

20
24



Reservas Votorantim Ltda.

Management Board David Canassa, João Schmidt, Mauro Ribeiro Neto and Nicolle Amorim da Silva

Direction David Canassa

Coordination Cicero de Melo Junior, Roberto Ferreira, Mayara Mira, Kamilla Lopes, Tatiana Motta

Team Aline Taminato, Andrei Pires, Barbara Aquino, Beatriz Rita, Elisângela Coutinho, Felipe Araujo, Felipe Lima, Fernanda Pannunzio, Fernando França, Lucas da Silva, Marcello Pimentel, Marina Giusti, Paulo Cesar Sousa, William Mendes

Writing Laila Rebecca

Editing and review Laila Rebecca and Kamilla Lopes

Translation LATAM Translations

Graphic project and design Rafael Agostinho Estudio

Photos Andrei Pires, Jésus Lopes, Laila Rebecca, Luciano Candisani and internal archive

Opening letter

David Canassa. Executive Director at Reservas Votorantim



Reservas Votorantim (rV) has seen consistent growth, as a result of its ambition and the clear goal of being one of Brazil's leading developers of nature-based solutions, combining biodiversity conservation with business generation, and showing the value of standing forests. The combination of these attributes made 2024 one of the most significant years in rV's trajectory, with solid growth at a speed necessary to cater for market demand in the green economy.

A year on from the launch of PSA Carbonflor—a pioneering methodology for generating carbon credits in the Atlantic Forest—rV achieved a new milestone: the announcement, in partnership with ECCON and ACX, of Brazil's first platform for registering carbon projects, under development by the Brazilian stock exchange, B3. PSA Carbonflor will be the first project registered on the platform, an important step towards maturity of the Brazilian carbon-credit market, aimed at reducing costs, increasing the transparency and integrity of assets, and making viable the development of tropical methodologies, accelerating Brazil's decarbonization efforts. The announcement, made at the Brazil Climate Summit, in New York, was accompanied by the opening sale of 70% of the credits of PSA Carbonflor to the CCR Group.

In another biome, the high integrity and technical rigor of Reservas Votorantim's carbon projects gave it

reliable credentials at a time when distrust hung over REDD+ projects in Brazil, resulting in the sale of the first issue of all the credits of the REDD+ Cerrado project. In addition, to strengthen the climate agenda in the Brazilian production sectors, rV, in partnership with Citrosuco and ECCON, launched PSA Carbon Agro Perene, a new methodology for measuring ecosystem services in conservation areas and productive areas within rural Brazilian properties, including forest carbon.

Also booming as a result of the climate agenda, ecological restoration embodied the results of the period. Innovation in production methods, technical capacity-building for staff, and increased productivity for nurseries in the Biodiversity Centers of its managed territories, expanded rV's capacity to offer custom solutions to projects, both voluntary and offsetting, in all biomes where there is demand.

In the same period, rV's range of nature-based solutions gained new layers with bioprospecting. rV and CNPEM (National Center for Research in Energy and Materials) entered an agreement for studying herbivores and microorganisms from the Atlantic Forest—in particular bacteria, yeasts, and fungi. The research, which will take place at Legado das Águas, envisages the development of biofuels, biochemicals, bio-inputs, pharmaceuticals, and other innovations benefiting human health, the environment and the economy.

On its other business fronts, rV also increased access to the market, for example through the rental of space on its managed territories for commercial and corporate events, as well as launching new types of environmental consultancy. In sustainable landscaping, the capacity to establish strong partnerships was essential to increase rV's presence in this market and cater for different projects with a wide variety of species of native flora.

Reservas Votorantim's business fronts grew and developed. But these advances are only genuine when shared. And that was another reason for commemoration in this period. At Legado das Águas, for example, an important target was achieved: 75% of contracted products and services are from local suppliers. And all these advances are signed by rV's teams and those of its managed territories. Based on strong corporate governance and business management, the company maintain its trajectory in an ambidextrous movement, structuring the future while doing business in the present.

The following pages demonstrate Reservas Votorantim's potential and vocation for offering solutions to support the domestic and international markets in the climate transition and sustainable development. That is because it is in our nature to think of business that transforms the world, looking after forests and people.

Contents

6 innovation, connection and conservation

- It is in our nature to think of business that transforms the world.

8 timeline

- Building legacies.
- Seeds.

14 the future is planted

- The evolution of a brand.
- Strategy and identity translated into 5Ps.

18 people, nature and business

- Governance for the future.
- A forest of possibilities.

22 sustainable and diversified use

- Multiple use, multiple opportunities.

24 decarbonizing the economy

- rV creates solutions to tropicalize the carbon market.

26 climate economy

- New platform to register carbon projects.

28 climate in the countryside

- Innovation for sustainable agribusiness.

30 generation R

- Ecological restoration as a climate strategy.

32 solutions A to Z

- Customized restoration solutions.

34 nativizing cities

- Native species become more common on the traditional market.

36 less bureaucracy, more sustainability

- Mechanism facilitates regularization of Legal Reserves.

37 experience is also business

- Consultancy on NbS and Multiple Land Use.

38 innovative ideas

- Bioprospecting as an alternative to conservation.

40 one territory, many options

- Public use expands business portfolio.

42 science-based

- Scientific research: the basis for conservation and new business.

44 management and green projects

- Managed territories and Business Units.

46 vocation to innovate

- Legado das Águas: innovation is in its nature.

52 trailblazing in the Brazilian savanna

- A business model that works.

58 epilogue

- Moving forward with confidence.

Click on the link to visit the desired page.
To return to the contents page, click the icon.



When this icon appears, click and access the additional content.



Reservas Votorantim

It is in our nature to think of business that transforms the world.



With over a decade of experience in managing conserved areas and multiple land use, we have consolidated a new business model with nature-based solutions for different economic segments.

We have a robust portfolio of businesses, products and services that generate revenue streams while conserving Brazilian biodiversity.

Reservas Votorantim (rV) is a Brazilian company specializing in land management and nature-based solutions for traditional and green economy businesses. Based in São Paulo, the entity operates nationwide and is present in four of Brazil's six biomes: Atlantic Forest, Cerrado, Pantanal and Caatinga, managing over 130,000 hectares of conserved areas. The company develops projects, products and services through a business model that values Brazilian biodiversity and adds market value through ESG initiatives and low-carbon solutions.

Solidity and innovation

Throughout its history, Votorantim S.A. has acquired land that goes beyond the needs of its enterprises. The company maintains highly conserved forest areas across Brazil, shoring up its commitment to protecting natural resources.

In 2015, the first step was taken to manage some of these geographies and find nature-based solutions, combining biodiversity conservation and business: the creation of Reservas Votorantim, a developer of green economy projects. Introduced to the market in 2022, the company now boasts the solidity of a

century-old company, experienced in managing conserved areas and multiple land use in sectors such as carbon credits, Legal Reserves and biodiversity.

Reservas Votorantim currently manages:

Legado das Águas: the largest private Atlantic Forest reserve in the country, covering 31,000 hectares inside São Paulo state, founded in 2012 by four Votorantim portfolio companies: CBA - Companhia Brasileira de Alumínio, Nexa, Votorantim Cimentos and Auren.

Legado Verdes do Cerrado Private Sustainable Development Reserve of 32,000 hectares that combines traditional and new economy businesses, owned by CBA - Companhia Brasileira de Alumínio, in Niquelândia, Goiás.

Reservas Votorantim also has Business Units:

At Fazenda Bodoquena, in Miranda and Corumbá, Mato Grosso do Sul, with 74,000 hectares, where it carries out activities linked to the green economy, like carbon projects.

At Pátio Caeté, a center for the sale of plants for sustainable landscaping using species of native flora, located in Miracatu, Legado das Águas (São Paulo).

In the Caatinga, in Paulistana, Piauí, with an ecological restoration project.

With a proposal for creating social, economic and environmental value, Reservas Votorantim is consolidating its strategy of growth, differentiation and diversification.



A. HQ of Reservas Votorantim SP

Managed territories

B. Legado das Águas SP
C. Legado Verdes do Cerrado GO

Business Units

D. Pátio Caeté SP
sale of plants
E. Fazenda Bodoquena MS
carbon projects and other nature-based solutions

Carbon projects

PSA Carbonflor (B) SP
REDD+ Cerrado (C) GO
REDD Carbonflor e REDD Pantanal (E) MS

Ecological restoration projects

Paulistana - PI, Goiânia - GO, Tapiraí - SP, Votorantim - SP, Salto de Pirapora - SP, Ibiúna - SP, Campos do Jordão - SP.

● Amazon ● Caatinga ● Cerrado ● Atlantic Forest ● Pampa ● Pantanal



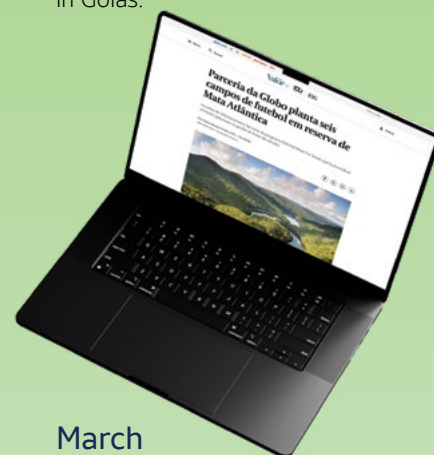
Building legacies

The history of Reservas Votorantim (rV) is marked by important events. Many of them reaffirm its competitive, pioneering and innovative nature in the green economy. 2024 added important moments that will go down as milestones in its trajectory.



January

Completion of the ecological restoration project to **neutralize the carbon of the 29th Encafé conference**, organized by the Brazilian Coffee Industry Association (ABIC). The project resulted in the planting of 2,624 seedlings of tree species native to the Cerrado, reinforcing an environmental corridor in Legado Verdes do Cerrado, a territory managed by rV in Goiás.



March

Completion of the ecological restoration project to reduce carbon emissions of the vehicle fleet of the Globo Group, through Edenred's global sustainability program **Move for Good**, whose goal is to support companies in the decarbonization of their fleets. The group planted 10,000 trees in an area of 60,000 sqm (equivalent to six soccer pitches), in Jurupará State Park (São Paulo). The project was developed and executed by rV.

June

Start of the **partnership with Hitachi Vantara** to carry out a restoration project in the Jurupará State Park, in the Ribeira Valley, interior of São Paulo. The project involves the planting of thousands of seedlings, to contribute to the IT company's carbon reduction targets and ESG goals.



Legado Verdes do Cerrado, a territory managed by Reservas Votorantim in Goiás and owned by Companhia Brasileira de Alumínio (CBA), has officially become the **first Private Sustainable Development Reserve (RPDS) in Goiás** and Brazil's first in the Cerrado. The formalization document was signed with the Goiás State Government.



July



Legado das Águas, a territory managed by Reservas Votorantim in the interior of São Paulo, is becoming an anchor point for **Brazil's first eco-tourism district**. Christened "Gateway to the Atlantic Forest", the district—which comprises a number of areas of the Ribeira Valley, is an initiative of the São Paulo State Travel and Tourism Office (Setur-SP) to promote sustainable development through tourism.



August

Reservas Votorantim, in partnership with Citrosuco and ECCON Soluções Ambientais, launched, in São Paulo city, the **PSA Carbon Agro Perene**, a pioneering methodology to measure ecosystem services in productive areas on Brazilian rural properties, including forest carbon.

September

Announcement of the first national platform for registering carbon projects, being developed by the Brazilian stock exchange, B3. PSA Carbonflor will be the first project registered on the platform. The announcement, made at the **Brazil Climate Summit**, in New York, was accompanied by the opening sale of 70% of the credits of PSA Carbonflor to the CCR Group.



Participation, for the second year running, in **Climate Week NYC**, in New York. The event marked the launch of the international public consultation about the PSA Carbon Agro Perene, a pioneering methodology for measuring ecosystem services in productive areas within Brazilian rural property, including forest carbon, developed in partnership with Citrosuco and ECCON Soluções Ambientais.



September



Reservas Votorantim became a member of the **Atlantic Forest Restoration Pact**, a nationwide movement that connects actors interested in restoring the biome, leading to large-scale actions and results, with environmental, social and economic benefits.

October

Participation at **COP16, in Cali, Colombia**, on various themed panels, including the use of technology to monitor biodiversity, genetic mapping of the Atlantic Forest and the multiple land-use business model applied by rV in its managed territories.



Holding of **Compliance Day**, an initiative of rV to recycle knowledge and discuss market best practices in compliance, as well as reinforcing the values and conduct of the company towards its employees.



November

Celebration of rV's ninth birthday
The event brought together all of the Reservas Votorantim employees in the Votorantim Memorial space, in São Paulo city, to commemorate the advances that put the company at the forefront of Brazil's green economy.



Launch of the Reservas Votorantim video manifesto, which reflects the essence of the company's organizational culture, its ambitious targets, and its determination and excellence to generate transformative business with a positive impact. The manifesto is one of the results of **rV's branding project**, which expresses and presents the evolution of the brand.



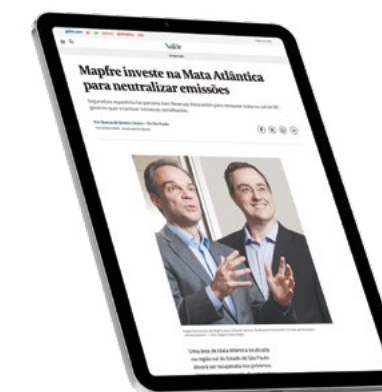
Participation in **COP29, in Azerbaijan**, highlighting opportunities in the carbon market in Brazil and the impact of innovative methodologies, like PSA Carbonflor. rV also contributed to panels on multiple land use in forested areas and implementation of sustainable practices, essential to mitigate the effects of climate change.



rV joined the **Nascentes Program**, an initiative of the São Paulo State Government, which helps connect investors in the restoration market, with the aim of expanding native plant cover in the state.

December

Start of the **MAPFRE Forest** ecological restoration project, carried out by rV in partnership with global insurance and financial corporation MAPFRE, with the aim of offsetting the carbon footprint of the company's operations in Brazil with a view to neutralizing its emissions by 2028.





Seeds

Reservas Votorantim is spearheading the transformations it wants to see in the world, while creating solutions for those who also wish to be part of the change. To build this trajectory, rV believes that major changes begin with small actions, planting the seeds for evolution.

Therefore, every year it has been involved in important agendas and contributed to crucial debates for the advance of society. In 2024, it maintained this movement—which it treats as a commitment to share its expertise, but also to absorb other know-how.

See what seeds were harvested and planted in the period:

April

Second edition of the immersion course in the forestry carbon market, a partnership between ECCON Soluções Ambientais, Trevisan Escola de Negócios, Reservas Votorantim and law firm DC Associados. The course comprised three online modules and one face-to-face module, held in Legado das Águas, an area managed by rV in the interior of São Paulo, training professionals to work in the forestry carbon market.



June



Participation in **ESX 2024 - Espírito Santo Innovation Experience**, taking as a case study the rV management model of multiple land use at the round table “*ESG Talk: How to innovate while preserving biomes*”. The event was organized by Sebrae/ES and Mobilização Capixaba pela Inovação (MCI), with the goal of providing content and innovation to generate business, networking and knowledge.

July

Participation in the **5th Brazilian Conference on Ecological Restoration**, organized by SOBRE in Juazeiro (Bahia) and Petrolina (Pernambuco). rV took part in a symposium on “*Positive Socioeconomic Impacts of the Ecological Restoration Chain*”, in partnership with Fundação Florestal, CEPAN and WRI. rV’s involvement in the event reinforced the company as a strategic partner in this segment.



August

Participation in the **Annual Positive Impact Conference 2024**, on the panel “*How to combat the climate emergency in the Global South?*”, with Thelma Krug, chair of the *Global Climate Observing System* (GCOS), representing the INPE. The event was organized by Instituto Votorantim, with the goal of bringing business closer to the socio-environmental agenda and promoting relevant discussions to the sustainability journey of companies.



September

Participation of rV in the **G20 in Brasil**, on the panel “*Step by step towards sustainable, inclusive development: what Brazilian companies think*”, organized by Editora Globo. The event covered themes such as innovation, digitization and the transition to a low-carbon economy, with a focus on drawing up sustainable strategies and promoting more inclusive development.



Participation in **Forest Carbon Brasil 2024**, on the panel “*Investing in biodiversity: native forests as a carbon asset*.” The event brought together experts to discuss, among other themes, the key challenges and opportunities of the forestry carbon market in Brazil.

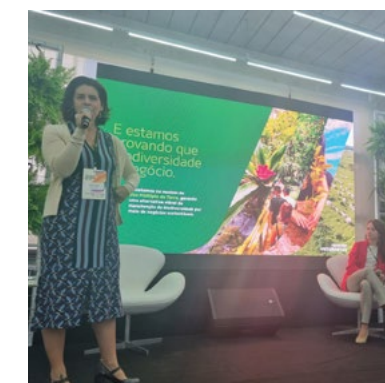
October



Participation in the **National ESG Congress**, in São Paulo, on the panel “*Conserving Biodiversity and Protecting Ecosystems*.” rV presented its business model, which combines environmental conservation and revenue generation, promoting sustainable practices that benefit both the environment and the economy.

November

Participation in **FECLIMA 2024**, the business forum for climate solutions, on the panel “*Guardians of Nature: Business-led Nature-based Solutions*”, where it presented PSA Carbonflor, an innovative methodology for measuring ecosystem services, including forest carbon. The event drew together leaders and experts to share success stories on sustainable solutions.



December

Conclusion of the 2024 edition of the **Florestas Inteligentes** (smart forests) project, which Reservas Votorantim has supported for three consecutive years. This year, the project benefited the Association of Women Banana-Fiber Artisans with a solution to improve their craft production process.



The evolution of a brand that wants to make its mark on the world

We take our inspiration from biodiversity to create viable, scalable solutions for organizations that believe in the value of standing forests.

To evolve, we need to be clear about who we are, what we want to be and the role we wish to play in the world. On the eve of completing our first decade, we are leading a trajectory of growth built around a bold stance. We know, however, that evolution is a continuous process, driven by dialog and collective construction. And it only become genuine when it reflects, in an integrated way, the demands of society, nature and business.

More than what we are, how we are perceived is also important. For that reason, in 2024, we presented our brand strategy and new verbal identity—tone of voice, the result of a branding project that reflects our culture and steers us into the future. The tone we arrived at is a union of diversity, extracted from dozens of interviews with our employees, leaders and partners, in a careful process that took nearly four years, begun in 2021 with the development of our visual identity and logo.

This repositioning also reflects the maturity of a young company born in an ancient cradle, emancipating our own identity as a business.

Underlying our brand strategy and new tone of voice—which reveals, respects and rethinks new pathways—the branding project involved an in-depth market analysis to help us overcome the challenges inherent to trailblazing, especially that of being seen and understood as a business through the lens of biodiversity, beyond well-known markets like beauty and pharmaceuticals.

We have evolved a great deal in these years. And the world too. We have bravely—and boldly—addressed the challenges of these transformations. But knowing that this is a shared agenda, we understand the need to have a voice that is understood by everyone. And that understanding should begin, necessarily, “at home”. We were clear about this need when, on completing this element of the project, we presented the new tone to our employees, at an event to mark our ninth birthday, opportunely looking at the present and planting the future.

The branding project was conducted by Rafael Agostinho Estúdio (logo and visual identity), Fragma Comunicação (brand strategy and verbal identity), and Comunicação rV.

Event marking the ninth birthday of Reservas Votorantim, at the Votorantim Memorial space, in São Paulo city. At the event, we presented our new verbal identity, commemorating our trajectory and planting the future.



Having defined our brand strategy, we also established a new corporate signature, translated in a video manifesto, which reflects the essence of our organizational culture. The video marked the launch of our new verbal identity and our new tone of voice for all our audiences.

With the strengthening of our branding, we demonstrate the care we take over our brand and, consequently, the care we take over the forest, people and business. We demonstrate that the Reservas Votorantim brand is also our way of being.

Manifesto

It is in our nature to think of business that transforms the world.

Together, we have built an innovative trajectory. We have done things that no other company has dared do in Brazil.

And, of course, we have evolved!

We have sown biodiversity in our business, motivating communities and organizations to believe in standing forests as the way to a promising future.

With visionary ideas, a versatile stance and virtuous attitudes, combined with lived experience, we plant the seeds that transform the world around us.

After all, we are a business ecosystem that takes its inspiration from nature to create viable, scalable solutions for those who recognize the importance of standing forests.

Through constant reinvention, tireless resilience and acknowledged responsibility—foundations that underpin the quest to achieve our goals—we go on building legacies that value new futures.

Because we believe in equilibrium. Forest standing, business booming!

Watch the video manifesto [🔗](#)

Strategy and identity translated into 5Ps

Reservas Votorantim is a nature-based business ecosystem that takes inspiration from biodiversity to create a range of viable, scalable solutions for organizations that believe in the value of standing forests.

We have reserves in different biomes and we study the real potential of each territory to sow the generation of shared value by sustainable businesses.



Purpose

Sow biodiversity in business, motivating communities and organizations to believe in standing forests as the way to a promising future.

Principles

Constant **reinvention**, tireless **resilience** and acknowledged **responsibility** are the foundations that underpin the quest to **achieve** our goals.

Personality

With **visionary** ideas, a **versatile** stance and **virtuous** attitudes, combined with **lived** experience, we plant the seeds that transform the world around us.

Positioning

A **business ecosystem** that takes its **inspiration from nature to create viable, scalable solutions** for those who recognize that standing forests are the future.

Promise

Build legacies that value our futures.

Governance for the future



Reservas Votorantim knows that the place it occupies in society goes far beyond business relations. Its work is directed at reinforcing the commitment to actions that generate shared value, connecting business, nature and people in a management that incorporates conservation, sustainable development and ethical relations, strengthening the trust of strategic audiences and ensuring long-term business success.

Mindful that ethical culture begins internally, in 2024, Reservas Votorantim took important steps towards strengthening its compliance program, with the second *"Compliance Day"*, which brought together employees of rV and Legado das Águas, a managed territory in the interior of São Paulo, to reinforce the values of integrity, transparency, respect and compliance—fundamental to business strategy, reputation and sustainable growth.

The event adopted a format of open dialog, informative and accessible, to address corporate conduct, facilitating the comprehension of the topics and the sharing of best practices among employees. *Compliance Day* complemented the other initiatives that are organized periodically to strengthen governance.

rV maintains a continuous improvement process in its corporate governance and business management structure, underpinned by the Oversight Board, which remains committed to identifying, discussing and ensuring the dissemination of the company's values and principles. The board makes decisions aligned with the defined strategy, optimizing long-term investment returns with positive social and environmental impacts.

The compliance guidelines practiced by Reservas Votorantim derive from those of Votorantim S.A. and are outlined in the Code of Conduct and Anti-Corruption Policy.

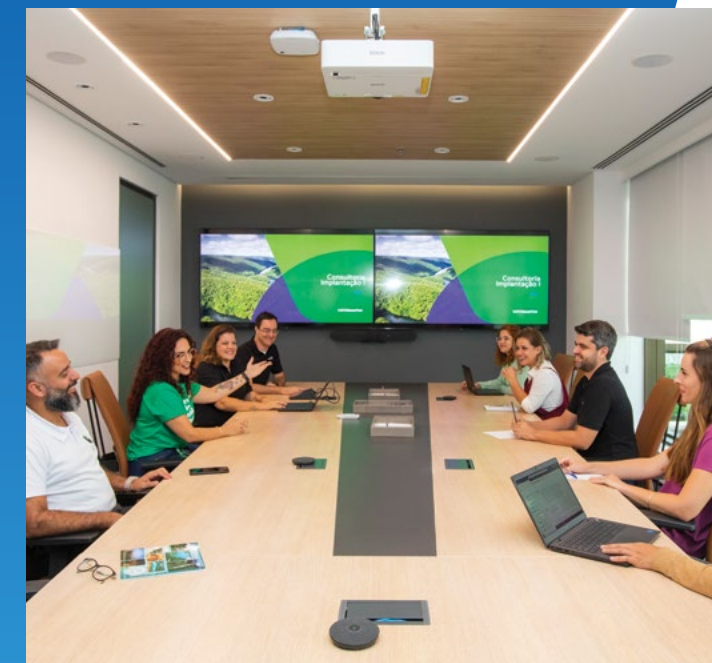


Numbers tell stories

To arrive at the forefront of the green economy and continue innovating, financial performance must lie in the sum of good results. In 2024, rV took important steps to improve its financial management, with a strategy that analyzed results and performance indicators by area of operation.

Many of the corporate governance advancements in the period also drove business management and human resources results. To that end, as well as seeking new talent to expand our technical staff and cater promptly to market demand, rV also strengthened its retention of employees, creating opportunities for internal growth and mobility between posts, while at the same time strengthening its internal culture and working on smart supply-chain management.

This movement was guided by numbers, which not only translate rV's past, but also shape its future, providing the directions for strategic decisions that maintain the company on the path of innovation and sustainability.



46% of Reservas Votorantim's leadership positions are held by women.

55% of Reservas Votorantim's team consists of women.

12% headcount growth.

41 training sessions were conducted with rV employees in 2024.



Reservas Votorantim understands that conservation is easier when the value of the forest is perceived and ensured in the long term,, which is why it made the commitment to strengthen its supply chain in the territories where it operates. In 2024, rV reached a major milestone: 75% of the inputs and services used in Legado das Águas, a managed territory in the interior of São Paulo, are from local suppliers, the result of a gradual increase in recent years.

For that growth to be legitimate, it must be built on foundations that guarantee ethics, integrity and transparency in business. Therefore, to reinforce its values in commercial relations, Reservas Votorantim launched the **best practice guide for business partners**, based on the Votorantim Code of Conduct. As well as addressing common market themes, like integrity in commercial and labor relations and prevention of corruption, it also explores in depth ESG issues and contains guidance on how business partners can show their fulfillment of the rules.

By contributing to increase the level of awareness and work of the entire supply chain, rV believes it reduces risk and increases value generation for everyone, in a virtuous cycle.

Think globally, act locally

Reservas Votorantim organizes annual events like **Diálogos** (dialogs) and **Semear** (sowing), in order to share information with civil society, government authorities, researchers and partners. It also participates in various initiatives in its geographies. Reservas Votorantim believes in the importance of maintaining dialog with its stakeholders to share the main results of scientific research, social projects and economic development conducted in its operational territories.

In respect of global sustainable development commitments and agendas, in 2024 Reservas Votorantim celebrated four years in the **United Nations Global Compact**, expressing its intention to embed principles regarding human rights, labor, the environment and anti-corruption in its strategy, culture and daily operations.

Through its managed territories—Legado das Águas, in the interior of São Paulo, and Legado Verdes do Cerrado, in northern Goiás—and its portfolio of products and services, Reservas Votorantim has contributed effectively to **14 of the 17 UN Sustainable Development Goals (SDGs)**:

1	eradicating poverty	
2	zero hunger and sustainable agriculture	
3	good health and well-being	
4	quality education	
5	gender equality	
6	clean water and sanitation	
8	decent work and economic growth	
9	industry, innovation and infrastructure	
10	reduced inequalities	
11	sustainable cities and communities	
12	responsible consumption and production	
13	climate action	
15	life on land	
17	partnerships for the goals	

Building legacies

The positive impact of our business:

Over 70,000 people benefited directly or indirectly through rV's business model applied in Legado das Águas and Legado Verdes do Cerrado, in socio-environmental actions.

Conservation of over 80 species of wildlife threatened with extinction in the Atlantic Forest and Cerrado.

Nearly 20 municipalities benefited from socio-environmental partnership actions, programs and projects in the territories managed by rV.

Production capacity of 450,000 plants per year in the Biodiversity Centers of the managed territories..

Nearly 200 direct and outsourced, operational and leadership posts created, at rV and in the managed territories.

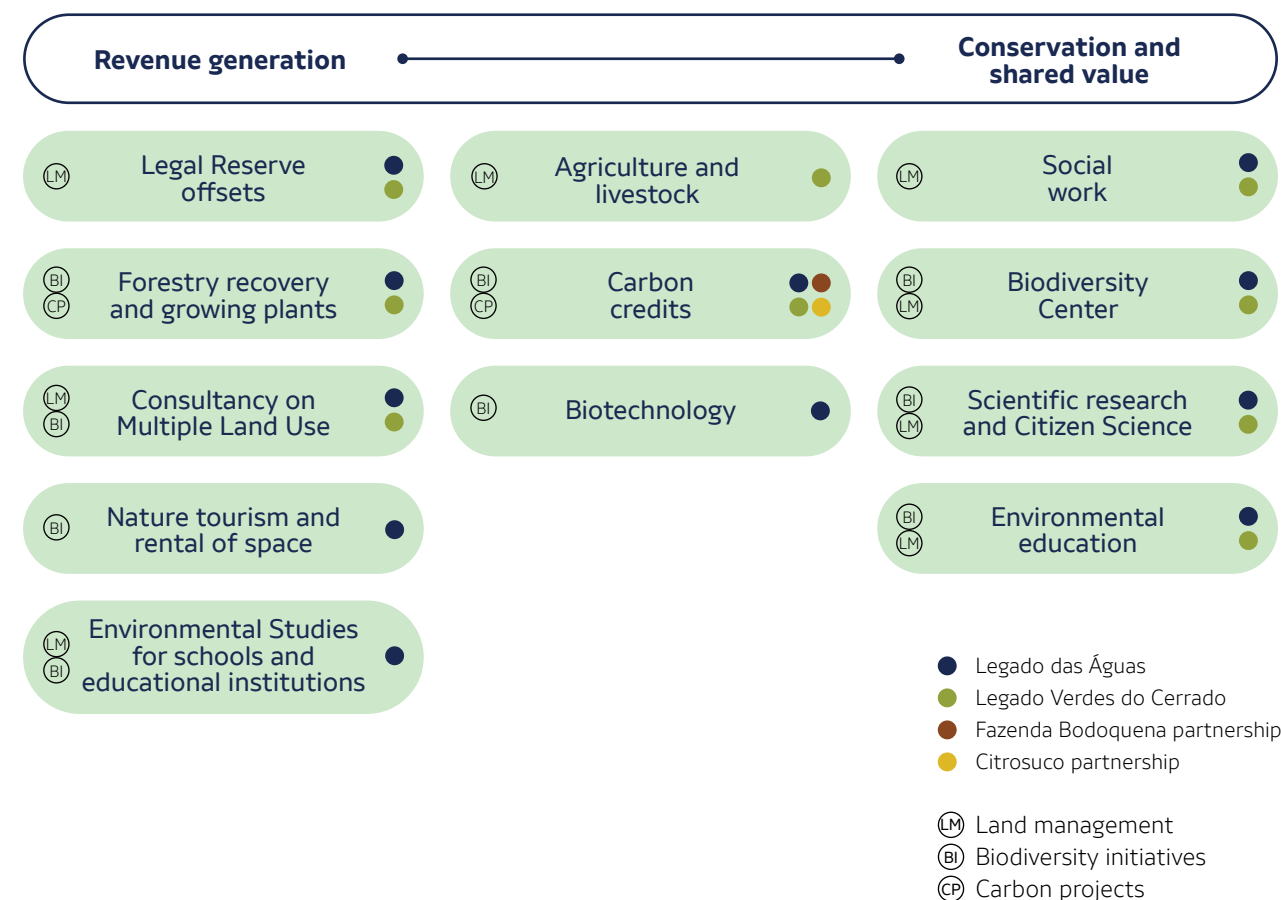
A forest of possibilities





Multiple use, multiple opportunities

Business model forest and biodiversity conservation



Reservas Votorantim (rV) maps the real potential of territories, developing different business in the same hectare of forest, combining income generation, biodiversity conservation and shared value.

To cater for ever more complex demands from the Brazilian and international markets, in its goals and strategies, rV's work is structured around three main axes: Each axis offers tailored products, services, and solutions to meet diverse needs, affording its clients ease, practicality, quality and innovation.

rV's business model is therefore based on Multiple Land Use, where conservation and biodiversity enhancement initiatives occur alongside sustainable economic activities. This ensures the maintenance of the land itself and foment new local productive chains, creating shared value for both the company and society.

Carbon projects

By entering Brazil's carbon credit market within the context of climate change and decarbonization strategies, rV is enhancing studies to unlock new biomes and foster innovative methodologies that harness forest protection as a viable alternative for maintaining biodiversity. With partners we conduct studies to identify and value the carbon potential in stock and through sequestration via ecological restoration, generating a viable alternative for maintaining socio-biodiversity. Currently, Reservas Votorantim has in its portfolio new methodologies for the generation of carbon credits: PSA Carbonflor, in the Atlantic Forest; REDD+ Cerrado, a pioneer of credit generation in this biome; and REDD Carbonflor and REDD Pantanal, in certification; as well as PSA Carbon Agro Perene, under development (p. 24-29).

Land management

rV manages territories within an innovative green economy model, carrying out activities that conserve biodiversity while generating economic potential.

Biodiversity initiatives

rV maps the biodiversity wealth through scientific surveys harnessing biotechnology, identifying the forest's potential with support from researchers and universities. It also produces native plant species from the biomes where it operates to offer sustainable solutions for ecological restoration initiatives.



rV creates solutions to tropicalize the carbon market



Tropicalizing the carbon market is an expression used to refer to the development of carbon-credit generation projects that meet the specificities of the Brazilian biomes, unlocking new methodologies to contribute to the decarbonization of country's production sectors.



Brazil's portfolio of environment assets—including its forests and soils—put it in a leadership position at the table of solutions to mitigate the effects of climate change and decarbonization of the economy. The country concentrates 15% of global potential for carbon capture by natural means, and could cater for 48.7% of global demand¹.

To contribute to maintaining this competitiveness and unlock Brazil's potential, Reservas Votorantim has taken a lead role in the generation of carbon credits from the preserved forest and through planting new forest areas, thereby contributing to Brazil's growth on the international voluntary market.

With a pioneering spirit, technical rigor and strong partnerships, rV conducts studies to unlock projects in Brazilian biomes, besides the Amazon, through REDD+ and PES (Payment for Environmental Services) initiatives. As well as contributing to accelerating Brazil's decarbonization efforts, these initiatives generate credits that go beyond climate benefits, adding social gains and shared value.

To broaden the range of solutions for the different production sectors, Reservas Votorantim operates on the following fronts:

Preserved forests

rV was a pioneer in the co-creation of carbon-credit generation methodologies, with initial application in territories managed by the company, and which can now be made available to other owners by means of consultancy.

Ecological restoration

Through carbon insetting solutions, rV helps companies to incorporate restoration projects in their corporate strategies, ensuring that decarbonization efforts are aligned to their core business.

Project management

rV creates opportunities to generate carbon credits, managing long-term contracts and developing strategies aimed at taking advantage of the best carbon market conditions.

rV's areas of activity in the carbon market are the product of its trajectory of innovation in successful, pioneering solutions for carbon-credit generation, benefiting socially and environmentally responsible enterprises. Reservas Votorantim currently has the following carbon-market portfolio:

PSA Carbonflor, a new methodology for generating carbon credits via Payment for Environmental Services, developed for application in any biome and initially applied in Legado das Águas, a managed territory in the interior of São Paulo and Brazil's largest private Atlantic Forest reserve;

REDD+ Cerrado, the first carbon-credit project in the Brazilian Cerrado, applied to Legado Verdes do Cerrado, a managed territory in northern Goiás;

REDD Pantanal, a forest-carbon credit generation project of the type REDD+ (reducing emissions from deforestation and forest degradation), in the process of verification at Fazenda Bodoquena, Mato Grosso do Sul, where rV works on green-economy initiatives;

REDD Carbonflor, which replicates the successful REDD+ Cerrado model, in the process of validation, also at Fazenda Bodoquena;

PSA Carbon Agro Perene, a new methodology for measuring ecosystem services in conservation areas, combined with good agricultural practices in productive areas of permanent plantations, within rural Brazilian properties, including forest carbon, developed on land owned by Citrosuco.

¹ From the Insights report, 'Voluntary carbon market has huge potential in Brazil', by McKinsey Brasil



New platform to register carbon projects

Voluntary carbon market has risen to the fore on ESG agendas as a strategy for mitigating the effects of climate change, especially in the private sector. As a result, it is necessary to ensure a secure market, with reliability and integrity of the credits generated.

Against this backdrop, in 2024 Brazil began a step that marks an advance in mitigation actions: the country's first national platform for registering carbon-credit generating projects, under development by the Brazilian stock exchange, B3. The goal of the initiative is to provide investors with greater control of the ownership and movement of credits, leading to

greater transparency and ensuring the integrity of the credits.

The platform was announced by B3, Reservas Votorantim, ECCON Soluções Ambientais and ACX (AirCarbon Exchange), at the Brazil Climate Summit, an event held in New York, which discussed the country's role as a provider of solutions capable of supporting global decarbonization. The announcement was accompanied by the opening sale of 70% of the credits (67,000 tons) of PSA Carbonflor to the CCR Group, the first company to buy carbon credits from a project that will be registered on the B3 platform.

In the first stage of implementation, the platform will register projects developed by rV and ECCON based on the application of PSA Carbonflor, a new methodology for measuring ecosystem services, including forest carbon, through a Payment for Environmental Services (PES) project. Against this backdrop, another objective of the platform is to facilitate access to information concerning these projects, and speed up the carbon-credit issuing process so that companies offset their greenhouse gas (GHG) emissions. The documents and reports uploaded to the new platform will be available to ensure the transparency of the projects.

An important step towards the maturity of the Brazilian carbon-credit market, aimed at reducing costs, increasing the transparency and integrity of the assets, and enabling the development of tropical methodologies.



The credits generated using the PSA Carbonflor methodology will be registered on the B3 platform and traded on the international ACX platform, thereby providing liquidity and capillarity to the credits. The platform is expected to be available for registering projects before the end of 2025.

REDD+ Cerrado: quality and reliability

Switching biomes, 2024 also represented an important landmark due to the sale of all credits generated in the first issue of the REDD+ Cerrado project, applied in Legado Verdes do Cerrado, in

Niquelândia, Goiás, land belonging to Companhia Brasileira de Alumínio (CBA) and managed by Reservas Votorantim. The high degree of integrity and technical rigor of REDD+ Cerrado—the first carbon-credit project in the Brazilian Cerrado—provided the necessary credentials of reliability for the credits to be sold out within two years of its launch on the market.

The approval of REDD+ Cerrado in this format represents a significant stride forward in consolidating Brazil's position in the international voluntary carbon market, as well as a viable and profitable strategy for conserving the biome. It took over two years of studies to

adapt REDD+, one of the world's most respected methodologies, previously applied only in the Amazon, for use in the Cerrado. Apart from this methodology, the project is also certified with the CCB Standard (The Climate, Community and Biodiversity), which recognizes and quantifies the socio-environmental benefits of carbon credit projects.

REDD+ Cerrado is the product of a partnership between Reservas Votorantim, Companhia Brasileira de Alumínio (CBA) and the consultancy firms *Ecosystem Regeneration Associates* (ERA) and ECCON Soluções Ambientais.

Innovation for sustainable agribusiness



The new methodology promotes environmental conservation and sustainable agricultural practices, while also contributing to food security and to mitigating the effects of climate change.

Brazil has unique characteristics in terms of climate. Our national production sectors require custom solutions if we are to progress on these agendas, unlike the countries of the Global North, which do not have the complexity of the Brazilian biomes and whose emissions mostly come from the industrial and energy sectors. Brazilian agribusiness is one example that has specific needs, and our importance as the world's biggest exporter of commodities means it is strategic for us to have a seat at the negotiating table of climate and sustainable development solutions.



With the intention of presenting carbon as the new frontier for sustainable agribusiness, Reservas Votorantim teamed up with Citrosuco—the world's number-one producer of orange juice—and ECCON Soluções Ambientais, to launch PSA Carbon Agro Perene: a new methodology for measuring ecosystem services in preserved areas and good farming practices in production areas within rural Brazilian properties, including forest carbon.

The methodology was launched in August, in São Paulo city, and is under public consultation in Brazil. It was also presented in New York to investors from around the world. PSA Carbon Agro Perene aims to recognize and measure Ecosystem Services, and remunerate Environmental Services provided by rural properties—large and small—that combine preserved native areas with perennial crop cultivation, with good practices that favor the neutralization of greenhouse gas emissions. Producers are remunerated based on the assessment of the Environmental Services provided by their properties, bearing in mind Ecosystem Indicators and Agricultural Best Practice Indicators. The measurement of these indicators is essential to the generation of Carbon Plus Credits (C+), which serve as an instrument to pay for environmental services.

Innovating on tradition

In 2024, during Climate Week, in New York, rV and ECCON also presented two other carbon projects, in the REDD+ category, as an opportunity for farms with preserved forest areas to earn an alternate income that can be reconciled with conventional activities. The initiatives are carried out at Fazenda Bodoquena, a farm in Mato Grosso do Sul which spans the Cerrado and Pantanal biomes, with preserved native forest accounting for over 50% of its area.



REDD Pantanal is Reservas Votorantim's first initiative in that biome. The more than 36,000 hectares in the process of certification by Verra should generate, at the first issue, over 133,000 carbon credits for the period 2021 to 2024.

Meanwhile, on the Cerrado area of the farm, REDD Carbonflor is currently undergoing certification. Its 8,900 hectares should generate, at the first issue, over 45,000 carbon credits for the period 2021 to 2023.

Private properties in both biomes are home to most of their preserved forests, especially the Pantanal, with around 93% in private areas. For that reason, rV believes it is crucial to find viable alternatives for income generation as an incentive to owners, which will be a tool for maintaining Ecosystem Services that are essential not only to farming but also to climate stability and sustainable development, both nationally and internationally.



The ESG agenda has matured within the climate economy in Brazil, driven primarily by the diversification of decarbonization solutions. Initiatives now also include regenerative actions that generate a positive impact for biodiversity and communities, integrating these practices into companies' operational structure and value chain. This maturing widens the range of alternatives to cater for Brazil's different productive sectors, ensuring that each adopts the solutions that are best suited to its reality.

Ecological restoration as a climate strategy



In 2024, Reservas Votorantim diversified its portfolio and progressed on its innovation journey by developing carbon insetting solutions, through ecological restoration projects. The initiatives in this area seek to incorporate carbon-reduction practices directly into companies' supply chains and operations, thereby ensuring that decarbonization efforts are aligned with their core business.

MAPFRE Forest

The interest in this solution has been steadily increasing, as evidenced by the projects developed in the period, such as the "MAPFRE Forest". The initiative is a partnership between MAPFRE, the insurance company, and Reservas Votorantim, to recover 29.42 hectares (equivalent to 30 soccer pitches) of Atlantic Forest.

Lasting four years, the project will offset 5,100 tons of carbon, neutralizing MAPFRE's emissions by 2028. This includes emissions generated by the company's operational activities, like energy consumption, emissions from business travel by employees and

their daily journeys to work, and also those linked to waste management and the supply chain. To this end, over 42,000 seedlings of 264 native species will be planted, selected on the basis of the biome and the regional ecosystem.

The site chosen for the project, Carlos Botelho State Park, is an important Conservation Unit of over 37,000 hectares, in the southeast of the state, recognized as a UNESCO Natural World Heritage site. As well as being a link with the community through ecotourism, the park is home to four of the largest mammals threatened with extinction in the Atlantic Forest: the jaguar, southern muriqui, South American tapir and white-lipped peccary. The project will have also have a positive socio-economic impact, by generating jobs and income for the surrounding community in the execution of activities and acquisition of inputs.

For project transparency, rV will monitor progress and issue six-monthly reports, and there will be periodic site visits by MAPFRE and support from independent auditors. To that end, rV has developed a carbon insetting methodology, which will enable MAPFRE to use planting data in its 2028 emissions inventory. Project evolution and development will be communicated to stakeholders in annual sustainability reports published by the insurer.

Decarbonization of events

Meanwhile, in the sphere of agribusiness solutions, in 2024 Reservas Votorantim had other important carbon insetting partnerships to neutralize events in the sector. One was the **29th ENCAFÉ** coffee conference, which resulted in the planting of 2,624 native seedlings in 2.64 hectares in Legado Verdes do Cerrado, land managed by rV in northern Goiás. The project is the result of a partnership between rV, the Brazilian Coffee Industry Association (ABIC) and Companhia Brasileira de Alumínio (CBA), which will contribute by creating an ecological corridor in Legado Verdes do Cerrado.

The Dubai Sugar Conference, one of the world's biggest events in the sugar and ethanol market, was another highlight of the period. The carbon footprint of the event, held in Dubai, was entirely offset by an ecological restoration project in an area of Atlantic Forest in Brazil.

For each project, rV offered custom solutions, understanding and respecting the needs of the business, people and market. With an increasingly robust portfolio, Reservas Votorantim demonstrates its potential and vocation for offering solutions to the climate transition and sustainable development to domestic and international markets.



Carbon insetting solutions

seek to reduce environmental impacts in a company's value chain by working with suppliers, production processes and end products. Instead of financing external projects (offsetting), solutions are incorporated in a company's corporate strategy, generating environmental, social and economic benefits.



Customized restoration solutions



The experience acquired over the years has enabled Reservas Votorantim to offer comprehensive, customized ecological restoration solutions in Brazilian biomes, whether for voluntary or environmental offsetting projects.

One of the highlights of 2024 was the ongoing partnership with Edenred Ticket Log, which saw a contribution from Globo Group in the period. Through Edenred's global sustainability program Move for Good—whose goal is to support companies in the decarbonization of their fleets—Globo Group planted 10,000 trees in an area of 60,000 sqm (equivalent to six soccer pitches), in Jurupará State Park, in the interior of São Paulo.

In the sphere of voluntary projects, 155.73 hectares of Atlantic Forest were restored in

the period, as a result of six initiatives with clients like Nexway, Unimed Nacional, Hitachi Vantara, and others. This planting was geared towards Conservation Units in São Paulo state that require rehabilitation, further emphasizing the projects' importance since they are within areas already protected by the state for their ecological and cultural value. Thanks to rV's solutions, initiatives of this nature not only offer environmental benefits but also have a positive impact on climate change mitigation and social development, going far beyond reputational value for the brand.

Projects to fulfill legal commitments accounted for 126 hectares restored. For these clients, rV's technical expertise offers a practical and secure means of complying with the legislation, as well as quality way to optimize resources and ensure the success of the project.



Protection of water resources

2024 also saw rV join the Nascentes program, an initiative of the São Paulo State Government, which connects investors to the restoration market, with the aim of increasing native plant cover in the state to protect water resources and biodiversity. The opening project will restore 43 hectares in the Carlos Botelho State Park, in the interior of São Paulo, including the management of exotic plant species. rV's participation in the program enables it to create opportunities to connect its expertise with other actors in the chain, as well as expanding its projects to other target audiences.

Biomes and landscapes

During the period, as well as the carbon insetting initiatives, 256.68 hectares of Cerrado received ecological restoration offsetting projects developed by rV, through the Legado Verdes do Cerrado, a managed territory in northern Goiás. Of this total, 72 hectares are in the João Leite State Park, in Goiânia. For the project, 30,740 seedlings of 27 different species native to the Cerrado will be planted over 24 months.

Back to the Atlantic Forest, in 2024 rV began working with other vegetation types in the biome, such as high-altitude fields for a project in the Campos do Jordão Springs State Park, in Vale do Paraíba, São Paulo state.

From the Mid-West and Southeast, rV expanded its scope to the Northeast of the country and the semi-arid northeastern Caatinga. The offsetting project, to be carried out in the municipality of Paulistana, will involve local partnerships for the procurement of inputs, as well as labor. The initiative contributes not only to expand rV's presence in other biomes and landscapes, but also to strengthen the restoration network, by forging new partnerships, essential to reducing the bottlenecks in the segment in Brazil.

Research, development & partnerships

rV applies a native plant production model in its geographies, where research and the study of best cultivation practices for species become a differentiator, leading to the creation of Biodiversity Centers, which entail much more than mere nurseries. Legado das Águas and Legado Verdes do Cerrado have centers which grow Atlantic Forest and Cerrado species for trading in landscaping and the ecological rehabilitation of degraded areas. The centers have a joint production capacity of 450,000 seedlings per year.

In the period, to cater for growing demand for ecological restoration, the centers invested in scientific research to improve production methods and, primarily, in staff training, in particular to manage exotic and invasive species and combat forest fires, two major challenges for natural areas. Structural improvements and staff skills training give rV the technical and operational capacity needed to offer bespoke solutions for every project.

In the sphere of partnerships, in 2024 rV became a member of Nativas Brasil, the Brazilian association of native seed and seedling producers, which comprises around 90 producers from all the Brazilian biomes, with a combined production capacity of over 60 million native seedlings per year. The partnership was signed at the first meeting of producers in Legado das Águas. Meanwhile, rV attended important events in the segment, such as the 5th Brazilian Ecological Restoration Conference (SOBRE 2024), reinforcing its role as a strategic partner in the segment.



Native species

become more
common
on the
traditional
market

The concept of “resilient cities” has been gaining currency on global and local agendas, driving solutions for urban well-being in the face of climate change. Against this backdrop, Nature-based Solutions (NbS), such as sustainable landscaping with native species, are particularly viable strategies for combining environmental benefits with quality of life. More than just aesthetic, native vegetation is functional: it contributes to the thermal regulation of cities, helps reduce air pollution, improves the permeability of the soil, and offers a series of other benefits. Incorporating these solutions in the urban landscape contributes to healthier, more balanced spaces.

Demand for these spaces created using landscaping with native species has grown, with projects on varying scales, from small gardens to large residential and commercial real-estate developments. To cater for this demand, Reservas Votorantim operates on two fronts: establishing partnerships and improving the technical and production capacity of its Biodiversity Centers.

In the sphere of partnerships, one example is that agreed with Papo de Paisagista, the biggest collaborative network for landscape gardeners in the country. The partnership began in 2022 in Legado das Águas and, subsequently, in 2023, in Legado Verdes do Cerrado. The events organized by the collective brought together landscape gardeners and other professionals in the segment of Biodiversity Centers, facilitating the alignment of production to market demand, as well as strengthening the network of contacts, including landscapers of other initiatives.

Throughout the year, following rV's growth strategy, Legados staff strengthened the relationship with the network, keeping it informed about the latest news and driving sales for projects developed by members. This collaboration also generated other initiatives, like the event “O potencial paisagístico do Cerrado” (the landscaping potential of the Cerrado), held in Brasília in partnership with Shopping Partage, Papo de Paisagista, Legado Verdes do Cerrado and Deflora, a specialist landscaping firm from Goiás.

The event also marked the second year of partnership between Deflora and Legado Verdes do Cerrado, which, in this period, began initial testing for the production of species native to the Cerrado for landscaping. To that end, two new greenhouses were installed: one in Legado, the other at the

company's HQ in Goiânia. Standardized testing was carried out at both, aimed at identifying the best production practices for domestication of the species. Initially, the focus is on ground-cover plants, shrubs and small trees.

Another partnership was between the Belo Horizonte outlet of haircare chain **LACES Belvedere** and Legado das Águas, between 2023 and 2024. The brand wanted to recreate the Atlantic Forest in its purest form. For this, 900 seedlings of ten different species were grown, including bromeliads, anthuriums, and other epiphytes. The plants were attached to small pieces of wood to simulate their natural forest habitat and how they appear in the Legado's research orchidarium. With landscaping appeal, these plants are now also available on the market, and have earned an exclusive place in the Legado das Águas Biodiversity Center, devoted to the production of epiphytes.

Legado das Águas is the new site of Pátio Caeté

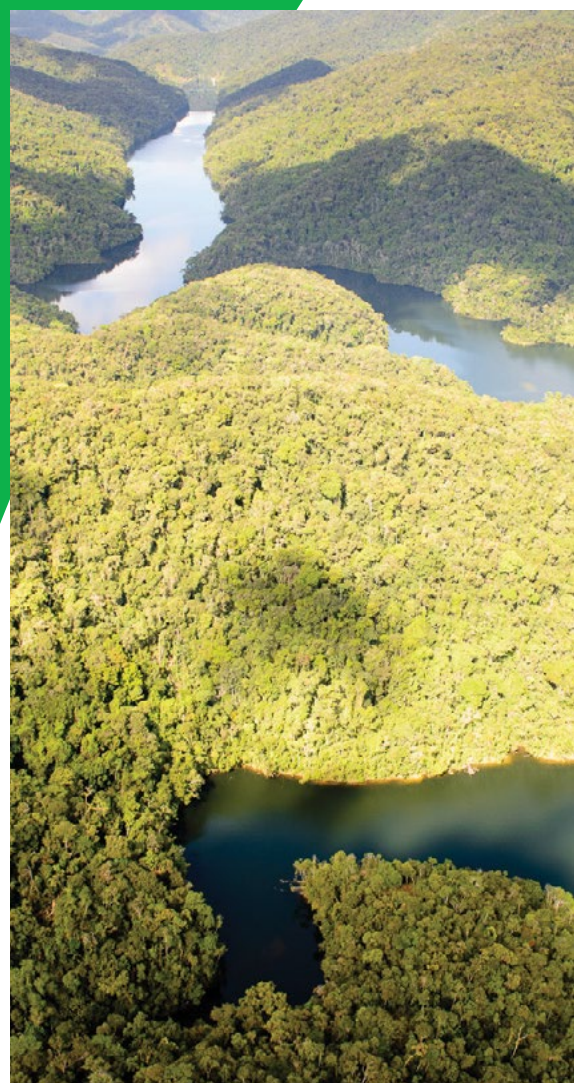
Pátio Caeté, which distributes the native species produced in the Legado das Águas Atlantic Forest Biodiversity Center (CBMA), is now in Miracatu, São Paulo. Pátio Caeté inherited the space that was previously the Porto Raso nursery, an extension of the CBMA. The site measures 8,500 sqm and has a storage capacity of 20,000–40,000 plants, whether ornamental or for restoration.

The move contributes to catering more promptly for the ecological restoration and landscaping markets, especially in the supply of more mature plants or those closer to trees in size, ready for use in projects, giving them a competitive advantage in the market. Another advantage of the species sold at Legado das Águas is traceability, ensuring quality standards throughout all stages of the plant production process. This process ensures responsible production in compliance with the law. The plants are tagged with a QR code that allows anyone with a smartphone to read about the plant's entire history, including its origin in the forest.

With Pátio Caeté, rV increases the competitiveness of Legado das Águas, supplying the market with higher quality, higher integrity plants.



Mechanism facilitates regularization of Legal Reserves



Reservas Votorantim has an extensive portfolio of solutions to enable Brazil and its production sectors to progress in its journey of sustainable development, balancing financial performance, biodiversity conservation and shared value..

One of the solutions offered to agribusiness and industry is Legal Reserve offsetting through leasing. The regularization of rural properties with a Legal Reserve deficit is a necessity and obligation throughout the country, as stipulated by the Forest Code. The property owner can decide whether to restore their reserves on their own land by rewilding the area required by law or to offset by using an area of existing native vegetation on another property.

As a practical and swift solution, rV offers rural property owners the opportunity to lease the area they need in the territories it manages in the Atlantic Forest and Cerrado, by paying an annual fee, without having to worry about managing, preserving and protecting this land.

Rural property owners and companies that partner with Reservas Votorantim not only meet their legal requirements but also help protect endangered species, encourage scientific research of wildlife and flora, help protect water resources and drive local development. This is because rV aids local economic development through socio-environmental projects applied in the territories it manages.

With this product, Reservas Votorantim presents its solutions for agribusiness and industry and, through its portfolio of products and services, helps business people in these sectors fulfill environmental requirements or make their operations more sustainable.

Consultancy on NbS and Multiple Land Use

For over a decade, Reservas Votorantim has been pioneering business in the green economy and in Nature-based Solutions (NbS). The expertise acquired in this period has contributed to an in-depth understanding of the market and the improvement of its own products and services. rV trajectory of innovation not only ensures its place in the vanguard, but now also helps other companies and initiatives to play a central role in Brazil's sustainable development.

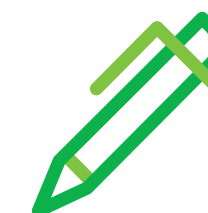
To that end, rV offers a wide range of consultancy services. The Multiple Land Use helps large landowners of conserved areas to monetize their properties, creating opportunities to generate revenue while keeping the forest standing. Leveraging the experience of managing two large native vegetation areas, rV's Multiple Land Use methodology demonstrates that it is possible to create value in conserved areas by integrating business, community and biodiversity conservation.

Regarding NbS, rV offers consultancy in Ecological Restoration, which comprises everything from analysis to project development and implementation, using rV's expertise in the sector. The consultancy in this field also led to Planting the Future, an environmental awareness-raising and engagement activity involving planting native Atlantic Forest species in Legado das Águas, in public parks, schools or even on company sites.

In 2024, guided by rV's growth strategy, Legado das Águas devised two new consulting products. One is wildlife monitoring, the result of 12 years' experience at Legado managing scientific research. The product can be taken out by companies for environmental licensing processes, or even to investigate the biological diversity of a natural area, which can contribute to mapping potential new business based on local biodiversity.

In the same period, Legado das Águas also launched the Volunteering Program which, as well as catering for an internal audience, has a commercial branch, whereby companies can hire the service to undertake volunteering activities. This new program is geared to companies, schools or institutions wishing to strengthen their sustainability activities, ESG activities and organizational culture through volunteering actions, but who have few opportunities to do so. The program builds on the experience of Legado das Águas in social and environmental actions, and uses the business model applied by rV in the area.

With its portfolio of consultancies, Reservas Votorantim not only offers a variety of solutions to the market, but also demonstrates how a standing forest is a lucrative business that generates shared value for companies and society.

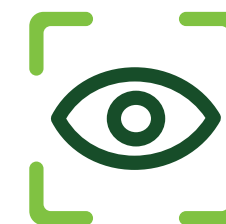




Bioprospecting as an alternative to conservation



Partnership with CNPEM forms part of rV's innovation strategies and is an opportunity for the bioeconomy.



Back in 2015, when Reservas Votorantim began investing in bioprospecting, it was clear to the company how the segment had the potential to free up bioeconomy opportunities, while at the same time presenting new conservation alternatives for Brazilian biomes through the diversification of income generation from a standing forest. What was then a growing segment is today the focus of an unprecedented race driven by the global climate and sustainable development agendas, especially the move to decarbonize the economy and find sustainable solutions for the production sectors.

In 2024, rV's Bioprospecting business unit took an important step by signing a partnership agreement with the National Center for Research in Energy and Materials (CNPEM) for bioprospecting of herbivores and microorganisms from the Atlantic Forest—in particular bacteria, yeasts, and fungi. The partnership was announced during COP16 on biodiversity, held in Cali, Colombia.

The research, to be carried out initially at Legado das Águas—an area managed by rV in the interior of São Paulo—is part of a bigger project by the CNPEM for the genetic mapping of microfauna in Brazilian biomes with biotechnology potential for developing biofuels, biochemicals, bio-inputs, pharmaceuticals and other products to benefit human health, the environment and the economy.

The database generated by the CNPEM initiative, which includes genomes, functional genes and metabolic routes, will be made available to the scientific community, thereby contributing to the advance of the bioprospecting in the country. With the information from the genetic mapping, it is possible to research new nature-based biotechnology solutions which could, for example, make viable the production of clean energy, mitigate the use of chemical pesticides in farming and develop medicines.

Conservation and development

The announcement of the partnership at COP16 was emblematic, showing the potential of the union between private enterprise and research institutes, not only for the bioeconomy, but also to fulfill the ambitious—and essential—targets of the Global Biodiversity Framework (GBF).

These combined efforts towards the genetic mapping of Brazilian biomes not only expand scientific knowledge, but also promote new discoveries, an essential move in a context in which the CNPEM's National Biorenewables Laboratory estimates that 99% of microorganism biodiversity is as yet unknown to science.

In terms of tropical rainforest biodiversity, the agreement represents a step forward in the production of scientific knowledge of the Atlantic Forest. The outlook is optimistic, since the research is getting underway at Legado das Águas, an area that has produced some of the most important discoveries in the biome of the last 12 years.

The first expedition to collect specimens took place in early July, focusing on fungi for genetic sequencing. It has already had surprising results: over 20 types of fungus were identified within a few meters of a single trail.

As well as fungi, this first phase of the partnership includes research into the microbiota of species of wildlife of the Atlantic Forest, including the capybara and two of the most emblematic and endangered species of large mammals in the biome: the tapir—the largest wild mammal in the country—and the Southern muriqui, the largest non-human primate in the Americas and at high risk of extinction.



Public use expands business portfolio



Among Reservas Votorantim's management model methodologies is public use, which, alongside revenue generation, also aims to involve people in conservation solutions for standing forests. In the areas under its management, this business area already has consolidated products, like nature tourism, but has expanded the company's portfolio with new categories, including venue hire for commercial and corporate events, and study trips.

The extensive structure of Legado das Águas, which has a guest house, complete houses, other accommodation, an air-conditioned auditorium and a restaurant, in the heart of the Atlantic Forest, is a major competitive advantage for rV to offer the market customized solutions for different types of event.

In 2024, Legado das Águas received 24 hires, 13 of them for team building and corporate

actions, two for filming documentaries and fashion features, two courses as part of the Science Tourism Program, three trade events—on the themes of photography, yoga and nature tourism for children—and a further four, involving gastronomy and a course on the carbon market. The venue hire service at Legado das Águas has been increasingly sought after, especially by companies and initiatives wishing to offer a unique experience of immersive, pleasurable and safe contact with the Atlantic Forest.

At Legado Verdes do Cerrado, the public-use structure has been enhanced in recent years, with significant advances in 2024. In the period, the **3rd Orienteering Race** was held, open for the first time to the general public, with a focus on Niquelândia, the town where Legado is situated. The events held in Legado Verdes do Cerrado are pilots, serving to assess the nature-tourism potential of the area.



Proving the potential of multiple land use, rV has transformed the highly conserved forests of its territories into veritable open-air laboratories and classrooms. In 2024, the Study Trip Program, in Legado das Águas, receive eight visits and a total of 402 students from research institutions and schools, like the Avenues, Concept and Lumiar schools, the Auá Institute, São Paulo State University (UNESP, Registro campus), Federal University of São Carlos (UFSCar), Armando Gonçalves State School in Miracatu, and SESC (Commerce Social Service) Vila Mariana, São Paulo.

At Legado Verdes do Cerrado, the year marked the **launch of the Educational Tourism Program**, aimed at students of elementary and middle school, vocational, specialization and bachelor's degree programs. The initiative had its first class at the end of 2024, with Year 9 students (14-15 year olds) of SESI (Industry Social Service) Niquelândia. The program looks at topics like Cerrado conservation, sustainable agriculture and bioeconomy business carried out

in Legado, sharing the knowledge acquired with the innovative management model for the territory.

Studio in the forest

rV has expanded its portfolio of **solutions for the audiovisual and creative markets**, like advertisements, fashion features and other artistic productions, offering the area of Legado das Águas as a veritable "studio in the forest". The territory offers unique conditions, such as logistics and security—essential factors for these kinds of segments, especially for staff and equipment. Currently, few locations offer a forest setting with complete infrastructure, including food and accommodation, as well as guides trained to work in remote locations, all in one place.

This is one more aspect of Reservas Votorantim's business model applied to Legado das Águas, evidencing the potential of a standing forest and its capacity to host multiple uses in a single territory.

Forest for all

Legado das Águas and Legado Verdes do Cerrado's socio-environmental agenda also exerted a significant positive impact on public use, welcoming students and representatives from non-profit institutions through the **Open Doors Program**, alongside researchers and members of the two reserves' partnering public institutions.

The Program uses the infrastructure of Legados to offer contact with the Atlantic Forest and Cerrado, including the local communities in biome conservation actions, as well as strengthening the relationship with the territories and rV, reinforcing the shared-value business model.





Scientific research: the basis for conservation and new business

The maturing of Reservas Votorantim's scientific research, combined with the concept of scientific entrepreneurship, reflects business growth and drives the sector towards innovation.



The basis for rV's business model, and that of its products and services, is scientific research.

Legado das Águas, the first managed territory, and later Legado Verdes do Cerrado, were established under a scientific framework that validated the value of these territories for biome conservation and sustainable development.

With over a decade of experience, Reservas Votorantim has now matured and elevated scientific research in the managed territories to the concept of "scientific entrepreneurship," aiming to transform company research into viable, self-sustaining products. This maturer approach to research in the sphere of business is reflected in the creation of new products and services, as well as improvements to existing ones.

Scientific entrepreneurship seeks to transform scientific research into innovative, sustainable business geared to biodiversity conservation and sustainable development. It is an activity that can create jobs, new business opportunities and advances in areas like technology, energy, health and the environment.

Tourism and science

One of the highlights of 2024, in Legado das Águas, was the Science Tourism Program (STP), which incorporated a new aspect of "science for all". Launched in 2020, the program was up until then aimed at an academic audience. In its new form, the program has kept its scientific slant, but is now more accessible, allowing the participation of different audiences.

The first pilot was run by the Wildlife Laboratory at UFSCar's Araras campus, on the topic of bats, and comprised around 20 participants, including children. The STP course



was "Immersive Monitoring", carried out by Onçafari, an organization for the study and conservation of wildlife, and a partner of Legado das Águas in wildlife monitoring. Lasting two days, the course combined theory and practice, and comprised around 20 participants, among them professionals and students of biology, teachers and communicators.

The remodeling of the STP seeks to share the knowledge generated by scientific research at Legado das Águas with different audiences, strengthening the dissemination of science, while at the same time creating alternative sources of income for partner researchers.

At Legado Verdes do Cerrado, scientific entrepreneurship drove the creation of the Educational Tourism Program, which transforms its 32,000 hectares into a vast open-air classroom and outdoor laboratory. The program, aimed at elementary-school, vocational, specialization and university students, shares Legado Verdes do Cerrado's experience of applying a pioneering model of land management. It highlights how scientific research guides the management and use of land in traditional activities, as well as creating products for green-economy initiatives, like carbon credits.



To that end, the program comprises topics such as Cerrado conservation, sustainable agriculture and bioeconomy business carried out in Legado, which can take the form of practical classes and workshops, run by in-house technical staff.

As well as the programs, the portfolio of science-based products and services includes Wildlife Monitoring Consultancy, launched in 2024 and built on over ten years of scientific research in Legado das Águas (find out more on page 51); and Study Trips, aimed at schools and learning and research institutions, which transforms the forest into a classroom (see page 41).

Joint workplan

To strengthen scientific entrepreneurship in the territories managed by rV, since 2023 the Legados' research tenders have been structured with specific thematic axes to generate data for the creation of new products, such as bioeconomy, carbon, hydrology, soil, fungi and ecosystem services. New partnerships, particularly public-private ones, are focused on research involving wildlife and flora as opportunities for environmental assets to generate revenue for municipalities through wildlife watching tourism.



The "scientific entrepreneurship" concept creates a virtuous cycle, generating revenue to keep the forest standing with new products, while expanding expertise about the biomes, contributing to the conservation of these environments, and diversifying the resource base to sustain long-term research.



Managed territories



Legado das Águas

Created in 2012, this is the largest private Atlantic Forest reserve in Brazil, covering an area of 31,000 hectares in the municipalities of Juquiá, Miracatu and Tapiraí, in Vale do Ribeira, in the São Paulo state countryside. Just over 100 kilometers from São Paulo city, Legado das Águas is at an advanced stage of conservation like few other areas in Brazil, with the Juquiá River crossing it from end to end. Legado das Águas' mission to establish a new model of private protected area, generating social, environmental and economic benefits in a sustainable manner. This is achieved by the business model balancing forest protection and scientific research with green economy activities such as native plant production, public use and carbon credit generation through a novel Payment for Environmental Services methodology, including forest carbon, in the Atlantic Forest.



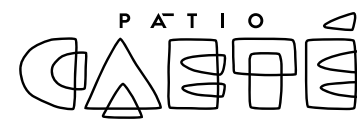
Legado Verdes do Cerrado

With 32,000 hectares belonging to Companhia Brasileira de Alumínio (CBA), Legado Verdes do Cerrado is the first Private Sustainable Development Reserve in Goiás state, and the first for the biome in Brazil. Located in Niquelândia, about three hours from Brasília, Legado Verdes do Cerrado combines conventional and new economy activities to create value and save the forest through Reservas Votorantim's multiple land use business model. Approximately 80% of the reserve consists of native Cerrado and is divided into two cores. At the Núcleo Engenho core, spanning 22,000 hectares, scientific research and environmental education activities are conducted, along with new economy activities such as plant production, Legal Reserve offsets, and the first REDD+ project in the Brazilian Cerrado. In the remaining 5,000 hectares, integrated cattle ranching and agriculture operations are conducted. The 5,000-hectare Santo Antônio Serra Negra core contains virgin native Cerrado savanna vegetation and is partly bordered by the Lago de Serra da Mesa lake.

Currently, Reservas Votorantim manages two environmental reserves and has Business Units, like Fazenda Bodoquena, where it develops green economy projects, and Pátio Caeté, a center for the sale of native plants. It has over 130,000 hectares under its management.



Business Units



Pátio Caeté

This is a center for selling plants and supplies for landscaping based on Brazilian biodiversity, serving as a distribution center for plants produced at Legado das Águas. Managed by Reservas Votorantim, Pátio Caeté aims to meet the demand for native and often rare species that provide environmental and economic benefits to landscaping and ecological restoration projects. The Pátio Caeté site is located in Miracatu, São Paulo, in the territory of Legado das Águas.



Fazenda Bodoquena

Located in Miranda and Corumbá, MS, this territory spans 74,000 hectares, of which 50,000 are conserved areas. The farm is divided into two cores: Miranda, home to the Cerrado biome, and Corumbá, with the Pantanal biome. Traditional economic activities such as cattle ranching are conducted in the area. In 2021, Reservas Votorantim set up a Business Unit to explore the feasibility of green economy initiatives to generate revenue through sustainable natural resource use, alongside traditional activities. In 2023, Reservas Votorantim began implementing the multiple land use model in the territory, developing a project to generate forest carbon credits under the REDD+ form (REDD Pantanal), currently undergoing assurance, and another project called REDD Carbonflor in the Cerrado area of the farm, currently in the certification phase too. Initial socio-environmental actions following Reservas Votorantim's business model have also begun.



Legado das Águas: **innovation** is in its nature

Reservas Votorantim's growth strategy for Legado das Águas makes it a leader in the field of management of environmental assets, with the sustainable use of natural resources and generation of shared value.

In the last 12 years, Reservas Votorantim (rV) has diversified the portfolio of Legado das Águas, the biggest private reserve of Atlantic Forest in the country, giving scale to business based on standing forests, especially through innovation. The trajectory of evolution and growth has focused on scalable products and services, optimization of resources and diversification of income generation, contributing not just to the growth of its own business, but also to transition to a more sustainable economy, in a fair and efficient way, prioritizing shared value.

In 2024, the results for the areas of activity of Legado das Águas demonstrate its vocation to innovate and, at the same time, its operational capacity to mature and consolidate its portfolio.





Science and partnerships for ecological restoration and landscaping

To strengthen rV's competitiveness in the ecological restoration and landscaping markets, the Atlantic Forest Biodiversity Center (CBMA) has ensured investment in different areas, from structural improvement and staff training to innovation in production methods of native species of flora. Among its highlights, in 2024 the Center expanded its production by 14,000 tubes, but with an 80% saving on materials. The strategy was to adapt the already available production resources.

Among the advances in innovation, the CBMA continued to apply a **production method to the juçara palm (*Euterpe edulis*)** discovered in 2023. With experimentation and statistical technology, the team identified a method for increasing the productivity of this endangered species, which has high value in ecological restoration projects, ornamental potential and ecological value.

Meanwhile, for the landscaping market, Legado invested in relations with landscapers, showing the CBMA's potential as a strategic project partner. In addition, in the period, the CBMA invested in the diversification of species, implementing improvements to its structure to devote an area exclusively to the production of epiphytes (species that grow on other plants without undermining them).

A legacy of positive impact

The maturity of Legado das Águas' business is also reflected in its socio-environmental activities, which today are guided by the Vale do Ribeira Sustainable Development Program (SDP). The program aims to strengthen the network of partners to address challenges across different sectors and communities, using human or financial resources combined with local know-how and coordination to implement initiatives with positive impacts.

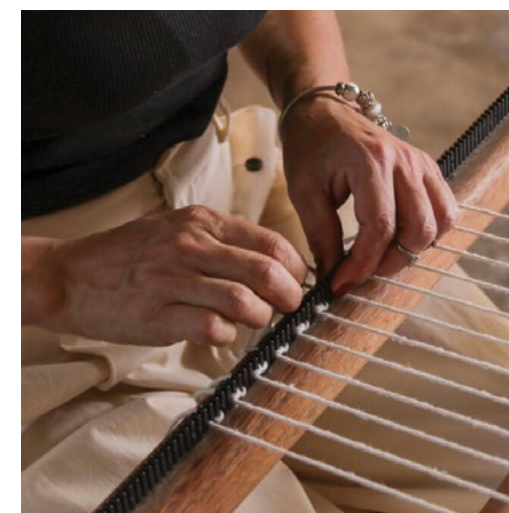
The socio-environmental and scientific research activities are structured around the SDP, which currently comprises six active, ongoing in-house programs: *Portas Abertas* (Open Doors), *Voluntariado* (Volunteering), *Guardiões da Mata Atlântica* (Atlantic Forest Guardians), *Saúde Única* (One Health), *Monitoramento de Fauna* (Wildlife Monitoring) and *Turismo Científico* (Science Tourism). As well as these programs, in 2024 Legado carried out a further 11 actions with partners, plus two incentivized projects, all of which produced significant results. Together, the initiatives benefited over 5,000 people.

Among the highlights of the period is the Open Doors Program, which has been an important tool for the putting the community in touch with conservation actions, through an immersive day in the forest. In 2024, three institutions visited Legado das Águas.

Meanwhile, on the environmental education front, 2024 represented a milestone: the inclusion of Legado das Águas in MapEA, an initiative of the Brazilian Environmental Education Fund (FunBEA) and the Ribeira de Iguape and Litoral Sul Hydrographic Basin Committee to map the initiatives dedicated to environmental conservation through different forms of environmental education, with the aim of joining forces to advocate in favor of this issue in the territory.

Smart forests, smart solutions

The Smart Forests Project, which brings together students of the Centro Universitário Facens and CESUPA with the aim of developing high-impact, sustainable solutions for local communities, delivered another important social technology to the Vale do Ribeira, in 2024. Supported by Legado das Águas since 2022, through Reservas Votorantim in the context of the SDP, the project benefited **Banarte, a pioneering organization that makes items out of banana fiber in Miracatu**. The initiative provided a drying chamber, which reduced drying time for the fiber from 24 hours to just 30 minutes, minimizing losses of raw materials. Equipped with moisture and temperature controls and sensors, the chamber is solar-powered, guaranteeing efficiency without impacting nature or the material produced.



First ecological tourism district in Brazil

With easy road and air access, the heart of Vale do Ribeira, the biggest and best preserved Atlantic Forest continuum in the country, is just a few hours from São Paulo city. The region, where Legado das Águas is situated, is a hub of opportunities for the green economy, including nature tourism. In 2024, Vale do Ribeira made an important advance for its visibility in the national tourist trade: the creation of the **Atlantic Forest Portal, Brazil's first ecological tourism district**.

With the publication of the decree, Legado das Águas was made the "anchor development" for the district. Together with other developments, Legado makes up the territory of the district, which includes, strategically, high-potential tourist areas in the municipalities of Ibiúna, Juquiá, Miracatu, Piedade and Tapiraí. The creation of the new tourism district is part of a series of initiatives of the São Paulo State Travel and Tourism Office (Setur-SP) to promote sustainable development through tourist activity.

Considering all six districts combined, the sector could see a turnover of around R\$ 10.3 billion in the state by 2030, according to the Tourism Economy Intelligence Center.



2024 at a glance

5,000 people benefited
from socio-environmental actions;

Over 80 sightings of native wildlife
recorded;

Presence on national and international
popular science platforms;

7 scientific studies
active in the territory;

2 studies involving large mammals
threatened with extinction;

Nearly 100,000 seedlings
of native species produced for ecological
restoration and landscaping;

Support for creation of social
technology to improve
productivity of women artisans.



New attractions expand nature tourism portfolio

With a public-use structure increasingly prepared to receive different audiences, in 2024 Legado das Águas expanded its portfolio of activities. Among the new activities are **abseiling and the Mountaineering School**. Operated by the Brazilian Alpine Club, the abseiling offers two options of descent: 27 and 48 meters. Meanwhile, the Mountaineering School offers an introduction to the key techniques of mountaineering.

The other new activity was the “Trail of the Ancients”, a trek for experienced trekkers looking for a challenge. The destination of the route is a figueira-gameleira (*Ficus gomelleira*) tree, described as one of the largest and oldest trees in Brazil’s Atlantic Forest, which has been the theme of a TV program. The trail also owes its name to the other gigantic, centuries-old trees that are found along its route. The many figueiras, copaíbas, jequitibás and jatobás date back to the primary forest of pre-1500s Brazil. The activity shows how a variety of natural attractions can be turned into viable products.

Research, knowledge and engagement

Popular science came to the fore with a Scientific Survey that involved around 200 people in the generation of data for Atlantic Forest conservation. In Participatory Wildlife Monitoring, collaborators recorded over 80 native species. The data, which are georeferenced, aid the management of Legado’s 31,000 hectares. Besides the program, Legado das Águas was present on key popular science platforms: iNaturalist, eBird and WikiAves. The former two have significant global reach, driven primarily by ecotourism in the reserve, placing Legado das Águas on the world map for **conservation and birdwatching tourism**.

There was also a focus on large mammals, essential to the health of the Atlantic Forest and allies in mitigating the impacts of climate change. Research to update the population estimate for the southern muriqui, the largest primate in the Americas, carried out by the Muriqui Biodiversity Institute (MIB), advanced with the help of technology: a thermal drone that is contributing to locating groups of the animal. The research is essential, since the species, typical of the Atlantic Forest, is endangered, and Legado das Águas serves as a refuge for the animal.



In 2024, the project “Molecular ecology and population genetics of the South American tapir in the Paranapiacaba continuum”—an initiative of the Serra do Mar Large Mammals Program, through the Manacá Institute, and UFSCar’s Molecular Biodiversity and Conservation Laboratory, through the VBio platform—an unprecedented study of the genetics of tapirs in the Paranapiacaba Continuum, analyzing their variation and the relationship between albino tapirs, and generating data for the species’ conservation.

In the sphere of the One Health Program (OHP), a pioneering initiative that comprises public health and Atlantic Forest conservation with the support of a network of partners, in the period a control plan for domestic animals in forest areas was drawn up. The material will help local councils to devise mitigation and prevention actions, avoiding the presence of cats and dogs in these environments, since they can transmit diseases, threaten the wild animals and put them at risk.

To reinforce the topics covered in the OHP, a scientific study got underway to map bat species in Legado das Águas, contributing to increasing the knowledge of the importance of these animals and their relation to “One Health”. The study is carried out by UFSCar’s Wildlife Laboratory, Araras campus, which, in 2024, invited the general public to Legado for a course within the Science Tourism Program, to learn about the safe management and ecological role of bats in the environment, as part of researchers’ routine field activities.

Other initiatives of Legado das Águas in the period are described on pages 33, 35, 36, 37, 39, 41 and 43.



LEGADO
VERDES
DO CERRADO
RESERVA VOTORANTIM

A business model that **works**

Legado Verdes do Cerrado, located in Niquelândia, Goiás, is officially recognized as the first Private Sustainable Development Reserve of Cerrado in Goiás, and the first in Brazil for the biome.

A Private Sustainable Development Reserve (RPDS) is a private area that seeks to incorporate nature conservation and sustainable development into conventional production activities and benefits to society. At Legado Verdes, for example, activities of the green economy, like native plant production, ecological restoration and carbon projects, are carried out alongside traditional agricultural activities, applying the concept of multiple land use.



In the ranking of Brazil's top ten states by nominal GDP (gross domestic product), Goiás holds its high position with much of its wealth coming "from the earth", thanks to nearly 70% of the state being comprised of Cerrado. As well as being a competitive economic advantage, it is also a responsibility, the key challenge being conservation of the biome, one of the most biodiverse on the planet. The search for solutions and alternatives had a new path opened up with the business model applied in Legado Verdes do Cerrado: Multiple Land Use, which combines conventional economic activities with those of the green economy.

On June 5, 2024, emblematically World Environment Day, this business model attained a level of recognition with a replicable solution. On that date, Goiás state officially recognized Legado Verdes do Cerrado as the **first Private Sustainable Development Reserve in Goiás**, creating a new category of Conservation Unit in the state, while also becoming the first for the Cerrado in Brazil.

The agreement was signed by Companhia Brasileira de Alumínio (CBA), the area's owner, and Reservas Votorantim, which manages the territory. With this recognition, other areas of Cerrado could adopt the same model, expanding the conservation of the biome at the same time as remaining competitive in the commodity production, as well as generating new opportunities for diversification of income sources, with business and products of the green economy.



The recognition crowned seven years of existence of Legado Verdes do Cerrado, which with Reservas Votorantim's innovative business model, implemented a new form of land use: of the 32,000 hectares of its territory, 20% are set aside for traditional farming activities, and 80% as conserved Cerrado, devoted to green economy activities.

With scalable results, Legado Verdes do Cerrado has shown this is a model that works, and induces sustainable development not only for the region, but for the entire country where the biome is present.

In 2024, Legado Verdes do Cerrado achieved important results, reflecting the maturity of Reservas Votorantim's business model and its areas of activity, generating shared value with a positive impact for socio-economic development and conservation of the biome.

Biodiversity Center expands presence on the ecological restoration and landscaping markets

Legado Verdes do Cerrado is spearheading a pioneering initiative in the country: the production of native flora species, focusing on ecological restoration and landscaping through the Cerrado Biodiversity Center (CBC). The CBC combines the expertise of scientific research conducted in the territory with the intelligent production of native species, including some that are rare or endangered. The center is increasingly preparing to be a significant differentiator for rV's operations in these segments, adding reliability, technical quality, reputational value and environmental value to the projects.

In 2024, the CBC began the initial trials for the production of native species for landscaping. In partnership with landscaping specialists Deflora, two 40-sqm greenhouses were installed, one at Legado, the other at the company's site in Goiânia. The trials are being conducted in a standardized way at both sites, with the aim of identifying best production practices for domestication of the species. With the results, it will be possible to draw up a protocol for scaling up production. Initially, 12 species are on the list to be trialed, including ground-cover plants, shrubs and small trees.

The production capacity of 250,000 seedlings/year of 50 different species means CBC is able to supply restoration projects in different landscapes (vegetation and ecosystems) of the Cerrado. In the period, five projects were carried out, for offsetting and emissions neutralization of agribusiness events. Planting for neutralization took place within the Legado area, contributing to enlarging its ecological corridors (learn more on page 31).

New products test the potential of public use

Throughout 2024, Reservas Votorantim advanced in assessing the viability of implementing public use in Legado Verdes do Cerrado, expanding the number of events by 50% compared to 2023. The activities involved various audiences, from cyclists and orienteering race runners to employees' families. A leading event in the period was the 3rd edition of the "Orienta Legado" orienteering race in partnership with the Goiás Orienteering Federation (FOG), a sport that uses nature as a playing field. As well as athletes from other cities and states, the event also saw participation from the local community.

The period also saw the launch of the Educational Tourism Program, aimed at students of elementary and high school, vocational and specialization courses and bachelor's programs, through workshops on topics linked to Cerrado conservation, sustainable agriculture and bioeconomy business in Legado. The first class saw the participation of around 20 Year 9 students (14-15 year olds) from the SESI (Industry Social Service) School in Niquelândia. The new product was essential to expand the target audiences of Legado Verdes do Cerrado linked to business and conservation.

The events aim to assess Legado's infrastructure for hosting tourists and organizing the public use strategy, while generating revenue and engaging diverse audiences.



2024 at a glance

50% increase in the number of test events conducted to study the feasibility of public use;

Use of technology for fire prevention and firefighting;

Testing initiated to insert the Cerrado Biodiversity Center into the landscaping market;

More than 500 people benefited from our Social Work;

Three new research projects started field work through the second open call in partnership with Fapeg.

Technology aids fire-fighting in the Cerrado

Forest fires are one of the key challenges to conservation of the Cerrado. To ensure a more rapid and efficient response to outbreaks of fire, as well as prevention measures, in 2024 Legado Verdes do Cerrado signed a partnership for satellite monitoring with ECCON Soluções Ambientais and Um Grau e Meio, a Brazilian company specializing in advanced technology for the management of forest fires.

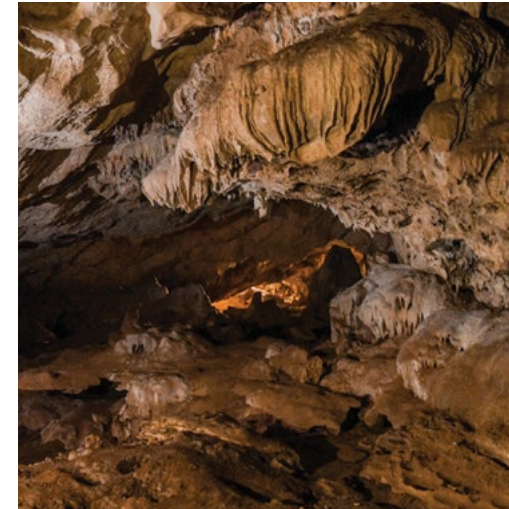
Through these partnerships, Legado could rely on a system that combines risk analysis, early detection and real-time monitoring, using satellite data to rapidly identify outbreaks of fire. As soon as a fire is detected, staff receive an alert with its exact coordinates, enabling them to assess the situation and take the necessary action more quickly.

In the Legado territory, preventive actions follow a strict, careful calendar, and rapid-response plans and structure are in place in case of fire.

New studies focus on biodiversity and water resources

In 2024, three new scientific studies got underway, following an open call for projects in partnership with the Goiás State Research Support Foundation, FAPEG. The initial field work for the studies was carried out to collect data for analysis and publication of preliminary results in 2025.

The studies are: cave research titled **“Speleology and Biodiversity in Legado Verdes do Cerrado,”** conducted by Professor Renata Santos Momoli. This research will focus on gathering preliminary data and information on the physical, chemical and biological properties of the caves discovered in Legado.



In the field of biodiversity, Legado is hosting research using the innovative method of “iDNA Metabarcoding for Vertebrate Monitoring in Legado Verdes do Cerrado,” led by Professor Mariana Pires de Campos Telles.

And in the field of water resources, “Graphene and maghemite nanocomposites for absorption of aquatic pollutants and environmental remediation,” led by Dr Simone Maria Teixeira de Sabóia-Morais, is another important study undertaken.

Meanwhile, Legado kept up its Participatory Monitoring of Biodiversity in the period, which has been taking place since 2019 using “camera traps” installed strategically at various points around the territory to monitor wildlife, as well as sightings recorded by staff. The data contribute to an understanding of the territory’s biological wealth.

Social engagement brings community in contact with the forest

In 2024, Legado Verdes do Cerrado’s social engagement initiatives aimed to bring the local community closer to the Reserve’s business model.

One such initiative was the Voluntary Challenge, where employees of Companhia Brasileira de Alumínio (CBA) and Legado carried out activities in various community locations. Over 15 actions were carried out, including talks about occupations, environmental education, gardening workshop, sporting activities and litter picking around the town. These initiatives gathered approximately 100 volunteers, including members of the community, benefiting over 500 students.

In addition, Legado took part in two events: the 21st Agriculture Exhibition in Niquelândia, where it had a stand to present its works; and a meeting of landscapers in Brasília to talk about the biome’s landscaping potential.

The Open Doors Program served three schools, benefiting upwards of 100 students. This environmental education initiative aims to provide public schools and non-profit institutions access to Legado and a day of experiences in the Cerrado.

To round off the period, Legado held the 5th Technical and Scientific Meeting, on the theme of “Cerrado: a living laboratory for learning and innovation,” which brought together staff, researchers and the community of Niquelândia to share knowledge and present preliminary results of the projects underway in the territory. What made this edition special was the participation of Year 9 students (14–15 year-olds) of the Industry Social Service (SESI) School, who presented the project “Roots of the Cerrado,” a website that disseminates the initiatives undertaken in the Reserve, as well as the history and culture of the local area.

Other initiatives in Legado Verdes do Cerrado in the period are described on pages 25, 27, 31, 32, 33, 34 and 36.



Moving forward with confidence

Reservas Votorantim's business has grown and evolved. Its trajectory is guided by innovation, but also by the conviction that a standing forest is a valuable asset for the economy and for life. As it advances, it goes on expanding its solutions and strengthening strategic partnerships that drive the climate transition and sustainable development. The next chapter is already being written—and it will be as transformative as rV's essence: firm steps towards a solid future, with business that transforms the world, looking after forests and people.



reservasvotorantim.com

comercial@reservasvotorantim.com

[+55 11 94457 2546](https://api.whatsapp.com/send?phone=5511944572546)

[in](#) [@reservasvotorantim](#)

