

# A BRIDGE BETWEEN TODAY AND TOMORROW:

## Building sustainable futures

Ponte Verde Lab - Rio de Janeiro, Brasil.



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# Our Purpose

**Ponte Verde Lab** was born from the need to address the sustainability agenda through technology, promoting discussions on the presented topics, data analytics, and technological innovations. This platform is built as a creative ecosystem, a space for fearless creation and experimentation, with a strong social purpose. Here, technology and sustainability converge to reinforce the promotion of a future in which sustainable development is an active part of society, inspiring positive change and seeking transformative technological paths, especially in the financial field. We emphasize the application of these themes in socially vulnerable areas. We want to combat the accelerated process of degradation in these territories, making them visible to institutions and strategic sectors that can directly impact them, providing resources to improve quality of life. Furthermore, **Ponte Verde Lab** seeks to strengthen collaboration between communities, students, and technology professionals. We believe that socio-environmental transformation is only possible when we combine innovation with active listening and the real needs of the territories.



# The road to COP30: global goals

In November 2025, Brazil will host the 30th United Nations Climate Change Conference (COP30). This event is an annual global gathering that brings together world leaders, scientists, non-governmental organizations, and social activists from more than 190 countries to discuss and present actions against climate imbalance.

The city of Belém, in the state of Pará, will host COP30 for the first time, reaffirming Brazil's commitment to becoming a leading player in negotiations on climate change and sustainability. **Ponte Verde Lab** has listed five proposals to positively impact the fight against environmental degradation:

- 1. Analytical transparency:** It is crucial to provide public data that demonstrates progress or setbacks in any measures implemented in the countries involved.
- 2. Organization of financing funds:** Prioritize investments in technological research and innovation projects aimed at tackling the climate crisis, with an emphasis on solutions with social and environmental impact.
- 3. Green finance for sustainable economic growth:** It is essential to create green credit lines to foster businesses committed to environmental protection and social responsibility.
- 4. Climate education in schools:** Expand the debate on sustainability and climate change in schools in countries committed to the global climate agenda.
- 5. Strengthening police and environmental action:** Ensure a rapid and effective response to environmental complaints, with active monitoring. Use technology to create accessible, secure reporting channels that are integrated with oversight systems.

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# **Green Finance and its promising role in sustainable practices**

Green finance is a financial instrument, such as bonds, funds, loans, and investments, aimed at financing projects that promote environmental benefits. Its main objective is to support initiatives that contribute to the preservation of biodiversity, the environment, the use of natural resources, and the transition to a low-carbon economy. These instruments represent a bridge between the financial sector and sustainability, connecting capital to environmental solutions.

In recent years, the debate on this topic has been gaining momentum on a global scale, reflecting a growing concern about the environmental impacts of economic activity and the urgency of a transition to more sustainable models. This type of finance seeks to transform the traditional investment logic into a more innovative and socially responsible approach.

In Brazil, home to some of the greatest biodiversity on the planet and largely responsible for global climate balance, green finance plays a fundamental and even strategic role in advancing this agenda in our country. Although we face challenges related to deforestation and environmental degradation, we possess valuable natural assets and a moderately clean energy matrix, which positions us in a privileged position for global leadership in this area. The green bond market in Brazil has begun to grow in recent years. Better known as "Green Bonds," these are financial instruments used to raise funds to finance projects that benefit the environment. These initiatives promote the transition from fossil fuels to renewable energy sources. The goal is to limit global temperature rise to 1.5°C above pre-industrial levels, a target established in the 2015 Paris Agreement.

However, there are many obstacles to overcome. Among them is the lack of financially viable projects with proven environmental impact and the unreliability of the data provided on these advances, which can drive away investors and compromise the reputation of ESG (environmental, social, and governance) criteria.

Furthermore, it is important that these green finance resources also reach local communities and indigenous peoples, who are fundamental to the conservation of Brazil's biomes. The development of these initiatives, when well-structured, can generate jobs, reduce inequalities, and preserve natural resources for future generations. Brazil has the potential to become a major player in green finance worldwide, but it needs to strengthen this issue, expand green tax incentives, and invest in technical training, especially given the international visibility it will gain by hosting COP30 in Belém.

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# Data science: the territory is an algorithm

Data analysis has become an essential tool for companies seeking to integrate sustainability into their operations. The strategic use of information is a key ally in this process, as the ability to collect, process, and interpret large volumes of data can help identify opportunities to reduce negative environmental impacts and promote more responsible decisions.

Governments and organizations, both national and international, have sought to implement stricter environmental regulations to guide and strengthen sustainable practices. These measures aim to ensure concrete progress and enable effective monitoring of actions taken in each context. Continuous monitoring not only promotes positive social impacts but also contributes to cost reduction and increased relevance and competitiveness for companies.

In recent years, the ESG (environmental, social, and governance) agenda has gained ground in corporate strategies, driven by more conscious consumers and investors. However, the growth of this movement also raises concerns about greenwashing — when companies promote a sustainable image without actually taking concrete actions. This practice, in addition to damaging the brand's credibility, hinders the identification of genuine initiatives and diverts focus from necessary transformations.

**Ponte Verde Lab** wants to not only observe this movement, but also actively participate in the collection, analysis, and dissemination of data that supports truly sustainable practices. Our goal is to positively impact the environmental narrative, combating greenwashing through reliable information and fostering a collaborative space among students, researchers, technology professionals, and others interested in building real solutions to climate challenges.

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# **Social media, digital connections, and community mobilization for climate justice**

In a century where everything is recorded and monitored through screens, social media has transformed the way society relates, communicates, and organizes itself. Although envisioned as an ecosystem for entertainment and information exchange, it has become a space for social and political mobilization. Voices that were previously invisible find echo and visibility. Although surrounded by controversy, social media is capable of mobilizing people around common causes, especially when it comes to social and environmental justice.

This movement reminds us of the trajectory of Carolina Maria de Jesus, author of the landmark "Quarto de Despejo," published in 1960. By recording her life in the Canindé favela in São Paulo, she gave a voice to marginalized communities, revealing realities previously ignored to the country. Her raw diary transformed pain into denunciation. What Carolina did in notebooks, social media today does through algorithms: historically excluded communities can share their stories around the globe. The difference is that, in the digital environment, the impact is instantaneous and mobilization is faster.

In 2019, the Amazon fires reached alarming proportions and exposed the vulnerability of Brazil's largest biome. What could have remained just another ignored episode gained international attention thanks to social media. Satellite images, videos made by residents, and news reports circulated rapidly, driven by hashtags, transforming a Brazilian environmental crisis into a global issue. The impact pressured governments, companies, and institutions to take a stand. International leaders, artists, and influencers used their platforms to denounce and demand effective action. The 2019 fires demonstrated how climate justice depends on public visibility and community mobilization to draw attention to the progress of environmental degradation. Despite this potential, we cannot ignore the problem. The same algorithms that amplify important causes fuel misinformation, intolerance, and violence around the world. This imbalance highlights the urgent need for regulation of digital platforms capable of ensuring transparency, accountability, and user protection.

Digital connections are much more than virtual interactions. They are **bridges** that bring vulnerable people, students, professionals, and institutions together around a greater purpose. Almost 50 years after the death of Carolina Maria de Jesus, communities find space to tell their stories and gain visibility.

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# **Environmental injustice as a political project: when degradation is not an accident, it is a choice**

The expression "environmental injustice as a political project" relates to the idea that environmental degradation, which primarily affects the most marginalized segments of the population, is used as a form of political power. It is a project conceived by the most powerful, who use these mechanisms to profit and expand their dominance. This instrument of power manifests itself in the way governments relax environmental laws to allow mining on Indigenous lands or when they create projects that displace the poorest population to peripheral areas, often located in high-risk areas within cities. Environmental disasters, such as water contamination in riverside communities, are the consequences of conscious political and economic decisions that create environmental inequalities to promote wealth for a small segment of the population, those with wealth and power.

Marginalized groups are constantly more impacted and more intensely exposed to the scarcity of natural resources and environmental risks, such as floods, landslides, and water pollution. A study by the Pólis Institute, entitled "Environmental Racism and Socioenvironmental Justice in Cities," conducted in 2022 in the capitals of São Paulo, Recife, and Belém, found that Black and low-income people make up the majority of residents in areas with limited infrastructure, precisely those most affected by disasters and environmental crimes in Brazil. Therefore, when faced with major environmental tragedies, a closer look is needed to understand which segment of the population is most affected by disasters caused by environmental degradation.

These situations require a bridge that retraces the entire path taken to that point, considering the laws that have been changed, the profile of those affected, and, above all, who benefits from these processes. This way, it is possible to understand why environmental degradation is not an accident, but rather a political choice.

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A bridge between today and tomorrow: building sustainable futures

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I am very excited to begin my journey into the world of sustainable technology. This is just the beginning, and I intend to walk this path with calm and dedication, exploring each new step without rushing.

Ponte Verde Lab

