AN EXECUTIVE SUMMARY TO BUILDING VIABLE ECOSYSTEMS AND **SUSTAINABLE INFRASTRUCTURE** FOR TRADE AND DEVELOPMENT **IN SOUTH BRAZIL**

CONTENTS

The following pages are a synopsis, with excerpts from an executive summary that outlines the principal elements for building an intergraded sustainable transportation infrastructure and ecosystems. There are also excerpts from the regional train's business plan that outline the train's infrastructure objectives, proposed financing mechanisms, and links to the Brazilian Federal Government's law that provides insurance to safeguard foreign investments. It also incorporates carbon credits usage and the applicable technologies supporting the deliverables. The contents have been compiled from 2019 to 2025 regarding the Serra Gaúcha Region of South Brazil.

The developments planned for the Serra Gaúcha Regional Projects have incorporated a holistic approach for the trains, airport, and seaport systems and their sustainable ecosystem development. The incorporation and use of the Carbon Sat technology will provide a mechanism for verification and accountability for the usage of carbon credits to access sustainable resources for development. Through our collaborations with MOBICAXAIS and the UNIVERSITY CAXAIS DO SUL, not only will the technology for sustainability be accessible to verify the carbon offsets, but it may also identify applicable usage of hydrogen extraction as a viable energy resource. We have also explored the research and applications of the indigenous raw material extraction, such as graphene, and its application for building and its value-added applications.

These excerpts are examples of the catalyst we are applying for the optimum impact, in addition to the Quantm® computing software application being utilized to navigate the train's path in coordination with the roadway system. The adaptations of best practices are aimed at adapting measures to minimize the effects of variable change, to minimize the cost associated with scheduling, and to optimize efforts in securing capital resources. The incorporation of best practices, innovative research, and commercial applications is the benchmark for obtaining the Serra Gaúcha Regional Development Project's Sustainability Goals.

The business plan for the train's development is currently available for review. The business plan for the two other transportation projects is forthcoming once the tenders for the train are made available for certified investors upon receipt of a Letter of Intent from the investor (s) or their representative. The latter two projects will be executed under a Public Private Partnership (PPP) and a Build Operate and Transfer (BOT) mechanism for development.

SIGA
MOBILIDADE

Establishing the Serra Gaúcha Regional Trains, Airports, and Seaport For Sustainable Ecosystems Development:

This is a private endeavor to; initiate passenger and cargo railway services, installation of the International, refurbishing of the regional airport within the 14 Municipalities to accommodate 42 regional governments' 2028's projections. All in support of the demographic and GDP expansion for the State of Rio Grande do Sul, in 2040.

This presentation is not typical of a business plan but, more so an amalgamation of various factions that have a vested interest in the sustainable development for the region.

SIGA MOBILIDADA'S INFRASTRUCTURE & BUSINESS DEVELOPMENTS:

SERRA GAÚCHA REGIONAL TRAIN • HORTENSIAS INTERNATIONAL & CAXIAS AIRPORTS

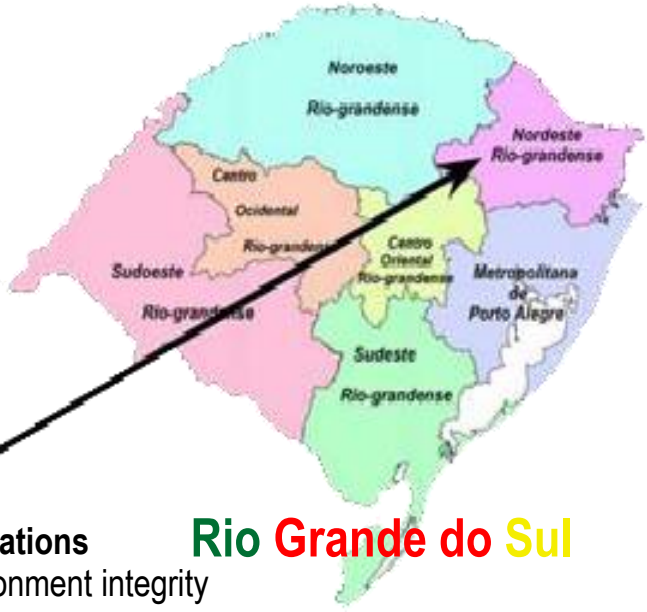
TECHNOLOGY INNOVATIONS • EXPORT/IMPORT TRADE

LOCATION

BRASIL

1st Stage Of The Trains' Development To Fourteen Municipal Governments

2nd Stage To Sea Port In Santa Catarina



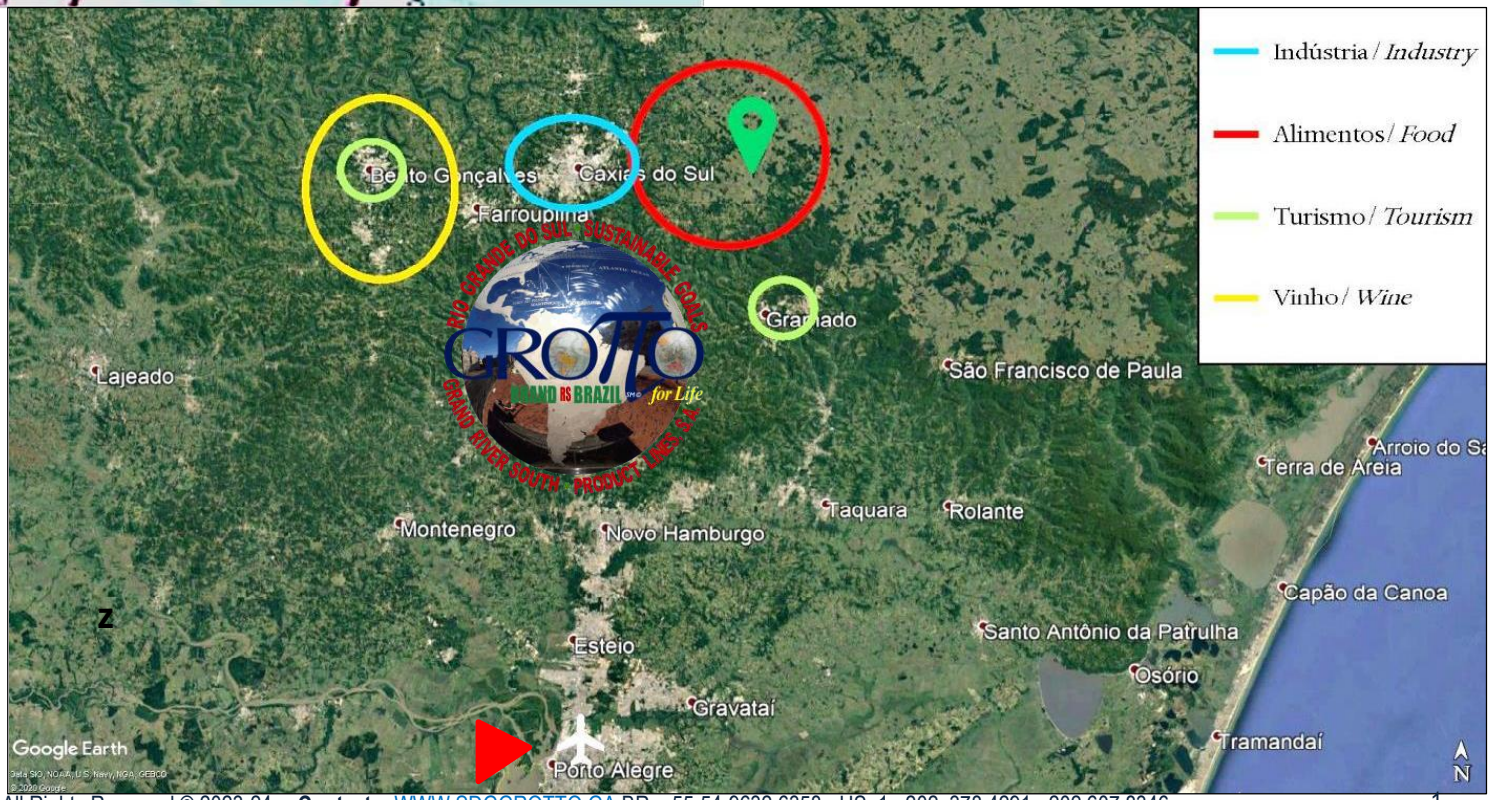
Considerations **Rio Grande do Sul**

a. Environment integrity
b. Cost of lands expropriation
c. Acquisition of capital, conversion and sale of the natural resources from the development's excavated
d. Integration of the regional ecosystems
e. Carbon Credits (CCs) assessments for development
f. Logistics for utilities and ground transportation
g. Installation of 14 stations and 4 depots to serve an estimated 42 communities to expand production of products for export and increase the regional GDP
f. Railway engineering and maintenance variables.

➢ Updates complete technical and engineering.

➢ CCs initiated for infrastructure development.

➢ Documented for 99 years of operation of the train.



Ad Majorem Dei Gloriam

Aeroporto Regional Serra Gaúcha e Ferrovias

The Serra Gaúcha Regional Trains and Airport

NOTICE OF TENDERS

The tenders for the development of the Regional Train Systems, Airport, and CDL will be presented for the implementation of each project and will be issued in the last quarter of 2025. The developers/concessionaire will consider all viable offers as such may be to Build Operate & Transfer (BOT) or others that will be best address the interest of the municipalities being served with an expansion of the transportation infrastructure to address the 2040 projections.

Vacaria • Bom Jesus • São José dos Ausentes • Jaquirana • Cambará do Sul • São Francisco de Paula • Canela • Gramado • Nova Petropolis
Caxias do Sul • Farroupilha • Carlos Barbosa • Garibaldi

14
Municipal Stations

14 Passenger Station, and 4 Depots Serving 42 Municipalities in the Serra Gaúcha, Rio Granda do Sul Regional Train

The First Line Approximate Total Railroad Section 372.28 Km

SIGA MOBILIDADE

Serra Gaúcha Regional Train Routes & Stations

Vacaria
Bom Jesus
São José dos Ausento
Jaquirana
Gambará do Sul
Caxias do Sul
Bento Gonçalves
Farroupilha
Garibaldi
Carlos Barbosa
Nova Petrópolis
Gramado
Canela
Francisco de Paula

1st Stage Of The Trains' Development
To Fourteen Municipal Governments

GROTTO BRAND RS BRAZIL since for Life
RIO GRANDE DO SUL SUSTAINABLE GOALS
GRAND RIVER SOUTH PRODUCT LINES S.A.

mobicaxias

2nd Stage Train
To Sea Port 2026 at: Arroio do Sal. RS

Hortênsias International
Airport & CDL Complex at: Canela and Caxias

OVERVIEW OF THE TRAIN PROJECT

The Serra Gaúcha Regional Train; this infrastructure project is a private venture being instituted to accommodate the projected demographics for an expansion of the region's GDP index. This project is being developed in conjunction with the Canela Hortênsias Region Airport and Logistic Center. This infrastructure development project will support a multipurpose transportation system for the transport of products produced in the Serra Gaúcha region, the transport of an indigenous workforce required for an expansion of the region's GDP, which is capable of expanding production within the region for access to a border global market, and to accommodate the region's tourism industries' and passenger transportation. The train's consideration is to support the projected demographic expansion that has been projected for the 2040 growth in the state of Rio Grande do Sul. The first tranche for seed capital of $25,000.000 identified in the project's 2023, budget of 1.5 Billion USD will be applied as designated on pages that delineate the projects' equity, funds usage, and proposed distribution schedule.

The objective, (s) is to stabilize the transport and delivery systems of the supply chain for the delivery of goods to proposed export facilities. Secondly, this endeavor will ensure more timely deliveries and volumes of products, many of which would be categorized as perishable. Third, the development will minimize the degradation and fatalities of the current road infrastructure by decreasing the number of heavy transport vehicles carrying goods over the road systems. Lastly, with a diminished carbon emission from the current mode of supply chain operations, there will be a stable foundation for implementing viable regional ecosystems. The proposed railway system is being designed to allow for obtaining the following results:

- Sustaining the projected demographics of the population in the region, accommodating a greater influx of tourism and minimalizing the carbon foot print from everyday activities via a matrix of interconnected eco systems of infrastructure, industries, societal and environmental adaptations.
- It will accommodate and become an important component to the tourist industry as an attraction that will motivate and accommodate tourists to circulate throughout the region.
- It will reduce the cost of transporting natural raw materials, from forestry, mining, agriculture and industrialized value added products from the region.
- It will increase the industrial and commercial competitiveness of companies in the region.
- It will reduce the flow of vehicles on the region's roads, whether cargo or passengers.
- It will reduce the emission of greenhouse gases emitted by the transport network in the region.
- It will reduce the travel time between cities.

The railway will pass through the following municipalities with boarding stations in: Bento Gonçalves, Bom Jesus, Cambará do Sul, Canela, Carlos Barbosa, Caxias do Sul, Farroupilha, Garibaldi, Gramado, Jaquirana, Nova Petrópolis, São Francisco de Paula, São José dos Absentes and Vacaria.

Objectives and Success Criteria

Objectives	Success Criteria
Decrease the volume of cargo transported by ground transportation modal	Rail modal should reach 15% of transport of loads by 2035
Serve as a viable means of transportation for handling passengers	Movement of an estimated 8 million passengers by 2035
Generate funds through the issuance of bonds via Carbon Credits for development	Generation of US$ 1.5 billion in carbon credits by passengers 2035
Provide quality service to carbon credit users (passengers, cargo and tenants)	User satisfaction rate above 80% and punctuality above 95

Milestones

Milestone	Goals	Completion Date
First phase	Fundraising in preparation for the layout and for obtaining the criteria and implementation of carbon credit for the full development of all the aspect of the project.	07/2024
Second phase	Elaboration of the project's economic viability, completion of engineering and negotiation of the private lands to be acquired.	11/2025
Third phase	Purchase of equipment, i.e. locomotives, cargo and passenger cars and the construction of stations and railway line.	08/2027

Priority Levels Requirements and Assessments

1. Legislation on railways must remain unchanged.
2. Investors must have their return guaranteed.
3. The population must have a positive view of the project.
4. Industrial entrepreneurs must realize how much the railroad will improve the competitiveness of local businesses.
5. Tourism entrepreneurs should realize the advantages of having one more tourist attraction and a half of transporting people.
6. Local governments must support the project.

Assumptions

a. Due to the desire for political gain, there will be politicians who will attempt to obstruct the progress of the project.
b. Investors and population will be more supportive if the project is environmentally sustainable, financially feasible and viable for the communities.
c. Due to the volume of resources involved, the project must have transparence and be compliant to Local State and Federal governments.

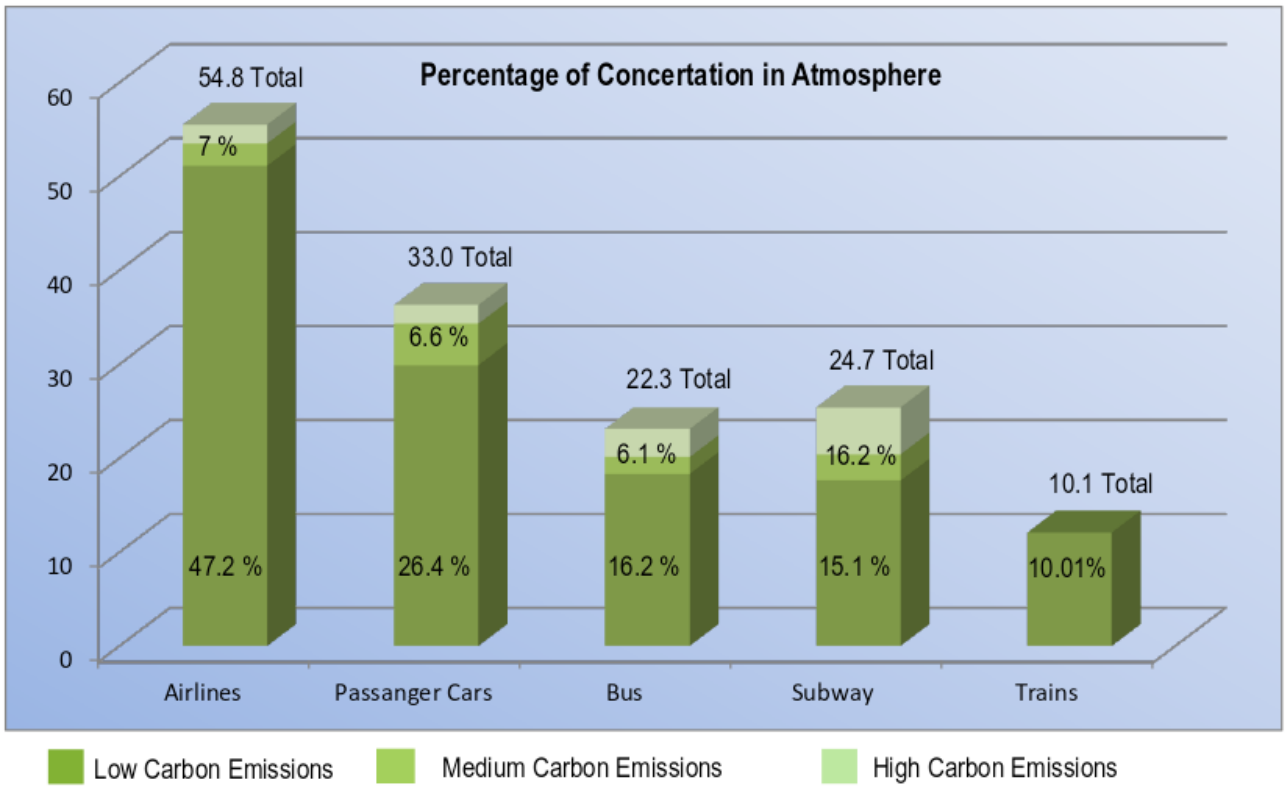
Limitations

d. The. The length of the railroad should be limited to the Serra Gaúcha region.
e. Manufacture as many of the equipment used on the railroad as possible by companies located in Serra Gaúcha region.

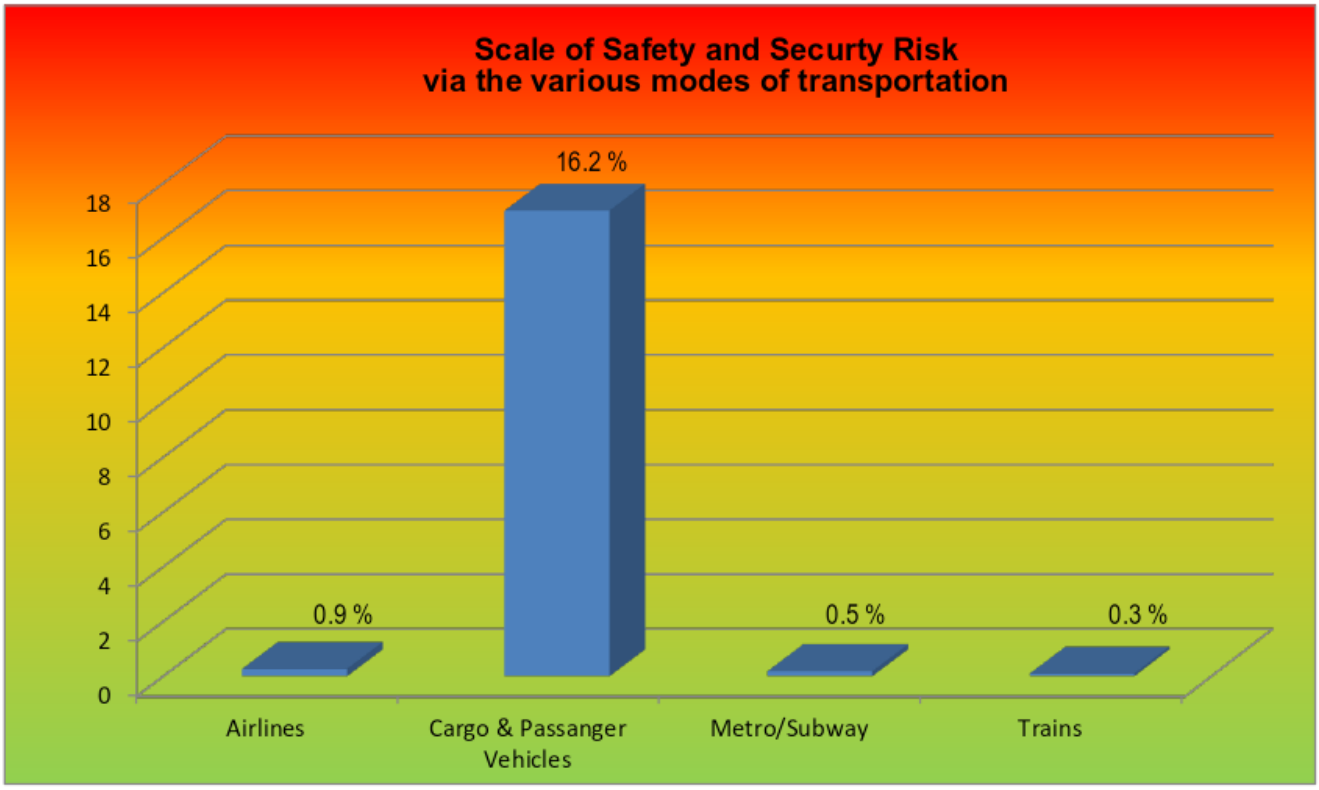
Risk Assessments

- Not raising enough funds to complete the work (-)
- Government change legislation preventing the autonomy of private companies in the railway sector
- Low demand for freight transport (-)
- Low demand for passenger transport (-)
- Demand for cargo transportation exceeds available capacity (+)
- Demand for passenger transport exceeds available capacity (+)
- Work load and cost becomes much more expensive than expected (-)
- Uncalculatable risk associated with Climate Change conditions (-)

Environmental Impact from Transportation Modes



Analysis of Transportation Modes

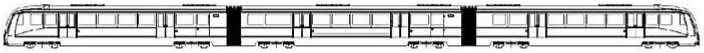


NOTE: Technical details and specifications can be provided for investment consideration with nondisclosure agreements engaged, as the technical aspects are proprietary for engineering and methods of operation are development trade secrets. Financial projections, development content, and agreements for investments are currently available only in Portuguese. The assessments and measures of Carbon Credits that will be generated from the sustainable closed loops of ecosystems, and infrastructure initiatives for the municipalities, will be available during the fourth quarter of 2025. An analysis of environmental impact shall be made in full disclosure for all TENDERS that will be offered, and the Carbon Credits that may be applicable for obtaining international economic expansion funds to offset costs for development.

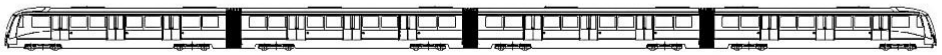
	Turismo	Intercidades	Urbana
Largura de portas	1000 mm	1000 mm	1300 mm
Número de abertura de portas por carro	2	2	6
Capacidade de passageiros por carro	70	70	180

Turismo e Intercidades | **Urbana**

2 carros - 140 passageiros | **2 carros - 360 passageiros**

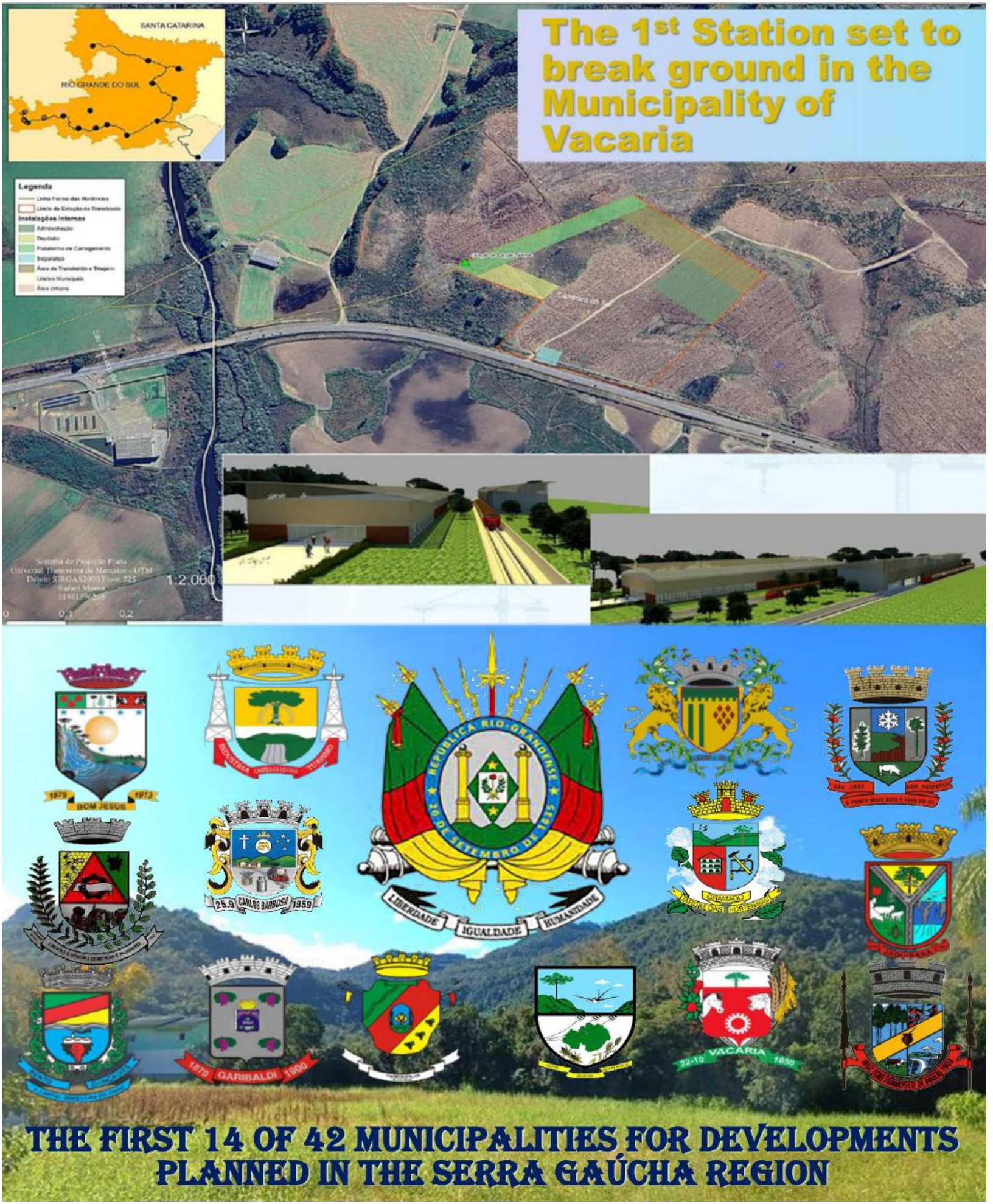


3 carros - 210 passageiros | **3 carros – 560 passageiros**



4 carros - 280 passageiros | **4 carros - 760 passageiros**

Sites for Serra Gaucha Regional Train Routes and Stations



FOODS & PRODUCTS FOR EXPORT

Establishing the Serra Gaúcha Regional Trains, Airport Systems, and coming in 2026 the Sea Port at Arroio do Sal to expand Development of South Brazil's Sustainable Ecosystems

We have obtained contractual agreements with the various producer associations in the sectors of: agricultural and livestock, industrial sectors, construction, and mechanical product lines. Our engagements range from establishing market access and brand development for organizations such as technology innovation-based companies for rebranding and or, repackaging of products under the branding, " GROTTO BRAZIL ERPORTTRADE" for the export of products to the Global Marketplace via our network of consortiums.

"The beauty of our Trains and Airports Systems is their ability to connect the communities of the Serra Gaúcha Region. Together, these 3 infrastructure developments will provide collective access points to a world of opportunities and cultural exchange."

Infrastructure Development and Management: Facilitating the Serra Gaúcha Regional Trains, Airports, Seaport, and Ecosystems designed to increase the region's GDP and increase the exportation of Brazilian product lines.

Hortencias International Airport, CDL, and Entertainment Projects

2028

2024, 2025, 2026, 2027,

Siga Mobilidade Urbana
MOBICAXIAS and GROTTO
PRESENTS DEVELOPMENTS
IN THE SERRA GAUCHA REGION
OF HYDRANGEAS

2024, 2025, 2026, 2027, 2028

THE REGION OF HORTÊNSES

According to the REGIONAL COUNCIL FOR THE DEVELOPMENT OF THE HORTÊSES REGION (COREDE), the region has been considered for three consecutive years to be the third most popular tourist destination in the country. Currently, it is the largest tourist complex in Rio Grande do Sul and has the city of Canela as the largest municipality in the region, encompassing 30.9% of the total population. With regard to capacity and accommodation, the Hortênses Region is the main attraction highlights of Rio Grande do Sul. There are 295 means of accommodation with a high concentration of 5 & 6 star hotels. The Tourism Observatory of Rio Grande do Sul monitors which municipalities in Rio Grande do Sul are being offered by the 26 main Tour Operators in Brazil.

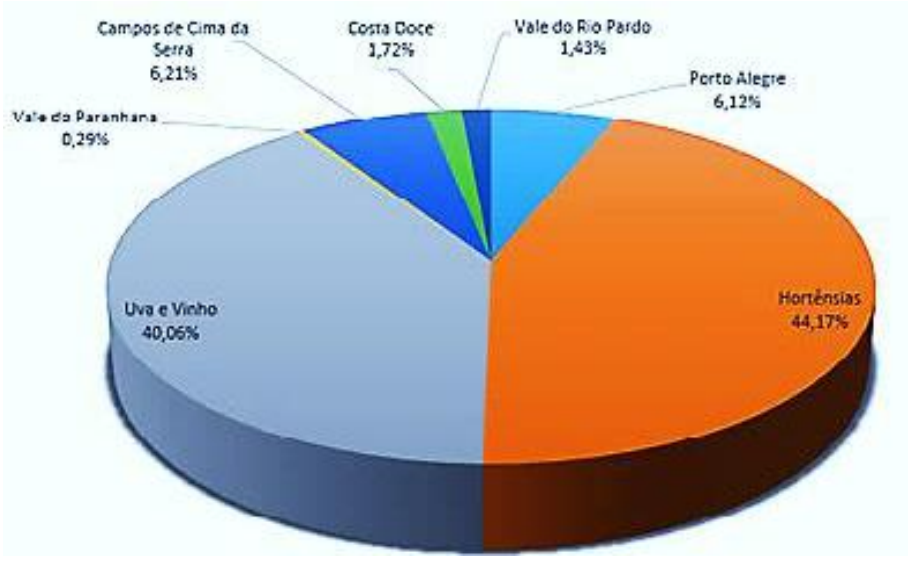
According to the Annual Survey of the Economic Conjuncture of Tourism-PACET, by the Getúlio Vargas Foundation – FGV, in 2014 and according to criteria contained in the Rio Grande do Sul Tourism Marketing Plan 2012/2015 - SETUR).

Historical Data

Considering the 497 regionalized municipalities in Rio Grande do Sul, only 16 appear (since the beginning of collection of this type of data by the Observatory statics, in September/14) as options in the main operators in the country, which represents 3.39% of the total.

Figure 1, represents the percentages of participation from each tourist region in the total offers by operators, in the period from April/2015 to April/2016. With the constant growth of tourism, the airport emerges as a necessity to increase the number of tourists and to expand the socioeconomic development of the region. According to the Regional Council for the Development of the Hortênsas Region (CORED), Gramado and Canela receive more than 8 million tourists a year, which would justify the option of having its own airport.

Figure 1



The project will be built through a Public-Private Partnership (PPP), with the development permits having already been granted, that are designated in an area close to Saiqui Park and at 8 kilometers away from the Center of Canela. It will be necessary to renew the environmental licenses, after which, to assemble the term of reference and the public notice to carry out the bidding, then open competition. The project is being presented at events with consortiums of national and foreign investors, who have shown interest in participating from the moment the municipality makes the bidding available.

Within the tourist industry potential, the region lacks adequate access by airports:

- About 44.17% of passengers who land at Salgado Filho Airport in Porto Alegre come to Canela and or Gramado.
- According to the Ministry of Tourism, the Hortênsas Region is the third most desired by visitors to Brazil.
- Greater visibility with the country's tourism agencies.
- Facilitate direct access for tourists.
- The Hortênsas Region has about 18.78% of the accommodation beds in the entire state of Rio do Grande do Sul.
- Regional and municipal socioeconomic growth.
- Increase in the number of fairs and events in the region.
- Economic growth of companies located in the surroundings.
- Increase in the number of jobs.

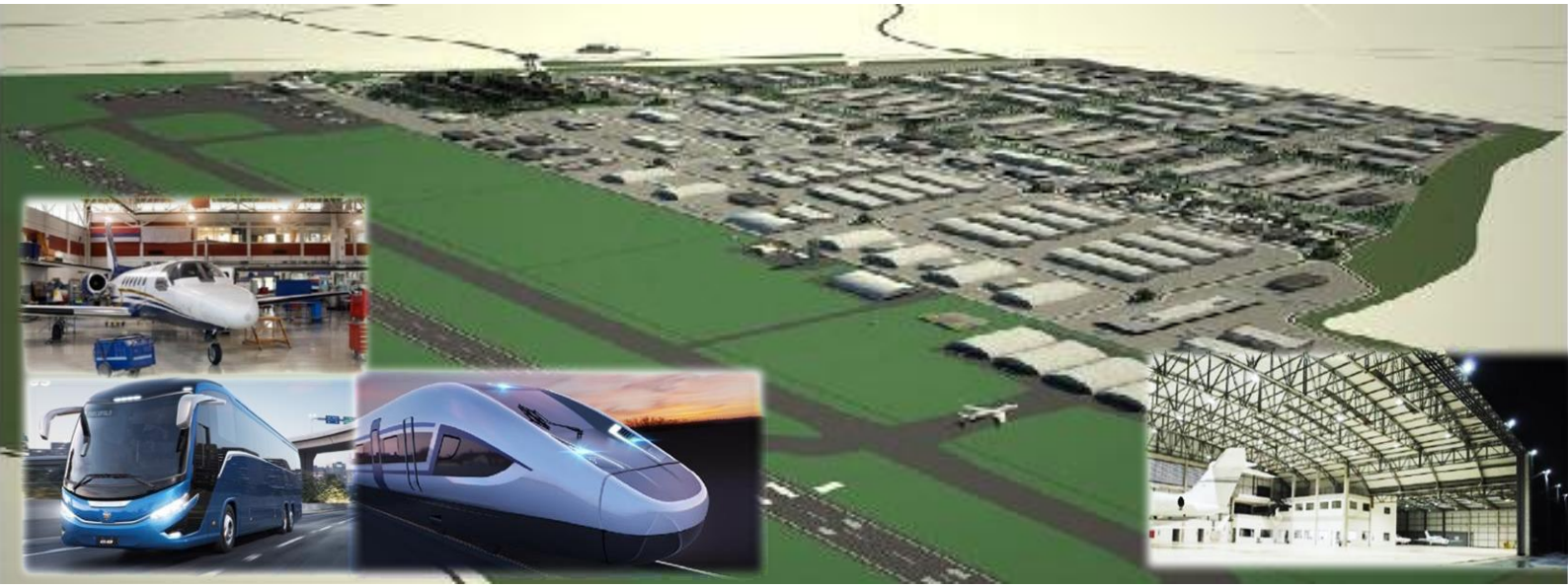
HORTENCIAS INTERNATIONAL AIRPORT DETAILS

The Hortênsias Region Airport – RS was included in the State Network in order to meet the tourist demand of the municipalities of Canela and Gramado. Thus, an airport site is proposed that will allow meeting this portion of the demand. In this context, the Airport to be implemented was classified as Tourist, and must be capable of serving large non-regular aviation, starting from the first planning phase. However, it should be noted that, in addition to the tourist activity, the operation of regular aviation is being planned for this development. In September 2001, the Civil Aviation Institute (IAC) prepared the Airport Development Plan for the Hortênsas Region, and approved by Ordinance No. 1340/DGAC, on September 17, 2001.

Specifically, the evolution needs of the infrastructure of the Hortênsias International Airport - RS were study, and must be developed in accordance with this document, which has its proposal indicated in the Proposed Configuration Plan. The Airport plays an important role in the international, national and regional air transport systems, especially when evaluating the domestic and international components and for projecting demand. Its geographic location, its role in terms of commercial service and traffic, and its origin and destination base, give the airport the role of hub (concentrator) of connection, although passenger traffic is also a result in part of the decisions related to the transport network routes taken by the airlines that use it. It should also be noted that the airport infrastructure plays a relevant role in the economic, political and social context of a given region, as it concentrates a large part of the traffic of people and goods over medium and long distances, with positive impacts for the country and for the regional economies.

In addition, the airport center is being development for a productive supply chain to the exchange of export and importation of goods, machinery, equipment, technologies, parts and various components, helping to promote national, regional and local development, as they attract companies and expand activities industrial, commercial and service sectors, in addition to generating taxes, employment and income. The Canela Caxais Multimodal Logistics Center, adjecen to the Airport will provide platforms that will allow for National and International coverage as an integrative ECO System project to a logistical axes. The center will be inclusive of a; a Dry Port (Inland Customs Station), full Rail & Bus (Freight and Passanger), Govermental offices, Banks, Stores and Shops, Restaurants, Automotive Services, Museums, Recreational Facilities, and a designated Formula One Race course.

FEATURE ELEMENTS THAT WILL BE APART OF, AND ADJACENT TO THE HORTENSIAS INTERNATIONAL AIRPORT, RIO GRANDE DO SUL



The Canela Caxais - Multimodal Logistics Center

The attractions of the Logistics Platform at the Canela Multimodal we have incorporated

- Proxsimity to Hortênsias Airport with frequent flights,
- Diversification of commercial services,
- Governmental Administrative Center,
- Complementing the tourist activity,
- Accommodating large-body aircraft,
- Access to information technology,
- Shopping and Services Center,
- Traffic and loads optimization,
- Reduction of operating costs,
- Valuing logistical integration,
- Highway Freight Center,
- Air Passanger Terminal,
- Rail and Bus Terminals,
- Inland Customs Station,
- Air Cargo Terminal,
- Industrial District,
- INFRASTRUCTURE: Energy, IT, Water Aquifer, Roads Systems, and Water Treatment Stations.

Project details available upon receipt of a Letter of Intent from certified investor (s) for the Serra Gaúcha Regional Projects.

Railway system and bus platform est.: 1.95 billion
Airport & Multimodal Logistics Center est.: 2.0 billion
Tenders will be presented in the fourth quarter 2025

Cargo Rail Terminal – TFC;

In Brazil, rail transport is used in a complementary way, feeding the other terminals. Domestic rail terminals carry out cargo operations and unloading of goods, coming from or destined for different lines railways or other modes of transport, in the national territory the terminals existing and in operation today, in the country, are distributed in the 14 railway networks granted:

1. Carajás Railroad (EFC);
2. Paraná-West Railroad (EFPO);
3. Vitória Minas Railroad (EFVM);
4. Centro-Atlântica Railroad (FCA);
5. North-South Railway – North Section (FNSTN);
6. Tereza Cristina Railroad (FTC)
7. Transnordestina Logística Railroad (FTL);
8. MRS Logística (MRS);
9. Rumo Malha Central (RMC) – known as Central Section North-South Railroad (FNSTC);
10. Towards Malha Norte (RMN);
11. Rumo Malha Oeste (RMO);
12. Rumo Malha Paulista (RMP);
13. Towards Malha Sul (RMS).

A Rail Cargo Terminal also serves as the terminus of lines railroads, as well as at road terminals. However, the Railway Terminal of Loads, 'operation has some differences. It is at these endpoints of a line where loading or unloading loads. As the lines make circular paths, that is, always return to the same terminal, there is a whole stipulated logistics for that loads are loaded or unloaded efficiently and properly. Therefore, the Railway Cargo Terminals can be defined as a series of installations and equipment for loading, unloading, and transfer of products and even the transportation of passengers.

They can be located at the ends of railroad lines or even at points of depot intersections. Infrastructure conditions of the terminals can be specialized for different types of loads and are of great importance to the overall efficiency of the transport. This involves aspects of agility, logistics information, and safety in the transshipment of the load to and from the various ports of air, land, and seaports. Rail freight is even more secure than road transport, with a lower rate of accidents and a lower incidence of thefts and robberies per load.

Mods of Operations and Products Transported:

- Grains.
- Metal Ores.
- Steel Products.
- Cement and Lime.
- Manures and Fertilizers.
- Petroleum Derivatives.
- Mineral Coal & Clinker.
- Value-added products.
- Raw and refined timber.
- Granite, Marble, and other indigenous stones and materials for construction.

Brazilian rail freight transport characteristics:

- Large load capacity in its wagons forming convoys.
- Suitable for long distances, ideally between 500 km to 1,000 km.
- High energy efficiency in cargo transport, in relation to fuel consumption.
- Low pollution rate compared to other modes.
- High value with the cost of implementation.
- Low transport cost compared to road transportation.

Canela Town Hall Meeting: Resumes Plans for Development of the Hortênsias International Airport after the 2024 Climate Disaster

Por Gerson Sorgetz
Publicado em 21/05/2024

A meeting took place on the afternoon of Tuesday, the 21st, of May at the Grande Hotel in Canela where the project's technical and feasibility study of the Hortênsias International Airport were presented, as a result form the devastation at the Porta Alegre Airport. The meeting was attended by the Municipal Executives of Canela, Gramado and São Francisco de Paula, entities such as CIC, Convention, Sindtur, Abrasel, Visão, Sindilojas, as well as representatives from the State Government, Legislative Assembly, councilors and businesspeople from the tourist trade of Region.

The Hortênsias International Airport project is designed to take place in the Saiqui Region, in the location known as Tubiana. There will be 2,200 m of tarmac, which can be extended up to 3,200 m. The idea is to move forward as quickly as possible with the creation of a working group. This group will be composed of; the Mayor's Office, SIGA, MobiCaxias, UCS, the funding institution (s) and the community designated persons to ensure sustainable development practices to overt or mitigate potential climate change occurrences. The City of Canela will draw up the Concession Notice and the viability will be entirely provided by the private sector. The investment is expected at be around 600 to 720 Million Reais.

With the advent of the State wide devastation, the initial time schedule projected for the Tenders to be offered in the 2 and 3rd quarters of 2024, has been pushed to the first quarter of 2025. The estimated time for completion of the Airport is about 3 years, with the first stages of the CDL to be completed simultaneously.

Over 200 people participated in the main meeting which required over flow seating and standing for an additional 75 plus persons in attendance.

NEWS ANNOUNCEMENT

03/18/2025

PORTO MERIDIONAL: ENTREPRENEURS PROJECT INSTALLATION LICENSE IN UP TO 12 MONTHS

AND IT'S ALL GOOD NEWS: We remain steadfast in monitoring and following up on the Porto Meridional Project in Arroio do Sal. That said, we highlight the stage of delivering the Environmental Impact Study and Environmental Impact Report (EIA-RIMA) to the Brazilian Institute of the Environment and Renewable Natural Resources (Ibama), last Wednesday (12), which marked a new stage in the Porto Meridional project, in Arroio do Sal. The document details the environmental impacts of the project and the compensation and mitigation measures to be implemented by the developers. In addition, the population will have the opportunity to participate in the process through public hearings, contributing to the definition of more concrete deadlines for the start of the works.

Data for the study was collected between September 2023 and September 2024, allowing analysis of seasonal variations throughout the year. Based on this data, the team consolidated and examined the information, culminating in the preparation of the report delivered to Ibama.

DTA Engenharia, responsible for the project's consultancy, considered the project viable from an environmental point of view, highlighting that the expected impacts can be mitigated or compensated. Among the main challenges identified is the influence of the port's structure on the transport of marine sediments, an issue raised by environmental entities. The coordinator of Porto Meridional contracts at DTA, Daniel Kohl, stated that technical solutions were developed to reduce this impact, including the artificial transposition of accumulated sediments.

Another point of concern is related to the economic impact on tourism on neighboring beaches, especially in the event of accidents or spills. According to Kohl, the project includes a set of preventive measures and emergency plans to minimize any potential environmental or economic damage.

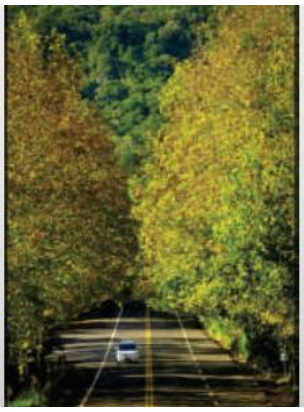
FORECAST FOR START OF WORKS IN 2026

With the submission of the EIA-RIMA, the analysis phase begins by Ibama, which will have approximately 30 days to verify whether all required aspects have been covered. Public hearings will then be held to discuss the study with the community. Based on these contributions, Ibama will conduct the final assessment and, if the opinion is favorable, will grant the Preliminary License (LP), attesting to the environmental viability of the project.

This process is expected to take approximately six months. Next, the proposed measures will be detailed and will also undergo a new assessment by Ibama, taking another six months to complete. If approved, the project will receive the Installation License (LI), allowing construction to begin, estimated for 2026.

HORTÊNSIAS FORMULA 1 RACING

2028



FORMULA 1 - PROPOSED RACING VENUE, MUSEUMS AND INSTALLATIONS

Photos top to bottom: on March, 07/2023, (presenters name) and the attendees from the various development aspects receive the Formula 1 presentation before Rio Grande do Sul, Governor Eduardo Leite, to receive the proposal as a part of the Hortênsias Airport in Canela, and the Canela Caxais Multimodal Logistics Center complex

Meeting at the Piratini Palace - Headquarters of the Government of the State of Rio Grande do Sul

Meeting at the Piratini Palace - Headquarters of the Government of the State of Rio Grande do Sul

FORMULA 1 - LETTER OF INTENT

Gramado/RS, March 07, 2023

A
Follow Urban Mobility
Caxias do Sul/RS

Att.: Mr. Arnold Schildt

Ref.: **DUMONDO - Complexo Automobilístico da América do Sul**
F1 stage in Gramado/RS - Mercosur Grand Prix

Dear Sir,

Pursuant to understandings maintained, this official letter serves to update you on the actions that we have developed aimed at the implementation of the **DUMONDO project - Automobile Complex of South America** in Serra Gaúcha, a Planned Neighborhood with more than 1,000 Ha (~2,500 acres) including a International class **race track** whose goal is to take a **Formula 1** stage to Gramado/RS in the form of the **Mercosur Grand Prix1 .**

Motorsport is one of the sports with the highest financial turnover in the world, circulating around **BRL 1 trillion annually2 in** the **world economy .**

F1 has become, after the entry of the Americans in 2016, a real entertainment show and a **tourist development engine for** countries and regions.

The recent 2022 **São Paulo Grand Prix** moved **BRL 1.3 billion** in the São Paulo capital in just 3 days of the event.

Within this context, our undertaking is a major **Socio-Economic and Environmental Development** project for the entire **Serra Gaúcha region,** as it generates many jobs, increases the region's income and also deals with social and environmental projects in accordance with **the FIA's ESG Agenda3 .**

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[1] Serving the large motorsport consumer market in South America, concentrated in Argentina, Uruguay and the Center-South of Brazil.
[2] A Report on the Global Contribution of Motor Sport to Economy and Community Development, FIA, 2021
[3] The FIA - International Automobile Federation, has a vast educational, social and environmental program (FIA Action for Road Safety, FIA Mobility Worldwide, FIA Environmental Accreditation Program, FIA University, FIA Foundation).

The total planned investment is around **R$ 3 billion,** and we estimate that it is possible to increase revenue from the tourism industry in the region by **R$ 2 billion/year ,** which could generate up to **300,000 jobs** throughout the production chain4 .

The synergy of our **DUMONDO** project with the **Serra Gaúcha Train** and **Hortênsias International Airport** projects is enormous and it is a great complement to them, since it will give international visibility to **Serra Gaúcha,** considerably increasing tourism in the region, as well as the demand for it by new residents.

Today we present our project to the **Government of Rio Grande do Sul,** represented by the Secretary of the Civil House, Artur Lemos, and about 40 other people, including business and government authorities, leaving the meeting with a project manifesto of public interest for the State of Rio Grande do Sul, given its character of regional economic development.

In view of all the above, we reaffirm our interest in integrating our **DUMONDO** project with the **Trem da Serra Gaúcha** and **Hortênsias International Airport** projects , since such projects complement each other in their viability.

In this sense, we make ourselves available to meet and discuss more details about it.

We thank you for your attention, at which time we renew our wishes of esteem and appreciation.

Yours sincerely,

Rodrigo Stehling
CEO
DUMONDO project

[4] Among direct, indirect and induced jobs, according to the scientific article "The Potential Creator of Employment and Income of Tourism in Brazil", UNB/USP/WTO.

NEWS PAPER ARTICLES

NOVA ÉPOCA

PORQUE TODA CIDADE PRECISA TER SEU JORNAL

CANELA/RS - SEXTA-FEIRA
10 DE MARÇO DE 2023
ANO 11 - EDIÇÃO 562 - R$ 4,50

NOVO PROJETO PARA REGIÃO

CORRIDA PELA FÓRMULA 1

PÁG 5

RENEGOCIAÇÃO

Refis 2023 oferece desconto de 100% sobre juros e multas

PÁGINA 3

OBRAS

Primeira camada de asfalto é concluída na rua Dom Pedro II

PÁGINA 4

COVID-19

Pessoas com 60 anos ou mais podem receber vacina bivalente

PÁGINA 12

SEGURANÇA

Maníaco do carro é preso pela Polícia Civil em Minas Gerais

PÁGINA 13

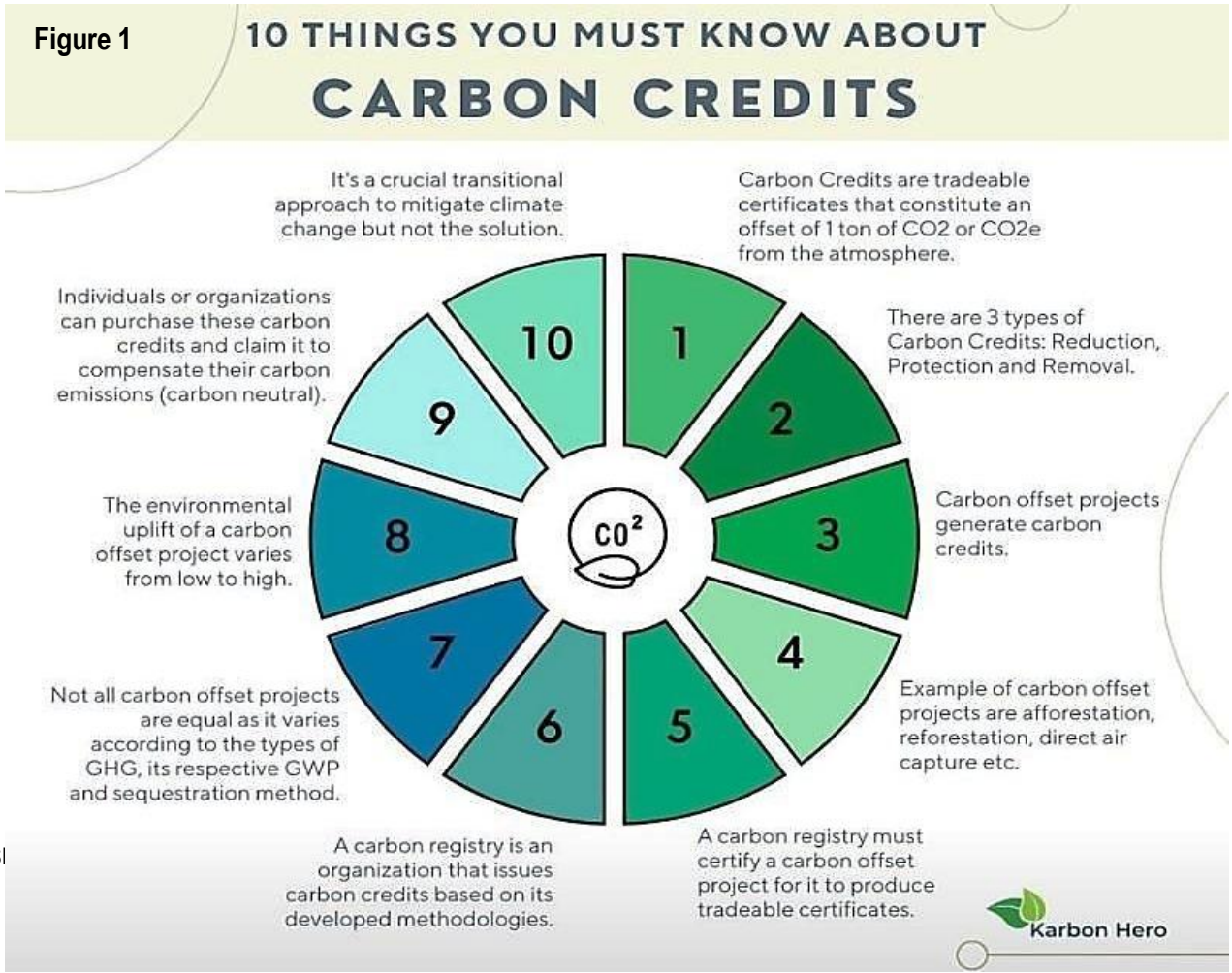

SIGA
MOBILIDADE
URBANA
RIO GRANDE DO SUL • SUSTAINABLE GOALS
GROTTO
BRAND RS BRAZIL for Life
GRAND RIVER SOUTH • PRODUCT LINES, S.A.
WE ARE BUILDING VIABLE
ECOSYSTEMS AND SUSTAINABLE
INFRASTRUCTURE IN SOUTH BRAZIL

CARBON CREDITS USAGE & TECHNOLOGIES

As the world faces the challenges of climate change, businesses, and individuals are increasingly turning to carbon credits as a way to reduce their carbon footprint and support sustainable development. In the preliminary studies cited the generation of carbon credits are but a fraction of the potential available assets proposed in the development of the train, stations depots and merchants establishment that will be required to be in compliance with the sustainable eco regulations. In the estimates of the Serra Gacha Regional Train buffer strip, the following considerations are being taken into account to utilize the Carbon Credits that are available to help offset the cost of development along with the raw materials from excavation.

- Carbon credits are a way to offset greenhouse gas emissions by investing in projects that reduce or remove carbon dioxide from the atmosphere. By purchasing carbon credits, individuals and businesses can support projects such as renewable energy, reforestation, and energy efficiency, and reduce their environmental impact.
- Carbon credits are traded on carbon markets, where they have a monetary value based on the amount of carbon dioxide they represent. Each carbon credit represents one tonne of carbon dioxide equivalent (CO2e) that has been avoided or removed from the atmosphere. Companies or individuals can purchase these credits to offset their own carbon emissions, thus supporting sustainable projects and reducing their environmental impact.
- Carbon credits not only help to reduce greenhouse gas emissions, they also support sustainable development by promoting clean energy, protecting forests, and improving access to clean water and sanitation. Furthermore, carbon credits can provide economic opportunities for developing countries and communities, as they can generate revenue from sustainable projects and support local employment.

Figure 1



- If you're interested in reducing your carbon footprint and supporting sustainable development, consider purchasing carbon credits from reputable providers. Look for projects that align with your values and priorities, and verify that the credits are third-party certified to ensure their legitimacy. By investing in carbon credits, we can turn emissions into opportunities and support a more sustainable and resilient future for ourselves and for the planet.

GLOBAL CARBON MARKET

The global carbon credits market operates under the Kyoto Protocol and the Paris Agreement. It allows companies and nations to compensate your emissions by purchasing carbon credits from projects that reduce emissions in other areas of the world. Carbon credits are often traded on stock exchanges, and its value varies according to supply and demand. Carbon Market in Brazil: Brazil is one of the countries that actively participate of the carbon credits market. With the vast extension of forests and their importance in reducing emissions, the country is involved in projects to reduce deforestation and reforestation that generate carbon credits. The carbon credits market in Brazil has attracted investors and companies interested in offsetting their emissions.

FINANCING SUSTAINABLE PROJECTS

Many companies and financial organizations often invest in emissions reduction projects as a way to meet their targets for sustainability and social responsibility. This may include project financing renewable energy, reforestation, energy efficiency and others. Financial Innovations: The carbon market has encouraged financial innovation, such as the creation of impact investment funds and green bonds, which channel capital for sustainable projects that generate carbon credits. The carbon credit market is a dynamic and evolving area that is interconnected with financial and investment issues.

As concerns about climate change increases, the carbon market is likely to play an increasingly important role in allocating financial resources to projects sustainability and the mitigation of greenhouse gas emissions. We intend to utilize the marketing strategies and contacts made at Conference of the Parties COP-29 for preparation of Proof of Concept that will be presented to the (UNFCCC) during the third quarter of 2025 at COP/30 in Brazil. Upon presentation of Proof of Concept, the intention is to consider its usage as an international standard for a means of verification of Carbon Credit Certification.

Regulated and Voluntary Carbon Credit Markets: Carbon credit markets play a vital role in reducing GHG emissions, there are two main types of markets: regulated and voluntary. Regulated Markets: These markets are created based on regulations governments, such as the CDM established by the Kyoto Protocol. Companies and governments are required to reduce emissions or acquire carbon credits to meet their targets. Brazilian legislation related to regulated carbon credits involves the Policy National Climate Change Act (Law No. 12,187/2009) and the Commission's regulations Inter-Ministerial Council for Global Climate Change (CIMGC).

Voluntary Markets: These markets are based on voluntary companies, organizations and individuals who wish to offset their emissions and promote sustainable practices. Although they are not compulsory, they play an important role in promoting climate action. Participation in voluntary markets has grown in Brazil as companies seek to reduce their carbon footprint and demonstrate commitment to sustainability.

- Legislation related to carbon credits varies according to countries and regions. In Brazil, legislation is a combination of government regulations and international agreements. The National Climate Change Policy (Law No. 12,187/2009) establishes guidelines for reducing GHG emissions in the country and regulating Interministerial Commission on Global Climate Change (CIMGC) defines procedures for the implementation of CDM projects and the issuance of carbon credits. The law that changes rules for the management of public forests by concession, to expand the possibilities of exploration of the area by the concessionaire (Law nº 14,590/23) which allows credit trading of carbon and the exploitation of the biodiversity of the granted unit.

Regulated Markets: In accordance with international legislation; The Kyoto Protocol (CMNUCC, 2023) established the framework for the CDM and defined emissions reduction targets for countries signatories and the Paris Agreement (2015) commits countries to limit the increase in global temperature and promote mitigation actions. In this sense, regulated carbon credits are generally certified by entities recognized and authorized by the competent body of the country or region in which the project is located.

At the international level, the body that supervises and regulates carbon credit activities is under the United Nations Framework Convention on Change (UNFCCC), which includes the Clean Development Mechanism (CDM). However, there are several national and regional entities that are authorized to certify carbon credit projects, subject to UNFCCC guidelines. Some examples of these entities include:

- **National Designated Entities (NDE):** In many countries, National Designated Entities Nationals are responsible for evaluating and approving carbon credit projects in accordance with UNFCCC guidelines. They ensure that projects meet the criteria established and that emission reductions are real and measurable.
- **Certification Organizations:** There are independent certification organizations who act as third parties to verify carbon credit projects and issue emission reduction certificates. Examples include Gold Standard and Verified Carbon Standard.
- **Audit Entities:** In some cases, independent auditors, often auditing companies, are hired to verify carbon credit projects and issue verification reports that are submitted to the competent authorities.
- **Environmental Regulators**: In some countries, environmental regulatory agencies have a role in the certification and verification of carbon credit projects.

Carbon credits come from the flexibility mechanism, called the Clean Development Mechanism (MDL). They emerged through the proposal of the Kyoto Protocol, with the objective of guaranteeing economic development, combined with environmental protection, with reduction targets being established to be achieved by nations. One carbon credit is equivalent to one ton of carbon dioxide (CO2), which is the main gas causing of the greenhouse effect. This offset is no longer emitted or is sequestered from th atmosphere. Thus, credits are a kind of “permission to emit such gases. The owner of a credit can emit a ton of carbon or concentrate equivalent tons of other greenhouse gases.

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Countries that fail to meet targets can buy credits from nations that have reduced their emissions. The same logic applies to companies. Due to the extra cost of the purchase, an incentive is created for companies to reduce emissions or invest in projects that yield credits. Brazil, as it has a large area of both planted forests and native forests, has potential in relation to this system, which in addition to being a measure allied to the environment, it can bring financial compensation to the country.

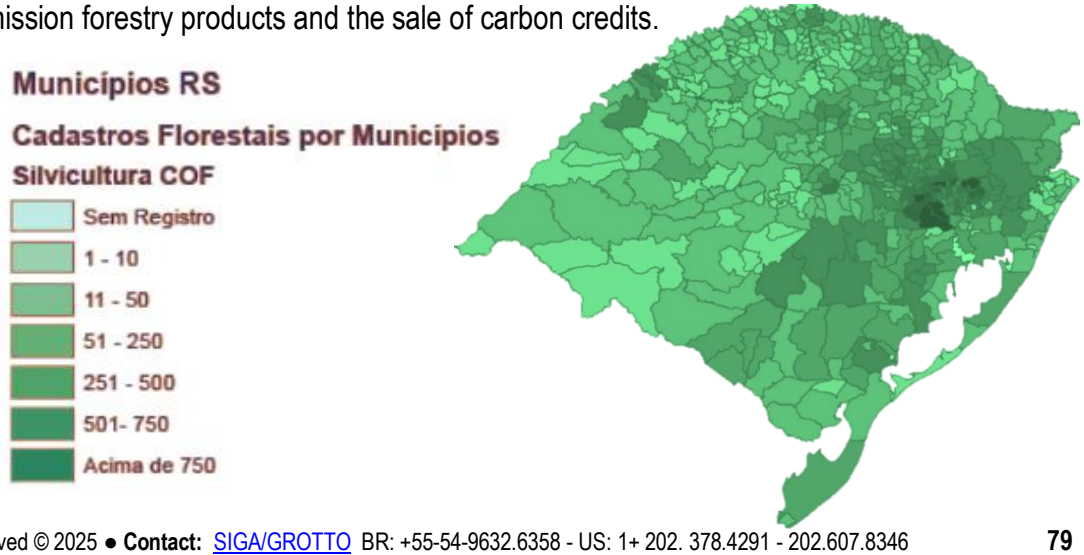
It is important to note that for carbon credits are accepted and traded on international markets, they must be certified by entities recognized by the UNFCCC and comply with international guidelines and regulations. Additionally, carbon credits must be issued in accordance with standards and methods specific to ensure that they represent a real and measurable reduction in greenhouse gas emissions greenhouse gases. Therefore, the certification of regulated carbon credits involves a rigorous verification process in accordance with national and international standards. With this factor in mind, SIGA has taken what it feels to be necessary steps to establish contractual engagements with corporations developing technologies for verification of said credits and with associations such as AGAFLOR, Gaúcha Association of Foresters and AGEFLOR, Gaúcha Association of Forestry Companies that will encore the continuous production of CO2 inhibitors from the forestry and agricultural industries in South Brazil.

FOREST PLANTATION AREAS

The planted forest sector stands out for its potential impact in relation to climate change mitigation through its extensive forest areas, which can be considered a renewable resource and a recycling source of carbon, with storage and storage being of fundamental importance in terms of sustainability and reducing climate impacts. The carbon balance in forest ecosystems is represented by net primary production, which is defined by difference between the chemical energy fixed by photosynthesis and the loss between heterotrophic and autotrophic respiration and mortality. Planted forests have a great capacity to remove CO2 from the atmosphere, inserting carbon (C) into the plant biomass and, consequently, in the soil, thus allowing an excellent carbon balance.

At the national level, planted forests have high potential for carbon sequestration, and for With 9.6 million hectares of plantations, the country stores around 1.9 billion tons of carbon dioxide (IBÁ, 2021). Already the Legal Reserve (RL) and Permanent Preservation Areas (APP) areas total around 6 million hectares and stores around 2.06 billion tons of carbon dioxide IBÁ, 2021 (Figure 2 below). These advantages allow the carbon balance of planted forests to be favorable, even enabling the generation of income from the certification of low-emission forestry products and the sale of carbon credits.

Figure 2



The RS Regional Development Councils were created by Law 10,283/1994 and regulated by Decree 35-764/1994. Their objective is to promote harmonious and sustainable regional development; the integration of government and region resources and actions; improving the population's quality of life; the equitable distribution of the wealth produced; encouraging people to stay in their region; the preservation and recovery of the environment. The State is divided into 28 Regional Development Councils (COREDEs), Coredes, aiming to define public policies aimed at each of the regions. The Coredes that have the highest coverage of planted forests can be seen in Table **1**.

Table 1 – Evolution of Planted Area by gender in RS

COREDE	EUCALYPTUS	PINE	ACACIA	TOTAL
Sul	74.292	49.828	34.765	158.885
Vale do Rio Pardo	72.274	20.638	16.712	109.625
Centro-Sul	80.292	4.567	11.032	95.891
Hortênsias	3.103	92.262	135	95.500
Fronteira Oeste	42.202	2.404	52	44.658
Campanha	33.261	657	9.637	43.556
Campos de Cima da Serra	1.024	42.116	-	43.141
Metropolitano Delta do Jacuí	30.533	4.384	7.169	42.086
Litoral	12.090	28.318	-	40.408
Jacuí-centro	16.000	8.825	658	25.483
Vale do Jaguari	18.494	303	30	18.828
Vale do Taquari	15.504	522	404	16.429
Vale do Caí	4.354	-	7.503	11.857
Outros	23.284	9.776	1.497	34.557

Source: *AFUBRA, AGEFLOR, FEPAM, SEMA*

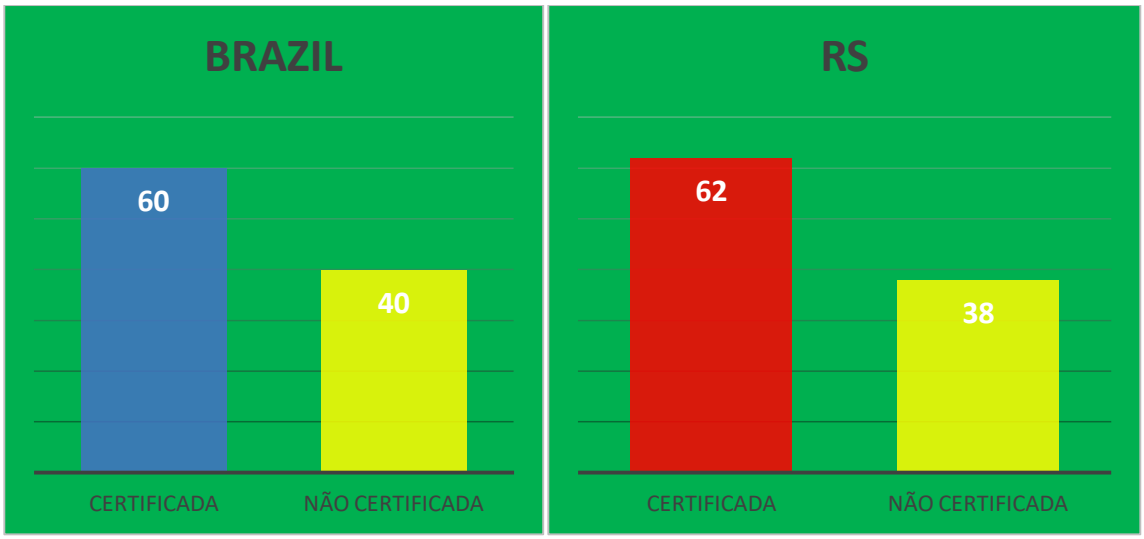
In Rio Grande do Sul there are approximately 780.9 thousand hectares cultivated with planted forests, which corresponds to 2.7% of the 28.2 million hectares of forest within Rio Grande do Sul's territorial boundaries. The total area of properties where forestry is the predominant and active is an estimated total area of 1.84 million hectares. At the national level, the planted area in RS corresponds to approximately 10% of the total area of planted forests in Brazil. Eucalyptus plantations represent 54.6%, while pine and acacia represent 33.9% and 11.5%, respectively.

In the national context, planted forests in Rio Grande do Sul represent 10% of the national total, with emphasis on the acacia genus in which the State holds practically 100% of the plantations, followed by pine and eucalyptus plantations, with 17% and 8%., respectively, as shown in Figure 3 on the next page.

CERTIFIED FORESTS

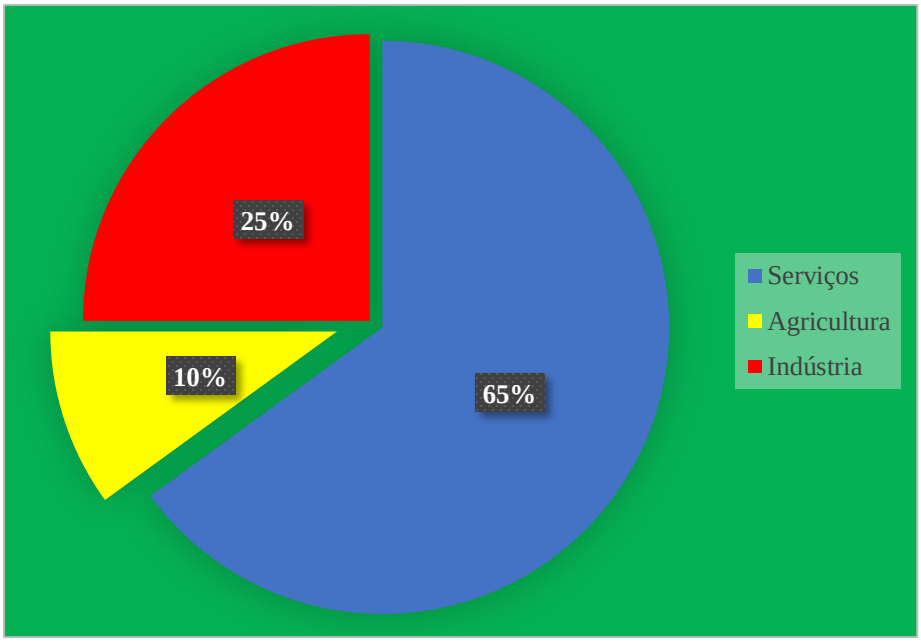
The forest certification process aims to guarantee that the wood comes from areas where forest management is ecologically correct, socially fair and economically viable. To achieve this, one of its criteria is full compliance with current legislation. Given this scenario, forest certification is used as a marketing element for companies, contributing to the enhancement of image and products, in addition to facilitating access to international markets. In Rio Grande do Sul, around 300 thousand hectares planted are FSC certified areas. Figure 4 shows the participation of certified areas in relation to the total, in Brazil and in the State.

Figure 4 - Composition of National and State



Source: *FSC Certification (Forest Stewardship Council)*

Figure 5 - Composition of State GDP



Source: *FEE State Statistics Foundation*

Table 3 – Planted Forests by municipality

Ranking	County	Area (ha)	Ranking	County	Area (ha)
1	Encruzilhada do Sul	61.280	14	Dom Feliciano	14.636
2	São Francisco de Paula	42.556	15	São José dos Ausentes	13.513
3	Piratini	39.997	16	Pinheiro Machado	12.305
4	Cambará do Sul	20.527	17	Jaquirana	12.245
5	Cachoeira do Sul	20.255	18	Taquari	12.163
6	Bom Jesus	18.974	19	Bagé	12.126
7	São José do Norte	18.646	20	Cacequi	11.073
8	Butiá	17.645	21	Pedras Altas	10.954
9	Triunfo	17.473	22	Santa Vitória do Palmar	10.858
10	Mostardas	15.904	23	São Jerônimo	10.788
11	São Gabriel	15.578	24	Barra do Ribeiro	10.535
12	Pantano Grande	15,134	25	Rio Pardo	10.115
13	Canguçu	14.990	26	Outros	474.022
					Total 934.290

Source: *AFUBRA, AGEFLOR, FEPAM, SEMA*

CARBON CREDITS VERIFICATION AND CARBON SAT TECHNOLOGY

Establishing the alliance with Safeweb Institute's Safe Carbon CO_2 in conjunction with the application of C is the confirmation of boots on the ground in Brazil for verification and the measuring of Corban Credits for development. Combining techniques and technology is a revolutionary innovative solution for tackling climate change, offering an advanced technological solution for the accurate measurement, certification, and automatic generation of carbon credits. When utilized it has the potential to significantly impact the global market due to its accuracy, efficiency, automation, and ease of adoption. Its ability to accurately measure greenhouse gas (GHG) emissions is fundamental for the legitimate generation of carbon credits. Its advanced technology allows for more reliable and efficient data collection, ensuring that emission reductions are properly quantified. In addition, automation in the process of generating carbon credits significantly optimizes the time and resources required for companies to offset their emissions. In the context of climate change, where reducing GHG emissions is crucial, CarboSat offers a practical and scalable solution for monitoring and mitigating these emissions, meeting the global demand for technologies that contribute to the fight against climate change. Its legitimacy and credibility, stemming from precise measurement and automation in the process, are vital to guaranteeing the trust of investors, governments, and consumers.

CarbonSat's ease of adaptation makes it attractive to a wide range of sectors and organizations, suggesting the possibility of widespread adoption of the technology, amplifying its global impact. In addition, the transformative potential of CarbonSat is highlighted, and recommended that the technology can drive the transition to a more sustainable economy. The application also addresses the process of measuring GHG and generating carbon credits, highlighting the importance of accuracy and transparency in this process. Carbon credits are essential for meeting emission reduction commitments in international climate agreements, such as the Kyoto Protocol and the Paris Agreement, and for voluntary emission offset initiative. The carbon credit market is presented as a crucial part of climate change mitigation strategies, with significant financial implications.

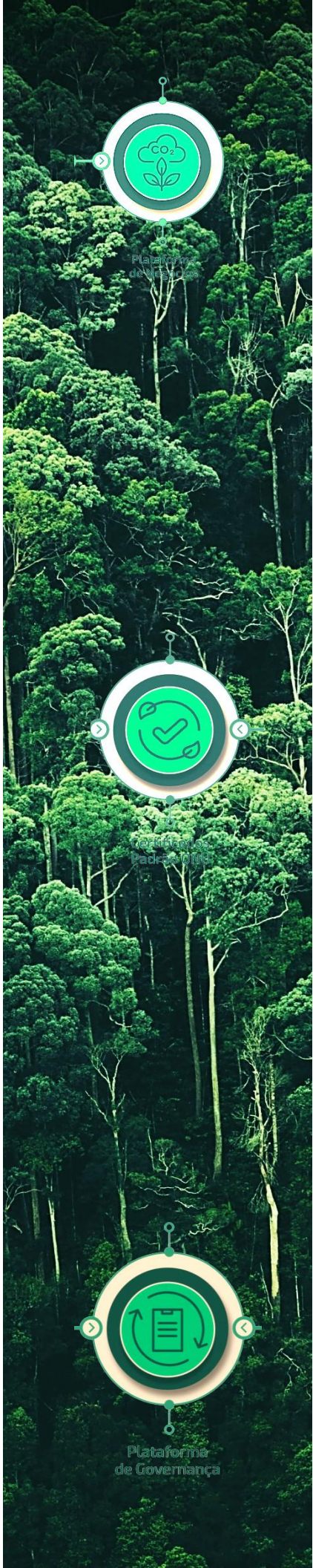
Carbon pricing creates incentives to reduce emissions, driving investments in clean technologies and efficient processes. The market also offers business opportunities, allowing companies to develop emission reduction projects and sell the carbon credits generated as an additional source of revenue. In this sense, Brazil's role in the carbon credit market stands out, especially due to its vast expansion of forests and deforestation reduction projects. Despite the challenges facing the global market, the growing attention to climate change and initiatives such as the Paris Agreement has the potential to boost the carbon market, playing a key role in the transition to a more sustainable economy.

The process of measuring GHG and generating carbon credits highlights the importance of accuracy and transparency in this process. Carbon Credits are essential for meeting emission reduction commitments in international climate agreements, such as the Kyoto Protocol and the Paris Agreement, and for voluntary emission offset initiatives. The Carbon Credit market is presented as a crucial part of climate change mitigation strategies, with significant financial implications. The market also offers business opportunities, allowing companies to develop emission reduction projects and sell the carbon credits generated as an additional source of revenue.

In this sense, Brazil's role in the carbon credit market stands out, especially due to its vast expansion of forests and deforestation reduction projects. The Brazilian Government has already instituted incentives for the Banking Industry and its Central Bank to take advantage of the resources provided through the use of Carbon Credits, as a means for development. Despite the challenges facing the global market, the growing attention to climate change and initiatives such as the Paris Agreement has the potential to boost the carbon market, playing a key role in the transition to a more sustainable economy.

In short, CARBON SAT is presented as a promising innovation that can make a significant contribution to reducing GHG emissions and combating climate change. It highlights, not only the importance of the technology but also the relevance of the carbon credit market as a crucial financial tool to boost global sustainability. This will establish our Bona Fides, for the proposed usage, and availability of Carbon Credits for the sustainable development projects in South Brazil. We develop projects that aim to decarbonize the environment, contributing to the fight against climate change and the slowdown of global warming.

SafeCarbon CO2's commitment to implementing the complete journey towards decarburization, through the development of techniques and technological innovations, and SOCIO-ENVIRONMENTAL solutions provides a more inclusive approach. The process of recycling, reusing more products, and making more sustainable choices in our daily lives by setting goals that everyone agrees on and creating incentives to pursue them are the focal points to a social reengineering! In this way, several countries have committed to reducing greenhouse gas (GHG) emissions through international commitments



In Brazil, it is no different. Social concern about the climate crisis has been growing every year, and one of the solutions found to overcome this challenge is to invest in decarburization practices. Carbon Credit is not only a financial tool but also an environmental asset, intending to encourage the reduction of greenhouse gas emissions by people, companies, organizations, and countries. A carbon credit is a unit of measurement that represents the reduction of one metric ton of carbon dioxide (CO2) or equivalent greenhouse gases (GHG) from a specific activity or project over a certain period. An accurate measure of the carbon footprint that calculates the equivalent carbon emission into the atmosphere by a person's activity, event, company, organization, or government can be quantified.

Carbon credits have different natures. In the regulated market, they will be monitored by governments, while in the voluntary market, they depend on the interest of individuals, to buy and sell independently. The main benefit of the carbon credit system is that it provides a financial incentive for companies and organizations to reduce their greenhouse gas emissions. This helps accelerate the adoption of more sustainable practices and the transition to low-carbon technologies.

Project development and certification for environmental projects are actions and goals carried out to preserve the environment and can be carried out by companies, public bodies, institutions, and associations, among others. Through our techniques and application of CarbonSat technologies, and certification via Safeweb, our objectives are the stabilization of greenhouse gas concentrations in the atmosphere. At a level that prevents dangerous anthropogenic interference is possible with a climate modeling system, to allow ecosystems sufficient time to adapt naturally to climate change. The convention under this scenario is to ensure that food production is not threatened and to allow economic development to continue to maintain sustainably.

An offset credit is a tool for governments and companies to achieve the carbon reduction targets set by the Paris Agreement. Individuals or companies that want to offset their own greenhouse gas emissions can purchase these credits through an intermediary or from those who directly capture the carbon. The entire process is certified by independent entities or those linked to the UN. According to the Kyoto Protocol, they include carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), sulfur hexafluoride (SF6), as well as two families of gases: hydrofluorocarbons (HFCs) and perfluorocarbons (PFCs). The management of forests to obtain and secure economic viability, social, and environmental benefits, while respecting the mechanisms that support the ecosystem is the object of management. Considering, cumulatively or alternatively, the use of multiple timber species, multiple non-timber products and by-products, as well as the use of other forest goods and services is being adapted.

AVAILABLE CARBON CREDIT [CO²E] FOR PROJECTS DEVELOPMENT

The following is a limited offer from the cooperative for the sale of Carbon Credits. The evaluations are for access to the Equivalent Carbon Credit Project [CO²e], totaling with specifications described below:

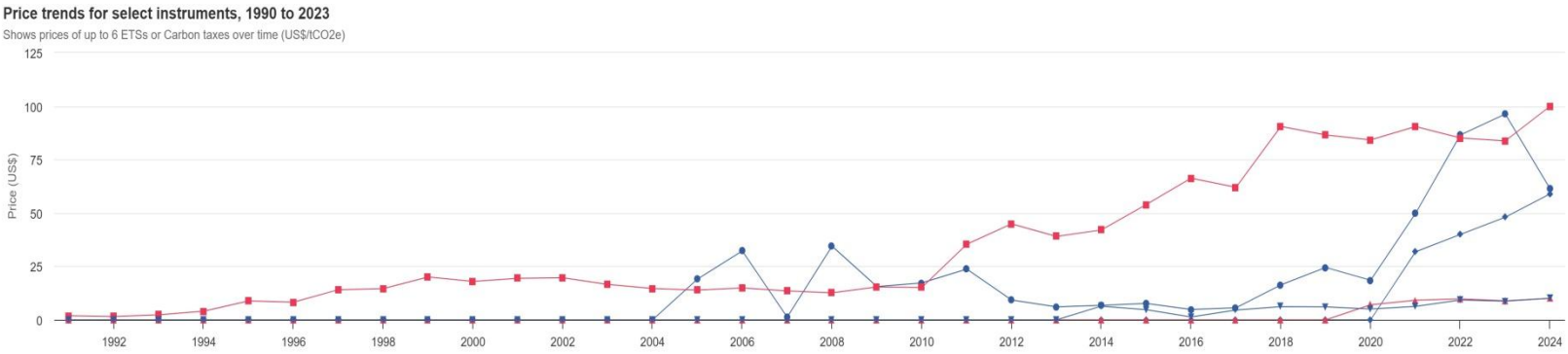
Lots 1 to 4 CCs available = 35 Million Tons. Projections for 285 Million Tons in 4 years upon verification
Certification: VCS (Verified Carbon Standard)
Type: REDD ++; Reducing Emissions from Deforestation and forest Degradation
Type of Project: Reforestation - 80% from (Projects Amazon & Atlantic Forest) and 20% relative to Biomass

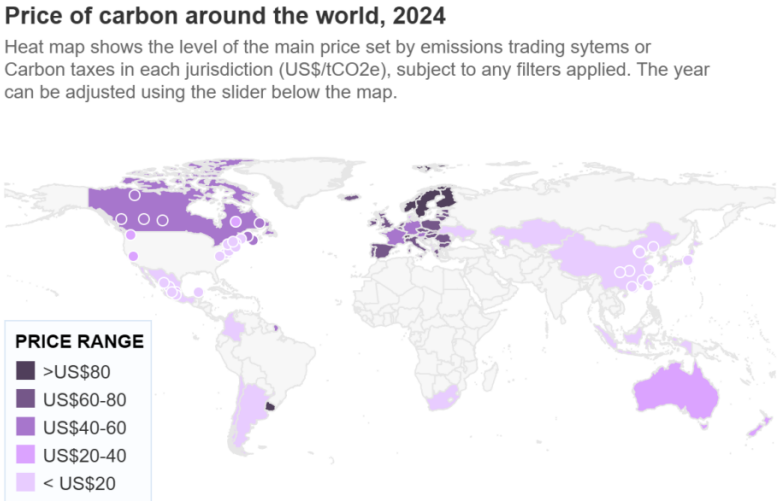
Certification

The projects described are approved and certified, with Mandated representatives assigned to projects;

- **All projects current with environmental licenses;**
- **All projects duly licensed and registered with the UN;**
- **All projects with credits approved by the UN; Custody - IHS MARKET.**
- **Carbon Credits will be utilized for opportunities for sustainable development**

SUMMARY OF GLOBAL MARKET PRICING FOR CARBON CREDITS





The consortium of landowners represented by SIGA/GROTTO in Rio Grande do Sul will entertain offers for negotiated pricing. The purchase of Carbon Credits at a reduced price is an incentive to secure funding requirements for the Serra Gaúcha Region planned infrastructure projects for the Regional Train System and the International Airport. The acquisition of these Credits will aid in the restoration from the May 2024 devastation, and provide the knowledge base and engineering for the infrastructure that will be required to mitigate the anticipated effects of Climate Change. The primary incentive being offered is requirements for term contract agreements of not less than five to seven years for the purchase of products at 2% to 7% above fair market price for products from the region.

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ECONOMIC DEVELOPMENT MATRIX

SIGA's plans for the regional development have considered the estimated cost for the transportation infrastructure from a vantage point of expansion. The train's development, combined with the statistics for the inevitable growth in demographics and retooling for an increased economy of scale for Serra Gaúcha's GDP, is the goal. This mode for a holistic approach will better support a sustainable ecosystem for social reengineering. The framework is an evolution from the 3 primary corporate Methods of Operation that have been established and tightly woven into a planned development structure of alliances for the expanded economy of the region. The amalgamation is the catalyst that drives the effort and differentiates SIGA's efforts from the previous undertaking for a railway system. More importantly, its objectives entail a broader perspective from the previous plan, with global brand identification.

The corporate matrix is a compilation of the principal officer's experiences in Political and Civic Diplomacy Advertising/Public Relations, and the development of Manufacturing and Supply Chain Distribution. These core experiences and expertise have been lent to the development of the Train, Airport, and CDL, that will eventually culminate with development of the seaport, completing the transportation infrastructure creating the arteries for the ecosystems. The delegation of responsibilities and task will be divided as follows, with the appropriate qualitative and quantitative reports of the work.

The creation of Request for Proposals (RFPs), Tender Offerings and contract BIDs for the continuous and uninterrupted development of the Serra Gaúcha Regional Train works will be done as an Management Administrative Act, edited by the President according to the powers conferred to him in degree, type, and number. These amendments will be absorbed by the Siga Mobilidade Urbana Officers into resolutions, and ratified into SIGA's corporate law. Public Bidding and or Concession will pay with interest and monetary correction as the Notary Act designates the company opting for the advance BID of the Futures Market. In this case, the Ticket of passage, referring to 50% of the monetary value paid of the insurance quota of the passage that will be issued in the Futures Market of the railway operation, this action will be instituted for the maximum period of 5 years from the entry into operation of the partial or total railway line.

The recently established consortiums in the United States for the purpose of expansion to gaining market share, is the first of several planed global consortiums for the exportation of Brazilian products produced and transported from the Serra Gaúcha Region. Train State of the Art in Sustainability. MO's for trading directly in to GROTTO Trade of products an initiating consortiums collective best interest und contract for a designated period. Alliances with SIGA GROTTO BRAZIL will facilitate:

- Commercial intermediation to facilitate internal external logistics.
- Validation of qualified suppliers,
- Monitoring of global distribution logistics,
- Packaging evaluation of product lines,
- Evaluation of product placement in markets, and
- Exploration and expansion of Regional and International Market Share.

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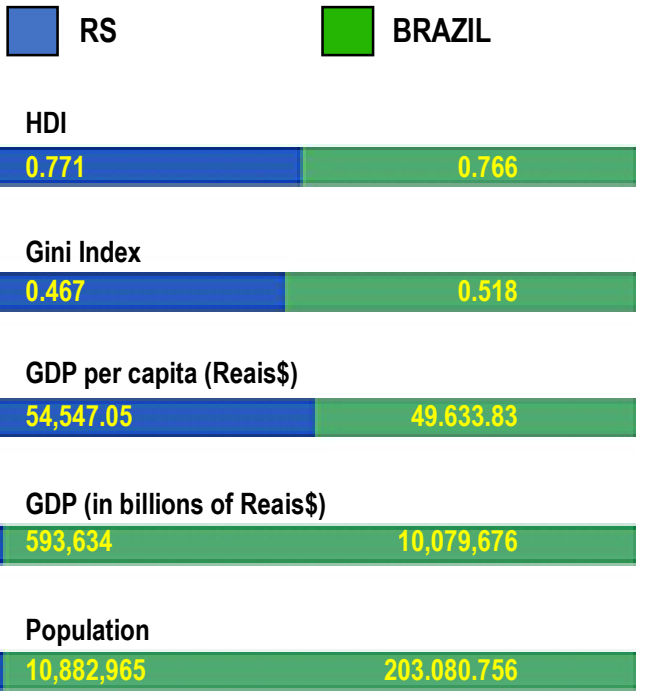
INDICATORS SOCIOECONOMIC

Proportions of the socioeconomic indicators of RS, in comparison to the nation state of Brazil:



Source: Prepared from IBGE Cidades e Estados (2023), IBGE/SIDRA (2023), IBGE/SCR (2023) and Atlas Brasil

Rio Grande do Sul (RS) is the sixth most populous state in Brazil, with a Municipal Human Development Index (**HDI**-M) of 0.771, tied with Espírito Santo (**ES).** It has the sixth lowest (**Gini Index),** an indicator which reflects the status of social inequality, and fifth-largest Gross Domestic Product **(GDP)** in the country. This indicates a robust and varied economy with an emphasis on agribusiness, vehicle, and footwear sectors.

GOVERNANCE AND CLIMATE FINANCING

The state participates in international agreements, such as Regions Adapt (COP 21), Under-2° Coalition, and Race to Zero and Race to Resilience. It is part of national initiatives such as the Governors for Climate coalition and the Green Brazil Consortium, the Alliance for Climate Action (ACA Brasil), and collaborates with CDP, and participates in Abema. At the regional level, it leads efforts to promote climate change (CBC, 2023).

In 2022, RS launched ProClima 2050, a comprehensive plan that seeks to establish Climate Compliance, covering: Implementation of the Climate Governance Plan, in partnership with ICLEI; Carrying out the GHG Inventory by 2025; Risk and Vulnerability Analysis and the Climate Action Plan, roadmaps for decarbonization and climate regulations that ensure the transversality of actions. This program also includes the PSA and Biogas programs (Government of RS, 2023). In 2024, at COP 29, it launched the Climate Roadmap for municipalities in Rio Grande do Sul, an initiative partially financed by UNDER2. Among the municipalities verified by the Climate Roadmap, there were only two stated that had climate action plans, *(Government of RS/IEDE, 2025)*.

The ABC+ Plan 2020-2030 was established in 2023 and is under development, *(Gov. RS/SEAPI, Oct. 2024).* In December 2020, SEMA/RS launched the State Revitalization Program of Hydrographic Basins, focused on water security, which includes actions to improve the quality and quantity of water in hydrographic basins in situations of vulnerability and environmental degradation, improving aquatic ecosystems and reducing the risks associated with extreme climate events, *(Government of RS/SEMA, 2023*). The Rio Grande Plan encompasses emergency actions, reconstruction and long-term projects to strengthen local infrastructure and economy (Governo RS/SERG, 2024), including Contingency Planning for Socio-environmental Disasters, which proposes to create contingency plans and protocols with a standard of excellence for all federated entities in risk areas, the implementation of which began in October 2024.

Although the State Fund for Climate Change and Environmental Disasters, provided for in Law No. 13,594 of 2010, has not yet been created, in June 2024, Decree 57,647 regulated the Rio Grande Plan and provided for the Rio Grande Plan Fund (FUN-RIGS). Its aim is implementing actions, projects or programs for the implementation of climate resilience and addressing the social, economic and environmental consequences resulting from the climate events of 2023 and 2024. *(Governo RS/SERG, 2024),RS/SERG, 2024a).*

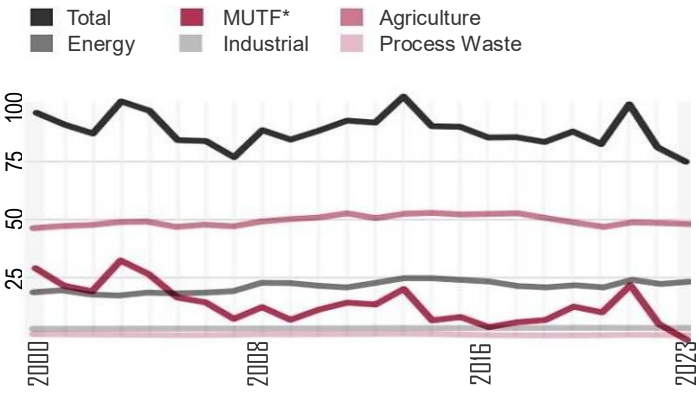
NET GREENHOUSE GAS EMISSIONS

The agricultural sector has historically been the largest emitter of GHGs in the state, maintaining high levels over time and, despite small fluctuations, showing a tendency to stabilize, but since 2017 it has been undergoing a slight process of reducing its emissions.

Emissions from the energy sector showed considerable growth until 2013, when they reached their peak (26,120 MtCO2e). Since then, there has been a slight reduction, but it remains the second largest source of emissions, which reflects the increase in energy demand in the state.

The land use change sector, on the other hand, has shown sharp variations over time, with peaks and troughs, but since 2021 its emissions have been significantly decreasing, with a 113.2% reduction in net emissions from 2021 to 2023, mainly due to removals by secondary vegetation, with negative net emissions in this last year, being the lowest volume recorded in the historical series, *(SEEG, 2024).* This indicates that the sector has started to act as a carbon sink, probably due to good soil management, reforestation and deforestation reduction policies in recent years, standing out as the main factor responsible for reducing emissions in the state.

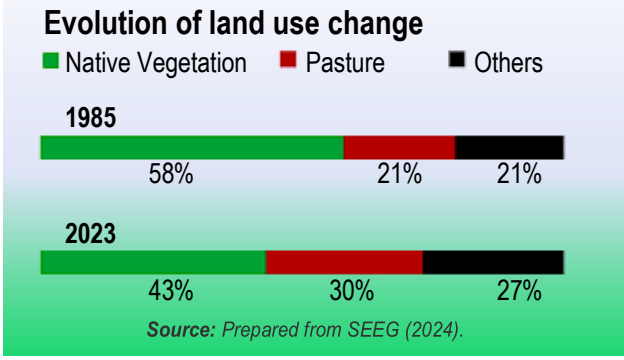
Evolution of net CO2e emissions from 2000 to 2023 (MtCO2e



Acre's total GHG emissions vary greatly depending on land use changes and the pace of deforestation. Between 2003 and 2012, the state managed to curb deforestation, which increased again and reached a historic peak between 2021 and 2022. From 2022 onwards, deforestation in the amount of Acres decreased significantly and, consequently, its emissions also decreased (90.7% reduction in net emissions from the land use change sector from 2022 to 2023).

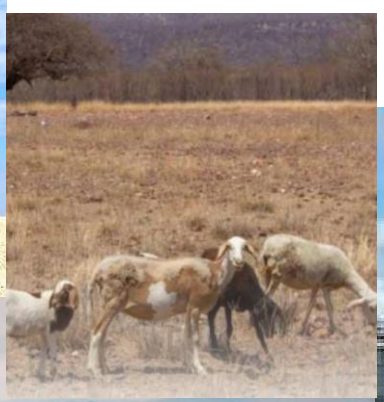
Source: Prepared from(SEEG) (2024).

AGRICULTURE AND LAND USE CHANGE



From 1985 to 2023, the area of native vegetation was reduced by 15% in the state, while areas designated for pasture increased by 9%, *(MapBiomas, 2024).* However, there was a reduction in deforestation rates from 2022 to 2024. In the period from July 2023, to June 2024, 1,688.3 hectares were deforested, a reduction of 66% compared to the same previous period (July 2022 to June 2023), when 4,968.4 hectares were deforested. In the periods analyzed, in relation to the biomes that affect the state, there was a 55.6% reduction in the deforested area in the Pampa biome, and an 82.2% reduction in the deforested area in the Atlantic Forest biome *(MapBiomas Alerta, 2024).* Although the ABC+ Plan prioritized the recovery of degraded pastures, there is still room for progress in this area, but the state has higher average costs (R$/hectare) than other biomes*, (FGV, 2022).*

Since the creation of the ABC Program, Renovagro and Pronaf ABC+ credit lines for rural producers in Rio Grande do Sul have financed R$4,161,297,072 in credit lines and 10,283 contracts. This has resulted in an expansion of approximately 1,274,299 hectares of land and the integration of sustainable technologies, *(Governo RS/SEAPI, 2024)*. Thus, it can be seen that rural credit is essential to achieving the sector's decarbonization goals. According to Embrapa, in Rio Grande do Sul more than 85% of the agricultural area is dedicated to the Crop-Livestock Integration, (ILP) system. In almost 9 million hectares (of which 70% are soybean crops, 10% corn, 10% rice and 10% corn silage and others), alternating winter crops and fallow in 80% of the area, or is used for cover crops such as black oats and rye grass, and are also used for grazing dairy cows and fattening heifers. The Crop-Livestock-Forest Integration (ILPF) and Livestock-Forest Integration (IPF) systems use eucalyptus, black acacia, pine, yerba mate and citrus (ILPF Network, 2024). According to the National Registry of Organic Producers (MAPA, 2025), RS is the second largest producer of organic products in Brazil, and has laws to encourage agroecological, organic, and bio input production (Law 14,486/2014). The State Program for the Recovery of Native Vegetation in Rio Grande do Sul (PRO-VEG), from 2022, has the goal of restoring 12 million hectares by 2030 (Governo RS/SEMA, 2022). The Gaucho Program for Environmental Services rewards the landowners who have adopted state environmental conservation, protection, and recovery practices.

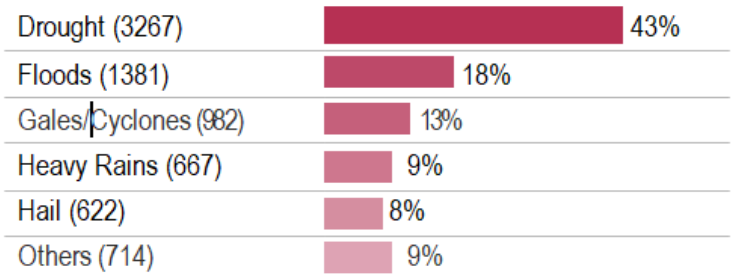


With the state's conservation and environmental management actions, the Campos do Sul Program stands out, which supports rural landowners in implementing sustainable management practices that preserve the biodiversity and ecosystems of the Pampas; the Certified Management Seal, a pioneer in Brazil in enabling the regularization of the sustainable and commercial use of native flora; and the Long-Distance Trails, which are paths planned to connect Conservation Units and create ecological corridors, playing a fundamental role in the integration between protected natural areas.

CLIMATE CHANGE VULNERABILITIES AND ADAPTATION ACTIONS

Disaster records from 2000 to 2023

According to the Digital Atlas of Disasters in Brazil, the accumulated data concerning disaster records that occurred in the period from 2000 to 2023 in Rio Grande do Sul show that 21.92 million people were affected. The state suffered public losses, especially in water supply, energy distribution, and sanitation, and private losses, especially in agriculture. During this period, there was a greater occurrence of droughts and dry spells.



Source: *Prepared from MIDR (2024).*

There were 153 deaths, more than 886.5 thousand people displaced, R$8.82 billion in material damages, R$3.52 billion in public losses, and R$121.54 billion in private losses, not counting the great flood that occurred in 2024 (MIDR, 2024). Between April and May 2024, the state faced the worst calamity in its history, with 96% of its municipalities impacted, totaling more than 183 deaths and billions in losses (Governo RS/Casa Militar/Defesa Civil, 2024; Metró-poles, 2025), which highlighted the state's climatic fragility to face events of this magnitude, never before reported in the history of RS. After the historic floods, the state received several federal financial aids to help with its reconstruction, in addition to a package of measures. The considerations would include suspension of payment of the state's debt with the Union, exempting the payment of interest on stock during that period (totaling R$23 billion). Maintenance of ICMS credits, credit lines with subsidized interest to help individual micro-entrepreneurs (MEIs), microenterprises and small businesses affected by the floods (Banrisul), prioritization in income tax refunds, and extraordinary resources for the health area, among others.

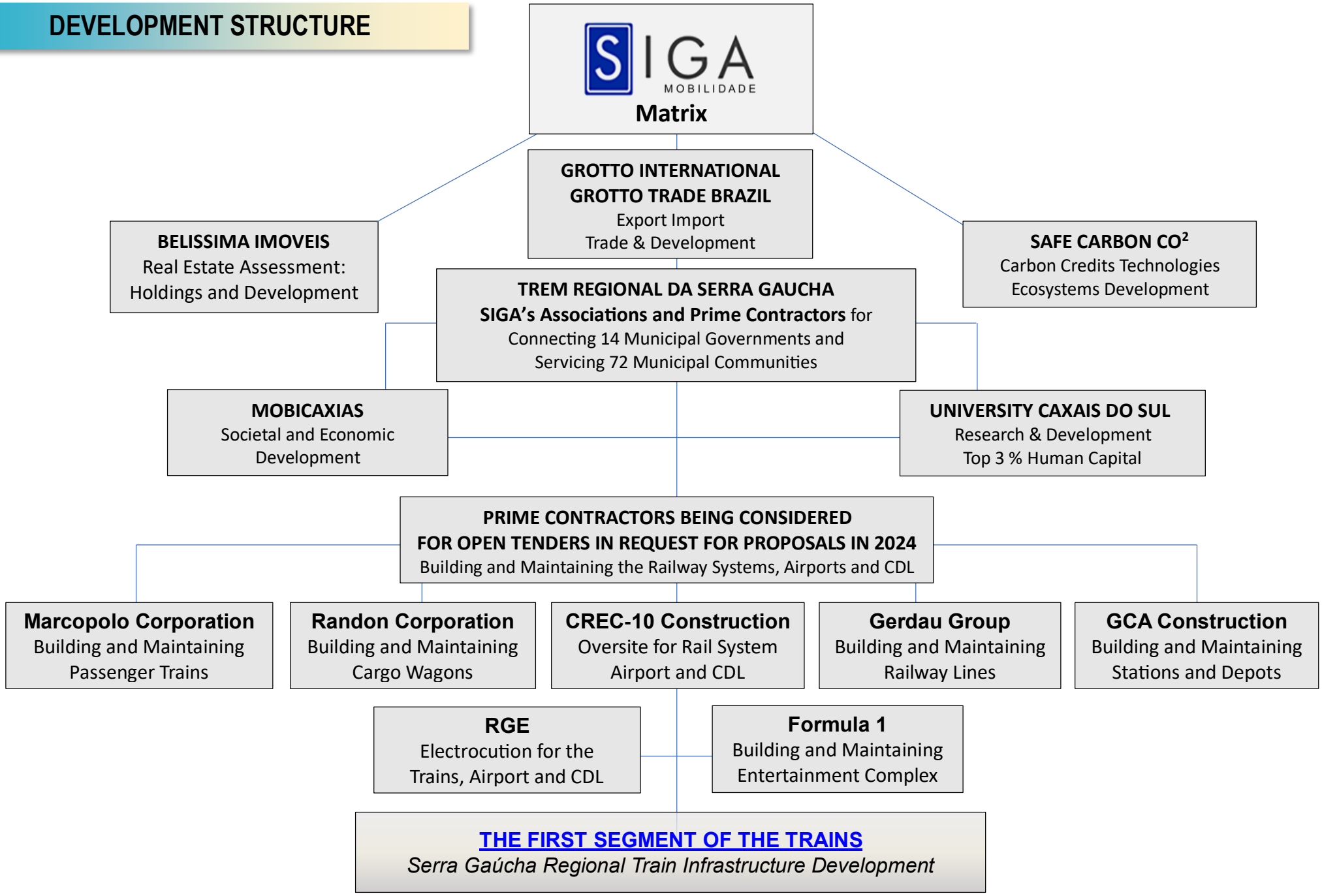
Photos: May 2024, damages to roads and bridges along the major mountain route 116 between Caxias do Sul to Nova Petropolis presented a real cause for concern.



The various initiatives announced by the federal government for the reconstruction of the state totaled more than R$100.4 billion (Ministry of Finance, 2024). The Rio Grande Plan, created for the reconstruction, adaptation, and climate resilience of the state, proposes measures to mitigate the impacts caused by the 2024 flood. The plan articulates emergency actions, such as strengthening the early warning system, and reconstruction actions and long-term climate resilience initiatives, such as nature-based actions, drainage projects, etc…, (Governo RS/SERG), 2024). For this purpose, the Secretariat for Rio Grande do Sul Reconstruction (SERG) was created, in addition to the Scientific Committee for Climate Adaptation and Resilience, with the Planning Council's governmental participation. There is also a special public fund to finance the Plan's actions through (FUNRIGS). Since 2020, a collaborative project between the World Bank and the Southern Regional Development Bank (BRDE) has sought to increase the resilience of cities in the states of Paraná, Santa Catarina, and Rio Grande do Sul. The initiative has faced several obstacles, such as the pandemic, difficulties in the Senate, and in defining viable projects (World Bank, 2022). As of June 2024, the project was in the subproject selection phase, with Porto Alegre, Chapada, and Torres as possible candidates.

Photos: Prior to May 6th throughout the next following 7 day period of torrential rainfall would expanded the levels of sedimentation from the mountains' runoff. The remainder of the month and in to the next, rain would rotate on a 7 day and 2 -3 days rain over an extend area reaching Porto Allegra and the Airport in the day's bringing murky muddy waters and debris as the rivers and streams would make their downhill descent to the ocean.

DEVELOPMENT STRUCTURE



SIGA (*Let's Go*)

OUR AFFILIATIONS AND CONSORTIUMS

SIGA MOBILIDADE

GROTTO — RIO GRANDE DO SUL • SUSTAINABLE GOALS — GRAND IS BRAZIL one for Life — GRAND RIVER SOUTH • PRODUCT LINES, S.A.

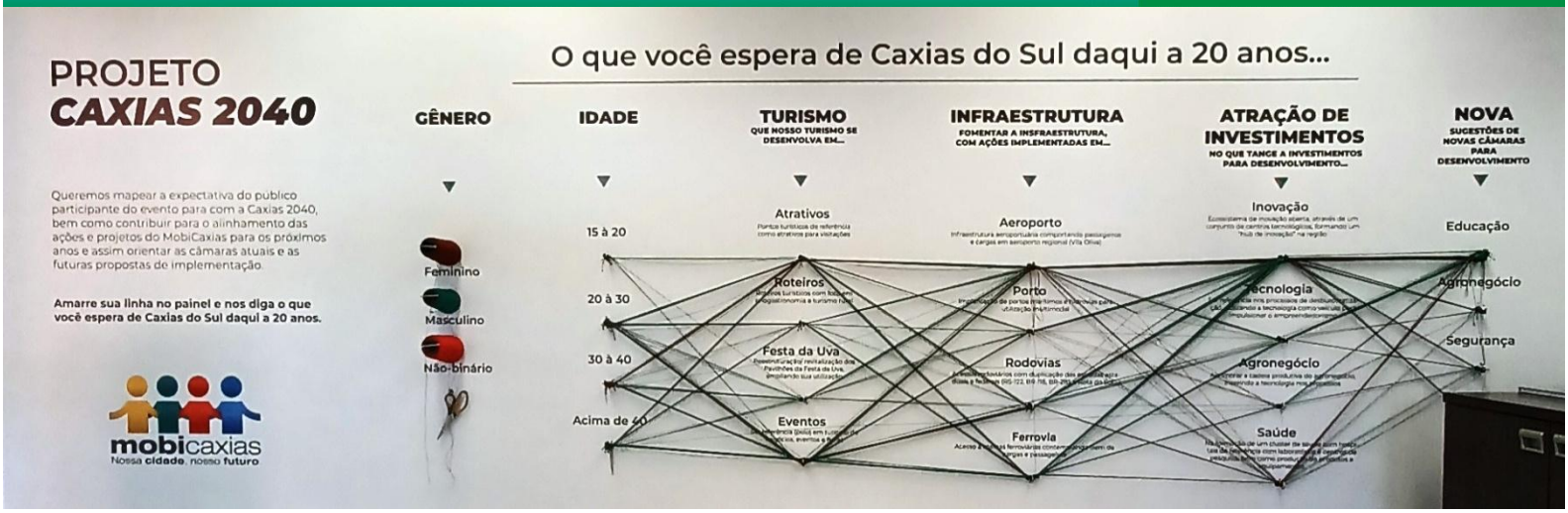
Infrastructure Development: responsible for the Serra Gaúcha Train, Airport, Sea Shipping Port, EcoSystems and the Import/Export of products.

mobicaxias
Nossa cidade, nosso futuro.

UCS
UNIVERSIDADE DE CAXIAS DO SUL

Instituto safeweb

Research and Development: Technology Commercialization, EcoSystems Development, Certification of Sustainable Product Lines and Carbon Credits.



The Association for Mobilization of Caxias (MobiCaxias), addresses and aids in the development of its 5 pillars for the region for 2024, the University of Caxias Do Sul, and with 14 of the regional Municipal Governments representing an estimated 120 cities. Our principle investigations have been relegated to:

- Technology Proliferation
- Networking and Market Entry Assistance
- Project Evaluation, Execution, and Exchanges
- Infrastructure Building Projects, with Extended Services
- Coordination and Exchange via Trade Missions
- Business Representation, Advocacy and Promotion.

CONSORTIUM: US/BR Businesses est. in 2024

Expansion

- Brazilian Companies Members in Lylee Enrico LLC, dba GROTTO;
  - SIGA Mobilidade International, **(SIGA),** and
  - Safeweb-Nzeru Consultoria em Seguranca da Informacao, **(NZERU},**.
- Supply chain distribution throughout the United States.
- Technology Commercialization, US/BR Technology Patients.
- Information Security, Product Certification & CO_2 Verification.
- Development of premium and exclusive GROTTO products.

CONSORTIUM: China • EuroAsia • India • MENA

Expansion *Moving Forward...*

- GROTTO business Consortiums and Team Leaders.
- Supply chain distribution throughout Global Sovereign States.
- Technology Manufacturing, Commercialization and BRANDING.
- Information Security, Product Certification & Co2 Verification.
- Development of premium and exclusive GROTTO products.

OUR TRADING CONSORTIUMS

GROTTO BRAZIL EXPORTTRADE...*Conectando Mercados*

www.sdggrotto.ga/products

GROTTO BRAZIL EXPORTTRADE
Distribution Networks

Global Business Corridors

ASIA, Americas, Euro, & MENA

GROTTO's Brazilian Market Place

China, Southeast Asia, The Americas N.& S., European Union, Middle East North Africa (MENA)

14. INVESTMENT OPPORTUNITIES WITH SIGA MOBILIDADE URBANA AND ITS SERRA GAÚCHA REGIONAL PROJECTS, IN RIO GRANDE DO SUL, BRAZIL

Proposed Ratios for Projected Returns on Investments in USDs for:

Development Bank Institutions at: 05-07% of Total Invested **(15 Years 500M and Above)**

Private Equity Institutions at: 07-10% of Total Invested **(10 Years 200M and Above)**

Individual Private Investments at: 12% of Total Invested **(5 Years 25M up to 75M)**

ASSURANCES FOR RETURNS ON INVESTMENT (ROI) IN SOUTH BRAZIL

As of March 2023, the infrastructure projects were presented in the request for securing public and private investments. Please note that by Brazilian law, all Foreign Investments must file an application to CDNR (Cadastro Declaratório de Não Residente) CDNR-SISBACEN must be applied for before the banks can receive funding from outside the country. The requirements are established to ensure that foreign investments are held safe and to monetize via the Central Bank, to this matter, all foreign investments are guaranteed and the returns on investments ROIs are assured.

For details, please reference to web link https://www.bcb.gov.br/estabilidadefinanceira/capitaisestrangeiros for the foreign investor to do the CDNR-SISBACEN. This is a must for those who do not reside in Brazil and wish to make direct investments in companies or carry out any financial transactions. This matter is the first line of security for eligible investors and investments.

A second line of security will be in the form capital insurance bond guarantees on each project's investment requirements. Upon verification of the addition Carbon Credits, the sale of the first 35 Million Credits will be places against loans to the value of the credits to be applied to the infrastructure and economic developments in the region. These measures will ensure a safe environment for the security of investments while providing viable instruments for healthy returns on investments. Details of the stock options will be available in 2025 along with tenders to be offered, financial projections, draw downs, and Returns On Investments (ROIs). Finally, as a method of operations, public tenders will be considered for concessions to Build-Operate-Transfer (BOT) and Design-Build-Operate (DBO).

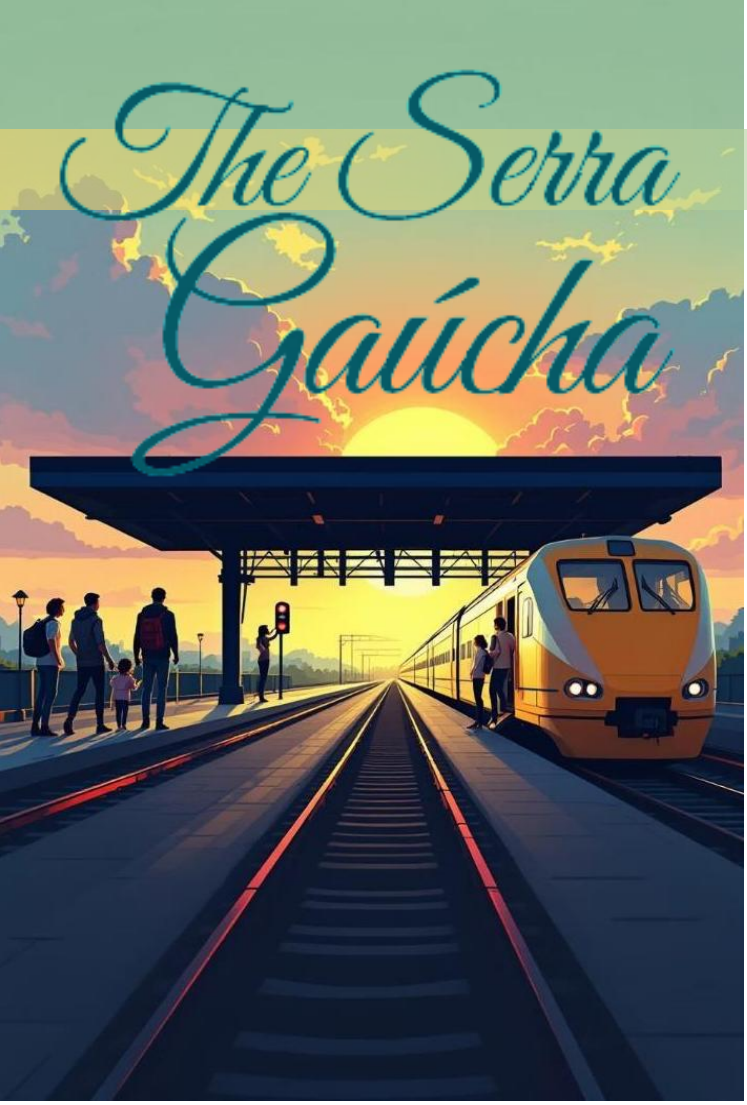
15. SIG'S OFFERINGS, IN PROJECT DEVELOPMENT AND CONTRACTS

SIGA Mobilidade Urbana (SIGA) is a Brazilian corporation in the deployment of sustainable infrastructure development and International trade. SIGA is a conduit to enterprise-level businesses having a vested interest in the development of sustainable ecosystems of infrastructure, energy, economic and social development, and international trade. SIGA is providing market access to address market demands for products. SIGA, with its corporate headquarters in Caxias do Sul, Rio Grande, Brazil, with an international office in Metropolitan Washington, DC, USA to conduct operations for market access to global markets.

SERRA GAÚCHA REGIONAL TRAIN: This infrastructure project is being instituted to accommodate the projected demographics for an expansion of the region's GDP index. This project is being developed in conjunction with the Canela Hortênsias Regional Airport and CDL. This infrastructure development project will support a multipurpose transportation system for the transport of products produced in the Serra Gaúcha Region. The transport of an indigenous workforce is required for an expansion of the region's GDP, which is capable of expanding in the continental and international markets. Additionally, the tourism industry will benefit from this expanded passenger transportation system.

These infrastructure requirements are to accommodate the demographic expansion that has been slated for the 2040 projected growth in the state of Rio Grande Do Sul. From the projections in 2021, an estimated budget of 1,450,000,000, the requirements from the project's current estimated budget of **$1,995,957,624.00** that will be applied as designated for the following. The first application of seed capital will be applied towards verification of Carbon Credits, which in turn will be applied towards securing additional resources for the infrastructure development. The second application will be applied to make payments for compensation, completion of the engineering specifications for the rail lines, and development of the first station.

The third is to initiate guarantees for state access roads, utilities for energy, and other vital elements for the development of the train. The fourth is for expanded offices and facilities in Brazil and the United States to accommodate the needed personnel, equipment, and technologies for the promotion and logistical operations for the movement and distribution of products.



CONCLUSION & NEXT STEPS

1 DETAILED STUDY

We have initiated both the feasibility and environmental impact studies.

2 PUBLIC ENGAGEMENTS

We have engaged and conduct public consultations with each of the 14 initial Municipal governments and the State Legislature establishing channels of communication within each of the governing bodies and the communities.

3 PARTNERSHIPS AND FINANCING

We have identified strategic partnerships and diversified funding and underwriting sources.

4 EXECUTIVE PLANNING

We have developed timelines for phase of the planned implementation for the multimodal rail line between Bento Gonçalves to Vacaria railway and stations to transform the region and state of Rio Grande do Sul. Our investigations, planning, public participation, with a commitment towards sustainability, we will create a transportation infrastructure and ecosystems beneficial for the next 7 to 10 years, and future generations to come.

CONSIDERATIONS

- **A.** Environment integrity,
- **B.** Cost of lands expropriation,
- **C.** Acquisition of capital, and sale of the natural resources from the development's excavation,
- **D.** Integration of the regional ecosystems,
- **E.** Carbon Credits assessments for development,
- **F.** Logistics for utilities & ground transportation,
- **G.** Installation of 14 passenger stations, along with four 4 loading depots to serve an estimated 42 surrounding communities, increasing their capable of expanding production of products for market access to export, creating an increase in the regional GDP.
- **H.** Assessments of rail engineering, and maintenance variables.

Trem Regional da Serra Gaúcha

- Updates to completing technical and engineering.
- CCs initiated for infrastructure development.
- Documented for 99 years of operation of the train.

17. SUMMERY

The occurrences of atmospheric acts from 2000 to 2023 and most recently the catastrophic event of May 2024 brought devastation to Rio Grande do Sul, is concrete evidence of Climate Change that is destined to happen again. Unless early warning systems, climate modeling, and innovative technologies are implemented, the next atmospheric event will once again affect an unprepared population. By not accepting the potential for rapidly changing environmental conditions or incorporating innovative technologies and engineering techniques required for mitigation, any community will succumb to the negative effects in any region. These disastrous and unpredictable occurrences have become our greatest concern for developing sustainable infrastructure and ecosystems.

The investments required to address the planned developments are not only paramount to the Serra Gaucha Region, but also to the Nation of Brazil and the world. We make this statement based solely on the fact that Brazil is credited as the world's largest exporter of food with products that are part of the diets of 1 in every 7 persons. Brazil's food supply is largely produced in the Serra Gaucha Region which provides for 35% of Brazil's food exports. Among the other products, Brazil is renowned for its exportation of iron ore, ranking 2nd globally, and 9th in sawn woods for exportation given its vast forestry. This brings us to several disputed and undisputed facts.

The Amazon Forest is the largest ecosystem in the world, which has been verified to help mitigate the carbon greenhouse effects attributed to the negative aspects of Climate Change. Disputes in recent years have sparked aggression toward Brazil for its deforestation. This is due to naysayers not understanding the importance of Brazil to the earth's sustainability. This notion of inadequacies has proven not to be true!!! To these matters, our proposal will utilize the sale of carbon credits from the Amazon Region and the South Brazil Atlantic Forest to support our sustainable development objectives.

This proposal is presented to consider the potential and requirements to advance the Serra Gaúcha Regional transportation infrastructure. The initial objective was to aid in expanding the region's GDP, to what is now a recovery for the region. There is now a consideration from the World Bank to provide an estimated $200 million in financial aid.

SIGA's corporate participation at the 2024 COP 29, also known as the 29th United Nations Climate Change Conference in Baku, Azerbaijan venue proved to be an invaluable exchange of best practices. COP 29 prioritized negotiations on new collective climate finance targets. This conference also expanded discussions on accelerating the energy transition. The next climate change conference COP 30 will be held in the city of Belém do Pará, Brazil, in November 2025. This event will be a prime opportunity for the investment community to better understand the climatic impact Brazil has globally, with a locally driven propose for economic sustainability, environmental conservation, societal reengineering, technological innovation, and re-energizing the quality of life.

We would like to thank the international community for their aid and assistance during the 2024 time of crisis. Specially thanks are given to the Sister Cities Program, which several of the Serra Gaúcha cities are a part. We welcome any inquires and are willing to negotiate with potential investment instruments, both public and private, to address the requirements for developing sustainable infrastructure and viable ecosystems throughout South Brazil.

18. APPENDIX I: LIST OF DOCUMENTS & SOURCES INDEXING

1. The 14 Municipalities Corporation Document
2. Banco Pactual BTG Pactua
3. Brazilian and US Patients for Carbon Sat Technology

SOURCE INDEX:

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