

COP 30: Brazilian policies must change

The 30th Conference of the Parties (COP 30) of the United Nations Framework Convention on Climate Change will be held in November 2025 in Belém, in the Brazilian Amazon. For COP 30 to be effective in leading the world to reverse its disastrous course toward a climate tipping point, it will be necessary not only to halt deforestation but also to facilitate a rapid worldwide phaseout of fossil-fuel combustion. Yet as host of the conference, Brazil is not leading by example. As participants prepare for COP 30 over the months ahead, it is important that the meeting be used not only to agree on further global measures to combat climate change, but also to encourage the host country to change current practices.

Except for Brazil's Ministry of Environment and Climate Change, virtually all branches of the country's government are promoting activities that increase greenhouse gas emissions. For instance, the Ministry of Transportation is intent on opening large areas of Amazon forest to the entry of deforesters through the 408-km "middle stretch" of the BR-319 (Manaus-Porto Velho) highway and associated side roads. The vast forest area

opened by those roads contains enough carbon to push global warming past an irreversible tipping point. The Ministry of Agriculture subsidizes the transformation of pasture to soy, which is an important driver of deforestation because, when land becomes more valuable for soy than for cattle, ranchers (including those outside of Amazonia) sell their land to soy planters and use the profits to buy much larger areas of cheap Amazon rainforest for new ranches in more remote areas. Each hectare of pasture converted to soy can cause several hectares of deforestation. Brazil's land-tenure agency legalizes illegal land claims and occupations in government land (a major deforestation driver and stimulus for further illegal claims). In parallel, the Ministry of Mines and Energy is opening new oil and gas fields in the Amazon forest and in offshore areas, including its drilling plan in the mouth of the Amazon River, near the site of the upcoming COP.

Brazil's current plan is to continue drilling for oil until the country reaches "the [economic] level of developed countries," which is a formula for climate disaster. In 2021, the International Energy Agency issued

a report presenting the argument for not opening any new gas or oil fields in the world, restricting extraction to existing fields that must reduce their extraction rates to zero by 2050. This is because new fields imply long-term extraction. For example, the proposed field in the mouth of the Amazon River would take 5 years to begin producing oil and another 5 years to pay back the investment, and because no one would want to stop with zero profit, the initiative implies extraction for decades to come—long after the world must abandon fossil fuels.

For Brazil to assume leadership in the fight against global warming would make perfect sense, not only because of the opportunity provided by hosting COP 30 and the importance of the country's own potential

emissions, but also because of the catastrophic impact on Brazil if temperature increase is allowed to escape from human control. Brazil would lose its Amazon forest, including the vital role it plays in recycling the water that supplies greater São Paulo, the world's fourth-largest city. The hydrographic basin that includes São Paulo receives 16% to 70% of its annual rainfall from water recycled by the Amazon forest and transported as water vapor by winds

known as "flying rivers." Loss of even the lowest of these estimates would leave the city without water in extreme drought years like 2014 and 2021, and ongoing climate change is projected to greatly increase the frequency of severe droughts there. The heavily populated semi-arid region in Northeast Brazil would become a desert, and the large populations all along Brazil's Atlantic coast would be exposed to increased storms and sea levels. Brazil's agribusiness and its family agriculture would suffer heavy impacts. Droughts of "unprecedented" severity are expected in Brazil, and the frequency of severe droughts would increase by at least 10 times. "Climate surprises" like the 2024 floods in Rio Grande do Sul would become more common.

COP 30 faces great challenges to achieving its climate objectives. A key part of this is containing emissions from the Amazon, and for this, the greatest challenge is obtaining a radical change in the policies of the Brazilian government, both on the drivers of deforestation and on fossil fuel extraction.

—Philip M. Fearnside and Walter Leal Filho

Philip M. Fearnside is at the Instituto Nacional de Pesquisas da Amazônia, Manaus, Brazil. pmfearn@inpa.gov.br

Walter Leal Filho is at the Department of Natural Sciences, Manchester Metropolitan University, Manchester, UK; WSB Merito University, Wrocław, Poland; and Faculty of Life Sciences, Hamburg University of Applied Sciences, Hamburg, Germany. walter.leal2@haw-hamburg.de

“...as host of the conference, Brazil is not leading by example.”