climate > lead

Regional Climate Overview Brazil



Brazil's Role in Climate

Brazil is a world leader in clean energy, and home to diverse ecosystems that hold global potential for carbon removal. It has a key role to play as a platform for new industrial development, decarbonization, and forest restoration as well as robust opportunities for climate finance to support these efforts.

As the world's fifth-largest country and home to more than 212 million people, Brazil occupies a critical role on the global stage. It has delivered outcomes at the G20, reinforcing the importance of multilateral action and the Paris Agreement, and was among the first countries to submit its Nationally Determined Contribution (NDC). Brazil has advanced major public policies in support of climate finance in addition to taking significant action on anti-deforestation and forest restoration. Not only is Brazil strongly positioned to reduce its own emissions, it holds global promise as a supplier of critical minerals needed for the energy transition and as a producer of sustainable biofuels for use in shipping and aviation.

Brazil is also home to two-thirds of the Amazon, the largest and most biodiverse area of tropical rainforest on Earth, as well as the Cerrado, the planet's most diverse woodlands and savannas. These ecosystems act as a powerful carbon "sink" and are vital to climate stability—representing 15 percent of global potential for forest restoration and carbon emissions removals. However, the Amazon and the Cerrado are under immense pressure from habitat conversion to clear land for cattle ranching, logging, mining, and commodity crops like soy, maize, and cotton.

As a result, most of Brazil's emissions come from agriculture, land-use change, and forestry. The good news is that Brazil can rapidly reduce deforestation to lower its emissions. In 2024 alone, deforestation in the Cerrado decreased by 26 percent and in the Amazon declined by more than 30 percent, to the lowest level in nearly a decade. This progress was made



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possible by Brazilians electing a new government that followed through on its pledges to cut illegal logging and land grabbing by rebuilding law enforcement in the Amazon—ending the environmental devastation that occurred under the previous administration. Further, Brazil already has one of the world's cleanest power grids and is a leader in renewable energy, which generates up to 90 percent of its electricity,² mostly from hydroelectric power. But, new fossil fuel exploitation, particularly geared for the export market, remains a key part of Brazil's overall energy portfolio and must be addressed.

Progress to lower emissions in Brazil therefore entails advancing national goals to accelerate growth and reduce poverty and inequality while promoting a sustainable forest-based economy and a clean industrial future that benefits all Brazilians. If Brazil can meet its growing electricity demand by maintaining its current hydroelectric power, increasing solar and wind power, and fully phasing out oil and gas, it could achieve 100 percent clean electricity by 2030—setting a powerful example for the world.³

- 2 Climate Action Tracker, Brazil: Power sector, August 2024
- 3 Climate Action Tracker, Brazil: Overview, August 2024

Select Philanthropic Funders Include:

- Ballmer Group / Rainier Climate
- · Bezos Earth Fund
- Children's Investment Fund Foundation
- Gordon and Betty Moore Foundation
- Instituto Clima e Sociedade
- · Sequoia Climate Foundation

Fighting Deforestation by Protecting Lands and Communities

For decades, the conversion of the Amazon forest and the Cerrado— mainly for ranching and agriculture— has been the main source of Brazil's greenhouse gas emissions. As a result, more than 20 percent of the Amazon and over 50 percent of the Cerrado has been lost in the last 50 years.⁴ In the Cerrado, most deforestation has happened on private lands, whereas half of the losses in the Amazon have occurred on forested public lands. A significant amount of these deforested lands have been left underused and underproductive.

In the Amazon in particular, a lack of clear land tenure security and designation of protected lands has led to increased deforestation, land disputes, and biodiversity loss. Recognizing an urgent

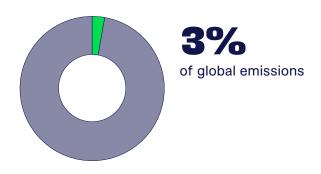
need to reduce deforestation and habitat conversion while securing the rights of local people, especially Indigenous and traditional communities, international philanthropy has acted to support the Brazilian NGO community and government to respond to the crisis.

Coordinated efforts have focused on advancing the designation of public lands for protection, and spurred the creation of the world's largest tropical forest conservation initiative, the Amazon Protected Areas Program (ARPA). Since 2002, ARPA has accounted for reductions in deforestation of up to nearly 40 percent in areas supported by the program. It has also exceeded its goal of conserving and permanently protecting 148 million acres of forestlands.

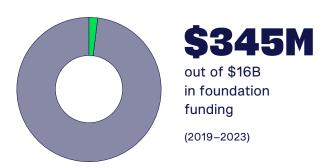


Brazil at a Glance

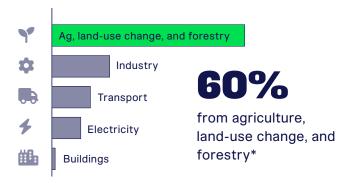
No. 7 emitter



Received 2% of climate mitigation philanthropy



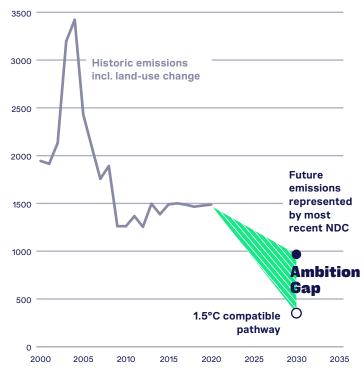
Emission sources by sector



Pathway to 1.5°C

The goal of the 2015 Paris Agreement calls for limiting global warming, ideally to 1.5°C compared to pre-industrial levels. Brazil's nationally determined contribution (NDC) is its commitment to reduce emissions as part of this agreement.

Million metric tons of carbon dioxide equivalent



Top climate hazards

River floods

Coastal floods

Drought

Pathways to Impact

Philanthropy can have the biggest impact by supporting two overarching strategic pathways to accelerate Brazil's climate progress:



Reduce emissions from deforestation and agriculture.

Ending deforestation and transitioning land use and food systems to a sustainable, low-carbon model can deliver greater and broader economic benefits. While agriculture will remain a critical part of Brazil's economy, it can become more efficient and sustainable. Focus areas include:

- Protection: End illegal deforestation and build incentives to reduce legal deforestation in private lands.
- Restoration: Use the recently created carbon market and other funding mechanisms to rapidly and massively scale reforestation and natural regeneration on degraded lands, building a powerful carbon sink.
- Bioeconomy:⁵ Create sustainable economic growth through non-timber forest products like açai berries, cacao, essential oils, medicines, and cosmetics as well as ecotourism.
- Ranching and agriculture: Promote practices such as agroforestry and more sustainable cattle ranching.

Decarbonize electricity, transport, and industry.

Lowering emissions requires decoupling Brazil's economic growth from carbon intensity, supporting clean industrial infrastructure and supply chains, and decarbonizing the energy sector. Focus areas include:

- Electricity: Invest in clean energy and infrastructure to accelerate an expansion of renewable resources; increase wind and solar energy; invest in green hydrogen development; and eliminate fossil fuels in electricity generation by 2035.
- Transport: Promote transit-oriented development and public transit systems that use electric buses and freight vehicles to reduce emissions and improve urban quality of life. Also support the dissemination of second-generation biofuels and development of Sustainable Aviation Fuels.
- Industry: Bolster the competitiveness of Brazilian industry (steel, cement, cooling fluids, and chemical manufacturing) by making it more efficient, electric, and innovative.
- Fossil fuels: Support in-country policy expertise and advocacy
 to transition Petrobras, Brazil's national oil and gas company, into
 an energy company less dependent on petroleum; counter new oil
 and gas drilling; and prove that alternative economic revenues can
 be generated beyond fossil fuels.
- 5 In Brazil, "bioeconomy" is used to describe a development model that incorporates production of goods utilizing sustainable practices like agroforestry, conservation of biodiversity, and valuing the knowledge of traditional peoples. Bioeconomy often includes adding greater value to products (e.g., higher quality cacao) and equity in the distribution of value along production chains.