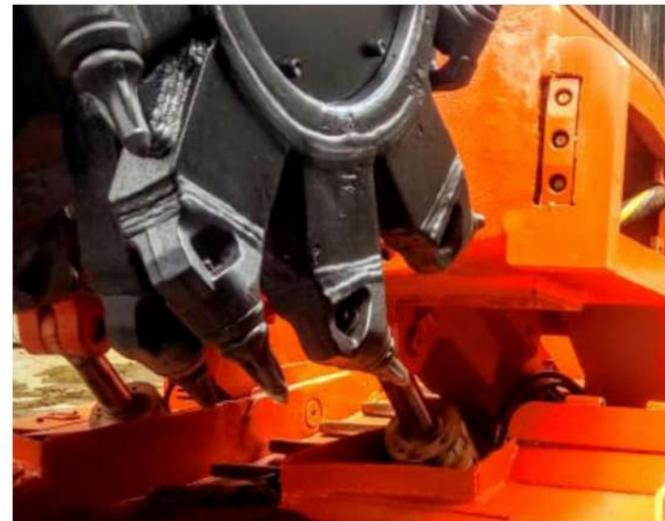


# 2020

## SUSTAINABILITY REPORT



*Commitment to the development of  
Southern Santa Catarina.*



**RIO DESERTO**  
SYNERGY WITH YOU

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## MESSAGE FROM THE MANAGEMENT



### 2020: CHALLENGES AND OVERCOMING

*There was a lack of hugs, but bonds were created. The smiles were hidden, but the eyes intensified with brightness and truth. This was 2020, a year marked by the Covid-19 pandemic, challenges and overcoming.*

Rio Deserto, understood as an essential activity for the supply of mineral coal for the generation of electric energy, did not stop at any time. But at home or at work, adaptations were necessary.

Using masks and gel alcohol, measuring body temperature, following protocols and respecting guidelines such as social distancing have become essential for everyone's safety. Since the beginning of the pandemic, the company has respected and meets the standards stipulated by the World Health Organization (WHO), in order to mitigate the risk of transmission in the workplace.

Reinventing and reorganizing have become, more than ever, part of our actions. Throughout the year, we tried to maintain projects, programs, support communities and families, continue to dedicate ourselves to sustainability, the environment, and the development of the South of Santa Catarina. Even with the distance, we unite even more heartily, reinforcing solidarity and attention to those who walk with us.

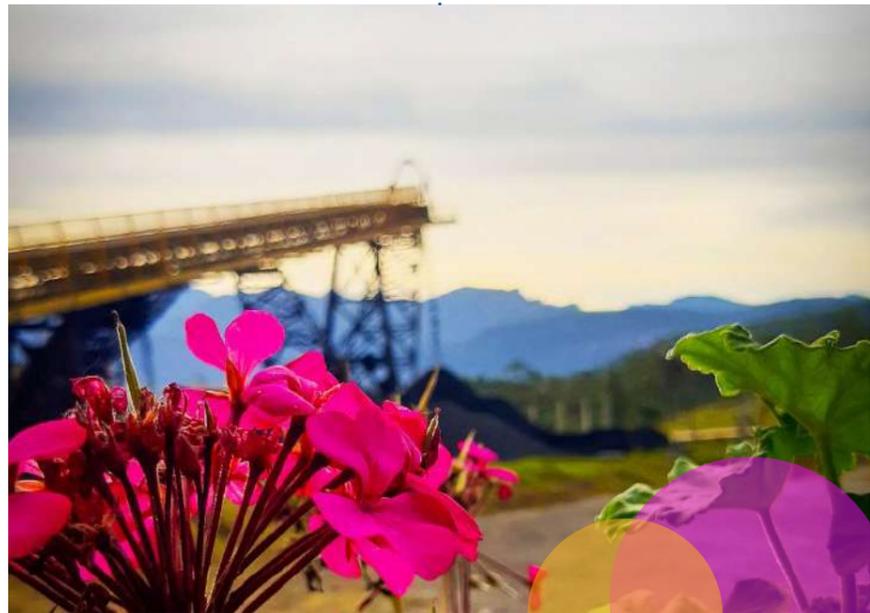
Even in times of so much uncertainty, we are confident and hopeful about the Covid-19 vaccination. We continue with all the necessary care, providing assistance and closely monitoring the health of all employees and their families. We believe in science and technology and are truly optimistic that better times will come.

This Sustainability Report presents Rio Deserto's main achievements throughout 2020. The following pages contain concrete results from projects and initiatives that reinforce the company's integrity, transparency and commitment to ethical, environmental, social and economic principles . Good reading!

**HEITOR AGENOR ZANETTE**  
**GIOVANNI PAGNAN ZANETTE**  
**VALCIR JOSÉ ZANETTE**  
Rio Deserto Administrators

**JOÃO GABRIEL PAGNAN ZANETTE**  
**EDUARDO NETTO ZANETTE**  
Financial and Administrative Advisers

# RIO DESERTO



## INNOVATION AND SUSTAINABILITY

Evaluating paths, seeking solutions and improving procedures has been Rio Deserto's strategy in pioneering changes in the globalized scenario of the current market. At the company, innovation and sustainability go hand in hand with teamwork and valuing people.

Rio Deserto encourages education, is attentive to the environment, technology, health, safety and quality in all processes. Invest in equipment and training. Wins awards, contributes to communities and social projects. It is also a signatory of the National Movement SDG (Sustainable Development Goals) of Santa Catarina.

Rio Deserto's business covers several segments. The main one is coal, used to generate electricity. Provides mineral solutions for the ceramic, glass and steel industries. It also works with filtering and forestry. It is also present in agribusiness, with inputs for plant strengthening and animal nutrition.

**Mineral Coal** is a source of safe electricity, employment and income.

### Business

Supply of mineral inputs.

### Vision

To be a national reference in the supply of mineral inputs.

### Mission

Contribute to national development through the extraction, industrialization and commercialization of mineral products, transforming mineral resources into solutions.

## Values

Rio Deserto's behavior reflects the thinking towards the country's socioeconomic development. All actions are taken in the direction of growth, both for the company and for employees, customers, suppliers, communities and partners in general.

### > Innovation

Technological improvement, development and valorization of the employee's initiative, in search of continuous results for organization.

### > Commitment

With customers, employees, suppliers, inspection agents, communities and safety.

### > Ethic

Respect the principles, policies and practices defined by the company, regulated by law and by society, working with honesty, professionalism and transparency.

### > Socio-environmental Responsibility

Contribute to the conscious and sustainable development of society, favoring the full exercise of citizenship and respecting the environment.

## MANAGEMENT POLICY

Rio Deserto establishes the Management Policy:

### 1. Clients

Customer satisfaction, which are the reason for existence, identifying and meeting the applicable requirements.

### 2. Employees and Suppliers

Development of employees and suppliers.

### 3. Health and Safety

Compliance with legal and other requirements, adoption of procedures to prevent and reduce injuries, incidents, accidents and occupational diseases, eliminating hazards and reducing risks.

### 4. Environment

Respect for legal and other requirements, protecting the environment, adopting procedures to prevent pollution, especially related to water resources and solid waste.

Continuous improvement in the effectiveness of the Quality Management System, environmental performance, health and safety is guaranteed through compliance with the Management Policy, consultation and participation of employees who make up the company.

## SUSTAINABLE DEVELOPMENT GOALS



### SIGNATORY COMPANY

Rio Deserto is a signatory company of the SDG National Movement of Santa Catarina. The seal attests that the company has been incorporating the 17 Sustainable Development Goals into its business, carrying out various practical actions that drive the development and well-being of the communities where it operates. The company is the first coal company in southern Santa Catarina to become a signatory of the National Movement SDG SC.

In addition, it is also an articulator, mobilizer and supporter of challenges to themes related to sustainability, in favor of the 17 SDGs. He approves of such causes, as he believes in organizations that seek to unite representatives from all areas of society to do good in defense of the planet and life. It also understands that everyone can contribute – directly or indirectly – so that societies move towards sustainability and so that the harmony between economic development, social inclusion and nature conservation is no longer just a utopia.

The National Movement SDG Santa Catarina is a social movement, without

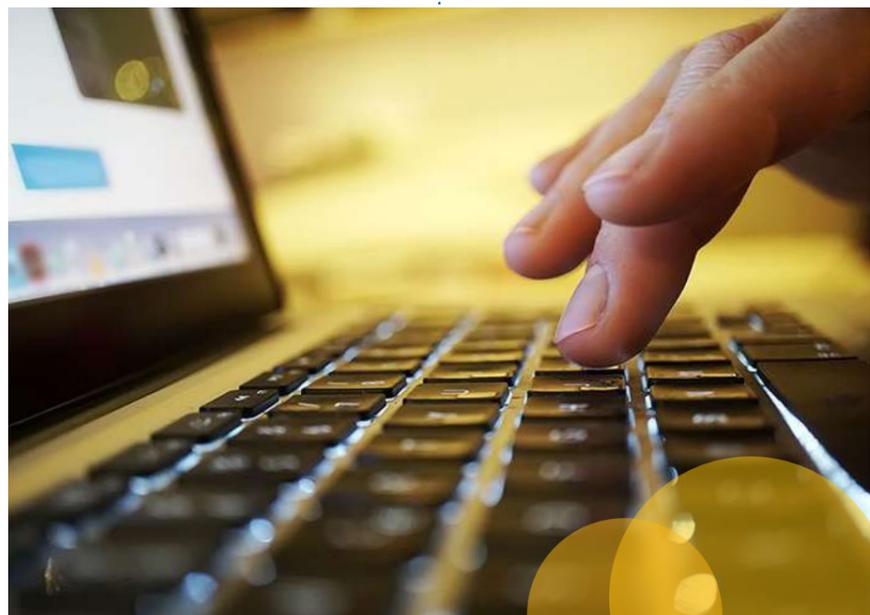
economic purposes, made up of volunteers, of a non-partisan, plural and ecumenical character, with the purpose of contributing to the improvement of the quality of life of Santa Catarina citizens, seeking to build an inclusive society, environmentally sustainable and economically balanced.

It also aims to fulfill the commitments of the 2030 Agenda for Sustainable Development, approved by the member countries of the United Nations (UN), during the 70th General Assembly held in September 2015, in New York.

Currently, Rio Deserto stands out for meeting the following SDGs:



## LGPD



### DATA PROTECTION

In compliance with the General Law for the Protection of Personal Data (LGPD), in 2020 Rio Deserto launched a Privacy Portal. On the website, documents such as the Privacy Policy, Cookie Policy, Terms of Use and Privacy Request Form are available.

The purpose of the Privacy Portal is to record the company's commitment to security and transparency in the treatment of personal data, as provided for in current legislation. The page aims to detail how Rio Deserto Group collects, uses, shares and protects personal data of its users (via the website), as well as the existing alternatives for the treatment of this data.

In addition to the Privacy Portal, other measures were adopted by Rio Deserto Group with a view to protecting personal data.

## UNITS



### Criciúma (SC)

- Central Office
- Extraction Unit Novo Horizonte Mine
- RD Engineering
- Oriental Wealth Management Ltda.

### Treviso (SC)

- Extraction Unit Cruz de Malta Mine

### Içara (SC)

- Extraction Unit 101 Mine

### Correia Pinto (SC)

- Unit Correia Pinto

### Lages (SC)

- Unit Lages

### Cocal do Sul (SC)

- RD São Geraldo
- Floresul Forestry and Reforestation Sul Ltda

### Capivari de Baixo - Consórcio (SC)

- Unit Capivari de Baixo

### Siderópolis (SC)

- Boarding Box
- Metallurgical Unit

### Urussanga (SC)

- Laboratory Division
- Industrial Complex

## RDLAB LABORATORY REFERENCE

Rio Deserto Laboratory is now RDLAB Reference Laboratory. The renewal reflects the advance in the interpretation of results and in innovation. It also consolidates the laboratory as a third-party analysis service provider.

The visual identity has some peculiarities, such as the symbology of molecular connections (representing the research and analysis carried out) and the formation of the diamond (associated with the geometric figure that is also part of the Rio Deserto logo). The blue and purple colors, in turn, bring aspects of modernity and technology, representing security, confidence, intelligence and stability.

With over four decades of history and professionals trained to carry out chemical and physical-chemical analyzes in general, the Rio Deserto Laboratory, now RD LAB Reference Laboratory, is registered with the Ministry of Agriculture, Livestock and Supply (MAPA) as a provider of laboratory analysis services in the field of fertilizers, inoculants and correctives. It also has ISO 9001 certification (Quality Management System) since 2003 and an Environmental Laboratory Recognition Certificate for Water and Effluent Analysis from the Environmental Institute of Santa Catarina (IMA).



**RDLAB**  
LABORATORY  
REFERENCE

## COVID-19



### FACING COVID-19

*In December 2019, the Chinese Center for Disease Control and Prevention (CDC) identified an outbreak of respiratory disease among workers at a food market in Wuhan (capital of Hubei province), later touted as a new Coronavirus, called SARS- CoV-2. The disease spread rapidly in Hubei province and spread throughout the world. Covid-19 was declared a pandemic by the World Health Organization (WHO) on March 11, 2020.*

With the declaration of the Covid-19 pandemic, in March 2020, Rio Deserto quickly established a Coronavirus Situation Committee, with the purpose of watching and monitoring the disease in the world and, mainly, coordinating internal actions in the various fields performance of the company. Administrators, advisors, superintendents, managers and coordinators from various sectors came together to seek the best strategies.

A Contingency Plan was also drawn up, supervised by the company's medical department, with the objective of guiding the maintenance of safe and healthy environments and standardizing actions at all Rio Deserto units to maintain activities. The document was updated throughout 2020, as well as being revised in 2021, as new knowledge is acquired and the epidemiological scenario of the disease changes in Brazil.

Considered an essential activity, due to the supply of mineral coal for the generation of electric energy, Rio Deserto did not stop activities at any time during the pandemic. However, it adopted all the recommended measures and standards established by official agencies, with a view to preventing the spread of the virus and preserving the health of all.

### 3 GOOD HEALTH AND WELL-BEING



*Rio Deserto employees and their families can count on all the necessary healthcare assistance. During the Covid-19 pandemic, the activities of the medical department intensified.*

## ACTIONS AND INNOVATIONS TAKEN DURING THE COVID-19 PANDEMIC

The new coronavirus pandemic required many adaptations from companies and professionals. It is clear that several actions taken in 2020 will continue to be used in the post-pandemic period as well. Below are listed some of the main initiatives and innovations that became part of Rio Deserto during Covid-19.

### Procedure in the units

At Rio Deserto units, the use of a mask has become mandatory, and Personal Protective Equipment (PPE) is indispensable. The company started to make fabric masks available to all employees, including a replacement system.

Several procedures were also adapted to the routine, including constant hand hygiene with alcohol gel, body temperature measurement at the beginning of shifts and safe distance between employees.

In cases where it was possible, the Home Office model was adopted, mainly for employees aged over 60 years. The work was facilitated by the Information Technology (IT) team, which contributed to creating a favorable field for employees to efficiently carry out their tasks. Now, practically all sectors are already working face-to-face, but the company is aware that it is possible to adopt the form of remote work, if necessary.

In March 2020, Rio Deserto hired two professionals (nursing technicians), with knowledge and experience in conducting screening in hospitals.

Both remained in the extraction units for a period of 30 days, providing the necessary services at the beginning of each shift, with support in orientation and service campaigns to answer questions.

Guidance and awareness of the necessary care for the prevention of Covid-19 also gained space during the Daily Health and Safety Dialogue (DDSS). A quick conversation, which precedes the start of work at the Rio Deserto production units.

Some sectors of Rio Deserto, such as the medical department, Human Resources and communication, started to work even closer to the employees, being present in the production units, reinforcing the company's responsibility and the importance of everyone respecting and adopting the measures to contain Covid-19. The change had a very positive effect, ensuring confidence to workers to continue in their functions, with all the necessary care. This proximity should also prevail in the post-pandemic period, as a way to keep the entire Rio Deserto family informed about the company's main actions.

To reinforce the need for care against the coronavirus, posters were placed at many points in the units, highlighting the importance of using masks, washing hands frequently, the constant use of alcohol gel and avoiding greetings and crowding. A manual was also prepared with practical tips to help employees and family members in possible cases of isolation.

During the pandemic, employees with symptoms or who had any contact with a positive case for Covid-19 were immediately removed from work. Rio Deserto's medical department monitored each situation on a daily basis, providing guidance to employees and families. Testing (antigen, PCR and

serology), as well as monitoring and face-to-face assistance, ensured more safety for everyone. The company also signed an agreement with a clinic specialized in pulmonology, offering better support to employees in case of need.

### Gel Alcohol Totems

To reinforce the prevention of Covid-19, gel alcohol totems were made available at the Rio Deserto units, with a dispenser activated by a pedal. The structures, personalized with the company's logo, were made at the Metallurgical Unit and placed in strategic locations, where there is more circulation of employees. Several containers with alcohol gel were also installed in the units, facilitating frequent hand hygiene.



### Distribution of masks for employees and families

Since April 2020, Rio Deserto has made masks available to employees. Periodically, four fabric masks are distributed to each employee and two to employees who already use a respirator such as PPE – Personal Protective Equipment (such as underground miners). By the end of 2020, Rio Deserto had delivered 8,752 protective masks. Of this amount, 1,628 were allocated to family members who live with employees.



### Awareness

Awareness of Covid-19 prevention was reinforced throughout 2020 at the Rio Deserto units. During the conversations, emphasis was placed on the general measures and practices adopted by the company, procedures with suspected cases (employee with the flu and/or cold) and assistance to employees with a positive diagnosis. In addition, the importance of each person doing their part, inside and outside the company, to avoid contamination was also reinforced.

The awareness actions highlighted Rio Deserto's objectives during the Covid-19 pandemic: preserving the health and safety of all employees, maintaining activities and jobs, and mitigating the risk of transmission in the units.



### Training for supervisors

Supervisors of Rio Deserto's production units received training to act during the new coronavirus pandemic. The objective was to reinforce the importance of each leader with the teams in confronting Covid-19 and also in carrying out activities in general. The orientation was given by the coordinator of nursing work at Rio Deserto, Edivaldo Sobrinho Velho.

Among the topics covered, emphasis on the current scenario of the pandemic, the importance of decision-making, creativity, communication and resilience. At the end of each training, a surprise video was also presented with a message from the supervisors' relatives, with requests for everyone to take care of themselves and return home in health and safety.



## Internal communication

Rio Deserto's internal communication was reinforced during the new coronavirus pandemic, with the implementation of WhatsApp Transmission Lists. The tool was implemented with the purpose of disseminating information (mainly awareness and guidance) in a quick and practical way to all company employees.

Unlike WhatsApp groups, Broadcast Lists do not expose the participants' phone contacts and messages are sent in a private format, that is, it is as if the company were talking directly to each employee. Employees can also reply to messages, with the content sent only to the company's cell phone (which triggers the messages) and not to all contacts in the Broadcast List.

To be effective, the tool is constantly updated, taking into account possible moves such as admissions, dismissals and cell phone number changes by employees.

The novelty had excellent effects on the company's internal communication, ensuring the engagement of Rio Deserto employees in the fight against Covid-19. The new means of communication was so successful that it will continue to be used by the company also in the post-pandemic.

## Online meetings and events

From the beginning of the pandemic to the present day, meetings are held online at Rio Deserto. The measure has avoided agglomerations and ensured the smooth progress of work. The company also invested in video conferencing equipment to ensure more quality for virtual meetings. Even after the pandemic, the intention is to continue holding meetings in this new format, avoiding travel costs and time.

In 2020, some of the company's events also gained an online version. This is the case, for example, with the Trainee Meeting. Every year, the event was held in person, bringing together interns from all Rio Deserto units in a single location, usually the Head Office. Due to the pandemic, the 8th edition of the Trainee Meeting was marked by an online workshop, which brought all interns together for a chat with an expert in professional and career guidance.

For the next few years, the idea is that the Trainee Meeting will continue to be held in a virtual format, preventing interns from moving from one unit of the company to another.



## SOCIAL SUPPORT DURING THE PANDEMIC

*In addition to paying attention to employees and their families, during the Covid-19 pandemic, Rio Deserto reinforced its support for the social environment. The company donated R\$ 170,000 to hospitals, in order to contribute to facing the difficulties created by the coronavirus. It also delivered 200 food baskets and 360 liters of milk to the Juntos de Coração Campaign, promoted by the Business Association of Criciúma (ACIC), helping needy families, social assistance entities and institutions in the southern region of Santa Catarina. With a view to protecting health professionals, Rio Deserto made available, through a partnership with the Charitable Association of the Santa Catarina Carbon Industry (SATC) and the Coal Extraction Industry Union of the State of Santa Catarina (SIECESC), 200 face shields for hospitals and health departments. The solidarity of the company's employees also gained strength, with milk, supplies and hygiene and cleaning products being donated to rest homes in the region. All together fighting for a more favorable and sustainable scenario, to overcome the difficult period and re-establish socioeconomic development in various sectors.*

*“Health safety and attention to the social environment are even more in evidence at the company during this period of combating the Covid-19 pandemic. Rio Deserto is attentive to the protocols and recommendations of official bodies and adopts all appropriate measures to prevent the spread of the virus. Likewise, it understands the social role and strengthens actions to contribute to hospitals, entities and families in the south of Santa Catarina.”*

*Valcir José Zanette, one of the administrators of Rio Deserto*

### Donation of BRL 170 thousand to hospitals

In April 2020, Rio Deserto donated BRL 170,000 to hospitals, BRL 100,000 to Hospital São José (Criciúma-SC), BRL 50,000 to Hospital São Donato (Içara-SC) and R\$ 20 thousand for the Coronavirus Treatment Center (Criciúma-SC). The aim was to contribute to the fight against the Covid-19 pandemic.



*“The union of entities and businessmen is very important at this difficult time. This gesture by the companies will help many families spend this period in a more comfortable way. With an entrepreneurial spirit, we are sure that we will overcome all the challenges that arise.”*

*Moacir Dagostin, President of the Business Association of Criciúma (ACIC)*

### 200 food baskets and 360 liters of milk donated to the “Juntos de Coração” Campaign

Rio Deserto donated 200 food baskets and 360 liters of milk to the “Juntos de Coração” campaign, promoted by entities in the south of Santa Catarina, with the aim of reducing the social impacts of the coronavirus pandemic. The supplies were delivered to needy families, social assistance entities and institutions in Criciúma, such as *Abadeus*, *Bairro da Juventude* and others. The distribution was made by the Red Cross, responsible for screening the beneficiaries.

The executive committee that coordinates the actions of the “Juntos de Coração” campaign was composed of the Business Association of Criciúma (ACIC), Chamber of Shopkeepers (CDL) of Criciúma, Federation of Industries of the State of Santa Catarina (FIESC) Regional South, Forum of the Entities of Criciúma (FORCRI), *Sicredi Sul SC*, *Sebrae Regional Sul*, *Somarsul* (Masonic Lodges), Lions and Rotary Clubs of Criciúma. The Red Cross and the Business Association of Içara (ACII) were also united in the initiative.



### Criciúma Rest Homes receive donations

*Asilo São Vicente de Paulo, Feistauer Elderly Home and Asilo Cantinho do Idoso, located in Criciúma (SC), received donations from Rio Deserto employees during the Covid-19 pandemic in 2020. For São Vicente de Paulo were delivered personal hygiene and cleaning products. For the Feistauer Elderly Help Home, chicken meat was donated. Asilo Cantinho do Idoso received food baskets, more than 70 liters of milk, adult diapers and various foods.*

The response to the requests of the rest homes was indicated by the employees of Rio Deserto, in view of the entities' need, mainly to overcome the challenges arising from the moment.

### Donation of 200 face masks to hospitals and health departments

In May 2020, Rio Deserto distributed more than 200 face shield masks, benefiting Hospital São Donato (Içara-SC), Hospital São Marcos (Nova Veneza-SC) and municipal health departments from Siderópolis (SC) and Treviso (SC). The devices were produced by the Charitable Association of the Santa Catarina Carbon Industry (SATC) in partnership with the Coal Extraction Industry Union of the State of Santa Catarina (SIECESC). Approved by the National Health Surveillance Agency (Anvisa), face shield masks constitute a physical barrier and contribute to the safety of health professionals in times of Covid-19.



# BENEFITS AND COMMITMENTS



## Life Insurance

Rio Deserto employees can have life insurance. The company contributes 50% of the monthly fee, with the remainder being deducted from the payroll.

## Transport

Rio Deserto provides transport for employees of the production units. Vehicles follow previously established routes.

## Uniform

The use of uniform is mandatory at Rio Deserto's production units, ensuring standardization and organization. The supply is made by the company.

## Meal at the company

At Rio Deserto's production units, meals are produced and served by industrial kitchens, in accordance with nutritionist guidelines. The company contributes 80% of each meal, with the rest being deducted from the payroll.

## Food Voucher

Rio Deserto employees receive a food voucher in the month of vacation. The benefit only covers units that follow the convention of workers in the coal extraction industry.

## Milk

All Rio Deserto employees receive 24 liters of milk every month.

## Acicard Card

The Acicard Card is exclusive for the purchase of medication and is available to Rio Deserto employees. Expenses are deducted from payroll.

## Internal medical assistance

At Rio Deserto units there is medical assistance. Prevention and awareness actions are carried out, as well as consultations, referrals to specialists, periodic exams, vaccines and others.

## Periodic exams

Periodically, employees of Rio Deserto's production units carry out examinations corresponding to the function performed. Audiometry, spirometry, clinical examination and chest X-ray are among the main.

## Health insurance

Rio Deserto offers a health plan to employees and assists in the payment of monthly fees, with support ranging from 30 to 70% of the amount, depending on the salary range.

## Agreement with clinics and laboratories

Rio Deserto has an agreement with clinics and laboratories. The benefit facilitates the access of employees and their families to medical exams and guarantees more affordable prices.

### 3 GOOD HEALTH AND WELL-BEING



*Rio Deserto ensures that employees have access to quality essential health services. Agreements with clinics and laboratory, health plan and life insurance are some of the benefits.*

### 8 DECENT WORK AND ECONOMIC GROWTH



*Valuing people and managing the organizational climate are practices that favor work environments. With seriousness and commitment, Rio Deserto generates jobs and income.*

## PRODUCTS



### ENERGY SEGMENT, CARBON SOURCE, ELASTOMER AND SULFUR

#### Energy Coal

Used in thermal power plants, as fuel (heat source), for the generation of electrical energy. It is obtained after processing the ROM (raw coal). Throughout the process, the ash, sulfur, volatile matter and calorific value are adjusted to the granulometry, always in accordance with market needs.

#### Bormix

Widely used as a catalyst for ebonite and as a semi-reinforcing filler to compose low-cost moldings, in composites based on elastomers. It is achieved through rigorously selected and controlled coal.

#### Pyrite (Iron Sulfide)

Used to correct the sulfur content in cast iron, as a source of sulfur. Results from the selective processing of coal.

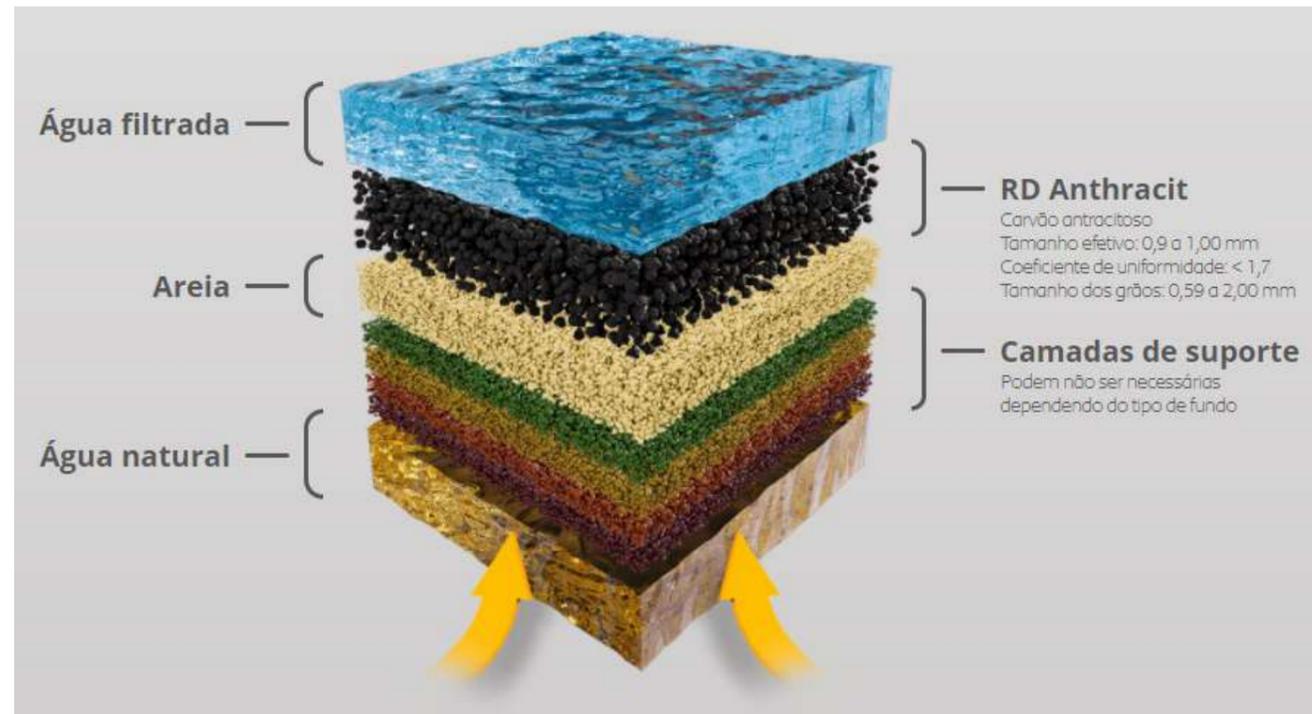
#### RD Carbo

Used in the manufacture of iron and steel castings, in the manufacture of glass, for applications of cathodic protection (civil construction), high voltage networks and various industrial processes. Indicated for carbon correction (carburization process). It is the result of the calcination of green petroleum coke.

## FILTERING RIO DESERTO

### RD Anthracit

Used in water treatment filters, it increases filtration rates, impurities removal efficiency and improves water quality in many respects. It is produced from specific coal and controlled processes. It has different angular particles, providing perfect filtration.



## FUNDS SEGMENT

### RD Fund

Used in the ceramic and glass industry with the function of assigning brightness, transparency, densification and control of dimensional variation. In the metallurgical industry, it has the function of fluidizing the slag, replacing fluorite. Flux and flux minerals, whose main purpose is to lower the melting point, through the formation of eutectic compounds. RD Fund increases the mechanical strength and densification of the material in which it was applied.



## ANIMAL PROTECT

### Protetox Afla

It is a mycotoxin adsorbent additive, composed of calcium and sodium aluminum silicate, tested in vivo for poultries. Natural product that, when used in feed, has the ability to form a highly stable complex with mycotoxins. When ingested by the animal, it adsorbs and retains aflatoxins, inhibiting absorption before they reach the bloodstream, and the toxicity is eliminated with feces. Protetox Afla allows the best use of nutrients, reflecting on the productive performance of the animals. The product has no odor and no taste.

### Bugram Protect

Bugram Protect is an anti-caking additive recommended for product formulations used in animal feed. It acts on grains, bran and feed, removing moisture, working as an anti-pasting (anti-caking) and protecting against fungi and toxins. It is totally natural (organic input).



## NOTOX

Notox line products are intelligent adsorbents, elaborated from a careful selection of mineral technologies. Intended for all animal species and strategically developed to carry out the fast and efficient adsorption of mycotoxins. They are composed of synergistic technologies that provide extreme capture of mycotoxins at stomach pH, as well as mechanisms that prevent this binding from being broken at gut pH. They do not adsorb nutrients and vitamins, nor do they cause negative impacts on food.

The Notox line is the result of more than 20 years of research and development, and the collaboration of more than five research institutes around the world, which resulted in extremely efficient solutions, proven through in vivo and in vitro evaluations.



## Notox One

Intended for all animal species, Notox One is added to the feed, being effective in combating fumonisins and aflatoxins, which can harm the health of animals. It is a mycotoxin adsorbent additive, composed of calcium and sodium aluminum silicate. It has a high cation exchange capacity, high swelling and, consequently, more thixotropy, favoring the adsorption of mycotoxins. When ingested, it adsorbs and retains mycotoxins, inhibiting absorption by the body.

## Notox Poultry

Product intended for poultries. It is a large spectrum mycotoxin adsorbent additive, composed of special aluminosilicates and organic additives, with in vivo proof. When ingested by the animal, it adsorbs and retains mycotoxins (zearalenone, aflatoxin, fumonisin, ochratoxin, T2 toxin and deoxynivalenol), avoiding absorption by the body. It has a wide adsorption capacity for polar (through cation exchange) and non-polar (through porosity and surface area) mycotoxins, generating more stability in the adsorption of mycotoxins with different molecular weights.



## Notox LS

It is a large spectrum anti-mycotoxin additive with effective action against Fusarium Toxins (zearalenone, fumonisin and T2 toxin), aflatoxin and ochratoxin. Notox LS is composed of special aluminosilicates and organic additive, which facilitates the adsorption of apolar and polar mycotoxins.

## Notox Reproduction

Product suitable for swines in the reproduction stage. With innovative technology, it is a large spectrum additive, effective in combating mycotoxins such as zearalenone, aflatoxin, fumonisin, ochratoxin, T2 toxin and deoxynivalenol. It should be used in swine feed. With alkaline pH, the adsorption of Notox Reproduction starts with chewing, passing to the stomach and then through the small intestine of the animal, where the chemical digestion and adsorption of mycotoxins continues, preventing them from reaching the bloodstream.

## Notox Swine

Product suitable for swines in the nursery phase. It is made up of special aluminosilicates and an organic additive. Product validated in vivo against the main mycotoxins that affect swines in the nursery phase. Effective against fumonisin, aflatoxin, T2 toxin, zearalenone and ochratoxin.



*The Notox line is distributed exclusively by Cargill, in Brazil and in more than 20 countries.*

## PLANT PROTECT

### Gran Start Mn+

Based on manganese and silicon, Gran Start Mn+ was developed aiming to supply manganese at specific times for different cultures. Its formulation promotes an improvement in nutritional balance, in addition to enhancing the plants' defense structures.

### Gran Protect Max

Gran Protect Max has, in its formulation, essential elements for a good plant development. Composed of copper, potassium, phosphorus and silicon, the product is able to help combat biotic and abiotic stresses, maximizing the profitability of rural producers.



### Induktor Si+

Suitable input for use in organic production. Source of copper, sulfur and silicon. These elements provide more resistance to disease, act in the metabolism of proteins and in the photosynthesis process. Mixed mineral fertilizer for foliar application. The use of Induktor Si+ is authorized in organic agriculture, being a great ally in the search for a more sustainable agriculture.



### Silicon Protect

Silicon Protect is a contact insecticide for pest control in stored grains and seeds, with approved use in organic agriculture. The composition of diatomaceous earth provides fast and prolonged effect. It must be applied in a sprayed way to the grains, before entering the silos, deposits or warehouses.



*Suitable input for use in organic production. Use subject to the criteria of each organic regulation, according to the respective certificate issued. Inspected by Ecocert.*

# TECHNOLOGY



## DIGITALIZATION OF PROCESS

Innovation, sustainability and conscientious consumption are factors that lead Rio Deserto to continually reinvent itself. In 2020, with the support of the Information Technology (IT) department, the company invested in the digitalization of processes, eliminating paper and investing in technology.

The result translates into efficiency, agility, saving paper and working time. It is estimated that, in 2021, almost 200 thousand sheets of A4 paper will no longer be used by Rio Deserto. The company's strategic guideline has been to use technology to automate and digitize processes, improving operational efficiency and reducing costs.

### QR code

Among the changes, we highlight the implementation of the QR Code, which facilitates the identification of employees. With the system, each employee at Rio Deserto's production units received a card with a QR Code. From then on, to pick up Personal

Protective Equipment (PPE) from the security sector, participate in training and other activities, the employee is identified by reading the QR Code, which works as a digital signature. The information is automatically entered into the company's code reading system, generating agility to processes.

Before implementation, the actions required the employee to sign papers, after which the information was entered into the system and the physical documents stored. The purpose of the new system is to facilitate process management, manage stocks and requisitions and, above all, drastically reduce paper consumption.

### Payroll in application

Another change implemented at Rio Deserto is sending the payroll to employees through an application. The system is simple and each employee received a step-by-step guide on how to download and install the application on their own cell phone. In addition to considerably reducing the consumption of paper that was used to print the payroll of almost 700 employees, the application also ensures speed of information, which is in the employee's hands. The system is secure and meets legal issues.

**9** INDUSTRY, INNOVATION AND INFRASTRUCTURE



*Innovation and quality are part of all Rio Deserto procedures. The company bets on technology, believes in the future and develops methods with an emphasis on sustainability.*

## EDUCATION



### SATC

In southern Santa Catarina, education is strengthened through coal mining. The sector created and today supports one of the most recognized educational institutions in Brazil, the Santa Catarina Carbon Industry Beneficent Association (SATC), headquartered in the municipality of Criciúma.

In all, about five thousand students (including some of them in socially vulnerable conditions) and 600 employees are part of the institution, which has an infrastructure focused on complete learning, offering everything from early childhood education to postgraduate studies. It also maintains the Technological Center, which operates in the area of scientific research, projects and laboratory services, bringing new perspectives for sustainable development.

All coal companies that make up the Coal Extraction Industry Union of the State of Santa Catarina (SIECESC) contribute to the maintenance of SATC through the transfer of 1% of monthly revenue.

Amount invested in education by Rio Deserto in 2020:

**R\$ 1.627.200,81**

### Scholarships

Rio Deserto grants scholarships to employees and employees' children. All orders are analyzed according to pre-established criteria. In the case of an employee request, the importance of training is evaluated in view of the needs required by the company.



4 QUALITY EDUCATION



*Rio Deserto transfers financial resources to SATC and encourages the education of employees and their children through scholarships. The company encourages practices involving education.*

\*The photos in which people appear without masks were taken before the WHO declaration of the Covid-19 pandemic in March 2020.

## TRAINEE PROGRAM

Rio Deserto’s Trainee Program has existed for almost 15 years and aims to identify potential talent, strengthening the practice of responsible trainee, contributing to professional and personal training, and ensuring growth opportunities. The company’s trainees are paid and are entitled to benefits such as transportation vouchers, food, health insurance and others. They also participate in internal training, campaigns and programs, acquiring technical and behavioral knowledge and skills.

### SATC Careers and Employability Week

Rio Deserto Trainee Program was presented during the Careers and Employability Week, promoted by the Charitable Association of the Carboniferous Industry of Santa Catarina (SATC). The online event, held in 2020, consisted of lectures and workshops. The live, with the participation of companies from various sectors, was open to students and the community in general and obtained more than a thousand views. The SATC Careers and Employability Week fulfilled the purpose of the Employability Fair, held every year at the educational institution.



## Virtual Trainee Workshop

The importance of adapting and developing skills in the face of new scenarios generated by the Covid-19 pandemic was the main focus of the online workshop “Career & Expectations – What to expect from the post-pandemic professional?”, which marked the 8th Meeting of Trainees, from Rio Deserto, held in 2020.

The event, coordinated by Rio Deserto’s Human Resources department, was given by the psychologist, coach and specialist in professional and career guidance, Thiélen Taveira, from Florianópolis. Among the subjects, the need to continually reinvent oneself, seek knowledge and always learn.

### Trainee supervisors virtual workshop

Employees of Rio Deserto who work or will act as trainee supervisors of the company participated in a virtual workshop in 2020. The training was promoted by the Human Resources department in partnership with the Euvaldo Lodi Institute/ Federation of Industries of the State of Santa Catarina (IEL/ FIESC), Criciúma regional.

The workshop was given by the administrative assistant of IEL/FIESC Regional Criciúma, Taise de Oliveira Ferreira. The objective was to highlight the main aspects related to responsible trainee practice, in a participatory and enlightening way, with information on the legislation, duties of trainee supervisors and questions/answers on the subject.

## PROFESSIONAL ORIENTATION

In 2020, the *Caminhos & Escolhas* Project, by Rio Deserto, started to have a practical guide for professional guidance. The material, available in e-book format and in PDF on the company’s website, aims to contribute so that, even in uncertain times such as the Covid-19 pandemic, people make conscious and safe choices regarding the profession.

The *Caminhos & Escolhas* Project, with professional orientation, was carried out every two years at Rio Deserto, bringing together employees and their families in face-to-face meetings, lectures, assessments and individual feedback. With the pandemic, in view of the need to avoid agglomerations, an e-book was thought of with information and practical tips related to professional choice.



# HEALTH

## AMIGO SANGUE BOM PROGRAM

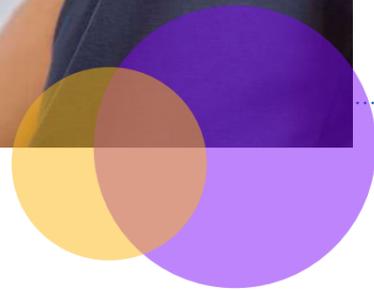
Rio Deserto raises awareness and encourages employees to donate blood. Since 2016, through the *Amigo Sangue Bom* Program, 230 donations have been accounted for. In 2020, even with the Covid-19 pandemic and the need for social isolation, changing people's routine, 35 donations were made by company employees. The action is carried out in partnership with the Center for Hematology and Hemotherapy of Santa Catarina (*Hemosc*), regional Criciúma.

With the pandemic, *Hemosc* adopted the procedure for scheduling donations, in order to avoid agglomerations. Rio Deserto's medical department helped and provided participants with a protective mask for Covid-19, personalized with the logo of the *Amigo Sangue Bom* Program.

Rio Deserto's medical department maintains a database of donors and blood types. In case of any specific need, *Hemosc* contacts the company directly.

## Rio Deserto is a Solidarity Company of *Hemosc*

In 2020, Rio Deserto received a letter of thanks for being part of the Solidarity Company Project, of the Center for Hematology and Hemotherapy of Santa Catarina (*Hemosc*), regional Criciúma. In their gratitude, the director of *Hemosc*/Criciúma, Dr. Thiago Barbieri Lopes, and the person responsible for the donor collection sector, Maria Regina Boteon Buttner, highlighted that Rio Deserto has played an essential role in the development of more aware and supportive citizens.



**3** GOOD HEALTH AND WELL-BEING



*Rio Deserto maintains a culture of disease prevention and health promotion. The activities ensure employee awareness.*

### VACCINE AGAINST THE H1N1 FLU

In March 2020, Rio Deserto employees received the vaccine against the H1N1 flu. The immunization of employees was anticipated due to the Covid-19 pandemic. The action was supported by the Social Service for Industry (SESI) and covered all company units. In all, 472 people received the vaccine. Rio Deserto makes immunization available every year, free of charge, to interested parties.



### HEALTH INSURANCE

Considering the Covid-19 pandemic and the importance of better health care, the medical department of Rio Deserto promoted, in 2020, an action with the objective of facilitating the adhesion of employees to the *Unimed* Health Plan. In addition to the more affordable values, the proposal guaranteed exemption from the grace period for procedures such as examinations and consultations with specialists. The health plan is a benefit offered to Rio Deserto employees. By providing more attractive forms of membership, the company demonstrates attention to the health and well-being of employees and their families.

#### Adhesions to the *Unimed* Health Plan

**Employees: 397** (86 adhesions in 2020)

**Dependents: 360** (91 adhesions in 020)

### CARNIVAL

The Carnival 2020 Campaign, carried out by the medical department of Rio Deserto, reinforced prevention and awareness of alcohol abuse and its impacts on family, social, financial and, above all, health. Awareness took place in February. On the occasion, a video on the effects of alcohol consumption on the body was presented. Employees contributed and participated in the approach.

## WHITE JANUARY

January White is the month of allusion to the campaign dedicated to mental health. It is about awareness and prevention of the emotional illness of humanity, sensitizing people to care for emotions, feelings, behaviors and human relationships. In 2020, Rio Deserto published an article with tips for practical daily actions, such as having more dialogue with people and investing in kindness.

## YELLOW SEPTEMBER

Mental health and quality of life were highlighted in a virtual meeting promoted by Rio Deserto, in September 2020. The live, with the theme “Yellow September: Knowing, Acting and Preventing”, had the participation of psychologists Fernanda de Souza Fernandes and Karoline Anjos, as well as volunteers from the Center for the Valorization of Life (CVV), Margarida Teixeira and Olívia Rocha. In all, more than 200 people accessed the live broadcast, which lasted for an hour.

The action was developed by Rio Deserto’s Human Resources department, encouraging the participation of employees, their families and communities in general. The objective was to promote reflection on the valuation of life. Yellow September is an awareness campaign on suicide prevention.

## PINK OCTOBER

Using pink masks, Rio Deserto collaborators reinforced the Pink October Campaign, to raise awareness and prevent breast cancer. In addition to highlighting the importance of women’s health, the play highlighted the need for care against the Covid-19 pandemic, being one of the main protection instruments.

The pink masks were delivered to the employees of Rio Deserto with the message: “Get to know yourself and take care of yourself. To prevent is to love yourself!”. The pink pieces were used at least twice a week, always on Tuesdays and Fridays. The aim was to emphasize the importance of women being aware of their own health. Posters about the Pink October and awareness of breast cancer were also placed on the walls of the units.



## BLUE NOVEMBER

The Blue November Campaign, to raise awareness of human health, was highlighted in 2020 during the Daily Health and Safety Dialogues (DDSS), held at the beginning of shifts, at Rio Deserto’s production units. The company’s medical department coordinated actions with the aim of informing and encouraging employees to take care of their health and quality of life. For employees over 45 years of age, Rio Deserto offered support to carry out tests, through an agreement with laboratories in the region. The importance of practicing physical activities was also encouraged in the meetings.

## RED DECEMBER

The Red December Campaign, to raise awareness against *AIDS* and Sexually Transmitted Infections (STIs), was highlighted at the Rio Deserto units in 2020. Professionals from the company’s medical department promoted orientation actions, through conversations with employees, during the Dialogue Health and Safety Diary (DDSS), at the beginning of work shifts.

The action was carried out at the Industrial Complex, Metallurgical Unit, Extraction Units 101 Mine and Cruz de Malta Mine, where there is a greater number of employees.

## SAFETY



### ONLINE EMERGENCY CONTROL SYSTEM

The underground mining activity is one of the most adverse for emergency assistance. Therefore, the definition of controls, the training of firefighters and employees, as well as the implementation of new technologies are of great value to ensure the physical integrity of employees and the maintenance of the enterprise.

In order to reduce response time and prevent emergency occurrences, the project “Online Emergency Control System” was developed at the Extraction Unit Cruz de Malta Mine at Rio Deserto. The proposal consisted in the development of a physical controller and a web platform for interconnecting monitoring supervisors, allowing the observation of factors, the issuance of automatic communication and the execution of commands, with a view to quick resolution and minimization of impacts. The application also allows for the expansion and evolution of controls with the development of new technologies and the growth of the enterprise.

The development of the project

provided the improvement of the Emergency Assistance Plan (PAE) and guaranteed the Extraction Unit Cruz de Malta Mine, the follow-up and interventions in immediate connection with the main emergency control devices, facilitating the emergency management process , mainly on a preventive basis.

Before the project was implemented, controls were carried out by direct intervention, that is, receiving verbal information and human action (displacement, failure verification, resource mobilization, taking action, among other initiatives). This opened up possibilities for several failures to occur, in addition to the high response time for service and containment in case of claims.

**8 DECENT WORK AND ECONOMIC GROWTH**



*Employee safety is a priority at Rio Deserto. The company conducts training and invests in equipment. It also has the support of SESMT and the Emergency Brigades.*

## DAM TRAINING

Among the trainings carried out during 2020, the highlight was the Emergency Action Plan for a Mining Dam (PAEBM) and a simulated dam failure. The training brought together firefighters, employees of Rio Deserto and members of the Civil Defense, and was given by environmental engineer, Felipe Medeiros Bertoncini, and by mining engineer, Samuel Henrique de Andrade Campos.

During training, emergency situations that can occur in a dam were highlighted, as well as the actions to be taken in each case. Aspects such as the importance of visual monitoring, the reading of piezometers, topographic landmarks and the electronic water level, as well as the safety factor of the slopes, which condition the safe operation of the structure, gained emphasis.

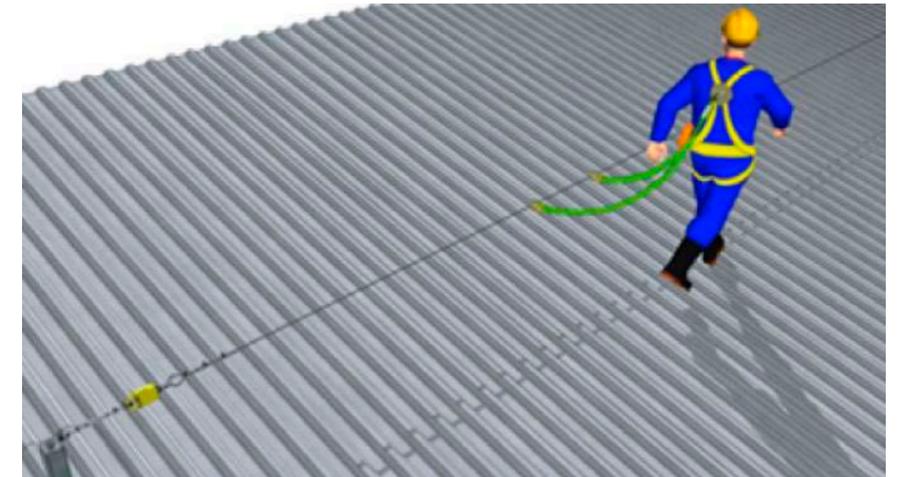


## WORK AT HEIGHT

In order to facilitate the execution of activities at heights, fixed devices were installed at the Rio Deserto units to anchor safety equipment, known as "Life Lines". The work has already been completed in the structure of the Industrial Complex - Fuel and in the Extraction Unit Cruz de Malta Mine. The goal is to expand regularization to company structures with more access and risk.

### Regulatory Standard NR 35

Regulatory Standard NR 35 (Work at Height), created, disclosed and supervised by the Ministry of Labor, describes several guidelines regarding the risks and obligations to ensure the safety and preserve the health and physical integrity of workers and third parties directly and indirectly involved in the activities in height. The procedures require special care, as each activity and/or environment has different characteristics (type of structure, strength of materials, roof, nearby activities...). Among the main practical measures adopted, we highlight the installation of means of access, anchorage points and life lines for movement.



## EMERGENCY SIMULATES

Keeping all the necessary precautions related to the Covid-19 pandemic, Rio Deserto carried out the emergency drills, in 2020, according to the annual schedule. The practical training followed all the measures adopted by the company, being mandatory the use of masks and frequent hand hygiene with alcohol gel.

Among the Emergency Plans with an emphasis on simulated ones, PE 504 (Serious and/or Fatal Accident), PE 508 (Fire Fighting) and PE 510 (Climbing) stand out. The objective was to keep employees' attention to the existing risks, preparing them for an eventual care and, especially, for frequent action in prevention.

## SESMT AND EMERGENCY BRIDGES

At the Rio Deserto units, safety is evidenced by the work of the Specialized Service in Safety Engineering and Occupational Medicine (SESMT), formed by engineers, safety technicians, occupational physicians and nurses, and by the Emergency Brigades, with employees periodically trained to act in the prevention of accidents and intervene in situations of risk and urgency.

## DDSS

Every day, at Rio Deserto's production units, the Daily Health and Safety Dialogue (DDSS) is held. The action brings employees together at the beginning of shift activities, for a conversation about communication, teamwork, leadership, safety, valuing time and other topics. Lasting 10 to 15 minutes and generally given by security technicians, the meetings aim to raise awareness among employees.

## RESCUE EQUIPMENT

In 2020, the Extraction Unit 101 Mine had new underground rescue equipment. The "rescue cart" has a tractor as its driving equipment and was designed by the safety and mechanical maintenance departments, with the participation of the Emergency Brigade and company employees. The model is also used in the Extraction Unit Cruz de Malta Mine.



## TRAINING AND DEVELOPMENT

In 2020, the total sum of training hours for employees at Rio Deserto reached 62,022.97, including internal and external courses provided by the company. Work procedures, emergency drills, meetings of the Emergency Brigade and the Internal Accident Prevention Commission (CIPA), admission training, among others, were also accounted for.

During the year, there were also trainings related to regulatory standards NR10 (Installations and Services in Electricity), NRs11 and 12 (Safety at Work in Machines and Equipment), NR20 (Safety with Flammables and Fuels) and NR35 (Work in Height).

### SPECIFIC QUALIFICATIONS

In compliance with a legal requirement, based on the regulatory standard NR22 (Health and Safety in Mining), the specific qualifications and training for the function continued to be carried out in 2020. During the year, the sum of hours of specific qualification reached 76,968, 00.

#### Specific training of each role

It aims to train the employee admitted to a certain position (with the supervision and guidance of other experienced and qualified professionals).

#### Qualification for the Role

It involves training employees in order to cover vacations (if necessary), and prepare for future internal promotions.

Unity	Specific qualification for the job (total hours)	Training and development (total hours)
Extraction Unit Cruz de Malta Mine	40.664,00	27.678,53
Extraction Unit 101 Mine	23.904,00	23.144,80
Extraction Unit Novo Horizonte Mine	--	962,93
RD Engineering	400,00	333,23
Metallurgical Unit	4.080,00	1.927,61
Laboratory Reference	1.200,00	834,57
RD São Geraldo	--	69,72
Boarding Box	--	203,82
Unit Correia Pinto	2.000,00	1.885,70
Central Office	--	327,25
Industrial Complex (Ragro)	2.080,00	1.560,40
Industrial Complex (Ceramics)	480,00	362,23
Industrial Complex (Carburante Fuel)	2.160,00	2.732,18
<b>TOTAL</b>	<b>76.968,00</b>	<b>62.022,97</b>

# ENVIRONMENT



## SUSTAINABILITY

Rio Deserto practices, at its units, the Environmental Management System parallel to the requirements of ISO 14001. The aim is to establish a set of actions so that the processes are in line with the applicable environmental legislation. The processes carried out by Rio Deserto comply with all sustainability principles. The department responsible for the area often invests in studies, enabling more actions to be carried out with fewer resources, due to the reuse in the production of raw materials in the manufacturing centers.

## ENVIRONMENTAL RECOVERY

In over ten years, Rio Deserto has already recovered more than three million square meters (much of this territory was not part of the company's environmental liabilities). During this period, the investment exceeded the amount of R\$ 35 million. By 2030, the recovery of other areas is scheduled, with investments that should also reach R\$ 30 million.

All the amount invested in areas impacted by mining has already resulted in environmentally sustainable conditions. Currently, some of these areas serve as public spaces that are green, safe, inclusive and accessible to the entire population. In addition to revitalizing degraded areas, Rio Deserto also maintains native forest areas in the cities of Orleans and Siderópolis, in southern Santa Catarina.

The environmental recovery methods used by Rio Deserto are based on criteria developed by the Technical Advisory Group (GTA). Among the activities carried out in the areas, there is the removal of tailings from Permanent Preservation Areas (APP), topographical conformation, waterproofing the land with clay, recovery of soil fertility and introduction of new vegetation. After the work, monitoring is still carried out, in order to certify the quality of the recovery and the balance of the ecosystem.



*Rio Deserto maintains special attention to soil, water and air. Therefore, it reuses water, manages waste and invests in environmental recovery.*



*The revitalization of areas and the planting of sustainable forests are actions that reinforce Rio Deserto's commitment to the environment. The company also maintains native forest areas.*

## WATERS

Currently, the activity of extracting and processing coal has important investments in technology and environmental control. Thus, through the survey of data obtained from environmental studies and monitoring, Rio Deserto proves that the mineral coal extraction process, when carried out in a managed manner, with all environmental precautions, does not interfere with the behavior of local water resources. Sustainable water management is highlighted in the company's extraction units, through the Effluent Treatment Stations (ETE).

At Rio Deserto's Extraction Units, water from operational activities, after undergoing physical-chemical treatment, is reused in the unit itself, with the surplus being released into the receiving body, fully meeting current environmental requirements.

## Monitoring

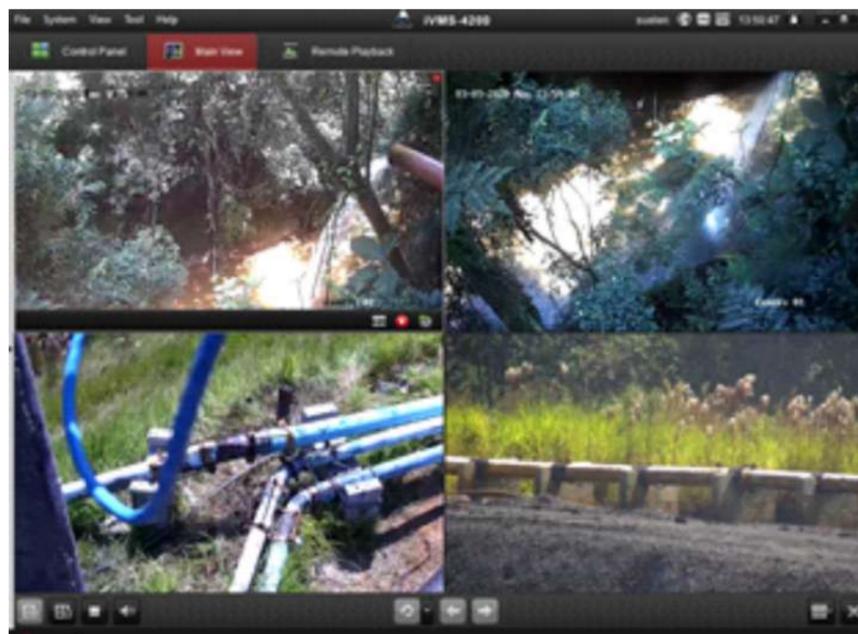
Rio Deserto has an Effluent Treatment Station (ETE) in the coal extraction units, treating the effluents generated in the tailings deposit, mine subsoil and operational yard. It also has a decantation basin system, whose function is to clarify the raw effluent before treatment, as well as sediment the treated effluent sludge.

In order to improve the operational safety system of the ETE's basins/dams, the company invested in the development of specific software. The technology allows the technical team to monitor, in real time and from any place (remotely), the situation of the basins/dams at the Extraction Unit Cruz de Malta Mine, located in Treviso. With this, it is possible to obtain the level of the basins, the reading of the pH of the treated effluent (every five seconds), and the control, by cameras, of the basins and the point of discharge of the treated effluent into the receiving body (River *Mãe Luzia*).

## Reuse in agriculture

At the Extraction Unit 101 Mine, as the surrounding area consists of rice plantations, the company started to contribute to agriculture, benefiting the plantations, as well as the local industry, through the provision of treated water from mining. The unit has an extensive water monitoring network including surface points, underground, mine pumping with flow controls, potentiometric level and quality.

Before the implementation of the coal extraction unit, the surrounding community suffered from a shortage of water to maintain rice farming and the local industry (usually, they used dug wells). After the installation of the mine, with treated water from mining, the local conditions of the community were improved, with the expansion of rice cultivation areas. The local industry also started to use treated water from mining in the production process.



\*The photos in which people appear without masks were taken before the WHO declaration of the Covid-19 pandemic in March 2020.

## SUSTAINABLE FOREST

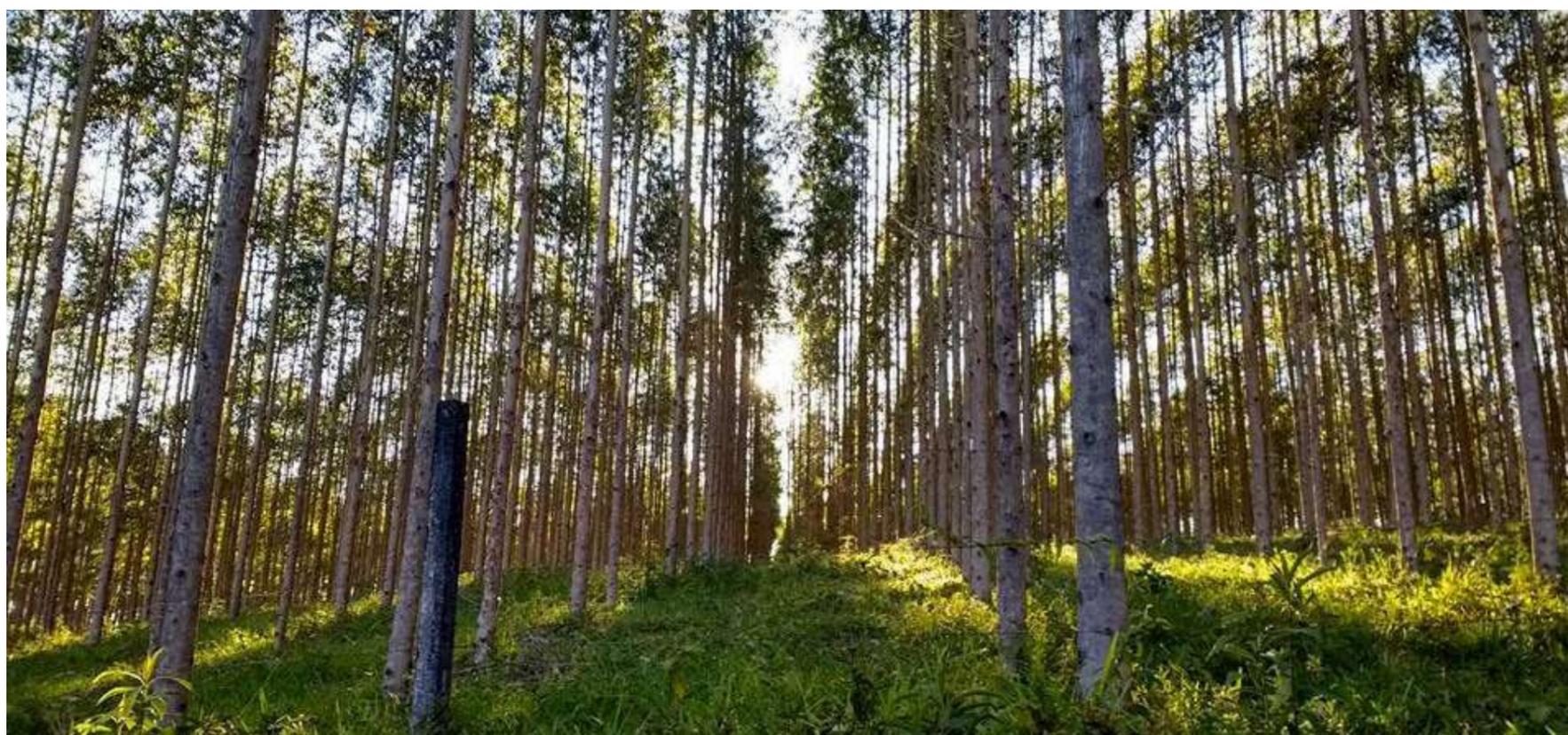
Rio Deserto has a culture of preservation and respect for natural resources. Therefore, it develops several projects. Among them, the highlight is the Sustainable Forest Planting, carried out on land located in the municipalities of Orleans, Siderópolis, Treviso and Urussanga, in southern Santa Catarina. The objective is the production of sustainable wood through the planting of fast-growing exotic species, as well as soil recovery (through forestry techniques).

The planting and management of the forest aim to respect the forest code and current legislation, with the aim of protecting water sources, local vegetation and, above all, native forests. The project also significantly contributes to the capture and consequent reduction of carbon dioxide in the region, which is fundamental in the mitigation of greenhouse gas emissions.

Planted forests provide several direct and indirect benefits to rural properties and communities. In addition to the economic advance that forest

production provides, it is possible to mention other benefits in the environmental and social areas, such as: improved air quality, reduced noise pollution, natural balance in thermal comfort, reduced erosion, recovery of degraded areas - contributing to reduce environmental liabilities, improve the flow of water sources and others.

In the company's eucalyptus cultivation areas, the mosaic planting technique is adopted, which allows synchronism between commercial and natural areas, providing gains in forestry production and in the conservation of biodiversity. In addition, current legislation is strictly followed, such as the Forest Code (Law No. 12,651 of May 25, 2012) and the Atlantic Forest Law. Mosaic planting and ecological corridors are essential in dispersing seeds and moving fauna and flora between isolated areas.



### Reforestation and conservation of native forests

Reforestation plays a fundamental role in economic, social and environmental areas. Trees are raw materials for various industries, which use sawn wood, wood extractives, biomass, cellulose and reconstituted wood, being transformed into essential products for everyday life. The industrial use of wood from planted trees has grown substantially and represents the conservation of native forests.

## SOLID WASTE

Rio Deserto's Solid Waste Management Program (PGRS) is a reference when it comes to correct waste disposal. The company maintains adequate processes, classifies and manages all materials. The result is reflected in solutions aimed at recycling, composting, as well as environmentally sound treatment and/or final disposal.

Rio Deserto maintains the Solid Waste Management Program (PGRS) implemented in all units. The initiative comprises the collection of waste deposited in selective collection dumps and sorting at the waste center, according to classification. Subsequently, the residues are sold with a licensed company. All waste generated at Rio Deserto units is monitored through traceability. The actions can be verified in the openings of the Waste and Tailings Transport Manifest (MTR), on the Environment Institute (IMA) website.

For the PGRS to work, the company and employees work together. The company identifies, quantifies and characterizes all waste generated. It also has a waste collection, handling and storage system in order to minimize the risk of accidents and contamination. Employees, in turn, participate in training and carry out selective collection.



## ENVIRONMENT WEEK 2020

The Environment Week, celebrated in early June, is celebrated every year at Rio Deserto with activities that involve employees and their families. Ecological trails and scout activities were some of the actions already carried out.

In 2020, due to the Covid-19 pandemic, it was decided to hold a Photographic Contest. The first edition, "I love the environment", had the participation of 80 employees. The objective was to highlight, through photos, the landscapes of the South of Santa Catarina.

### Winning photos:



Lagoa dos Esteves - Balneário Rincão (SC)  
Vera Ferreira - Central Office



Ponte de Laguna - Laguna (SC)  
Anderson de Souza - Extraction Unit Cruz de Malta Mine



Cachoeira do Cirenaica - Treviso (SC)  
Anderson Valdati - Industrial Complex



Bairro Santaninha - Urussanga (SC)  
Gustavo Maccari - RDLAB



Serra do Corvo Branco - Grão-Pará (SC)  
Gedielson Araújo - Metallurgical Unit



Cânion do Funil - Bom Jardim da Serra (SC)  
Darlan Pavei - Extraction Unit 101 Mine



Rio Lava-tudo - Bom Jardim da Serra (SC)  
Robson Magalhães - Extraction Unit Nova Horizonte Mine



Rio Canoas - Correia Pinto (SC)  
João Sidney Ribeiro - Correia Pinto Unit

## PEOPLE VALUING



### 2020 INDICATORS

Total employees hired at the end of the period: 633

Outsourced employees: 34

Trainees: 21

Employees over 45 years old: 80

Women working in the organization: 31

Afro-descendants working in the organization: 21

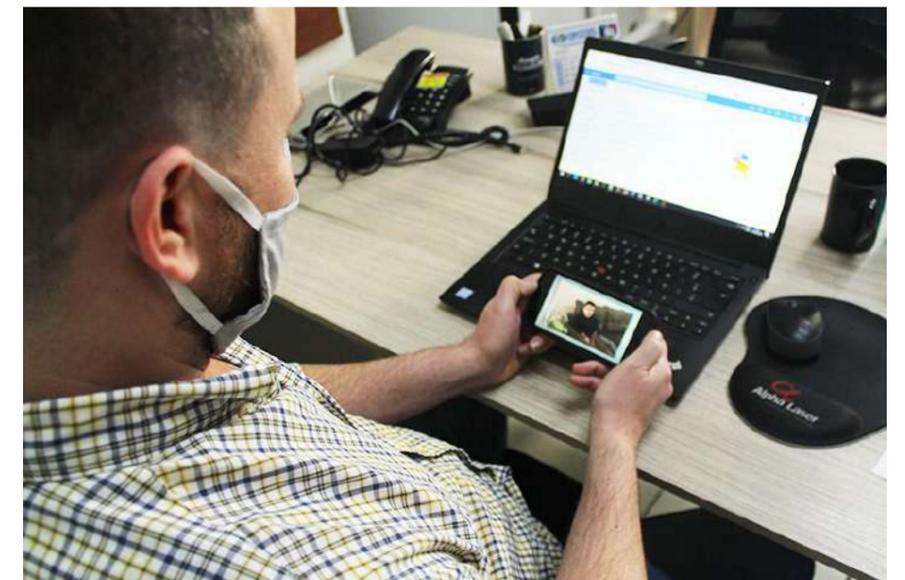
People with disabilities: 21

### CURRICULUM REGISTRATION

With the objective of facilitating the recruitment and selection processes of people, since July 2020, Rio Deserto receives resumes only through the website [www.riodeserto.com.br](http://www.riodeserto.com.br) (option "Work with us"). The change, evaluated and implemented by the Human Resources and Information Technology departments, allows for the centralization and security of data, as well as the optimization of time in the selection process.

### FATHER'S DAY

Recognized for valuing the family, Rio Deserto prepared videos in honor of the passage of Father's Day in 2020. In the material, employees' children interpret excerpts from the song *Trem Bala* (a special version of Father's Day), by singer Ana Vilela. Photos of the collaborators' families also completed the tribute. The material was sent to everyone who is part of the company, through WhatsApp. Father's Day is one of the commemorative dates considered the most important at Rio Deserto, since, adding all employees, more than 300 are parents.



## DESENHANDO O NATAL RIO DESERTO

The children who created the winning drawings of the 7th edition of the project “Desenhando o Natal Rio Deserto” remade the arts, proving their authorship, and were presented in 2020. The meeting took place at Association Rio Deserto, in Criciúma, and, due to the Covid-19, was restricted only to the winning children and the father/mother (collaborator).

The 7th edition of the project “Desenhando o Natal Rio Deserto” had the theme “Christmas is to be a Family”. In all, 58 drawings were entered, with two being chosen from each category (children from 4 to 6 years old, from 7 to 9 years old, and from 10 to 12 years old). All participants received a souvenir as a form of thanks.

### Category 4 to 6 years

Alice Cypriano de Oliveira – Daughter of employee Claidson Cardoso de Oliveira (Extraction Unit 101 Mine)



Ana Clara de Lima Rodrigues – Daughter of the Trainee Aline Silva de Lima Rodrigues (Central Office)



### Category 7 to 9 years

Alice Demetrio Dutra – Daughter of employee Fabrício Damásio Dutra (Metallurgical Unit)



Elias Fortunato Camargo – Son of employee Ezequiel Camargo (Industrial Complex)



### Category 10 to 12 years

Isabelly Madeira – Daughter of employee Adriano Pizoni (Extraction Unit Cruz de Malta Mine)



Larissa Polla Custodio da Silva – Daughter of employee Canan A. Custodio da Silva (Industrial Complex)



## SOCIAL AND ENVIRONMENTAL INITIATIVES



### LEITE SOLIDÁRIO PROJECT

In 2020, through Rio Deserto's *Leite Solidário* Project, 6,943 liters of milk were donated, benefiting 15 entities and many families in southern Santa Catarina. Only in the last four months (from September to December), 2,097 liters were donated. Donations increased, mainly due to the Covid-19 pandemic.

The institutions benefiting from the *Leite Solidário* Project in 2020 were: *Casa Maria Tereza* to Support People with Cancer, *Sementes do Futuro* Football School, Association of Parents and Friends of the Exceptional (*APAE de Lauro Müller* and *Criciúma*), *CRAS Vila Miguel* (Social Welfare Reference Center), *Bom Jesus* Rest Home, *Cantinho do Idoso* Rest Home, *Abecin* (Assembled of God Church Families Support Group), *Guido House*, *Feistauer* Elderly Home, *Associação Nossa Casa*, *Associação Beneficente Abadeus*, *Bairro da Juventude*, *Asilo São Vicente de Paulo* and *Associação Lar da Terceira Idade Rede Viva*.

As social support, during the Covid-19 pandemic in 2020, 360 liters of milk were also delivered to the *Juntos de Coração* Campaign, of the Business Association of Criciúma (*ACIC*), which distributed it to needy entities and families in the southern region of Santa Catarina, as already mentioned in this report.

The Rio Deserto *Leite Solidário* Project has existed since 2005 and consists of donating milk to needy organizations and families in the municipalities where the company's units are located. Every month, each employee receives 24 liters of milk and can choose to donate a portion. Since 2015, when the project completed ten years of existence, Rio Deserto started to double the amount of milk donated monthly by employees, allowing more institutions and families to benefit.

#### Monthly donation in 2020

<b>January:</b> 724 liters	<b>July:</b> 374 liters
<b>February:</b> 412 liters	<b>August:</b> 1,250 liters
<b>March:</b> 339 liters	<b>September:</b> 237 liters
<b>April:</b> 1,032 liters	<b>October:</b> 504 liters
<b>May:</b> 331 liters	<b>November:</b> 480 liters
<b>June:</b> 384 liters	<b>December:</b> 876 liters

**15** LIFE ON LAND



Projects to protect animal and plant species are part of the daily routine of Rio Deserto. The company carries out activities in order to keep the economy, the social and environmental environment balanced.

## FELINOS DO AGUAÍ PROJECT

The Institute *Felinos do Aguaí* is a Civil Society Organization of Public Interest (OSCIP) dedicated to the conservation of wild cats in the Aguaí State Biological Reserve and its surroundings. The project serves the municipalities of the Southern Catarinense coal region (AMREC) and has been in partnership with Rio Deserto since 2006, when it started its activities.

The list of activities of Institute *Felinos do Aguaí*, in 2020, was in the areas of environmental education, scientific research and involvement with local communities.



### Scientific research

In the scientific research program, emphasis is placed on completing the work of the scientific breeding for conservation purposes, which aims at the rehabilitation and subsequent release of felines to nature. There was also the equipment, with a radio-collar, of another individual of an ocelot (for monitoring), in addition to the collection of blood samples to assess the health of the animals (Ecological Health Program).

### Environmental education

In 2020, in the area of environmental education, emphasis was given to online lectures (due to the Covid-19 pandemic), the production of educational materials and the creation of the Fauna List of the municipality of Nova Veneza.

Another highly relevant action was the campaign to prevent zoonotic diseases, which offered a free service for the castration of domestic animals (dogs and cats) in the surroundings of the Aguaí State Biological Reserve. The initiative arose with



the National Action Plan for the Conservation of Small Cats Endangered with Extinction, coordinated by the Chico Mendes Institute for Biodiversity Conservation/National Center for Research and Conservation of Carnivorous Mammals (ICMBio/CENAP).

The biologist and coordinator of the Institute *Felinos do Aguaí*, Michele Ribeiro Luiz, went to the properties, talked to the families and delivered educational material, highlighting simple measures that can be adopted on a daily basis to prevent the transmission of diseases between animals and human beings. The relationship between domestic and wild animals (diseases and predation) and the importance of neutering, with a view to reducing the populations of domestic dogs and cats, were also discussed in the visits.

In the municipality of Treviso, the action aimed at the castration of domestic animals was completed in 2020. In 2021, it includes Nova Veneza and, in 2022, it should take place in Siderópolis.

### Local communities

Regarding involvement with communities, the main highlight was the construction of the wet bridge, which facilitated access to the mountain coast and to the Environmental Education Center of the Institute *Felinos do Aguaí*.

Important achievements were possible to achieve, with persistence and focus, such as the recognition of the Latin America Green Award and the adhesion to the National Movement ODS (Sustainable Development Goals), given that *Felinos do Aguaí* has well-defined objectives and goals, which lead to to even greater achievements.

## IÇARA MAIS DOCE PROJECT

More than 40 thousand melliferous eucalyptus seedlings were donated by Rio Deserto, in 2020, through the *Içara Mais Doce* Project. In all, 33 honey producers who are part of the Içara Beekeepers Association (API) were benefited. In addition to the donation of melliferous eucalyptus seedlings, Rio Deserto provided technical and guidance advice, and the planting sites were monitored.

Another benefit provided by the *Içara Mais Doce* Project is that, after a few years, eucalyptus wood can also be used and/or sold, generating yet another source of income for landowners. The initiative has existed for over 10 years and, during this period, it fulfilled the purpose of promoting one of the main economic sources of the municipality of Içara, which is the production of honey.



## ENTITIES AND COMMUNITIES

In 2020, Rio Deserto continued to collaborate with social entities, projects and communities located around the units. All support requests that arrived at the company were analyzed and received due feedback.

### Entities benefiting from monthly support

- *São Bento* Parents and Athletes Association (APASB);
- Women's Basketball from the Municipal Sports Foundation (FME) of Criciúma/SATC;
- Institute *Show de Bola*, which promotes the social inclusion of socially vulnerable children through sports and music;
- Association of Parents and Friends of the Exceptional (APAE) of Criciúma;
- Association of the Physically Handicapped of Criciúma (*Judecri*), a non-profit organization that seeks the social integration of people with disabilities;
- Criciúma Basketball Club, for men's basketball;
- *Bairro da Juventude*, a philanthropic institution that serves children, teenagers and young people from Criciúma and region, enrolled in programs ranging from early childhood education to professional training.

## PARK-FRIENDLY COMPANY

Rio Deserto is the "Friendly Company" of the *Encantos do Sul* Environmental Park, located in Capivari de Baixo (SC). The monthly financial support is mainly intended for projects related to environmental education. In 2020, Rio Deserto also donated a charcoal wagon to the park. The monument, symbol of the beginning of mining, should be part of the "*Museu do Carvão*", which is being created at the site. The park opened in October 2013 and has 35 hectares of green area. The space is managed by the *Jorge Lacerda* Association (AJL).



### Donation to the Union of Miners

Also in 2020, a coal cart was donated by Rio Deserto to the Union of Workers in the Coal Extraction Industry of Siderópolis, Cocal do Sul and Treviso (SC), and installed in the skate park built at *Praça da Matriz* in Siderópolis. The monument is made up of original pieces of wagons used in coal mines in the 1930s.

\*The photos in which people appear without masks were taken before the WHO declaration of the Covid-19 pandemic in March 2020.

## CERTIFICATIONS



### CERTIFIED MANAGEMENT SYSTEM

Rio Deserto is the first coal company in the south of Santa Catarina to be certified under three management standards: ISO 9001 (Quality Management), ISO 14001 (Environmental Management) and OHSAS 18001 (Occupational Health and Safety Management).

#### NBR ISO 9001:2015

- Extraction Unit 101 Mine
- Extraction Unit Cruz de Malta Mine
- Extraction Unit Novo Horizonte Mine
- Laboratory Division
- Industrial Complex (Carburante Fuel)

#### NBR ISO 14001:2015

- Extraction Unit 101 Mine
- Extraction Unit Cruz de Malta Mine
- Extraction Unit Novo Horizonte Mine

#### OHSAS 18001:2007

- Extraction Unit 101 Mine
- Extraction Unit Cruz de Malta Mine
- Extraction Unit Novo Horizonte Mine



### MAPA

The RD LAB Reference Laboratory is registered with the Ministry of Agriculture, Livestock and Supply (MAPA) as a provider of laboratory analysis services in the field of fertilizers, inoculants and correctives.



### IMA

It also has the Laboratory Recognition Certificate for Water and Effluent Analysis from the Environmental Institute of Santa Catarina (IMA).



### GMP+B2

Ragro Animal Nutrition has the GMP+B2 Production of Feed Ingredients, a Dutch standard that represents the seal of a Quality Assurance Certificate in the international scenario of supplying industries for animal feed ingredients.



### Ecocert Certificate

Ragro also has the Ecocert Certificate for appropriately used inputs in organic production in accordance with Brazilian and international standards.

\*The photos in which people appear without masks were taken before the WHO declaration of the Covid-19 pandemic in March 2020.

## RECOGNITION

### **IEL 2020 TRAINEE AWARD**

Rio Deserto won the *IEL* 2020 Trainee Award at the state level. The company took second place in the Large Size category – Innovative Company, with the case “Digital Transformation in Trainee Program Practices”. For the achievement, the various adaptations necessary to keep the Trainee Program active in 2020 were presented, due to the Covid-19 pandemic.

Rio Deserto was the only company in the south of Santa Catarina classified in the Large Size – Innovative Company category of the *IEL* 2020 Internship Award. In previous years, the Trainee Program had also been recognized. In 2016, in addition to the state stage, Rio Deserto won the *IEL* Award for Best Trainee Practices nationwide.

The *IEL* Trainee Award is held every two years, being an initiative of the *Euvaldo Lodi* Institute – *IEL/FIESC*. The objective is to recognize and encourage the quality of trainee programs in Brazil, encouraging improvement in the quality of education and training of future professionals.



### CHALLENGE STAGE 4.i

A plaque of recognition was given to Rio Deserto, in 2020, for its participation in the “Challenge Stage 4.i – New Talents, New Ideas”, promoted by the *Euvaldo Lodi Institute (IEL/SC)*.

The initiative encouraged students to propose solutions to companies in Santa Catarina. The challenge was given the acronym “4.i” as it represents the pillars of the current industrial sector: internationalization, inclusion, infrastructure and innovation.

On the occasion, Rio Deserto launched a challenge related to “Digital transformation in mining”, through the creation of an application for process optimization, being among the 13 organizations in Santa Catarina selected to have their cases studied.

The Stage 4.i Challenge – New Talents, New Ideas – was held in partnership with the Federal University of Santa Catarina (*UFSC*), the State University of Santa Catarina (*Udesc*) and the National Industrial Learning Service of Santa Catarina (*Senai Faculty*).



### 22nd EXCELLENCE AWARD OF THE BRAZILIAN MINERO METALÚRGICA INDUSTRY

Rio Deserto was one of the Brazilian mining companies awarded at the 22nd Excellence Award of the 2020 Brazilian Mining Industry. The company was classified in the Dams and Maintenance categories, with the project “Online automation and control system for underground dams”. In all, more than 90 projects, from 40 mining companies across the country, competed for the award.

Rio Deserto’s award-winning project combines innovation and technology. The idea, which consists of extensive control of underground dams, was implemented in the Cruz de Malta Mine and 101 Mine extraction units.

With this achievement, Rio Deserto had eight years of recognition in the Excellence Award of the Brazilian Minero Metalúrgica Industry, having won titles between 2010 and 2020. The main objective of the award is to annually disclose the best technologies, processes and concepts applied in mining companies from all over Brazil.



#### Know the project

In the underground mining activity, dams are built to contain water from the process and geological conditions. In these dams, pumps are installed to drain the water to the surface. In Rio Deserto’s underground mining activities, dams are used in series in order to store and remove underground water, directing it to the treatment system, located on the surface. Subsequently, the drained water is used in the production process or returned to nature within the required quality standards after proper treatment.

The operation of these dams full time, eventually, caused calls at special times to resolve possible situations. To improve the operation of the dams, an automation system was developed that allows online control of the entire operation, reducing decision-making time, maintaining the operational safety of the underground and avoiding calls and access to the underground outside of office hours extraction operations.

## EXPRESSION OF ECOLOGY AWARD

With the Sustainable Forest Planting project, related to afforestation and reforestation, Rio Deserto won the 27th Expression of Ecology Award, the largest environmental award in southern Brazil, recognized by the Ministry of the Environment. In all, 164 projects, from organizations in Paraná, Santa Catarina and Rio Grande do Sul, competed for the title, with only 27 awarded. In southern Santa Catarina, Rio Deserto was the only company to receive this recognition.

This is the third time that Rio Deserto has won the Expression Ecology of Award. The first award was in 2011, with the project “Knowing Rebio’s Wild Animals: Aguaí Biological Reserve”. In 2018, in turn, the company won with the project “Ozone - Mass and Energy Balance for the Treatment of Acid Mining Drainage”.

### Know the project

The planting and management of the forest aim to respect the forest code and current legislation, with the aim of protecting water sources, local vegetation and, above all, native forests. The Sustainable Forest Planting project also contributes significantly to the capture and consequent reduction of carbon dioxide in the region, which is fundamental in mitigating greenhouse gas emissions. The management used promotes the deposition of antlers, leaves and bark, causing part of the nutrients absorbed by the trees to be returned to the soil. The maintenance of this organic matter significantly helps in reducing erosive processes.

## LATIN AMERICA GREEN AWARD

The project “Researching to Educate”, by Institute *Felinos do Aguaí*, supported by Rio Deserto, was among the best in the Latin America Green 2020 international award (Latin American Green Awards). The work won 9th place in the Fauna category and 117th place in the general category, being among the 500 best projects submitted. In all, 2,540 initiatives competed for the award.

With the classification, Institute *Felinos do Aguaí* received a certificate and a seal that can be used in printed and digital documents. In addition, it was awarded a program aimed at strengthening actions, consisting of online training related to strategy and planning, which can connect *Felinos do Aguaí* with other institutions.

The Latin America Green Award is international, with organizational headquarters in the city of Guayaquil, Ecuador. The aim is to highlight initiatives aligned with the Sustainable Development Goals (SDGs). In addition to Brazilian and Ecuadorian projects, initiatives carried out in countries such as Argentina, Bolivia, Colombia, Costa Rica, Mexico and Peru were also enrolled in the award.

## ACIC ENVIRONMENTAL SUSTAINABILITY SEAL

In 2020, Rio Deserto received the Seal of Best Environmental Sustainability Practices, from the Environmental Center of the Business Association of Criciúma (ACIC). The recognition took into account initiatives aimed at environmental preservation and social responsibility.

To achieve this, the company made available documents from the units and presented innovative actions and projects, proving its sustainable performance. Visits were also carried out at the registered units, where members of the ACIC’s Environment Nucleus got to know personally the environmental and social practices carried out.



## ALESC CERTIFICATION

Transparency in actions, sustainability and innovation applied to business were factors that ensured, for the 9th time, Rio Deserto's recommendation for Social Responsibility Certification in Santa Catarina. The recognition, promoted by the Legislative Assembly of the State of Santa Catarina (ALESC), aims to highlight companies and organizations from Santa Catarina committed to the well-being of society and environmental preservation.

The Social Responsibility Certification is annual and, in 2020, it reached its 10th edition. To obtain the title, Rio Deserto proved that it carries out social and environmental actions, through data and the presentation of the Sustainability Report related to the year 2019. The registered organizations were carefully evaluated by the Mixed Committee for Certification of Social Responsibility, composed of by technical representatives of public agencies and civil society in Santa Catarina.

The recommendation for the Social Responsibility Certification in Santa Catarina also reinforces Rio Deserto's commitment to aligning management practices with the Sustainable Development Goals (SDGs), in order to cooperate directly or indirectly in favor of a socially just and sustainable future. In this 10th edition, 77 organizations from Santa Catarina were awarded, of which 45 are non-profit, 27 private companies and five public companies.



**EQUITY AND INVESTMENTS (01/01/2020 a 31/12/2020)**

Economic and Financial Data	R\$
Sales Revenue	270.653.488,54
Payroll	42.187.886,30

Internal Social Indicators	R\$
Food	1.625.927,71
Social Charges	19.964.411,31
Health	1.102.688,46
Occupational Health and Safety	451.665,89
Education	1.627.200,81
Training and Development Professional	124.184,40
Participation in Profits and Results	--

External Social Indicators	R\$
Federal Taxes	7.817.017,65
State Taxes	3.890.280,63
Municipal Taxes	2.610.849,83

Environmental Indicators	R\$
Company Operation	1.512.384,00
Environmental Recovery	2.812.013,47

Mineral Reserves	Tons
Coal	32.389.168
Other minerals	23.126.551

Investments	R\$
Machines and Equipment	4.390.540,15
Industrial Installations	8.201.434,93
Buildings	297.285,87
Land	--
Furniture and Utensils	65.525,58
Equipment and Software	416.507,42
Vehicles	208.830,00
Maracaja	360.607,83
Development of New Products	174.520,89

Calculation Basis	R\$
Gross Revenue	270.653.488,54
Net Revenue	258.276.097,71
Operating Income	268.091.210,45

*Between the value of the Sales Revenue and the other registered items, there is the value of the inputs acquired from third parties (raw materials, materials, services, freight, energy and others).*

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