



# *Sustainability* REPORT 2019



**RIO DESERTO**  
SYNERGY WITH YOU



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*More than mineral coal.  
It is energy that generates development.*

*More than investing in technology.  
It is planning the future with innovation  
and quality in each process.*

*More than taking care of the environment.  
It is to comply with all the principles  
of sustainability.*

*More than valuing people.  
It is to encourage them to overcome  
challenges.*

**MINERAL COAL**

*Safe electrical power source.*

## Innovation and Sustainability

Improving procedures, evaluating paths and seeking solutions, has been Rio Deserto's strategy in pioneering transformations in the globalized scenario of the current market. In the company, innovation and sustainability go hand in hand with teamwork and valuing employees, families and communities.

2019 was a challenging year, in which new programs and projects were implemented. A period in which startups, students and employees joined forces in favor of creativity applied to business. Notable months, where everyone's involvement was the impetus for the great achievements.

The company continued to encourage the education of employees and family members, attentive to the environment, technology, health, safety and quality in all processes. Invested in equipment, training and expertise of employees. Won awards, developed new products, contributed to communities and social projects, received certifications and recognitions.

It also took its first steps as a Signatory Company of the National Movement SDGs (Sustainable Development Goals) of Santa Catarina. The objective is to contribute to the improvement of the quality of life of Santa Catarina's citizens, seeking to build an inclusive, environmentally sustainable and economically balanced society.

Therefore, Rio Deserto remains on a consolidated path, based on years of history, work, dedication and respect. A differentiated company that continually reinvents itself and values the progress of the economy in the Southern Santa Catarina coal region.

*Heitor Agenor Zanette*  
*Giovanni Pagnan Zanette*  
*Valcir José Zanette*  
**Administrators of Rio Deserto**



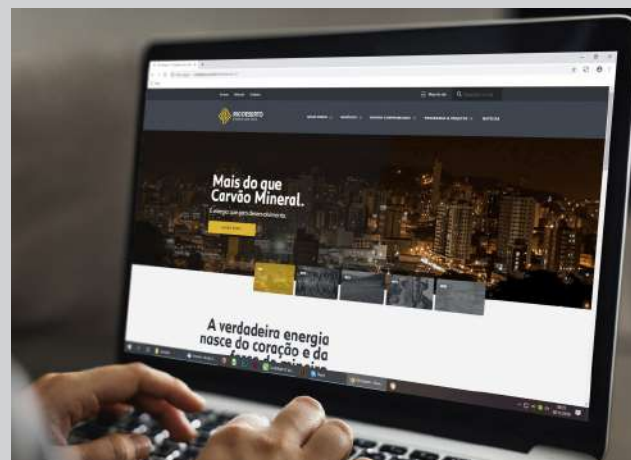
## NEW RIO DESERTO WEBSITE

Dynamic, interactive, practical, objective and capable of generating proximity. These are characteristics that marked the launch of the new Rio Deserto website, in 2019. The website shows the main features of the company, with an emphasis on modernization, and highlights the new visual identity.

Several differentials make up the new structure, including business segmentation, highlighting **Rio Deserto Mining**, **Rio Deserto Forestry**, **Rio Deserto Filters** and **Ragro Mineral Solutions** (including a direct link to the website). The annual sustainability manuals and reports, available at the main link “Who We Are”, can be viewed on the web, using the e-book format. In addition, important improvements were made in the registration of resumes.

Another novelty is that the site is responsive, that is, it adapts automatically when accessed on devices with different screen sizes, such as cell phones and tablets. The constant updating of data, such as information and images, is the main proposal.

Go to **[www.riodeserto.com.br](http://www.riodeserto.com.br)** and check all the changes!



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# SUSTAINABILITY REPORT 2019

## History



*João and Gabriel Zanette (in memoriam)  
Twin brothers, founders of Rio Deserto.*



*Overhead cable used to transport coal.  
Partial view of the Rio Deserto community, in  
Urussanga (SC), in the 1930s.*



## THE RIO DESERTO

A history written with dedication to the work, respect for people and commitment to development. That is Rio Deserto, the first coal mine in the South of Santa Catarina with certification in the three management standards: ISO 9001 (Quality Management), ISO 14001 (Environmental Management) and OHSAS 18001 (Occupational Health and Safety Assessment Series).

With 17 units and present in nine municipalities in Santa Catarina, Rio Deserto's business covers several segments. The main one is mineral coal, used in the generation of electric energy. The company also provides mineral solutions for the ceramic, glass and steel sectors, and operates in the filtering and forestry sector.

Agribusiness is another aspect of Rio Deserto, with the Ragro Mineral Solutions brand, which stands out in the supply of inputs for plant strengthening, animal nutrition and pet hygiene. Animal nutrition, in fact, is certified under the GMP + B2 Management System (acronym that represents the seal of quality assurance in the international scenario of industries supplying ingredients for animal feed).



### 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

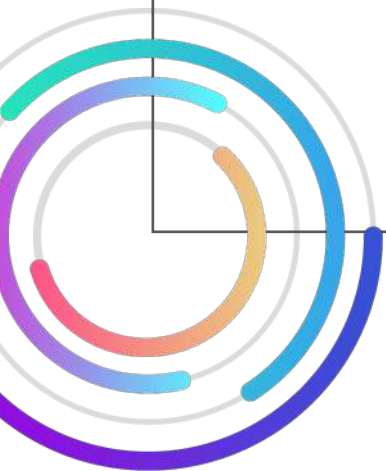
Respect the principles, policies and practices defined by the company, regulated by law and by society, working with honesty, professionalism and transparency.

### Socio-environmental Responsibility

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

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2019

*Units*





### **Criciúma (SC)**

- Central Office  
General Administration.

- Extraction Unit Novo Horizonte Mine  
Energy Coal.

### **Treviso (SC)**

- Extraction Unit Cruz de Malta Mine  
Energy Coal.

### **Içara (SC)**

- Extraction Unit 101 Mine  
Energy Coal.

### **Correia Pinto (SC)**

- Unit Correia Pinto  
Phonolith, Nepheline and Sodalite.

### **Lages (SC)**

- Unit Lages  
Phonolith.

### **Cocal do Sul (SC)**

- RD São Geraldo  
Environmental Recovery.

### **Capivari de Baixo - Consórcio (SC)**

- Unit Capivari de Baixo  
Energy Coal and Pelleted Mineral Coal  
(Marombado).

### **Siderópolis (SC)**

- Boarding Box  
Energy Coal for Jorge Lacerda  
Thermoelectric Complex.

- Metallurgical Unit  
Mining and maintenance equipment.

### **Urussanga (SC)**

- Laboratory Division  
Chemical and physical-chemical analysis in  
general. Research, development and  
innovation.

- Industrial Complex  
Nepheline, RD Glass, Feldspar,  
Carburante Fuel (Calcinated Petroleum  
Coke), Bormix and Pyrite.

### **Criciúma (SC)**

- Oriental Wealth Management Ltda.  
Movable and immovable property.



### **Cocal do Sul (SC)**

- Floresul Forestry and Reforestation  
Sul Ltda.  
Eucalyptus.



### **Urussanga (SC)**

- Industrial Complex  
Anthracite Coal for Water Treatment  
(ANTHRACIT)



### **Urussanga (SC)**

- Industrial Complex (Ragro)  
Plant Protect, Animal Protect and  
Pet Protect.

## SUSTAINABILITY REPORT 2019

# Benefits



*Agreement with clinics and laboratories, health plan and life insurance are some of the benefits offered to Rio Deserto employees. In addition to ensuring access to essential quality health services, the company provides, through campaigns, via prevention and treatments, the fight against communicable diseases, the promotion of mental health and well-being for all employees.*



*Rio Deserto understands that cooperation and collective effort have the power to transform people and, therefore, values each of its employees with good practices in the work environment. With seriousness and commitment, the company provides the generation of decent jobs, seeking creativity, technological innovation, labor rights, investing in organizational climate management, providing conditions of freedom, equity, safety, dignity, protection, extra benefits in food, health, transport and education.*

**Life Insurance**

Life insurance is a benefit that is available to all employees of Rio Deserto. The company contributes with the payment of 50% of the monthly fee, the rest being deducted from the payroll of the interested employee.

**Transport**

Employees working in Rio Deserto's production units have transportation provided by the company. Vehicles follow a previously established route.

**Internal Medical Assistance**

Rio Deserto has health professionals capable of providing guidance to employees, as well as carrying out preventive actions, periodic examinations, vaccines, consultations and emergency procedures. Specialist care and other exams can also be referred through internal medical assistance.

**Uniform**

Rio Deserto offers uniforms to employees of the production units. Use is mandatory and guarantees standardization and organization.

**Periodic Exams**

Employees at Rio Deserto's production units carry out periodic examinations, corresponding to their duties. The list includes tests such as visual acuity, audiometry, spirometry, clinical examination, X-ray of the spine and chest.

**Health Plan**

The health plan is a benefit available to employees of Rio Deserto. The company assists in the payment of monthly fees, with support ranging from 30 to 70% of the amount, according to the employee's salary range.

**Company Meal**

The meals served in the cafeterias of the production units of Rio Deserto are provided by industrial kitchens and follow the guidance of a nutritionist. The company pays 80% of the value of each meal, the other 20% being deducted from the employee's payroll.

**Acicard Card**

Rio Deserto employees can count on the Acicard Card, exclusive for the purchase of medicines. Expenses are deducted from the payroll.

**Agreement with Clinics and Laboratories**

Rio Deserto has an agreement with clinics and laboratories, facilitating the access of employees and family members to medical exams. With the partnership, different values in exams are also contemplated for the company's employees.

**FoodStamps**

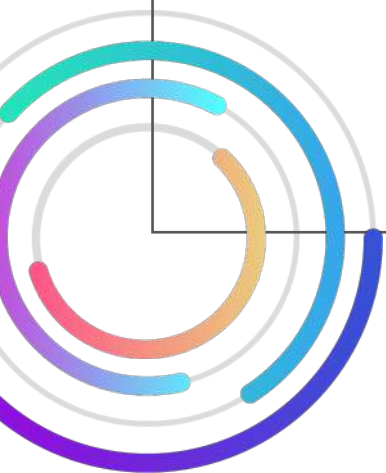
Employees at the Rio Deserto Mineração units receive food stamps in the holiday month. The benefit does not include Metallurgical, which complies with the convention of the Metalworkers Union.

**Milk**

All Rio Deserto employees receive 24 liters of milk per month. The benefit is the result of a union agreement of the coal industry convention. The agreement provides for the delivery of milk only to employees who work in coal mining, but the company extends the assistance to all workers.

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*Products*







**RIO DESERTO**  
MINING

**Energy Segment, Carbon Source,  
Elastomer and Sulfur**



*Cruz de Malta Mine Extraction Unit, located in the city of Treviso (SC).*

### **Energy Coal**

It's obtained after the processing of ROM (raw coal). In the whole process, the contents of ash, sulfur, volatile matter, calorific value are adjusted to the granulometry, always according to the needs of the market. It is used in thermal plants, as fuel (heat source), for the generation of electric energy.

### **Carburante Fuel**

It is the result of the calcination of green petroleum coke. Used in the correction of carbon (carburization process) in iron and steel castings, of several industrial processes.

### **Bormix**

It's achieved by means of coal rigorously selected and controlled. It is widely used as a catalyst agent for ebonite and as a semi-reinforcing filler for composing low-cost moldings in an elastomer-based compound.

### **Pyrite (Iron Sulphide)**

It results from the selective processing of mineral coal. It's used to correct the sulfur content in cast iron as a source of sulfur.



## Founding Segment: Ceramic, Glass and Steel

### Sodalite

Natural product from volcanic rocks, with a high content of alkalis. In the metallurgical industry, its function is to fluidize the slag, replacing fluorite.

### Phonolith

It is a natural product from volcanic rocks, melting with a high content of alkalis. It's used for densification and control of dimensional variation in the masses of the ceramic and glass industry.

### Unferrified Nepheline

Mineral product that, after processing and classification, has a very low iron content. It's used in ceramic enamels, with the function of attributing brightness and transparency.

### RD Glass

Product formed by several minerals that, after processing and classification, give properties to ceramic glazes. It's used in ceramic enamels with the function of improving texture and fusibility.

### Feldspar

It is a natural product from volcanic rocks. It is a melt material with a high alkali content, used in the glass, ceramics and melting frit and color industries.

### Syenite Nepheline

It is a natural product from volcanic rocks, with a high content of alkalis and low content of iron. It's used to densify and control the dimensional variation of porcelain tiles in the ceramic and glass industry.

## Anthracite Coal for Water Treatment (ANTHRACIT)

Produced from specific mineral coal and controlled processes, the product has different angular particles, providing perfect filtration. Used in water treatment filters, it increases filtration rates, the efficiency of removing impurities and improves water quality in several aspects, such as turbidity, color, coliforms and other microorganisms.



**RIO DESERTO**  
FILTERS



## ANIMAL PROTECT

### Notox

It is a mycotoxin adsorbent additive, composed of activated calcium and sodium aluminosilicate clay mineral, tested in vivo for poultry and swine. Intended for all animal species, Notox is added to the feed, being effective in combating fumonisins and aflatoxins, which can harm the health of animals. It has no smell and taste, does not absorb vitamins, minerals and other feed additives, and does not cause negative side effects such as interference with the levels of nutrients in animal feed. When ingested, adsorb and retain mycotoxins, inhibiting the absorption by the organism.

### Notox One

It is a mycotoxin adsorbent additive, composed of calcium and sodium aluminosilicate. It has a high cation exchange capacity, high swelling and, consequently, more thixotropy, favoring mycotoxin adsorption. 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. When ingested, adsorb and retain mycotoxins, inhibiting the absorption by the organism.

### Notox Poultry

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

**Ragro**  
MINERAL  
SOLUTIONS



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



### Notox Reproduction

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

### Notox LS

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

### Notox Swine

Product indicated for swine in the nursery phase. It consists of special aluminosilicates and organic additive. Product validated in vivo against the main mycotoxins that affect swine in the nursery phase. Effective against fumonisin, aflatoxin, T2 toxin, zearalenone and ochratoxin.



### **Protetox Afla**

It is a mycotoxin adsorbent additive, composed of calcium and sodium aluminosilicate, tested in vivo for poultries. Natural product for all animal species. When used in the feed, it forms a highly stable complex with mycotoxins. When ingested by the animal, it adsorbs and retains aflatoxins, inhibiting their absorption before they reach the bloodstream, thereby eliminating their toxicity along with the feces, allowing for better use of nutrients. The product has no odor or taste.

### **Bugram Protect**

Product registered with the Ministry of Agriculture, Livestock and Supply (MAPA) as an anti-caking additive. It is a compound from natural rocks, consisting mainly of silica. Intended for animal feed. The product acts on stored grains, bran and feed, absorbing moisture and controlling fungi and toxins. It works as an anti-bulge, protecting products against damage from excessive moisture.



### **PET PROTECT**

#### **Top Clean**

It is a hygienic sand for cats, composed of bentonite which, after processing and granulometric adjustment, gives characteristics of high capacity for the formation of firm clods. It has two versions: with and without fragrance.

Sanitary product for the adsorption of odors in cats' urine. Through its cation exchange capacity, it reduces unpleasant odors, helping to prevent the proliferation of bad smells. When in contact with the cats' urine, the spaces between the leaves of the chemical structure dilate, happening a phenomenon called thixotropy, forming a gel. Due to the agglomerating characteristic, the product allows the formation of a clods.



## PLANT PROTECT

### Gran Start Mn+

Mixed mineral fertilizer for foliar application composed of manganese, phosphorus and silicon. Its formulation promotes better nutritional balance and enhances the defense structures of plants. Product developed for post-stress recovery caused by herbicides.

### Gran Protect Max

Mixed mineral fertilizer for foliar application composed of copper, potassium, phosphorus and silicon. Its new formulation provides better syrup stability, makes nutrients present in its composition more quickly and facilitates operations due to the lower dosage. It is responsible for activating plant defense “artillery”, in addition to providing more tolerance to abiotic stresses.

### Induktor Si+ \*

Mixed mineral fertilizer for foliar application composed of copper, sulfur and silicon. Its innovative formulation enhances the defense structures of plants in addition to providing a better nutritional balance. The use of the Induktor Si + product is authorized in organic agriculture, being a great ally in the search for a more sustainable agriculture.

**GRAN PROTECT MAX**

No jokes when it comes to **protection.**

\*Induktor Si+ / Registered with the Ministry of Agriculture, Livestock and Supply (MAPA) nº SC-22787 10001-4



**Silicon Protect \***

Product registered with the Ministry of Agriculture, Livestock and Supply (MAPA) as a contact insecticide for the inorganic chemical group. From fossilized rocks of marine diatoms, consisting mainly of amorphous silica.

It is a contact insecticide and must be applied by spraying the product on the grains, before entering silos, deposits or warehouses. The microscopic particles of the product adhere to the insects' epicuticles, causing bodily dehydration, consequently leading to death. The effect results from the adsorption of waxes from the lipid layer by the silica crystals and from the cuticle abrasion, or both. Due to the adsorption of the wax molecules from the surface layer, the protective lipid layer breaks, allowing the body fluids to evaporate from insects.



The Induktor Si + and Silicon Protect products have the Ecocert Certificate of Conformity, aimed at the commercialization of products applicable in organic agriculture. Ecocert is an inspection and certification body founded in France, whose purpose is to certify products that can be used for organic production, according to Brazilian and international standards.

Suitable input for use in organic production. Use conditioned to the criteria of each organic regulation according to the respective Certificate issued. Inspected by Ecocert.

\*Silicon Protect / Registered with the Ministry of Agriculture, Livestock and Supply (MAPA) nº11617

## SUSTAINABILITY REPORT 2019

Technology



*Rio Deserto excels in innovation and quality, using modern methods for the processes of research, extraction, processing, mineral transformation, transport and commercialization of the final product. National and international technologies are inserted in all procedures, from the extraction of raw material to the final destination of the tailings.*



## iRD INNOVATION STRATEGY

In 2019, Rio Deserto launched the iRD Innovation Strategy, a program that encompasses the company's various actions related to the search for transformational and efficient solutions. Among the initiatives of the iRD Innovation Strategy, emphasis on training, the company's approach with startups and educational institutions, support and participation in regional events, guided by innovation, and practices involving the internal and external public.

iRD's visual identity is the representation of a brain, which reflects the essence of the strategy. The right side of art has vibrant colors, as it is the part of the brain linked to creativity. The left side, in turn, has colder colors, being associated with logic. The acronym iRD stands for "Rio Deserto Innovation".



## The Big Day

Innovation, technology, solutions, new business, exchange of experiences, evolution. The expressions that are so common in everyday business have gained even more strength in Rio Deserto in 2019. The company, in partnership with Plurall Coworking - based in Criciúma and with the objective of connecting businesses and entrepreneurs -, carried out the project "The Big Day".

One of the main objectives was to bring the company closer to the world of startups and to understand new business models. The partnership also took into account the development of new products and services, the mapping of trends and new technologies, the optimization of business processes, the reduction of costs, the search for insights to improve the business and the creation of a collaborative culture and entrepreneurial.



## American Technology Equipment in the Laboratory Division

In 2019, the Laboratory Division, of Rio Deserto, now has the equipment of American technology, the ICP OES - Optical Emission Spectrometry with Plasma. Considered an advance in terms of chemical analysis, it provides more agility in the characterization of raw materials, determining all the elements of a sample simultaneously, with more precision and less interference.

The practical training to put the equipment into operation was given by the service engineer, Reinaldo José Júlio, from the manufacturer company PerkinElmer.

The technology came to provide facilities. Heavy metals, which were previously sent to third-party laboratories, are now analyzed internally, reducing the cost of analysis. The use of cutting-edge technology, in addition to assisting in the innovation and development of new products, provides better results and faster product release.

The ICP OES - Optical Emission Spectrometry with Plasma, acquired by the Laboratory Division, of Rio Deserto, is considered a high technology. The equipment is a new model, which has been on the market for about two years, being used in universities and companies in sectors such as petrochemicals, paper and cellulose, among others. In Brazil, it is estimated that there are around 12 pieces of equipment of this same model in operation.



## Agricultural greenhouse contributes to research and development of new agribusiness products

Investment in research and development of new products by Ragro - a company active in agribusiness that is part of Rio Deserto, exceeded expectations with the use of an agricultural greenhouse in 2019. The structure was built attached to the Industrial Complex, in Urussanga, to expand and highlight the Plant Protect segment, related to plant strengthening. The new space contributes to the execution of tests in a controlled environment, enabling the conduction of experiments in times unfavorable to the cultures of interest, due to the control of water, light and temperature.



**STAY TUNED!**

In order to get to know the trends in the area of innovation and technology, Rio Deserto professionals accompanied the delegation formed by entrepreneurs from the Business Association of Criciúma (ACIC) visiting the Catarinense Technology Association (Acate), in Florianópolis. On the occasion, the company was represented by one of the administrators, Valcir José Zanette, who is also vice president of ACIC, by the financial advisor, João Gabriel Pagnan Zanette, by the administrative advisor, Eduardo Netto Zanette, and by the coordinator of the Information Technology (IT) sector, André Dalsasso. The Catarinense Technology Association (Acate) is the main representative of the innovative entrepreneurship in Santa Catarina.



Rio Deserto employees participated in the Startup Weekend Criciúma 2019 event, at the Business Association of Criciúma (ACIC), which brought together more than 80 people. During more than 50 hours of work, teams were challenged to transform ideas into viable business models. The company supports events that encourage innovation in the South of Santa Catarina.



High school students Sesi/Senai (Social Industry Service/National Service for Industrial Learning), who are part of the Technology and Robotics Club, studied innovations for application in Rio Deserto. In the action, the students were challenged to come up with solutions and ideas for real situations.

## SUSTAINABILITY REPORT 2019

Safety



*Safety is a highlight and priority at Rio Deserto. The company has a team of Specialized Service in Safety Engineering and Occupational Medicine (SESMT) and Emergency Brigades. Several programs are also part of the routine. This is the case of the Daily Health and Safety Dialogue (DDSS), held at the beginning of each shift in order to clarify doubts and warn of possible risks.*



## SESMT

Propagating the importance of health and safety in all areas of activity is the objective of SESMT (Specialized Service in Safety Engineering and Occupational Medicine), from Rio Deserto. The group, formed by engineers, safety technicians, doctors and occupational nurses, prepares projects and actions to make the working environment safer and more effective. In the Rio Deserto units, the participative safety management method is also applied, where each employee has responsibility for his/her area of activity, promoting the health and physical integrity of all.

In 2019, the rate of occupational accidents remained at low levels, following the reduction line of recent years.

## Emergency Brigades

Safety is a priority at Rio Deserto. Employees are periodically trained in all units of the company to work on accident prevention and intervene in risk and emergency situations. The training of the Emergency Brigades is the responsibility of SESMT (Specialized Service in Safety Engineering and Occupational Medicine) and comply with the requirements of the Regulatory Norms. Brigadiers also act as multipliers of concepts of good safety practices, inside and outside the organization.



## DDSS – Daily Health and Safety Dialogue

In order to make employees aware of good safety practices, Rio Deserto maintains the DDSS (Daily Health and Safety Dialogue). The meetings, lasting 10 to 15 minutes, are held at the beginning of shift activities at the production units. Among the topics covered, emphasis on communication, teamwork, leadership, consequences of not using and/or incorrect use of Personal Protective Equipment (PPE), valuing time, resources and space limitations. Meetings are usually held by safety technicians.

## Training and development

Rio Deserto values the training of employees in their functions. In 2019, the total amount of training hours reached 87,773.38 (amount of all participating employees), being 30 thousand more hours compared to 2018. Result that reflects the search for continuous improvement in the professional development of employees.

The training is related to internal and external courses, granted by the company. Among them, in 2019, the training courses that meet the regulatory standards NR 10 (Facilities and Services in Electricity), NRs 11 and 12 (Safety at Work in Machinery and Equipment), NR 20 (Safety and Health with Flammable and Fuel) and NR 35 (Work at Height).

In addition to those legally required, training on internal operating procedures was carried out, linked to the instructions and handling of machines and equipment. There was also recycling training (according to requirements for each position), internal training for brigade training, among others required by ISO 9001, ISO 14001 and OHSAS 18001.

Unity	Specific qualification for the job (total hours)	Training and development (total hours)
Extraction Unit Cruz de Malta Mine	29.440,00	37.414,87
Extraction Unit 101 Mine	29.968,00	33.349,45
Extraction Unit Novo Horizonte Mine	800,00	1.623,96
Metallurgical Unit	4.240,00	5.297,26
Laboratory Division	400,00	819,39
RD São Geraldo	320,00	719,03
Boarding Box	160,00	177,25
Unit Correia Pinto	1.200,00	996,29
Central Office	---	735,20
Industrial Complex (Ragro)	480,00	1.738,92
Industrial Complex (Ceramics)	---	637,12
Industrial Complex (Carburante Fuel)	1440,00	4.264,64
<b>TOTAL</b>	<b>68.448,00</b>	<b>87.773,38</b>

## Specific qualifications

In 2019, the specific qualifications of Rio Deserto, which have different workloads in mining and industry, reached a total of 68,448 hours (sum of all participating employees).

In the company's extraction units, the course "Specific in function and orientation in service" meets the mandatory requirement of NR 22 (Mining Regulatory Standard). The objective is to train beginning employees, with supervision and guidance from experienced and qualified employees.

There is also the "Qualification in function and orientation in service" course, which meets legal requirements. The aim is to enable employees to perform functions different from those they already perform, either to cover possible vacations of co-workers and/or internal promotions.

## Professional development training

Safety programs and actions: aimed at preventing accidents at work and caring for employees.

Mining operational procedures: related to the handling of machinery and equipment in the workplace.

Regulatory Standards (NRs): train employees in the NR 10 (Facilities and Services in Electricity), NR 12 (Safety at Work in Machinery and Equipment), NR 20 (Safety and Health with Flammable and Fuel) and NR 35 (Work at Height) standards, according to legal requirements, having in view of the physical integrity of employees.

## STAY TUNED!

Rio Deserto renewed the emergency vehicles in the extraction units. The company invested in the acquisition of two ambulances and two underground rescue equipment.

In the case of rescue equipment, the engine (New Holland 4030 tractor) received necessary adjustments in the Metallurgical Unit, with emphasis on the reinforcement in structure, couplings, bumpers, as well as protections. The implement was developed by a third-party company, with the support of the engineering team of Rio Deserto.





## SUSTAINABILITY REPORT 2019

# Education



*Rio Deserto encourages the education of employees and their children, through scholarships. It also transfers monthly financial resources to SATC (Beneficent Association of the Santa Catarina Coal Industry).*

## INCENTIVE TO EDUCATION

Rio Deserto, as well as all the coal companies that make up the SIECESC (Santa Catarina State Coal Extraction Industry Union), contributes to the maintenance of SATC (Beneficent Association of the Santa Catarina Coal Industry), through the transfer of 1% of monthly revenue. The educational institution is considered a social extension of carboniferous activity and a reference in education and technology. Transferring the value to SATC is one of the priorities of Rio Deserto, a company that agrees with the importance of supporting education, technology, innovation and offering opportunities.

## Amount invested in education by Rio Deserto in 2019:

**R\$ 1.442.634,67**

### Scholarships

Rio Deserto's incentive to education also gains emphasis by granting scholarships to employees and the children of employees. The analysis of requests is made by the Human Resources department. In the case of requests by employees, the importance of training is assessed in view of the needs required of the company's employee.



## SATC

SATC was founded in 1959, with the purpose of supporting workers in the Southern Santa Catarina Carbon Industry, as well as family members. Currently, non-profit, the institution belongs to the community segment, serving the entire population. The SATC campus, located in Criciúma, has a total area of 550 thousand square meters, with 36 thousand square meters of built area. There are more than 60 laboratories with advanced technological equipment, 85 classrooms, a library with more than 40 thousand titles and a virtual collection, a sports complex composed of two open gyms, two soccer fields, an athletics track, green areas and aligned professionals with the market.

SATC offers kindergarten, elementary, high school, technical, graduation and specialization courses. It also maintains the Technological Center, with several scientific researches, projects and provision of laboratory services. In all, about 5,000 students and 600 employees are part of the institution.

## SUSTAINABILITY REPORT 2019

# Environment



*Sustainable water management is highlighted in the extraction units of Rio Deserto, through the Effluent Treatment Stations (ETEs). Safe solutions to treat, recycle and reuse water from mining, positively improving quality standards and contributing to the sustainability of agriculture, the community and local industry.*



*Rio Deserto has significantly reduced the environmental impact in its areas of operation, including with special attention to soil, water and air quality, waste management and others. Recovers and revitalizes areas degraded by coal mining. Proof of this are the large investments made every year. All the amount invested in areas impacted by mining has already resulted in environmentally sustainable conditions. Some of these areas today, serve as green public spaces, safe, participatory, including and accessible to all population.*



*With a specific sector responsible for preparing studies, identifying preventive measures and innovations in the processes, the company uses methods of environmental recovery and revitalization of areas degraded by coal mining. The company also maintains the conservation and preservation of native forest areas in the cities of Orleans and Siderópolis, in the South of Santa Catarina. In addition, the company supports projects to protect animal and plant species that are at serious risk of extinction, as well as significantly mobilizing resources for implementing sustainable forest management, stopping deforestation and substantially increasing afforestation and reforestation.*

## ENVIRONMENTAL MANAGEMENT

Rio Deserto practices, in the units, the Environmental Management System parallel to the requirements of ISO 14001 (Environmental Management). The set of actions contributes so that the company's processes are aligned with the applicable environmental legislation. Lectures and training are also promoted to clarify topics related to environmental criteria and the requirements of certifying bodies. Audits, in turn, are carried out in order to improve the Management Systems implemented.



### Actions that demonstrate Rio Deserto's commitment to the environment

- Effluent treatment system and lamella decanter and filter press;
- Emergency response plan;
- Compliance with legislation;
- Periodic monitoring covering soil, water and air;
- Partnership activities with the community;
- Transport inspection system;
- Solid Waste Management Program (PGRS);
- Dam Safety;
- Environmental Moment;
- Automation of controls and environmental safety in the ETEs, making it possible to monitor the conditions of the area in real time;
- Continuous improvement of treatment systems and environmental monitoring.

## SOLID WASTE CENTER

The collection of waste deposited in the selective collection bins of the units, the sorting and marketing with a licensed company, are actions of the Solid Waste Management Program (PGRS), of Rio Deserto. The commitment to sustainable development and the correct destination of the waste generated has already earned certifications to the company regarding the recovery of the waste generated.

For PGRS to work, company and employees work together. The company identifies, quantifies and characterizes all waste generated. It also has a system for collecting, handling and storing waste, in order to minimize the risks of accidents and contamination. Employees, in turn, participate in training and carry out selective collection. The objective is to clarify and make employees aware of the importance of preserving the environment, managing waste through selective collection, rational use of natural resources and the way in which they can contribute to improving the quality of life, in the days current and future generations. Dynamics are also carried out on the environment, so

that they adopt habits and live correctly in the places where they live. In the meetings/lectures, the amount of waste generated in the unit, reduction methods, as well as reuse are presented.



Complete and efficient. Such is the Rio Deserto Solid Waste Management Program (PGRS). The organized system ensures that all waste generated at the company's units has an environmentally correct destination. The method adopted is a reference and complies with all current legislation.



## ENVIRONMENTAL RECOVERY

Rio Deserto has a culture of preservation and respect for natural resources. For this reason, the company operates in the recovery and revitalization of areas degraded by the extraction of mineral coal. Investments in research and innovation in processes occur constantly and allow activities to be carried out towards a more environmentally sustainable and healthy development, demonstrating that the company acts responsibly and challenges

itself, every day, to do more for the social environment in which it is inserted.

In almost ten years, Rio Deserto has already recovered more than three million square meters, including much of the territory is not part of the company's environmental liabilities. From 2010 to 2019, investment in the recovery and revitalization of degraded areas exceeded the amount of R \$ 35 million. By 2030, the recovery of other areas is expected, with investments that should reach R \$ 30

million. In the year 2019 alone, over 100 thousand square meters of degraded areas were recovered by Rio Deserto.

The environmental recovery methods used by Rio Deserto are based on the criteria developed by the Technical Advisory Group (GTA). Among the activities carried out in the areas, the following stand out: removal of tailings in Permanent Preservation Areas (APP), topographic conformation, waterproofing of the land with clay, recovery of soil fertility and introduction of new vegetation. Completed the work, monitoring is still carried out, with visits and proper maintenance, which certify the quality of the recovery and the balance of the ecosystem.



Rio Deserto contributes to the conscious and sustainable development of society.



## AFFORESTATION AND REFORESTATION



Rio Deserto operates in the forestation and reforestation of eucalyptus in the Southern Region of Santa Catarina. The objective is the recovery of soils (through forestry techniques) and the production of sustainable wood. The initiative also contributes significantly to the capture and consequent reduction of carbon dioxide in the region.

In the company's eucalyptus cultivation areas, the mosaic planting technique is adopted, which allows synchronization between commercial and natural areas, providing gains in forest production and biodiversity conservation. 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 displacing fauna and flora between isolated areas.

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





## EFFLUENT TREATMENT STATIONS (ETE)

At Rio Deserto, wastewater from mining is treated using physical-chemical processes. The procedure, which includes techniques such as aeration, neutralization and sedimentation in waterproofed basins, is carried out at Effluent Treatment Stations (ETEs), located in the extraction units themselves. Treated water is reused in underground equipment, cleaning and bathrooms. The surplus is also reused in local industry and agriculture, fully meeting the requirements of environmental legislation.



### STAY TUNED!

A study carried out at the 101 Mine Extraction Unit, in Içara, demonstrates, through data collection and environmental monitoring, that the mineral coal extraction process, when carried out in a managed manner, with all environmental care, does not interfere with behavior of local water resources.

Before the implantation of the mining unit, the community suffered from water scarcity to maintain rice growing and the local industry (they generally used excavated wells). After the implantation of the mine, with the treated water from mining, there was an improvement in the local conditions of the community, expanding the areas of rice cultivation. The local industry also started to use water in its production process.



## SUSTAINABILITY REPORT 2019

People  
Valuing



To meet this objective, Rio Deserto maintains the Quality of Life and Health Program, promoted by the company's medical department, which consolidates the monitoring of a worldwide trend in organizations: the culture of disease prevention and health promotion, in addition to organizational spheres. Initiatives such as Good Blood Friend Program, Getting Into Shape Project, labor gymnastics, anti-smoking campaigns, suicide prevention, vaccination and health care are some examples.

## WHITE JANUARY CAMPAIGN

White January, mental health awareness month, is remembered every year at Rio Deserto with posters on the murals, wallpaper (main image on the company's computer screen) and other forms of communication. The actions are promoted by the Human Resources department. Currently, if necessary, Rio Deserto employees, as well as family members, can seek specialized professionals, through the benefits offered by the company, with the Health Plan (Unimed), Sesi Clínica and partnerships with professionals in the field of psychology.

## CARNIVAL CAMPAIGN AND STI PREVENTION

The orientation actions and strategies related to the quality of life and health of Rio Deserto employees gain emphasis in the week before the Carnival parties. The importance of preventing Sexually Transmitted Infections (STIs) and care with alcoholic beverages and driving are some of the issues addressed by professionals in the medical department during the Daily Health and Safety Dialogue (DDSS). The theme is mainly highlighted in the units where there are more employees, such as the Metallurgical Unit and the Extraction Units 101 Mine and Cruz de Malta Mine.

## YELLOW FEVER VACCINATION CAMPAIGN

The campaign to expand the vaccine against Yellow Fever, which gained attention in several regions of Brazil in 2019, was also evident in the units of Rio Deserto. In order to contribute to the immunization of employees, explanatory posters were posted at the units, highlighting the main vaccination points in the Southern Region of Santa Catarina. In addition, through partnerships with municipal health departments, the internal vaccination campaign of interested employees was also carried out at the Extraction Units 101 Mine, Novo Horizonte Mine and Central Office.



It is the first time that a campaign against Yellow Fever has taken place in Rio Deserto. The action was part of the Quality of Life and Health Program, being promoted by the medical department. The initiative facilitates access to disease prevention measures and reinforces Rio Deserto's concern with the health of its employees.

### DAILY VACCINATION CAMPAIGN

In order to encourage employees to keep their vaccines up to date, a Vaccination Campaign was carried out at the Rio Deserto Industrial Complex. The action, promoted by the company's medical department, had the partnership of the Basic Health Unit of the Municipality of Urussanga, which provided vaccines and a nurse. On that occasion, doses of Yellow Fever, Hepatitis B and double adult vaccine (Tetanus and Diphtheria) were applied, according to the individual need to complete the vaccination schedule. The situations of employees who were pending reinforcements or doses of tetanus vaccine and against hepatitis were also regularized.

The permanent updating of vaccines is essential, highlighting the importance of prevention. The vaccination schedule followed by Rio Deserto is based on the indication of the Brazilian Society of Immunization (Sbim), regarding the recommendation of vaccines in the stages of life, and the Ministry of Health.

Rio Deserto always seeks to protect employees against these serious diseases, providing access to essential safe, effective and quality vaccines.

### OCCUPATIONAL GYMNASTICS

Occupational gymnastics comprises a series of exercises practiced in the workplace with the aim of providing good physical and mental conditions to employees. At Rio Deserto, gymnastics at work is classified as preparatory, being carried out before work begins. The activity consists of stretching, increasing blood circulation, viscosity and lubrication of joints and tendons.

At Rio Deserto, labor gymnastics are planned and performed by a physical education professional with the support of the multidisciplinary team in the medical department. The sessions, lasting 10 to 20 minutes, are held more frequently at the Metallurgical Unit and at the Extraction Units 101 Mine and Cruz de Malta Mine, where there are more employees. Among the benefits provided by workplace gymnastics in the organizational environment, emphasis on reducing sedentary lifestyle, improving physical conditioning and self-esteem.

### GOOD BLOOD FRIEND PROGRAM

Contribute to saving lives. This was the objective of employees and family members of employees of Rio Deserto, who went to Hemosc (Hematology and Hemotherapy Center of Santa Catarina), located in Criciúma, in 2019, for blood donation. The action is part of the activities calendar of the Good Blood Friend Program, maintained by the company.

Recognizing the need for Hemosc to maintain a stock that offers security to the population, awareness actions are routinely carried out at Rio Deserto. In the months of June and November, when World Day and National Blood Donor Day are celebrated, respectively, donation incentive campaigns gain even more strength in the company.





## ANTI-SMOKING CAMPAIGN

The “10 steps to stop smoking”, displayed on the Ministry of Health Portal, were the theme of the Anti-Smoking Campaign held at Rio Deserto in 2019. The subject was exposed to employees in the space for the Daily Health and Safety Dialogue (DDSS), at the Extraction Units 101 Mine and Cruz de Malta Mine, and at the Metallurgical Unit.

The objective was to present important information and tips for people who wish to quit smoking. At Rio Deserto, as the number of employees who smoke is relatively low, the intention was also to help those who live with smokers, to encourage people to quit the habit.

During the campaign, state coordinators of the National Program to Combat Tobacco were also consulted, and contacts were made available to employees interested in participating in treatment and support groups offered by the Unified Health System (SUS) at the municipal/regional level.

### Check out the 10 steps to quit smoking

1. Be determined
2. Schedule a day to stop
3. Cut the smoke triggers
4. Choose a method
5. Choose healthy substitutes
6. Get rid of cigarette memories
7. Seek support from friends and family
8. Choose the best food
9. Seek medical support
10. Exchange experiences in a support group

### STAY TUNED!

More than 50 students from the Antônio Colonetti Basic Education School, located in the municipality of Içara (SC), participated in the lecture “Combating drugs”, promoted by the medical department of Rio Deserto. The activity was held on the National Day to Combat Tobacco, August 29, 2019, and highlighted the harmful effects of the use of cigarettes and other legal and/or illegal drugs.

Every year, Rio Deserto runs internal and external campaigns related to the fight against smoking. The great intention is to emphasize how the use of drugs causes serious damage to health. Likewise, actions related to healthy habits are also motivated, such as reading, physical activity, food and others.



### YELLOW SEPTEMBER

The appreciation of life is highlighted in September, the international suicide prevention month. At Rio Deserto, guidelines are disseminated mainly through posters on murals and newsletters.

The Yellow September is an awareness campaign on suicide prevention, with the aim of alerting and speaking openly to society on the subject. In Brazil, it was created in 2015 by the CVV (Center of Life Appreciation), CFM (Federal Council of Medicine) and ABP (Brazilian Psychiatric Association), with the proposal of associating color to the month that marks the World Day of Prevention Suicide (September 10).

### PINK OCTOBER AND BLUE NOVEMBER

The October Rose and November Blue campaigns, for the prevention of breast cancer and prostate cancer, respectively, were remembered with awareness actions at the Rio Deserto units in 2019. In the activities, the importance of prevention and early diagnosis was highlighted of diseases.

In October, Rio Deserto employees received tips on healthy habits and were invited to wear a pink accessory on Wednesdays, in support of the cause. They

also received pink ribbons from the Human Resources department to be attached to clothing, used throughout the month.

Men's health, in turn, was highlighted during the Daily Health and Safety Dialogue (DDSS), held at the beginning of work shifts, mainly at the Metallurgical Unit and at the Extraction Units 101 Mine and Cruz de Malta Mine. In the conversation with employees, promoted by the medical department, testicular cancer was also mentioned.

### RED DECEMBER

In December 2019, the medical department of Rio Deserto promoted an internal campaign to prevent AIDS and Sexually Transmitted Infections (STIs). The activities took place in the Metallurgical Unit and in the Extraction Units 101 Mine and Cruz de Malta Mine, during the Daily Health and Safety Dialogue (DDSS), held at the beginning of shifts.

On that occasion, epidemiological data on the disease and HIV infections were addressed, made available by the report of the Directorate of Epidemiological Surveillance of Santa Catarina. Issues such as AIDS symptoms and the importance of carrying out rapid tests for the identification of HIV infection, available in municipal Basic Health Units, were also mentioned.



## GETTING INTO SHAPE PROJECT

The reduction in body weight and health gains marked the 3rd edition of the Getting into Shape Project, promoted by the medical department of Rio Deserto, in 2019. The activities of the Healthy Weight Loss Group, carried out in partnership with Sesi (Social Service of Industry), started in August and ended in December, totaling four months of follow-up. In all, the 3rd edition had 20 subscribers, including employees and family.

The project consisted of four group meetings, in addition to individual meetings. The first group meeting, with a psychologist, was intended to motivate participants to achieve results. In the second, with the nutritionist, the agenda was food labeling and the amounts of sugar, salt and oil recommended by the Ministry of Health. The third meeting, with a physical educator, highlighted theoretical and practical information on physical activity and heart rate. In the fourth meeting, in turn, the participants were divided into two groups, with various recipes being developed in the culinary workshop.

At each group meeting, the participants' anthropometric assessment was also carried out, with the measurement of measures such as weight, height, chest

circumference, waist, hip, arm (relaxed and contracted) and thigh (for women). Issues such as the evolution of the participant in the weight loss process and changes in the eating plan were also addressed at the meetings. It also had bioimpedance measurements (scale that measures the percentage of fat, lean mass, BMI - Body Mass Index and total body water).

### Satisfactory results

In the results of the 3rd edition of the Getting into Shape Project, emphasis on weight reduction. Together, the eight people who completed three or more visits, eliminated 25.3 kg, an average loss of 3.2 kg per participant. In addition, other health gains have also been reported, such as increased self-esteem, more satisfaction with the body and health, change in eating habits, reduction and/or exclusion of processed foods (soft drinks, processed spices, processed foods and refined flours), increased water intake and consumption of fruits and vegetables, natural, organic and whole foods. Some of the participants also mentioned the reduction of pain, reduction of tiredness and more disposition for daily activities, improvement of sleep quality, decrease in blood pressure, reduction of cholesterol and triglycerides, among others.

The Getting into Shape Project represents how much Rio Deserto values the health of its employees, revealing that the company spares no effort to provide quality of life to people who are dedicated every day to the good results of the organization.



## COFFEE AND HUMAN VALUE

Thanking, honoring and valuing employees for the length of service rendered to Rio Deserto was the aim of the 3rd Coffee and Human Value, held in 2019. The event brought together about 100 people, including employees and family members. Coordinators, unit managers, superintendents, advisors and administrators also honored the honors. On the occasion, employees who completed their time in the period between July 1, 2018 and June 30, 2019 were honored.

### Human Value Project

The Human Value Project aims at valuing people. In addition to honoring employees who complete their service, the action also makes reference to employees for their retirement time (honored on the date relating to the fact, in the unit where they perform their activities). Currently, the project is coordinated by the Human Resources department. The homage of the Human Value Project begins when the employee completes 10 years of work and continues every 5 years, until retirement.

## Employees honored in the 3° Coffee and Human Value

### 10 years award

#### Extraction Unit Cruz de Malta Mine

André Valentin Zanellato  
Cristiano Bez Fontana  
Everton Conti Peterle  
Luciano Fernandes Evangelista  
Luis Carlos De Bona  
Luiz Carlos Wolfart  
Luiz Rodrigo Miranda  
Ramiriz Rita  
Rony Abati  
Valter Stangherlin  
Ederson de Oliveira  
Elcio Antônio Padilha Vieira  
Jacintho Anof Baggio

#### Central Office

Gustavo Ronconi Scarabelot  
Junior Locatelli

#### Extraction Unit 101 Mine

Denise Elisa Gielow  
Diego da Silva Demétrio  
Paulo Giovani Tavares Tomasi  
Paulo Sérgio da Rosa  
Ezequiel Paulino  
Gilberto Becker Jordão  
Italo Armando C. Possenti

Joel Carlos Cardoso  
Ricardo Rita  
Rogério Rozeng  
Sandro Elias Correa

#### Metallurgical Unit

Adilson Antônio de Souza  
Antônio Marcos da Silva

#### Unit Capivari de Baixo

Felipe Medeiros Bertoncini

#### Boarding Box

Luis Malfriso da Silva



## 15 years award

### RD São Geraldo

Rogério Gastaldon

### Extraction Unit Cruz de Malta Mine

Rafael Pluceno da Silva

Sidney Stangherlin

### Laboratory Division

Sabrina Tavares

### Boarding Box

Vilmar Dagostim



## 20 years award

### Unit Correia Pinto

Reginaldo Rodrigues Lima

## 35 years award

### Boarding Box

Defende Adair Ferro

## 50 years award

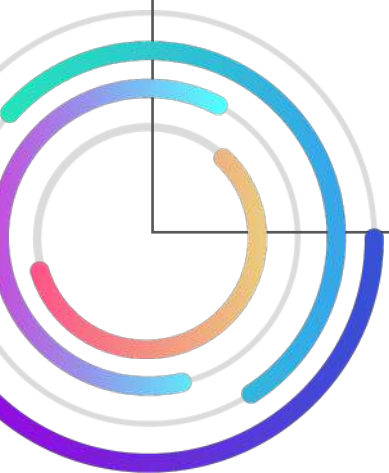
### Extraction Unit Novo Horizonte Mine

Esio Luiz Possamai



SUSTAINABILITY  
REPORT  
2019

*Internal  
Celebrations*





## INTERNATIONAL WOMEN'S DAY

The women who work at Rio Deserto were presented with flowers in celebration of International Women's Day, in 2019. In addition to marking the special date, the initiative reinforced the importance of each employee in the company's day-to-day activities. The action is part of the Human Resources department's calendar with a view to valuing people.

Along with the flowers, each employee also received a card with the following message: "May it be remembered, not just for a day, but at all times. His name is courage, strength, love, life. Generating inspiration, it is creation, it is blessed. Always exercising his social and professional role with excellence, he conquers space and law. Today and always, it deserves all respect."

## MOTHER'S DAY

Hug, reflection, music, emotion. In all Rio Deserto units, Mother's Day was celebrated in a special way. The 24 mothers who were part of the company's staff, in 2019, were provided with a makeup bag (bag to store personal items) and a face towel, both personalized with the employee's name

and the company's logo. In addition to congratulating women who are mothers and professionals, the company's intention was also to highlight the importance of all employees valuing the people they love and enjoying the moments with the family.

## FATHER'S DAY

One of the most special dates of the year, Father's Day was celebrated with great affection at Rio Deserto, in 2019. The company honored and presented a personalized pen drive to all employees who have children. The objective was to promote a moment of reflection on the importance of the family. The celebration, promoted by the Human Resources department, is considered very important in the company's calendar, since the vast majority of employees are parents.

Throughout the commemorative week, a poster with the following sentence was also displayed on the mural of Rio Deserto units: "Father, a word that inspires strength, security and protection. It is the one who gives affection, example and love. That is present in the memory and in the heart. Happy Father's Day! Family is precious!".





## DRAWING CHRISTMAS RIO DESERTO

Creativity and talent were the hallmarks of the Drawing Christmas Rio Deserto 2019 Project. The 6th edition was attended by 54 children, all children of employees, and had the theme “Christmas is Hope”. The competition, promoted by the Human Resources department, is a tradition of the company, being held annually. The objective is to bring together and integrate employees and family members, in addition to encouraging children to make the drawings that illustrate Rio Deserto’s year-end cards, delivered to employees, customers and suppliers.



### Meet the winners

#### Category 4 to 6 years

##### Lorenzo Rodrigues Miranda

Son of collaborator Ederson da Silva Miranda (Extraction Unit Cruz de Malta Mine)



#### Category 7 to 9 years

##### Maria Laura de Melo Ronchi

Daughter of collaborator Natalina Jardim de Melo Ronchi (Central Office)



##### Lara Vicente Fernandes

Daughter of collaborator Vilmar P. Fernandes (Extraction Unit Cruz de Malta Mine)



## Category 10 to 12 years

### Heitor Zanini Formanski

Son of collaborator Leonardo Stachowski Formanski (Extraction Unit 101 Mine)



Lorenzo



Maria Laura



Lara



Heitor



Vitor Hugo

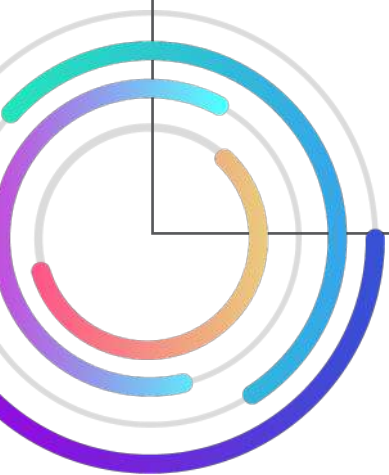
### Vitor Hugo de Azevedo Pereira

Son of collaborator Nériton Borges Pereira (Unit Correia Pinto)



SUSTAINABILITY  
REPORT  
2019

*Certifications*





### MANAGEMENT SYSTEM CERTIFIED BY THE NBR ISO 9001: 2015

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

ISO 9001 certifies the company's Quality Management System. It aims to ensure the optimization of processes and more agility in production, in order to satisfy customers and achieve the desired success.



### MANAGEMENT SYSTEM CERTIFIED BY THE NBR ISO 14001: 2015

- Boarding box
- 101 Mine Extraction Unit
- Cruz de Malta Mine Extraction Unit
- Novo Horizonte Mine Extraction Unit
- Central Office
- Laboratory Division

ISO 14001 is a certification that recognizes the effectiveness of the Environmental Management System. The standard aims to balance the company's profitability with the reduction of environmental impacts, through the commitment of the entire organization.



### MANAGEMENT SYSTEM CERTIFIED BY THE NBR OHSAS 18001: 2007

- Boarding box
- 101 Mine Extraction Unit
- Cruz de Malta Mine Extraction Unit
- Novo Horizonte Mine Extraction Unit
- Central Office
- Laboratory Division

OHSAS 18001 refers to an acronym in English (Occupational Health and Safety Assessment Series) which stands for Occupational Health and Safety Assessment Series. The standard aims to protect and ensure that an organization's employees have a healthy and safe work environment.



Ragro Animal Nutrition is also certified under the Dutch standard GMP + B2, which represents the seal of a Quality Assurance Certificate in the international scenario of industries that supply ingredients for animal feed.



## SIGNATORY COMPANY OF SDGs SC MOVEMENT

In the second half of 2019, Rio Deserto started negotiations to become a Signatory Company of the National Movement SDGs of Santa Catarina. The seal indicates that the company has been incorporating the 17 Sustainable Development Goals into its businesses, carrying out several practical actions that boost the development and well-being of the communities where it operates.

The National Movement SDGs Santa Catarina is a social movement, without economic ends, 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 the citizens of Santa Catarina, seeking to build an inclusive society, environmentally sustainable and economically balanced. It also aims to comply with the commitments of the 2030 Agenda for Sustainable Development, approved by UN member countries (United Nations), during the 70th

General Assembly held in September 2015, in New York.

Altogether, in Santa Catarina, there are more than 500 signatories, including individuals, class organizations, civil society organizations, educational institutions, companies and public authorities, who are willing to contribute to the construction of a more peaceful world, just and sustainable. Rio Deserto is the first coal mining company in the south of Santa Catarina to become a Signatory Company of the National Movement SDGs SC.



## What are the Sustainable Development Goals?

The 2030 Agenda is an action plan for people, the planet and prosperity, which seeks to strengthen universal peace. The plan indicates 17 Sustainable Development Goals and 169 goals to eradicate poverty and promote decent life for all, within the limits of the planet. These are clear objectives and targets for all countries to adopt according to their own priorities and to act in the spirit of a global partnership that guides the choices needed to improve people's lives, now and in the future.



**Objective 1 - No poverty:** End poverty in all its forms everywhere.

**Objective 2 - Zero hunger:** End hunger, achieve food security and improved nutrition and promote sustainable agriculture.

**Objective 3 - Good health and well-being:** Ensure healthy lives and promote well-being for all at all ages.

**Objective 4 - Quality education:** Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.

**Objective 5 - Gender equality:** Achieve gender equality and empower all women and girls.

**Objective 6 - Clean water and sanitation:** Ensure availability and sustainable management of water and sanitation for all.

**Objective 7 - Affordable and clean energy:** Ensure access to affordable, reliable, sustainable and modern energy for all.

**Objective 8 - Decent work and economic growth:** Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.

**Objective 9 - Industry, innovation and infrastructure:** Build resilient infrastructures, promote inclusive and sustainable industrialization and foster innovation.

**Objective 10 - Reduced inequalities:** Reduce inequality within and among countries.

**Objective 11 - Sustainable cities and communities:** Make cities and human settlements inclusive, safe, resilient and sustainable.

**Objective 12 - Responsible consumption and production:** Ensure sustainable consumption and production patterns.

**Objective 13 - Climate action:** Take urgent action to combat climate change and its impacts.

**Objective 14 - Life below water:** Conserve and sustainably use the oceans, seas and marine resources for sustainable development.

**Objective 15 - Life on land:** Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.

**Objective 16 - Peace, justice and strong institutions:** Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.

**Objective 17 - Partnerships for the goals:** Strengthen the means of implementation and revitalize the global partnership for sustainable development.

## SUSTAINABILITY REPORT 2019

# Socio-environmental Programs



*With this objective in mind, Rio Deserto has, since 2006, the Felines of Aguaí Project, and since 2010, the Içara More Sweet Project. Therefore, it carries out activities in order to keep the economy, the social and environmental environment balanced.*



### **IÇARA + DOCE**

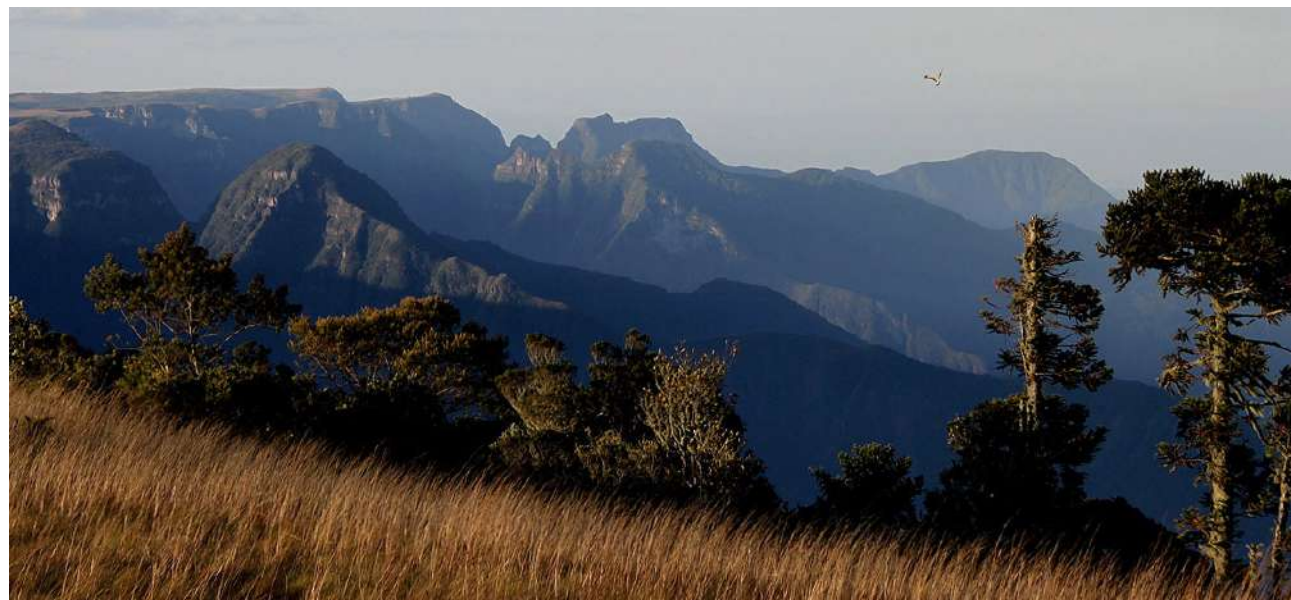
For ten years, Rio Deserto has maintained the Içara Mais Doce Project, which consists of donating honey eucalyptus seedlings to honey producers from the Içara Beekeepers Association (API). In 2019, 52,500 meliferous eucalyptus seedlings were donated to 42 beekeepers.

In total, it is estimated that beekeepers benefited by the Içara Mais Doce Project have more than 20 thousand hives and at least 700 apiaries. This in at least 200 properties in the Southern Region of Santa Catarina. The municipality of Içara is among the cities of Santa Catarina with the most expressive production of honey, so much so that it has the title of Honey Capital.



## FELINOS DO AGUAÍ

The Felinos do Aguaí Institute is a non-governmental organization dedicated to the conservation of wild cats of the Aguaí State Biological Reserve and surroundings, which are among the most endangered species in the world, mainly affected by the loss of their habitat. The project, created in 2006, has a partnership with Rio Deserto and serves the municipalities of the Southern Catarinense coal region (AMREC), contributing significantly to the environment and society, developing research activities, environmental education and involvement with local communities.



## Conservation Unit

The Aguaí State Biological Reserve was created in 1983 and is one of the ten conservation units of the Integral Protection Group of Santa Catarina. It comprises an area of almost 8 thousand hectares, covering territories of municipalities such as Treviso, Siderópolis, Nova Veneza, Morro Grande, Bom Jardim da Serra and Criciúma and is considered very special for environmental preservation, as it houses one of the richest natural heritage of the country, the Atlantic Forest.

Aguaí (*Chrysophyllum Viride*) is the name of a tree that is present in the Atlantic Forest

and, in the conservation unit, dominates mainly the tree extract of the steep slopes of Serra Geral.

The conservation unit stands out for presenting a complex natural physiognomy with rugged reliefs and altitudes ranging from 200 to 1470 meters, with cold waters, typical of mountain, and a great diversity and endemism of many species in the various groups of fauna and flora. For communities in the Southern Region of Santa Catarina, the conservation unit is essential, as it supplies water to the São Bento River Dam, which supplies several municipalities.

## Environmental Education and Research Program

In the Environmental Education Program of the Felinos do Aguaí Institute, emphasis is given to the lectures, participation in events, production and dissemination of educational materials, interpretive trails at the Aguaí State Biological Reserve and São Francisco Reserve and visits to the Environmental Education Center of the Felinos do Aguaí Institute. Actions that, during 2019, directly involved more than 2 thousand people.

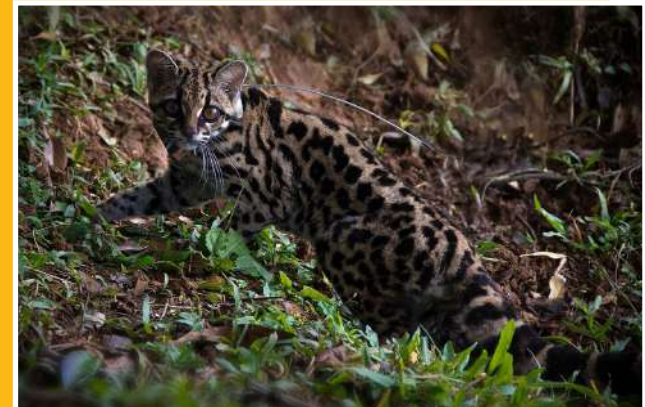
Emphasis also on the opening of the amphitheater in the middle of nature, located in the São Francisco Reserve, in Nova Veneza (SC), and on the creation of an enclosure for wild cats, an important educational tool in the process of sensitizing people to the conservation of species.

Significant advances also marked the Research Program in 2019, with records, including, of cubs of lion-bay in the State Biological Reserve of Aguaí. The first satellite radio was also acquired for placement in lion-bay, a monitoring technology that allows surprising and unprecedented data on wildlife. The reintroduction of wild cats to nature and the capture campaign also moved the year.

## Technology in favor of the Research Program

Technology has been an important ally in the research program of the Felinos do Aguaí Project. One of the highlights is the use of radio telemetry in the monitoring of wild cats. The technique makes it possible to locate and monitor the individual from a distance, monitoring vital and physiological signs, as well as activity patterns.

Highlight for the development of FaunaSoft software, with the objective of managing a large unified database with universities, NGOs and Environmental Foundations. FaunaSoft allows information on wild fauna to be continuously deposited, essential knowledge for the definition of strategies for preserving local biodiversity. So far, the software has 3,200 records of individuals of wild fauna, of various species, which are evaluated and result in the production of scientific articles.





## ENCANTOS DO SUL ENVIRONMENTAL PARK

In 2019, Rio Deserto became “Friendly Company” of the Encantos do Sul Environmental Park, located in the municipality of Capivari de Baixo (SC). Monthly financial support is mainly used for environmental education projects.

The Encantos do Sul Environmental Park was opened in October 2013 and has 35 hectares of green area. The space is managed by the Jorge Lacerda Association (AJL), composed of higher education institutions (University of the South of

Santa Catarina - Unisul and Faculdade Capivari - Fucap), organized civil society (Association of Employees of Tractebel Energia and Eletrosul - Ases e Association of Municipalities of the Laguna Region - Amurel), as well as the private institution Engie Brasil Energia. The Park’s mission is to stimulate environmental education and offer culture, leisure and entertainment to the community, bringing together large audiences, especially on weekends.



## APASB

In 2019, the futsal team São Bento Parents and Athletes Association (APASB) competed in several competitions at the municipal, regional and state level, among them the State Under-17 Championship, the Olesc (Catarinense Student Olympics), Jasc (Open Games of Santa Catarina), Jesc (Santa Catarina School Games) and Moleque Bom de Bola, sponsored by the Catarinense Sports Foundation (Fesporte). APASB has athletes in the under-9, under-11, under-13, under-15 and under-17. In addition to futsal, it also maintains handball, volleyball and basketball teams. Currently, almost 500 children are part of the schools. One of the main characteristics of the association is the essence of training critical citizens, capable of transforming the world into a better place. Rio Deserto contributes to the São Bento Parents and Athletes Association through monthly financial support.

## BALL SHOW INSTITUTE

Ball Show Institute, which has monthly financial support from Rio Deserto, was created in 2008, with the objective of promoting education and social inclusion of children in social vulnerability through the practice of sport (soccer, women's volleyball) and of music (guitar and classical music). Currently, about 90 children and adolescents, aged between 7 and 16 years, enrolled in public schools, are served by the project. To remain in the workshops, the student must have an average equal to or higher than grade 7 at school, and not commit acts of indiscipline, respecting and being cordial with colleagues and teachers. Currently, the project has two centers (Bairro Ana Maria and Bairro Mina do Mato), in Criciúma.



## WOMEN'S BASKETBALL PROJECT

The Women's Basketball Project, from the Municipal Sports Foundation (FME) of Criciúma/SATC, trains and trains athletes to practice sports. It also contributes to moral and ethical education, providing opportunities for the emergence of talents in sport and in life. The activities carried out include daily training, physical monitoring, nutritional guidance and participation in municipal, state and national competitions. Currently, the project has 50 athletes, in addition to the beginners' schools. Rio Deserto's monthly financial support mainly contributes to the maintenance of athletes in accommodation.



### CRICIÚMA BASKETBALL CLUB

Giving opportunities to young people, discovering talents and developing men's basketball teams is the objective of Criciúma Basketball Club. With seriousness and responsibility, the project aims to encourage sports practice, through partnerships with public and private schools, and maintains teams in the sub-12, sub-13, sub-15 and sub-17 categories. Rio Deserto believes in the transformation that sport can bring to people's lives and, therefore, supports projects.

### ASSOCIATION OF PEOPLE WITH PHYSICAL DISABILITIES OF CRICIÚMA (JUDECRI)

Founded in 1981, the Association of People with Physical Disabilities of Criciúma (Judecri) is a non-profit organization that aims at the social integration of people with disabilities, through sport, culture and leisure. Judecri members practice sports such as swimming, boules, chess, table tennis and athletics and participate in competitions promoted by Fesporte (Catarinense Sports Foundation) and CPB (Brazilian Paralympic Committee). Rio Deserto's monthly financial support is used to maintain the institution's activities.

### SUPPORT FOR SCHOOLS, COMMUNITIES AND SPORT TEAMS

Whenever possible, Rio Deserto contributes to the communities and institutions located around the units. All requests for support that arrive at the company by letter are analyzed and receive due return. Among the situations, highlight to benefits to schools, churches, sports teams, festive, cultural and other events.

## APAE CRICIÚMA

Rio Deserto provides financial assistance to the Association of Parents and Friends of the Exceptional (APAE) of Criciúma, maintainer of Caminho da Luz School. Founded in 1968, it is a private non-profit philanthropic entity. It receives from newborns to adults with intellectual and multiple disabilities, syndromes, global developmental delay, among others. Currently, it serves 287 students, providing assistance, monitoring and guidance in the area of health, assistance and education, with trained professionals in the area of speech therapy, pedagogy, physiotherapy, occupational therapy, nutrition, dentistry, social assistance and medicine.

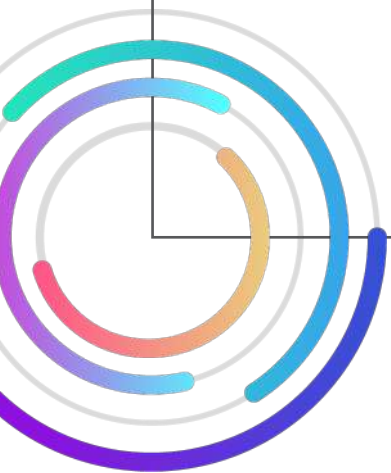
The organization also has a place for the development of domestic skills, art room, music, computer lab, physical education rooms, outdoor gym, indoor court, playground, TV room, air-conditioned classrooms, library, swimming pools, cafeteria (where about 20 thousand meals are served per month), among other facilities.

## BAIRRO DA JUVENTUDE

In addition to the monthly financial contribution to the aforementioned entities, Rio Deserto continues with an expressive participation in the monthly support to Bairro da Juventude - a philanthropic institution that serves children, adolescents and young people, from Criciúma and region, enrolled in programs from the beginning of early childhood education to training professional. With the donation of resources and / or materials for educational, cultural, sporting and social events, among other initiatives, the company believes in the purpose of the Bairro da Juventude within the South of Santa Catarina, carried out with transparency, so it has maintained its support for several years.



# SUSTAINABILITY REPORT 2019



## Internal Programs



*Rio Deserto has the Young Apprentice and Leader Development Programs. It also maintains the Internship Program, with actions that stimulate personal and professional growth.*

## SOLIDARY MILK

The donation of milk, through the Solidary Milk Project, of Rio Deserto, benefited 18 entities and several families in the South of Santa Catarina, in 2019. In the whole year, the number of donations reached 5,865 liters.

The institutions benefited by the Solidary Milk Project were: Casa Guido, Casa de Repouso Bom Jesus, CRAS Vila Miguel - Social Assistance Reference Center, Abecin - Group of Support for Families of the Assembly of God Church, Bairro da Juventude, Associação Beneficente Abadeus, Casa Maria Tereza of Support for People with Cancer, SATC - Beneficent Association of the Santa Catarina Coal Industry, Soccer School Seeds of the Future, São Vicente de Paulo Asylum, Association Nossa Casa, AMA - Association Amigos do Autista, Association Lar da Terceira Idade Rede Viva, Feistauer Asylum and Cantinho do Idoso, all from Criciúma. Also benefited were APAE - Association of Parents and Friends of the Exceptional (by Lauro Müller and Siderópolis) and the Casa de Recuperação Rosa de Saron (Siderópolis).

The Rio Deserto Solidary Milk Project, exists since 2005 and aims to donate milk to needy entities and families in the municipalities where the company units or in nearby cities are located. Each month, each employee receives 24 liters of milk and can choose to donate part. Since 2015, Rio Deserto doubles the amount of milk donated monthly by employees, helping more institutions to benefit.

Finally, the initiative provides the feeling of sharing and kindness to those most in need and the spirit of volunteering to employees. The Solidary Milk Project is renewed every year, with constant incentives for its continuity with excellence.

### Monthly donation in 2019

January: 616 liters  
February: 540 liters  
March: 714 liters  
April: 489 liters  
May: 480 liters  
June: 390 liters  
July: 656 liters  
August: 580 liters  
September: 450 liters  
October: 315 liters  
November: 325 liters  
December: 310 liters





## INNOVATION AND QUALITY PROGRAM (PIQ)

Rio Deserto's Innovation and Quality Program (PIQ) has existed since 2003 and aims to stimulate the creativity of collaborators, who can propose solutions and improvements to the units' processes. Ideas are welcomed, rewarded and applied. This is a recognition of Rio Deserto for the efforts of employees.



## INTERNSHIP PROGRAM

The Rio Deserto Internship Program has existed for almost 15 years and aims to identify potential talents, strengthening the practice of responsible internship, contributing to personal and professional training, and ensuring growth opportunities. In 2019, the Rio Deserto Internship Program - known as "a gateway to the labor market" - provided 65 internship links (between mandatory and non-mandatory). Of these, about 23 active trainees are considered,

where 57% of the internships were hired. There was, therefore, a considerable increase of 8.15% related to the volume of trainee links.

Rio Deserto trainees are paid and are entitled to benefits such as transportation vouchers, food, health insurance and others. They also participate in training, campaigns and internal programs, acquiring technical and/or behavioral knowledge and skills.

## 7th Trainee Meeting

The 7th Traineeship Meeting, promoted by Rio Deserto in 2019, brought together about 30 people who do traineeship at the company. The learning workshop, with the theme "Professional of the future: what are the skills and abilities?" Was held in the innovation room of the Sesi/Senai (Social Industry Service/National Service for Industrial Learning), in Criciúma, and also marked the Trainee's Day, celebrated on August 18.

Among the subjects discussed in the afternoon of activities, highlighting the concept of skills and competences, reflections on what is expected of the professional of the future, the qualified professional for the job market, emotional intelligence and professional posture, and allied technology and innovation to the professional of the future. The dynamics also ensured interaction between meeting participants.

### Trainee supervisors

Rio Deserto's Traineeship supervisors also participated in training in 2019. The objective was to highlight the duties of employees who assume the role of trainee supervisors, guiding and accompanying young people in the units. The action is held every year and is part of the activities calendar of the Rio Deserto Internship Program.

The training took place in the Industrial Complex, in the Laboratory Division, in the Central Office, in the Metallurgical Unit, and in the Mina Cruz de Malta and Mina 101 Extraction Units. In the meetings, the Internship Program Manual was also detailed, which is an official document from the company.

### Santa Catarina Movement for Education

Rio Deserto considers the traineeship as an educational action and, therefore, is part of the Santa Catarina for Education Movement, led by the Federation of Industries of the State of Santa Catarina (FIESC). The Movement's focus of activity is education for the world of work, understood as that which ensures the best teaching and learning standards for the training of professionals and citizens capable of meeting the current and future demands of the economic sectors and acting constructively in the community of surroundings and society.

### STAY TUNED!

Rio Deserto's Human Resources Department was present at the Pedagogical Week of Colégio SATC. The aim was to present the professional profile of a technical level that the job market currently requires, allowing the educational institution to evaluate how it is directing the interns, as well as to verify aspects that can be improved in the processes and activities.



## YOUNG APPRENTICE

The opportunity to learn a profession, through study and work, is the purpose of the 18 young apprentices of Rio Deserto. The program, which began in 2018, is aimed at young people aged 15 to 21, who are attending or have already completed high school. Rio Deserto's young apprentices are registered in the Work Permit, transportation voucher and remuneration according to the legal provision.

Young people hired by the Mina Cruz de Malta and Mina 101 Extraction Units participate in theoretical and practical activities carried out exclusively at the SATC (Beneficent Association of the Santa Catarina Coal Industry), from Monday to Friday, from 1:15 pm to 5:30 pm. The training is focused on the technical course in mechanics.

Those hired by the Industrial Complex, on the other hand, work at the company and participate in theoretical meetings held at CIEE (Center for Company-School Integration), in Urussanga. Participants are trained in the professional course of Administrative Routines. Classes at CIEE take place every Monday and the last two Tuesdays of each month, from 8 am to 12 pm. The practice, in Rio Deserto, is from Tuesday to Friday, from 7 am to 11 am, except on the last two Tuesdays of the month, when there are activities at CIEE.



## LEADERSHIP DEVELOPMENT PROGRAM

Self-knowledge, Emotions Management, Leader of the Future and Time Management. These were the themes addressed at the meetings of the Leadership Development Program, promoted by the Human Resources sector of Rio Deserto, in 2019. In all, ten employees from the Metallurgical Unit participated in the training.

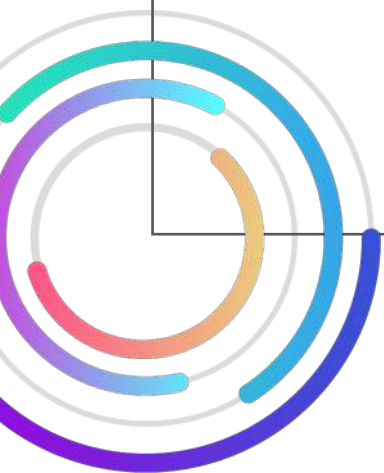
Rio Deserto's Leadership Development Program aims to develop leadership and support areas in improving people management skills, helping to manage internal behaviors and enhance human capital. In 2018, the training had brought together employees from the Mina Cruz de Malta and Mina 101 Extraction Units.





SUSTAINABILITY  
REPORT  
2019

*Awards*



## 21st EXCELLENCE AWARD of the Brazilian Mining-Metallurgical Industry

A project developed by employees of the Mine Extraction Unit 101, of Rio Deserto, was awarded, in 2019, the 21st Excellence Award of the Brazilian Mining-Metallurgical Industry. The event took place in Belo Horizonte (MG). With the title, Rio Deserto has seven years of awards, won between 2010 and 2019. The recognition reveals the organization's attention to process improvements.

The study, entitled "Reducing costs and increasing availability of equipment (focusing on tires)", was developed from the perception of underground production stops resulting from tire changes, as well as the high cost of repairs and acquisitions. The project was designed by employees Adilmar da Silva, Alexsandro Heerd, Jeferson Bittencourt, Jefferson Rodrigues and Rauan Martins, and was supervised by the mining engineer and unit manager, Fabio Vanzeloti da Rosa, and by the mechanical engineer, Geovane Rosso Felipe.



The Brazilian Mining-Metallurgy Industry Excellence Award is organized by the Minérios & Minerales Magazine. The objective is to annually disclose the best technologies, processes and concepts applied to mining companies throughout Brazil.

### The Winning Project

For the development of the project "Reducing costs and increasing availability of equipment (focusing on tires)", the team of employees identified two causes of damage to tires in the underground of the mine: the presence of metallic residues on the floor (electrodes, nails), screws and others), and the heating and subsequent reduction of the viscosity of the oil that leaks from the wheel hubs, running down into the tires. For the first problem, the group of employees proposed to install magnets attached to a support, on the bumpers of the tractors, in order to collect the materials from the ground that, possibly, could damage the tires. For the second problem, the solution was to replace the lubricating product (oil) with the application of grease, which is more resistant to temperature and the mechanical work of the wheel hub.

## CATARINESE AWARD OF CCQ 2019

Rio Deserto represented the Southern Region of Santa Catarina and was the champion of the VIII edition of the Santa Catarina Award for CCQ (Quality Control Circles) 2019. The event took place in Costão do Santinho, in Florianópolis (SC), during the XXI State Congress of Improvement Teams. In addition to Rio Deserto, two more companies competed for the title, one from the North and the other from the Itajaí Valley.

The conquest came through the project “Recovery of the ax of the continuous mining cutter head”, developed by the employees Alcides Frasson Serafim, Diego Baldasar Kestering, Marcus André Colombo, Rafael Levati Montagnoli and Miguel Genuíno, from the Metallurgical Unit. At the event, the professionals presented the identified problem, the studies carried out, the discoveries and the benefits achieved, especially in terms of cost reduction for the company.



## What is CCQ?

In order to strengthen the Quality Management Systems in the State, in January 1999, the Santa Catarina Center for the Promotion of CCQ (Quality Control Circles) was founded. The nucleus is formed by companies that have the CCQ program - improvement teams in different regions of Santa Catarina. They are organizations that believe in valuing teamwork to promote sustainable development.

## SOCIAL RESPONSIBILITY CERTIFICATION - ALESC

Rio Deserto was awarded, in 2019, for the 8th time, with the Santa Catarina Social Responsibility Certificate. The title delivery ceremony took place during a special session held at Plenary Deputy Osni Régis, at the Legislative Assembly of the State of Santa Catarina (ALESC), in Florianópolis. In all, more than 80 companies and organizations from Santa Catarina were recognized for their social and environmental practices and actions developed in the State.

The recognition of ALESC is a reflection of one of the main characteristics of Rio Deserto, which is attention to socio-environmental issues. In the company, the actions related to the social-environmental and environment are constant, and several projects are supported throughout the southern region of Santa Catarina. To obtain the title, Rio Deserto proved that it carries out socio-environmental actions, through data and the presentation of the Sustainability Report related to the year 2018.

### The certification

The Social Responsibility Certification, promoted by ALESC, is carried out annually, instituted by state law, and aims to value private companies, public companies and non-profit organizations that have the social and environmental responsibility included in their management policies. The initiative also encourages organizations from Santa Catarina to align their management practices with the 17 Sustainable Development Goals (SDGs), in order to cooperate directly or indirectly in favor of a socially fair and sustainable future.





## IÇARA FEATURED

For contributing to the development of Içara, Rio Deserto - Mina 101 Extraction Unit - received the Highlight Trophy Içarense 2019. This is the 9th consecutive time that Rio Deserto has been nominated for the award. At the ceremony, the company was represented by employee Marcel Matias Anastácio.

During the 21st edition of the Içara Featured, almost 70 trophies were delivered, including classes such as business, medical, sports, politics, union, economic, banking, cultural, real estate, as well as professionals and companies recognized for making a difference in the municipality. The voting to define the winners took place via the internet, for three months. The Featured Içarense Trophy is an established award and has been held for over two decades.



In Içara, Rio Deserto has a significant participation in tax collection and job creation. The company's social involvement is also highlighted in the municipality, mainly with the development of the Içara Mais Doce Project, which benefits beekeepers, and for the social actions that favor communities.

## GREEN SEAL

Conquest of Green Seal highlights Rio Deserto's attention to sustainability. The work carried out by the company in the area of preservation and environmental education in 2019 was recognized through the Environmental Seal Green Certificate. With the achievement, the company is entitled to use, for another year, the Green Seal label, proving that it has operational licenses issued by environmental agencies and is in compliance with the required criteria, as well as the Environment Policy.

The Green Seal Environmental Certificate is issued by the Jornal do Meio Ambiente of the State of São Paulo based on a survey conducted with environmental agencies. The intention is to congratulate, annually, public and private companies from all over Brazil that combine activities with the preservation of natural resources, as well as boost the production and improvement of technologies aimed at sustainable development.



## STAY TUNED!

Rio Deserto and the twin brothers João and Gabriel Zanette (in memoriam), founders of the company, were honored during the celebration of the 75th anniversary of the founding of the Business Association of Criciúma (ACIC). The event to thank you was held at the institution's headquarters on June 18, 2019, and brought together former presidents and people who helped build the association's history, as well as businessmen, political leaders and the general public. Rio Deserto was represented by one of the directors, Valcir José Zanette, who also serves as vice president of ACIC, and by the financial advisor, João Gabriel Pagnan Zanette.

During the commemoration of the

75th anniversary of the foundation of ACIC, about 80 honors were delivered, with the congratulations of former presidents, associated companies, patrons, business unions, associations, security bodies and educational institutions.



**EQUITY AND INVESTMENTS (01/01/2019 a 31/12/2019)**

Economic and Financial Data	R\$
Sales Revenue	239.488.167,44
Payroll	39.824.111,67

Internal Social Indicators	R\$
Food	1.640.870,99
Social Charges	19.800.030,89
Health	1.032.512,88
Occupational Health and Safety	519.794,45
Education	1.442.634,67
Training and Development Professional	204.825,78
Participation in Profits and Results	29.073,81

External Social Indicators	R\$
Federal Taxes	7.314.179,85
State Taxes	4.833.556,08
Municipal Taxes	2.485.284,80

Environmental Indicators	R\$
Company Operation	1.270.044,34
Environmental Recovery	2.740.468,74

Mineral Reserves	Tons
Coal	32.389.168
Nepheline	2.525.714
Phonolite	19.886.637
Bentonite	714.200

Investments	R\$
Machines and Equipment	4.086.499,82
Industrial Installations	5.616.814,30
Buildings	875.365,54
Land	3.000.000,00
Furniture and Utensils	135.756,95
Equipment and Software	229.895,59
Vehicles	1.116.891,24
Maracaja	229.968,90
Development of New Products	533.773,17

Calculation Basis	R\$
Gross Revenue	246.395.356,99
Net Revenue	227.348.665,45
Operating Income	239.488.167,44

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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